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ArcGIS Workspace

Package «ArcGIS» in package 'Model'

ArcGIS Workspace
Version 1.0 Phase 1.0 Proposed
32fuab1mpg created on 26.12.2023. Last modified 02.03.2012

ArcGIS Workspace diagram

ArcGIS diagram in package 'ArcGIS Workspace'

ArcGIS Workspace
Version 1.1
32fuab1mpg created on 26.12.2023. Last modified 30.12.2023

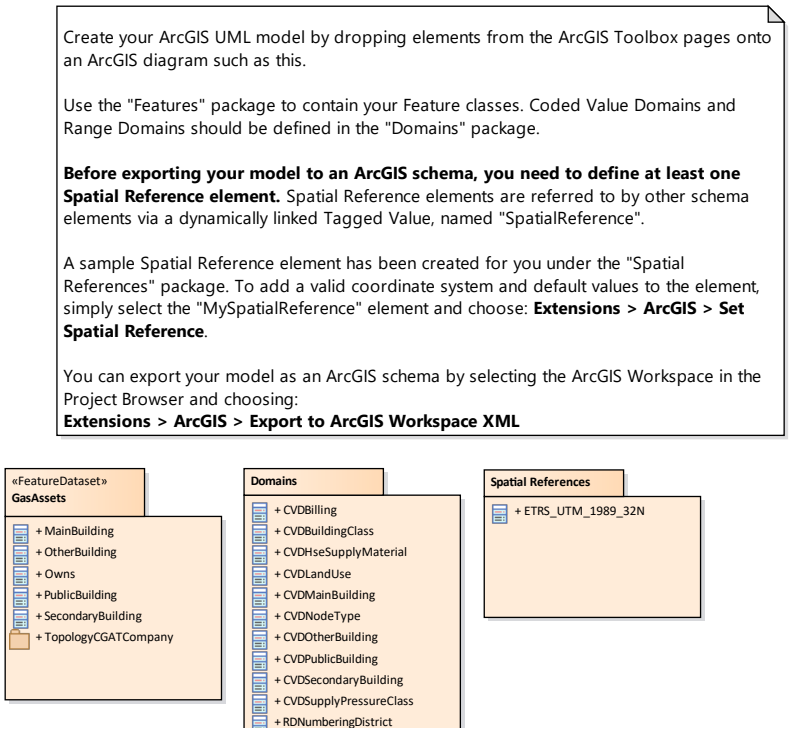


Figure 1: ArcGIS Workspace

Note

Note in package 'ArcGIS Workspace'

Create your ArcGIS UML model by dropping elements from the ArcGIS Toolbox pages onto an ArcGIS diagram such as this.

Use the "Features" package to contain your Feature classes. Coded Value Domains and Range Domains should be defined in the "Domains" package.

Before exporting your model to an ArcGIS schema, you need to define at least one Spatial Reference element. Spatial Reference elements are referred to by other schema elements via a dynamically linked Tagged Value, named "SpatialReference".

A sample Spatial Reference element has been created for you under the "Spatial References" package. To add a valid coordinate system and default values to the element, simply select the "MySpatialReference" element and choose: **Extensions > ArcGIS > Set Spatial Reference**.

