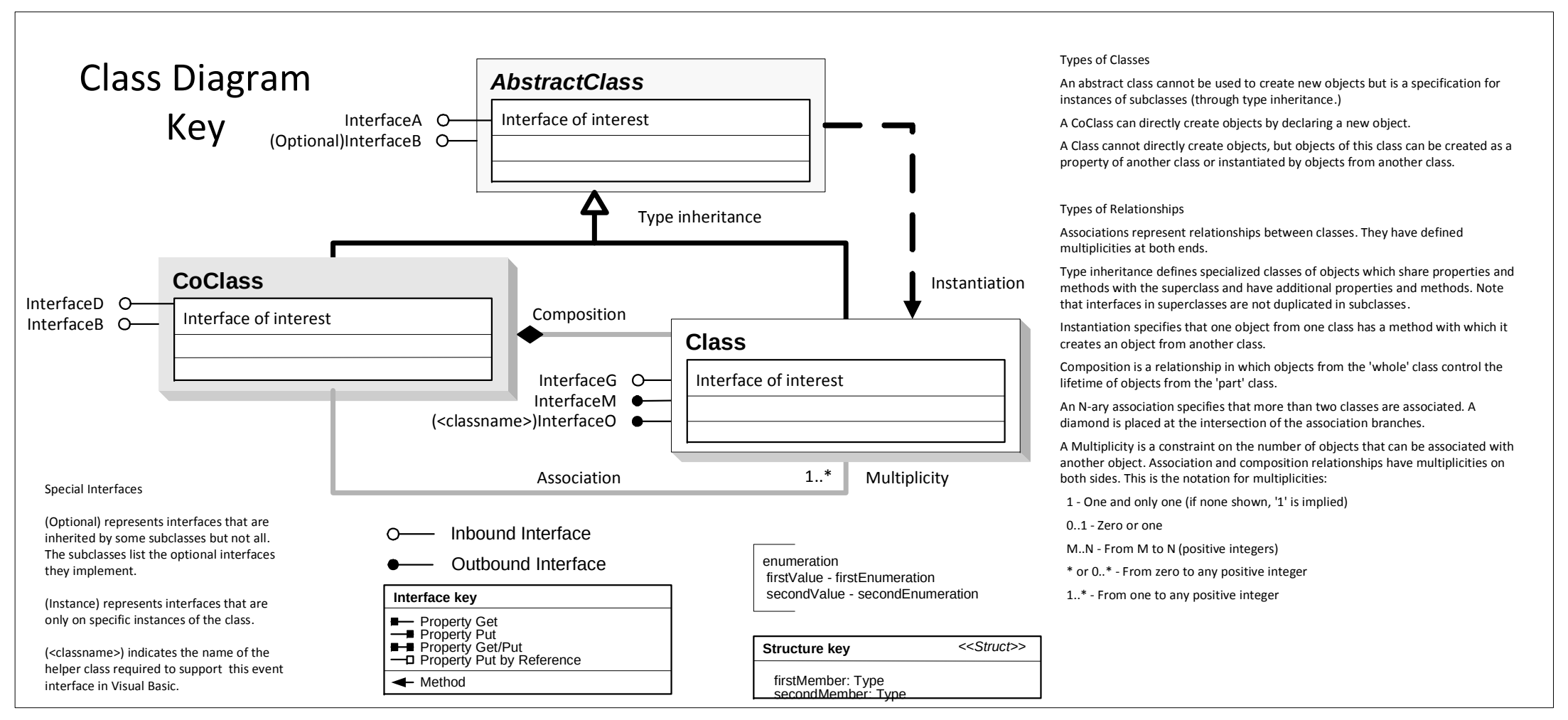
Class Diagram
Key
AbstractClass
Interface of interest
InterfaceA
(Optional)InterfaceB
Type inheritance
Instantiation
CoClass
Interface of interest
InterfaceD
InterfaceB
Composition
Class
Interface of interest
InterfaceG
InterfaceM
(<classname>)InterfaceO
Association
1..*
Multiplicity
Inbound Interface
Outbound Interface
Interface key
Property Get
Property Put
Property Get/Put
Property Put by Reference
Method
enumeration
firstValue - firstEnumeration
secondValue - secondEnumeration
Structure key
<<Struct>>
firstMember: Type
secondMember: Type

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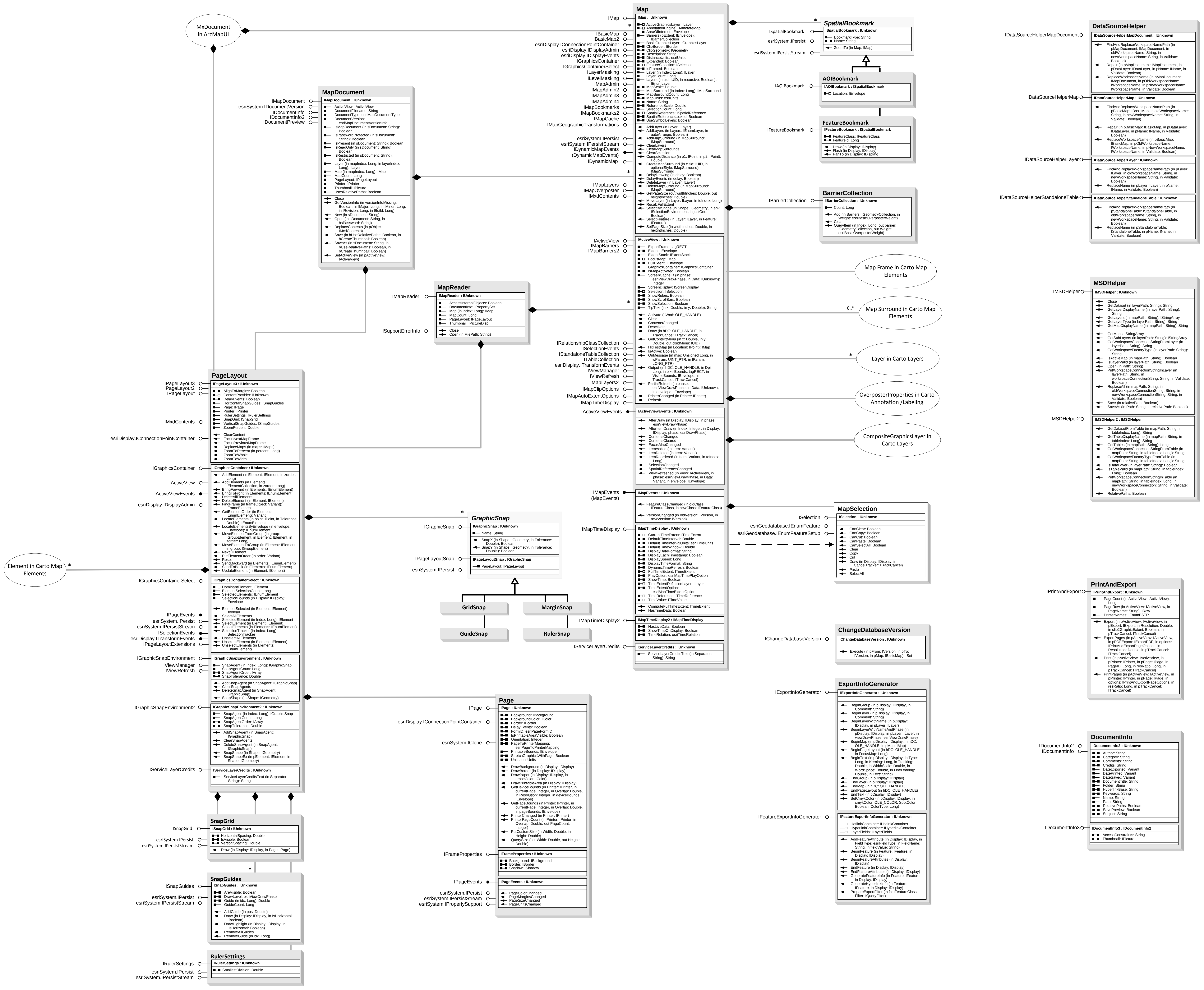
Carto Object Model
Map and Page Layout

Esri® ArcGIS® 10.3.1


MxDocument in ArcMapUI
Map
IMap : IUnknown
IActiveView : IUnknown
IActiveViewEvents : IUnknown
IMapEvents : IUnknown
IMapTimeDisplay : IUnknown
IMapTimeDisplay2 : IMapTimeDisplay
IServiceLayerCredits : IUnknown
IMap
IBasicMap
IBasicMap2
esriDisplay.IConnectionPointContainer
esriDisplay.IDisplayAdmin
esriDisplay.IDisplayEvents
IGraphicsContainer
IGraphicsContainerSelect
ILayerMasking
ILevelMasking
IMapAdmin
IMapAdmin2
IMapAdmin3
IMapAdmin4
IMapBookmarks
IMapBookmarks2
IMapCache
IMapGeographicTransformations
esriSystem.IPersist
esriSystem.IPersistStream
IDynamicMapEvents
(IDynamicMapEvents)
IDynamicMap
IMapLayers
IMapOverposter
IMxdContents
IActiveView
IMapBarriers
IMapBarriers2
IRelationshipClassCollection
ISelectionEvents
IStandaloneTableCollection
ITableCollection
esriDisplay.ITransformEvents
IViewManager
IViewRefresh
IMapLayers2
IMapClipOptions
IMapAutoExtentOptions
IMapTimeDisplay
IActiveViewEvents
IMapEvents
(MapEvents)
IMapTimeDisplay
IMapTimeDisplay2
IServiceLayerCredits
MapDocument
IMapDocument : IUnknown
IMapDocument
esriSystem.IDocumentVersion
IDocumentInfo
IDocumentInfo2
IDocumentPreview
MapReader
IMapReader : IUnknown
IMapReader
ISupportErrorInfo
PageLayout
IPageLayout3 : IUnknown
IGraphicsContainer : IUnknown
IGraphicsContainerSelect : IUnknown
IGraphicSnapEnvironment : IUnknown
IGraphicSnapEnvironment2 : IUnknown
IServiceLayerCredits : IUnknown
IPageLayout3
IPageLayout2
IPageLayout
IMxdContents
esriDisplay.IConnectionPointContainer
IGraphicsContainer
IActiveView
IActiveViewEvents
esriDisplay.IDisplayAdmin
IGraphicsContainerSelect
IPageEvents
esriSystem.IPersist
esriSystem.IPersistStream
ISelectionEvents
esriDisplay.ITransformEvents
IPageLayoutExtensions
IGraphicSnapEnvironment
IViewManager
IViewRefresh
IGraphicSnapEnvironment2
IServiceLayerCredits
Element in Carto Map Elements
*
GraphicSnap
IGraphicSnap : IUnknown
IPageLayoutSnap : IGraphicSnap
IGraphicSnap
IPageLayoutSnap
esriSystem.IPersist
GridSnap
MarginSnap
GuideSnap
RulerSnap
SnapGrid
ISnapGrid : IUnknown
ISnapGrid
esriSystem.IPersist
esriSystem.IPersistStream
SnapGuides
ISnapGuides : IUnknown
ISnapGuides
esriSystem.IPersist
esriSystem.IPersistStream
RulerSettings
IRulerSettings : IUnknown
IRulerSettings
esriSystem.IPersist
esriSystem.IPersistStream
Page
IPage : IUnknown
IFrameProperties : IUnknown
IPageEvents : IUnknown
IPage
esriDisplay.IConnectionPointContainer
esriSystem.IClone
IFrameProperties
IPageEvents
esriSystem.IPersist
esriSystem.IPersistStream
esriSystem.IPropertySupport
SpatialBookmark
ISpatialBookmark : IUnknown
ISpatialBookmark
esriSystem.IPersist
esriSystem.IPersistStream
AOIBookmark
IAOIBookmark : ISpatialBookmark
IAOIBookmark
FeatureBookmark
IFeatureBookmark : ISpatialBookmark
IFeatureBookmark
BarrierCollection
IBarrierCollection : IUnknown
IBarrierCollection
Map Frame in Carto Map Elements
0..*
Map Surround in Carto Map Elements
Layer in Carto Layers
Overposter Properties in Carto Annotation /Labeling
CompositeGraphicsLayer in Carto Layers
MapSelection
ISelection : IUnknown
ISelection
esriGeodatabase.IEnumFeature
esriGeodatabase.IEnumFeatureSetup
ChangeDatabaseVersion
IChangeDatabaseVersion : IUnknown
IChangeDatabaseVersion
ExportInfoGenerator
IExportInfoGenerator : IUnknown
IFeatureExportInfoGenerator : IUnknown
IExportInfoGenerator
IFeatureExportInfoGenerator
DataSourceHelper
IDataSourceHelperMapDocument : IUnknown
IDataSourceHelperMap : IUnknown
IDataSourceHelperLayer : IUnknown
IDataSourceHelperStandaloneTable : IUnknown
IDataSourceHelperMapDocument
IDataSourceHelperMap
IDataSourceHelperLayer
IDataSourceHelperStandaloneTable
MSDHelper
IMSDHelper : IUnknown
IMSDHelper2 : IMSDHelper
IMSDHelper
IMSDHelper2
PrintAndExport
IPrintAndExport : IUnknown
IPrintAndExport
DocumentInfo
IDocumentInfo2 : IUnknown
IDocumentInfo3 : IDocumentInfo2
IDocumentInfo2
IDocumentInfo
IDocumentInfo3

Interfaces

IBasicMapIdentifyObject : IUnknown
BasicMap: IBasicMap

IContextAnalyzer : IUnknown
Priority: Long
GetContextMenu (in contextObject: IUnknown, out clsidMenu: IUID)

IEnumLayer : IUnknown
Next: ILayer
Reset

IEnumMap : IUnknown
Next: IMap
Reset

IEnumMapSurround : IUnknown
Next: IMapSurround
Reset

IEnumSpatialBookmark : IUnknown
Next: ISpatialBookmark
Reset

IExtentStack : IUnknown
Count: Long
Item (in Index: Long): IEnvelope
CanRedo: Boolean
CanUndo: Boolean
Do (in Extent: IEnvelope)
Redo
Reset
Undo

IKmlConversion : IUnknown
GetLayerIDListFromMap (in pMap: IMap): IArray
GetLayerIDListFromMapServer (in pMapServer: IMapServer): IArray
LayerToArray (in pLayer: ILayer, in pQueryFilter: IQueryFilter, in pKmlParameters: IPropertySet): BYTE[]
LayerToFile (in pLayer: ILayer, in pQueryFilter: IQueryFilter, in pKmlParameters: IPropertySet, in Filename: String)
MapServerMapToArray (in pMapServer: IMapServer, in pQueryFilter: IQueryFilter, in pKmlParameters: IPropertySet, in pLayerIDs: String): BYTE[]
MapServerMapToFile (in pMapServer: IMapServer, in pQueryFilter: IQueryFilter, in pKmlParameters: IPropertySet, in pLayerIDs: String, in Filename: String)
MapToArray (in pMap: IMap, in pQueryFilter: IQueryFilter, in pKmlParameters: IPropertySet, in pLayerIDs: String): BYTE[]
MapToFile (in pMap: IMap, in pQueryFilter: IQueryFilter, in pKmlParameters: IPropertySet, in pLayerIDs: String, in Filename: String)

IMapEvents2 : IUnknown
ActiveGraphicsLayerChanged (in oldGraphicsLayer: IGraphicsLayer, in newGraphicsLayer: IGraphicsLayer)
TableChanged (in oldTable: ITable, in newTable: ITable)

IMapEvents3 : IUnknown
BeginBuildCache (in Map: IMap)
EndBuildCache (in Map: IMap)

IMaps : IUnknown
Count: Long
Item (in Index: Long): IMap
Create: IMap
Remove (in Map: IMap)
RemoveAt (in Index: Long)
Reset

IMaps2 : IUnknown
Count: Long
Item (in Index: Long): IMap
Create: IMap
MoveItem (in pMap: IMap, in toIndex: Long)
Remove (in Map: IMap)
RemoveAt (in Index: Long)
Reset

IPushPin : ISpatialBookmark
Location: IPoint
MarkerSymbol: IMarkerSymbol
MaxLabelWidthPts: Double
TextSymbol: ITextSymbol
Draw (in Display: IDisplay)
Flash (in Display: IDisplay)

IRotateOperation : IOperation
ActiveView: IActiveView
Name: String
PreviousRotation: Double
Refresh: Boolean
Rotation: Double

ITOCClass : IUnknown
Description: String
Label: String
SymbolPatchImage (in fileType: String): String

ITOCGroup : IUnknown
Classes: IArray
Heading: String

Enumerations

esriBufferSpatialReferenceType
0 - esriMapSpatialReference
1 - esriFeatureClassSpatialReference
2 - esriFeatureOptimizedSpatialReference
3 - esriFeatureSetOptimizedSpatialReference
4 - esriOtherSpatialReference

esriExtentTypeEnum
0 - esriExtentDefault
0 - esriAutoExtentNone
1 - esriExtentScale
1 - esriAutoExtentScale
2 - esriExtentBounds
2 - esriAutoExtentBounds
3 - esriAutoExtentMarginPercent
4 - esriAutoExtentMarginMapUnits
5 - esriAutoExtentMarginPageUnits
6 - esriExtentPageIndex

esriMapClipType
0 - esriMapClipNone
1 - esriMapClipShape
2 - esriMapClipMapExtent
3 - esriMapClipPageIndex

esriMapCacheUpdateMode
0 - esriMapCacheUpdateRecreateMissing
1 - esriMapCacheUpdateRecreateAll
2 - esriMapCacheUpdateDelete

esriMapDocumentType
0 - esriMapDocumentTypeMxd
1 - esriMapDocumentTypePmf
2 - esriMapDocumentTypeLyr
3 - esriMapDocumentTypeUnknown

esriMapDocumentVersionInfo
0 - esriMapDocumentVersionInfoSuccess
1 - esriMapDocumentVersionInfoFail
2 - esriMapDocumentVersionInfoUnknown

esriMapTimePlayOption
0 - esriMapTimeStopAfterPlaying
1 - esriMapTimeRepeatAfterPlaying
2 - esriMapTimeReverseAfterPlaying

esriMapTimeExtentOption
0 - esriMapTimeExtentAllData
1 - esriMapTimeExtentAllVisibleLayers
2 - esriMapTimeExtentUndefined
3 - esriMapTimeExtentSpecifiedLayer

esriMappingMsgCodeEnum
103000 - esriMappingMsgCode_LayerDrawBegin
103001 - esriMappingMsgCode_LayerDrawEnd
103002 - esriMappingMsgCode_GroupLayerDrawBegin
103003 - esriMappingMsgCode_GroupLayerDrawEnd
103004 - esriMappingMsgCode_GeographyDrawBegin
103005 - esriMappingMsgCode_GeographyDrawEnd
103006 - esriMappingMsgCode_AnnotationDrawBegin
103007 - esriMappingMsgCode_AnnotationDrawEnd
103008 - esriMappingMsgCode_SelectionDrawBegin
103009 - esriMappingMsgCode_SelectionDrawEnd
103010 - esriMappingMsgCode_GraphicSelectionDrawBegin
103011 - esriMappingMsgCode_GraphicSelectionDrawEnd
103012 - esriMappingMsgCode_CustomDrawBegin
103013 - esriMappingMsgCode_CustomDrawEnd
103014 - esriMappingMsgCode_GraphicDrawBegin
103015 - esriMappingMsgCode_GraphicDrawEnd
103016 - esriMappingMsgCode_LabelingBegin
103017 - esriMappingMsgCode_LabelingEnd
103018 - esriMappingMsgCode_LabelingLayers
103019 - esriMappingMsgCode_FeatureCount
103020 - esriMappingMsgCode_GraphicCount
103021 - esriMappingMsgCode_ExecutingQuery
103022 - esriMappingMsgCode_DrawingAsMaskingLayer
103023 - esriMappingMsgCode_SymbolDrawTime
103024 - esriMappingMsgCode_Rendering
103800 - esriMappingMsgCode_LayerDrawingError

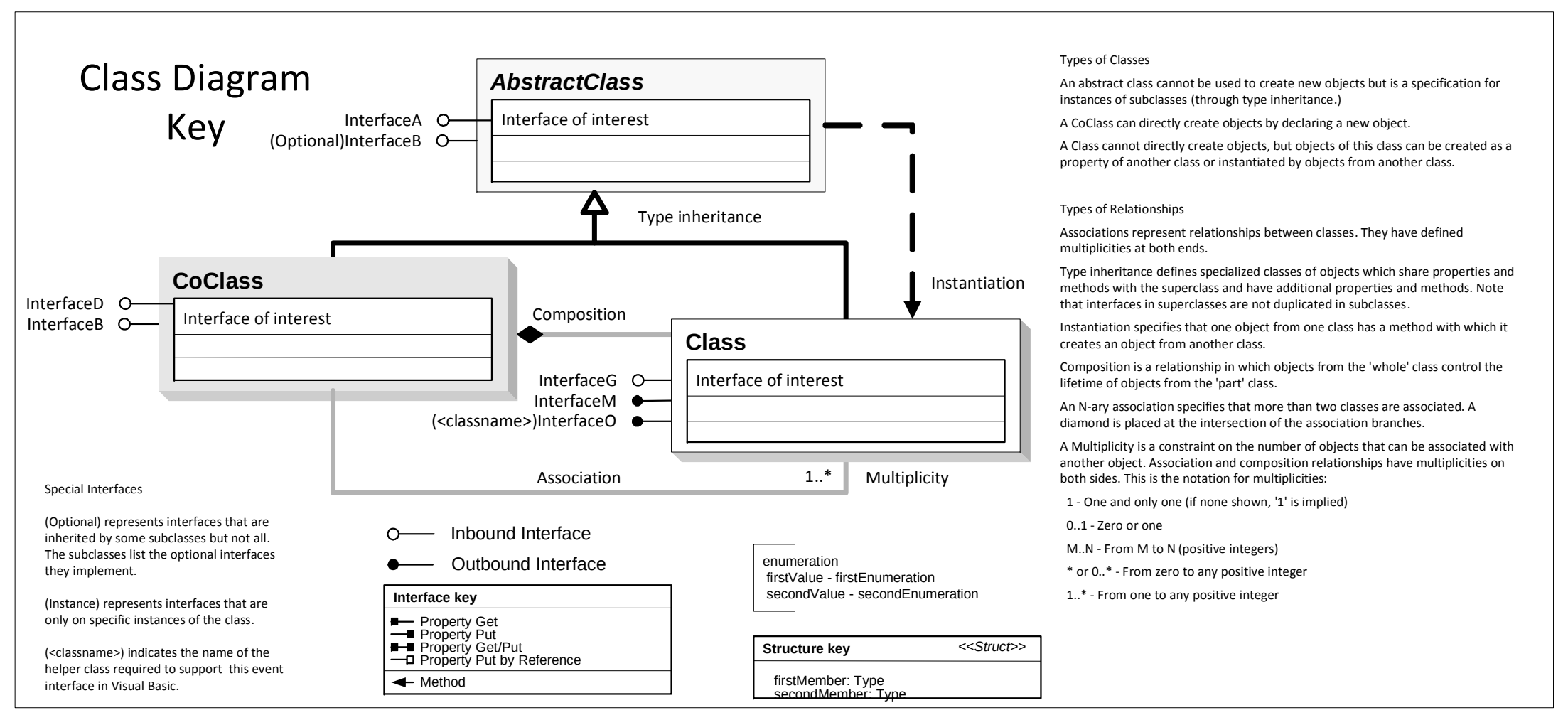
esriPageFormID
0 - esriPageFormLetter
1 - esriPageFormLegal
2 - esriPageFormTabloid
3 - esriPageFormC
4 - esriPageFormD
5 - esriPageFormE
6 - esriPageFormA5
7 - esriPageFormA4
8 - esriPageFormA3
9 - esriPageFormA2
10 - esriPageFormA1
11 - esriPageFormA0
12 - esriPageFormCUSTOM
13 - esriPageFormSameAsPrinter

esriPageToPrinterMapping
0 - esriPageMappingCrop
1 - esriPageMappingScale
2 - esriPageMappingTile

esriSelectionResultEnum
0 - esriSelectionResultNew
1 - esriSelectionResultAdd
2 - esriSelectionResultSubtract
3 - esriSelectionResultAnd
4 - esriSelectionResultXOR

esriValueRepresentations
0 - esriValueRepUnknown
1 - esriValueRepRadius
2 - esriValueRepArea
3 - esriValueRepDistance
4 - esriValueRepWidth

esriViewDrawPhase
0 - esriViewNone
1 - esriViewBackground
2 - esriViewGeography
4 - esriViewGeoSelection
8 - esriViewGraphics
16 - esriViewGraphicSelection
32 - esriViewForeground
64 - esriViewInitialized
255 - esriViewAll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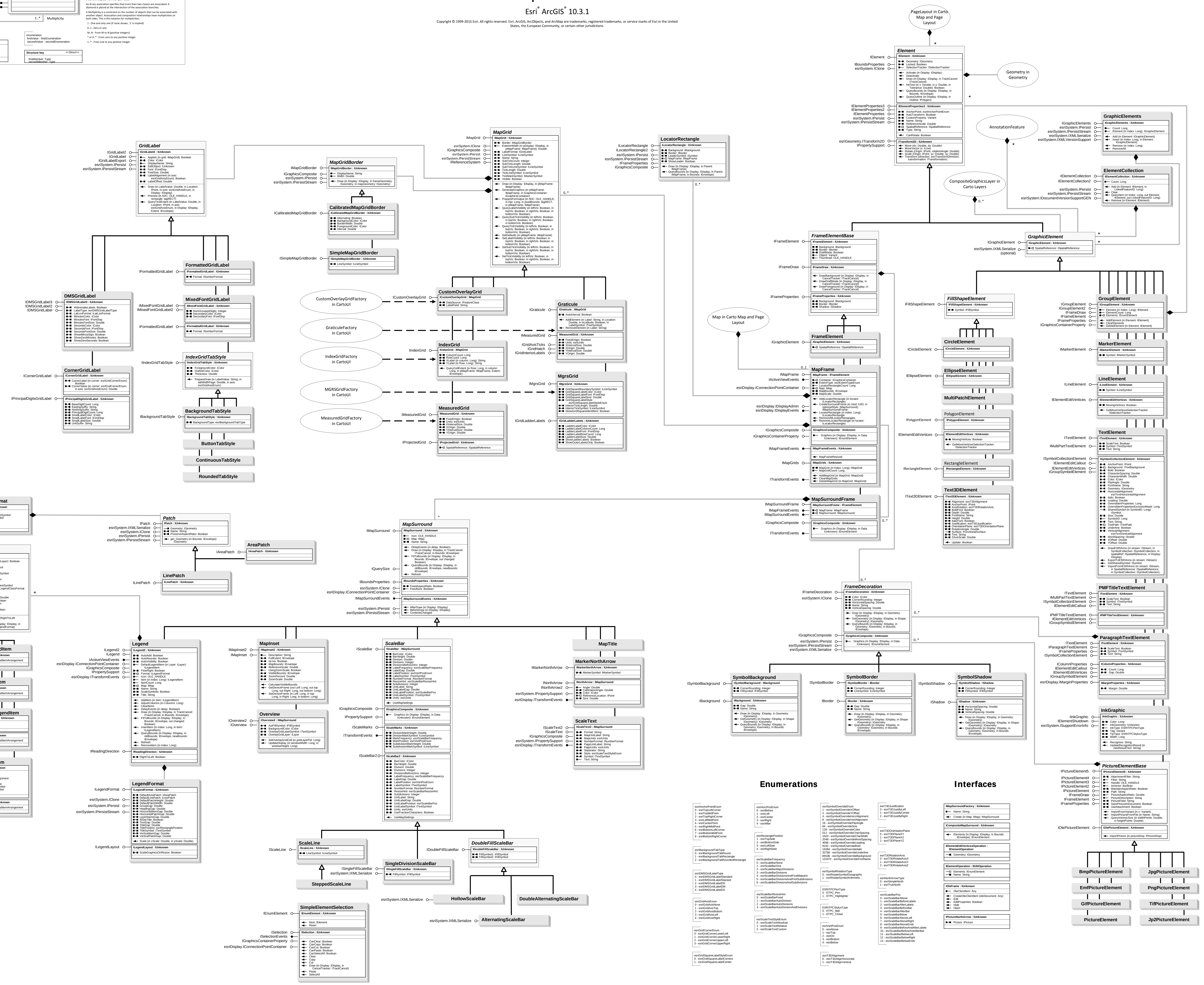
Carto Object Model
Map Elements

