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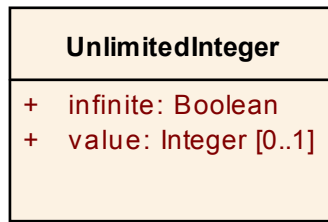
1 S-100 V2.1.0 (*package*)

1.1 S100 V2.1 Part 1 ConceptualSchemaLanguage (*package*)

1.1.1 V2.1.0 Fig 1-1 UnlimitedInteger (*diagram*)

A signed integer number whose value may be infinite.

V2.1.0 Fig 1-1 UnlimitedInteger
Diagram Version 1.0

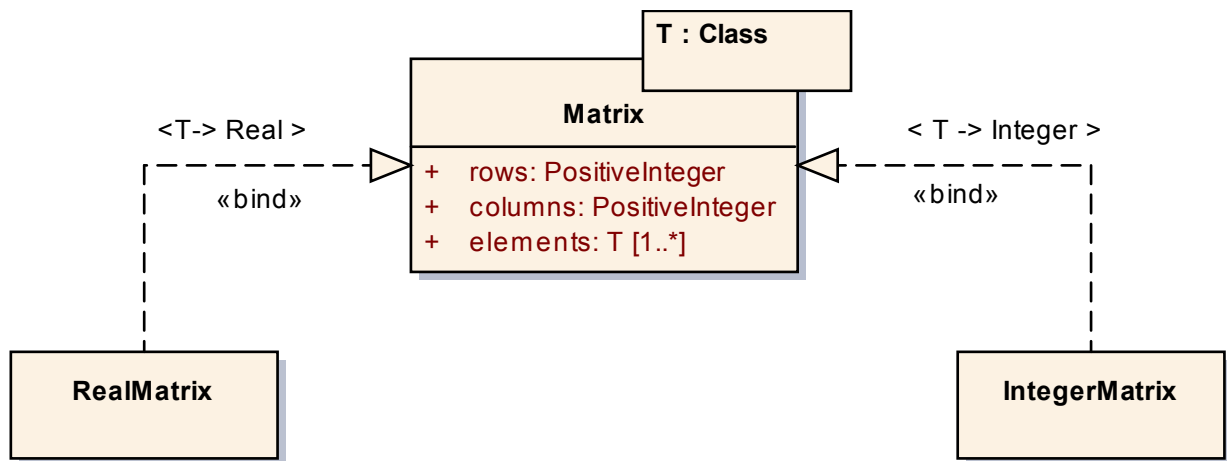


V2.1.0 Fig 1-1 UnlimitedInteger

1.1.2 V2.1.0 Fig 1-2 Matrix (*diagram*)

A grid of either real or integer elements.

V2.1.0 Fig 1-2 Matrix
Diagram Version 1.0

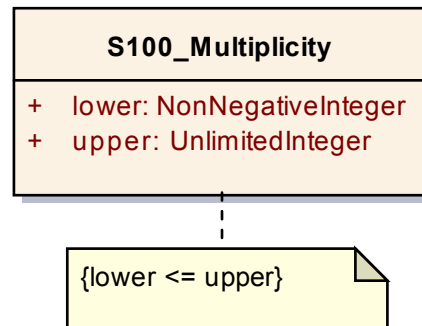


V2.1.0 Fig 1-2 Matrix

1.1.3 V2.1.0 Fig 1-3 S100_Multiplicity (*diagram*)

Defines a multiplicity range from lower to upper. The upper boundary may be infinite.

V2.1.0 Fig 1-3 S100_Multiplicity
Diagram Version 1.0

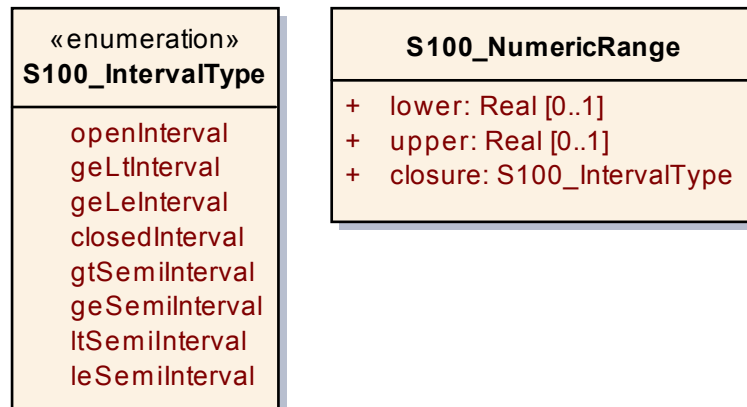


V2.1.0 Fig 1-3 S100_Multiplicity

1.1.4 V2.1.0 Fig 1-4 S100_NumericRange (diagram)

Specifies a numeric interval by its lower and upper boundary and the closure type of the interval.

V2.1.0 Fig 1-4 S100_NumericRange
Diagram Version 1.0



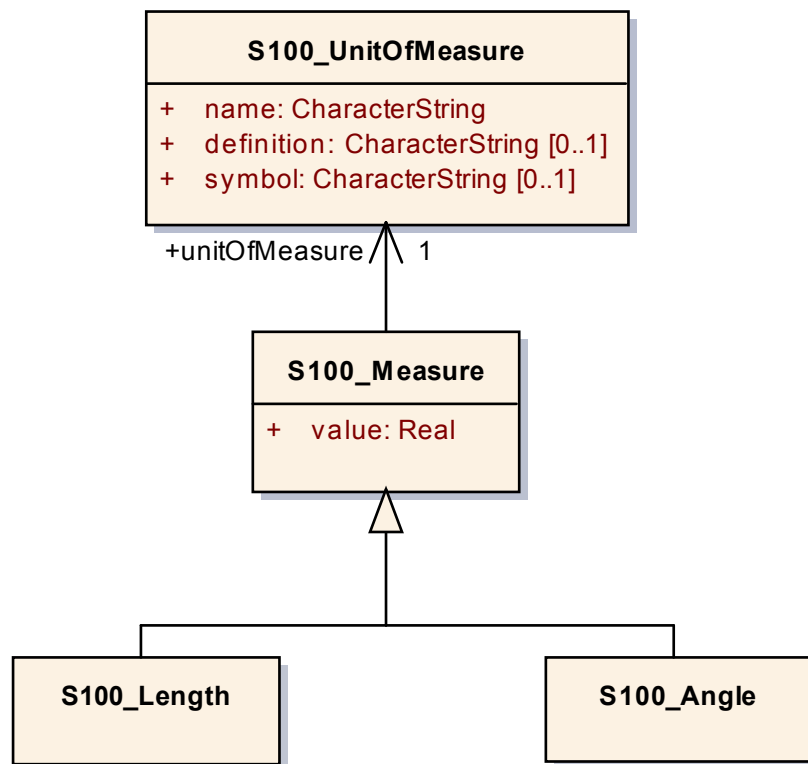
V2.1.0 Fig 1-4 S100_NumericRange

1.1.5 V2.1.0 Fig 1-5 S100_UnitOfMeasure (diagram)

A unit of measurement is a well defined comparator for a magnitude.

In S-100 a unit of measure is comprised of a name and optionally of a definition and a symbol.

V2.1.0 Fig 1-5 S100_UnitOfMeasure
Diagram Version 1.0

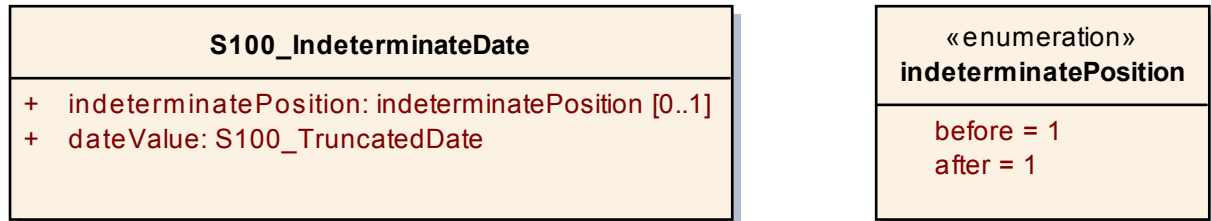


V2.1.0 Fig 1-5 S100_UnitOfMeasure

1.1.6 V2.1.0 Fig 1-6 S100_IndeterminateDate (*diagram*)

An indeterminate instant is an instant related by a specified temporal relation to a date specified in truncated format.

V2.1.0 Fig 1-6 S100_IndeterminateDate
Diagram Version 2.0



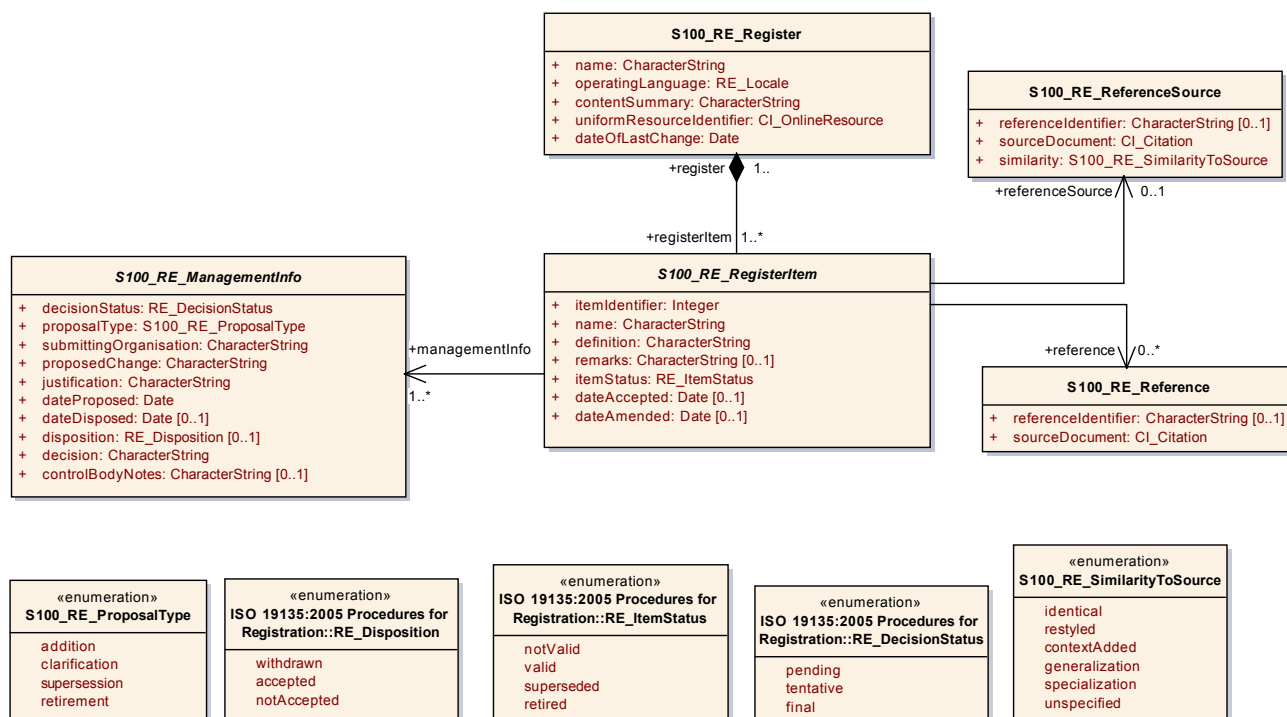
V2.1.0 Fig 1-6 S100_IndeterminateDate

1.2 S100 V2.1 Part 2 Registers (package)

1.2.1 V2.1.0 Fig 2-4 The Register Schema (diagram)

Describes the structure of an IHO Geospatial Information Register.

V2.1.0 Fig 2-4 The Register Schema
Diagram Version 2.0



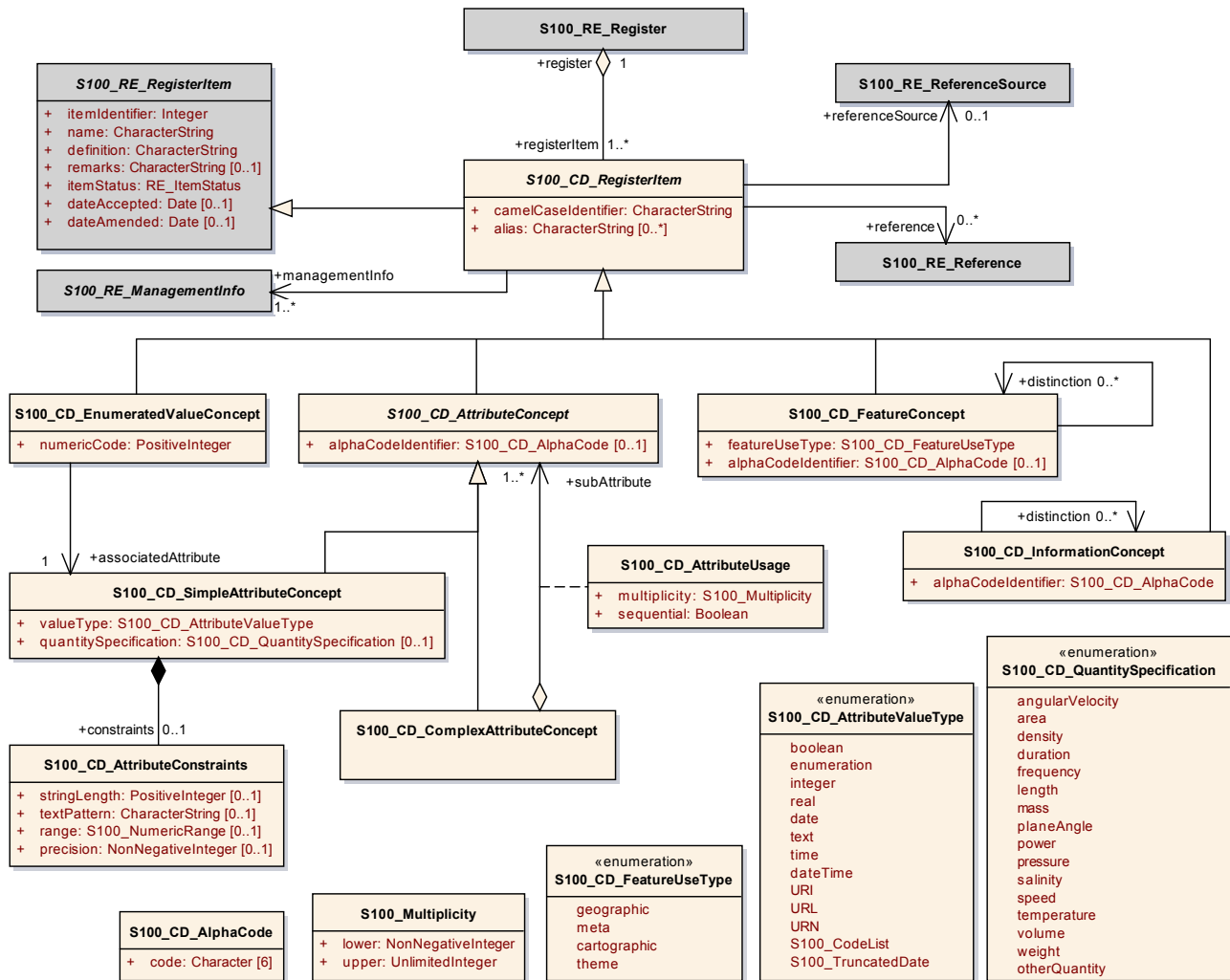
V2.1.0 Fig 2-4 The Register Schema

1.2.2 S100 V2.1 Part 2a FCD Registers (package)

1.2.2.1 V2.1.0 Fig 2a-1 Feature Concept Dictionary (diagram)

A feature concept dictionary specifies independent sets of definitions of features, attributes, enumerated values, and information types that may be used to describe geographic, hydrographic, and metadata information.

V2.1.0 Fig 2a-1 Feature Concept Dictionary
Diagram Version 2.0



V2.1.0 Fig 2a-1 Feature Concept Dictionary

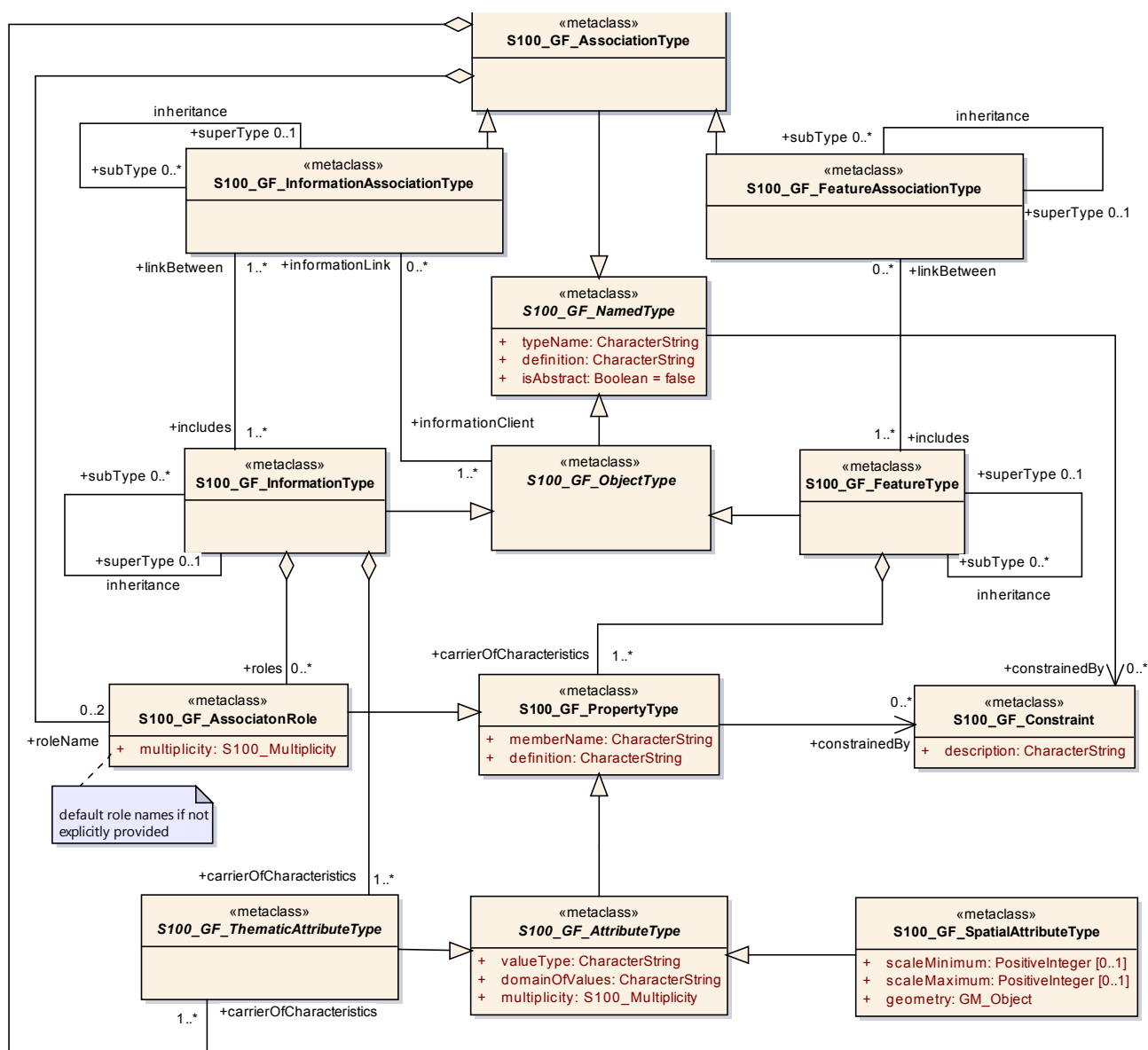
1.3 S100 V2.1 Part 3 General Feature Model (*package*)

1.3.1 V2.1.0 Fig 3-1 The General Feature Model *(diagram)*

A conceptual model of types that shall be used in S-100 products is presented in this document. It is known as the GFM and is derived from the ISO 19109 General Feature Model by realization of its classes.

The GFM is a basis for the classification of features and information types and their properties. The GFM also acts as the basis for the structure of feature catalogues.

V2.1.0 Fig 3-1 The General Feature Model
Diagram Version 1.0



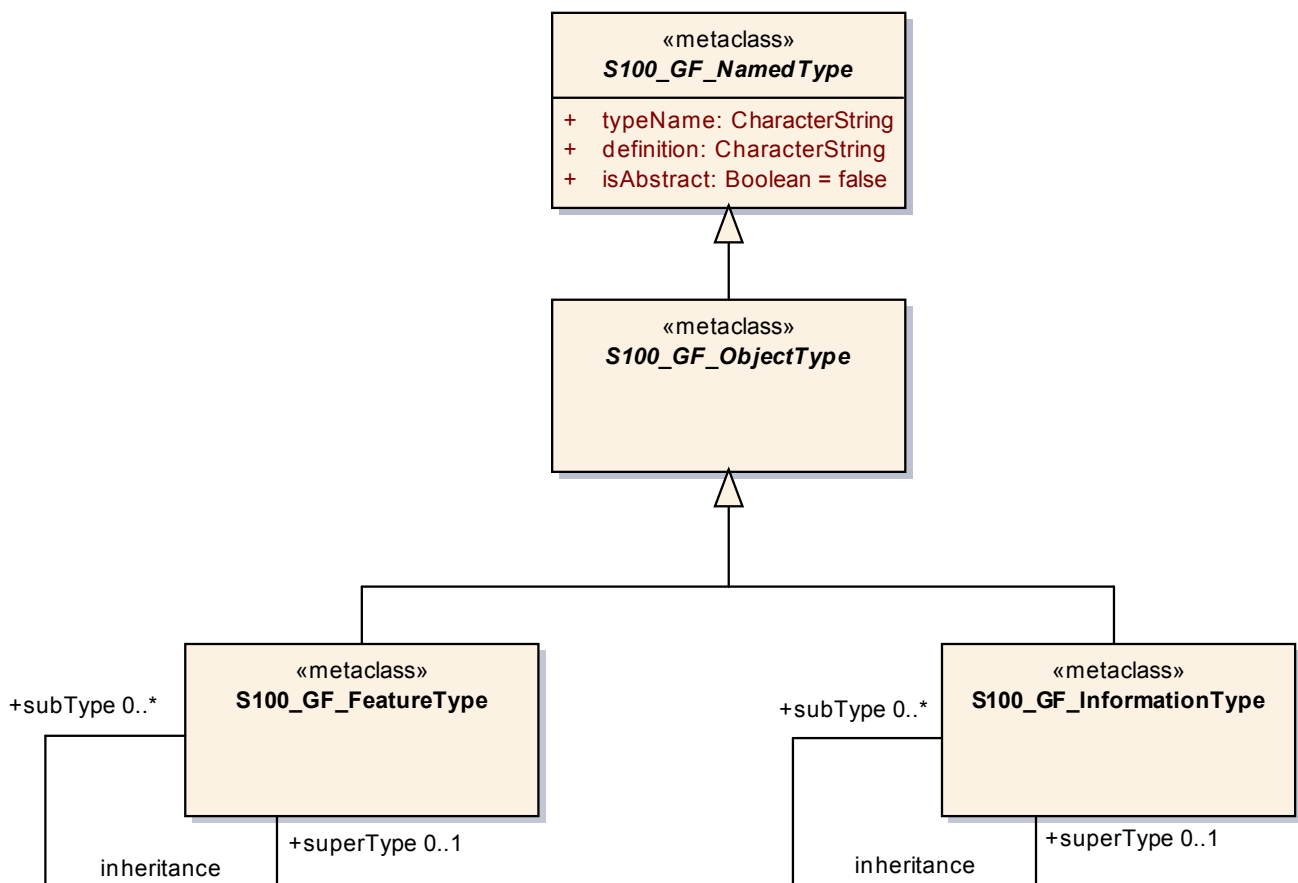
V2.1.0 Fig 3-1 The General Feature Model

1.3.3 V2.1.0 Fig 3-3 Specialisation and Generalisation Associations (diagram)

The class GF_InheritanceRelation is not realised in the S-100 GFM but object inheritance is allowed through the use of an identical association on the class S100_GF_FeatureType and the class S100_GF_InformationType (see Figure 3-3). The multiplicity of the superType end of the association is such that a subtype may have only one supertype. This is to prevent the modelling of multiple inheritance. The inheritance relation association is modelled at the level of the concrete class rather than on the abstract class S100_GF_NamedType. This prevents a feature type inheriting from an information type and vice versa.

Inheritance associations exist only between named types (classes) and not between named type instances (i.e. entities occurring in a dataset).

V2.1.0 Fig 3-3 Specialisation and Generalisation Associations
Diagram Version 1.0

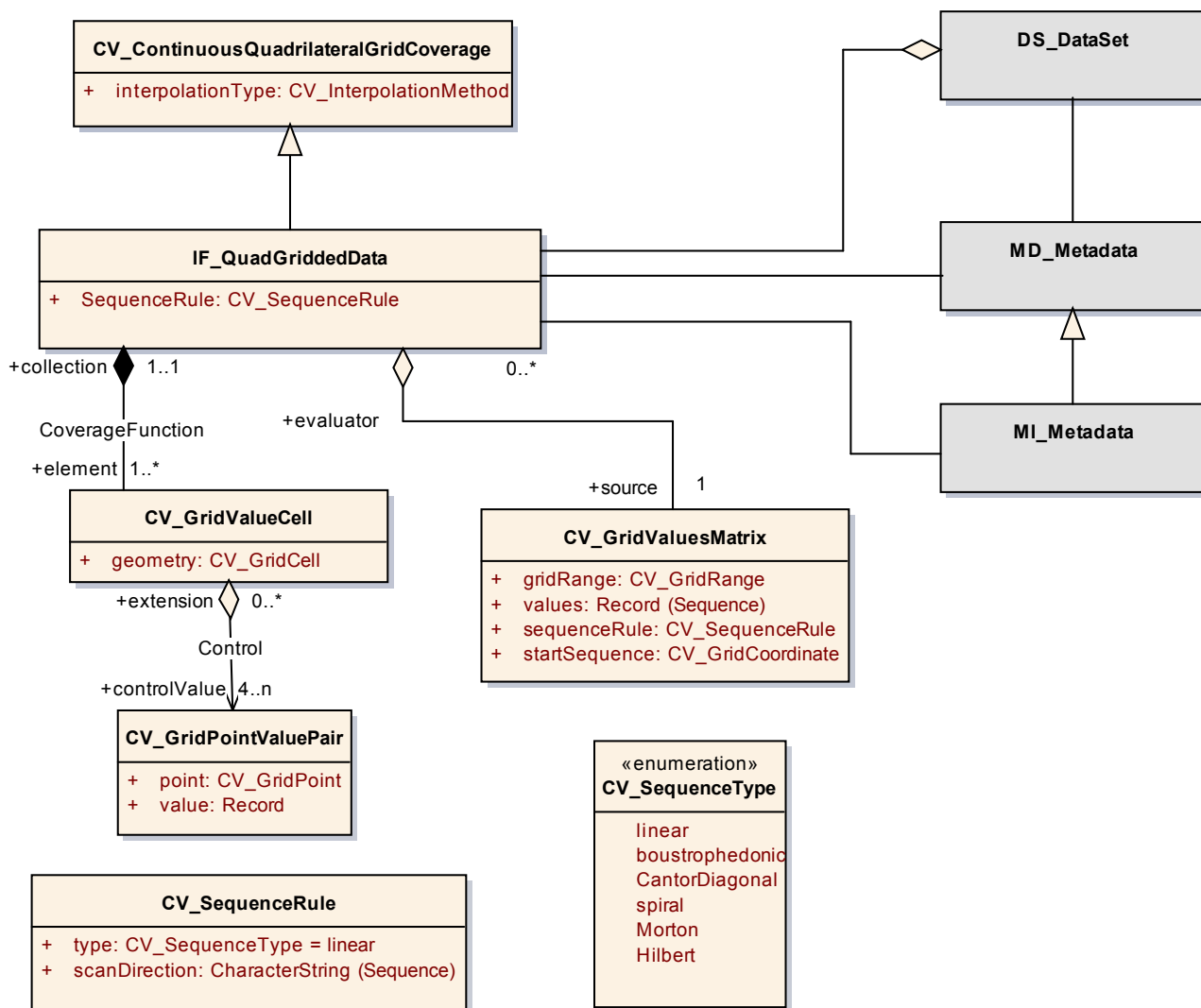


V2.1.0 Fig 3-3 Specialisation and Generalisation Associations

1.3.4 V2.1.0 Fig 3-4 (Fig 8-28) Template Application Schema for a Quadrilateral Grid Coverage (*diagram*)

This is the same as Figure 8-28.

V2.1.0 Fig 3-4 (Fig 8-28) Template Application Schema for a Quadrilateral Grid Coverage
Diagram Version 1.0

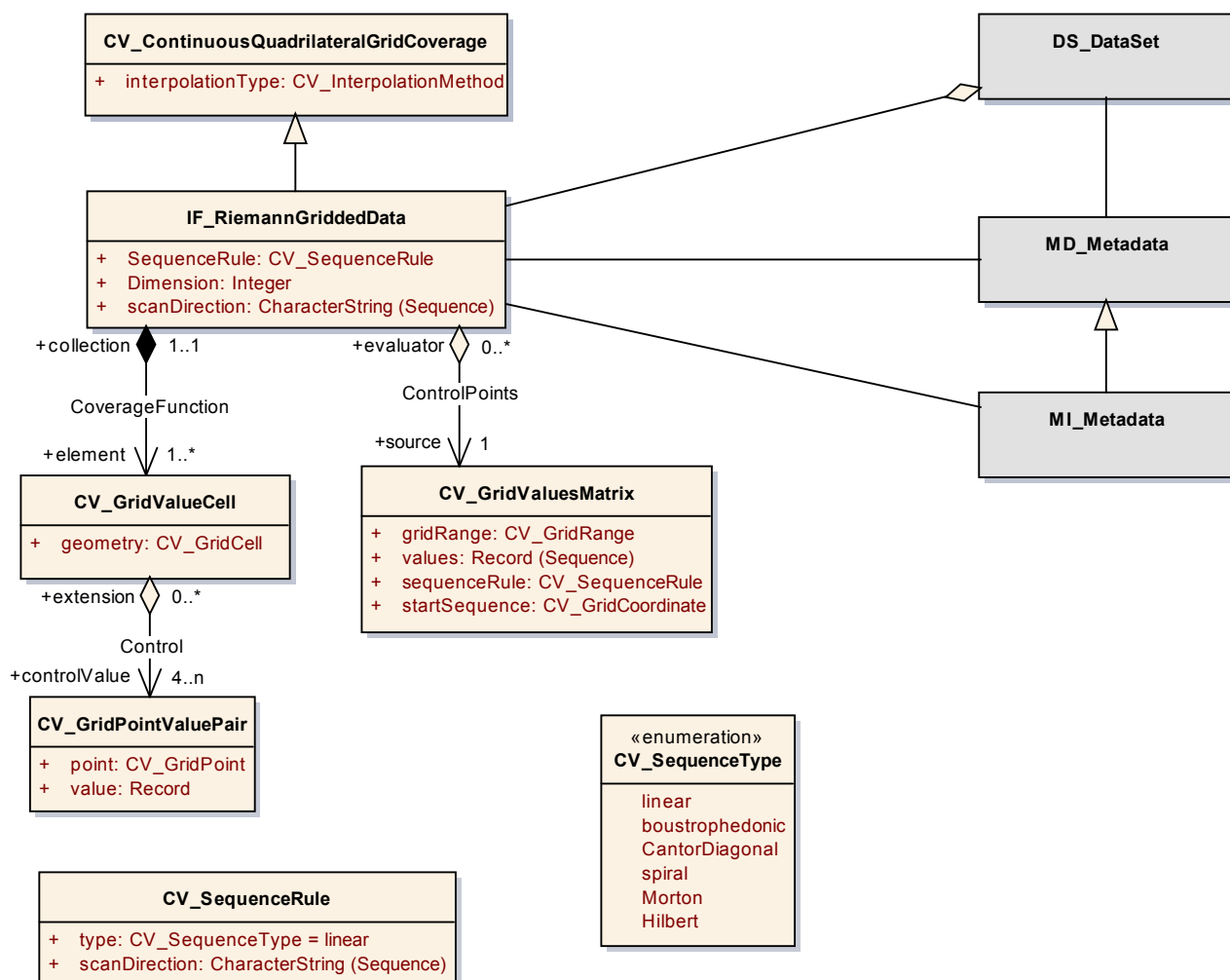


V2.1.0 Fig 3-4 (Fig 8-28) Template Application Schema for a Quadrilateral Grid Coverage

1.3.5 V2.1.0 Fig 3-5 (Fig 8-29) Template Application Schema for a Riemann Grid Coverage (diagram)

This is the same as Figure 8-29.