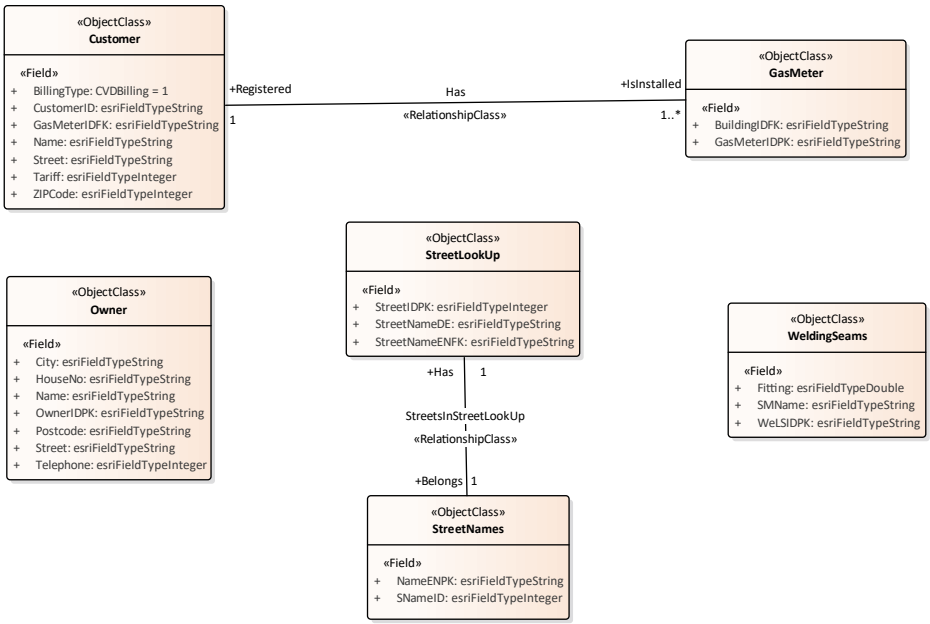


Figure 2: ObjectClasses

Customer

ObjectClass «ObjectClass» in package 'ObjectClasses'

Customer
Version 1.0 Phase 1.0 Proposed
32fuab1mpg created on 29.12.2023. Last modified 29.12.2023

ATTRIBUTES

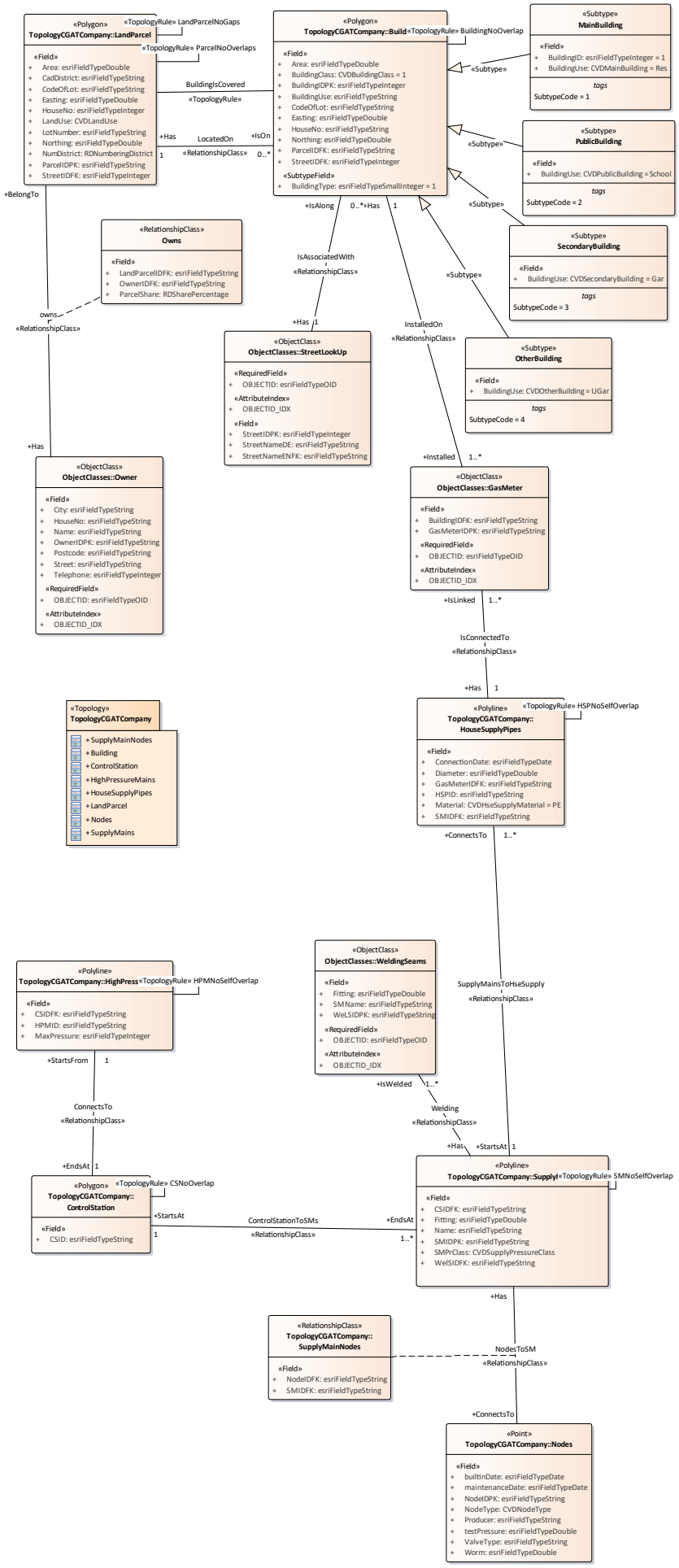
BillingType : CVDBilling Public = 1

Properties:
DomainFixed = false
Editable = true
GeometryDef =
IsNullable = true
Length = 50
ModelName =
Precision = 9
RasterDef =
Required = false
Scale =

[Stereotype is «Field». Is static False. Containment is Not Specified.]