Esri® ArcGIS® 10.3.1


PageLayout in Carto Map and Page Layout
Element
Geometry in Geometry
AnnotationFeature
GraphicElements
ElementCollection
CompositeGraphicsLayer in Carto Layers
GraphicElement
FrameElementBase
FillShapeElement
GroupElement
Map in Carto Map and Page Layout
FrameElement
CircleElement
MarkerElement
MapFrame
EllipseElement
LineElement
MultiPatchElement
PolygonElement
TextElement
RectangleElement
Text3DElement
MapSurroundFrame
PMFTitleTextElement
ParagraphTextElement
FrameDecoration
SymbolBackground
SymbolBorder
SymbolShadow
InkGraphic
PictureElementBase
BmpPictureElement
JpgPictureElement
EmfPictureElement
PngPictureElement
GifPictureElement
TifPictureElement
PictureElement
Jp2PictureElement
LocatorRectangle
MapGrid
GridLabel
MapGridBorder
CalibratedMapGridBorder
SimpleMapGridBorder
FormattedGridLabel
DMSGridLabel
MixedFontGridLabel
IndexGridTabStyle
CornerGridLabel
BackgroundTabStyle
ButtonTabStyle
ContinuousTabStyle
RoundedTabStyle
CustomOverlayGridFactory in CartoUI
GraticuleFactory in CartoUI
IndexGridFactory in CartoUI
MGRSGridFactory in CartoUI
MeasuredGridFactory in CartoUI
CustomOverlayGrid
Graticule
IndexGrid
MgrsGrid
MeasuredGrid
LegendClassFormat
Patch
AreaPatch
LinePatch
LegendItem
HorizontalLegendItem
VerticalLegendItem
HorizontalBarLegendItem
NestedLegendItem
MapSurround
Legend
LegendFormat
MapInset
Overview
ScaleBar
ScaleLine
SteppedScaleLine
SingleDivisionScaleBar
DoubleFillScaleBar
HollowScaleBar
DoubleAlternatingScaleBar
AlternatingScaleBar
MapTitle
MarkerNorthArrow
ScaleText
SimpleElementSelection
Enumerations
Interfaces

Carto Object Model

Layers

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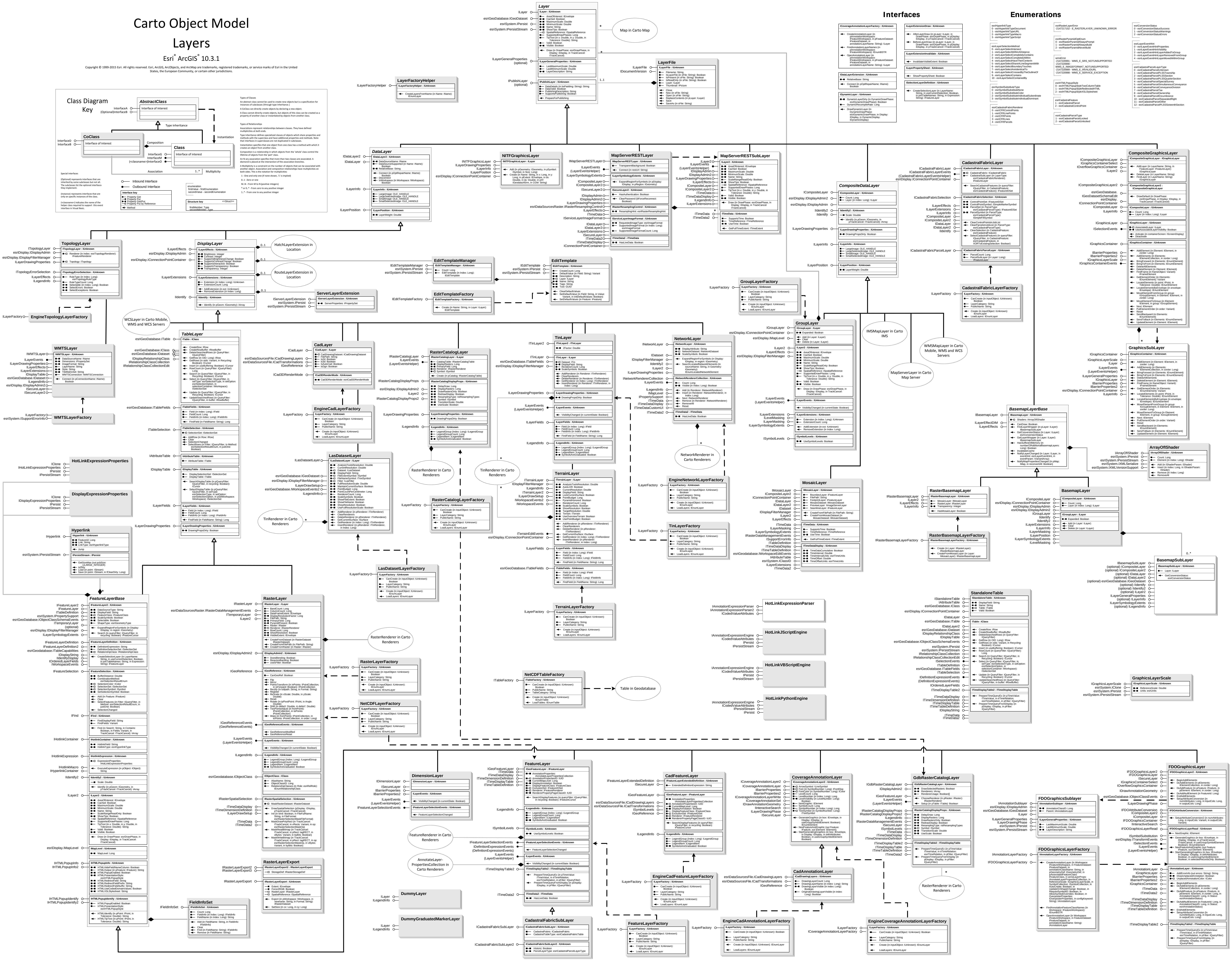
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Types of Classes
Types of Relationships
Layer
Map in Carto Map
LayerFile
LayerFactoryHelper
Interfaces
Enumerations
DataLayer
NITFGraphicsLayer
MapServerRESTLayer
MapServerRESTSubLayer
CompositeDataLayer
CadastralFabricLayer
CompositeGraphicsLayer
TopologyLayer
DisplayLayer
HatchLayerExtension in Location
RouteLayerExtension in Location
EditTemplateManager
EditTemplate
ServerLayerExtension
EditTemplateFactory
GroupLayerFactory
CadastralFabricLayerFactory
EngineTopologyLayerFactory
WCSLayer in Carto Mobile, WMS and WCS Servers
WMTSLayer
WMTSLayerFactory
TableLayer
CadLayer
RasterCatalogLayer
TinLayer
NetworkLayer
GroupLayer
IMSMapLayer in Carto IMS
WMSMapLayer in Carto Mobile, WMS and WCS Servers
MapServerLayer in Carto Map Server
GraphicsSubLayer
HotLinkExpressionProperties
DisplayExpressionProperties
Hyperlink
EngineCadLayerFactory
LasDatasetLayer
RasterRenderer in Carto Renderers
TinRenderer in Carto Renderers
NetworkRenderer in Carto Renderers
TerrainLayer
EngineNetworkLayerFactory
MosaicLayer
BasemapLayerBase
ArrayOfIShader
RasterBasemapLayer
BasemapLayer
RasterCatalogLayerFactory
TinLayerFactory
RasterBasemapLayerFactory
BasemapSubLayer
LasDatasetLayerFactory
TerrainLayerFactory
StandaloneTable
FeatureLayerBase
RasterLayer
RasterLayerFactory
NetCDFLayerFactory
NetCDFTableFactory
Table in Geodatabase
HotLinkExpressionParser
HotLinkJScriptEngine
HotLinkVBScriptEngine
HotLinkPythonEngine
GraphicsLayerScale
DimensionLayer
FeatureLayer
CadFeatureLayer
CoverageAnnotationLayer
GdbRasterCatalogLayer
FDOGraphicsSublayer
FDOGraphicsLayer
FDOGraphicsLayerFactory
FeatureRenderer in Carto Renderers
AnnotateLayer-PropertiesCollection in Carto Renderers
RasterLayerExport
FieldInfoSet
DummyLayer
DummyGraduatedMarkerLayer
CadastralFabricSubLayer
EngineCadFeatureLayerFactory
FeatureLayerFactory
CadAnnotationLayer
EngineCadAnnotationLayerFactory
EngineCoverageAnnotationLayerFactory

Carto Object Model

Rendering

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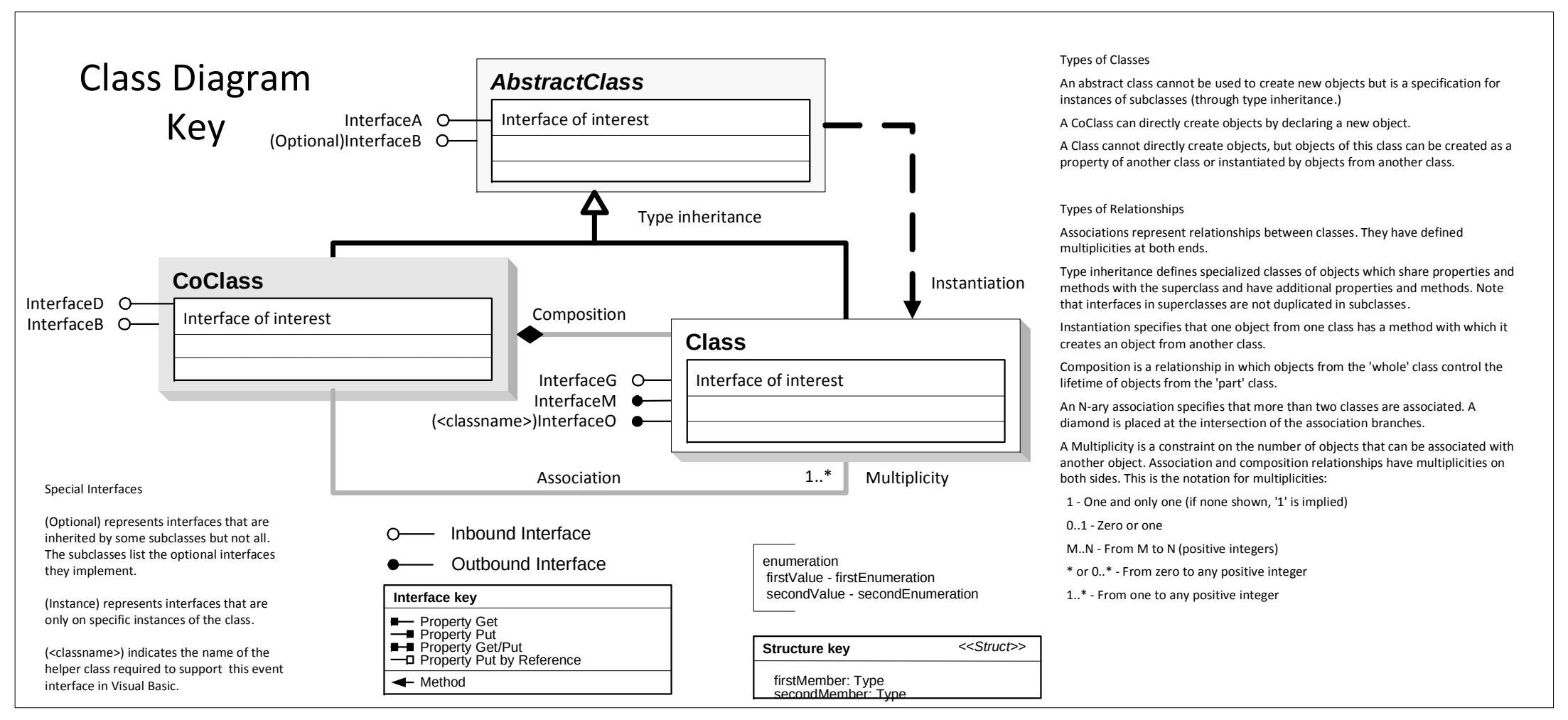
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Interface key
Property Get
Property Put
Property Get/Put
Property Put by Reference
Method
enumeration
firstValue - firstEnumeration
secondValue - secondEnumeration
Structure key
<<Struct>>
firstMember: Type
secondMember: Type

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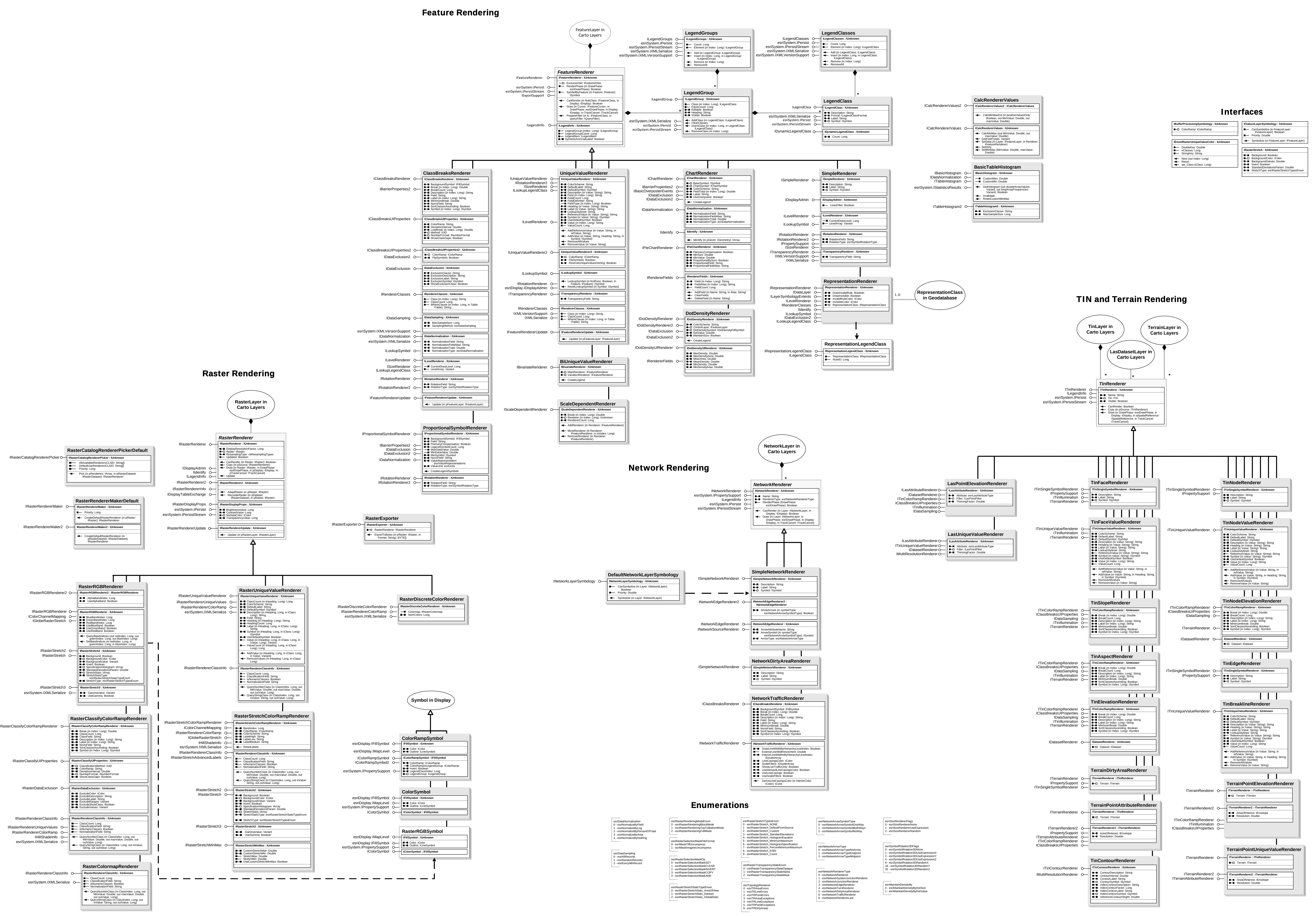

Feature Rendering
FeatureLayer in Carto Layers
FeatureRenderer
LegendGroups
LegendClasses
LegendGroup
LegendClass
CalcRendererValues
BasicTableHistogram
ClassBreaksRenderer
UniqueValueRenderer
ChartRenderer
SimpleRenderer
RepresentationRenderer
RepresentationClass in Geodatabase
RepresentationLegendClass
DotDensityRenderer
BiUniqueValueRenderer
ScaleDependentRenderer
ProportionalSymbolRenderer
Raster Rendering
RasterLayer in Carto Layers
RasterRenderer
RasterCatalogRendererPickerDefault
RasterRendererMakerDefault
RasterExporter
RasterRGBRenderer
RasterUniqueValueRenderer
RasterDiscreteColorRenderer
RasterClassifyColorRampRenderer
RasterStretchColorRampRenderer
RasterColormapRenderer
Symbol in Display
ColorRampSymbol
ColorSymbol
RasterRGBSymbol
Network Rendering
NetworkLayer in Carto Layers
NetworkRenderer
DefaultNetworkLayerSymbology
SimpleNetworkRenderer
NetworkDirtyAreaRenderer
NetworkTrafficRenderer
TIN and Terrain Rendering
TinLayer in Carto Layers
LasDatasetLayer in Carto Layers
TerrainLayer in Carto Layers
TinRenderer
LasPointElevationRenderer
LasUniqueValueRenderer
TinFaceRenderer
TinFaceValueRenderer
TinSlopeRenderer
TinAspectRenderer
TinElevationRenderer
TerrainDirtyAreaRenderer
TerrainPointAttributeRenderer
TinContourRenderer
TinNodeRenderer
TinNodeValueRenderer
TinNodeElevationRenderer
TinEdgeRenderer
TinBreaklineRenderer
TerrainPointElevationRenderer
TerrainPointUniqueValueRenderer
Interfaces
IBufferProcessingSymbology : IUnknown
ColorRamp: IColorRamp
IEnumRasterUniqueValueColor : IUnknown
DoubleKey: Double
nClasses: Long
StringKey: String
Next (out Index: Long)
Reset
set_Class (iClass: Long)
IFeatureLayerSymbology : IUnknown
CanSymbolize (in FeatureLayer: IFeatureLayer): Boolean
Priority: Double
Symbolize (in FeatureLayer: IFeatureLayer)
IRasterStretch : IUnknown
Background: Boolean
BackgroundColor: IColor
BackgroundValues: Double
Invert: Boolean
StandardDeviationsParam: Double
StretchType: esriRasterStretchTypesEnum

Enumerations

esriDataNormalization
0 - esriNormalizeByField
1 - esriNormalizeByLog
2 - esriNormalizeByPercentOfTotal
3 - esriNormalizeByArea
4 - esriNormalizeByNothing

esriDataSampling
0 - esriAllRecords
1 - esriRandomRecords
2 - esriEveryNthRecord

esriRasterRenderingModeEnum
0 - esriRasterRenderingBlockMode
1 - esriRasterRenderingTopToBottomMode
2 - esriRasterRenderingFullMode

esriRasterSelectionMaskFileFormat
0 - esriMaskTiffUncompress
1 - esriMaskImagineUncompress

esriRasterSelectionMaskOp
0 - esriRasterSelectionMaskSET
1 - esriRasterSelectionMaskCLEAR
2 - esriRasterSelectionMaskINVERT
3 - esriRasterSelectionMaskCOPY
4 - esriRasterSelectionMaskAND

esriRasterStretchStatsTypeEnum
0 - esriRasterStretchStats_AreaOfView
1 - esriRasterStretchStats_Dataset
2 - esriRasterStretchStats_GlobalStats

esriRasterStretchTypesEnum
0 - esriRasterStretch_NONE
1 - esriRasterStretch_DefaultFromSource
2 - esriRasterStretch_Custom
3 - esriRasterStretch_StandardDeviations
4 - esriRasterStretch_HistogramEqualize
5 - esriRasterStretch_MinimumMaximum
6 - esriRasterStretch_HistogramSpecification
7 - esriRasterStretch_PercentMinimumMaximum
8 - esriRasterStretch_ESRI
9 - esriRasterStretch_Count

esriRasterTransparencyStateEnum
0 - esriRasterTransparencyStateOpaque
1 - esriRasterTransparencyStateAlpha
2 - esriRasterTransparencyStateMask

esriTopologyRenderer
0 - esriTRAreaErrors
1 - esriTRLineErrors
2 - esriTRPointErrors
3 - esriTRAreaExceptions
4 - esriTRLineExceptions
5 - esriTRPointExceptions
6 - esriTRDirtyAreas

esriNetworkArrowSymbolType
0 - esriNetworkArrowSymbolOneWay
1 - esriNetworkArrowSymbolBothWays
2 - esriNetworkArrowSymbolNoWay

esriNetworkArrowType
0 - esriNetworkArrowTypeNoArrow
1 - esriNetworkArrowTypeEndpoint
2 - esriNetworkArrowTypeMidpoint

esriNetworkRendererType
0 - esriNetworkRenderer
1 - esriNetworkSystemJunctionRenderer
2 - esriNetworkJunctionRenderer
3 - esriNetworkEdgeRenderer
4 - esriNetworkTurnRenderer
5 - esriNetworkDirtyAreaRenderer
6 - esriNetworkTrafficRenderer
6 - esriNetworkRendererLast

esriSizeRendererFlags
0 - esriSizeRendererNone
1 - esriSizeRendererUseExpression
2 - esriSizeRendererRandom

esriSymbolRotation3DFlags
0 - esriSymbolRotation3DNone
1 - esriSymbolRotation3DUseExpressionX
2 - esriSymbolRotation3DUseExpressionY
4 - esriSymbolRotation3DUseExpressionZ
8 - esriSymbolRotation3DRandomX
16 - esriSymbolRotation3DRandomY
32 - esriSymbolRotation3DRandomZ

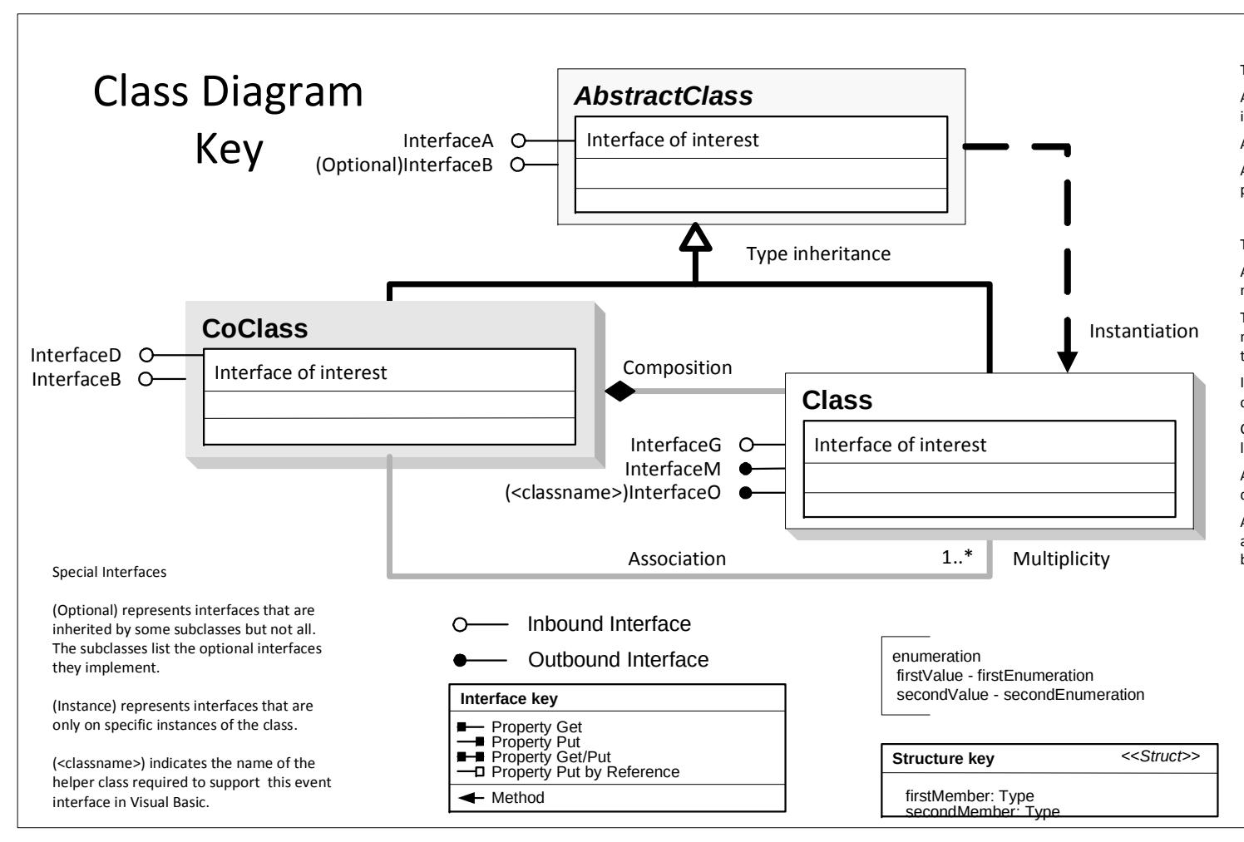
esriMaintainDensityBy
0 - esriMaintainDensityByDotSize
1 - esriMaintainDensityByDotValue

Carto Object Model

Labeling and Annotation

Esri® ArcGIS® 10.3.1

Class Diagram Key



Special Interfaces

(Optional) represents interfaces that are inherited by some subclasses but not all. The subclasses list the optional interfaces they implement.

(Instance) represents interfaces that are only on specific instances of the class.

(<classname>) indicates the name of the helper class required to support this event interface in Visual Basic.

Interface key
- Property Get
- Property Put
- Property Get/Put
- Property Put by Reference
- Method

enumeration
firstValue - firstEnumeration
secondValue - secondEnumeration

Structure key <<Struct>>
firstMember: Type
secondMember: Type

Types of Classes

An abstract class cannot be used to create new objects but is a specification for instances of subclasses (through type inheritance.)

A CoClass can directly create objects by declaring a new object.

A Class cannot directly create objects, but objects of this class can be created as a property of another class or instantiated by objects from another class.

Types of Relationships

Associations represent relationships between classes. They have defined multiplicities at both ends.

Type inheritance defines specialized classes of objects which share properties and methods with the superclass and have additional properties and methods. Note that interfaces in superclasses are not duplicated in subclasses.

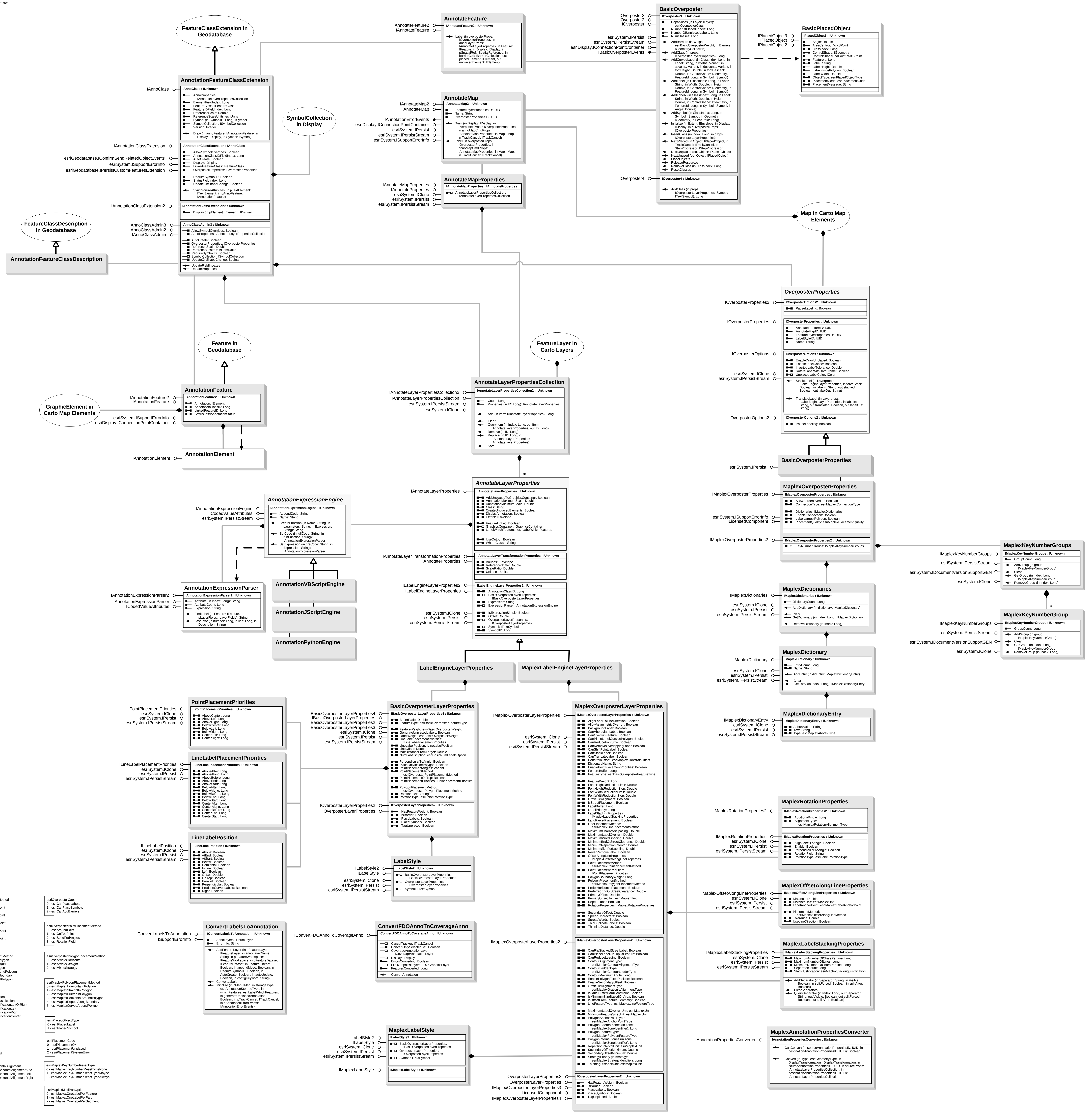
Instantiation specifies that one object from one class has a method with which it creates an object from another class.

