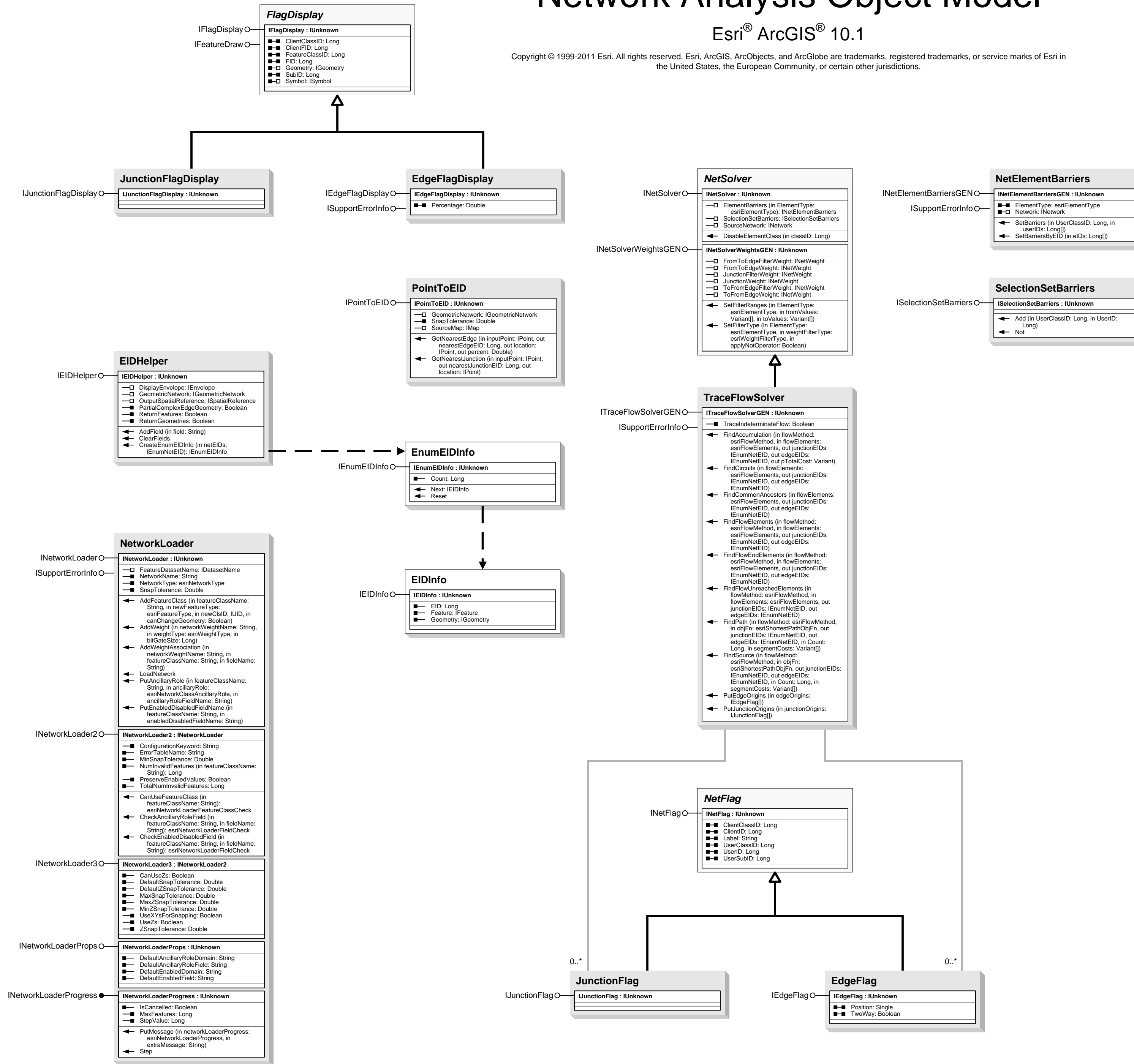


# Network Analysis Object Model

Esri® ArcGIS® 10.1

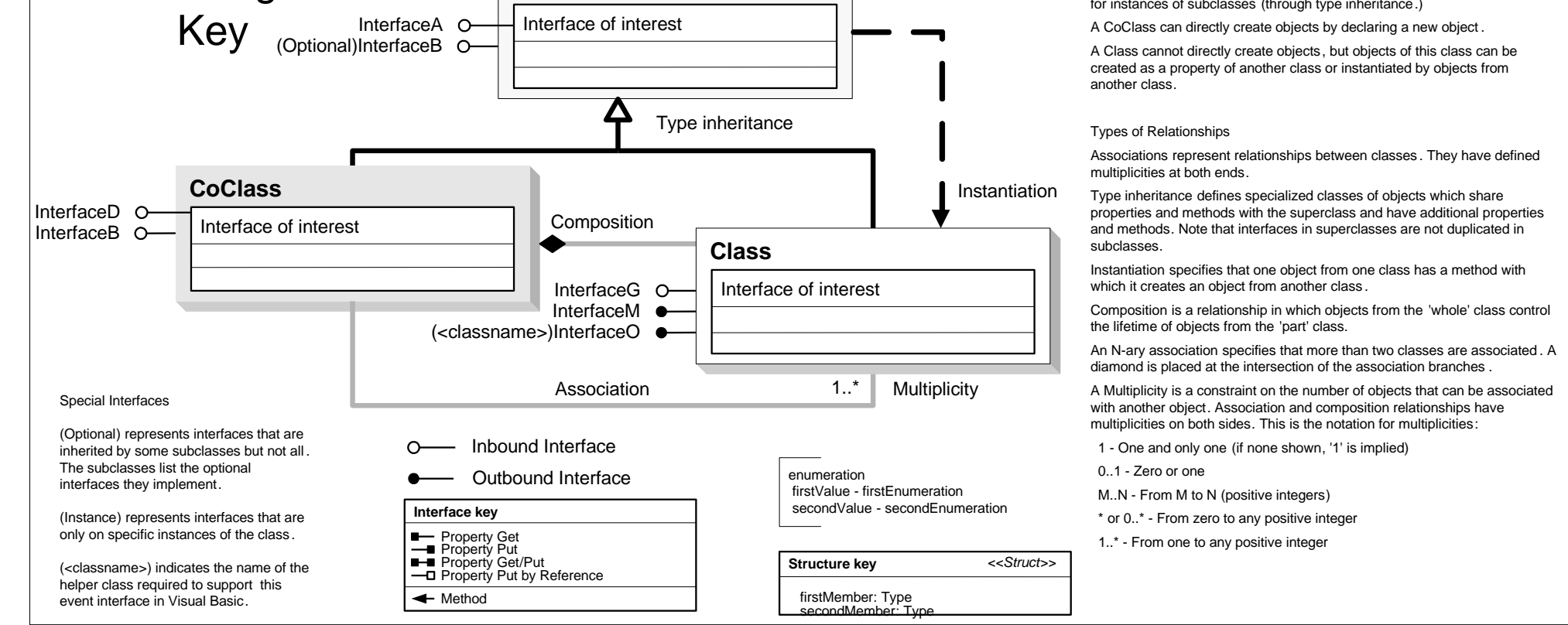
Copyright © 1999-2011 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, and ArcGlobe are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.



## Enumerations

- esriFlowElements**
  - 0 - esriFEJunctions
  - 1 - esriFEEdges
  - 2 - esriFEJunctionsAndEdges
  - 3 - esriFENone
- esriFlowMethod**
  - 0 - esriFMUpstream
  - 1 - esriFMDownstream
  - 2 - esriFMConnected
- esriNetworkLoaderFeatureClassCheck**
  - 0 - esriNLFValid
  - 1 - esriNLFCCannotOpen
  - 2 - esriNLFCCInvalidNetwork
  - 3 - esriNLFCCInvalidFeatureType
  - 4 - esriNLFCCInvalidShapeType
  - 5 - esriNLFCCRegisteredAsAVersioned
  - 6 - esriNLFCCInvalidTopology
  - 7 - esriNLFCCCompressedReadOnly
  - 255 - esriNLFCCUnknownError
- esriShortestPathObjIn**
  - 0 - esriSPObjMinSum
  - 1 - esriSPObjMinMax
- esriWeightFilterType**
  - 0 - esriWFRNone
  - 1 - esriWFRRange
- esriNetworkLoaderFieldCheck**
  - 0 - esriNLFValid
  - 1 - esriNLFCCannotOpen
  - 2 - esriNLFCCInvalidType
  - 3 - esriNLFCCInvalidDomain
  - 255 - esriNLFCCUnknownError
- esriNetworkLoaderProgress**
  - 0 - esriNLPOpenFeatureClasses
  - 1 - esriNLPStartSnapFeatures
  - 2 - esriNLPStartComplexFeatures
  - 3 - esriNLPCreateGeometricNetwork
  - 4 - esriNLPComputeTopology
  - 5 - esriNLPComputeJunctions
  - 6 - esriNLPAddEdges
  - 7 - esriNLPSetDefaultFlowDirections
  - 8 - esriNLPWriteTopology
  - 9 - esriNLPWriteTopology
  - 10 - esriNLPRebuildingBaseNetwork
  - 11 - esriNLPRebuildingCADNetworks

## 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.

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

**Enumeration key**  
 firstValue - firstEnumeration  
 secondValue - secondEnumeration

**Structure key**  
 firstMember: Type  
 secondMember: Type