CustomerID : esriFieldTypeString Public

Properties:
DomainFixed = false
Editable = true
GeometryDef =
IsNullable = true
Length = 50
ModelName =
Precision = 9
RasterDef =


«Polygon»
TopologyCGATCompany::LandParcel
«TopologyRule» LandParcelNoGaps
«TopologyRule» ParcelNoOverlaps
«Field»
+ Area: esriFieldTypeDouble
+ CadDistrict: esriFieldTypeString
+ CodeOfLot: esriFieldTypeString
+ Easting: esriFieldTypeDouble
+ HouseNo: esriFieldTypeInteger
+ LandUse: CVDLandUse
+ LotNumber: esriFieldTypeString
+ Northing: esriFieldTypeDouble
+ NumDistrict: RDNumberingDistrict
+ ParcelIDPK: esriFieldTypeString
+ StreetIDFK: esriFieldTypeInteger
BuildingIsCovered
«TopologyRule»
+Has
1
LocatedOn
«RelationshipClass»
+IsOn
0..*
+BelongTo
«Polygon»
TopologyCGATCompany::Build
«TopologyRule» BuildingNoOverlap
«Field»
+ Area: esriFieldTypeDouble
+ BuildingClass: CVDBuildingClass = 1
+ BuildingIDPK: esriFieldTypeInteger
+ BuildingUse: esriFieldTypeString
+ CodeOfLot: esriFieldTypeString
+ Easting: esriFieldTypeDouble
+ HouseNo: esriFieldTypeString
+ Northing: esriFieldTypeDouble
+ ParcelIDFK: esriFieldTypeString
+ StreetIDFK: esriFieldTypeInteger
«SubtypeField»
+ BuildingType: esriFieldTypeSmallInteger = 1
«Subtype»
«Subtype»
MainBuilding
«Field»
+ BuildingID: esriFieldTypeInteger = 1
+ BuildingUse: CVDMainBuilding = Res
tags
SubtypeCode = 1
«Subtype»
PublicBuilding
«Field»
+ BuildingUse: CVDPublicBuilding = School
tags
SubtypeCode = 2
«Subtype»
SecondaryBuilding
«Field»
+ BuildingUse: CVDSecondaryBuilding = Gar
tags
SubtypeCode = 3
«Subtype»
OtherBuilding
«Field»
+ BuildingUse: CVDOtherBuilding = UGar
tags
SubtypeCode = 4
+IsAlong
0..*
+Has
1
IsAssociatedWith
«RelationshipClass»
«RelationshipClass»
Owns
«Field»
+ LandParcelIDFK: esriFieldTypeString
+ OwnerIDFK: esriFieldTypeString
+ ParcelShare: RDSharePercentage
owns
«RelationshipClass»
+Has
1
«ObjectClass»
ObjectClasses::StreetLookUp
«RequiredField»
+ OBJECTID: esriFieldTypeOID
«AttributeIndex»
+ OBJECTID_IDX
«Field»
+ StreetIDPK: esriFieldTypeInteger
+ StreetNameDE: esriFieldTypeString
+ StreetNameENFK: esriFieldTypeString
InstalledOn
«RelationshipClass»
+Has
«ObjectClass»
ObjectClasses::Owner
«Field»
+ City: esriFieldTypeString
+ HouseNo: esriFieldTypeString
+ Name: esriFieldTypeString
+ OwnerIDPK: esriFieldTypeString
+ Postcode: esriFieldTypeString
