

DDI Moving Forward: Object Description

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Chapter 1. Conceptual ConceptSystem

Definition

A group of Concepts

Properties

Table ConceptSystem. list of properties

Name	Datatype	Description	Cardinality
definition	StructuredStringType		1..1

Designation

Definition

The representation of a concept by a sign (e.g., string, pictogram, bitmap) which denotes it; a property of concept

Properties

Table Designation. list of properties

Name	Datatype	Description	Cardinality
language	xs:string		1..1

Relationships

Table Designation. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasSign	Sign		Composition	1..n	1..1
hasVocabulary	Vocabulary		Composition	1..n	1..1

Sign

Definition

A representation (e.g., string, pictogram, bitmap) linked to a concept through a Designation

Properties

Table Sign. list of properties

Name	Datatype	Description	Cardinality
value	StructuredStringType	The text representation	1..1

Relationships

Table Sign. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
denotes	Designation	The kind of relation that links a Sign to a Designation is a "denotation".	Neither	1..1	1..1

Vocabulary

Extends

This object extends ConceptSystem

Definition

[The body of words used in a particular language]. A vocabulary is an established list of standardized terminology for use in indexing and retrieval of information.

Properties

Table Vocabulary. list of properties

Name	Datatype	Description	Cardinality
source			

AuthorizationSource

Definition

Identifies the authorizing agency for the study and allows for the full text of the authorization (law, regulation, or other form of authorization). [improve: it's not only for studies, and there are other properties in this object]

Properties

Table AuthorizationSource. list of properties

Name	Datatype	Description	Cardinality
statementOfAuthorization		Text of the authorization (law, mandate, approved business case).	0..1
legalMandate		Provide a legal citation to a law authorizing the study/data collection. For example, a legal citation for a law authorizing a country's census.	0..1

Name	Datatype	Description	Cardinality
authorizationDate	xs:dateTime	Identifies the date of Authorization.	0..1
description	StructuredStringType		0..1

Relationships

Table AuthorizationSource. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
authorizingOrganization	Organization	References the authorizing agency described as an organization	Composition	0..1	0..n
authorizingIndividual	Individual	References the authorizing individual.	Composition	0..n	0..n

Level

Definition

Used to describe the levels of the code list hierarchy. The level describes the nesting structure of a hierarchical coding structure. A level could have data attached to it (summary of its children) or no data attached to it (the equivalent of creating a category group in 2.0 and earlier versions Note that the attribute levelNumber is used for referencing specific codes to their level identifier. Although Code Lists can be physically nested, the use of a Level description and the level number on a specific code is needed to specify subsets of the CodeList for use in CodeRepresentations by level specification. Provides a name, description and level number. Specifies the relationship between the categories at that level and interval value if the relationship has the value of Interval.

Properties

Table Level. list of properties

Name	Datatype	Description	Cardinality
levelNumber	xs:integer	Designated identifier for the level; generally increases as the level of indentation for nesting increases. Normally initiating at 1.	0..1

Relationships

Table Level. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
levelName	Name	Name of the level as used	Composition	0..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		within a system.			
description	StructuredString	Description of the type and purpose of the level	Composition	0..1	0..1

Representation

Definition

Abstract type for the head of a substitution group for a variable representation or a question response domain. If specific values are used to denote missing values, these can be indicated as a space-delimited list in the missingValue attribute. If the missing value is indicated by a blank, this should be indicated by setting the value of blankIsMissingValue to true.

Properties

Table Representation. list of properties

Name	Datatype	Description	Cardinality
missingValue	xs:NMTOKENS	List the values used to represent missing data in a space delimited array. Use of MissingValuesReference is preferred. If this content does not match the values provided in the MissingValuesReference, the content of the MissingValuesReference overrides the content of this attribute.	0..1
blankIsMissingValue	xs:boolean	When value is true a blank or empty variable content should be treated as a missing value. Use of MissingValuesReference is preferred.	0..1
classificationLevel	CategoryRelationCode	Indicates the type of relationship, nominal, ordinal, interval, ratio, or continuous. Use where appropriate for the representation type.	0..1
recommendedDatatype	CodeValueType	This field provides the recommended treatment of the data within an	0..1

Name	Datatype	Description	Cardinality
		application. The value should come from a controlled vocabulary - recommended values include the set found in W3C XML Schema Part 2, but excluding string sub-types, QName, and NOTATION.	
genericOutputFormat	CodeValueType	This field provides a recommended generic treatment of the data for display by an application. The value should come from a controlled vocabulary.	0..1

Category

Extends

This object extends Node

Definition

A description of a particular category or response.

Relationships

Table Category. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasConcept	Concept	The defining concept.	Neither	0..1	0..1
hasSubCategory	SubCategoryReference	Refers to one or more categories for which the current category is a broader definition. Allows for a reference to the narrower category and the ability to define the relationship as a specialization or part.	Composition	0..n	0..n

Code

Definition

A structure that links a unique value of a code to a specified category and provides information as to the location of the code within a hierarchy, whether it is discrete, represents a total for the CodeList contents, and if its sub-elements represent a comprehensive coverage of the code. The Code is identifiable, but the value within the code must also be unique within the CodeList.

Properties

Table Code. list of properties

Name	Datatype	Description	Cardinality
isDiscrete	xs:boolean	Indicates whether the code is discrete (that is, placed at the lowest level in a hierarchy and has no children).	0..1
levelNumber	xs:integer	Level number of the code.	0..1
isTotal	xs:boolean	This expresses a total whether or not isComprehensive is true. If isComprehensive = "true" then if addition is supported by the measure type, the contained categories can be aggregated to calculate the total. If isComprehensive = "false" or "unknown" the content of this field cannot be calculated if the value is not provided in the data.	0..1
isComprehensive	xs:boolean	Used in hierarchical structures at upper level values to indicate whether or not the subelements of the code are comprehensive in coverage. Not applicable if attribute isDiscrete is set to "true".	0..1

Relationships

Table Code. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasCategory	Category	A definition for the code.	Composition	1..1	0..1
hasValue	Value	Specified value of the code.	Composition	1..1	0..n
hasSubCode	Code	Allows for nesting of codes.		1..1	0..n

Concept

Definition

A concept per ISO/IEC 11179.

Properties

Table Concept. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the Concept. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
label	Label	A display label for the Concept. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
description	StructuredStringType	A description of the content and purpose of the Concept. May be expressed in multiple languages and supports the use of structured content.	0..1
isCharacteristic	xs:boolean	If set to "true" this concept is used to describe a characteristic of another concept.	0..1

Relationships

Table Concept. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasSimilarConcept	SimilarConcept	Type reference to a concept expressing a similar idea plus a description of the differences. Used to assist in disambiguation of concepts.		0..n	0..n
isSubClassOfConcept	Concept	Reference to a Concept that is used for qualifying this data element concept. The referenced Concept should have its isCharacteristic attribute set to true.	Composition	0..n	0..n

ConceptualVariable

Definition

A Conceptual Variable links a concept to a specific universe (object).

Properties

Table ConceptualVariable. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the ConceptualVariable. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
label	Label	A display label for the ConceptualVariable. May be expressed in multiple languages.	0..n

Name	Datatype	Description	Cardinality
		Repeat for labels with different content, for example, labels with differing length limitations.	
description	StructuredStringType	A description of the content and purpose of the ConceptualVariable. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ConceptualVariable. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasConcept	Concept	Reference to a Concept that is being linked to a Universe identified by the UniverseReference. TypeOfObject should be set to Concept.		0..1	0..n
hasUniverse	Universe	Reference to a universe being associated with this concept. TypeOfObject should be set to Universe.		0..1	0..n

RepresentationMap

Definition

Maps between any two representations and describes the correspondence between source and target representations.

Properties

Table RepresentationMap. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the RepresentationMap. May be expressed in multiple languages.	0..n

Name	Datatype	Description	Cardinality
		Repeat the element to express names with different content, for example different names for different systems.	
label	Label	A display label for the RepresentationMap. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
description	StructuredStringType	A description of the content and purpose of the RepresentationMap.	0..1
contextSpecificComparison	boolean	Set to "true" when a Concept has been identified in the SourceRepresentation.	0..1
validFrom	xs:dateTime	The date from which the mapping is valid.	0..1
validTo	xs:dateTime	The date after which the mapping is no longer valid.	0..1

Relationships

Table RepresentationMap. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasTargetRepresentation	Representation	The target that will hold the result of the transformation.	Neither	1..n	0..n
hasSourceRepresentation	Representation	The source of the information used for the transformation	Neither	1..n	0..n
hasProcessStep	ProcessStep	Process Step provides the transformation process for moving from the source to the target. As used in a correspondence table it relates to the Map	Neither	1..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		in the GSIM model.			
hasSourceLevel	Level	In the case of Statistical Classification: the correspondence is normally restricted to a certain Level in the source Statistical Classification. In this case, target items are assigned only to source items on the given level. If no level is indicated, target items can be assigned to any level of the source Statistical Classification.	Neither	0..1	0..1
hasTargetLevel	Level	In the case of Statistical Classification: the correspondence is normally restricted to a certain Level in the target Statistical Classification. In this case, source items are assigned only to target items on the given level. If no level is indicated, source items can be assigned to any level of the target Statistical Classification.	Neither	0..1	0..1
hasMaintenance	Organization	The group of persons	Neither	0..n	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		responsible for maintaining and updating the RepresentationMap.			
hasDistribution	OtherMaterialType	A list of distribution formats in which the Correspondence Table has been published.	Neither	0..n	0..n

RepresentedVariable

Definition

A combination of a characteristic of a population to be measured and how that measure will be represented. (From GSIM 1.1).

Properties

Table RepresentedVariable. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the RepresentedVariable. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
label	Label	A display label for the RepresentedVariable. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
description	StructuredStringType	A description of the RepresentedVariable. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table RepresentedVariable. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
linksToConceptualVariable	ConceptualVariable	Reference to a ConceptualVariable which provides the linkage to the Universe and Concept used by this RepresentedVariable.	Neither	0..1	0..1
hasValueRepresentation	ValueRepresentation	Allows for the use of managed value representations by reference.	Neither	0..1	0..1
hasUniverse	Universe	Link to the universe statement containing a description of the widest possible group of persons or other elements that this RepresentedVariable refers to, and to which any analytic results refer.	Neither	0..1	0..1
hasConcept	Concept	Link to the concept measured by this RepresentedVariable.	Neither	0..1	0..1

SubUniverseClass

Definition

A sub-universe group provides a definition to the universes contained within it.

Properties

Table SubUniverseClass. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the SubUniverseClass. May	0..n

Name	Datatype	Description	Cardinality
		be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	
label	Label	A display label for the SubUniverseClass. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
description	StructuredStringType	A description of the content and purpose of the SubUniverseClass.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table SubUniverseClass. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
definingConcept	Concept	A concept that provides a grouping factor for the universes contained by the SubUniverseClass. For example if the parent Universe is Population of the World and the two universes in the group are Male and Female the defining concept may be Sex.	Neither	0..1	0..n
belongsToUniverse	Universe	A reference to a universe contained in this	Composition	0..n	1..1

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>SubUniverseClass. Note that two different parent universes may contain references to the same universe within a sub-universe group. For example, the Universe "Population of Europe" and the Universe "Population of the United States" may both have a reference to the SubUniverseClass with the defining concept of Gender and member Universes "Males" and "Females". The SubUniverseClass is ALWAYS a restriction of its parent universe so that in one case it would be "Males within the Population of Europe" and in the other usage "Males within the Population of the United States". A question or variable should reference each relevant universe to define the appropriate intersect group.</p>			
hasSubUniverseClass	SubUniverseClass	A reference to a SubUniverseClass	Aggregation	0..n	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		contained in this SubUniverseClass (a means of nesting hierarchies).			

Universe

Definition

A universe is a group of units for which characteristics are being measured.

Properties

Table Universe. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the Universe. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
label	Label	A display label for the Universe. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
description	StructuredStringType	A description of the content and purpose of the Universe.	0..1
isInclusive	xs:boolean	The default value is "true". The description statement of a universe is generally stated in inclusive terms such as "All persons residing in Europe". Occasionally a universe is defined by what it excludes, i.e., "All persons residing in Europe except for those residing on U.S. Military bases". In this case the value would be changed to "false".	0..1

Relationships

Table Universe. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasDefiningConcept	Concept	One or more concepts that define or aid in understanding the content of the universe. For example the Universe "Males" may link to the concept of "Male".	Neither	0..1	0..n
hasSubUniverseClass	SubUniverseClass	A sub-universe class provides a definition to the universes contained within it. For example the Sub-Universe Class of Gender for the Universe Resident Population may contain the Universe Males and the Universe Females	Composition	0..1	0..n
hasGenerationProcess	Process	The process step which can be used to generate the universe.	Neither	0..n	0..1

CodeList

Extends

This object extends NodeSet

Definition

A list of Categories where each Category has a predefined Code assigned to it. May be flat or hierarchical.

Properties

Table CodeList. list of properties

Name	Datatype	Description	Cardinality
isHierarchical	xs:boolean	Indicator designates the nature of the Code List as flat ("false") or hierarchical ("true")	0..1
isRegularHierarchy	xs:boolean	Identifies the type of hierarchy used in the nesting of categories. Possible values are Regular and Irregular. IsRegularHierarchy equal "true" indicates that the category hierarchy is consistent at all lower levels of the hierarchy, i.e., the lowest levels of the hierarchy are at the same level for every branch on the hierarchy.	0..1

Relationships

Table CodeList. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasIncludedCodeList	CodeList	Allows for inclusion by reference of another CodeList. Care must be taken to ensure that all code values of the resulting CodeList are unique.	Neither	0..1	0..n
hasLevel	Level	Describes the levels of the code hierarchy. The level describes the nesting structure of a hierarchical coding structure. Note that the attribute levelNumber is used for	Composition	0..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		referencing specific codes to their level identifier.			
hasCode	Code	Includes a code value and category, and describes the code's position in a hierarchy.	Composition	0..1	0..n

Node

Definition

A combination of a category and related attributes.

Properties

Table Node. list of properties

Name	Datatype	Description	Cardinality
isPart	xs:boolean	Use for a node that is nested within another node. Set to true if the nested node has a partitive relationship to the higher level node (the nested node is a part of the "whole" node).	0..1
isChild	xs:boolean	Use for a node that is nested within another node. Set to true if the nested node has a hierarchical relationship to the higher level node (the nested node is a child of the "parent" node).	0..1
description		Description of the object	0..1

Relationships

Table Node. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
name	Name	Name of the object within a specified system.	Composition	0..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
label	Label	Label for the object.	Composition	0..1	0..n

NodeSet

Definition

A NodeSet is a set of Nodes forming a concept system.

Properties

Table NodeSet. list of properties

Name	Datatype	Description	Cardinality
isPart	xs:boolean	Use for NodeSet that is subordinate to another NodeSet. Set to true if the relationship is partitive (nested NodeSet is a part of the "whole" NodeSet that contains it).	0..1
isChild	xs:boolean	Use for NodeSet that is subordinate to another NodeSet. Set to true if the relationship is hierarchical (nested NodeSet is a child of the "parent" NodeSet that contains it).	0..1
description		Description of the object.	0..1

Relationships

Table NodeSet. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
name	Name	Name of the object within a system.	Composition	0..1	0..n
label	Label	Label for the object	Composition	0..1	0..n

CategorySet

Extends

This object extends NodeSet

Definition

A Category Set is a type of Node Set which groups Categories.

Relationships

Table CategorySet. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasCategorySet	CategorySet	A CategorySet that is included as part of this CategorySet	Composition	0..1	0..n
hasCategory	Category	A Category that is a member of this Category Set	Composition	0..1	0..n

ClassificationItem

Extends

This object extends Node

Definition

A Classification Item represents a Category at a certain Level within a Statistical Classification.

Properties

Table ClassificationItem. list of properties

Name	Datatype	Description	Cardinality
isValid	xs:boolean	If updates are allowed in the Statistical Classification, an item may be restricted in its validity, i.e. it may become valid or invalid after the Statistical Classification has been released. Indicates whether or not the item is currently valid.	0..1
isGenerated	xs:boolean	Indicates whether or not the item has been generated to make the level to which it belongs complete	0..1

Relationships

Table ClassificationItem. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
officialName	Name	A Classification Item has a name as provided by the owner or maintenance unit. The name describes the content of the category. The name is unique within the Statistical Classification to which the item belongs, except for categories that are identical at more than one level in a hierarchical classification	Neither	1..1	1..1
explanatoryNotes	StructuredString	Type Classification Item may be associated with explanatory notes, which further describe and clarify the contents of the Category. Explanatory notes consist of: General note: Contains either additional information about the Category, or a general description of the Category, which is not structured according to the "includes", "includes also",	Neither	0..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>"excludes" pattern.</p> <p>Includes: Specifies the contents of the Category.</p> <p>Includes also: A list of borderline cases, which belong to the described Category.</p> <p>Excludes: A list of borderline cases, which do not belong to the described Category.</p> <p>Excluded cases may contain a reference to the Classification Items to which the excluded cases belong.</p>			
hasCode	Code	<p>A Classification Item is identified by an alphabetical, numerical or alphanumerical code, which is in line with the code structure of the classification Level. The code is unique within the Statistical Classification to which the item belongs.</p>	Composition	1..1	1..1
validDate	DateType	<p>Dates for which the classification is valid. Date from which the item became valid. The date must be defined if the item belongs</p>	Neither	0..1	0..1

Name	Target	Description	Type	Source cardinality	Target cardinality
		to a floating Statistical classification. Date at which the item became invalid. The date must be defined if the item belongs to a floating Statistical classification and is no longer valid.			
futureEvents	InternationalString	The type future events describe a change (or a number of changes) related to an invalid item. These changes may e.g. have turned the now invalid item into one or several successor items. This allows the possibility to follow successors of the item in the future.	Neither	0..1	0..n
changeLog	InternationalString	Describes the changes, which the item has been subject to during the life time of the actual Statistical Classification.	Neither	0..1	0..1
changeFromPreviousVersion	InternationalString	Describes the changes, which the item has been subject to from the previous version to the actual	Composition		

Name	Target	Description	Type	Source cardinality	Target cardinality
		Statistical Classification.			
caseLaw	AuthorizationSource	Case law rulings related to the Classification Item.	Composition	0..1	0..n
hasSubItem	ClassificationItem		Composition		

StatisticalClassification

Extends

This object extends CodeList

Definition

A Statistical Classification is a set of Categories which may be assigned to one or more variables registered in statistical surveys or administrative files, and used in the production and dissemination of statistics. The Categories at each Level of the classification structure must be mutually exclusive and jointly exhaustive of all objects/units in the population of interest. (Source: GSIM StatisticalClassification)

Properties

Table StatisticalClassification. list of properties

Name	Datatype	Description	Cardinality
introduction	StructuredStringType	The introduction provides a detailed description of the Statistical Classification, the background for its creation, the classification variable and objects/units classified, classification rules etc. (Source: GSIM StatisticalClassification)	0..1
releaseDate	xs:dateTime	Date the Statistical Classification was released	0..1
terminationDate	xs:dateTime	Date on which the Statistical Classification was superseded by a successor version or otherwise ceased to be valid. (Source: GSIM Statistical Classification)	0..1

Name	Datatype	Description	Cardinality
isCurrent	xs:boolean	Indicates if the Statistical Classification is currently valid.	0..1
isFloating	xs:boolean	Indicates if the Statistical Classification is a floating classification. In a floating statistical classification, a validity period should be defined for all Classification Items which will allow the display of the item structure and content at different points of time. (Source: GSIM StatisticalClassification/Floating)	0..1
variantOf	xs:anyURI	For those Statistical Classifications that are variants, notes the Statistical Classification on which it is based and any subsequent versions of that Statistical Classification to which it is also applicable. (Source: GSIM StatisticalClassification/Variant)	0..1
changeFromBase	StructuredStringType	Describes the relationship between the variant and its base Statistical Classification, including regroupings, aggregations added and extensions. (Source: GSIM StatisticalClassification/Changes from base Statistical Classification)	0..1
purposeOfVariant	StructuredStringType	If the Statistical Classification is a variant, notes the specific purpose for which it was developed. (Source: GSIM StatisticalClassification/Purpose of variant)	0..1

Name	Datatype	Description	Cardinality
copyright	xs:string	Copyright of the statistical classification	0..n
predecessor	xs:anyURI	For those Statistical Classifications that are versions or updates, notes the preceding Statistical Classification of which the actual Statistical Classification is the successor.	0..1
successor	xs:anyURI	Notes the Statistical Classification that superceded the actual Statistical Classification.	0..1
validDate	xs:dateTime	The date the statistical classification enters production use.	0..1

Relationships

Table StatisticalClassification. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasClassificationItems	ClassificationItem	Classification Items belonging to the Statistical Classification	Composition	1..1	1..n
hasStatisticalClassification	StatisticalClassification	Statistical classification that is contained in this classification.	Aggregation	0..n	0..n
hasMaintenanceOrganization	Organization	The organization, agency, or group within an agency responsible for the maintenance and upkeep of the statistical classification.	Neither	0..1	0..n
hasDistribution	OtherMaterialType	Description and link to a publication, including print, PDF, HTML and other	Aggregation	0..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		electronic formats, in which the Statistical Classification has been published. This is similar to dcat:Distribution.			
hasLanguagesAvailable	LanguageList	A list of languages in which the Statistical Classification is available	Neither	0..1	0..1
hasUpdateChanges	StructuredString	Summary description of changes which have occurred since the most recent classification version or classification update came into force.	Neither		

Chapter 2. SimpleDataDescription

InstanceVariableDeprecated

Definition

The use of a represented variable within a DataDescription. It may include information about the source of the data. [GSIM 1.0]. NOTE THAT THIS IS A HOLDING OBJECT ONLY - IT SHOULD BE REPLACED BY THE "ACTUAL" InstanceVariable (PART OF THE Discovery PACKAGE) ONCE THIS PACKAGE IS ADDED TO THE LIBRARY.

Relationships

Table InstanceVariableDeprecated. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
usageOfRepresentedVariable	IdentifiableType		Neither	0..n	1..1
describesaField	Field		Neither	0..1	1..n

Field

Definition

A field in a record

Relationships

Table Field. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Label	NOT DEFINED		Neither	1..1	0..1
RecordLayout	RecordLayout		Aggregation	1..n	1..1

DataDescription

Definition

Describe aggregated instance variables contained in a Data Serialization

Relationships

Table DataDescription. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
describeDataInTermsOf	Fields		Neither	0..n	1..1
describeInstanceVariable	InstanceVariableDeprecated		Aggregation	1..n	1..1

RecordLayout

Definition

Describes record layout in a physical data file

Properties

Table RecordLayout. list of properties

Name	Datatype	Description	Cardinality
fieldDelimiter	xs:string		1..1
decimalSymbol	xs:string		0..1
textQualifier	xs:string		0..1
fieldNamesOnFirstRow	xs:boolean		0..1
defaultLanguageOfData	xs:string		0..1
defaultLocaleOfData	xs:string		
newline	xs:string		

Relationships

Table RecordLayout. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Label	NOT DEFINED		Neither	1..1	0..1

ValueRepresentation

Extends

This object extends Representation

Definition

Describes a set of values that are used to represent a characteristic of the universe [MATCH WITH GSIM]

Properties

Table ValueRepresentation. list of properties

Name	Datatype	Description	Cardinality
additivity			0..1
numericPrecision	xs:integer		0..1
multiplier	xs:integer		0..1
unitOfMeasurement	xs:string		0..1

Name	Datatype	Description	Cardinality
intendedDataType			0..1

Relationships

Table ValueRepresentation. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
isRepresentedBy	NOT DEFINED		Neither		

RectangularDataFile

Extends

This object extends DataFile

Definition

A physical file representing data organized in records and fields.

Properties

Table RectangularDataFile. list of properties

Name	Datatype	Description	Cardinality
defaultDecimalSymbol	xs:string		0..1
defaultTextQualifier	xs:string		0..1
fieldNamesOnFirstRow	xs:boolean		0..1
defaultLanguageOfData	xs:string		0..1
defaultLocaleOfData	xs:string		0..1
newline	xs:string		0..1

Relationships

Table RectangularDataFile. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
HasRecordLayout	RecordLayout		Aggregation	1..n	1..n
hasLabel	NOT DEFINED		Neither	1..1	0..1

DataSerialisation

Definition

The description of the physical representation of the data.

Relationships

Table DataSerialisation. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
aPartOfTofkas	Tofkas		Neither	0..n	1..1

DescribedValueDomain

Extends

This object extends ValueRepresentation

Definition

A Value Domain defined by an expression.

Properties

Table DescribedValueDomain. list of properties

Name	Datatype	Description	Cardinality
Name	xs:string		0..n
Label	xs:string		0..n
Description	xs:string		0..n

EnumeratedValueDomain

Extends

This object extends ValueRepresentation

Definition

A Value Domain expressed as a list of Categories and associated Codes.

Properties

Table EnumeratedValueDomain. list of properties

Name	Datatype	Description	Cardinality
Name	xs:string		0..n
Label	xs:string		0..n
Description	xs:string		0..n

Chapter 3. SimpleCodebook

LogicalRecord

Definition

A LogicalRecord references the specific InstanceVariables which serve as attributes of a specific case. Contains a reference to the InstanceVariable containing a specified designation which identifies a record as being a specific type.

Relationships

Table LogicalRecord. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
LogicalRecordName	NOT DEFINED		Composition	0..n	1..1
Label	NOT DEFINED		Composition	0..n	1..1
Description	NOT DEFINED		Composition	0..1	1..1
RecordTypeSpec	NOT DEFINED		Composition	0..1	1..1
VariableUsedReference	NOT DEFINED		Composition	1..n	1..n

RecordSet

Definition

A set of one or more LogicalRecords that list the InstanceVariables related to a specific type of case (e.g. Household, Person, Event, etc.) as well as how the record type is identified by the record itself. May contain a RecordRelationship describing the link between two Logical Records of different types (e.g. Person to Household).

Relationships

Table RecordSet. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
RecordSetName	NOT DEFINED		Composition	0..n	1..1
Label	NOT DEFINED		Composition	0..n	1..1
Description	NOT DEFINED		Composition	0..1	1..1
LogicalRecord	NOT DEFINED		Composition	1..n	1..1

Name	Target	Description	Type	Source cardinality	Target cardinality
RecordRelationship	NOT DEFINED		Composition	0..n	1..1

RecordRelationship

Definition

Describes the means of linking two Logical Records of different types (e.g. Person to Household)

Relationships

Table RecordRelationship. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Label	NOT DEFINED		Composition		
RecordRelationshipName	NOT DEFINED		Composition	0..n	1..1
Description	NOT DEFINED		Composition	0..1	1..1
SourceLogicalRecordReference	NOT DEFINED		Composition	1..1	1..1
TargetLogicalRecordReference	NOT DEFINED		Composition	1..1	1..1
SourceLinkVariableReference	NOT DEFINED		Composition	1..1	1..1
TargetLinkVariableReference	NOT DEFINED			1..1	1..1

Tofkas

Definition

The object formerly known as StudyUnit.

Properties

Table Tofkas. list of properties

Name	Datatype	Description	Cardinality
Disco			
Title			1..1
Abstract			0..1
AlternativeTitle			0..n
Available			0..n
SubTitle			0..n
etcetera			0..n

Name	Datatype	Description	Cardinality
analysisUnit	CodeValueType	A brief textual description or classification of the unit of analysis.	0..n
analysisUnitsCovered	InternationalStringType	A description of the types of analysis units covered expressed using an International String to support multiple language versions of the same content.	0..1

Relationships

Table Tofkas. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ddiFile	NOT DEFINED		Neither	0..n	0..n
spatial	NOT DEFINED		Neither		
temporal	NOT DEFINED		Neither	0..n	0..n
kindOfData	NOT DEFINED		Neither	0..n	0..1
Subject	NOT DEFINED		Neither	0..n	0..n

RecordTypeSpecification

Definition

References the InstanceVariable that contains a value which identifies the record of being of the specified type as well as the designated value for the variable.

Properties

Table RecordTypeSpecification. list of properties

Name	Datatype	Description	Cardinality
relatedValue			1..1

Relationships

Table RecordTypeSpecification. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	NOT DEFINED		Composition	1..1	

Chapter 4. New Objects for Discovery

DataFile

Definition

An generic class representing a data file.

Properties

Table DataFile. list of properties

Name	Datatype	Description	Cardinality
fileName			1..1
mediaType			1..1
fileDescription			0..1

InstrumentType

Extends

This object extends VersionableType

Definition

Defines the type of instrument used for data collection or capture. In addition to the standard name, label, and description contains a classification of the type of instrument, a reference to an external instance of the instrument (such as an image of a questionnaire or programming script) and a reference to the Sequence control construct that contains the flow for data collection or capture.

Properties

Table InstrumentType. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the Instrument. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
label	Label	A display label for the Instrument. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n

Name	Datatype	Description	Cardinality
description	StructuredStringType	A description of the Instrument. May be expressed in multiple languages and supports the use of structured content.	0..1
externalInstrumentLocation	anyURI	A reference to an external representation of the data collection instrument, such as an image of a questionnaire or programming script.	0..n

Relationships

Table InstrumentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasControlConstruct	ControlConstruct	A reference to the Sequence control construct that initiates the flow of the instrument content.	Neither	0..1	

dcterms:abstract

Definition

A summary of the resource.

dcterms:title

Definition

A name given to the resource.

dcterms:description

Definition

An account of the resource.

dcterms:provenance

Definition

A statement of any changes in ownership and custody of the resource since its creation that are significant for its authenticity, integrity, and interpretation.

dcterms:available

Definition

Date (often a range) that the resource became or will become available.

dcterms:creator

Definition

An entity primarily responsible for making the resource.

dcterms:contributor

Definition

An entity responsible for making contributions to the resource.

dcterms:publisher

Definition

An entity responsible for making the resource available.

foaf:Agent

Definition

An agent (eg. person, group, software or physical artifact).

foaf:Person

Definition

A person.

org:Organization

Definition

Represents a collection of people organized together into a community or other social, commercial or political structure.

adms:Identifier

Definition

This is based on the UN/CEFACT Identifier class which consists of: a content string which is the identifier; an optional identifier for the identifier scheme; an optional identifier for the version of the identifier scheme; an optional identifier for the agency that manages the identifier scheme.

prov:Entity

Definition

An entity is a physical, digital, conceptual, or other kind of thing with some fixed aspects; entities may be real or imaginary.

prov:Activity

Definition

An activity is something that occurs over a period of time and acts upon or with entities; it may include consuming, processing, transforming, modifying, relocating, using, or generating entities

prov:Agent

Definition

An agent is something that bears some form of responsibility for an activity taking place, for the existence of an entity, or for another agent's activity.

prov:wasDerivedFrom

Definition

A derivation is a transformation of an entity into another, an update of an entity resulting in a new one, or the construction of a new entity based on a pre-existing entity.

prov:wasAssociatedWith

Definition

An activity association is an assignment of responsibility to an agent for an activity, indicating that the agent had a role in the activity. It further allows for a plan to be specified, which is the plan intended by the agent to achieve some goals in the context of this activity.

prov:used

Definition

Usage is the beginning of utilizing an entity by an activity. Before usage, the activity had not begun to utilize this entity and could not have been affected by the entity.

prov:wasGeneratedBy

Definition

Generation is the completion of production of a new entity by an activity. This entity did not exist before generation and becomes available for usage after this generation.

prov:actedOnBehalfOf

Definition

Delegation is the assignment of authority and responsibility to an agent (by itself or by another agent) to carry out a specific activity as a delegate or representative, while the agent it acts on behalf of retains some responsibility for the outcome of the delegated work. For example, a student acted on behalf of his supervisor, who acted on behalf of the department chair, who acted on behalf of the university; all those agents are responsible in some way for the activity that took place but we do not say explicitly who bears responsibility and to what degree.

org:memberOf

Definition

Indicates that an agent (person or other organization) is a member of the Organization with no indication of the nature of that membership or the role played. Note that the choice of property name is not meant to limit the property to only formal membership arrangements, it is also intended to cover related concepts such as affiliation or other involvement in the organization. Extensions can specialize this relationship to indicate particular roles within the organization or more nuanced relationships to the organization.

prov:hadPrimarySource

Definition

A primary source for a topic refers to something produced by some agent with direct experience and knowledge about the topic, at the time of the topic's study, without benefit from hindsight. Because of the directness of primary sources, they 'speak for themselves' in ways that cannot be captured through the filter of secondary sources. As such, it is important for secondary sources to reference those primary sources from which they were derived, so that their reliability can be investigated. A primary source relation is a particular case of derivation of secondary materials from their primary sources. It is recognized that the determination of primary sources can be up to interpretation, and should be done according to conventions accepted within the application's domain.

prov:wasInvalidatedBy

Definition

Invalidation is the start of the destruction, cessation, or expiry of an existing entity by an activity. The entity is no longer available for use (or further invalidation) after invalidation. Any generation or usage of an entity precedes its invalidation.

prov:Revision

Definition

A revision is a derivation for which the resulting entity is a revised version of some original. The implication here is that the resulting entity contains substantial content from the original. Revision is a particular case of derivation.

prov:hadGeneration

Definition

Generation is the completion of production of a new entity by an activity. This entity did not exist before generation and becomes available for usage after this generation.

prov:hadUsage

Definition

Usage is the beginning of utilizing an entity by an activity. Before usage, the activity had not begun to utilize this entity and could not have been affected by the entity.

skos:Concept

Definition

The class `skos:Concept` is the class of SKOS concepts. A SKOS concept can be viewed as an idea or notion; a unit of thought. However, what constitutes a unit of thought is subjective, and this definition is meant to be suggestive, rather than restrictive. The notion of a SKOS concept is useful when describing the conceptual or intellectual structure of a knowledge organization system, and when referring to specific ideas or meanings established within a Knowledge Organization System.

skos:prefLabel

Definition

The preferred label of a resource.

skos:notation

Definition

This property is used to assign a notation as a typed literal.

skos:inScheme

Definition

Indicates that a resource is part of a concept scheme.

skos:ConceptScheme

Definition

A SKOS concept scheme can be viewed as an aggregation of one or more SKOS concepts.

skos:broader

Definition

This hierarchical link between two concepts indicates that one is in some way more general ("broader").

skos:narrower

Definition

This hierarchical link between two concepts indicates that one is in some way more general ("broader") than the other ("narrower").

Chapter 5. SimpleInstrument

Capture

Extends

This object extends InstrumentControl

Definition

Means of obtaining information

Relationships

Table Capture. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
storesInformation	AbstractIdentifiableType		Aggregation	1..1	1..n
usesResponseDomain	ResponseDomain		Aggregation	0..1	1..n

Question

Extends

This object extends Capture

Definition

A query of a human subject

Properties

Table Question. list of properties

Name	Datatype	Description	Cardinality
text			1..1

Relationships

Table Question. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
usesStatement	NOT DEFINED				

Measurement

Extends

This object extends Capture

Definition

A data capture other than question

Properties

Table Measurement. list of properties

Name	Datatype	Description	Cardinality
ExternalAid	xs:anyURI		0..n

Statement

Definition

Explanatory text for humans

Properties

Table Statement. list of properties

Name	Datatype	Description	Cardinality
Text			0..n

Relationships

Table Statement. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
usedByInstrument	Question	Reference	Neither	0..n	0..n

InstrumentControl

Definition

Defines how the instrument or data capture tool is administered

Properties

Table InstrumentControl. list of properties

Name	Datatype	Description	Cardinality
type			0..n

Relationships

Table InstrumentControl. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
contains	InstrumentControl		Aggregation	1..1	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
usesStatement	Statement		Aggregation	0..n	0..n

LogicalInstrument

Definition

Design plan for creating a data capture tool

Relationships

Table LogicalInstrument. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
contains	InstrumentControl		Aggregation	1..n	1..n

PhysicalInstrument

Definition

Implementation of the LogicalInstrument

Properties

Table PhysicalInstrument. list of properties

Name	Datatype	Description	Cardinality
mode			0..1

Relationships

Table PhysicalInstrument. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
implements	LogicalInstrument		Neither	0..n	0..1

ResponseDomain

Definition

Allowed or possible list of values that can be captured

Relationships

Table ResponseDomain. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
measures	Capture		Neither	0..n	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
isCodedBy	ValueRepresentation		Neither	1..1	1..n

Chapter 6. Deleted

CaptureInstruction

Definition

Instructions used by the interviewer or respondent to support the accurate collection or capture of data

Properties

Table CaptureInstruction. list of properties

Name	Datatype	Description	Cardinality
Text			

Chapter 7. Methodology

StudyDesign

Definition

HOLDING OBJECT ONLY - Represents the Primary reference for the conduct of the study

Relationships

Table StudyDesign. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasLogicalInstrumentReference	LogicalInstrument	Instrument	Composition	0..n	0..1

Chapter 8. Discovery

Coverage

Definition

Coverage provides a description of restrictions on the Universe and Concepts associated with some object. Part of Coverage might include a time frame, the geography involved and applicable topics. Coverage may be extended to other dimensions in the future.

SpatialCoverage

Definition

A Coverage describing an area of physical location. This might be described in a number of ways.

Relationships

Table SpatialCoverage. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
providesSpatialCoverage			Aggregation	0..1	0..n

TopicalCoverage

Definition

Describes the topics (categories) related to some object.

Relationships

Table TopicalCoverage. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
providesTopicalCoverageFor			Aggregation	0..1	0..n

Subject

Extends

This object extends TopicalCoverage

Definition

A category from a scheme with mutually exclusive categories (like a format classification such as the Dewey Decimal System)

CodedGeography

Extends

This object extends SpatialCoverage

Definition

A description of a geography using a code value from a named code scheme

GeographicCodeList

Extends

This object extends SpatialCoverage

Definition

A list of codes for geographic areas

ExternalGISSystem

Extends

This object extends SpatialCoverage

Definition

A description of a geographic area employing an external GIS system

TextualGeography

Extends

This object extends SpatialCoverage

Definition

A text description of a geographic area

Keyword

Extends

This object extends TopicalCoverage

Definition

A Categorization for a list which might include synonyms in the category set

ExternalTopic

Extends

This object extends TopicalCoverage

Definition

A Categorization taken from a not foreknowable category set (e.g. a folksonomy see <http://en.wikipedia.org/wiki/Folksonomy>)

Properties

Table ExternalTopic. list of properties

Name	Datatype	Description	Cardinality
system	xs:string		1..1

Categorization

Definition

The association of a Category with an IdentifiableObject

Relationships

Table Categorization. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
references	IdentifiableObject		Neither	0..n	0..n

TemporalCoverage

Definition

Describes times or ranges of times

Relationships

Table TemporalCoverage. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
providesTemporalCoverage	TemporalCoverage		Aggregation	0..1	0..n

CategoryStatisticType

Extends

This object extends StatisticType

Definition

The value of a statistic associated with the category value.

Properties

Table CategoryStatisticType. list of properties

Name	Datatype	Description	Cardinality
typeOfCategoryStatistic	CodeValueType	Type of category statistic. Supports the use of an external controlled vocabulary. DDI strongly recommends the use of a controlled vocabulary.	0..1
statistic	StatisticType	The value of the statistics and whether it is weighted and/or includes missing values.	0..1
name	Name	Name	0..n
label	Label	Label	0..n
description	StructuredStringType	Description	0..1

SummaryStatisticType

Definition

Describes a summary statistic for a variable.

Properties

Table SummaryStatisticType. list of properties

Name	Datatype	Description	Cardinality
name	Name	Name	0..n
label	Label	Label	0..n
description	StructuredStringType	Description	0..1
typeOfSummaryStatistic	CodeValueType	Type of summary statistic, such as count, mean, mode, median, etc. Supports the use of an external controlled vocabulary. DDI strongly recommends the use of a controlled vocabulary.	0..1
statistic	StatisticType	The value of the statistics and whether it is weighted and/or includes missing values.	0..1

Chapter 9. ExtendedPrimitives

BoundingBox

Definition

Set of north, south, east, west coordinates defining a rectangle that encompasses the full extent of geographic coverage.

Properties

Table BoundingBox. list of properties

Name	Datatype	Description	Cardinality
westLongitude	LongitudeType	West longitude of the bounding box. (xmin)	0..1
eastLongitude	LongitudeType	East longitude of the bounding box. (xmax)	0..1
southLatitude	LatitudeType	South latitude of the bounding box. (ymin)	0..1
northLatitude	LatitudeType	North latitude of the bounding box. (ymax)	0..1

Audio

Definition

Describes the type and length of the audio segment.

Properties

Table Audio. list of properties

Name	Datatype	Description	Cardinality
typeOfAudioClip	CodeValueType	The type of audio clip provided. Supports the use of a controlled vocabulary.	0..1
audioClipBegin	xs:string	The point to begin the audio clip. If no point is provided the assumption is that the start point is the beginning of the clip provided.	0..1
audioClipEnd	xs:string	The point to end the audio clip. If no point is provided the assumption is that the end point is the end of the clip provided.	0..1

BasedOnObject

Definition

Use when creating an object that is based on an existing object or objects that are managed by a different agency or when the new object is NOT simply a version change but you wish to maintain a reference to the object that served as a basis for the new object. BasedOnObject may contain references to any number of objects which serve as a basis for this object, a BasedOnRationaleDescription of how the content of the referenced object was incorporated or altered, and a BasedOnRationaleCode to allow for specific typing of the BasedOnReference according to an external controlled vocabulary.

Properties

Table BasedOnObject. list of properties

Name	Datatype	Description	Cardinality
basedOnRationaleDescription	InternationalStringType	Textual description of the rationale/purpose for the based on reference to inform users as to the extent and implication of the version change. May be expressed in multiple languages.	0..1
basedOnRationaleCode	CodeValueType	RationaleCode is primarily for internal processing flags within an organization or system. Supports the use of an external controlled vocabulary.	0..1

Binding

Definition

A structure used to bind the content of a parameter declared as the source to a parameter declared as the target. For example, binding the output of a question to the input of a generation instruction. Question A has an OutParameter X. Generation Instruction has an InParameter Y used in the recode instruction. Binding defines the content of InParameter Y to be whatever is provided by OutParameter X for use in the calculation of the recode.

Properties

Table Binding. list of properties

Name	Datatype	Description	Cardinality
SourceParameter		A structure used to bind the content of a parameter declared as the source to a	0..1

Name	Datatype	Description	Cardinality
		parameter declared as the target. For example, binding the output of a question to the input of a generation instruction. Question A has an OutParameter X. Generation Instruction has an InParameter Y used in the recode instruction. Binding defines the content of InParameter Y to be whatever is provided by OutParameter X for use in the calculation of the recode.[Referenced object not explicit]	
TargetParameter		A structure used to bind the content of a parameter declared as the source to a parameter declared as the target. For example, binding the output of a question to the input of a generation instruction. Question A has an OutParameter X. Generation Instruction has an InParameter Y used in the recode instruction. Binding defines the content of InParameter Y to be whatever is provided by OutParameter X for use in the calculation of the recode.[Referenced object not explicit]	0..1

CharacterParameter

Definition

Specification of the character offset for the beginning and end of the segment.

Properties

Table CharacterParameter. list of properties

Name	Datatype	Description	Cardinality
startCharOffset	xs:integer	Number of characters from beginning of the	0..1

Name	Datatype	Description	Cardinality
		document, indicating the inclusive start of the text range.	
endCharOffset	xs:integer	Number of characters from the beginning of the document, indicating the inclusive end of the text segment.	0..1

CitationType

Definition

Provides bibliographic citation information for a DDI instance, a group of studies, a study unit, or a physical instance. Note that a native DDI citation is required - the citation information may be repeated using DCElements if desired, but a citation must not consist only of DCElements.

Properties

Table CitationType. list of properties

Name	Datatype	Description	Cardinality
title	InternationalStringType	Full authoritative title. List any additional titles for this item as AlternativeTitle.	0..1
subTitle	InternationalStringType	Secondary or explanatory title.	0..n
alternateTitle	InternationalStringType	An alternative title by which a data collection is commonly referred, or an abbreviation for the title.	0..n
creator	Creator	Person, corporate body, or agency responsible for the substantive and intellectual content of the described object.	0..n
publisher	PublisherType	Person or organization responsible for making the resource available in its present form.	0..n
contributor	ContributorType	The name of a contributing author or creator, who worked in support of the primary creator given above.	0..n
publicationDate	DateType	The date of publication.	0..1
language	CodeValueType	Language of the intellectual content of the described object.	0..n

Name	Datatype	Description	Cardinality
		Strongly recommend the use of language codes supported by xs:language which include the 2 and 3 character and extended structures defined by RFC4646 or its successors.	
internationalIdentifier	InternationalIdentifier	An identifier whose scope of uniqueness is broader than the local archive. Common forms of an international identifier are ISBN, ISSN, DOI or similar designator.	0..n
copyright	InternationalStringType	The copyright statement.	0..n

CommandCode

Definition

Contains information on the command used for processing data. Contains a description of the command which should clarify for the user the purpose and process of the command, an in-line provision of the command itself, a reference to an external version of the command such as a coding script, and the option for attaching an extension to DDI to permit insertion of a command code in a foreign namespace.

Properties

Table CommandCode. list of properties

Name	Datatype	Description	Cardinality
description	StructuredStringType	A description of the purpose and use of the command code provided. Supports multiple languages.	0..1

Relationships

Table CommandCode. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
structuredCommandCode	StructuredCommandCode	This is an extension stub to allow for the insertion of command	Composition	0..1	1..1

Name	Target	Description	Type	Source cardinality	Target cardinality
		code using an external namespace.			
commandFile	CommandFile	Identifies and provides a link to an external copy of the command, for example, a SAS Command Code script.	Composition	0..1	1..1
command	Command	This is an in-line provision of the command itself.	Composition		

Content

Definition

Supports the optional use of XHTML formatting tags within the string structure. XHTML tag content is controlled by the schema, see Part I of the DDI Technical Manual for a detailed list of available tags. Language of the string is defined by the attribute `xml:lang`. The content can be identified as translated (`isTranslated`), subject to translation (`isTranslatable`), the result of translation from one or more languages (`translationSourceLanguages`), and carry an indication whether or not it should be treated as plain text (`isPlain`).

Properties

Table Content. list of properties

Name	Datatype	Description	Cardinality
xhtml:BlkNoForm.mix	xhtml:BlkNoForm.mix	The following xhtml tags are available for use in Content: address, blockquote, pre, h1, h2, h3, h4, h5, h6, hr, div, p, a, abbr, acronym, cite, code, dfn, em, kbd, q, samp, strong, var, b, big, i, small, sub, sup, tt, br, span, dl, dt, dd, ol, ul, li, table, caption, thead, tfoot, tbody, colgroup, col, tr, th, and td. They should be used with the xhtml namespace prefix, i.e., <code>xhtml:div</code> . See DDI Technical Manual Part I for additional details.	0..n

Name	Datatype	Description	Cardinality
xml:lang	xml:lang	Indicates the language of content.	0..1
isTranslated	xs:boolean	Indicates whether content is a translation (true) or an original (false).	0..1
isTranslatable	xs:boolean	Indicates whether content is translatable (true) or not (false).	0..1
translationSourceLanguage		List the language or language codes in a space delimited array. The language original may or may not be provided in this bundle of language specific strings.	0..1
translationDate	xs:date	The date the content was translated. Provision of translation date allows user to verify if translation was available during data collection or other time linked activity.	0..1
isPlainText	xs:boolean	Indicates that the content is to be treated as plain text (no formatting). You may use DDIPprofile to fix the value of this attribute to true in cases where you wish to indicate that your system treats all content should be treated as plain text.	0..1

ContributorType

Definition

Holds the name of the contributor, their role, and optional reference to the contributor as described within a DDI Organization scheme. Repeat this element for multiple creators.

Properties

Table ContributorType. list of properties

Name	Datatype	Description	Cardinality
contributorName	BibliographicNameType	Full name of the contributor. Language equivalents should be expressed within the	0..1

Name	Datatype	Description	Cardinality
		International String structure.	
contributorRole	CodeValueType	The role of the contributor. Language equivalents should be expressed within the International String structure.	0..n

Relationships

Table ContributorType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
contributorAssociation	Agent	Reference to a creator as described within a DDI Organization Scheme.	Neither		

Creator

Definition

Holds the name of the creator and/or a reference to the creator as described within a DDI Organization scheme. Repeat this element for multiple creators.

Properties

Table Creator. list of properties

Name	Datatype	Description	Cardinality
creatorName	BibliographicNameType	Full name of the creator and affiliation. Language equivalents should be expressed within the International String structure.	0..1

Relationships

Table Creator. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
creatorAssociation	Agent	Reference to a creator as described by an Agent (Organization or Individual).	Neither	0..1	0..n

DateType

Definition

Provides the structure of a Date element, which allows a choice between single, simple dates (of BaseDateType) or date ranges. If the Date element contains a range, Cycle may be used to indicate occurrence of this range within a series of ranges as an integer identifying the cycle, i.e. the 4th wave of a data collection cycle would have

Properties

Table DateType. list of properties

Name	Datatype	Description	Cardinality
simpleDate	BaseDateType	A single point in time. If a duration is expressed as a SimpleDate it is defining a period of time without a designated Start or End date.	0..1
historicalDate	HistoricalDateType	A simple date expressed in a historical date format, including a specification of the date format and calendar used.	0..1
startDate	BaseDateType	Start of a date range. If there is a start date with no end date provided, this implies that the end date is unknown but that the date being recorded is not just a simple date but a range of unknown duration.	0..1
historicalStartDate	HistoricalDateType	A start date expressed in a historical date format, including a specification of the date format and calendar used.	0..1
endDate	BaseDateType	End of a date range which may or may not have a known start date.	0..1
historicalEndDate	HistoricalDateType	An end date expressed in a historical date format, including a specification of the date format and calendar used.	0..1
cycle	xs:integer	Use to indicate occurrence of this range within a series of	0..1

Name	Datatype	Description	Cardinality
		ranges as an integer identifying the cycle, i.e. the 4th wave of a data collection cycle would have	

DynamicTextType

Definition

Structure supporting the use of dynamic text, where portions of the textual content change depending on external information (pre-loaded data, response to an earlier query, environmental situations, etc.).

Properties

Table DynamicTextType. list of properties

Name	Datatype	Description	Cardinality
textContent	TextContent	This is the head of a substitution group and is never used directly as an element name. Instead it is replaced with either LiteralText or ConditionalText.	0..n
isStructureRequired	xs:boolean	If textual structure (e.g. size, color, font, etc.) is required to understand the meaning of the content change value to "true".	0..1
audienceLanguage	xs:language	Specifies the language of the intended audience. This is particularly important for clarifying the primary language of a mixed language textual string, for example when language testing and using a foreign word within the question text.	0..1

FormType

Definition

A link to a form used by the metadata containing the form number, a statement regarding the contents of the form, a statement as to the mandatory nature of the form and a privacy level designation.

Properties

Table FormType. list of properties

Name	Datatype	Description	Cardinality
formNumber	xs:string	The number or other means of identifying the form.	0..1
uri	xs:anyURI	The URN or URL of the form.	0..1
statement	InternationalStringType	A statement regarding the use, coverage, and purpose of the form.	0..1
isRequired	xs:boolean	Set to "true" if the form is required. Set to "false" if the form is optional.	0..1

HistoricalDateType

Definition

Used to preserve an historical date, formatted in a non-ISO fashion.

Properties

Table HistoricalDateType. list of properties

Name	Datatype	Description	Cardinality
nonISODate	xs:string	This is the date expressed in a non-ISO compliant structure. Primarily used to retain legacy content or to express non-Gregorian calendar dates.	0..1
historicalDateFormat	CodeValueType	Indicate the structure of the date provided in NonISODate. For example if the NonISODate contained 4/1/2000 the Historical Date Format would be mm/dd/yyyy. The use of a controlled vocabulary is strongly recommended to support interoperability.	0..1
calendar	CodeValueType	Specifies the type of calendar used (e.g., Gregorian, Julian, Jewish).	0..1

ImageAreaType

Definition

Defines the shape and area of an image used as part of a location representation. The shape is defined as a Rectangle, Circle, or Polygon and Coordinates provides the information required to define it.

Properties

Table ImageAreaType. list of properties

Name	Datatype	Description	Cardinality
coordinates	xs:string	A comma-delimited list of x,y coordinates, listed as a set of adjacent points for rectangles and polygons, and as a center-point and a radius for circles (x,y,r).	0..1

Relationships

Table ImageAreaType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Shape	ShapeCodedType	A fixed set of valid responses includes Rectangle, Circle, and Polygon.		1..1	

ImageType

Definition

A reference to an image, with a description of its properties and type.

Properties

Table ImageType. list of properties

Name	Datatype	Description	Cardinality
imageLocation	xs:anyURI	A reference to the location of the image using a URI.	0..1
typeOfImage	CodeValueType	Brief description of the image type. Supports the use of an external controlled vocabulary.	0..1

Name	Datatype	Description	Cardinality
dpi	xs:integer	Provides the resolution of the image in dots per inch to assist in selecting the appropriate image for various uses.	0..1
languageOfImage	xs:language	Language of image.	0..1

InternationalIdentifier

Definition

An identifier whose scope of uniqueness is broader than the local archive. Common forms of an international identifier are ISBN, ISSN, DOI or similar designator. Provides both the value of the identifier and the agency who manages it.

Properties

Table InternationalIdentifier. list of properties

Name	Datatype	Description	Cardinality
identifierContent	xs:string	An identifier as it should be listed for identification purposes.	0..1
managingAgency	CodeValueType	The identification of the Agency which assigns and manages the identifier, i.e., ISBN, ISSN, DOI, etc.	0..1

InternationalStringType

Definition

Packaging structure for multiple language versions of the same string content. Where an element of this type is repeatable, the expectation is that each repetition contains different content, each of which can be expressed in multiple languages. The language designation goes on the individual String.

Properties

Table InternationalStringType. list of properties

Name	Datatype	Description	Cardinality
string	String	A non-formatted string of text with an attribute that designates the language of the text. Repeat this object to express the same content in another language.	0..n

LanguageList

Definition

Allows for a list of language codes (those valid for xmlang) expressed as a space delimited array.

LatitudeType

Definition

Latitude values expressed as a decimal between the values of -90 and 90 degrees.

LineParameter

Definition

Specification of the line and offset for the beginning and end of the segment.

Properties

Table LineParameter. list of properties

Name	Datatype	Description	Cardinality
startLine	xs:integer	Number of lines from beginning of the document.	0..1
startOffset	xs:integer	Number of characters from start of the line specified in StartLine.	0..1
endLine	xs:integer	Number of lines from beginning of the document.	0..1
endOffset	xs:integer	Number of characters from the start of the line specified in EndLine.	0..1

LongitudeType

Definition

Longitude values expressed as a decimal between the values of -180 and 180 degrees.

Note

Definition

A note related to one or more identifiable objects. Note is designed to be an inherent part of the DDI. (Unlike XML comments or other types of system-level annotations, which may be removed during

processing.) DDI recommends placing the note within the maintainable object containing the objects this note relates to in order to assist tracking of note items within a study. Each note may indicate who is responsible for the note, its type using a controlled vocabulary, the subject of the note, a head and note content, a set of key/value pairs and language specification for the overall note. In addition each note must be related to one or more identifiable objects.

Properties

Table Note. list of properties

Name	Datatype	Description	Cardinality
typeOfNote	CodeValueType	Specifies the type of note. Supports the use of a controlled vocabulary.	0..1
noteSubject	CodeValueType	The subject of the note.	0..1
relationship	Relationship	Reference to one or more identifiable objects which the note is related to.	0..n
responsibility	xs:string	The person or agency responsible for adding the note.	0..1
header	InternationalStringType	A brief label or heading for the note contents.	0..1
noteContent	StructuredStringType	The content of the note. Note should contain content except when it is a production flag that is fully explained by its "type". If the note provides system specific information in a structured way using XHTML formatting, DDI strongly recommends the use of local extensions or the Key/Value pair structure in ProprietaryInfo whenever possible.	0..1
proprietaryInfo		A set of actions related to the object as described by a set of name-value pairs. This would commonly be used in a case where additional information needs to be recorded regarding the content of a new element or attribute that has not yet been added to the schema, for example when a bug for a	0..1

Name	Datatype	Description	Cardinality
		missing object has been filed and the user wishes to record the content prior to correction in the schema. Ideally this should be handled by local extensions of the schema as described in Part 2 of the formal documentation. However, the structure in Note allows for an unanticipated need for an extension at run time by providing a means of capturing system specific information in a structured way.	
xml:lang	xml:lang	Indicates the language of content. Note that xml:lang allows for a simple 2 or 3 character language code or a language code extended by a country code , for example en-au for English as used in Australia.	0..1

PointType

Definition

A geographic point consisting of an X and Y coordinate. Each coordinate value is expressed separately providing its value and format.

Properties

Table PointType. list of properties

Name	Datatype	Description	Cardinality
xCoordinate	SpatialCoordinateType	An X coordinate (latitudinal equivalent) value and format expressed using the Spatial Coordinate structure.	0..1
yCoordinate	SpatialCoordinateType	A Y coordinate (longitudinal equivalent) value and format expressed using the Spatial Coordinate structure.	0..1

PolygonType

Definition

A closed plane figure bounded by three or more line segments, representing a geographic area. Contains either the URI of the file containing the polygon, a specific link code for the shape within the file, and a file format, or a minimum of 4 points to describe the polygon in-line. Note that the first and last point must be identical in order to close the polygon. A triangle has 4 points. A geographic time designating the time period that the shape is valid should be included. If the date range is unknown use a SingleDate indicating a date that the shape was known to be valid.

Properties

Table PolygonType. list of properties

Name	Datatype	Description	Cardinality
externalURI	xs:anyURI	Note that ExternalURI points to the boundary file location.	0..1
polygonLinkCode	xs:string	The PolygonLinkCode is the identifier of the specific polygon within the file. For example in an NHGIS file the LinkCodeForPolygon for Tract 101.01 in Hennepin County in Minnesota is 2700530010101.	0..1
shapeFileFormat	CodeValueType	The format of the shape file existing at the location indicated by the sibling ExternalURI element.	0..1
point	PointType	A geographic point defined by a latitude and longitude. A minimum of 4 points is required as the first and last point should be identical in order to close the polygon. Note that a triangle has three sides and requires 3 unique points plus a fourth point replicating the first point in order to close the polygon.	0..n

PrivacyCodeType

Definition

A basic set of privacy codes for the parent element. These may be stricter than the general access restrictions for the overall metadata. If available codes are insufficient this may also contain any string.

ProprietaryInfoType

Definition

Contains information proprietary to the software package which produced the data file. This is expressed as a set of key(name)-value pairs.

Properties

Table ProprietaryInfoType. list of properties

Name	Datatype	Description	Cardinality
proprietaryProperty	StandardKeyValuePairType	A structure that supports the use of a standard key value pair. Note that this information is often not interoperable and is provided to support the use of the metadata within specific systems.	0..n

PublisherType

Definition

Holds the name of the publisher with their role and/or a reference to the publisher as described within a DDI Organization scheme. Repeat this element for multiple publishers.