Composition is a relationship in which objects from the 'whole' class control the lifetime of objects from the 'part' class.

An N-ary association specifies that more than two classes are associated. A diamond is placed at the intersection of the association branches.

A Multiplicity is a constraint on the number of objects that can be associated with another object. Association and composition relationships have multiplicities on both sides. This is the notation for multiplicities:

1 - One and only one (if none shown, '1' is implied)
0..1 - Zero or one
M..N - From M to N (positive integers)
* or 0..* - From zero to any positive integer
1..* - From one to any positive integer


FeatureClassExtension in Geodatabase
SymbolCollection in Display
FeatureClassDescription in Geodatabase
Feature in Geodatabase
GraphicElement in Carto Map Elements
FeatureLayer in Carto Layers
Map in Carto Map Elements
*
*

AnnotationFeatureClassExtension
IAnnoClass
IAnnotationClassExtension
esriGeodatabase.IConfirmSendRelatedObjectEvents
esriSystem.ISupportErrorInfo
esriGeodatabase.IPersistCustomFeaturesExtension
IAnnotationClassExtension2
IAnnoClassAdmin3
IAnnoClassAdmin2
IAnnoClassAdmin

IAnnoClass : IUnknown
- AnnoProperties: IAnnotateLayerPropertiesCollection
- ElementFieldIndex: Long
- FeatureClass: IFeatureClass
- FeatureIDFieldIndex: Long
- ReferenceScale: Double
- ReferenceScaleUnits: esriUnits
- Symbol (in SymbolID: Long): ISymbol
- SymbolCollection: ISymbolCollection
- Version: Integer
- Draw (in annoFeature: IAnnotationFeature, in Display: IDisplay, in Symbol: ISymbol)

IAnnotationClassExtension : IAnnoClass
- AllowSymbolOverrides: Boolean
- AnnotationClassIDFieldIndex: Long
- AutoCreate: Boolean
- Display: IDisplay
- LinkedFeatureClass: IFeatureClass
- OverposterProperties: IOverposterProperties
- RequireSymbolID: Boolean
- StatusFieldIndex: Long
- UpdateOnShapeChange: Boolean
- SynchronizeAttributes (in pTextElement: ITextElement, in pAnnoFeature: IAnnotationFeature)

IAnnotationClassExtension2 : IUnknown
- Display (in pElement: IElement): IDisplay

IAnnoClassAdmin3 : IUnknown
- AllowSymbolOverrides: Boolean
- AnnoProperties: IAnnotateLayerPropertiesCollection
- AutoCreate: Boolean
- OverposterProperties: IOverposterProperties
- ReferenceScale: Double
- ReferenceScaleUnits: esriUnits
- RequireSymbolID: Boolean
- SymbolCollection: ISymbolCollection
- UpdateOnShapeChange: Boolean
- UpdateFieldIndexes
- UpdateProperties

AnnotationFeatureClassDescription

AnnotateFeature
IAnnotateFeature2
IAnnotateFeature

IAnnotateFeature2 : IUnknown
- Label (in overposterProps: IOverposterProperties, in annoLayerProps: IAnnotateLayerProperties, in Feature: IFeature, in Display: IDisplay, in pSpatialRef: ISpatialReference, in barrierColl: IBarrierCollection, out placedElement: IElement, out unplacedElement: IElement)

AnnotateMap
IAnnotateMap2
IAnnotateMap
IAnnotationErrorEvents
esriDisplay.IConnectionPointContainer
esriSystem.IPersist
esriSystem.IPersistStream
esriSystem.ISupportErrorInfo

IAnnotateMap2 : IUnknown
- FeatureLayerPropertiesID: IUID
- Name: String
- OverposterPropertiesID: IUID
- Draw (in Display: IDisplay, in overposterProps: IOverposterProperties, in annoMapCmdProps: IAnnotateMapProperties, in Map: IMap, in TrackCancel: ITrackCancel)
- Label (in overposterProps: IOverposterProperties, in annoMapCmdProps: IAnnotateMapProperties, in Map: IMap, in TrackCancel: ITrackCancel)

AnnotateMapProperties
IAnnotateMapProperties
IAnnotateProperties
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IAnnotateMapProperties : IAnnotateProperties
- AnnotateLayerPropertiesCollection: IAnnotateLayerPropertiesCollection

BasicOverposter
IOverposter3
IOverposter2
IOverposter
esriSystem.IPersist
esriSystem.IPersistStream
esriDisplay.IConnectionPointContainer
IBasicOverposterEvents
IOverposter4

IOverposter3 : IUnknown
- Capabilities (in Layer: ILayer): esriOverposterCaps
- NumberOfPlacedLabels: Long
- NumberOfUnplacedLabels: Long
- NumClasses: Long
- AddBarriers (in Weight: esriBasicOverposterWeight, in Barriers: IGeometryCollection)
- AddClass (in props: IOverposterLayerProperties): Long
- AddCurvedLabel (in ClassIndex: Long, in Label: String, in widths: Variant, in ascents: Variant, in descents: Variant, in fontHeight: Double, in fontDescent: Double, in ControlShape: IGeometry, in FeatureId: Long, in Symbol: ISymbol)
- AddLabel (in ClassIndex: Long, in Label: String, in Width: Double, in Height: Double, in ControlShape: IGeometry, in FeatureId: Long, in Symbol: ISymbol)
- AddLabel2 (in ClassIndex: Long, in Label: String, in Width: Double, in Height: Double, in ControlShape: IGeometry, in FeatureId: Long, in Symbol: ISymbol, in Angle: Double)
- AddSymbol (in ClassIndex: Long, in Symbol: ISymbol, in Geometry: IGeometry, in FeatureId: Long)
- Initialize (in Extent: IEnvelope, in Display: IDisplay, in pOverposterProps: IOverposterProperties)
- InsertClass (in Index: Long, in props: IOverposterLayerProperties)
- NextPlaced (in Object: IPlacedObject, in TrackCancel: ITrackCancel, in StepProgressor: IStepProgressor)
- NextUnplaced (out Object: IPlacedObject)
- NextUnused (out Object: IPlacedObject)
- PlaceObjects
- ReleaseResources
- RemoveClass (in ClassIndex: Long)
- ResetClasses

IOverposter4 : IUnknown
- AddClass (in props: IOverposterLayerProperties, Symbol: ITextSymbol): Long

BasicPlacedObject
IPlacedObject3
IPlacedObject
IPlacedObject2

IPlacedObject3 : IUnknown
- Angle: Double
- AreaCentroid: WKSPoint
- ClassIndex: Long
- ControlShape: IGeometry
- ControlShapeEndPoint: WKSPoint
- FeatureId: Long
- Label: String
- LabelHeight: Double
- LabelInsidePolygon: Boolean
- LabelWidth: Double
- ObjectType: esriPlacedObjectType
- PlacementCode: esriPlacementCode
- PlacementMessage: String

AnnotationFeature
IAnnotationFeature2
IAnnotationFeature
esriSystem.ISupportErrorInfo
esriDisplay.IConnectionPointContainer

IAnnotationFeature2 : IUnknown
- Annotation: IElement
- AnnotationClassID: Long
- LinkedFeatureID: Long
- Status: esriAnnotationStatus

AnnotationElement
IAnnotationElement

AnnotationExpressionEngine
IAnnotationExpressionEngine
ICodedValueAttributes
esriSystem.IPersistStream

IAnnotationExpressionEngine : IUnknown
- AppendCode: String
- Name: String
- CreateFunction (in Name: String, in parameters: String, in Expression: String): String
- SetCode (in fullCode: String, in runFunction: String): IAnnotationExpressionParser
- SetExpression (in preCode: String, in Expression: String): IAnnotationExpressionParser

AnnotationExpressionParser
IAnnotationExpressionParser2
IAnnotationExpressionParser
ICodedValueAttributes

IAnnotationExpressionParser2 : IUnknown
- Attribute (in Index: Long): String
- AttributeCount: Long
- Expression: String
- FindLabel (in Feature: IFeature, in pLayerFields: ILayerFields): String
- LastError (in number: Long, in line: Long, in Description: String)

AnnotationVBScriptEngine

AnnotationJScriptEngine

AnnotationPythonEngine

AnnotateLayerPropertiesCollection
IAnnotateLayerPropertiesCollection2
IAnnotateLayerPropertiesCollection
esriSystem.IPersistStream
esriSystem.IClone

IAnnotateLayerPropertiesCollection2 : IUnknown
- Count: Long
- Properties (in ID: Long): IAnnotateLayerProperties
- Add (in Item: IAnnotateLayerProperties): Long
- Clear
- QueryItem (in Index: Long, out Item: IAnnotateLayerProperties, out ID: Long)
- Remove (in ID: Long)
- Replace (in ID: Long, in pAnnotateLayerProperties: IAnnotateLayerProperties)
- Sort

AnnotateLayerProperties
IAnnotateLayerProperties
IAnnotateLayerTransformationProperties
IAnnotateProperties
ILabelEngineLayerProperties2
ILabelEngineLayerProperties
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IAnnotateLayerProperties : IUnknown
- AddUnplacedToGraphicsContainer: Boolean
- AnnotationMaximumScale: Double
- AnnotationMinimumScale: Double
- Class: String
- CreateUnplacedElements: Boolean
- DisplayAnnotation: Boolean
- Extent: IEnvelope
- FeatureLinked: Boolean
- GraphicsContainer: IGraphicsContainer
- LabelWhichFeatures: esriLabelWhichFeatures
- UseOutput: Boolean
- WhereClause: String

IAnnotateLayerTransformationProperties : IUnknown
- Bounds: IEnvelope
- ReferenceScale: Double
- ScaleRatio: Double
- Units: esriUnits

ILabelEngineLayerProperties2 : IUnknown
- AnnotationClassID: Long
- BasicOverposterLayerProperties: IBasicOverposterLayerProperties
- Expression: String
- ExpressionParser: IAnnotationExpressionEngine
- IsExpressionSimple: Boolean
- Offset: Double
- OverposterLayerProperties: IOverposterLayerProperties
- Symbol: ITextSymbol
- SymbolID: Long

LabelEngineLayerProperties

MaplexLabelEngineLayerProperties

OverposterProperties
IOverposterProperties2
IOverposterProperties
IOverposterOptions
esriSystem.IClone
esriSystem.IPersistStream
IOverposterOptions2

IOverposterOptions2 : IUnknown
- PauseLabeling: Boolean

IOverposterProperties : IUnknown
- AnnotateFeatureID: IUID
- AnnotateMapID: IUID
- FeatureLayerPropertiesID: IUID
- LabelStyleID: IUID
- Name: String

IOverposterOptions : IUnknown
- EnableDrawUnplaced: Boolean
- EnableLabelCache: Boolean
- InvertedLabelTolerance: Double
- RotateLabelWithDataFrame: Boolean
- UnplacedLabelColor: IColor
- StackLabel (in Layerprops: ILabelEngineLayerProperties, in forceStack: Boolean, in labelIn: String, out stacked: Boolean, out labelOut: String)
- TranslateLabel (in Layerprops: ILabelEngineLayerProperties, in labelIn: String, out translated: Boolean, out labelOut: String)

IOverposterOptions2 : IUnknown
- PauseLabeling: Boolean

BasicOverposterProperties
esriSystem.IPersist

MaplexOverposterProperties
IMaplexOverposterProperties
esriSystem.ISupportErrorInfo
ILicensedComponent
IMaplexOverposterProperties2

IMaplexOverposterProperties : IUnknown
- AllowBorderOverlap: Boolean
- ConnectionType: esriMaplexConnectionType
- Dictionaries: IMaplexDictionaries
- EnableConnection: Boolean
- LabelLargestPolygon: Boolean
- PlacementQuality: esriMaplexPlacementQuality

IMaplexOverposterProperties2 : IUnknown
- KeyNumberGroups: IMaplexKeyNumberGroups

MaplexKeyNumberGroups
IMaplexKeyNumberGroups
esriSystem.IPersistStream
esriSystem.IDocumentVersionSupportGEN
esriSystem.IClone

IMaplexKeyNumberGroups : IUnknown
- GroupCount: Long
- AddGroup (in group: IMaplexKeyNumberGroup)
- Clear
- GetGroup (in Index: Long): IMaplexKeyNumberGroup
- RemoveGroup (in Index: Long)

MaplexKeyNumberGroup
IMaplexKeyNumberGroups
esriSystem.IPersistStream
esriSystem.IDocumentVersionSupportGEN
esriSystem.IClone

IMaplexKeyNumberGroups : IUnknown
- GroupCount: Long
- AddGroup (in group: IMaplexKeyNumberGroup)
- Clear
- GetGroup (in Index: Long): IMaplexKeyNumberGroup
- RemoveGroup (in Index: Long)

MaplexDictionaries
IMaplexDictionaries
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IMaplexDictionaries : IUnknown
- DictionaryCount: Long
- AddDictionary (in dictionary: IMaplexDictionary)
- Clear
- GetDictionary (in Index: Long): IMaplexDictionary
- RemoveDictionary (in Index: Long)

MaplexDictionary
IMaplexDictionary
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IMaplexDictionary : IUnknown
- EntryCount: Long
- Name: String
- AddEntry (in dicEntry: IMaplexDictionaryEntry)
- Clear
- GetEntry (in Index: Long): IMaplexDictionaryEntry

MaplexDictionaryEntry
IMaplexDictionaryEntry
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IMaplexDictionaryEntry : IUnknown
- Abbreviation: String
- Text: String
- Type: esriMaplexAbbrevType

PointPlacementPriorities
IPointPlacementPriorities
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IPointPlacementPriorities : IUnknown
- AboveCenter: Long
- AboveLeft: Long
- AboveRight: Long
- BelowCenter: Long
- BelowLeft: Long
- BelowRight: Long
- CenterLeft: Long
- CenterRight: Long

LineLabelPlacementPriorities
ILineLabelPlacementPriorities
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

ILineLabelPlacementPriorities : IUnknown
- AboveAfter: Long
- AboveAlong: Long
- AboveBefore: Long
- AboveEnd: Long
- AboveStart: Long
- BelowAfter: Long
- BelowAlong: Long
- BelowBefore: Long
- BelowEnd: Long
- BelowStart: Long
- CenterAfter: Long
- CenterAlong: Long
- CenterBefore: Long
- CenterEnd: Long
- CenterStart: Long

LineLabelPosition
ILineLabelPosition
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

ILineLabelPosition : IUnknown
- Above: Boolean
- AtEnd: Boolean
- AtStart: Boolean
- Below: Boolean
- Horizontal: Boolean
- InLine: Boolean
- Left: Boolean
- Offset: Double
- OnTop: Boolean
- Parallel: Boolean
- Perpendicular: Boolean
- ProduceCurvedLabels: Boolean
- Right: Boolean

BasicOverposterLayerProperties
IBasicOverposterLayerProperties4
IBasicOverposterLayerProperties
IBasicOverposterLayerProperties2
IBasicOverposterLayerProperties3
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream
IOverposterLayerProperties2
IOverposterLayerProperties

IBasicOverposterLayerProperties4 : IUnknown
- BufferRatio: Double
- FeatureType: esriBasicOverposterFeatureType
- FeatureWeight: esriBasicOverposterWeight
- GenerateUnplacedLabels: Boolean
- LabelWeight: esriBasicOverposterWeight
- LineLabelPlacementPriorities: ILineLabelPlacementPriorities
- LineLabelPosition: ILineLabelPosition
- LineOffset: Double
- MaxDistanceFromTarget: Double
- NumLabelsOption: esriBasicNumLabelsOption
- PerpendicularToAngle: Boolean
- PlaceOnlyInsidePolygon: Boolean
- PointPlacementAngles: Variant
- PointPlacementMethod: esriOverposterPointPlacementMethod
- PointPlacementOnTop: Boolean
- PointPlacementPriorities: IPointPlacementPriorities
- PolygonPlacementMethod: esriOverposterPolygonPlacementMethod
- RotationField: String
- RotationType: esriLabelRotationType

IOverposterLayerProperties2 : IUnknown
- HasFeatureWeight: Boolean
- IsBarrier: Boolean
- PlaceLabels: Boolean
- PlaceSymbols: Boolean
- TagUnplaced: Boolean

LabelStyle
ILabelStyle2
ILabelStyle
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

ILabelStyle2 : IUnknown
- BasicOverposterLayerProperties: IBasicOverposterLayerProperties
- OverposterLayerProperties: IOverposterLayerProperties
- Symbol: ITextSymbol

MaplexOverposterLayerProperties
IMaplexOverposterLayerProperties
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream
IMaplexOverposterLayerProperties2
IOverposterLayerProperties2
IOverposterLayerProperties
IMaplexOverposterLayerProperties3
ILicensedComponent
IMaplexOverposterLayerProperties4

IMaplexOverposterLayerProperties : IUnknown
- AlignLabelToLineDirection: Boolean
- AllowAsymmetricOverrun: Boolean
- BackgroundLabel: Boolean
- CanAbbreviateLabel: Boolean
- CanOverrunFeature: Boolean
- CanPlaceLabelOutsidePolygon: Boolean
- CanReduceFontSize: Boolean
- CanRemoveOverlappingLabel: Boolean
- CanShiftPointLabel: Boolean
- CanStackLabel: Boolean
- CanTruncateLabel: Boolean
- ConstrainOffset: esriMaplexConstrainOffset
- DictionaryName: String
- EnablePointPlacementPriorities: Boolean
- FeatureBuffer: Long
- FeatureType: esriBasicOverposterFeatureType
- FeatureWeight: Long
- FontHeightReductionLimit: Double
- FontHeightReductionStep: Double
- FontWidthReductionLimit: Double
- FontWidthReductionStep: Double
- GraticuleAlignment: Boolean
- IsStreetPlacement: Boolean
- LabelBuffer: Long
- LabelPriority: Long
- LabelStackingProperties: IMaplexLabelStackingProperties
- LandParcelPlacement: Boolean
- LinePlacementMethod: esriMaplexLinePlacementMethod
- MaximumCharacterSpacing: Double
- MaximumLabelOverrun: Double
- MaximumWordSpacing: Double
- MinimumEndOfStreetClearance: Double
- MinimumRepetitionInterval: Double
- MinimumSizeForLabeling: Double
- NeverRemoveLabel: Boolean
- OffsetAlongLineProperties: IMaplexOffsetAlongLineProperties
- PointPlacementMethod: esriMaplexPointPlacementMethod
- PointPlacementPriorities: IPointPlacementPriorities
- PolygonBoundaryWeight: Long
- PolygonPlacementMethod: esriMaplexPolygonPlacementMethod
- PreferHorizontalPlacement: Boolean
- PreferredEndOfStreetClearance: Double
- PrimaryOffset: Double
- PrimaryOffsetUnit: esriMaplexUnit
- RepeatLabel: Boolean
- RotationProperties: IMaplexRotationProperties
- SecondaryOffset: Double
- SpreadCharacters: Boolean
- SpreadWords: Boolean
- ThinDuplicateLabels: Boolean
- ThinningDistance: Double

IMaplexOverposterLayerProperties2 : IUnknown
- CanFlipStackedStreetLabel: Boolean
- CanPlaceLabelOnTopOfFeature: Boolean
- CanReduceLeading: Boolean
- ContourAlignmentType: esriMaplexContourAlignmentType
- ContourLadderType: esriMaplexContourLadderType
- ContourMaximumAngle: Long
- EnablePolygonFixedPosition: Boolean
- EnableSecondaryOffset: Boolean
- GraticuleAlignmentType: esriMaplexGraticuleAlignmentType
- IsLabelBufferHardConstraint: Boolean
- IsMinimumSizeBasedOnArea: Boolean
- IsOffsetFromFeatureGeometry: Boolean
- LineFeatureType: esriMaplexLineFeatureType
- MaximumLabelOverrunUnit: esriMaplexUnit
- MinimumFeatureSizeUnit: esriMaplexUnit
- PolygonAnchorPointType: esriMaplexAnchorPointType
- PolygonExternalZones (in zone: esriMaplexZoneIdentifier): Long
- PolygonFeatureType: esriMaplexPolygonFeatureType
- PolygonInternalZones (in zone: esriMaplexZoneIdentifier): Long
- RepetitionIntervalUnit: esriMaplexUnit
- SecondaryOffsetMaximum: Double
- SecondaryOffsetMinimum: Double
- StrategyPriority (in strategy: esriMaplexStrategyIdentifier): Long
- ThinningDistanceUnit: esriMaplexUnit

IOverposterLayerProperties2 : IUnknown
- HasFeatureWeight: Boolean
- IsBarrier: Boolean
- PlaceLabels: Boolean
- PlaceSymbols: Boolean
- TagUnplaced: Boolean

MaplexRotationProperties
IMaplexRotationProperties2
IMaplexRotationProperties
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IMaplexRotationProperties2 : IUnknown
- AdditionalAngle: Long
- AlignmentType: esriMaplexRotationAlignmentType

IMaplexRotationProperties : IUnknown
- AlignLabelToAngle: Boolean
- Enable: Boolean
- PerpendicularToAngle: Boolean
- RotationField: String
- RotationType: esriLabelRotationType

MaplexOffsetAlongLineProperties
IMaplexOffsetAlongLineProperties
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IMaplexOffsetAlongLineProperties : IUnknown
- Distance: Double
- DistanceUnit: esriMaplexUnit
- LabelAnchorPoint: esriMaplexLabelAnchorPoint
- PlacementMethod: esriMaplexOffsetAlongLineMethod
- Tolerance: Double
- UseLineDirection: Boolean

MaplexLabelStackingProperties
IMaplexLabelStackingProperties
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream

IMaplexLabelStackingProperties : IUnknown
- MaximumNumberOfCharsPerLine: Long
- MaximumNumberOfLines: Long
- MinimumNumberOfCharsPerLine: Long
- SeparatorCount: Long
- StackJustification: esriMaplexStackingJustification
- AddSeparator (in Separator: String, in Visible: Boolean, in splitForced: Boolean, in splitAfter: Boolean)
- ClearSeparators
- QuerySeparator (in Index: Long, out Separator: String, out Visible: Boolean, out splitForced: Boolean, out splitAfter: Boolean)

MaplexAnnotationPropertiesConverter
IAnnotationPropertiesConverter

IAnnotationPropertiesConverter : IUnknown
- CanConvert (in sourceAnnotationPropertiesID: IUID, in destinationAnnotationPropertiesID: IUID): Boolean
- Convert (in Type: esriGeometryType, in DisplayTransformation: IDisplayTransformation, in sourceAnnotationPropertiesID: IUID, in sourceProps: IAnnotateLayerPropertiesCollection, in destinationAnnotationPropertiesID: IUID): IAnnotateLayerPropertiesCollection

ConvertLabelsToAnnotation
IConvertLabelsToAnnotation
ISupportErrorInfo

IConvertLabelsToAnnotation : IUnknown
- AnnoLayers: IEnumLayer
- ErrorInfo: String
- AddFeatureLayer (in pFeatureLayer: IFeatureLayer, in annoLayerName: String, in pFeatureWorkspace: IFeatureWorkspace, in pFeatureDataset: IFeatureDataset, in FeatureLinked: Boolean, in appendMode: Boolean, in RequireSymbolID: Boolean, in AutoCreate: Boolean, in autoUpdate: Boolean, in configKeyword: String)
- ConvertLabels
- Initialize (in pMap: IMap, in storageType: esriAnnotationStorageType, in whichFeatures: esriLabelWhichFeatures, in generateUnplacedAnnotation: Boolean, in pTrackCancel: ITrackCancel, in pAnnotationErrorEvents: IAnnotationErrorEvents)

ConvertFDOAnnoToCoverageAnno
IConvertFDOAnnoToCoverageAnno

IConvertFDOAnnoToCoverageAnno : IUnknown
- CancelTracker: ITrackCancel
- ConvertOnlySelectedSet: Boolean
- CoverageAnnotationLayer: ICoverageAnnotationLayer
- Display: IDisplay
- ErrorsConverting: Boolean
- FDOGraphicsLayer: IFDOGraphicsLayer
- FeaturesConverted: Long
- ConvertAnnotation

MaplexLabelStyle
ILabelStyle2
ILabelStyle
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream
IMaplexLabelStyle

ILabelStyle2 : IUnknown
- BasicOverposterLayerProperties: IBasicOverposterLayerProperties
- OverposterLayerProperties: IOverposterLayerProperties
- Symbol: ITextSymbol