V2.1.0 Fig 3-5 (Fig 8-29) Template Application Schema for a Riemann Grid Coverage
Diagram Version 1.0

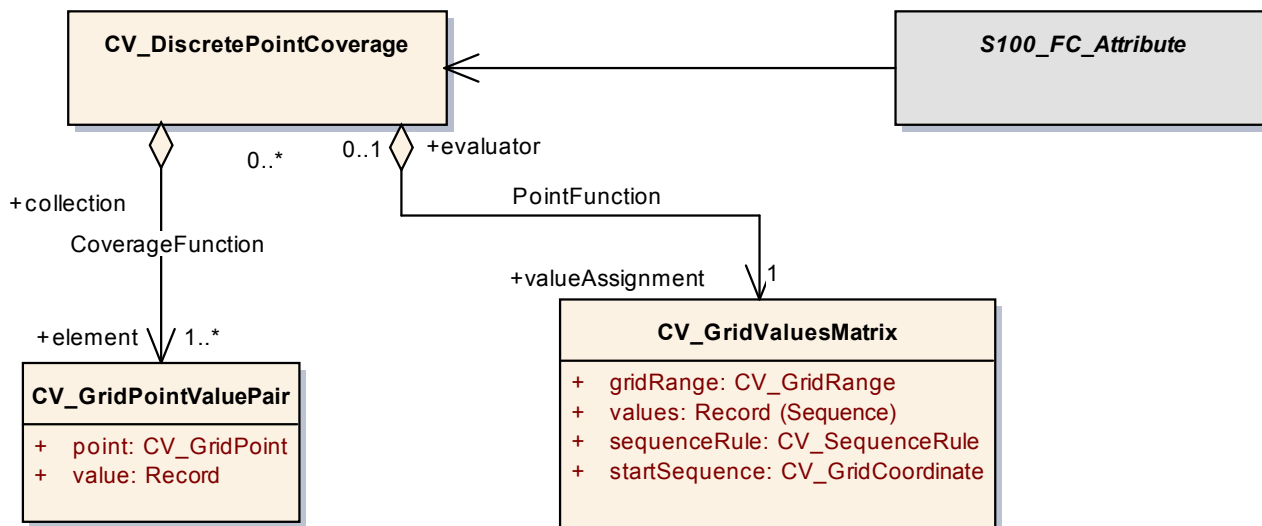


V2.1.0 Fig 3-5 (Fig 8-29) Template Application Schema for a Riemann Grid Coverage

1.3.6 V2.1.0 Fig 3-6 (Fig 8-30) Feature Oriented Discrete Coverage (diagram)

This is the same as Figure 8-30.

V2.1.0 Fig 3-6 (Fig 8-30) Feature Oriented Discrete Coverage
Diagram Version 1.0



V2.1.0 Fig 3-6 (Fig 8-30) Feature Oriented Discrete Coverage

1.4 S100 V2.1 Part 4 Metadata (*package*)

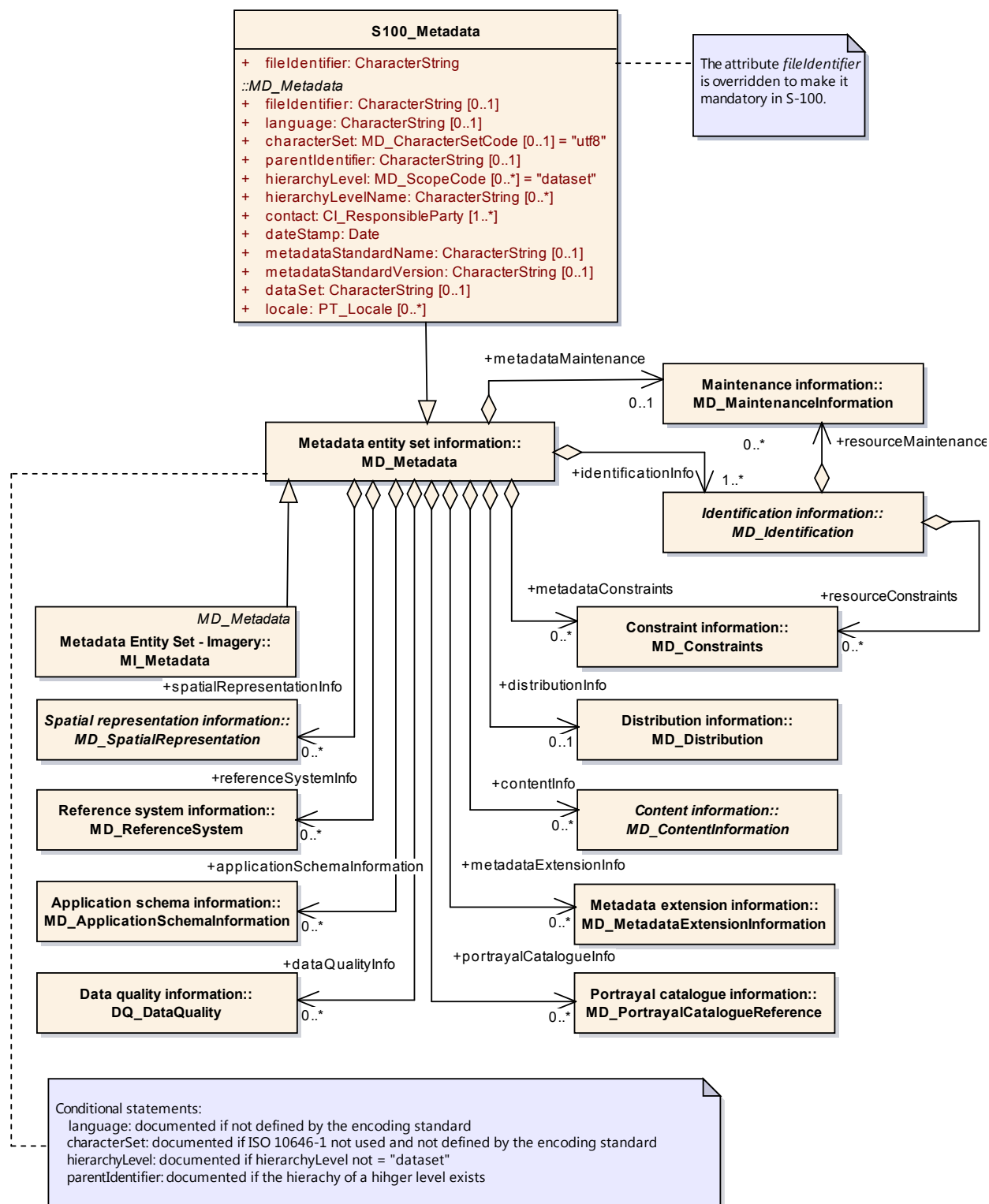
1.4.1 S100 V2.1 Part 4a Metadata (*package*)

1.4.1.1 V2.1.0 Fig 4a-2 Metadata entity set information (*diagram*)

The structure of metadata included in the S-100 Metadata Profile is defined with reference to UML diagrams that identify metadata packages and classes included at Annex A of ISO 19115:2005 (and further modified by Technical Corrigendum 1 ISO 19115:2003/Cor.1:2006). [It should be noted that in ISO 19115:2003/Cor.1:2006, there is a discrepancy between the use of “locale” in the UML diagram (Figure A.1) and element 11.2 “locate” in Table B.2.1. The word “locale” in MD_Metadata shown in Figure 4a-2 below is the correct reference].

The new class *S100_Metadata* shows the relationship to *MD_Metadata* and its related metadata classes. For the purpose of this Profile *Metadata entity set information* replaces the equivalent diagram Figure A.1 in ISO 19115:2005.

V2.1.0 Fig 4a-2 Metadata entity set information
Diagram Version 2.0

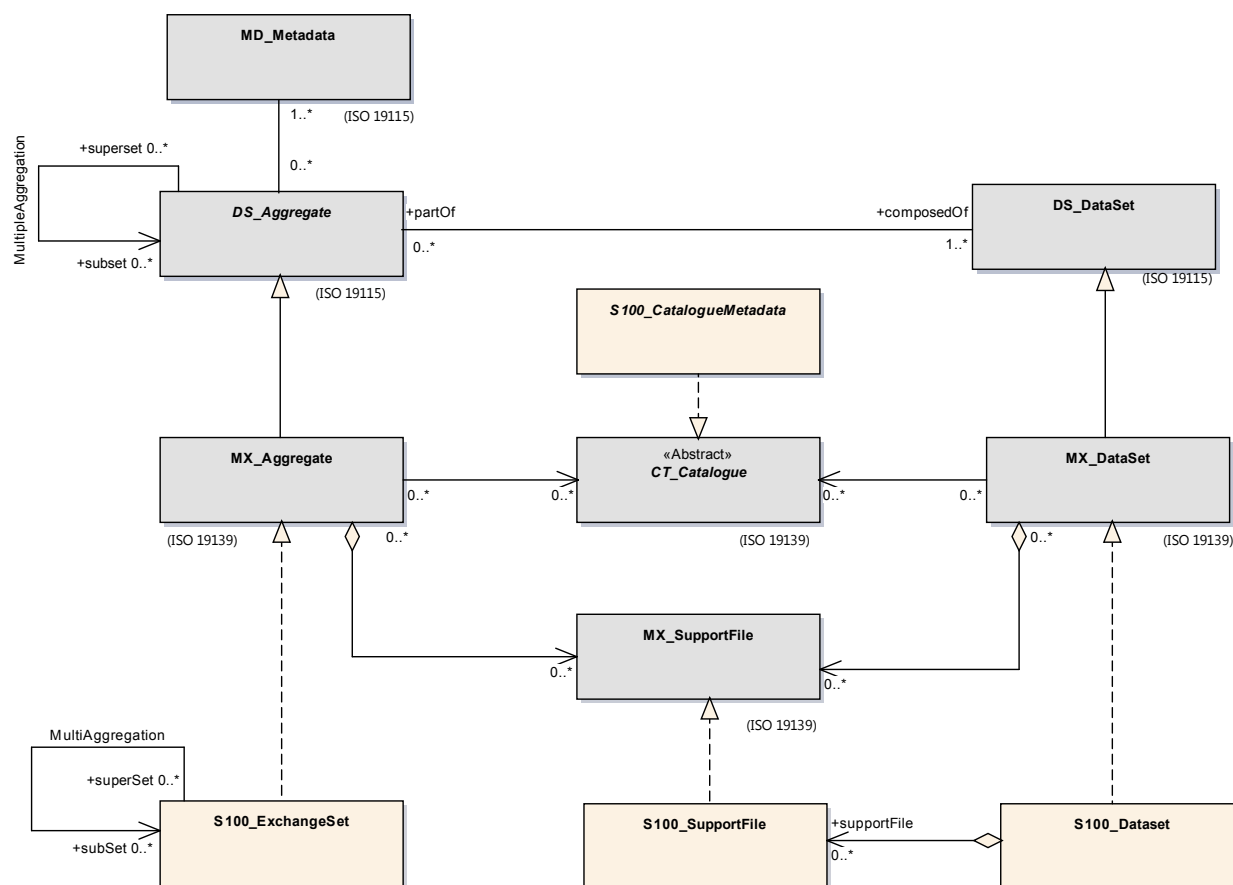


V2.1.0 Fig 4a-2 Metadata entity set information

1.4.1.2 V2.1.0 Fig 4a-D1 Realization of the Exchange Set Classes (diagram)

Figures 4a-D1 to 4a-D3 outline the overall concept of an S-100 exchange set for the interchange of geospatial data and its relevant metadata. Figure 4a-D1 depicts the realization of the ISO 19139 classes which form the foundation of the exchange set.

V2.1.0 Fig 4a-D1 Realization of the Exchange Set Classes
Diagram Version 2.0

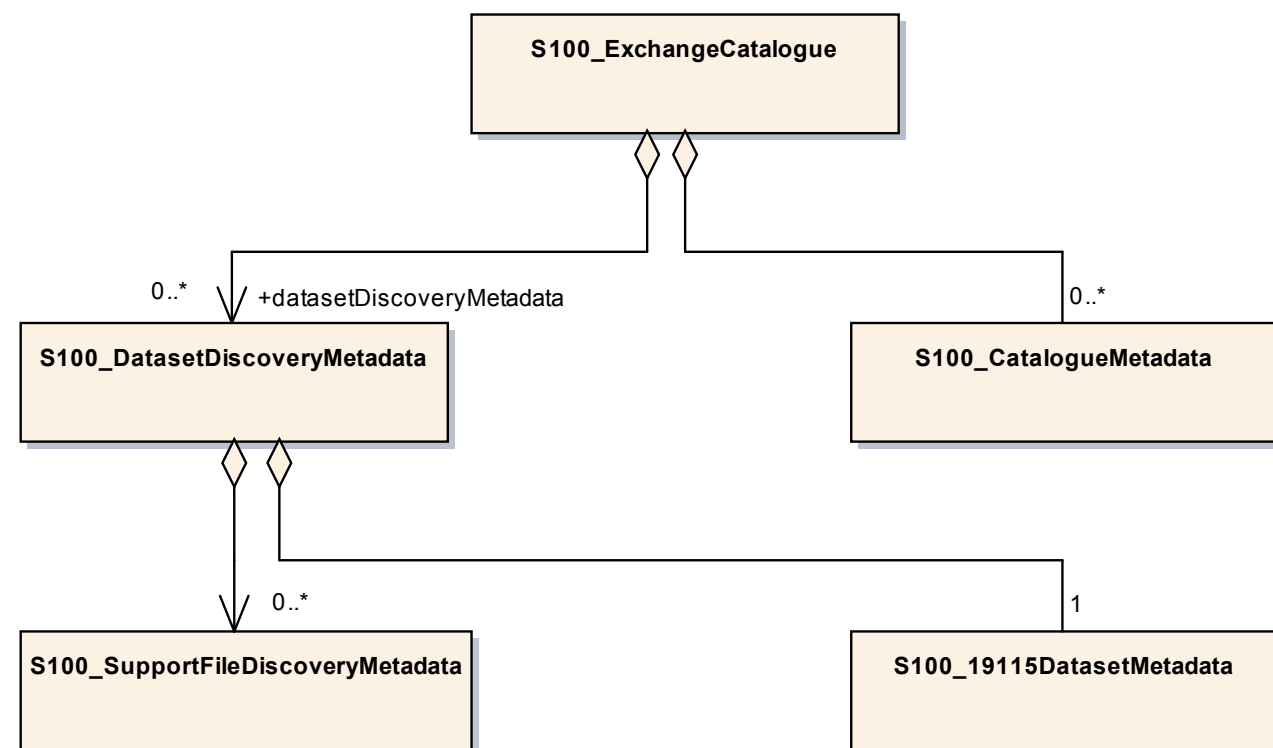


V2.1.0 Fig 4a-D1 Realization of the Exchange Set Classes

1.4.1.3 V2.1.0 Fig 4a-D2 S100 ExchangeSetCatalogue (diagram)

The S100_ExchangeCatalogue is an XML instance, which provides the information needed to exploit all the components of an exchange set. It consists of sections for the catalogues and datasets with subsections for support file metadata and a reference to classic ISO 19115 dataset metadata.

V2.1.0 Fig 4a-D2 S100 ExchangeSetCatalogue
Diagram Version 2.0



Discovery metadata for a support file for a dataset should be located or referenced as shown here, i.e., in the dataset discovery metadata.

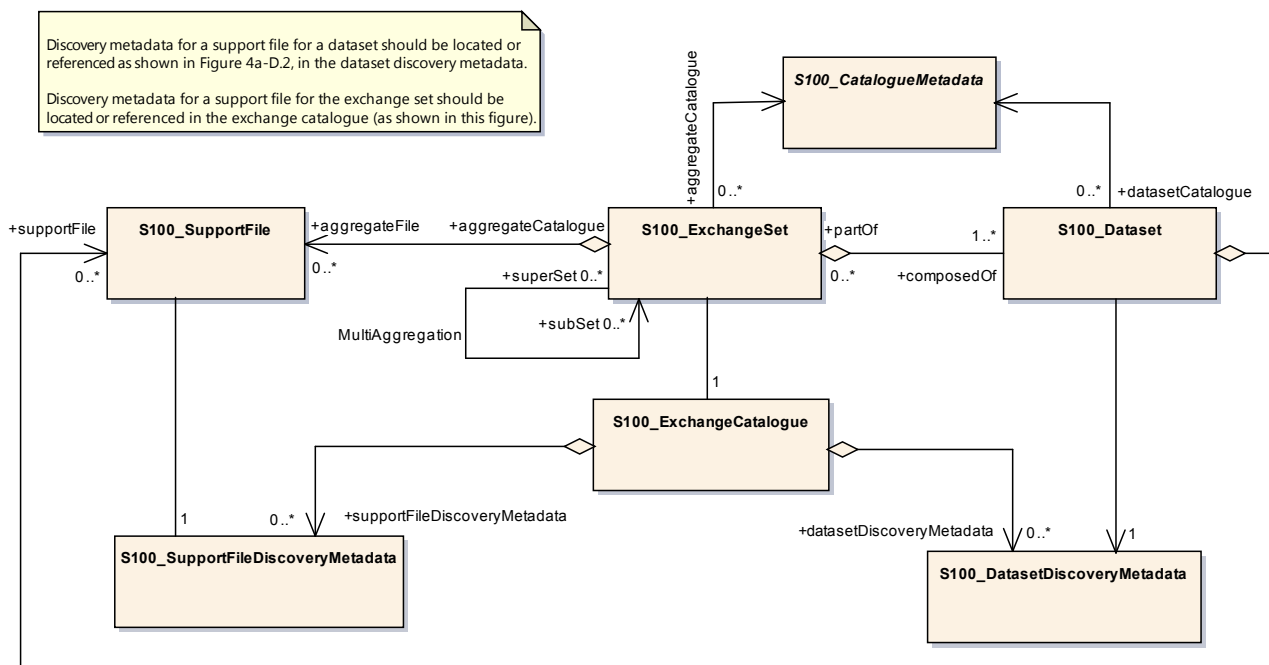
Discovery metadata for a support file for the exchange set should be located or referenced in the exchange catalogue (Figure 4a-D.3).

V2.1.0 Fig 4a-D2 S100 ExchangeSetCatalogue

1.4.1.4 V2.1.0 Fig 4a-D3 S100 ExchangeSet (diagram)

The S-100 Exchange set is a container that combines all the elements needed for the exchange of S-100 data. The exchange set may include S-100 based datasets, files, feature catalogues and portrayal catalogues.

V2.1.0 Fig 4a-D3 S100 ExchangeSet
Diagram Version 2.0

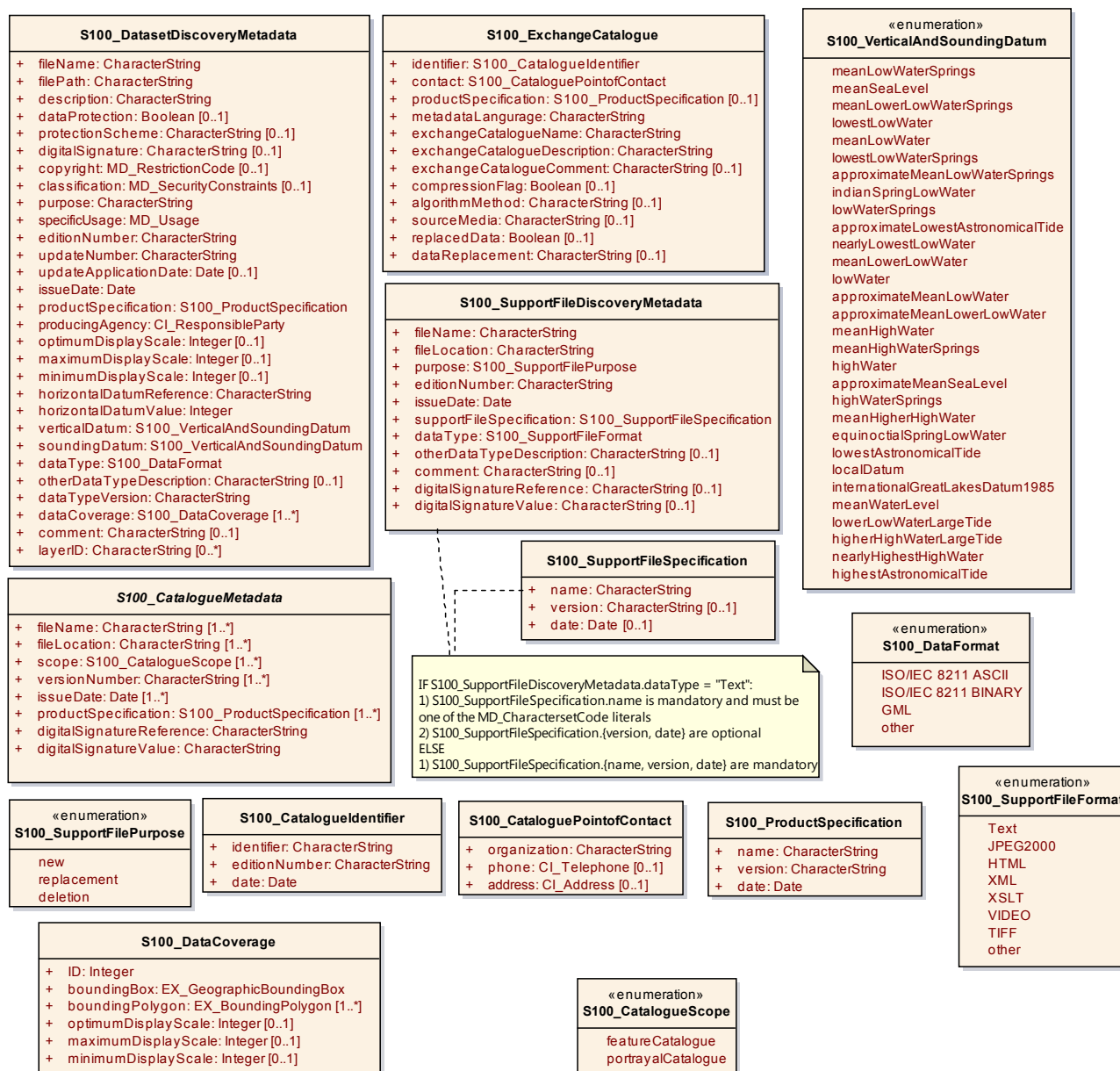


V2.1.0 Fig 4a-D3 S100 ExchangeSet

1.4.1.5 V2.1.0 Fig 4a-D4 S100 Exchange Set - class details (diagram)

Details for S-100 Exchange set classes.

V2.1.0 Fig 4a-D4 S100 Exchange Set - class details
Diagram Version 2.0



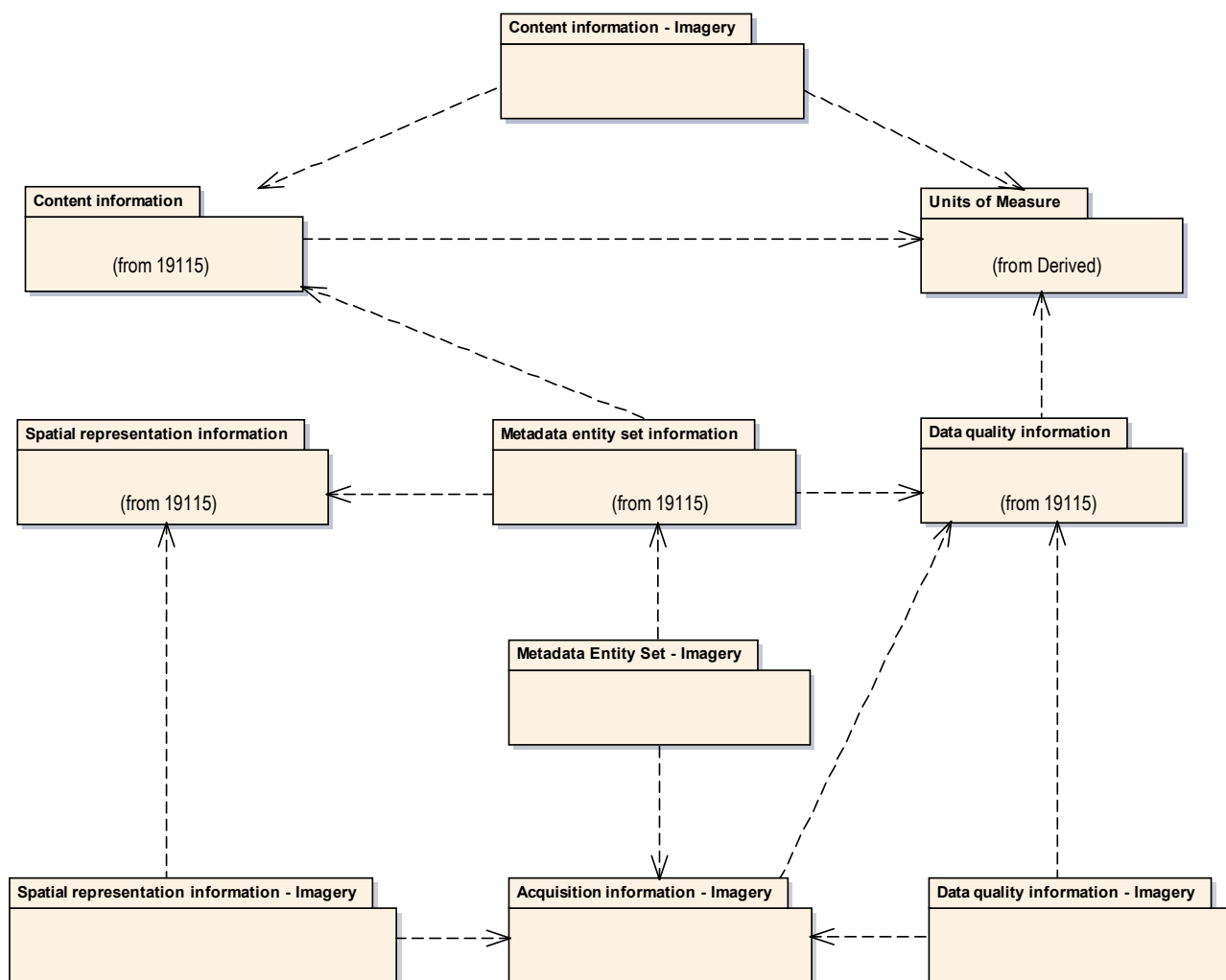
V2.1.0 Fig 4a-D4 S100 Exchange Set - class details

1.4.2 S100 V2.1 Part 4b Metadata for Imagery and Gridded Data (package)

1.4.2.1 V2.1.0 Fig 4b-1 Metadata Packages (Figure 3 ISO 19115-2 (2009)) (diagram)

The relationships between the packages contained in ISO 19115 and the extensions for geospatial imagery and gridded data are illustrated. These metadata extensions have been fully documented using both UML models and a data dictionary, in ISO/TC211 19115 – Part 2 - Annex A and Annex B respectively.

V2.1.0 Fig 4b-1 Metadata Packages (Figure 3 ISO 19115-2 (2009))
Diagram Version 1.0



V2.1.0 Fig 4b-1 Metadata Packages (Figure 3 ISO 19115-2 (2009))

1.4.3 S100 V2.1 Part 4c Quality (package)

1.4.3.1 V2.1.0 Fig 4c-A1 Data Quality UML (diagram)

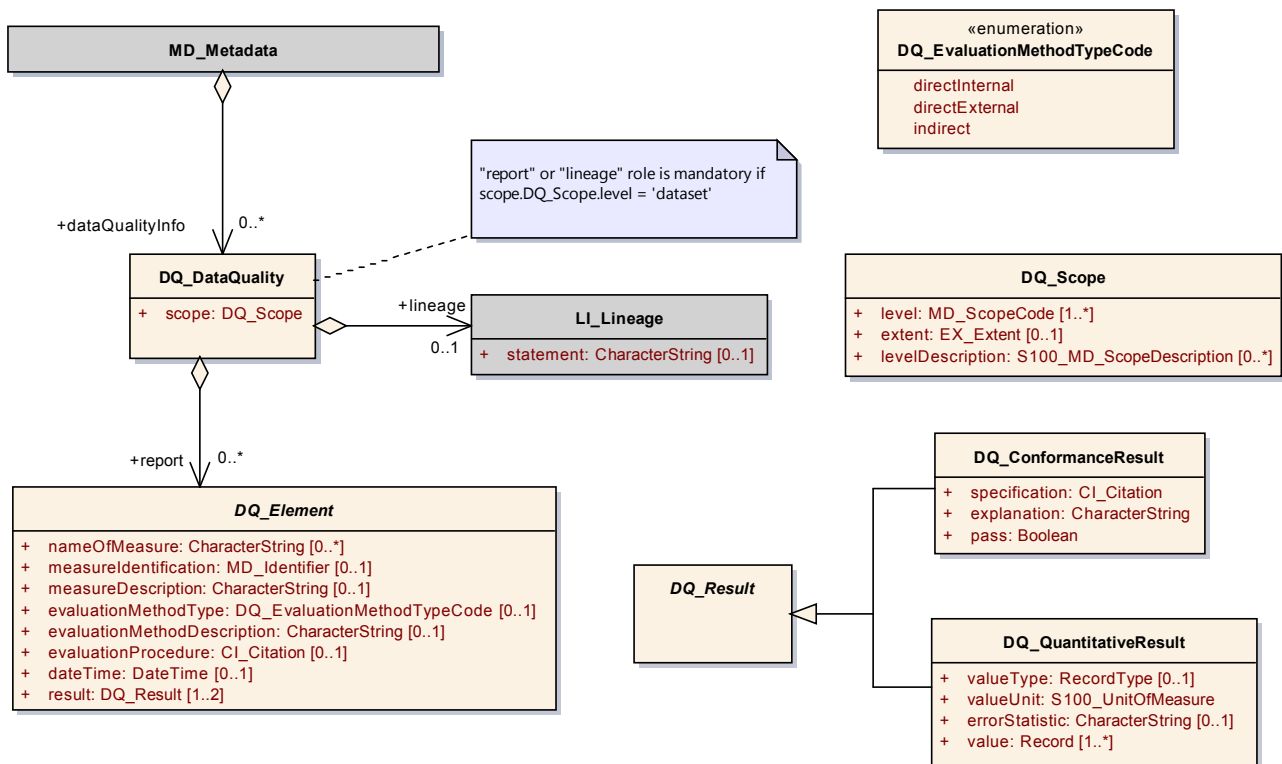
Data Quality UML from ISO 19115.

Elements in this diagram are ISO 191xx elements copied and adapted to conform to Edition 2.0.0 of S-100, which has a small number of differences from the ISO model (see diagram notes). It should either be harmonized with ISO or S100_ prefixes used.

S-100 edition 2.0.0 actually adapts a few of the ISO elements - in the future it should be harmonized with ISO or S100_ prefixes should be used.