+ Street: esriFieldTypeString
+ Telephone: esriFieldTypeInteger
«RequiredField»
+ OBJECTID: esriFieldTypeOID
«AttributeIndex»
+ OBJECTID_IDX
+Installed
1..*
«ObjectClass»
ObjectClasses::GasMeter
«Field»
+ BuildingIDFK: esriFieldTypeString
+ GasMeterIDPK: esriFieldTypeString
«RequiredField»
+ OBJECTID: esriFieldTypeOID
«AttributeIndex»
+ OBJECTID_IDX
+IsLinked
1..*
IsConnectedTo
«RelationshipClass»
+Has
1
«Topology»
TopologyCGATCompany
+ SupplyMainNodes
+ Building
+ ControlStation
+ HighPressureMains
+ HouseSupplyPipes
+ LandParcel
+ Nodes
+ SupplyMains
«Polyline»
TopologyCGATCompany::
HouseSupplyPipes
«TopologyRule» HSPNoSelfOverlap
«Field»
+ ConnectionDate: esriFieldTypeDate
+ Diameter: esriFieldTypeDouble
+ GasMeterIDFK: esriFieldTypeString
+ HSPID: esriFieldTypeString
+ Material: CVDHseSupplyMaterial = PE
+ SMIDFK: esriFieldTypeString
+ConnectsTo
1..*
«Polyline»
TopologyCGATCompany::HighPress
«TopologyRule» HPMNoSelfOverlap
«Field»
+ CSIDFK: esriFieldTypeString
+ HPMID: esriFieldTypeString
+ MaxPressure: esriFieldTypeInteger
+StartsFrom
1
ConnectsTo
«RelationshipClass»
+EndsAt
1
«ObjectClass»
ObjectClasses::WeldingSeams
«Field»
+ Fitting: esriFieldTypeDouble
+ SMName: esriFieldTypeString
+ WeLSIDPK: esriFieldTypeString
«RequiredField»
+ OBJECTID: esriFieldTypeOID
«AttributeIndex»
+ OBJECTID_IDX
+IsWelded
1..*
Welding
«RelationshipClass»
+Has
+StartsAt
1
SupplyMainsToHseSupply
«RelationshipClass»
«Polygon»
TopologyCGATCompany::
ControlStation
«TopologyRule» CSNoOverlap
«Field»
+ CSID: esriFieldTypeString
+StartsAt
1
ControlStationToSMs
«RelationshipClass»
+EndsAt
1..*
«Polyline»
TopologyCGATCompany::SupplyI
«TopologyRule» SMNoSelfOverlap
«Field»
+ CSIDFK: esriFieldTypeString
+ Fitting: esriFieldTypeDouble
+ Name: esriFieldTypeString
+ SMIDPK: esriFieldTypeString
+ SMPrClass: CVDSupplyPressureClass
+ WeSIDFK: esriFieldTypeString
+Has
«RelationshipClass»
TopologyCGATCompany::
SupplyMainNodes
«Field»
+ NodeIDFK: esriFieldTypeString
+ SMIDFK: esriFieldTypeString
NodesToSM
«RelationshipClass»
+ConnectsTo
«Point»
TopologyCGATCompany::Nodes
«Field»
+ builtinDate: esriFieldTypeDate
+ maintenanceDate: esriFieldTypeDate
+ NodeIDPK: esriFieldTypeString
+ NodeType: CVDNodeType
+ Producer: esriFieldTypeString
+ testPressure: esriFieldTypeDouble
+ ValveType: esriFieldTypeString
+ Worm: esriFieldTypeDouble