Properties

Table PublisherType. list of properties

Name	Datatype	Description	Cardinality
publisherName	BibliographicNameType	Full name of the publisher. Language equivalents should be expressed within the International String structure.	0..1
publisherRole	CodeValueType	The role of the publisher as publisher, distributor, etc.	0..n

Relationships

Table PublisherType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
publisherAssociation	Agent	Reference to a publisher as described as a form of agent (Organization, Individual, etc.).	Neither	0..1	0..n

Range

Definition

Indicates the range of items expressed as a string, such as an alphabetic range.

Properties

Table Range. list of properties

Name	Datatype	Description	Cardinality
rangeUnit	xs:string	Specifies the units in the range.	0..1
minimumValue	RangeValueType	Minimum value in the range.	0..1
maximumValue	RangeValueType	Maximum value in the range.	0..1

Relationship

Definition

Relationship specification between this item and the item to which it is related. Provides a reference to any identifiable object and a description of the relationship.

Properties

Table Relationship. list of properties

Name	Datatype	Description	Cardinality
relationshipDescription	StructuredStringType	A description of the nature of the relationship between the parent element of the relationship item and the DDI object to which it is related.	0..1

Relationships

Table Relationship. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
relatedToAssociation	NOT DEFINED	Reference to the item within the DDI Instance to which this item is related.	Neither	0..n	0..n

SegmentType

Definition

A structure used to express explicit segments or regions within different types of external materials (Textual, Audio, Video, XML, and Image). Provides the appropriate start, stop, or region definitions for each type.

Properties

Table SegmentType. list of properties

Name	Datatype	Description	Cardinality
audio	Audio	Describes the type and length of the audio segment.	0..n
video	Video	Describes the type and length of the video segment.	0..n
xml	xs:string	An X-Pointer expression identifying a node in the XML document.	0..n

Relationships

Table SegmentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Textual	Textual	Defines the segment of textual content used by the parent object. Can identify a set of lines and or characters used to define the segment.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
ImageArea	ImageAreaType	Defines the shape and area of an image used as part of a location representation. The shape is defined as a Rectangle, Circle, or Polygon and Coordinates provides the information required to define it.		0..n	

SoftwareType

Definition

Describes a specific software package, which may be commercially available or custom-made.

Properties

Table SoftwareType. list of properties

Name	Datatype	Description	Cardinality
softwareName	Name	The name of the software package, including its producer.	0..n
softwarePackage	CodeValueType	A coded value from a controlled vocabulary, describing the software package.	0..1
softwareVersion	xs:string	The version of the software package. Defaults to '1.0'.	0..1
description	StructuredStringType	A description of the content and purpose of the software. May be expressed in multiple languages and supports the use of structured content.	0..1
date		Supported date of the software package with, at minimum, a release date if known.	0..1
function	CodeValueType	Identifies the functions handled by this	0..n

Name	Datatype	Description	Cardinality
		software. Repeat for multiple functions. It may be advisable to note only those functions used in the specific usage of the software.	
xml:lang	xml:lang	Language (human language) of the software package.	0..1

SpatialCoordinateType

Definition

Lists the value and format type for the coordinate value. Note that this is a single value (X coordinate or Y coordinate) rather than a coordinate pair.

Properties

Table SpatialCoordinateType. list of properties

Name	Datatype	Description	Cardinality
coordinateValue	xs:string	The value of the coordinate expressed as a string.	0..1
coordinateType	PointFormat	Identifies the type of point coordinate system using a controlled vocabulary. Point formats include decimal degree, degrees minutes seconds, decimal minutes, meters, and feet.	1..1

StandardKeyValuePairType

Definition

A basic data representation for computing systems and applications expressed as a tuple (attribute key, value). Attribute keys may or may not be unique.

Properties

Table StandardKeyValuePairType. list of properties

Name	Datatype	Description	Cardinality
attributeKey	CodeValueType	This key (sometimes referred to as a name) expressed as a string.	0..1

Name	Datatype	Description	Cardinality
		Supports the use of an external controlled vocabulary which is the recommended approach.	
attributeValue	CodeValueType	The value assigned to the named Key expressed as a string. Supports the use of an external controlled vocabulary.	0..1

StructuredStringType

Definition

Packaging structure for multiple language versions of the same string content. for objects that allow for internal formatting using XHTML tags. Where an element of this type is repeatable, the expectation is that each repetition contains different content, each of which can be expressed in multiple languages.

Properties

Table StructuredStringType. list of properties

Name	Datatype	Description	Cardinality
content	Content	Supports the optional use of XHTML formatting tags within the string structure. In addition to the language designation and information regarding translation, the attribute isPlain can be set to true to indicate that the content should be treated as plain unstructured text, including any XHTML formatting tags. Repeat the content element to provide multiple language versions of the same content.	0..n

TextContent

Definition

Abstract type existing as the head of a substitution group. May be replaced by any valid member of the substitution group TextContent. Provides the common element Description to all members using TextContent as an extension base.

Properties

Table TextContent. list of properties

Name	Datatype	Description	Cardinality
description	StructuredStringType	A description of the content and purpose of the text segment. May be expressed in multiple languages and supports the use of structured content.	0..1

Textual

Definition

Defines the segment of textual content used by the parent object. Can identify a set of lines and or characters used to define the segment.

Properties

Table Textual. list of properties

Name	Datatype	Description	Cardinality
lineParameter	LineParameter	Specification of the line and offset for the beginning and end of the segment.	1..1
characterParameter	CharacterParameter	Specification of the character offset for the beginning and end of the segment.	1..1

Video

Definition

Describes the type and length of the video segment.

Properties

Table Video. list of properties

Name	Datatype	Description	Cardinality
typeOfVideoClip	CodeValueType	The type of video clip provided. Supports the use of a controlled vocabulary.	0..1
videoClipBegin	xs:string	The point to begin the video clip. If no point is provided the assumption is that the start point is the	0..1

Name	Datatype	Description	Cardinality
		beginning of the clip provided.	
videoClipEnd	xs:string	The point to end the video clip. If no point is provided the assumption is that the end point is the end of the clip provided.	0..1

XMLPrefixMap

Definition

Maps a specified prefix to a namespace. For each XML namespace used in the profile's XPath expressions, the XML namespaces must have their prefix specified using this element.

Properties

Table XMLPrefixMap. list of properties

Name	Datatype	Description	Cardinality
xmlPrefix	xs:string	Specify the exact prefix used.	0..1
xmlNamespace	xs:string	Specify the namespace which the prefix represents.	0..1

BibliographicNameType

Extends

This object extends InternationalStringType

Definition

Personal names should be listed surname or family name first, followed by forename or given name. When in doubt, give the name as it appears, and do not invert. In the case of organizations where there is clearly a hierarchy present, list the parts of the hierarchy from largest to smallest, separated by full stops and a space. If it is not clear whether there is a hierarchy present, or unclear which is the larger or smaller portion of the body, give the name as it appears in the item. The name may be provided in one or more languages.

Properties

Table BibliographicNameType. list of properties

Name	Datatype	Description	Cardinality
affiliation	xs:string	The affiliation of this person to an organization. This is generally an organization or sub-organization name and	0..1

Name	Datatype	Description	Cardinality
		should be related to the specific role within which the individual is being listed.	

CodeValueType

Definition

Allows for string content which may be taken from an externally maintained controlled vocabulary (code value). If the content is from a controlled vocabulary provide the code value, as well as a reference to the code list from which the value is taken. Provide as many of the identifying attributes as needed to adequately identify the controlled vocabulary. Note that DDI has published a number of controlled vocabularies applicable to several locations using the CodeValue structure. Use of shared controlled vocabularies helps support interoperability and machine actionability.

Properties

Table CodeValueType. list of properties

Name	Datatype	Description	Cardinality
codeListID	xs:string	The ID of the code list (controlled vocabulary) that the content was taken from.	0..1
codeListName	xs:string	The name of the code list.	0..1
codeListAgencyName	xs:string	The name of the agency maintaining the code list.	0..1
codeListVersionID	xs:string	The version number of the code list (default is 1.0).	0..1
otherValue	xs:string	If the value of the string is "Other" or the equivalent from the codelist, this attribute can provide a more specific value not found in the codelist.	0..1
codeListURN	xs:string	The URN of the codelist.	0..1
codeListSchemeURN	xs:string	If maintained within a scheme, the URN of the scheme containing the codelist.	0..1

ContentDateOffset

Extends

This object extends CodeValueType

Definition

Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago. A value of true for the attribute isNegativeOffset indicates that the offset is the specified number of declared units prior to the date of the data as a whole and false indicates information regarding a future state.

Properties

Table ContentDateOffset. list of properties

Name	Datatype	Description	Cardinality
numberOfUnits	xs:decimal	The number of units to off-set the date for this item expressed as a decimal.	0..1
isNegativeOffset	xs:boolean	If set to "true" the date is offset the number of units specified PRIOR to the default date of the data. A setting of "false" indicates a date the specified number of units in the FUTURE from the default date of the data.	0..1

CountryCodeType

Definition

Serves as head of a substitution group for specifying ISO 3166 Country Codes or use of unspecified text.

Properties

Table CountryCodeType. list of properties

Name	Datatype	Description	Cardinality
effectiveDate	xs:dateTime	If it is important to specify the date that this code is effective in order to accurately capture a name or similar change, specify that here.	0..1

Country

Extends

This object extends CountryCodeType

Definition

An unspecified identification of a Country. When using ISO 3166 code (2-letter, 3-letter, or numeric) use the specific CountryCode substitution element. Allows for an optional specification of language and effective date.

Properties

Table Country. list of properties

Name	Datatype	Description	Cardinality
xml:lang	xml:lang	Indicates the language of content. Note that xml:lang allows for a simple 2 or 3 character language code or a language code extended by a country code , for example en-au for English as used in Australia.	0..1

Label

Extends

This object extends StructuredStringType

Definition

Properties

Table Label. list of properties

Name	Datatype	Description	Cardinality
locationVariant	xs:string	Indicate the locality specification for content that is specific to a geographic area. May be a country code, sub-country code, or area name.	0..1
validForStartDate		Allows for the specification of a starting date for the period that this label is valid. The date must be formatted according to ISO 8601.	0..1
validForEndDate		Allows for the specification of a ending	0..1

Name	Datatype	Description	Cardinality
		date for the period that this label is valid. The date must be formatted according to ISO 8601.	
maxLength	xs:integer	A positive integer indicating the maximum number of characters in the label.	0..1

LiteralText

Extends

This object extends TextContent

Definition

Literal (static) text to be used in the instrument using the StructutedString structure plus an attribute allowing for the specification of white space to be preserved.

Properties

Table LiteralText. list of properties

Name	Datatype	Description	Cardinality
Text	Text	The value of the static text string. Supports the optional use of XHTML formatting tags within the string structure. If the content of a literal text contains more than one language, i.e. "What is your understanding of the German word 'Gesundheit'?", the foreign language element should be placed in a separate LiteralText component with the appropriate xmlang value and, in this case, isTranslatable set to "false". If the existence of white space is critical to the understanding of the content (such as inclusion of a leading or trailing white space), set the attribute of Text xmspace to "preserve".	0..1

Name

Extends

This object extends InternationalStringType

Definition

A reusable type assigned to an element with the naming convention XxxName e.g. OrganizationName at selected locations where the element may be assumed to be administered by a registry or is otherwise shared. This is a human understandable name (word, phrase, or mnemonic) that reflects the ISO/IEC 11179-5 naming principles. An item administered by a registry should have at least one name. Names within an administered registry should follow the naming conventions of the registry. If more than one name is provided the context of each name should be noted and one name selected as the preferred name. See ISO/IEC 11179-5 Information Technology - Metadata Registries (MDR) Part 5: naming and identification principles. ISO/IEC1179-5:2005(E).

Properties

Table Name. list of properties

Name	Datatype	Description	Cardinality
isPreferred	xs:boolean	If more than one name for the object is provided, use the isPreferred attribute to indicate which is the preferred name content. All other names should be set to isPreferred="false".	0..1
context	xs:string	A name may be specific to a particular context, i.e., a type of software, or a section of a registry. Identify the context related to the specified name.	0..1

OneCharStringType

Definition

A string constrained to a single character in length.

PrivateImageType

Extends

This object extends ImageType

Definition

References an image using the standard Image description. In addition to the standard attributes provides an effective date (period), the type of image, and a privacy ranking.

Properties

Table PrivateImageType. list of properties

Name	Datatype	Description	Cardinality
effectivePeriod	DateType	The period for which this image is effective/valid.	0..1
privacy	PrivacyCodeType	Specify the level privacy for the image as public, restricted, or private.	0..1

RepresentationReference

Extends

This object extends ReferenceType

Definition

References the managed representation of the variables' values. Allows for the listing of values to be treated as missing in order to support 3.1 structures. The preferred method is the use of a reference to MissingValues description using MissingValuesReference. If both are used and there is a conflict in the content, MissingValuesReference will override the content provided in the ValueRepresentationReference. TypeOfObject should be set to ManagedDateTimeRepresentation, ManagedNumericRepresentation, ManagedScaleRepresentation, or ManagedTextRepresentation.

Properties

Table RepresentationReference. list of properties

Name	Datatype	Description	Cardinality
missingValue	xs:NMTOKENS	List the values used to represent missing data in a space delimited array. Use of MissingValuesReference is preferred. If this content does not match the values provided in the MissingValuesReference, the content of the MissingValuesReference overrides the content of this attribute.	0..1

Name	Datatype	Description	Cardinality
blankIsMissingValue	xs:boolean	When value is true a blank or empty variable content should be treated as a missing value. Use of MissingValuesReference is preferred.	0..1

StatisticType

Definition

The value of the statistics and whether it is weighted and/or includes missing values.

Properties

Table StatisticType. list of properties

Name	Datatype	Description	Cardinality
isWeighted	xs:boolean	Set to "true" if the statistic is weighted using the weight designated in VariableStatistics.	0..1
computationBase		Defines the cases included in determining the statistic. The options are total=all cases, valid and missing (invalid); validOnly=Only valid values, missing (invalid) are not included in the calculation; missingOnly=Only missing (invalid) cases included in the calculation.	0..1

String

Definition

Allows for non-formatted strings that may be translations from other languages, or that may be translatable into other languages. Only one string per language/location type is allowed. String contains the following attributes, xmlang to designate the language, isTranslated with a default value of false to designate if an object is a translation of another language, isTranslatable with a default value of true to designate if the content can be translated, translationSourceLanguage to indicate the source languages used in creating this translation, and translationDate.

Properties

Table String. list of properties

Name	Datatype	Description	Cardinality
xml:lang	xml:lang	Indicates the language of content. Note that xml:lang allows for a simple 2 or 3 character language code or a language code extended by a country code , for example en-au for English as used in Australia.	0..1
isTranslated	xs:boolean	Indicates whether content is a translation (true) or an original (false).	0..1
isTranslatable	xs:boolean	Indicates whether content is translatable (true) or not (false). An example of something that is not translatable would be a MNEMONIC of an object or a number.	0..1
translationSourceLanguage	languageList	List the language or language codes in a space delimited array. The language original may or may not be provided in this bundle of language specific strings.	0..1
translationDate	xs:date	The date the content was translated. Provision of translation date allows user to verify if translation was available during data collection or other time linked activity.	0..1

Text

Extends

This object extends Content

Definition

The static portion of the text expressed as a StructuredString with the ability to preserve whitespace if critical to the understanding of the content.

Properties

Table Text. list of properties

Name	Datatype	Description	Cardinality
xml:space	xml:space	The default setting states that leading and trailing white space will be removed and multiple adjacent white spaces will be treated as a single white space. If the existence of any of these white spaces is critical to the understanding of the content, change the value of this attribute to "preserve".	0..1

URIType

Definition

A URN or URL for a file with a flag to indicate if it is a public copy.

Properties

Table URIType. list of properties

Name	Datatype	Description	Cardinality
isPublic	xs:boolean	Set to "true" (default value) if this file is publicly available. This does not imply that there are not restrictions to access. Set to "false" if this is not publicly available, such as a backup copy, an internal processing data file, etc.	0..1

URL

Definition

A web site URL

Properties

Table URL. list of properties

Name	Datatype	Description	Cardinality
privacy	PrivacyCodeType	Specify the level privacy for the web site URL as public, restricted, or private.	0..1
isPreferred	xs:boolean	Set to "true" if this is the preferred URL.	0..1

UserID

Definition

A user provided identifier that is locally unique within its specific type. The required type attribute points to the local user identification system that defines the values. The optional userIDVersion allows specification of a version number for the identifier. If multiple UserIDs are used they must be differentiated by the type attribute.

Properties

Table UserID. list of properties

Name	Datatype	Description	Cardinality
typeOfUserID	xs:string	This is a required attribute containing the local user identification system that maintains and defines the UserID.	0..1
userIDVersion	xs:string	The UserID may designate the version number of the UserID. This is important in cases where the DDI identification system and the UserID system use different structures to record version numbers or if there is a difference between the DDI version number and the UserID's version number.	0..1
typeOfUserVersion	xs:string	This is the name of the versioning scheme as defined by the user's system, in cases where the user's system employs more than one versioning scheme. It is specific to the	0..1

Name	Datatype	Description	Cardinality
		system identified by the typeOfUserID attribute	

Value

Definition

The Value expressed as an xs:string with the ability to preserve whitespace if critical to the understanding of the content.

Properties

Table Value. list of properties

Name	Datatype	Description	Cardinality
xml:space	xml:space	The default setting states that leading and trailing white space will be removed and multiple adjacent white spaces will be treated as a single white space. If the existence of any of these white spaces is critical to the understanding of the content, change the value of this attribute to "preserve".	0..1

RangeValueType

Extends

This object extends Value

Definition

Describes a bounding value of a string.

Properties

Table RangeValueType. list of properties

Name	Datatype	Description	Cardinality
included	xs:boolean	Set to "true" if the value is included in the range.	0..1

Chapter 10. Primitives

IdentifiableObject

Definition

Any object which has an identifier

Chapter 11. Agents

Agent

Definition

An actor that performs a role in relation to a process.

Properties

Table Agent. list of properties

Name	Datatype	Description	Cardinality
Name	Name	Name of the agent	0..n
Description	StructuredStringType	Text describing the agent	0..1

Machine

Extends

This object extends Agent

Definition

Mechanism used to implement a process.

Properties

Table Machine. list of properties

Name	Datatype	Description	Cardinality
type	InternationalStringType	The kind of machine used--software, web service, physical machine	0..1
location	InternationalStringType	Virtual or physical place	0..n

Organization

Extends

This object extends Agent

Definition

A framework of authority designated to act toward some purpose.

Properties

Table Organization. list of properties

Name	Datatype	Description	Cardinality
imageURL	URL	The URL of an image of the organization.	0..n
organizationName	Name	The name of the organization	0..n
DDIID	xs:string	The agency identifier of the organization as registered at the DDI Alliance register.	0..n

Relationships

Table Organization. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasContactInformation	ContactInformation	Information about how to communicate with an organization or individual.	Composition	0..1	0..n

Address

Definition

Location address identifying each part of the address as separate elements, identifying the type of address, the level of privacy associated with the release of the address, and a flag to identify the preferred address for contact.

Properties

Table Address. list of properties

Name	Datatype	Description	Cardinality
typeOfAddress	CodeValueType	Indicates address type (i.e. home, office, mailing, etc.)	0..1
line	xs:string	Number and street including office or suite number. May use multiple lines.	0..n
cityPlaceLocal	xs:string	City, Place, or local area used as part of an address.	0..1
stateProvince	xs:string	A major subnational division such as a state	0..1

Name	Datatype	Description	Cardinality
		or province used to identify a major region within an address.	
postalCode	xs:string	Postal or ZIP Code	0..1
countryCode	CountryCodeType	Country of the location	0..1
timeZone	CodeValueType	Time zone of the location expressed as code.	0..1
effectivePeriod	xs:date	Clarifies when the identification information is accurate.	0..1
privacy	PrivacyCodeType	Specify the level privacy for the address as public, restricted, or private.	0..1
isPreferred	xs:boolean	Set to "true" if this is the preferred location for contacting the organization or individual.	0..1

Relationships

Table Address. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasGeographicCoordinates	CoordinatesType	Coordinates	Composition	1..1	0..1

ContactInformation

Definition

Contact information for the individual or organization including location specification, address, URL, phone numbers, and other means of communication access. Address, location, telephone, and other means of communication can be repeated to express multiple means of a single type or change over time. Each major piece of contact information (with exception of URL contains the element EffectiveDates in order to date stamp the period for which the information is valid.

Properties

Table ContactInformation. list of properties

Name	Datatype	Description	Cardinality
regionalCoverage	CodeValueType	The geographic region for which this location operates. For example, the Kansas City office of the United States Bureau of the Census has responsibility for	0..1

Name	Datatype	Description	Cardinality
		a region covering a number of states.	
typeOfLocation	CodeValueType	Type of location e.g. home, primary office, alternate office etc.	0..1
privacy	PrivacyCodeType	Specify the level of privacy for the contact information as public, restricted, or private.	0..1
url	URL	The URL of a website or other internet presence of the organization or individual.	0..n
email	Email	The e-mail address of an organization or individual.	0..n

Relationships

Table ContactInformation. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasLocationName	LocationNameType	May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	Composition	0..1	0..n
hasAddress	Address	The contact address for the organization or individual.	Composition	0..1	0..n
hasTelephone	Telephone	Information about a telephone (number, type).	Composition	0..1	0..n
hasInstantMessaging	InstantMessaging	Information about instant messaging an organization or individual.	Composition	0..1	0..n
hasEmail	Email	The e-mail address of an organization or individual.	Composition	0..1	0..n

Email

Definition

Email address type (Currently restricted to Internet format user@server.ext.).

Properties

Table Email. list of properties

Name	Datatype	Description	Cardinality
internetEmail	InternetEmail	The email address express as a string (restricted to the Internet format).	0..1
EmailTypeCode	CodeValueType	Code indicating the type of e-mail address. Supports the use of an external controlled vocabulary.	0..1
EffectivePeriod		Clarifies when the identification information is accurate.	0..1

IndividualNameType

Definition

The name of an individual broken out into its component parts of prefix, first/given name, middle name, last/family/surname, and suffix. The preferred compilation of the name parts may also be provided. The legal or formal name of the individual should have the isFormal attribute set to true. The preferred name should be noted with the isPreferred attribute. The attribute sex provides information to assist in the appropriate use of pronouns.

Properties

Table IndividualNameType. list of properties

Name	Datatype	Description	Cardinality
Prefix	xs:string	Title that precedes the name of the individual, such as Ms., or Dr.	0..1
FirstGiven	xs:string	First (given) name of the individual	0..1
Middle	xs:string	Middle name or initial of the individual	0..n
LastFamily	xs:string	Last (family) name / surname of the individual	0..1
Suffix	xs:string	Title that follows the name of the individual, such as Esq.	0..1

Name	Datatype	Description	Cardinality
FullName	InternationalStringType	This provides a means of providing a full name as a single object for display or print such as identification badges etc. For example a person with the name of William Grace for official use may prefer a display name of Bill Grace on a name tag or other informal publication.	0..1
EffectivePeriod		Clarifies when the name information is accurate.	0..1
Abbreviation	InternationalStringType	An abbreviation or acronym for the name. This may be expressed in multiple languages. It is assumed that if only a single language is provided that it may be used in any of the other languages within which the name itself is expressed.	0..1
TypeOfIndividualName	CodeValueType	The type of individual name provided. the use of a controlled vocabulary is strongly recommended. At minimum his should include, e.g. PreviousFormalName, Nickname (or CommonName), Other.	0..1
sex		Sex allows for the specification of male, female or neutral. The purpose of providing this information is to assist others in the appropriate use of pronouns when addressing the individual. Note that many countries/ languages may offer a neutral pronoun form.	0..1
isPreferred	xs:boolean	If more than one name for the object is provided, use the isPreferred attribute to indicate which is	0..1

Name	Datatype	Description	Cardinality
		the preferred name content. All other names should be set to isPreferred="false".	
context	xs:string	A name may be specific to a particular context, i.e. common usage, business, social, etc.. Identify the context related to the specified name.	0..1
isFormal	xs:boolean	The legal or formal name of the individual should have the isFormal attribute set to true. To avoid confusion only one individual name should have the isFormal attribute set to true. Use the TypeOfIndividualName to further differentiate the type and applied usage when multiple names are provided.	0..1

InstantMessaging

Definition

Indicates type of Instant messaging account identification

Properties

Table InstantMessaging. list of properties

Name	Datatype	Description	Cardinality
IMIdentification	xs:string	Indicates Instant messaging account identification	0..1
typeOfInstantMessaging	CodeValueType	Indicates type of Instant messaging account used. Supports the use of a controlled vocabulary.	0..1
effectivePeriod	DateType	Clarifies when the identification information is accurate.	0..1
privacy	PrivacyCodeType	Specify the level privacy for the instant messaging address as public, restricted, or private.	0..1

Name	Datatype	Description	Cardinality
isPreferred	xs:boolean	Set to "true" if this is the preferred address for instant messaging.	0..1

InternetEmail

Definition

Pattern for Internet email address.

SexSpecificationType

Definition

Sex specification is limited to the purpose of determining the proper pronoun to use in addressing the individual. This may be based on conventional usage or personal preference.

Telephone

Definition

Details of a telephone number including the number, type of number, a privacy setting and an indication of whether this is the preferred contact number.

Properties

Table Telephone. list of properties

Name	Datatype	Description	Cardinality
telephoneNumber	xs:string	The telephone number including country code if appropriate.	0..1
typeOfTelephone	CodeValueType	Indicates type of telephone number provided (home, fax, office, cell, etc.). Supports the use of a controlled vocabulary.	0..1
effectivePeriod	DateType	Clarifies when the identification information is accurate.	0..1
privacy	PrivacyCodeType	Specify the level of privacy for the telephone number as public, restricted, or private.	0..1
isPreferred	xs:boolean	Set to "true" if this is the preferred telephone number for contact.	0..1

AdditionalInformationType

Extends

This object extends StructutedStringType

Definition

Additional Information provided using a StructutedString plus a privacy code to support multiple language versions of the same content as well as optional formatting of the content.

Properties

Table AdditionalInformationType. list of properties

Name	Datatype	Description	Cardinality
effectivePeriod	DateType	Clarifies when the identification information is accurate.	0..1
privacy	PrivacyCodeType	Specify the level privacy for the address as public, restricted, or private.	0..1

OrganizationName

Extends

This object extends Name

Definition

Names by which the organization is known. Use the attribute isFormal="true" to designate the legal or formal name of the Organization. The preferred name should be noted with the isPreferred attribute. Names may be typed with TypeOfOrganizationName to indicate their appropriate usage.

Properties

Table OrganizationName. list of properties

Name	Datatype	Description	Cardinality
abbreviation	InternationalStringType	An abbreviation or acronym for the name. This may be expressed in multiple languages. It is assumed that if only a single language is provided that it may be used in any of the other languages within which the name itself is expressed.	0..1

Name	Datatype	Description	Cardinality
typeOfOrganizationName	CodeValueType	The type of organization name provided. the use of a controlled vocabulary is strongly recommended. At minimum this should include, e.g. PreviousFormalName, Nickname (or CommonName), Other.	0..1
effectivePeriod	DateType	The time period for which this name is accurate and in use.	0..1
isFormal	xs:boolean	The legal or formal name of the organization should have the isFormal attribute set to true. To avoid confusion only one organization name should have the isFormal attribute set to true. Use the TypeOfOrganizationName to further differentiate the type and applied usage when multiple names are provided.	0..1

Relation

Definition

Describes the relationship between any two organizations or individual, or an individual and an organization. This is a pairwise relationship and relationships may be unidirectional. Identifies the Source organization or individual and the Target organization or individual, describes the relationship, provides a keyword to classify the relationship, provides and effective period for the relationship, allows for addition information to be provided, and can contain a privacy specification.

Properties

Table Relation. list of properties

Name	Datatype	Description	Cardinality
description	StructuredStringType	A description of the relationship. May be expressed in multiple languages and supports the use of structured content.	0..1
effectivePeriod	DateType	Time period during which this relationship is valid.	0..n

Name	Datatype	Description	Cardinality
privacy	PrivacyCodeType	Specify the level of privacy for the relationship specification as public, restricted, or private.	0..1
additionalInformation	AdditionalInformationType	Any additional information you wish to note about the relation. This is a structured string so it can be formatted and a privacy tag can be applied.	0..n

Relationships

Table Relation. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SourceObject	Agent	Identifies the Source organization or individual in the relationship. Source to Target provides a directional perception when defining the relationship.	Aggregation	1..1	
TargetObject	Agent	Identifies the Target organization or individual in the relationship. The Target object describes its role in relationship to the Source object.	Aggregation	1..1	
Keyword	Keyword	A brief textual identification of the relation type. Supports the use of an external controlled vocabulary.	Neither	0..n	

Individual

Extends

This object extends Agent

Definition

A person who acts, or is designated to act towards a specific purpose.

Properties

Table Individual. list of properties

Name	Datatype	Description	Cardinality
name	Name	The individual's name.	1..n
imageURL	URL	The URL of an image of the individual.	0..n
researcherID	xs:string	The ID of the researcher according to Orchid or other similar system.	0..n
DDIID	xs:string	The agency identifier of the individual according to the DDI Alliance agent registry.	0..n

Relationships

Table Individual. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasContactInformation	ContactInformation	The contact details of the individual.	Composition	0..1	0..n

Chapter 12. CollectionManagement

CollectionMap

Definition

A structure that defines the relationships between specific objects within a collection in terms of relationships, aggregations, and specific relationships such as the link between a data file and the metadata that describes it. This structure allows the creation of OAI-ORE Resource Maps, Dublin Core isPartOf, hasPart, etc. It is a flexible mapping that provides a single location for capturing multiple relationships that can be restricted or selected in creating output for external cataloging, preservation, or access systems.

CollectionProfile

Definition

A collection of materials that are managed together. It describes the coverage of the collection, collection policies, submission or acquisition activities, the processing of objects into the collection, and records for the collection objects. These may contain records for non-DDI objects as well as records that describe collections or aggregations of records.

CollectionDescription

Definition

Description of the Collection expressed as text. This should summarize information on the purpose of the collection, its coverage, and any particular features or sub-collections.

CollectionPolicy

Definition

This will be an extension of an OtherMaterialType

Properties

Table CollectionPolicy. list of properties

Name	Datatype	Description	Cardinality
effectiveStartDate	xs:date		0..1
effectiveEndDate	xs:date		0..1

Chapter 13. Achim-Test

AbstractNotExtendable

Definition

Abstract, not extendable

Chapter 14. Review

AbstractIdentifiableType

Definition

Used to identify described identifiable objects for purposes of internal and/or external referencing. Elements of this type cannot be versioned or maintained except as part of a complex parent element. Provides containers for Uniform Resource Name (URN) as well as ID information. An entity can either be identified either by a URN and/or an identification sequence. At a minimum, one or the other is required. You must designate they type of URN supported by your agency, either "Canonical" or "Deprecated". To fully support interoperability both the DDI URN and identification sequence should be used. Note that to support interoperability of the canonical and deprecated URN. If both URN and the identification sequence is used, and there is any conflict, the URN takes precedence. The action attribute is used ONLY for inheritance is a Group structure. For the local use the maintainable you can "Add", "Delete", or "Replace" an identified object. These actions only effect the local usage of the content. These changes cannot be inherited.

Properties

Table AbstractIdentifiableType. list of properties

Name	Datatype	Description	Cardinality
URN	URNTYPE	The URN of the entity matching the DDI URN pattern associated with the value of the attribute typeOfIdentifier (Canonical or Deprecated).	0..1
UserID	UserID	Allows for the specification of identifiers other than the specified DDI identification of the object. This may be a legacy ID from DDI-C, a system specific ID such as for a database or registry, or a non-DDI unique identifier. As the identifier is specific to a system the system must be identified with the UserID structure.	0..n
isUniversallyUnique	xs:boolean	If the ID of the object was created as a Universally Unique ID (UUID) set this attribute to "true". If you wish to specifically state that the ID is NOT	0..1

Name	Datatype	Description	Cardinality
		universally unique set this attribute to "false"	

Relationships

Table AbstractIdentifiableType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Agency	DDIAgencyIDType	This is the registered agency code with optional sub-agencies separated by dots.		1..1	
ID	IDType	The ID of the object. This must conform to the allowed structure of the DDI Identifier and must be unique within the declared scope of uniqueness (Agency or Maintainable).		1..1	
Version	VersionType	The version number of the object. For the identifiable object this is the version number of its parent versionable at the point of creation or alteration of the non-administrative metadata of the identifiable. Versionable and Maintainable items increment their version number whenever the non-administrative metadata		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		contained by the object changes.			
inheritanceAction	ActionCodeType	<p>The attribute "action" is used for inheritance situations where there is an override at the local level (within a grouped StudyUnit) which is not available for further inheritance.</p> <p>There are three possible values for "action":</p> <ul style="list-style-type: none"> Add - A new identifiable object (an Identifiable, Versionable, or Maintainable element) is provided locally with a new identifier (one that is not inherited). All properties (elements and attributes contained in the object) of the object are as specified. If an object with an existing id is created, this is an error.; Update - An object is provided locally with the SAME id as the inherited object. For each type of property that is specified locally, a full set of those 		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>properties is specified for local use. These properties replace any properties of this type which were inherited. Unspecified properties are used as inherited.;</p> <p>Delete - An object is provided locally with the SAME id as the inherited object. All properties specified locally in this object will be deleted if their types and values match those inherited. Note that to completely delete an object at the local level, all properties of the inherited object must be listed.</p>			
objectSource	DDIURNType	<p>When placing objects included by reference in-line for the purposes of archiving or production of unpublished metadata to accompany data subsets, enter the DDI URN here. This addition will NOT cause a version change in the parent maintainable.</p>		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
scopeOfUniqueness	UniquenessScope	States the scope of uniqueness for the ID. The default value is Agency. This asserts that the ID will be a unique value within the Agency/Sub-Agency provided in the element Agency. Changing this value to Maintainable indicates that the ID is unique only within the scope of its parent maintainable object. The ID of the parent maintainable is required in order to create either the Canonical or Deprecated URN.		0..1	

AggregationDefinitionType

Definition

Identifies the independent (denominator) and dependent (numerator) dimensions for calculating aggregate measures such as percent. When two or more independent or dependent dimensions are listed here, the value is defined as the intersection of the listed dimensions.

Properties

Table AggregationDefinitionType. list of properties

Name	Datatype	Description	Cardinality
IndependentDimension	xs:integer	The rank of a dimension that acts as the denominator (independent variable).	0..n
DependentDimension	xs:integer	The rank of a dimension that acts as the	0..n

Name	Datatype	Description	Cardinality
		numerator (dependent variable).	
isNCubeUniverse	xs:boolean	When true indicates that total count of the NCube as described by the universe acts as the independent variable (denominator) and that all dimensions are used to define the dependent variable (numerator). When false, use the IndependentDimension and DependentDimension elements to assign each rank to its appropriate role.	0..1

AggregationType

Definition

Describes the aggregation method and the variables used in the aggregation process. Identifies the method using an external controlled vocabulary and identifies the variables used either in-line or by reference to an existing description.

Properties

Table AggregationType. list of properties

Name	Datatype	Description	Cardinality
AggregationMethod	CodeValueType	Identification of the type of aggregation method used. Supports the use of a controlled vocabulary. DDI strongly recommends the use of a controlled vocabulary.	0..1

Relationships

Table AggregationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AggregationVariable	AggregationVariable	Identifies the independent and dependent variables used in the		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		aggregation process in-line.			

AnchorType

Definition

Allows for the attachment of a category label at any anchor point in a scale.

Properties

Table AnchorType. list of properties

Name	Datatype	Description	Cardinality
value	xs:string	The value of the anchor point.	0..1

Relationships

Table AnchorType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategoryReference	Category	A reference to the category containing the label for the anchor point.		0..1	

AttachedAttributeType_m2

Definition

References the attribute description or provides a value.

Properties

Table AttachedAttributeType_m2. list of properties

Name	Datatype	Description	Cardinality
Value	Value	Contains the value for the attribute.	0..1

Relationships

Table AttachedAttributeType_m2. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AttributeReference	AttributeType	Reference to the attribute		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		described in an NCube.			

AttachedAttributeType_m1

Definition

References the attribute description in the NCube and provides for a choice between describing an explicit value, or a location in a file where the value can be found.

Properties

Table AttachedAttributeType_m1. list of properties

Name	Datatype	Description	Cardinality
Value	Value	Contains the value for the attribute.	0..1

Relationships

Table AttachedAttributeType_m1. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AttributeReference	AttributeType	Reference to the attribute described in an NCube.		1..1	
PhysicalLocation	PhysicalLocationDescription	Description of the physical location of the attribute value in the data file.		0..	

AttachedAttributeType_m3

Definition

References the attribute description in the NCube and provides for a choice between describing an explicit value, or a location in a file where the value can be found.

Properties

Table AttachedAttributeType_m3. list of properties

Name	Datatype	Description	Cardinality
Value	Value	Contains the value for the attribute.	0..1

Relationships

Table AttachedAttributeType_m3. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AttributeReference	AttributeType	Reference to the attribute described in an NCube.		1..1	
PhysicalTableLocation	PhysicalTableLocationType	Description of the physical location of the attribute value in the data file.		0..	

BaseIDType

Definition

A type which is used for restricting the characters in DDI ID structures. Valid characters include A-Z, a-z, 0-9, *, @, \$, -, and _.

BasicIncrementType

Definition

Describes the start, end, and increment value for an incremental string (numeric, character, or length).

Properties

Table BasicIncrementType. list of properties

Name	Datatype	Description	Cardinality
increment	xs:string	The size of the increment in units (number of characters, length, number of units).	0..1
startValue	xs:string	The starting value or beginning point of the increment string.	0..1
endValue	xs:string	The ending value or end point of the increment string.	0..1

CanonicalURNTType

Definition

The canonical URN is the default structure for the DDI URN. It is composed of the following portions separated by a colon: urn:AgencyIOBJECTIVersion. Note that the self identifying portion

(urn:ddi) of the canonical URN may be upper or lower case. The Version is always the version number of the object itself. If the object is scoped to the Agency, the objectID is the ID. [Example: urn:us.mp194R671:1] If it is scoped to the Maintainable and is a Maintainable Object, the objectID is the ID. [Example: urn:us.mpIPUMS_CL_EDU:1] If it is scoped to the Maintainable and is either a Versionable or Identifiable Object, the objectID consists of the ID of the parent Maintainable followed by a dot "." used as a separator followed by the ID of the object itself. [Example: urn:us.mpIPUMS_CL_EDU.C4:1]

CasIdentificationType

Definition

Describes the information needed to identify an individual case within a record type. This may be the variable or concatenated variable used to identify a unique case of a particular record type. Often referred to as a unique key. There may be more than one means of identifying a record. For example a US Census Summary File has a LogicalRecordIdentifier that is unique to the original file within which it was published. A specific geography has a set of fields that uniquely identify it.

Properties

Table CaseIdentificationType. list of properties

Name	Datatype	Description	Cardinality
isPrimary	xs:boolean	Indicates whether the case identifier is the primary key.	0..1

Relationships

Table CaseIdentificationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
FixedIdentifier	FixedIdentifierType	Reference to the variable containing the unique identifier. This may be a concatenated variable which indicates the combination of variable required to create a unique identification. If more than one variable reference is included the combination of the variable field contents must be unique and all		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		variables are required for case identification.			
ConditionalIdentifier	ConditionalIdentifier	Describes the information needed to identify a specific record or case within a record type. Repeating the field allows multiple means of identifying a case referencing multiple variables.		0..	

CaseSpecificationType

Definition

Case specification allows different unique identifiers to be used based on the value of an identified variable. In some cases the value of a variable (such as a geographic level) results in a different set of variables required to identify a unique case. Case specification is used to capture these combinations. For example: a file containing State, County, and Place records. The unique identifier for a State requires a combination of GeoLevel=State and the variable STATE. Place would require a combination of GeoLevel=Place and the variables STATE and PLACE.

Relationships

Table CaseSpecificationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ConditionalVariableReference	ConditionalVariableReference	Refers to the variable containing the conditional content, provides the value of the condition.		1..1	
VariableReference	VariableType	The variables required to provide a unique identification when the conditional variable		1..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		contains the stated value.			

CHOICE

Definition

Dummy Object for Choices

CollectionType

Definition

Describes a collection of items held or distributed by the archive in connection with a study, group of studies, or resource packages. What constitutes an collection is determined by the archive. These may be data file(s) in a variety of formats, statistical setups, codebooks, questionnaires, etc. A collection may also be a group of studies, groups, and/or resource packages.

Properties

Table CollectionType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	A citation for the collection. May additionally be rendered in native qualified Dublin Core (dc and dcterms).	0..1
LocationInArchive	InternationalStringType	Describes the location of the collection within the archive. Repeat for multiple locations such as separate stores for access and archival copies.	0..n
CallNumber	xs:string	The name, code, or number used by the archive to uniquely identify the collection within the archive.	0..1
URI	xs:anyURI	The URL or URN for the collection.	0..1
ItemQuantity	xs:integer	The number of items in the collection. This is a check sum and should be updated as the contents of the collection changes. The use of this element is best restricted to completed collections	0..1

Name	Datatype	Description	Cardinality
		where change in the number of objects is not dynamic.	
AvailabilityStatus	StructuredStringType	A statement of availability for the collection. This is a positive statement (as opposed to access restrictions) which may be used for publication or other purposes. Allows for structured content.	0..1
DataFileQuantity	xs:integer	The number of data files in the described collection, expressed as an integer. This is a check sum and should be updated as the contents of the collection changes. The use of this element is best restricted to completed collections where change in the number of objects is not dynamic.	0..1
CollectionCompleteness	StructuredStringType	Describes the completeness of the collection. Note coverage gaps as well as collections strengths. This statement may be used for publication or other purposes. Allows for structured content.	0..1

Relationships

Table CollectionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
StudyClass	StudyClassType	An archive specific classification for the collection. This may be a topical classification, a classification of intended processing levels, or		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		information on the processing status.			
DefaultAccess	AccessType	Default access restriction information applying to all of the items in the collection.		0..1	
OriginalArchive	OrganizationType Deprecate	The original archive for the described collection, expressed as a reference to an organization listed in the organization scheme. [Referenced object not explicit]		0..n	
OriginalArchive	OrganizationType	The original archive for the described collection, expressed as a reference to an organization listed in the organization scheme. [Referenced object not explicit]		0..n	
Item	ItemType	Allows for the nesting of Item descriptions with a collection.		0..n	
Collection	CollectionType	Allows for the nesting of collection descriptions with a collection hierarchical groupings within a collection description.		0..n	

ConcatenatedValueType

Definition

Lists the variables whose values when concatenated result in the value for this variable.

Relationships

Table ConcatenatedValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Identifies the variables whose values are concatenated to form the concatenated variable. Note that the order of these variables determines the order of concatenation.		2..n	

ConditionalIdentifierType

Definition

Describes the information needed to identify a specific record or case within a record type. Repeating the field allows multiple means of identifying a case referencing multiple variables.

Relationships

Table ConditionalIdentifierType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CaseSpecification	CaseSpecificationType	specification allows different unique identifiers to be used based on the value of an identified variable. In some cases the value of a variable (such as a geographic level) results in a different set of variables		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		required to identify a unique case. Case specification is used to capture these combinations. For example: a file containing State, County, and Place records. The unique identifier for a State requires a combination of GeoLevel=State and the variable STATE. Place would require a combination of GeoLevel=Place and the variables STATE and PLACE.			

ContentLinkingMapType

Definition

Contains a stack of links from the LocalAddedContent to the Depository content and provides instructions regarding the relationship between the local added content and the deposited content.

Relationships

Table ContentLinkingMapType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
LinkingMap	LinkingMapType	Provides a link from a local object to a deposited object via reference and designates if the added material should Override, act as AddedContent, or DeleteContent		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		in the original deposited material.			

DataAppraisalInformationType

Definition

Describes the result of data appraisal activities as a response rate and sampling error. May also list additional appraisal processes taken as a result of the initial appraisal process.

Properties

Table DataAppraisalInformationType. list of properties

Name	Datatype	Description	Cardinality
SamplingError	StructuredStringType	Sampling Error provided using a StructuredString to support multiple language versions of the same content as well as optional formatting of the content.	0..n
OtherAppraisalProcess	StructuredStringType	Other Appraisal Process provided using a StructuredString to support multiple language versions of the same content as well as optional formatting of the content.	0..n

Relationships

Table DataAppraisalInformationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseRate	ResponseRateType	A specific rate of response and/or a description of the rate of response for this event. If data contains multiple response rates for different portions of the data due to delivery		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		method, identification of sub-populations or other reasons, repeat this element providing the specific response rate and a description of the sub-population, delivery method or other feature that was used in developing the specific rate.			

DataItem Type

Definition

Describes a single data item within the record, linking its description in a variable to its physical location in the stored record.

Relationships

Table DataItem Type. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Reference to the Variable describing this data item.		1..1	
PhysicalLocation	PhysicalLocation	Description of the physical location of the value of the object in the data file.		0..1	

DataItem Type_m2

Definition

Describes a single data item or cell within an NCube Instance. It defines its location within the NCube by its coordinate (matrix) address which is its intersect point on each dimension. Allows for the specification of data item specific attributes, and identifies the value of each measure for the data item. May optionally indicate the language of the data contents.

Properties

Table DataItemType_m2. list of properties

Name	Datatype	Description	Cardinality
xml:lang	xml:lang	Use to indicate the language of the data values for this item.	0..1

Relationships

Table DataItemType_m2. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DimensionRank	DimensionRank	Value type describes the rank or order of the dimension within the NCube structure and provides the specific coordinate value of the dimension for the data item.		1..n	

DataItemType_m1

Definition

Describes a single data item or cell within an NCube Instance. It defines its location within the NCube by its coordinate (matrix) address which is its intersect point on each dimension. Allows for the specification of data item specific attributes, and identifies the physical location of each measure for the data item. May optionally indicate the language of the data contents.

Properties

Table DataItemType_m1. list of properties

Name	Datatype	Description	Cardinality
xml:lang	xml:lang	Use to indicate the language of the data item in the file.	0..1

Relationships

Table DataItemType_m1. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DimensionRank	DimensionRank	Value type describes the		1..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		rank or order of the dimension within the NCube structure and provides the specific coordinate value of the dimension for the data item.			

DataItem m3

Definition

Describes a single data item or cell within an NCube Instance. It defines its location within the NCube by its coordinate (matrix) address which is its intersect point on each dimension. Allows for the specification of data item specific attributes, and identifies the physical location of each measure for the data item. May optionally indicate the language of the data contents.

Properties

Table DataItem m3. list of properties

Name	Datatype	Description	Cardinality
xml:lang	xml:lang	Use to indicate the language of the data item in the file.	0..1

Relationships

Table DataItem m3. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DimensionRank	DimensionRank	Value type describes the rank or order of the dimension within the NCube structure and provides the specific coordinate value of the dimension for the data item.		0..n	

DataProductGroupCodeType

Definition

Indicates how all members of the group are related in terms of physical data products in relation to data collection efforts. These relationships are inferred by the markup author, and should be considered as her/his own interpretation of the data.

DataSourceType

Definition

Describes the source of the data. This may be a population group, an environmental object, a registry, published or unpublished data source, etc. Describes and provides a classification of the source, a citation of the origin if applicable, and a listing of any characteristics of the data source that may affect understanding of the data.

Properties

Table DataSourceType. list of properties

Name	Datatype	Description	Cardinality
SourceDescription	StructuredStringType	A description of the data source. May be expressed in multiple languages and supports the use of structured content.	0..1
SourceType	CodeValueType	Brief classification of the data source. Supports the use of an external controlled vocabulary. May be repeated to represent different forms of classification.	0..n
SourceCharacteristic	StructuredStringType	A significant characteristic of the data source that may affect understanding or collection of the data. This will include the level of documentation of the source data. For example: 'Legibility of data source affected due to water damage,' or 'solar flares during the data collection period may have affected the consistency of the data during the following period.'	0..1

Relationships

Table DataSourceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Origin	OriginType	A citation or URI for the source of the data. Note that this is an external reference, and should not be used to point to DDI descriptions of the data, or to DDI-encoded data.		0..n	

DDIAgencyIDType

Definition

The agency expressed as filed with the DDI Agency ID Registry with optional additional sub-agency extensions. The length restriction of the complete string is done with the means of minLength and maxLength.

DDIIDType

Definition

Specification of the format of the DDI URN as well as the information required by the maintaining agency system to identify a specific DDI object. The two values are Canonical and Deprecated.

DDIURNTYPE

Definition

The DDI URN is comprised of the self identifying "urn" or "URN" and "ddi" or "DDI" followed by an agency, identifier, and version number. Note that the identifier is composed in different ways for the Canonical and Deprecated URN (all other portions are the same). The identifier in the Canonical URN is composed of the unique identifier which may be scoped to the agency or the maintainable object (urn:DDIAgencyIBaseIVersion). In the case of being scoped to the maintainable, the identification is the ID of the Maintainable parent, followed by a dot '.', followed by the ID of the object. The identifier in the Deprecated URN is composed of the following parts separated by ':' a colon: The object type of the Maintainable Object, the ID of the Maintainable Object, and if the object is Versionable or Identifiable this is followed by the Object Type and the Object ID.

DefaultMissingValueType

Definition

Identifies the default missing value parameter for the this logical record by referencing a ManagedMissingValuesRepresentation or by stating that there is a default missing values parameter used but it is undocumented. Note that a conflicting DefaultMissingValues definition in a PhysicalInstance will override that found in the LogicalRecord.

Properties

Table DefaultMissingValueType. list of properties

Name	Datatype	Description	Cardinality
DefaultUsedNoDocumentation	boolean	Use when it is known that a default missing values definition was use but there is NO documentation describing its content.	0..1

Relationships

Table DefaultMissingValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MissingValuesReference	ManagedMissingValuesRepresentation	Refers to the appropriate ManagedMissingValuesRepresentation describing the default values.	RepresentationType	0..	

DeprecatedURNTType

Definition

The deprecated URN is an alternative structure for the DDI URN which contains additional information regarding the object types. It is composed of the following portions separated by a colon: urn:AgencyIMaintainableObject:Type:MaintainableObjectIObjType:ObjType:Version. Note that the self identifying portion (urn:ddi) of the deprecated URN may be upper or lower case. The Version is always the version number of the object itself. The MaintainableObject and ObjType should be taken from the TypeOfObject list which provides a consistent ObjType name over time. If the deprecated URN structure is the same where the object is scoped to the Agency or to the Maintainable. If the object is a Maintainable Object, only the Maintainable Object information is included. [Example: urn:us.mpCodeList:IPUMS_CL_EDU:1] If it is either a Versionable or Identifiable Object, the ObjType and ObjectID of the parent Maintainable is provided followed by the ObjType and ObjectID of the object itself. [Example: urn:us.mpCodeList:IPUMS_CL_EDU:Code:C4:1]

DummyType

Definition

Dummy Object

FundingInformationType

Definition

Provides information about the individual, agency and/or grant(s) which funded the described entity. Lists a reference to the agency or individual as described in a DDI Organization Scheme, the role of the funder, the grant number(s) and a description of the funding activity.

Properties

Table FundingInformationType. list of properties

Name	Datatype	Description	Cardinality
FunderRole	CodeValueType	Role of the funding organization or individual. Supports the use of a controlled vocabulary.	0..1
GrantNumber	xs:string	The identification code of the grant or other monetary award which provided funding for the described object.	0..n
Description	StructuredStringType	Additional information regarding the role and actions of the this funding source.	0..1

Relationships

Table FundingInformationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AgencyOrganization	OrganizationType Deprecate	Reference to an organization or individual, defined in the organization scheme, that served as a funding source.		0..n	
AgencyIndividual	IndividualType	Reference to an organization or individual, defined in the organization scheme, that served as a funding source.		0..n	

GenerationType

Definition

Description of the process used to generate the category content. Includes a reference to component parts, a description of the generation process, a structured command, and other materials that are needed in the generation process. The item may be designated as a derivation process (default value) and be qualified in some way by a qualification attribute.

Properties

Table GenerationType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the generation process. May be expressed in multiple languages and supports the use of structured content.	0..1
CommandCode	CommandCode	Structured information used by a system to generate the category.	0..n
OtherMaterial	OtherMaterialType	External documentation required for creating the generation - for example, a chart or table for defining poverty.	0..n
isDerived	xs:boolean	If not a derivation process set this attribute to "false".	0..1
qualification	xs:string	A qualification for the generation process expressed as a simple string.	0..1

Relationships

Table GenerationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ComponentReference	Category	Reference to a category used in the generation process.		0..n	

GeographicBoundaryType

Definition

A choice of a BoundingBox and/or a set of BoundingPolygons and ExcludingPolygons that describe an area for a specific time period.

Properties

Table GeographicBoundaryType. list of properties

Name	Datatype	Description	Cardinality
BoundingBox	BoundingBox	A BoundingBox (North, South Latitude and East, West Longitude) of the LocationValue for the time period specified with the GeographicBoundary.	0..1
BoundingPolygon	PolygonType	A description of the boundaries of the polygon either in-line or by a reference to an external file containing the boundaries. Repeatable to describe non-contiguous areas such as islands or Native American Reservations in some parts of the United States.	0..n
ExcludingPolygon	PolygonType	A description of a the boundaries of a polygon internal to the bounding polygon which should be excluded. For example, for the bounding polygon describing the State of Brandenburg in Germany, the Excluding Polygon would describe the boundary of Berlin, creating hole within Brandenburg which is occupied by Berlin.	0..n
GeographicTime	DateType	A time for which the polygon is an accurate description of the area. This may be a range (without an end date if currently still valid) or	0..1

Name	Datatype	Description	Cardinality
		a single date when the shape was know to be valid if a range is not available.	

Relationships

Table GeographicBoundaryType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AreaCoverage	AreaCoverageType	Use to specify the area of land, water, total or other area coverage in terms of square miles/kilometers or other measures.		0..n	

GridResponseDomainType

Definition

Designates the response domain and the cells using the specified response domain within a QuestionGrid.

Properties

Table GridResponseDomainType. list of properties

Name	Datatype	Description	Cardinality
ResponseDomain	Representation	This is a substitution head and can be replaced by any valid member of the substitution group for ResponseDomain.	0..1

Relationships

Table GridResponseDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GridAttachment	GridAttachmentType	Identifies the cell or cells in a grid to which the item is attached by		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		a reference to a specific cell coordinate in a grid or by identifying a range of values along a dimension.			

IncludedGeographicLocationCodesType

Definition

Specifies the Geographic Location Codes included in the representation by providing a reference to the authorized source of the code, the GeographicLocation used, and any excluded values.

Relationships

Table IncludedGeographicLocationCodesType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizedSourceReference	AuthorizedSource	A reference to the Authorized Source of the value used by this representation. A GeographicLocation may have more than one Authorized Source included in the listing.		0..1	
GeographicLocationReference	GeographicLocation	A reference to the GeographicLocation used by this representation.		0..1	
ExcludedLocationValue	LocationValue	A reference to a location value that is excluded, not used by, this representation. May be repeated to exclude multiple location values.		0..n	

ItemValueType

Definition

Each value in the data set linked to it's variable and record identification.

Properties

Table ItemValueType. list of properties

Name	Datatype	Description	Cardinality
RecordReference	xs:string	The value of the record identifier or key. This is the value found in the item linked to the variable identified by the DataSet in the IdentifyingVariableReference.	0..1
Value	Value	The value of the item for the specified variable and record.	0..n

Relationships

Table ItemValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Reference to the variable describing the item.		0..1	

KindOfDataTypeType

Definition

Provides a description of the types of data described by the KindOfData element.

LifecycleInformationType

Definition

Allows a listing of events in the life cycle of a data set or collection. Identification, date, agency, and descriptive information are provided for each event. Note that the agency that documents a lifecycle event is not necessarily the same agency as the one that performed the operation being documented as a lifecycle event.

Relationships

Table LifecycleInformationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
LifecycleEvent	LifecycleEvent	Documents an event in the life cycle of a study or group of studies. A life cycle event can be any event which is judged to be significant enough to document by the agency maintaining the documentation for a particular set of data.		0..n	

LocalAddedContentType

Definition

Allows a depository to provide locally created value added material and processing information in the appropriate packaging structure and to designate the relationship of added material to the original by means of a content map. The content maps indicates if the added material should Override, act as AddedContent, or DeleteContent in the original deposited material. The material is expressed in the structure of either a StudyUnit, Group, or ResourcePackage within a local content structure.

Relationships

Table LocalAddedContentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ContentLinkingMap	ContentLinkingMap	Contains a stack of links from the LocalAddedContent to the Depository content and provides instructions regarding the relationship between the local added content and		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the deposited content.			
LocalStudyUnitContent	StudyUnitType	Local Content using the StudyUnit structure.		0..n	
LocalGroupContent	GroupType	Local Content using the Group structure.		0..n	
LocalResourcePackageContent	ResourcePackageType	Local Content using the ResourcePackage structure.		0..n	

MaintainableObject

Definition

Provides information on the Maintainable Parent of the object. If the scope of the Identifiable or Versionable Object is the Maintainable, this information must be provided in order to provide all the information contained in the Canonical DDI URN. This is done to support interoperability.

Relationships

Table MaintainableObject. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
TypeOfObject	TypeOfObjectType	The object type of the parent maintainable taken from a restricted list.		1..1	
MaintainableID	IDType	The value of the ID of the maintainable parent object.		1..1	
MaintainableVersion	VersionType	The version number of the maintainable parent object at the time the identifiable or versionable object was created or altered. Note that creating or altering the non-		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		administrative content of an object within a maintainable will increment the version number of the maintainable and the content of this element should contain the new version number. In short, this represents the version number of the maintainable when the content of the current object first appeared in its present form.			

MeasureType_m2

Definition

Identifies the specific measure of the cell designating the order value of the Measure within the MeasureDimension and the value of the measure. It is recommended to repeat Measure to define each measure definition and value separately. When Value contains multiple measures expressed as an ordered array list each measure in the array as a MeasureDimensionValue with its specified arrayOrder within a single Measure definition.

Properties

Table MeasureType_m2. list of properties

Name	Datatype	Description	Cardinality
Value	Value	Value of the Measure expressed as a single value or ordered array.	0..1

Relationships

Table MeasureType_m2. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MeasureDimensionValue	MeasureDimension	Specifies the orderValue of	MeasureType	1..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the Measure in the MeasureDimension described in the NCubeInstance along with its arrayOrder if multiple measures are provided as an array in a single storage location.			

MeasureType_m1

Definition

Identifies the specific measure of the cell by reference and provides information on the storage location of the value for the measure. When individual measures are stored in separately identifiable locations repeat Measure to define each measure and storage location. When multiple measures are stored as an ordered array in a single location list each measure in the array as a MeasureReference with its specified arrayOrder within a single Measure definition.

Relationships

Table MeasureType_m1. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MeasureDefinition	MeasureDefinition	Reference to the MeasureDefinition in NCube.	ReferenceType	1..n	
PhysicalLocation	PhysicalLocation	Description of the physical location of the measure value in the data file.	Description	0..1	

MeasureType_m3

Definition

Identifies the specific measure of the cell designating the order value of the Measure within the MeasureDimension and provides information on the storage location of the value for the measure. When individual measures are stored in separately identifiable locations repeat Measure to define each measure and storage location. When multiple measures are stored as an ordered array in a single location list each in the array as a MeasureDimensionValue with its specified arrayOrder within a single Measure definition.