- DQ_Element dateTime multiplicity
- DQ_EvaluationMethodTypeCode stereotype changed to enumeration
- DQ_Scope level multiplicity
- levelDescription type changed from MD_ScopeDescription to S100_MD_ScopeDescription
- DQ_QuantitativeResult valueUnit type S100_UnitOfMeasure

V2.1.0 Fig 4c-A1 Data Quality UML
Diagram Version 2.0



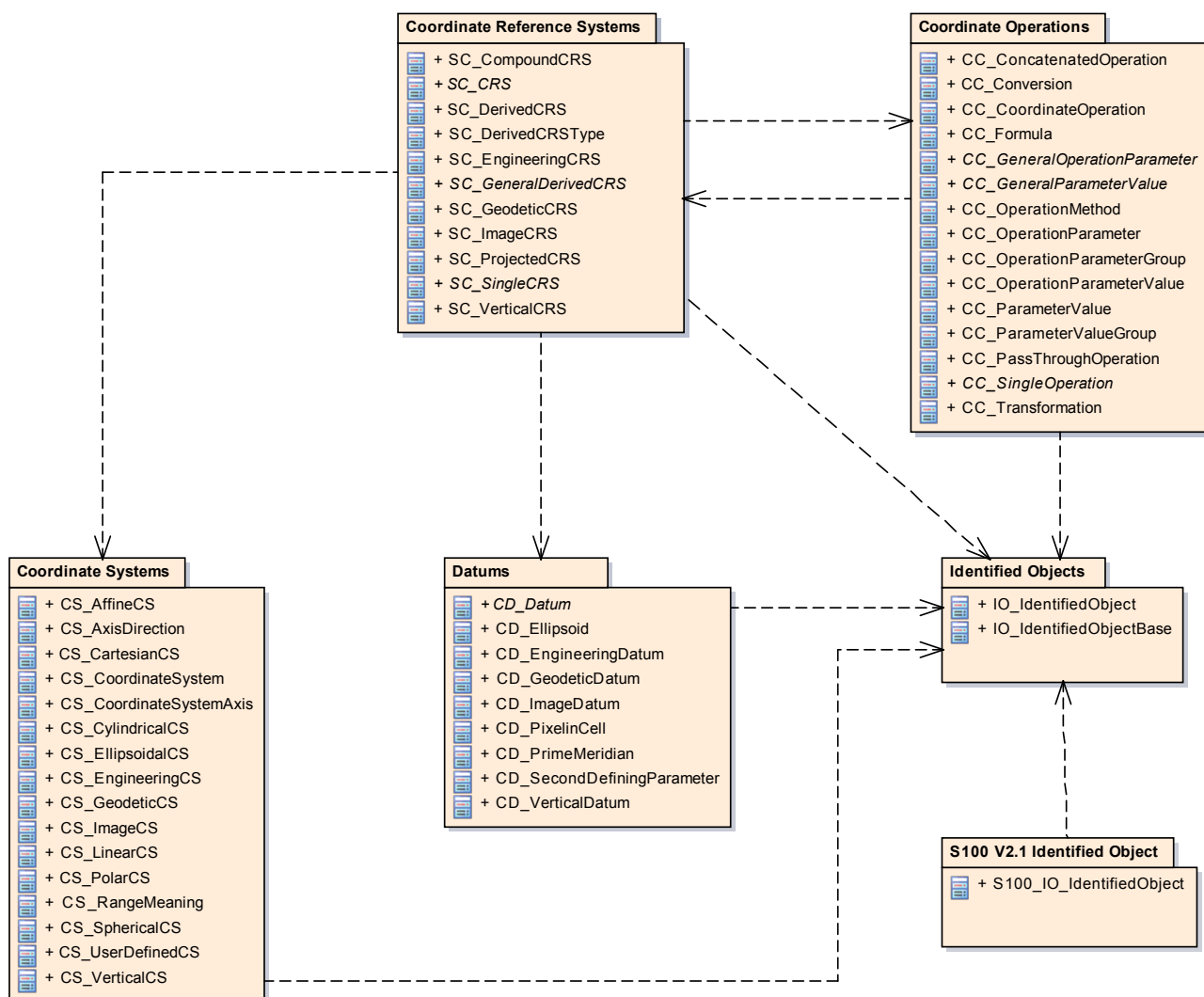
V2.1.0 Fig 4c-A1 Data Quality UML

1.6 S100 V2.1 Part 6 Coordinate Reference Systems (*package*)

1.6.1 S100 Part 6-1 The CRS Packages (*diagram*)

The CRS Packages

S100 Part 6-1 The CRS Packages
Diagram Version 2.0

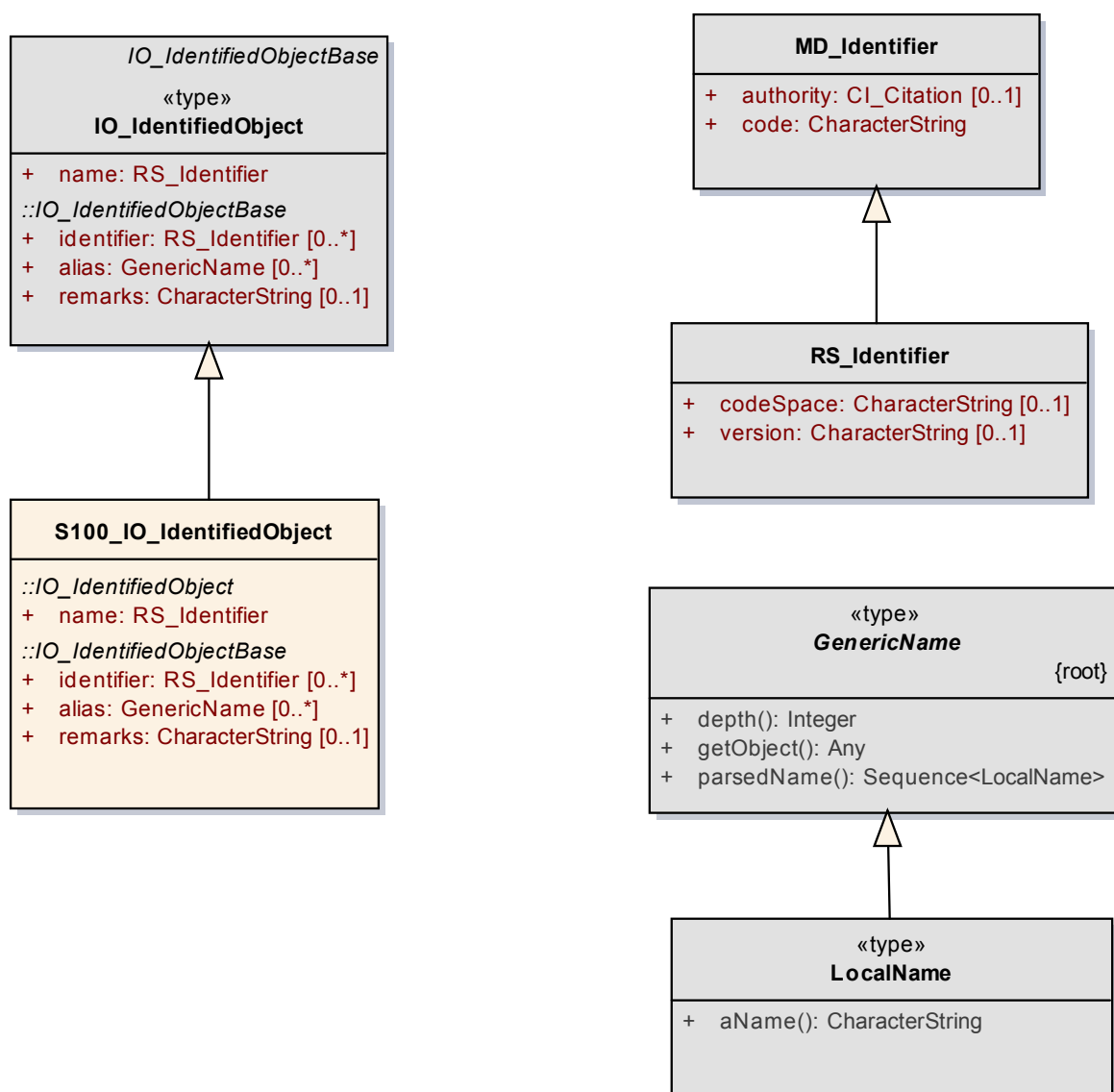


S100 Part 6-1 The CRS Packages

1.6.2 S100 Part 6-2 Identified Object class diagram (diagram)

S100 Part 6-2 Identified Object class diagram
Diagram Version 2.0

S-10 V2 – Part 6 Coordinate Reference Systems Figure 6-2 — The Identified Object class diagram

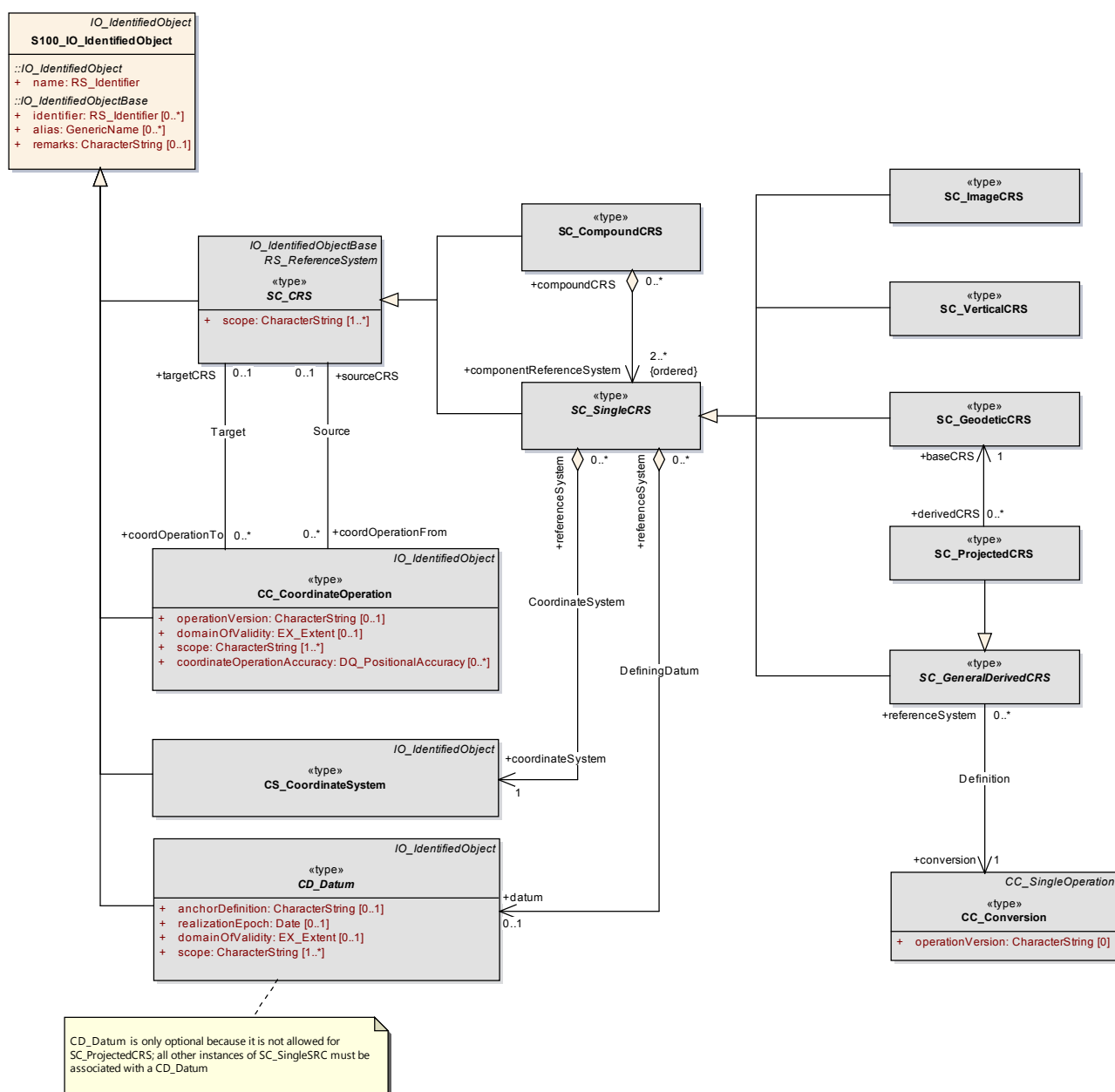


S100 Part 6-2 Identified Object class diagram

1.6.3 S100 Part 6-3 The Coordinate Reference System class diagram (diagram)

S100 Part 6-3 The Coordinate Reference System class diagram
Diagram Version 2.0

S-100 V2 – Part 6 Coordinate Reference Systems
Figure 6-3 The Coordinate Reference System class diagram



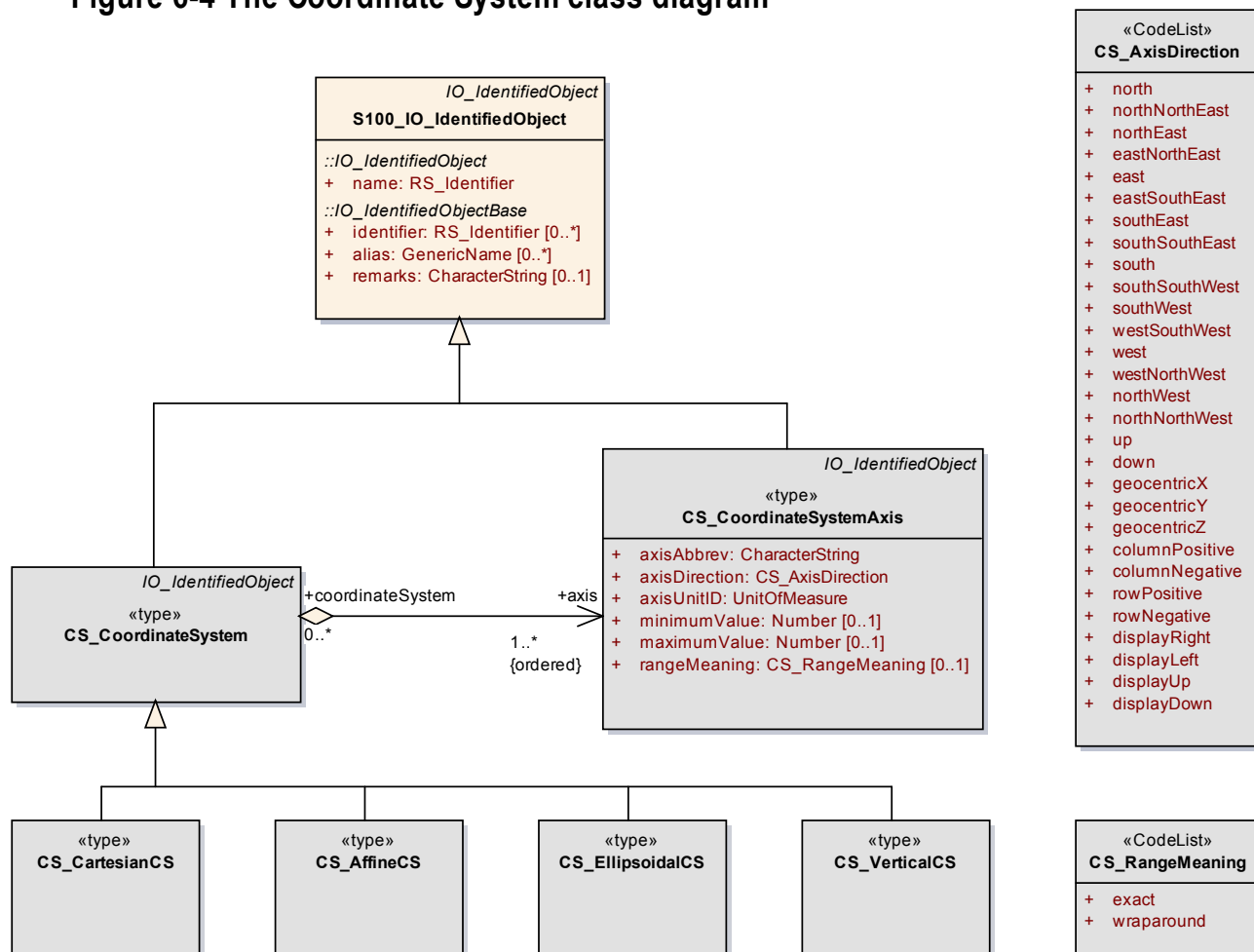
S100 Part 6-3 The Coordinate Reference System class diagram

1.6.4 S100 Part 6-4 The Coordinate System class diagram (*diagram*)

The "Coordinate System" class diagram

S100 Part 6-4 The Coordinate System class diagram
Diagram Version 2.0

S-100 V2 – Part 6 Coordinate Reference Systems
Figure 6-4 The Coordinate System class diagram



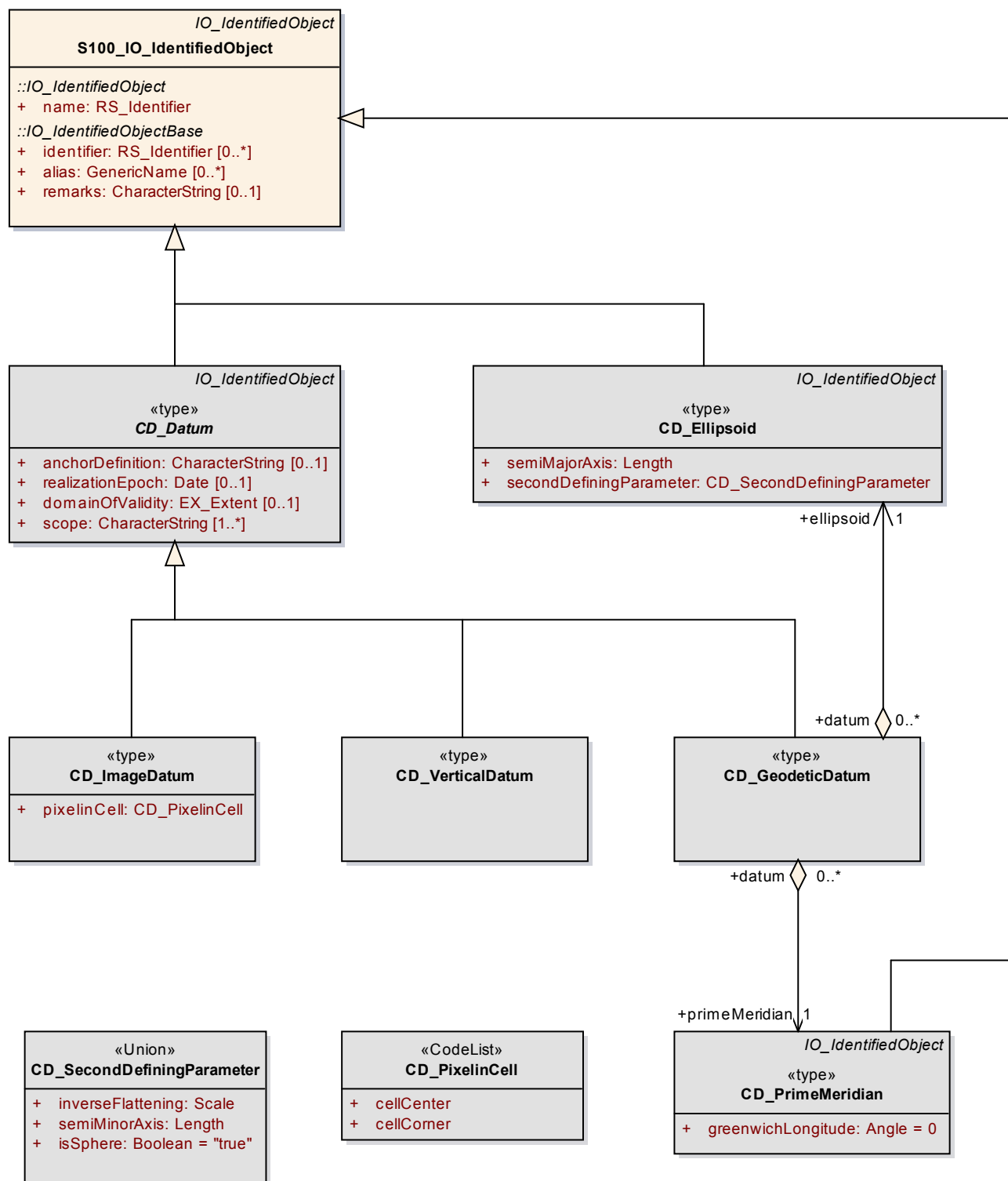
S100 Part 6-4 The Coordinate System class diagram

1.6.5 S100 Part 6-5 The Datum class diagram (*diagram*)

S100 Part 6-5 The Datum class diagram
Diagram Version 2.0

S-100 V2 – Part 6 Coordinate Reference Systems

Figure Part 6-5 The Datum class diagram

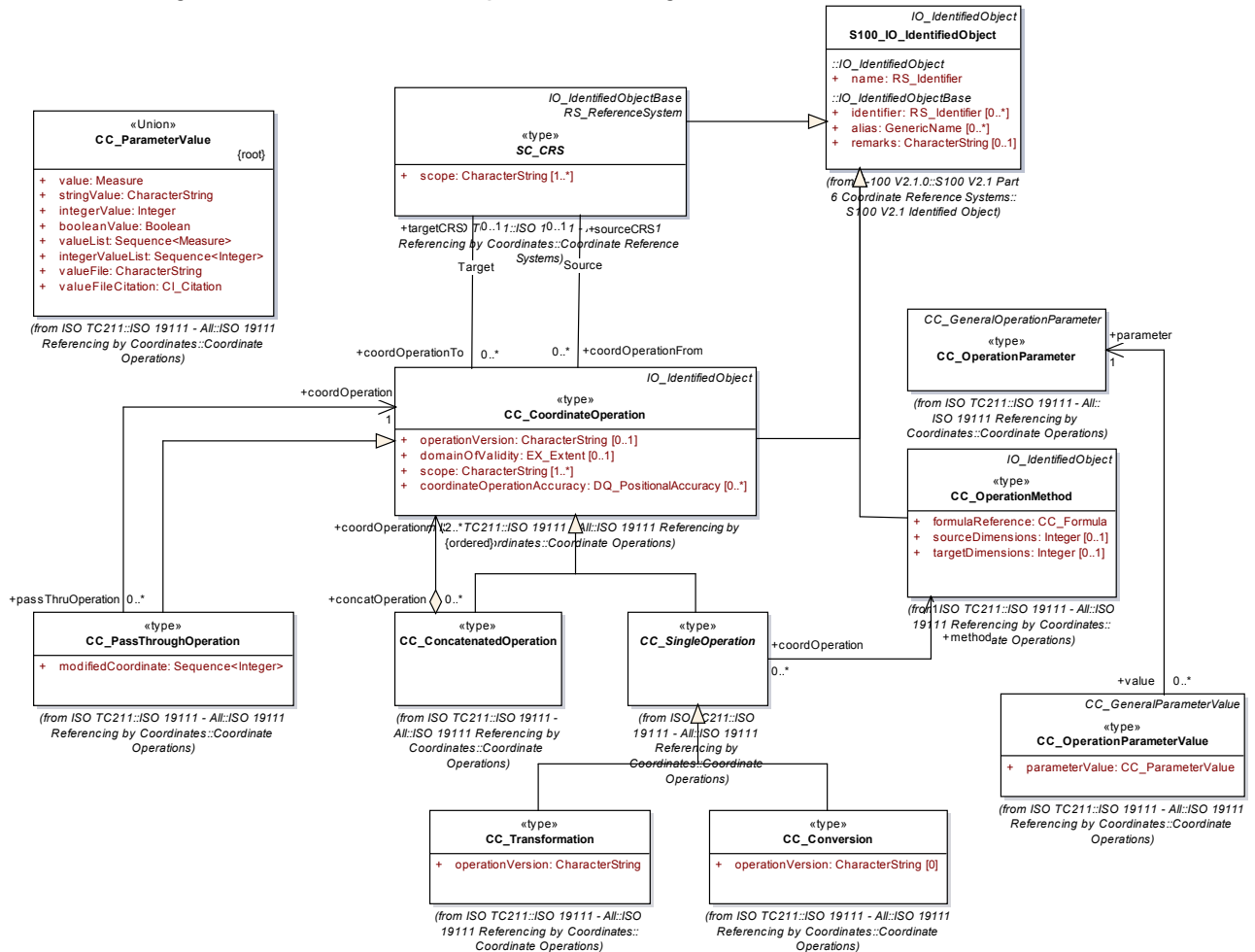


S100 Part 6-5 The Datum class diagram

1.6.6 S100 Part 6-6 The Coordinate Operation class diagram (diagram)

S100 Part 6-6 The Coordinate Operation class diagram
Diagram Version 2.0

S-100 V2 – Part 6 Coordinate Reference Systems
Figure Part 6-6 The Coordinate Operation class diagram



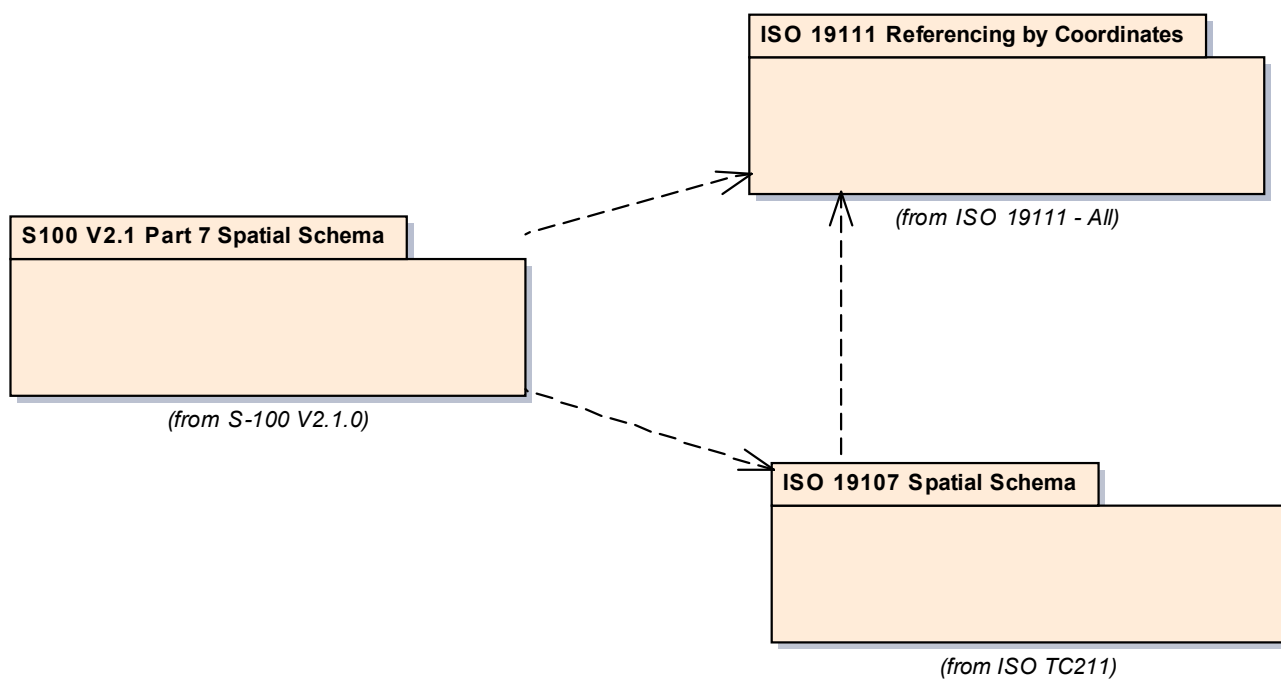
S100 Part 6-6 The Coordinate Operation class diagram

1.6.7 S100 V2.1 Identified Object (*package*)

1.7 S100 V2.1 Part 7 Spatial Schema (*package*)

1.7.1 2.1.0 Fig 7-1 S-100 Spatial Schema relationship with ISO 19100 packages (*diagram*)

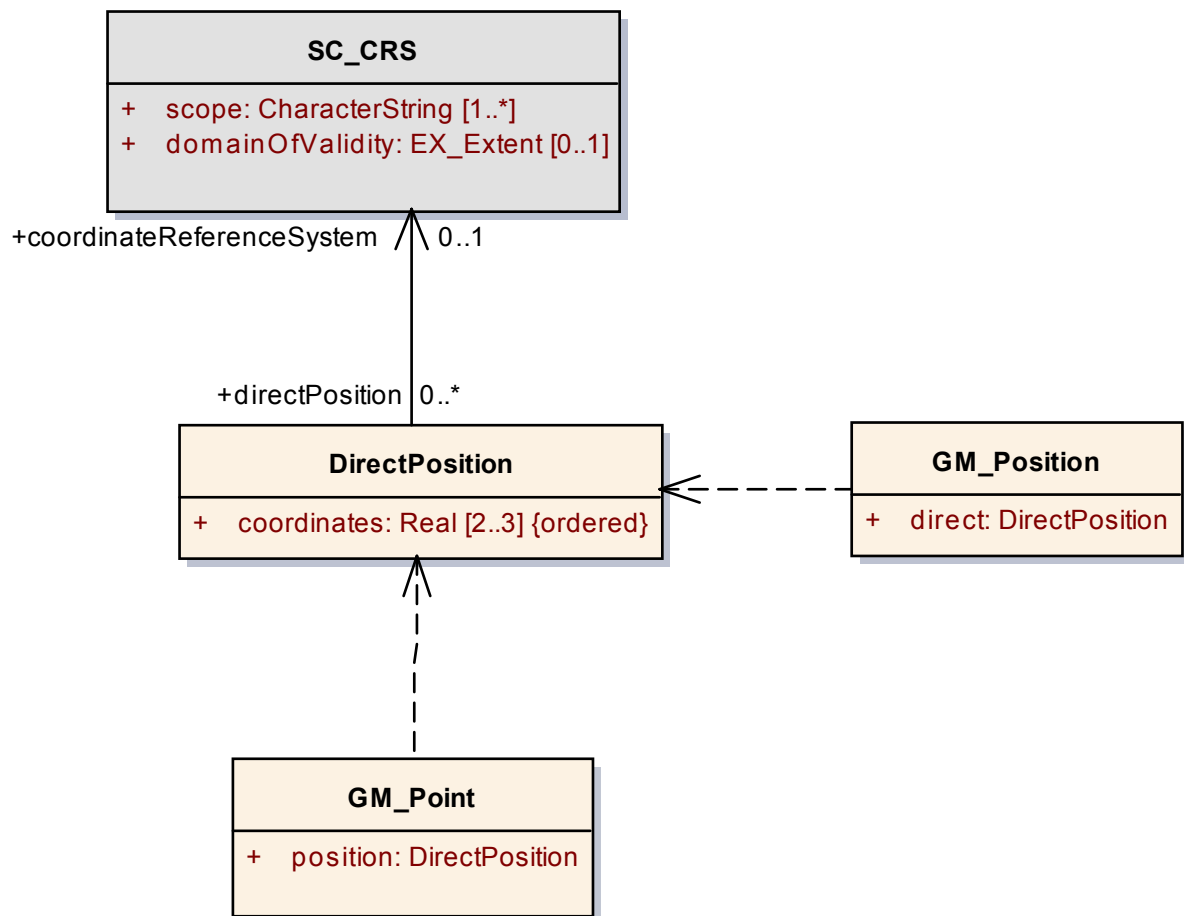
2.1.0 Fig 7-1 S-100 Spatial Schema relationship with ISO 19100 packages
Diagram Version 2.0



2.1.0 Fig 7-1 S-100 Spatial Schema relationship with ISO 19100 packages

1.7.2 2.1.0 Fig 7-2 Coordinate Geometry (*diagram*)

2.1.0 Fig 7-2 Coordinate Geometry
Diagram Version 1.0



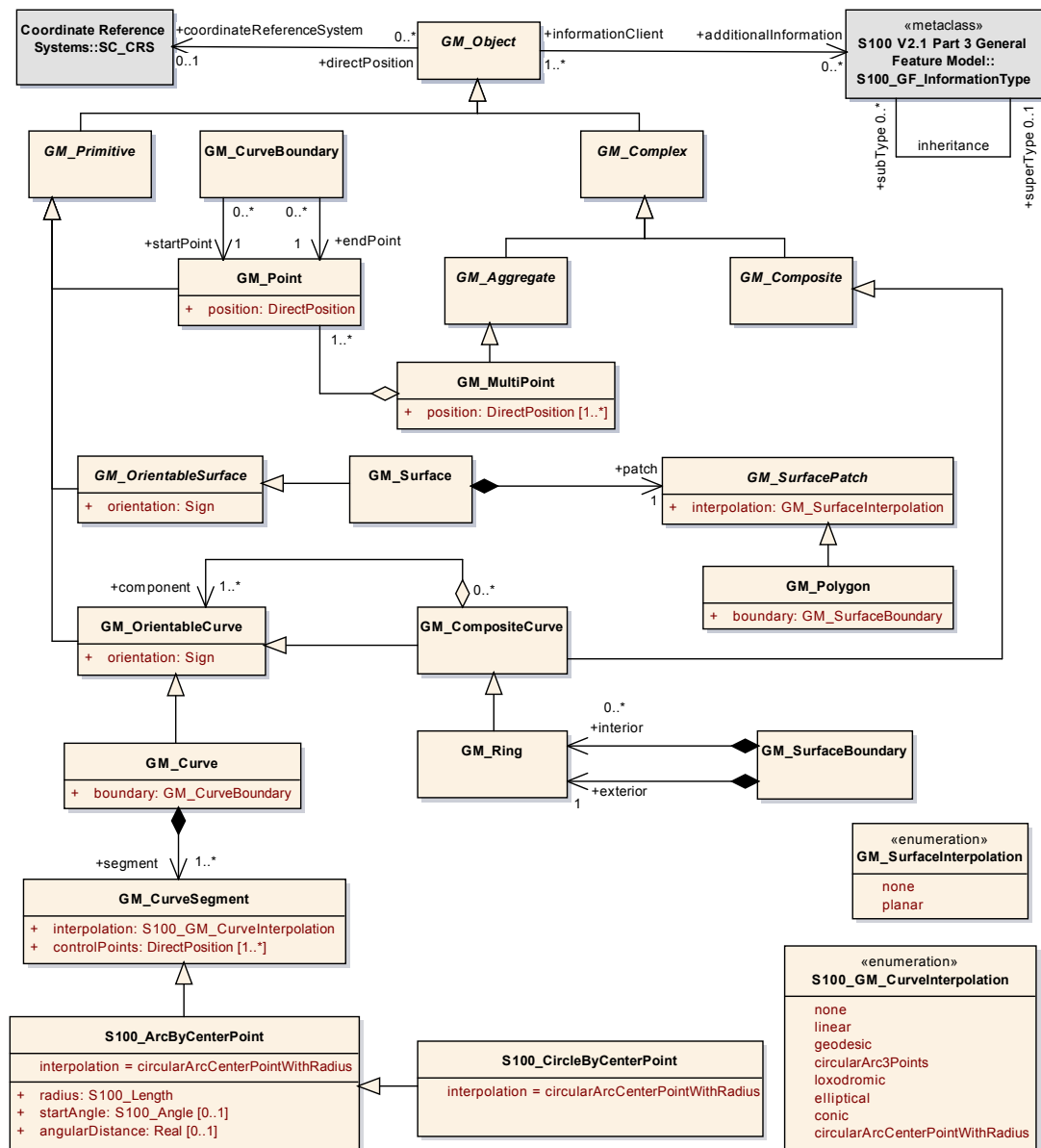
2.1.0 Fig 7-2 Coordinate Geometry

1.7.3 2.1.0 Fig 7-3 Geometry (diagram)

Edition 2.0.0. Defines Circle and Arc by CP and adds a direction attribute. Also adds conic, elliptical, and circularArcCenterPointWithRadius curve interpolation types.