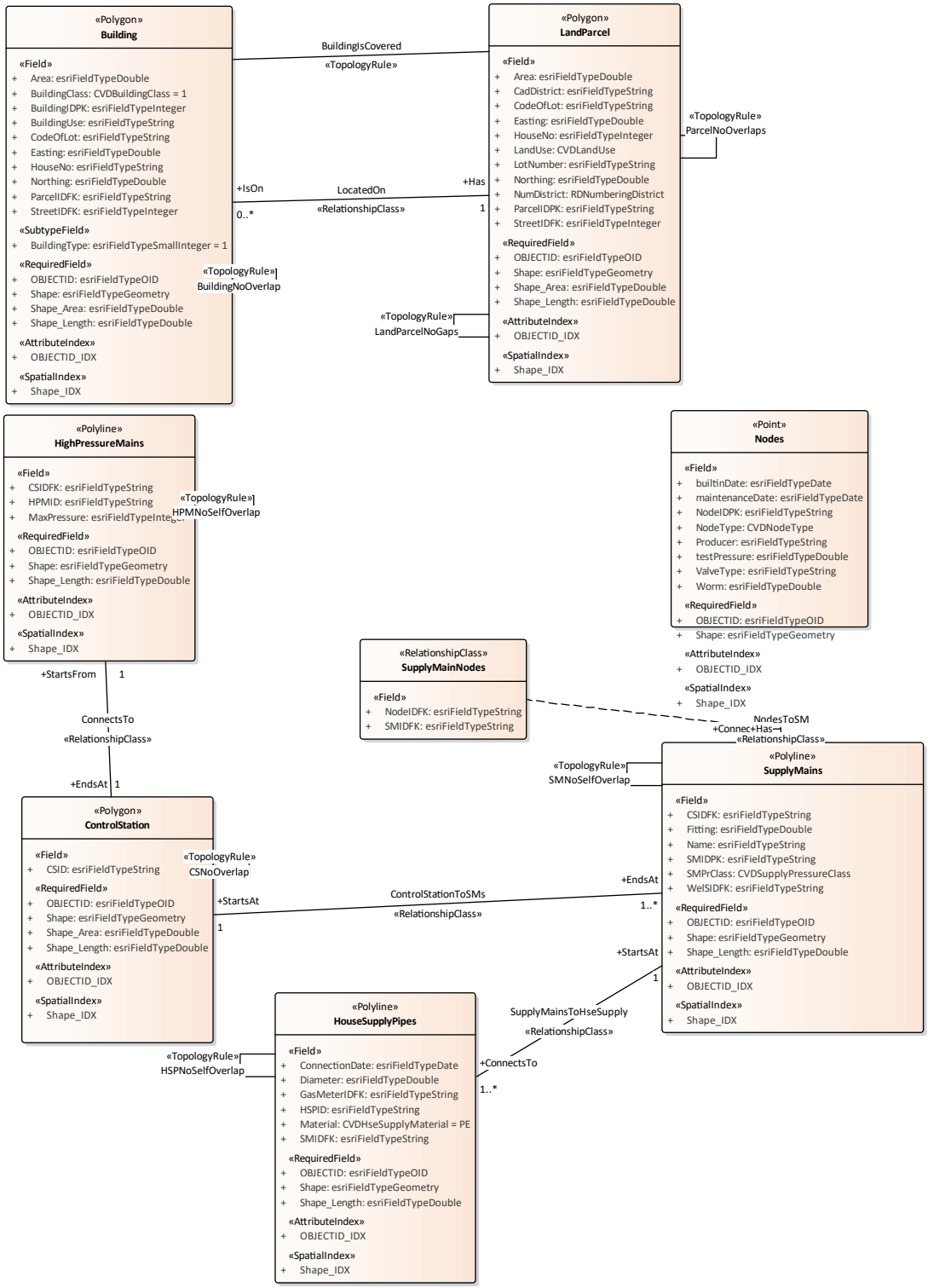


Figure 4: TopologyATownCompany

SupplyMainNodes

RelationshipClass «RelationshipClass» in package 'TopologyCGATCompany'

SupplyMainNodes
Version 1.0 Phase 1.0 Proposed
32fuab1mpg created on 29.12.2023. Last modified 29.12.2023

