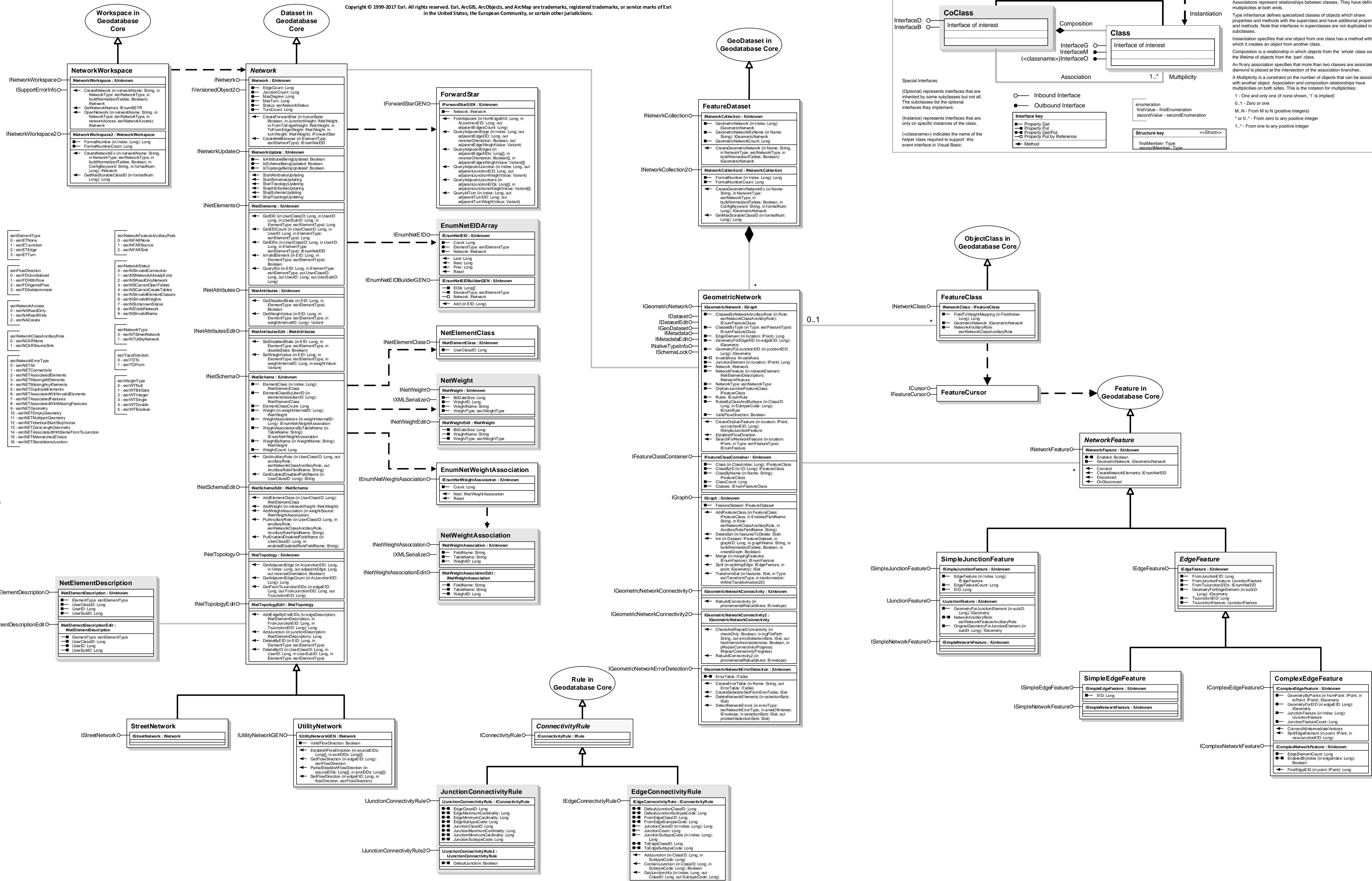


Geodatabase Object Model Geometric Network

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

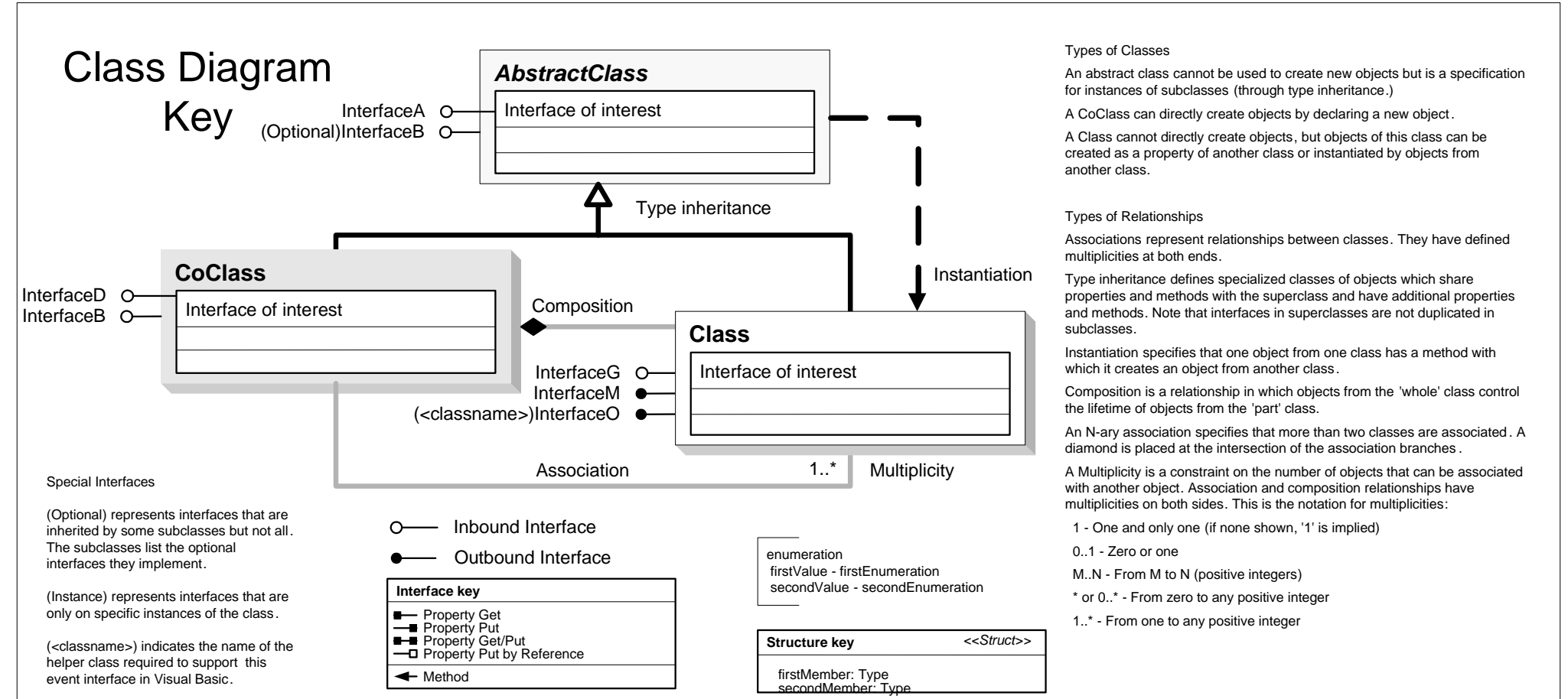


Geodatabase Object Model

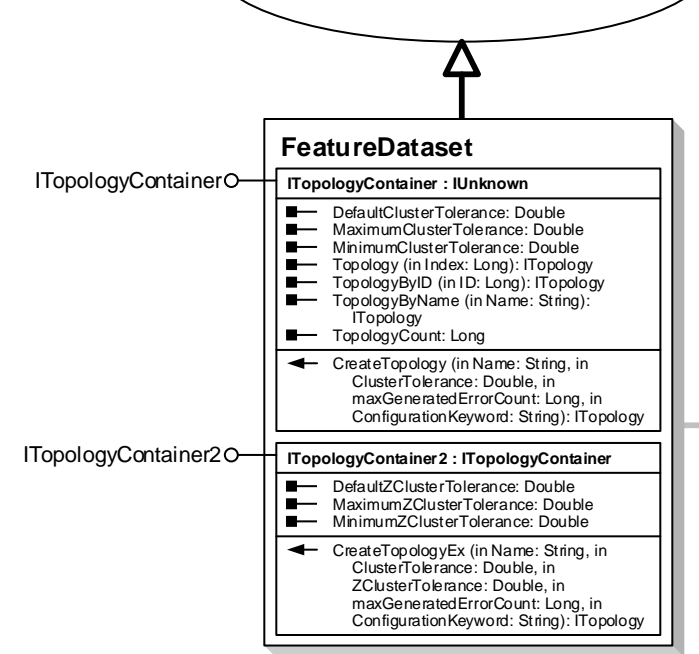
Topology

Esri® ArcGIS® 10.5

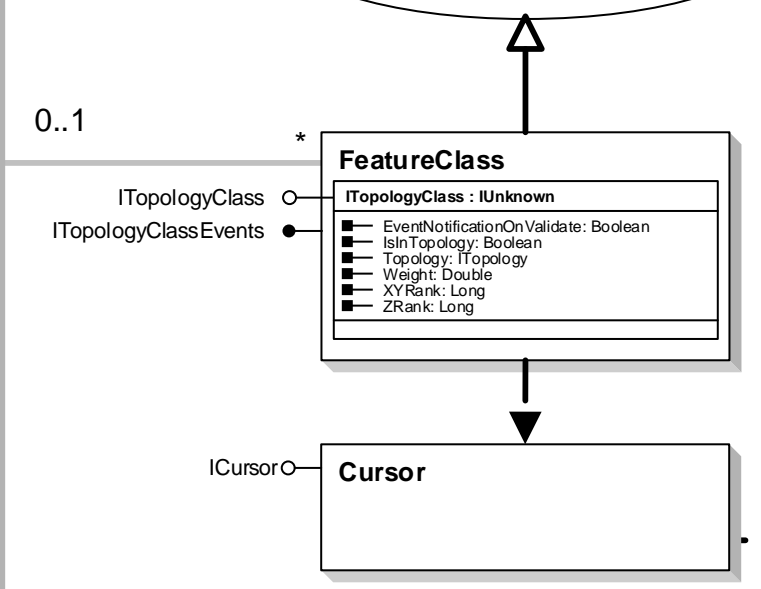
Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.



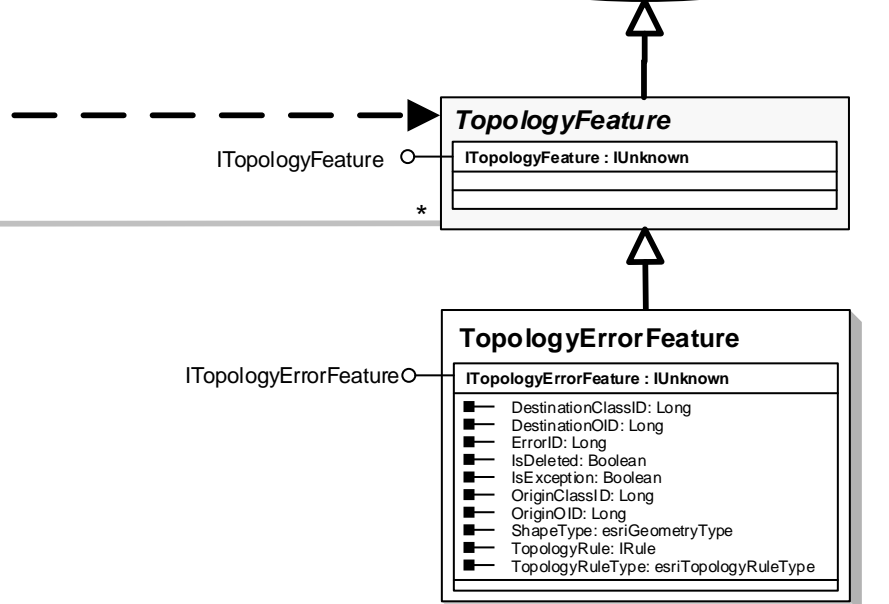
GeoDataset in Geodatabase Core



ObjectClass in Geodatabase Core



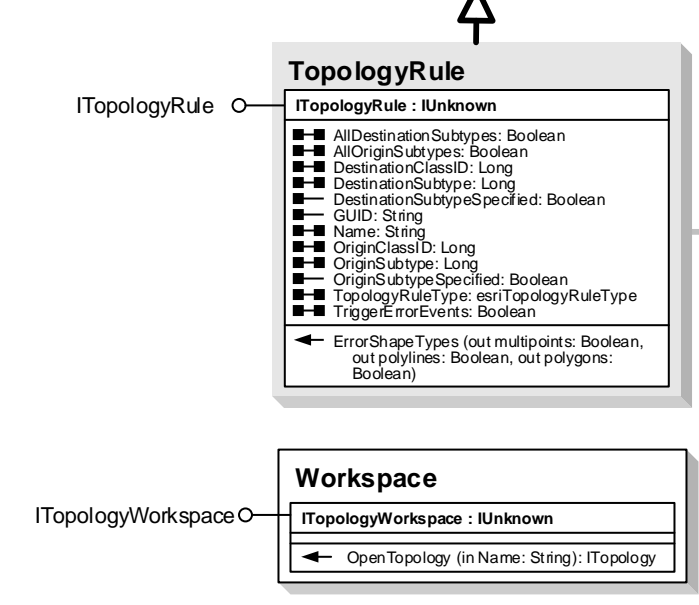
Feature in Geodatabase Core



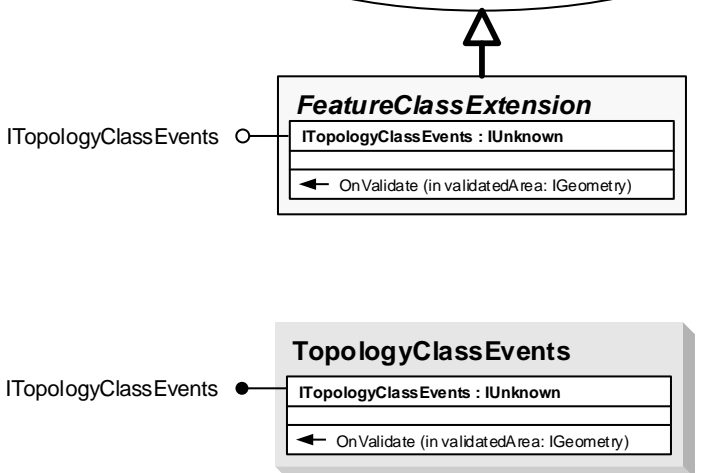
Enumerations

- esriTopologyRuleType
- 1 - esriRTAny
- 0 - esriRTFeatureLargerThanClusterTolerance
- 1 - esriRTAreaNoGaps
- 3 - esriRTAreaNoOverlap
- 4 - esriRTAreaCoveredByAreaClass
- 5 - esriRTAreaCoveredByAreaOther
- 7 - esriRTAreaCoveredByArea
- 8 - esriRTAreaNoOverlapArea
- 10 - esriRTLineCoveredByAreaBoundary
- 11 - esriRTLinePropertyInsideArea
- 15 - esriRTPointCoveredByAreaBoundary
- 16 - esriRTPointPropertyInsideArea
- 19 - esriRTLineNoOverlap
- 20 - esriRTLineNoIntersection
- 21 - esriRTLineNoDangles
- 22 - esriRTLineNoPseudos
- 26 - esriRTLineCoveredByLineClass
- 28 - esriRTLineNoOverlapLine
- 29 - esriRTPointCoveredByLine
- 31 - esriRTPointCoveredByLineEndpoint
- 34 - esriRTPointDisjoint
- 35 - esriRTPointCoincidePoint
- 37 - esriRTAreaBoundaryCoveredByLine
- 38 - esriRTAreaBoundaryCoveredByAreaBoundary
- 39 - esriRTLineNoSelfOverlap
- 40 - esriRTLineNoSelfIntersect
- 41 - esriRTLineNoIntersectInteriorTouch
- 42 - esriRTLineEndpointCoveredByPoint
- 44 - esriRTAreaContainPoint
- 45 - esriRTLineNoMultiPart
- 46 - esriRTLineNoIntersectInteriorTouchLine

