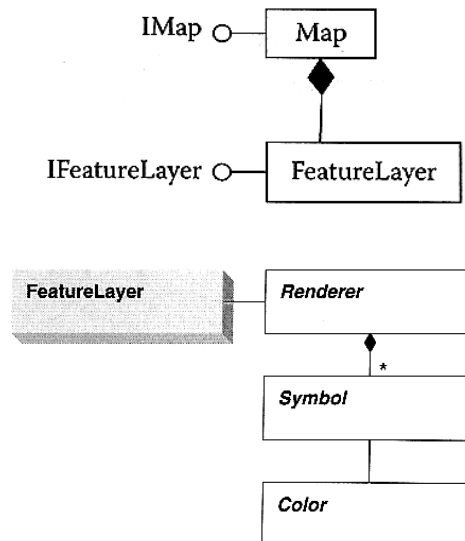


Layer Symbolology

Basic Classes

Abstract Classes

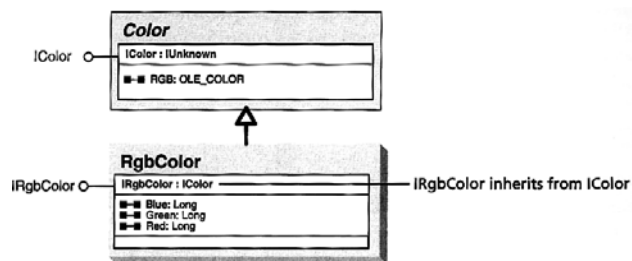
- *Renderer*
- *Symbol*
- *Color*



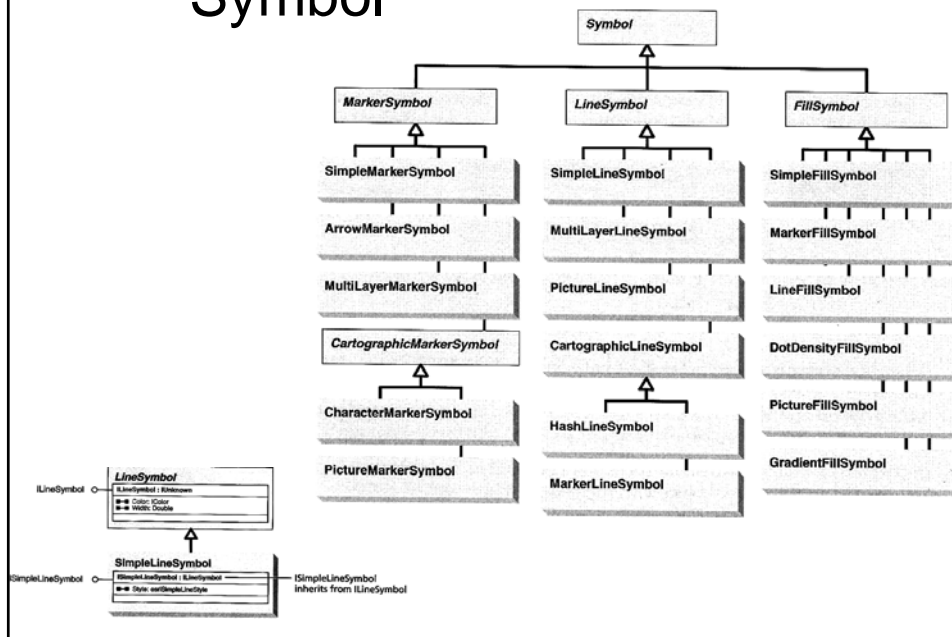
Color & RgbColor

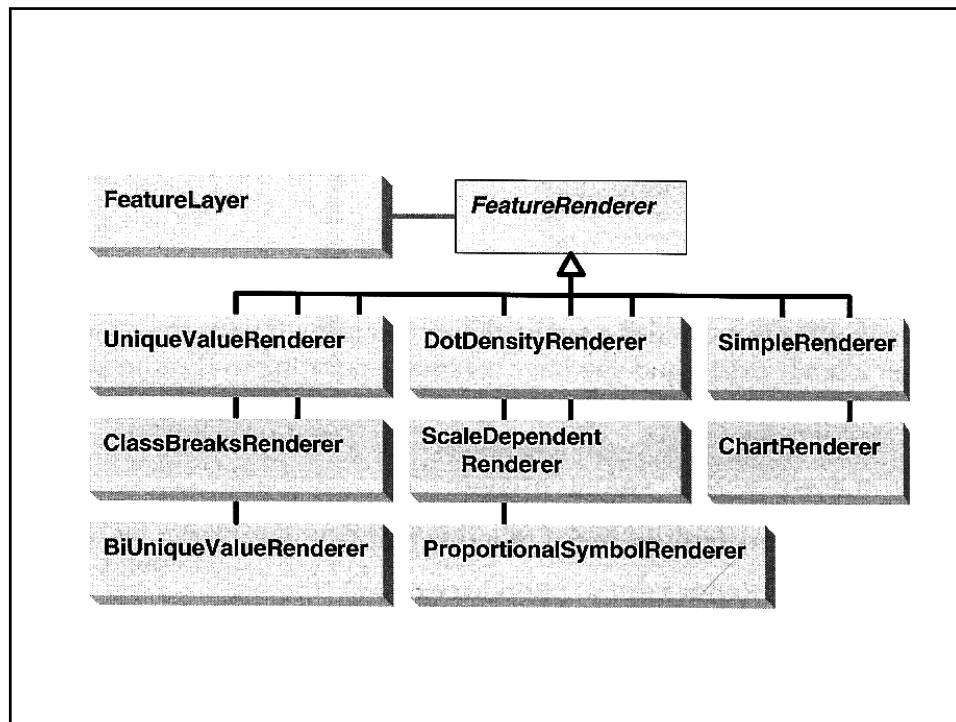
```
Dim pColor As IRgbColor
Set pColor = New RgbColor
```

'interface inheritance, IRgbColor inherits IColor
 pColor.RGB = RGB(255, 127, 0) 'RGB is a VB function
 pColor.Red = 255
 pColor.Green = 127
 pColor.Blue = 0



Symbol





Add Layer with User-Defined Color

```

Dim pColor As IRgbColor
Set pColor = New RgbColor
pColor.RGB = RGB(255, 127, 0) 'orange
  
```

```

Dim pLineSym As ISimpleLineSymbol
Set pLineSym = New SimpleLineSymbol
pLineSym.Color = pColor
  
```

```

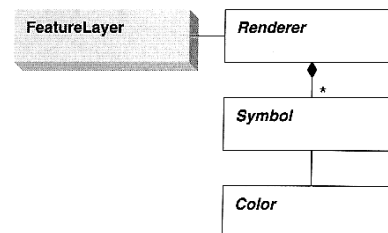
Dim pRenderer As ISimpleRenderer
Set pRenderer = New SimpleRenderer
Set pRenderer.Symbol = pLineSym
  
```

```

Dim pGFLayer As IGeoFeatureLayer
'Renderer is access through IGeoFeatureLayer interface of a
  FeatureLayer
Set pGFLayer = pFLayer 'QI
Set pGFLayer.Renderer = pRenderer
  