Relationships

Table MeasureType_m3. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MeasureDimension	MeasureDimension	Specifies the orderValue of the Measure in the MeasureDimension described in the NCubeInstance along with its arrayOrder if multiple measures are provided as an array in a single storage location.		1..n	
PhysicalTableLocation	PhysicalTableLocation	Specifies the physical location of the measure value(s) in the data file.		0..1	

OperationType

Definition

A generic operation description used as a type by specified operations. Describes the operation and identifies the organization or individual responsible for performing it.

Properties

Table OperationType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the operation.	0..1

Relationships

Table OperationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AgencyOrganization	OrganizationType Deprecate	A reference to an organization or individual responsible for the operation. [Referenced		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		object not explicit]			
AgencyOrganizationIndividualType	IndividualType	A reference to an organization or individual responsible for the operation. [Referenced object not explicit]		0..n	

PhysicalLocationType

Definition

Description of the physical location of the value of the object in the data file. Includes information about the data item location and its data type/format if other than the default.

Properties

Table PhysicalLocationType. list of properties

Name	Datatype	Description	Cardinality
StorageFormat	CodeValueType	An explicit definition of the data storage format. This field is necessary in the case of some numeric data formats where the format definition would allow real values, but the values are integer values. Supports the use of an external controlled vocabulary. Use of a controlled vocabulary is strongly recommended.	0..1
StartPosition	xs:integer	Position of the first character of the data item in fixed format file.	0..1
ArrayPosition	xs:integer	Array number of the data item for delimited files.	0..1
EndPosition	xs:integer	Position of the last character of the data item in fixed format. Must be specified if a value for Width is not provided.	0..1
Width	xs:integer	Data item width for fixed format file, maximum width for	0..1

Name	Datatype	Description	Cardinality
		delimited file. Must be specified if a value for EndPosition is not provided.	
DecimalPositions	xs:integer	Number of decimal places for data with an implied decimal separator. Another expression is the decimal scaling factor (SAS). Default: 0.	0..1
DecimalSeparator	OneCharStringType	The character used to separate the integer and the fraction part of a number (if an explicit separator is used in the data). Allowed values are: None (default), Dot, Comma, Other. On the basis of the data definition in DDI documents, data processing tools could compute the necessary precision width on the basis of the format width and the existence of separators. Appropriate data types could be used, i.e. float or double, short or long. The decimal separator definition only makes sense with some XML Schema primitives.	0..1
DigitGroupSeparator	OneCharStringType	The character used to separate groups of digits (if an explicit separator is used in the data). Allowed values are: None (default), Dot, Comma, Other. The decimal separator definition makes only sense with some XML Schema primitives.	0..1
LanguageOfData	LanguageList	Language of the data file expressed as a delimited list of language codes.	0..1
LocaleOfData	xs:string	A two-character ISO country code, to supplement the LanguageOfData value.	0..1

Relationships

Table PhysicalLocationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Delimiter	DelimiterType	Defines the delimiter used to separate variables in a delimited record. The attribute treatConsecutiveDelimitersAsOne indicates how consecutive delimiters should be handled by the software.	DelimiterAsOne	0..1	

RecordSetType

Definition

Storage format arranged record by record. A RecordSet requires a list of variables to appear in a specified order. Provides a consistent order for the variables and a set of values for each record displayed in variable order.

Relationships

Table RecordSetType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableOrder	VariableType	Provides the sequence of variables representing the order of storage within each record.		0..1	
Record	RecordType	For each record, contains the values for the items in order by the specified variable sequence.		1..n	

RecordType

Definition

For each record, contains the values for the items in order by the specified variable sequence.

Properties

Table RecordType. list of properties

Name	Datatype	Description	Cardinality
Value	Value	An individual item value.	0..n

RequiredResourcePackagesType

Definition

Specifies by reference the ResourcePackages required to resolve the module.

Relationships

Table RequiredResourcePackagesType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResourcePackageReference	ResourcePackageReference	References a resource package used by the module.		0..n	

ResponseCardinalityType

Definition

Indicates the minimum and maximum number of occurrences of a response within the given parameters.

Properties

Table ResponseCardinalityType. list of properties

Name	Datatype	Description	Cardinality
minimumResponses	xs:integer	Minimum number of responses accepted expressed and an integer.	0..1
maximumResponses	xs:integer	Maximum number of responses accepted expressed and an integer.	0..1

ResponseRateType

Definition

A specific rate of response and/or a description of the rate of response for a specific processing event that includes data appraisal.

Properties

Table ResponseRateType. list of properties

Name	Datatype	Description	Cardinality
SampleSize	xs:integer	The size of the sample from whom data was requested.	0..1
NumberOfResponses	xs:integer	The number of responses within the specified sample.	0..1
SpecificResponseRate	xs:decimal	The specific rate of response expressed as a percent.	0..1
Description	StructuredStringType	A description of the rate of response including any information pertinent to understanding the specified rate of response.	0..1

SEQUENCE

Definition

Dummy Object for Sequences

SeriesStatementType

Definition

Series statement contains information about the series to which a study unit or group of study units belongs. You may point to the URL of a series repository and then use the SeriesName field to indicate the series itself as identified in that repository. Fields also exist for describing the series and providing abbreviations.

Properties

Table SeriesStatementType. list of properties

Name	Datatype	Description	Cardinality
SeriesRepositoryLocation	xs:anyURI	Location of the repository containing	0..n

Name	Datatype	Description	Cardinality
		the series. This may be repeated for multiple repository locations.	
SeriesName	Name	The full name of the series. The structure supports the use of multiple language versions of the content. If the name varies depending upon the context or is known by multiple names, this element may be repeated.	0..n
SeriesAbbreviation	CodeValueType	Abbreviation of the series name. Repeat for multiple abbreviations for the SAME series Name.	0..n
SeriesDescription	StructuredStringType	Describe the purpose of coverage of the series. The structure supports the use of multiple language versions of the content.	0..1

ShapeCodedType

Definition

Specifies a type of geometric shape for the purpose of determining the required information needed to render the object.

SpecifiedDelimiterType

Definition

Defines the delimiter used to separate variables in a delimited record. Valid values include, space, tab, comma, semicolon, colon, pipe, and other.

StructuredMixedGridResponseDomainType

Definition

Contains a mixture of response domains for the grid cells. Each response domain can be attached to a specific region of the grid, for example a single column or row. It is assumed that each cell will contain either a response domain or be declared as containing No Data By Definition. Any cell may also contain an internal label.

Relationships

Table StructuredMixedGridResponseDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GridResponseDomain	GridResponseDomain	Identifies a response type found in the grid and defines the cell or cells that contain it.		0..n	
NoDataByDefinition	GridAttachmentType	Identifies the cell or cells in the grid that by definition contain no response domains. These cells MAY contain a label.		0..n	

StructuredMixedResponseDomainType

Definition

A structure to allow for mixing multiple response domains in a single question. These may also include intervening text statements that are tightly bound to a response domain. A common example is the use of a CodeDomain and a TextDomain where the TextDomain is associated with the value with the label "Other" in the CodeDomain. ResponseDomains should be chosen that do NOT duplicate responses such as CodeLists with overlapping codes. Be aware that certain instruments may collect responses in such a way that confusion between a code response and text response may be possible. The process of resolving such conflicts should be addressed in the data processing instructions. There is an assumption that if a text or numeric response duplicates a coded response to a question, that the value is that of the coded category. At least one ResponseDomain must be provided.

Relationships

Table StructuredMixedResponseDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseTextSet	ResponseTextSet	Text closely related to the content of the ResponseDomain(s), in general, text required to make sense of the related response domain. ResponseTextSet provides a		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		means of bundling multiple language versions of ResponseText together. This wrapper serves to differentiate between a case where multiple language content for a single ResponseText are provided and when two differing sets of ResponseText are in immediate sequence (with no intervening question). Note that when using ResponseText, the full ResponseText must be repeated for multi-language versions of the content within the same ResponseTextSet.			
ResponseDomain	ResponseDomain	AnnotationType provides both the response domain and information on how it should be attached, or related, to other specified response domains in the question.		0..	

TopLeftTableAnchorType

Definition

Notes the column and row position of the top left corner of the data table in the spreadsheet.

Properties

Table TopLeftTableAnchorType. list of properties

Name	Datatype	Description	Cardinality
column	xs:string	The column identifier expressed as a string.	0..1
row	xs:integer	The row number expressed as an integer.	0..1

TranslationType

Definition

Provides the language of translation as well as a description of translation for the contents of the DDI Instance.

Properties

Table TranslationType. list of properties

Name	Datatype	Description	Cardinality
Language	CodeValueType	Uses the more generic Language element found in a Citation. Allows for use of an external controlled vocabulary.	0..n
I18n-text	xs:string	Value of the language identifier used.	0..1
I18n-catalog	xs:string	Identifies the I18n catalog used.	0..1
Description	StructuredStringType	Description of the translation process of the data and metadata	0..1
xml:lang	xml:lang	Language of the tag content.	0..1

UniquenessScopeType

Definition

States the scope of uniqueness for the ID. The default value is Agency. This asserts that the ID will be a unique value within the Agency/Sub-Agency provided in the element Agency. Changing this value to Maintainable indicates that the ID is unique only within the scope of its parent maintainable object.

VariableItemtype

Definition

The set of values associated with a single variable (one for each record in storage order of records).

Properties

Table VariableItemType. list of properties

Name	Datatype	Description	Cardinality
Value	Value	Value associated with the referenced variable in record storage order.	0..n

Relationships

Table VariableItemType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Reference to the variable associated with the values given.		0..1	

VariableOrderType

Definition

A set of References to Variable found in the record in storage order.

Relationships

Table VariableOrderType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	References variables in storage order. One reference per variable.		1..n	

VariableSetType

Definition

Storage format arranged variable by variable. Item values are listed in record order with the assumption that each record will occupy the position in each array.

Relationships

Table VariableSetType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableItem	VariableItemType	The set of values		1..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		associated with a single variable (one for each record in storage order of records).			

VersionType

Definition

A type used for restricting the characters in a DDI version number. Valid characters include 0-9 and '.' used as a separator to express levels for the version number. The use of levels is optional and a version number can contain as many levels as needed by the agency.

AbstractVersionableType

Extends

This object extends AbstractIdentifiableType

Definition

Used to identify described versionable objects for purposes of internal and/or external referencing. Elements of this type cannot be maintained except as part of a complex parent element. Provides containers for Uniform Resource Name (URN) as well as ID information. An entity can either be identified either by a URN and/or an identification sequence. At a minimum, one or the other is required. You must designate the type of URN supported by your agency, either "Canonical" or "Deprecated". To fully support interoperability both the DDI URN and the full identification sequence should be used. Note that to support interoperability of the canonical and deprecated URN, at minimum the MaintainableIdentifier and TypeOfMaintainableObject should be supplied if the canonical URN is being used by the agency. If both URN and the identification sequence is used, and there is any conflict, the URN takes precedence. The element can be designated as an addition, replacement, or deletion to facilitate tracking changes. In addition to the elements and attributes inherited from AbstractIdentifiable, additional information regarding the versioning process can be provided; version date, the person and/or organization within the maintenance agency responsible for the change as either text or reference, and the reason for the change. If the object created was based on an existing object (other than by versioning), the object on which it is based can be identified using BasedOnReference. In addition to UserID, versionable and maintainable objects may also designate additional user specific properties expressed as a key/value pair using UserAttributePair.

Properties

Table AbstractVersionableType. list of properties

Name	Datatype	Description	Cardinality
UserAttributePair	StandardKeyValuePairType	System specific user defined property of the object expressed as a key/value pair. As this is specific to an individual system the use of controlled vocabularies	0..n

Name	Datatype	Description	Cardinality
		for the key is strongly recommended.	
VersionResponsibility	xs:string	Person or organization within the MaintenanceAgency responsible for the version change. If it is important to retain the affiliation between and individual responsible for the version and his/her agency, it may be included in this notation. This is primarily intended for internal use.	0..1
BasedOnObject	BasedOnObject	Use when creating an object that is based on an existing object or objects that are managed by a different agency or when the new object is NOT simply a version change but you wish to maintain a reference to the object that served as a basis for the new object. BasedOnObject may contain references to any number of objects which serve as a basis for this object, a BasedOnRationalDescription of how the content of the referenced object was incorporated or altered, and a BasedOnRationalCode to allow for specific typing of the BasedOnReference according to an external controlled vocabulary.	0..1
versionDate		Date of version using the union set BaseDateType. Duration should not be used in this field, even though allowed by the ISO format enforced by the parser.	0..1

Relationships

Table AbstractVersionableType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VersionRationale	VersionRationale	<p>Equal</p> <p>description of the rationale/purpose for the version change and a coded value to provide an internal processing flag within and organization or system. Note that versioning can only take place on objects owned by the specified DDI Agency. If you are creating a local instance of an object from another agency for current or future modification use BasedOnObject. If the changes being made result in what you determine to be new object rather than a version of a previous object, i.e. the change is too extensive to consider it a version of the existing object, create a new object and use BasedOnObject to provide a link to the object or objects that</p>		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		were a basis for the new object.			

CategoryRepresentationBaseType

Extends

This object extends Representation

Definition

Describes a representation based on categorization. The CategorySchemeReference allows for the exclusion of selected items from the use of the CategoryScheme as a representation.

Relationships

Table CategoryRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategorySchemeReference	CategoryScheme	Type reference to a CategoryScheme containing the required categories using the SchemeReference structure. Use Exclude in the SchemeReference to designate any categories NOT to include in this representation.		1..1	

CodeRepresentationBaseType

Extends

This object extends Representation

Definition

Describes the use of all or part of a CodeList as a representation used by a question response domain or variable value representation.

Relationships

Table CodeRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeListReference	CodeList	A reference to the CodeList included in this representation using the Reference structure.		0..1	
CodeSubsetInformation	CodeSubsetInformation	Alternative specification of the codes to use from the CodeList by defining the level or only the most discrete codes of a hierarchical CodeList, the range of codes to use, or an itemized subset.		0..1	

ConditionalVariableReferenceType

Extends

This object extends ReferenceType

Definition

Value of variable indicating this record type, multiple entries allow for multiple valid values or ranges. Includes a reference to the variable and the specified related value. TypeOfObject should be set to Variable.

Relationships

Table ConditionalVariableReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
RelatedValue	RelatedValueType	Use to specify the value of variable for which this is a case specification		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		(i.e., GeoLevel in the example for Case Specification).			

DataCollectionFrequencyType

Extends

This object extends DateType

Definition

Documents the intended frequency of data collection, for example monthly, yearly, weekly, etc., preferably using an optional controlled vocabulary in the IntendedFrequency element. Date of first collection should be provided in StartDate as a basis for defining periodicity. EndDate should be entered for data collection cycles with a known or anticipated end date. EndDate is omitted in data collection series that are intended to be on-going.

Properties

Table DataCollectionFrequencyType. list of properties

Name	Datatype	Description	Cardinality
IntendedFrequency	CodeValueType	Documents the intended frequency of data collection, for example monthly, yearly, weekly, etc., preferably using an optional controlled vocabulary.	0..1

DateTimeRepresentationBaseType

Extends

This object extends Representation

Definition

Structures the representation for any type of time format (including dates, etc.). Regardless of the format of the data the content may be treated as a date and or time and converted to ISO standard structure if sufficient information is supplied.

Properties

Table DateTimeRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
DateFieldFormat	CodeValueType	Describes the format of the date field, in formats	0..1

Name	Datatype	Description	Cardinality
		such as YYYY/MM or MM-DD-YY, etc. If this element is omitted, then the format is assumed to be the XML Schema format corresponding to the type attribute value.	
DateTypeCode	CodeValueType	This is a standard XML date type code and supports the use of an external controlled vocabulary. Examples are date, dateTime, gYearMonth, gYear, and duration	0..1
regExp	xs:string	The regular expression allows for further description of the allowable content of the data.	0..1

DDIMaintenanceAgencyIDType

Extends

This object extends xs:string

Definition

Provides the official DDI ID of a maintenance agency as a value taken from the registry cited in @registryID.

Properties

Table DDIMaintenanceAgencyIDType. list of properties

Name	Datatype	Description	Cardinality
registryID	xs:string	Currently there is only a single DDI Agency Registry. Use "DDIAgencyRegistry".	0..1
startDate	xs:dateTime	The date when this agency ID was registered or become active.	0..1

DefaultMissingValuesReferenceType

Extends

This object extends ReferenceType

Definition

Identifies the default missing value parameter for the this physical instance by referencing a ManagedMissingValuesRepresentation. Note that this MissingValues declaration overrides the value found in the LogicalRecord if it conflicts. The assumption is that this is a System Missing Value declaration, specific to the storage format of the file. If not, change the value of isSystemMissingValue to "false". TypeOfObject should be set to ManagedMissingValuesRepresentation.

Properties

Table DefaultMissingValuesReferenceType. list of properties

Name	Datatype	Description	Cardinality
isSystemMissingValue	xs:boolean	The assumption is that this is a System Missing Value declaration, specific to the storage format of the file (default value of "true"). If not, change the value to "false".	0..1

DelimiterType

Extends

This object extends SpecifiedDelimiterType

Definition

Defines the delimiter used to separate variables in a delimited record. Valid values include, space, tab, comma, semicolon, colon, pipe, and other. If "other" is used the characters used for separating (delimiting) objects should be entered in the attribute otherValue. Spaces and binary characters are not allowed. The attribute treatConsecutiveDelimiterAsOne indicates how consecutive delimiters should be handed by the software. The default value of "false" indicates that each delimiter should be treated as a valid delimiter.

Properties

Table DelimiterType. list of properties

Name	Datatype	Description	Cardinality
otherValue	xs:NMTOKEN	When the value of Delimiter is "other" provide the character used for delimiting values here. Spaces and binary values are not allowed.	0..1
treatConsecutiveDelimitersAsOne	xs:boolean	Defines the default value for the delimiter used to separate variables in a delimited record. The attribute	0..1

Name	Datatype	Description	Cardinality
		treatConsecutiveDelimitersAsOne indicates how consecutive delimiters should be handled by the software.	

DomainReferenceType

Extends

This object extends ReferenceType

Definition

Abstract type for the head of a substitution group that allows for the use of a response domain by reference. If specific values are used to denote missing values, these can be indicated as a space-delimited list in the missingValue attribute. If the missing value is indicated by a blank, this should be indicated by setting the value of blankIsMissingValue to true.

Properties

Table DomainReferenceType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1

Name	Datatype	Description	Cardinality
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table DomainReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	Indicates the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

ExternalCategoryRepresentationBaseType

Extends

This object extends Representation

Definition

Structures a response domain based on categorization that is described in an external non-DDI structure. Includes a UsageDescription that should provide information on how the external source is to be used.

Properties

Table ExternalCategoryRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
ExternalCategoryReference	anyURI	References an external, non DDI category. This is the element to use if the Code Scheme being used is not in DDI and cannot be used directly. It provides for both the reference and an explanation of how to use the information accurately within a DDI context.	0..1

Name	Datatype	Description	Cardinality
UsageDescription	StructuredStringType	A description of the use of the external category file.	0..1

GeographicStructureCodeRepresentationBaseType

Extends

This object extends Representation

Definition

Allows for the use of all or part of a GeographicStructure description to be used as a response domain or value representation by a question or variable. In addition to the basic objects of a representation it describes the Geographic Structure values available for use by the question or variable.

Relationships

Table GeographicStructureCodeRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IncludedGeographicStructureCodeRepresentationBaseType	IncludedGeographicStructureCodeRepresentationBaseType	Geographic Structure codes included by the Authorized source of the code, the Geographic Structure being used and the Structures to exclude.	GeographicStructureCodeRepresentationBaseType	0..1	

IdentifiableType

Extends

This object extends AbstractIdentifiableType

Definition

Adds the attribute identifying this as an identifiable object as well as the MaintainableObject. All identifiable objects should provide their contextual information, the identity of their maintainable parent. The deprecated form of the URN contains all the information to identify and object and its context. A Canonical URN scoped to the Maintainable contains the ID of the Maintainable as part of its structure. To provide full contextual information use the MaintainableObject structure. The use of the Canonical URN scoped to the agency or the identification sequence alone requires the content of the MaintainableObject to provide full contextual information. All content of Identifiable is considered to be administrative metadata. Note that changes to the administrative metadata does not drive a change in the version of the parent objects. See DDI 3.2 Technical Documentation: Part I for further details.

Properties

Table IdentifiableType. list of properties

Name	Datatype	Description	Cardinality
isIdentifiable	xs:boolean	This is a fixed flag informing the system or user that this element is identifiable and may be referenced.	0..1

Relationships

Table IdentifiableType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MaintainableObject	MaintainableObject	This section provides information on the Maintainable Parent of this object at its point of origination. This content will not change over time unless the version of the object changes. Note that if the ID, Agency, Version sequence is used, and the scope of uniqueness of the referenced object is the Maintainable, then the ID of the Maintainable is needed to create the structured ID portion of the canonical URN. If the system uses the deprecated URN, both the Maintainable ID and		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		TypeOfMaintainableObject are required to create the deprecated URN structure.			

LifecycleEventType

Extends

This object extends IdentifiableType

Definition

Documents an event in the life cycle of a study or group of studies. A life cycle event can be any event which is judged to be significant enough to document by the agency maintaining the documentation for a particular set of data. The element EventType indicates the type of event, using a typology meaningful to the documenter.

Properties

Table LifecycleEventType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A label for the Lifecycle Event. May be repeated to provide different labels needed due to system or application constraints.	0..n
EventType	CodeValueType	Indicates the type of event, using a typology meaningful to the documenter. Supports the use of a controlled vocabulary.	0..1
Date	DateType	The date or date range of the lifecycle event.	0..1
Description	StructuredStringType	A description of the event such as what the event included, its importance, or other significant information. Structure supports the use of multiple languages.	0..1
Relationship	Relationship	Allows linking a lifecycle event to one or more sections of metadata. If no relationship is noted the lifecycle event relates	0..n

Name	Datatype	Description	Cardinality
		to its full parent StudyUnit, Group, or Resource Package.	

Relationships

Table LifecycleEventType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AgencyOrganizationType	OrganizationType Deprecate	Reference to an organization or individual, defined in the organization scheme, responsible for the life cycle event.		0..n	
AgencyIndividualType	IndividualType	Reference to an organization or individual, defined in the organization scheme, responsible for the life cycle event.		0..n	

LocationRepresentationBaseType

Extends

This object extends Representation

Definition

Means of describing the Location of an action and the action itself within a representation so that they can be used by questions as a response domain. In addition to the basic objects of the representation, the structure briefly describes the object type upon which the action is to take place and the action to take (where an how to mark the object).

Properties

Table LocationRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
Object	CodeValueType	The type of object on which the action takes place such as an image, audio tape, etc. Allows for the use of a controlled vocabulary.	0..1

Relationships

Table LocationRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Action	ActionType	Describes the region of an image, recording, or text where an action where a specified action is performed and the type of action taken (i.e., Mark an "X" where the actor should be standing on the picture of the stage.).		0..n	

MeasureDefinitionReferenceType

Extends

This object extends ReferenceType

Definition

Reference to the description of a MeasureDefinition in the NCube with a designation for its place in an array of measures if applicable. TypeOfObject should be set to MeasureDefinition.

Properties

Table MeasureDefinitionReferenceType. list of properties

Name	Datatype	Description	Cardinality
arrayOrder	xs:integer	Oder within the array. Note that this attribute assumes an array base of 0. The array order assumes that the measures will always be displayed in the same order and that sparse content (a missing value in the array) will be clear between two delimiters in this array. (For example 1,1,1 or 1,,1)	0..1

ModeOfCollectionType

Extends

This object extends IdentifiableType

Definition

Describes the mode of collection, i.e., paper questionnaire, observation, web delivered questionnaire, computer assisted interview, automated data harvesting, etc. In addition to the narrative description allows for the use of a brief term or item from a controlled vocabulary to classify the mode used. If multiple modes are used repeat the element.

Properties

Table ModeOfCollectionType. list of properties

Name	Datatype	Description	Cardinality
TypeOfModeOfCollection	CodeValueType	Allows brief identification of the mode used with the option of using a controlled vocabulary.	0..1
Description	StructuredStringType	Full description of the mode of collection. Supports structured content and multiple language content.	0..1

NumericRepresentationBaseType

Extends

This object extends Representation

Definition

Defines the representation for a numeric response. May be a range or specific value, or a list of ranges.

Properties

Table NumericRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
NumericTypeCode	CodeValueType	Identification of the numeric type such as integer, decimal, etc. supports the use of an external controlled vocabulary.	0..1
format	xs:string	A format for number expressed as a string.	0..1
scale	xs:integer	The scale of the number expressed as an integer	0..1

Name	Datatype	Description	Cardinality
		(for example a number expressed in 100's, 5 = 500 would have a scale of 100).	
decimalPositions	xs:integer	The number of decimal positions expressed as an integer (precision of the number).	0..1
interval	xs:integer	The interval between valid responses expressed as an integer.	0..1

Relationships

Table NumericRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NumberRange	NumberRangeType	Defines the valid number range or number values for the representation.		0..n	

PhysicalRecordSegmentType

Extends

This object extends IdentifiableType

Definition

A description of the physical record segment as found in the data store. A logical record may be stored in one or more segments housed hierarchically in a single file or in separate data files. All logical records have at least one segment. Identifies the Key variable identifying the segment if the identifier exists in the record, a file name identifier if the segment identification is expressed as part of the file name (used when each segment is stored in a separate file), the order of this segment in relation to other physical segments as part of the logical record, and a flag indicating whether or not the physical segment contains a key.

Properties

Table PhysicalRecordSegmentType. list of properties

Name	Datatype	Description	Cardinality
FileNameIdentification	xs:string	If the file containing this segment has a standard section of its file name, include it here. For example a segment number. For example, in the files	0..1

Name	Datatype	Description	Cardinality
		2000SF10001.csv and 2000SF10002.csv the last 4 digits contain the segment number. There is no standard means of specifying this information in a machine-actionable way. This statement is informational but in some legacy files may be the only location where the segment identification is found.	
segmentOrder	xs:integer	Indicates the position of this physical record segment within the logical record expressed as an integer.	0..1
hasSegmentKey	xs:boolean	Set to "true" if there is a variable identifying the segment order. If true a segment key should be declared in a KeyVariableReference. Set to "false" if there are multiple segments and the identification of a particular segment is based on the order of the records within the file.	0..1

Relationships

Table PhysicalRecordSegmentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
KeyVariableReference	KeyVariableReference	Reference to the Unique key variable for segment identification.		0..1	

PhysicalStructureLinkReferenceType

Extends

This object extends ReferenceType

Definition

References a PhysicalStructure description and the ID of the physical record segment from that is described by this record layout. TypeOfObject should be set to PhysicalStructure.

Relationships

Table PhysicalStructureLinkReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
PhysicalRecordSegmentUsed	PhysicalRecordSegment	References the ID of PhysicalRecordSegment that describes the coverage of the record contents. The ID of the PhysicalRecordSegment must be contained within the referenced PhysicalStructure.	PhysicalRecordSegment	1..1	

PhysicalTableLocationType

Extends

This object extends PhysicalLocationType

Definition

The location of the data item within a two-dimensional (spreadsheet) storage format.

Properties

Table PhysicalTableLocationType. list of properties

Name	Datatype	Description	Cardinality
ColumnNumber	xs:integer	Column in which data item is found. This is an integer defined in relationship to a specified "first" column NOT the column identifier found in the spreadsheet. Begin numbering columns from the upper left corner of the table as defined in TopLeftTableAnchor attribute "column".	0..1
RowSequence	xs:integer	A single case may be represented on a single row or a series of rows, particularly when multiple measures	0..1

Name	Datatype	Description	Cardinality
		are used. This element designates the row, with the assumption that there is a single row per case unless otherwise stated.	

RankingRangeType

Extends

This object extends Range

Definition

Describes the range of values used in the ranking system using Range and sets the number of times a single value can be repeated.

Properties

Table RankingRangeType. list of properties

Name	Datatype	Description	Cardinality
maximumRepetitionOfSingleValue	Integer	Allows values to be expressed more than once, for example if respondent can specify a "tie" by repeating a single value.	0..1

RankingRepresentationBaseType

Extends

This object extends Representation

Definition

A means of capturing the representation of Ranking to be used as a response domain used by a question. In addition to the basic objects of the representation, the structure defines the range used for ranking including the number of times an individual value may be repeated.

Relationships

Table RankingRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
RankingRange	RankingRangeType	The allowed values expressed using Range (allows for		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		non-numeric values). In addition, defines the number of times a value may be used in expressing a ranking.			

SamplingProcedureType

Extends

This object extends IdentifiableType

Definition

Describes the type of sample, sample design and provides details on drawing the sample. In addition to the descriptive narrative supports the use of a brief term or controlled vocabulary to classify the type of sampling procedure described.

Properties

Table SamplingProcedureType. list of properties

Name	Datatype	Description	Cardinality
TypeOfSamplingProcedure	CodeValueType	Allows brief identification of sampling procedure used with the option of using a controlled vocabulary.	0..1
Description	StructuredStringType	Full description of the sampling procedure. This may include information on the sample frame, sampling methodology, and procedures for identifying and selecting sub-populations. Supports structured content and multiple language content.	0..1

TextRepresentationBaseType

Extends

This object extends Representation

Definition

Structures a textual representation. MinLength and maxlength attributes are inclusive integers describing the number of permitted characters. The regExp attribute holds a regular expression describing the valid contents of the string.

Properties

Table TextRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
maxLength	xs:integer	The maximum number of characters allowed.	0..1
minLength	xs:integer	The minimum number of characters allowed.	0..1
regExp	xs:string	A regular expression limiting the allowed characters or character order of the content.	0..1

TimeMethodType

Extends

This object extends IdentifiableType

Definition

Describes the time method or time dimension of the data collection. This may cover specific timing issues such as when a data collection instrument is fielded (time of year, month, week, day), intended repetition, length of data collection period etc. In addition to the descriptive narrative supports the use of a brief term or external controlled vocabulary to classify the methodology used.

Properties

Table TimeMethodType. list of properties

Name	Datatype	Description	Cardinality
TypeOfTimeMethod	CodeValueType	Allows brief identification of time method used with the option of using a controlled vocabulary.	0..1
Description	StructuredStringType	Full description of the data time method used. Supports structured content and multiple language content.	0..1

URNType

Extends

This object extends DDIURNType

Definition

Container for a URN following the pattern designed by DDIURNType. Provides a fixed type attribute signifying that it is a URN.

Properties

Table URNType. list of properties

Name	Datatype	Description	Cardinality
type	xs:string	Specifies that this URI is a URN. In future, other types of URI may be allowed here.	0..1
typeOfIdentifier	DDIIDType	Identifies the format of the DDI URN as being canonical or deprecated.	0..1

VersionableType

Extends

This object extends AbstractVersionableType

Definition

Adds the attribute identifying this as a versionable object as well as the MaintainableObject. All versionable objects should provide their contextual information, the identity of their maintainable parent. The deprecated form of the URN contains all the information to identify and object and its context. A Canonical URN scoped to the Maintainable contains the ID of the Maintainable as part of its structure. To provide full contextual information use the MaintainableObject structure. The use of the Canonical URN scoped to the agency or the identification sequence alone requires the content of the MaintainableObject to provide full contextual information. All content of Versionable is considered to be administrative metadata. Note that changes to the administrative metadata does not drive a change in the version of the parent objects. See DDI 3.2 Technical Documentation: Part I for further details.

Properties

Table VersionableType. list of properties

Name	Datatype	Description	Cardinality
isVersionable	xs:boolean	This is a fixed flag informing the system or user that this element is versionable and may be versioned over time as well as referenced.	0..1

Relationships

Table VersionableType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MaintainableObject	MaintainableObject	This Type section provides information on the Maintainable Parent of this object at its point of origination. This content will not change over time unless the version of the object changes. Note that if the ID, Agency, Version sequence is used, and the scope of uniqueness of the referenced object is the Maintainable, then the ID of the Maintainable is needed to create the structured ID portion of the canonical URN. If the system uses the deprecated URN, both the Maintainable ID and TypeOfMaintainableObject are required to create the deprecated URN structure.	TypeOfMaintainableObject	0..1	

AbstractMaintainableType

Extends

This object extends AbstractVersionableType

Definition

Used to identify described maintainable objects for purposes of internal and/or external referencing. Elements of this type may be maintained as independent objects (outside of a parent object). Provides containers for Uniform Resource Name (URN) as well as ID information. An entity can either be identified either by a URN and/or an identification sequence. At a minimum, one or the other is required. You must designate they type of URN supported by your agency, either "Canonical" or "Deprecated". To fully support interoperability both the DDI URN and the full identification sequence should be used. Note that to support interoperability of the canonical and deprecated URN, at minimum the MaintainableIdentifier and TypeOfMaintainableObject should be supplied if the canonical URN is being used by the agency. If both URN and the identification sequence is used, and there is any conflict, the URN takes precedence. The element can be designated as an addition, replacement, or deletion to facilitate tracking changes. In addition to the elements and attributes inherited from AbstractIdentifiable, additional information regarding the versioning process can be provided; version date, the person and/or organization within the maintenance agency responsible for the change as either text or reference, and the reason for the change. If the object created was based on an existing object (other than by versioning), the object on which it is based can be identified using BasedOnReference. In addition to UserID, versionable and maintainable objects may also designate additional user specific properties expressed as a key/value pair using UserAttributePair. Maintainable objects may also contain any notes related to the objects they contain, identification of the software used to create and/or manage the metadata, a statement of the metadata quality, and a default URI value to use for external external references. The attribute xmlang can be used to provide specification of the default language of the metadata contents. When the isPublished attribute is set to "true" it indicates to the user that they may safely reference the contents as they will continue to be accessible and any changes in the non-administrative content will be tracked by a versioning mechanism.

Properties

Table AbstractMaintainableType. list of properties

Name	Datatype	Description	Cardinality
Note	Note	Note allows for the attachment of a piece of additional information to any object with an ID. Note facilitates capturing temporary processing notes such as "Review and approval required". A single note can be attached to multiple objects by reference to the objects. Note may also contain content for a needed object that has been reported for addition in a later version of the schema. Ideally this should be handled by a local extension, but Note can accommodate run-time extensions when required. The Note should be housed within the Maintainable	0..n

Name	Datatype	Description	Cardinality
		object that contains the referenced objects. In this way the user is ensured of receiving all known Note attachments when the maintainable content is delivered. This means that if a Note references objects within multiple Maintainable objects, the Note should be repeated in each Maintainable and reference only those objects with that Maintainable.	
Software	SoftwareType	Indicate the software used to create and/or manage the metadata. This is repeatable to allow for multiple softwares or multiple functions. If this information is important it is advisable to provide it in each maintainable so that it does not become separated from the internal content if the metadata is refactored.	0..n
externalReferenceDefaultURI	xsd:anyURI	Use to provide a default value for the URI of external references. Use of a URI in a reference within this maintainable overrides the value entered here. Nested maintainables should redeclare the contents of this attribute for clarity.	0..1
isPublished	xs:boolean	Indicates that the maintainable will not be changed without versioning, and is a stable target for referencing.	0..1
xml:lang	xml:lang	This is used to designate the language of the metadata content of the maintainable. If a lower level xmlang attribute conflicts with	0..1

Name	Datatype	Description	Cardinality
		the content at the maintainable level, the object level value takes precedence.	

Relationships

Table AbstractMaintainableType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MetadataQuality	MetadataQuality	Type assessment of the quality of the metadata within the Maintainable object, e.g. the quality of the transcription, completeness, editing status, etc.		0..n	

AccessType

Extends

This object extends IdentifiableType

Definition

Describes access to the holdings of the archive or to a specific data product. In addition to the name, label, and description for access. This item includes a confidentiality statement, descriptions of the access permissions required, restrictions to access, citation requirements, depositor requirements, conditions for access, a disclaimer, any time limits for access restrictions, and contact information regarding access.

Properties

Table AccessType. list of properties

Name	Datatype	Description	Cardinality
AccessTypeName	Name	A name by which the description of access is known. May be expressed in multiple languages. Repeat the element to express names with different content, for example, different names for different systems.	0..n
Label	Label	A display label for the description of access.	0..n

Name	Datatype	Description	Cardinality
		May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the access description. May be expressed in multiple languages and supports the use of structured content.	0..1
ConfidentialityStatement	StructuredStringType	A statement regarding the confidentiality of the related data or metadata.	0..1
AccessPermission	FormType	A link to a form used to provide access to the data or metadata including a statement of the purpose of the form.	0..n
Restrictions	StructuredStringType	A statement regarding restrictions to access. May be expressed in multiple languages and supports the use of structured content.	0..1
CitationRequirement	StructuredStringType	A statement regarding the citation requirement. May be expressed in multiple languages and supports the use of structured content.	0..1
DepositRequirement	StructuredStringType	A statement regarding depositor requirements. May be expressed in multiple languages and supports the use of structured content.	0..1
AccessConditions	StructuredStringType	A statement regarding conditions for access. May be expressed in multiple languages and supports the use of structured content.	0..1
Disclaimer	StructuredStringType	A disclaimer regarding the liability of the data producers or providers. May be expressed in multiple languages and	0..1

Name	Datatype	Description	Cardinality
		supports the use of structured content.	

Relationships

Table AccessType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AccessRestriction	AccessRestriction	Date Type or date range of the access restriction for all or portions of the data. Includes a reason for the access restriction as well as the user group to which the restriction applies.		0..1	
ContactOrganization	OrganizationType Deprecate	A reference to an organization or individual to contact for further information regarding the metadata or data.		0..n	
ContactOrganization	IndividualType	A reference to an organization or individual to contact for further information regarding the metadata or data.		0..n	

AggregationVariablesType

Extends

This object extends IdentifiableType

Definition

Identifies the independent and dependent variables used in the aggregation process. Note that in the case of calculating a percentage, mean, etc. of a dependent value against the total population of the cell, there is no independent variable.

Relationships

Table AggregationVariablesType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IndependentVariableType	VariableType	A reference to a variable, which is an important constraint for the computed aggregation measure and has the potential to invoke a change in a dependent variable like sex for average of income. In the context of calculating percentages, the use of Sex as the independent variable would indicate that the percentages provided represent the percentage of the dependent variable associated with a specific value for Sex (i.e., the dependent variable expressed as a percentage of the total for Males). This would be opposed to the percent for the full population (the percent of the total grid population falling within that particular cell).		0..n	
DependentVariableType	VariableType	A reference to a variable, for which		1..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the aggregate measure is computed like average of income.			

BaseRecordLayoutType

Extends

This object extends VersionableType

Definition

This type structures an abstract element which is used only as the head of a substitution group. It contains a reference to the Physical Structure that is available for use in all of the substitute RecordLayout structures.

Properties

Table BaseRecordLayoutType. list of properties

Name	Datatype	Description	Cardinality
EndOfLineMarker	CodeValueType	Specifies the end-of-line (EOL) marker used in the file as produced. If no value is provided assume the use of a CRLF (carriage return and line feed). This is the common EOL for PC's. The common EOL in a Unix environment is LF. Some systems will automatically translate EOLs when a file is moved across systems. Common EOLs include: CR (carriage return), LF (line feed), CRLF, NEL (next line), VT (vertical tab), FF (form feed), LS (line separator) and PS (paragraph separator). See Part I documentation for more detailed information. This object supports the use of a controlled vocabulary. Use of a common controlled vocabulary is strongly recommended.	0..1

Relationships

Table BaseRecordLayoutType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
PhysicalStructure	PhysicalStructure	FileReferenceType the PhysicalStructure and the PhysicalSegment used by this Record Layout.		1..1	
textQualifier	TextQualifierType	Use for delimited files to designate the which text qualifier, if any, was used. Valid values include: singleQuote, doubleQuote, and none.		0..1	

CategoryDomainType

Extends

This object extends CategoryRepresentationBaseType

Definition

A response domain capturing a category (without an attached code) response for a question item. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content, as well as a CategoryRepresentationBase.

Properties

Table CategoryDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports	0..1

Name	Datatype	Description	Cardinality
		the use of structured content.	
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table CategoryDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AnyType the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

CodeDomainType

Extends

This object extends CodeRepresentationBaseType

Definition

A response domain capturing a coded response (where both codes and their related category value are displayed) for a question. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content. Contains the equivalent content of a CodeRepresentation including a reference to the CodeList used and the ability to limit the use of the CodeList to specific CodeList levels, ranges, or values. Adds a set of elements available to all Response Domains; Label, Description, OutParameter, designation of response cardinality, and

a declaration of an offset date for the data content. CodeDomains cannot be included by reference. CodeDomain does not have an equivalent managed representation as the CodeList itself is a managed object. CodeDomains must be entered in-line.

Properties

Table CodeDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table CodeDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AllType the designation of the minimum		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		and maximum number of responses allowed for this response domain.			

CollectionEventType

Extends

This object extends IdentifiableType

Definition

Information on a specific data collection event including details on who was involved in data collection, the source of the data, the date and frequency of collection, mode of collection, identification of the instrument used for collection, information on the actual situation under which data was collected, actions taken to minimize loss of data, and reference to a quality standard or statement regarding the handling of the data collection process during this event.

Properties

Table CollectionEventType. list of properties

Name	Datatype	Description	Cardinality
DataCollectionDate	DateType	Provides a date or range of dates for the described data collection event as well as a cycle number when the collection is part of a series of data collection events.	0..1

Relationships

Table CollectionEventType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DataCollectorOrganizationType	OrganizationType Deprecate	Reference to an organization or individual, defined in the organization scheme, responsible for the data collection. [Referenced object not explicit]		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
DataCollectorOrganization	IndividualType	Reference to an organization or individual, defined in the organization scheme, responsible for the data collection. [Referenced object not explicit]		0..n	
DataSource	DataSourceType	Describes a source of the data.		0..n	
DataCollectionFrequency	DataCollectionFrequencyType	Intended frequency of data collection, for example monthly, yearly, weekly, etc., preferably using an optional controlled vocabulary in the IntendedFrequency element. Date of first collection should be provided in StartDate as a basis for defining periodicity. EndDate should be entered for data collection cycles with a known or anticipated end date. EndDate is omitted in data collection series that are intended to be on-going.		0..n	
ModeOfCollection	ModeOfCollectionType	Describes the mode of data collection.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
InstrumentReference	InstrumentType	References the instrument or instruments used during the process of collecting data for this collection event period.		0..n	
CollectionSituation	CollectionSituationType	Describes the situation in which the data collection event takes place. If a number of collection situation types occurred repeat this element.		0..n	
ActionToMinimizeLosses	ActionToMinimizeLossesType	Describes the action taken to minimize loss of data from the collection event.		0..n	
QualityStatementReference	QualityStatement	Type reference to a Quality Statement pertaining to the quality of the study methodology, metadata, or data to which it is associated. Quality statements may be related to external quality standards.		0..n	

CollectionSituationType

Extends

This object extends IdentifiableType

Definition

Describes the situation in which the data collection event takes place.

Properties

Table CollectionSituationType. list of properties

Name	Datatype	Description	Cardinality
TypeOfCollectionSituation	CodeValueType	Allows brief identification of collection situation with the option of using a controlled vocabulary.	0..1
Description	StructuredStringType	Full description of the collection situation. Supports structured content and multiple language content.	0..1

Country_2Type

Extends

This object extends CountryCodeType

Definition

Allows for string content which may be taken from an externally maintained controlled vocabulary (code value). If the content is from a controlled vocabulary provide the code value, as well as a reference to the code list from which the value is taken. Provide as many of the identifying attributes as needed to adequately identify the controlled vocabulary. Note that DDI has published a number of controlled vocabularies applicable to several locations using the CodeValue structure. Use of shared controlled vocabularies helps support interoperability and machine actionability.

Properties

Table Country_2Type. list of properties

Name	Datatype	Description	Cardinality
codeListID	xs:string	The ID of the code list (controlled vocabulary) that the content was taken from.	0..1
codeListName	xs:string	The name of the code list. Fixed as ISO3166 2-letter	0..1
codeListAgencyName	xs:string	The name of the agency maintaining the code list.	0..1
otherValue	xs:string	If the value of the string is "Other" or the equivalent from the codelist, this attribute can provide a more	0..1

Name	Datatype	Description	Cardinality
		specific value not found in the codelist.	
codeListURN	xs:string	The URN of the codelist. Fixed value. Note this is fixed as late bound. Codes will not be removed from this list when the country code is no longer in active use.	0..1

Country_3Type

Extends

This object extends CountryCodeType

Definition

Allows for string content which may be taken from an externally maintained controlled vocabulary (code value). If the content is from a controlled vocabulary provide the code value, as well as a reference to the code list from which the value is taken. Provide as many of the identifying attributes as needed to adequately identify the controlled vocabulary. Note that DDI has published a number of controlled vocabularies applicable to several locations using the CodeValue structure. Use of shared controlled vocabularies helps support interoperability and machine actionability.

Properties

Table Country_3Type. list of properties

Name	Datatype	Description	Cardinality
codeListID	xs:string	The ID of the code list (controlled vocabulary) that the content was taken from.	0..1
codeListName	xs:string	The name of the code list. Fixed as ISO3166 3-letter	0..1
codeListAgencyName	xs:string	The name of the agency maintaining the code list.	0..1
otherValue	xs:string	If the value of the string is "Other" or the equivalent from the codelist, this attribute can provide a more specific value not found in the codelist.	0..1
codeListURN	xs:string	The URN of the codelist. Fixed value. Note this is fixed as late	0..1

Name	Datatype	Description	Cardinality
		bound. Codes will not be removed from this list when the country code is no longer in active use.	

Country_NType

Extends

This object extends CountryCodeType

Definition

Allows for string content which may be taken from an externally maintained controlled vocabulary (code value). If the content is from a controlled vocabulary provide the code value, as well as a reference to the code list from which the value is taken. Provide as many of the identifying attributes as needed to adequately identify the controlled vocabulary. Note that DDI has published a number of controlled vocabularies applicable to several locations using the CodeValue structure. Use of shared controlled vocabularies helps support interoperability and machine actionability.

Properties

Table Country_NType. list of properties

Name	Datatype	Description	Cardinality
codeListID	xs:string	The ID of the code list (controlled vocabulary) that the content was taken from.	0..1
codeListName	xs:string	The name of the code list. Fixed as ISO3166 numeric	0..1
codeListAgencyName	xs:string	The name of the agency maintaining the code list.	0..1
otherValue	xs:string	If the value of the string is "Other" or the equivalent from the codelist, this attribute can provide a more specific value not found in the codelist.	0..1
codeListURN	xs:string	The URN of the codelist. Fixed value. Note this is fixed as late bound. Codes will not be removed from this list when the country code is no longer in active use.	0..1

DataCollectionMethodologyType

Extends

This object extends IdentifiableType

Definition

A basic structure for describing the methodology used for collecting data. In addition to a descriptive narrative, the methodology may be classified by a short term or external controlled vocabulary.

Properties

Table DataCollectionMethodologyType. list of properties

Name	Datatype	Description	Cardinality
TypeOfDataCollectionMethodology	ChoiceType	Allows for brief identification of the type of data collection methodology using an optional controlled vocabulary.	0..1
Description	StructuredStringType	Full description of the data collection methodology. Supports structured content and multiple language content.	0..1

DataSetType

Extends

This object extends BaseRecordLayoutType

Definition

DataSet is a substitution for a BaseRecordLayout and allows for in-line inclusion of micro or unit level data in the metadata file. This is valuable for small datasets or cases where there is a need to combine the metadata and data within a single file. In addition to the PhysicalStructureReference the DataSet indicates the ArrayBase if applicable, a name for the DataSet, a reference to the default Variable Scheme used by the data set, a reference to an Identifying Variable (e.g. case number), and a choice of organization order for the data Record Set, Item Set, or Variable Set. RecordSet describes records of data which contain the same variables in the same order, ItemSet describes individual items of a dataset in any order. VariableSet describes the values for a given variable in record order.

Properties

Table DataSetType. list of properties

Name	Datatype	Description	Cardinality
ArrayBase	xs:integer	Sets the array base for any arrays used in	0..1

Name	Datatype	Description	Cardinality
		the definition (that is, whether the first value is in position 0 or 1, etc.).	
DataSetName	Name	A name for the data set. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n

Relationships

Table DataSetType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IdentifyingVariableReference	VariableReference	Reference to the variable used to identify a specific record within the data set (unique identifier or key).		0..1	
DefaultVariableSchemeReference	VariableScheme	Reference to the Variable Scheme containing all or a majority of the variables in the data set. May be overridden by an individual VariableReference.		0..1	
RecordSet	RecordSetType	Storage format arranged record by record. A RecordSet requires a list of variables to appear in a specified order.		0..	
ItemSet	ItemSetType	Storage format for random order item variables. Each ItemValue references it's defining		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		variable, it's record identifier, and the it's value.			
VariableSet	VariableSetType	Storage format arranged variable by variable. Item values are listed in record order with the assumption that each record will occupy the position in each array.		0..	

DateTimeDomainType

Extends

This object extends DateTimeRepresentationBaseType

Definition

A response domain capturing a date or time response for a question item. Contains the equivalent content of a DateTimeRepresentation including the format of the date field, a DateTypeCode, and restriction of content using a regular expression. Adds a set of elements available to all Response Domains; Label, Description, OutParameter, designation of response cardinality, and a declaration of an offset date for the data content. Has an equivalent DateTimeDomainReference which references a ManagedTextRepresentation.

Properties

Table DateTimeDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1

Name	Datatype	Description	Cardinality
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent and ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table DateTimeDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AnyType the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

DeviationFromSampleDesignType

Extends

This object extends IdentifiableType

Definition

Describes any deviations from the planned sample design. These may be for reasons of practicality, implementation issues, or other reasons. In addition to a narrative description allows for use of a brief term or controlled vocabulary term to classify the type of deviation.

Properties

Table DeviationFromSampleDesignType. list of properties

Name	Datatype	Description	Cardinality
TypeOfDeviationFromSampleDesignType	CodeDataType	Allows brief identification of the deviation from the sample design with the option of using a controlled vocabulary.	0..1
Description	StructuredStringType	Full description of deviation from the sample design. Supports structured content and multiple language content.	0..1

DistributionDomainType

Extends

This object extends DistributionRepresentationBaseType

Definition

A response domain capturing a distribution response for a question item. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content, as well as the description of a distribution representation.

Properties

Table DistributionDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one	0..1

Name	Datatype	Description	Cardinality
		of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent and ordered array of the responses.	
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table DistributionDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	Indicates the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

EmbargoType

Extends

This object extends IdentifiableType

Definition

Provides information about data that are not currently available because of policies established by the principal investigators and/or data producers. This item may be attached to specific levels of a study such as a specific variable by reference. Embargo provides a name, label and description of the embargo, the dates covered by the embargo, the rationale or reason for the embargo, a reference to the agency establishing the embargo, and a reference to the agency enforcing the embargo.

Properties

Table EmbargoType. list of properties

Name	Datatype	Description	Cardinality
EmbargoName	Name	The name or names by which the embargo is known. Repeat if different names are used for different purposes or different contexts. Language repetition is handled within the structure of the Embargo Name element.	0..n
Label	Label	A label or labels for the embargo element. Repeat for differences in content due to software or application constraints. Language repetition is handled within the structure of the label.	0..n
Description	StructuredStringType	Describe the content and coverage of the embargo. Structure supports multiple languages.	0..1
Date	DateType	Provides the end date of the embargo, which may take the form of a date range (complete or open ended). Note SimpleDate should not be used for an Embargo Date as an embargo is for a period of time.	0..1
Rationale	StructuredStringType	Indicates the reason for the embargo.	0..1

Relationships

Table EmbargoType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AgencyOrganization	OrganizationType Deprecate	Reference to an organization or individual, defined in the organization scheme,		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		responsible for the embargo.			
AgencyOrganizationIndividualType	IndividualType	Reference to an organization or individual, defined in the organization scheme, responsible for the embargo.		0..1	
EnforcementAgencyOrganizationType	OrganizationType Deprecate	Reference to an organization or individual, defined in the organization scheme, responsible for enforcing the embargo.		0..n	
EnforcementAgencyIndividualType	IndividualType	Reference to an organization or individual, defined in the organization scheme, responsible for enforcing the embargo.		0..n	

GeneralInstructionType

Extends

This object extends VersionableType

Definition

Processing instructions that pertain to data collection or data processing overall such as handling of non-response to questions, imputation practices, suppression rules, etc. General instructions should be listed separately to allow for referencing of specific processes.

Properties

Table GeneralInstructionType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the general instruction. May be expressed in multiple languages and supports the use of structured content.	0..1

Name	Datatype	Description	Cardinality
CommandCode	CommandCode	Structured information used by a system to process the instruction.	0..n
isOverride	xs:boolean	If set to "true", indicates that this coding instruction overrides a more generally used process.	0..1

Relationships

Table GeneralInstructionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
OverriddenCode	GeneralInstructionType	Used when attribute of the containing GeneralInstruction isOverride equals true. This element provides the reference to the GeneralInstruction being overridden by the use of this instruction. For example a special confidentiality process used for a select set of variables rather than the normal process. [Referenced object not explicit]		0..1	
OverriddenCode	GenerationInstructionType	Used when attribute of the containing GeneralInstruction isOverride equals true. This element provides the reference to the GeneralInstruction being overridden by the use of this instruction. For example a		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		special confidentiality process used for a select set of variables rather than the normal process. [Referenced object not explicit]			

GenerationInstructionType

Extends

This object extends VersionableType

Definition

Processing instructions for recodes, derivations from multiple question or variable sources, and derivations based on external sources. Instructions should be listed separately so they can be referenced individually.

Properties

Table GenerationInstructionType. list of properties

Name	Datatype	Description	Cardinality
ExternalInformation	OtherMaterialType	Reference to an external source of information used in the coding process, for example a value from a chart, etc.	0..n
Description	StructuredStringType	A description of the generation instruction. May be expressed in multiple languages and supports the use of structured content.	0..1
CommandCode	CommandCode	Structured information used by a system to process the instruction.	0..n
isDerived	xs:boolean	Default setting is "true", the instruction describes a derivation. If the instruction is a simple recode, set to "false".	0..1

Relationships

Table GenerationInstructionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SourceVariable	SourceReferenceType	Reference to a variable used in the coding process		0..n	
ControlConstructReference	ControlConstructReferenceType	Reference to a construct which is used to describe or process the instruction.		0..n	
Aggregation	AggregationType	Describes the aggregation process, identifying both the independent and dependent variables within the process.		0..1	

GeographicDomainType

Extends

This object extends GeographicRepresentationBaseType

Definition

Structures the response domain for a geographic point to ensure collection of relevant information. The point may be associated with a polygon (such as the centroid of the polygon) or a line (end or shape points of a line). Note that the common response domain objects (OutParameter, ResponseCardinality, and ContentDateOffset) are available at each of the response objects in the representation.

Properties

Table GeographicDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1

GeographicLocationCodeDomainType

Extends

This object extends GeographicLocationCodeRepresentationBaseType

Definition

A response domain capturing the name or code of a Geographic Location as a response for a question item. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content, as well as a description of a geographic location code representation. Allows for capturing a limited segment of a complex geographic code.

Properties

Table GeographicLocationCodeDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses	0..1

Name	Datatype	Description	Cardinality
		are possible, this would represent and ordered array of the responses.	
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table GeographicLocationCodeDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	Identifies the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

GeographicStructureCodeDomainType

Extends

This object extends GeographicStructureCodeRepresentationBaseType

Definition

A response domain capturing a geographic structure code as a response for a question item. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content, as well as a description of a geographic structure code representation.

Properties

Table GeographicStructureCodeDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example,	0..n

Name	Datatype	Description	Cardinality
		labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table GeographicStructureCodeDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AllType the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

GrossFileStructureType

Extends

This object extends IdentifiableType

Definition

Includes information about the file structure, as well as other characteristics that are specific to the physical instance. Information includes place of production, processing checks to validate the content, processing status, the software used to create the data file, and check sums for the number of cases and overall record count.

Properties

Table GrossFileStructureType. list of properties

Name	Datatype	Description	Cardinality
PlaceOfProduction	xs:string	Indicates the place where the physical instance was produced expressed as a simple string.	0..1
ProcessingCheck	StructuredStringType	Documents processing checks and other operations performed on the data file.	0..n
ProcessingStatus	CodeValueType	Processing status of the data file. Supports the use of an external controlled vocabulary.	0..1
CreationSoftware	SoftwareType	Indicates the software that was used to create the data file.	0..1
CaseQuantity	xs:integer	Number of cases or observations in the data file. Caution in using optional checksums is recommended. Conflict between checksums and the items being counted can cause problems with warning flags during processing. If using checksum to capture information for internal processing purposes, the use of automatically generated check sums is strongly urged.	0..1
OverallRecordCount	xs:integer	Overall record count in the data file. Caution in using optional checksums is recommended. Conflict between checksums and the items being counted can cause problems with warning flags during processing. If using checksum to capture	0..1

Name	Datatype	Description	Cardinality
		information for internal processing purposes, the use of automatically generated check sums is strongly urged.	

GrossRecordStructureType

Extends

This object extends IdentifiableType

Definition

The gross or macro level structures of the record structure including the link to the LogicalRecord and information on the number and ordering of each Physical Segment of the LogicalRecord as stored in the data file. Provides an attribute stating the number of physical segments with a default value of "1".

Properties

Table GrossRecordStructureType. list of properties

Name	Datatype	Description	Cardinality
numberOfPhysicalSegments	integer	Number of physical records segments each logical record (case) is divided into. Express as an integer. Caution in using checksums is recommended. Conflict between checksums and the items being counted can cause problems with warning flags during processing. If using checksum to capture information for internal processing purposes, the use of automatically generated check sums is strongly urged.	0..1

Relationships

Table GrossRecordStructureType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
LogicalRecordReference	LogicalRecordType	Reference to the LogicalRecord that describes the record type and intellectual		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		content of the record within the physical data file.			
PhysicalRecordSegment	PhysicalRecordSegment	Segment Type of each physical storage segment required to completely cover the logical record. A logical record may be stored in one or more segments housed hierarchically in a single file or in separate data files. All logical records have at least one segment.		1..n	

LocationDomainType

Extends

This object extends LocationRepresentationBaseType

Definition

A response domain capturing a location response (mark on an image, recording, or object) for a question. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content.

Properties

Table LocationDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of	0..1

Name	Datatype	Description	Cardinality
		the domain. May be expressed in multiple languages and supports the use of structured content.	
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table LocationDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AnyType the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

ManagedDateTimeRepresentationType

Extends

This object extends VersionableType

Definition

Means of describing DateTime so that they can be reused by multiple variables or questions/question constructs. Regardless of the format of the data the content may be treated as a date and or time and converted to ISO standard structure if sufficient information is supplied. In addition to the name, label,

and description of the representation, the structure provides the DateField Format, a DateTypeCode and a regular expression for further defining allowed content.