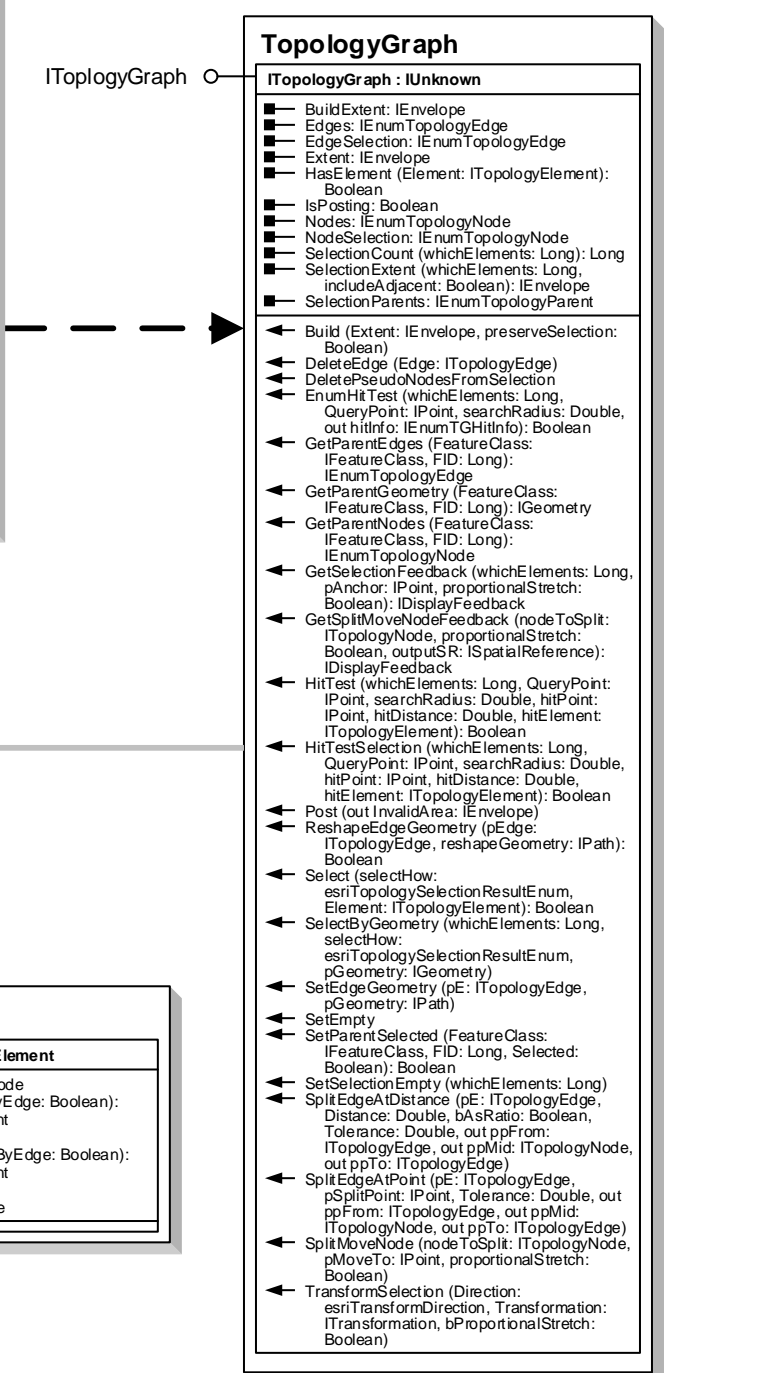
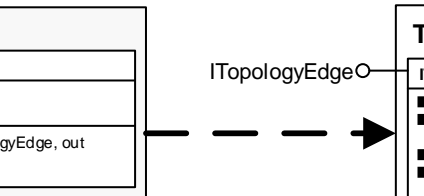
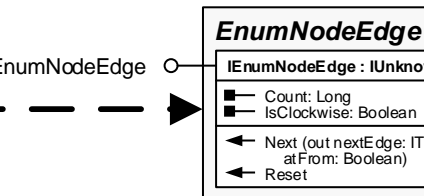
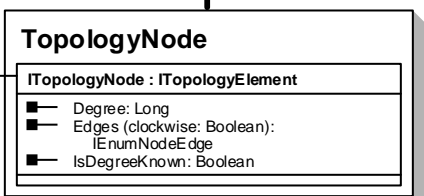
Rule in Geodatabase Core



ObjectClassExtension in Geodatabase Core



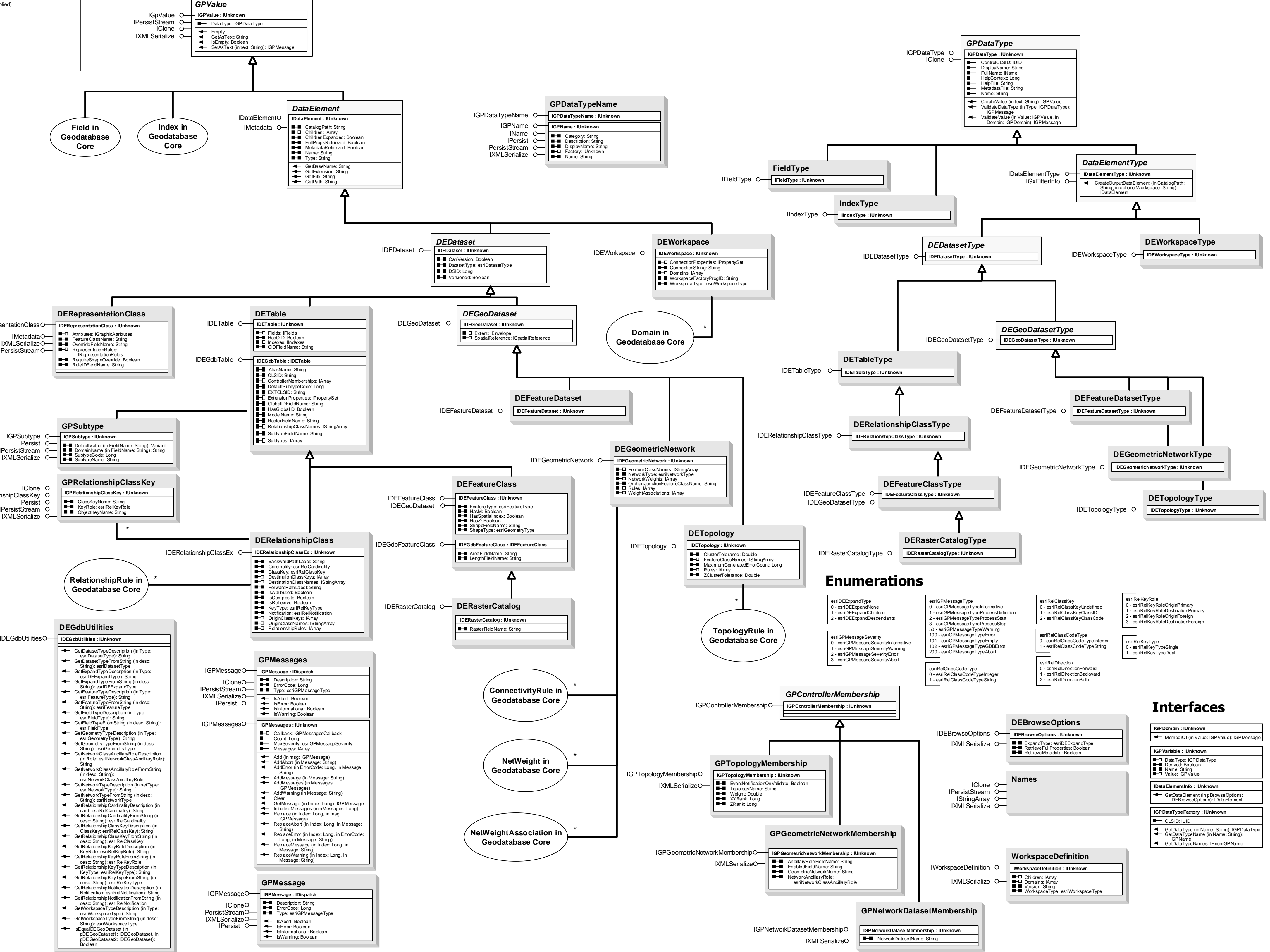
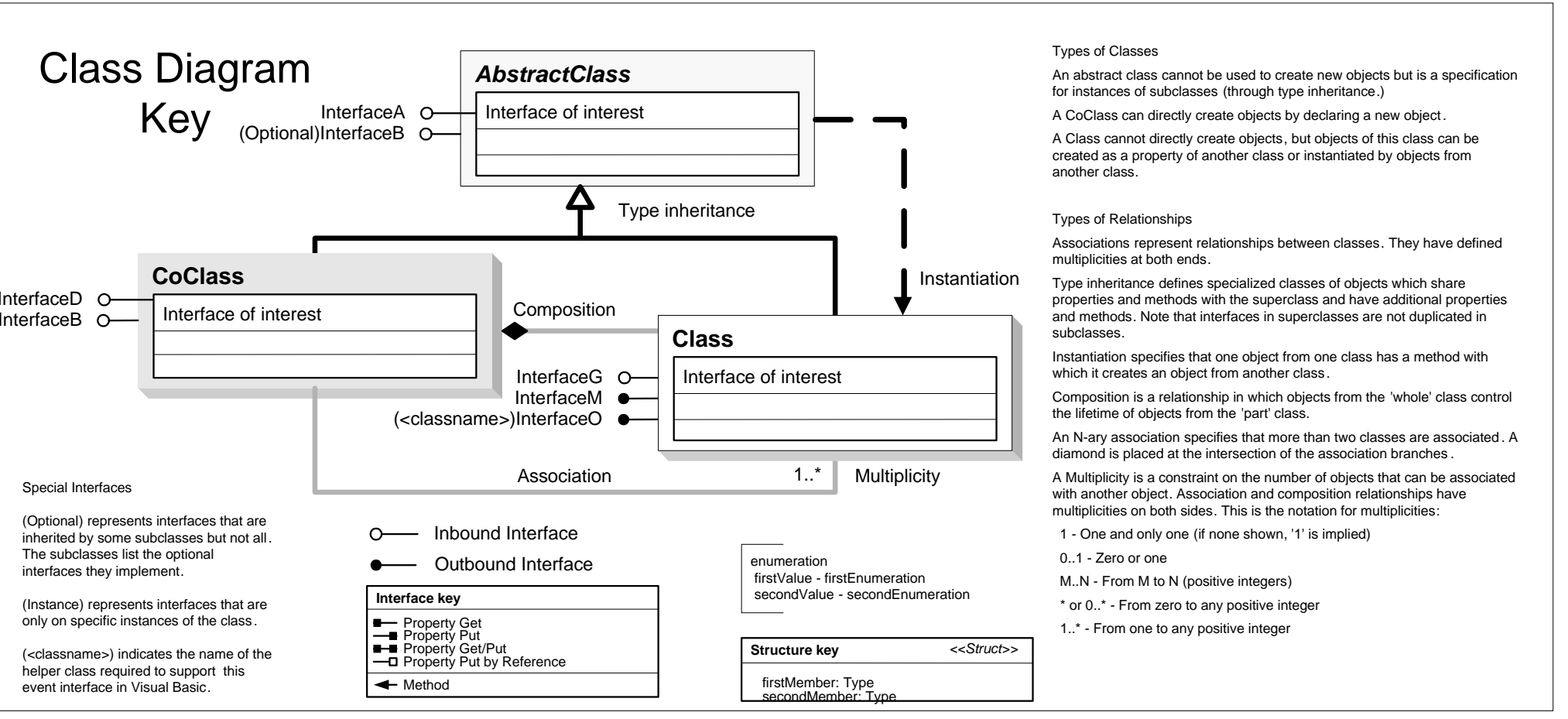
TopoElement



Geodatabase Object Model Data Elements

Esri ArcGIS 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.