Note: The GM_ classes in the S-100 UML model are copies of the ISO 19107 classes, pending identification of any discrepancies in the effective "black-box" semantics and the forthcoming new version of ISO 19107.

2.1.0 Fig 7-3 Geometry
Diagram Version 2.0



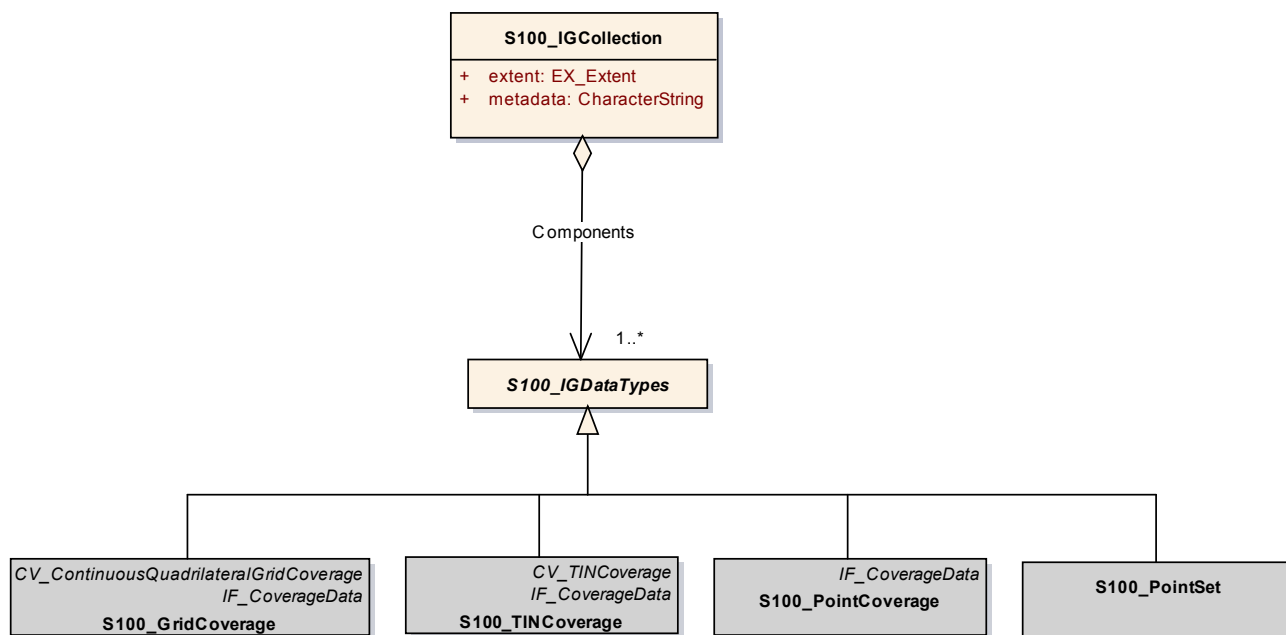
2.1.0 Fig 7-3 Geometry

1.8 S100 V2.1 Part 8 Imagery and Gridded Data (package)

1.8.1 S100 Part 8-18 IGDataSetStructure (diagram)

S100 Part 8-18 IGDataSetStructure
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data
Figure 8-18 IGCD Data Set Structure

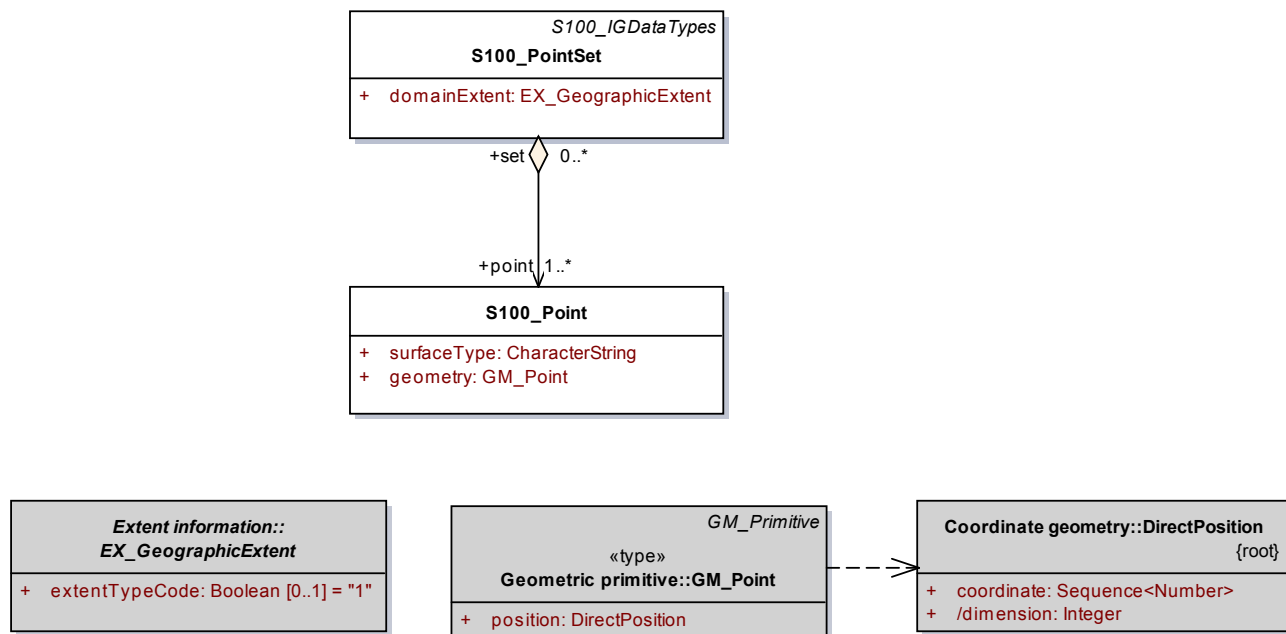


S100 Part 8-18 IGDataSetStructure

1.8.2 S100 Part 8-20 Point Set Spatial Model (diagram)

S100 Part 8-20 Point Set Spatial Model
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data
Figure 8-20 S100_Point

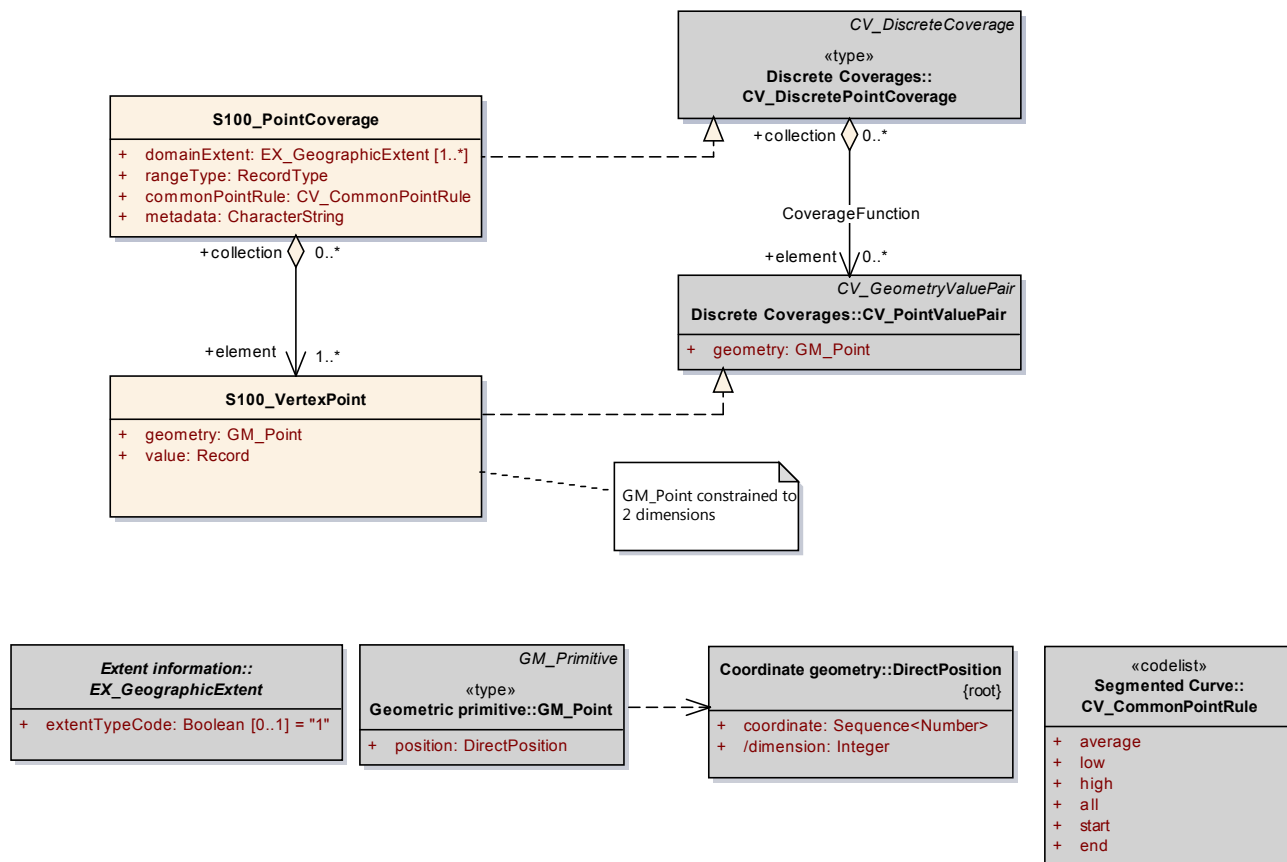


S100 Part 8-20 Point Set Spatial Model

1.8.3 S100 Part 8-21 Point Coverage (diagram)

S100 Part 8-21 Point Coverage
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data
Figure 8-21 Point Coverage

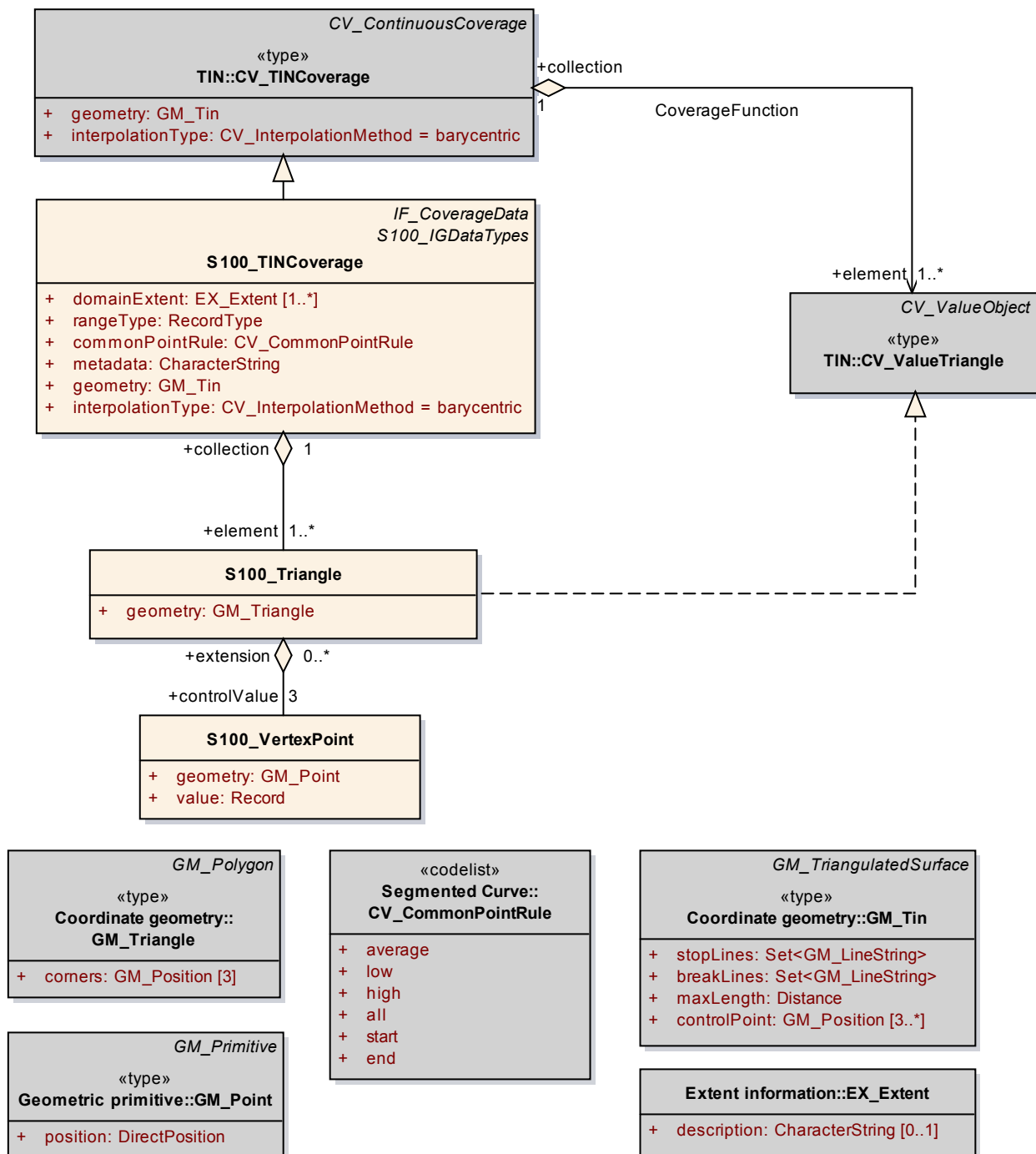


S100 Part 8-21 Point Coverage

1.8.4 S100 Part 8-22 TIN Coverage (diagram)

S100 Part 8-22 TIN Coverage
Diagram Version 2.0

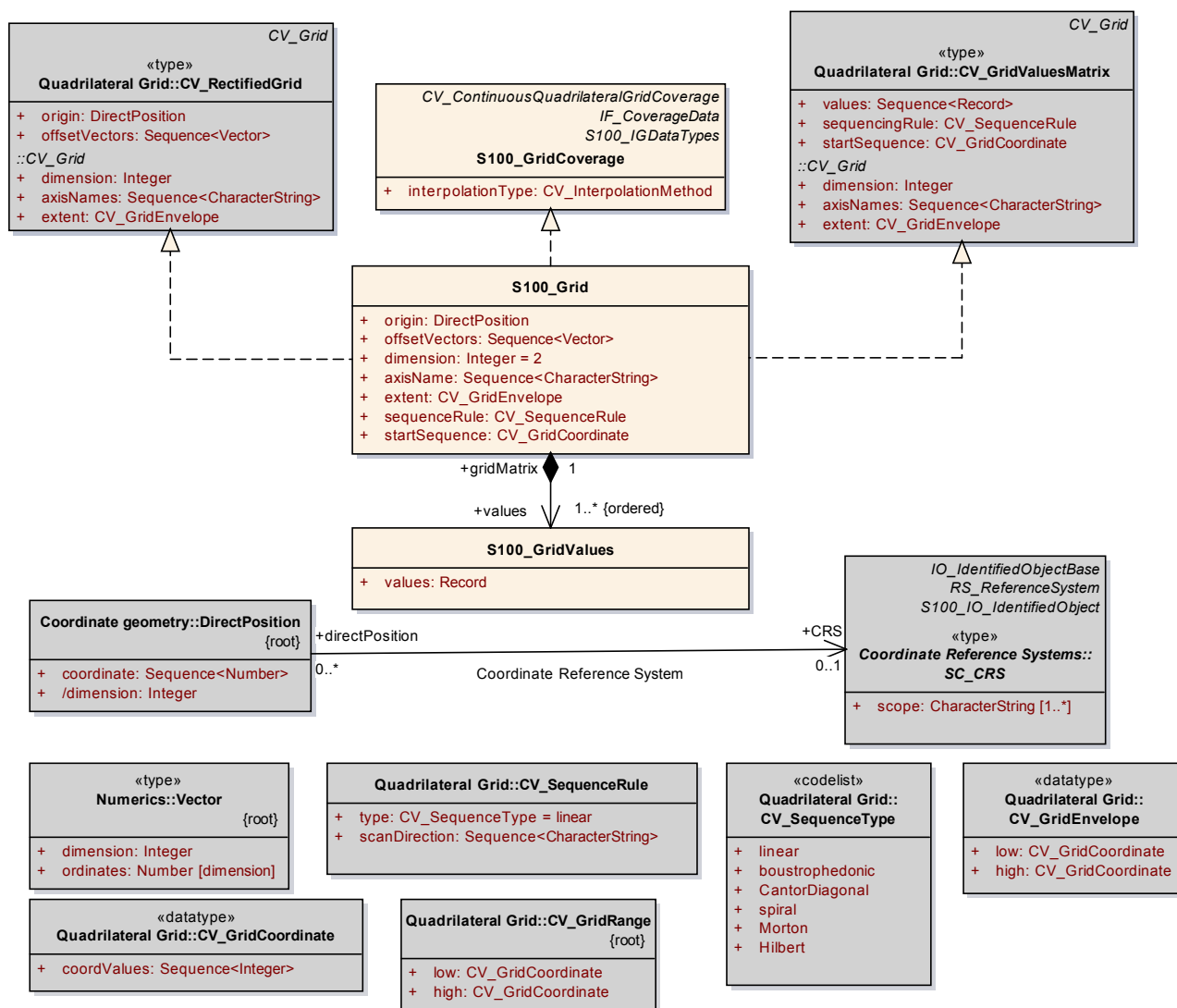
S-100 V2 – Part 8 Imagery and Gridded Data
Figure 8-22 S100 TIN Coverage



1.8.5 S100 Part 8-23 GridCoverage (diagram)

S100 Part 8-23 GridCoverage
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data
Figure 8-23 S100 GridCoverage

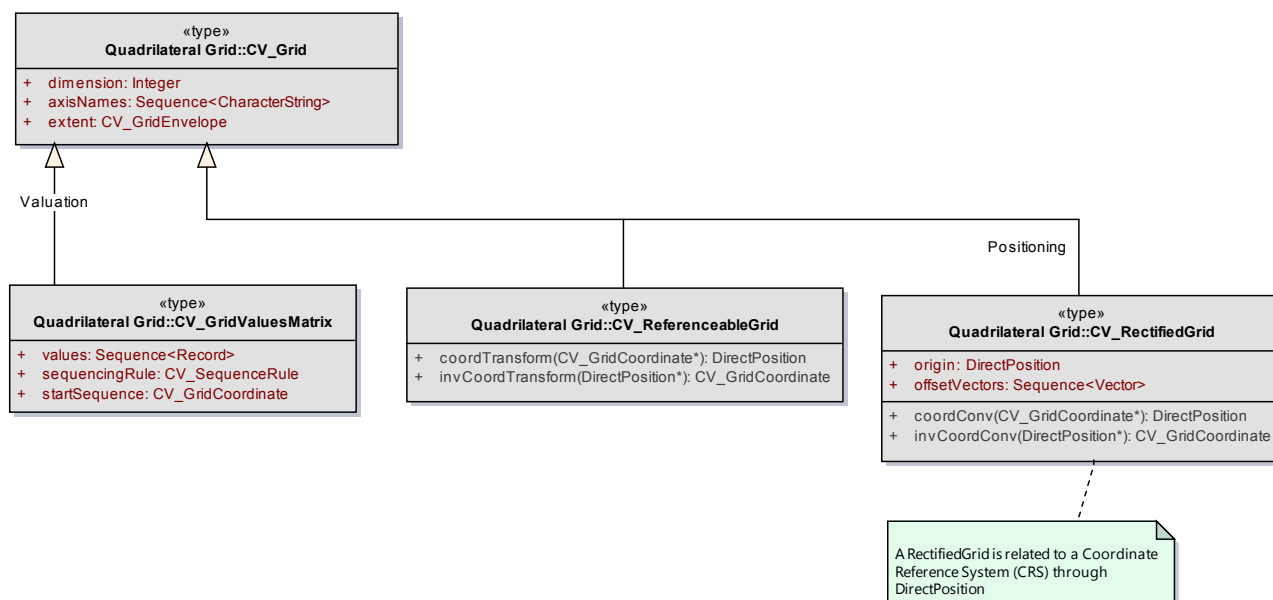


S100 Part 8-23 GridCoverage

1.8.6 S100 Part 8-24 Rectified or Georeferencable Grids *(diagram)*

S100 Part 8-24 Rectified or Georeferencable Grids
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data
Figure 8-27 – Relationship to Metadata



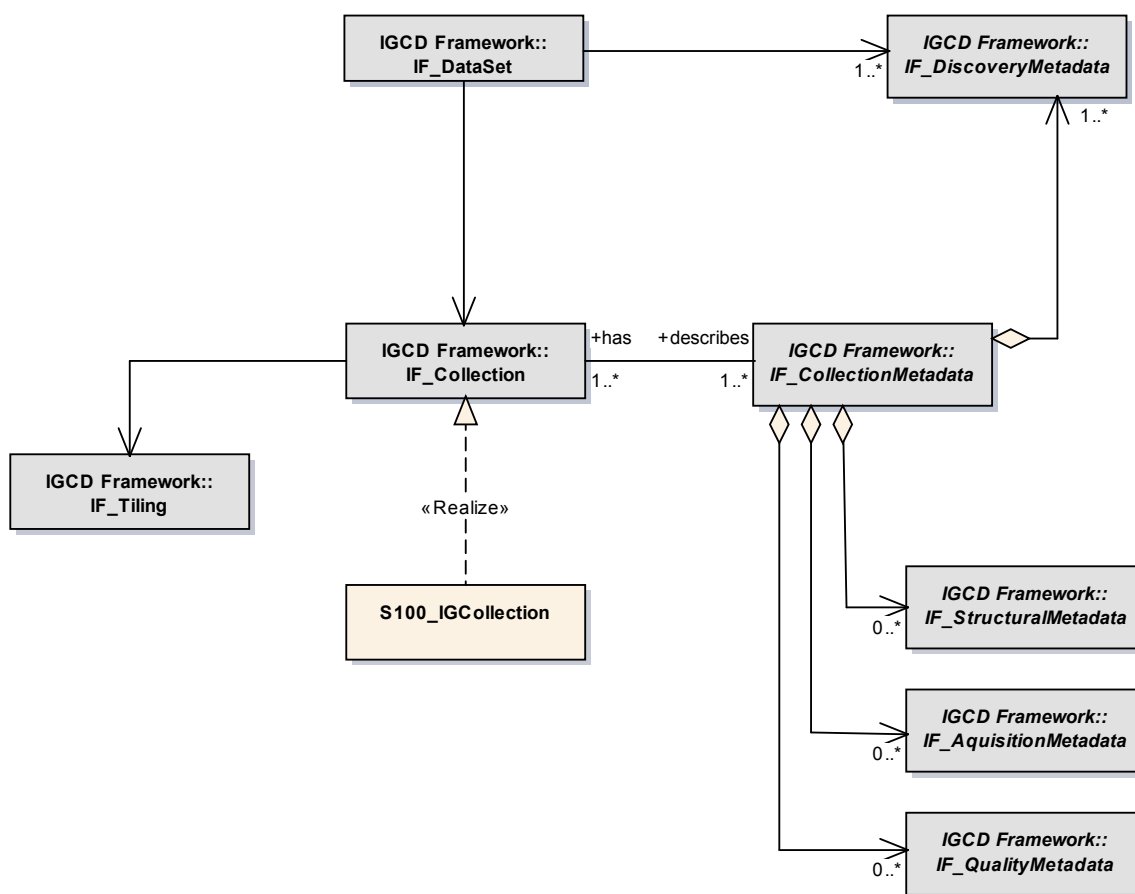
S100 Part 8-24 Rectified or Georeferencable Grids

1.8.7 S100 Part 8-27 Relationship to Metadata (*diagram*)

S100 Part 8-27 Relationship to Metadata
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data

Figure 8-27 – Relationship to Metadata



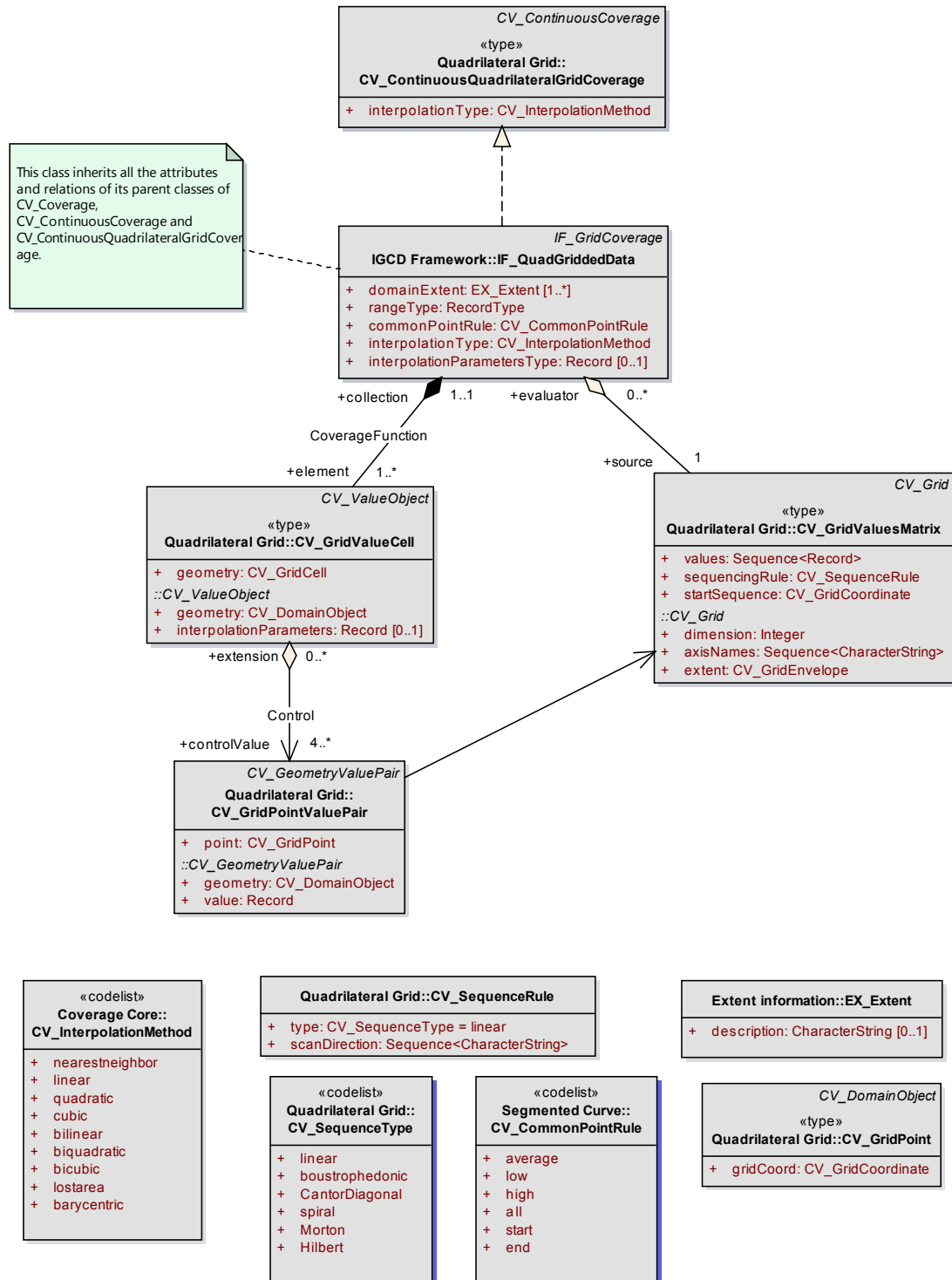
S100 Part 8-27 Relationship to Metadata

1.8.8 S100 Part 8-28 Template Quad Grid Coverage (*diagram*)

S100 Part 8-28 Template Quad Grid Coverage
Diagram Version 2.0

S-100 V2– Part 8 Imagery and Gridded Data

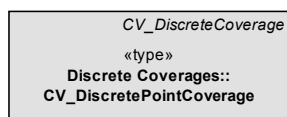
Figure 8-28 Template Application Schema for a Quadrilateral Grid Coverage



1.8.10 S100 Part 8-30 Feature Oriented Discrete Coverage (*diagram*)

S100 Part 8-30 Feature Oriented Discrete Coverage
Diagram Version 2.0

S-100 V1 – Part 8 Imagery and Gridded Data Figure 8-30 Feature Oriented Discrete Coverage

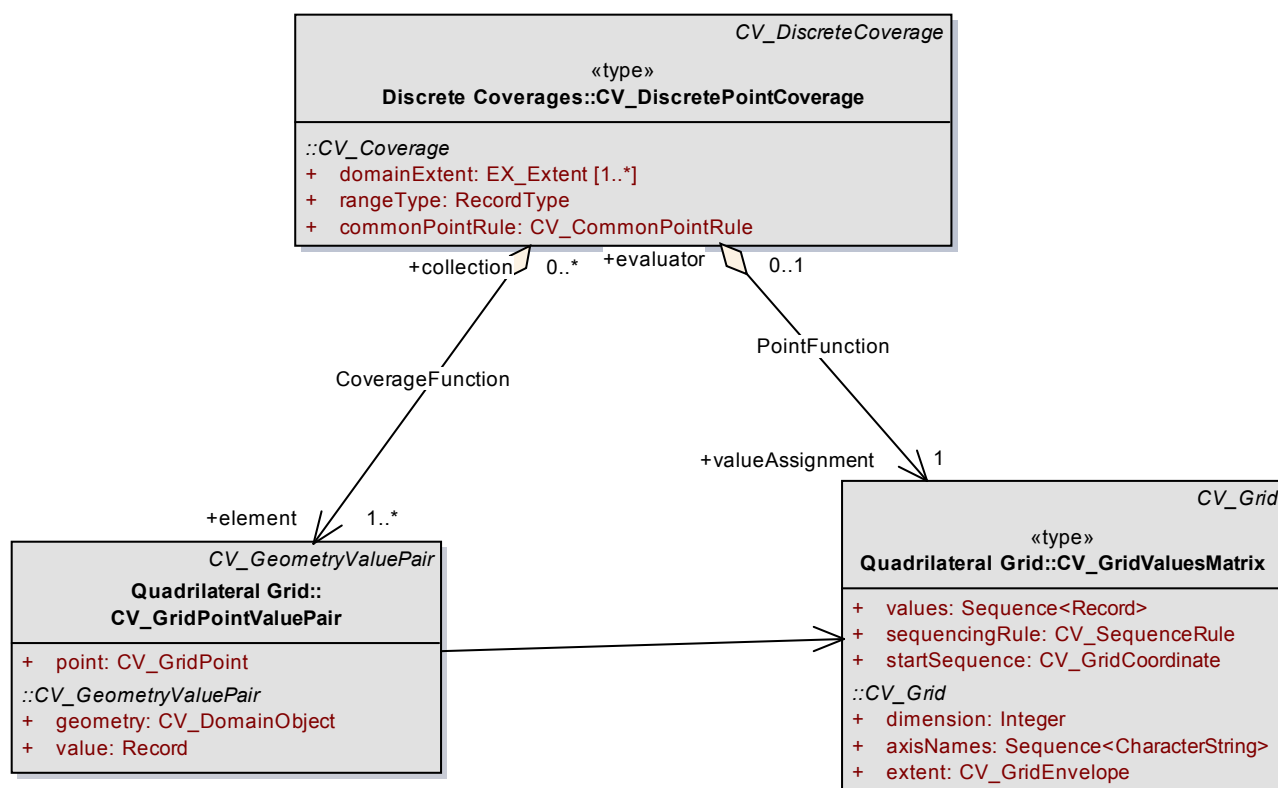


S100 Part 8-30 Feature Oriented Discrete Coverage

1.8.11 S100 Part 8-F1 Feature Oriented Discrete Coverage (*diagram*)

S100 Part 8-F1 Feature Oriented Discrete Coverage
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data Figure 8-F1 Feature Oriented Discrete Coverage