```

```

pMxDoc.FocusMap.AddLayer pFLayer
  
```



Change Layer Color

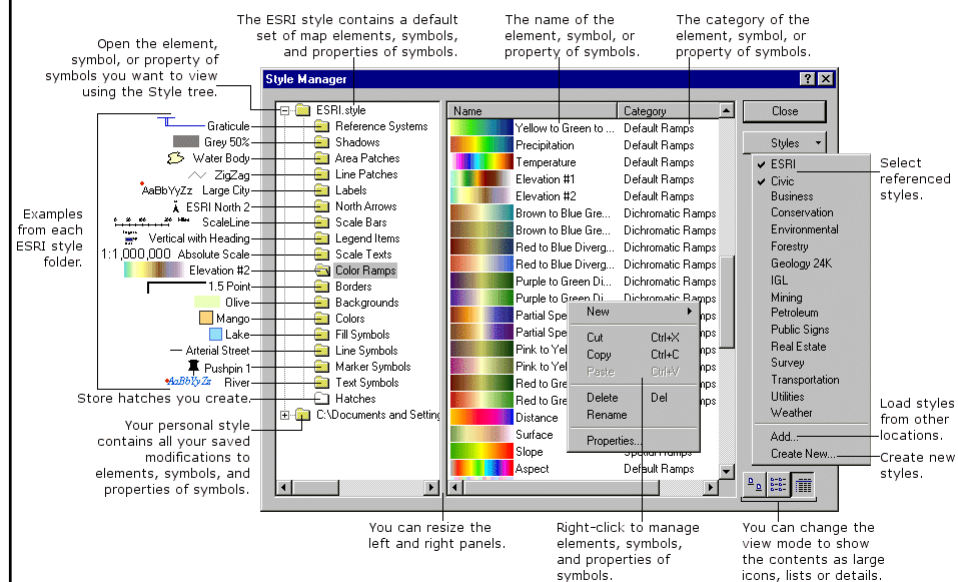
```
Dim pColor As IColor
Set pColor = New RGBColor
pColor.RGB = RGB(255, 0, 0)
```

```
Dim pSymbol As ILineSymbol
Set pSymbol = New SimpleLineSymbol
pSymbol.Color = pColor
```

```
Dim pRenderer As ISimpleRenderer
Set pRenderer = New SimpleRenderer
Set pRenderer.Symbol = pSymbol
```

```
Dim pGFLayer As IGeoFeatureLayer
Set pGFLayer = pMxDoc.FocusMap.Layer(0)
Set pGFLayer.Renderer = pRenderer
pMxDoc.UpdateContents
pMxDoc.ActivatedView.Refresh
```

The Style Manager



StyleGallery

```
Dim pMxDoc As IMxDocument
Set pMxDoc = ThisDocument
```

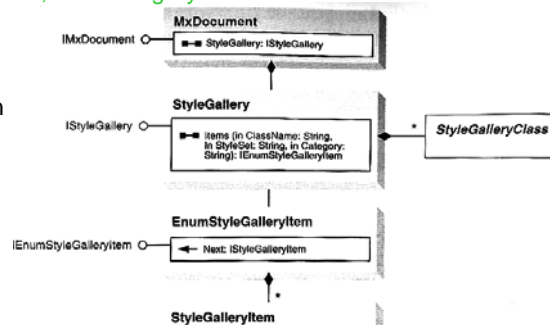
```
Dim pStyleG As IStyleGallery
Set pStyleG = pMxDoc.StyleGallery
```

```
Dim pEnumStyleG As IEnumStyleGalleryItem
Set pEnumStyleG = pStyleG.Items("Line Symbols", "ESRI.style",
"Dashed")
```

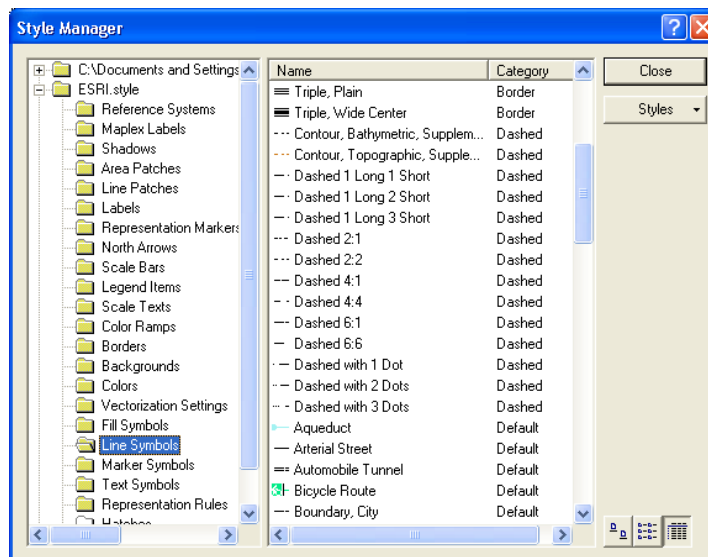
'Items Arguments: Class Name, StyleSet, and Category

```
Dim pStyleItem As IStyleGalleryItem
Set pStyleItem = pEnumStyleG.Next
If pStyleItem.Name = "Dash 4:4" then
    Dim pLineSym As ILineStyle
    Set pLineSym = pStyleItem.Item
End If
```

```
pEnumStyle.Reset
```



