ArcScanTM Object Model

OnBackgroundValueChanged
OnForegroundClassIndexChanged
OnForegroundValueChanged
OnRasterTargetChanged
OnVectorizationBatchPropertiesChanged

Esri[®] ArcGIS[®] 10.5 Copyright © 1999-2017 Esri. All rights reserved. Esri, ArcGIS, ArcObjects, ArcScan, and ArcMap are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions. **Class Diagram** AbstractClass | An abstract class cannot be used to create new objects but is a specification for instances of subclasses (through type inheritance.) InterfaceA O Interface of interest A **Co Class** can directly create objects by declaring a new object. (Optional)InterfaceB O-A Class cannot directly create objects, but objects of this class can be created as a Types of Relationships Type inheritance Associations represent relationships between classes. They have defined ArcMap multiplicities at both ends. Extension Type inheritance defines specialized classes of objects which share properties and CoClass methods with the superclass and have additional properties and methods. Note InterfaceD O that interfaces in $\sup \mathsf{erclas}\,\mathsf{ses}$ are not $\mathsf{dup}\,\mathsf{licated}$ in $\mathsf{sub}\,\mathsf{classes}.$ Interface of interest Composition InterfaceB O Instantiation specifies that one object from one class has a method with which it Class creates an object from another class. Composition is a relationship in which objects from the 'whole' class control the Interface G O Interface of interest lifetime of objects from the 'part' class. InterfaceM • An N-ary as sociation specifies that more than two classes are associated. A (<classname>)InterfaceO ● 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 relations hips have multiplicities on both sides. This is the notation for multiplicities: Raster Cleanup Vectorization Association 1..* Multiplicity Special Interfaces 1 - One and only one (if none shown, '1' is implied) IVectorization O IVectorization : IUnknown IRasterCleanup : IUnknown (Optional) represents interfaces that are IExtension O— IPersist O— SettingsDialog: IVectorizationSettingsDialog ShowPreview: Boolean esriSystem.IExtension O—

BrushSize: Long
EditState: Long
ForegroundColorActive: Boolean
LineWidth: Long
Raster: IRaster
Transaction: IRasterTransaction O—— Inbound Interface inherited by some subclasses but not all.
The subclasses list the optional interfaces they implement. M..N - From M to N (positive integers) enumeration Outbound Interface IPErsistO

IPersistStreamO

— ShowPreview: Boolean

QueryLineWidth (in position: IPoint, in tolerance: Double, in Line Width: Double, in left: IPoint, in right: IPoint)

— QuerySoldDiameter (in position: IPoint, in tolerance: Double, in solidDiameter/BapUnits: Double). In solidDiameterMapUnits: Double). $\boldsymbol{*}$ or $\boldsymbol{0..*}$ - From zero to any positive integer firstValue - firstEnumeration 1..* - From one to any positive in teger second Value - second Enumeration (Instance) represents interfaces that are only on specific instances of the class. ■— Property Get

■■ Property Put

■■ Property Get/Put

□□ Property Put by Reference HasRasterEdits: Boolean
 RasterChanged (in pEnv: IEnvelope)
 Save
 StartRasterCleanup
 StopRasterCleanup (in saveChanges: Boolean) (<class name>) indicates the name of the helper class required to support this event interface in Visual Basic. Structure key → Method firstMember: Type Double)

Snap (in point: IPoint, in tolerance: Double): Strap (in John: Irruti, intoterance: Double):
 esriRasterSnappedType
 Trace (in fromPt: IPoint, in direction: IPoint, in tolerance: Double): IPolyline
 Vectorize (in useSelection: Boolean, in extent: IEnvelope, in callbackGeom: INotifyGeometryFound, in cancel: Intervelope in the programmer. OnRasterChanged (in pUpdateEnv:
 IEnvelope)
 OnStarRasterCleanup
 OnStopRasterCleanup (in Save: Boolean) ITrackCancel, in step Progressor: IStep Progressor) VectorizationStyle IVectorization2 O IVectorization2 : IVectorization **Enumerations:** IVectorizationStyle O IVectorizationStyle : IUnknown SettingsDialog2:

IV ectorizationSettingsDialog esriSystem.IClone O— Preview: IPictureDisp
Properties: IVectorizationBatchProperties esriIntersectionSolutionType
0 - esriNoIntersectionSolution
1 - esriGeometricalIntersectionSolution ComputeDistance (in fromPt: IPoint, in toPt: IPoint): Double
ShapeRecognition (in fromPt: IPoint, in IPersist O— IPersistStream O— Shaper-ecognition (In from Pt. IP onit, in tolerance: Double): IP olyline
Trace2 (in from Pt. IP oint, in direction: IP oint, in tolerance: Double, in cancel: IT rackCancel): IP olyline
TraceBetween Points (in from Pt. IP oint, in to Pt. IP oint, in tolerance: Double, in cancel: IT rackCancel): IP olyline 2 - esriMedianIntersectionSolution MorphologicalOperations IMorphologicalOperations O IMorphologicalOperations : IUnknown esriRasterSnappedType 0 - esriRasterSnappedNone **VectorizationStyleGalleryClass** ◆ Do (in Type: esriRasterSnappedCenterline
 esriRasterSnappedCorner Do (in Type: esriVectoizationMorphologicalType, in Distance: Double, in layer: IRasterLayer, in ForegroundClassIndex: Long, in Transaction: IRasterTransaction, in color: Long, in cancel: ITrackCancel, in stepProgressor: IStepProgressor) IConnectedCells O IConnectedCells : IUnknown esriDisplay.IStyleGalleryClass O IStyleGalleryClass: IUnknown 3 - esriRasterSnappedIntersection 4 - esriRasterSnappedSolid 5 - esriRasterSnappedEnds ■ IsForeground (in position: IPoint): Boolean Description: String
ItemClass: GUID
ItemClass: GUID
Name: String
ItemClass: Guid
NewObject (in newType: String): IUnknown
NewObjectTypes: IEnumBSTR
PreviewRatio: Double Locate (in searchShape: IGeometry, in Foreground: Boolean, in spatialRelMethod: Long, in calbackSel: INotifySelectionBlock, in trackCancel: ITrackCancel, in step Progressor: IStepProgressor)