Properties

Table ManagedDateTimeRepresentationType. list of properties

Name	Datatype	Description	Cardinality
ManagedDateTimeRepresentationName	NotationName	A name for the representation. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the representation. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the representation. May be expressed in multiple languages and supports the use of structured content.	0..1
RecommendedDataType	CodeValueType	This field provides the recommended treatment of the data within an application. The value should come from a controlled vocabulary - recommended values include the set found in W3C XML Schema Part 2, but excluding string sub-types, QNAME, and NOTATION.	0..1
GenericOutputFormat	CodeValueType	This field provides a recommended generic treatment of the data for display by an application. The value should come from a controlled vocabulary.	0..1
DateFieldFormat	CodeValueType	Describes the format of the date field, in formats such as YYYY/MM or MM-DD-YY, etc. If this	0..1

Name	Datatype	Description	Cardinality
		element is omitted, then the format is assumed to be the XML Schema format corresponding to the type attribute value.	
DateTypeCode	CodeValueType	This is a standard XML date type code and supports the use of an external controlled vocabulary. Examples are date, dateTime, gYearMonth, gYear, and duration	0..1
regExp	xs:string	The regular expression allows for further description of the allowable content of the data.	0..1
classificationLevel		Indicates the type of relationship, nominal, ordinal, interval, ratio, or continuous. Use where appropriate for the representation type.	0..1

ManagedNumericRepresentationType

Extends

This object extends VersionableType

Definition

A means of capturing a managed representation of a numbers (item that are analyzed as numbers) which can be referenced by a variable or question and used as a value representation or response domain. In addition to the name, label, and description of the managed numeric representation, the structure defines the number range of valid values, plus information on the format, scale, number of decimals, and intervals between valid responses within the range.

Properties

Table ManagedNumericRepresentationType. list of properties

Name	Datatype	Description	Cardinality
ManagedNumericRepresentationName	Name	A name for the ManagedNumericRepresentation. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n

Name	Datatype	Description	Cardinality
Label	Label	A display label for the representation. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the representation. May be expressed in multiple languages and supports the use of structured content.	0..1
RecommendedDataType	CodeValueType	This field provides the recommended treatment of the data within an application. The value should come from a controlled vocabulary - recommended values include the set found in W3C XML Schema Part 2, but excluding string sub-types, QName, and NOTATION.	0..1
GenericOutputFormat	CodeValueType	This field provides a recommended generic treatment of the data for display by an application. The value should come from a controlled vocabulary.	0..1
NumericTypeCode	CodeValueType	Identification of the numeric type such as integer, decimal, etc. supports the use of an external controlled vocabulary.	0..1
format	xs:string	A format for number expressed as a string.	0..1
scale	xs:integer	The scale of the number expressed as an integer (for example a number expressed in 100's, 5 = 500 would have a scale of 100).	0..1
decimalPositions	xs:integer	The number of decimal positions expressed as an integer (precision of the number).	0..1

Name	Datatype	Description	Cardinality
interval	xs:integer	The interval between valid responses expressed as an integer.	0..1
classificationLevel		Indicates the type of relationship, nominal, ordinal, interval, ratio, or continuous. Use where appropriate for the representation type.	0..1

Relationships

Table ManagedNumericRepresentationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NumberRange	NumberRangeType	Defines the valid number range or number values for the representation.		0..n	

ManagedRepresentationGroupType

Extends

This object extends VersionableType

Definition

Contains a group of managed representation and other managed objects used for representation, that are grouped for conceptual, administrative, or other purposes. Contents of the group may be ordered or hierarchical. In addition to the name, label, and description of the group, the structure allows for the identification of the type of group, a related universe or concept, and a listing of the included ManagedRepresentations, managed objects used for representation, and ManagedRepresentationGroups by reference.

Properties

Table ManagedRepresentationGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfManagedRepresentationGroupType	EnumerationType	A generic element for specifying a reason for a ManagedRepresentationGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1

Name	Datatype	Description	Cardinality
ManagedRepresentationGroupName	GroupName	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ManagedRepresentationGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the ManagedRepresentationGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table ManagedRepresentationGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this managed representation group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the managed		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		representations in this group.			
Subject	InternationalCode	ValueTypes are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	
Keyword	InternationalCode	ValueTypes are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
CategorySchemeReference	CategoryScheme	Reference to a CategoryScheme used as a representation.		0..n	
CodeListReference	CodeList	Reference to a CodeList used as a representation.		0..n	
GeographicStructureReference	GeographicStructureScheme	Reference to a GeographicStructureScheme used as a representation.		0..n	
GeographicLocationReference	GeographicLocationReference	Reference to a GeographicLocationReference used as a representation.		0..n	
ManagedRepresentationGroup	ManagedRepresentationGroup	Definition of constituent ManagedRepresentationGroup. This allows for nesting of ManagedRepresentationGroups.		0..n	

ManagedRepresentationSchemeType

Extends

This object extends MaintainableType

Definition

This scheme contains sets of values described by ManagedRepresentation. These are used by reference to define Variable Representation and Question Response Domain. Text representations cover all non-code and non-category representations/response domains that should be treated or analyzed as

characters regardless of whether the character is a number or a letter. In addition to the name, label and description of the scheme, the structure allows for the inclusion on an external scheme by reference, definitions of ManagedRepresentations in-line or by reference, and ManagedRepresentationGroups in-line or by reference.

Properties

Table ManagedRepresentationSchemeType. list of properties

Name	Datatype	Description	Cardinality
ManagedRepresentationSchemeName	StringName	A name for the scheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the scheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the scheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ManagedRepresentationSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ManagedRepresentationGroup	ManagedRepresentationGroupType	ManagedRepresentations for conceptual, administrative or other reasons.		0..n	

ManagedTextRepresentationType

Extends

This object extends VersionableType

Definition

Means of describing text based content used by reference to define Variable Representation and Question Response Domain. Text Representations cover all non-code and non-category representations/response domains that should be treated or analyzed as characters regardless of whether the character is a number or a letter. In addition to the name, label, and description, the scheme defines the maximum and minimum length of the allowed text and allows for the use of a regular expression to further define the valid content.

Properties

Table ManagedTextRepresentationType. list of properties

Name	Datatype	Description	Cardinality
ManagedTextRepresentationName	Name	A name for the ManagedTextRepresentation. May be expressed in multiple languages. Repeat the element to express names with different content, for example, different names for different systems.	0..n
Label	Label	A display label for the representation. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the representation. May be expressed in multiple languages and supports the use of structured content.	0..1
RecommendedDataType	CodeValueType	This field provides the recommended treatment of the data within an application. The value should come from a controlled vocabulary - recommended values include the set found in W3C XML Schema Part 2, but excluding string sub-types, QNAME, and NOTATION.	0..1
GenericOutputFormat	CodeValueType	This field provides a recommended generic treatment of the data for display by an	0..1

Name	Datatype	Description	Cardinality
		application. The value should come from a controlled vocabulary.	
maxLength	xs:integer	The maximum number of characters allowed.	0..1
minLength	xs:integer	The minimum number of characters allowed.	0..1
regExp	xs:string	A regular expression limiting the allowed characters or character order of the content.	0..1
classificationLevel		Indicates the type of relationship, nominal, ordinal, interval, ratio, or continuous. Use where appropriate for the representation type.	0..1

MethodologyType

Extends

This object extends VersionableType

Definition

Metadata regarding the methodologies used concerning data collection, determining the timing and repetition patterns for data collection, and sampling procedures. Identifies areas where there were deviations from the planned sampling approach, the software used for data collection, and references to any quality standards or statements regarding the processes surrounding the planning and implementation of data collection.

Properties

Table MethodologyType. list of properties

Name	Datatype	Description	Cardinality
DataCollectionSoftware	SoftwareType	Specification of a software package used to instantiate a data collection method.	0..n

Relationships

Table MethodologyType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DataCollectionMethod	DataCollectionMethod	MethodologyType structure for describing the methodology used for		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		collecting data. Repeat this element if multiple methodologies are used.			
TimeMethod	TimeMethodType	Describes how time fits into the data collection methodology.		0..n	
SamplingProcedure	SamplingProcedureType	Describes the type of sample, sample design and provides details on drawing the sample. May be repeated to provide descriptions of individual facets of a single sample design or when multiple sampling methods are used. When multiple descriptions are used, the use of a controlled vocabulary to identify the parts and relationships is strongly recommended.		0..n	
DeviationFromSampleDesign	DeviationFromSampleDesignType	Describes deviations from the planned sample design.		0..n	
QualityStatement	QualityStatementType	Type reference to a Quality Statement pertaining to the quality of the study methodology, metadata, or data to which it is associated. Quality		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		statements may be related to external quality standards.			

NCubeInstanceType_m2

Extends

This object extends VersionableType

Definition

A container for defining an instance of an NCube, indicating the matrix address of each cell and capturing the data for each measure within a cell of the NCube is stored. Allows specifying the values of the attributes attached to a NCube.

Properties

Table NCubeInstanceType_m2. list of properties

Name	Datatype	Description	Cardinality
DefaultDataType	CodeValueType	An explicit definition of the data type that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. This field is necessary in the case of some numeric data formats where the format definition would allow real values, but the values are integer values. Allowed values are: integer (default), real, string.	0..1
DefaultDecimalPositions	xs:integer	Number of decimal places for data with an implied decimal separator that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Another expression is the decimal scaling factor (SAS). Default: 0.	0..1

Name	Datatype	Description	Cardinality
DefaultDecimalSeparator	OneCharStringType	<p>The character used to separate the integer and the fraction part of a number (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. On the basis of the data definition in DDI documents, data processing tools could compute the necessary precision width on the basis of the format width and the existence of separators. Appropriate data types could be used, i.e. float or double, short or long. The decimal separator definition only makes sense with some XML Schema primitives. This is a default which may be overridden in specific cases.</p>	0..1
DefaultDigitGroupSeparator	OneCharStringType	<p>The character used to separate groups of digits (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. The decimal separator definition makes only sense with some XML Schema primitives. This is a default which may be overridden in specific cases.</p>	0..1

Name	Datatype	Description	Cardinality
NumberOfCases	xs:integer	Total number of cases represented by the contents of the NCube. This is normally the sum of the cell contents when the NCube contains counts and sub-totals are not included.	0..1

Relationships

Table NCubeInstanceType_m2. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NCubeReference	NCubeType	Reference to the logical NCube description.		1..1	
MeasureDimension	MeasureDimension	This element defines the structure of a measure dimension for the NCube Instance. A value along the MeasureDimension is defined by a stack of references to one or more MeasureDefinitions found in the logical description of the NCube with each containing an attribute of orderValue which provides its value for use in the cell address (similar to the use of a CodeRepresentation of a Variable used as a conceptual dimension. This allows measures (whether one or		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>several) to be handled in the same way as the conceptual dimension of the NCube in declaring a cell address. It is assumed that the value of the MeasureDimension is the last value in the address array. For example, for an NCube with 3 conceptual dimensions of rank 1 = Sex, rank 2 = Age, and rank 3 = Educational Attainment, plus a MeasureDimension. The cell address of 1,4,2,2 would indicate Code value of 1 for Sex, 4 for Age, 2 for Educational Attainment, and 2 for MeasureDimension. For systems translating to SDMX or an OLap structure DDI assumes that the MeasureDefinitionReference with the orderValue="1" is the equivalent of the PrimaryMeasure.</p>			
DataItem	DataItemType	Describes a single data item or cell within an NCube Instance. It defines its		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		location within the NCube by its coordinate (matrix) address which is its intersect point on each dimension. Allows for the specification of data item specific attributes, and identifies the value of each measure for the data item. May optionally indicate the language of the data contents.			
DefaultDelimiter	DelimiterType	Delimiter definition for delimited (free field) data that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: Empty (default), Tab, Blank, AnyString. If a delimiter is used, free field (delimited data) is assumed; binary formats are not allowed.		0..1	

NCubeInstanceType_m1

Extends

This object extends VersionableType

Definition

A container for defining an instance of an NCube, indicating the matrix address of each cell and where the data for each measure within a cell of the NCube is stored. Allows specifying the values of the attributes attached to a NCube.

Properties

Table NCubeInstanceType_m1. list of properties

Name	Datatype	Description	Cardinality
DefaultDataType	CodeValueType	An explicit definition of the data type that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. This field is necessary in the case of some numeric data formats where the format definition would allow real values, but the values are integer values. Allowed values are: integer (default), real, string.	0..1
DefaultDecimalPositions	xs:integer	Number of decimal places for data with an implied decimal separator that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Another expression is the decimal scaling factor (SAS). Default: 0.	0..1
DefaultDecimalSeparator	OneCharStringType	The character used to separate the integer and the fraction part of a number (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma,	0..1

Name	Datatype	Description	Cardinality
		Other. On the basis of the data definition in DDI documents, data processing tools could compute the necessary precision width on the basis of the format width and the existence of separators. Appropriate data types could be used, i.e. float or double, short or long. The decimal separator definition only makes sense with some XML Schema primitives. This is a default which may be overridden in specific cases.	
DefaultDigitGroupSeparator	xsd:CharStringType	The character used to separate groups of digits (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. The decimal separator definition makes only sense with some XML Schema primitives. This is a default which may be overridden in specific cases.	0..1
NumberOfCases	xsd:integer	Total number of cases represented by the contents of the NCube. This is normally the sum of the cell contents when the NCube contains counts and sub-totals are not included.	0..1

Relationships

Table NCubeInstanceType_m1. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NCubeReference	NCubeType	Reference to the logical NCube description.		1..1	
MeasureDimension	MeasureDimension	This type element defines the structure of a measure dimension for the NCube Instance. A value along the MeasureDimension is defined by a stack of references to one or more MeasureDefinitions found in the logical description of the NCube with each containing an attribute of orderValue which provides its value for use in the cell address (similar to the use of a CodeRepresentation of a Variable used as a conceptual dimension. This allows measures (whether one or several) to be handled in the same way as the conceptual dimension of the NCube in declaring a cell address. It is assumed that the value of the MeasureDimension is the last value		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>in the address array. For example, for an NCube with 3 conceptual dimensions of rank 1 = Sex, rank 2 = Age, and rank 3 = Educational Attainment, plus a MeasureDimension. The cell address of 1,4,2,2 would indicate Code value of 1 for Sex, 4 for Age, 2 for Educational Attainment, and 2 for MeasureDimension. For systems translating to SDMX or an OLap structure DDI assumes that the MeasureDefinitionReference with the orderValue="1" is the equivalent of the PrimaryMeasure.</p>			
DataItem	DataItemType	<p>Describes a single data item or cell within an NCube Instance. It defines its location within the NCube by its coordinate (matrix) address which is its intersect point on each dimension. Allows for the specification of data item specific</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		attributes, and identifies the physical location of each measure for the data item. May optionally indicate the language of the data contents.			
DefaultDelimiter	DelimiterType	Delimiter definition for delimited (free field) data that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: Empty (default), Tab, Blank, AnyString. If a delimiter is used, free field (delimited data) is assumed; binary formats are not allowed.		0..1	

NCubeInstanceType_m3

Extends

This object extends VersionableType

Definition

A container for defining an instance of an NCube, indicating the matrix address of each cell and where the data for each measure within a cell of the NCube is stored. Allows specifying the values of the attributes attached to a NCube.

Properties

Table NCubeInstanceType_m3. list of properties

Name	Datatype	Description	Cardinality
DefaultDataType	CodeValueType	An explicit definition of the data type that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. This field is necessary in the case of some numeric data formats where the format definition would allow real values, but the values are integer values. Allowed values are: integer (default), real, string.	0..1
DefaultDecimalPositions	xs:integer	Number of decimal places for data with an implied decimal separator that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Another expression is the decimal scaling factor (SAS). Default: 0.	0..1
DefaultDecimalSeparator	OneCharStringType	The character used to separate the integer and the fraction part of a number (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. On the basis of the data definition in DDI documents, data processing tools could compute the necessary precision width on	0..1

Name	Datatype	Description	Cardinality
		the basis of the format width and the existence of separators. Appropriate data types could be used, i.e. float or double, short or long. The decimal separator definition only makes sense with some XML Schema primitives. This is a default which may be overridden in specific cases.	
DefaultDigitGroupSeparator	xs:CharStringType	The character used to separate groups of digits (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. The decimal separator definition makes only sense with some XML Schema primitives. This is a default which may be overridden in specific cases.	0..1
NumberOfCases	xs:integer	Total number of cases represented by the contents of the NCube. This is normally the sum of the cell contents when the NCube contains counts and sub-totals are not included.	0..1

Relationships

Table NCubeInstanceType_m3. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NCubeReference	NCubeType	Reference to the logical NCube description.		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
MeasureDimension	MeasureDimension	<p>This element defines the structure of a measure dimension for the NCube Instance. A value along the MeasureDimension is defined by a stack of references to one or more MeasureDefinitions found in the logical description of the NCube with each containing an attribute of orderValue which provides its value for use in the cell address (similar to the use of a CodeRepresentation of a Variable used as a conceptual dimension. This allows measures (whether one or several) to be handled in the same way as the conceptual dimension of the NCube in declaring a cell address. It is assumed that the value of the MeasureDimension is the last value in the address array. For example, for an NCube with 3 conceptual dimensions of rank 1 = Sex, rank 2 = Age,</p>		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>and rank 3 = Educational Attainment, plus a MeasureDimension. The cell address of 1,4,2,2 would indicate Code value of 1 for Sex, 4 for Age, 2 for Educational Attainment, and 2 for MeasureDimension. For systems translating to SDMX or an OLap structure DDI assumes that the MeasureDefinitionReference with the orderValue="1" is the equivalent of the PrimaryMeasure.</p>			
DataItem	DataItemType	<p>Describes a single data item or cell within an NCube Instance. It defines its location within the NCube by its coordinate (matrix) address which is its intersect point on each dimension. Allows for the specification of data item specific attributes, and identifies the physical location of each measure for the data item. May optionally indicate the</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		language of the data contents.			
DefaultDelimiter	DelimiterType	Delimiter definition for delimited (free field) data that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: Empty (default), Tab, Blank, AnyString. If a delimiter is used, free field (delimited data) is assumed; binary formats are not allowed.		0..1	

NominalDomainType

Extends

This object extends `NominalRepresentationBaseType`

Definition

A response domain capturing a nominal (check off) response for a question grid response. Includes standard response domain elements; `OutParameter`, designation of response cardinality, and a declaration of an offset date for the data content.

Properties

Table NominalDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different	0..n

Name	Datatype	Description	Cardinality
		content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table NominalDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	Indicates the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

NumericDomainType

Extends

This object extends NumericRepresentationBaseType

Definition

A response domain capturing a numeric response (the intent is to analyze the response as a number) for a question. Contains the equivalent content of a NumericRepresentation including the numeric range, numeric type code, format, scale, decimal position, and interval. Adds a set of elements available to all Response Domains; Label, Description, OutParameter, designation of response cardinality, and a declaration of an offset date for the data content. Has an equivalent NumericDomainReference which references a ManagedNumericRepresentation.

Properties

Table NumericDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table NumericDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	Indicates the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

PhysicalInstanceType

Extends

This object extends MaintainableType

Definition

Includes information about the physical instance of a data product (an actual data file). It completes the documentation contained in the Physical Data Product module that is specific to the individual file and serves as a descriptive record of the external data file. Physical Instance provides a citation for the data file, a link to the RecordLayout(s) used by the files records, a description of its coverage (as a constraint if different from the study), check figures for quality control (e.g. digital fingerprint, record count, etc.), and a statistical summary of the data in the file at both the variable and category level.

Properties

Table PhysicalInstanceType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	A citation for the physical instance of a data set. Note that a DOI or similar unique identifier for the data file should be placed in InternationalIdentifier. It is strongly recommended that use of a Citation in this location includes the use of the optional sub-element Title.	0..1
OtherMaterial	OtherMaterialType	Provides information about other resources related to the physical instance.	0..n
ProprietaryInfo	ProprietaryInfoType	Contains information proprietary to the	0..1

Name	Datatype	Description	Cardinality
		software package which produced the data file. This is expressed as a set of name-value pairs. The value may be taken from a controlled vocabulary.	
ByteOrder	CodeValueType	Contains a term from a controlled vocabulary indicating the byte ordering.	0..1

Relationships

Table PhysicalInstanceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DataFingerprint	DataFingerprint	Allows for assigning a hash value (digital fingerprint) to the data or data file. Set the attribute flag to "data" when the hash value provides a digital fingerprint to the data contained in the file regardless of the storage format (ASCII, SAS, binary, etc.). One approach to compute a data fingerprint is the Universal Numerical Fingerprint (UNF). Set the attribute flag to "dataFile" if the digital fingerprint is only for the data file in its current storage format.		0..n	
Coverage	CoverageType	Includes information		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		about the topical, spatial, and temporal coverage of the physical instance. May be expressed as a restriction of the parent study coverage.			
DataRelationshipReference	DataRelationship	Reference to the DataRelationship containing the LogicalRecord to which the RecordLayout refers. Repeat for cases where LogicalRecords are described in multiple DataRelationship structures. Note that this does not imply that all of the LogicalRecords described in the DataRelationship are contained, wholly or in part in the PhysicalInstance. This reference allows for a direct path between the PhysicalInstance and the related content found in a LogicalProduct.		0..n	
RecordLayoutReference	RecordLayout	References the record layout of the data documented in the physical instance.		0..n	
DefaultMissingValueReference	DefaultMissingValue	Reference to the content of the default missing values used in	Type	0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the file. The content of this file overrides default missing value information provided in the LogicalRecord. Allows for the specification that is a Systems Missing Value.			
DataFileIdentification	DataFileIdentification	Identifies the data file documented in the physical instance and provides information about its location.		0..n	
DataFileVersion	DataFileVersion	Provides the version information for the data file related to this physical instance. Note that while Physical Instance allows for multiple copies of the same data file (such as backup copies) the assumption is that they are identical in terms of content, layout, format and version.		0..1	
QualityStatement	QualityStatement	Type reference to a Quality Statement pertaining to the quality of the study methodology, metadata, or data to which it is associated.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Quality statements may be related to external quality standards.			
GrossFileStructure	GrossFileStructure	Includes information about the file structure, as well as other characteristics that are specific to the physical instance.		0..1	
StatisticalSummary	StatisticalSummary	Includes variable and category statistics data documented in the physical instance, or a reference to a physical instance where the statistics are described or located in line.		0..1	

PhysicalStructureType

Extends

This object extends VersionableType

Definition

Description of a PhysicalStructure providing the primary link to the LogicalRecord and general structural information. Each description can apply to one or more data files containing the same logical records in the same overall structure.

Properties

Table PhysicalStructureType. list of properties

Name	Datatype	Description	Cardinality
FileFormat	CodeValueType	A brief textual description or classification of the format of the file (e.g., SAS save file, Delimited file, Fixed format file, DDI DataSet). Supports the	0..1

Name	Datatype	Description	Cardinality
		use of an external controlled vocabulary. DDI recommends the use of a controlled vocabulary.	
DefaultDataType	CodeValueType	Defines the data type to use unless otherwise specified. Supports the use of an external controlled vocabulary. Similar content to RecommendedDataType.	0..1
DefaultDecimalPositions	xs:integer	Number of decimal places (expressed as an integer) for data with an implied decimal separator that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Another expression is the decimal scaling factor (SAS). Default: 0.	0..1
DefaultDecimalSeparator	OneCharStringType	The character used to separate the integer and the fraction part of a number (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. On the basis of the data definition in DDI documents, data processing tools could compute the necessary precision width on the basis of the format width and the existence of separators. Appropriate data types could be used, i.e. float or double, short or long. The decimal separator definition only makes sense with some XML	0..1

Name	Datatype	Description	Cardinality
		Schema primitives. This is a default which may be overridden in specific cases.	
DefaultDigitGroupSeparator	OneCharStringType	The character used to separate groups of digits (if an explicit separator is used in the data) that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: None (default), Dot, Comma, Other. The decimal separator definition makes only sense with some XML Schema primitives. This is a default which may be overridden in specific cases.	0..1

Relationships

Table PhysicalStructureType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DefaultDelimiter	DelimiterType	Delimiter definition for delimited (free field) data that is applied to the majority of the data items reducing the amount of repetitive markup required. It can be overridden at the data item level. Allowed values are: Empty (default), Tab, Blank, AnyString. If a delimiter is used, free field (delimited		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		data) is assumed; binary formats are not allowed..			
GrossRecordStructure	GrossRecordStructure	The Types or macro level structures of the record structure including the link to the LogicalRecord and information on the number and ordering of each Physical Segment of the LogicalRecord as stored in the data file.		0..n	

ProcessingEventType

Extends

This object extends VersionableType

Definition

ProcessingEvent can contain a number of operations of different types to express a range of events that occur together. For example a ProcessingEvent of a CleaningOperation may also include a reference to a ProcessingInstruction used in the cleaning process. Event activities include ControlOperation, CleaningOperation, Weighting, and DataAppraisalInformation. References to related processing instructions and quality statement may be included.

Relationships

Table ProcessingEventType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ControlOperation	OperationType	Description of a Control Operation used to facilitate data control.		0..n	
CleaningOperation	OperationType	Description of a Cleaning Operation such as consistency checking,		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		invalid or out of range values, etc.			
Weighting	WeightingType	Description of the weighting process and any resultant standard weights.		0..n	
DataAppraisalIn	DataAppraisalIn	Description of the data appraisal processing including the resultant sampling error and response rate.		0..n	
ProcessingInstru	ProcessingInstru	Reference to a processing instruction (GeneralInstruction or GenerationInstruction) used during the processing event. The basic Reference structure is extended to allow for the use of ParameterLinkage to link specific source parameters to the InParameter of the instruction to reflect its use within this specific Processing Event.		0..n	
QualityStatement	QualityStatement	Reference to a quality statement relating to the processing event.		0..n	

RankingDomainType

Extends

This object extends RankingRepresentationBaseType

Definition

A response domain capturing a ranking response which supports a "ranking" of categories. Generally used within a QuestionGrid. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content, as well as content for a Nominal Representation.

Properties

Table RankingDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent and ordered array of the responses.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table RankingDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AllType the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

RecordLayoutType

Extends

This object extends BaseRecordLayoutType

Definition

A member of the BaseRecordLayout substitution group intended for use with archival formats of microdata held in an external file with fixed or delimited locations for data items. In addition to the link to the PhysicalStructure provided by BaseRecordLayout, the record layout is this namespace (p) identifies the character set and array base for the stored data, an optional reference to the default VariableScheme for the data items, a flag indicating that the variable names are provided on the first row of the data file, and a full description of each data item including a link to its description and its physical location in the record.

Properties

Table RecordLayoutType. list of properties

Name	Datatype	Description	Cardinality
CharacterSet	CodeValueType	Character set used in the data file (e.g., US ASCII, EBCDIC, UTF-8). This is a required field.	0..1
ArrayBase	xs:integer	Sets the array base for any arrays used in the definition (that is, whether the first value is in position 0 or 1, etc.). This may be the data array in a delimited data file or the measure array for measures that are bundled and stored in a single location. Array	0..1

Name	Datatype	Description	Cardinality
		base is generally set to either 0 or 1. There is no override provided as systems processing a record would use a consistent array base.	
namesOnFirstRow	xs:boolean	Set this item to "true" if the first row of the file contains the names of the variables (data items).	0..1

Relationships

Table RecordLayoutType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DefaultVariableScheme	VariableSchemeType	References a variable scheme for the RecordLayout. This can be overridden by individual data items if they are from a different variable scheme.		0..1	
DataItem	DataItemType	Includes a reference to a variable, and information about its data item location and its data type/format.		0..n	

RecordLayoutType_m2

Extends

This object extends BaseRecordLayoutType

Definition

A member of the BaseRecordLayout substitution group intended for use when the data items of an NCube Instances are captured in-line within the metadata instance. In addition to the link to the PhysicalStructure provided by BaseRecordLayout, the record layout is this namespace (m2) identifies the array base for the in-line data, a full description of each data item contained within an NCube Instance including a link to its description (matrix address) and contained values.

Properties

Table RecordLayoutType_m2. list of properties

Name	Datatype	Description	Cardinality
ArrayBase	xs:integer	Sets the array base for any arrays used in the definition (that is, whether the first value is in position 0 or 1, etc.). This may be the data array in a delimited data file or the measure array for measures that are bundled and stored in a single location. Array base is generally set to either 0 or 1. There is no override provided as systems processing a record would use a consistent array base.	0..1

RecordLayoutType_m1

Extends

This object extends BaseRecordLayoutType

Definition

A member of the BaseRecordLayout substitution group intended for use with archival formats of NCube Instances or mixed NCube and microdata (i.e., a set of NCubes where the case identification is not described as a dimension of the NCube) held in an external file with fixed or delimited locations for data items arranged as one-dimensional rows. In addition to the link to the PhysicalStructure provided by BaseRecordLayout, the record layout in this namespace (m1) identifies the character set and array base for the stored data, a full description of any microdata (individual variable) structured data items, and a full description of each data item contained within an NCube Instance including a link to its description (matrix address) and its physical location in the record.

Properties

Table RecordLayoutType_m1. list of properties

Name	Datatype	Description	Cardinality
CharacterSet	CodeValueType	Character set used in the data file (e.g., US ASCII, EBCDIC, UTF-8). This is a required field.	0..1
ArrayBase	xs:integer	Sets the array base for any arrays used in the definition (that is,	0..1

Name	Datatype	Description	Cardinality
		whether the first value is in position 0 or 1, etc.). This may be the data array in a delimited data file or the measure array for measures that are bundled and stored in a single location. Array base is generally set to either 0 or 1. There is no override provided as systems processing a record would use a consistent array base.	

Relationships

Table RecordLayoutType_m1. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DataItem	DataItemType	Use for variables that have content in the data file but are not part of an NCube structure, such as case identification variables, or situations where the primary record content is microdata but NCube structured data has been added (such as aggregated data on the City or State where the case is located). Includes a reference to a variable, and information about its data item location and its data type/format.		0..n	

RecordLayoutType_m3

Extends

This object extends BaseRecordLayoutType

Definition

A member of the BaseRecordLayout substitution group intended for use with tabular formats of NCube Instances held in an external file with location for data items arranged as two-dimensional rows (identified by row and column). In addition to the link to the PhysicalStructure provided by BaseRecordLayout, the record layout in this namespace (m3) identifies the character set and array base for the stored data, a full description of each data item contained within an NCube Instance including a link to its description (matrix address) and its physical location in the file.

Properties

Table RecordLayoutType_m3. list of properties

Name	Datatype	Description	Cardinality
CharacterSet	CodeValueType	Character set used in the data file (e.g., US ASCII, EBCDIC, UTF-8). This is a required field.	0..1
ArrayBase	xs:integer	Sets the array base for any arrays used in the definition (that is, whether the first value is in position 0 or 1, etc.). This may be the data array in a delimited data file or the measure array for measures that are bundled and stored in a single location. Array base is generally set to either 0 or 1. There is no override provided as systems processing a record would use a consistent array base.	0..1

Relationships

Table RecordLayoutType_m3. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
TopLeftTableAnchor	TopLeftTableAnchor	Note: the column and row position of the top left		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		corner of the data table in the spreadsheet.			

ScaleDomainType

Extends

This object extends ScaleRepresentationBaseType

Definition

A response domain capturing a scale response which describes a 1..n dimensional scale of various display types for a question item. Includes standard response domain elements; OutParameter, designation of response cardinality, and a declaration of an offset date for the data content. May be replaced by a ScaleRepresentationReference.

Properties

Table ScaleDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere, for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent an ordered array of the responses.	0..1

Name	Datatype	Description	Cardinality
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table ScaleDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	AllType the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

StudyUnitType

Extends

This object extends MaintainableType

Definition

A primary packaging and publication module within DDI representing the purpose, background, development, data capture, and data products related to a study. In DDI a study is defined as a single coordinated set of data collection/capture activities, such as a one-time survey or a single iteration of a multi-year repeated study (such as one year of a longitudinal survey). The StudyUnit brings together all of the components of the study including the description of its purpose, funding, quality statements, data collection and capture methods and activities, processing activities, and a description of the resulting data (description of its intellectual or logical content plus a description of its physical store). A study unit may have only a single data collection or capture process resulting in one or more data products (i.e., Census). A complex study unit may contain multiple means of data capture that are integrated into one or more data products (i.e., a medical study collecting biomarkers, patient background, health care service information, etc.). A longitudinal study with multiple waves or iterations of data collection is considered to be a group of studies, each wave or iteration captured as a single study unit. As a primary packaging module, the Study Unit contains a full citation, abstract, authorization information, a universe reference, series statement, quality statement, information on post study evaluation, funding information, budget, purpose, coverage, type of analysis units covered, kind of data, other materials, a list of required resource packages, embargoes, the conceptual components (universe, concept, data element, geographic structure and locations), data collection, logical products, physical data products, physical instance, archive, and DDI profile. The maintainable elements within a Study Unit may be included in-line or by reference.

Properties

Table StudyUnitType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	The citation for the study. DDI strongly recommends that at minimum a Title be provided.	0..1
Abstract	StructuredStringType	An abstract of the study unit describing the nature and scope of the data collection, special characteristics of its content. Note that detailed information on the purpose of the study and structured coverage information are to be entered in Purpose and Coverage. Abstract supports multiple language versions of the same content as well as optional formatting of the content.	0..1
Purpose	StructuredStringType	The purpose of the study, why the study took place. This should include detailed information on the investigator's primary study questions or hypotheses as well as information on any legal basis for the data collection, such as laws requiring the collection of census data for apportionment purposes. Legal or other authorization should be provided in detail within AuthorizationSource. Purpose supports multiple language versions of the same content as well as optional formatting of the content.	0..1
AnalysisUnit	CodeValueType	Allows the use of a controlled vocabulary to list all of the units	0..n

Name	Datatype	Description	Cardinality
		of analysis used in the study. Should be repeated to describe multiple units of analysis.	
AnalysisUnitsCovered	InternationalStringType	A narrative of the units of analysis in the study unit. Uses an InternationalString to support multiple languages.	0..1
OtherMaterial	OtherMaterialType	Contains references to other materials relevant to the study unit, whether in DDI form or external. Links can be made from items in this section to any identifiable element in the instance. Best practice is to include OtherMaterial inside the maintainable containing the objects that are related to the OtherMaterial.	0..n

Relationships

Table StudyUnitType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizationSource	AuthorizationSource	Identifies the authorizing agency for the study and allows for the full text of the authorization (law, regulation, or other form of authorization). May be used to list authorizations from oversight committees and other regulatory agencies.		0..n	
UniverseReference	Universe	Reference to the universe statement from		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>the universe scheme, describing the group of persons or other elements that are the object of research and to which any analytic results refer. Age, nationality, and residence commonly help to delineate a given universe, but any of a number of factors may be involved, such as sex, race, income, veteran status, criminal convictions, etc. The universe may consist of elements other than persons, such as housing units, court cases, deaths, countries, etc. In general, it should be possible to tell from the description of the universe whether a given individual or element (hypothetical or real) is a member of the population under study. A universe may be described as "inclusive" or "exclusive". This StudyUnit level reference</p>			

Name	Target	Description	Type	Source cardinality	Target cardinality
		is normally to the top level of the UniverseScheme.			
SeriesStatement	SeriesStatement	Type study, particularly one in a series, may be the result of two series merging into a single study. The new study belongs to both series. For example, Niger now fields the UNICEF Multiple Indicators Cluster Survey (MICS) and the Demographic and Health Survey as a single merged instrument.		0..n	
QualityStatement	QualityStatement	Type reference to a Quality Statement pertaining to the quality of the study overall, metadata, or data to which it is associated. Quality statements may be related to external quality standards.		0..n	
QualityStatement	QualityStatement	SchemeType containing statements of quality related to the quality of methodologies, metadata, or data. Quality statements may be related to external quality standards.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
ExPostEvaluation	ExPostEvaluation	Type evaluation of the study process, often taking place after the completion of the study. These may include issues such as timing of the study, sequencing issues, cost/budget issues, relevance, institutional or legal arrangements etc. of the study. If the study is part of a series or group (i.e., a single wave in a longitudinal study) this may include evaluation of earlier waves which resulted in changes to the current wave.		0..n	
FundingInformation	FundingInformation	Contains details of the study unit's funding, including information about grants, agencies, etc.		0..n	
StudyBudget	BudgetType	This describes the overall budget of the study. It can be repeated for distinct budget activities. It contains a structured description and one or more budget documents		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		described by an OtherMaterial type.			
Coverage	CoverageType	Describes the coverage of the study unit. Detailed information on Topical, Temporal, and Spatial Coverage is contained here. Note that Coverage at this level should be inclusive all lower level modules or section. Lower level descriptions serve to constrain coverage within the scope described here.		0..1	
KindOfData	KindOfDataType	Briefly describes the kind of data documented in the logical product(s) of a study unit. Examples include survey data, census/ enumeration data, administrative data, measurement data, assessment data, demographic data, voting data, etc. Supports the use of an external		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		controlled vocabulary.			
RequiredResourcePackages	ResourcePackages	Specifies the reference the ResourcePackages required to resolve the Study. This list is informational and assists in creating full transmissions of metadata or creating archival packages. Primarily used after the instance is relatively stable and published.		0..1	
Embargo	EmbargoType	Embargo information about the study unit. References to embargo information in this section can be made from individual variables.		0..n	
ConceptualComponents	ConceptualComponents	Documents the content and relational structure of the concepts, universes, data elements, geographic structures and geographic locations used by the study unit.		0..n	
DataCollection	DataCollectionType	Documents the content of the Data Collection activities used in this study; development of data collection		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		processes, questions, question flows (control constructs), data collection instrument, instructions, processing events and instructions, methodology, etc.			
BaseLogicalProduct	BaseLogicalProduct	DocType represents the logical (intellectual) content of the data produced by the study unit. Note that BaseLogicalProduct is the head of a substitution group and is replaced by the appropriate member of that substitution group.	Product	0..n	
PhysicalDataProduct	PhysicalDataProduct	DocType represents the physical structure of the data produced by the study unit.		0..n	
PhysicalInstance	PhysicalInstance	DocType represents the link to a specific external data file produced by the study unit. May contain summary and category level statistics on the variables contained in the data file.		0..n	
Archive	ArchiveType	Archive serves as a packet containing both persistent and transient		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		information. Describes archive-specific material including item record information as well as lifecycle information. The metadata in the package is divided into elements that are persistent (should remain with the Study Unit through its life-cycle), and transient (pertinent only to the Study Unit as held by that archive).			
DDIProfile	DDIProfileType	Contains a DDI Profile which is used by the study unit.		0..n	

WeightingType

Extends

This object extends VersionableType

Definition

Describes the weighting used in the process. In addition to a description of the weighting process it may be designated as a specific type of weighting. If the data uses a standard weight (each record has an equal weight) it may be expressed here with StandardWeight.

Properties

Table WeightingType. list of properties

Name	Datatype	Description	Cardinality
TypeOfWeighting	CodeValueType	Allows brief identification of Time Method used with the option of using a controlled vocabulary.	0..1

Name	Datatype	Description	Cardinality
Description	StructuredStringType	Full description of the data collection methodology. Supports structured content and multiple language content.	0..1

Relationships

Table WeightingType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
StandardWeight	StandardWeight	Type standard weighting factor used by all or a group of variables within the data set.		0..n	

BaseLogicalProductType

Extends

This object extends MaintainableType

Definition

This is an abstract structure which serves as a substitution base for current and future LogicalProduct definitions relating to specific data types. Used as an extension base for all other LogicalProducts within its substitution group, it ensures that all DDI LogicalProduct descriptions will contain a consistent means of linking a physical data file to its logical (intellectual) description via the LogicalRecord found in DataRelationship. The extension base includes the standard name, label, and description, coverage information, a structure to define data relationships (identifies each logical record and the relationship(s) between them), as well as OtherMaterial related to its contents.

Properties

Table BaseLogicalProductType. list of properties

Name	Datatype	Description	Cardinality
LogicalProductName	Name	A name for the LogicalProduct. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the LogicalProduct. May be expressed in multiple	0..n

Name	Datatype	Description	Cardinality
		languages. Repeat for labels with different content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the LogicalProduct. May be expressed in multiple languages and supports the use of structured content.	0..1
OtherMaterial	OtherMaterialType	Describes Other Materials that have a specific relation to the logical product. For example the printed data dictionary or printed output for the logical product.	0..n

Relationships

Table BaseLogicalProductType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Coverage	CoverageType	The Coverage statement at this level may be used to restrict the coverage described in the StudyUnit module. For example if this specific logical product from a population and housing census only covers housing questions or only provides State and County level data these should be noted here. If there are no changes in the coverage from the coverage of the StudyUnit		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		module, no entry is needed here.			
DataRelationship	DataRelationship	Contains a written description of how the logical contents of the file relate to each other for programming purposes. For example, noting that there are household, family and person items where the household is identified by variable, the unique family by the concatenation of variable_H and variable_F, and the unique person within a household by the concatenation of variable_H and variable_P.		0..n	

CoordinatePairsType

Extends

This object extends TextDomainType

Definition

Field to capture coordinate pairs as individual pairs or as an array of pairs.

Properties

Table CoordinatePairsType. list of properties

Name	Datatype	Description	Cardinality
maxArray	xs:integer	The maximum number of coordinate pairs listed in the array.	0..1

Name	Datatype	Description	Cardinality
		The two values in a coordinate pair are separated by a comma. Pairs in an array are separated by the character indicated in the arraySeparator attribute. Default value is "1".	
arraySeparator	xs:string	The character used to separate arrays, if present. If not given a value, and if the maxArray attribute has a value greater than one, the separator is assumed to be whitespace.	0..1

DDIProfileType

Extends

This object extends MaintainableType

Definition

Describes the subset of valid DDI objects used by an agency for a specified purpose. This may be the required and supported objects for a specific system, a profile for deposit in an archive, requirements at different points of production, etc. In addition to the standard name, label, and description the DDI Profile describes the intended application of the profile, its purpose, the version of XPath used in describing the supported objects, the DDI namespace (major and minor version numbers), a mapping of schema to prefixes (if different from the standard DDI model), a set of instructions for use of the profile, and a listing of used and unsupported objects. These objects may be constrained (i.e., change from optional to required), provided a fixed value, or provided a local name.

Properties

Table DDIProfileType. list of properties

Name	Datatype	Description	Cardinality
DDIProfileName	Name	A name for the profile. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the profile. May be expressed in multiple languages. Repeat for labels with different	0..n

Name	Datatype	Description	Cardinality
		content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the profile. May be expressed in multiple languages and supports the use of structured content.	0..1
ApplicationOfProfile	CodeValueType	A brief description of the intended applications of the profile. Supports the use of an external controlled vocabulary.	0..n
Purpose	StructuredStringType	Purpose describes the purpose of creating the profile such as describing the coverage of a distribution software system.	0..1
XPathVersion	xs:decimal	Provides the version of XPath used. Values are 1.0, 2.0 at this time.	0..1
DDINamespace	xs:decimal	Provides the version of DDI schemas used. Values are 2.5, 3.0, 3.1, etc. Note that only the Major.Minor portion of the version number is used.	0..1
XMLPrefixMap	XMLPrefixMap	If you are not using the standard DDI prefix or the full DDI name then provide mapping. For each XML namespace used in the profile's XPath expressions, the XML namespaces must have their prefix specified using this element.	0..n
Instructions	StructuredStringType	Instructions for use of the profile. Supports multiple language versions of the same content as well as optional formatting of the content.	0..1

Relationships

Table DDIProfileType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Used	UsedType	Indicates an element in the DDI which is used by the profile expressed as an XPath. Note that including a complex element will include all of its component parts.		0..n	
NotUsed	NotUsedType	Indicates an element in the DDI which is not used by the profile expressed as an XPath. You cannot list anything which is required in the DDI schemas, as this would produce invalid XML instances.		0..n	

Chapter 15. Keep

ActionCodeType

Definition

The attribute "action" is used for inheritance situations in which there is an override at the local level (within a grouped StudyUnit) which is not available for further inheritance. There are three possible values for "action" include Add, Update, and Delete.

ActionType

Definition

Describes the region of an image, recording, or text where an action where a specified action is performed and the type of action taken (i.e., Mark an "X" where the actor should be standing on the picture of the stage.).

Properties

Table ActionType. list of properties

Name	Datatype	Description	Cardinality
RegionOfAction	SegmentType	Identifies the region of the object where the action needs to occur based on the object type by specifying a segment of the object.	0..1
Description	StructuredStringType	Describes the specific actions that should take place. May be expressed in multiple languages and supports the use of structured content.	0..1
regExp	xs:string	Allows for the provision of a regular expression to describe a mark (such as a specific letter or number).	0..1

AdditivityCodeType

Definition

Describes the nature of additivity for the content. By designating the type of content, a user will understand whether the contents can be summed or must be treated differently in terms of processing an aggregation.

AreaCoverageType

Definition

Use to specify the area of land, water, total or other area coverage in terms of square miles/kilometers or other measure.

Properties

Table AreaCoverageType. list of properties

Name	Datatype	Description	Cardinality
TypeOfArea	CodeValueType	Specify the type of area covered i.e. Total, Land, Water, etc. Supports the use of an external controlled vocabulary.	0..1
MeasurementUnit	CodeValueType	Records the measurement unit, for example, Square Kilometer, Square Mile. Supports the use of an external controlled vocabulary.	0..1
AreaMeasure	xs:decimal	The area measure expressed as a decimal for the measurement unit designated.	0..1

AttachmentLevelCodeType

Definition

Identifies the contextual level of an NCube to which the attribute is attached; the full cube, a specific set of coordinates, a full dimension, a specific measurement, or a specific measurement value.

AttachmentLocationType

Definition

Allows attachment of a response domain to a specific item in a code or category scheme. For example, attach a TextDomain to the value "Other".

Relationships

Table AttachmentLocationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeReference	Code	Identifies the value to which		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the new response domain is attached by a references a specific Code within the CodeDomain.			
CategoryReference	Category	Identifies the value to which the new response domain is attached by a references a specific Category within the CategoryDomain.		0..	
DomainSpecificValue	DomainSpecificValue	Identifies the value to which the new response domain is attached by a reference to a specific value used by the response domain and the specific value.		0..	

BudgetType

Definition

A description of the budget for any of the main publication types that can contain a reference to an external budget document.

Properties

Table BudgetType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the overall budget of the project. Supports structured content including tables.	0..1
BudgetDocument	OtherMaterialType	References to one or more external budget documents.	0..n

CategoryValueType

Definition

A category value for which one or more statistics are recorded. Each VariableCategory has one category value and any number of associated statistics.

Properties

Table CategoryValueType. list of properties

Name	Datatype	Description	Cardinality
Value	Value	The value of the category.	0..1

Relationships

Table CategoryValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeReference	Code	A reference to the coded value of the category as used by a CodeRepresentation.		0..	

CellCoordinatesAsDefinedType

Definition

Defines one or more cells by defining the applicable values of each dimension as "all values", a "specific value" or a range. For example in a simple 2 dimensional grid where dimension rank-1 is displayed as rows and dimension rank-2 as columns and the first column contains a NumericDomain; SelectDimension rank="1" allValues="true" and SelectDimension rank="2" specificValue="1" would result in the NumericDomain being attached to the first column of the grid only.

Relationships

Table CellCoordinatesAsDefinedType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SelectDimension	SelectDimension	Type each dimension in the grid define the applicable values as "all values", a "specific value" or a range. If a rangeMinimum or		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		rangeMaximum is provided without the other, the assumption is unbounded for the object not included.			

CodeSubsetInformationType

Definition

Allows further specification of the codes to use from the CodeList by defining the level or only the most discrete codes of a hierarchical CodeList, the range of codes to use, or an itemized sub-set.

Properties

Table CodeSubsetInformationType. list of properties

Name	Datatype	Description	Cardinality
IncludedLevel	xs:integer	Identifies the specific level to include using the levelNumber. Repeat if more than one level is included.	0..n

Relationships

Table CodeSubsetInformationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IncludedCode	IncludedCodeType	Specifies the codes to include in the representation.		0..1	
DataExistence	DataExistenceType	Use when only the lowest, most discrete codes in the CodeList will be expressed as valid values. Identifies those levels of a CodeList with a regular hierarchy or those indicates discrete codes within an		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		irregular hierarchy. All other codes will be used as labels within the hierarchy to clearly express content, but will not be valid as a response or representation value.			

CohortType

Definition

Defines the included values of a dimension by means of individual value references or by defining a range of values to include. Allows the included values to be identified by reference to the Code, the Category used by the Code, or the Value of the Code (which by definition should be unique). The dimension is identified by its rank value.

Properties

Table CohortType. list of properties

Name	Datatype	Description	Cardinality
Range	Range	Use when multiple values are included. This uses the unique Value provided for the Code as a means of identification. Provides the range of Values for this dimension that are within the area being defined. Repeat for non-contiguous values.	0..n
rank	xs:integer	Identify the dimension being described by its rank value within the NCube description.	0..1

Relationships

Table CohortType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategoryReference	Category	Reference to the Category		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		represented by the Value of the Code assigned in a CodeList. Repeat for including multiple values.			
CodeReference	Code	Reference to the Code within the CodeList used by the variable describing the dimension. Repeat for including multiple values.		0..n	

CommonalityWeightType

Definition

A value between 0 and 1 expressing the degree of commonality (0 indicates none, 1 indicates that they are identical).

ComplianceType

Definition

Allows for a quality statement based on frameworks to be described using itemized properties. A reference to a concept, a coded value, or both can be used to specify the property from the standard framework identified in StandardUsed. ComplianceDescription can provide further details or a general description of compliance with a standard.

Properties

Table ComplianceType. list of properties

Name	Datatype	Description	Cardinality
ExternalComplianceCode	CodeValueType	Specification of a code which relates to an area of coverage of the standard. Supports the use of an external controlled vocabulary.	0..1
ComplianceDescription	StructuredStringType	Describe the measures taken to comply with the standards and/	0..1

Name	Datatype	Description	Cardinality
		or specific levels of compliance by providing further details or a general description of compliance with the standard.	

Relationships

Table ComplianceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ComplianceConceptReference	ConceptReference	A reference to a concept which relates to an area of coverage of the standard.		0..1	
Compliance	ComplianceType	Allows for a quality statement based on frameworks to be described using itemized properties. A reference to a concept, a coded value, or both can be used to specify the property from the standard framework identified in StandardUsed. ComplianceDescription can provide further details or a general description of compliance with a standard.		0..n	

ComponentPartsType

Definition

A stack of LocationValueReferences to each of the locations of the specified PrimaryComponentLevel type that make up the Component Area. Includes a GeographicTime to allow for repetition for change over time.

Properties

Table ComponentPartsType. list of properties

Name	Datatype	Description	Cardinality
GeographicTime	DateType	The time period for which the LocationValues listed are a valid set.	0..1

Relationships

Table ComponentPartsType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
LocationValueReference	LocationValueType	Reference to the LocationValue of a basic building block of the composite area.		0..1	

ComputationBaseType

Definition

Defines the cases included in determining the statistic.

CorrespondenceType

Definition

Describes the commonalities and differences between two items using a textual description of both commonalities and differences plus an optional coding of the type of commonality, a commonality expresses as a 0 to 1 weighting factor (expressing degree of comparability) and a user defined correspondence property which is specific to an organization or community of use.

Properties

Table CorrespondenceType. list of properties

Name	Datatype	Description	Cardinality
Commonality	StructuredStringType	A description of the common features of the two items using a StructuredString to support multiple language versions of the	0..1

Name	Datatype	Description	Cardinality
		same content as well as optional formatting of the content.	
Difference	StructuredStringType	A description of the differences between the two items using a StructuredString to support multiple language versions of the same content as well as optional formatting of the content.	0..1
CommonalityTypeCode	CodeValueType	A brief description describing the commonality of the two schemes/items, i.e., "Identical", "High", "Medium", "Low", "None". Supports the use of an external controlled vocabulary.	0..1
UserDefinedCorrespondence	StructuredKeyValuePairType	An alternate means of expressing commonality within a specific system. A system specific user defined correspondence expressed as a key/value pair. As this is specific to an individual system the use of controlled vocabularies for the key is strongly recommended.	0..n

Relationships

Table CorrespondenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CommonalityWeight	CommonalityWeight	Value between 0 and 1 expressing the degree of commonality (0 indicates none, 1 indicates that they are identical).		0..1	

CoverageType

Definition

Describes the temporal, spatial and topical coverage. At the instance level these descriptions should be inclusive of the coverage of all modules in the instance. The element is available within individual modules and can be used to refine the coverage to that of the individual module.

Properties

Table CoverageType. list of properties

Name	Datatype	Description	Cardinality
isRestrictionOfParentCoverage	boolean	If the coverage described within this object is a restriction of the coverage of its parent study or group set this attribute to "true". If the coverage of a specific type (spatial, topical, or temporal) is not a restriction, include this coverage type by reference to that described in parent. Create a new coverage for the type being restricted.	0..1

Relationships

Table CoverageType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
TopicalCoverage	TopicalCoverage	Description of the topical coverage of the data described in a particular DDI module.		0..1	
SpatialCoverage	GeographicCoverage	Description of the geographic coverage of the data described in a particular DDI module.		0..1	
TemporalCoverage	TemporalCoverage	Description of the temporal coverage of the data described in a particular DDI module.		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
RestrictionProcess	RestrictionProcess	All types for a specific machine actionable description of the restriction process using a GenerationInstructionReference, if one currently exists, or through a CommandCode. In the case of a physical instance, the RestrictionProcess would be the same as a case, record or variable selection process.	RestrictionReference,	0..1	

DataExistenceType

Definition

Use when only the lowest, most discrete codes in the CodeList will be expressed as valid values. Identifies those levels of a CodeList with a regular hierarchy or those indicates discrete codes within an irregular hierarchy. All other codes will be used as labels within the hierarchy to clearly express content, but will not be valid as a response or representation value.

Properties

Table DataExistenceType. list of properties

Name	Datatype	Description	Cardinality
LevelNumber	xs:integer	Use for a regular hierarchy. List the Level Number of the lowest or most discrete level of data available.	0..1
DiscreteCategory	xs:boolean	Use for an irregular hierarchy where the most discrete codes have been identified by attribute isDiscrete. This element is to be used if only the most discrete data elements will have data. It has a fixed value, so it will indicate	0..1

Name	Datatype	Description	Cardinality
		which categories have data based on their description.	

DataFileIdentificationType

Definition

Identifies the data file documented in the physical instance and provides information about its location.

Properties

Table DataFileIdentificationType. list of properties

Name	Datatype	Description	Cardinality
Location	InternationalStringType	Documents the location of the data file as a description. Supports the multi-language content.	0..1
DataFileURI	URIType	A URN or URL for the data file with a flag to indicate if it is a public copy.	0..1
isMaster	xs:boolean	Set to "true" when this file is the master file (in the case that there are multiple, i.e. backup, copies).	0..1

DataFileVersionType

Definition

Provides the version information for the data file related to this physical instance. Note that while Physical Instance allows for multiple copies of the same data file (such as backup copies) the assumption is that they are identical in terms of content, layout, format and version. The minimum information required is the versionNumber. Additional information on the versionDate, the type of version number when multiple types are supported by an agency, as well as information on VersionResponsibility (inline or by reference) and VersionRationale are available to provide additional information for process tracking and/or informing users of the differences between this and the previous version of the file.

Properties

Table DataFileVersionType. list of properties

Name	Datatype	Description	Cardinality
TypeOfVersionNumber	xs:string	This is the name of the versioning scheme as defined by the user's system, in cases where the user's system	0..1

Name	Datatype	Description	Cardinality
		employs more than one versioning scheme.	
VersionResponsibility	xs:string	Person or organization within the MaintenanceAgency responsible for the version change. If it is important to retain the affiliation between and individual responsible for the version and his/her agency, it may be included in this notation. This is primarily intended for internal use.	0..1
versionNumber	xs:string	The version number of the data file identified by this physical instance.	0..1
versionDate		Date of version using the union set BaseDateType. Duration should not be used in this field, even though allowed by the ISO format enforced by the parser.	0..1

Relationships

Table DataFileVersionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VersionResponsibility	OrganizationType Deprecate	Reference person or organization within the MaintenanceAgency responsible for the version change, as described in an OrganizationScheme. If it is important to retain the affiliation between and individual responsible for the version and his/her agency, a		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>Relation should be created between the individual referenced here and his/her organization. This is primarily intended for internal use. [Referenced object not explicit]</p>			
VersionResponsibility	IndividualType	<p>Reference person or organization within the MaintenanceAgency responsible for the version change, as described in an OrganizationScheme. If it is important to retain the affiliation between and individual responsible for the version and his/her agency, a Relation should be created between the individual referenced here and his/her organization. This is primarily intended for internal use. [Referenced object not explicit]</p>		0..	
VersionRationale	VersionRationale	<p>Typical description of the rationale/purpose for a version change.</p>		0..1	

DataFingerprintObjectType

Definition

Declares if the DataFingerprint is for a data file or for the data content.

DataFingerprintType

Definition

Allows for assigning a hash value (digital fingerprint) to the data or data file. Set the attribute flag to "data" when the hash value provides a digital fingerprint to the data contained in the file regardless of the storage format (ASCII, SAS, binary, etc.). One approach to compute a data fingerprint is the Universal Numerical Fingerprint (UNF). Set the attribute flag to "dataFile" if the digital fingerprint is only for the data file in its current storage format.

Properties

Table DataFingerprintType. list of properties

Name	Datatype	Description	Cardinality
DigitalFingerprintValue	xs:string	Contains the value of the specified digital fingerprint.	0..1
AlgorithmSpecification	xs:string	Specifies the type of the fingerprint (what algorithm or scheme).	0..1
AlgorithmVersion	xs:string	Contains the version of the algorithm.	0..1

Relationships

Table DataFingerprintType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
type	DataFingerprintObject	identification of the type of data fingerprint used. The data fingerprint may be for the data file (storage format specific) or data (format neutral).		1..1	

DefiningCharacteristicType

Definition

Use to attach one or more characteristics to the parent object. The defining characteristic supports the use of a controlled vocabulary and may provide a time period for which the classification is valid.

Properties

Table DefiningCharacteristicType. list of properties

Name	Datatype	Description	Cardinality
Characteristic	CodeValueType	A characteristic which defines the area. These are often useful in terms of selection. For example a U.S. Block may be classified as Urban, Rural, or Mixed. The characteristic supports the use of a controlled vocabulary.	0..1
GeographicTime	DateType	The time period for which the characteristic is valid.	0..1

DimensionIntersectType

Definition

Identifies the point at which the scales of a multidimensional scale intersect. May include all or a subset of dimensions intersecting at a given point. Repeat for multiple intersect points.

Properties

Table DimensionIntersectType. list of properties

Name	Datatype	Description	Cardinality
IncludedDimension	xs:integer	List by repetition all dimensions intersecting at this value by Dimension Number.	0..n
forAllDimensions	xs:boolean	If different dimensions intersect at different values list each set in a separate DimensionIntersect and list each dimension included by an IncludeDimension.	0..1
intersectValue	xs:string	The value at which the dimensions intersect.	0..1

DimensionRankValueType

Definition

A dimension describes the rank or order of the dimension within the NCube structure and provides the specific coordinate value of the dimension for the data item. In the case where the value is found within the data file, it provides a reference to the variable containing the value.