Geodatabase Object Model

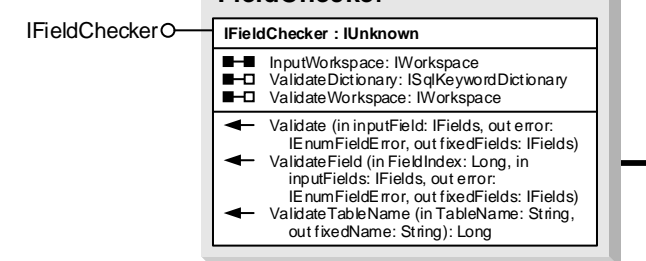
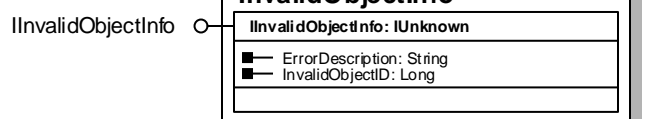
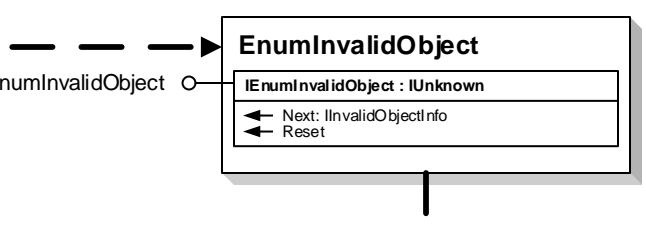
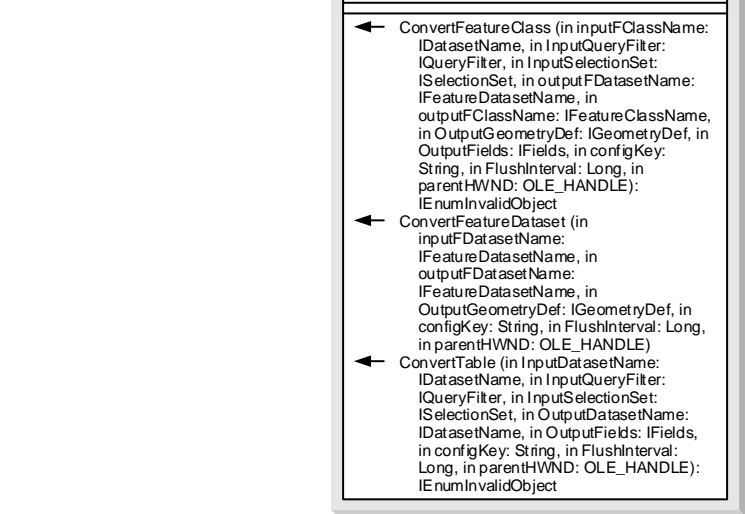
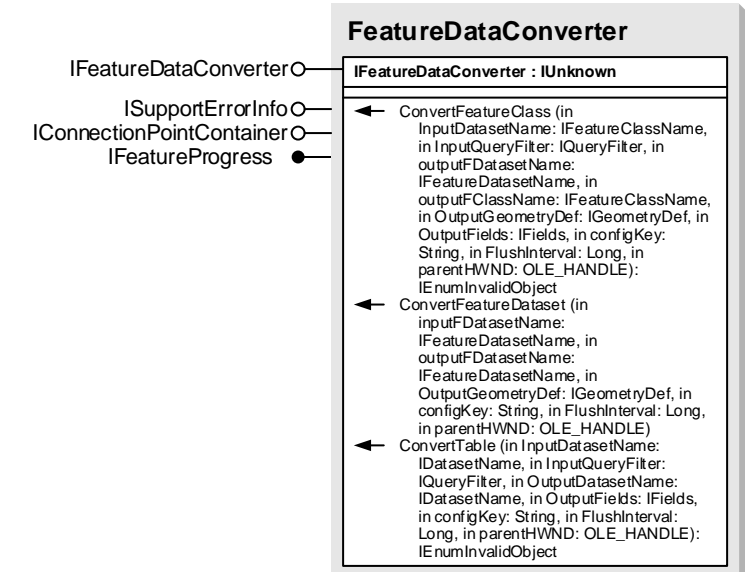
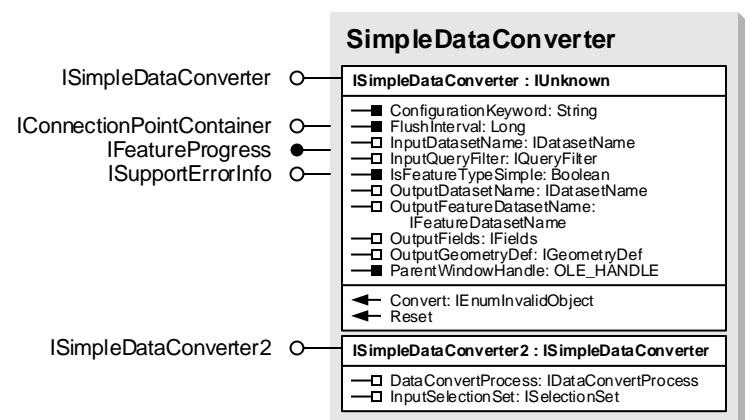
Data Transfer

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

Distributed Geodatabase Core Objects

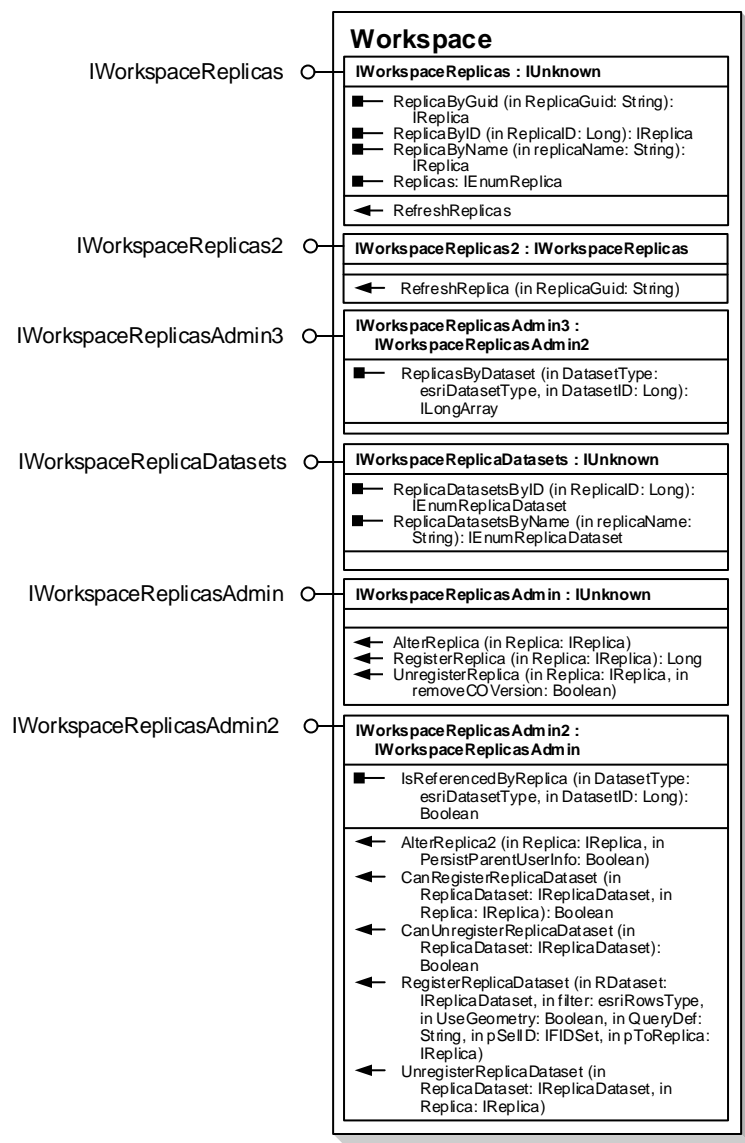
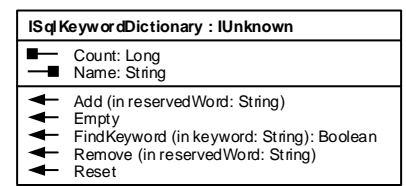
DataConverter Objects



Enumerations

- esriDataConverterError
- 0 - S_DATACONVERTER_OK
- 513 - E_DATACONVERTER_OPENFEATURECLASSFAILED
- 514 - E_DATACONVERTER_OPENTABLEFAILED
- 515 - E_DATACONVERTER_OPENFEATUREDATASETFAILED
- 516 - E_DATACONVERTER_OPENFEATUREWORKSPACEFAILED
- 517 - E_DATACONVERTER_CREATEFEATURECLASSFAILED
- 518 - E_DATACONVERTER_CREATEABLEFAILED
- 519 - E_DATACONVERTER_WRITEFEATURESFAILED
- 520 - E_DATACONVERTER_WRITEROWSFAILED
- 521 - E_DATACONVERTER_UNLOADFAILED
- 522 - E_DATACONVERTER_OPENCURSORFAILED
- 523 - E_DATACONVERTER_OPENINSERTCURSORFAILED
- 524 - E_DATACONVERTER_INSERTCURSORFAILED
- 525 - E_DATACONVERTER_CANCELLED
- 526 - E_DATACONVERTER_MATCHINPUTFIELDSETFAILED
- 527 - E_DATACONVERTER_FLUSHINSERTCURSORFAILED
- 528 - E_DATACONVERTER_ACQUIRESCHEMALOCKFAILED
- 529 - E_DATACONVERTER_INVALID_INPUT_DATASET_NAME
- 530 - E_DATACONVERTER_CANNOT_CREATE_FEATURE_DATASET
- 531 - E_DATACONVERTER_ERROR_READ_ROWS
- 532 - E_DATACONVERTER_ERROR_READ_ALL_ROWS

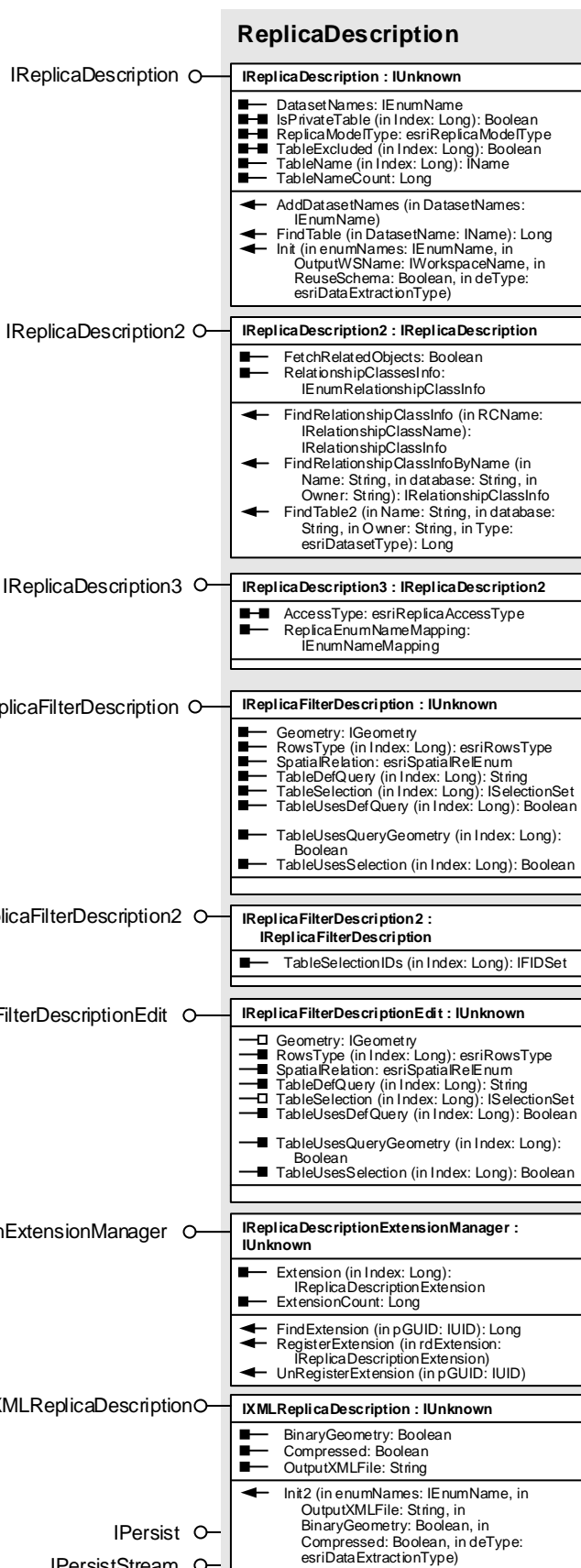
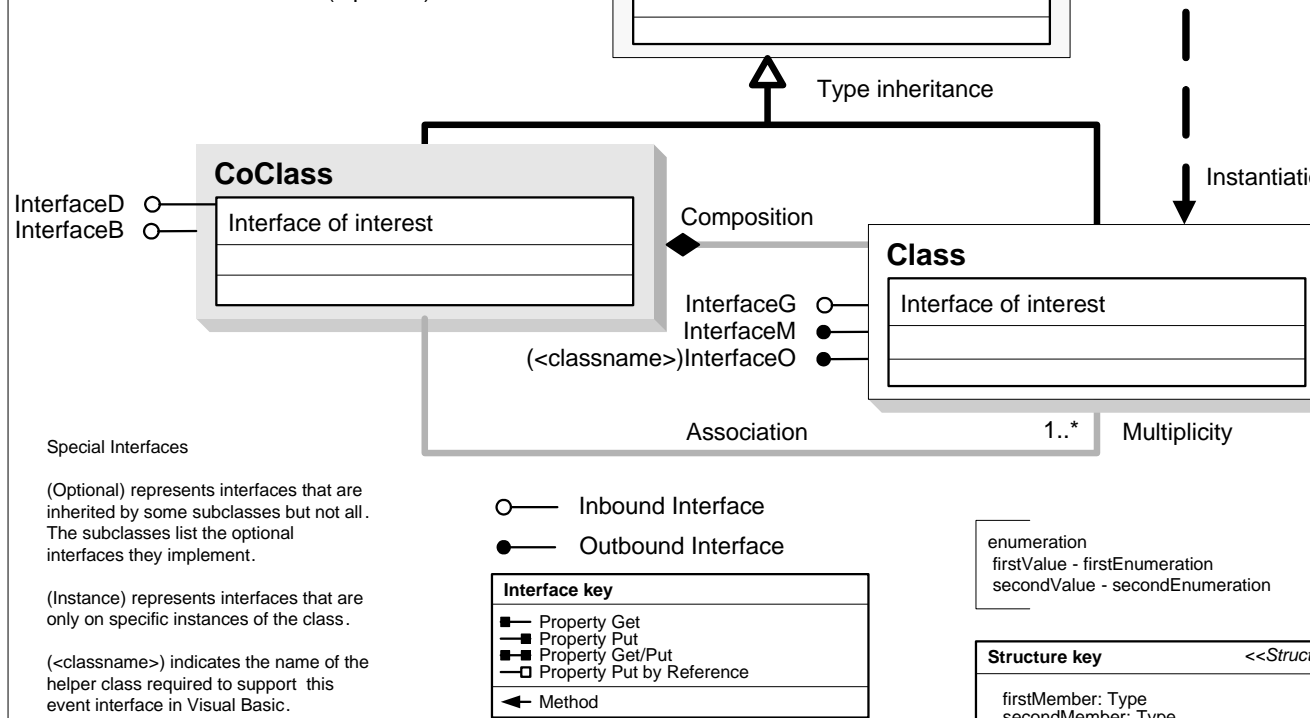
Interfaces