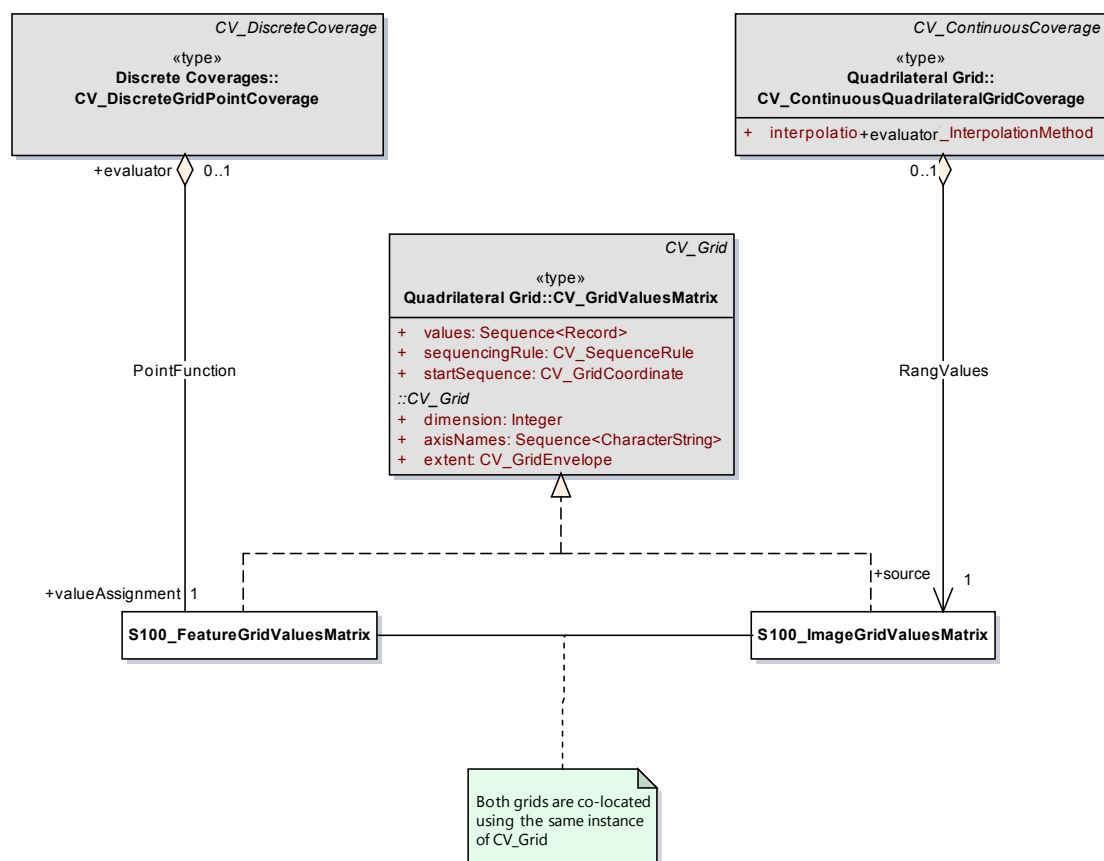
S100 Part 8-F1 Feature Oriented Discrete Coverage

1.8.12 S100 Part 8-F2 Assigning feature codes to pixels in an image (diagram)

S100 Part 8-F2 Assigning feature codes to pixels in an image
Diagram Version 2.0

S-100 V2 – Part 8 Imagery and Gridded Data

Figure 8-F.2 Assigning feature codes to pixels in an image



S100 Part 8-F2 Assigning feature codes to pixels in an image

1.9 S100 V2.1 Part 9 Portrayal (*package*)

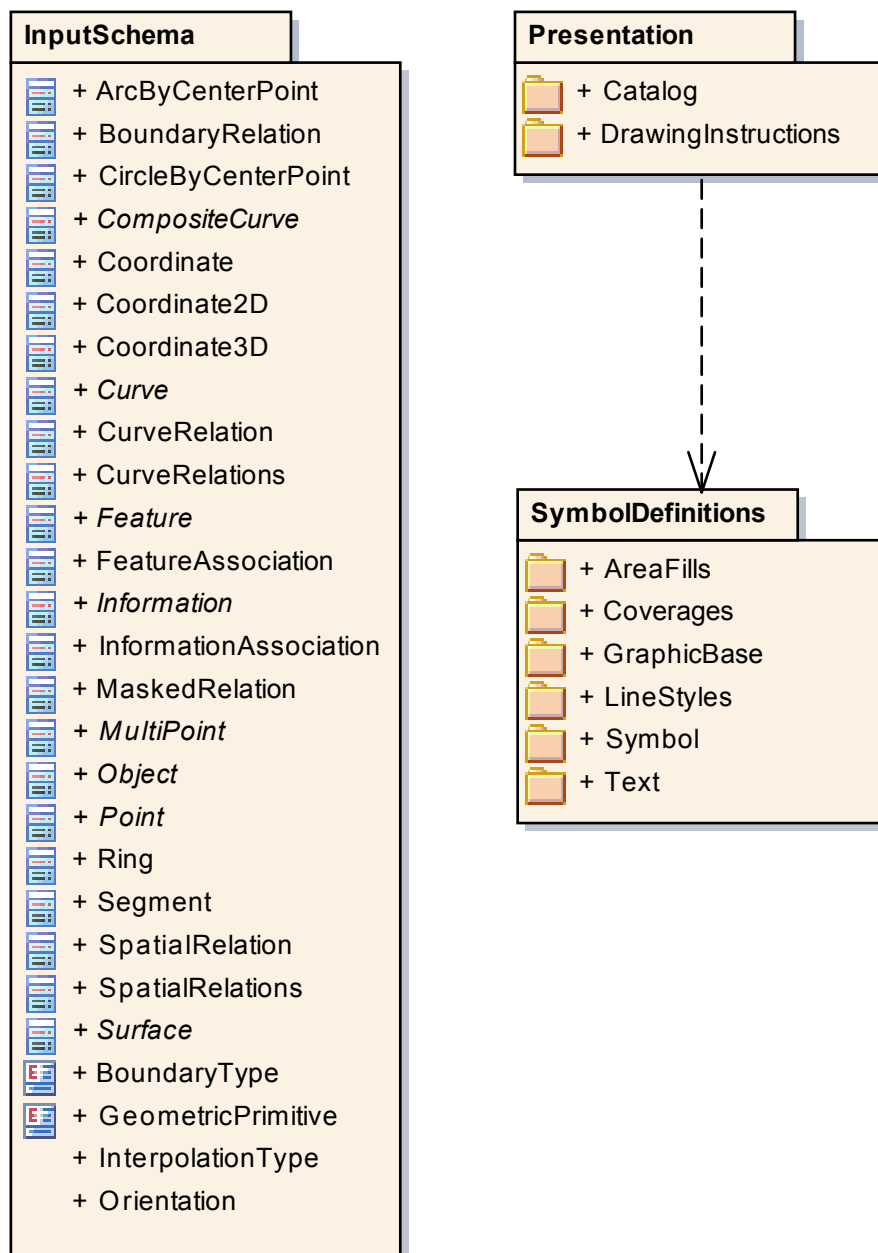
1.9.1 V2.1.0 Fig 9-3 Packages (*diagram*)

The InputSchema describes how the data is presented to the portrayal engine (XSLT processor). The Presentation package includes two subpackages one describing the portrayal catalogue structure the other describing the drawing instructions. Drawing instructions are the output of the portrayal engine (XSLT processor)

The SymbolDefinitions package describes the graphic primitives used for portrayal.

The portrayal engine is using standard XSLT. There is no package describing this part of the portrayal.

V2.1.0 Fig 9-3 Packages
Diagram Version 1.0



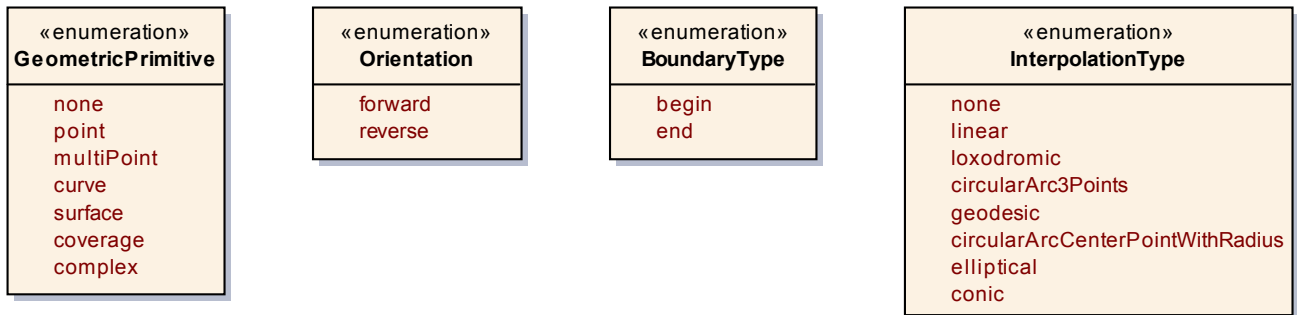
V2.1.0 Fig 9-3 Packages

1.9.2 InputSchema (package)

1.9.2.1 V2.1.0 Fig 9-4 Input Schema Enumerations (diagram)

Enumerations defined for use in the input schema.

V2.1.0 Fig 9-4 Input Schema Enumerations
Diagram Version 1.0



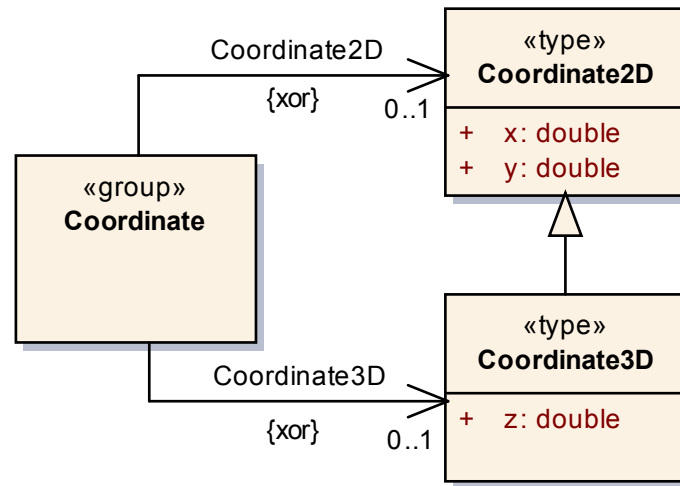
V2.1.0 Fig 9-4 Input Schema Enumerations

1.9.2.2 V2.1.0 Fig 9-5 Input Schema Coordinates (diagram)

In case that coordinates have to be presented to the XSLT processor the types in this schema have to be used.

V2.1.0 Fig 9-5 Input Schema Coordinates

Diagram Version 1.0

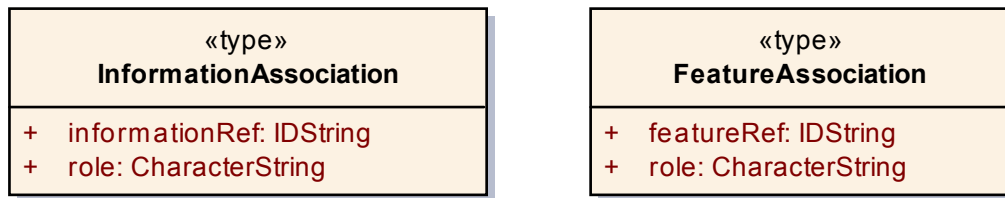


V2.1.0 Fig 9-5 Input Schema Coordinates

1.9.2.3 V2.1.0 Fig 9-6 Input Schema Associations (diagram)

Associations according to the General Feature Model.

V2.1.0 Fig 9-6 Input Schema Associations
Diagram Version 1.0



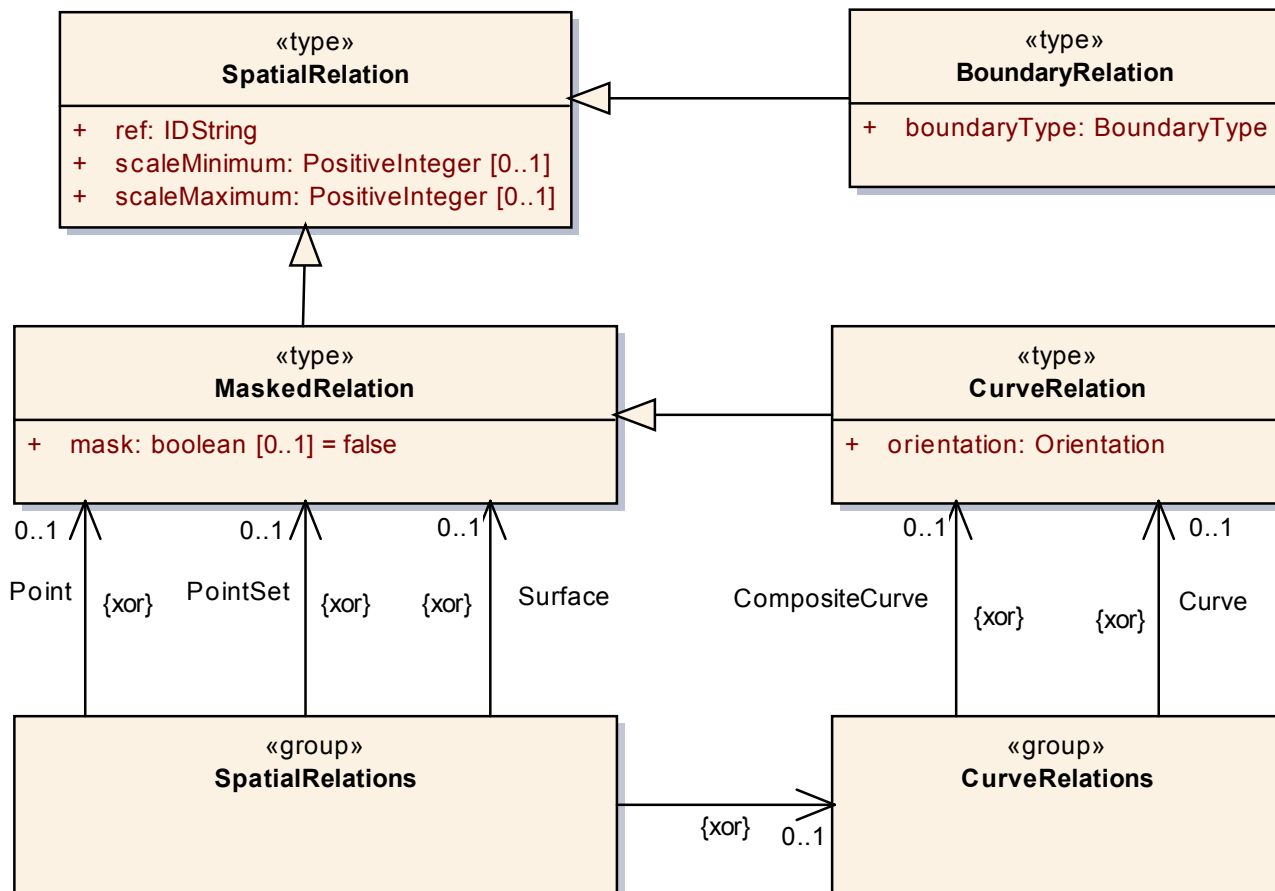
V2.1.0 Fig 9-6 Input Schema Associations

1.9.2.4 V2.1.0 Fig 9-7 Input Schema Spatial Relations (diagram)

In the general feature model different relations are modelled between feature types and spatial types but also between spatial types. For such relations the following types are defined by this schema.

V2.1.0 Fig 9-7 Input Schema Spatial Relations

Diagram Version 1.0



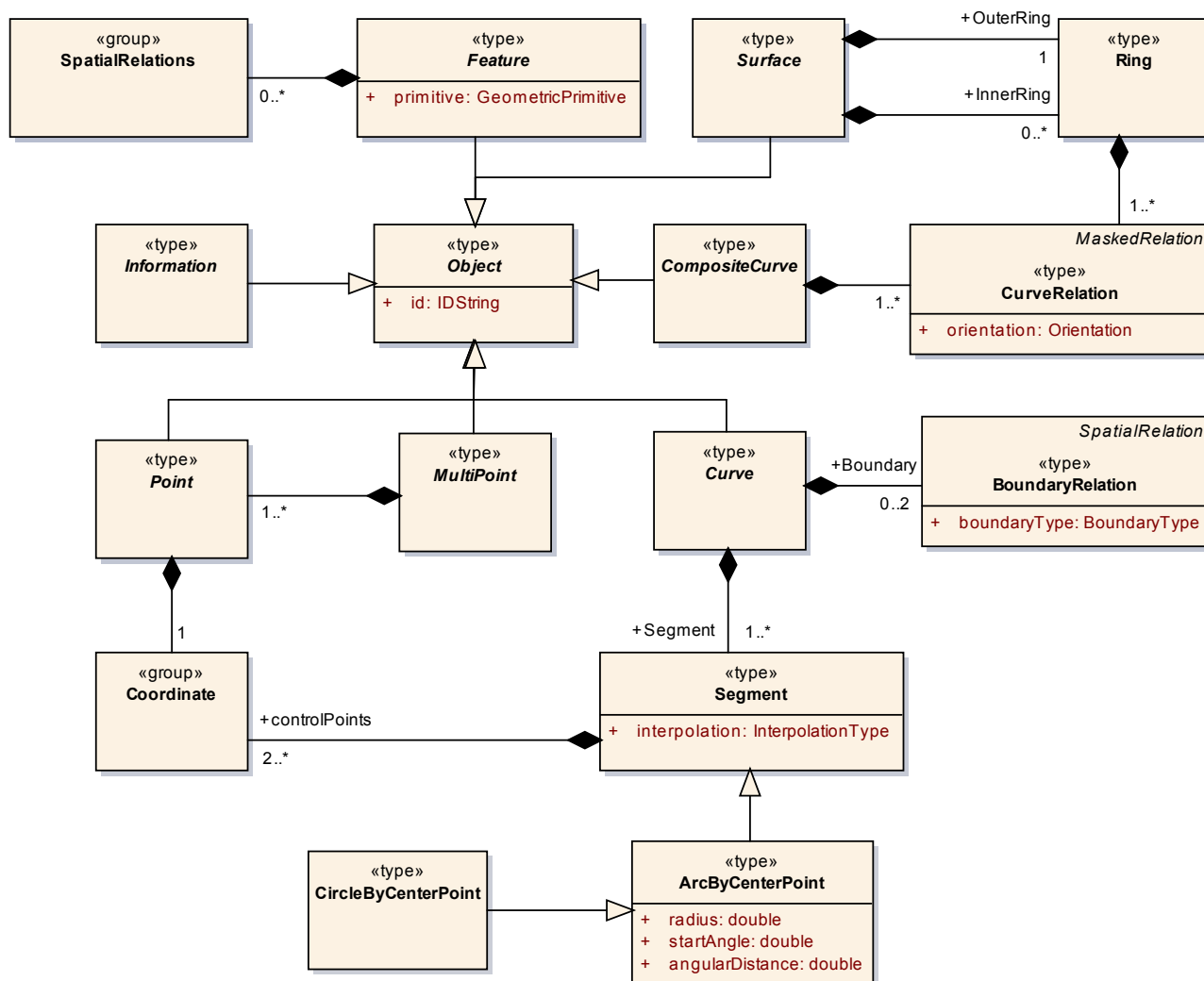
V2.1.0 Fig 9-7 Input Schema Spatial Relations

1.9.2.5 V2.1.0 Fig 9-8 Input Schema Objects (diagram)

All objects in a data set are based on the type Object which carries the common properties of all objects. The only commonality on objects is the identifier. Each objects needs to be identifiable within a data set. This is done by the attribute id.

Note that the type of the identifier is IDString to be as general as possible with respect to different methods used for identification. The characters allowed in this string are 0-9a-zA-Z.

V2.1.0 Fig 9-8 Input Schema Objects
Diagram Version 1.0

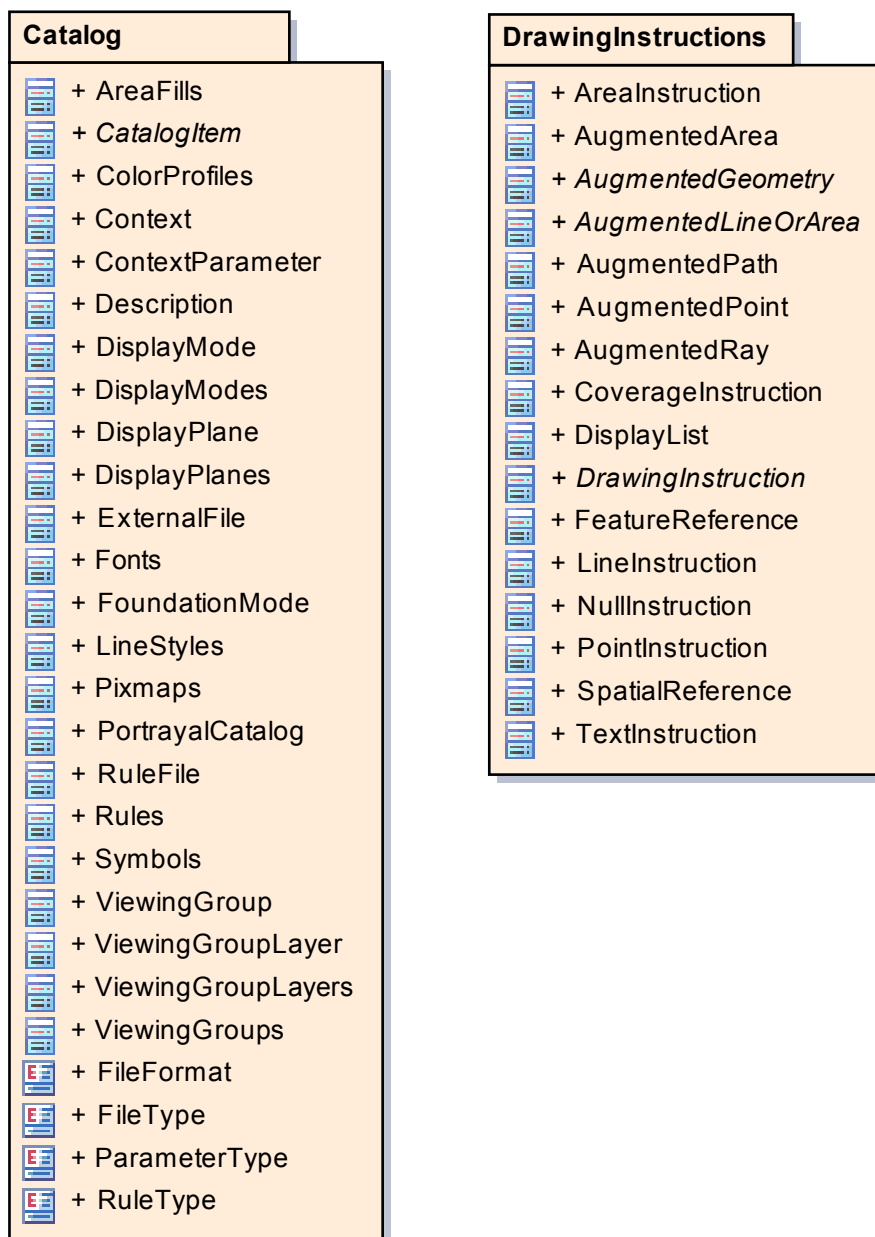


V2.1.0 Fig 9-8 Input Schema Objects

1.9.3 Presentation (*package*)

1.9.3.1 V2.1.0 Fig 9-x (none) Presentation (diagram)

V2.1.0 Fig 9-x (none) Presentation
Diagram Version 1.0

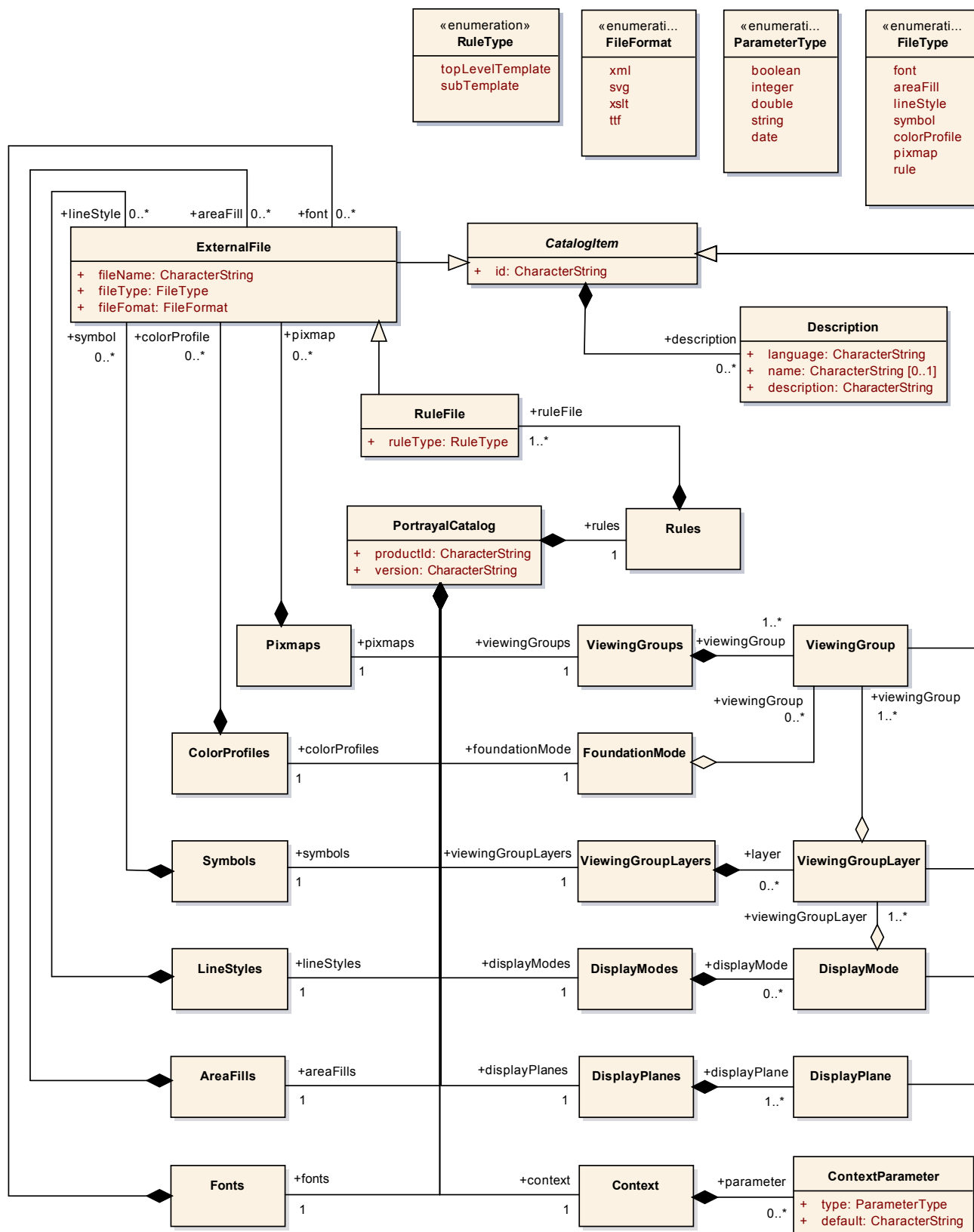


V2.1.0 Fig 9-x (none) Presentation

1.9.3.2 Catalog (package)

1.9.3.2.1 V2.1.0 Fig 9-20 Catalogue (diagram)

V2.1.0 Fig 9-20 Catalogue
Diagram Version 1.0

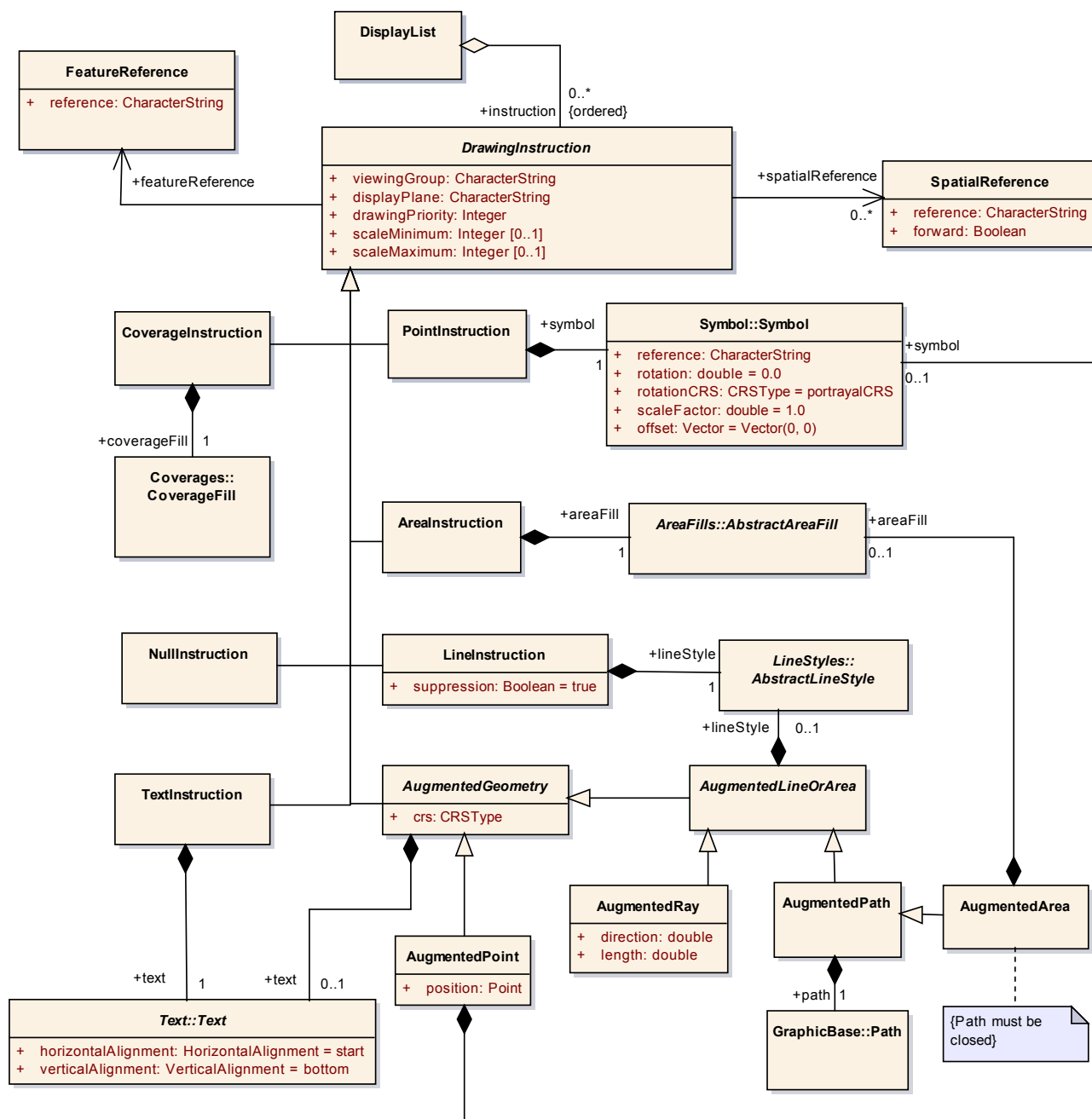


V2.1.0 Fig 9-20 Catalogue

1.9.3.3 DrawingInstructions (package)

1.9.3.3.1 V2.1.0 Fig 9-10 Drawing Instructions (diagram)

V2.1.0 Fig 9-10 Drawing Instructions
Diagram Version 1.0



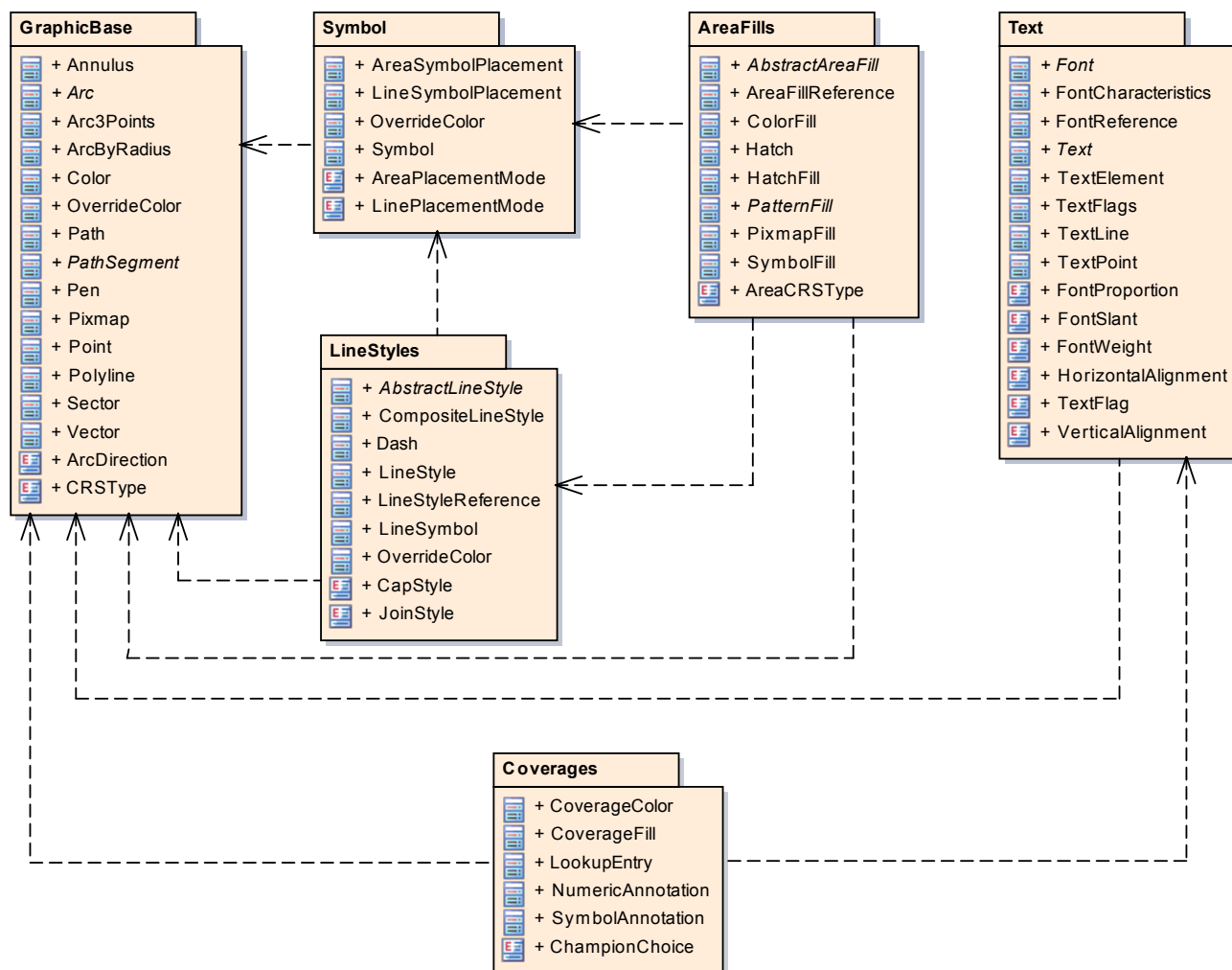
V2.1.0 Fig 9-10 Drawing Instructions

1.9.4 SymbolDefinitions (package)

1.9.4.1 V2.1.0 Fig 9-11 Symbol Definition Packages (diagram)

The SymbolDefinition package describes the graphic primitives used for the portrayal. Parts of the primitives are defined externally by using SVG definitions. Those external parts will be referenced from the types in this model.