Properties

Table DimensionRankValueType. list of properties

Name	Datatype	Description	Cardinality
Value	Value	The value of this dimension for this particular data item.	0..1
rank	xs:integer	Enter the rank (placement) order in which the value from this dimension appears in the coordinate address of any cell in the NCube matrix.	0..1

Relationships

Table DimensionRankValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	References the Variable holding the dimension value. Use this instead of the value attribute when the value must be obtained from the data file at the location of the variable indicated in the reference.		0..	

DimensionType

Definition

A dimension is provided a rank and a reference to a variable that describes it. Cell locations are "addressed" by the value of their intersect on each dimension provided in rank order.

Properties

Table DimensionType. list of properties

Name	Datatype	Description	Cardinality
rank	xs:integer	The rank order of this dimension (the order in which the value for this dimension will appear in the cell address)denoted with a 1-based indexing. Provides coordinate order (1,2,n) for the intersect point of this dimension within the cell address. For example, if the rank of this dimension is 2, the intersect point on this dimension will be the second value listed in the cell address.	0..1

Relationships

Table DimensionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Identifies the variable describing this dimension. The dimension uses the CodeList and related categories, or a fixed range of numeric values to define the labels and intersect points for the dimension. The data set will contain a value for each cell in the NCube rather than the code from the CodeList.		1..1	

DomainSpecificValueType

Definition

Identifies the value of the ResponseDomain to which the new ResponseDomain is attached by specifying its attachmentBase number of the target ResponseDomain in the attribute attachmentDomain. Specifies one or more values within the ResponseDomain to which the object is attached (i.e. single item or set).

Properties

Table DomainSpecificValueType. list of properties

Name	Datatype	Description	Cardinality
Value	Value	The value of the target response domain to which the object should be attached.	0..n
attachmentDomain	xs:integer	This is the value of the attribute "attachmentBase" on the ResponseDomainInMixed to which the specified response domain will be attached. This is used to clarify attachment locations when more than two response domains are provided in a StructuredMixedResponseDomain.	0..1

EmptyType

Definition

Element with no content. It is an abstract type, used to extend into subclasses.

EvaluatorType

Definition

Describes the type of evaluation, completion date, evaluation process and outcomes of the ExPost Evaluation. Allows identification of the Evaluator via reference to and organization or individual and provides for the optional use of a controlled vocabulary to define the specific role of the evaluator.

Properties

Table EvaluatorType. list of properties

Name	Datatype	Description	Cardinality
EvaluatorRole	CodeValueType	Describes the role of the evaluator with optional	0..n

Name	Datatype	Description	Cardinality
		use of a controlled vocabulary.	

Relationships

Table EvaluatorType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
EvaluatorA	OrganizationType Deprecate	Reference to an Organization or Individual involved in performing the evaluation.		1..1	
EvaluatorB	IndividualType	Reference to an Organization or Individual involved in performing the evaluation.		1..1	

ExPostEvaluationType

Definition

Evaluation for the purpose of reviewing the study, data collection, data processing, or management processes. Results may feed into a revision process for future data collection or management. Identifies the type of evaluation undertaken, who did the evaluation, the evaluation process, outcomes and completion date.

Properties

Table ExPostEvaluationType. list of properties

Name	Datatype	Description	Cardinality
TypeOfEvaluation	CodeValueType	Brief identification of the type of evaluation. Supports the use of an external controlled vocabulary.	0..n
EvaluationProcess	StructuredStringType	Describes the evaluation process. Supports multi-lingual content. Allows the optional use of structured content.	0..n
Outcomes	StructuredStringType	Describes the outcomes of the evaluation process. Supports multi-lingual content. Allows the optional use of structured content.	0..n

Name	Datatype	Description	Cardinality
completionDate		Identifies the date the evaluation was completed.	0..1

Relationships

Table ExPostEvaluationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Evaluator	EvaluatorType	Identifies the evaluator and specifies the role of the evaluator using an external controlled vocabulary.		0..n	

FilteredCategoryStatisticsType

Definition

Category statistics filtered by the value of a second variable. Essentially a cross tabulation of one variable by another. For example variable may be crossed with country as is done in the Eurobarometer when reporting category statistics. For example, the Eurobarometer may filter its category statistics by country as represented in a variable "CountryCode".

Relationships

Table FilteredCategoryStatisticsType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
FilterVariableReferenceType	ReferenceType	Reference to the variable used to filter the category level statistics.		0..1	
FilterVariableCategoryType	FilterVariableCategoryType	filtered category statistics for the specified filter variable category.		0..n	

FilterVariableCategoryType

Definition

Category statistics for the variable when the filter variable contains the specified value.

Relationships

Table FilterVariableCategoryType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
FilterCategoryValue	CategoryValue	Provides the specific value of the variable being used as a filter. References a specific Code within the variable if using a CodeRepresentation. May alternately provide the Value of the Category.		1..1	
VariableCategory	VariableCategory	Category statistics for the specified value of the variable (when the filter variable contains the specified value). Repeat for each value of the variable.		0..n	

FixedIdentifierType

Definition

Reference to the variable containing the unique identifier. This may be a concatenated variable which indicates the combination of variable required to create a unique identification. If more than one variable reference is included the combination of the variable field contents must be unique and all variables are required for case identification.

Relationships

Table FixedIdentifierType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Reference to a variable used as a fixed identifier either singly or in combination with additional		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		reference variables.			

FragmentInstanceType

Definition

A Fragment Instance is used to transfer maintainable or versionable objects plus any associated notes and other material in response to a query. TopLevelReference provides a record of the reference(s) (from the query) to which the FragmentInstance is responding. The contents of the maintainable and versionable objects are transported as Fragment entries. Child items, which are items included in the top level items by reference, may be provided as additional Fragment entries depending on the desired resolution depth. Be aware that within the DDI model all versionables must provide contextual information on the maintainable parent. When creating your web services you must be able to provide contextual information on the maintainable parent of a versionable object. The identification and reference structure provides the MaintainableObject structure to use in capturing this information if it is not provided by the URN structure of the versionable object.

Relationships

Table FragmentInstanceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
TopLevelReference	GeographicLevel	TopLevelReference is used to denote which items in the Fragment Instance are the specific results of a query or process. For example, if a user queries for a Variable, the response may include several items in the returned FragmentInstance: the Variable, several related Concepts, CodeLists, Questions, or other referenced items. In order to clarify which item is the main item in response to a query, a		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>reference to that item can be specified as a TopLevelReference. Note that if a Identifiable object is being resolved, the query will be to the parent Versionable or Maintainable.</p>			
Fragment	FragmentType	<p>A Fragment is a means of transporting a maintainable or versionable object plus any associated notes and other material. This item is repeated for each object included in the FragmentInstance. At minimum it should include the objects identified in TopLevelReference. Fragments for child objects of the items identified by a TopLevelReference may also be included. For a versionable object this requires information on the identification of its parent maintainable. This is considered to be administrative metadata and the addition of this metadata to an object does not cause it to version.</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		The list of maintainables and versionables may occur in any order followed by associated notes and OtherMaterial.			

FragmentType

Definition

A Fragment is a means of transporting a maintainable or versionable object plus any associated notes and other material. The list of maintainables and versionables may occur in any order followed by associated notes and OtherMaterial.

Properties

Table FragmentType. list of properties

Name	Datatype	Description	Cardinality
Note	Note	Notes specific to the object within the fragment.	0..n
OtherMaterial	OtherMaterialType	OtherMaterial associated with the object within the fragment.	0..n

Relationships

Table FragmentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationScheme	OrganizationSchemeType				
OrganizationGroup	OrganizationGroupType				
Organization	OrganizationType-- Deprecate				
Individual	IndividualType				
Archive	ArchiveType				
Relation	Relation				
ConceptualComponent	ConceptualComponentType				
ConceptualVariableScheme	ConceptualVariableSchemeType				
ConceptualVariable	ConceptualVariable				
ConceptGroup	ConceptGroupType				

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptScheme	ConceptScheme	Type			
Concept	Concept				
GeographicLocationScheme	GeographicLocationScheme	Type			
GeographicStructureScheme	GeographicStructureScheme	Type			
ConceptualVariableGroup	ConceptualVariableGroup	Type			
Universe	Universe				
UniverseScheme	UniverseScheme	Type			
UniverseGroup	UniverseGroup	Type			
GeographicStructureGroup	GeographicStructureGroup	Type			
GeographicLocationGroup	GeographicLocationGroup	Type			
SubUniverseClass	SubUniverseClass				
QuestionMap	GenericMap	Type			
UniverseMap	GenericMap	Type			
Comparison	Comparison	Type			
ConceptMap	GenericMap	Type			
CategoryMap	GenericMap	Type			
VariableMap	GenericMap	Type			
RepresentationMap	RepresentationMap				
RepeatWhile	RepeatWhile				
QuestionBlock	QuestionBlock	Type			
QuestionScheme	QuestionScheme	Type			
ProcessingInstructionGroup	ProcessingInstructionGroup	Type			
ProcessingEventGroup	ProcessingEventGroup	Type			
ProcessingEvent	ProcessingEvent	Type			
ProcessingEventScheme	ProcessingEventScheme	Type			
InterviewerInstructionScheme	InterviewerInstructionScheme	Type			
InstrumentScheme	InstrumentScheme	Type			
Sequence	Sequence				
QuestionConstruct	QuestionConstruct	Type			
Loop	Loop				
QuestionGrid	QuestionGrid	Type			
ComputationItem	ComputationItem				
StatementItem	StatementItem				
DataCollection	DataCollection	Type			
QuestionGroup	QuestionGroup	Type			
ControlConstructScheme	ControlConstructScheme	Type			
RepeatUntil	RepeatUntil				
ControlConstructGroup	ControlConstructGroup	Type			
Instrument	Instrument	Type			
InstructionGroup	InstructionGroup	Type			

Name	Target	Description	Type	Source cardinality	Target cardinality
GeneralInstruction	GeneralInstructionType				
GenerationInstruction	GenerationInstructionType				
Instruction	InstructionType				
QuestionItem	QuestionItemType				
Methodology	MethodologyType				
ProcessingInstructionScheme	ProcessingInstructionSchemeType				
IfThenElse	IfThenElse				
Weighting	WeightingType				
DDIInstance	DDIInstanceType				
DataSet	DataSetType				
LocalGroupContent	GroupType				
LocalStudyUnitContent	StudyUnitType				
ResourcePackage	ResourcePackageType				
LocalResourcePackageContent	ResourcePackageType				
SubGroup	SubGroupType				
Group	GroupType				
LocalHoldingPackage	LocalHoldingPackageType				
CodeListScheme	CodeListSchemeType				
CodeList	CodeList				
Category	Category				
NCube	NCubeType				
BaseLogicalProduct	BaseLogicalProductType				
DataRelationship	DataRelationshipType				
NCubeScheme	NCubeSchemeType				
VariableScheme	VariableSchemeType				
CategoryScheme	CategorySchemeType				
Variable	VariableType				
CodeListGroup	CodeListGroupType				
VariableGroup	VariableGroupType				
RepresentedVariableScheme	RepresentedVariableSchemeType				
RepresentedVariable	RepresentedVariable				
CategoryGroup	CategoryGroupType				
RepresentedVariableGroup	RepresentedVariableGroupType				
RecordLayout	RecordLayoutType				
PhysicalStructureGroup	PhysicalStructureGroupType				
PhysicalStructureScheme	PhysicalStructureSchemeType				
RecordLayoutScheme	RecordLayoutSchemeType				
RecordLayoutGroup	RecordLayoutGroupType				
PhysicalDataProduct	PhysicalDataProductType				
PhysicalStructure	PhysicalStructureType				

Name	Target	Description	Type	Source cardinality	Target cardinality
PhysicalInstance	PhysicalInstance	Type			
VariableStatistic	VariableStatistic	Type			
DDIProfile	DDIProfile	Type			
QualityStatement	QualityStatement	Type			
QualityStatementGroup	QualityStatementGroup	Type			
QualityStatementScheme	QualityStatementScheme	Type			
ManagedRepresentationScheme	ManagedRepresentationScheme	Type			
ManagedTextRepresentation	ManagedTextRepresentation	Type			
ManagedScaleRepresentation	ManagedScaleRepresentation	Type			
ManagedNumericRepresentation	ManagedNumericRepresentation	Type			
ManagedMissingValues	ManagedMissingValues	Type			
ManagedDateTime	ManagedDateTime	Type			
GeographicLocation	GeographicLocation	Type			
GeographicStructure	GeographicStructure	Type			
StudyUnit	StudyUnit	Type			

GeographicDescriptionCodeType

Definition

Indicates the most discrete spatial object type identified for a single case. Note that data can be collected at a geographic point (address) and reported as such in a protected file, and then aggregated to a polygon for a public file.

GeographicLocationIdentifierType

Definition

Describes the GeographicLocation as represented by a specific GeographicCode provided by an Authorized Source.

Properties

Table GeographicLocationIdentifierType. list of properties

Name	Datatype	Description	Cardinality
GeographicCode	xs:string	Container for a standard geography code expressed as a string.	0..1

Relationships

Table GeographicLocationIdentifierType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizedSourceReference	AuthorizedSourceReference	Reference to the AuthorizedSource description in GeographicLocation that provided this code.		0..1	

GridAttachmentType

Definition

Identifies the cell or cells in a grid to which the item is attached by a reference to a specific cell coordinate in a grid or by identifying a range of values along a dimension.

Properties

Table GridAttachmentType. list of properties

Name	Datatype	Description	Cardinality
SpecificCellCoordinate	xs:string	Defines a single cell by its matrix coordinate address. For example "1,3,2" for a 3 dimensional matrix where dimension rank-1 has a value of 1, dimension rank-2 has a value of 3, and dimension rank-3 has a value of 2.	0..n
allCells	xs:boolean	If the item should be attached to all the cells in the grid set this attribute to "true".	0..1

Relationships

Table GridAttachmentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CellCoordinates	CellCoordinates	DefinedType or more cells by defining the applicable values of each		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		dimension as "all values", a "specific value" or a range. For example in a simple 2 dimensional grid where dimension rank-1 is displayed as rows and dimension rank-2 as columns and the first column contains a NumericDomain; SelectDimension rank="1" allValues="true" and SelectDimension rank="2" specificValue="1" would result in the NumericDomain being attached to the first column of the grid only.			

GridDimensionType

Definition

Describes each dimension of the grid including dimension rank (for the purpose of identifying a cell address), a text for the dimension, and optional labels and codes used as column and row stubs. May also describe a roster (a set of unlabeled rows or columns depending upon display situation).

Properties

Table GridDimensionType. list of properties

Name	Datatype	Description	Cardinality
rank	xs:integer	The rank order of this dimension (the order in which the value for this dimension will appear in the cell address)denoted with a 1-based indexing.	0..1

Name	Datatype	Description	Cardinality
		Provides coordinate order (1,2,n) for the intersect point of this dimension within the cell address. For example, if the rank of this dimension is 2, the intersect point on this dimension will be the second value listed in the cell address.	
displayCode	xs:boolean	If set to "true" (default value) the code value associated with the category label will be displayed. Set to "false" if only the category label should be displayed.	0..1
displayLabel	xs:boolean	If set to "true" (default value) the label of the CodeList will be displayed. Set to "false" to suppress this display.	0..1

Relationships

Table GridDimensionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeDomain	CodeDomainType	This includes a reference to a CodeList that is used for the labels contained in the dimension. CodeLists are used even when the code is not being displayed in order to use this information for creating the cell coordinate address.		0..	
Roster	RosterType	A roster is an unlabeled list of numbered rows or columns depending upon		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		orientation. The numbers may or may not be displayed but will be used as information for creating the cell coordinate address.			

HandlingType

Definition

Clarifies how stimulus material is to be handled within the resequencing using a controlled vocabulary.

HierarchyCodeType

Definition

Defines the type of hierarchical structure as Regular or Irregular.

IdentificationPortionType

Definition

Provides structural information for parsing the identification code structure of the Authorized Source into its separate parts.

Properties

Table IdentificationPortionType. list of properties

Name	Datatype	Description	Cardinality
startPosition	xs:integer	The start position of the first character expressed as an integer.	0..1
length	xs:integer	The length of the segment expressed as an integer.	0..1

Relationships

Table IdentificationPortionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLevel	GeographicLevel	Reference to the Geographic Level to which		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		this identification segment refers.			

IdentifierParsingInformationType

Definition

Provides structural information for parsing the identification code structure of the Authorized Source into its separate parts.

Properties

Table IdentifierParsingInformationType. list of properties

Name	Datatype	Description	Cardinality
arrayBase		The array base is the value of the designation for the first item in an array and is set to either 0 or 1. Unix based systems and most current programming systems use an array base of 0. Traditional codebooks normally set the array base at 1, for example the first data item in a fixed format ASCII file record begins at character 1.	0..1

Relationships

Table IdentifierParsingInformationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ParentIdentificationPortion	IdentificationPortion	Identifies the parent portions of the code string as individual segments. Repeat for each parental segment.		0..n	
UniqueIdentificationPortion	IdentificationPortion	Identifies the unique portion of the code string as a segment.		0..1	

IncludedCodeType

Definition

Specifies the codes to include in the representation by providing the references to the included Codes or a range of Values from the Code.

Properties

Table IncludedCodeType. list of properties

Name	Datatype	Description	Cardinality
Range	Range	Use when multiple values are included. This uses the unique Value provided for the Code as a means of identification. Provides the range of Values used by the representation. Repeat for non-contiguous values.	0..n

Relationships

Table IncludedCodeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeReference	Code	Reference to the Code within the CodeList used by the representation. Repeat for including multiple values.		0..n	

IncludedGeographicStructureCodesType

Definition

Specifies the Geographic Structure Codes included in the representation by providing a reference to the authorized source of the code, the GeographicStructure used, and any excluded levels.

Relationships

Table IncludedGeographicStructureCodesType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizedSourceReference	AuthorizedSource	Reference to the Authorized		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Source of the value used by this representation. A GeographicStructure may have more than one Authorized Source included in the listing.			
GeographicStructure	GeographicStructure	Reference to the GeographicStructure used by this representation.	ReferenceType	0..1	
ExcludedGeographicStructure	GeographicStructure	Type reference to a Structure Level that is excluded, not used by, this representation. May be repeated to exclude multiple Structure values.	ReferenceType	0..n	

IndividualLanguageType

Definition

Use to specify the languages known by the individual in terms of their ability to speak, read, and write the language. May be repeated to cover multiple languages. This information is useful for foreign contacts in determining the language of communication to use with this individual.

Properties

Table IndividualLanguageType. list of properties

Name	Datatype	Description	Cardinality
Language	CodeValueType	Specifies the language (and optionally the locale) of the individual. The language identifier is defined by IETF RFC 4646 or its successor. The base sub-tag is the ISO 639 2 or 3 digit language code.	0..1

Name	Datatype	Description	Cardinality
Read	CodeValueType	Indicates reading knowledge of the language specified. Supports an optional controlled vocabulary.	0..1
Write	CodeValueType	Indicates writing knowledge of the language specified. Supports an optional controlled vocabulary.	0..1
Speak	CodeValueType	Indicates speaking knowledge of the language specified. Supports an optional controlled vocabulary.	0..1
EffectivePeriod	DateType	Clarifies when the identification information is accurate.	0..1

InstructionAttachmentLocationType

Definition

Allows attachment of an instruction to a specific item in a question structure. For example, to a Label, QuestionText, ResponseDomain, Response domain value, or grid cell.

Properties

Table InstructionAttachmentLocationType. list of properties

Name	Datatype	Description	Cardinality
attachToLabel	xs:boolean	Attach the instruction to the Question Label.	0..1
attachToQuestionText	xs:boolean	Attach the instruction to the QuestionText.	0..1

Relationships

Table InstructionAttachmentLocationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AttachmentLocationType	AttachmentLocationType	Attachment of an instruction to a specific item in a code or category scheme. For example, attach		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		a Definition to a specific Code/Category the value.			
GridAttachment	GridAttachment	Identifies the cell or cells in a grid to which the instruction is attached by a reference to a specific cell coordinate in a grid or by identifying a range of values along a dimension.		0..n	

IntervalType

Definition

Describes the structure, starting point and increment step of an interval.

Properties

Table IntervalType. list of properties

Name	Datatype	Description	Cardinality
Anchor	xs:string	Identifies the start value for this interval.	0..1
Increment	xs:string	Value specifying the increment between categories.	0..1

IsComprehensiveType

Definition

Indicates the values are comprehensive, they cover all possible values. If the data collected for these values is additive the sum of the values should equal the value of the parent.

ItemSetType

Definition

Storage format for random order item variables. Each ItemValue references it's defining variable, it's record identifier, and the it's value.

Relationships

Table ItemSetType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ItemValue	ItemValueType	Each value in the data set linked to it's variable and record identification.		1..n	

ItemType

Definition

Describes individual items held or distributed by the archive in connection with a study, group of studies, or resource packages. What constitutes an item is determined by the archive. Provides identification information on the item within the context of the archive including citation, a statement on its location, call number (internal identifier), URI, format, media type, and source. The item is classified by a study class designation, information on access restrictions, and availability status. Content information on the number of data files associated with the item, the completeness of the collection of objects represented by this item as well as descriptions of nested items are provided.

Properties

Table ItemType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	A citation for the item. May additionally be rendered in native qualified Dublin Core (dc and dcterms).	0..1
LocationInArchive	InternationalStringType	Describes the location of the item within the archive. Repeat for multiple locations such as separate stores for access and archival copies.	0..n
CallNumber	xs:string	The name, code, or number used by the archive to uniquely identify the item within the archive.	0..1
URI	xs:anyURI	The URL or URN for the item.	0..1
ItemFormat	CodeValueType	Describes the item's format.	0..1
Media	CodeValueType	Describes the medium, or media, for the item.	0..1

Name	Datatype	Description	Cardinality
AvailabilityStatus	StructuredStringType	A statement of availability for the item. This is a positive statement (as opposed to access restrictions) which may be used for publication or other purposes. Allows for structured content.	0..1
DataFileQuantity	xs:integer	The number of data files in the described item, expressed as an integer. This is a check sum and should be updated as the contents of the collection changes. The use of this element is best restricted to completed collections where change in the number of objects is not dynamic.	0..1
CollectionCompleteness	StructuredStringType	Describes the completeness of the collection for the item and its related data files and sub-items. Note coverage gaps as well as unique content. This statement may be used for publication or other purposes. Allows for structured content.	0..1

Relationships

Table ItemType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
StudyClass	StudyClassType	An archive specific classification for the item. This may be a topical classification, a classification of intended processing levels, or information on the processing status.		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
Access	AccessType	Access restriction information applying to the item. If none are specified the default restrictions of the archive or parent collection or item apply.		0..1	
OriginalArchive	OrganizationType Deprecate	The original archive for the described item, expressed as a reference to an organization listed in the organization scheme.		0..n	
OriginalArchive	OrganizationType	The original archive for the described item, expressed as a reference to an organization listed in the organization scheme.		0..n	
Item	ItemType	Allows for the nesting of Item descriptions with a item.		0..n	

LanguageGroupCodeType

Definition

Indicates the panel relationships among all Study Units within the group and its sub-groups. This is an assertion of the relationship, and it is incumbent on the creating user or application to make sure that the assertion is true.

LevelReferenceType

Definition

Contains a Reference to a GeographicLevel if available and a name for the level. Only one reference can be provided but multiple name provided.

Properties

Table LevelReferenceType. list of properties

Name	Datatype	Description	Cardinality
LevelName	xs:string	Name of a geographic level. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..1

Relationships

Table LevelReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLevelReference	GeographicLevel	Reference to the Geographic Level as described in the GeographicStructure. TypeOfObject should be set to GeographicLevel.		0..1	

LimitedCodeSegmentCapturedType

Definition

When the code is a concatenation this structure allows you to limit the portion of the concatenated code that this object captures. Provides an description of the segment, declares the array base used, the start position of the segment and its length.

Properties

Table LimitedCodeSegmentCapturedType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the content and purpose of the segment used. May be expressed in multiple languages and supports the use of structured content.	0..1
arrayBase		The array base is the value of the designation for the first item in	0..1

Name	Datatype	Description	Cardinality
		an array and is set to either 0 or 1. Unix based systems and most current programming systems use an array base of 0. Traditional codebooks normally set the array base at 1, for example the first data item in a fixed format ASCII file record begins at character 1.	
startPosition	xs:integer	The start position of the first character expressed as an integer.	0..1
length	xs:integer	The length of the segment expressed as an integer.	0..1

LinkingMapType

Definition

Provides a link from a local object to a deposited object via reference and designates if the added material should Override, act as AddedContent, or DeleteContent in the original deposited material. A description of the link or reason for new material may be provided.

Properties

Table LinkingMapType. list of properties

Name	Datatype	Description	Cardinality
RelationshipAction	CodeValueType	Provides a structured means of stating if the local object overrides (replaces) the depository object, adds information to the deposited object, deletes the content of the depository object without replacing it. or restricts access the deposited object by attaching an embargo or access restriction to it. Supports the use of a controlled vocabulary.	0..1
Description	StructuredStringType	A description of the link such as the reason for adding or changing local content. May be expressed in multiple languages and supports	0..1

Name	Datatype	Description	Cardinality
		the use of structured content.	

MeasureDimensionType

Definition

This element defines the structure of a measure dimension for the NCube Instance. A value along the MeasureDimension is defined by a stack of references to one or more MeasureDefinitions found in the logical description of the NCube with each containing an attribute of orderValue which provides its value for use in the cell address (similar to the use of a CodeRepresentation of a Variable used as a conceptual dimension. This allows measures (whether one or several) to be handled in the same way as the conceptual dimension of the NCube in declaring a cell address. It is assumed that the value of the MeasureDimension is the last value in the address array. For example, for an NCube with 3 conceptual dimensions of rank 1 = Sex, rank 2 = Age, and rank 3 = Educational Attainment, plus a MeasureDimension. The cell address of 1,4,2,2 would indicate Code value of 1 for Sex, 4 for Age, 2 for Educational Attainment, and 2 for MeasureDimension. For systems translating to SDMX or an OLap structure DDI assumes that the MeasureDefinitionReference with the orderValue="1" is the equivalent of the PrimaryMeasure.

Relationships

Table MeasureDimensionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NCubeMeasureDimensionReference	NCubeMeasureDefinitionReference	Reference to a MeasureDefinition as described in the parent NCube logical structure. The reference has an additional attribute orderValue which defines the position of the referenced MeasureDefinition along the MeasureDimension so that it can be used as part of the cell address. The default value is "1". Additional MeasureDefinitions should have incremental values (2,3,4,...)	ReferenceType	1..n	

MeasureDimensionValueType

Definition

Specifies the orderValue of the Measure in the MeasureDimension described in the NCubeInstance along with its arrayOrder if multiple measures are provided as an array in a single storage location.

Properties

Table MeasureDimensionValueType. list of properties

Name	Datatype	Description	Cardinality
dimensionValue	xs:integer	The value of the dimension used to determine the cell address.	0..1
arrayOrder	xs:integer	Oder within the array. Note that this attribute assumes an array base of 0. The array order assumes that the measures will always be displayed in the same order and that sparse content (a missing value in the array) will be clear between two delimiters in this array. (For example 1,1,1 or 1,,1)	0..1

MetadataQualityType

Definition

An assessment of the quality of the metadata within the Maintainable object, e.g. the quality of the transcription, completeness, editing status, etc. It indicates the type of metadata quality being assessed, the purpose of providing the measure, and either a value for the quality from a controlled vocabulary and/or a description of the value.

Properties

Table MetadataQualityType. list of properties

Name	Datatype	Description	Cardinality
MeasurePurpose	StructuredStringType	The purpose of the type of metadata quality and its value. Supports multiple languages and the use of structured content.	0..1

Name	Datatype	Description	Cardinality
MeasureValue	CodeValueType	A value representing the measurement of this set of metadata within the context of the TypeOfMetadataQuality indicated. Supports the use of an external controlled vocabulary.	0..1
Description	StructuredStringType	A textual description of the quality of this set of metadata which expands on or is provided in lieu of other objects within MetadataQuality. Supports multiple languages and the use of structured content.	0..1

NCubesInRecordType

Definition

Identifies the NCubes and any variables in the record external to NCube structures such as case identification variables that are contained in the logical record by indicating that all NCubes contained in the logical product are included, inclusion of a NCubeScheme to include, or listing individual NCubes to include. When the attribute allNCubesInLogicalProduct is set to "false" use the NCubeSchemeReference (which allows for exclusions) and NCubeReference to specify the included variables. A nested VariablesInRecord structure is used to include non-NCube variables in the record.

Properties

Table NCubesInRecordType. list of properties

Name	Datatype	Description	Cardinality
allNCubesInLogicalProduct	boolean	When the value is true, then the logical record contains all listed NCubes in the logical product module.	0..1

Relationships

Table NCubesInRecordType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariablesInRecord	VariablesInRecord	Like VariablesInRecord to describe any variables in the record that are external to the		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		NCube such as case identifiers.			
NCubeSchemeReference	NCubeSchemeType	Reference to an NCubeScheme whose members are included in the logical record. Note that individual items may be excluded from the scheme if not used by the logical record.		0..n	
NCubeReference	NCubeType	Reference to an NCube to include in the logical record. This may be used to supplement the contents of an included NCubeScheme or to list all the variables individually.		0..n	

NumberRangeType

Definition

Structures a numeric range. Low and High values are designated. The structure identifies Low values that should be treated as bottom coded (Stated value and bellow, High values that should be treated as top coded (stated value and higher), and provides a regular expression to further define the valid content of the range.

Properties

Table NumberRangeType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the number range. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
TopCode	xs:decimal	Indicates that any response equal to or	0..1

Name	Datatype	Description	Cardinality
		greater than this value has been coded as the top-code value. Expressed in the datatype xs:decimal.	
TopCodeDouble	xs:double	Indicates that any response equal to or greater than this value has been coded as the top-code value. Expressed in the datatype xs:decimal.	0..1
BottomCode	xs:decimal	Indicates that any response equal to or less than this value has been coded as the bottom-code value. Expressed in the datatype xs:double.	0..1
BottomCodeDouble	xs:double	Indicates that any response equal to or less than this value has been coded as the bottom-code value. Expressed in the datatype xs:double.	0..1
regExp	xs:string	Regular expression defining the allowed syntax of the number.	0..1

Relationships

Table NumberRangeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Low	NumberRangeValue	The lower bound of the range expressed in the datatype xs:decimal. If not present, then there is no lower bound.		0..	
LowDouble	DoubleNumberRangeValue	The lower bound of the range expressed in the datatype xs:double. If not present, then there is no lower bound.		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
High	NumberRangeValue	The upper bound of the range in the datatype xs:decimal. If not present, then there is no upper bound.		0..	
HighDouble	DoubleNumberRangeValue	The upper bound of the range in the datatype xs:double. If not present, then there is no upper bound.		0..	

OriginType

Definition

A citation or URI for the source of the data. Note that this is an external reference, and should not be used to point to DDI descriptions of the data, or to DDI-encoded data.

Properties

Table OriginType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	Citation for the data source.	0..1
OriginLocation	xs:anyURI	A URN or URL for the data source.	0..1

PrimaryComponentLevelType

Definition

Provides references to the base level elements that are used as building blocks for composed geographies. For example, Metropolitan areas that are composed of counties except in the New England States where they are composed of county subdivisions, or School Attendance Boundaries (SABINS) built from Census Blocks. This structure allows for specifying the basic building block for composed areas and any restrictions (coverage limitations).

Properties

Table PrimaryComponentLevelType. list of properties

Name	Datatype	Description	Cardinality
CoverageLimitation	InternationalStringType	Describes a limitation of the coverage such as	0..1

Name	Datatype	Description	Cardinality
		all Metropolitan Areas EXCEPT those in New England States.	

Relationships

Table PrimaryComponentLevelType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLevel	GeographicLevel	Reference to the Geographic Level used as the basic building block to a composite area. Use the largest level that is consistently used in full (i.e. Use a State rather than the sub-level County if a State is always a member of the composed unit in its entirety.		0..1	

RecommendedPrivacyCodeType

Definition

A basic set of privacy codes

ReferenceType

Definition

Used for referencing an identified entity expressed in DDI XML, either by a URN and/or an identification sequence. If both are supplied, the URN takes precedence. At a minimum, one or the other is required. If the identification sequence is used the content of MaintainableObject may be required to be able to assemble the canonical or deprecated DDI URN. To fully support interoperability both the DDI URN and the full identification sequence should be used. Note that to support interoperability of the canonical and deprecated URN, at minimum the MaintainableIdentifier and TypeOfMaintainableObject should be supplied if the canonical URN is being used for the reference. The lateBound attribute has a boolean value, which - if set to true - indicates that the latest version should be used. Use the attribute lateBoundRestriction to indicate when a portion, such as the major version number, should be restricted to a specific value and then late bound within that restriction. Element descriptions will contain a list of applicable TypeOfObject values.

Properties

Table ReferenceType. list of properties

Name	Datatype	Description	Cardinality
URN	URNTYPE	The URN of the entity being referenced. The URN should follow the pattern associated with the value of the attribute typeOfIdentifier (Canonical or Deprecated).	0..1
isExternal	xs:boolean	Indicates that the reference is made to an external source. If the value is true, then a URI must be provided.	0..1
externalReferenceDefaultURI	URI	URI identifying the location of an external reference as provided in the maintainable object of the referenced item. For example the content of the externalReferenceDefaultURI of the parent VariableScheme for a referenced Variable. If there is a conflict where the content of the URI does not match the requested object, the DDI URN becomes the preferred value.	0..1
isReference	xs:boolean	A fixed attribute value identifying which elements are references.	0..1
lateBound	xs:boolean	The default value is set to false indicating that the reference is to a specific version of the object. If the most recent version or most recent minor version within a major version is required, set this flag to "true". Indicating lateBound and not providing information for lateBoundRestriction indicates the request is	0..1

Name	Datatype	Description	Cardinality
		for the latest version available without restriction.	
objectLanguage	LanguageList	Specifies the language (or language-locale pair) to use for display in references to objects which have multiple languages available.	0..1
sourceContext	xs:anyURI	Provide a DDI URN for the version of the parent maintainable that shows the full context for the referenced object. This is used only when the context of the object within the current version of a maintainable is important to the user and this version is later than the one containing the object itself. For example a occupation classification may be unchanged since version 1.0 of its maintainable but at the point of reference the current version of the maintainable containing the original structure is at version 2.0 etc..	0..1

Relationships

Table ReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Agency	DDIAgencyIDType	This is the registered agency code with optional sub-agencies separated by dots.		1..1	
ID	IDType	ID of the object being referenced. This must conform to the allowed structure of the DDI Identifier and must be		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		unique within the declared scope of uniqueness (Agency or Maintainable).			
Version	VersionType	The version of the object at the time of reference. Late binding is handled separately and does not effect the content of this object.		1..1	
TypeOfObject	TypeOfObjectType	States the type of object being referenced based on a persistent list of valid DDI object types.		1..1	
MaintainableObject	MaintainableObject	Do not use if the referenced object is Maintainable. For references to Identifiable and Versionable objects this provides contextual information on the Maintainable Parent of this object at point of origin. Note that if the ID, Agency, Version sequence is used, and the scope of uniqueness of the referenced object is the Maintainable, then the ID of the Maintainable is needed to		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		create the structured ID portion of the canonical URN. If the system uses the deprecated URN, both the Maintainable ID and TypeOfMaintainableObject are required to create the deprecated URN structure.			
lateBoundRestriction	VersionType	Use when lateBound is changed to "true". The specifies the point to begin late binding the version number. For example if an object had a two part version number such as X.Y where X is a major version and Y a minor version and the request is for the latest minor version of major version number 4, the content of this field would be 4. Indicating lateBound and not providing information for this field indicates the request is for the latest version available without restriction.		0..1	

RelatedValueTypeCodeType

Definition

Indicates the relationship of the value of a source object to a target object. Except in the case of equality or non-equality of the relationship is unidirectional (source to target).

RelationCodeType

Definition

Indicates the relationship of a source object to a target object. Except in the case of sibling the relationship is unidirectional (source to target).

RelationshipCodeType

Definition

Indicates relation.

ResearcherIDType

Definition

Captures an individuals assigned researcher ID within a specified system. Includes the type or researcher ID provided, the ID, a URI of the location or link, and a description of the researcher ID provided. E.g., Rajiv Agrwal, type=researcherID, ID=A-8725-2008), URI=www.researcherid.com/rid/A-8725-2008 which brings you to the researchers page.

Properties

Table ResearcherIDType. list of properties

Name	Datatype	Description	Cardinality
TypeOfID	CodeValueType	Brief description of the ID type. Supports the use of an external controlled vocabulary.	0..1
ResearcherIdentification	xs:string	The value of the researcher ID.	0..1
URI	xs:anyURI	The URI (URN or URL) of the of the researcher ID.	0..1
Description	StructuredStringType	A description of the purpose and use of the researcher ID. May be expressed in multiple languages and supports the use of structured content.	0..1

Name	Datatype	Description	Cardinality
EffectivePeriod	DateType	Clarifies when the identification information is accurate.	0..1

ResourcePackageArchiveType

Definition

This is archive information specific to the creation, maintenance, and archiving of the ResourcePackage provided either in-line or by reference. This packaging element differentiates this "Archive" from one being published as a product within a ResourcePackage.

Relationships

Table ResourcePackageArchiveType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Archive	ArchiveType	Allows for in-line entry of an Archive related to the creation and maintenance of the ResourcePackage.		0..n	

ResponseDomainInMixedType

Definition

A structure that provides both the response domain and information on how it should be attached, or related, to other specified response domains in the question. If no AttachmentLocation information is provided it is assumed that multiple response domains or response text occurs in sequence.

Properties

Table ResponseDomainInMixedType. list of properties

Name	Datatype	Description	Cardinality
ResponseDomain	Representation	The response domain being used. An abstract element. May be substituted by any valid object of substitution type ResponseDomain.	0..1
attachmentBase	xs:integer	If another response domain will be attached to the response domain listed	0..1

Name	Datatype	Description	Cardinality
		withinResponseDomainInMixed provide a value in attachmentBase to allow for unique identification within this question. AttachmentLocation contains an attribute attachmentDomain which will provide a link from the domain that is being attached to the domain it is being attached to.	

Relationships

Table ResponseDomainInMixedType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AttachmentLocation	AttachmentLocation	AttachmentType attachment of a secondary response domain to a specific item within another response domain used in the question. For example, attach a TextDomain to the value "Other" using the TextDomain label (Please specify) as a label for the TextDomain.		0..1	

ResponseTextSetType

Definition

Provides a means of bundling multiple language versions of the same intended dynamic text together. This wrapper serves to differentiate between a case where multiple language content for a single ResponseText are provided and when two differing sets of ResponseText are in immediate sequence (with no intervening question). Each of the repetitions of ResponseText within this wrapper are assumed to be multi-language equivalents.

Properties

Table ResponseTextSetType. list of properties

Name	Datatype	Description	Cardinality
ResponseText	DynamicTextType	Text closely related to the content of the ResponseDomain(s), in general, text required to make sense of the related response domain. Note that when using ResponseText, the full ResponseText must be repeated for multi-language versions of the content. Different languages may handle the dynamic portions in different locations and/or with different content. Therefore languages cannot be mixed within a dynamic text except when the full text itself has multiple language sections, for example, a foreign language term in a text. The DisplayText may also be repeated to provide a dynamic and plain text version of the display. This allows for accurate rendering of the ResponseText in a non-dynamic environment like print.	0..n

RestrictionProcessType

Definition

Allows for a specific machine actionable description of the restriction process using a ProcessingInstructionReference, if one currently exists, or through a CommandCode. In the case of a physical instance, the RestrictionProcess would be the same as a case, record or variable selection process.

Properties

Table RestrictionProcessType. list of properties

Name	Datatype	Description	Cardinality
CommandCode	CommandCode	The process instructions for restricting a level of	0..1

Name	Datatype	Description	Cardinality
		coverage expressed as a command code.	

Relationships

Table RestrictionProcessType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ProcessingInstruction	ProcessingInstruction	Reference to a ProcessingInstruction containing the process instructions for restricting a level of coverage.	Reference	0..	

RoleType

Definition

Describes the role of Target Individual or Organization in relation to the Source Object. Provides a description and classification of the role, the period for which the role was valid, and any additional information relevant to the role.

Properties

Table RoleType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	Description of the role played by the Target Object in relationship to the Source Object.	0..1
EffectivePeriod	DateType	Time period when this role is/was valid.	0..n

Relationships

Table RoleType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Keyword	InternationalCodeType	Keyword used to classify the role of the organization or individual in relationship to		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the Source Object			
AdditionalInformation	AdditionalInformation	Any additional information you wish to note about this role of the Target object in this relationship. This is a structured string so it can be formatted and a privacy tag can be applied.		0..n	

RosterType

Definition

A roster is an unlabeled list of numbered rows or columns depending upon orientation. The numbers may or may not be displayed but will be used as information for creating the cell coordinate address. The Roster defines the numbering used for the coordinate system, sets a minimum and maximum number of values, and provides the condition for continuation. The Roster label is used in the same way as the label of the CodeDomain, providing a dimension level header or label.

Properties

Table RosterType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the roster. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..1
ConditionForContinuation	CommandCode	Provides the condition for continuing to add another iteration to the roster. This may be a human readable condition and/or a machine-actionable command.	0..1
baseCodeValue	xs:integer	A base value for the first item on the Roster (normally 0 or 1 but	0..1

Name	Datatype	Description	Cardinality
		can be set to any value especially when the use of a roster extends an enumerated list expressed as an integer.	
codeIterationValue	xs:integer	The value added to the last used value to create the iteration value for the current row or column expressed as an integer.	0..1
minimumRequired	xs:integer	The minimum number of rows or columns required expressed as an integer.	0..1
maximumAllowed	xs:integer	The maximum number of rows or columns allowed expressed as an integer. Leaving this attribute with no value implies that the maximum allowed is unbounded.	0..1

ScaleDimensionType

Definition

Defines a dimension of a scale providing it with a label, a numeric or character based range, the attachment of a category label at one or more of the scale values, the frequency of increment markers, and the frequency of value labels on marked or unmarked increments.

Properties

Table ScaleDimensionType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the scale. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Range	Range	Indicates the high and low values (endpoints) of a non-numeric scale.	0..1

Relationships

Table ScaleDimensionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NumberRange	NumberRangeType	Indicates the high and low values (endpoints) of a numeric scale.		0..	
Anchor	AnchorType	Allows for the attachment of a category label at any anchor point.		0..n	
MarkedIncrement	BasicIncrementType	Identifies the frequency for increment markers (with or without value attachments).		0..1	
ValueIncrement	BasicIncrementType	Identifies the frequency for value labels on marked or unmarked increments.		0..1	

SelectDimensionType

Definition

For each dimension in the grid define the applicable values as "all values", a "specific value" or a range. If a rangeMinimum or rangeMaximum is provided without the other, the assumption is unbounded for the object not included.

Properties

Table SelectDimensionType. list of properties

Name	Datatype	Description	Cardinality
rank	xs:integer	The rank value of the dimension for which the selection criteria apply.	0..1
allValues	xs:boolean	If set to "true" applies to the full set of dimension values. If set to "false" use specificValue, rangeMinimum and rangeMaximum as	0..1

Name	Datatype	Description	Cardinality
		appropriate to define the subset of values needed.	
specificValue	xs:string	May contain a single value or a delimited array of values.	0..1
rangeMinimum	xs:string	The inclusive minimum value of the range. Use when the values or subset of values are ordered and contiguous and may be expressed as a range.	0..1
rangeMaximum	xs:string	The inclusive maximum value of the range. Use when the values or subset of values are ordered and contiguous and may be expressed as a range.	0..1

SimilarConceptType

Definition

A reference to a concept with similar meaning and a description of their differences. Formal comparison is done using a ConceptMap. The similar concept structure allows specification of similar concepts to address cases where confusion may affect the appropriate use of the concept.

Properties

Table SimilarConceptType. list of properties

Name	Datatype	Description	Cardinality
Difference	StructuredStringType	Describes the difference between the concept referenced in SimilarConceptReference and the concept included in the concept's Description element.	0..1

Relationships

Table SimilarConceptType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SimilarConceptReference	ReferenceType	Reference to a concept with a similar definition.		1..1	

SourceObjectType

Definition

Identifies the Source organization or individual in the relationship. References either an Organization or an Individual and specifies their relationship in terms of parent, child, or sibling.

Relationships

Table SourceObjectType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationReference	OrganizationType Deprecate	A reference to an Organization described in DDI.		..	
IndividualReference	IndividualType	A reference to an Individual described in DDI.		0..	
RelationshipCode	RelationshipCode	A specification of the relationship of the Source to the Target in terms of Parent (superior), Child (subordinate), or Sibling (on par).		0..1	

SourceRepresentationType

Definition

Provides a reference to the managed content of a representation which may be a ManagedRepresentation or a specific CodeList, GeographicRepresentation, or GeographicLocation. Allows for the optional reference to a Concept when context is important. For example, a ManagedNumericRepresentation within the context of Age.

Relationships

Table SourceRepresentationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategorySchemeReference	CategoryScheme	Type reference to a		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		CategoryScheme as the managed component of a representation.			
CodeListReference	CodeList	A reference to a CodeList as the managed component of a representation.		0..	
GeographicStructureReference	GeographicStructure	A Reference to a GeographicStructure as the managed component of a representation.	Type	0..	
GeographicLocationReference	GeographicLocation	A Reference to a GeographicLocation as the managed component of a representation.	Type	0..	
ConceptReference	Concept	Reference to a Concept which provides a context for the representation, e.g. Age for a numeric representation.		0..1	

SourceTargetLinkType

Definition

Contains a set of variables, one from the source record and one from the target record used as all or part of a link between the source and target records.

Relationships

Table SourceTargetLinkType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SourceLinkVariableReference	Variable	A reference to the variable in the Source Record containing the value that is equal to the value in		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the identified variable in the Target Record.			
TargetLinkVariableReference	MaterialType	A reference to the variable in the Target Record containing the value that is equal to the value in the identified variable in the Source Record.		1..1	

StandardType

Definition

Identifies the external standard used and describes the level of compliance with the standard in terms specific aspects of the standard's content.

Properties

Table StandardType. list of properties

Name	Datatype	Description	Cardinality
StandardUsed	OtherMaterialType	Provide the citation and location of the published standard using the OtherMaterialType.	0..1

Relationships

Table StandardType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Compliance	ComplianceType	Allows for a quality statement based on frameworks to be described using itemized properties. A reference to a concept, a coded value, or both can		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		be used to specify the property from the standard framework identified in StandardUsed. ComplianceDescription can provide further details or a general description of compliance with a standard.			

StatisticalDataLocationType

Definition

References a PhysicalInstance module that describes a data file containing the summary and/or category statistics OR contains the statistics in-line. For example, when the same data are stored as an ASCII file and as an ORACLE file, the summary and category statistics would only be listed in one of the physical instance files, and referenced in the other(s).

Properties

Table StatisticalDataLocationType. list of properties

Name	Datatype	Description	Cardinality
isInline	xs:boolean	Set to "true" if the summary/category statistics are found inline in the referenced physical instance. Set to "false" if they are in the data file associated with the physical instance.	0..1

Relationships

Table StatisticalDataLocationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
PhysicalInstance	PhysicalInstance	References a physical instance containing the statistics inline or that identifies the		1..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		data file which contains the statistics.			

StatisticalSummaryType

Definition

Provides a statistical summary of the data in the related file as a set of variable level and category level statistics. May refer to a set of statistics provided in another physical instance (for example if the same data is held in multiple storage formats) or if the summary statistics are held as a separate data set.

Relationships

Table StatisticalSummaryType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
StatisticalDataLocation	StatisticalDataLocation	Refers to a PhysicalInstance that describes a data file containing the summary and/or category statistics OR contains the statistics in-line as in the case of the same data stored as an ASCII file and as an ORACLE file where the summary and category statistics are listed only in one of the physical instance files.		0..n	
VariableStatistics	VariableStatistics	One or more statistical measures that describe the responses to a particular variable. Include both variable and category level statistics.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableStatisticsReference	VariableStatistics	Description of a VariableStatistics by reference.		0..	

StudyClassType

Definition

An archive specific classification. This may be a topical classification, a classification of intended processing levels, or information on the processing status. Consists of a description of the study class and a term used to specify the class type.

Properties

Table StudyClassType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the purpose in classifying the object and how it conforms to the classification. May be expressed in multiple languages and supports the use of structured content.	0..1
ClassType	CodeValueType	A term used to classify the study class. As these are archive specific, DDI strongly recommends the use of a controlled vocabulary.	0..1

SubCategoryType

Definition

Defines the sub-category in terms being generic or partitive in nature. For example, a radial tire is a type of tire (generic) while a tire is a part of a car (partitive). The value refers to the role of the SubCategory within the broader category .

TargetObjectType

Definition

Identifies the Target organization or individual in the relationship. References either an Organization or an Individual and specifies the role of the Target in relationship to the Source. Multiple roles for specified periods may be identified.

Relationships

Table TargetObjectType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationReference	OrganizationType Deprecate	A reference to an Organization described in DDI.		0..	
IndividualReference	IndividualType	A reference to an Individual described in DDI.		0..	
Role	RoleType	Describes the role of Target Individual or Organization in relation to the Source Object.		0..n	

TargetRepresentationType

Definition

Provides a reference to a codified representation. Supports the ability to limit code coverage as appropriate for the coding structure referenced.

Relationships

Table TargetRepresentationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategorySchemeReference	CategoryScheme	Type reference to a CategoryScheme as the managed component of a representation.		0..	
CodeListReference	CodeList	A reference to a CodeList as the managed component of a representation.		1..1	
CodeSubsetInformation	CodeSubsetInformation	Additional type specification of the codes to use from the CodeList.		0..1	
IncludedGeographicStructureCodes	IncludedGeographicStructureCodes	Classification of Geographic Structure codes	CodesType	0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		included by the Authorized source of the code, the geographic location being used and the locations to exclude.			
IncludedGeographic	IncludedGeographic	Geographic Location codes included by the Authorized source of the code, the geographic location being used and the locations to exclude.	IdentificationCodesType	0..	

TextQualifierType

Definition

Use for delimited files to designate the which text qualifier, if any, was used. Valid values include: singleQuote, doubleQuote, and none.

TypeOfObjectType

Definition

This is a list of all current object types of Identifiable, Versionable, or Maintainable type. These values are intended to remain consistent over time, even if the name of an object is altered.

UnfilteredCategoryStatisticsType

Definition

The unfiltered values of any number of statistics by category value representing the full response distribution of the variable.

Relationships

Table UnfilteredCategoryStatisticsType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableCategory	VariableCategory	Structure that is repeated for each category		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		value for which one or more statistics are recorded. Each VariableCategory has one category value and any number of associated statistics.			

UsedType

Definition

Specifies a DDI object and all its sub-objects supported by the DDIProfile. May specify an alternate local name and description of an object, instructions for its use, and set limits on its allowed usage.

Properties

Table UsedType. list of properties

Name	Datatype	Description	Cardinality
AlternateName	InternationalStringType	Provides an alternate name for the element, for presentation purposes (not for use in the XML instance). It may be supplied in several language-versions.	0..1
Description	StructuredStringType	A description of the content and purpose of the object. May be expressed in multiple languages and supports the use of structured content.	0..1
Instructions	StructuredStringType	Instructions for the use of the object within the context of the profile. May be expressed in multiple languages and supports the use of structured content.	0..1
isRequired	xs:boolean	If true indicates that an element described as optional in DDI is required by the profile.	0..1
xpath	xs:string	Contains an XPath which points to an	0..1

Name	Datatype	Description	Cardinality
		element or attribute in DDI instances which is used by the profile. All subelements of a used element are assumed to be supported unless explicitly addressed by the profile. The number of supported repetitions may be included in the XPath expression.	
defaultValue	xs:string	This field provides a default value for the specified element or attribute if it holds simple content, and the value must be a valid one per the DDI schemas. This assumes that the value is not specified in the DDI instance itself, which would override the default. The value should also be provided as part of the XPath expression supplied for the field.	0..1
limitMaxOccurs	xs:string	This field allows for limiting the maximum occurrences of this field. If the number is greater than the maxOccurs value in DDI it will be ignored and the DDI specification will remain in use.	0..1
fixedValue	xs:boolean	This field, if set to true, provides an indication that the default value supplied in the fixedValue attribute is the only one which is allowed for the profile - other values will be overridden with the default (a warning should be issued to the creator of the instance); the value must be a valid one per the DDI schemas.	0..1

VariableCategoryType

Definition

A category value for which one or more statistics are recorded. Each VariableCategory has one category value and any number of associated statistics.

Relationships

Table VariableCategoryType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategoryValue	CategoryValue	The value of the category.		1..1	
CategoryStatistic	CategoryStatistic	The value of a statistic associated with the category value indicated in the sibling CategoryValue element.		1..n	

VariableRepresentationType

Definition

Describes the representation of the variable in the data set. Describes the function of the variable, variables or standard weights that may be used to weight this variable during analysis, imputation and processing information, other variables used to create the value of this variable through concatenation, valid value representations (valid for analysis of respondents), missing value representations, aggregation methods used to generate the content of the variable, and additivity information.

Properties

Table VariableRepresentationType. list of properties

Name	Datatype	Description	Cardinality
VariableRole	CodeValueType	Describes a specific function of the variable, such as identity, weight, geographic variable, time, date, currency, etc. This is a more extensive means of identifying the function of the variable than the Boolean indicators on the variable. Allows for agency specific designations. Supports the use of a controlled vocabulary.	0..1

Name	Datatype	Description	Cardinality
ValueRepresentation	Representation	Describes the actual representation of the variables' values. Allows for the listing of values to be treated as missing in order to support 3.1 structures. The preferred method is the use of a reference to ManagedMissingValues description using MissingValuesReference. If both are used and there is a conflict in the content, MissingValuesReference will override the content provided in the ValueRepresentationReference.	0..1
MeasurementUnit	CodeValueType	Records the measurement unit, for example, 'km', 'miles', etc. Supports the use of a controlled vocabulary.	0..1
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1
AggregationMethod	CodeValueType	Indicates the type of aggregation method used. Supports the use of a controlled vocabulary.	0..1

Relationships

Table VariableRepresentationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
WeightVariableReference	VariableType	Reference to one or more weight variables that may be used in analyzing this variable.		0..n	
StandardWeightReference	StandardWeightType	Reference to the StandardWeight found in the		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Weighting description, which is relevant for analyzing this variable. A standard weight is a single weight used for all variables of a specific type or for a specified sub-universe.			
ImputationA	GenerationInstruction	Reference to the imputation process described as a General Instruction in a ProcessingInstructionScheme.		0..1	
ImputationB	GeneralInstruction	Reference to the imputation process described as a General Instruction in a ProcessingInstructionScheme.		0..1	
ConcatenatedValue	ConcatenatedValue	This type is a reference to other variables and describes the method for deriving the value of this variable by concatenating a collection of other variables. This is useful in creating concatenated keys.		0..1	
ProcessingInstruction	ProcessingInstruction	Reference to either a general or generation instruction that was provided to those who converted information from one form to another to create a	type	0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		particular variable. This might include the reordering of numeric information into another form or the conversion of textual information into numeric information.			
MissingValuesReference	MissingValuesReference	References an existing MissingValuesRepresentation using the Reference structure. If this content conflicts with content provided in the ValueRepresentation regarding Missing Values. The content of the MissingValuesRepresentation overrides. TypeOfObject will be MissingValuesRepresentation	MissingValuesRepresentation	0..1	
additivity	AdditivityCodeType	Records type of additivity, such as 'stock', 'flow', 'non-additive'.		0..1	

VariablesInRecordType

Definition

Identifies the variables contained in the logical record by indicating that all variable contained in the logical product are included, inclusion of a scheme of variable to include, or listing individual variables to include. When the attribute allVariablesInLogicalProduct is set to "false" use the VariableSchemeReference (which allows for exclusions) and VariableUsedReference to specify the included variables.

Properties

Table VariablesInRecordType. list of properties

Name	Datatype	Description	Cardinality
allVariablesInLogicalProduct	boolean	Set to "true" when the logical record contains all the variables identified within the logical product module.	0..1

Relationships

Table VariablesInRecordType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableSchemeReference	VariableScheme	Reference to a VariableScheme whose members are included in the logical record. Note that individual items may be excluded from the scheme if not used by the logical record.		0..n	
VariableUsedReference	VariableType	Reference to a variable to include in the logical record. This may be used to supplement the contents of an included VariableScheme or to list all the variables individually.		0..n	

VariableValueReferenceType

Definition

A reference to the variable containing the record type locator and the value being used. TypeOfObject should be set to Variable.

Relationships

Table VariableValueReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Reference to the variable containing the record type locator.		1..1	
RelatedValue	RelatedValueType	Value of variable indicating this record type, multiple entries allow for multiple valid values or ranges. Indicates if the variable should be equal to, greater than, less than, greater than or equal to, less than or equal to, or not equal to the stated value. (default value is "Equal"). Also allows the conditional value to be defined as blank (or no content).		0..n	

VersionDistinctionType

Definition

Describes the data versioning scheme(s) used by an organization. If more than one, Name should differentiate between a standard versioning structure used by the organization and special structures used by specific projects or studies. Information on what drives and major and minor change and how they are structured.

Properties

Table VersionDistinctionType. list of properties

Name	Datatype	Description	Cardinality
VersionDistinctionName	Name	A name for the Version Distinction. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the Version Distinction. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the Version Distinction. May be expressed in multiple languages and supports the use of structured content.	0..1
EffectivePeriod	DateType	Clarifies when the identification information is accurate.	0..1
regExp	xs:string	Allows the version structure to be defined by a regular expression.	0..1

VersionRationaleType

Definition

Textual description of the rationale/purpose for the version change and a coded value to provide an internal processing flag within an organization or system. Note that versioning can only take place on objects owned by the specified DDI Agency. If you are creating a local instance of an object from another agency for current or future modification use BasedOnObject. If the changes being made result in what you determine to be a new object rather than a version of a previous object, i.e. the change is too extensive to consider it a version of the existing object, create a new object and use BasedOnObject to provide a link to the object or objects that were a basis for the new object.

Properties

Table VersionRationaleType. list of properties

Name	Datatype	Description	Cardinality
RationaleDescription	InternationalStringType	Textual description of the rationale/purpose for the version change to inform users as to the extent and implication of the version change. May be expressed in multiple languages.	0..1
RationaleCode	CodeValueType	RationaleCode is primarily for internal processing flags within an organization or system. Supports the use of an external controlled vocabulary.	0..1

VocabularyType

Definition

Provides information about the vocabulary used to create a concept scheme.

Properties

Table VocabularyType. list of properties

Name	Datatype	Description	Cardinality
VocabularyTitle	InternationalStringType	Full title of vocabulary.	0..1
Abbreviation	InternationalStringType	Abbreviation of vocabulary title.	0..n
Description	StructuredStringType	A description of the content and purpose of the Vocabulary. May be expressed in multiple languages and supports the use of structured content.	0..1
URI	xs:anyURI	URI to external resource providing information about the vocabulary (general description, main web page).	0..1
XML-URI	xs:anyURI	URI to the vocabulary represented as an XML document.	0..1
Scheme	xs:string	Textual description of the XML scheme in	0..1

Name	Datatype	Description	Cardinality
		which the classification is written.	
SchemeURI	xs:anyURI	URI to the XML scheme used in the vocabulary (DTD or XML Schema for the XML document above; schemes like DDI, Claset, Neuchatel, and DocBook). Typically, this will be an XML namespace.	0..1
Comments	StructuredStringType	Information for the user regarding the reasons for use of the vocabulary and appropriate usage constraints.	0..n

Relationships

Table VocabularyType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Keyword	InternationalCodeType	Keywords that describe the vocabulary.		0..n	

ConditionalTextType

Extends

This object extends TextContent

Definition

Text which has a changeable value depending on a stated condition, response to earlier questions, or as input from a set of metrics (pre-supplied data).

