

Geodatabase Object Model

Topology

ESRI® ArcGIS® Enterprise 12.0

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Enumerations
esriTopologyRuleType esriTRTAny = 1 esriTRTFeatureLargerThanClusterTolerance = 0 esriTRTAreaNoGaps = 1 esriTRTAreaNoOverlap = 3 esriTRTAreaCoveredByAreaClass = 4 esriTRTAreaAreaCoverEachOther = 5 esriTRTAreaCoveredByArea = 7 esriTRTAreaNoOverlapArea = 8 esriTRTLineCoveredByAreaBoundary = 10 esriTRTLineInsideArea = 11 esriTRTPointCoveredByAreaBoundary = 13 esriTRTPointProperlyInsideArea = 15 esriTRTAreaContainOnePoint = 16 esriTRTLineNoOverlap = 19 esriTRTLineNoIntersection = 20 esriTRTLineNoAngles = 21 esriTRTLineNoPseudos = 22 esriTRTLineCoveredByLineClass = 26 esriTRTLineNoOverlapLine = 28 esriTRTPointCoveredByLine = 29 esriTRTPointCoveredByLineEndpoint = 31 esriTRTPointDisjoint = 34 esriTRTPointCoincidePoint = 35 esriTRTAreaBoundaryCoveredByLine = 37 esriTRTAreaBoundaryCoveredByAreaBoundary = 38 esriTRTLineNoSelfIntersect = 39 esriTRTLineNoSelfIntersect = 40 esriTRTLineNoIntersectOrInteriorTouch = 41 esriTRTLineEndpointCoveredByPoint = 42 esriTRTAreaContainPoint = 43 esriTRTLineNoMultipart = 44 esriTRTLineNoIntersectLine = 45 esriTRTLineNoIntersectOrInteriorTouchLine = 46 esriInternalTRTParcel = 63
esriTopologySelectionResultEnum esriTopologySelectionResultNew = 0 esriTopologySelectionResultAdd = 1 esriTopologySelectionResultSubtract = 2 esriTopologySelectionResultXOR = 3
esriTopologyState esriTSUnanalyzed = 0 esriTSAnalyzedWithErrors = 1 esriTSAnalyzedWithoutErrors = 2 esriTSEmpty = 3

EnumParents
IEnumTopologyParent Count : int Next() : esriTopologyParent Reset()
esriTopologyParent m_AttributeAwareness : int m_bSelected : short m_FID : long m_PFC : IFeatureClass

TopologyNode
ITopologyNode Degree : int Edges : IEnumNodeEdge IsDegreeKnown : bool

EnumNodeList
IEnumTopologyNode Count : int Next() : ITopologyNode Reset()

TopologyEdge
ITopologyEdge FromNode : ITopologyNode LeftParents : IEnumTopologyParent LeftVisited : bool RightParents : IEnumTopologyParent RightVisited : bool ToNode : ITopologyNode

EnumEdgeList
IEnumTopologyEdge Count : int Next() : ITopologyEdge Reset()

TopologyRule
ITopologyRule AllDestinationSubtypes : bool AllOriginSubtypes : bool DestinationClassID : int DestinationSubtype : int DestinationSubtypeSpecified : bool GUID : string DestinationClassID : int DestinationSubtype : int Name : string OriginClassID : int OriginSubtype : int OriginSubtypeSpecified : bool TopologyRuleType : esriTopologyRuleType TriggerErrorEvents : bool ErrorShapeTypes(out multipoints : bool, out polylines : bool, out polygons : bool)

ITopologyElement
Geometry : IGeometry IsDeleted : bool IsSelected : bool Parents : IEnumTopologyParent Visited : bool QueryGeometry(geometry : IGeometry)

FeatureDataset
ITopologyContainer DefaultClusterTolerance : double DefaultZClusterTolerance : double MaximumClusterTolerance : double MaximumZClusterTolerance : double MinimumClusterTolerance : double MinimumZClusterTolerance : double TopologyIndex : int TopologyByD[id : int] : ITopology TopologyByName[name : string] : ITopology TopologyCount : int CreateTopology(name : string, clusterTolerance : double, maxGeneratedErrorCount : int, configurationKeyword : string) : ITopology CreateTopologyEx(name : string, clusterTolerance : double, zClusterTolerance : double, maxGeneratedErrorCount : int, configurationKeyword : string) : ITopology

Workspace
ITopologyWorkspace OpenTopology(name : string) : ITopology

TopologyClassEvents
ITopologyClassEvents OnValidate(validatedArea : IGeometry)

TopologyName
ITopologyName DirtyAreasName : IName FeatureDatasetName : IDatasetName TopologyErrorName : IName

Topology
ITopology Cache : ITopologyGraph ClusterTolerance : double DirtyArea : IPolygon FeatureDataset : IFeatureDataset MaximumGeneratedErrorCount : int State : esriTopologyState TopologyID : int ZClusterTolerance : double AddClass(class : IClass, weight : double, xyRank : int, zRank : int, eventNotificationOnValidate : bool) Remove(class : IClass) ValidateTopology(areaToValidate : IEnvelope) : IEnvelope
ITopologyRuleContainer CanAddRule(rule : ITopologyRule) : bool Rule[id : int] : IRule RulesByGUID[guid : string] : IRule Rules : IEnumRule RulesByClass[classID : int] : IEnumRule RulesByClassAndSubtype[classID : int, subtype : int] : IEnumRule AddRule(rule : ITopologyRule) DeleteRule(rule : ITopologyRule) DemoteFromRuleException(exception : ITopologyRuleErrorFeature) PromoteToRuleException(exception : ITopologyRuleErrorFeature)
IErrorFeatureContainer ErrorFeature(spatialReference : ISpatialReference, errorType : esriTopologyRuleType, geometryType : esriGeometryType, originClassID : int, originOID : long, destinationClassID : int, destinationOID : long) : ITopologyErrorFeature ErrorFeatures(spatialReference : ISpatialReference, rule : ITopologyRule, extent : IEnvelope, errors : bool) : IEnumTopologyErrorFeature ErrorFeaturesByGeometryType(spatialReference : ISpatialReference, geometryType : esriGeometryType, exceptions : bool) : IEnumTopologyErrorFeatures ErrorFeaturesByRuleType(spatialReference : ISpatialReference, ruleType : esriTopologyRuleType, extent : IEnvelope, errors : bool, exceptions : bool) : IEnumTopologyErrorFeature
ITopologyProperties Classes : IEnumFeatureClass ClusterTolerance : double SpatialReference : ISpatialReference

TopologyErrorFeature
ITopologyFeature

EnumTopologyErrorFeature
IEnumTopologyErrorFeature Next() : ITopologyErrorFeature