V2.1.0 Fig 9-11 Symbol Definition Packages
Diagram Version 1.0

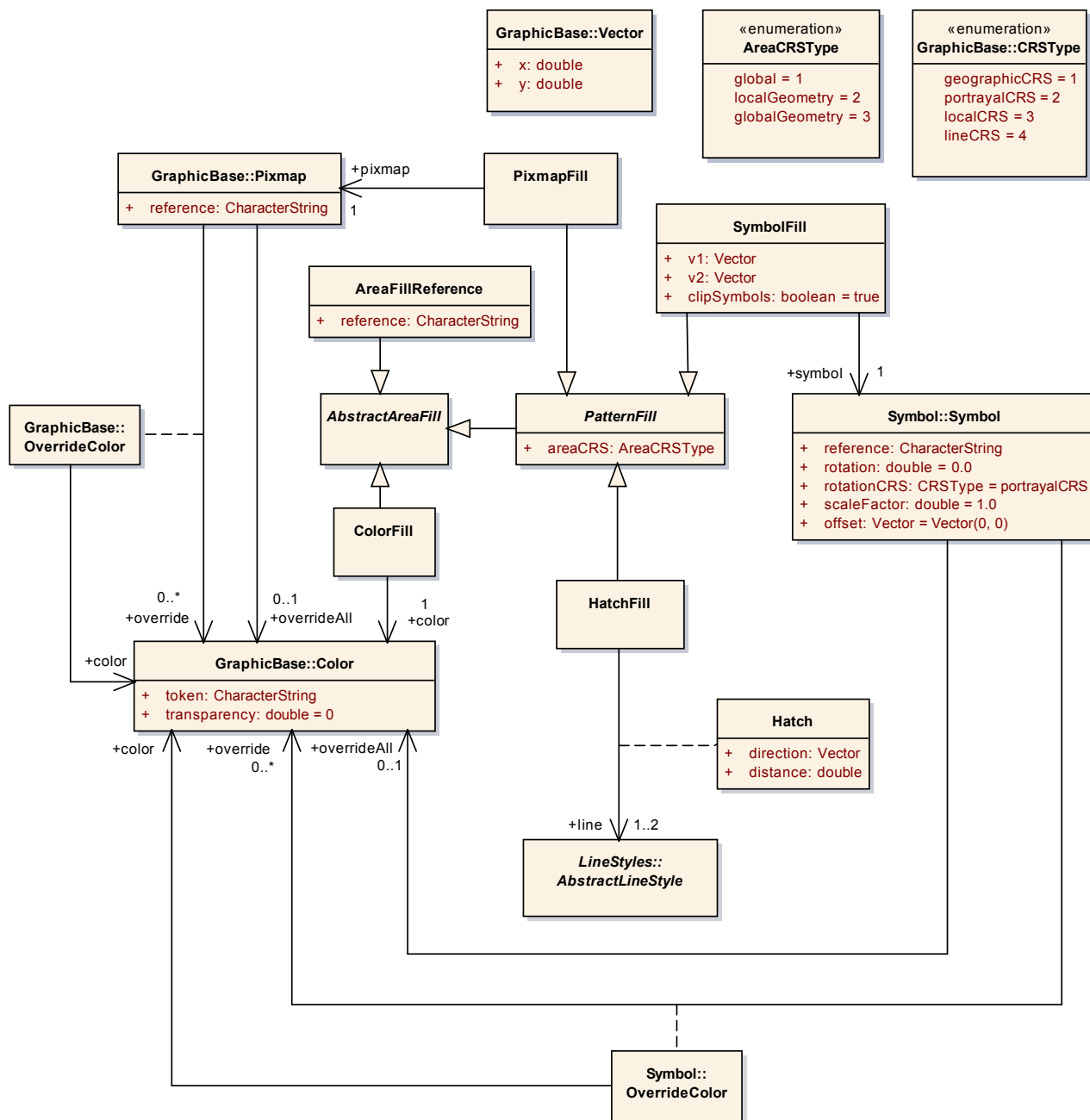


V2.1.0 Fig 9-11 Symbol Definition Packages

1.9.4.2 AreaFills (package)

1.9.4.2.1 V2.1.0 Fig 9-17 Area Fills Package (diagram)

V2.1.0 Fig 9-17 Area Fills Package
Diagram Version 1.0



V2.1.0 Fig 9-17 Area Fills Package

1.9.4.3 Coverages (package)

1.9.4.3.1 V2.1.0 Fig 9-19 Coverage Package (diagram)

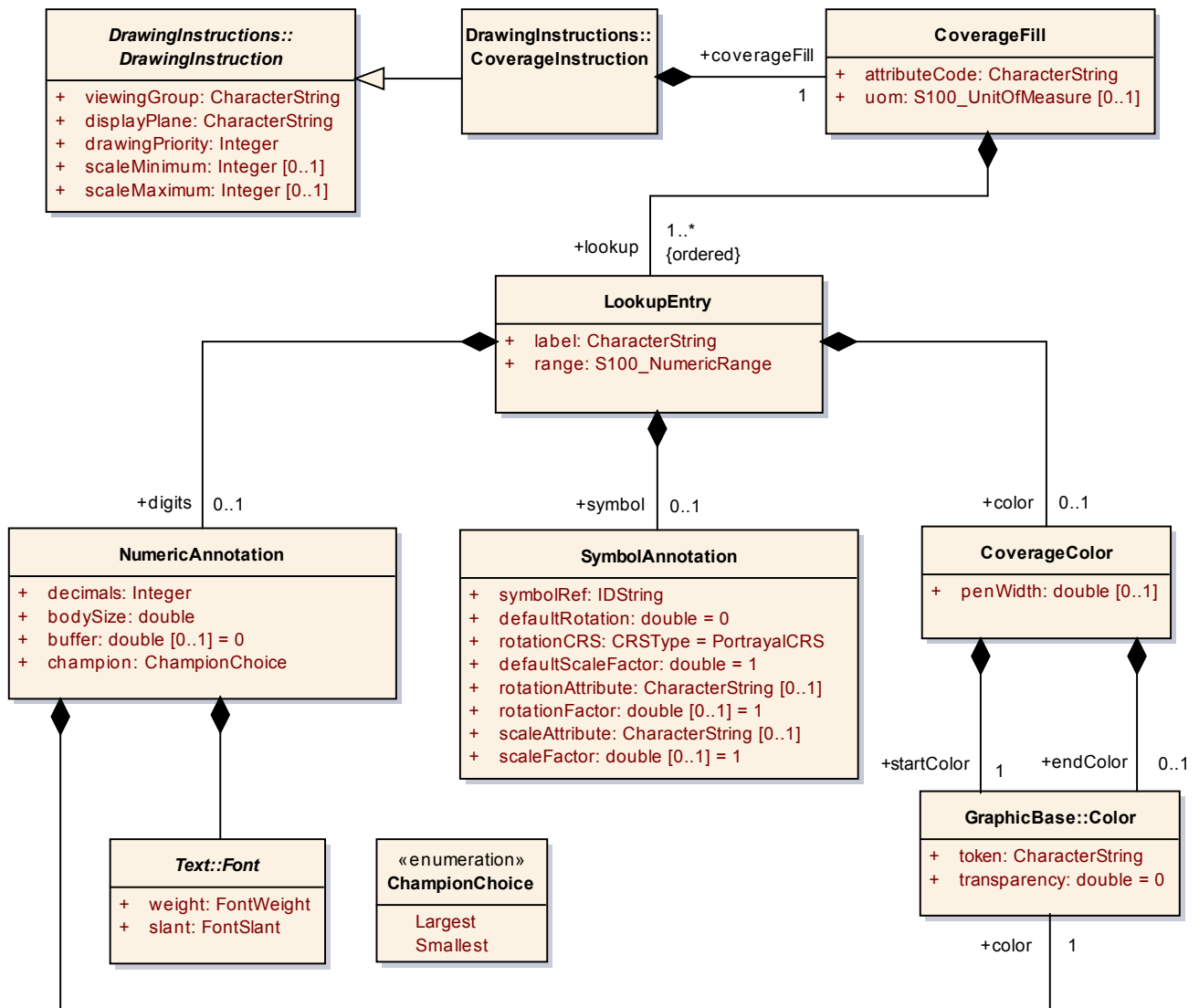
The coverage package contains the types for the depiction of a Coverage. This portrayal is applicable to the portrayal of numeric Coverage values. Three types of coverage portrayals are supported:

- Colour
- Numeric Annotation
- Symbol Annotation

Ranges are used to control how portrayal is assigned to the values in a Coverage. These make use of the S-100_NumericRange complex type which is defined in S-100 Part 1 Conceptual Schema Language. The Numeric Range type allows for various range definitions with different closure options.

The CoverageFill class carries an ordered list of lookup entries. Each of these entries carries a range used to evaluate a match by testing if the coverage value matches the range. The first lookup entry with a matching range is used to apply up to one of each type of portrayal (colour, numeric annotation or a symbol) to the coverage element. This allows for example to fill a cell in a grid with a colour and assign a numeric or symbol annotation to the cell as well.

V2.1.0 Fig 9-19 Coverage Package
Diagram Version 1.0

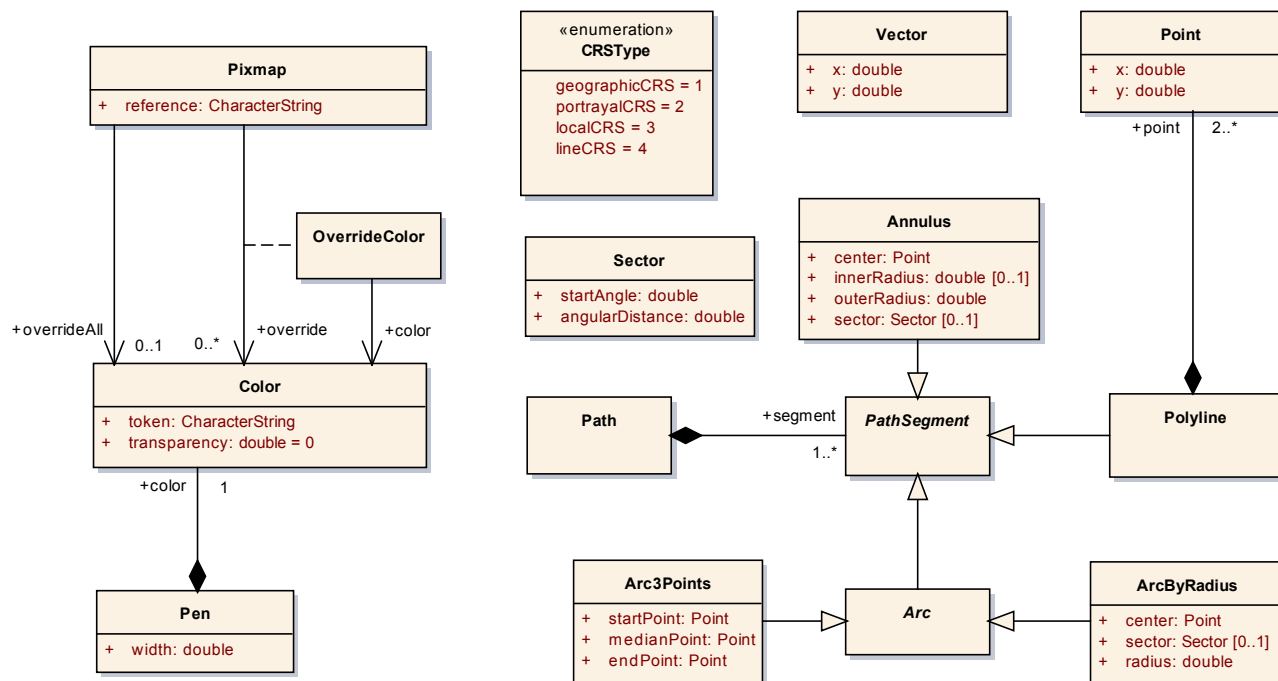


V2.1.0 Fig 9-19 Coverage Package

1.9.4.4 GraphicBase (package)

1.9.4.4.1 V2.1.0 Fig 9-12 Graphics Base (diagram)

V2.1.0 Fig 9-12 Graphics Base
Diagram Version 1.0

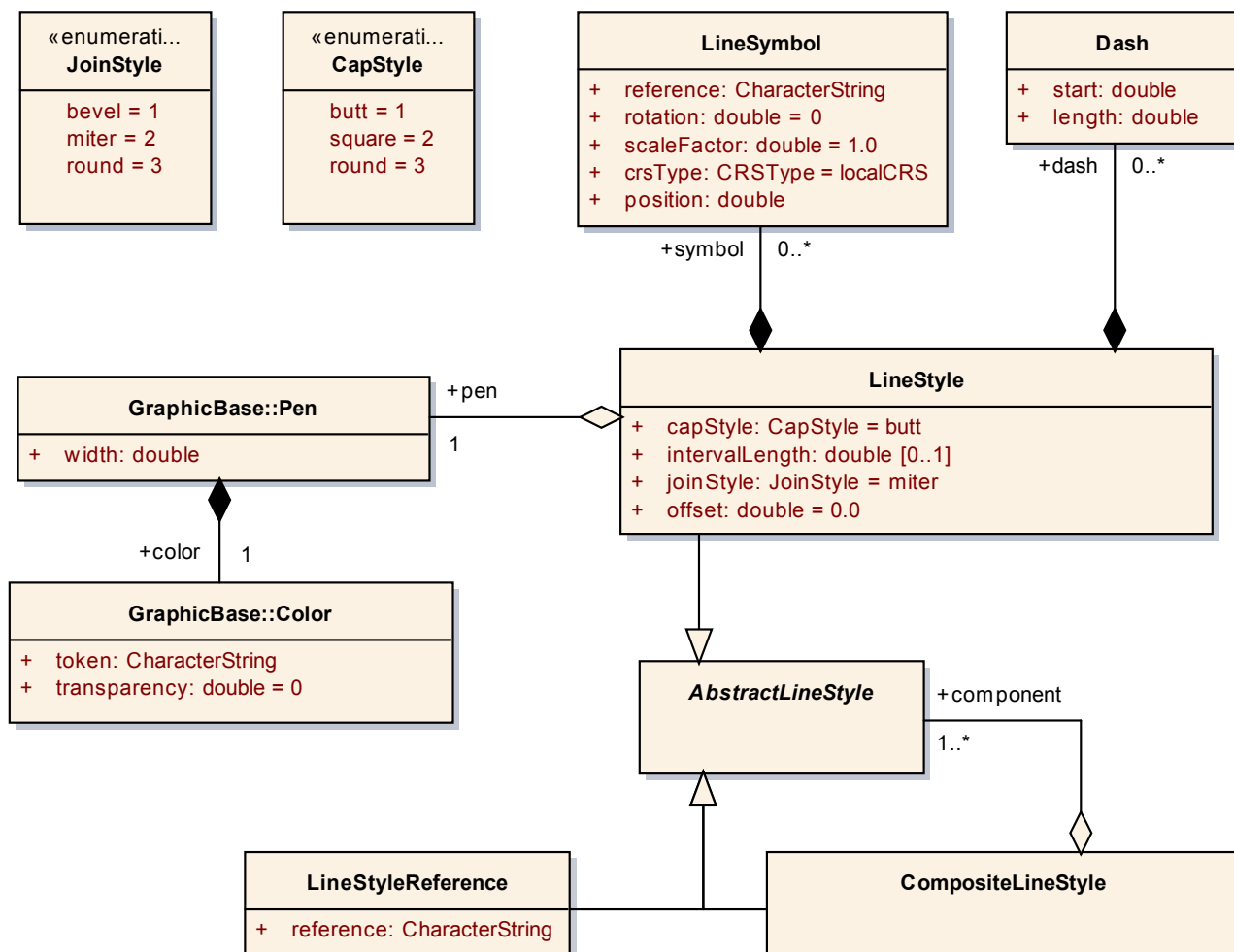


V2.1.0 Fig 9-12 Graphics Base

1.9.4.5 LineStyles (package)

1.9.4.5.1 V2.1.0 Fig 9-16 Linestyles Package (diagram)

V2.1.0 Fig 9-16 Linestyles Package
Diagram Version 1.0



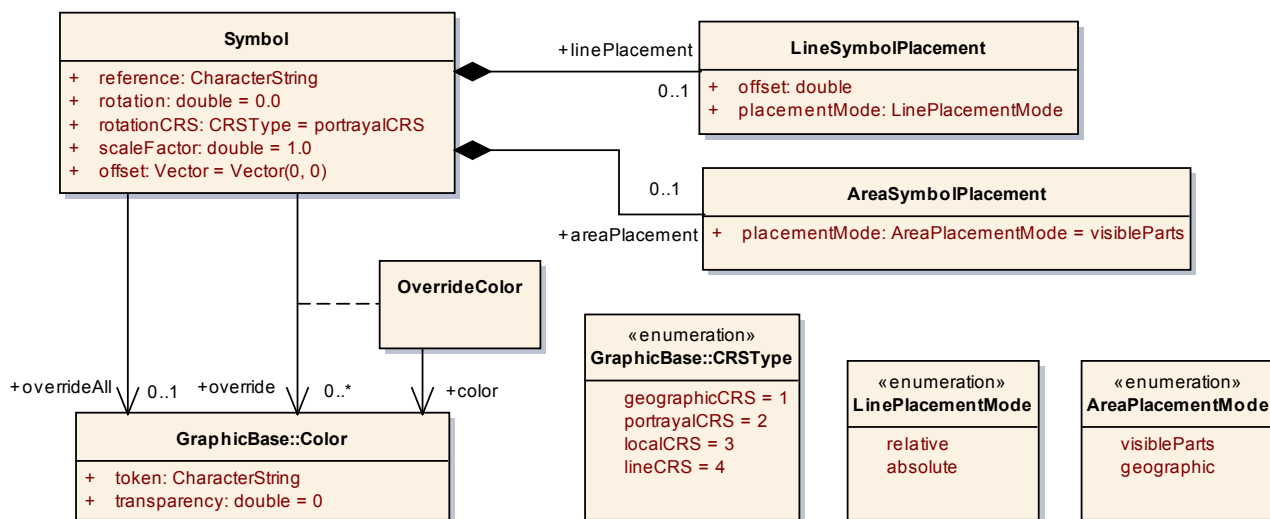
V2.1.0 Fig 9-16 Linestyles Package

1.9.4.6 Symbol (package)

1.9.4.6.1 V2.1.0 Fig 9-15 Symbol Package (diagram)

This package contains the model of a symbol. Note that the definition of the symbol graphic itself is not the subject of this model. This will be defined in external files according to the SVG 1.1 recommendation.

V2.1.0 Fig 9-15 Symbol Package
Diagram Version 1.0



V2.1.0 Fig 9-15 Symbol Package

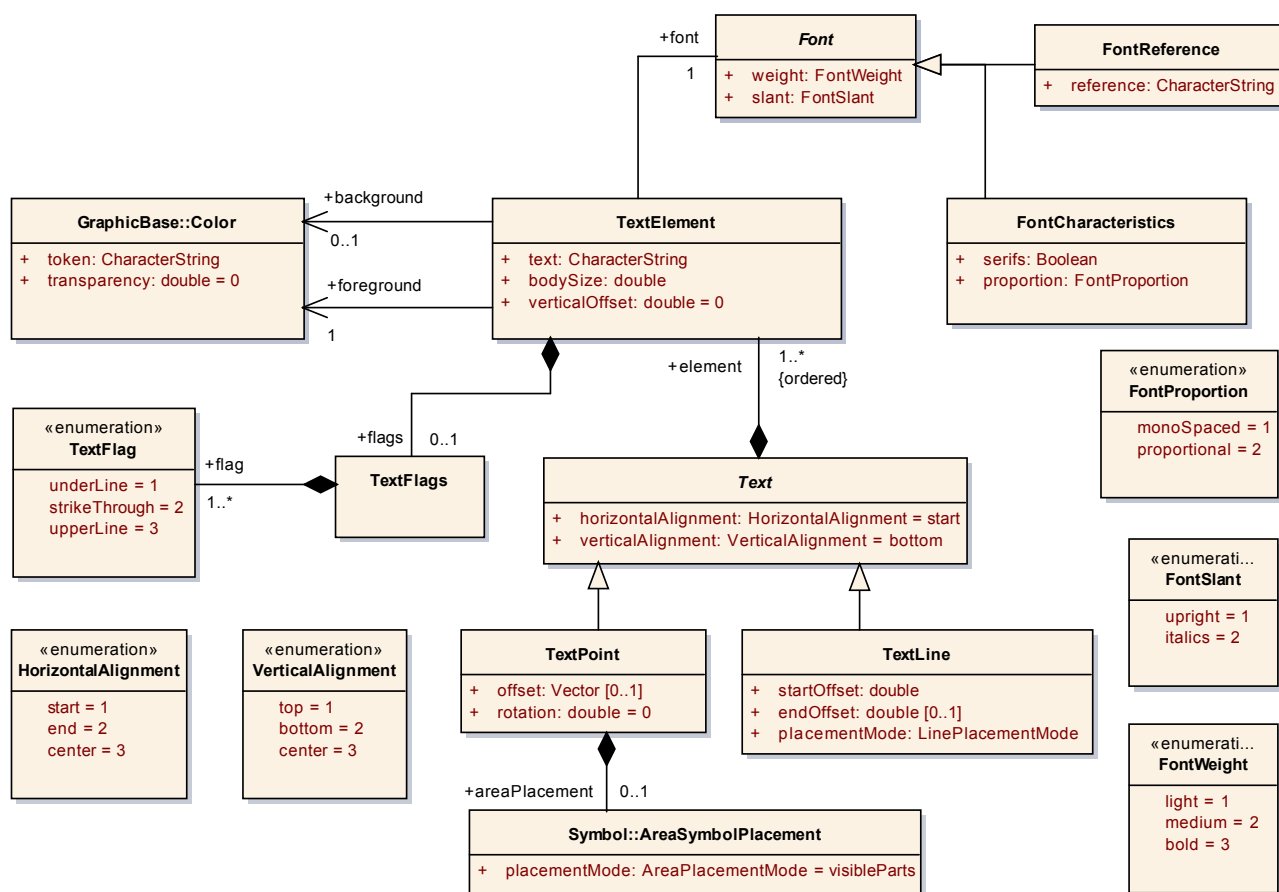
1.9.4.7 Text (package)

1.9.4.7.1 V2.1.0 Fig 9-18 Text Package (diagram)

The text package contains the types necessary for the depiction of text. This includes fonts. In this model fonts may be described by characteristics or referenced by name. Two types of text instructions are supported:

- Text relative to a point
- Text that will be drawn along a linear geometry

V2.1.0 Fig 9-18 Text Package
Diagram Version 1.0



V2.1.0 Fig 9-18 Text Package

1.10 V2.1 Examples (*package*)

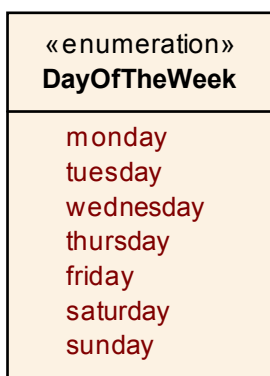
1.10.1 V2.1.0 Part 1 Examples (*package*)

1.10.1.1 V2.1.0 Fig 1-7 Enumeration (*diagram*)

Example of Enumeration for Figure 1-7.

An enumerated type declaration defines a list of valid identifiers of mnemonic words. Attributes of an enumerated type can only take values from this list.

V2.1.0 Fig 1-7 Enumeration
Diagram Version 2.0



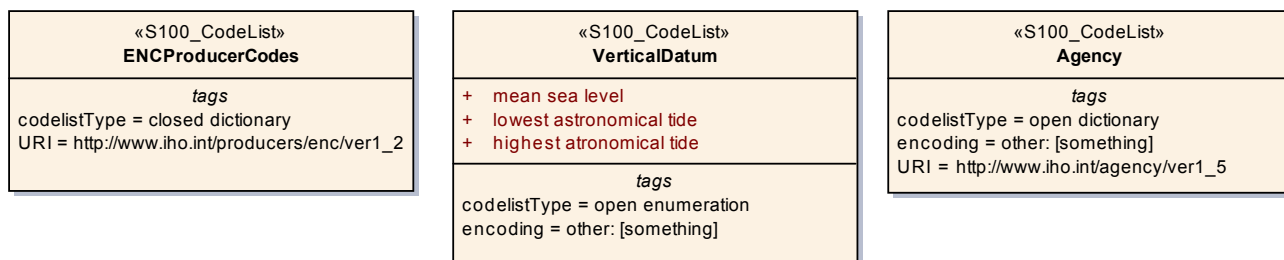
V2.1.0 Fig 1-7 Enumeration

1.10.1.2 V2.1.0 Fig 1-8 Codelists (diagram)

S100 Codelist examples for Figure 1-8.

1. The **VerticalDatum** codelist is an example of a codelist modelled as an extensible enumeration, which can take additional values conforming to a specified format.
2. The **ENCProducerCodes** codelist is an example of a codelist modelled by an external dictionary.
3. The **Agency** codelist is an example of a codelist modelled by an external dictionary which can also take additional values conforming to a specified format.

V2.1.0 Fig 1-8 Codelists
Diagram Version 2.0



V2.1.0 Fig 1-8 Codelists

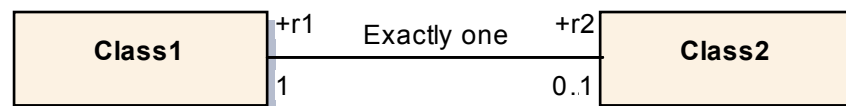
1.10.1.3 V2.1.0 Fig 1-10 Association (diagram)

An association in UML is the semantic relationship between two or more classifiers (e.g. class, interface, type, ...) that involves connections among their instances.

An association is used to describe a relationship between two or more classes. In addition to an ordinary association, UML defines two special types of associations called aggregation and composition. The three types have different semantics. An ordinary association shall be used to represent a general relationship between two classes. The aggregation and composition associations shall be used to create part-whole relationships between two classes.

A binary association has a name and two association-ends. An association-end has a role name, a multiplicity statement, and an optional aggregation symbol.

V2.1.0 Fig 1-10 Association
Diagram Version 1.0

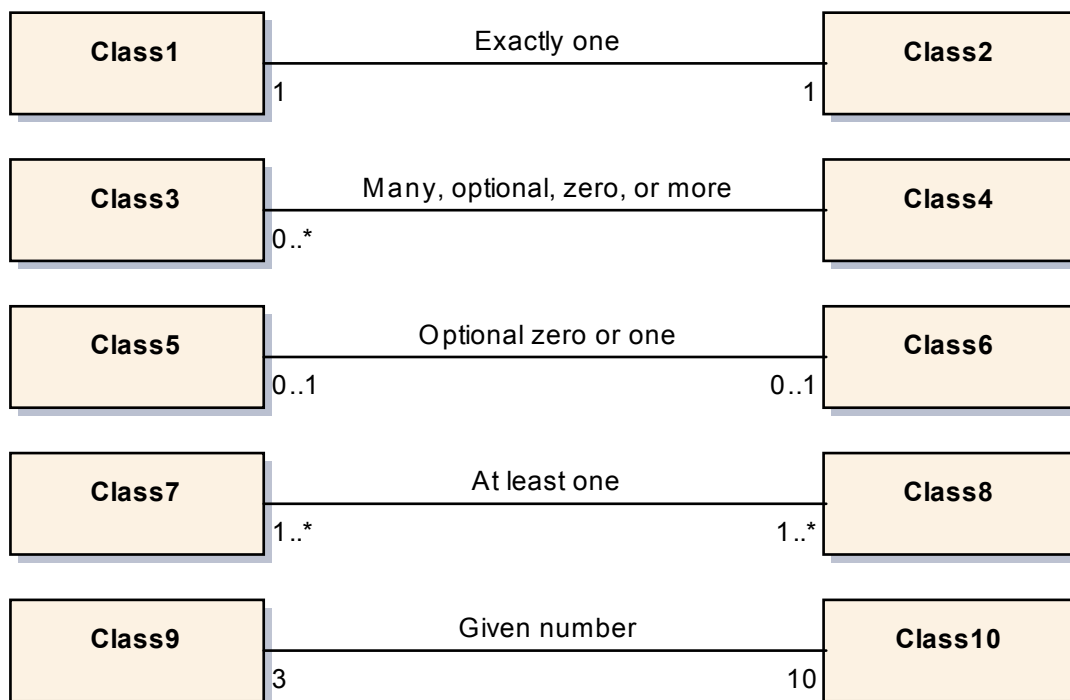


V2.1.0 Fig 1-10 Association

1.10.1.4 V2.1.0 Fig 1-11 Specification of multiplicity (diagram)

Examples of the number of instances that can participate at one end in an association (or attribute).

V2.1.0 Fig 1-11 Specification of multiplicity
Diagram Version 1.0



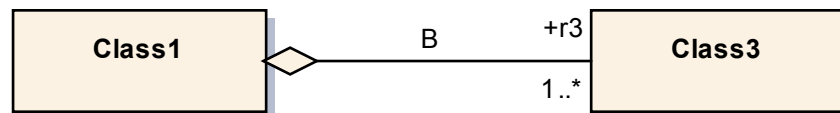
V2.1.0 Fig 1-11 Specification of multiplicity

1.10.1.5 V2.1.0 Fig 1-12 Aggregation (diagram)

An aggregation association is a relationship between two classes, in which one of the classes plays the role of container and the other plays the role of a containee.

Aggregation is a symbolic short-form for the part-of association but does not have explicit semantics. It allows for sharing of the same objects in multiple aggregations.

V2.1.0 Fig 1-12 Aggregation
Diagram Version 1.0



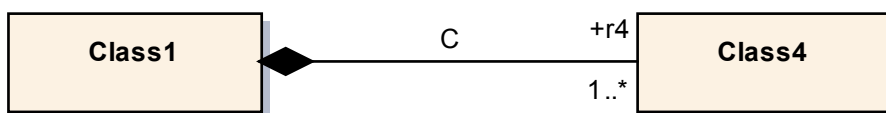
V2.1.0 Fig 1-12 Aggregation

1.10.1.6 V2.1.0 Fig 1-13 Composition (strong aggregation) (diagram)

A composition association is a strong aggregation. In a composition association, if a container object is deleted then all of its containee objects are deleted as well. The composition association shall be used when the objects representing the parts of a container object, cannot exist without the container object.