Enumerations

- esriDataExtractionType
- 1 - esriDataExtraction
- 2 - esriDataCheckOut
- 3 - esriDataReplication
- 4 - esriDataXMLExport
- 5 - esriDataXMLCheckOut
- 6 - esriDataXMLXtract
- 7 - esriDataXMLReplication
- 8 - esriRegisterXMLCheckOut
- 9 - esriRegisterCheckOut
- 10 - esriRegisterXMLReplica
- 11 - esriRegisterReplica

Class Diagram



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

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

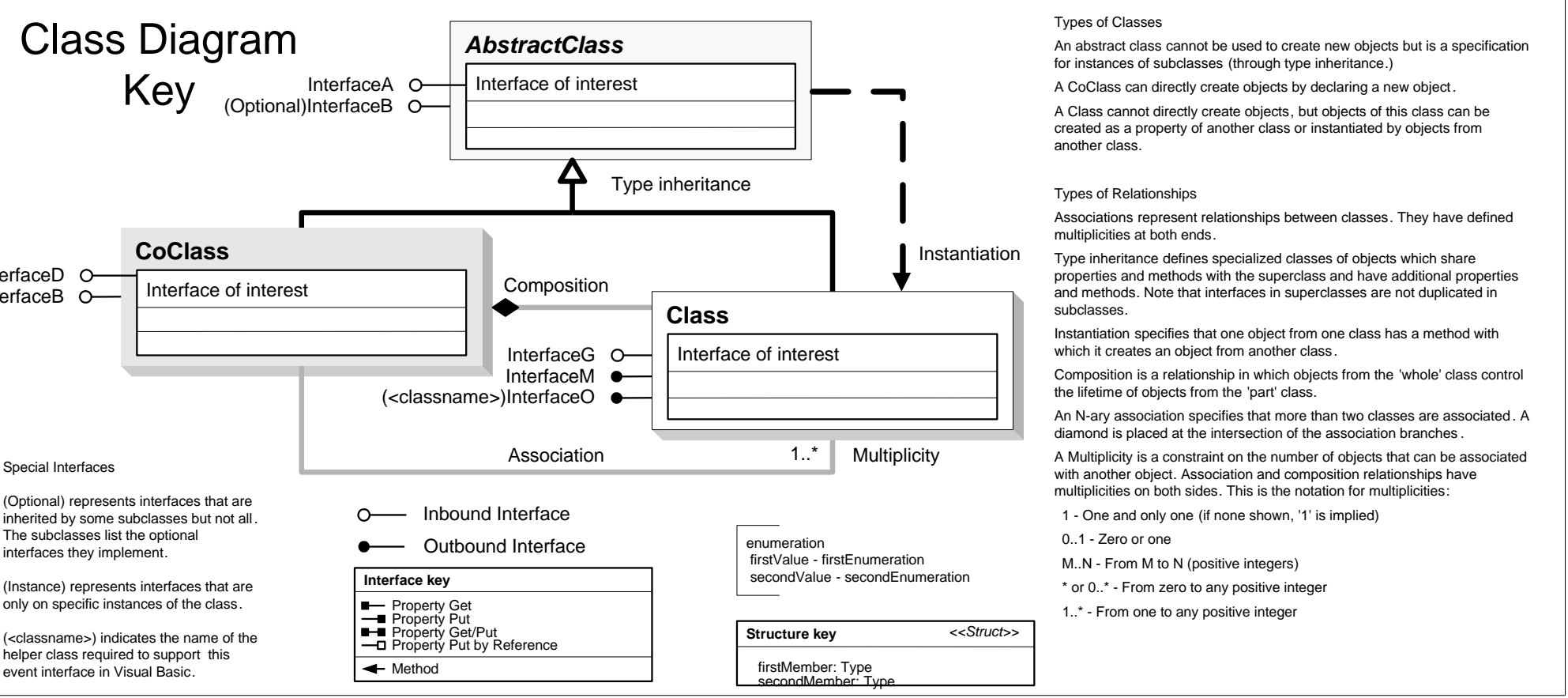
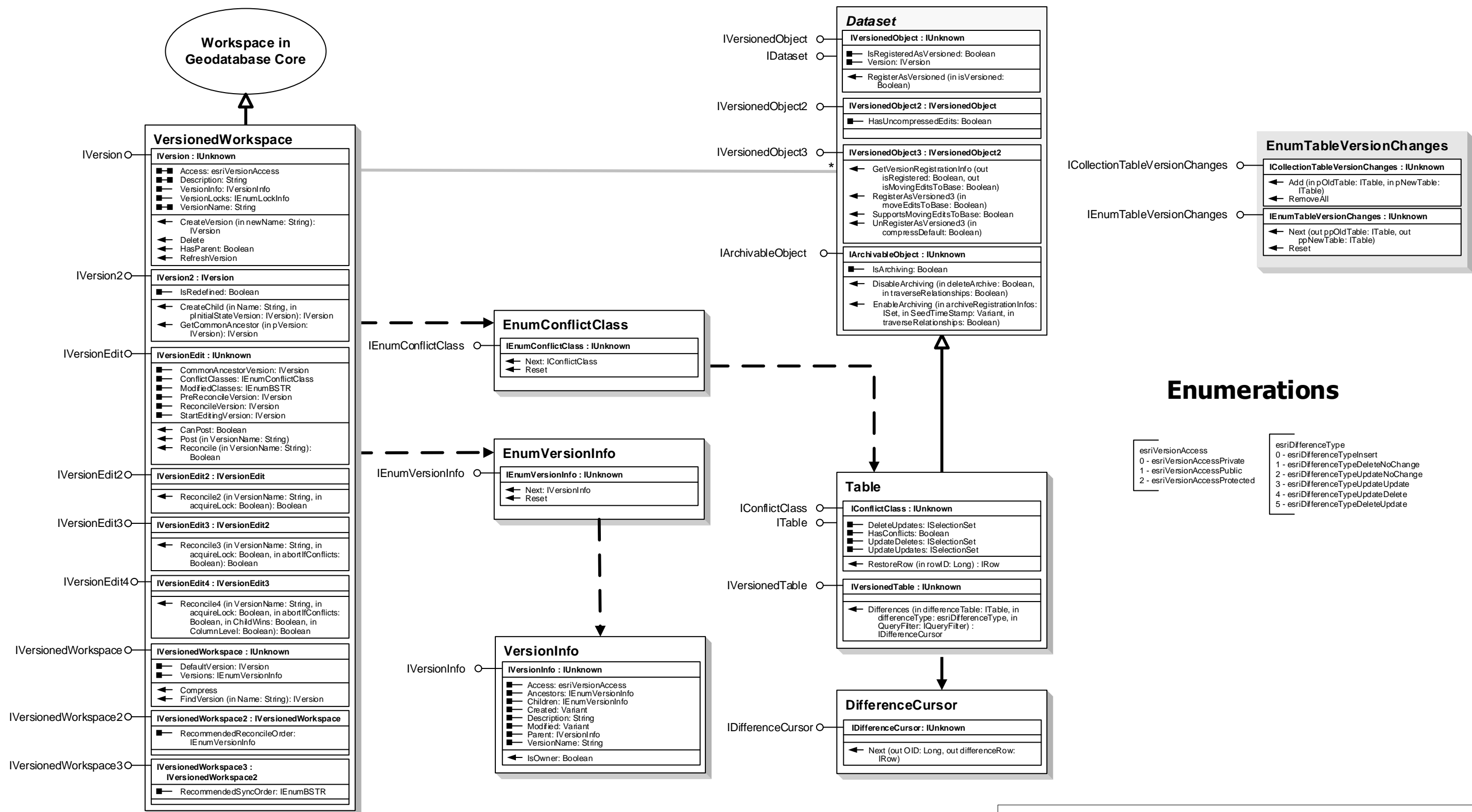
```
<<Struct>>
firstMember: Type
secondMember: Type
```

Geodatabase Object Model

Versioning

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

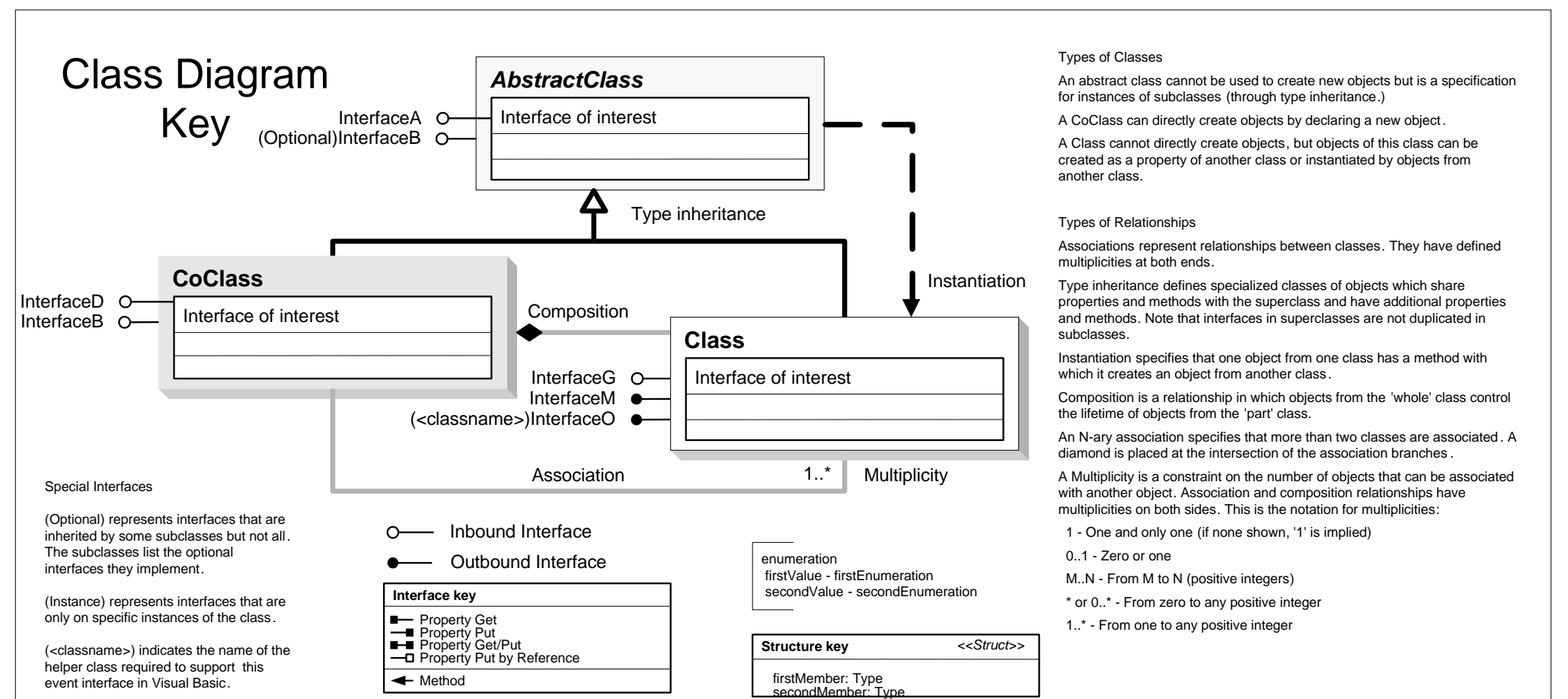
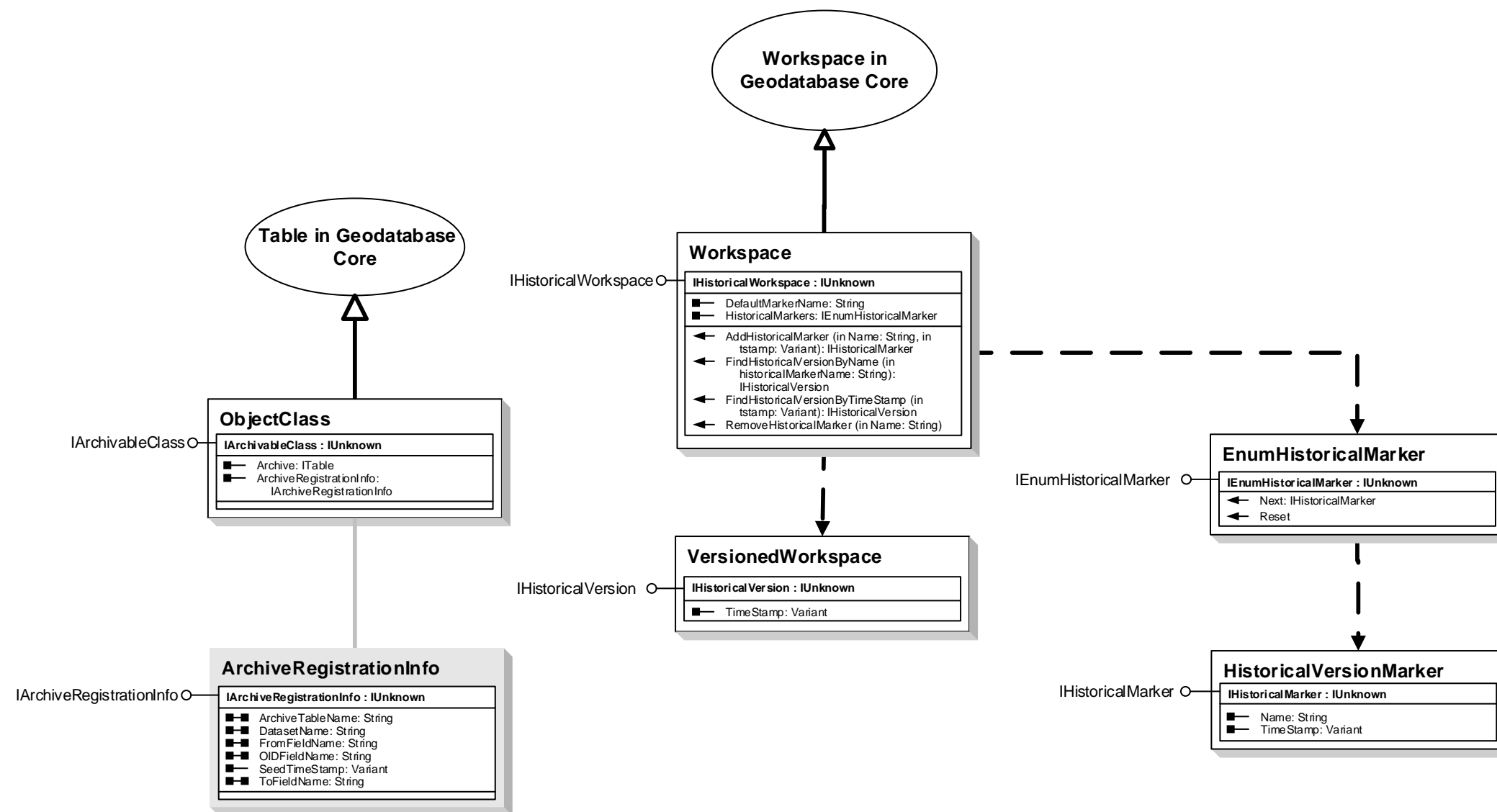