pStyleG.Items("Line Symbols", "ESRI.style", "Dashed")



IFeatureClass.ShapeType esriGeometryType Constants

Constant	Value	Description
<i>esriGeometryNull</i>	0	<i>A geometry of unknown type.</i>
<i>esriGeometryPoint</i>	1	<i>A single zero dimensional geometry.</i>
<i>esriGeometryMultipoint</i>	2	<i>An ordered collection of points.</i>
<i>esriGeometryLine</i>	13	<i>A straight line segment between two points.</i>
<i>esriGeometryCircularArc</i>	14	<i>A portion of the boundary of a circle.</i>
<i>esriGeometryEllipticArc</i>	16	<i>A portion of the boundary of an ellipse.</i>
<i>esriGeometryBezier</i>	3	<i>Curve15A third degree bezier curve (four control points).</i>
<i>esriGeometryPath</i>	6	<i>A connected sequence of segments.</i>
<i>esriGeometryPolyline</i>	3	<i>An ordered collection of paths.</i>
<i>esriGeometryRing</i>	11	<i>An area bounded by one closed path.</i>
<i>esriGeometryPolygon</i>	4	<i>A collection of rings ordered by their containment relationship.</i>
<i>esriGeometryEnvelope</i>	5	<i>A rectangle indicating the spatial extent of another geometry.</i>
<i>esriGeometryAny</i>	7	<i>Any of the geometry coclass types.</i>
<i>esriGeometryBag</i>	17	<i>A collection of geometries of arbitrary type.</i>
<i>esriGeometryMultiPatch</i>	9	<i>A collection of surface patches.</i>
<i>esriGeometryTriangleStrip</i>	18	<i>A surface patch of triangles defined by three consecutive points.</i>
<i>esriGeometryTriangleFan</i>	19	<i>A surface patch of triangles defined by the first point and two consecutive points.</i>
<i>esriGeometryRay</i>	20	<i>An infinite, one-directional line extending from an origin point.</i>
<i>esriGeometrySphere</i>	21	<i>A complete 3 dimensional sphere.</i>
<i>esriGeometryTriangles</i>	22	<i>A surface patch of triangles defined by non-overlapping sets of 3 consecutive points each.</i>

SelectionSet

```

Dim pFLayer As IFeatureLayer
Dim pFSele As IFeatureSelection
Set pFLayer = pMap.Layer(0)
Set pFSele = pFLayer 'QI

'define selection queryfilter by attribute
Dim pQFilter As IQueryFilter
Set pQFilter = New QueryFilter
pQFilter.WhereClause = "TOTPOP < 200"
pFSele.SelectFeatures pQFilter, esriSelectionResultNew, False
pMxDoc.ActivatedView.Refresh 'refresh the view to see the selected features

'retrieve selected features using a FeatureCursor
Dim pSeleSet As ISelectionSet
Set pSeleSet = pFSele.SelectionSet
Dim pFCursor As IFeatureCursor
pSeleSet.Search Nothing, False, pFCursor

nf = pSeleSet.Count
Dim pFeature As IFeature
'display the TOTPOP value in each polygon
For i = 1 To nf
    Set pFeature = pFCursor.NextFeature
    Debug.Print pFeature.Value(10)
Next

```