The required (implied) multiplicity for the owner class is always one. The containees, or parts, cannot be shared among multiple owners.

V2.1.0 Fig 1-13 Composition (strong aggregation)
Diagram Version 1.0



V2.1.0 Fig 1-13 Composition (strong aggregation)

1.10.1.7 V2.1.0 Fig 1-14 Example note (diagram)

Note boxes are used to comment on the model in general or on a specific item (i.e. class or association) of the model.

V2.1.0 Fig 1-14 Example note
Diagram Version 1.0

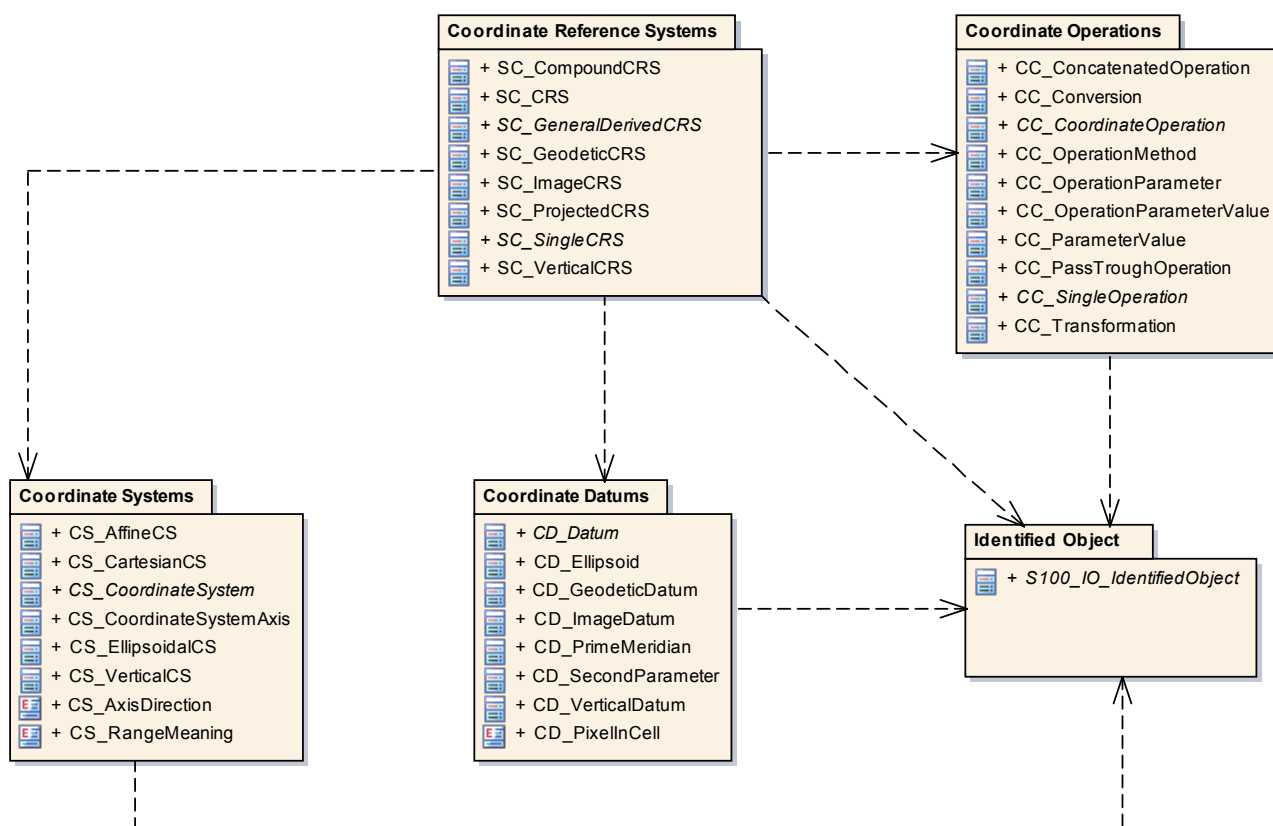


V2.1.0 Fig 1-14 Example note

1.10.1.8 V2.1.0 Fig 1-15 (Fig 6-1) Example package structure (diagram)

A UML package is a container that is used to group declarations of subpackages, classes and their associations. The package structure in UML enables a hierarchical structure of subpackages, class declarations, and associations. (In Edition 2.0.0 this figure is the same as Figure 6-1.)

V2.1.0 Fig 1-15 (Fig 6-1) Example package structure
Diagram Version 1.0

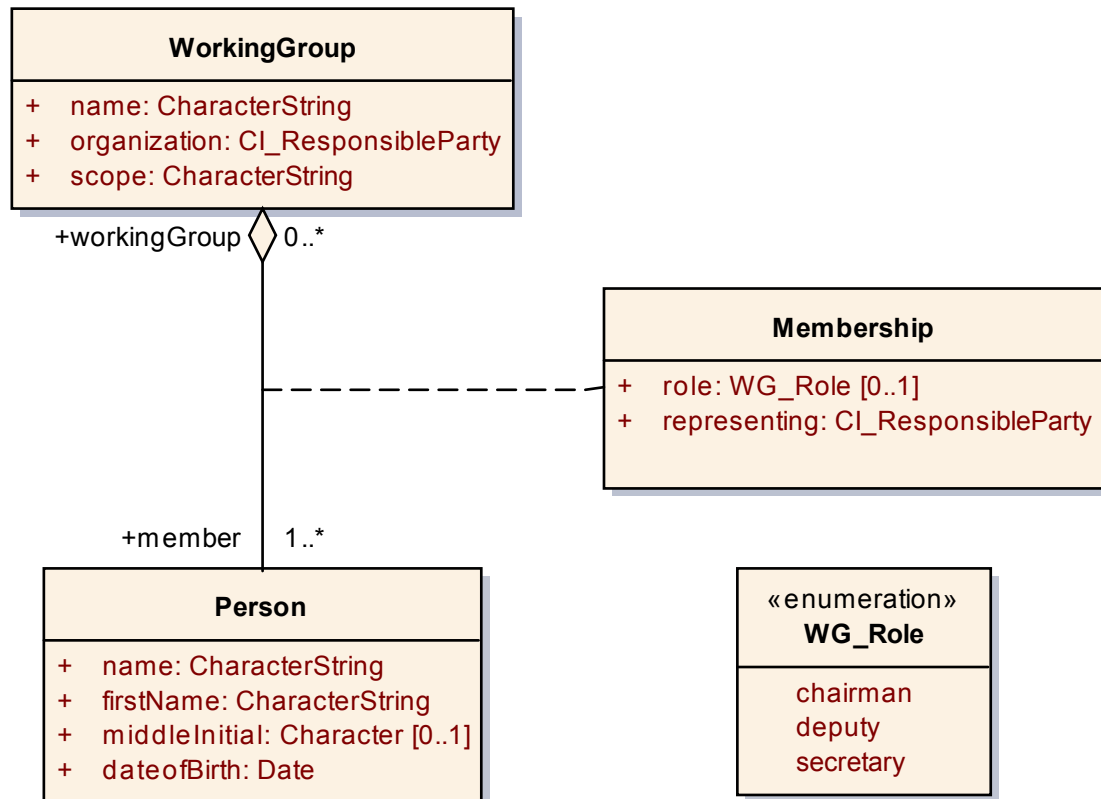


V2.1.0 Fig 1-15 (Fig 6-1) Example package structure

1.10.1.9 V2.1.0 Fig 1-16 (diagram)

Example illustrating the use of context Tables in Part 1.

V2.1.0 Fig 1-16
Diagram Version 1.0

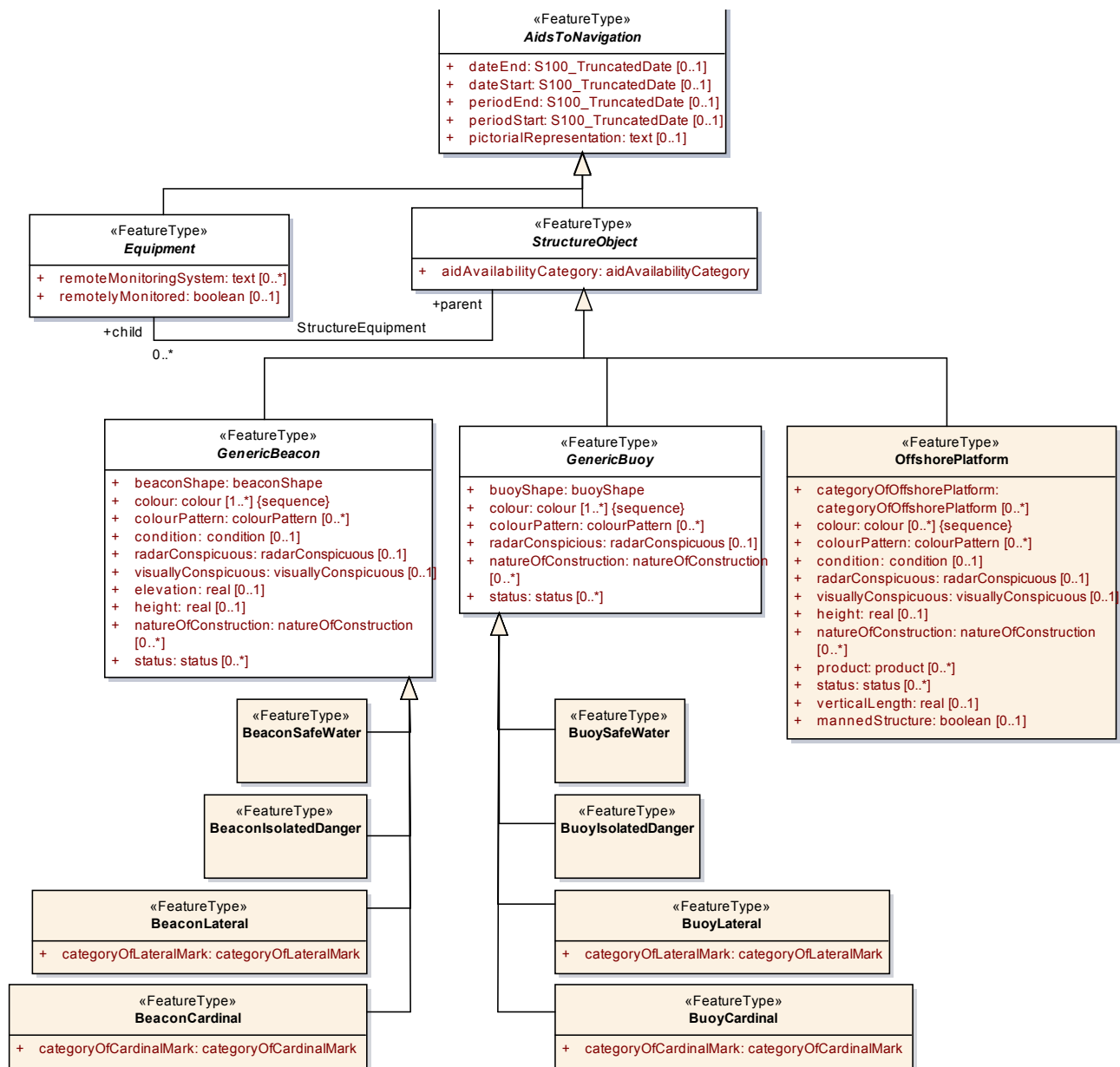


V2.1.0 Fig 1-16

1.10.2 V2.1.0 Part 5 Examples (package)

1.10.2.1 V2.1.0 Figure 5-1 Inheritance Example (diagram)

V2.1.0 Figure 5-1 Inheritance Example
Diagram Version 1.0



V2.1.0 Figure 5-1 Inheritance Example

1.10.3 V2.1.0 Part 10b Examples (*package*)

1.10.3.1 Figure 10b-11 Association in application schema (diagram)

Figure 10b-11 Association in application schema
Diagram Version 1.0

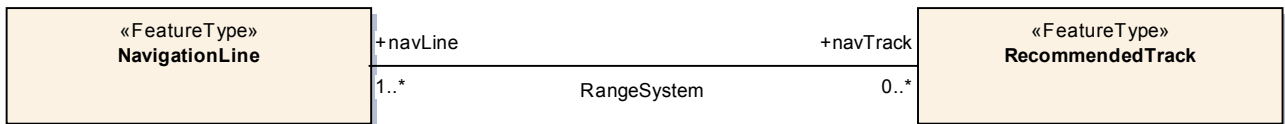


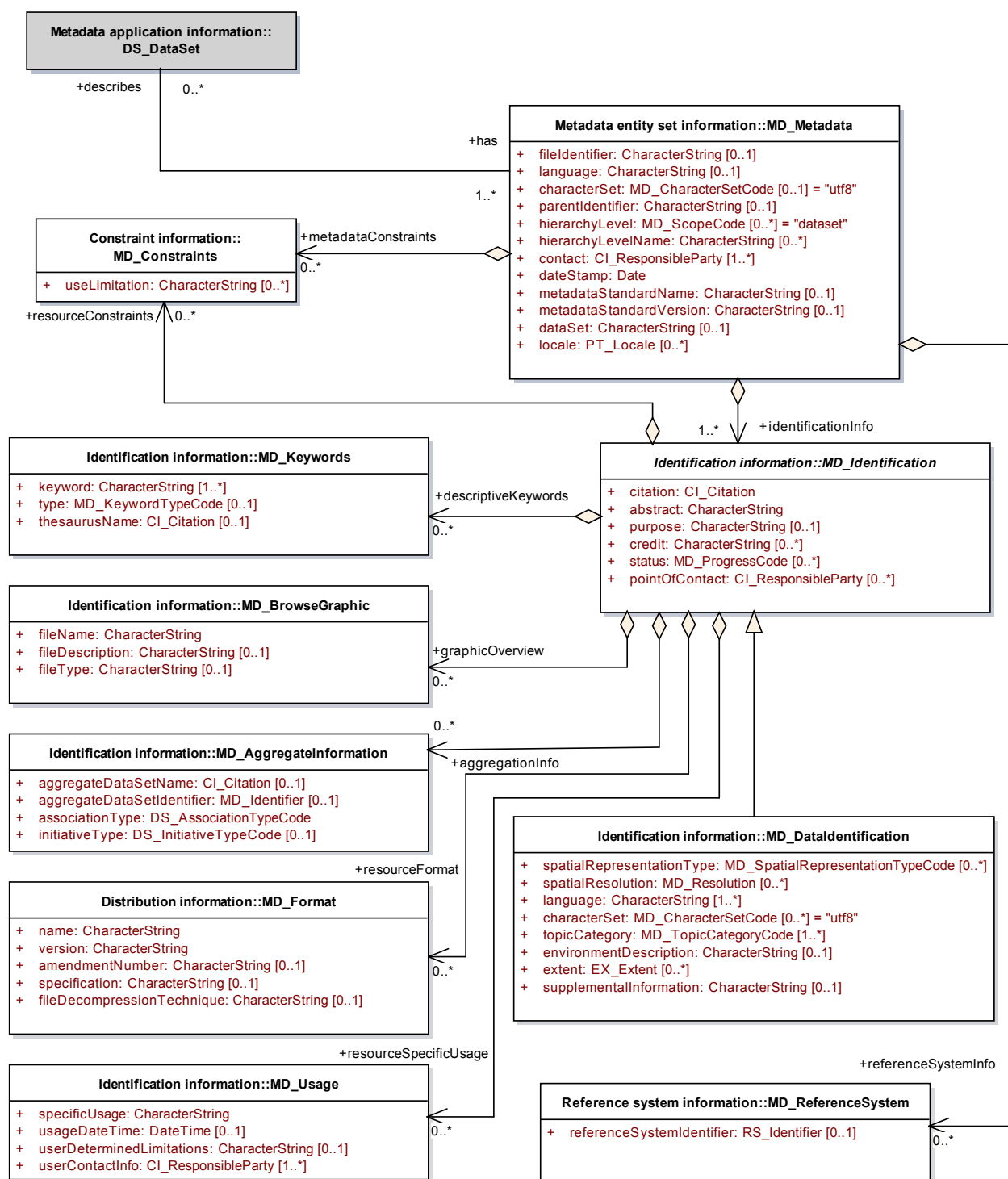
Figure 10b-11 Association in application schema

1.11 Orphans (package)

1.11.1 Additional Metadata Models (package)

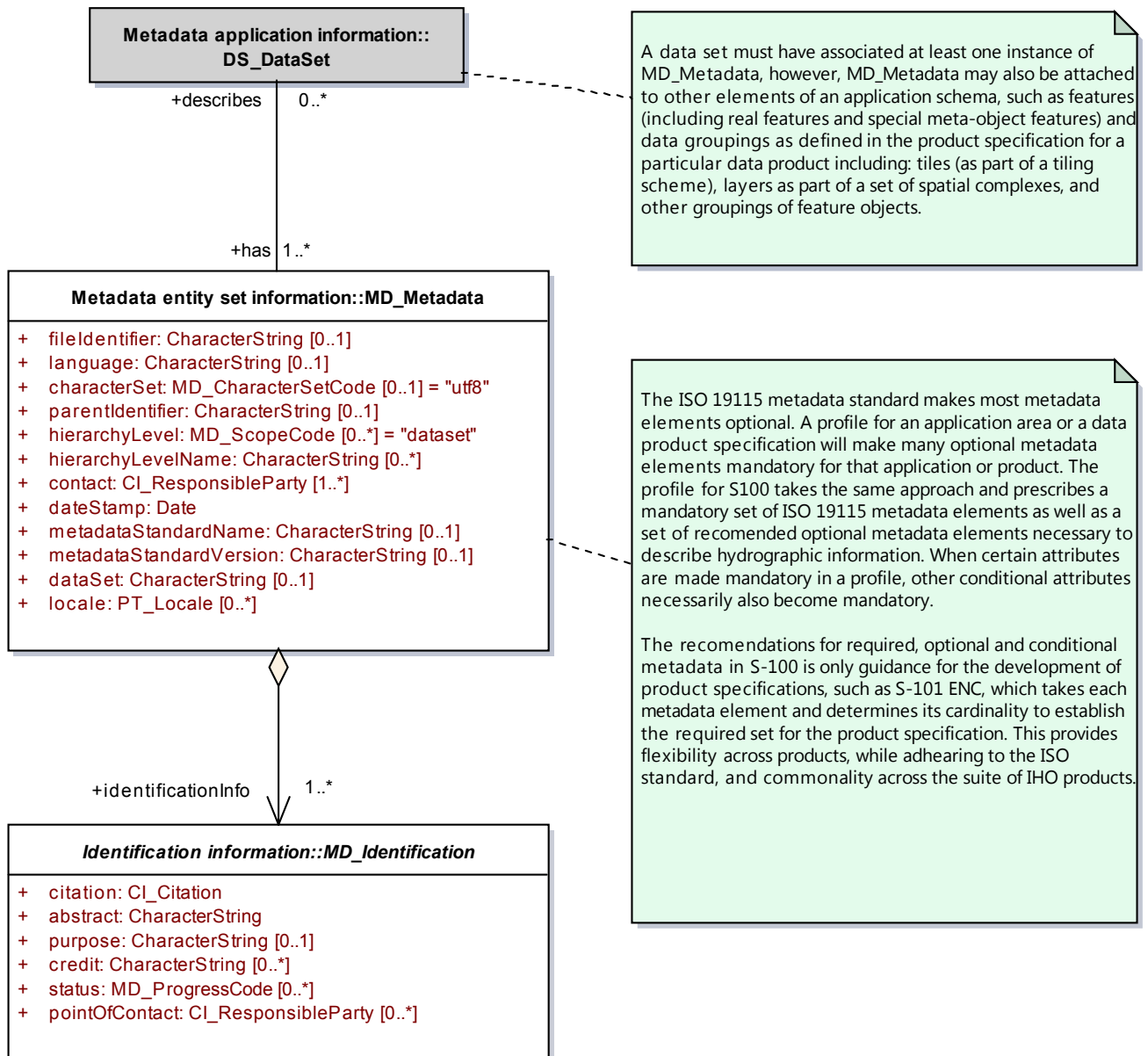
1.11.1.1 S100 DiscoveryMetadata (diagram)

S100 DiscoveryMetadata
Diagram Version 1.0



1.11.1.2 S100 RequiredDataSetMetadata (diagram)

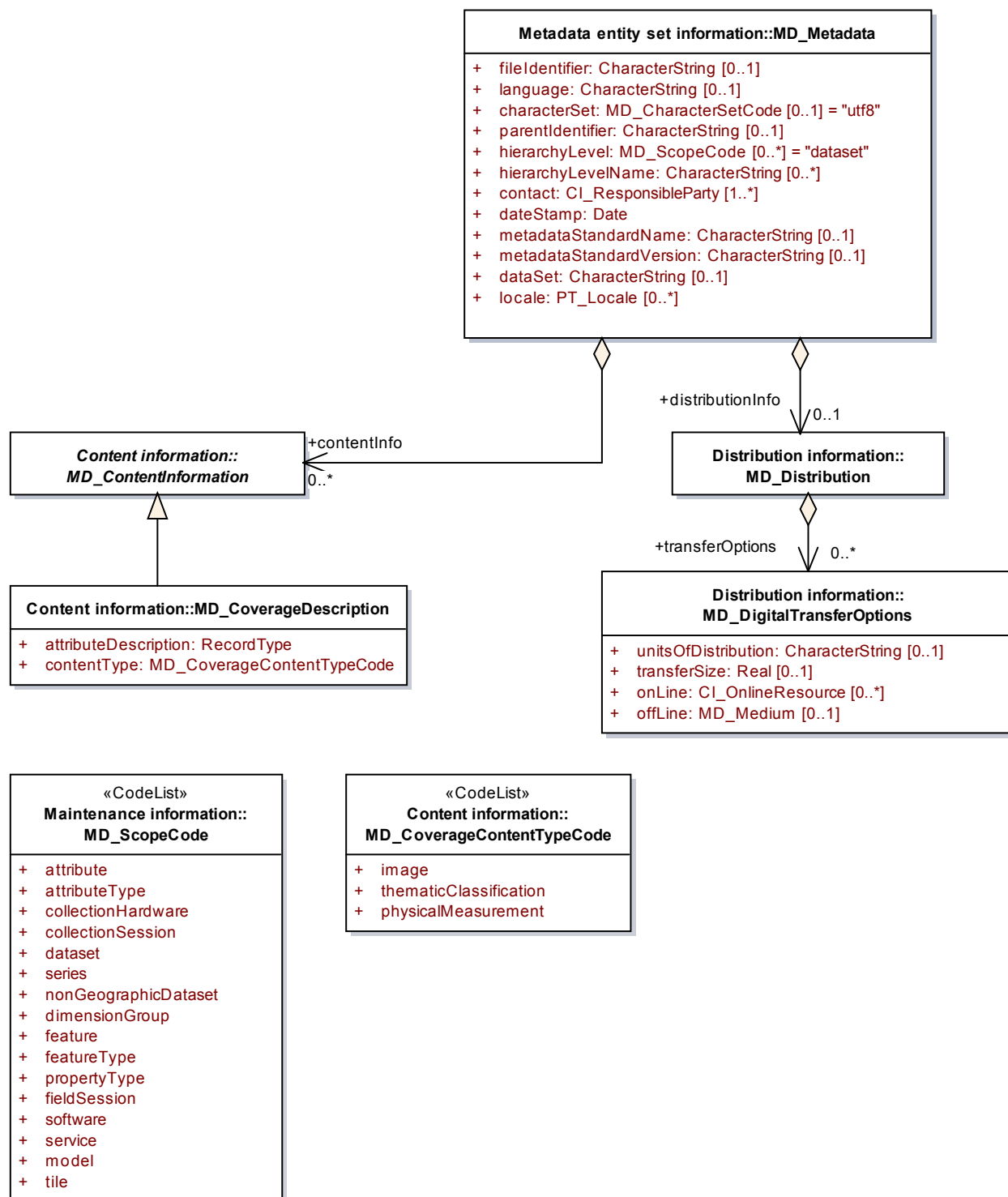
S100 RequiredDataSetMetadata
Diagram Version 1.0



S100 RequiredDataSetMetadata

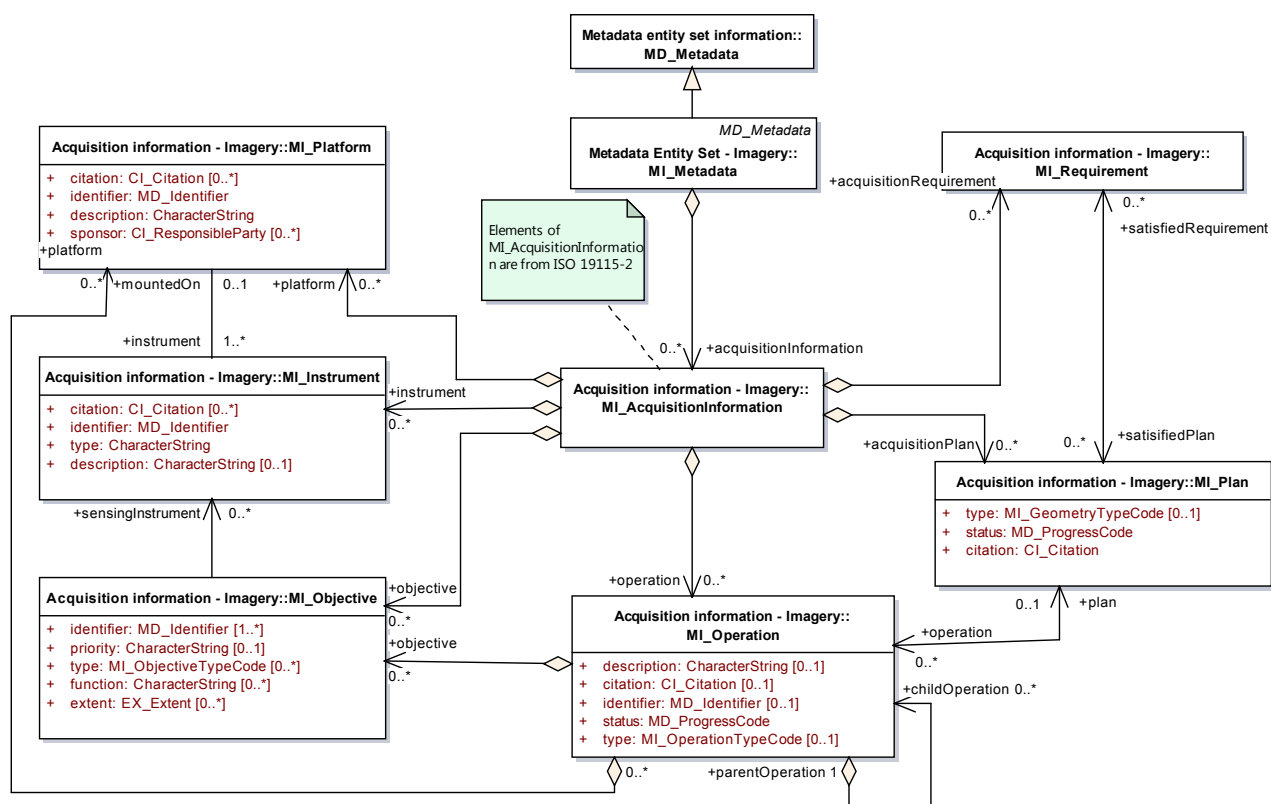
1.11.1.3 S100 StructuralMetadata (diagram)

S100 StructuralMetadata
Diagram Version 1.0



1.11.1.4 S100 AcquisitionMetadata (diagram)

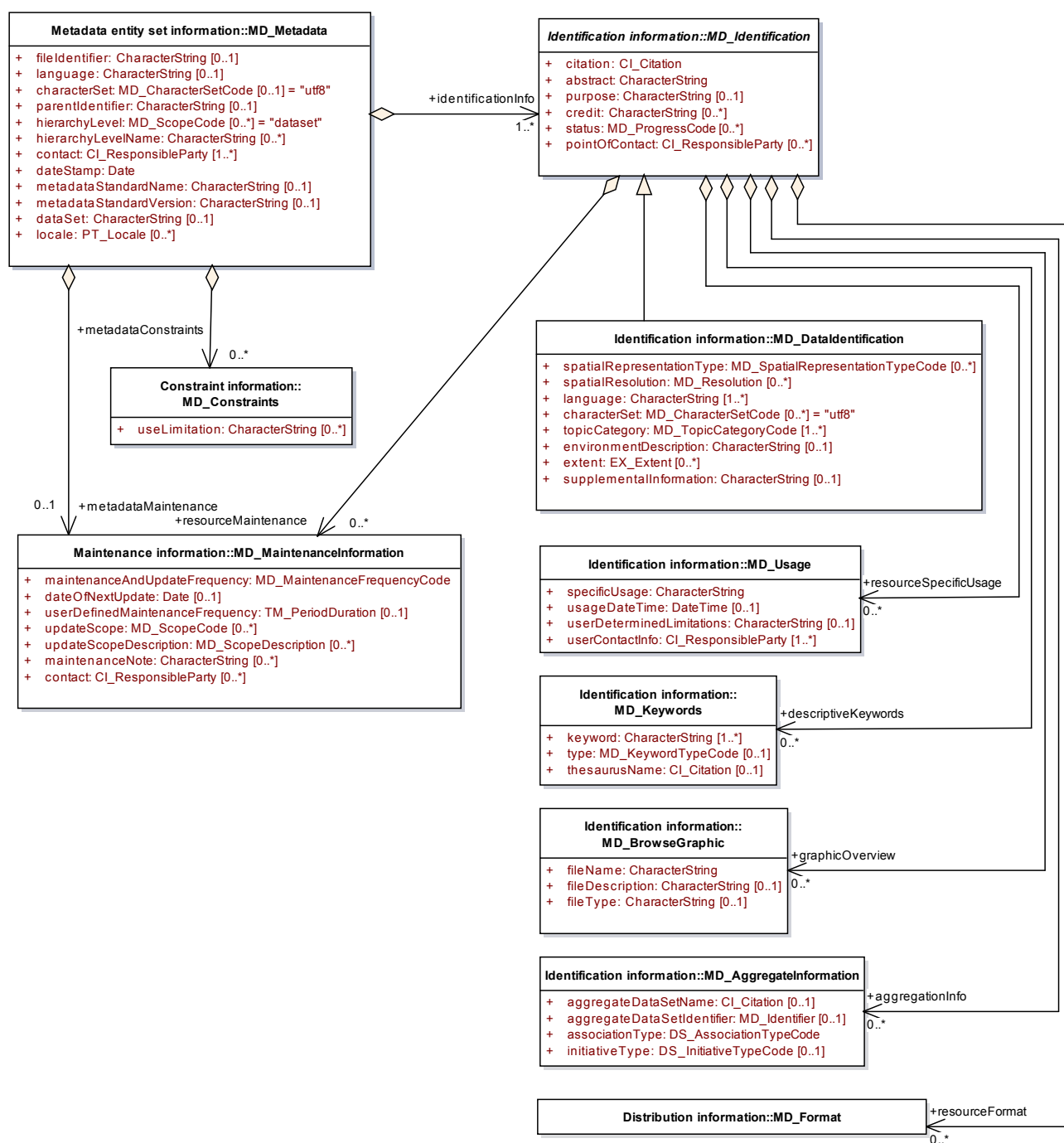
S100 AcquisitionMetadata
Diagram Version 1.0



