'Count features within an area
Dim pMxDoc As IMxDocument
Set pMxDoc = ThisDocument

Dim pEnv As IEnvelope
Dim pRubber As IRubberBand
Set pRubber = New RubberEnvelope

Dim pActiveView As IActiveView
Set pActiveView = pMxDoc.FocusMap
Set pEnv = pRubber.TrackNew(pActiveView.ScreenDisplay, Nothing)

Dim pSpatialFilter As ISpatialFilter
Set pSpatialFilter = New SpatialFilter
Set pSpatialFilter.Geometry = pEnv
pSpatialFilter.SpatialRel = esriSpatialRelIntersects

Dim lPoints As Long, lPolylines As Long, lPolygons As Long
Dim pLayer As IFeatureLayer
Dim pFeatureCursor As IFeatureCursor
Dim pFeature As IFeature
Dim i As Long
For i = 0 To pMxDoc.FocusMap.LayerCount - 1
  If (TypeOf pMxDoc.FocusMap.Layer(i) Is IGeoFeatureLayer) Then
    Set pLayer = pMxDoc.FocusMap.Layer(i)
    pSpatialFilter.GeometryField = pLayer.FeatureClass.ShapeFieldName
    Set pFeatureCursor = pLayer.Search(pSpatialFilter, True)
    Set pFeature = pFeatureCursor.NextFeature
    Do Until (pFeature Is Nothing)
      Select Case pFeature.Shape.GeometryType
        Case esriGeometryPoint
          lPoints = lPoints + 1
        Case esriGeometryPolyline
          lPolylines = lPolylines + 1
        Case esriGeometryPolygon
          lPolygons = lPolygons + 1
      End Select
      Set pFeature = pFeatureCursor.NextFeature
    Loop
  End If
Next i

MsgBox "Features Found:" & vbCrLf & lPoints & " Points " & vbCrLf & lPolylines & " Polylines " & vbCrLf & lPolygons & " Polygons "