Properties

Table ConditionalTextType. list of properties

Name	Datatype	Description	Cardinality
Expression	CommandCode		0..1
SourceParameterA	ParameterType		0..1
SourceParameterB	InParameter		0..1

ControlConstructReferenceType

Extends

This object extends ReferenceType

Definition

A reference to a control construct of any type with the ability to bind the InParameter or OutParameter of the ControlConstruct to external information as needed. ComputationItem, IfThenElse, Loop, QuestionConstruct, RepeatUntil, RepeatWhile, Sequence, or StatementItem

Properties

Table ControlConstructReferenceType. list of properties

Name	Datatype	Description	Cardinality
Binding	Binding	A structure used to bind the content of a parameter declared as the source to a parameter declared as the target. For example, binding the output of a question to the input of a generation instruction. Question A has an OutParameter X. Generation Instruction has an InParameter Y used in the recode instruction. Binding defines the content of InParameter Y to be whatever is provided by OutParameter X for use in the calculation of the recode.	0..n

DoubleNumberRangeValueType

Extends

This object extends xs:double

Definition

Describes a bounding value for a number range expressed as an xs:double.

Properties

Table DoubleNumberRangeValueType. list of properties

Name	Datatype	Description	Cardinality
isInclusive	xs:boolean	Indicates that the value is included in the range. Set to false if the range includes numbers up to but no including the designated value.	0..1

GeographicLocationCodeRepresentationBaseType

Extends

This object extends Representation

Definition

Allows for the use of all or part of a GeographicLocation description to be used as a response domain or value representation by a question or variable. In addition to the basic objects of a representation it describes the Geographic Location values available for use by the question or variable.

Relationships

Table GeographicLocationCodeRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IncludedGeographicLocationCodes	IncludedGeographicLocationCodes	Indicates the Geographic Location codes included by the Authorized source of the code, the geographic location being used and the locations to exclude.	CodeType	0..1	
LimitedCodeSegment	LimitedCodeSegment	When captured this code is a concatenation this structure allows you to limit the portion of the concatenated code that this object captures.	CodeType	0..1	

GeographicLocationReferenceType

Extends

This object extends ReferenceType

Definition

Reference to an existing GeographicLocation using the Reference structure plus the ability to exclude any number of contained location values as specified by reference. TypeOfObject should be set to GeographicLocation.

Relationships

Table GeographicLocationReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ExcludedLocationValueReference	LocationValueReference	Reference to a LocationValue within the referenced GeographicLocation which should be excluded. Each excluded location value should be specified by reference.		0..n	

GeographicRepresentationBaseType

Extends

This object extends Representation

Definition

Structures the representation for a geographic point to ensure collection of relevant information using a single response domain structure. The point may be associated with a polygon (such as the centroid of the polygon) or a line (end or shape points of a line). The structure provides a description of the default values for the datum type, coordinate system used, the coordinate zone, error correction method, standard offset, the geographic object being positioned, the type of address match if used, the point format, and spatial primitive type. It provides response options for the coordinate pairs being captured, and alternate values for the offset, geo-referenced object and coordinate system if a different one is used to capture a specific response.

Properties

Table GeographicRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
Datum	CodeValueType	The standard datum format used. Supports	0..1

Name	Datatype	Description	Cardinality
		the use of a controlled vocabulary.	
CoordinateSystem	CodeValueType	The standard coordinate system used. Supports the use of a controlled vocabulary.	0..1
CoordinateZone	CodeValueType	The standard coordinate zone being used. Supports the use of a controlled vocabulary.	0..1
CoordinateSource	CodeValueType	The standard coordinate source being used. Supports the use of a controlled vocabulary.	0..1
ErrorCorrection	CodeValueType	The standard method of error correction being used. Supports the use of a controlled vocabulary.	0..1
Offset	xs:string	A definition of the standard offset used when taking a coordinate reading on the geo-referenced object.	0..1
GeoreferencedObject	CodeValueType	The standard object for which the geographic coordinates are being captured. This could be a household, village centroid, etc. Supports the use of a controlled vocabulary.	0..1
AddressMatchType	CodeValueType	Use for coordinates obtained through address matching only. Identify the address matching method. Example: street segment match, ZIP code centroid, etc. Supports the use of a controlled vocabulary.	0..1

Relationships

Table GeographicRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CoordinatePairs	CoordinatePairs	Field to capture coordinate pairs as		1..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		individual pairs or as an array of pairs.			
AlternateOffset	TextDomainType	If unable to use the standard offset, allows entry of a non-standard offset figure.		0..1	
AlternateObject	TextDomainType	If the default geo-referenced object is unavailable or cannot be measured, allows identification of an alternate object.		0..1	
AlternateCoordinateSystem	TextDomainType	Specifies the coordinate system used for a response if different from that stated in the response structure.		0..1	
pointFormat	NOT DEFINED	The type attribute is used by the documenter to describe the numeric response domain.		1..1	
spatialPrimitive	GeographicDescriptionCodeType	Indicates a spatial primitive object which the point references.		1..1	

GeographicStructureReferenceType

Extends

This object extends ReferenceType

Definition

Reference to an existing GeographicStructure using the Reference structure plus the ability to exclude any number of contained GeographicLevels as specified by reference. TypeOfObject should be set to GeographicStructure.

Relationships

Table GeographicStructureReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ExcludedGeographicLevelReferenceType	GeographicLevel	Reference to a GeographicLevel within the referenced GeographicStructure which should be excluded. Each excluded GeographicLevel should be specified by reference.		0..n	

IDType

Extends

This object extends BaseIDType

Definition

ID type. A fixed attribute is added to the string to ensure that only one ID can be provided.

Properties

Table IDType. list of properties

Name	Datatype	Description	Cardinality
type	xs:string	This is a fixed value attribute declaring that the element is Identifiable and follows the rules of an identifiable object within DDI.	0..1

InterviewerInstructionReferenceType

Extends

This object extends ReferenceType

Definition

Reference to an interviewer instruction expressed as DDI XML plus a flag to designate whether the instruction should always be displayed. TypeOfObject should be set to InterviewerInstruction.

Properties

Table InterviewerInstructionReferenceType. list of properties

Name	Datatype	Description	Cardinality
isDisplayed	xs:boolean	If set to "true" the content of the instruction is intended to be displayed. If set to "false" the preference is for the instruction to be displayed upon request if this is supported by the mode of presentation.	0..1

Relationships

Table InterviewerInstructionReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
InstructionAttachment	ItemReference	AssociationType attachment of an instruction to a specific item in a question structure. For example, to a Label, QuestionText, ResponseDomain, Response domain value, or grid cell.	ItemReferenceType	0..n	

ItemMapType

Extends

This object extends IdentifiableType

Definition

Maps two items of the same type within the Source and Target Schemes identified.

Properties

Table ItemMapType. list of properties

Name	Datatype	Description	Cardinality
alias	xs:NMTOKEN	Allows for an alias to be assigned to the correspondence between two items, so that it can be referred to with a single name, that would include both related items.	0..1

Relationships

Table ItemMapType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SourceItem	IDType	The ID of the source object in the source scheme already identified. Note that the version of the object is whichever version of it that exists in the version of the parent scheme as identified.		1..1	
TargetItem	IDType	The ID of the target object in the target scheme already identified. Note that the version of the object is whichever version of it that exists in the version of the parent scheme as identified.		1..1	
Correspondence	Correspondence	Describe the level of similarity and difference between the Source and the Target objects.		0..1	

KeyVariableReferenceType

Extends

This object extends ReferenceType

Definition

Reference to the Unique key variable for segment identification and the value it contains for the specific segment. TypeOfObject should be set to Variable.

Properties

Table KeyVariableReferenceType. list of properties

Name	Datatype	Description	Cardinality
Value	Value	Value of the variable for this segment.	0..1

KindOfDataType

Extends

This object extends CodeValueType

Definition

Describes, with a string or a term from a controlled vocabulary, the kind of data documented in the logical product(s) of a study unit. Examples include survey data, census/enumeration data, administrative data, measurement data, assessment data, demographic data, voting data, etc.

Relationships

Table KindOfDataType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
type	KindOfDataType	Provides a description of the types of data described by the KindOfData element.		0..1	

LocationValueType

Extends

This object extends IdentifiableType

Definition

A location of the specified geographic level providing information on its name, identification codes, temporal and spatial coverage as expressed by bounding and excluding polygon descriptions or references.

Properties

Table LocationValueType. list of properties

Name	Datatype	Description	Cardinality
LocationValueName	Name	A name for the Location. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
GeographicTime	DateType	The time period for which the description (names and codes) are valid. Use a date range when start and end periods are known (or the location description is still valid). If the range is unknown indicate a single date for which you know the description is valid. This will allow others to relate it to a fuller date range if external information become available.	0..1

Relationships

Table LocationValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLocation	GeographicLocation	Non-Identifying identifier for the geographic location. Repeat for multiple identifiers from other authorized sources.	Identifying	0..n	
DefiningCharacteristics	DefiningCharacteristics	Identifying one or more	Identifying	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		characteristics which define the area. These are often useful in terms of selection. For example a U.S. Block may be classified as Urban, Rural, or Mixed. The defining characteristic supports the use of a controlled vocabulary and may provide a time period for which the characteristic is valid.			
GeographicBoundary	GeographicBoundary	AryType of a BoundingBox and/or a set of BoundingPolygons and ExcludingPolygons that describe an area for a specific time period. Repeat the GeographicBoundary for changes in the geographic footprint of the LocationValue or when providing references to BoundingPolygons from different sources.		0..n	
SupersedesLocation	Relocation	Provides reference to the LocationValue or Values that the current LocationValue supersedes partially or fully. For example, if the LocationValue	Type	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		was the State of North Dakota as defined in 1890 it would supersede the LocationValue for Dakota Territory (1861-1889) as a description of "part" of that Territory.			
PrecedesLocationValue	RelativeLocationValue	Provides reference to the LocationValue or Values that the current LocationValue immediately precedes partially or fully. For example, if the LocationValue was the Dakota Territory (1861-1889) preceded the State of North Dakota and the State of South Dakota as defined in 1890. The Dakota Territory provided "part" of its area in the creation of each new LocationValue.	PrecedenceType	0..n	

LogicalRecordType

Extends

This object extends IdentifiableType

Definition

A logical record is a description of all of the elements (variables or NCubes) related to a single case or analysis unit. Required to link a description of a physical record structure to its logical record. In addition to the standard name, label, and description, the structure identifies the variable designating its record type, describes case identification within the record type, indicates support for multiple storage

segments, and defines a default set of missing values used by the record. In a data set with multiple records repeat to describe each logical record, such as a household, family, person, or event, record. A LogicalRecord is required to link a description of a physical record structure to its logical record.

Properties

Table LogicalRecordType. list of properties

Name	Datatype	Description	Cardinality
LogicalRecordName	Name	A name for the LogicalRecord. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the LogicalRecord. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the LogicalRecord. May be expressed in multiple languages and supports the use of structured content.	0..1
hasLocator	xs:boolean	If "true" indicates that the record type has a field which identifies its record type. In logical structures with a single record type there is generally no identifier. Most multi-record files will have a variable that identifies the record type.	0..1
variableQuantity	xs:integer	Number of variables in the logical record. Caution in using optional checksums is recommended. Conflict between checksums and the items being counted can cause problems with warning flags during processing. If using checksum to capture information for internal	0..1

Name	Datatype	Description	Cardinality
		processing purposes, the use of automatically generated check sums is strongly urged.	

Relationships

Table LogicalRecordType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableValueReference	VariableValueReference	Reference to the variable containing the record type locator and the value being used. Files with single record types or which store records in different files may not have a record type locator. If this element is used set the attribute hasLocator to "true".		0..1	
SupportForMultipleSegments	SingleValueReference	Information concerning support for breaking the logical record into segments for storage purposes. Some files may be broken into record segments for storage but lack variables to support identification of specific segments. In this case segments are identified by their physical order within the storage file.		0..1	
CaseIdentificationType	CaseIdentificationType	Provides the information		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>needed to identify an individual case within a record type. This may be the variable or concatenated variable used to identify a unique case of a particular record type. Often referred to as a unique key. There may be more than one means of identifying a record. For example a US Census Summary File has a LogicalRecordIdentifier that is unique to the original file within which it was published. A specific geography has a set of fields that uniquely identify it.</p>	LogicalRecordIdentifier		
VariablesInRecord	VariablesInRecord	<p>Type of all variables used in the record, either directly or as found in a defined VariableGroup; note that a variable can be used in multiple records. The variables in the logical record can be noted by inclusion or exclusion to facilitate listing. The attribute allVariablesInLogicalProduct, when set to</p>		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>'true', includes all variables in the LogicalProduct. VariableSchemeReference can then be used to exclude individual Variables schemes or include schemes from other logical products. In the same way VariableReference can be used to exclude specific variables from the previously defined variable set or include variables not already included. The simplest LogicalProduct descriptions with a single LogicalRecord can be described using only the attribute allVariablesInLogicalProduct with a value of true.</p>	Reference		
NCubesInRecord	NCubesInRecord	<p>Type of all NCubes used in the record, either directly or as found in a defined NCubeGroup; note that an NCube can be used in multiple records. The NCubes in the logical record can be noted by inclusion</p>		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>or exclusion to facilitate listing. The attribute allNCubesInLogicalProduct, when set to 'true', includes all NCubes in the LogicalProduct. NCubeSchemeReference can then be used to exclude individual NCubes schemes or include schemes from other logical products. In the same way NCubeReference can be used to exclude specific variables from the previously defined variable set or include variables not already included. The simplest LogicalProduct descriptions with a single LogicalRecord can be described using only the attribute allNCubesInLogicalProduct with a value of true.</p>	LogicalProduct, NCubeSchemeReference		
DefaultMissingValues	DefaultMissingValues	<p>The default missing value parameter for the this logical record by referencing a ManagedMissingValuesRepresentation or by stating that there is a</p>	ManagedMissingValuesRepresentation	0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		default missing values parameter used but it is undocumented. Note that a conflicting DefaultMissingValues definition in a PhysicalInstance will override that found in the LogicalRecord.			

MeasureDefinitionType

Extends

This object extends IdentifiableType

Definition

Defines the structure and type of measure captured within the cells. This may be repeated to describe multiple measure for the cells (i.e., count, percent of universe, dimensional percent, index, text, suppression flag, etc.). Includes a reference to the defining variable and an optional aggregation definition for use in defining content relying on the use of independent and dependent variables (such as the percentage of a specific dimension (like a row or column percent on a table).

Relationships

Table MeasureDefinitionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	A reference to the variable that defines the measure of the NCube.		1..1	
AggregationDefinition	AggregationDefinitionType	Identifies the independent (denominator) and dependent (numerator) dimensions for calculating aggregate measures such as percent. When two or more		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		independent or dependent dimensions are listed here, the value is defined as the intersection of the listed dimensions.			

NCubeMeasureDefinitionReferenceType

Extends

This object extends ReferenceType

Definition

This is a reference to a MeasureDefinition as described in the parent NCube logical structure. The reference has an additional attribute orderValue which defines the position of the referenced MeasureDefinition along the MeasureDimension so that it can be used as part of the cell address. The default value is "1". Additional MeasureDefinitions should have incremental values (2,3,4,...). TypeOfObject should be set to MeasureDefinition.

Properties

Table NCubeMeasureDefinitionReferenceType. list of properties

Name	Datatype	Description	Cardinality
orderValue	xs:integer	The reference has an additional attribute orderValue which defines the position of the referenced MeasureDefinition along the MeasureDimension so that it can be used as part of the cell address. The default value is "1". Additional MeasureDefinitions should have incremental values (2,3,4,...)	0..1

NotUsedType

Extends

This object extends xs:string

Definition

Identifies DDI objects expressed as an XPath that are not supported by the system or agency using this profile.

Properties

Table NotUsedType. list of properties

Name	Datatype	Description	Cardinality
xpath	xs:string	Contains an XPath which points to an element or attribute in DDI instances which is not used by the profile. All subelements of an unused element are assumed to be included unless explicitly addressed by the profile. The number of supported repetitions may be included in the XPath expression.	0..1

NumberRangeValueType

Extends

This object extends xs:decimal

Definition

Describes a bounding value for a number range expressed as an xs:demical.

Properties

Table NumberRangeValueType. list of properties

Name	Datatype	Description	Cardinality
isInclusive	xs:boolean	Indicates that the value is included in the range. Set to false if the range includes numbers up to but no including the designated value.	0..1

OtherMaterialType

Extends

This object extends IdentifiableType

Definition

OtherMaterialType describes the structure of the OtherMaterial element, used to reference external resources. It includes citations to materials related to the content of the DDI Instance. This includes citations to such material, an external reference to a URL (or other URI), and a statement about the relationship between the cited OtherMaterial the contents of the DDI instance.

Properties

Table OtherMaterialType. list of properties

Name	Datatype	Description	Cardinality
TypeOfMaterial	CodeValueType	Designation of the type of material being described. Supports the use of a controlled vocabulary.	0..1
Description	StructuredStringType	A description of the referenced material. This field can map to a Dublin Core abstract. Note that Dublin Core does not support structure within the abstract element. Supports multiple languages and optional structured content.	0..1
Citation	CitationType	Bibliographic citation for the external resource.	0..1
ExternalURLReference	xs:anyURI	Contains a URL which indicates the location of the cited external resource.	0..n
ExternalURNReference	xs:anyURI	Contains a URN which identifies the cited external resource.	0..1
Relationship	Relationship	Reference to the item within the DDI Instance to which the external resource is related.	0..n
MIMETYPE	CodeValueType	Provides a standard Internet MIME type for use by processing applications.	0..1
Segment	SegmentType	Can describe a segment within a larger object such as a text or video segment.	0..n
xml:lang	xml:lang	Language of the metadata describing the other material.	0..1

ParentGeographicLevelReferenceType

Extends

This object extends ReferenceType

Definition

References a parent geography and describes whether the geographic level completely fills its parent level. TypeOfObject should be set to GeographicLevel.

Properties

Table ParentGeographicLevelReferenceType. list of properties

Name	Datatype	Description	Cardinality
isExhaustiveCoverage	xs:boolean	Indicates whether the geographic level completely fills its parent level. Counties are exhaustive within States. Places are NOT exhaustive within States.	0..1

ProcessingInstructionReferenceType

Extends

This object extends ReferenceType

Definition

A reference to a General or Generation Instruction that was used by the parent object, e.g. an instruction used to derive a Variable or used by a ProcessingEvent. The basic Reference structure is extended to allow for the use of Binding to link specific source parameters to the InParameter of the instruction at the point of use. If there is a conflict between a Binding in the iinstruction of a specific source to an InParameter and the Binding information provided in the ProcessingInstructionReference, the Binding information in the reference overrides that found in the instruction. TypeOfObject should be set to ProcessingInstruction.

Properties

Table ProcessingInstructionReferenceType. list of properties

Name	Datatype	Description	Cardinality
Binding	Binding	A structure used to link the content of a parameter declared as the source to a parameter declared as the target. For example, linking the output of a question to the input of a generation	0..n

Name	Datatype	Description	Cardinality
		instruction. Question A has an OutParameter X. Generation Instruction has an InParameter Y used in the recode instruction. Binding defines the content of InParameter Y to be whatever is provided by OutParameter X for use in the calculation of the recode.	

QuestionSequenceType

Definition

Describes the ordering of questions when not otherwise indicated. Extends the standard sequencing information to indicate how and if StimulusMaterial should be treated in the resequencing.

Relationships

Table QuestionSequenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
handlingOfStimulusMaterialType	StimulusMaterialType	Clarifies how stimulus material is to be handled within the resequencing using a controlled vocabulary. Option "include"=Include StimulusMaterial in resequencing without restriction; "preceding"=Attach each StimulusMaterial to the preceding question; "following"=Attach each StimulusMaterial to the question following it; and the default value of "within"=Resequencing		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		occurs within each set of questions as delimited by StimulusMaterial			

RecordRelationshipType

Extends

This object extends IdentifiableType

Definition

Describes the relationship between records of different types or of the same type within a longitudinal study. Identifies the key and linking value relationships. All relationships are pairwise. Multiple pairwise relationships maybe needed to clarify all record relationships within a logical product or data set. In addition to the standard name, label, and description, the structure identifies the pair of logical records for which the relationship is defined as SourceLogicalRecord and TargetLogicalRecord, describes the link between these two records and indicates the relationship of the of the source record to the target record.

Properties

Table RecordRelationshipType. list of properties

Name	Datatype	Description	Cardinality
RecordRelationshipName	Name	A name for the RecordRelationship. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the RecordRelationship. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the RecordRelationship. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table RecordRelationshipType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SourceLogicalRecordReference	LogicalRecord	A reference to the Logical Record acting as the Source Record. All relationship information is from the source to the target. If the relationship is not unidirectional (i.e., sibling) simply assign one record as the source and the other as the target.		1..1	
TargetLogicalRecordReference	LogicalRecord	A reference to the Logical Record acting as the Target Record.		1..1	
SourceTargetLink	SourceTargetLink	SourceTargetLink provides a pair of variables which act as all or part of a link between the source and the target records. Repeat if more than one set of variables is required to make the link.		0..n	
relationToTarget	RelationCodeType	Indicates the relationship of the source to the target. The value describes the role of the source in the relationship. This is a restricted list of Parent, Child, Sibling, Unknown.		0..1	

ReferenceDateType

Extends

This object extends DateType

Definition

The date that the data reference such as at the point of collection, a previous year or date, etc. This is expressed as a date (singular or range) and may have specific subjects associated with it. For example if only income and labor force status relate to the previous year and all other data related to the point of collection.

Relationships

Table ReferenceDateType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Subject	InternationalCodeValueTypes	ValueTypes for a subset of data only such as a referent date for residence 5 years ago, use Subject to specify the coverage of the data this date applies to. May be repeated to reflect multiple subjects.		0..n	

RelatedLocationValueReferenceType

Extends

This object extends ReferenceType

Definition

Provides a reference to the LocationValue or Values that is related to the current LocationValue partially or fully. TypeOfObject should be set to LocationValue.

Properties

Table RelatedLocationValueReferenceType. list of properties

Name	Datatype	Description	Cardinality
isFull	xs:boolean	The attribute indicates whether or not the full area of the LocationValue within	0..1

Name	Datatype	Description	Cardinality
		which the element is used maps to the referenced area. The default value is false, i.e. only part of the current LocationValue maps to the referenced LocationValue. Change to "true" if the full area of the current LocationValue maps to the referenced LocationValue.	

ScaleRepresentationBaseType

Extends

This object extends Representation

Definition

A means of capturing the structure of Scale for use as a question response domain or variable value representation. In addition to the basic objects of the representation, the structure defines the dimensions of the scale, an intersect for a multi-dimensional scale, and display layout.

Properties

Table ScaleRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
DisplayLayout	CodeValueType	Defines the layout such as containing a drawn scale line, a list of values only, an outline (the boundaries of the area defined by 2 or more intersecting scales such as a diamond of opposites), or some other layout design. Allows for the use of a controlled vocabulary.	0..1

Relationships

Table ScaleRepresentationBaseType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ScaleDimension	ScaleDimension	Type description of a dimension of the scale.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Note that most scales will have only one dimension.			
DimensionIntersect	DimensionIntersect	Identifies the point at which the scales of a multidimensional scale intersect.		0..n	

SchemeReferenceType

Extends

This object extends ReferenceType

Definition

Used for referencing an scheme expressed in DDI XML using the standard reference structure plus the ability to exclude the inclusion of any specified items belonging to the scheme. TypeOfObject should be set to CategoryScheme, CodeListScheme, ConceptScheme, ConceptualVariableScheme, ControlConstructScheme, GeographicLocationScheme, GeographicStructureScheme, InstrumentScheme, InterviewerInstructionScheme, ManagedRepresentationScheme, NCubeScheme, OrganizationScheme, PhysicalStructureScheme, ProcessingEventScheme, ProcessingInstructionScheme, QualityStatementScheme, QuestionScheme, RecordLayoutScheme, RepresentedVariableScheme, UniverseScheme, or VariableScheme.

SourceReferenceType

Extends

This object extends ReferenceType

Definition

Reference to a variable or question used in the derivation or coding instruction. TypeOfObject should be set to Variable, QuestionItem, or QuestionGrid.

Properties

Table SourceReferenceType. list of properties

Name	Datatype	Description	Cardinality
Alias	xs:NMTOKEN	Allows for assigning an alias used to reference this item in a command. For example if the SourceReference was a question capturing a persons age the command might read "If	0..1

Name	Datatype	Description	Cardinality
		AGE LT 5...". AGE would be the alias.	

StandardWeightType

Extends

This object extends IdentifiableType

Definition

Provides an identified value for a standard weight expressed as an xs:float. This object may be referenced by a variable or statistic and used as a weight for analysis.

Properties

Table StandardWeightType. list of properties

Name	Datatype	Description	Cardinality
StandardWeightValue	xs:float	Provides the standard weight used for weighted analysis of data expressed as an xs:float. This element is referenced by the variable and/or statistics calculated using the standard weight.	0..1

SubCategoryReferenceType

Extends

This object extends ReferenceType

Definition

Reference to one or more categories for which the current category is a broader definition. Allows for a reference to the narrower category and the ability to define the relationship as a specialization or part. TypeOfObject should be set to Category.

Relationships

Table SubCategoryReferenceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
typeOfSubCategory	SubCategoryType	Defines the sub-category in terms being generic or partitive in nature. For		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		example, a radial tire is a type of tire (generic) while a tire is a part of a car (partitive). The value refers to the role of the SubCategory within the broader category .			

TemporalCoverageType

Extends

This object extends IdentifiableType

Definition

Describes the temporal coverage of the data described in a particular DDI module. A date may have a subject attached to it if the referent date has limited application.

TopicalCoverageType

Extends

This object extends IdentifiableType

Definition

Describes the topical coverage of the module using Subject and Keyword. Note that upper level modules should include all the members of lower level modules. Subjects are members of structured classification systems such as formal subject headings in libraries or topical thesauri. Keywords are generally unstructured and reflect the terminology found in the document and other related (broader or similar) terms.

Relationships

Table TopicalCoverageType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Subject	InternationalCodeValue	A subject or list of subjects that indicate the topical coverage of the data described in a particular		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		module/section. Uses and InternationalCodeValue and may indicate the language of the code used.			
Keyword	InternationalCodeValue	Keyword that indicates the topical coverage of the data described in a particular module/section. Uses and InternationalCodeValue and may indicate the language of the code used.		0..n	

ActionToMinimizeLossesType

Extends

This object extends IdentifiableType

Definition

Describes action taken to minimize loss of data from the collection event. This may include a brief term, such as from a controlled vocabulary, and a full description of the actions taken. If multiple actions were taken repeat this element.

Properties

Table ActionToMinimizeLossesType. list of properties

Name	Datatype	Description	Cardinality
TypeOfActionToMinimizeLosses	CodeValue	A brief textual description of the action taken to minimize loss of data. Supports the use of an external controlled vocabulary	0..1
Description	StructuredStringType	Full description of the action taken to minimize loss of data. Supports structured content and multiple language content.	0..1

AttributeType

Extends

This object extends IdentifiableType

Definition

An attribute may be any object which should be attached to all or part of the NCube. It may be defined as a Variable or contain textual content (such as a footnote).

Properties

Table AttributeType. list of properties

Name	Datatype	Description	Cardinality
AttachmentValue	xs:string	The value of the attachment expressed as a string, if not a variable.	0..1
Value	Value	Reference to the specified Value of the MeasureDefinition that the attribute is attached to.	0..n

Relationships

Table AttributeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	A reference to a variable that describes the attribute.		0..	
AttachmentRegion	CoordinateRegion	Reference to the CoordinateRegion that defines the attachment point for the attribute.		0..1	
MeasureDefinition	MeasureDefinition	Reference to the MeasureDefinition that the attribute is attached to.		0..n	
attachmentLevel	AttachmentLevel	Indicates the attachment level of the attribute as Cube, CoordinateRegion,		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Dimension, Measurement, or MeasurementValue.			

AuthorizedSourceType

Extends

This object extends OtherMaterialType

Definition

A stack of LocationValueReferences to each of the locations of the specified PrimaryComponentLevel type that make up the Component Area. Includes a GeographicTime to allow for repetition for change over time.

Relationships

Table AuthorizedSourceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IdentifierParsing	IdentifierParsing	Provides structural information for parsing the identification code structure of the Authorized Source into its separate parts.		0..1	

CellLabelType

Extends

This object extends Label

Definition

Provide a label to be included inside of a grid cell and defines the cell or cells that contain it.

Relationships

Table CellLabelType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GridAttachment	GridAttachment	Identifies the cell or cells		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		in a grid to which the label is attached by a reference to a specific cell coordinate in a grid or by identifying a range of values along a dimension.			

CoordinateRegionType

Extends

This object extends IdentifiableType

Definition

Defines the area of attachment for an NCube attribute. It may be defined as the NCube as a whole or as certain dimensions or values of dimensions.

Properties

Table CoordinateRegionType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the CoordinateRegion. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content of the CoordinateRegion. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table CoordinateRegionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		statement containing a description of the persons or other elements that this CoordinateRegion refers to, and to which any analytic results refer. If more than one universe is referenced the universe of the CoordinateRegion is the intersect of the referenced universes. Use when the CoordinateRegion describes a subset of the NCube universe.			
DimensionValue	CohortType	Defines the included set of values needed to describe the coordinate region of the NCube on a Dimension by Dimension basis.		0..n	

DataRelationshipType

Extends

This object extends VersionableType

Definition

Describes the relationships among logical records in the dataset. Date Relationship is needed to create the appropriate link between the logical record and the physical storage description. Data Relationship is optional because a logical product can contain only a category scheme and/or code scheme. In addition to the standard name, label, and description, it contains structures to describe the LogicalRecord and RecordRelationship.

Properties

Table DataRelationshipType. list of properties

Name	Datatype	Description	Cardinality
DataRelationshipName	Name	A name for the DataRelationship. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the DataRelationship. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the DataRelationship. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table DataRelationshipType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
LogicalRecord	LogicalRecordType	A logical record is a description of all of the elements (variables or NCubes) related to a single case or analysis unit. Required to link a description of a physical record structure to its logical record.		0..n	
RecordRelationship	RecordRelationshipType	Describes the relationship		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		between records of different types or of the same type within a longitudinal study. Identifies the key and linking value relationships. All relationships are pairwise. Multiple pairwise relationships maybe needed to clarify all record relationships within a logical product or data set.			

ExternalInterviewerInstructionType

Extends

This object extends OtherMaterialType

Definition

Specification of an external interviewer instruction not structured in DDI. Uses the structure of OtherMaterial to provide a citation, description, and locator for the object.

Properties

Table ExternalInterviewerInstructionType. list of properties

Name	Datatype	Description	Cardinality
isDisplayed	xs:boolean	If set to "true" indicates that the instruction should always be displayed, not just upon need.	0..1

Relationships

Table ExternalInterviewerInstructionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
InstructionAttachment	InstructionAttachment	AssociationType attachment of an instruction to a specific item in a question structure. For example, to a Label, QuestionText, ResponseDomain, Response domain value, or grid cell.		0..n	

GenericMapType

Extends

This object extends VersionableType

Definition

Maps the content of two different schemes of objects of the same type providing detail for the comparable items within those two schemes. Note that comparisons can be made between multiple items in the same scheme or two versions of the same scheme. In addition to the standard name, label, and description of the map, identifies the source scheme and target scheme containing those objects, describes the correspondence between the source and target schemes, and provides detailed comparison of the items within those two schemes.

Properties

Table GenericMapType. list of properties

Name	Datatype	Description	Cardinality
MapName	Name	A name for the Map. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the Map. May be expressed in multiple	0..n

Name	Datatype	Description	Cardinality
		languages. Repeat for labels with different content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the Map. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table GenericMapType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Correspondence	CorrespondenceType	Describe the level of similarity and difference between the Source and the Target schemes.		0..1	
ItemMap	ItemMapType	Contains the mappings for individual items within the Source and Target schemes.		0..n	

GeographicCoverageType

Extends

This object extends IdentifiableType

Definition

Describes the geographic coverage of the data documented in a particular DDI module. If subordinate to another module, this description should be a sub-set of the parent module's geographic coverage. Contains a definition for a Bounding Box used for coordinate searches, a definition of the geographic coverage, a reference to a variable that describes the geographic structure, definition of the spatial object of the data, a reference to a GeographicStructure and GeographicLocation providing further details of the coverage, and specification of the geographic summary levels for which data are provided, the top and lowest levels of geographic identification provided.

Properties

Table GeographicCoverageType. list of properties

Name	Datatype	Description	Cardinality
BoundingBox	BoundingBox	The Bounding Box is a 'rectangle, oriented to the x and y axes, which bounds a geographic feature or a geographic dataset. It is specified by two coordinate xmin, ymin and xmax, ymax.' [FGDC]. In the DDI, it describes the full extent of the geographic coverage, and is designed to be used by systems that search for geography by coordinates. It is compatible with the description and structure found in FGDC and other geographic metadata structures.	0..1
Description	StructuredStringType	A summary description of the geographic (spatial) coverage of the module. It may include information on all levels of spatial coverage, in addition to the overall coverage. This field can map to Dublin Core Coverage, which does not support structured strings. Therefore, if there is intent to map to Dublin Core, the text should not be marked up with XHTML. May be expressed in multiple languages and supports the use of structured content.	0..1
CountryCode	CountryCodeType	Serves as head of a substitution group for specifying ISO 3166 Country Codes or use of unspecified text. Use of ISO 3166 Country codes strongly recommended. Repeat for each country. If	0..n

Relationships

Table GeographicCoverageType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographyStructureVariableReference	VariableTypeReference	References a variable describing the geographic levels available in the data such as the variable "Summary Level" in U.S. Census data. This reference is needed for assistance in programming.		0..1	
SpatialObject	GeographicDescriptionCodeType	Information on the most discrete type of spatial representation to which data described by this module can be attached (point, line, polygon, linear ring). For example, a raw data file with an address attached to each case is 'point'. When the microdata file is anonymized and the geographic information is for a state or other defined area, it is 'polygon'. Some data, such as traffic or criminal incidence data may have a street range identification or 'line', and		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		some such as communications data have a point with a radius or 'linear ring'.			
GeographicStructureReference	GeographicStructure	Reference to the detailed information found in a GeographicStructure. Allows for the exclusion of specified LevelValues.	Type	0..n	
GeographicLevelReference	GeographicLevel	Reference to specific LevelValue found in a GeographicStructure. Use when only a limited number of GeographicLevel are used from a GeographicStructure.	Type	0..n	
GeographicLocationReference	GeographicLocation	Reference to detailed listing of named locations within the data described by a	Type	0..n	
LocationValueReference	LocationValue	Reference to specific LocationValue found in a GeographicLocation. Use when only a limited number of LocationValue are used from a GeographicStructure.	Type	0..n	
SummaryDataReference	GeographicLevel	Type be repeated to reference each geography (geographic level) for which there is summary data. For example, person records	Type	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		may contain summary data on the State, County, or City in which they reside. In data collections where the individual case is a geographic location such as a County, data may be provided that summarizes State or National data. This is often true where data suppression at lower geographies makes it impossible to roll-up or aggregate the data to obtain values for the higher levels.			
TopLevelReference	GeographicLevel	Reference to the top or highest GeographicLevel.		0..1	
LowestLevelReference	GeographicLevel	Reference to the bottom or lowest GeographicLevel.		0..1	

GeographicLevelType

Extends

This object extends IdentifiableType

Definition

Describes a level within the GeographicStructure. In addition to a name and description, provides one or more GeographicLevelCodes by which it is identified with specified system, any coverage limitations, and parent position within a single hierarchy or if it is the result of layering multiple hierarchies, the lowest component level for each of the layering hierarchies. Allows for an indicator declaring that coverage of the parent level is or is not exhaustive.

Properties

Table GeographicLevelType. list of properties

Name	Datatype	Description	Cardinality
GeographicLevelName	Name	A name for the GeographicLevel. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Description	StructuredStringType	A description of the GeographicLevel. May be expressed in multiple languages and supports the use of structured content.	0..1
GeographicLevelCode	CodeValueType	A code and its authorization source for identifying the level within a specific system.	0..n
CoverageLimitation	InternationalStringType	Describes a limitation of the coverage such as all objects of a specific type that meet population size requirements (i.e., All Places with a population of 10,000 or more).	0..1

Relationships

Table GeographicLevelType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
PrimaryComponent	PrimaryComponent	Provides references to the base level elements that are used as building blocks for composed geographies. For example, Metropolitan areas that are composed of counties except in the New England States		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>where they are composed of county subdivisions, or School Attendance Boundaries (SABINS) built from Census Blocks. This structure allows for specifying the basic building block for composed areas and any restrictions (coverage limitations). The field may be repeated to provide alternate information on the basic building blocks for areas outside of the coverage limitations described.</p>			
ParentGeography	ParentGeography	Reference to a single containing (parent) geography.	Reference Type	0..	
GeographicLayer	BaseReference	<p>Type for geographic polygons that are the result of layering two or more geographic hierarchies where the polygon being described is the intersect of the layers. For example: State - County - County Subdivision - Place/</p>		2..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>Remainder - Tract [The portion of a tract that is within a single place (or non-place area) and a single county subdivision]</p> <p>This polygon is made by overlaying the following three geographic hierarchie 1) State - Place, 2) State - County - Tract, and 3) State - County - Subdivision. The three GeographicLayerBase elements would point to Tract, Place, and County Subdivision.</p>			

GeographicLocationType

Extends

This object extends VersionableType

Definition

Describes specific instances of GeographicLocations associated with a specified GeographicLevel in a GeographicStructure. In addition to the standard name, level, and description, specifies the Geographic Level either by reference to an existing description in a GeographicStructure or by a textual description, identifies the authorization source for naming and coding identification a set of individual LocationValues.

Properties

Table GeographicLocationType. list of properties

Name	Datatype	Description	Cardinality
GeographicLocationName	Name	A name for the GeographicLocation. May be expressed in multiple languages. Repeat the element	0..n

Name	Datatype	Description	Cardinality
		to express names with different content, for example different names for different systems.	
Label	Label	A display label for the GeographicLocation. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the GeographicLocation. May be expressed in multiple languages and supports the use of structured content.	0..1
GeographicLevelDescription	StructuredStringType	A description of the GeographicLevel. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table GeographicLocationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLevel	GeographicLevel	Reference to an existing GeographicLevel describing structural level to which these locations belong.		0..	
AuthorizedSource	AuthorizedSource	Identifiable authorization source repeated for each identifying code type. This allows the codes to be used as representations for response domains and value		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		representations by designating a specific set of locations and the code of an authorization source. An authorization source should differentiate between codes derived for different purposes within the same agency.			
LocationValue	LocationValue	The location of the specified geographic level providing information on its name, identification codes, temporal and spatial coverage.		0..n	

GeographicStructureType

Extends

This object extends VersionableType

Definition

Contains information on the hierarchy of the geographic structure. In addition to the standard name, label, and description identifies one or more AuthorizedSources for the level codes/descriptions provided and a set of GeographicLevels in-line or by reference.

Properties

Table GeographicStructureType. list of properties

Name	Datatype	Description	Cardinality
GeographicStructureName	Name	A name for the GeographicStructure. May be expressed in multiple languages. Repeat the element to express names with different content, for example different	0..n

Name	Datatype	Description	Cardinality
		names for different systems.	
Label	Label	A display label for the GeographicStructure. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the GeographicStructure. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table GeographicStructureType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizedSource	AuthorizedSource	A type identifiable authorization source repeated for each identifying code type. This allows the codes to be used as representations for response domains and value representations by designating a specific set of locations and the code of an authorization source. An authorization source should differentiate between codes derived for different purposes within the same agency.		0..n	
GeographicLevel	GeographicLevel	Used to describe any		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		level of geography, including overall coverage and each of the lower levels.			

IndividualType

Extends

This object extends VersionableType

Definition

Details of an individual including name, contact information, a definition, keywords to support searching, their regional affiliation, language ability and any additional information. The individual and specific pieces of information regarding the individual may be tagged for information privacy.

Properties

Table IndividualType. list of properties

Name	Datatype	Description	Cardinality
Description	StructuredStringType	A description of the individual. Supports multiple languages and optional structured content.	0..1
RegionalCoverage	CodeValueType	The regional coverage of the individual. The geographic regions within which the individual is active.	0..n
ContactInformation	ContactInformation	Contact information for the individual including location specification, address, URL, phone numbers, and other means of communication access. Address, location, telephone, and other means of communication can be repeated to express multiple means of a single type or change over time. Each major piece of contact information	0..n

Name	Datatype	Description	Cardinality
		(with exception of URL contains the element EffectiveDates in order to date stamp the period for which the information is valid.	
PRIVACY	PrivacyCodeType	Specify the level of privacy for the all information on the individual as public, restricted, or private.	0..1

Relationships

Table IndividualType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
IndividualIdentification	NOT DEFINED	Identifying information about the individual.		0..1	
Keyword	InternationalCodeType	Used to classify an individual or their activities. May be used to support searching.		0..n	
AdditionalInformation	AdditionalInformationType	Additional information you wish to note about the individual. Supports multiple languages and optional structured content. A privacy tag may be used.		0..n	
LanguageAbility	IndividualLanguageType	Specify the languages known by the individual in terms of their ability to speak, read, and write the language. May be repeated to cover multiple languages.		0..n	

InstructionType

Extends

This object extends VersionableType

Definition

Provides the content and description of a single instruction. In addition to the standard name, label, and description, an InParameter can be designated to specify information needed to process the dynamic content of the instruction, an image can be associated with the instruction, and the instruction text provided using DynamicText. Note that when using Dynamic Text, the full InstructionText must be repeated for multi-language versions of the content. Different languages may handle the dynamic portions in different locations and/or with different content. Therefore languages cannot be mixed within a dynamic text except when the full text itself has multiple language sections, for example, a foreign language term in a text. The InstructionText may also be repeated to provide a dynamic and plain text version of the instruction. This allows for accurate rendering of the instruction in a non-dynamic environment like print.

Properties

Table InstructionType. list of properties

Name	Datatype	Description	Cardinality
InstructionName	Name	A name for the Instruction. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the Instruction. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the Instruction. May be expressed in multiple languages and supports the use of structured content.	0..1
InParameter	InParameter	A parameter that may accept content from outside the Instruction. In addition to standard parameter content may provide the instructions for limiting	0..n

Name	Datatype	Description	Cardinality
		the allowable array index.	
AssociatedImage	ImageType	An image associated with the Instruction, located at the provided URN or URL.	0..n
InstructionText	DynamicTextType	The content of the Instruction text provided using DynamicText. Note that when using Dynamic Text, the full InstructionText must be repeated for multi-language versions of the content. The InstructionText may also be repeated to provide a dynamic and plain text version of the instruction. This allows for accurate rendering of the instruction in a non-dynamic environment like print.	0..n

InternationalCodeValueType

Extends

This object extends String

Definition

Allows for string content which may be taken from an externally maintained controlled vocabulary (code value). If the content is from a controlled vocabulary provide the code value, as well as a reference to the code list from which the value is taken. This differs from a CodeValue only by the provision of a language-location specification. DDI uses the International CodeValue in cases where controlled vocabularies are assumed to be highly language specific, such as nationally maintained subject headings, thesauri, or keywords derived from the content of documents. The ability to identify language is especially important when supporting searches by external language-specific search engines. Provide as many of the identifying attributes as needed to adequately identify the controlled vocabulary.

Properties

Table InternationalCodeValueType. list of properties

Name	Datatype	Description	Cardinality
codeListID	xs:string	The ID of the code list (controlled vocabulary) that the content was taken from.	0..1

Name	Datatype	Description	Cardinality
codeListName	xs:string	The name of the code list.	0..1
codeListAgencyName	xs:string	The name of the agency maintaining the code list.	0..1
codeListVersionID	xs:string	The version number of the code list (default is 1.0).	0..1
otherValue	xs:string	If the value of the string is "Other" or the equivalent from the codelist, this attribute can provide a more specific value not found in the codelist.	0..1
codeListURN	xs:string	The URN of the codelist.	0..1
codeListSchemeURN	xs:string	If maintained within a scheme, the URN of the scheme containing the codelist.	0..1

LocationNameType

Extends

This object extends Name

Definition

Name of the location using the DDI Name structure and the ability to add an effective date.

Properties

Table LocationNameType. list of properties

Name	Datatype	Description	Cardinality
EffectivePeriod	DateType	The time period for which this name is accurate and in use.	0..1

MaintainableType

Extends

This object extends AbstractMaintainableType

Definition

Adds the attribute identifying this as a maintainable object. All content of Maintainable is considered to be administrative metadata. Note that changes to the administrative metadata does not drive a change in

the version of the parent objects. All content of Maintainable with the exception of 'Note' is considered to be administrative metadata. Note that changes to the administrative metadata does not drive a change in the version of the parent objects. See DDI 3.2 Technical Documentation: Part I for further details.

Properties

Table MaintainableType. list of properties

Name	Datatype	Description	Cardinality
isMaintainable	xs:boolean	This is a fixed flag informing the system or user that in addition to being versionable the element is maintainable in its own right (outside of a parent object).	0..1

ManagedMissingValuesRepresentationType

Extends

This object extends VersionableType

Definition

Means of describing the Missing Values within a managed representation so that they can be reused by multiple variables and questions. Variable has a separate Missing Values location for this representation. Questions must use a StructuredMixedResponseDomain to include both standard response and Missing Value responses in a single question. In addition to the name, label, and description of the representation, the structure defines the type of the missing values, a optional generation instruction for deriving the value to be recorded, and the ability to define a blank as a missing value. Allows for mixing CodeRepresentationBase, NumericRepresentationBase, and TextRepresentationBase into a single ManagedMissingValuesRepresentation. There cannot be conflicts between the combined valid values.

Properties

Table ManagedMissingValuesRepresentationType. list of properties

Name	Datatype	Description	Cardinality
ManagedMissingValuesRepresentationName	RepresentationName	A name for the missing value. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the managed representation. May be expressed in multiple languages. Repeat for labels with different	0..n

Name	Datatype	Description	Cardinality
		content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the managed representation. May be expressed in multiple languages and supports the use of structured content.	0..1
isBlankMissingValue	xs:boolean	Designates no response (white space, null) to be treated as a missing value.	0..1

Relationships

Table ManagedMissingValuesRepresentationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
MissingCodeRepresentation	CodeRepresentationBase	Inheritance description of a CodeRepresentationBase created for the purpose of capturing missing values with associated labels.	CodeRepresentationBase	0..n	
MissingNumericRepresentation	NumericRepresentationBase	Inheritance description of a NumericRepresentationBase created for the purpose of capturing missing values as a set of numbers or a range.	NumericRepresentationBase	0..n	
MissingTextRepresentation	TextRepresentationBase	Inheritance description of a TextRepresentationBase created for the purpose of capturing missing values as text content.	TextRepresentationBase	0..n	
ProcessingInstruction	ProcessingInstructionOptionalType	Optional reference to a GenerationInstruction describing how to generate the	ProcessingInstructionOptionalType	0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		value for this representation when used as a response domain or missing value representation.			

ManagedScaleRepresentationType

Extends

This object extends VersionableType

Definition

A means of capturing a managed representation of a Scale for use by a Response Domain Reference or Value Representation Reference. In addition to the name, label, and description of the representation, the structure defines the dimensions of the scale, an intersect for a multi-dimensional scale, and display layout.

Properties

Table ManagedScaleRepresentationType. list of properties

Name	Datatype	Description	Cardinality
ManagedScaleRepresentationName	Name	A name for the ManagedScaleRepresentation. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the representation. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the representation. May be expressed in multiple languages and supports the use of structured content.	0..1
RecommendedDataType	CodeValueType	This field provides the recommended treatment	0..1

Name	Datatype	Description	Cardinality
		of the data within an application. The value should come from a controlled vocabulary - recommended values include the set found in W3C XML Schema Part 2, but excluding string sub-types, QName, and NOTATION.	
GenericOutputFormat	CodeValueType	This field provides a recommended generic treatment of the data for display by an application. The value should come from a controlled vocabulary.	0..1
DisplayLayout	CodeValueType	Defines the layout such as containing a drawn scale line, a list of values only, an outline (the boundaries of the area defined by 2 or more intersecting scales such as a diamond of opposites), or some other layout design. Allows for the use of a controlled vocabulary.	0..1
classificationLevel		Indicates the type of relationship, nominal, ordinal, interval, ratio, or continuous. Use where appropriate for the representation type.	0..1

Relationships

Table ManagedScaleRepresentationType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ScaleDimension	ScaleDimension	Type description of a dimension of the scale. Note that most scales will have only one dimension.		0..n	
DimensionIntersect	DimensionIntersect	Identifies the point at which the scales of a multidimensional scale intersect.		0..n	

NCubeType

Extends

This object extends VersionableType

Definition

An NCube is a 1..n dimension structure which relates a set of individual values to each other by defining them within a matrix. The NCube may be the result of aggregations, cross-tabulation, time-series, etc. The NCube is described by its dimensions which are represented by categorical variables (variables with a set number of values of specific definition that can be used to identify a specific cell as part of a matrix address). The resulting cells can contain one or more measures, also defined by variables. In addition to the standard name, label, and description of the NCube, it contains a reference to a universe, defines both the normal source of the data in the cells and unit of analysis, the purpose of creating the structured data, the dimensions and measures, as well as the ability to attached any other attribute (i.e., footnote, cell or region specific note) to a specified area of the NCube. Three attribute serve as informational check values; dimensionCount, cellCount, and isClean.

Properties

Table NCubeType. list of properties

Name	Datatype	Description	Cardinality
NCubeName	Name	A name for the NCube. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the NCube. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and structure of the NCube. May be expressed in multiple languages and supports the use of structured content.	0..1
SourceUnit	CodeValueType	The normal source of the information contained in the NCube. In the case of a survey this may be a respondent, proxy, interviewer, or other	0..1

Name	Datatype	Description	Cardinality
		source. In the case of administrative data the position of a field on a form e.g., "top of page", "item 3", "generated by data processor", etc. Supports the use of an external controlled vocabulary.	
AnalysisUnit	CodeValueType	The entity to which the data refer, for example, individuals, families or households, groups, institutions/organizations, administrative units, etc. Supports the use of an external controlled vocabulary.	0..1
Purpose	StructuredStringType	Purpose for which the NCube was created. For example, designed to support a set of age pyramids generated yearly.	0..1
dimensionCount	xs:integer	The number of dimensions found in the NCube. Caution in using optional checksums is recommended. Conflict between checksums and the items being counted can cause problems with warning flags during processing. If using checksum to capture information for internal processing purposes, the use of automatically generated check sums is strongly urged.	0..1
cellCount	xs:integer	The number of cells (measures) found in the NCube. Note that this is the number of cells produced by dimension structure not the number of cells containing data in a sparse NCube. Caution in using optional checksums is recommended. Conflict between checksums and the items being counted	0..1

Name	Datatype	Description	Cardinality
		can cause problems with warning flags during processing. If using checksum to capture information for internal processing purposes, the use of automatically generated check sums is strongly urged.	
isClean	xs:boolean	A value of "true" indicates that all cells have the potential for content values. If set to "false" Attribute and CoordinateRegion should be used to define the sparse areas of the NCube, those that have no content by definition. For example a cross-tabulation between Household Type (Family, Non-Family) and Number of persons in Household (1,2,3,4,5,6,7+) would need an attribute for Family/1 Person as this will always be empty due to the definition of Family as two or more related persons.	0..1

Relationships

Table NCubeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to an imputation process described as a GeneralInstruction or GenerationInstruction held in a ProcessingInstructionScheme.		0..n	
ImputationA	GenerationInstruction	The normal source of the information contained in the NCube. In the case of a survey this may be		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		a respondent, proxy, interviewer, or other source. In the case of administrative data the position of a field on a form e.g., "top of page", "item 3", "generated by data processor", etc. [Referenced object not explicit]			
ImputationB	GeneralInstruction	Type normal source of the information contained in the NCube. In the case of a survey this may be a respondent, proxy, interviewer, or other source. In the case of administrative data the position of a field on a form e.g., "top of page", "item 3", "generated by data processor", etc. [Referenced object not explicit]		0..1	
Dimension	DimensionType	NCubes are defined by their dimensions. A dimension is provided a rank and a reference to a variable that describes it. Cell locations are "addressed" by the value of their intersection on each		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		dimension provided in rank order.			
CoordinateRegion	CoordinateRegion	Defines the area of attachment for an attribute. It may be defined as the NCube as a whole or as certain dimensions or values of dimensions.		0..n	
MeasureDefinition	MeasureDefinition	Defines the structure and type of measure captured within the cells. This may be repeated to describe multiple measure for the cells (i.e., count, percent of universe, dimensional percent, index, text, suppression flag, etc.).		0..n	
Attribute	AttributeType	An attribute may be any object which should be attached to all or part of the NCube. It may be defined as a Variable or contain textual content (such as a footnote).		0..n	

QualityStatementGroupType

Extends

This object extends VersionableType

Definition

Contains a group of QualityStatements, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table QualityStatementGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfQualityStatementCode	CodeValueType	A generic element for specifying a reason for a QualityStatementGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
QualityStatementGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the QualityStatementGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the QualityStatementGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table QualityStatementGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
QualityStatementReference	QualityStatement	Reference to constituent QualityStatement. TypeOfObject should be set to QualityStatement.			
QualityStatementGroup	QualityStatement	GroupType to constituent QualityStatementGroup. This allows for nesting of QualityStatementGroups. TypeOfObject should be set to QualityStatementGroup.	Group	0..n	

QualityStatementType

Extends

This object extends VersionableType

Definition

A statement of quality which may be related to an external standard or contain a simple statement of internal quality goals or expectations. When relating to an external standard information on compliance may be added providing a reference to a ComplianceConcept, an ExternalComplianceCode, as well as a description. Optionally, a general statement of quality may be provided using OtherQualityStatement.

Properties

Table QualityStatementType. list of properties

Name	Datatype	Description	Cardinality
QualityStatementName	Name	Name of the QualityStatement using the DDI Name structure.	0..n
Label	Label	A display label for the QualityStatement. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the QualityStatement. May be expressed in multiple languages and supports the use of structured content.	0..1
OtherQualityStatement	StructuredStringType	Describes the steps taken to ensure quality that are not related to a specific standard. Language variants should be captured within a single OtherQualityStatement. Repeat the OtherQualityStatement for differing content if needed.	0..1

Relationships

Table QualityStatementType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Standard	StandardType	Identifies the external standard used and describes the level of compliance with the standard in terms specific aspects of the standard's content.		0..	

QuestionBlockType

Extends

This object extends VersionableType

Definition

A QuestionBlock is a specific structure used in educational and other types of testing where an object (Stimulus Material) is provided and a set of questions are asked regarding the object. The QuestionBlock generally has related QuestionBlocks that measure similar skills or aptitudes and is used randomly within a set of questionnaires to create multiple versions of a single questionnaire that can be used with large groups for testing purposes. Assembly of the QuestionBlocks into a questionnaire may be the result of selection based on an experimental design model. It contains information on what the QuestionBlock is intended to measure, input and output parameters for the QuestionBlock, a description of the stimulus material and the questions related to it, instructions on sequencing and number of allowed responses, references to external aids and instructions, and an estimate of the time needed to complete the question. Note that the QuestionBlock is a reusable format for use in any number of applied uses. External aids, instructions, response sequencing etc. should contain information consistent with the general use of the QuestionBlock (QuestionItems and QuestionGrids will contain information specific to the individual question). Additional materials and information can be added within the QuestionConstruct which is the applied use of a question.

Properties

Table QuestionBlockType. list of properties

Name	Datatype	Description	Cardinality
QuestionBlockName	Name	A name for the QuestionBlock. May be expressed in multiple languages. Repeat the element to express names with different content, for example	0..n

Name	Datatype	Description	Cardinality
		different names for different systems.	
InParameter	InParameter	Provides an identity for input objects required for the QuestionBlock.	0..n
OutParameter	ParameterType	Provides an identify for the output objects of the QuestionBlock.	0..n
Binding	Binding	A structure used to bind the content of a parameter declared as the source to a parameter declared as the target. For example, binding the OutParameter of one Question to the InParameter of another Question in order to personalize a question text. Care should be taken to bind only reusable information at this level. Binding is also available at the QuestionConstruct to reflect bindings particular to the use of the question in a specific question flow or instrument.	0..n
QuestionBlockIntent	StructuredStringType	The purpose of the QuestionBlock in terms of what it is designed to test. May contain information on specific aspects of the Block and its construction.	0..1
StimulusMaterial	OtherMaterialType	Material that is visual, verbal and/or auditory used to communicate ideas or information which can be researched or provide a source for a response. For example, a picture about which a number of questions are asked, or a sound for which a measurable response is taken (as in a hearing test).	0..n
ExternalAid	OtherMaterialType	A pointer to an external aid presented by the instrument such as	0..n

Name	Datatype	Description	Cardinality
		a text card, image, audio, or audiovisual aid. Typically a URN. Use type attribute to describe the type of external aid provided. Example of terms to use would include: imageOnly audioOnly audioVisual multiMedia.	
estimatedSecondsResponseTerminal		The estimated amount of time required to answer a question expressed in seconds. Decimal values should be used to define fractions of seconds.	0..1

Relationships

Table QuestionBlockType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
QuestionItemReference	QuestionItemType	Reference to a QuestionItem containing a question regarding the stimulus material.		0..n	
QuestionGridReference	QuestionGridType	Reference to a QuestionGrid containing a question regarding the stimulus material.		0..n	
QuestionSequence	QuestionSequenceType	Types for recommending that the sequence of questions should vary according to a specified pattern, i.e., random, rotation, etc.		0..1	
ResponseCardinality	ResponseCardinalityType	Types the minimum and maximum number of		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		responses to expect from the QuestionBlock.			
ConceptReference	Concept	A reference to the concept the QuestionBlock is intended to gather data on.		0..n	
ExternalInterviewerInstruction	ExternalInterviewerInstruction	reference to an interviewer instruction not expressed as DDI XML using OtherMaterial.	ExternalInterviewerInstructionType	0..	
InterviewerInstructionReference	InterviewerInstructionReference	reference to an interviewer instruction expressed as DDI XML.	InterviewerInstructionReferenceType	0..	

QuestionConstructType

Extends

This object extends ControlConstruct

Definition

A member of the ControlConstruct substitution group. A construct which ties question content to the programmatic logic of the control constructs. Contains a reference to a QuestionItem, QuestionGrid or QuestionBlock, can set response or dimension sequence for use in a specific application, identifies the response unit, analysis unit, and universe. May provide an estimate of the number of minutes needed to respond.