Geodatabase Object Model

Archiving

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

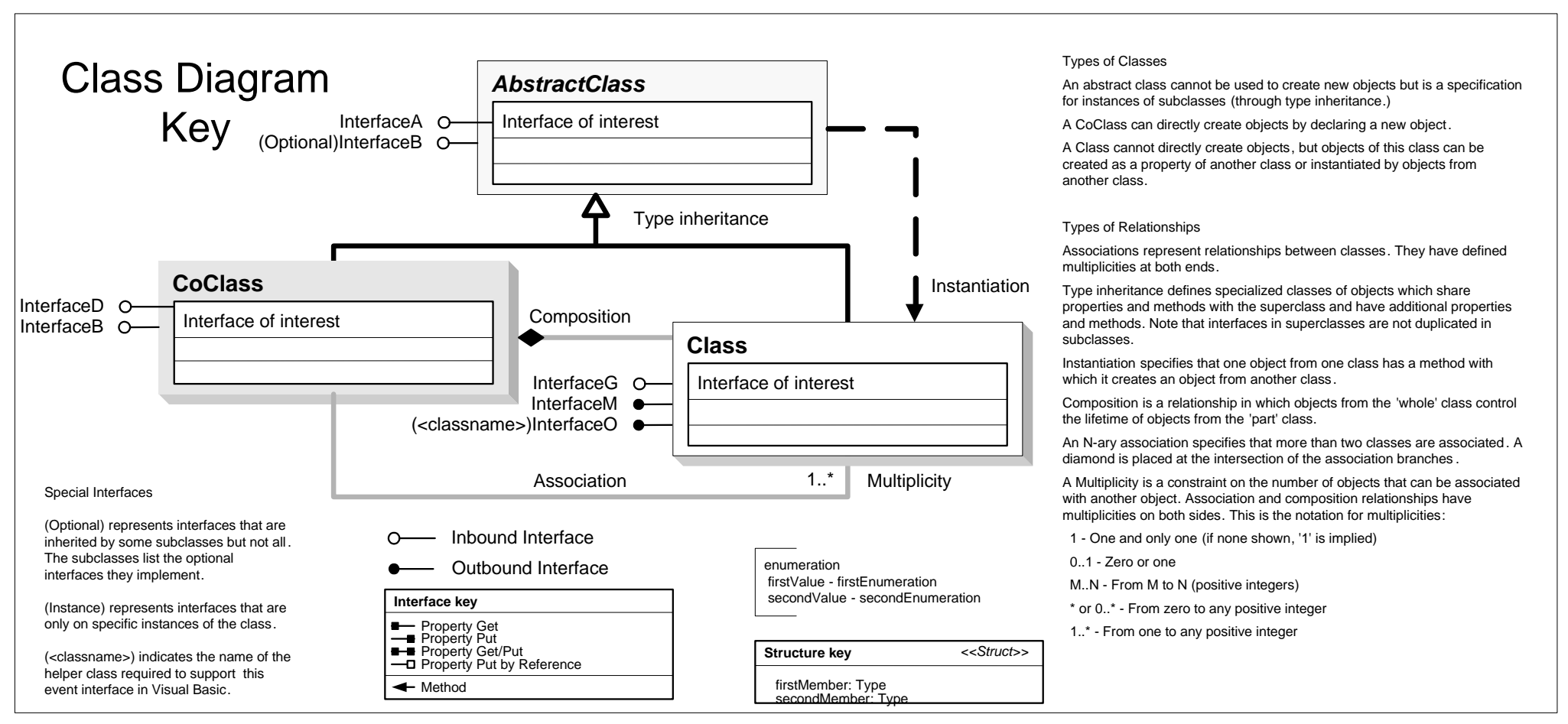
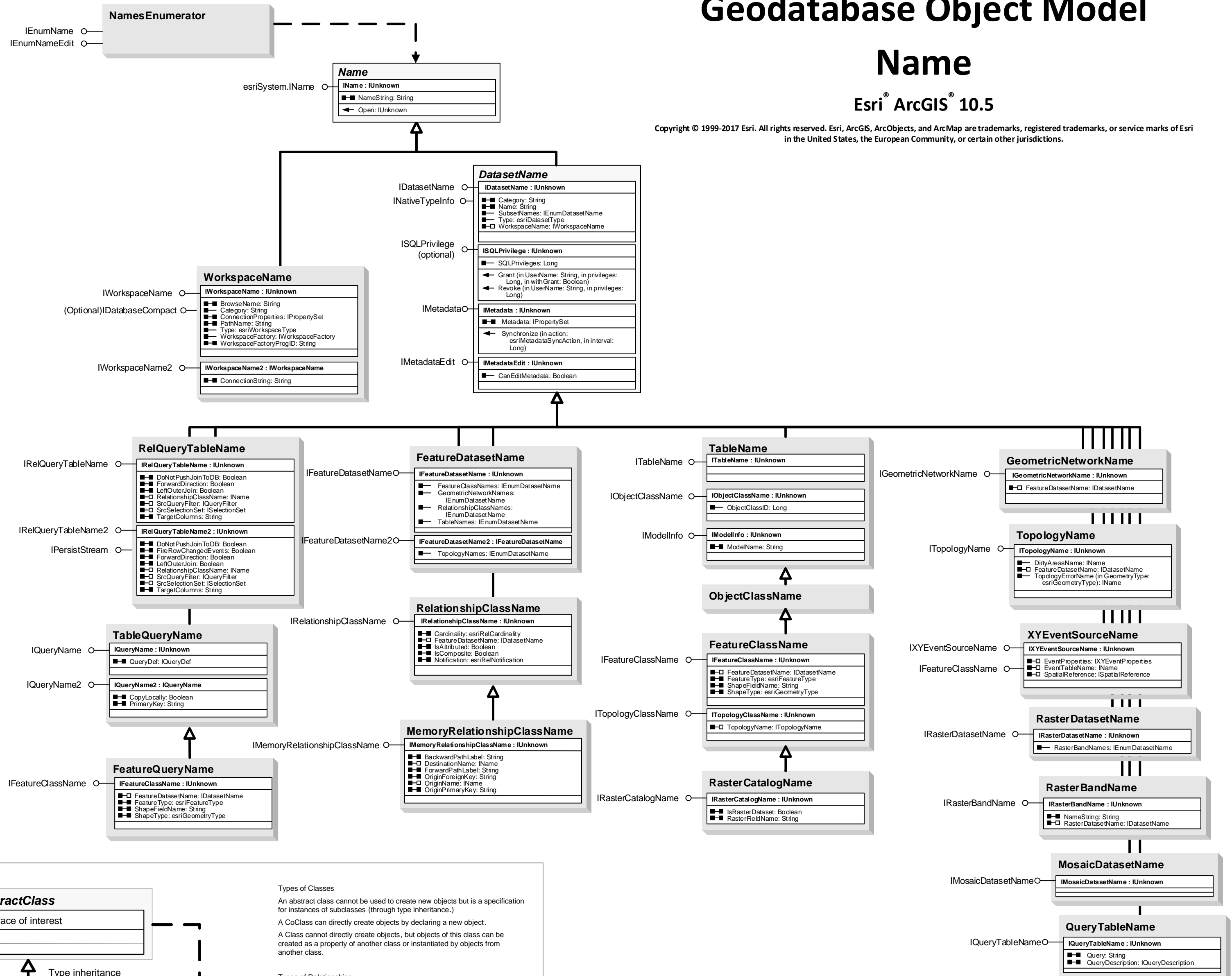


Geodatabase Object Model

Name

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

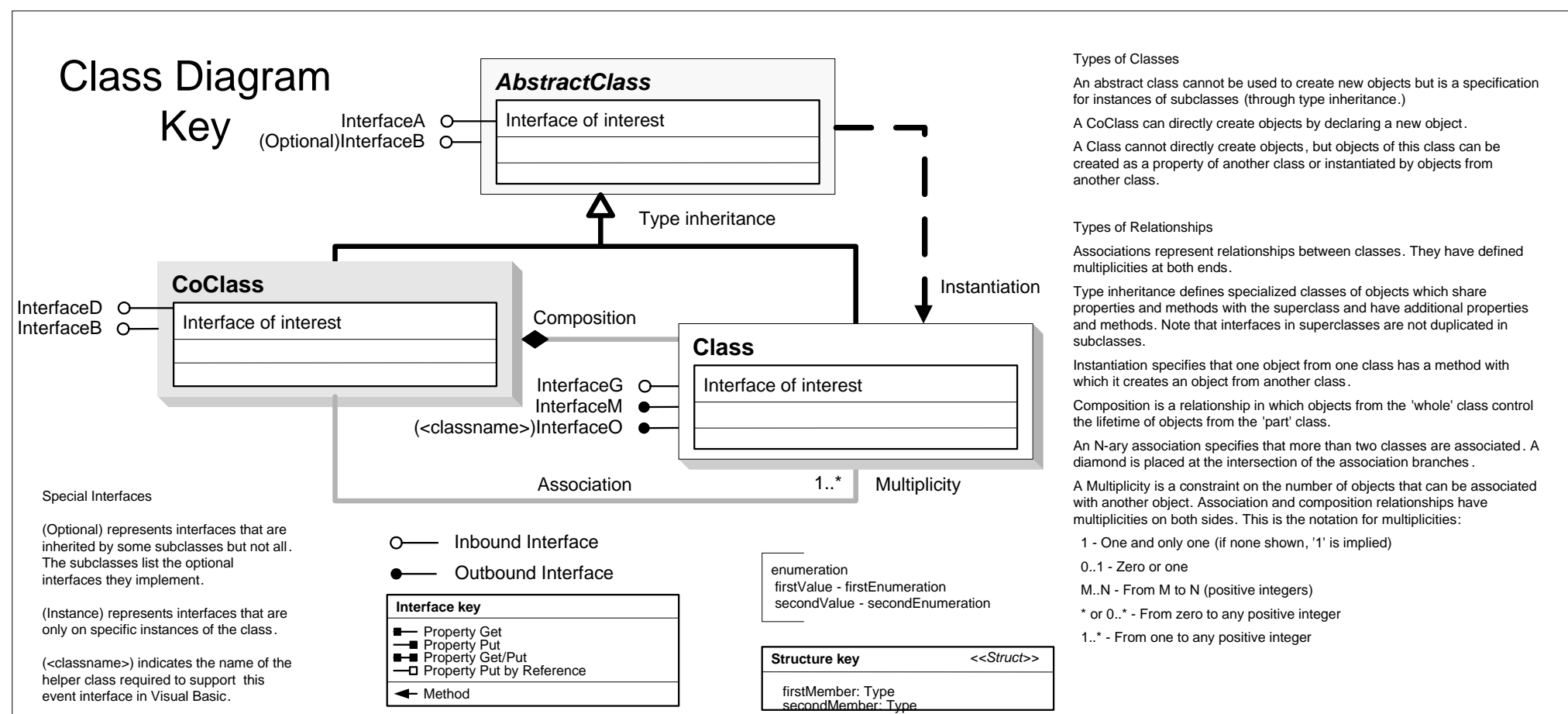
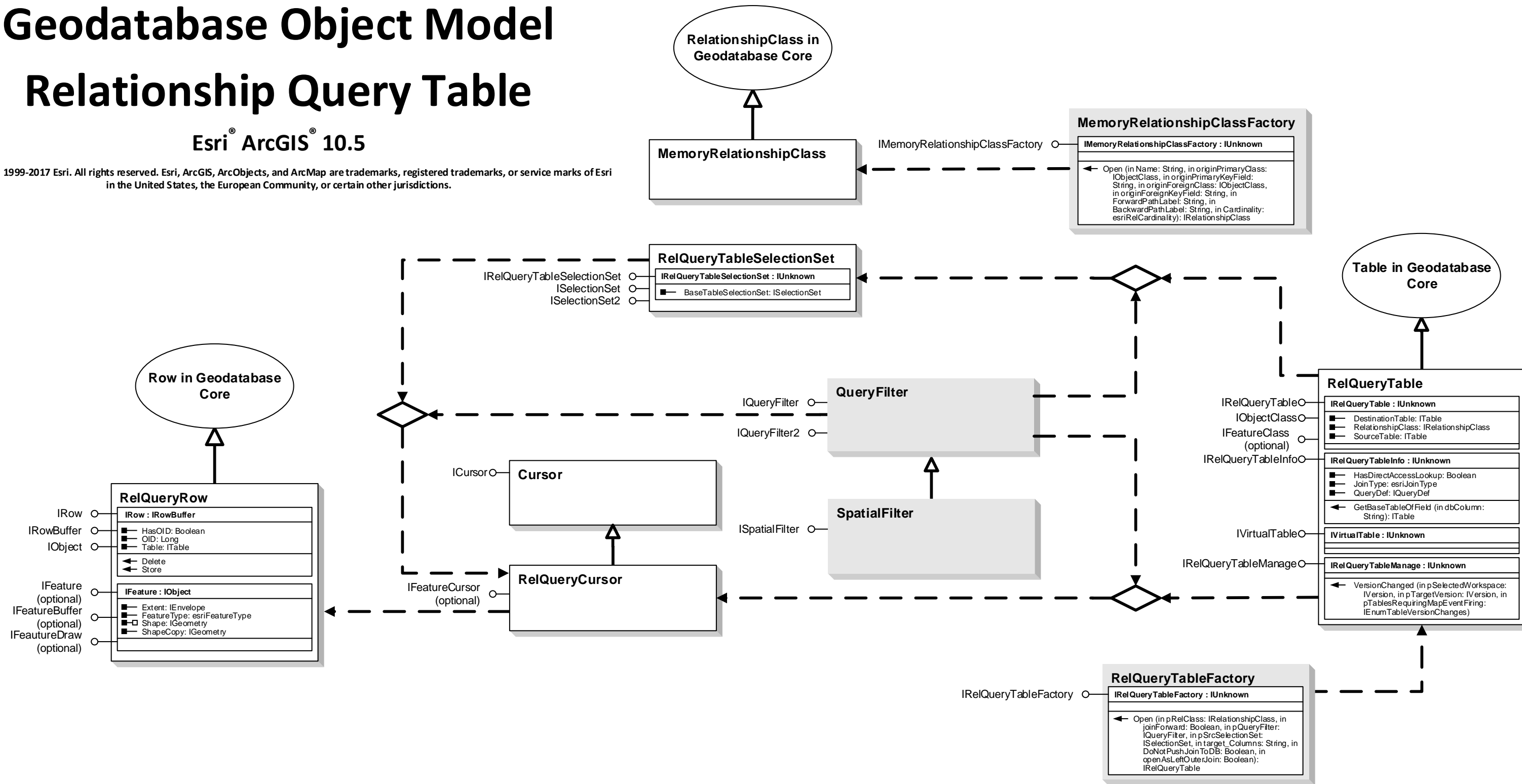