IMaplexLabelStyle : IUnknown

Enumerations

annoError
-2147220991 - ANNO_E_UNSUPPORTED_VERSION
-2147220990 - ANNO_E_NULL_NOT_SUPPORTED
-2147220989 - ANNO_E_FONT_NOT_FOUND
-2147220988 - ANNO_E_INVALID_FONT_SIZE
-2147220987 - ANNO_E_INVALID_ANGLE
-2147220986 - ANNO_E_NO_SYM_OVERRIDE
-2147220985 - ANNO_E_INVALID_SYM_ID

esriAnnotationStatus
0 - esriAnnoStatusPlaced
1 - esriAnnoStatusUnplaced

esriAnnotationStorageType
0 - esriMapAnnotation
1 - esriDatabaseAnnotation

esriBasicNumLabelsOption
0 - esriNoLabelRestrictions
1 - esriOneLabelPerName
2 - esriOneLabelPerShape
3 - esriOneLabelPerPart

esriBasicOverposterFeatureType
0 - esriOverposterPoint
1 - esriOverposterPolyline
2 - esriOverposterPolygon

esriBasicOverposterWeight
0 - esriNoWeight
1 - esriLowWeight
2 - esriMediumWeight
3 - esriHighWeight

esriMaplexPolygonFeatureType
0 - esriMaplexPolygonFeature
1 - esriMaplexLandParcelFeature
2 - esriMaplexRiverPolygonFeature
3 - esriMaplexPolygonBoundaryFeature

esriLegendItemArrangement
0 - esriPatchLabelDescription
1 - esriPatchDescriptionLabel
2 - esriLabelPatchDescription
3 - esriLabelDescriptionPatch
4 - esriDescriptionPatchLabel
5 - esriDescriptionLabelPatch

esriLabelEnvLabelStyleMethod
0 - esriUseFeatureLayerLabelStyle
1 - esriChooseLabelStyle

esriLabelEnvPlacement
0 - esriPlaceWhereClick
1 - esriCalculateBestPlacement

esriLabelRotationType
0 - esriRotateLabelGeographic
1 - esriRotateLabelArithmetic
2 - esriRotateLabelRadians
3 - esriRotateLabelAV3

esriLabelWhichFeatures
0 - esriAllFeatures
1 - esriVisibleFeatures
2 - esriSelectedFeatures

esriMaplexAbbrevType
0 - esriMaplexAbbrevTypeTranslation
1 - esriMaplexAbbrevTypeKeyword
2 - esriMaplexAbbrevTypeEnding

esriMaplexRotationAlignmentType
0 - esriMaplexRotationAlignmentStraight
1 - esriMaplexRotationAlignmentHorizontal
2 - esriMaplexRotationAlignmentPerpendicular

esriMaplexAnchorPointType
0 - esriMaplexGeometricCenter
1 - esriMaplexErodedCenter
2 - esriMaplexPerimeter
3 - esriMaplexUnclippedGeometricCenter

esriMaplexConnectionType
0 - esriMaplexMinimizeLabels
1 - esriMaplexUnambiguous

esriMaplexConstrainOffset
0 - esriMaplexNoConstraint
1 - esriMaplexAboveLine
2 - esriMaplexBelowLine
3 - esriMaplexLeftOfLine
4 - esriMaplexRightOfLine

esriMaplexContourAlignmentType
0 - esriMaplexUphillAlignment
1 - esriMaplexPageAlignment

esriMaplexContourLadderType
0 - esriMaplexNoLadder
1 - esriMaplexStraightLadder
2 - esriMaplexCurvedLadder

esriMaplexGraticuleAlignmentType
0 - esriMaplexGAStraight
1 - esriMaplexGAStraightNoFlip
2 - esriMaplexGACurved
3 - esriMaplexGACurvedNoFlip

esriMaplexStrategyIdentifier
0 - esriMaplexStrategyStacking
1 - esriMaplexStrategyOverrun
2 - esriMaplexStrategyFontCompression
3 - esriMaplexStrategyFontReduction
4 - esriMaplexStrategyAbbreviation

esriMaplexLabelAnchorPoint
0 - esriMaplexCenterOfLabel
1 - esriMaplexNearestSideOfLabel
2 - esriMaplexFurthestSideOfLabel

esriMaplexLineFeatureType
0 - esriMaplexLineFeature
1 - esriMaplexStreetFeature
2 - esriMaplexStreetAddressRange
3 - esriMaplexContourFeature
4 - esriMaplexRiverFeature

esriMaplexLinePlacementMethod
0 - esriMaplexCenteredHorizontalOnLine
1 - esriMaplexCenteredStraightOnLine
2 - esriMaplexCenteredCurvedOnLine
3 - esriMaplexCenteredPerpendicularOnLine
4 - esriMaplexOffsetHorizontalFromLine
5 - esriMaplexOffsetStraightFromLine
6 - esriMaplexOffsetCurvedFromLine
7 - esriMaplexOffsetPerpendicularFromLine

esriMaplexOffsetAlongLineMethod
0 - esriMaplexBestPositionAlongLine
1 - esriMaplexBeforeStartOfLine
2 - esriMaplexAlongLineFromStart
3 - esriMaplexAlongLineFromEnd
4 - esriMaplexAfterEndOfLine

esriMaplexPlacementQuality
1 - esriMaplexPlacementQualityLow
2 - esriMaplexPlacementQualityMedium
3 - esriMaplexPlacementQualityHigh

esriMaplexZoneIdentifier
0 - esriMaplexAboveLeft
1 - esriMaplexAboveCenter
2 - esriMaplexAboveRight
3 - esriMaplexCenterRight
4 - esriMaplexBelowRight
5 - esriMaplexBelowCenter
6 - esriMaplexBelowLeft
7 - esriMaplexCenterLeft
8 - esriMaplexCenter

esriMaplexPointPlacementMethod
0 - esriMaplexAroundPoint
1 - esriMaplexCenteredOnPoint
2 - esriMaplexNorthOfPoint
3 - esriMaplexNorthEastOfPoint
4 - esriMaplexEastOfPoint
5 - esriMaplexSouthEastOfPoint
6 - esriMaplexSouthOfPoint
7 - esriMaplexSouthWestOfPoint
8 - esriMaplexWestOfPoint
9 - esriMaplexNorthWestOfPoint

esriMaplexPolygonPlacementMethod
0 - esriMaplexHorizontalInPolygon
1 - esriMaplexStraightInPolygon
2 - esriMaplexCurvedInPolygon
3 - esriMaplexHorizontalAroundPolygon
4 - esriMaplexRepeatAlongBoundary
5 - esriMaplexCurvedAroundPolygon

esriMaplexStackingJustification
0 - esriMaplexChooseBestJustification
1 - esriMaplexConstrainJustificationLeftOrRight
2 - esriMaplexConstrainJustificationRight
3 - esriMaplexConstrainJustificationCenter
4 - esriMaplexConstrainJustificationLeft

esriMaplexUnit
0 - esriMaplexUnitMap
1 - esriMaplexUnitMM
2 - esriMaplexUnitInch
3 - esriMaplexUnitPoint
4 - esriMaplexUnitPercentage

esriMaplexKeyNumberHorizontalAlignment
0 - esriMaplexKeyNumberHorizontalAlignmentAuto
1 - esriMaplexKeyNumberHorizontalAlignmentLeft
2 - esriMaplexKeyNumberHorizontalAlignmentRight

esriOverposterCaps
0 - esriCanPlaceLabels
1 - esriCanPlaceSymbols
2 - esriCanAddBarriers

esriOverposterPointPlacementMethod
0 - esriAroundPoint
1 - esriOnTopPoint
2 - esriSpecifiedAngles
3 - esriRotationField

esriOverposterPolygonPlacementMethod
0 - esriAlwaysHorizontal
1 - esriAlwaysStraight
2 - esriMixedStrategy

esriPlacedObjectType
0 - esriPlacedLabel
1 - esriPlacedSymbol

esriPlacementCode
0 - esriPlacementOK
1 - esriPlacementReplaced
2 - esriPlacementSystemError

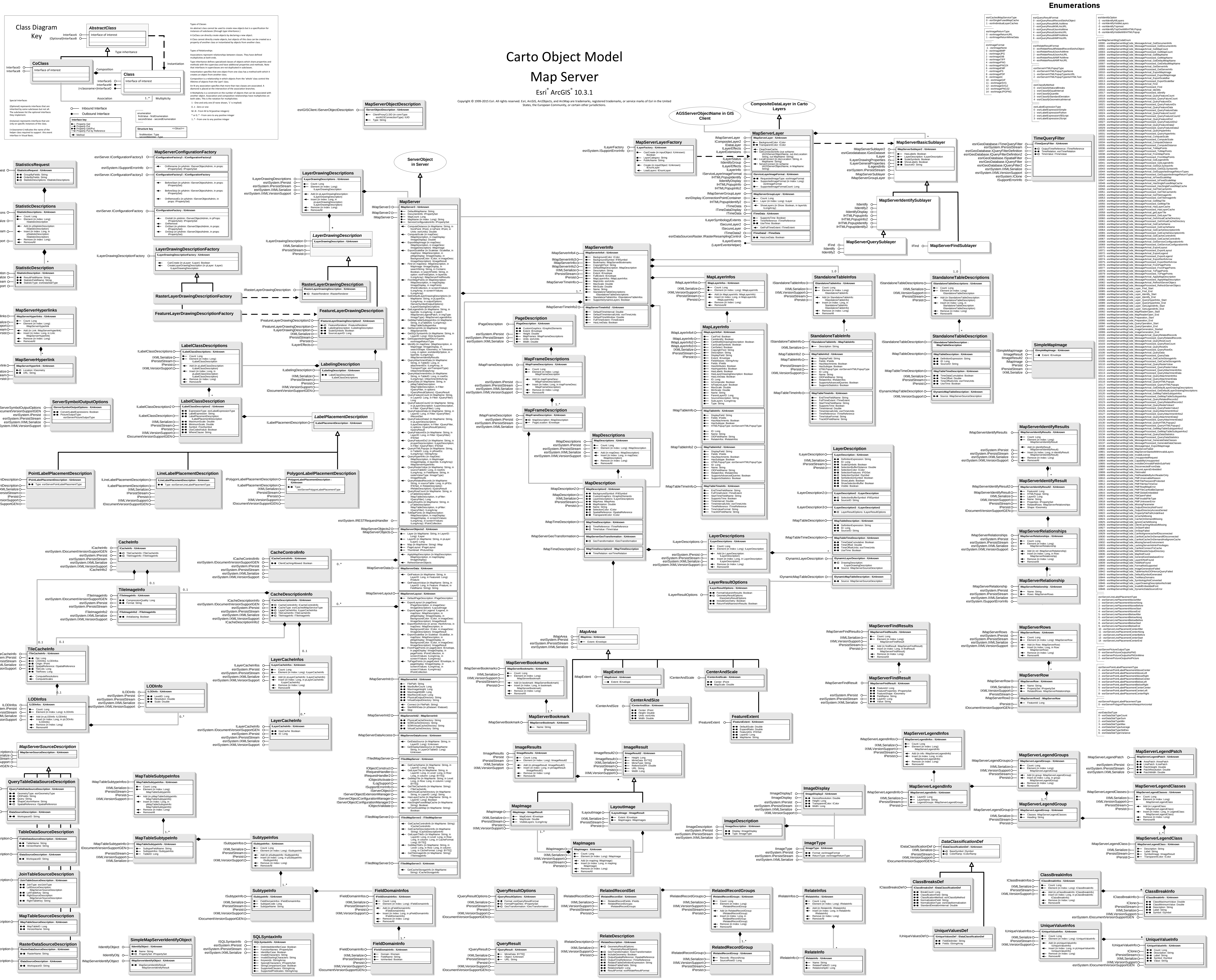
esriMaplexKeyNumberResetType
0 - esriMaplexKeyNumberResetTypeNone
1 - esriMaplexKeyNumberResetTypeMaybe
2 - esriMaplexKeyNumberResetTypeAlways

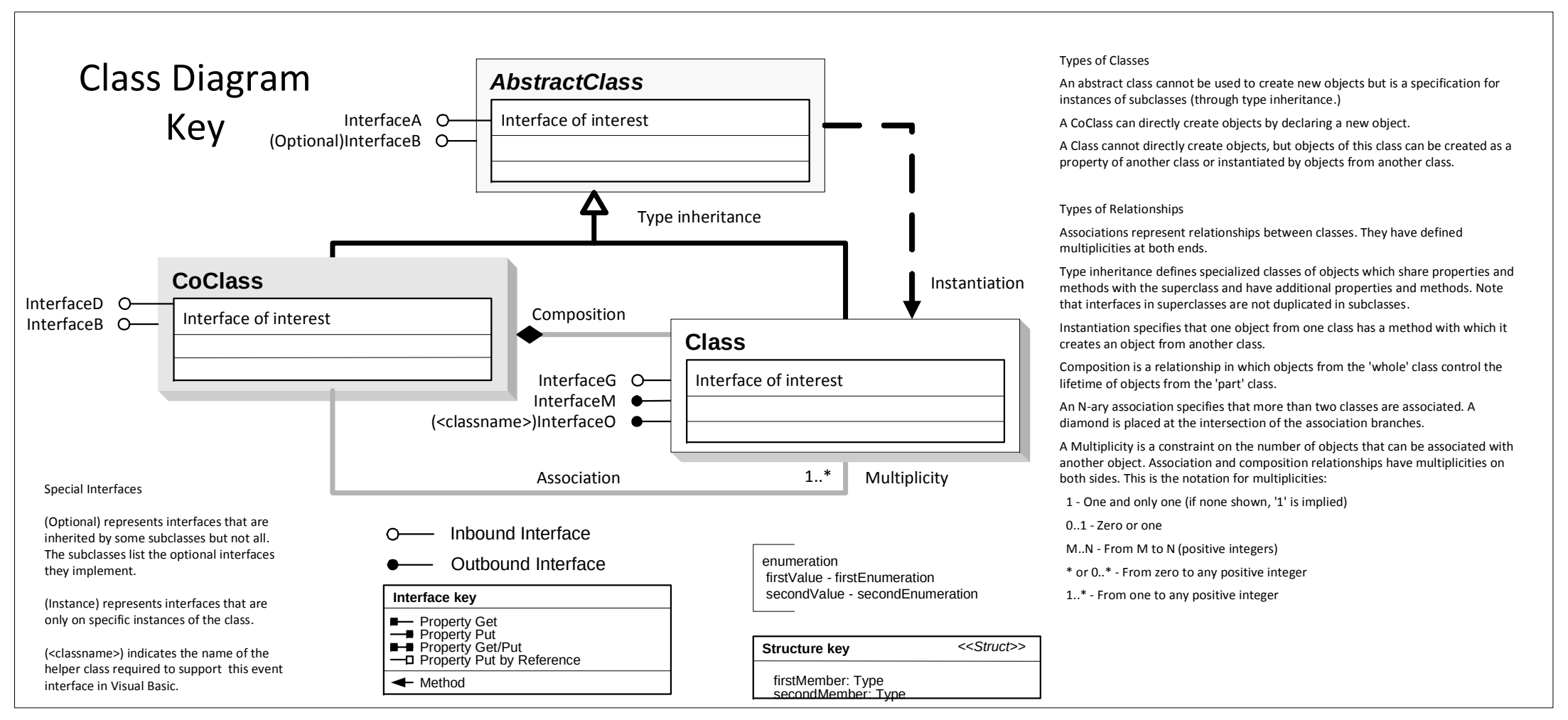
esriMaplexMultiPartOption
0 - esriMaplexOneLabelPerFeature
1 - esriMaplexOneLabelPerPart
2 - esriMaplexOneLabelPerSegment

Carto Object Model

Map Server

Esri® ArcGIS® 10.3.1


Class Diagram Key
AbstractClass
CoClass
Class
Enumerations
MapServerObjectDescription
CompositeDataLayer in Carto Layers
AGSServerObjectName in GIS Client
ServerObject in Server
MapServerLayerFactory
MapServerLayer
MapServerBasicSublayer
MapServerIdentifySublayer
MapServerQuerySublayer
MapServerFindSublayer
TimeQueryFilter
StatisticsRequest
StatisticDescriptions
StatisticDescription
MapServerConfigurationFactory
LayerDrawingDescriptions
LayerDrawingDescription
LayerDrawingDescriptionFactory
RasterLayerDrawingDescription
RasterLayerDrawingDescriptionFactory
FeatureLayerDrawingDescriptionFactory
FeatureLayerDrawingDescription
MapServer
MapServerHyperlinks
MapServerHyperlink
LabelClassDescriptions
LabelingDescription
LabelClassDescription
LabelPlacementDescription
ServerSymbolOutputOptions
PointLabelPlacementDescription
LineLabelPlacementDescription
PolygonLabelPlacementDescription
MapServerInfo
MapLayerInfos
MapLayerInfo
StandaloneTableInfos
StandaloneTableInfo
StandaloneTableDescriptions
StandaloneTableDescription
SimpleMapImage
PageDescription
MapFrameDescriptions
MapFrameDescription
MapDescriptions
MapDescription
LayerDescription
LayerDescriptions
LayerResultOptions
MapServerIdentifyResults
MapServerIdentifyResult
MapServerRelationships
MapServerRelationship
CacheInfo
CacheControlInfo
CacheDescriptionInfo
TileImageInfo
TileCacheInfo
LODInfo
LODInfos
LayerCacheInfos
LayerCacheInfo
MapArea
MapServerBookmarks
MapServerBookmark
MapExtent
CenterAndScale
CenterAndSize
FeatureExtent
MapServerFindResults
MapServerFindResult
MapServerRows
MapServerRow
MapServerSourceDescription
QueryTableDataSourceDescription
TableDataSourceDescription
JoinTableSourceDescription
MapTableSourceDescription
RasterDataSourceDescription
MapTableSubtypeInfos
MapTableSubtypeInfo
SubtypeInfos
SubtypeInfo
SimpleMapServerIdentifyObject
SQLSyntaxInfo
FieldDomainInfos
FieldDomainInfo
QueryResultOptions
QueryResult
RelatedRecordSet
RelateDescription
RelatedRecordGroups
RelatedRecordGroup
RelateInfos
RelateInfo
ImageResults
ImageResult
ImageDisplay
ImageDescription
ImageType
MapImage
LayoutImage
MapImages
MapServerLegendInfos
MapServerLegendInfo
MapServerLegendPatch
MapServerLegendGroups
MapServerLegendGroup
MapServerLegendClasses
MapServerLegendClass
DataClassificationDef
ClassBreaksDef
ClassBreakInfos
ClassBreakInfo
UniqueValuesDef
UniqueValueInfos
UniqueValueInfo


Class Diagram
Key
AbstractClass
Interface of interest
InterfaceA
(Optional)InterfaceB
Type inheritance
Instantiation
CoClass
InterfaceD
InterfaceB
Composition
Class
InterfaceG
InterfaceM
(<classname>)InterfaceO
Association
1..*
Multiplicity
Inbound Interface
Outbound Interface
Interface key
Property Get
Property Put
Property Get/Put
Property Put by Reference
Method
enumeration
firstValue - firstEnumeration
secondValue - secondEnumeration
Structure key
<<Struct>>
firstMember: Type
secondMember: Type

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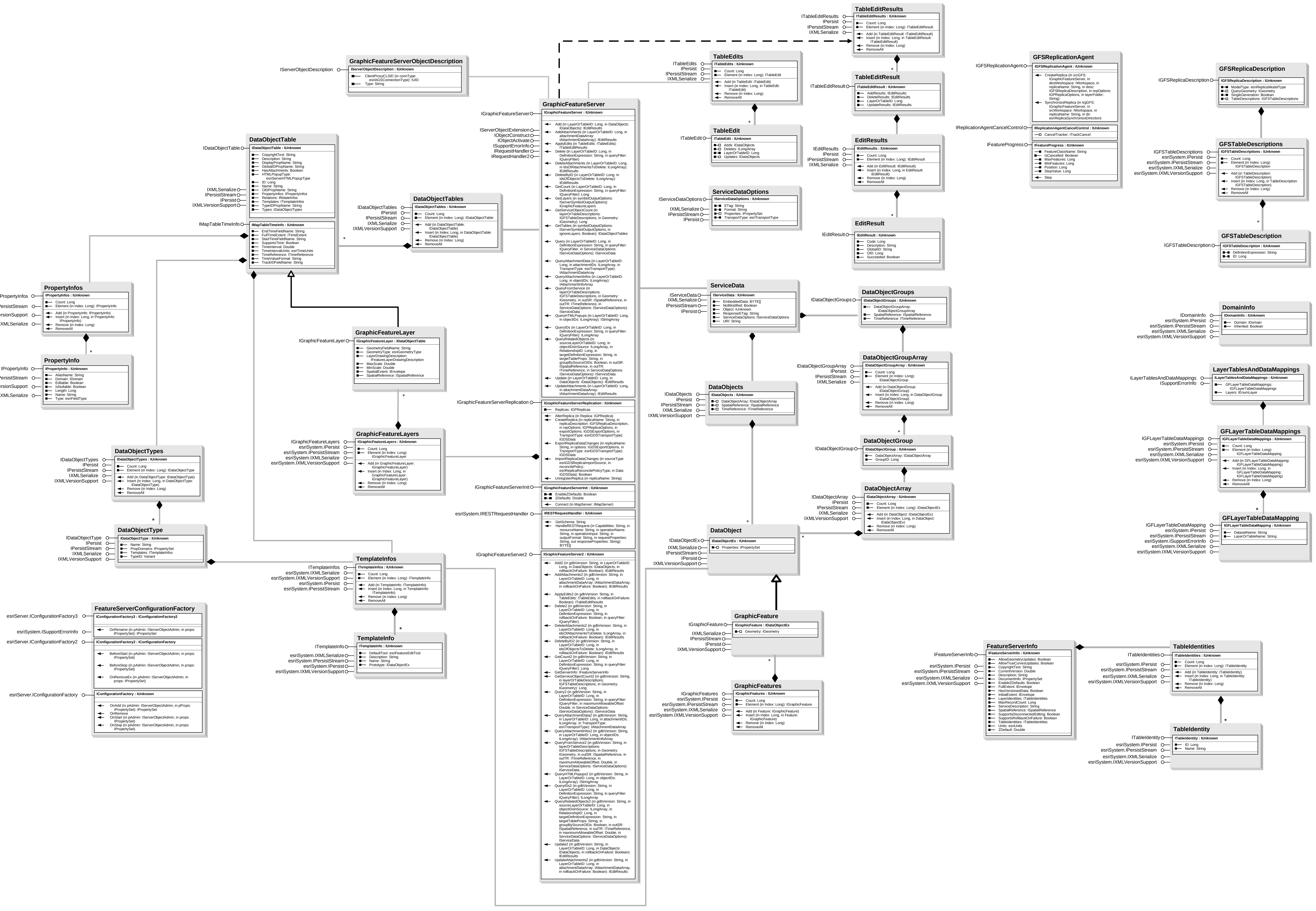
Carto Object Model

Feature Service

Esri® ArcGIS® 10.3.1

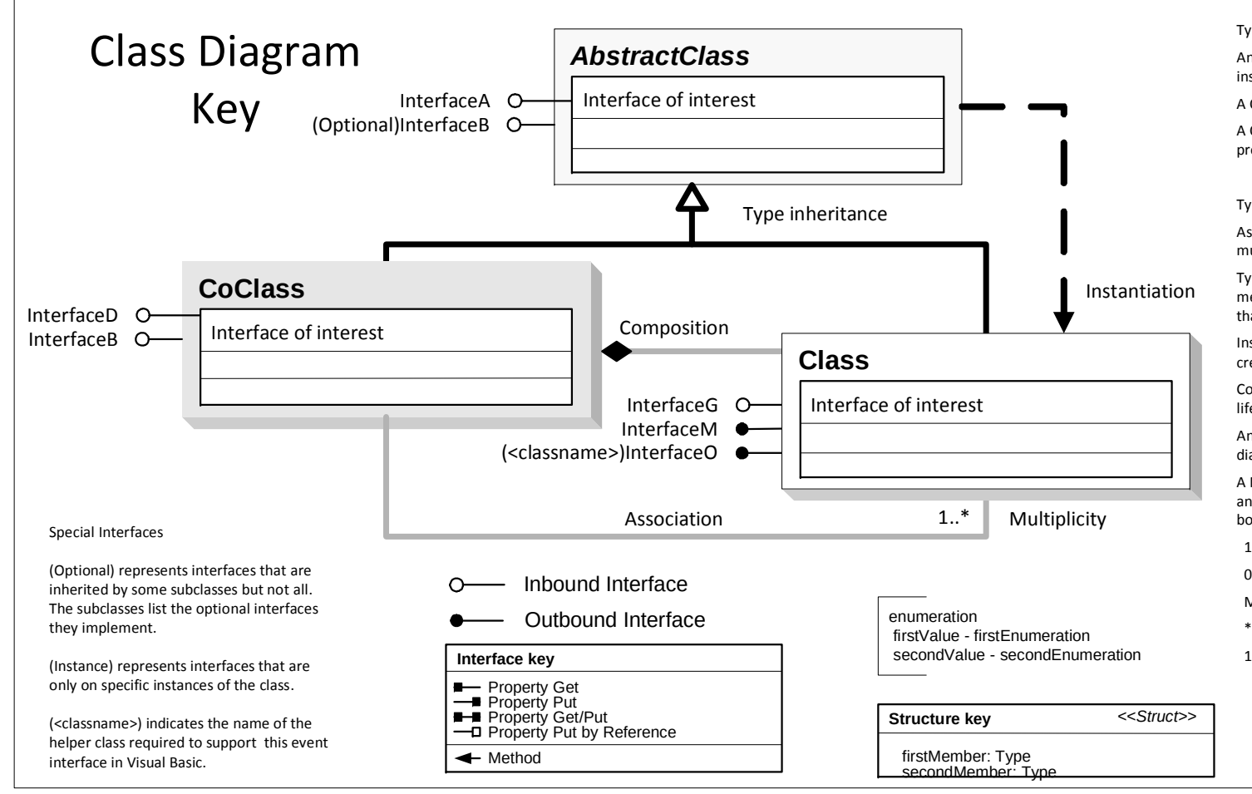

GraphicFeatureServerObjectDescription
GraphicFeatureServer
DataObjectTable
DataObjectTables
PropertyInfos
PropertyInfo
GraphicFeatureLayer
GraphicFeatureLayers
DataObjectTypes
DataObjectType
TemplateInfos
TemplateInfo
FeatureServerConfigurationFactory
TableEditResults
TableEdits
TableEditResult
TableEdit
EditResults
EditResult
ServiceDataOptions
ServiceData
DataObjectGroups
DataObjectGroupArray
DataObjects
DataObjectGroup
DataObjectArray
DataObject
GraphicFeature
GraphicFeatures
GFSReplicationAgent
GFSReplicaDescription
GFSTableDescriptions
GFSTableDescription
DomainInfo
LayerTablesAndDataMappings
GFLayerTableDataMappings
GFLayerTableDataMapping
FeatureServerInfo
TableIdentities
TableIdentity