Properties

Table QuestionConstructType. list of properties

Name	Datatype	Description	Cardinality
ResponseUnit	CodeValueType	Identifies the intended Response unit (respondent). Supports the use of an external controlled vocabulary.	0..1
AnalysisUnit	CodeValueType	The analysis unit, expressed as a term which may come from a controlled vocabulary.	0..n

Name	Datatype	Description	Cardinality
estimatedSecondsResponseTime	Decimal	The estimated amount of time required to answer a question expressed in seconds. Decimal values should be used to define fractions of seconds. At the question construct level it refers to the estimated time within the context of its use in a questionnaire.	0..1

Relationships

Table QuestionConstructType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseSequence	NOT DEFINED	Describes the sequencing of the response options to the question for this application.		0..1	
DimensionSequence	NOT DEFINED	Describes the sequencing of the dimension within a QuestionGrid for this application.		0..1	
UniverseReference	Universe	Reference to the universe statement containing a description of the persons or other elements that this variable refers to, and to which any analytic results refer. If more than one universe is referenced the universe of the variable is the intersect of the referenced universes.		0..n	

QuestionGridType

Extends

This object extends VersionableType

Definition

Structures the QuestionGrid as an NCube-like structure providing dimension information, labeling options, and response domains attached to one or more cells within the grid. Provides the intent of the QuestionGrid, input and output parameters for the grid, the question text for the grid, details on the dimensions, allowed responses, and additional cell contents of the grid, references to external aids and instructions, and an estimate of the time required to complete the grid. Note that the QuestionGrid is a reusable format for use in any number of applied uses. External aids, instructions, response sequencing etc. should contain information consistent with the general use of the QuestionGrid. Additional materials and information can be added within the QuestionConstruct which is the applied use of a question.

Properties

Table QuestionGridType. list of properties

Name	Datatype	Description	Cardinality
QuestionGridName	Name	A name for the QuestionGrid. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
InParameter	InParameter	Provides an identity for input objects required for the QuestionGrid.	0..n
OutParameter	ParameterType	Provides an identity for the output objects of the QuestionGrid.	0..n
Binding	Binding	A structure used to bind the content of a parameter declared as the source to a parameter declared as the target. For example, binding the OutParameter of one Question to the InParameter of another Question in order to personalize a question text. Care should be taken to bind only reusable information at this level. Binding is also available at	0..n

Name	Datatype	Description	Cardinality
		the QuestionConstruct to reflect bindings particular to the use of the question in a specific question flow or instrument.	
QuestionText	DynamicTextType	The text of a question. Supports the use of DynamicText. Note that when using QuestionText, the full QuestionText must be repeated for multi-language versions of the content. Different languages may handle the dynamic portions in different locations and/or with different content. Therefore languages cannot be mixed within a dynamic text except when the full text itself has multiple language sections, for example, a foreign language term in a text. The DisplayText may also be repeated to provide a dynamic and plain text version of the display. This allows for accurate rendering of the QuestionText in a non-dynamic environment like print.	0..n
QuestionIntent	StructuredStringType	The purpose of the QuestionGrid in terms of what it is designed to test. May contain information on specific aspects of the Grid and its construction.	0..1
ResponseDomain	Representation	Contains a response domain for the question grid. All cells in the grid have the same response domain. Any cell may also contain an internal label.	0..1
ExternalAid	OtherMaterialType	A pointer to an external aid presented by the instrument such as a text card, image, audio, or audiovisual	0..n

Name	Datatype	Description	Cardinality
		aid. Typically a URN. Use type attribute to describe the type of external aid provided. Example of terms to use would include: imageOnly audioOnly audioVisual multiMedia.	
estimatedSecondsResponseTerminal	Decimal	The estimated amount of time required to answer a question expressed in seconds. Decimal values should be used to define fractions of seconds.	0..1

Relationships

Table QuestionGridType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GridDimension	GridDimension	Describes each dimension of the grid including dimension rank (for the purpose of identifying a cell address), a text for the dimension, and optional labels and codes used as column and row stubs. May also describe a roster (a set of unlabeled rows or columns depending upon display situation).		0..n	
ResponseDomainReference	ResponseDomainReference	The inclusion of a response domain by reference (must be supported by a managed representation). An abstract element. May be substituted by any valid		0..	

Name	Target	Description	Type	Source cardinality	Target cardinality
		object of substitution type DomainReference.			
StructuredMixedGridResponseDomain	GridResponseDomain	A mixture of response domains for the grid cells. Each response domain can be attached to a specific region of the grid, for example a single column or row.	DomainType	1..1	
CellLabel	CellLabelType	Provides for the addition of a label within a cell or cells of the grid.		0..n	
ConceptReference	Concept	A reference to the concept the QuestionGrid is intended to gather data on.		0..n	
ExternalInterviewerInstruction	ExternalInterviewerInstruction	A reference to an interviewer instruction not expressed as DDI XML using OtherMaterial.	ExternalInterviewerInstructionType	0..n	
InterviewerInstructionReference	InterviewerInstructionReference	A reference to an interviewer instruction expressed as DDI XML.	InterviewerInstructionReferenceType	0..n	

QuestionItemType

Extends

This object extends VersionableType

Definition

Structure a single Question which may contain one or more response domains (i.e., a list of valid category responses where if "Other" is indicated a text response can be used to specify the intent of "Other"). The structure provides detail on the intent of the question, the text of the question, the valid

response options and the number of allowed responses, references to external aids and instructions, and an estimation of the time needed to respond to the question. Note that the `QuestionItem` is a reusable format for use in any number of applied uses. External aids, instructions, response sequencing etc. should contain information consistent with the general use of the `QuestionItem`. Additional materials and information can be added within the `QuestionConstruct` which is the applied use of a question.

Properties

Table `QuestionItemType`. list of properties

Name	Datatype	Description	Cardinality
<code>QuestionItemName</code>	<code>Name</code>	A name for the <code>QuestionItem</code> . May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
<code>InParameter</code>	<code>InParameter</code>	Provides an identity for input objects required for the <code>QuestionItem</code> .	0..n
<code>OutParameter</code>	<code>ParameterType</code>	Provides an identify for the output objects of the <code>QuestionItem</code> .	0..n
<code>Binding</code>	<code>Binding</code>	A structure used to bind the content of a parameter declared as the source to a parameter declared as the target. For example, binding the <code>OutParameter</code> of one <code>Question</code> to the <code>InParameter</code> of another <code>Question</code> in order to personalize a question text. Care should be taken to bind only reusable information at this level. <code>Binding</code> is also available at the <code>QuestionConstruct</code> to reflect bindings particular to the use of the question in a specific question flow or instrument.	0..n
<code>QuestionText</code>	<code>DynamicTextType</code>	The text of a question. Supports the use of <code>DynamicText</code> . Note that when using <code>QuestionText</code> , the full <code>QuestionText</code> must be repeated for multi-	0..n

Name	Datatype	Description	Cardinality
		language versions of the content. Different languages may handle the dynamic portions in different locations and/or with different content. Therefore languages cannot be mixed within a dynamic text except when the full text itself has multiple language sections, for example, a foreign language term in a text. The DisplayText may also be repeated to provide a dynamic and plain text version of the display. This allows for accurate rendering of the QuestionText in a non-dynamic environment like print.	
QuestionIntent	StructuredStringType	The purpose of the QuestionItem in terms of what it is designed to measure.	0..1
ResponseDomain	Representation	Contains a response domain for the question item. Typically used to describe simple response domains (textual, numeric, etc.).	0..1
ExternalAid	OtherMaterialType	A pointer to an external aid presented by the instrument such as a text card, image, audio, or audiovisual aid. Typically a URN. Use type attribute to describe the type of external aid provided. Example of terms to use would include: imageOnly audioOnly audioVisual multiMedia.	0..n
estimatedSecondsResponseTerminal		The estimated amount of time required to answer a question expressed in seconds. Decimal values should be used to define fractions of seconds.	0..1

Relationships

Table QuestionItem. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
StructuredMixedResponseDomain	ResponseDomain	ResponseDomainType where the question requires the option for multiple response domains, such as a category response and a text response to specify a value for "Other", or when text needs to be inserted before, after, or between response options for the question.	ResponseDomainType	0..	
ResponseCardinality	ResponseCardinality	ResponseCardinalityType the designation of the minimum and maximum number of responses allowed for this question. Note that each response domain has its own response cardinality.	ResponseCardinalityType	0..1	
ConceptReference	Concept	A reference to the concept associated with the response to the question.	ConceptReferenceType	0..n	
ExternalInterviewerInstruction	ExternalInterviewerInstruction	ExternalInterviewerInstructionType reference to an interviewer instruction not expressed as DDI XML using OtherMaterial.	ExternalInterviewerInstructionType	0..n	
InterviewerInstructionReference	InterviewerInstructionReference	InterviewerInstructionReferenceType an interviewer	InterviewerInstructionReferenceType	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		instruction expressed as DDI XML.			

RelatedValueType

Extends

This object extends Value

Definition

The characteristic value expressed as a string with an indicator of the specific relationship of the variable value to the characteristic value. The default is "Equal". The value may be defined as containing no content (blank) by setting the attribute valueIsBlank to "true".

Properties

Table RelatedValueType. list of properties

Name	Datatype	Description	Cardinality
valueIsBlank	xs:boolean	Set to "true" if the value of the conditional variable is blank.	0..1

Relationships

Table RelatedValueType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
type	RelatedValueType	Indicates value type as "GreaterThan", "LessThan", "Equal", "GreaterThanOrEqual", "LessThanOrEqual", or "NotEqual".		0..1	

VariableStatisticsType

Extends

This object extends VersionableType

Definition

Contains summary and category level statistics for the referenced variable. Includes information on the total number of responses, the weights in calculating the statistics, variable level summary statistics, and category statistics. The category statistics may be provided as unfiltered values or filtered through a single variable. For example the category statistics for Sex filtered by the variable Country for a

multi-national data file. Note that if no weighting factor is identified, all of the statistics provided are unweighted.

Properties

Table VariableStatisticsType. list of properties

Name	Datatype	Description	Cardinality
TotalResponses	xs:integer	The total number of responses to this variable. This element is especially useful if the number of responses does not match added case counts. It may also be used to sum the frequencies for variable categories.	0..1

Relationships

Table VariableStatisticsType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableReference	VariableType	Reference to the variable to which the statistics apply.		1..1	
StandardWeightReference	StandardWeightType	Reference to the StandardWeight value provided in Weighting.		0..	
WeightVariableReference	VariableType	Reference to a variable to use for weight in calculating the statistic.		0..	
MissingValuesReference	ManagedMissingValuesRepresentationType	Indicates missing values that were excluded from the statistic by referencing the ManagedMissingValuesRepresentation used by the Variable.		0..1	
SummaryStatisticReference	SummaryStatisticType	A type summary statistic for the referenced variable.		0..n	
UnfilteredCategoryReference	FilteredCategoryStatisticType	The statistic type values of any number of		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		statistics by category value representing the full response distribution of the variable.			
FilteredCategoryStatistics	FilteredCategoryStatistics	StatisticsType category-level statistic for the referenced variable using another variable to filter the categories through. For example, the Eurobarometer may filter its category statistics by country as represented in a variable "CountryCode".		0..n	

VariableType

Extends

This object extends VersionableType

Definition

Describes the structure of a Variable. This is the applied expression of a data item within a data set and maps to the GSIM InstanceVariable. In addition to the standard name, label, and description, includes a reference to a source parameter, represented variable, conceptual variable, universe, concept, question, source variable, and embargo information. It identifies the normal source of the data in the variable, the unit of analysis, whether the variable provides temporal or geographic information, or serves as a weight for other variables in the data, and provides a full description of its representation.

Properties

Table VariableType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the Variable. May be expressed in multiple languages. Repeat for labels with different content, for example,	0..n

Name	Datatype	Description	Cardinality
		labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the Variable. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter		Assigns a parameter that contains output from the Variable so that it can be bound to an InParameter of an instruction or act as the SourceParameter of another Variable.	0..1
SourceParameterA		Reference to an OutParameter that serves as the source for the content of this variable. [Referenced object not explicit]	0..1
SourceParameterB		Reference to an OutParameter that serves as the source for the content of this variable. [Referenced object not explicit]	0..1
SourceUnit	CodeValueType	The normal source of the information contained in the variable. In the case of a survey this may be a respondent, proxy, interviewer, or other source. In the case of administrative data the position of a field on a form e.g., "top of page", "item 3", "generated by data processor", etc. Supports the use of an external controlled vocabulary.	0..1
AnalysisUnit	CodeValueType	The entity to which the data refer, for example, individuals, families or households, groups, institutions/organizations, administrative units, etc. Supports the use	0..1

Name	Datatype	Description	Cardinality
		of an external controlled vocabulary.	
isTemporal	xs:boolean	Set to "true" if the variable relays time-related information (date, time, season, relative time, etc.).	0..1
isGeographic	xs:boolean	Set to "true" if the variable relays geographic information, i.e., geographic code, area name, relative location, etc.	0..1
isWeight	xs:boolean	Set to "true" if the variable is used a weight when analyzing data within the data set.	0..1

Relationships

Table VariableType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
SourceVariableReference	VariableType	Reference to variable(s) used as a basis for recoding, derivation, or other means of calculating the data for this variable. This reference is intended to provide basic information on the source variable structure including value representation, measurement unit, etc. Note that if a variable is used by reference within multiple VariableSchemes you can identify its role within a specific VariableScheme by including		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		that VariableScheme in the sourceContext attribute of the reference. Use ProcessingInstructionReference to provide additional information on the transformation of the source variable(s) into the data for this variable. If additional processing detail is required use the InParameter, OutParameter, and ParameterLinkage options in the GenerationInstruction and ProcessingInstructionReference.	Reference		
RepresentedVariable	ReferencedVariable	Reference to the RepresentedVariable that describes the core of this variable (the RepresentedVariable that the variable is the implementation of). The RepresentedVariable contains the broad reusable specification of the Variable, i.e., concept, universe, and value representation. These may be constrained by specifications within the Variable description. TypeOfObject		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		should be set to RepresentedVariable.			
ConceptualVariableReference	ConceptualVariable	Reference to the ConceptualVariable that describes the core of this variable. The ConceptualVariable provides linked Concept and Universe specifications. These may be constrained by specifications within the Variable description. TypeOfObject should be set to ConceptualVariable.		0..1	
UniverseReference	Universe	Reference to the universe statement containing a description of the persons or other elements that this variable refers to, and to which any analytic results refer. If more than one universe is referenced the universe of the variable is the intersect of the referenced universes.		0..n	
ConceptReference	Concept	Reference to the concept measured by this variable.		0..1	
EmbargoReference	EmbargoType	Reference to any embargoes placed on the contents of this variable. Embargoes may limit access to the		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		data and/or metadata to specific groups and/or for specified periods of time.			
VariableRepresentation	VariableRepresentation	Description of the representation of the variable in the data set, including allowed content, data typing, and computation information.		0..1	

ComparisonType

Extends

This object extends MaintainableType

Definition

A maintainable module containing maps between objects of the same or similar type. Maps allow for pair-wise mapping of two objects by describing their similarities and differences in order to make assertions regarding their comparability. Currently maps allow for the comparison of concepts, variables, questions, categories, universes, and representations that have managed content (code, category, numeric, text, datetime and scale). These mapping(s) inform users on the comparability of two objects and facilitate automation. Note that all maps are pairwise, identifying two schemes and the correlation between two items in those schemes. Due to the complexity of some objects, multiple mappings may be required to cover details of the comparison of component parts, e.g. a QuestionMap may also have a related RepresentationMap. By using a set of pairwise comparisons, it is possible to describe complex correspondences - pairwise comparisons are easier to process. In addition to providing a standard name, label, and description, Comparison consists of a simple stack of comparison maps. Comparison maps are currently limited to those objects that can be referenced and are sufficiently structured to support a clear comparison.

Properties

Table ComparisonType. list of properties

Name	Datatype	Description	Cardinality
ComparisonName	Name	A name for the comparison. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n

Name	Datatype	Description	Cardinality
Label	Label	A display label for the comparison. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the comparison. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ComparisonType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptMap	GenericMapType	Maps the content of two different concept schemes of objects of the same type providing detail for the comparable items within those two schemes.		0..n	
VariableMap	GenericMapType	Maps the content of two different variable schemes of objects of the same type providing detail for the comparable items within those two schemes.		0..n	
QuestionMap	GenericMapType	Maps the content of two different question schemes of objects of the		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		same type providing detail for the comparable items within those two schemes.			
CategoryMap	GenericMapType	Maps the content of two different category schemes of objects of the same type providing detail for the comparable items within those two schemes.		0..n	
RepresentationMap	RepresentationMap	Maps between any two managed representations. In addition to representation types held in a ManagedRepresentationScheme, managed representations include CategoryScheme and coded representations which include CodeList, GeographicStructureCode or GeographicLocationCode. Note that the source can be any managed representation including a CodeList, GeographicStructure or GeographicLocation. Note that comparisons between two category schemes is best		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		handled by CategoryMap.			
UniverseMap	GenericMapType	Maps the content of two different universe schemes of objects of the same type providing detail for the comparable items within those two schemes.		0..n	

Chapter 16. Toss

ArchiveSpecificType

Definition

Contains metadata specific to a particular archive's holding. This includes information on the items or collection of items held by the archive, the default terms of access, funding information and budget specific to the archive and its maintenance of this collection, reference to a quality statement related to archive activities, and coverage of the archive or sub-set of the archive.

Relationships

Table ArchiveSpecificType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ArchiveOrganization	OrganizationType Deprecate	A reference to the organization or an individual acting as the archive.		0..1	
ArchiveOrganization	IndividualType	A reference to the organization or an individual acting as the archive.		0..1	
Item	ItemType	Describes individual items held or distributed by the archive in connection with a study, group of studies, or resource packages. What constitutes an item is determined by the archive.		0..n	
Collection	CollectionType	Describes a collection of items held or distributed by the archive in connection with a study, group of studies, or resource		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		packages. What constitutes an collection is determined by the archive.			
DefaultAccess	AccessType	Describes access to the archive in general. The restrictions noted at this level apply to all holdings of the archive unless overridden for specified collections or items.		0..n	
FundingInformation	FundingInformationType	Describes funding information in relationship to the archive and its activities. This may be archive wide or related to specific collections or projects within the archive.		0..n	
Budget	BudgetType	This describes the archive budget. It can be repeated for distinct budget activities such as budget periods, specific projects or types of activity.		0..n	
QualityStatement	QualityStatementType	Type reference to a Quality Statement regarding the activities and operation of the archive. These may include access or preservation		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		appraisal assessments or certification.			
Coverage	CoverageType	Documents the spatial, temporal, and/or topical coverage of the archive or division of an archive.		0..1	

GeographyGroupCodeType

Definition

Indicates how all members of the group are related along the dimension of geography. These relationships are inferred by the markup author, and should be considered as her/his own interpretation of the data.

InstrumentGroupCodeType

Definition

Indicates how all members of the group are related in terms of the instruments used to collect data. These relationships are inferred by the markup author, and should be considered as her/his own interpretation of the data.

ItemSequenceType

Definition

Describes the types of sequences that can be used for a set of items.

PanelGroupCodeType

Definition

Indicates how all members of the group are related in terms of type of panel. These relationships are inferred by the markup author, and should be considered as her/his own interpretation of the data.

TimeGroupCodeType

Definition

Indicates how all members of the group are related along the dimension of time. These relationships are inferred by the markup author, and should be considered as her/his own interpretation of the data.

AccessRestrictionDateType

Extends

This object extends DateType

Definition

The date or date range of the access restriction for all or portions of the data. Includes a reason for the access restriction as well as the user group to which the restriction applies.

Properties

Table AccessRestrictionDateType. list of properties

Name	Datatype	Description	Cardinality
Reason	StructuredStringType	The reason for the access restriction.	0..1
User	StructuredStringType	The user group to whom the restriction applies	0..1

DistributionRepresentationBaseType

Extends

This object extends Representation

Definition

Means of describing Distributions as a representation so that they can be used as a response domain questions. Primarily used as a response domain in a QuestionGrid. In addition to the base of objects of a representation the structure provides the total value to be distributed between the objects and the number of decimal positions allowed within a response.

Properties

Table DistributionRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
DistributionValue	xs:decimal	Identifies the total value to be distributed among the designated objects.	0..1
decimalPositions	xs:integer	Identifies the number of decimal points allowed for the expression of a response.	0..1

NominalRepresentationBaseType

Extends

This object extends Representation

Definition

A means of capturing the features of a nominal (marked/unmarked) response domain. Note that this is not the same as a code or category list with a yes/no set of responses. This representation is generally used in QuestionGrids when defining the response domain of a grid cell. In addition to the basic objects of a representation, the structure defines the allowed content of the mark using a regular expression.

Properties

Table NominalRepresentationBaseType. list of properties

Name	Datatype	Description	Cardinality
regExp	xs:string	The regular expression allows for further description of the allowable content of the data.	0..1

CategoryGroupType

Extends

This object extends VersionableType

Definition

Contains a group of Category descriptions, which may be ordered or hierarchical. In addition to the name, label, and description of the group, the structure allows for defining the group as a valid category value using a DefiningCategoryReference, and a listing of Categories and CategoryGroups in any order.

Properties

Table CategoryGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfCategoryGroup	CodeValueType	A brief textual identification of the group type. Supports the use of an external controlled vocabulary.	0..1
CategoryGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the category group. May be expressed in multiple languages. Repeat for labels with different	0..n

Name	Datatype	Description	Cardinality
		content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the CategoryGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table CategoryGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DefiningCategoryReference	Category	A reference to a category that defines the group, thereby allowing the group to define the contents of that category by explicitly identifying its members.		0..1	
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
CategoryReference	Category	A category defined as a member of this group.		0..n	
CategoryGroupReference	CategoryGroupType	Type category group that is a member of this group (nesting structure).		0..n	

CodeListGroupType

Extends

This object extends VersionableType

Definition

A grouping of CodeLists for conceptual or administrative purposed. May be hierarchical.

Properties

Table CodeListGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfCodeListGroup	CodeValueType	A brief textual identification of the group type. Supports the use of an external controlled vocabulary.	0..1
CodeListGroupName	Name	A name for the CodeListGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the CodeList group. May be expressed in multiple languages. Repeat for	0..n

Name	Datatype	Description	Cardinality
		labels with different content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the CodeListGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table CodeListGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this CodeList group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the CodeLists in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.</p>			
Keyword	InternationalCodeValue	<p>Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeListReference	CodeList	Reference to constituent CodeList.		0..n	
CodeListGroupReference	CodeListGroup	Reference to constituent CodeListGroup. This allows for nesting of CodeListGroups.		0..n	

ConceptGroupType

Extends

This object extends VersionableType

Definition

Allows for grouping of concepts; groups may have a hierarchical structure. This structure should not be used to model semantic concept hierarchies - for this purpose, use the SubclassOfReference element within Concept.

Properties

Table ConceptGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfConceptGroup	CodeValueType	Specifies the purpose of the ConceptGroup. If conceptual the GroupingConceptReference or GroupingUniverseReference should be used to further define the group. The object allows for specification of the purpose using a brief string or term. Supports the use of an external controlled vocabulary.	0..1
ConceptGroupName	Name	A name for the ConceptGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ConceptGroup. May be expressed in multiple	0..n

Name	Datatype	Description	Cardinality
		languages. Repeat for labels with different content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the ConceptGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1
isAdministrativeOnly	xs:boolean	Indicates the purpose of a concept group.	0..1
isConcept	xs:boolean	A value of true indicates that there is a concept which defines the group, and which is comprised of the concepts contained in the group. A group can be conceptual in purpose (that is, have a value of "concept" for the purpose attribute), but not itself have a defining concept.	0..1

Relationships

Table ConceptGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GroupingUniverseReference	Reference	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain. Note that this is not a formal linking of a concept to a university such as found in a ConceptualVariable.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		It is a means of helping to define the context within which this ConceptGroup is relevant.			
GroupingConceptReference	Reference	Reference to the concept expressed by the objects in this group. Expresses a conceptual basis for grouping the concepts. Note that this is not a formal linking of a concept to a university such as found in a ConceptualVariable. It is a means of helping to define the context within which this ConceptGroup is relevant.		0..1	
Subject	InternationalCodeValue	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
ConceptReference	Concept	Reference to a concept included in the concept group. A concept can be referenced internally, from the concept		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		scheme included in the same conceptual components module, or externally, from another scheme. This element is recursive to allow for the description of hierarchical relationships within the concept group.			
ConceptGroupReference	ConceptGroupType	Reference to a subordinate concept group included in the concept group. A concept group can be referenced internally, from the concept scheme included in the same conceptual components module, or externally, from another scheme. This element is recursive to allow for the description of hierarchical relationships within the concept group.		0..n	

ConceptualVariableGroupType

Extends

This object extends VersionableType

Definition

Contains a group of `ConceptualVariables`, which may describe an ordered or hierarchical relationship structure. `ConceptualVariables` may be grouped for a wide range of reasons including conceptual or universe grouping, usage, subject or keyword relationships, or other grouping reason that will assist in the management of a group of `ConceptualVariables`. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table `ConceptualVariableGroupType`. list of properties

Name	Datatype	Description	Cardinality
<code>TypeOfConceptualVariableGroup</code>	<code>CodeValueType</code>	A generic element for specifying a reason for a <code>ConceptualVariableGroup</code> . Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
<code>ConceptualVariableGroupName</code>	<code>Name</code>	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
<code>Label</code>	<code>Label</code>	A display label for the <code>ConceptualVariableGroup</code> . May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
<code>Description</code>	<code>StructuredStringType</code>	A description of the content and purpose of the <code>ConceptualVariableGroup</code> . May be expressed in multiple languages and supports the use of structured content.	0..1
<code>isOrdered</code>	<code>xs:boolean</code>	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table ConceptualVariableGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain. TypeOfObject should be set to Universe.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group. TypeOfObject should be set to Concept.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
ConceptualVariableReference	ConceptualVariableReference	Reference to constituent ConceptualVariable (from the substitution group). TypeOfObject should be set to ConceptualVariable.		0..n	
ConceptualVariableConceptualVariableGroup	ConceptualVariableGroup	Group type constituent ConceptualVariableGroup. This allows		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		for nesting of ConceptualVariableGroups. TypeOfObject should be set to ConceptualVariableGroup.			

ControlConstructGroupType

Extends

This object extends VersionableType

Definition

Contains a group of ControlConstructs, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table ControlConstructGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfControlConstructGroup	GroupValueType	A generic element for specifying a reason for a ControlConstructGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
ControlConstructGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ControlConstructGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the	0..1

Name	Datatype	Description	Cardinality
		ControlConstructGroup. May be expressed in multiple languages and supports the use of structured content.	
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table ControlConstructGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
ControlConstruct	ReferenceConstruct	ReferenceType constituent ControlConstruct (from the substitution group). TypeOfObject should be set		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		to IfThenElse, RepeatUntil, RepeatWhile, Loop, Sequence, ComputationItem, StatementItem, or QuestionConstruct.			
ControlConstructGroupType	ControlConstructGroupType	ControlConstructGroupType to constituent ControlConstructGroup. This allows for nesting of ControlConstructGroups. TypeOfObject should be set to ControlConstructGroup.		0..n	

GeographicLocationGroupType

Extends

This object extends VersionableType

Definition

Contains a group of GeographicLocations, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table GeographicLocationGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfGeographicLocationGroup	ControlConstructGroupType	A generic element for specifying a reason for a GeographicLocationGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
GeographicLocationGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different	0..n

Name	Datatype	Description	Cardinality
		names for different systems.	
Label	Label	A display label for the GeographicLocationGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the GeographicLocationGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table GeographicLocationGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.</p>			
Keyword	InternationalCodeValue	<p>Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		group or to identify keyword characteristics of a reusable group of objects.			
GeographicLocationGroupReference	GeographicLocation	Reference to constituent GeographicLocation (from the substitution group). TypeOfObject should be set to GeographicLocation.	ReferenceType	0..n	
GeographicLocationGroupReference	GeographicLocationGroup	Reference to constituent GeographicLocationGroup. This allows for nesting of GeographicLocationGroups. TypeOfObject should be set to GeographicLocationGroup.	ReferenceType	0..n	

GeographicStructureGroupType

Extends

This object extends VersionableType

Definition

Contains a group of GeographicStructures, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table GeographicStructureGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfGeographicStructureGroup	GeographicStructureGroupType	A generic element for specifying a reason for a GeographicStructureGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1

Name	Datatype	Description	Cardinality
GeographicStructureGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the GeographicStructureGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the GeographicStructureGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table GeographicStructureGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.</p>			
Keyword	InternationalCodeValue	<p>Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
GeographicStructure	GeographicStructure	Reference to constituent GeographicStructure (from the substitution group). TypeOfObject should be set to GeographicStructure.	ReferenceType	0..n	
GeographicStructure	GeographicStructure	Reference to constituent GeographicStructureGroup. This allows for nesting of GeographicStructureGroups. TypeOfObject should be set to GeographicStructureGroup.	ReferenceType	0..n	

InstructionGroupType

Extends

This object extends VersionableType

Definition

Contains a group of Instructions, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table InstructionGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfInstructionGroup	CodeValueType	A generic element for specifying a reason for a InstructionGroup.	0..1

Name	Datatype	Description	Cardinality
		Note that this element can contain either a term from a controlled vocabulary list or a textual description.	
InstructionGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the InstructionGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the InstructionGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table InstructionGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the objects in this group.			
Subject	InternationalCodeValue	Type Objects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	
Keyword	InternationalCodeValue	Type Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
InstructionReference	InstructionType	Reference to constituent Instruction (from the substitution group). TypeOfObject should be set to Instruction.		0..n	
InstructionGroupReference	InstructionGroupType	Reference to constituent InstructionGroup. This allows for nesting of InstructionGroups. TypeOfObject should be set to InstructionGroup.		0..n	

InstrumentGroupType

Extends

This object extends VersionableType

Definition

Describes a group of instruments for administrative or conceptual purposes, which may be hierarchical. In addition to the standard name, label, and description, contains references to the contained Instruments and InstrumentGroups.

Properties

Table InstrumentGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfInstrumentGroup	CodeValueType	A generic element for specifying a reason for a instrument group. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
InstrumentGroupName	Name	A name for the InstrumentGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the InstrumentGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	Additional textual descriptions of the instrument group.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table InstrumentGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCode	If Value Types are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	
Keyword	InternationalCode	If Value Types are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
InstrumentReference	InstrumentType	Reference to constituent instrument.		0..n	
InstrumentGroupReference	InstrumentGroupType	Reference to constituent instrument group. This allows for nesting of instrument groups.		0..n	

NCubeGroupType

Extends

This object extends VersionableType

Definition

Contains a group of NCubes, which may be ordered or hierarchical. In addition to the name, label, and description of the group, the structure allows for defining the type of group using an optional controlled vocabulary, a reference to a defining universe or concept for the group, and a listing of NCubes and NCubeGroups in any order.

Properties

Table NCubeGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfNCubeGroup	CodeValueType	A brief textual identification of the group type. Supports the use of an external controlled vocabulary.	0..1
NCubeGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the NCube group. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the NCubeGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table NCubeGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		NCube group pertain.			
ConceptReference	Concept	Reference to the concept expressed by the NCubes in this group.		0..1	
Subject	InternationalCodeValueType	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	
Keyword	InternationalCodeValueType	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
NCubeReference	NCubeType	Reference to constituent NCube.		0..n	
NCubeGroupReference	NCubeGroupType	Reference to constituent NCubeGroup. This allows for nesting of NCubeGroups.		0..n	

NCubeSchemeType

Extends

This object extends MaintainableType

Definition

A set of NCubes maintained by an agency and used to structure data items into relational structures. In addition to the standard name, label, and description of the scheme, contains descriptions of individual NCubes and NCubeGroups as well as allowing the inclusion of another NCubeScheme by reference.

Properties

Table NCubeSchemeType. list of properties

Name	Datatype	Description	Cardinality
NCubeSchemeName	Name	A name for the NCubeScheme. May be	0..n

Name	Datatype	Description	Cardinality
		expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	
Label	Label	A display label for the NCubeScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the NCubeScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table NCubeSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
NCube	NCubeType	Describes the logical structure of an NCube which is a 1..n dimension structure which relates a set of individual value to each other by defining them within a matrix.		0..n	
NCubeGroup	NCubeGroupType	Describes a group of NCubes for conceptual or administrative purposes, which may be ordered or hierarchical.		0..n	
NCubeSchemeReference	NCubeSchemeType	Allows for inclusion of other NCube		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		schemes by reference.			

OrganizationGroupType

Extends

This object extends VersionableType

Definition

Contains a group of Organizations, Individuals, and/or Relations, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table OrganizationGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfOrganizationGroup		A generic element for specifying a reason for a OrganizationGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
OrganizationGroupName		A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label		A display label for the OrganizationGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description		A description of the content and purpose of the OrganizationGroup. May be expressed in multiple languages and supports the use of structured content.	0..1

Name	Datatype	Description	Cardinality
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table OrganizationGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValue Type	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		group or to identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
OrganizationReference	OrganizationType Deprecate	Reference to constituent Organization. TypeOfObject should be set to Organization.		0..n	
IndividualReference	IndividualType	Reference to constituent Individual. TypeOfObject should be set to Individual.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
RelationReference	Relation	Reference to a constituent Relation. TypeOfObject should be set to Relation.		0..n	
OrganizationGroupReference	OrganizationGroup	Reference to constituent OrganizationGroup. This allows for nesting of OrganizationGroups. TypeOfObject should be set to OrganizationGroup.		0..n	

OrganizationSchemeType

Extends

This object extends MaintainableType

Definition

Properties

Table OrganizationSchemeType. list of properties

Name	Datatype	Description	Cardinality
OrganizationSchemeName	Name	A name for the scheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the scheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the scheme. May be expressed in multiple languages and supports	0..1

Name	Datatype	Description	Cardinality
		the use of structured content.	

Relationships

Table OrganizationSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationSchemeReference	OrganizationScheme	RefType to an existing OrganizationScheme for inclusion by reference.		0..n	
OrganizationTypeDeprecate	OrganizationType	In-line description of an Organization. These may be referenced by many elements in DDI and provide fuller detail regarding the Organization.		0..n	
Individual	IndividualType	In-line description of an Individual. These may be referenced by many elements in DDI and provide fuller detail regarding the Individual.		0..n	
Relation	Relation	In-line description of a Relationship between two organizations or individual or between an individual and an organization. Relation is generally and on-going association not associated with a specific role in relationship to a study.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationGroup	OrganizationGroup	OrganizationType description of a group of Organizations, Individuals, and/or Relations.		0..n	

OrganizationType--Deprecate

Extends

This object extends VersionableType

Definition

Details of an organization including name, contact information, a description, keywords to support searching, their regional affiliation, and any additional information. In addition the organization may capture how they manage version distinction. All agencies should be defined as an Organization and referenced by the Archive module. The organization and specific pieces of information regarding the individual may be tagged for information privacy.

Properties

Table OrganizationType--Deprecate. list of properties

Name	Datatype	Description	Cardinality
Description		A description of the organization. May be expressed in multiple languages and supports the use of structured content.	0..1
RegionalCoverage		The geographic region within which this organization operates.	0..n
ContactInformation		Contact information for the organization including location specification, address, URL, phone numbers, and other means of communication access. Address, location, telephone, and other means of communication can be repeated to express multiple means of a single type or change over time. Each major piece of contact information	0..n

Name	Datatype	Description	Cardinality
		(with exception of URL contains the element EffectiveDates in order to date stamp the period for which the information is valid.	
PRIVACY		Specify the level privacy for the all information on the organization as public, restricted, or private.	0..1

Relationships

Table OrganizationType--Deprecate. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationIdentification	NOT DEFINED	Identification information on the Organization. The structure contains a OrganizationName which can be repeated to provide any number of OrganizationNames that have a) a specific contextual usage, or b) are of specific types (e.g. PreviousFormalName). The DDI Maintenance Agency ID and and organization images, such as a building picture or logo are found in OrganizationIdentification. Images and names can be individually date stamped.		0..1	
Keyword	InternationalCode	Keywords used to classify the organization or its activities.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Supports the use of an external controlled vocabulary.			
AdditionalInformation	AdditionalInformation	Any additional information you wish to note about the organization. This is a structured string so it can be formatted and a privacy tag can be applied.		0..n	
VersionDistinction	VersionDistinction	Describes the data versioning scheme(s) used by an organization. If more than one, Name should differentiate between a standard versioning structure used by the organization and special structures used by specific projects or studies. Information on what drives and major and minor change and how they are structured.		0..n	

PhysicalDataProductType

Extends

This object extends MaintainableType

Definition

A module describing the physical storage structures of data files and the relationship of their internal objects to the logical (intellectual) description of the objects found in LogicalProduct. This describes

the physical aspects of data files which may be common between one or more data files as described by physical structure of the file and the structure of data items within a record. The `PhysicalDataProduct` contains the critical links between the physical data store identified by a `PhysicalInstance` and the logical (intellectual) description of the data as found in the `LogicalProduct`. In addition to the standard name, label, and description, the module allows for `OtherMaterial`, and descriptions of `PhysicalStructureSchemes` and `RecordLayoutSchemes` in-line or by reference.

Properties

Table `PhysicalDataProductType`. list of properties

Name	Datatype	Description	Cardinality
<code>PhysicalDataProductName</code>	<code>Name</code>	A name for the <code>PhysicalDataProduct</code> module. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
<code>Label</code>	<code>Label</code>	A display label for the <code>PhysicalDataProduct</code> module. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
<code>Description</code>	<code>StructuredStringType</code>	A description of the <code>PhysicalDataProduct</code> module. May be expressed in multiple languages and supports the use of structured content.	0..1
<code>OtherMaterial</code>	<code>OtherMaterialType</code>	References other resources related to the described physical data product.	0..n

Relationships

Table `PhysicalDataProductType`. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
<code>PhysicalStructureSchemeType</code>	<code>PhysicalStructureSchemeType</code>	One containing a set of <code>PhysicalStructures</code> containing descriptions of overall		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>structure of a physical data storage format. These descriptions provide the primary link to the LogicalRecord found in the data file, general structural information such as use of proprietary storage structures, division of logical records into physical segment, and default values for decimal separators, etc. Each description can apply to one or more data files containing the same logical records in the same overall structure.</p>			
RecordLayoutScheme	RecordLayoutScheme	<p>RecordLayoutScheme containing a set of RecordLayouts describing the location of individual data items within the physical record and how to address them (locate and retrieve). RecordLayouts provide a link to the PhysicalStructure description and to individual variables or NCubes</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		describing the data items.			

PhysicalStructureGroupType

Extends

This object extends VersionableType

Definition

A group of PhysicalStructure descriptions for administrative or conceptual purposes. May be hierarchical. In addition to the standard name, label, and description, allows for a brief classification of the group type, reference to an applicable Universe and Concept, inclusion of PhysicalStructures and PhysicalStructureGroups by reference and an indicator which can be set to "true" if the group is ordered.

Properties

Table PhysicalStructureGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfPhysicalStructureCode	CodeValueType	A generic element for specifying a reason for a PhysicalStructureGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
PhysicalStructureGroupName	Name	A name for the PhysicalStructureGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the PhysicalStructureGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the PhysicalStructureGroup. May be expressed in	0..1

Name	Datatype	Description	Cardinality
		multiple languages and supports the use of structured content.	
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table PhysicalStructureGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueTopic	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValueKeywords	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
PhysicalStructureReference	PhysicalStructureReference	Reference to constituent PhysicalStructure.		0..n	
PhysicalStructureGroup	PhysicalStructureGroup	Group type to constituent PhysicalStructureGroup. This allows for nesting of PhysicalStructureGroups.		0..n	

PhysicalStructureSchemeType

Extends

This object extends MaintainableType

Definition

A scheme containing a set of PhysicalStructures containing descriptions of overall structure of a physical data storage format. These descriptions provide the primary link to the LogicalRecord found in the data file, general structural information such as use of proprietary storage structures, division of logical records into physical segment, and default values for decimal separators, etc. Each description can apply to one or more data files containing the same logical records in the same overall structure. In addition to the standard name, label, and description, it allows for inclusion of an existing PhysicalStructureScheme by reference, and PhysicalStructure or PhysicalStructureGroup descriptions in-line or by reference.

Properties

Table PhysicalStructureSchemeType. list of properties

Name	Datatype	Description	Cardinality
PhysicalStructureSchemeName	Name	A name for the PhysicalStructureScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the PhysicalStructureScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the PhysicalStructureScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table PhysicalStructureSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
PhysicalStructureSchemeType	PhysicalStructureSchemeType	Subtype of an existing PhysicalStructureScheme for inclusion.	PhysicalStructureSchemeType	0..n	
PhysicalStructureType	PhysicalStructureType	PhysicalStructure description providing the primary link to the LogicalRecord and general structural information. Each description can apply to one or more data files containing the same logical records in the same overall structure.	PhysicalStructureType	0..n	
PhysicalStructureGroupType	PhysicalStructureGroupType	Group of PhysicalStructure descriptions for administrative or conceptual purposes.	PhysicalStructureGroupType	0..n	

ProcessingEventGroupType

Extends

This object extends VersionableType

Definition

Describes a group of processing events for administrative or conceptual purposes, which may be hierarchical. In addition to the standard name, label, and description contains references to included Processing Events, and other ProcessingEventGroups.

Properties

Table ProcessingEventGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfProcessingEventGroup	CodeValueType	A generic element for specifying a reason for	0..1

Name	Datatype	Description	Cardinality
		a processing events group. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	
ProcessingEventGroupName	Name	A name for the ProcessingEventGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ProcessingEventGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the ProcessingEventGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table ProcessingEventGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCode	If Value Types are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	
Keyword	InternationalCode	If Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
ProcessingEvent	ProcessingEvent	Reference to constituent ProcessingEvent.	Reference	0..n	
ProcessingEvent	ProcessingEventGroup	Reference to constituent processing event group. This allows for nesting of processing instruction groups.	Reference	0..n	

ProcessingEventSchemeType

Extends

This object extends MaintainableType

Definition

A set of processing events maintained by an agency, and used in the processing data during development, cleaning, converting to variables, aggregating, and comparing. In addition to the standard name, label, and description allows for the inclusion of an existing ProcessingEventScheme by reference and descriptions of ProcessingEvent and ProcessingEventGroup either in-line or by reference.

Properties

Table ProcessingEventSchemeType. list of properties

Name	Datatype	Description	Cardinality
ProcessingEventSchemeName	Name	A name for the ProcessingEventScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ProcessingEventScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the ProcessingEventScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ProcessingEventSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ProcessingEventSchemeReference	ProcessingEventScheme	Reference to an existing ProcessingEventScheme for inclusion.	ReferenceType	0..n	
ProcessingEventGroupType	ProcessingEvent	ProcessingEvent described in the ProcessingEventScheme.	Type	0..n	
ProcessingEventGroup	ProcessingEvent	Description of a group of ProcessingEvent for administrative or conceptual purposes.	GroupType	0..n	

ProcessingInstructionGroupType

Extends

This object extends VersionableType

Definition

Describes a group of processing instructions for administrative or conceptual purposes, which may be hierarchical. In addition to the standard name, label, and description contains references to included Generation or General Instructions, and other ProcessingInstructionGroups.

Properties

Table ProcessingInstructionGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfProcessingInstructionCodeValue	CodeValue Type	A generic element for specifying a reason for a processing instruction group. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
ProcessingInstructionGroupName	Name	A name for the ProcessingInstructionGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ProcessingInstructionGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the ProcessingInstructionGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it	0..1

Name	Datatype	Description	Cardinality
		appears within the XML structure.	

Relationships

Table ProcessingInstructionGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group.		0..1	
Subject	InternationalCodeValueType	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
GeneralInstruction	GeneralInstruction	Reference to constituent General Instruction.		0..n	
GenerationInstruction	GeneralInstruction	Reference to constituent Generation Instruction.		0..n	
ProcessingInstruction	ProcessingInstruction	Reference to constituent processing instruction group. This allows for nesting of		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		processing instruction groups.			

ProcessingInstructionSchemeType

Extends

This object extends MaintainableType

Definition

A set of Processing Instructions (General and Generation Instructions) maintained by an agency. In addition to the standard name, label, and description allows for the inclusion of an existing ProcessingInstructionScheme by reference, and GeneralInstruction, GenerationInstruction, and ProcessingInstructionGroup descriptions either in-line or by reference.

Properties

Table ProcessingInstructionSchemeType. list of properties

Name	Datatype	Description	Cardinality
ProcessingInstructionSchemeName	Name	A name for the ProcessingInstructionScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ProcessingInstructionScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the ProcessingInstructionScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ProcessingInstructionSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ProcessingInstructionSchemeReference	ProcessingInstructionSchemeType	Reference to an existing ProcessingInstructionScheme for inclusion.		0..n	
GeneralInstruction	GeneralInstructionType	A General Instruction described in the Processing Instruction Scheme.		0..n	
GenerationInstruction	GenerationInstructionType	A Generation Instruction described in the Processing Instruction Scheme.		0..n	
ProcessingInstructionGroup	ProcessingInstructionGroupType	A group of ProcessingInstructions for administrative or conceptual purposes.		0..n	

QualityStatementSchemeType

Extends

This object extends MaintainableType

Definition

This scheme contains a set of quality statements referenced by the metadata at different points in the lifecycle. In addition to the name, label, and description of the scheme, the structure supports the inclusion of another QualityStatementScheme by reference and a set of QualityStatement descriptions either in-line or by reference.

Properties

Table QualityStatementSchemeType. list of properties

Name	Datatype	Description	Cardinality
QualityStatementSchemeName	Name	A name for the scheme. May be expressed in multiple languages. Repeat the element to express names with different content,	0..n

Name	Datatype	Description	Cardinality
		for example different names for different systems.	
Label	Label	A display label for the scheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the scheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table QualityStatementSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
QualityStatementSchemeReference	SchemeReference	Is a special type of an existing QualityStatementScheme by reference.		0..n	
QualityStatementType	QualityStatement	Type description of a QualityStatement. These are used by reference at various points in the lifecycle.		0..n	
QualityStatementGroup	QualityStatement	Group Type description of a group of QualityStatements.		0..n	

QuestionGroupType

Extends

This object extends VersionableType

Definition

Contains a group of Questions, which may be ordered or hierarchical. In addition to the name, label, and description of the group, the structure allows for defining the type of group using an optional controlled vocabulary, a reference to a defining universe or concept for the group, a subject classification for the group, and a listing of Questions and QuestionGroups in any order.

Properties

Table QuestionGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfQuestionGroup	CodeValueType	A brief textual identification of the group type. Supports the use of an external controlled vocabulary.	0..1
QuestionGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the question group. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the QuestionGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table QuestionGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		question group pertain.			
ConceptReference	Concept	Reference to the concept expressed by the Questions in this group.		0..1	
Subject	InternationalCodeValue	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.		0..n	
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
QuestionItemReference	QuestionItemType	Reference to constituent QuestionItem.		0..n	
QuestionGridReference	QuestionGridType	Reference to constituent QuestionGrid.		0..n	
QuestionBlockReference	QuestionBlockType	Reference to constituent QuestionBlock.		0..n	
QuestionGroupReference	QuestionGroupType	Reference to constituent QuestionGroup. This allows for nesting of QuestionGroups.		0..	

QuestionSchemeType

Extends

This object extends MaintainableType

Definition

Contains a set of QuestionItems, QuestionGrids, QuestionBlocks, and QuestionGroups. In addition to the standard name, label, and description of the Question Scheme, may contain another QuestionScheme by reference, a listing of Questions by type (in-line or by reference), and a listing of QuestionGroups (in-line or by reference).

Properties

Table QuestionSchemeType. list of properties

Name	Datatype	Description	Cardinality
QuestionSchemeName	Name	A name for the QuestionScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the scheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the QuestionScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table QuestionSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
QuestionScheme	QuestionScheme	Allows for the inclusion of another QuestionScheme by reference.		0..n	
QuestionItem	QuestionItemType	Describes a QuestionItem in-line.		0..n	
QuestionGrid	QuestionGridType	Describes a QuestionGrid in-line.		0..n	
QuestionBlock	QuestionBlockType	Describes a QuestionBlock in-line.		0..n	
QuestionGroup	QuestionGroupType	Contains a group of Questions, which may		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		be ordered or hierarchical.			

RecordLayoutGroupType

Extends

This object extends VersionableType

Definition

Contains a group of RecordLayout descriptions for administrative or conceptual purposes, which may be hierarchical. In addition to the standard name, label, and description, allows for a classification of the type of group, a reference to a Universe and Concept and inclusion of RecordLayouts and RecordLayoutGroups by reference, plus a flag indicating if the group is ordered.

Properties

Table RecordLayoutGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfRecordLayoutGroupCode	CodeValueType	A generic element for specifying a reason for a RecordLayoutGroup. Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
RecordLayoutGroupName	Name	A name for the RecordLayoutGroup. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the RecordLayoutGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the RecordLayoutGroup. May be expressed in multiple languages and	0..1

Name	Datatype	Description	Cardinality
		supports the use of structured content.	
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table RecordLayoutGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other elements that the data refer to, and to which any analytic results refer.		0..n	
ConceptReference	Concept	Reference to the concept represented by the record layout in this group.		0..1	
Subject	InternationalCodeValueType	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
RecordLayoutReference	RecordLayoutType	Reference to constituent RecordLayout.		0..n	
RecordLayoutGroupReference	RecordLayoutGroupType	Reference to constituent RecordLayoutGroup. This allows		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		for nesting of variable RecordLayoutGroups.			

RecordLayoutSchemeType

Extends

This object extends MaintainableType

Definition

A scheme containing a set of RecordLayouts describing the location of individual data items within the physical record and how to address them (locate and retrieve). RecordLayouts provide a link to the PhysicalStructure description and to individual variables or NCubes describing the data items.

Properties

Table RecordLayoutSchemeType. list of properties

Name	Datatype	Description	Cardinality
RecordLayoutSchemeName	Name	A name for the RecordLayoutScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the RecordLayoutScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the RecordLayoutScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table RecordLayoutSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
RecordLayoutSchemeReferenceType	RecordLayoutScheme	Refers to an existing RecordLayoutScheme for inclusion.		0..n	
BaseRecordLayoutType	RecordLayoutType	This is the head of a substitution group and may be replaced by any member of the group. Describes the contents and physical layout of a record of data. Different members of the substitution group support different storage formats as well as data records with and without NCube structures.		0..n	
RecordLayoutReferenceType	RecordLayoutType	Allows for the inclusion of a RecordLayout by reference.		0..n	
RecordLayoutGroupDescriptionType	RecordLayoutGroup	Describes a group of RecordLayout descriptions for administrative or conceptual purposes.		0..n	
RecordLayoutGroupReferenceType	RecordLayoutGroup	Allows for the inclusion of a RecordLayoutGroup by reference.		0..n	

RepresentedVariableGroupType

Extends

This object extends VersionableType

Definition

Contains a group of `RepresentedVariables`, which may describe an ordered or hierarchical relationship structure. `RepresentedVariables` may be grouped for a wide range of reasons including conceptual or universe grouping, usage, subject or keyword relationships, or other grouping reason that will assist in the management of a group of `RepresentedVariables`. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group.

Properties

Table `RepresentedVariableGroupType`. list of properties

Name	Datatype	Description	Cardinality
<code>TypeOfRepresentedVariableGroupType</code>	<code>EnumerationType</code>	A generic element for specifying a reason for a <code>RepresentedVariableGroup</code> . Note that this element can contain either a term from a controlled vocabulary list or a textual description.	0..1
<code>RepresentedVariableGroupName</code>	<code>Text</code>	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
<code>Label</code>	<code>Text</code>	A display label for the <code>RepresentedVariableGroup</code> . May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
<code>Description</code>	<code>StructuredStringType</code>	A description of the content and purpose of the <code>RepresentedVariableGroup</code> . May be expressed in multiple languages and supports the use of structured content.	0..1
<code>isOrdered</code>	<code>xs:boolean</code>	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table RepresentedVariableGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain. TypeOfObject should be set to Universe.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the objects in this group. TypeOfObject should be set to Concept.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		identify subject characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
RepresentedVariableReference	ReferencedVariable	Reference to constituent RepresentedVariable (from the substitution group). TypeOfObject should be set to RepresentedVariable.		0..n	
RepresentedVariableGroupReference	ReferencedVariableGroup	Reference to constituent RepresentedVariableGroup. This allows		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		for nesting of RepresentedVariableGroups. TypeOfObject should be set to RepresentedVariableGroup.			

RepresentedVariableSchemeType

Extends

This object extends MaintainableType

Definition

A set of RepresentedVariables managed by an agency. RepresentedVariables are the core reusable parts of a Variable. RepresentedVariable maps to the GSIM Represented Variable. In addition to the standard name, label, and description, allows for the inclusion of an existing RepresentedVariableScheme by reference and RepresentedVariables either in-line or by reference. RepresentedVariables may be grouped for management purposes.

Properties

Table RepresentedVariableSchemeType. list of properties

Name	Datatype	Description	Cardinality
RepresentedVariableSchemeName	Name	A name for the RepresentedVariableScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the RepresentedVariableScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the RepresentedVariableScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table RepresentedVariableSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
RepresentedVariableSchemeType	ReferencedVariableSchemeType	Indicates an existing RepresentedVariableScheme by reference. TypeOfObject should be set to RepresentedVariableScheme		0..n	
RepresentedVariableSchemeType	RepresentedVariableSchemeType	Describes a RepresentedVariable contained in the RepresentedVariableScheme. A RepresentedVariable contains a reference to the Concept and Universe (or ConceptualVariable) as well as the representation of the RepresentedVariable. Representation may be provided in-line or by reference to a managed representation. RepresentedVariables are the core reusable parts of a Variable. RepresentedVariable maps to the GSIM Represented Variable.		0..n	
RepresentedVariableSchemeType	RepresentedVariableGroupType	Indicates a description of a group of RepresentedVariables. RepresentedVariables may be grouped for a wide range of reasons including conceptual or		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		universe grouping, usage, subject or keyword relationships, or other grouping reason that will assist in the management of a group of RepresentedVariables.			

ResourcePackageType

Extends

This object extends MaintainableType

Definition

The Resource Package is a specialized structure which is intended to hold reusable metadata outside of the structures of a single StudyUnit or Group. For example this may be common methodological approaches bound in a DataCollection module, DataRelationship information bound in a LogicalProduct, or any maintainable scheme. The ResourcePackage is often used to manage and publish metadata that is used by StudyUnits or Groups by reference. Any maintainable object with the exception of a Group, StudyUnit or LocalHoldingPackage may be published in a Resource Package. Each maintainable object may be entered as either an in-line representation or by reference. Within each maintainable type the ordering of in-line or referenced content may be mixed. In addition the ResourcePackage contains self identifying information including a citation, abstract, authorization source, a universe reference, series statement, references to applicable quality statements, funding and budget information, purpose, coverage, other material, embargo, and the resource package archive (as opposed to an Archive module intended as the part of the published reusable content).

Properties

Table ResourcePackageType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	The citation for the ResourcePackage. DDI strongly recommends that at minimum a Title be provided.	0..1
TypeOfResourcePackage	CodeValueType	A brief description of the resource package type. Supports the use of a controlled vocabulary.	0..1
Abstract	StructuredStringType	An abstract of the ResourcePackage unit describing the nature and scope of the data collection, special	0..1

Name	Datatype	Description	Cardinality
		characteristics of its content. Note that detailed information on the purpose of the ResourcePackage and structured coverage information are to be entered in Purpose and Coverage. Abstract supports multiple language versions of the same content as well as optional formatting of the content.	
Purpose	StructuredStringType	The purpose of the ResourcePackage, why the ResourcePackage took place. This should include detailed information on the investigator's primary ResourcePackage questions or hypotheses as well as information on any legal basis for the data collection, such as laws requiring the collection of census data for apportionment purposes. Legal or other authorization should be provided in detail within AuthorizationSource. Purpose supports multiple language versions of the same content as well as optional formatting of the content.	0..1
OtherMaterial	OtherMaterialType	Contains references to other materials relevant to the ResourcePackage unit, whether in DDI form or external. Links can be made from items in this section to any identifiable element in the instance. Best practice is to include OtherMaterial inside the maintainable containing the objects	0..n

Name	Datatype	Description	Cardinality
		that are related to the OtherMaterial.	