Geodatabase Object Model

Relationship Query Table

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

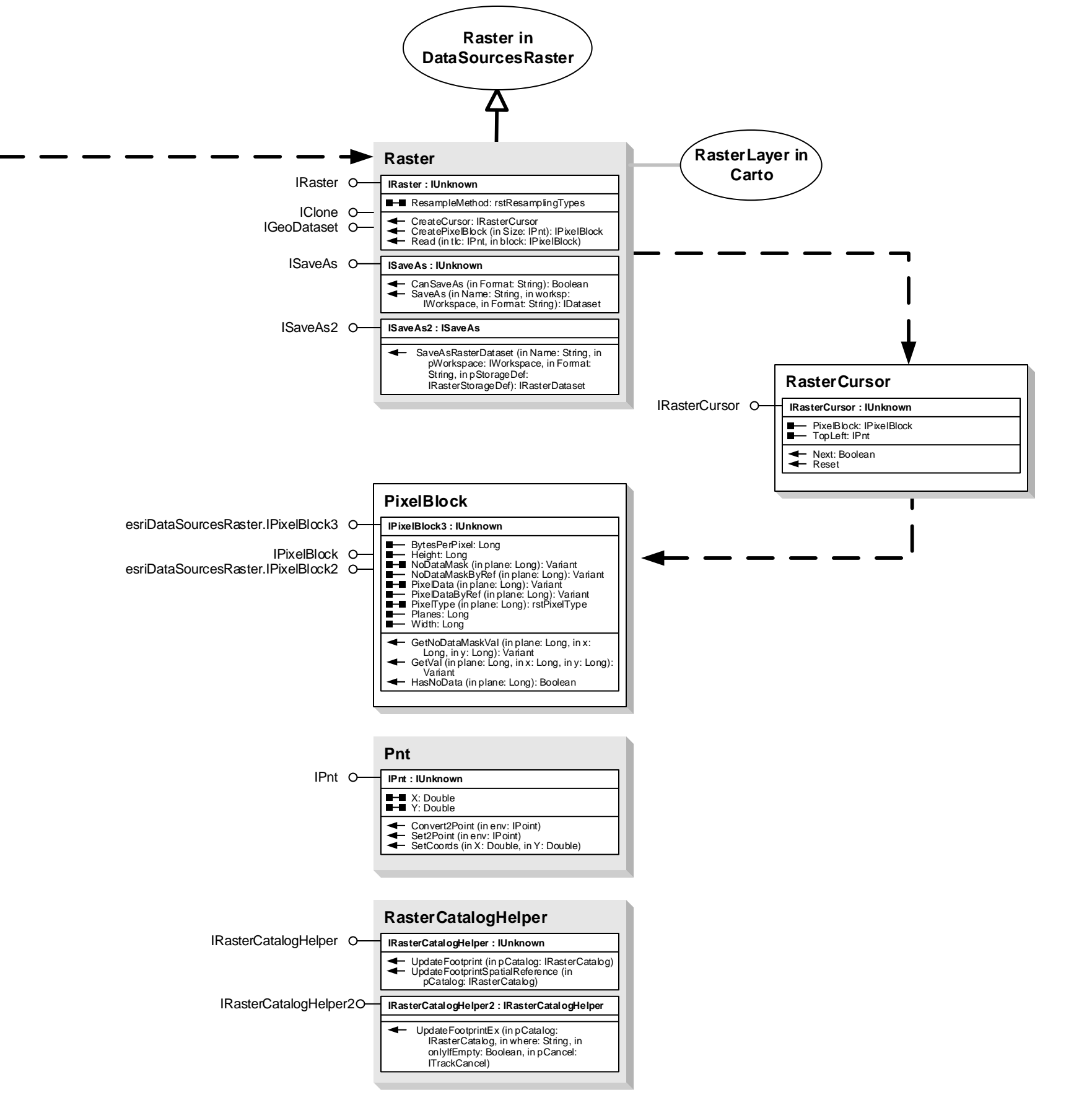
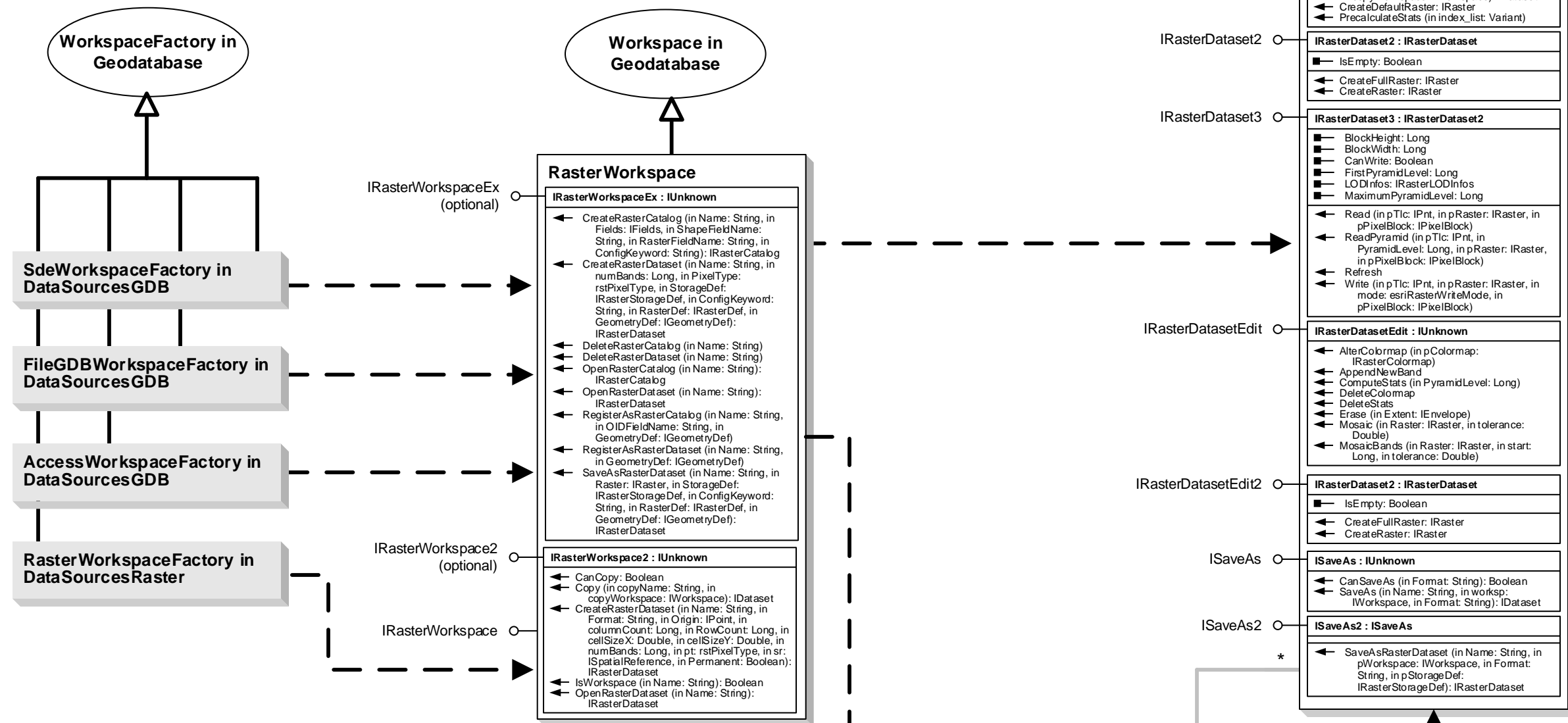


Geodatabase Object Model

Raster

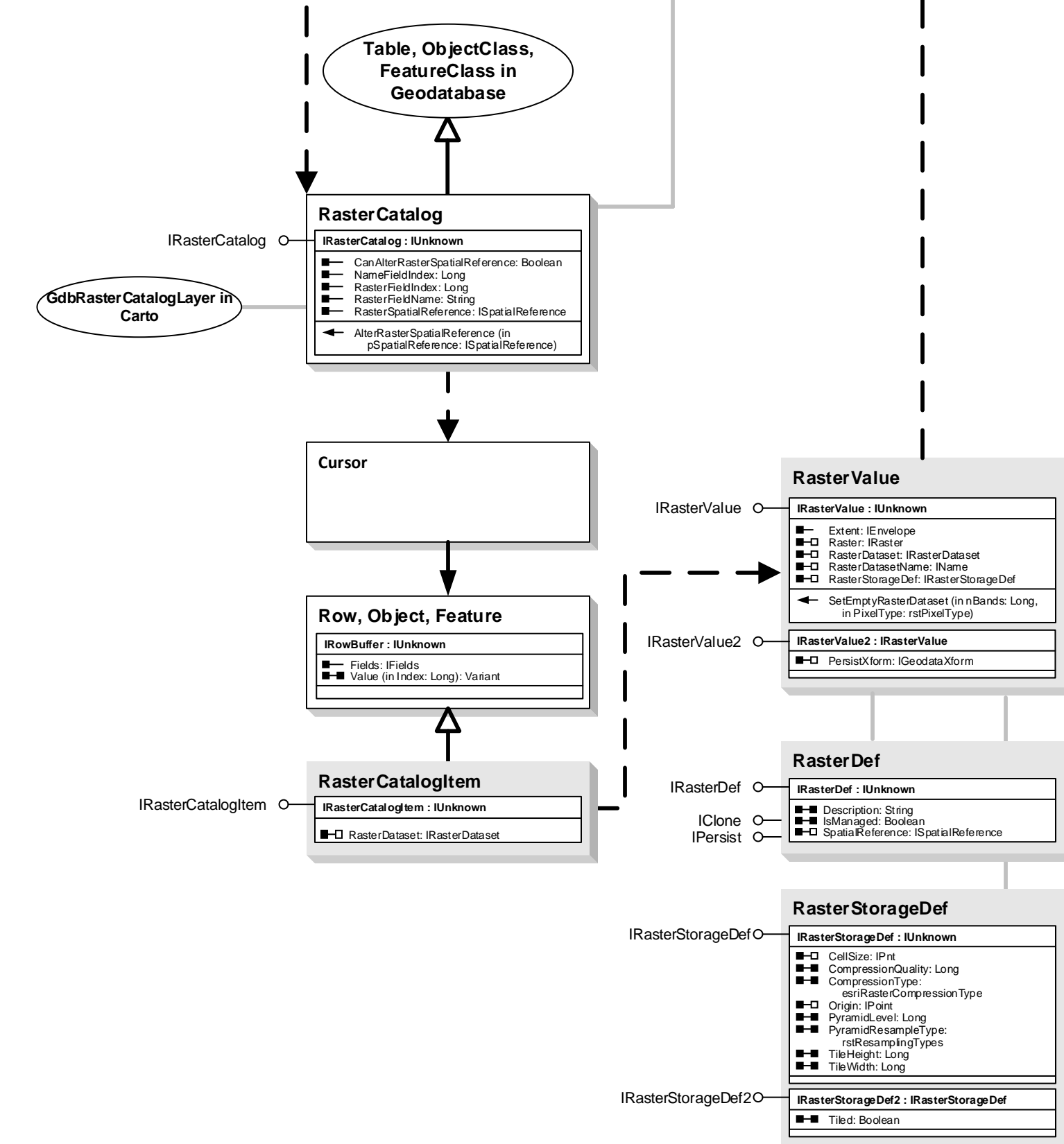
Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