Enumerations

esriFeatureEditTool
0 - esriFeatureEditToolNone
1 - esriFeatureEditToolPoint
2 - esriFeatureEditToolLine
3 - esriFeatureEditToolPolygon
4 - esriFeatureEditToolAutoCompletePolygon
5 - esriFeatureEditToolCircle
6 - esriFeatureEditToolEllipse
7 - esriFeatureEditToolRectangle
8 - esriFeatureEditToolFreehand
9 - esriFeatureEditToolAutoCompleteFreehand

esriGraphicFeatureServerErrors
-2147221403 - GFS_E_MISSING_PARAMETER
-2147221402 - GFS_E_UNSUPPORTED_DATASOURCE_TYPE
-2147221401 - GFS_E_NOLAYER_OR_TABLE_INITIALIZED
-2147221400 - GFS_E_LAYER_TABLE_NOT_EDITABLE
-2147221399 - GFS_E_FEATURE_UPDATE_FAILED_MISSING_M_VALUES
-2147221398 - GFS_E_FEATURE_GEOMETRY_PUT_FAILED_FAILED_MISSING_Z_VALUES
-2147221397 - GFS_E_EDITOR_TRACKING_TIMESTAMPS_IN_UTC_AND_DATABASETIME_ERROR
-2147221396 - GFS_E_MISSING_EDITOR_TRACKING_TIMEZONE_ERROR

esriGraphicFeatureServerMsgCodeEnum
17000 - esriGraphicFeatureServerMessageCode_ErrorMessage
17001 - esriGraphicFeatureServerMessageCode_WarningMessage
17002 - esriGraphicFeatureServerMessageCode_InfoMessage
17003 - esriGraphicFeatureServerMessageCode_DebugMessage
17004 - esriGraphicFeatureServerMessageCode_ConstructStarted
17005 - esriGraphicFeatureServerMsgCode_InvalidLicense
17006 - esriGraphicFeatureServerMessageCode_ConstructEnded
17007 - esriGraphicFeatureServerMsgCode_MixedEditingModeNotAllowed
17008 - esriGraphicFeatureServerMsgCode_RequestNotSupported
17009 - esriGraphicFeatureServerMsgCode_CapabilityNotSupported
17010 - esriGraphicFeatureServerMsgCode_TableLayerIDNotFound
17011 - esriGraphicFeatureServerMsgCode_TableLayerDoesNotSupportAttachments
17012 - esriGraphicFeatureServerMessageCode_NonSDEDataUsed
17013 - esriGraphicFeatureServerMessageCode_DefaultZValueReadingError
17014 - esriGraphicFeatureServerMessageCode_DefaultZValueBeingUsed
17015 - esriGraphicFeatureServeMsgCode_MissingParameter
17016 - esriGraphicFeatureServeMsgCode_InvalidLayerOrTableID
17017 - esriGraphicFeatureMsgCode_MessageArrival_Add
17018 - esriGraphicFeatureMsgCode_MessageProcessed_Add
17019 - esriGraphicFeatureMsgCode_MessageArrival_AddAttachments
17020 - esriGraphicFeatureMsgCode_MessageProcessed_AddAttachments
17021 - esriGraphicFeatureMsgCode_MessageArrival_ApplyEdits
17022 - esriGraphicFeatureMsgCode_MessageProcessed_ApplyEdits
17023 - esriGraphicFeatureMsgCode_MessageArrival_Delete
17024 - esriGraphicFeatureMsgCode_MessageProcessed_Delete
17025 - esriGraphicFeatureMsgCode_MessageArrival_DeleteAttachments
17026 - esriGraphicFeatureMsgCode_MessageProcessed_DeleteAttachments
17027 - esriGraphicFeatureMsgCode_MessageArrival_DeleteByID
17028 - esriGraphicFeatureMsgCode_MessageProcessed_DeleteByID
17029 - esriGraphicFeatureMsgCode_MessageArrival_GetCount
17030 - esriGraphicFeatureMsgCode_MessageProcessed_GetCount
17031 - esriGraphicFeatureMsgCode_MessageArrival_GetLayers
17032 - esriGraphicFeatureMsgCode_MessageProcessed_GetLayers
17033 - esriGraphicFeatureMsgCode_MessageArrival_GetServiceObjectCount
17034 - esriGraphicFeatureMsgCode_MessageProcessed_GetServiceObjectCount
17035 - esriGraphicFeatureMsgCode_MessageArrival_GetTables
17036 - esriGraphicFeatureMsgCode_MessageProcessed_GetTables
17037 - esriGraphicFeatureMsgCode_MessageArrival_Query
17038 - esriGraphicFeatureMsgCode_MessageProcessed_Query
17039 - esriGraphicFeatureMsgCode_MessageArrival_QueryAttachmentData
17040 - esriGraphicFeatureMsgCode_MessageProcessed_QueryAttachmentData
17041 - esriGraphicFeatureMsgCode_MessageArrival_QueryAttachmentInfos
17042 - esriGraphicFeatureMsgCode_MessageProcessed_QueryAttachmentInfos
17043 - esriGraphicFeatureMsgCode_MessageArrival_QueryFromService
17044 - esriGraphicFeatureMsgCode_MessageProcessed_QueryFromService
17045 - esriGraphicFeatureMsgCode_MessageArrival_QueryHTMLPopups
17046 - esriGraphicFeatureMsgCode_MessageProcessed_QueryHTMLPopups
17047 - esriGraphicFeatureMsgCode_MessageArrival_QueryIDs
17048 - esriGraphicFeatureMsgCode_MessageProcessed_QueryIDs
17049 - esriGraphicFeatureMsgCode_MessageArrival_QueryRelatedObjects
17050 - esriGraphicFeatureMsgCode_MessageProcessed_QueryRelatedObjects
17051 - esriGraphicFeatureMsgCode_MessageArrival_Update
17052 - esriGraphicFeatureMsgCode_MessageProcessed_Update
17053 - esriGraphicFeatureMsgCode_MessageArrival_UpdateAttachments
17054 - esriGraphicFeatureMsgCode_MessageProcessed_UpdateAttachments
17055 - esriGraphicFeatureMsgCode_MessageArrival_CreateReplica
17056 - esriGraphicFeatureMsgCode_MessageProcessed_CreateReplica
17057 - esriGraphicFeatureMsgCode_MessageArrival_ExportReplicaDataChanges
17058 - esriGraphicFeatureMsgCode_MessageProcessed_ExportReplicaDataChanges
17059 - esriGraphicFeatureMsgCode_MessageArrival_GetReplicas
17060 - esriGraphicFeatureMsgCode_MessageProcessed_GetReplicas
17061 - esriGraphicFeatureMsgCode_MessageArrival_ImportReplicaDataChanges
17062 - esriGraphicFeatureMsgCode_MessageProcessed_ImportReplicaDataChanges
17063 - esriGraphicFeatureMsgCode_MessageArrival_UnregisterReplica
17064 - esriGraphicFeatureMsgCode_MessageProcessed_UnregisterReplica
17065 - esriGraphicFeatureMsgCode_MessageArrival_AlterReplica
17066 - esriGraphicFeatureMsgCode_MessageProcessed_AlterReplica
17067 - esriGraphicFeatureMsgCode_Message_LayerTableNotEditable
17068 - esriGraphicFeatureMsgCode_Message_ErrorInitializingLayers
17069 - esriGraphicFeatureMsgCode_Message_ErrorInitializingTables
17070 - esriGraphicFeatureMsgCode_Message_ErrorMissingQueryCriteria
17071 - esriGraphicFeatureMsgCode_MessageArrival_GetServerInfo
17072 - esriGraphicFeatureMsgCode_MessageProcessed_GetServerInfo
17073 - esriGraphicFeatureMsgCode_CfgFactory_OnRemoveExStart
17074 - esriGraphicFeatureMsgCode_CfgFactory_OnRemoveExEnd
17075 - esriGraphicFeatureMsgCode_CfgFactory_NoInputDir
17076 - esriGraphicFeatureMsgCode_CfgFactory_InvalidInputDir
17077 - esriGraphicFeatureMsgCode_CfgFactory_NoCleanupRequired
17078 - esriGraphicFeatureMsgCode_CfgFactory_CleanupFailed
17079 - esriGraphicFeatureMsgCode_CfgFactory_MapServerConfigPropsMissing
17080 - esriGraphicFeatureMsgCode_CfgFactory_DeleteInfo
17081 - esriGraphicFeatureMsgCode_CfgFactory_CleanupRequired
17082 - esriGraphicFeatureMsgCode_CfgFactory_CleanupFinished


Class Diagram Key
AbstractClass
Interface of interest
InterfaceA
(Optional)InterfaceB
Type inheritance
CoClass
InterfaceD
InterfaceB
Interface of interest
Composition
Instantiation
Class
InterfaceG
InterfaceM
(<classname>)InterfaceO
Interface of interest
Association
1..*
Multiplicity
Inbound Interface
Outbound Interface
Interface key
Property Get
Property Put
Property Get/Put
Property Put by Reference
Method
enumeration
firstValue - firstEnumeration
secondValue - secondEnumeration
Structure key
<<Struct>>
firstMember: Type
secondMember: Type

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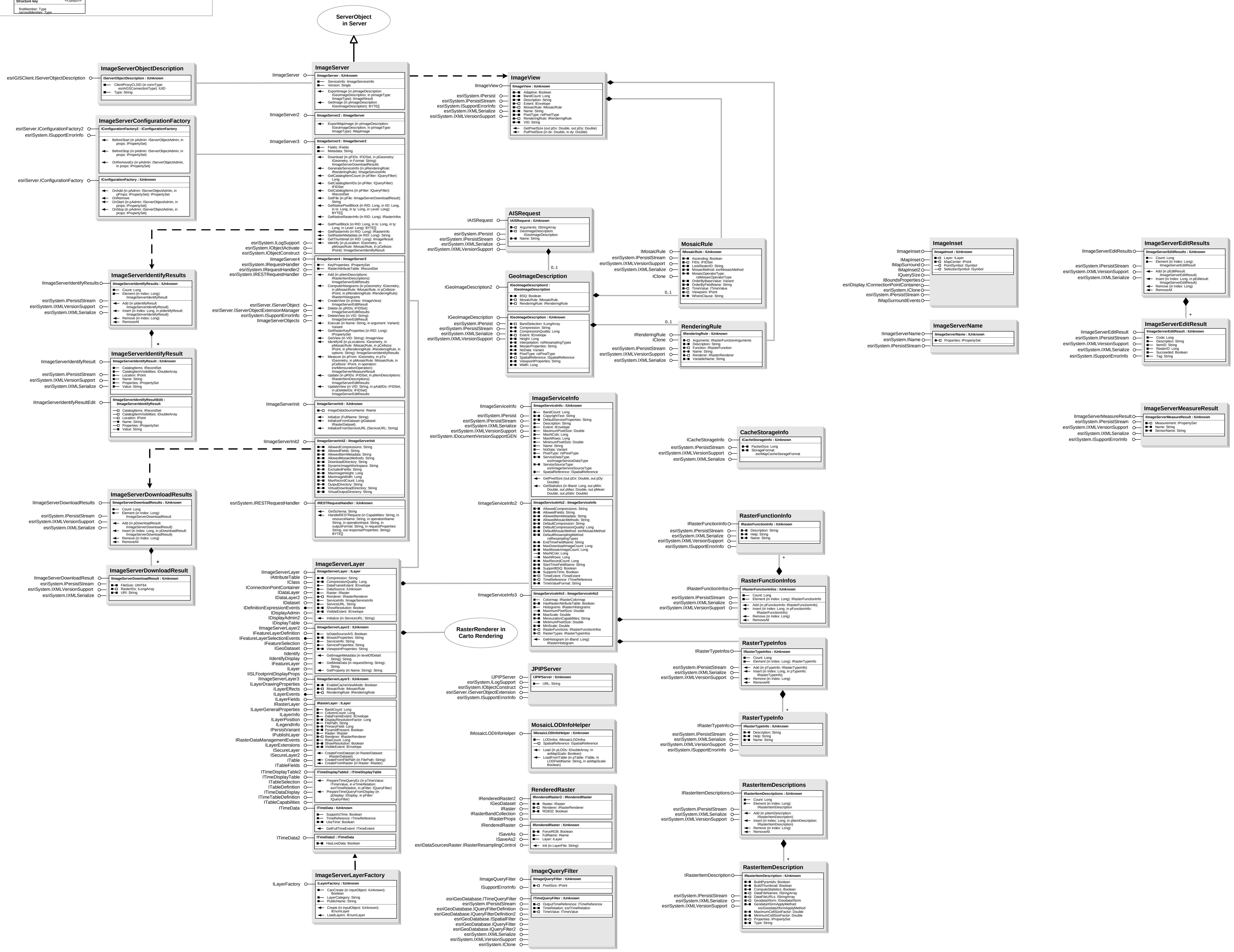
Carto Object Model

Image Server

Esri® ArcGIS® 10.3.1


ServerObject in Server
ImageServerObjectDescription
ImageServerConfigurationFactory
ImageServer
ImageView
AISRequest
GeoImageDescription
MosaicRule
RenderingRule
ImageInset
ImageServerName
ImageServerEditResults
ImageServerEditResult
ImageServerMeasureResult
ImageServerIdentifyResults
ImageServerIdentifyResult
ImageServerDownloadResults
ImageServerDownloadResult
ImageServiceInfo
CacheStorageInfo
RasterFunctionInfo
RasterFunctionInfos
RasterTypeInfos
RasterTypeInfo
ImageServerLayer
RasterRenderer in Carto Rendering
JPIPServer
MosaicLODInfoHelper
RenderedRaster
RasterItemDescriptions
RasterItemDescription
ImageServerLayerFactory
ImageQueryFilter

Enumerations

esriMapCacheStorageFormat
0 - esriMapCacheStorageModeCompact
1 - esriMapCacheStorageModeExploded

esriImageServerError
-2147216896 - E_IMAGESERVER_NO_AIS_CONNECTION
-2147216895 - E_IMAGESERVER_FAILED_TO_GETIMAGE
-2147216894 - E_IMAGESERVER_UNSUPPORTED_OPERATION
-2147216893 - E_IMAGESERVER_UNSUPPORTED_REQUEST
-2147216892 - E_IMAGESERVER_UNSUPPORTED_FORMAT
-2147216891 - E_IMAGESERVER_NO_FILE
-2147216890 - E_IMAGESERVER_JPIP_NOT_LICENSED
-2147216889 - E_IMAGESERVER_NO_DYNAMICIMAGEWORKSPACE
-2147216888 - E_IMAGESERVER_INVALID_FUNCTION_DATASET
-2147216887 - E_IMAGESERVER_NOT_ALLOW_FUNCTION
-2147216886 - E_IMAGESERVER_CANT_MEASURE_HEIGHT
-2147216885 - E_IMAGESERVER_CANT_MEASURE_SHADOW
-2147216884 - E_IMAGESERVER_FAILED_TO_EXPORTIMAGE
-2147216883 - E_IMAGESERVER_FAILED_TO_CREATE_VIEW
-2147216882 - E_IMAGESERVER_VIEW_ALREADY_EXIST
-2147216881 - E_IMAGESERVER_INVALID_VIEW_ID
-2147216880 - E_IMAGESERVER_NO_PERMISSION
-2147216879 - E_IMAGESERVER_VIEW_DOESNT_EXIST
-2147216878 - E_IMAGESERVER_CANT_MEASURE_3D
-2147216877 - E_IMAGESERVER_CANT_ACQUIRE_TILE_LOCK
-2147216876 - E_IMAGESERVER_CANT_ACCESS_RASTERID

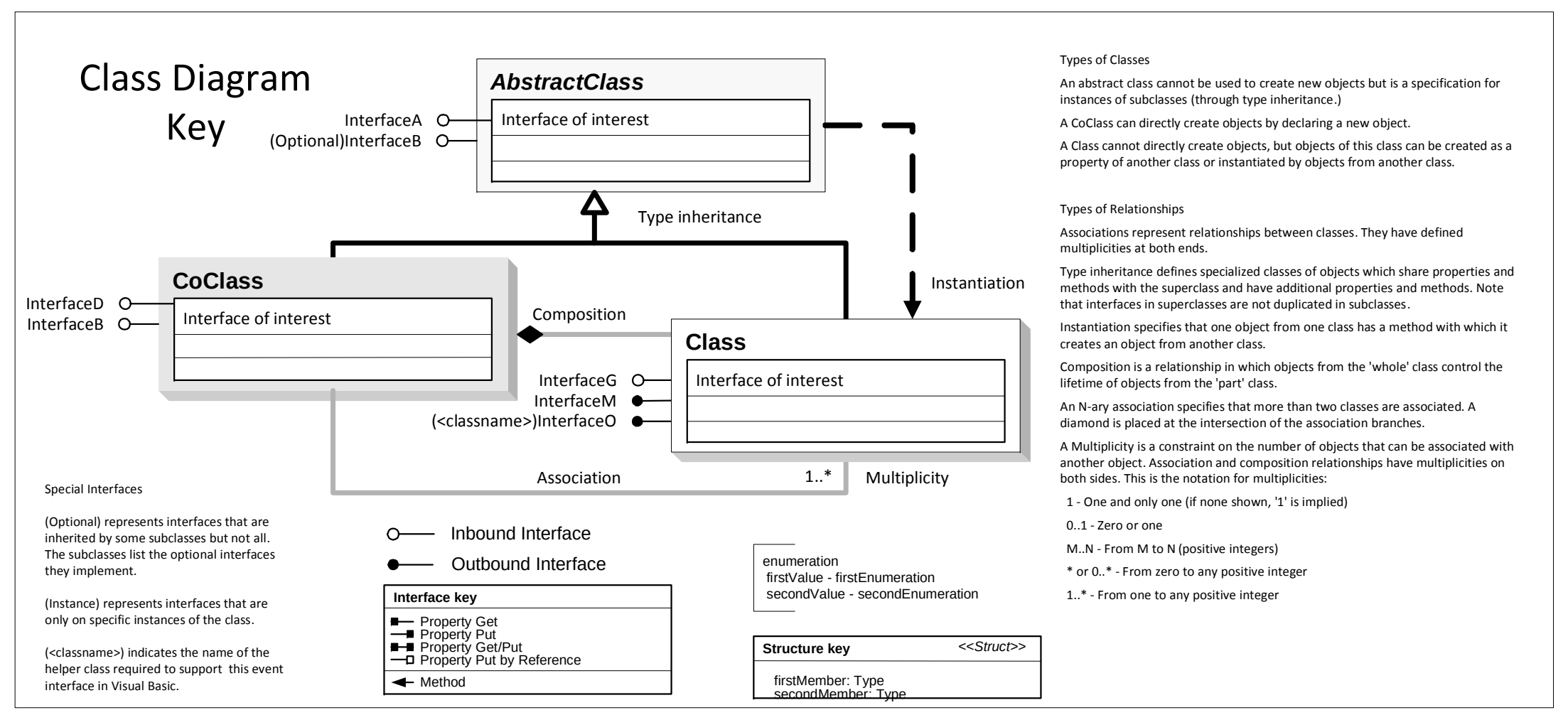
esriImageServerMessageCodeEnum
80001 - esriImageServerMessageCode_ImageServerFailed
80002 - esriImageServerMessageCode_ImageServerNotLicensed
80003 - esriImageServerMessageCode_ImageServerStarted
80004 - esriImageServerMessageCode_ImageServerDebug
80005 - esriImageServerMessageCode_ImageServerConfig
80006 - esriImageServerMessageCode_ImageServerUnknownRequest
80007 - esriImageServerMessageCode_CapabilityUnsupported
80010 - esriImageServerMessageCode_ImageServerGetVersion
80012 - esriImageServerMessageCode_ImageServerGetServiceInfo
80014 - esriImageServerMessageCode_ImageServerGetImage
80016 - esriImageServerMessageCode_ImageServerExportImage
80017 - esriImageServerMessageCode_ImageServerExportMapImage
80018 - esriImageServerMessageCode_ImageServerExecuteAISRequest
80019 - esriImageServerMessageCode_ImageServerGetPixelBlock
80020 - esriImageServerMessageCode_ImageServerMosaic
80021 - esriImageServerMessageCode_ImageServerStart
80022 - esriImageServerMessageCode_ImageServerStop
80023 - esriImageServerMessageCode_ImageServerComputeHistograms
80024 - esriImageServerMessageCode_ImageServerIdentify
80025 - esriImageServerMessageCode_ImageServerCache

esriImageServiceDataType
0 - esriImageServiceDataTypeGeneric
1 - esriImageServiceDataTypeRGB
2 - esriImageServiceDataTypeElevation
3 - esriImageServiceDataTypeThematic
4 - esriImageServiceDataTypeProcessed

esriImageServiceSourceType
0 - esriImageServiceSourceTypeDataset
1 - esriImageServiceSourceTypeLayer
2 - esriImageServiceSourceTypeCatalog
3 - esriImageServiceSourceTypeMosaicDataset

esriISLFootprintDisplayOptEnum
0 - esriISLFootprintDisplayAll
1 - esriISLFootprintDisplayPrimaryOnly

esriMensurationOperation
0 - esriMensurationPoint
1 - esriMensurationDistanceAndAngle
2 - esriMensurationAreaAndPerimeter
3 - esriMensurationHeightFromBaseAndTop
4 - esriMensurationHeightFromBaseAndTopShadow
5 - esriMensurationHeightFromTopAndTopShadow
6 - esriMensurationCentroid
7 - esriMensurationPoint3D
8 - esriMensurationDistanceAndAngle3D
9 - esriMensurationAreaAndPerimeter3D
13 - esriMensurationCentroid3D



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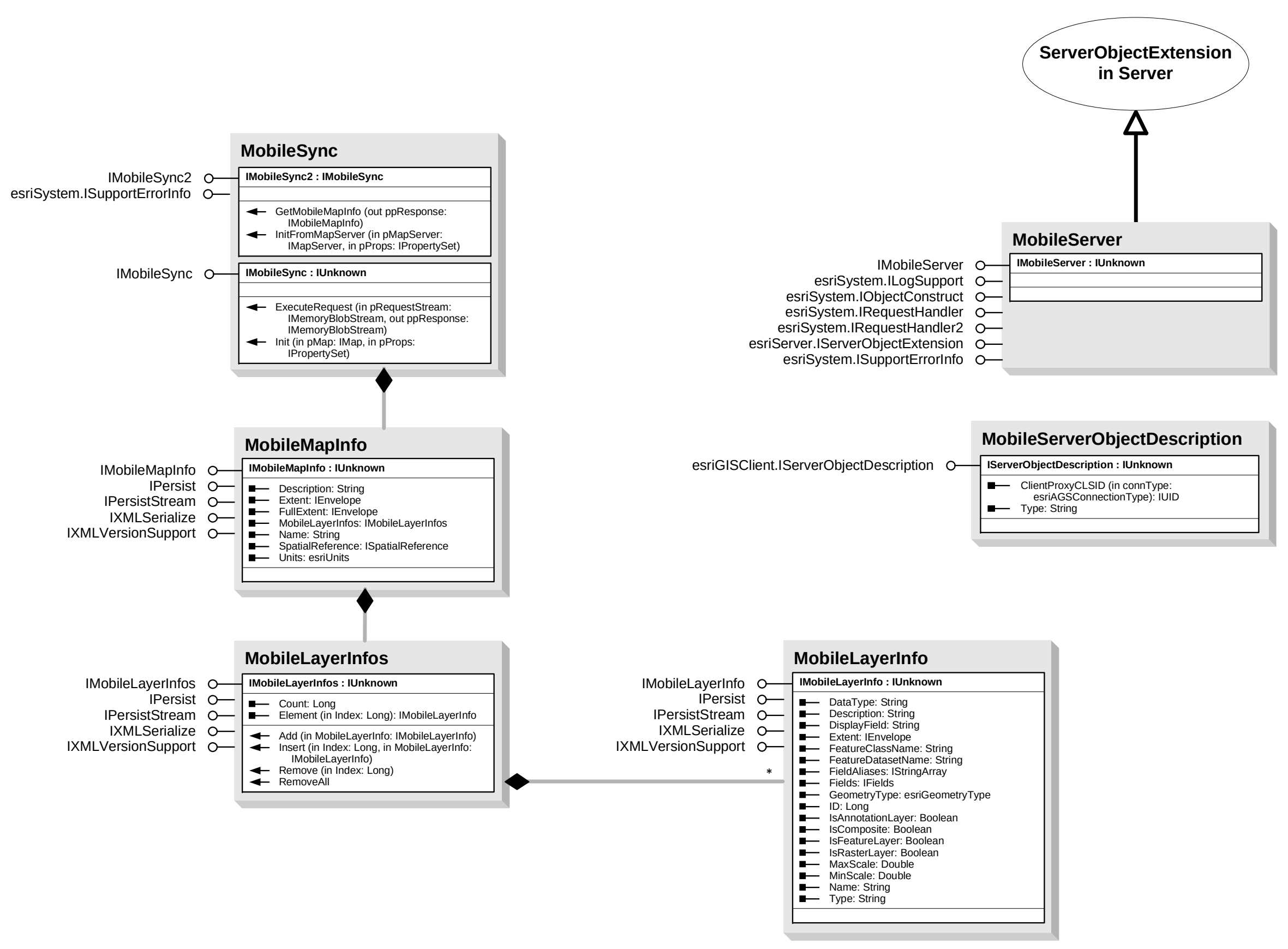
Carto Object Model
Mobile, WMS, and WCS Servers

Esri® ArcGIS® 10.3.1

Mobile Server


ServerObjectExtension in Server

MobileServer
IMobileServer
esriSystem.ILogSupport
esriSystem.IObjectConstruct
esriSystem.IRequestHandler
esriSystem.IRequestHandler2
esriServer.IServerObjectExtension
esriSystem.ISupportErrorInfo
IMobileServer : IUnknown

MobileServerObjectDescription
esriGISClient.IServerObjectDescription
IServerObjectDescription : IUnknown
ClientProxyCLSID (in connType: esriAGSConnectionType): IUID
Type: String

MobileSync
IMobileSync2
esriSystem.ISupportErrorInfo
IMobileSync2 : IMobileSync
GetMobileMapInfo (out ppResponse: IMobileMapInfo)
InitFromMapServer (in pMapServer: IMapServer, in pProps: IPropertySet)
IMobileSync
IMobileSync : IUnknown
ExecuteRequest (in pRequestStream: IMemoryBlobStream, out ppResponse: IMemoryBlobStream)
Init (in pMap: IMap, in pProps: IPropertySet)

MobileMapInfo
IMobileMapInfo
IPersist
IPersistStream
IXMLSerialize
IXMLVersionSupport
IMobileMapInfo : IUnknown
Description: String
Extent: IEnvelope
FullExtent: IEnvelope
MobileLayerInfos: IMobileLayerInfos
Name: String
SpatialReference: ISpatialReference
Units: esriUnits

MobileLayerInfos
IMobileLayerInfos
IPersist
IPersistStream
IXMLSerialize
IXMLVersionSupport
IMobileLayerInfos : IUnknown
Count: Long
Element (in Index: Long): IMobileLayerInfo
Add (in MobileLayerInfo: IMobileLayerInfo)
Insert (in Index: Long, in MobileLayerInfo: IMobileLayerInfo)
Remove (in Index: Long)
RemoveAll

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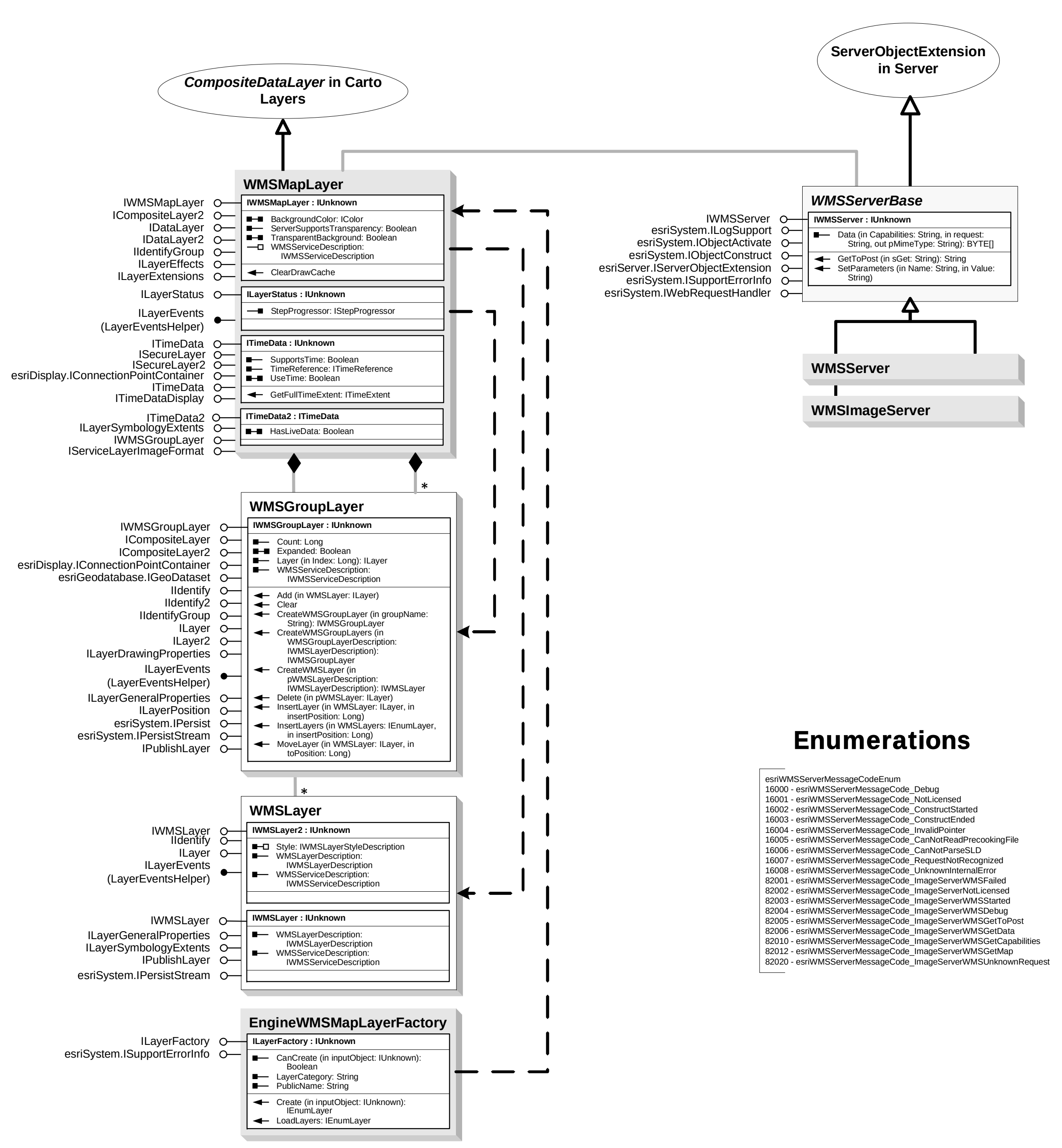
MobileLayerInfo
IMobileLayerInfo
IPersist
IPersistStream
IXMLSerialize
IXMLVersionSupport
IMobileLayerInfo : IUnknown
DataType: String
Description: String
DisplayField: String
Extent: IEnvelope
FeatureClassName: String
FeatureDatasetName: String
FieldAliases: IStringArray
Fields: IFields
GeometryType: esriGeometryType
ID: Long
IsAnnotationLayer: Boolean
IsComposite: Boolean
IsFeatureLayer: Boolean
IsRasterLayer: Boolean
MaxScale: Double
MinScale: Double
Name: String
Type: String