LocateByArea (in Area: Long, in lessThan:
Boolean, in equalTo: Boolean, in
Foreground: Boolean, in bounds:
IGeometry, in callbackSel: esriVectoizationType
0 - esriCenterlineVectorization
1 - esriOutlineVectorization EditProperties (in galleryttem: IUnknown, in listener: IComPropertySheetEvents, in hWnd: OLE_HANDLE, out ok: Boolean)
Preview (in galleryttem: IUnknown, in hDC: OLE_HANDLE, in rectangle: tagRECT) INotifySelectionBlock, in trackCancel: INdifySelection Block, in trackCancel:
ITrackCancel, in step Progressor:
IStepProgressor)

LocateByDiagonalOffe nvelope (in Value:
Double, in lessThan: Boolean, in
equalTo: Boolean, in Foreground:
Boolean, in bounds: IGeometry, in
callbackSel: INdifySelectionBlock, in
trackCancel: ITrackCancel, in
stepProgressor: IStepProgressor)

✓ OuterArea (in position: IPoint in esrilgnore Holes
0 - esrilgnore HolesNone
1 - esrilgnore HolesDiagonal 2 - esrilgnore HolesArea VectorizationStyleSelector VectorizationSettingsDialog esriFramework.IStyleSelector O IStyleSelector : IUnknown step/rogressor: Istep/rogressor)

QueryArea (in position: IPoint, in Foreground: Boolean, in Area: Long)

QueryDiagonalOfEnvelope (in position: IPoint, in Foreground: Boolean, in Value: Double) IVectorizationSettingsDialog O IVectorizationSettingsDialog: IUnknown esriMeasuringUnits 0 - esriMeasuringUnitsPixel 1 - esriMeasuringUnitsPoints esriSystemUI.IComPropertySheetEvents O

AddStyle (in Style: IUnknown): Boolean
DoModal (in parentHWnd: OLE_HANDLE):
Boolean
GetStyle (in Index: Long): IUnknown 2 - esriMeasuringUnitsMillimeter 3 - esriMeasuringUnitsCentiMeter IVectorizationProperties O IVectorizationProperties : IUnknown ■■ Background Value: Variant
■■ Foreground Class Index: Long
■■ Foreground Value: Variant
■□ Preview Fill Symbol: IFill Symbol
■□ Preview Ine Symbol: Line Symbol
■□ SelectForeground: Boolean esriShapeRecognition - esriShapeRecognitionRectangle
 - esriShapeRecognitionSquare 4 - esriShapeRecognitionEllipse IVectorizationLayers O IVectorizationLayers : IUnknown ■-□ CurrentLayer: IRasterLayer 16 - esriShapeRecognitionOrthogonalShape 31 - esriShapeRecognitionAllShapes IVectorizationBatchProperties O IVectorizationBatchProperties : IUnknown IVectorizationBatchProperties::Unkn

GapClosure: Double
GapFanAngle: Double
IntersectionSolution:
esrilntersectionSolutionType
MaxHoleLength: Double
MaxL ineWidth: Double
PolygonPointLimit: Long
Smoothing: Double
Type: esriVectoizationType
UseCompression: Boolean
UsePolygonPointLimit: Boolean
UsePolygonPointLimit: Boolean
UseSmoothing: Boolean esriVectoizationMorphologicalType 0 - esriMorphologicalOperationErosion 1 - esriMorphologicalOperationDilation 2 - esriMorphologicalOperationOpening IVectorizationBatchProperties2O IVectorizationBatchProperties2: Raster Cleanup Operation CornerNoiseLevel: Double
FindComers: Boolean
GeometricLineRecognitionGeometrization:
Double
GeometricLineRecognitionNoiseLevel:
Double IRasterCleanupOperation O IRasterCleanupOperation: IUnknown GeometricLineRecognitionNoiseLevel:
Double
IgnoreHoles: esrilgnoreHoles
IgnoreHoles: esrilgnoreHoles
IgnoreHoles: esrilgnoreHoles
ImaxCornerAngle: Double
ImaxFindConnectedCelsDiagonal: Initialize (in pGeom: IGeometry, in option: Variant) esriSystemUI.IOperation O IOperation : IUnknown $IRaster Snapping Properties O {\color{red} \begin{picture}(100,0) \put(0,0){\line(1,0){100}} \put(0,0){$ Centerline: Boolean
Corner: Boolean
Corner: Boolean
Ends: Boolean
Intersections: Boolean
MaxSolidWidth: Double
MinSolidWidth: Double
Solid: Boolean DrawLineOperation **DrawPolygonOperation** DrawRasterOperation DrawRectangleOperation EraseRasterOperation IVectorizationEvents O IVectorizationEvents : IUnknown