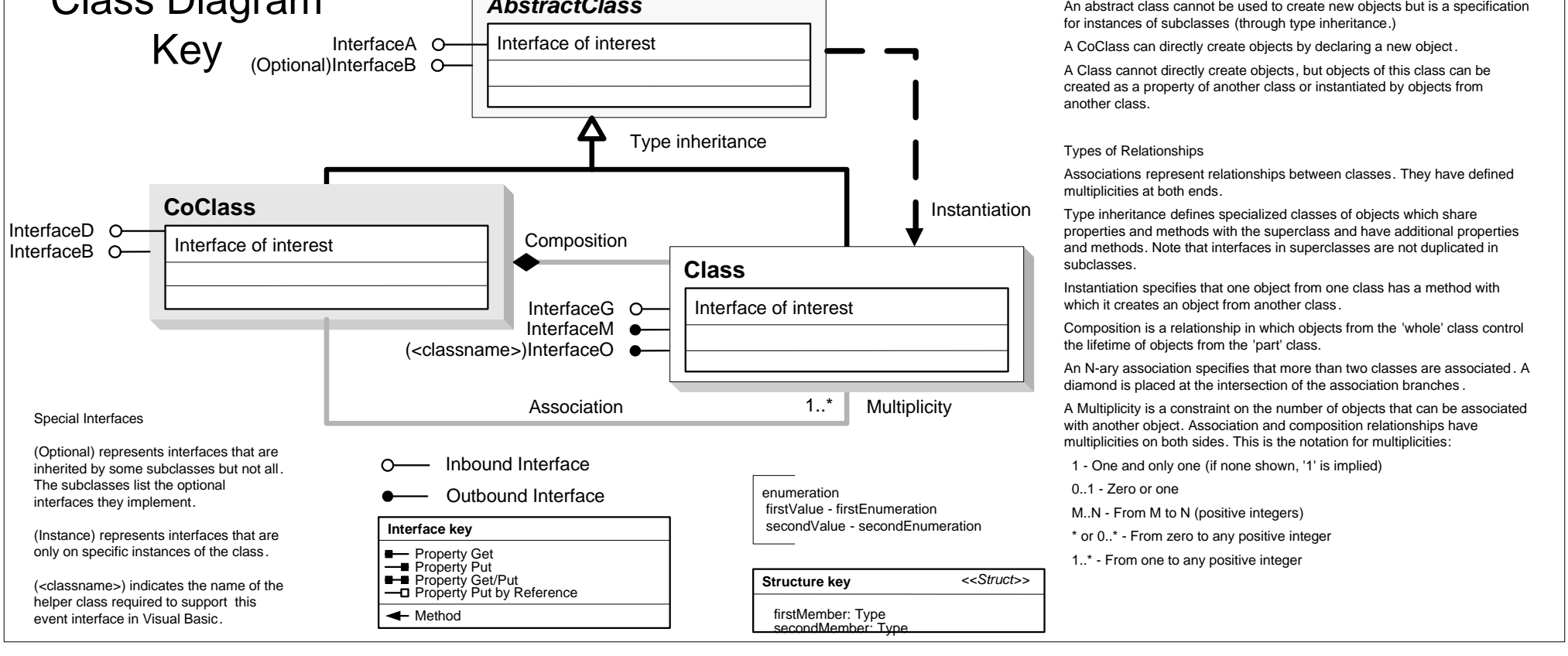


Enumerations

- rsPixelType
 - 1 - PT_UNKNOWN
 - 0 - PT_U1
 - 1 - PT_U2
 - 2 - PT_U4
 - 3 - PT_UCHAR
 - 4 - PT_CHAR
 - 5 - PT_USHORT
 - 6 - PT_SHORT
 - 7 - PT_ULONG
 - 8 - PT_LONG
 - 9 - PT_FLOAT
 - 10 - PT_DOUBLE
 - 11 - PT_COMPLEX
 - 12 - PT_DCOMPLEX
 - 13 - PT_CSHORT
 - 14 - PT_CLONG
- rsResamplingTypes
 - 0 - RSP_NearestNeighbor
 - 1 - RSP_BilinearInterpolation
 - 2 - RSP_CubicConvolution
 - 3 - RSP_Mapopy
- esriRasterSdeCompressionTypeEnum
 - 0 - esriRasterSdeCompressionTypeUncompressed
 - 1 - esriRasterSdeCompressionTypeRunLength
 - 2 - esriRasterSdeCompressionTypeJPEG
 - 3 - esriRasterSdeCompressionTypeJPEG2000
- esriRasterCompressionType
 - 1 - esriRasterCompressionUnknown
 - 0 - esriRasterCompressionUncompressed
 - 1 - esriRasterCompressionLZ77
 - 2 - esriRasterCompressionJPEG
 - 4 - esriRasterCompressionJPEG2000
 - 5 - esriRasterCompressionPackR14
 - 6 - esriRasterCompressionLZW
 - 7 - esriRasterCompressionRLE
 - 8 - esriRasterCompressionCITT03
 - 9 - esriRasterCompressionCITT04
 - 10 - esriRasterCompressionCITT14



Class Diagram



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 constrains 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

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.

Enumeration
 firstValue - firstEnumeration
 secondValue - secondEnumeration

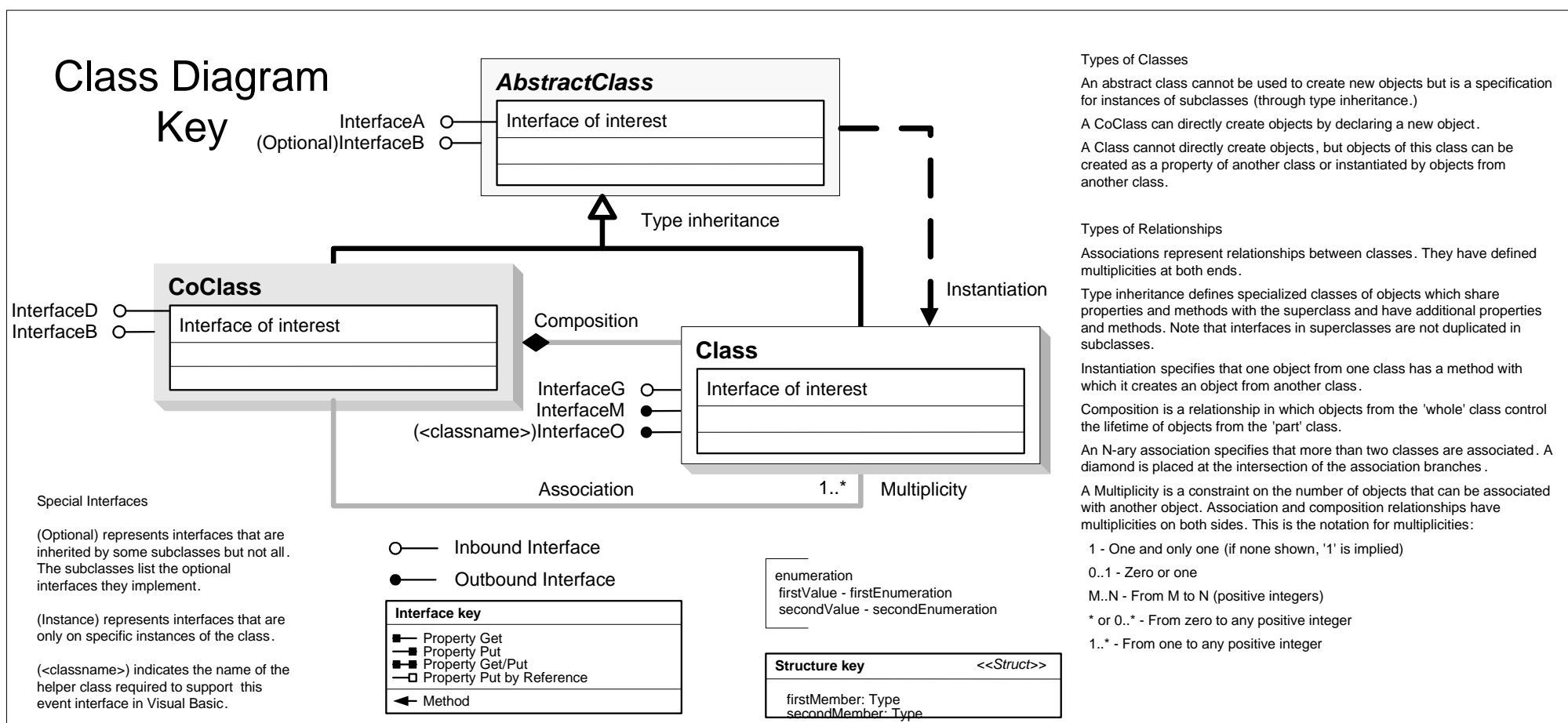
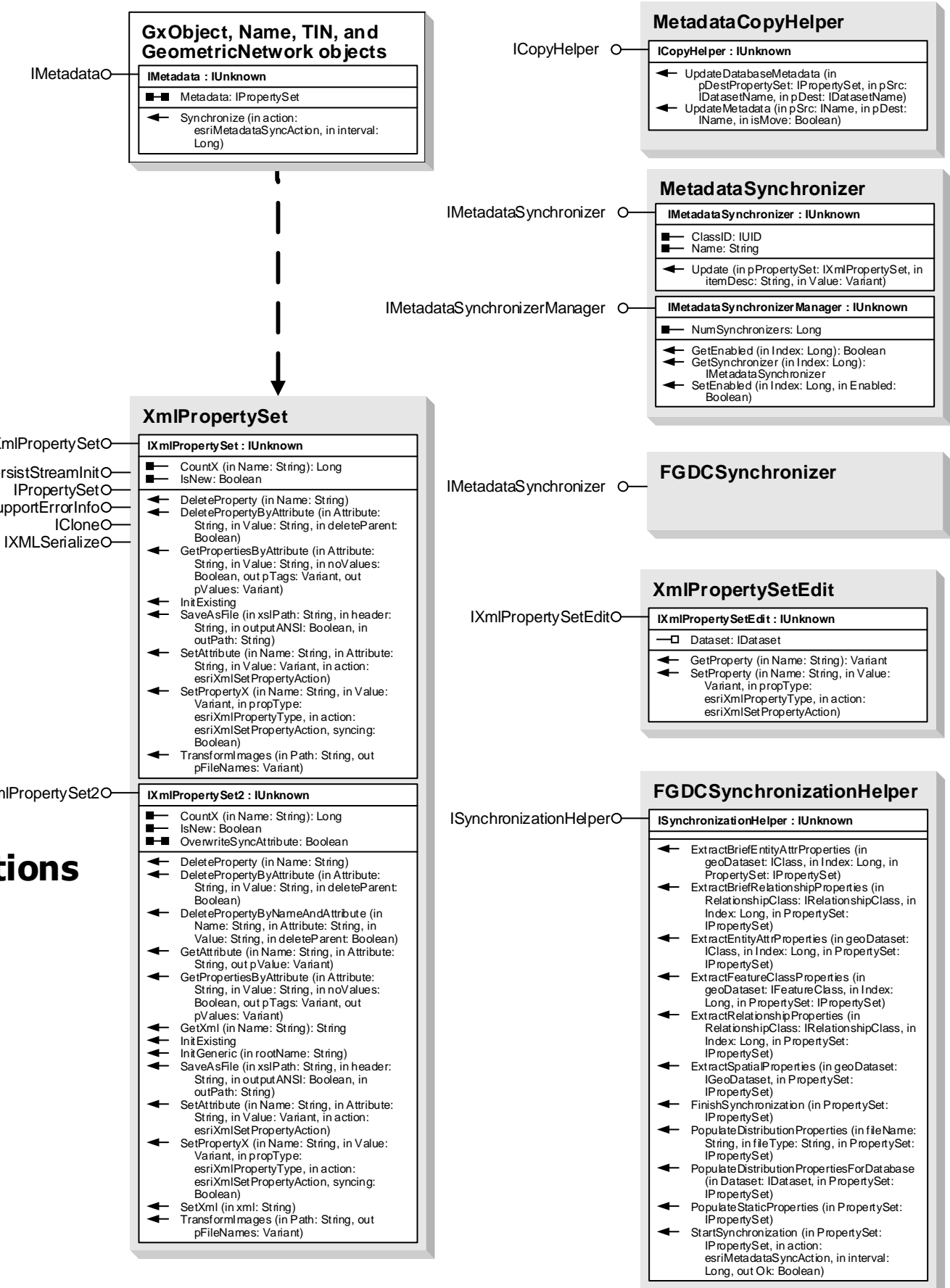
Structure key
 <<Struct>>
 firstMember: Type
 secondMember: Type