Enumerations

esriMobileServerMessageCodeEnum
11001 - esriMobileServerMessageCode_MissingParameter
11002 - esriMobileServerMessageCode_InvalidParameter
11003 - esriMobileServerMessageCode_NotLicensed
11004 - esriMobileServerMessageCode_ImportFromMemoryFailure
11005 - esriMobileServerMessageCode_InvalidServerObject
11006 - esriMobileServerMessageCode_ObjectInitializationFailure
11007 - esriMobileServerMessageCode_ErrorProcessingRequest
11008 - esriMobileServerMessageCode_FindFailure
11009 - esriMobileServerMessageCode_GetBinaryFailure
11010 - esriMobileServerMessageCode_AttachToMemoryFailure
11011 - esriMobileServerMessageCode_ConstructStart
11012 - esriMobileServerMessageCode_ConstructFinish
11013 - esriMobileServerMessageCode_ExtInitSuccess
11014 - esriMobileServerMessageCode_ExtInitFailure
11015 - esriMobileServerMessageCode_SchemaLayerExtractFail
11016 - esriMobileServerMessageCode_InvalidRequest
11017 - esriMobileServerMessageCode_GetSchemaRequestError
11018 - esriMobileServerMessageCode_RequestReadFailure
11019 - esriMobileServerMessageCode_InvalidClientChecksum
11020 - esriMobileServerMessageCode_FatalServerError
11021 - esriMobileServerMessageCode_UnsupportedRequestName
11022 - esriMobileServerMessageCode_DBFieldMappingMismatch
11023 - esriMobileServerMessageCode_UseOfInvalidPointer
11024 - esriMobileServerMessageCode_NoExistingChecksumForVersion
11025 - esriMobileServerMessageCode_SettingDefaultClientVersion
11026 - esriMobileServerMessageCode_ClientServerVersions
11027 - esriMobileServerMessageCode_ClientVersionUnderBaseline
11028 - esriMobileServerMessageCode_ClientVersionReduction
11029 - esriMobileServerMessageCode_FlushUpdatesFailure
11030 - esriMobileServerMessageCode_GetFeatureCountFailure
11031 - esriMobileServerMessageCode_GetFeaturesFailure
11032 - esriMobileServerMessageCode_DownloadFeaturesFailure
11033 - esriMobileServerMessageCode_GetRasterTilesFailure
11034 - esriMobileServerMessageCode_CreateVersionFailure
11035 - esriMobileServerMessageCode_CloseVersionFailure
11036 - esriMobileServerMessageCode_UploadFeaturesFailure
11037 - esriMobileServerMessageCode_ServerVersionReduction
11038 - esriMobileServerMessageCode_SpatialReferenceDefault
11039 - esriMobileServerMessageCode_InvalidProperty
11040 - esriMobileServerMessageCode_FailedToSyncAttachInfos
11042 - esriMobileServerMessageCode_UnderlyingError
11043 - esriMobileServerMessageCode_DeleteCountMismatch
11044 - esriMobileServerMessageCode_InvalidLayerIndex
11045 - esriMobileServerMessageCode_InvalidFeatureLayer
11046 - esriMobileServerMessageCode_FailedToGetFeatureCursor
11047 - esriMobileServerMessageCode_FailedRetrievingSyncItems
11048 - esriMobileServerMessageCode_InvalidRasterLayer
11049 - esriMobileServerMessageCode_InvalidLayerCount
11050 - esriMobileServerMessageCode_LayerNotEditable
11051 - esriMobileServerMessageCode_FailedToGetVersionFeatureClass
11052 - esriMobileServerMessageCode_InvalidWorkspaceIndex
11053 - esriMobileServerMessageCode_InvalidVersionedWorkspace
11054 - esriMobileServerMessageCode_VersionAlreadyExists
11055 - esriMobileServerMessageCode_InvalidParentVersion
11056 - esriMobileServerMessageCode_FailedToCreateVersion
11057 - esriMobileServerMessageCode_InvalidChildVersion
11058 - esriMobileServerMessageCode_FailedToStartEditingWorkspace
11059 - esriMobileServerMessageCode_RequestedVersionNotFound
11060 - esriMobileServerMessageCode_InvalidDecomposedQuery
11061 - esriMobileServerMessageCode_FailedToCompressToJPEG
11062 - esriMobileServerMessageCode_FileNotFound
11063 - esriMobileServerMessageCode_FileAccessDenied
11064 - esriMobileServerMessageCode_FileInvalid
11065 - esriMobileServerMessageCode_DirectoryNotFound
11066 - esriMobileServerMessageCode_DirectoryAccessDenied
11067 - esriMobileServerMessageCode_DirectoryInvalid
11068 - esriMobileServerMessageCode_FileInvalidOrAccessDenied
11069 - esriMobileServerMessageCode_DirectoryInvalidOrAccessDenied
11070 - esriMobileServerMessageCode_InvalidServerEnvironment
11071 - esriMobileServerMessageCode_InvalidURLUseMIME
11072 - esriMobileServerMessageCode_ExportMapImageFailed
11073 - esriMobileServerMessageCode_PrepareMapServerFailed
11074 - esriMobileServerMessageCode_InvalidWorkspace
11075 - esriMobileServerMessageCode_DownloadAttachmentsFailure
11076 - esriMobileServerMessageCode_NoOutputDirectory
11077 - esriMobileServerMessageCode_InvalidExtentType
11078 - esriMobileServerMessageCode_NoRasterSupport
11079 - esriMobileServerMessageCode_CoreClassCreateFail
11080 - esriMobileServerMessageCode_FailedToCreateSchema
11081 - esriMobileServerMessageCode_FailedToAddField
11082 - esriMobileServerMessageCode_FailedToOpen
11083 - esriMobileServerMessageCode_InvalidExtent
11084 - esriMobileServerMessageCode_FailedToCreateDataPackage
11085 - esriMobileServerMessageCode_InvalidSpatialQueryFilter
11086 - esriMobileServerMessageCode_FailedToConvert
11087 - esriMobileServerMessageCode_SynchronizeFeatureStats
11088 - esriMobileServerMessageCode_FailedToGetRelatedAttachmentTable
11089 - esriMobileServerMessageCode_FailedToGetAttachmentInfo
11090 - esriMobileServerMessageCode_FailedToGetAttachmentData
11091 - esriMobileServerMessageCode_SynchronizeAttachmentStats
11092 - esriMobileServerMessageCode_SynchronizeAttachmentRate
11093 - esriMobileServerMessageCode_SynchronizeAttachmentInfosStats
11094 - esriMobileServerMessageCode_ImportChangesStats
11095 - esriMobileServerMessageCode_DeleteUploadDirFailure
11096 - esriMobileServerMessageCode_RowUpdateFailure
11097 - esriMobileServerMessageCode_FailedToCommitDataPackage
11098 - esriMobileServerMessageCode_InvalidGIDIndex
11099 - esriMobileServerMessageCode_InvalidVariantType
11100 - esriMobileServerMessageCode_ImportAttachmentsStats
11101 - esriMobileServerMessageCode_FailedParseParams
11102 - esriMobileServerMessageCode_FailedParseParam
11103 - esriMobileServerMessageCode_FailedParseReqParam
11104 - esriMobileServerMessageCode_FailedGenRep
11105 - esriMobileServerMessageCode_NoInserverConn
11106 - esriMobileServerMessageCode_NoArcGISServerConn
11107 - esriMobileServerMessageCode_FailedToCreateUploadsClient
11108 - esriMobileServerMessageCode_UploadedItemNotFound
11109 - esriMobileServerMessageCode_FailedToPopulateFDR
11110 - esriMobileServerMessageCode_FailedToSyncFeatures
11111 - esriMobileServerMessageCode_FailedToPopulateADR
11112 - esriMobileServerMessageCode_FailedToSyncAttach
11113 - esriMobileServerMessageCode_InvalidPolyGeometry
11114 - esriMobileServerMessageCode_FailedToRetrieveGIDs
11115 - esriMobileServerMessageCode_FailedToRetrieveRowsByGUID
11116 - esriMobileServerMessageCode_FailedToSetRowValues
11117 - esriMobileServerMessageCode_FailedToRetrieveCursor
11900 - esriMobileServerMessageCode_MobileSyncDebug

WMS Server


CompositeDataLayer in Carto Layers
ServerObjectExtension in Server

WMSMapLayer
IWMSMapLayer
ICompositeLayer2
IDataLayer
IDataLayer2
IIdentifyGroup
ILayerEffects
ILayerExtensions
IWMSMapLayer : IUnknown
BackgroundColor: IColor
ServerSupportsTransparency: Boolean
TransparentBackground: Boolean
WMSServiceDescription: IWMSServiceDescription
ClearDrawCache
ILayerStatus
ILayerStatus : IUnknown
StepProgressor: IStepProgressor
ILayerEvents
(LayerEventsHelper)
ITimeData
ISecureLayer
ISecureLayer2
esriDisplay.IConnectionPointContainer
ITimeData
ITimeDataDisplay
ITimeData : IUnknown
SupportsTime: Boolean
TimeReference: ITimeReference
UseTime: Boolean
GetFullTimeExtent: ITimeExtent
ITimeData2
ILayerSymbologyExtents
IWMSGroupLayer
IServiceLayerImageFormat
ITimeData2 : ITimeData
HasLiveData: Boolean

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WMSGroupLayer
IWMSGroupLayer
ICompositeLayer
ICompositeLayer2
esriDisplay.IConnectionPointContainer
esriGeodatabase.IGeoDataset
IIdentify
IIdentify2
IIdentifyGroup
ILayer
ILayer2
ILayerDrawingProperties
ILayerEvents
(LayerEventsHelper)
ILayerGeneralProperties
ILayerPosition
esriSystem.IPersist
esriSystem.IPersistStream
IPublishLayer
IWMSGroupLayer : IUnknown
Count: Long
Expanded: Boolean
Layer (in Index: Long): ILayer
WMSServiceDescription: IWMSServiceDescription
Add (in WMSLayer: ILayer)
Clear
CreateWMSGroupLayer (in groupName: String): IWMSGroupLayer
CreateWMSGroupLayers (in WMSGroupLayerDescription: IWMSLayerDescription): IWMSGroupLayer
CreateWMSLayer (in pWMSLayerDescription: IWMSLayerDescription): IWMSLayer
Delete (in pWMSLayer: ILayer)
InsertLayer (in WMSLayer: ILayer, in insertPosition: Long)
InsertLayers (in WMSLayers: IEnumLayer, in insertPosition: Long)
MoveLayer (in WMSLayer: ILayer, in toPosition: Long)

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WMSLayer
IWMSLayer
IIdentify
ILayer
ILayerEvents
(LayerEventsHelper)
IWMSLayer2 : IUnknown
Style: IWMSLayerStyleDescription
WMSLayerDescription: IWMSLayerDescription
WMSServiceDescription: IWMSServiceDescription
IWMSLayer
ILayerGeneralProperties
ILayerSymbologyExtents
IPublishLayer
esriSystem.IPersistStream
IWMSLayer : IUnknown
WMSLayerDescription: IWMSLayerDescription
WMSServiceDescription: IWMSServiceDescription

EngineWMSMapLayerFactory
ILayerFactory
esriSystem.ISupportErrorInfo
ILayerFactory : IUnknown
CanCreate (in inputObject: IUnknown): Boolean
LayerCategory: String
PublicName: String
Create (in inputObject: IUnknown): IEnumLayer
LoadLayers: IEnumLayer

WMSServerBase
IWMSServer
esriSystem.ILogSupport
esriSystem.IObjectActivate
esriSystem.IObjectConstruct
esriServer.IServerObjectExtension
esriSystem.ISupportErrorInfo
esriSystem.IWebRequestHandler
IWMSServer : IUnknown
Data (in Capabilities: String, in request: String, out pMimeType: String): BYTE[]
GetToPost (in sGet: String): String
SetParameters (in Name: String, in Value: String)

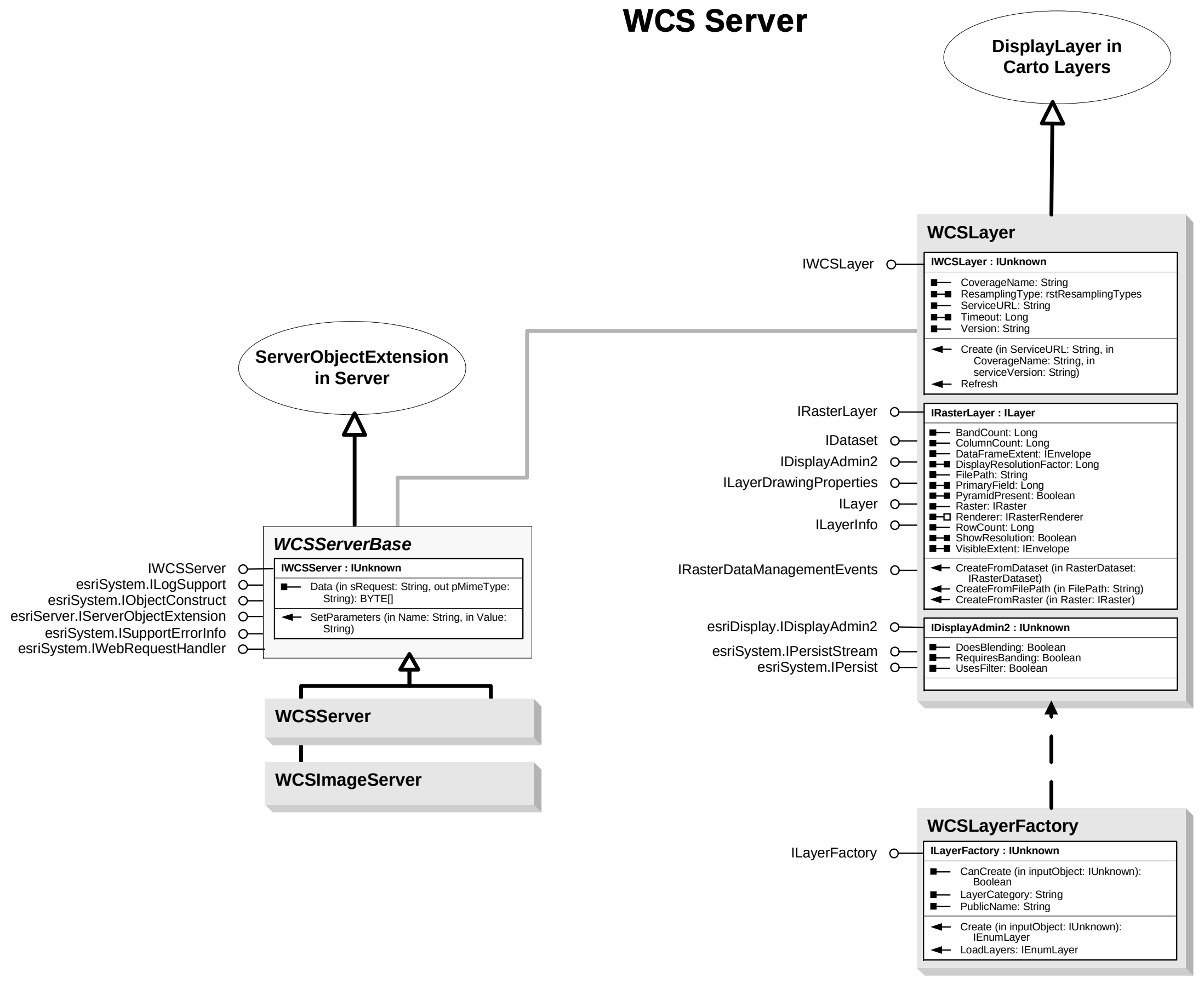
WMSServer

WMSImageServer

Enumerations

esriWMSServerMessageCodeEnum
16000 - esriWMSServerMessageCode_Debug
16001 - esriWMSServerMessageCode_NotLicensed
16002 - esriWMSServerMessageCode_ConstructStarted
16003 - esriWMSServerMessageCode_ConstructEnded
16004 - esriWMSServerMessageCode_InvalidPointer
16005 - esriWMSServerMessageCode_CanNotReadPrecookingFile
16006 - esriWMSServerMessageCode_CanNotParseSLD
16007 - esriWMSServerMessageCode_RequestNotRecognized
16008 - esriWMSServerMessageCode_UnknownInternalError
82001 - esriWMSServerMessageCode_ImageServerWMSFailed
82002 - esriWMSServerMessageCode_ImageServerNotLicensed
82003 - esriWMSServerMessageCode_ImageServerWMSStarted
82004 - esriWMSServerMessageCode_ImageServerWMSDebug
82005 - esriWMSServerMessageCode_ImageServerWMSGetToPost
82006 - esriWMSServerMessageCode_ImageServerWMSGetData
82010 - esriWMSServerMessageCode_ImageServerWMSGetCapabilities
82012 - esriWMSServerMessageCode_ImageServerWMSGetMap
82020 - esriWMSServerMessageCode_ImageServerWMSUnknownRequest

WCS Server


ServerObjectExtension in Server
DisplayLayer in Carto Layers

WCSServerBase
IWCSServer
esriSystem.ILogSupport
esriSystem.IObjectConstruct
esriServer.IServerObjectExtension
esriSystem.ISupportErrorInfo
esriSystem.IWebRequestHandler
IWCSServer : IUnknown
Data (in sRequest: String, out pMimeType: String): BYTE[]
SetParameters (in Name: String, in Value: String)

WCSServer

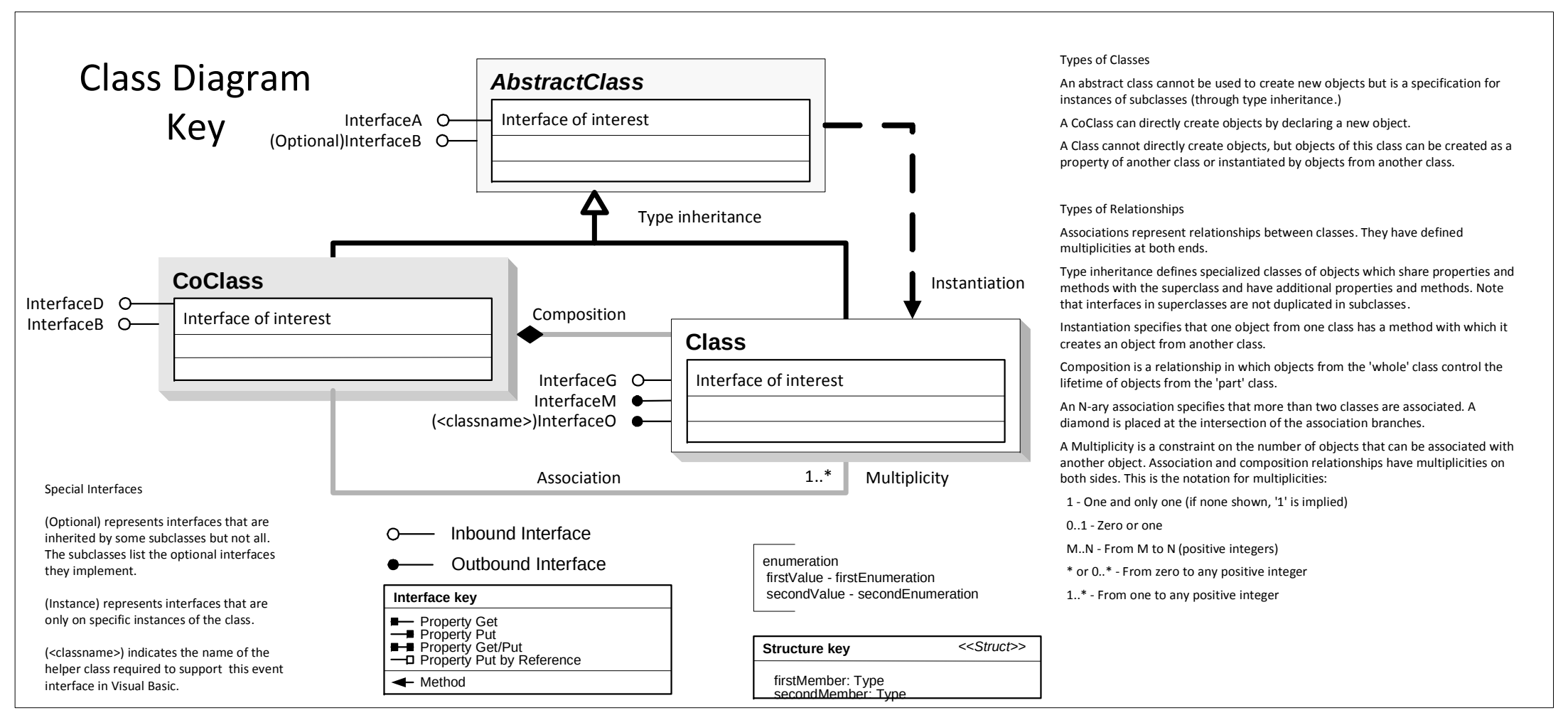
WCSImageServer

WCSLayer
IWCSLayer
IWCSLayer : IUnknown
CoverageName: String
ResamplingType: rstResamplingTypes
ServiceURL: String
Timeout: Long
Version: String
Create (in ServiceURL: String, in CoverageName: String, in serviceVersion: String)
Refresh
IRasterLayer
IDataset
IDisplayAdmin2
ILayerDrawingProperties
ILayer
ILayerInfo
IRasterLayer : ILayer
BandCount: Long
ColumnCount: Long
DataFrameExtent: IEnvelope
DisplayResolutionFactor: Long
FilePath: String
PrimaryField: Long
PyramidPresent: Boolean
Raster: IRaster
Renderer: IRasterRenderer
RowCount: Long
ShowResolution: Boolean
VisibleExtent: IEnvelope
IRasterDataManagementEvents
CreateFromDataset (in RasterDataset: IRasterDataset)
CreateFromFilePath (in FilePath: String)
CreateFromRaster (in Raster: IRaster)
esriDisplay.IDisplayAdmin2
esriSystem.IPersistStream
esriSystem.IPersist
IDisplayAdmin2 : IUnknown
DoesBlending: Boolean
RequiresBanding: Boolean
UsesFilter: Boolean

WCSLayerFactory
ILayerFactory
ILayerFactory : IUnknown
CanCreate (in inputObject: IUnknown): Boolean
LayerCategory: String
PublicName: String
Create (in inputObject: IUnknown): IEnumLayer
LoadLayers: IEnumLayer

Enumerations

esriWCSServerMessageCodeEnum
81001 - esriWCSServerMessageCode_ImageServerWCSFailed
81002 - esriWCSServerMessageCode_ImageServerWCSNotLicensed
81003 - esriWCSServerMessageCode_ImageServerWCSStarted
81004 - esriWCSServerMessageCode_ImageServerWCSInitialized
81010 - esriWCSServerMessageCode_ImageServerWCSGetData
81012 - esriWCSServerMessageCode_ImageServerWCSGetCapabilities
81014 - esriWCSServerMessageCode_ImageServerWCSDescribeCoverage
81016 - esriWCSServerMessageCode_ImageServerWCSGetCoverage
81020 - esriWCSServerMessageCode_ImageServerWCSUnknownRequest
81030 - esriWCSServerMessageCode_ImageServerWCSParseKVP
81031 - esriWCSServerMessageCode_ImageServerWCSParseXML
81032 - esriWCSServerMessageCode_ImageServerWCSParseKVP11
81033 - esriWCSServerMessageCode_ImageServerWCSParseXML11
81034 - esriWCSServerMessageCode_ImageServerWCSParseWriteData
81040 - esriWCSServerMessageCode_ImageServerWCSInvalidCRS
81041 - esriWCSServerMessageCode_ImageServerWCSInvalidDataset
81042 - esriWCSServerMessageCode_ImageServerWCSInvalidLayer
81043 - esriWCSServerMessageCode_ImageServerWCSAISInitialized
81044 - esriWCSServerMessageCode_ImageServerWCSDatasetInitialized
81045 - esriWCSServerMessageCode_ImageServerWCSWrongPixelType
91001 - esriWCSServerMessageCode_GeoDataServerWCSFailed
91002 - esriWCSServerMessageCode_GeoDataServerWCSNotLicensed
91003 - esriWCSServerMessageCode_GeoDataServerWCSStarted
91004 - esriWCSServerMessageCode_GeoDataServerWCSInitialized
91010 - esriWCSServerMessageCode_GeoDataServerWCSGetData
91012 - esriWCSServerMessageCode_GeoDataServerWCSGetCapabilities
91014 - esriWCSServerMessageCode_GeoDataServerWCSDescribeCoverage
91016 - esriWCSServerMessageCode_GeoDataServerWCSGetCoverage
91020 - esriWCSServerMessageCode_GeoDataServerWCSUnknownRequest
91030 - esriWCSServerMessageCode_GeoDataServerWCSParseKVP
91031 - esriWCSServerMessageCode_GeoDataServerWCSParseXML
91032 - esriWCSServerMessageCode_GeoDataServerWCSParseKVP11
91033 - esriWCSServerMessageCode_GeoDataServerWCSParseXML11
91034 - esriWCSServerMessageCode_GeoDataServerWCSParseWriteData
91040 - esriWCSServerMessageCode_GeoDataServerWCSInvalidCRS
91041 - esriWCSServerMessageCode_GeoDataServerWCSInvalidDataset
91042 - esriWCSServerMessageCode_GeoDataServerWCSInvalidLayer
91043 - esriWCSServerMessageCode_GeoDataServerWCSAISInitialized
91044 - esriWCSServerMessageCode_GeoDataServerWCSDatasetInitialized
91045 - esriWCSServerMessageCode_GeoDataServerWCSWrongPixelType
15001 - esriWCSServerMessageCode_MapServerWCSFailed
15002 - esriWCSServerMessageCode_MapServerWCSNotLicensed
15003 - esriWCSServerMessageCode_MapServerWCSStarted
15004 - esriWCSServerMessageCode_MapServerWCSInitialized
15010 - esriWCSServerMessageCode_MapServerWCSGetData
15012 - esriWCSServerMessageCode_MapServerWCSGetCapabilities
15014 - esriWCSServerMessageCode_MapServerWCSDescribeCoverage
15016 - esriWCSServerMessageCode_MapServerWCSGetCoverage
15020 - esriWCSServerMessageCode_MapServerWCSUnknownRequest
15030 - esriWCSServerMessageCode_MapServerWCSParseKVP
15031 - esriWCSServerMessageCode_MapServerWCSParseXML
15032 - esriWCSServerMessageCode_MapServerWCSParseKVP11
15033 - esriWCSServerMessageCode_MapServerWCSParseXML11
15034 - esriWCSServerMessageCode_MapServerWCSParseWriteData
15040 - esriWCSServerMessageCode_MapServerWCSInvalidCRS
15041 - esriWCSServerMessageCode_MapServerWCSInvalidDataset
15042 - esriWCSServerMessageCode_MapServerWCSInvalidLayer
15043 - esriWCSServerMessageCode_MapServerWCSAISInitialized
15044 - esriWCSServerMessageCode_MapServerWCSDatasetInitialized
15045 - esriWCSServerMessageCode_MapServerWCSWrongPixelType



Class Diagram Key

AbstractClass
InterfaceA
(Optional)InterfaceB
Interface of interest

Type inheritance

Instantiation

CoClass
InterfaceD
InterfaceB
Interface of interest

Composition

Class
InterfaceG
InterfaceM
(<classname>)InterfaceO
Interface of interest

Association

1..*

Multiplicity

Special Interfaces

(Optional) represents interfaces that are inherited by some subclasses but not all. The subclasses list the optional interfaces they implement.

(Instance) represents interfaces that are only on specific instances of the class.

(<classname>) indicates the name of the helper class required to support this event interface in Visual Basic.

Inbound Interface
Outbound Interface

Interface key
Property Get
Property Put
Property Get/Put
Property Put by Reference
Method

enumeration
firstValue - firstEnumeration
secondValue - secondEnumeration

Structure key *<<Struct>>*
firstMember: Type
secondMember: Type

Types of Classes

An abstract class cannot be used to create new objects but is a specification for instances of subclasses (through type inheritance.)

A CoClass can directly create objects by declaring a new object.

A Class cannot directly create objects, but objects of this class can be created as a property of another class or instantiated by objects from another class.

Types of Relationships

Associations represent relationships between classes. They have defined multiplicities at both ends.

Type inheritance defines specialized classes of objects which share properties and methods with the superclass and have additional properties and methods. Note that interfaces in superclasses are not duplicated in subclasses.

Instantiation specifies that one object from one class has a method with which it creates an object from another class.

Composition is a relationship in which objects from the 'whole' class control the lifetime of objects from the 'part' class.

An N-ary association specifies that more than two classes are associated. A diamond is placed at the intersection of the association branches.