S100 AcquisitionMetadata

1.11.1.5 S100 MD_Identification (diagram)

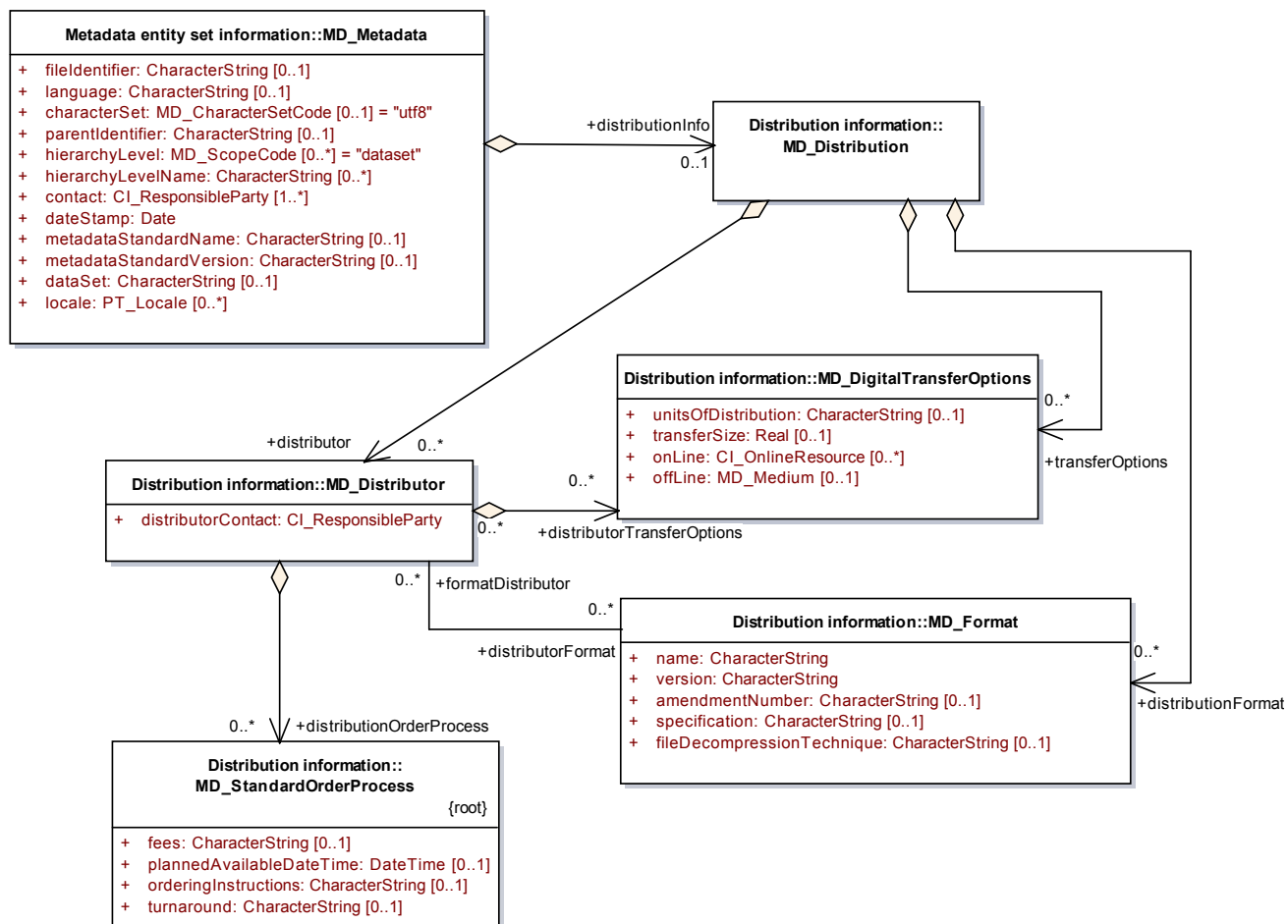
S100 MD_Identification
Diagram Version 1.0



S100 MD_Identification

1.11.1.6 S100 MD_Distribution (diagram)

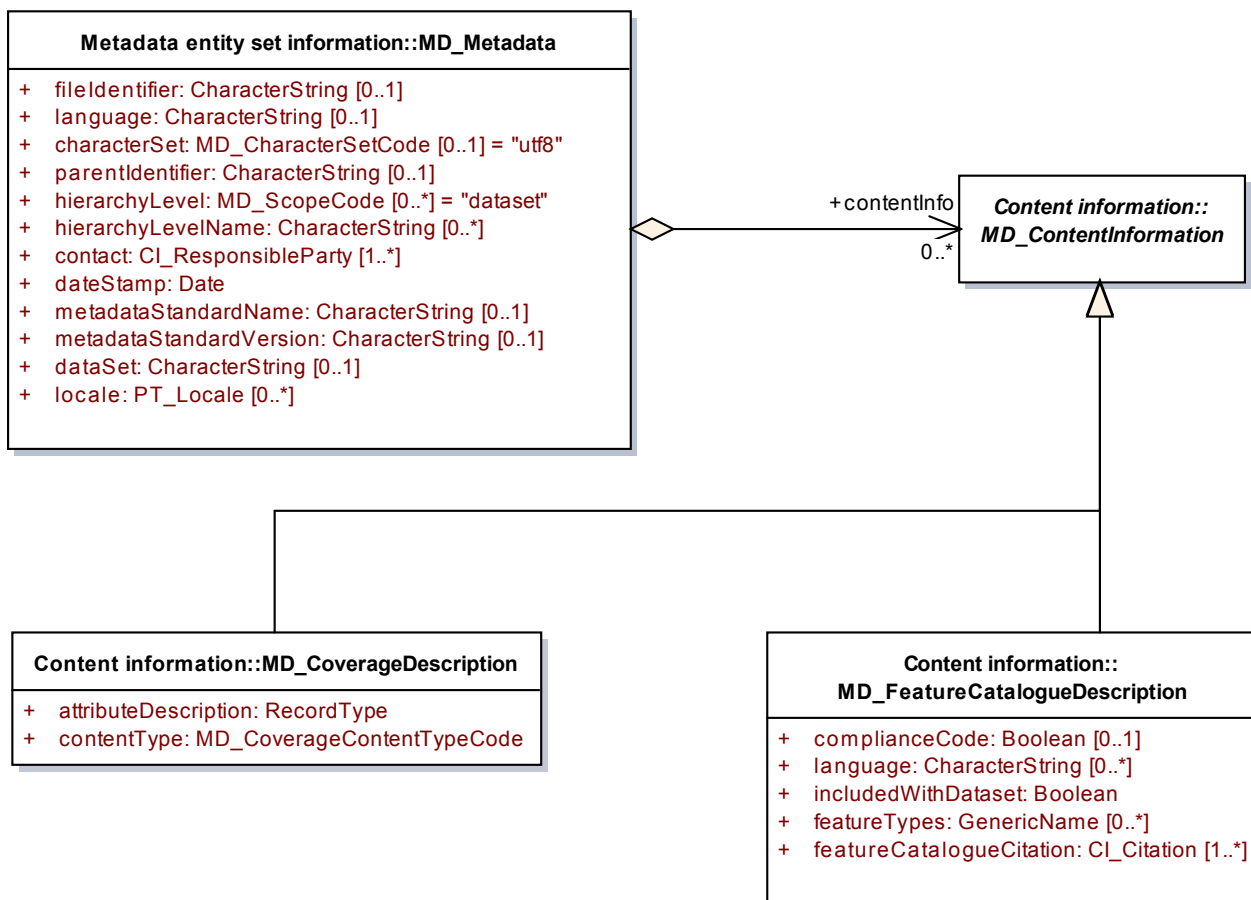
S100 MD_Distribution
Diagram Version 1.0



S100 MD_Distribution

1.11.1.7 S100 MD_ContentInformation (diagram)

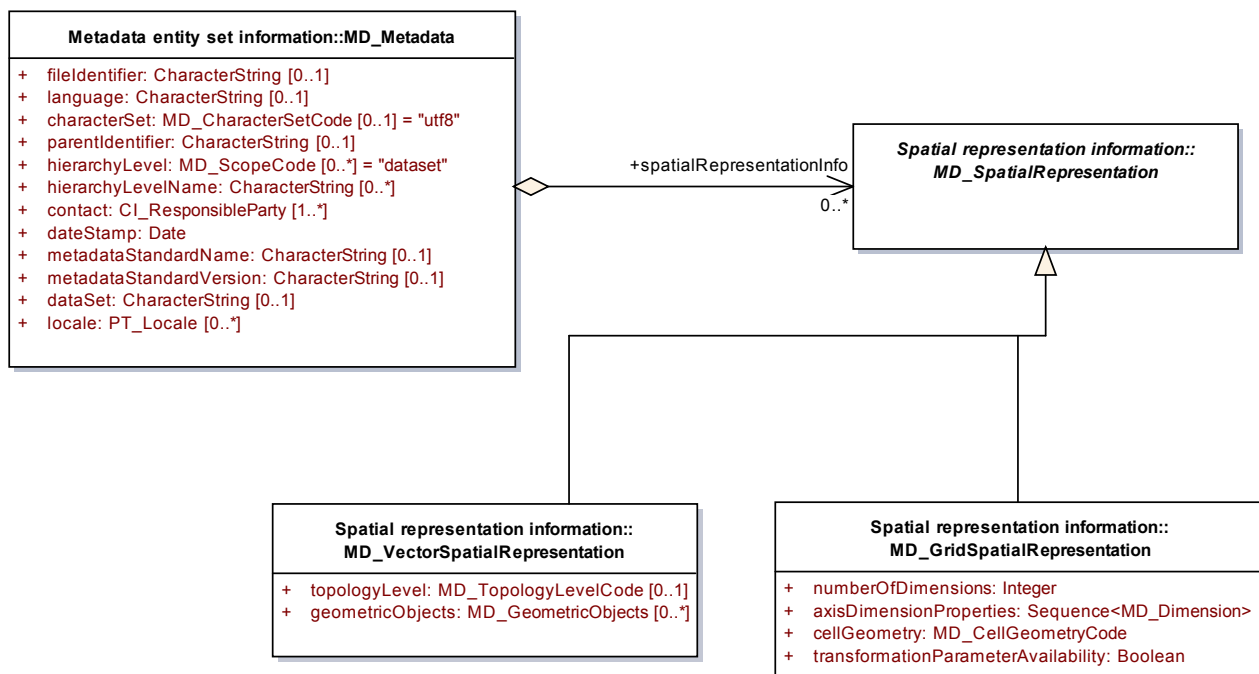
S100 MD_ContentInformation
Diagram Version 1.0



S100 MD_ContentInformation

1.11.1.8 S100 SpatialRepresentation (diagram)

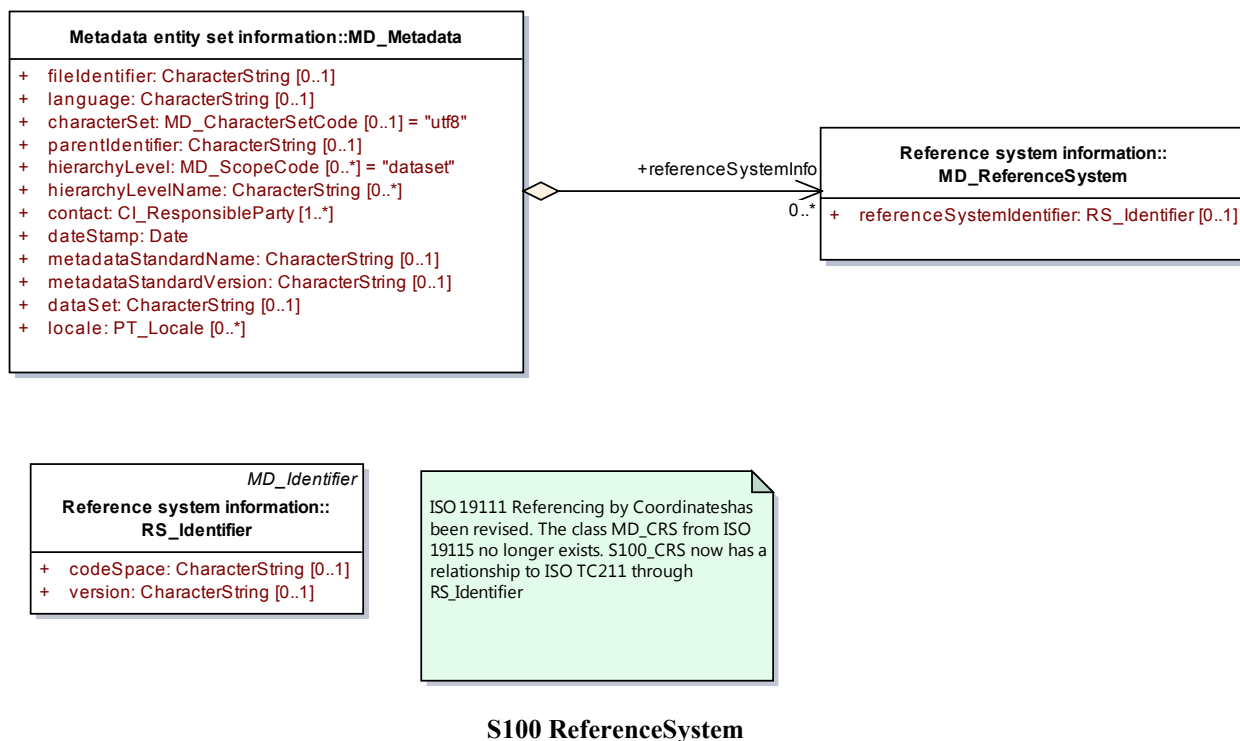
S100 SpatialRepresentation
Diagram Version 1.0



S100 SpatialRepresentation

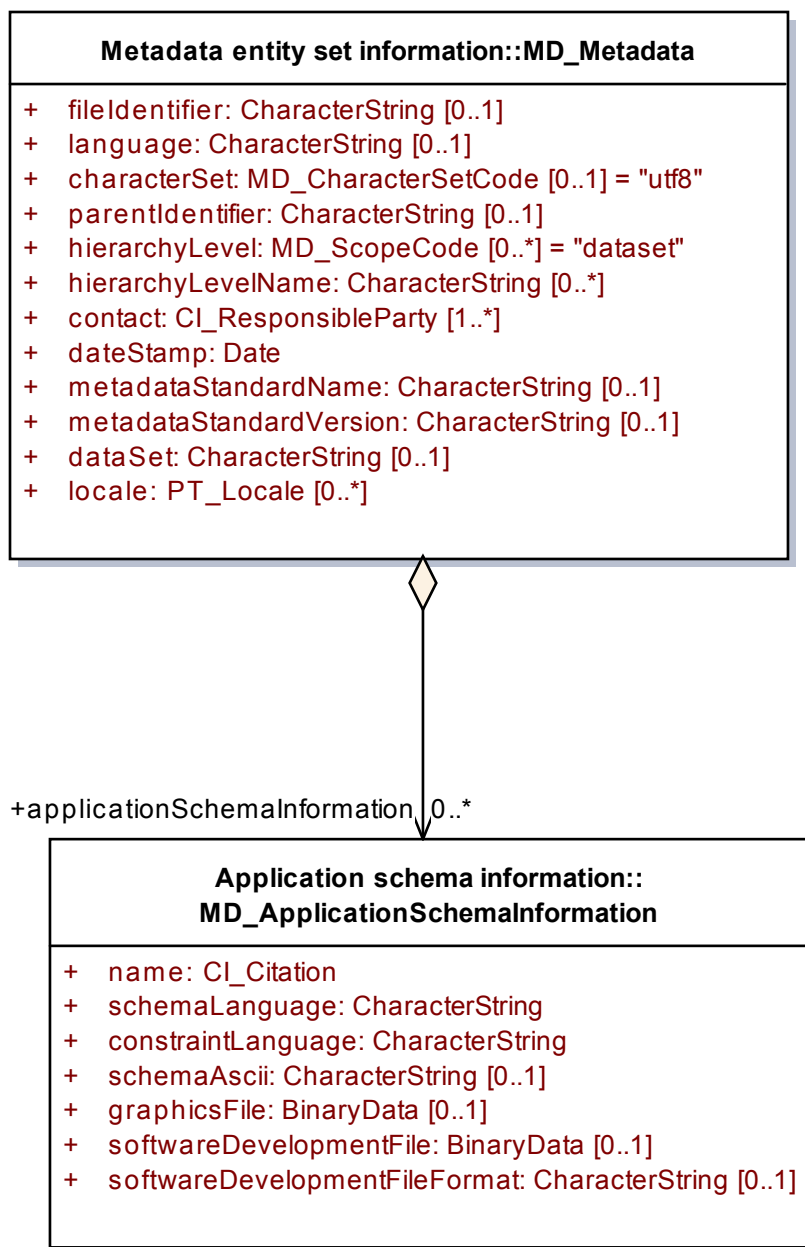
1.11.1.9 S100 ReferenceSystem (diagram)

S100 ReferenceSystem
Diagram Version 1.0



1.11.1.10 S100 MD_ApplicationSchema (diagram)

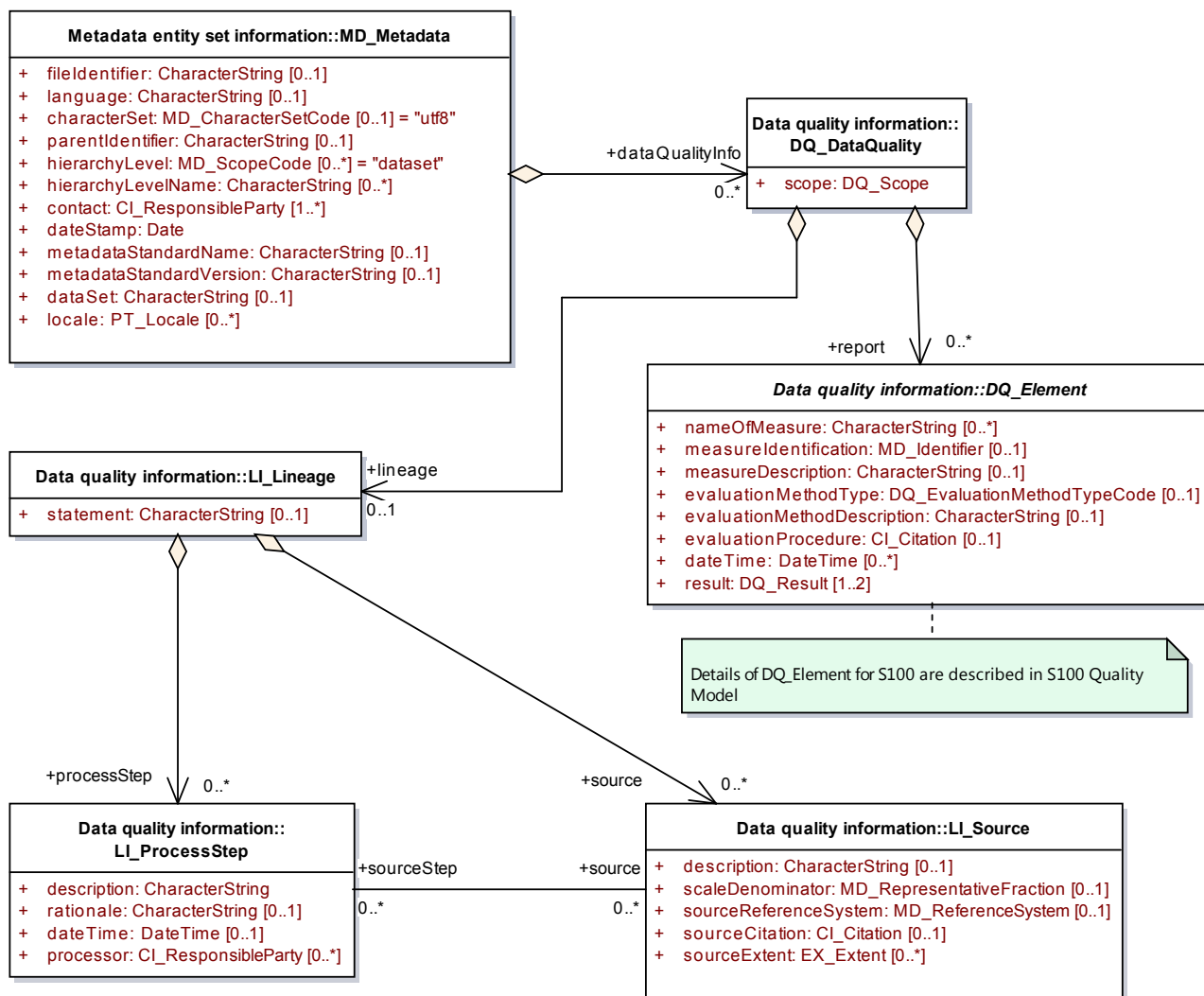
S100 MD_ApplicationSchema
Diagram Version 1.0



S100 MD_ApplicationSchema

1.11.1.11 S100 MD_DataQuality (diagram)

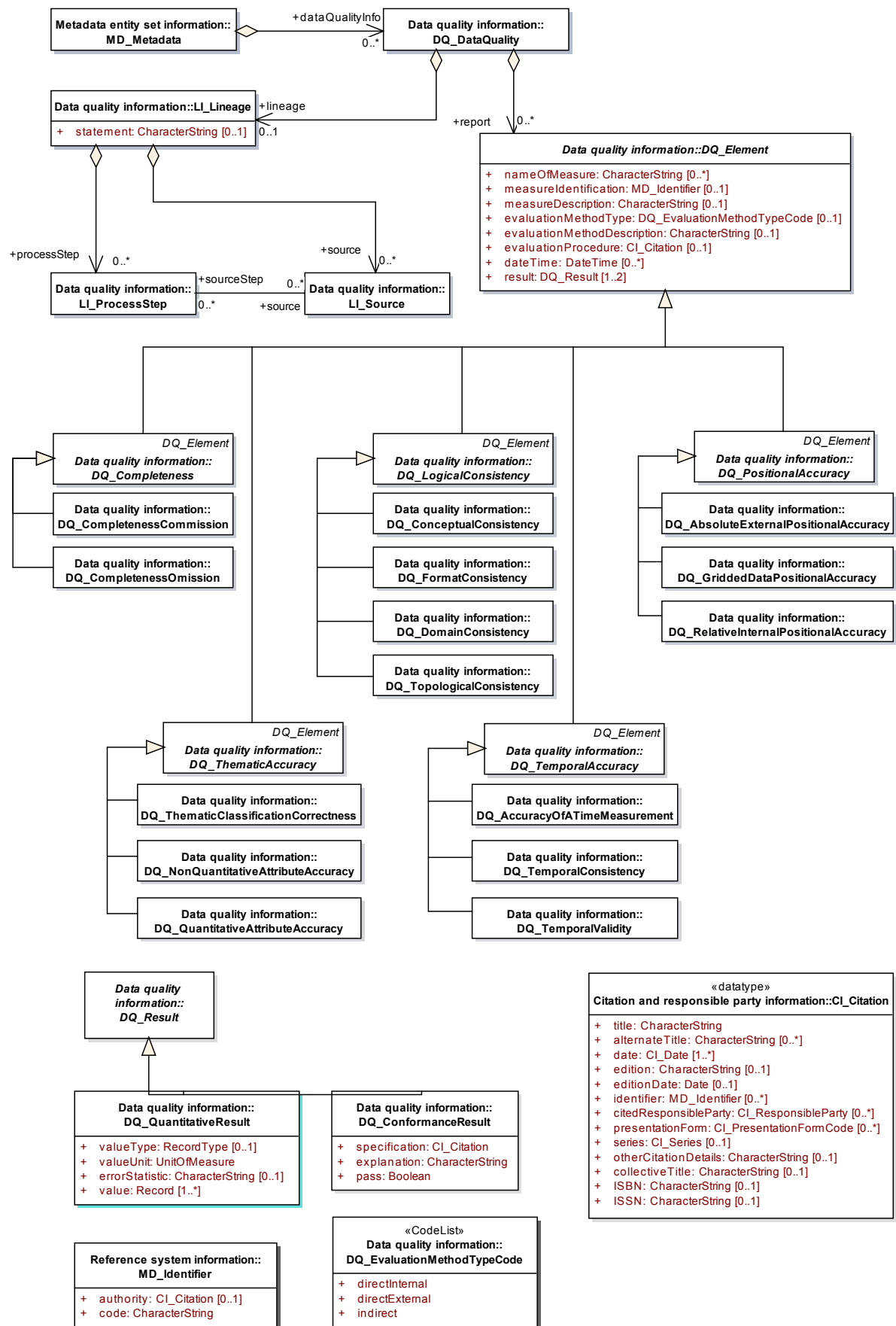
S100 MD_DataQuality
Diagram Version 1.0



S100 MD_DataQuality

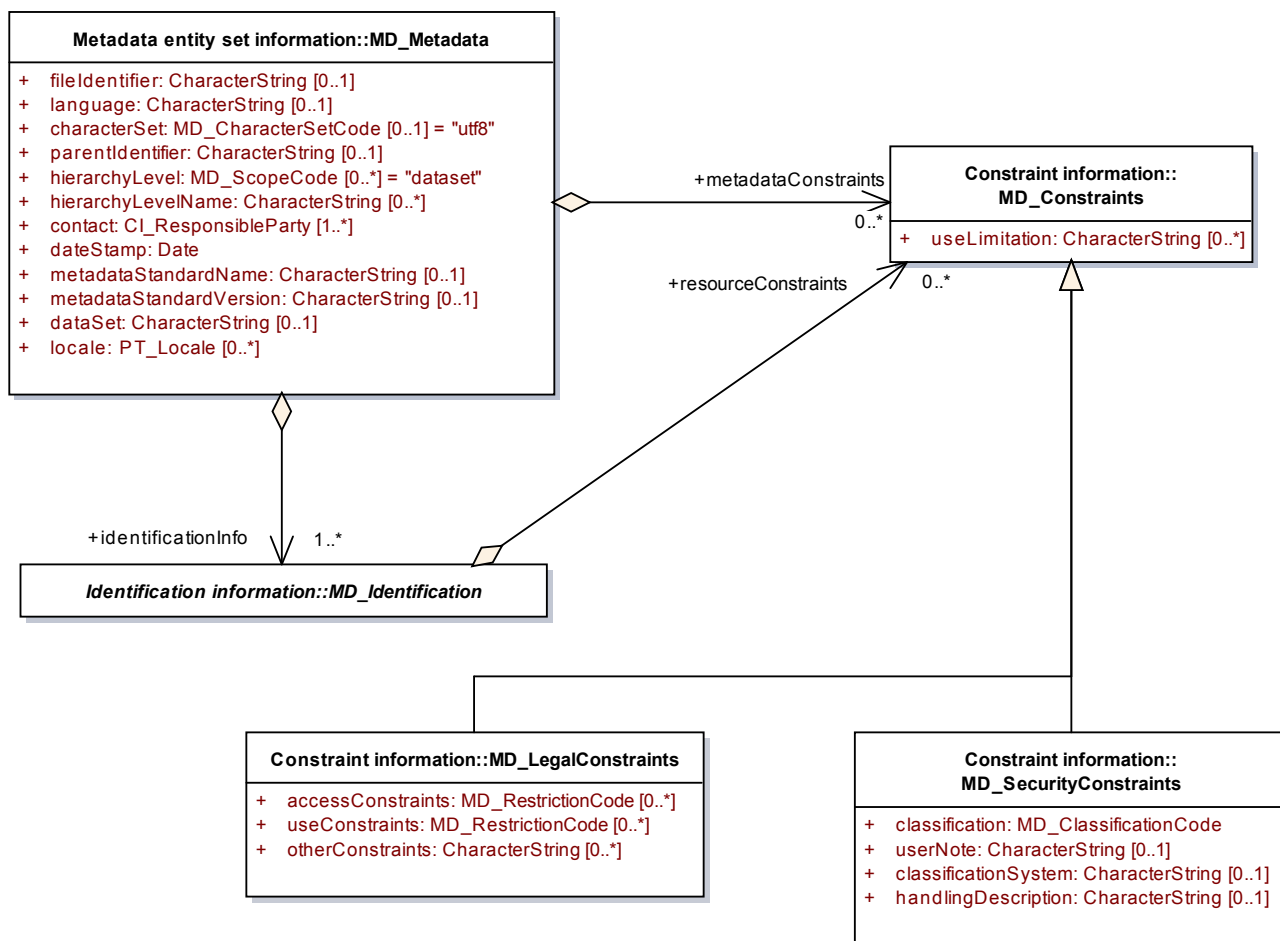
1.11.1.12 S100 MD_DataQualityOverview (diagram)

S100 MD_DataQualityOverview
Diagram Version 1.0



1.11.1.13 S100 MD_Constraint (diagram)

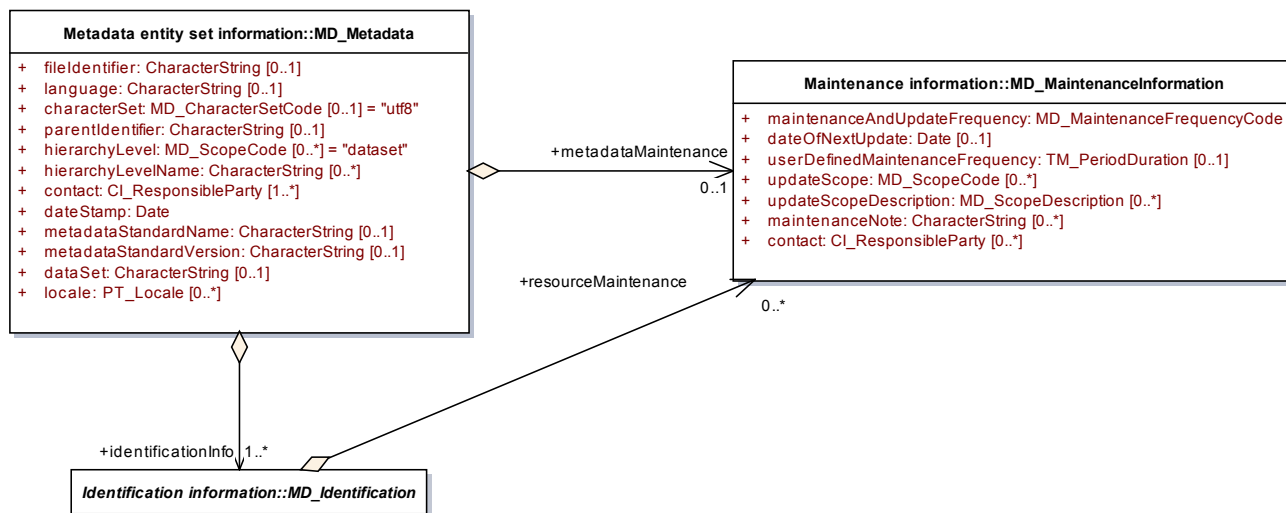
S100 MD_Constraint
Diagram Version 1.0



S100 MD_Constraint

1.11.1.14 S100 MD_MaintenanceInformation (diagram)

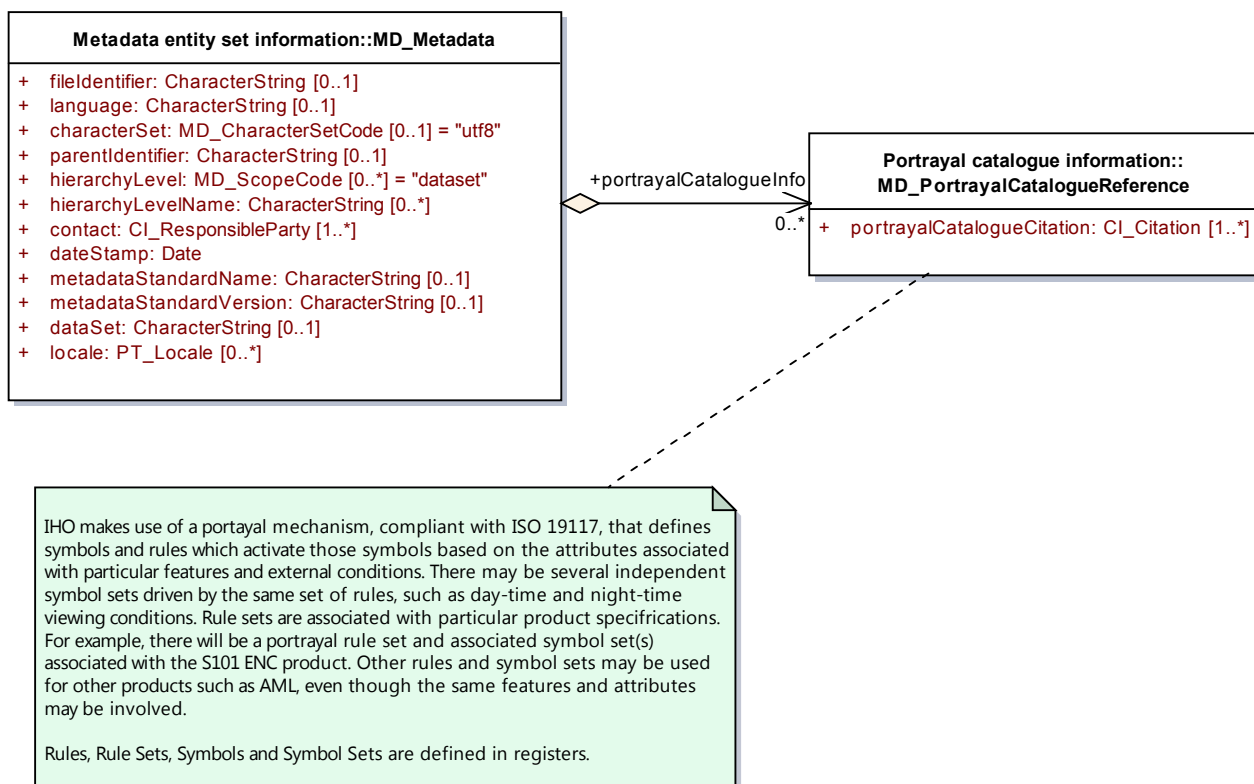
S100 MD_MaintenanceInformation
Diagram Version 1.0



S100 MD_MaintenanceInformation

1.11.1.15 S100 MD_Portrayal (diagram)

S100 MD_Portrayal
Diagram Version 1.0



S100 MD_Portrayal