Geodatabase Object Model

Metadata

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

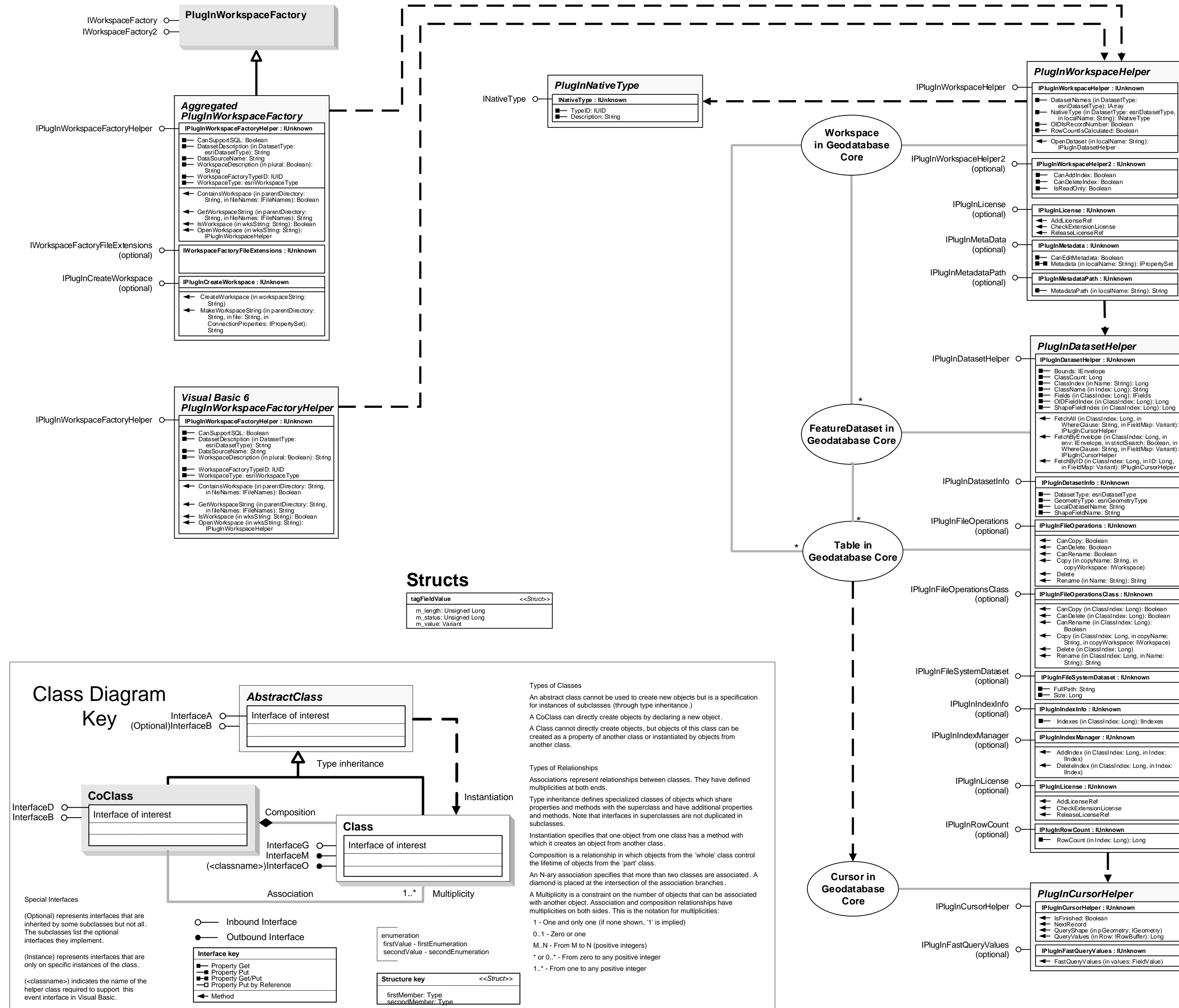


Geodatabase Object Model

Plug-in Data Source

Esri® ArcGIS® 10.5

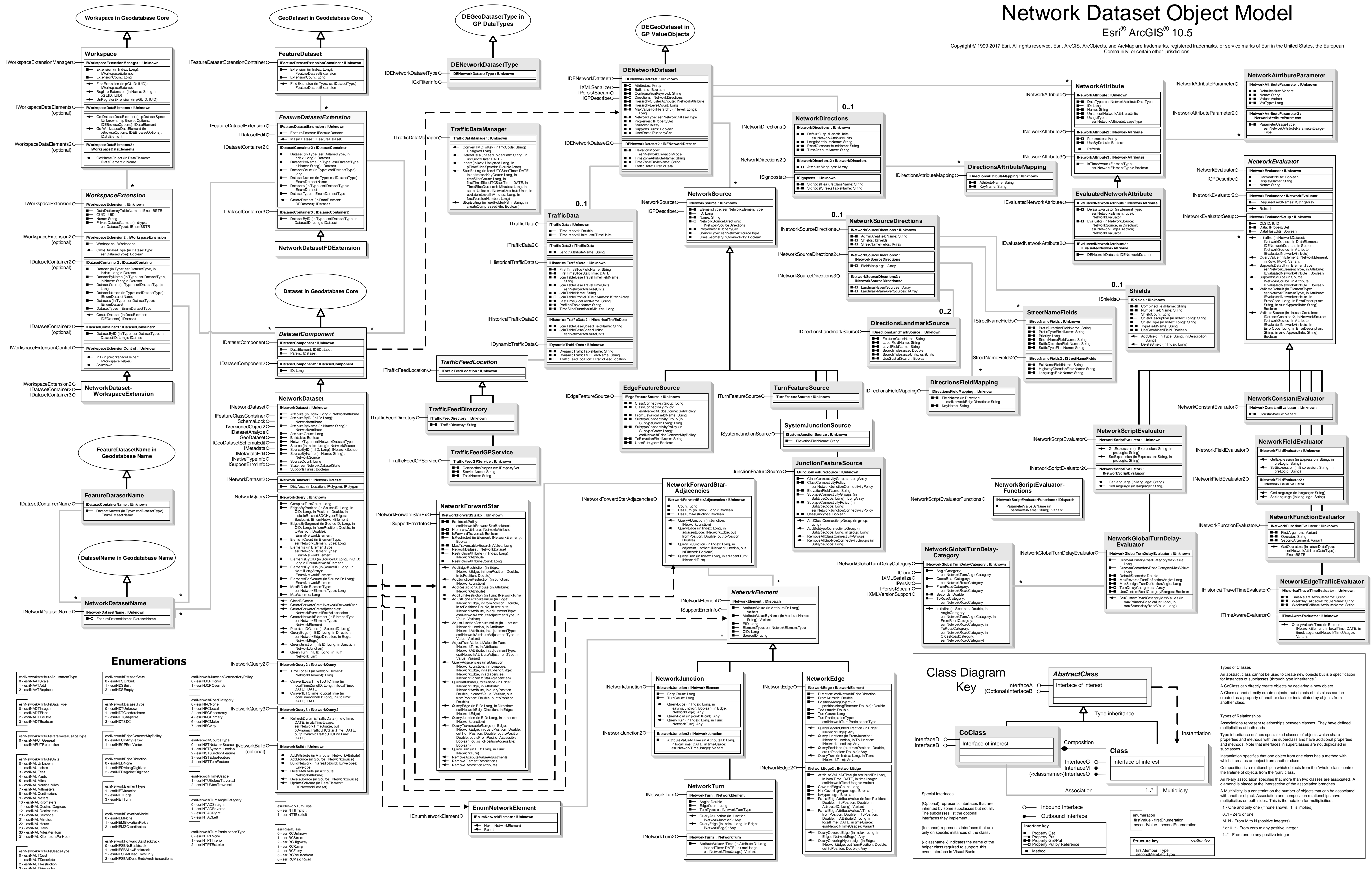
Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.



Network Dataset Object Model

Esri® ArcGIS® 10.5

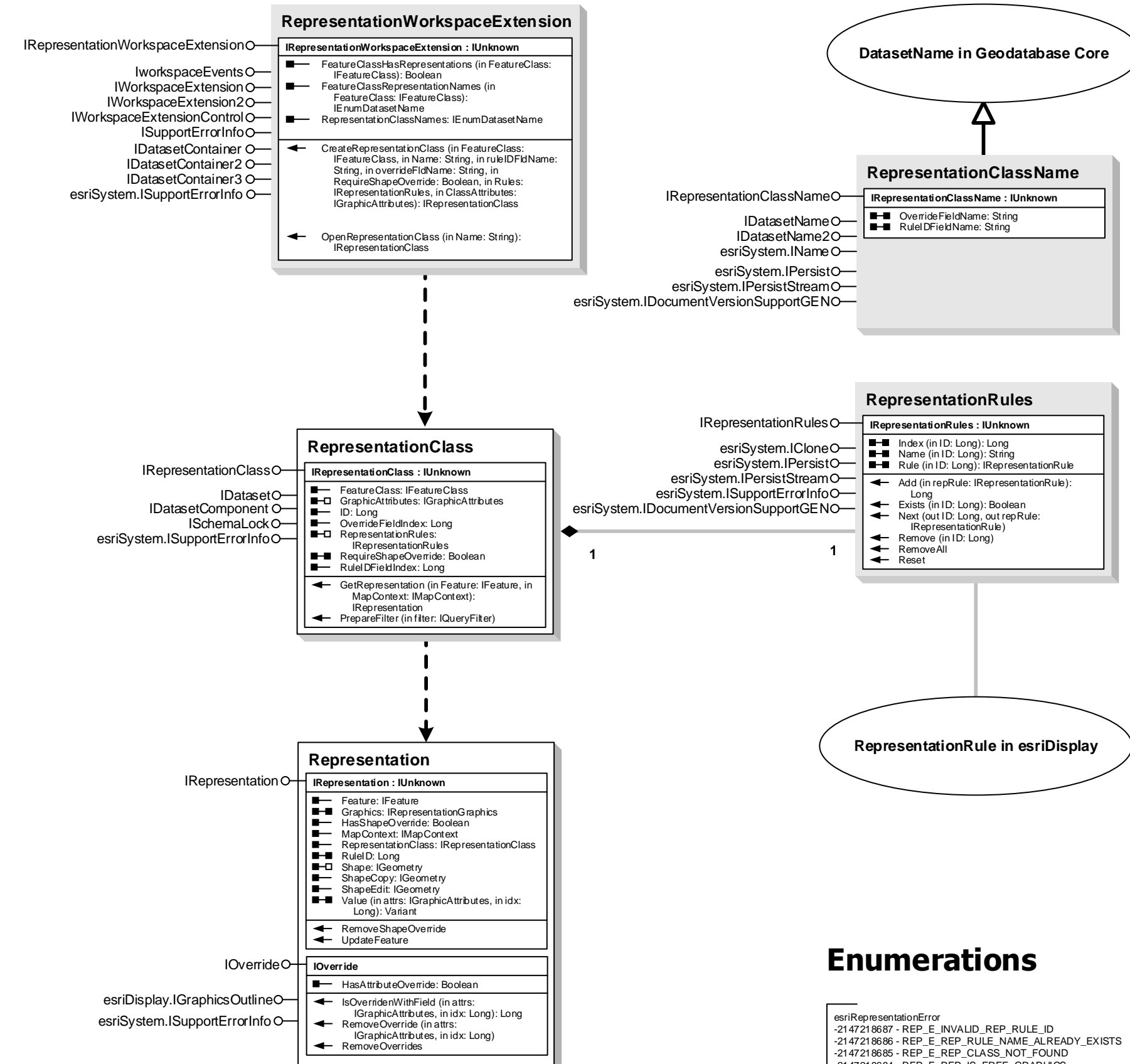
Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.



Geodatabase Object Model Representation Class

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

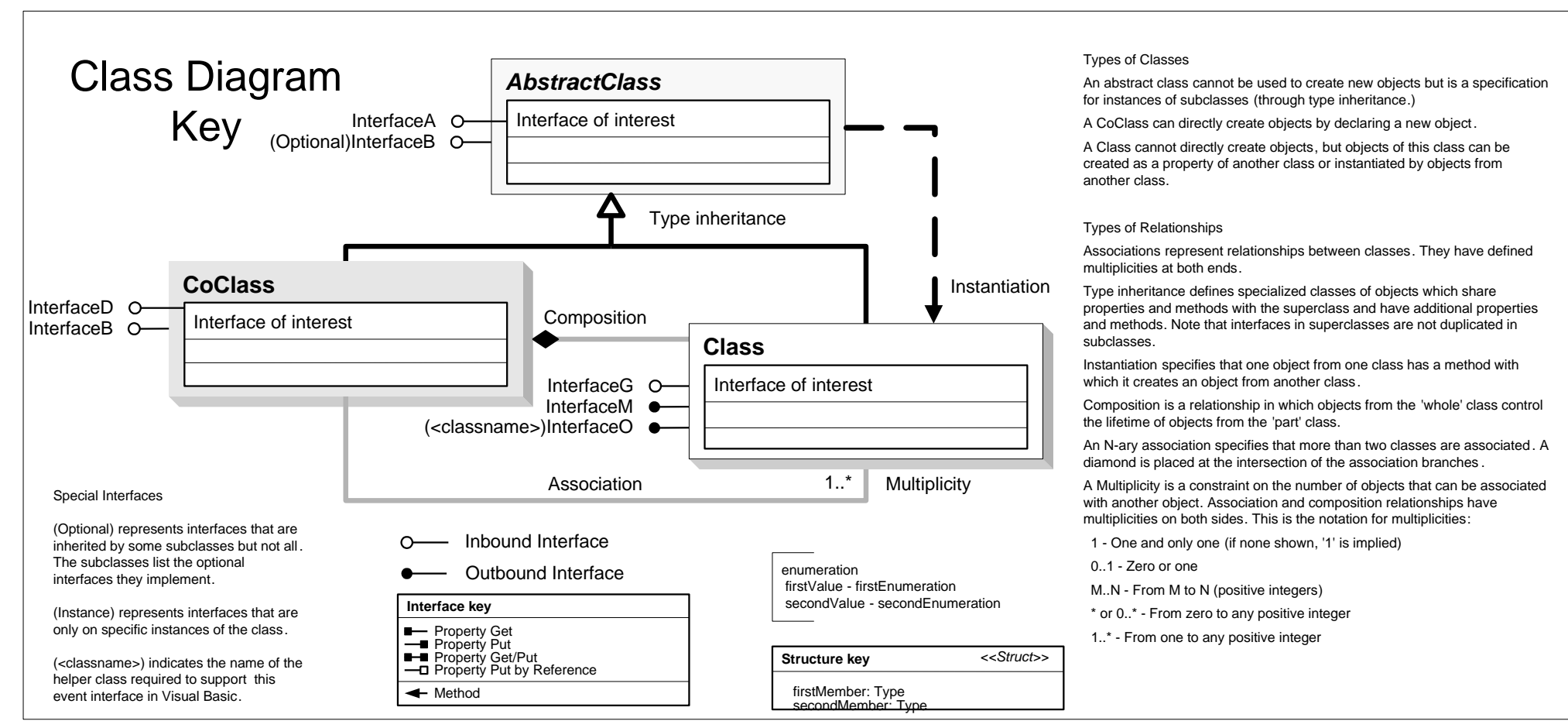


DatasetName in Geodatabase Core

RepresentationRule in esriDisplay

Enumerations

- esriRepresentationError
- 2147218687 - REP_E_INVALID_REP_RULE_ID
- 2147218686 - REP_E_REP_RULE_NAME_ALREADY_EXISTS
- 2147218685 - REP_E_REP_CLASS_NOT_FOUND
- 2147218684 - REP_E_REP_IS_FREE_GRAPHICS
- 2147218683 - REP_E_REP_USES_REP_RULE
- 2147218682 - REP_E_CANT_ACQUIRE_SCHEMA_LOCK
- 2147218681 - REP_E_OBJECT_IS_DELETED
- 2147218680 - REP_E_NO_REP_RULES
- 2147218679 - REP_E_WORKSPACE_DOESNT_SUPPORT_REP_EXTENSION
- 2147218678 - REP_E_FEATURE_TYPE_NOT_SUPPORTED
- 2147218677 - REP_E_GEODATABASE_DOESNT_SUPPORT_REPRESENTATIONS
- 2147218676 - REP_E_NO_REP_SYSTEM_TABLES
- 2147218675 - REP_E_REP_CLASS_NAME_ALREADY_EXISTS
- 2147218674 - REP_E_FIELD_NAME_ALREADY_EXISTS
- 2147218673 - REP_E_NAME_HAS_INVALID_CHARACTERS
- 2147218672 - REP_E_MUST_BE_THE_OWNER
- 2147218671 - REP_E_INVALID_LICENSE
- 2147218670 - REP_E_COMPRESSED_FEATURE_CLASS



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

Geodatabase Object Model

Query Classes

Esri® ArcGIS® 10.5

Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