A Multiplicity is a constraint on the number of objects that can be associated with another object. Association and composition relationships have multiplicities on both sides. This is the notation for multiplicities:

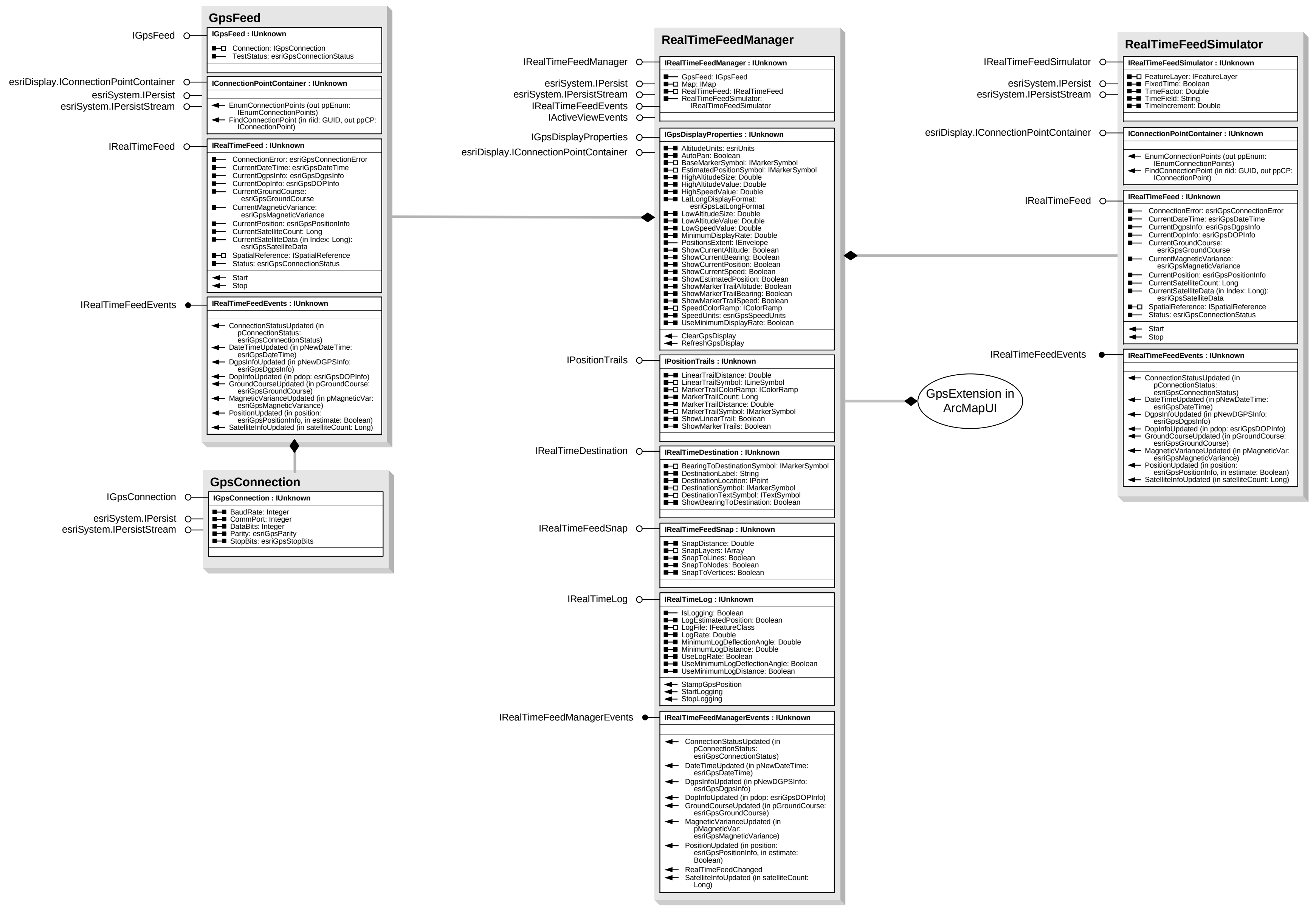
1 - One and only one (if none shown, '1' is implied)
0..1 - Zero or one
M..N - From M to N (positive integers)
* or 0..* - From zero to any positive integer
1..* - From one to any positive integer

Carto Object Model

GPS Support and Dimensions

Esri® ArcGIS® 10.3.1

GPS Support



GpsFeed
IGpsFeed
esriDisplay.IConnectionPointContainer
esriSystem.IPersist
esriSystem.IPersistStream
IRealTimeFeed
IRealTimeFeedEvents

IGpsFeed : IUnknown
Connection: IGpsConnection
TestStatus: esriGpsConnectionStatus

IConnectionPointContainer : IUnknown
EnumConnectionPoints (out ppEnum: IEnumConnectionPoints)
FindConnectionPoint (in riid: GUID, out ppCP: IConnectionPoint)

IRealTimeFeed : IUnknown
ConnectionError: esriGpsConnectionError
CurrentDateTime: esriGpsDateTime
CurrentDgpsInfo: esriGpsDgpsInfo
CurrentDopInfo: esriGpsDOPInfo
CurrentGroundCourse: esriGpsGroundCourse
CurrentMagneticVariance: esriGpsMagneticVariance
CurrentPosition: esriGpsPositionInfo
CurrentSatelliteCount: Long
CurrentSatelliteData (in Index: Long): esriGpsSatelliteData
SpatialReference: ISpatialReference
Status: esriGpsConnectionStatus
Start
Stop

IRealTimeFeedEvents : IUnknown
ConnectionStatusUpdated (in pConnectionStatus: esriGpsConnectionStatus)
DateTimeUpdated (in pNewDateTime: esriGpsDateTime)
DgpsInfoUpdated (in pNewDGPSInfo: esriGpsDgpsInfo)
DopInfoUpdated (in pdop: esriGpsDOPInfo)
GroundCourseUpdated (in pGroundCourse: esriGpsGroundCourse)
MagneticVarianceUpdated (in pMagneticVar: esriGpsMagneticVariance)
PositionUpdated (in position: esriGpsPositionInfo, in estimate: Boolean)
SatelliteInfoUpdated (in satelliteCount: Long)

GpsConnection
IGpsConnection
esriSystem.IPersist
esriSystem.IPersistStream

IGpsConnection : IUnknown
BaudRate: Integer
CommPort: Integer
DataBits: Integer
Parity: esriGpsParity
StopBits: esriGpsStopBits

RealTimeFeedManager
IRealTimeFeedManager
esriSystem.IPersist
esriSystem.IPersistStream
IRealTimeFeedEvents
IActiveViewEvents
IGpsDisplayProperties
esriDisplay.IConnectionPointContainer
IPositionTrails
IRealTimeDestination
IRealTimeFeedSnap
IRealTimeLog
IRealTimeFeedManagerEvents

IRealTimeFeedManager : IUnknown
GpsFeed: IGpsFeed
Map: IMap
RealTimeFeed: IRealTimeFeed
RealTimeFeedSimulator: IRealTimeFeedSimulator

IGpsDisplayProperties : IUnknown
AltitudeUnits: esriUnits
AutoPan: Boolean
BaseMarkerSymbol: IMarkerSymbol
EstimatedPositionSymbol: IMarkerSymbol
HighAltitudeSize: Double
HighAltitudeValue: Double
HighSpeedValue: Double
LatLongDisplayFormat: esriGpsLatLongFormat
LowAltitudeSize: Double
LowAltitudeValue: Double
LowSpeedValue: Double
MinimumDisplayRate: Double
PositionsExtent: IEnvelope
ShowCurrentAltitude: Boolean
ShowCurrentBearing: Boolean
ShowCurrentPosition: Boolean
ShowCurrentSpeed: Boolean
ShowEstimatedPosition: Boolean
ShowMarkerTrailAltitude: Boolean
ShowMarkerTrailBearing: Boolean
ShowMarkerTrailSpeed: Boolean
SpeedColorRamp: IColorRamp
SpeedUnits: esriGpsSpeedUnits
UseMinimumDisplayRate: Boolean
ClearGpsDisplay
RefreshGpsDisplay

IPositionTrails : IUnknown
LinearTrailDistance: Double
LinearTrailSymbol: ILineSymbol
MarkerTrailColorRamp: IColorRamp
MarkerTrailCount: Long
MarkerTrailDistance: Double
MarkerTrailSymbol: IMarkerSymbol
ShowLinearTrail: Boolean
ShowMarkerTrails: Boolean

IRealTimeDestination : IUnknown
BearingToDestinationSymbol: IMarkerSymbol
DestinationLabel: String
DestinationLocation: IPoint
DestinationSymbol: IMarkerSymbol
DestinationTextSymbol: ITextSymbol
ShowBearingToDestination: Boolean

IRealTimeFeedSnap : IUnknown
SnapDistance: Double
SnapLayers: IArray
SnapToLines: Boolean
SnapToNodes: Boolean
SnapToVertices: Boolean

IRealTimeLog : IUnknown
IsLogging: Boolean
LogEstimatedPosition: Boolean
LogFile: IFeatureClass
LogRate: Double
MinimumLogDeflectionAngle: Double
MinimumLogDistance: Double
UseLogRate: Boolean
UseMinimumLogDeflectionAngle: Boolean
UseMinimumLogDistance: Boolean
StampGpsPosition
StartLogging
StopLogging

IRealTimeFeedManagerEvents : IUnknown
ConnectionStatusUpdated (in pConnectionStatus: esriGpsConnectionStatus)
DateTimeUpdated (in pNewDateTime: esriGpsDateTime)
DgpsInfoUpdated (in pNewDGPSInfo: esriGpsDgpsInfo)
DopInfoUpdated (in pdop: esriGpsDOPInfo)
GroundCourseUpdated (in pGroundCourse: esriGpsGroundCourse)
MagneticVarianceUpdated (in pMagneticVar: esriGpsMagneticVariance)
PositionUpdated (in position: esriGpsPositionInfo, in estimate: Boolean)
RealTimeFeedChanged
SatelliteInfoUpdated (in satelliteCount: Long)

GpsExtension in ArcMapUI

RealTimeFeedSimulator
IRealTimeFeedSimulator
esriSystem.IPersist
esriSystem.IPersistStream
esriDisplay.IConnectionPointContainer
IRealTimeFeed
IRealTimeFeedEvents

IRealTimeFeedSimulator : IUnknown
FeatureLayer: IFeatureLayer
FixedTime: Boolean
TimeFactor: Double
TimeField: String
TimeIncrement: Double

IConnectionPointContainer : IUnknown
EnumConnectionPoints (out ppEnum: IEnumConnectionPoints)
FindConnectionPoint (in riid: GUID, out ppCP: IConnectionPoint)

IRealTimeFeed : IUnknown
ConnectionError: esriGpsConnectionError
CurrentDateTime: esriGpsDateTime
CurrentDgpsInfo: esriGpsDgpsInfo
CurrentDopInfo: esriGpsDOPInfo
CurrentGroundCourse: esriGpsGroundCourse
CurrentMagneticVariance: esriGpsMagneticVariance
CurrentPosition: esriGpsPositionInfo
CurrentSatelliteCount: Long
CurrentSatelliteData (in Index: Long): esriGpsSatelliteData
SpatialReference: ISpatialReference
Status: esriGpsConnectionStatus
Start
Stop

IRealTimeFeedEvents : IUnknown
ConnectionStatusUpdated (in pConnectionStatus: esriGpsConnectionStatus)
DateTimeUpdated (in pNewDateTime: esriGpsDateTime)
DgpsInfoUpdated (in pNewDGPSInfo: esriGpsDgpsInfo)
DopInfoUpdated (in pdop: esriGpsDOPInfo)
GroundCourseUpdated (in pGroundCourse: esriGpsGroundCourse)
MagneticVarianceUpdated (in pMagneticVar: esriGpsMagneticVariance)
PositionUpdated (in position: esriGpsPositionInfo, in estimate: Boolean)
SatelliteInfoUpdated (in satelliteCount: Long)

Enumerations

esriGpsBaudRate
300 - esriGpsBaudRate300
600 - esriGpsBaudRate600
1200 - esriGpsBaudRate1200
2400 - esriGpsBaudRate2400
4800 - esriGpsBaudRate4800
9600 - esriGpsBaudRate9600
14400 - esriGpsBaudRate14400
19200 - esriGpsBaudRate19200
1 - esriGpsBaudRate38400
2 - esriGpsBaudRate56000
3 - esriGpsBaudRate57600
4 - esriGpsBaudRate115200

esriGpsConnectionError
0 - esriGpsConnectionErrorNone
1 - esriGpsConnectionErrorCommportInUse
2 - esriGpsConnectionErrorCommportNotSupported
3 - esriGpsConnectionErrorInApplication
4 - esriGpsConnectionErrorUnableToCommunicateToDevice
5 - esriGpsConnectionErrorInsufficientData

esriGpsConnectionStatus
0 - esriGpsConnectionStatusClosed
1 - esriGpsConnectionStatusOpen
2 - esriGpsConnectionStatusNoSignal
3 - esriGpsConnectionStatusPoorSignal
4 - esriGpsConnectionStatusReceiving

esriGpsLatLongFormat
0 - esriGpsDegreesMinutesSeconds
1 - esriGpsDegreesMinutes
2 - esriGpsDecimalDegrees

esriGpsParity
0 - esriGpsParityNone
1 - esriGpsParityOdd
2 - esriGpsParityEven
3 - esriGpsParityMark
4 - esriGpsParitySpace

esriGpsSpeedUnits
0 - esriGpsSpeedKph
1 - esriGpsSpeedMph
2 - esriGpsSpeedMps
3 - esriGpsSpeedFps
4 - esriGpsSpeedKnots

esriGpsStopBits
0 - esriGpsStopBits1
1 - esriGpsStopBits15
2 - esriGpsStopBits2

Structures

esriGpsDateTime *<<Struct>>*
dateValid: Integer
day: Integer
hour: Integer
localOffsetHours: Integer
localOffsetMinutes: Integer
localOffsetsValid: Integer
minute: Integer
month: Integer
seconds: Double
timeValid: Integer
year: Integer

esriGpsPositionInfo *<<Struct>>*
altitude: Double
altitudeValid: Integer
hdop: Double
hdopValid: Integer
hours: Integer
latitude: Double
longitude: Double
minutes: Integer
pos2dValid: Integer
satellitesInUse: Integer
satellitesInUseValid: Integer
seconds: Double
timeValid: Integer

esriGpsSatelliteData *<<Struct>>*
azimuth: Integer
elevation: Integer
prn: Integer
snr: Integer

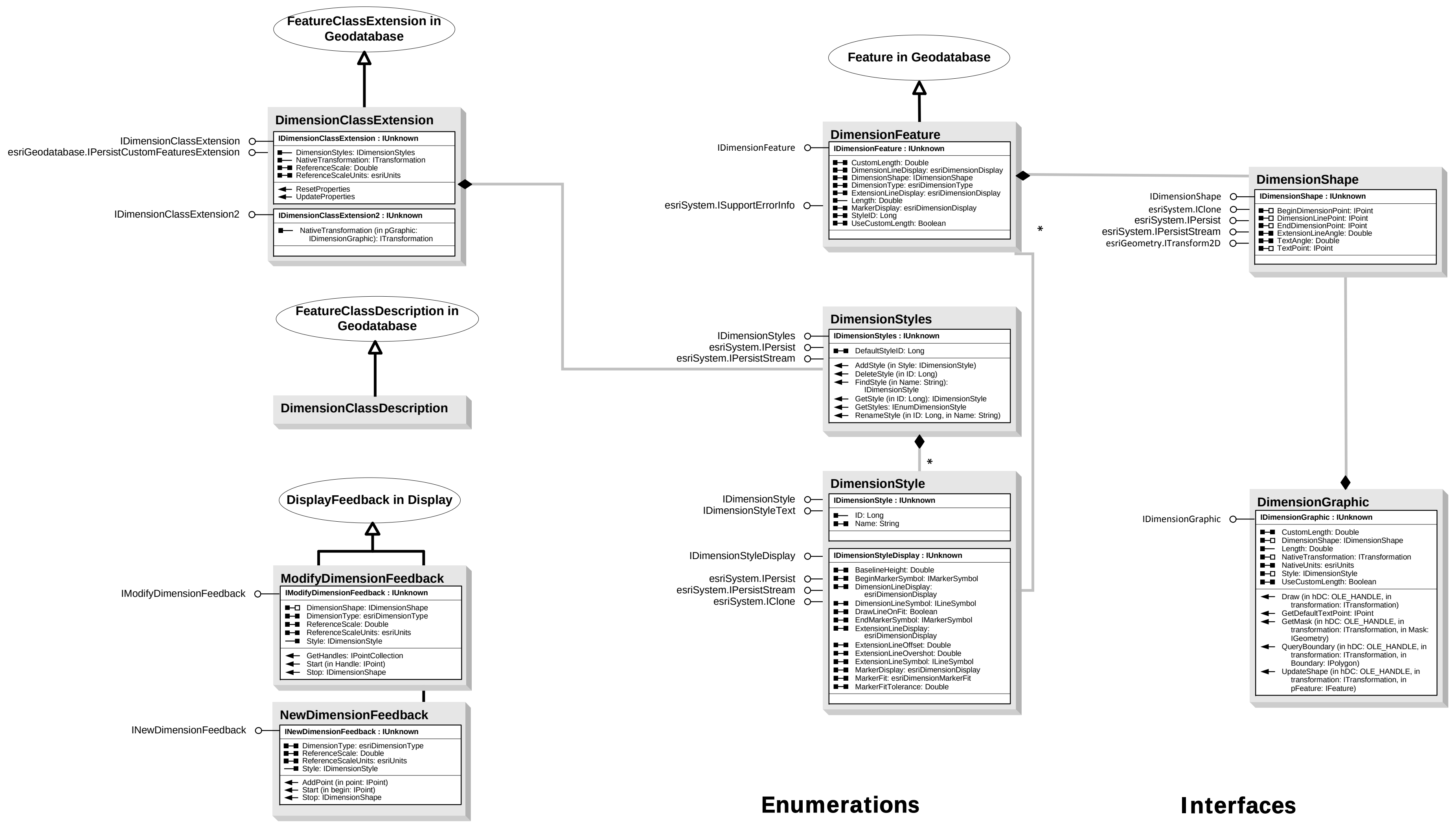
esriGpsDOPInfo *<<Struct>>*
hdop: Double
hdopValid: Integer
pdop: Double
pdopValid: Integer
vdop: Double
vdopValid: Integer

esriGpsGroundCourse *<<Struct>>*
Heading: Double
headingValid: Integer
speed: Double
speedValid: Integer

esriGpsDgpsInfo *<<Struct>>*
age: Double
ageValid: Integer
idValid: Integer
stationID: Long

esriGpsMagneticVariance *<<Struct>>*
magneticVariance: Double
magVarValid: Integer

Dimensions



FeatureClassExtension in Geodatabase

DimensionClassExtension
IDimensionClassExtension
esriGeodatabase.IPersistCustomFeaturesExtension
IDimensionClassExtension2

IDimensionClassExtension : IUnknown
DimensionStyles: IDimensionStyles
NativeTransformation: ITransformation
ReferenceScale: Double
ReferenceScaleUnits: esriUnits
ResetProperties
UpdateProperties

IDimensionClassExtension2 : IUnknown
NativeTransformation (in pGraphic: IDimensionGraphic): ITransformation

FeatureClassDescription in Geodatabase

DimensionClassDescription

DisplayFeedback in Display

ModifyDimensionFeedback
IModifyDimensionFeedback

IModifyDimensionFeedback : IUnknown
DimensionShape: IDimensionShape
DimensionType: esriDimensionType
ReferenceScale: Double
ReferenceScaleUnits: esriUnits
Style: IDimensionStyle
GetHandles: IPointCollection
Start (in Handle: IPoint)
Stop: IDimensionShape

NewDimensionFeedback
INewDimensionFeedback

INewDimensionFeedback : IUnknown
DimensionType: esriDimensionType
ReferenceScale: Double
ReferenceScaleUnits: esriUnits
Style: IDimensionStyle
AddPoint (in point: IPoint)
Start (in begin: IPoint)
Stop: IDimensionShape

Feature in Geodatabase

DimensionFeature
IDimensionFeature
esriSystem.ISupportErrorInfo

IDimensionFeature : IUnknown
CustomLength: Double
DimensionLineDisplay: esriDimensionDisplay
DimensionShape: IDimensionShape
DimensionType: esriDimensionType
ExtensionLineDisplay: esriDimensionDisplay
Length: Double
MarkerDisplay: esriDimensionDisplay
StyleID: Long
UseCustomLength: Boolean

*

DimensionStyles
IDimensionStyles
esriSystem.IPersist
esriSystem.IPersistStream

IDimensionStyles : IUnknown
DefaultStyleID: Long
AddStyle (in Style: IDimensionStyle)
DeleteStyle (in ID: Long)
FindStyle (in Name: String): IDimensionStyle
GetStyle (in ID: Long): IDimensionStyle
GetStyles: IEnumDimensionStyle
RenameStyle (in ID: Long, in Name: String)

*

DimensionStyle
IDimensionStyle
IDimensionStyleText
IDimensionStyleDisplay
esriSystem.IPersist
esriSystem.IPersistStream
esriSystem.IClone

IDimensionStyle : IUnknown
ID: Long
Name: String

IDimensionStyleDisplay : IUnknown
BaselineHeight: Double
BeginMarkerSymbol: IMarkerSymbol
DimensionLineDisplay: esriDimensionDisplay
DimensionLineSymbol: ILineSymbol
DrawLineOnFit: Boolean
EndMarkerSymbol: IMarkerSymbol
ExtensionLineDisplay: esriDimensionDisplay
ExtensionLineOffset: Double
ExtensionLineOvershot: Double
ExtensionLineSymbol: ILineSymbol
MarkerDisplay: esriDimensionDisplay
MarkerFit: esriDimensionMarkerFit
MarkerFitTolerance: Double

DimensionShape
IDimensionShape
esriSystem.IClone
esriSystem.IPersist
esriSystem.IPersistStream
esriGeometry.ITransform2D

IDimensionShape : IUnknown
BeginDimensionPoint: IPoint
DimensionLinePoint: IPoint
EndDimensionPoint: IPoint
ExtensionLineAngle: Double
TextAngle: Double
TextPoint: IPoint

DimensionGraphic
IDimensionGraphic

IDimensionGraphic : IUnknown
CustomLength: Double
DimensionShape: IDimensionShape
Length: Double
NativeTransformation: ITransformation
NativeUnits: esriUnits
Style: IDimensionStyle
UseCustomLength: Boolean
Draw (in hDC: OLE_HANDLE, in transformation: ITransformation)
GetDefaultTextPoint: IPoint
GetMask (in hDC: OLE_HANDLE, in transformation: ITransformation, in Mask: IGeometry)
QueryBoundary (in hDC: OLE_HANDLE, in transformation: ITransformation, in Boundary: IPolygon)
UpdateShape (in hDC: OLE_HANDLE, in transformation: ITransformation, in pFeature: IFeature)

Enumerations

dimError
-2147220991 - DIM_E_CONSTRUCTOR_TOOFEW_VERTICES
-2147220990 - DIM_E_CONSTRUCTOR_TOOMANY_VERTICES
-2147220989 - DIM_E_UNSUPPORTED_VERSION

esriDimensionDisplay
0 - esriDimensionDisplayBoth
1 - esriDimensionDisplayBegin
2 - esriDimensionDisplayEnd
3 - esriDimensionDisplayNone

esriDimensionMarkerFit
0 - esriDimensionMarkerFitNone
1 - esriDimensionMarkerFitTolerance
2 - esriDimensionMarkerFitText

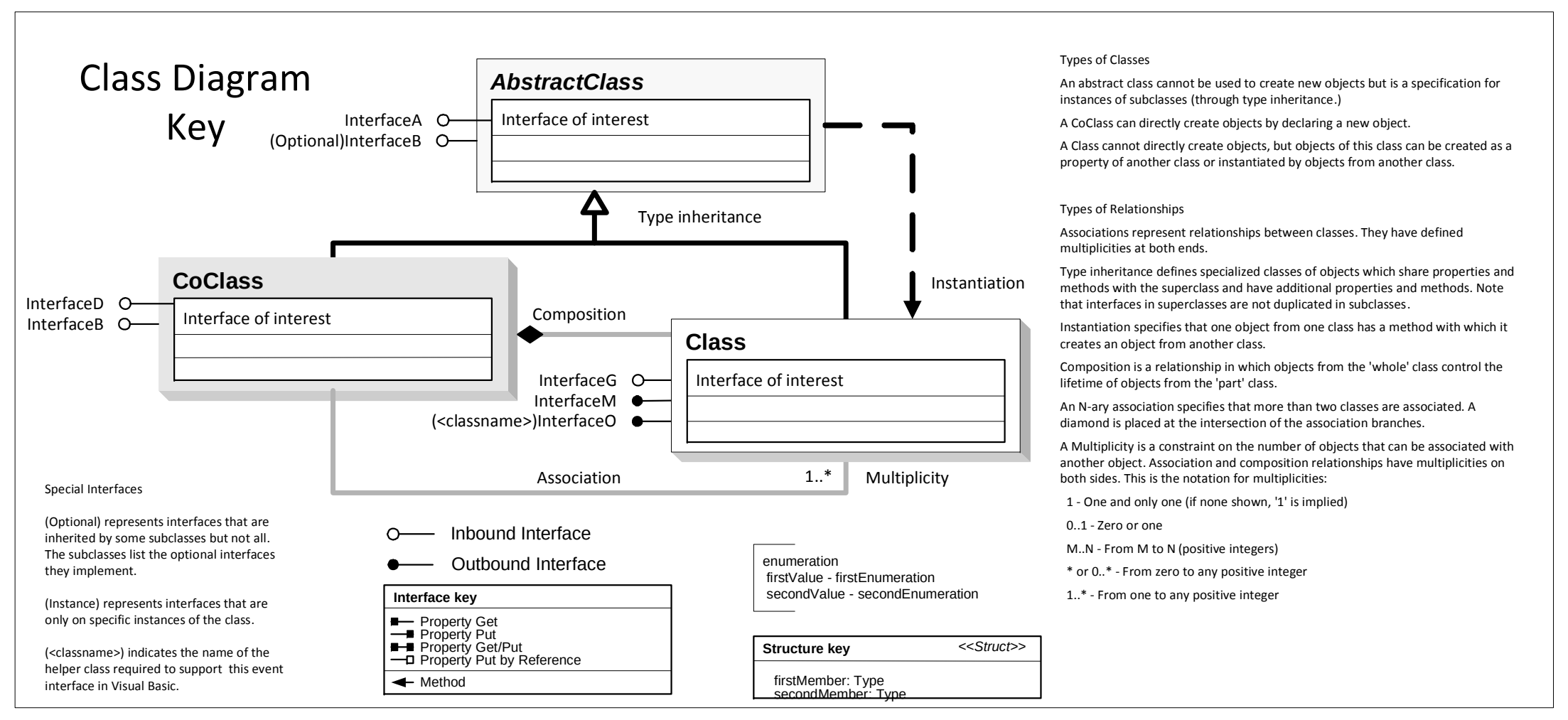
esriDimensionTextDisplay
0 - esriDimensionTDValueOnly
1 - esriDimensionTDPrefixSuffix
2 - esriDimensionTDExpression
3 - esriDimensionTDNone

esriDimensionTextFit
0 - esriDimensionTextFitNone
1 - esriDimensionTextFitMoveBegin
2 - esriDimensionTextFitMoveEnd

esriDimensionType
0 - esriDimensionTypeAligned
1 - esriDimensionTypeLinear

Interfaces

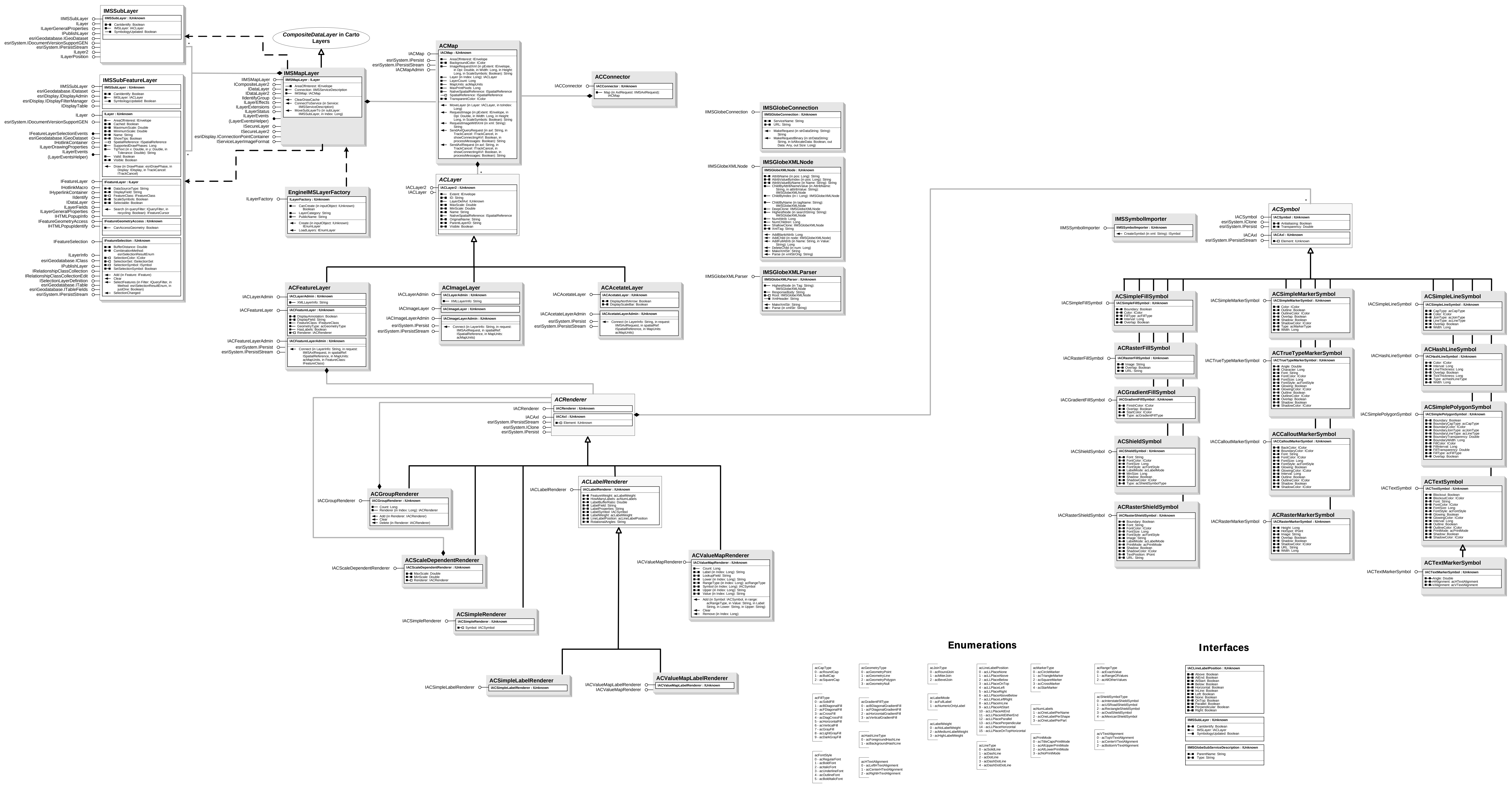
IEnumDimensionStyle : IUnknown
Next: IDimensionStyle
Reset