Relationships

Table ResourcePackageType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizationSource	AuthorizationSource	Identifies the authorizing agency for the ResourcePackage and allows for the full text of the authorization (law, regulation, or other form of authorization). May be used to list authorizations from oversight committees and other regulatory agencies.		0..n	
UniverseReference	Universe	Reference to the universe statement from the universe scheme, describing the ResourcePackage of persons or other elements that are the object of research and to which any analytic results refer. Age, nationality, and residence commonly help to delineate a given universe, but any of a number of factors may be involved, such as sex, race, income,		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>veteran status, criminal convictions, etc. The universe may consist of elements other than persons, such as housing units, court cases, deaths, countries, etc. In general, it should be possible to tell from the description of the universe whether a given individual or element (hypothetical or real) is a member of the population under ResourcePackage. A universe may be described as "inclusive" or "exclusive". This ResourcePackage level reference is normally to the top level of the UniverseScheme.</p>			
SeriesStatement	SeriesStatement	<p>Type ResourcePackage, particularly one in a series, may be the result of two series merging into a single ResourcePackage. The new ResourcePackage belongs to both series. For example, Niger now fields the UNICEF Multiple</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		Indicators Cluster Survey (MICS) and the Demographic and Health Survey as a single merged instrument.			
QualityStatement	QualityScheme	Type reference to a QualityStatementScheme containing statements of quality related to the quality of the ResourcePackage methodology, metadata, or data. Quality statements may be related to external quality standards.		0..n	
FundingInformation	FundingInformationType	Contains details of the ResourcePackage unit's funding, including information about grants, agencies, etc.		0..n	
ProjectBudget	BudgetType	This describes the overall budget of the ResourcePackage. It can be repeated for distinct budget activities. It contains a structured description and one or more budget documents described by an OtherMaterial type.		0..n	
Coverage	CoverageType	Describes the coverage of the ResourcePackage unit. Detailed information on		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>Topical, Temporal, and Spatial Coverage is contained here. Note that Coverage at this level should be inclusive all lower level modules or section. Lower level descriptions serve to constrain coverage within the scope described here.</p>			
Embargo	EmbargoType	<p>Embargo information about the ResourcePackage unit. References to embargo information in this section can be made from individual variables.</p>		0..n	
ResourcePackage	ResourcePackage	<p>Archive of the information specific to the creation, maintenance, and archiving of the ResourcePackage provided either in-line or by reference. This packaging element differentiates this "Archive" from one being published as a product within a ResourcePackage.</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptualComponent	ConceptualComponentType	Allows for in-line entry of an ConceptualComponent.		0..n	
DataCollection	DataCollectionType	Allows for in-line entry of an DataCollection.		0..n	
BaseLogicalProduct	BaseLogicalProductType	Allows for in-line entry of any LogicalProduct. BaseLogicalProduct is a substitution group base.		0..n	
PhysicalDataProduct	PhysicalDataProductType	Allows for in-line entry of an PhysicalDataProduct.		0..n	
PhysicalInstance	PhysicalInstanceType	Allows for in-line entry of an PhysicalInstance.		0..n	
Archive	ArchiveType	Allows for in-line entry of an Archive.		0..n	
DDIProfile	DDIProfileType	Allows for in-line entry of an DDIProfile.		0..n	
Comparison	ComparisonType	Allows for in-line entry of an Comparison.		0..n	
OrganizationScheme	OrganizationSchemeType	Allows for inclusion of a OrganizationScheme.		0..n	
ConceptScheme	ConceptSchemeType	Allows for inclusion of a ConceptScheme.		0..n	
UniverseScheme	UniverseSchemeType	Allows for inclusion of a UniverseScheme.		0..n	
ConceptualVariableScheme	ConceptualVariableSchemeType	Allows for inclusion of a ConceptualVariableScheme.		0..n	
RepresentedVariableScheme	RepresentedVariableSchemeType	Allows for inclusion of a RepresentedVariableScheme.		0..n	
GeographicStructureScheme	GeographicStructureSchemeType	Allows for inclusion of a GeographicStructureScheme.		0..n	
GeographicLocationScheme	GeographicLocationSchemeType	Allows for inclusion of a GeographicLocationScheme.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
InterviewerInstructionScheme	InterviewerInstructionScheme	Inclusion of a InterviewerInstructionScheme.	SchemaType	0..n	
ControlConstructScheme	ControlConstructScheme	Inclusion of a ControlConstructScheme.	SchemaType	0..n	
QuestionScheme	QuestionScheme	Inclusion of a QuestionScheme.	SchemaType	0..n	
CategoryScheme	CategoryScheme	Inclusion of a CategoryScheme.	SchemaType	0..n	
CodeListScheme	CodeListScheme	Inclusion of a CodeListScheme.	SchemaType	0..n	
NCubeScheme	NCubeScheme	Inclusion of a NCubeScheme.	SchemaType	0..n	
VariableScheme	VariableScheme	Inclusion of a VariableScheme.	SchemaType	0..n	
PhysicalStructureScheme	PhysicalStructureScheme	Inclusion of a PhysicalStructureScheme.	SchemaType	0..n	
RecordLayoutScheme	RecordLayoutScheme	Inclusion of a RecordLayoutScheme.	SchemaType	0..n	
QualityStatementScheme	QualityStatementScheme	Inclusion of a QualityStatementScheme.	SchemaType	0..n	
InstrumentScheme	InstrumentScheme	Inclusion of a InstrumentScheme.	SchemaType	0..n	
ProcessingEventScheme	ProcessingEventScheme	Inclusion of a ProcessingEventScheme.	SchemaType	0..n	
ProcessingInstructionScheme	ProcessingInstructionScheme	Inclusion of a ProcessingInstructionScheme.	SchemaType	0..n	
ManagedRepresentationScheme	ManagedRepresentationScheme	Inclusion of a ManagedRepresentationScheme.	SchemaType	0..n	

StatementItem

Extends

This object extends ControlConstruct

Definition

A textual statement used in the Instrument. A substitution for ControlConstruct. In addition to the objects found in ControlConstruct StatementItem adds the text for display at the specified point within the instrument.

SubGroupType

Extends

This object extends VersionableType

Definition

The subgroup element is a container for a group that is a child of a higher-level group described in this module, but may also be a parent to other (subordinate) groups. A studyunit can be fully described, or just referenced, within its subgroup container. The purpose of sub-groups is described using the attributes which summarize relationships along the dimensions of time, panel, geography, instrument and language. These attributes allow the purpose to be machine-actionable, while the sub-group also includes an element for describing the purpose in human-readable format. A SubGroup contains a Citation, Abstract, information on authorization, the universe of the sub-group, series statement, quality statements, funding information, purpose, coverage, analysis units covered, kind of data, other materials, and embargo information. It then allows all maintainable structures within the StudyUnit to be expressed at the SubGroup level.

Properties

Table SubGroupType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	The citation for the sub-group. DDI strongly recommends that at minimum a Title be provided.	0..1
Abstract	StructuredStringType	An abstract of the sub-group unit describing the nature and scope of the data collection, special characteristics of its content. Note that detailed information on the purpose of the sub-group and structured coverage information are to be entered in Purpose and Coverage. Abstract supports multiple language versions of the same content as well as optional formatting of the content.	0..1
Purpose	StructuredStringType	The purpose of the sub-group, why the sub-	0..1

Name	Datatype	Description	Cardinality
		group took place. This should include detailed information on the investigator's primary sub-group questions or hypotheses as well as information on any legal basis for the data collection, such as laws requiring the collection of census data for apportionment purposes. Legal or other authorization should be provided in detail within AuthorizationSource. Purpose supports multiple language versions of the same content as well as optional formatting of the content.	
AnalysisUnit	CodeValueType	Allows the use of a controlled vocabulary to list all of the units of analysis used in the sub-group. Should be repeated to describe multiple units of analysis.	0..n
AnalysisUnitsCovered	InternationalStringType	A narrative of the units of analysis in the sub-group unit. Uses an InternationalString to support multiple languages.	0..1
OtherMaterial	OtherMaterialType	Contains references to other materials relevant to the sub-group unit, whether in DDI form or external. Links can be made from items in this section to any identifiable element in the instance. Best practice is to include OtherMaterial inside the maintainable containing the objects that are related to the OtherMaterial.	0..n
userDefinedGroupProperty	xs:string	Provides a user-defined sub-grouping property,	0..1

Name	Datatype	Description	Cardinality
		different from those supplied in other attributes.	
userDefinedGroupProperty	xs:string	Provides a value for the user-defined sub-group property supplied in userDefinedSubGroupProperty.	0..1
isInheritable	xs:boolean	Default is true, and allows for inheritance of all properties and modules, and the use of lower-level overrides. If set to false, inheritance is switched off for specific sub-groups.	0..1

Relationships

Table SubGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizationSource	AuthorizationSource	Identifies the authorizing agency for the sub-group and allows for the full text of the authorization (law, regulation, or other form of authorization). May be used to list authorizations from oversight committees and other regulatory agencies.		0..n	
UniverseReference	Universe	Reference to the universe statement from the universe scheme, describing the sub-group of persons or other elements that are the object of research and to which any		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>analytic results refer. Age, nationality, and residence commonly help to delineate a given universe, but any of a number of factors may be involved, such as sex, race, income, veteran status, criminal convictions, etc. The universe may consist of elements other than persons, such as housing units, court cases, deaths, countries, etc. In general, it should be possible to tell from the description of the universe whether a given individual or element (hypothetical or real) is a member of the population under sub-group. A universe may be described as "inclusive" or "exclusive". This sub-group level reference is normally to the top level of the UniverseScheme.</p>			
SeriesStatement	SeriesStatement	Type sub-group, particularly one in a series, may be the result of two		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		series merging into a single sub-group. The new sub-group belongs to both series. For example, Niger now fields the UNICEF Multiple Indicators Cluster Survey (MICS) and the Demographic and Health Survey as a single merged instrument.			
QualityStatement	QualityStatement	Type reference to a QualityStatement pertaining to the quality of the subgroup overall, metadata, or data to which it is associated. Quality statements may be related to external quality standards.		0..n	
QualityStatement	QualityStatementScheme	SchemeType to a QualityStatementScheme containing statements of quality related to the quality of the sub-group methodology, metadata, or data. Quality statements may be related to external quality standards.		0..n	
FundingInformation	FundingInformation	Contains details of the sub-group unit's funding, including information		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		about grants, agencies, etc.			
Coverage	CoverageType	Describes the coverage of the sub-group unit. Detailed information on Topical, Temporal, and Spatial Coverage is contained here. Note that Coverage at this level should be inclusive all lower level modules or section. Lower level descriptions serve to constrain coverage within the scope described here.		0..1	
KindOfData	KindOfDataType	Briefly describes the kind of data documented in the logical product(s) of a sub-group unit. Examples include survey data, census/ enumeration data, administrative data, measurement data, assessment data, demographic data, voting data, etc. Supports the use of an external controlled vocabulary.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
Embargo	EmbargoType	Embargo information about the sub-group unit. References to embargo information in this section can be made from individual variables.		0..n	
ConceptualComponent	ConceptualComponentType	ConceptualComponent applying to the sub-group as a whole.		0..n	
DataCollection	DataCollectionType	DataCollection applying to the sub-group as a whole.		0..n	
BaseLogicalProduct	BaseLogicalProductType	BaseLogicalProduct applying to the sub-group as a whole.		0..n	
PhysicalDataProduct	PhysicalDataProductType	PhysicalDataProduct applying to the sub-group as a whole.		0..n	
PhysicalInstance	PhysicalInstanceType	PhysicalInstance applying to the sub-group as a whole.		0..n	
Archive	ArchiveType	Archive applying to the sub-group as a whole.		0..n	
DDIProfile	DDIProfileType	DDIProfile applying to the sub-group as a whole.		0..n	
Comparison	ComparisonType	In-line Comparison of differences between related objects in different study units or due to versioning.		0..n	
StudyUnit	StudyUnitType	A StudyUnit within the SubGroup provided in-line.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
SubGroup	SubGroupType	A description of study units comprising a sub-sub-group within the main SubGroup.		0..n	
time	TimeGroupCodeType	Indicates how all members of the sub-group are related along the dimension of time (for example single occurrence, multiple occurrence, etc.).		0..1	
captureInstrument	InstrumentGroupCodeType	Indicates how all members of the sub-group are related in terms of the instruments used to collect data (single, multiple, etc.).		0..1	
panel	PanelGroupCodeType	Indicates how all members of the sub-group are related in terms of type of panel (single, rolling, etc.).		0..1	
geography	GeographyGroupCodeType	Indicates how all members of the sub-group are related along the dimension of geography.		0..1	
dataProduct	DataProductGroupCodeType	Indicates how all members of the sub-group are related in terms of physical data products in relation to data collection efforts.		0..1	
languageRelation	LanguageGroupCodeType	Indicates how all members		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		of the subgroup are related in terms of language relationships such as parallel content in multiple languages, translations (full or partial), etc.			

TextDomainType

Extends

This object extends TextRepresentationBaseType

Definition

A response domain capturing a textual response. Contains the equivalent content of a TextRepresentation including the length of the text and restriction of content using a regular expression. Adds a set of elements available to all Response Domains; Label, Description, OutParameter, designation of response cardinality, and a declaration of an offset date for the data content. Has an equivalent TextDomainReference which references a ManagedTextRepresentation.

Properties

Table TextDomainType. list of properties

Name	Datatype	Description	Cardinality
Label	Label	A display label for the domain. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the domain. May be expressed in multiple languages and supports the use of structured content.	0..1
OutParameter	ParameterType	Allows for the response to be bound to one of the QuestionItem's OutParameters, so the collected information can be used elsewhere,	0..1

Name	Datatype	Description	Cardinality
		for example as inputs to subsequent questions in an Instrument or to a GenerationInstruction. If multiple responses are possible, this would represent and ordered array of the responses.	
ContentDateOffset	ContentDateOffset	Identifies the difference between the date applied to the data as a whole and this specific item such as previous year's income or residence 5 years ago.	0..1

Relationships

Table TextDomainType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ResponseCardinality	ResponseCardinality	the designation of the minimum and maximum number of responses allowed for this response domain.		0..1	

UniverseGroupType

Extends

This object extends VersionableType

Definition

Contains a group of Universes, which may describe an ordered or hierarchical relationship structure. Specifies the purpose of the group, a name, label, and description of the group, its relationship to a specific universe or concept, and lists the members of the group. Use primarily for administrative purposes. If structuring nesting of Universes to represent a hierarchical set of universes use the SubUniverseClass found in Universe.

Properties

Table UniverseGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfUniverseGroup	CodeValueType	A generic element for specifying a reason for a UniverseGroup.	0..1

Name	Datatype	Description	Cardinality
		Note that this element can contain either a term from a controlled vocabulary list or a textual description.	
UniverseGroupName	Name	A name for the group. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the UniverseGroup. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the UniverseGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table UniverseGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GroupingUniverseReference	Reference	Reference to the universe statement describing the persons or other objects to which the contents of this group pertain. This is not a university contained by the group but		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		one that helps define the purpose and application of the group.			
GroupingConceptReference	Reference	Reference to the concept expressed by the objects in this group. Note that this is not a formal linking of a concept to a university such as found in a ConceptualVariable. It is a means of helping to define the context within which this ConceptGroup is relevant.		0..1	
Subject	InternationalCodeValueType	Subjects are listed for this group, it is strongly recommended that the subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		characteristics of a reusable group of objects.			
Keyword	InternationalCodeValue	Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.		0..n	
UniverseReference	Universe	Reference to constituent Universe (from the substitution group). TypeOfObject should be set to Universe.		0..n	
UniverseGroupReference	UniverseGroup	Reference to constituent UniverseGroup. This allows for nesting of UniverseGroups.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		TypeOfObject should be set to UniverseGroup.			

UniverseSchemeType

Extends

This object extends MaintainableType

Definition

Contains a set of Universe descriptions that may be organized into sub-universe structures. A Universe may also be known as a population. A Universe describes the "object" of a Data Element Concept or Data Element as defined by ISO/IEC 11179.

Properties

Table UniverseSchemeType. list of properties

Name	Datatype	Description	Cardinality
UniverseSchemeName	Name	A name for the UniverseScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the UniverseScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the UniverseScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table UniverseSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseSchemeReferenceSchemeType	UniverseSchemeType	Allows the inclusion of a UniverseScheme by reference.		0..n	
Universe	Universe	Describes a universe (population, object). A universe may be organized into hierarchical sub-universe classes.		0..n	
UniverseGroup	UniverseGroupType	Describes a group of universes (populations, objects) for administrative purposes.		0..n	

VariableGroupType

Extends

This object extends VersionableType

Definition

Contains a group of Variables, which may be ordered or hierarchical. In addition to the name, label, and description of the group, the structure allows for defining the type of group using an optional controlled vocabulary, a reference to a defining universe or concept for the group, a subject classification for the group, and a listing of Variables and VariableGroups in any order.

Properties

Table VariableGroupType. list of properties

Name	Datatype	Description	Cardinality
TypeOfVariableGroup	CodeValueType	A brief textual identification of the group type. Supports the use of an external controlled vocabulary.	0..1
VariableGroupName	Name	A name for the group. May be expressed in multiple languages.	0..n

Name	Datatype	Description	Cardinality
		Repeat the element to express names with different content, for example different names for different systems.	
Label	Label	A display label for the variable group. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the VariableGroup. May be expressed in multiple languages and supports the use of structured content.	0..1
isOrdered	xs:boolean	If set to "true" indicates that the content of the group is ordered as it appears within the XML structure.	0..1

Relationships

Table VariableGroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
UniverseReference	Universe	Reference to the universe statement describing the persons or other objects to which the contents of this variable group pertain.		0..n	
ConceptReference	Concept	Reference to the concept expressed by the Variables in this group.		0..1	
Subject	InternationalCodeValueTypes	Subjects are listed for this group, it is strongly recommended that the		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		<p>subjects listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of subject at the group level allows for associating objects as a type of subject based group or to identify subject characteristics of a reusable group of objects.</p>			
Keyword	InternationalCodeValue	<p>Keywords are listed for this group, it is strongly recommended that the keywords listed also be found in the TopicalCoverage element for the parent packaging element when this group is included directly or by reference in a module containing a coverage element. Use of keyword at the group level allows for associating</p>		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		objects as a type of keyword based group or to identify keyword characteristics of a reusable group of objects.			
VariableReference	VariableType	Reference to constituent Variable.		0..n	
VariableGroupReference	VariableGroupType	Reference to constituent VariableGroup. This allows for nesting of VariableGroups.		0..n	

VariableSchemeType

Extends

This object extends MaintainableType

Definition

Contains a set of Variables and VariableGroups. In addition to the standard name, label, and description of the Variable Scheme, may contain another VariableScheme by reference, a listing of Variables (in-line or by reference), and a listing of VariableGroups (in-line or by reference).

Properties

Table VariableSchemeType. list of properties

Name	Datatype	Description	Cardinality
VariableSchemeName	Name	A name for the VariableScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the scheme. May be expressed in multiple languages. Repeat for labels with different	0..n

Name	Datatype	Description	Cardinality
		content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the VariableScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table VariableSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
VariableSchemeReference	VariableScheme	Allows for the inclusion of another VariableScheme by reference.		0..n	
Variable	VariableType	Describes a Variable in-line. This is the applied expression of a data item within a data set.		0..n	
VariableGroup	VariableGroupType	Contains a group of Variables, which may be ordered or hierarchical.		0..n	

ArchiveType

Extends

This object extends MaintainableType

Definition

A maintainable module containing information related to the archiving (longer term access and/or preservation) of the data and metadata. Note that in DDI Archive refers to a set of processes rather than a location. Archive contents are split into archive specific information (information that is related to the organization or individual performing archival activities) and information that reflects the processes that the metadata or data have undergone which should be maintained along with other content if the metadata changes locations. Two key pieces of information held within the Archive are the Organization Scheme (containing records of Organizations, Individuals, and the Relationships

between them) and the Lifecycle. The Lifecycle can be used to document any significant event in the life of the data and metadata. It is a series of Lifecycle Events which note the date of the event, what took place, and who was involved. The module is described by a name, label, and description, archive specific information, an Organization Scheme (in-line or by reference), Lifecycle Information, and Other Materials related to the objects within the Archive Module. Archive Specific information covers details regarding individual items and collections within the archive as well as access conditions, funding and budget information, and quality statements. The reference to the Organization or individual acting as the archive as well as a coverage statement regarding the archive collection is found here.

Properties

Table ArchiveType. list of properties

Name	Datatype	Description	Cardinality
ArchiveModuleName	Name	A name for the Archive module. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the Archive module. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the Archive module. May be expressed in multiple languages and supports the use of structured content.	0..1
OtherMaterial	OtherMaterialType	Material related to this item from the archive's perspective.	0..n

Relationships

Table ArchiveType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ArchiveSpecific	ArchiveSpecific	Contains metadata specific to a particular archive's holding.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
OrganizationScheme	OrganizationScheme	A type of the organizations related to the DDI instance. This includes information on the archives responsible for creating and maintaining the instance. All agencies must be defined as an Organization in an Archive schema (which can be defined inline or resolved externally).		0..n	
LifecycleInformation	LifecycleInformation	Information contains the description of a set of events in the life cycle of the data. It may be extended by specific users.		0..1	

CategorySchemeType

Extends

This object extends MaintainableType

Definition

A scheme containing a set of Categories managed by an agency. These are used to manage category definitions used as a domain for data element and basic content for a category representations. In addition to the name, label, and description of the scheme, the structure supports the inclusion of another CategoryScheme by reference, a set of Category descriptions either in-line or by reference, and the description of a CategoryGroup either in-line or by reference.

Properties

Table CategorySchemeType. list of properties

Name	Datatype	Description	Cardinality
CategorySchemeName	Name	A name for the scheme. May be expressed in multiple languages. Repeat the element to express names	0..n

Name	Datatype	Description	Cardinality
		with different content, for example different names for different systems.	
Label	Label	A display label for the scheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the scheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table CategorySchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategoryScheme	CategoryScheme	Types for inclusion by reference of other category schemes.		0..n	
Category	Category	A description of a particular category or response. OECD Glossary of Statistical Term Generic term for items at any level within a classification, typically tabulation categories, sections, subsections, divisions, subdivisions, groups, subgroups, classes and subclasses.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
CategoryGroup	CategoryGroup	Allows categories to be grouped with or without hierarchical structure.		0..n	
CategoryGroupReference	CategoryGroup	Inclusion of a CategoryGroup that allows categories to be grouped with or without hierarchical structure by reference. TypeOfObject should be set to Category.		0..	

CodeListSchemeType

Extends

This object extends MaintainableType

Definition

A scheme containing sets of CodeLists that are used by reference to define code representations used by value representations and response domains. In addition to the standard name, label, description, the CodeListScheme may contain another CodeListScheme by reference, CodeLists either in-line or by reference, and CodeListGroups either in-line or by reference.

Properties

Table CodeListSchemeType. list of properties

Name	Datatype	Description	Cardinality
CodeListSchemeName	Name	A name for the CodeListScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the CodeListScheme. May be expressed in multiple languages. Repeat for labels with different content, for example,	0..n

Name	Datatype	Description	Cardinality
		labels with differing length limitations.	
Description	StructuredStringType	A description of the content and purpose of the CodeListScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table CodeListSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CodeListScheme	CodeListScheme	Allows for the inclusion of another CodeListScheme by reference.		0..n	
CodeList	CodeList	A structure used to associate a list of code values to specified categories. May be flat or hierarchical. A maintainable CodeList listed in the CodeListScheme in-line.		0..n	
CodeListGroup	CodeListGroup	Type description of a group of CodeLists for conceptual, administrative or other purposes.		0..n	

ComputationItem

Extends

This object extends ControlConstruct

Definition

A form of control construct providing a code and assigning a variable to hold value of the code as used for computation in control construct flow. Member of the ControlConstruct substitution group.

Properties

Table ComputationItem. list of properties

Name	Datatype	Description	Cardinality
CommandCode		The Code which contains the value of the variable in programming terms.	0..1

Relationships

Table ComputationItem. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AssignedVariableReference	VariableType	A reference to a variable to which the associated value in the Code element is assigned.		0..1	

ConceptSchemeType

Extends

This object extends MaintainableType

Definition

A comprehensive list of the concepts measured by the data that are being documented that is maintained by an agency. In addition to the standard name, label, and description, allows for the inclusion of an existing ConceptScheme by reference, assignment of a controlled vocabulary for the scheme, inclusion of descriptions for Concepts and ConceptGroups in-line or by reference.

Properties

Table ConceptSchemeType. list of properties

Name	Datatype	Description	Cardinality
ConceptSchemeName	Name	A name for the ConceptScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ConceptScheme. May be expressed in multiple	0..n

Name	Datatype	Description	Cardinality
		languages. Repeat for labels with different content, for example, labels with differing length limitations.	
Description	StructuredStringType	A description of the ConceptScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ConceptSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptScheme	ConceptScheme	Reference to an existing ConceptScheme for inclusion.		0..n	
Vocabulary	VocabularyType	Identifies and describes the vocabulary used to create the concept scheme.		0..1	
Concept	Concept	Describes an individual concept.		0..n	
ConceptGroup	ConceptGroupType	Allows for grouping of concepts for administrative or conceptual purposes; groups may have a hierarchical structure.		0..n	

ConceptualComponentType

Extends

This object extends MaintainableType

Definition

A maintainable module for the conceptual components of the study or group of studies. Conceptual components include the objects used to describe the concepts the study is examining, the universe (population) and sub-universes those concepts to which they are related, and the geographic

structures and locations wherein those populations reside. Concepts, and ConceptualVariables (containing a concept linked to a universe) provide an abstract view of what is being measured by questions or other forms of data capture, and the variables which are used to describe the data that will be collected. Universe describes the populations (objects) about whom information is sought. GeographicStructure and GeographicLocation specify the geographical locations of those objects and the structural relationships between locations of different types, e.g. the relationship of a city to the state that contains it. In addition to the standard name, label, and description, ConceptualComponent contains ConceptSchemes, ConceptualVariableSchemes, UniverseSchemes, GeographicStructureSchemes, and GeographicLocationSchemes both in-line and by reference.

Properties

Table ConceptualComponentType. list of properties

Name	Datatype	Description	Cardinality
ConceptualComponentModuleName	Name	A name for the ConceptualComponentModule. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ConceptualComponentModule. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the ConceptualComponentModule. May be expressed in multiple languages and supports the use of structured content.	0..1
OtherMaterial	OtherMaterialType	Provides information about external resources related to the conceptual components described in this module.	0..n

Relationships

Table ConceptualComponentType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Coverage	CoverageType	Provides information about the		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		topical, spatial, and temporal coverage of the conceptual components included in this module.			
ConceptScheme	ConceptScheme	Contains a set of the concepts measured by the data that are being documented.		0..n	
UniverseScheme	UniverseScheme	Contains a set of the Universes and sub-universes of the data that are being documented.		0..n	
ConceptualVariableScheme	ConceptualVariableScheme	Contains a set of ConceptualVariables.		0..n	
GeographicStructureScheme	GeographicStructureScheme	Contains a collection of geographic structures.		0..n	
GeographicLocationScheme	GeographicLocationScheme	Contains a collection of geographic locations.		0..n	

ConceptualVariableSchemeType

Extends

This object extends MaintainableType

Definition

A comprehensive list of the ConceptualVariables measured by the data that are being documented and/or maintained by an agency. In addition to the standard name, label, and description, allows for the inclusion of an existing ConceptualVariableScheme by reference, the inclusion of descriptions for ConceptualVariables and ConceptualVariableGroups in-line or by reference.

Properties

Table ConceptualVariableSchemeType. list of properties

Name	Datatype	Description	Cardinality
ConceptualVariableSchemeName	Name	A name for the ConceptualVariableScheme.	0..n

Name	Datatype	Description	Cardinality
		May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	
Label	Label	A display label for the ConceptualVariableScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the ConceptualVariableScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table ConceptualVariableSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ConceptualVariableSchemeReference	ConceptualVariableScheme	ReferenceType an existing ConceptualVariableScheme for inclusion. TypeOfObject should be set to a ConceptualVariableScheme.	ConceptualVariableScheme	0..n	
ConceptualVariable	ConceptualVariable	Describes a ConceptualVariable which provides the link between a concept to a specific universe (object) that defines this as a ConceptualVariable.	ConceptualVariable	0..n	
ConceptualVariableGroup	ConceptualVariable	AllGroupType for grouping of ConceptualVariables for	ConceptualVariable	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		administrative or conceptual purposes; groups may have a hierarchical structure.			

ControlConstructSchemeType

Extends

This object extends MaintainableType

Definition

A set of control constructs maintained by an agency and used in the instrument or computational instruction. ControlConstructs describe the ordering and flow of questions within an instrument or information through a process. In addition to the standard name, label and description can include an existing ControlConstructScheme by reference and describe individual Control Constructs of varying types.

Properties

Table ControlConstructSchemeType. list of properties

Name	Datatype	Description	Cardinality
ControlConstructSchemeName	Name	A name for the ControlConstructScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the ControlConstructScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the ControlConstructScheme. May be expressed in multiple languages and	0..1

Name	Datatype	Description	Cardinality
		supports the use of structured content.	

Relationships

Table ControlConstructSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
ControlConstructSchemeReference	ControlConstructScheme	Provides Type for inclusion by reference of external Control Construct Schemes.		0..n	
ControlConstructGroup	ControlConstruct	Extensible structure for control elements used in describing flow logic within the instrument.: IfThenElse, RepeatUntil, RepeatWhile, Loop, Sequence, ComputationItem, StatementItem, and QuestionConstruct.		0..n	
ControlConstructGroup	ControlConstruct	Group Type description of a group of ControlConstructs.		0..n	

DataCollectionType

Extends

This object extends MaintainableType

Definition

A maintainable module containing information on activities related to data collection/capture and the processing required for the creation a data product. This section covers the methodologies, events, data sources, collection instruments and processes which comprise the collection/capture and processing of data. Methodology covers approaches used for selecting samples, administering surveys, timing repeated data collection activities. Collection Event specifies data sources, collection instruments, questions and question flow, and data processing activities. This module houses

Processing Instructions (General Instructions and Generation Instructions) which may be referenced by variables or comparison maps. The module is described by a name, label, and description, provides spatial, temporal, and topical coverage information on the activities covered by the module, and references to external material related to objects in the module using OtherMaterial. The content of the module is organized within the following sections; Methodology, Collection Event, QuestionScheme (in-line or by reference), ControlConstructScheme (in-line or by references) containing the flow of a questionnaire or data capture process, InterviewerInstructionScheme (in-line or by reference), InstrumentScheme (in-line or by reference) and ProcessingEventScheme (in-line or by reference).

Properties

Table DataCollectionType. list of properties

Name	Datatype	Description	Cardinality
DataCollectionModuleName	Name	A name for the DataCollection module. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the DataCollection module. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the DataCollection module. May be expressed in multiple languages and supports the use of structured content.	0..1
OtherMaterial	OtherMaterialType	Contains references to other materials relevant to the data collection module, whether in DDI form or external. Links can be made from items in this section to any identifiable element in the instance. Best practice is to include OtherMaterial inside the maintainable containing the objects that are related to the OtherMaterial.	0..n

Relationships

Table DataCollectionType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Coverage	CoverageType	Documents the spatial, temporal, and/or topical coverage of the data collection module.		0..1	
Methodology	MethodologyType	Metadata regarding the methodology of the data collection process including, determining repetition patterns, sampling, collection modes, etc.		0..1	
CollectionEvent	CollectionEventType	Type specific event in the collection or capture process.		0..n	
QuestionScheme	QuestionSchemeType	Describes a set of questions used for data collection.		0..n	
ControlConstruct	ControlConstructSchemeType	Type a set of control constructs used to produce the flow pattern of a questionnaire or steps in a data capture process.		0..n	
InterviewerInstructions	InterviewerInstructionsSchemeType	Type of instructions used by the interviewer (respondent in the case of a self administered questionnaire) or instrument to support		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		the accurate collection or capture of data.			
InstrumentScheme	InstrumentScheme	DDIType describes a set of instruments used to collect or capture data.		0..n	
ProcessingEventScheme	ProcessingEventScheme	DDIType describes a set of processing events used to collect or capture data and process it during or post collection. May include the processes used to capture data in non-questionnaire data capture.		0..n	
ProcessingInstructionScheme	ProcessingInstructionScheme	DDIType describes a set of processing instructions used to collect or capture data and process it during or post collection. May include the processing instructions used to capture data in non-questionnaire data capture.		0..n	

DDIInstanceType

Extends

This object extends MaintainableType

Definition

DDIInstance is the top-level publication wrapper for any DDI document. All DDI content published as XML (with the exception of a Fragment intended for transmission) has DDIInstance as its top level structure. In addition to a citation and coverage statement for the instance, the DDIInstance can contain a Group, ResourcePackage, LocalHoldingPackage or StudyUnit. Additional OtherMaterial content may be added but in general OtherMaterial should be listed in the maintainable object containing the objects the OtherMaterial is related to. The instance can provide an applicable DDIPProfile either in-line or by reference and can contain overall translation information.

Properties

Table DDIInstanceType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	Citation for the Instance. Note that the citation is optional, because the DDI Instance may contain only reusable component pieces of metadata sets, which are not directly concerned with a single study or studies.	0..1
OtherMaterial	OtherMaterialType	External materials related to the DDI Instance that have not been included in any maintainables contained within the instance.	0..n

Relationships

Table DDIInstanceType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
Coverage	CoverageType	This element contains descriptions of temporal, geographic and topical coverage. At the instance level these descriptions should be inclusive of the coverage of all modules in the instance. The element is available within individual modules and can be used to refine the coverage to that of the individual module.		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
Group	GroupType	A publication of a Group of StudyUnits in-line.		0..n	
ResourcePackage	ResourcePackageType	A publication of a set of maintainables (modules or schemes) intended for reuse between studies in-line.		0..n	
LocalHoldingPackage	LocalHoldingPackageType	A publication package containing a deposited publication as well as local value added or processing information in-line.		0..n	
StudyUnit	StudyUnitType	A publication of a study unit representing the purpose, background, development, data capture, and data products related to a study in-line.		0..n	
DDIProfile	DDIProfileType	A DDIProfile applicable to the instance.		0..n	
TranslationInformation	TranslationType	TranslationInformation contains information about the translation of the content of the DDI Instance. This includes human-readable information about which language(s) are involved in the translation.		0..1	

GeographicLocationSchemeType

Extends

This object extends MaintainableType

Definition

A Scheme containing a set of geographic locations, each for a single Geography type, e.g., States, OR Counties, OR Countries, etc. The geographic location element has to be repeated for each geography. In addition to the standard name, label, and description, allows for the inclusion of an existing GeographicLocationScheme by reference and GeographicLocation descriptions either in-line or by reference.

Properties

Table GeographicLocationSchemeType. list of properties

Name	Datatype	Description	Cardinality
GeographicLocationSchemeName	Name	A name for the GeographicLocationScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the GeographicLocationScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the GeographicLocationScheme. May be expressed in multiple languages and supports the use of Location content.	0..1

Relationships

Table GeographicLocationSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLocationSchemeReference	GeographicLocationSchemeType	Include an existing GeographicLocationScheme by reference.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicLocation	GeographicLocation	Description of a GeographicLocation.		0..n	
GeographicLocation	GeographicLocation	Description of a group of GeographicLocation.		0..n	

GeographicStructureSchemeType

Extends

This object extends MaintainableType

Definition

Contains information on the hierarchy of the geographic structure. In addition to the standard name, label, and description identifies one or more AuthorizedSources for the level codes/descriptions provided and a set of GeographicLevels in-line or by reference.

Properties

Table GeographicStructureSchemeType. list of properties

Name	Datatype	Description	Cardinality
GeographicStructureSchemeName	Name	A name for the GeographicStructure. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the GeographicStructure. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the GeographicStructure. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table GeographicStructureSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
GeographicStructureSchemeReference	GeographicStructureScheme	The inclusion of an existing GeographicStructureScheme in the parent scheme by reference.	GeographicStructureScheme	0..n	
GeographicStructureGroupType	GeographicStructure	Used type to describe any level of geography, including overall coverage and each of the lower levels.		0..n	
GeographicStructureGroupType	GeographicStructure	Inherited description of a group of GeographicStructure.		0..n	

GroupType

Extends

This object extends MaintainableType

Definition

A primary packaging and publication module within DDI containing a Group of StudyUnits. The Group structure allows metadata regarding multiple study units to be published as a structured entity. Studies may be grouped "by design" such as a repeated study with intended areas of commonality between each study, or "ad hoc" where studies are grouped for applied or administrative reasons. When grouping is done "by design", such as within a longitudinal study, common metadata such as shared methodology, common category schemes, etc. may be moved up from the individual studies into the Group and inherited by all the members of the group. Inherited metadata may be over-riden at the lower levels. Inheritance may be turned "off" for groups of study units done on an ad-hoc basis, such as a set of studies used for a particular activity such as instruction. The purpose of groups is described using the attributes which summarize relationships along the dimensions of time, panel, geography, instrument and language. These attributes allow the purpose to be machine-actionable, while the group also includes an element for describing the purpose in human-readable format. As a publication package Group contains a Citation, Abstract, information on authorization, the universe of the group, series statement, quality statements, ex-post evaluation material, funding and budget, purpose, coverage, analysis units covered, kind of data, other materials, a list of required resource packages and embargo information. It then allows all maintainable structures within the StudyUnit to be expressed at the Group level along with individual StudyUnits. StudyUnits may also be grouped into SubGroups allowing for infinite nesting of StudyUnits.

Properties

Table GroupType. list of properties

Name	Datatype	Description	Cardinality
Citation	CitationType	The citation for the group. DDI strongly recommends that at minimum a Title be provided.	0..1
Abstract	StructuredStringType	An abstract of the group unit describing the nature and scope of the data collection, special characteristics of its content. Note that detailed information on the purpose of the group and structured coverage information are to be entered in Purpose and Coverage. Abstract supports multiple language versions of the same content as well as optional formatting of the content.	0..1
Purpose	StructuredStringType	The purpose of the group, why the group took place. This should include detailed information on the investigator's primary group questions or hypotheses as well as information on any legal basis for the data collection, such as laws requiring the collection of census data for apportionment purposes. Legal or other authorization should be provided in detail within AuthorizationSource. Purpose supports multiple language versions of the same content as well as optional formatting of the content.	0..1
AnalysisUnit	CodeValueType	Allows the use of a controlled vocabulary to list all of the units	0..n

Name	Datatype	Description	Cardinality
		of analysis used in the group. Should be repeated to describe multiple units of analysis.	
AnalysisUnitsCovered	InternationalStringType	A narrative of the units of analysis in the group unit. Uses an InternationalString to support multiple languages.	0..1
OtherMaterial	OtherMaterialType	Contains references to other materials relevant to the group unit, whether in DDI form or external. Links can be made from items in this section to any identifiable element in the instance. Best practice is to include OtherMaterial inside the maintainable containing the objects that are related to the OtherMaterial.	0..n
userDefinedGroupProperty	xs:string	Provides a user-defined grouping property, different from those supplied in other attributes.	0..1
userDefinedGroupProperty	xs:string	Provides a value for the user-defined group property supplied in userDefinedGroupProperty.	0..1
isInheritable	xs:boolean	Default is true, and allows for inheritance of all properties and modules, and the use of lower-level overrides. If set to false, inheritance is switched off for specific groups.	0..1

Relationships

Table GroupType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
AuthorizationSource	AuthorizationSource	Identifies the authorizing agency for the group and		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		allows for the full text of the authorization (law, regulation, or other form of authorization). May be used to list authorizations from oversight committees and other regulatory agencies.			
UniverseReference	Universe	Reference to the universe statement from the universe scheme, describing the group of persons or other elements that are the object of research and to which any analytic results refer. Age, nationality, and residence commonly help to delineate a given universe, but any of a number of factors may be involved, such as sex, race, income, veteran status, criminal convictions, etc. The universe may consist of elements other than persons, such as housing units, court cases, deaths, countries, etc. In general, it should be		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		possible to tell from the description of the universe whether a given individual or element (hypothetical or real) is a member of the population under group. A universe may be described as "inclusive" or "exclusive". This group level reference is normally to the top level of the UniverseScheme.			
SeriesStatement	SeriesStatement	Type group, particularly one in a series, may be the result of two series merging into a single group. The new group belongs to both series. For example, Niger now fields the UNICEF Multiple Indicators Cluster Survey (MICS) and the Demographic and Health Survey as a single merged instrument.		0..n	
QualityStatement	QualityStatement	Type reference to a Quality Statement pertaining to the quality of the group overall, metadata, or data to which it is associated. Quality		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		statements may be related to external quality standards.			
QualityStatementSchemeType	QualityStatementSchemeType	SchemeType containing statements of quality related to the quality of methodologies, metadata, or data. Quality statements may be related to external quality standards.		0..n	
ExPostEvaluationType	ExPostEvaluationType	A type evaluation of the group process, often taking place after the completion of the group. These may include issues such as timing of the group, sequencing issues, cost/budget issues, relevance, institutional or legal arrangements etc. of the group. If the group is part of a series or group (i.e., a single wave in a longitudinal group) this may include evaluation of earlier waves which resulted in changes to the current wave.		0..n	
FundingInformationType	FundingInformationType	Contains details of the group unit's funding, including		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		information about grants, agencies, etc.			
ProjectBudget	BudgetType	This describes the overall budget of the group. It can be repeated for distinct budget activities. It contains a structured description and one or more budget documents described by an OtherMaterial type.		0..n	
Coverage	CoverageType	Describes the coverage of the group unit. Detailed information on Topical, Temporal, and Spatial Coverage is contained here. Note that Coverage at this level should be inclusive all lower level modules or section. Lower level descriptions serve to constrain coverage within the scope described here.		0..1	
KindOfData	KindOfDataType	Briefly describes the kind of data documented in the logical product(s) of a group unit. Examples include survey		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		data, census/ enumeration data, administrative data, measurement data, assessment data, demographic data, voting data, etc. Supports the use of an external controlled vocabulary.			
RequiredResourcePackages	ResourcePackages	Specifies the reference the ResourcePackages required to resolve the group. This list is informational and assists in creating full transmissions of metadata or creating archival packages. Primarily used after the instance is relatively stable and published.	Type	0..1	
Embargo	EmbargoType	Embargo information about the group unit. References to embargo information in this section can be made from individual variables.		0..n	
ConceptualComponent	ConceptualComponent	Conceptual Component applying to the group as a whole.	Component	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
DataCollection	DataCollectionType	DataCollection applying to the group as a whole.		0..n	
BaseLogicalProduct	BaseLogicalProductType	LogicalProduct applying to the group as a whole.		0..n	
PhysicalDataProduct	PhysicalDataProductType	PhysicalDataProduct applying to the group as a whole.		0..n	
PhysicalInstance	PhysicalInstanceType	PhysicalInstance applying to the group as a whole.		0..n	
Archive	ArchiveType	Archive applying to the group as a whole.		0..n	
DDIProfile	DDIProfileType	DDIProfile applying to the group as a whole.		0..n	
Comparison	ComparisonType	In-line Comparison of differences between related objects in different study units or due to versioning.		0..n	
StudyUnit	StudyUnitType	A StudyUnit within the Group provided in-line.		0..n	
SubGroup	SubGroupType	A description of study units comprising a sub-group within the main Group.		0..n	
time	TimeGroupCodeType	Indicates how all members of the group are related along the dimension of time (for example single occurrence, multiple		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		occurrence, etc.).			
captureInstrument	InstrumentGroupCode	Indicates how all members of the group are related in terms of the instruments used to collect data (single, multiple, etc.).		0..1	
panel	PanelGroupCode	Indicates how all members of the group are related in terms of type of panel (single, rolling, etc.).		0..1	
geography	GeographyGroupCode	Indicates how all members of the group are related along the dimension of geography.		0..1	
dataProduct	DataProductGroupCode	Indicates how all members of the group are related in terms of physical data products in relation to data collection efforts.		0..1	
languageRelation	LanguageGroupCode	Indicates how all members of the group are related in terms of language relationships such as parallel content in multiple languages, translations (full or partial), etc.		0..1	

InstrumentSchemeType

Extends

This object extends MaintainableType

Definition

Describes a set of instruments maintained by an agency. In addition to the standard name, label, and description, allows for the inclusion of an existing InstrumentScheme by reference and contains Instruments and InstrumentGroups inline an by reference.

Properties

Table InstrumentSchemeType. list of properties

Name	Datatype	Description	Cardinality
InstrumentSchemeName	Name	A name for the InstrumentScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the InstrumentScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the InstrumentScheme. May be expressed in multiple languages and supports the use of structured content.	0..1

Relationships

Table InstrumentSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
InstrumentScheme	InstrumentScheme	Allows for inclusion by reference of another InstrumentScheme.		0..n	
Instrument	InstrumentType	Describes an instrument within this instrument scheme.		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
InstrumentGroup	InstrumentGroup	Describes a group of instruments as in instrument group within an instrument scheme.		0..n	

InterviewerInstructionSchemeType

Extends

This object extends MaintainableType

Definition

A set of interviewer instructions to be displayed within the instrument, such as definitions, and explanations of terminology and questions. Content may also be used to provide the contents of an instruction manual for questions or instruments. In addition to the standard name, label, and description, allows for the inclusion of another InterviewerInstructionScheme by reference an a set of in-line instructions.

Properties

Table InterviewerInstructionSchemeType. list of properties

Name	Datatype	Description	Cardinality
InterviewerInstructionSchemeName	Name	A name for the InterviewerInstructionScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
Label	Label	A display label for the InterviewerInstructionScheme. May be expressed in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	0..n
Description	StructuredStringType	A description of the content and purpose of the InterviewerInstructionScheme. May be expressed in multiple languages and	0..1

Name	Datatype	Description	Cardinality
		supports the use of structured content.	

Relationships

Table InterviewerInstructionSchemeType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
InterviewerInstructionSchemeReference	InterviewerInstructionSchemeType	the inclusion of an existing InterviewerInstructionScheme by reference.		0..n	
Instruction	InstructionType	Content of an individual instruction.		0..n	
InstructionGroup	InstructionGroupType	description of a group of Instructions.		0..n	

LocalHoldingPackageType

Extends

This object extends MaintainableType

Definition

Allows a depository to hold the contents of a DDI StudyUnit, Group, or ResourcePackage as received while providing locally created value added material and processing information without having to alter the maintenance agency or version of the original material. Contains the depository object by reference plus local added content including the objects added and a link to the location of the addition or change in the deposited object.

Relationships

Table LocalHoldingPackageType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
DepositoryStudyUnitReference	StudyUnitType	A reference to the StudyUnit as deposited.		0..n	
DepositoryGroupReference	GroupType	A reference to the Group as deposited.		0..n	
DepositoryResourcePackageReference	ResourcePackageType	A reference to the ResourcePackage as deposited.		0..n	
LocalAddedContent	LocalAddedContent	A reference to the		0..1	

Name	Target	Description	Type	Source cardinality	Target cardinality
		ResourcePackage as deposited.			

LogicalProductType

Extends

This object extends BaseLogicalProductType

Definition

A module describing the logical (intellectual) contents of the quantitative data. It is a member of the substitution group BaseLogicalProduct and contains all of the common features of the BaseLogicalProduct as well as content specific to quantitative data. This is a member of the BaseLogicalProduct substitution group and in addition to the content inherited from the BaseLogicalProduct, contains CategorySchemes, CodeListSchemes, ManagedRepresentationSchemes, RepresentedVariableSchemes, VariableSchemes and NCubeSchemes both in-line and by reference.

Relationships

Table LogicalProductType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
CategoryScheme	CategoryScheme	Contains descriptions of particular categories used as question responses and in the logical product. Their relationships and code values are described in the code scheme.		0..n	
CodeListScheme	CodeListScheme	Define the code values used to represent categories for a variable or question. Also describes hierarchical relationships between categories used in the code scheme.		0..n	
ManagedRepresentationScheme	ManagedRepresentationScheme	ManagedRepresentationSchemeType containing		0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		representations that are being managed as reusable sources for response domains and value representations.			
RepresentedVariable	RepresentedVariable	<p>VariableSchemeType</p> <p>RepresentedVariables managed by an agency. RepresentedVariables are the core reusable parts of a Variable. RepresentedVariable maps to the GSIM RepresentedVariable. In addition to the standard name, label, and description, allows for the inclusion of an existing RepresentedVariableScheme by reference and RepresentedVariables either in-line or by reference. RepresentedVariables may be grouped for management purposes.</p>	VariableScheme	0..n	
VariableScheme	VariableSchemeType	Contains a collection of variables and variable groups.	VariableSchemeType	0..n	
NCubeScheme	NCubeSchemeType	Contains a collection of NCubes and NCube groups.	NCubeSchemeType	0..n	

Chapter 17. BaseObjects

CommandFile

Definition

Identifies and provides a link to an external copy of the command, for example, a SAS Command Code script. Designates the programming language of the command file, designates input and output parameters, binding information between input and output parameters, a description of the location of the file, and a URN or URL for the command file.

Properties

Table CommandFile. list of properties

Name	Datatype	Description	Cardinality
programLanguage	CodeValueType	Designates the programming language used for the command. Supports the use of a controlled vocabulary.	0..1
binding	Binding	Defines the link between the output of an external object to an InParameter described above.	0..n
location	InternationalStringType	A description of the location of the file. This may not be machine actionable. It supports a description expressed in multiple languages.	0..1
uri	xs:anyURI	The URL or URN of the command file.	0..1

Relationships

Table CommandFile. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
inParameter	InParameter	Describes the information used by the command as it is identified within the command structure. Use of the Alias may be needed to tie the designated	Neither	0..n	0..n

Name	Target	Description	Type	Source cardinality	Target cardinality
		input parameter content to its use in the external command file.			
outParameter	ParameterType	Describes the information that results from the command that may be used as input by another object. Use of the Alias may be needed to tie the designated output parameter content to its use in the external command file.	Neither	0..n	0..n

Command

Definition

Provides the following information on the command: The content of the command, the programming language used, the pieces of information (InParameters) used by the command, the pieces of information created by the command (OutParameters) and the source of the information used by the InParameters (Binding).

Properties

Table Command. list of properties

Name	Datatype	Description	Cardinality
programLanguage	CodeValueType	Designates the programming language used for the command. Supports the use of a controlled vocabulary.	0..1
binding	Binding	Defines the link between the output of an external object to an InParameter described above.	0..n
commandContent	xs:string	Content of the command itself expressed in the language designated in	0..1

Name	Datatype	Description	Cardinality
		Programming Language.	

Relationships

Table Command. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
inParameter	InParameter	Describes the information used by the command as it is identified within the command structure.	Neither	0..n	0..n
outParameter	ParameterType	Describes the information that results from the command that may be used as input by another object.	Neither	0..n	0..n

StructuredCommand

Definition

This type structures an empty stub which is used as the basis for extensions added using external namespaces such as MathML. The DDI 3.0 extension methodology is used here - a new module is declared, and the StructuredCommand element is used as the head of a substitution group to insert whatever XML is needed to express the command.

ParameterType

Extends

This object extends IdentifiableType

Definition

A parameter is a structure that specifically identifies a source of input or output information so that it can be use pragmatically.

Properties

Table ParameterType. list of properties

Name	Datatype	Description	Cardinality
parameterName	Name	A name for the Parameter. May be	0..n

Name	Datatype	Description	Cardinality
		expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	
alias	xs:NMTOKEN	If the content of the parameter is being used in a generic set of code as an alias for the value of an object in a formula (for example source code for a statistical program) enter that name here. This provides a link from the identified parameter to the alias in the code.	0..1
description	StructuredStringType	A description of the Parameter. May be expressed in multiple languages and supports the use of structured content.	0..1
valueRepresentation		If the content of the parameter contains representational content, such as codes, provide the representation here. ValueRepresentation is the abstract head of a substitution group and may be replaced with any valid substitution for ValueRepresentation. Inclusion of the ValueRepresentation is recommended if you will be sharing data with others as it provides information on the structure of what they can expect to receive when the parameter is processed.	0..1
defaultValue	Value	Provides a default value for the parameter if there is no value provided by the object it is bound to or the process that was	0..1

Name	Datatype	Description	Cardinality
		intended to produce a value.	
isArray	xs:boolean	If set to "true" indicates that the content of the parameter is a delimited array rather than a single object and should be processed as such.	0..1

Relationships

Table ParameterType. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
valueRepresentation	ValueRepresentation	<p>If the content of the parameter contains representational content, such as codes, provide the representation here.</p> <p>ValueRepresentation is the abstract head of a substitution group and may be replaced with any valid substitution for ValueRepresentation. Inclusion of the ValueRepresentation is recommended if you will be sharing data with others as it provides information on the structure of what they can expect to receive when the parameter is processed.</p>	Neither	1..1	0..n

InParameter

Extends

This object extends ParameterType

Definition

A parameter that may accept content from outside its parent element. In addition to standard parameter content may provide the instructions for limiting the allowable array index.

Properties

Table InParameter. list of properties

Name	Datatype	Description	Cardinality
limitArrayIndex	xs:NMTOKENS	When the InParameter represents an array of items, this attribute specifies the index identification of the items within the zero-based array which should be treated as input parameters. If not specified, the full array is treated as the input parameter.	0..1

Chapter 18. Process

ElseIf

Definition

ElseIf is used to extend an IfCondition to represent a subsidiary branching in the flow logic .

Properties

Table ElseIf. list of properties

Name	Datatype	Description	Cardinality
ifCondition	CommandCode	The condition which must be met to trigger the Then clause, expressed as a CommandCode. The condition is an expression in the programming language used in the instrument.	0..1

ControlConstruct

Extends

This object extends ProcessStep

Definition

Provides the basic, extensible structure for control elements in the process steps. [To be improved - this is not a definition!]

Properties

Table ControlConstruct. list of properties

Name	Datatype	Description	Cardinality
name	Name	A name for the ControlConstructScheme. May be expressed in multiple languages. Repeat the element to express names with different content, for example different names for different systems.	0..n
label	Label	A display label for the ControlConstructScheme. May be expressed	0..n

Name	Datatype	Description	Cardinality
		in multiple languages. Repeat for labels with different content, for example, labels with differing length limitations.	
description	StructuredStringType	A description of the content and purpose of the ControlConstructScheme.	0..1

Relationships

Table ControlConstruct. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasControlConstruct	ControlConstruct		Aggregation	1..1	0..n

IfThenElse

Extends

This object extends ControlConstruct

Definition

IfThenElse describes an if-then-else decision type of control construct. IF the stated condition is met, the THEN clause is triggered, otherwise the ELSE clause is triggered.

Properties

Table IfThenElse. list of properties

Name	Datatype	Description	Cardinality
ifCondition	CommandCode	The condition which must be met to trigger the Then clause, expressed as a CommandCode. The condition is an expression in the programming language used in the instrument.	0..1

Relationships

Table IfThenElse. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasElseIf	ElseIf	Use for multiple	Neither	0..n	

Name	Target	Description	Type	Source cardinality	Target cardinality
		branching from a single point in the flow logic represented by the flow logic If, Then, ElseIf, Then, etc.			
hasElse	ProcessStep	The command to be triggered if ifCondition is false. (It is assumed that the command to be triggered if ifCondition is true is represented by the inherited relationship between ControlConstruct and ProcessStep.)	Neither	0..1	

Loop

Extends

This object extends ControlConstruct

Definition

Describes an action which loops until a limiting condition is met. The ControlConstruct contained in the Loop operates on the LoopVariable until the LoopWhile condition is met, and then control is handed back to the containing control construct.

Properties

Table Loop. list of properties

Name	Datatype	Description	Cardinality
initialValue	xs:integer	Information on the command used to set the initial value for the process. Could be a simple value.	0..1
loopWhile	CommandCode	Information on the command used to determine whether the "LoopWhile" condition is met.	0..1

Name	Datatype	Description	Cardinality
stepValue	xs:integer	Information on the command used to set the incremental or step value for the process. Could be a simple value.	0..1

RepeatUntil

Extends

This object extends ControlConstruct

Definition

Specifies a ControlConstruct to be repeated until a specified condition is met. Before each iteration the condition is tested. When the condition is met, control passes back to the containing control construct.

Properties

Table RepeatUntil. list of properties

Name	Datatype	Description	Cardinality
untilCondition	CommandCode	Information on the command used to determine whether the "Until" condition is met.	0..1

RepeatWhile

Extends

This object extends ControlConstruct

Definition

Specifies a ControlConstruct to be repeated while a specified condition is met. Before each iteration the condition is tested. When the condition is not met, control passes back to the containing control construct.

Properties

Table RepeatWhile. list of properties

Name	Datatype	Description	Cardinality
whileCondition	CommandCode	Information on the command used to determine whether the "While" condition is met.	0..1

Sequence

Extends

This object extends ControlConstruct

Definition

Provides a sequence order for operations expressed as control constructs. The sequence can be typed to support local processing or classification flags and alternate sequencing instructions (such as randomize for each respondent).

Properties

Table Sequence. list of properties

Name	Datatype	Description	Cardinality
typeOfSequence		Provides the ability to "type" a sequence for classification or processing purposes. Supports the use of an external controlled vocabulary.	0..n
constructSequence		Describes alternate ordering for different cases using the SpecificSequence structure. If you set the sequence to anything other than order of appearance the only allowable children are QuestionConstruct or Sequence. Contents must be randomizable.	0..1

ProcessStep

Definition

Work package performed by a service to transform inputs to outputs considering rules as defined in the control construct.

Relationships

Table ProcessStep. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasControlConstruct	ControlConstruct	(description needed!!!)	Aggregation	1..1	0..1

Name	Target	Description	Type	Source cardinality	Target cardinality
		because it is absolutely not clear to me what this means and when to use it. Also the name should probably be reconsidered.]			
hasSubStep	ProcessStep	[description needed]	Aggregation	1..1	0..n
hasInput	Input		Aggregation	1..1	0..n
hasOutput	Output		Aggregation	1..1	0..n

Service

Definition

A means of performing a Business Function (an ability that an organization possesses, typically expressed in general and high level terms and requiring a combination of organization, people, processes and technology to achieve). (source: GSIM)

Properties

Table Service. list of properties

Name	Datatype	Description	Cardinality
interface	CodeValueType	Specifies how to communicate with the service.	0..1
location	CodeValueType	Specifies where the service can be accessed.	0..1
description	StructuredStringType		0..1
name	Name		0..1
label	Label		0..1

Relationships

Table Service. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasProcessStep	ProcessStep		Neither	0..n	0..n
hasPrecondition	Precondition		Neither	0..n	0..n
hasResult	Result		Neither	0..n	0..n
hasAgent	Agent		Neither	0..1	0..n

Process

Definition

The set of Process Steps to perform one or more Business Functions. (Source: based on GSIM)

Properties

Table Process. list of properties

Name	Datatype	Description	Cardinality
status	CodeValueType	Provides the state of the process in terms of its development or progress through the process.	0..1
name	Name	The name of the object in machine-readable form	0..1
label	Label	The name of the object in human-readable form	0..1
description	StructuredStringType		0..1

Relationships

Table Process. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasService	Service		Aggregation	1..1	0..1

Precondition

Definition

Condition that needs to be satisfied in order for the process to execute

Properties

Table Precondition. list of properties

Name	Datatype	Description	Cardinality
condition	CommandCode	A logical formula that indicates whether the precondition is true or false	0..1

Result

Definition

The state of the process after its execution

Properties

Table Result. list of properties

Name	Datatype	Description	Cardinality
commandCode	CommandCode	A logical formula that indicates whether the result is true or false	0..1

Input

Definition

Input to a process step, either a type of an object or an instance.

Output

Definition

Output to a process step, either a type of an object or an instance. [I don't think his should be an actual object, but rather something concrete. It does not contain any properties or relationships. It carries no information.]

Split

Extends

This object extends ControlConstruct

Definition

The components of a Split process are a bag of process components to be executed concurrently. Split completes as soon as all of its component processes have been scheduled for execution

SplitJoin

Extends

This object extends ControlConstruct

Definition

Here the process consists of concurrent execution of a bunch of process components with barrier synchronization. That is, SplitJoin completes when all of its components processes have completed. With Split and SplitJoin, we can define processes that have partial synchronization (e.g., split all and join some sub-bag)

TransformationControl

Extends

This object extends ControlConstruct

Definition

Provides an extensible framework for specific transformation objects like the GenerationInstruction.

Properties

Table TransformationControl. list of properties

Name	Datatype	Description	Cardinality
activityDescription	StructuredStringType	Describes the transformation activity	0..1

Relationships

Table TransformationControl. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
wasDerivedFrom	ProcessStep	The entity an activity uses	Neither	0..n	0..1
wasAssociatedWith	Agent	The agent an activity is associated with	Neither	0..n	0..n
wasGeneratedBy	ProcessStep	The entity an activity generates	Neither	0..n	0..n

StudyUnitControl

Extends

This object extends ControlConstruct

Definition

StudyUnitControl references a StudyUnitType. StudyUnitControl enables the representation of a research protocol at the StudyUnit level. [If the only purpose of the object is to carry a StudyUnit, it should be seriously considered for melting with another object. Modeling rules state that any object needs to have a reality of its own. Carrying another object is not a reality. If I misunderstood, please clarify the description instead]

Relationships

Table StudyUnitControl. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasStudyUnit	StudyUnitType		Aggregation	0..1	1..1

pInstrumentControl

Extends

This object extends ControlConstruct

Definition

InstrumentControl references a PhysicalInstrument. InstrumentControl assists in protocol representation. More specifically InstrumentControl facilitates the representation of an instrument order within a StudyUnit. [please clear this up. I fear this may not be an object. Either way the definition is not very clear.]

Properties

Table pInstrumentControl. list of properties

Name	Datatype	Description	Cardinality
Name	Name		0..1

Relationships

Table pInstrumentControl. list of relationships

Name	Target	Description	Type	Source cardinality	Target cardinality
hasInstrument	PhysicalInstrument		Aggregation	0..1	1..1