ATTRIBUTES

- NodeIDFK : esriFieldTypeString Public

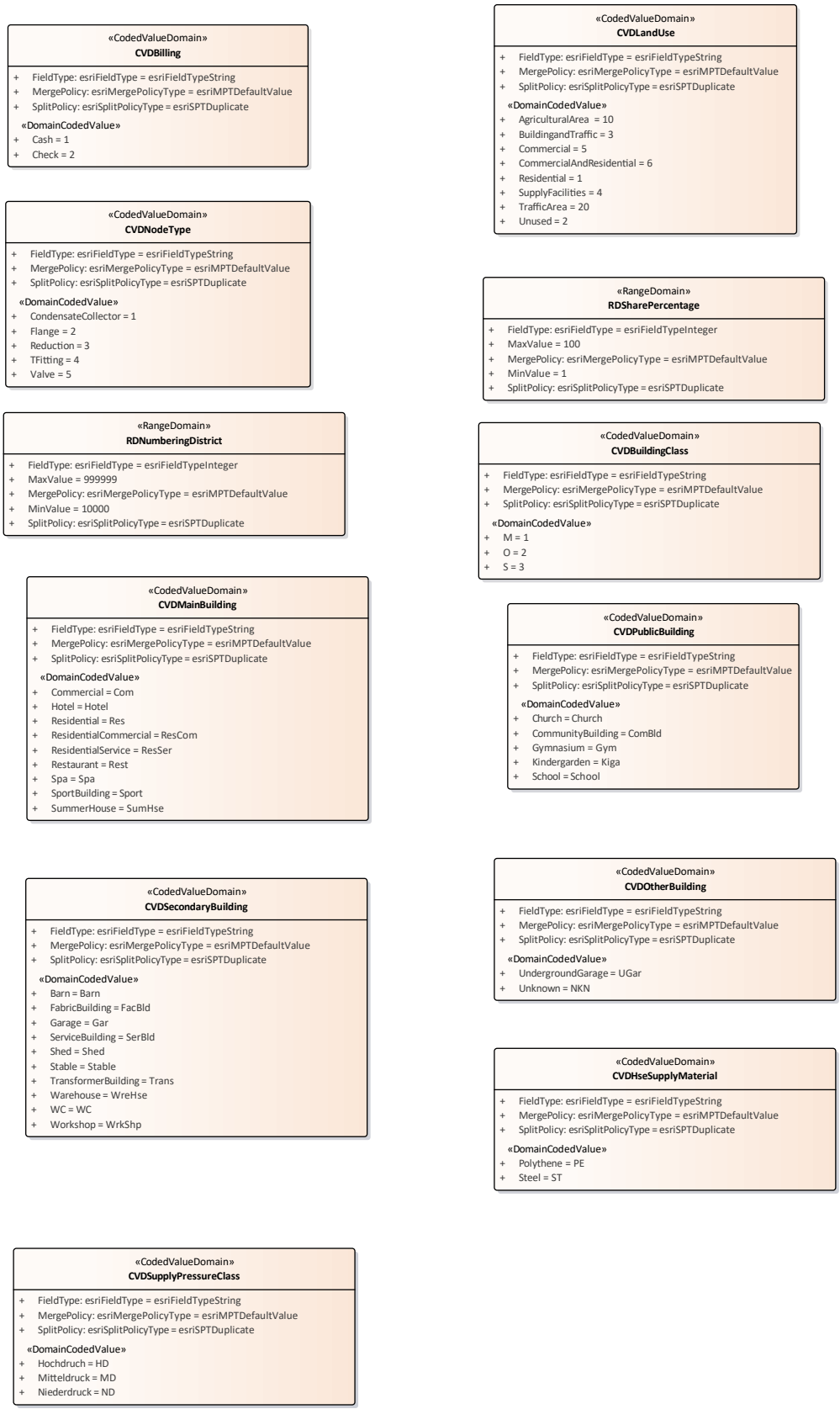


Figure 5: Domains

CVDBilling

CodedValueDomain «CodedValueDomain» in package 'Domains'

Spatial References

Package in package 'ArcGIS Workspace'

Spatial References
Version 1.0 Phase 1.0 Proposed
32fuab1mpg created on 26.12.2023. Last modified 26.12.2023

Spatial References diagram

ArcGIS diagram in package 'Spatial References'

Spatial References
Version 1.1
32fuab1mpg created on 26.12.2023. Last modified 26.12.2023

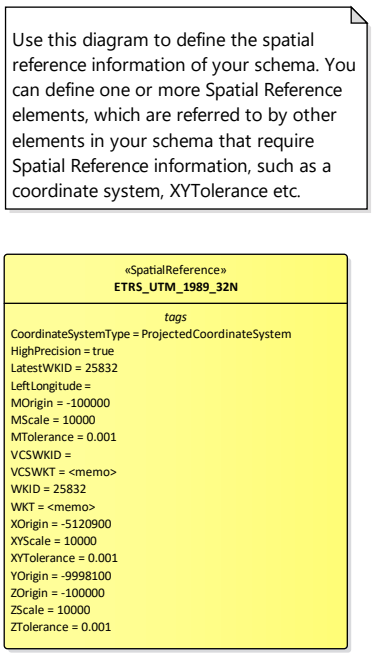


Figure 6: Spatial References

Note

Note in package 'Spatial References'

Use this diagram to define the spatial reference information of your schema. You can define one or more Spatial Reference elements, which are referred to by other elements in your schema that require Spatial Reference information, such as a coordinate system, XYTolerance etc.

Note
Version 1.0 Phase 1.0 Proposed
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Extends

ETRS_UTM_1989_32N

SpatialReference «SpatialReference» in package 'Spatial References'