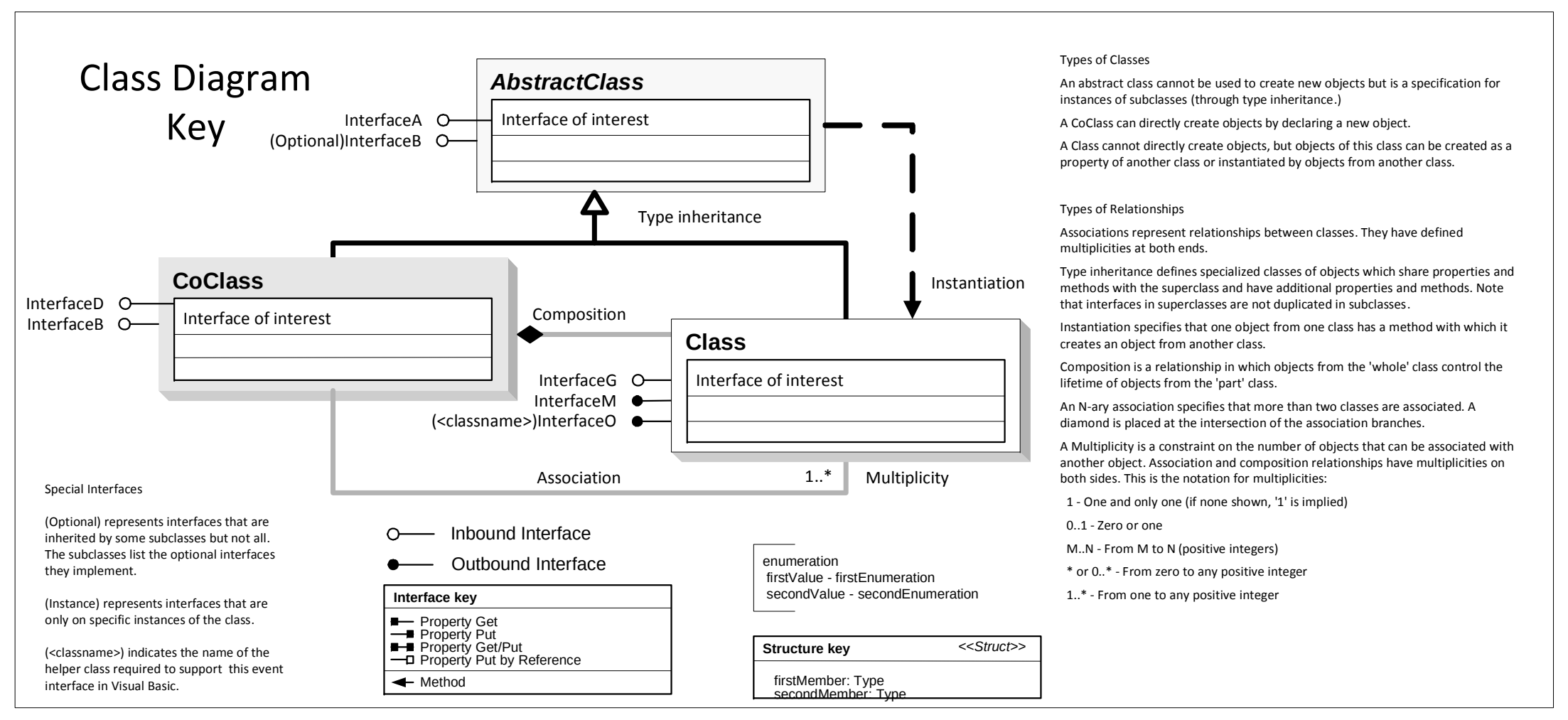

Class Diagram Key
AbstractClass
CoClass
Class
Type inheritance
Composition
Instantiation
Association
Multiplicity
Inbound Interface
Outbound Interface

Carto Object Model

ArcIMS Layer, Symbology, and Rendering

Esri® ArcGIS® 10.3.1


IMSSubLayer
IMSSubFeatureLayer
CompositeDataLayer in Carto Layers
IMSMapLayer
ACMap
ACConnector
EngineIMSLayerFactory
ACLayer
IMSGlobeConnection
IMSGlobeXMLNode
IMSGlobeXMLParser
IMSSymbolImporter
ACSymbol
ACFeatureLayer
ACImageLayer
ACAcetateLayer
ACSimpleFillSymbol
ACSimpleMarkerSymbol
ACSimpleLineSymbol
ACRasterFillSymbol
ACTrueTypeMarkerSymbol
ACHashLineSymbol
ACGradientFillSymbol
ACSimplePolygonSymbol
ACRenderer
ACShieldSymbol
ACCalloutMarkerSymbol
ACTextSymbol
ACGroupRenderer
ACLabelRenderer
ACRasterShieldSymbol
ACRasterMarkerSymbol
ACTextMarkerSymbol
ACScaleDependentRenderer
ACValueMapRenderer
ACSimpleRenderer
ACSimpleLabelRenderer
ACValueMapLabelRenderer
Enumerations
Interfaces


Class Diagram Key
AbstractClass
Interface of interest
InterfaceA
(Optional)InterfaceB
Type inheritance
Instantiation
CoClass
Interface of interest
InterfaceC
InterfaceB
Composition
Class
Interface of interest
InterfaceD
InterfaceM
(<classname>)InterfaceD
Association
1..*
Multiplicity
Inbound Interface
Outbound Interface
Interface key
Structure key

Carto Object Model

Miscellaneous

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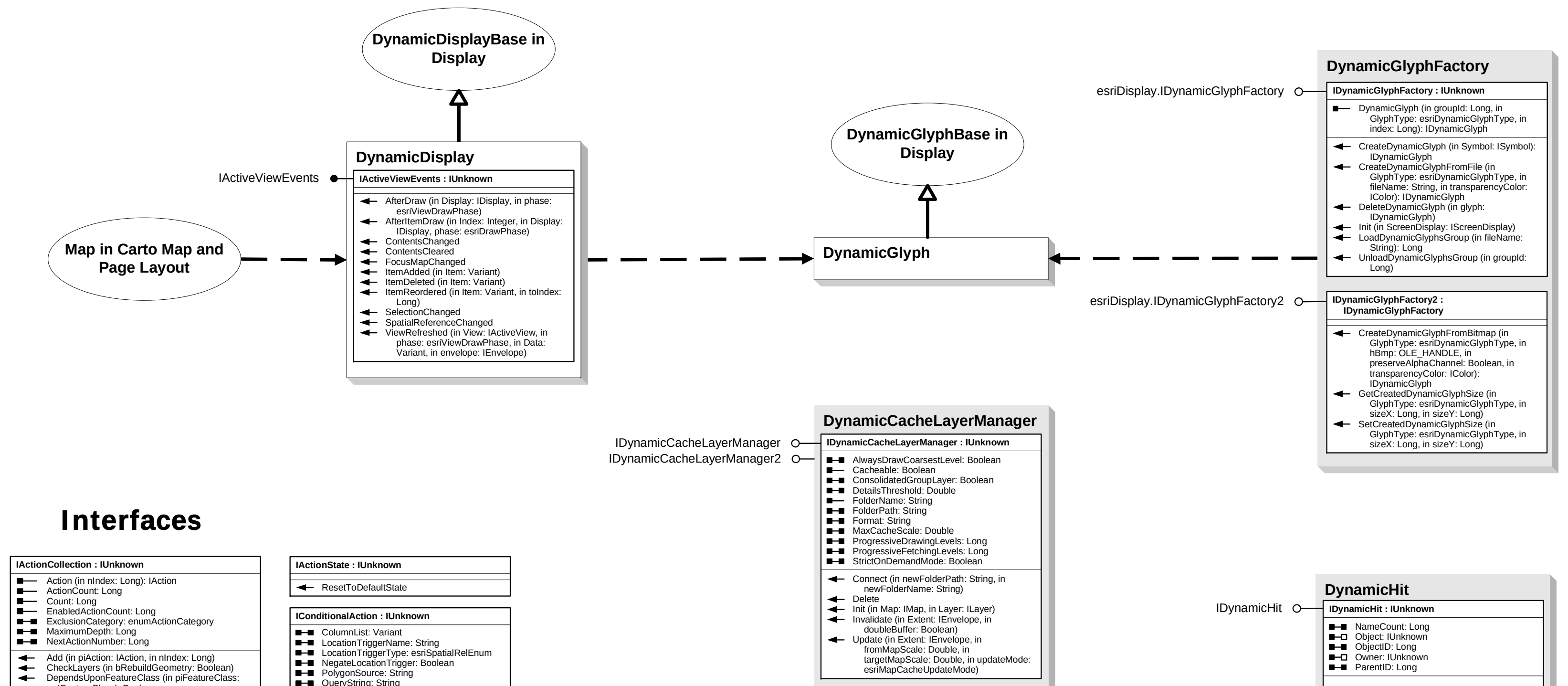
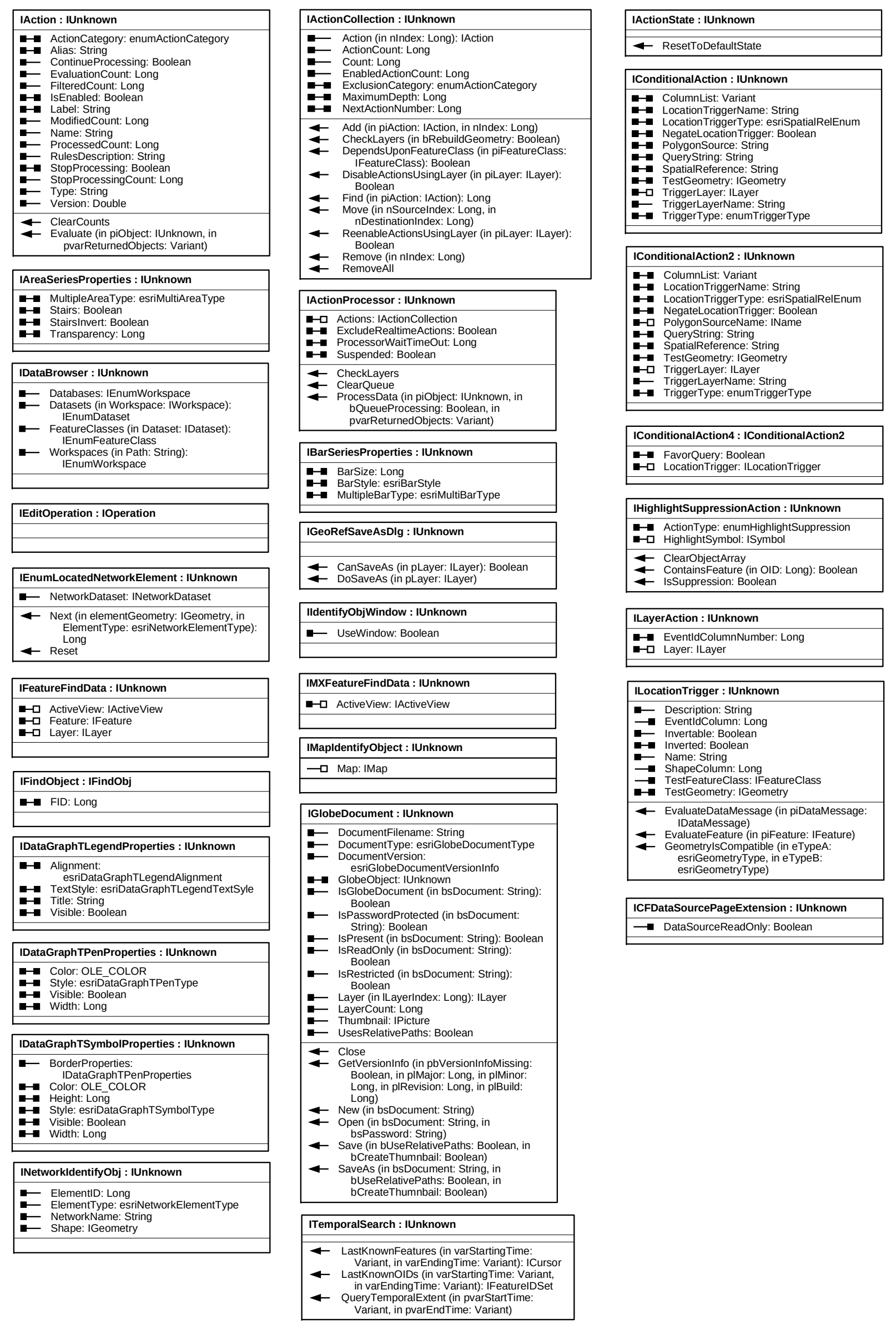
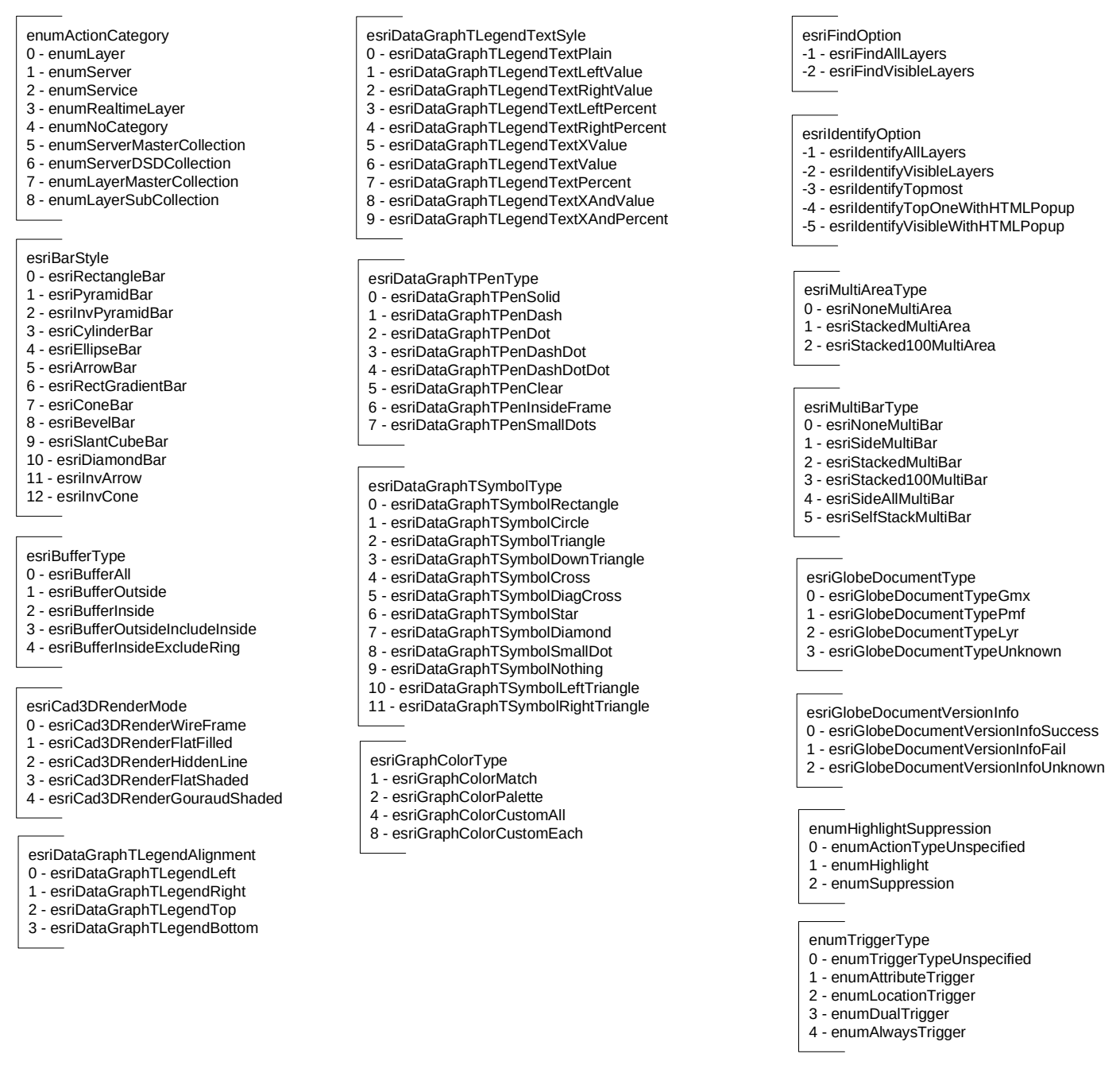
Dynamic Display


DynamicDisplayBase in Display
DynamicDisplay
IActiveViewEvents
Map in Carto Map and Page Layout
DynamicGlyphBase in Display
DynamicGlyph
DynamicGlyphFactory
esriDisplay.IDynamicGlyphFactory
esriDisplay.IDynamicGlyphFactory2
DynamicCacheLayerManager
IDynamicCacheLayerManager
IDynamicCacheLayerManager2
DynamicHit
IDynamicHit

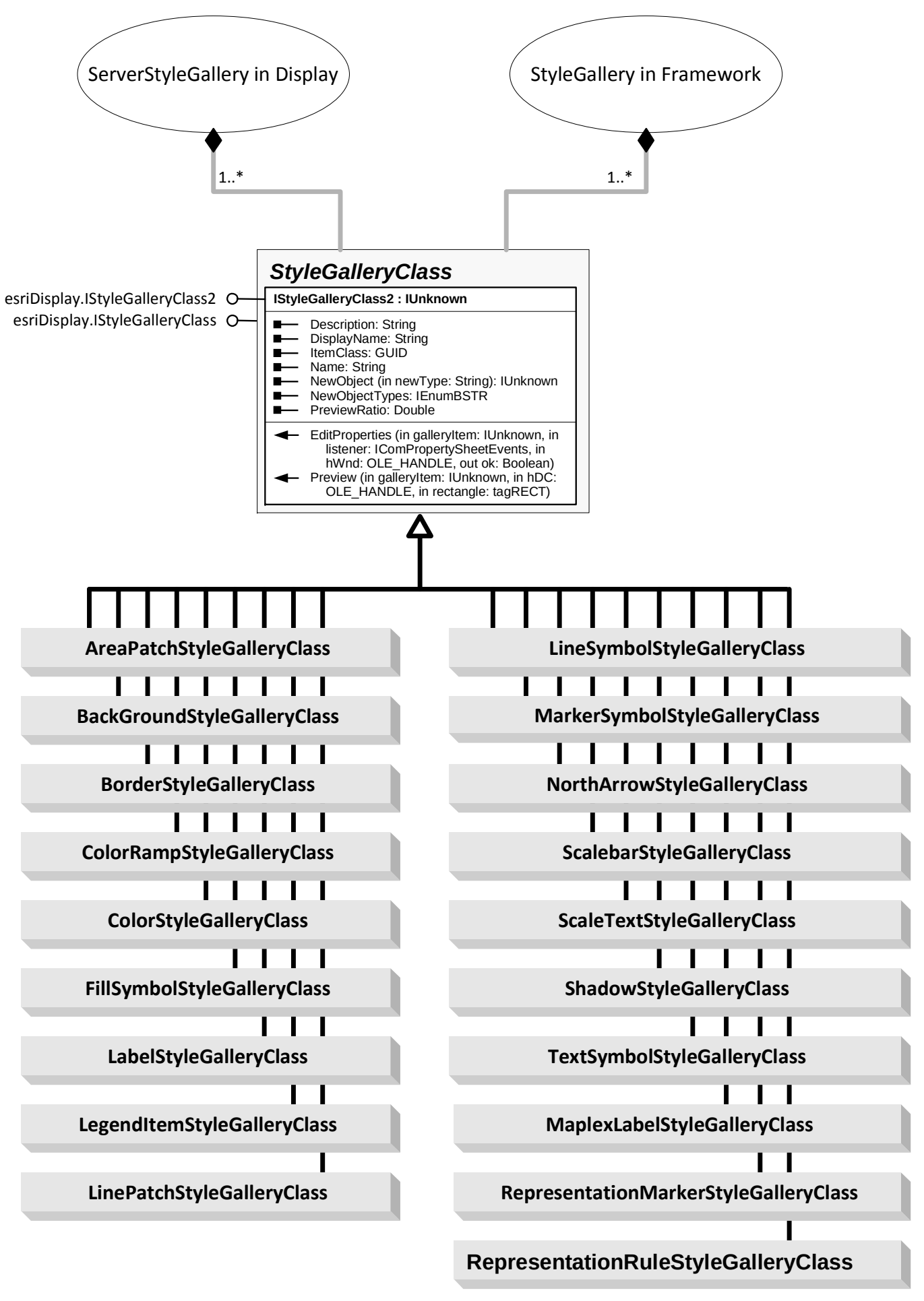
Interfaces



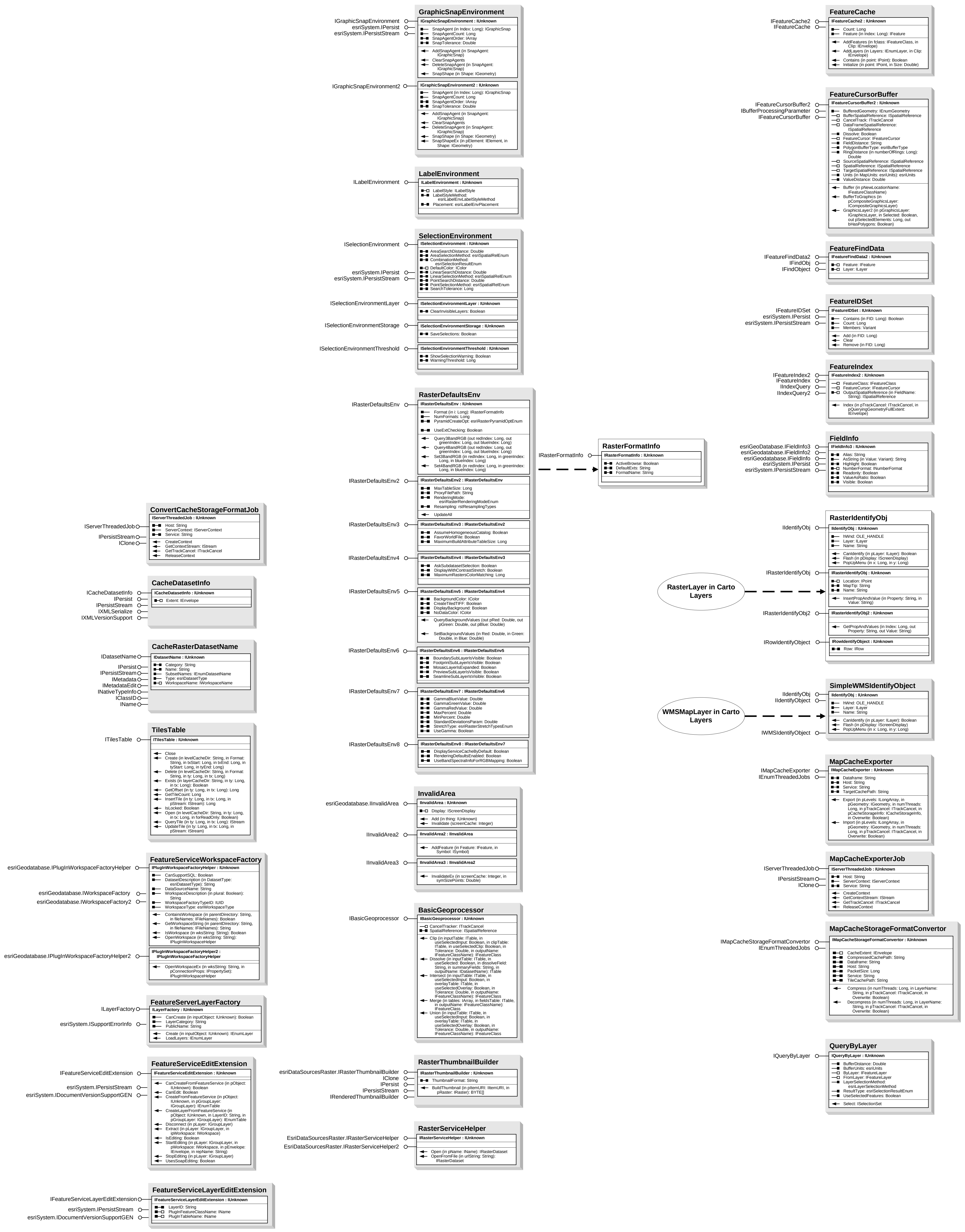
Enumerations



Style Gallery Classes


ServerStyleGallery in Display
StyleGallery in Framework
1..*
1..*
StyleGalleryClass
esriDisplay.IStyleGalleryClass2
esriDisplay.IStyleGalleryClass
AreaPatchStyleGalleryClass
LineSymbolStyleGalleryClass
BackGroundStyleGalleryClass
MarkerSymbolStyleGalleryClass
BorderStyleGalleryClass
NorthArrowStyleGalleryClass
ColorRampStyleGalleryClass
ScalebarStyleGalleryClass
ColorStyleGalleryClass
ScaleTextStyleGalleryClass
FillSymbolStyleGalleryClass
ShadowStyleGalleryClass
LabelStyleGalleryClass
TextSymbolStyleGalleryClass
LegendItemStyleGalleryClass
MaplexLabelStyleGalleryClass
LinePatchStyleGalleryClass
RepresentationMarkerStyleGalleryClass
RepresentationRuleStyleGalleryClass

Environment and Feature Management


GraphicSnapEnvironment
LabelEnvironment
SelectionEnvironment
RasterDefaultsEnv
RasterFormatInfo
InvalidArea
BasicGeoprocessor
RasterThumbnailBuilder
RasterServiceHelper
ConvertCacheStorageFormatJob
CacheDatasetInfo
CacheRasterDatasetName
TilesTable
FeatureServiceWorkspaceFactory
FeatureServerLayerFactory
FeatureServiceEditExtension
FeatureServiceLayerEditExtension
FeatureCache
FeatureCursorBuffer
FeatureFindData
FeatureIdSet
FeatureIndex
FieldInfo
RasterIdentifyObj
RasterLayer in Carto Layers
SimpleWMSIdentifyObject
WMSMapLayer in Carto Layers
MapCacheExporter
MapCacheExporterJob
MapCacheStorageFormatConvertor
QueryByLayer