

```
1 Imports System.Collections.Generic
2
3 Imports Grasshopper.Kernel
4 Imports Rhino.Geometry
5 Imports Interop.gsa_8_7
6 Imports UsageDataCollection
7
8 Public Class OpenGsaFile
9     Inherits GH_Component
10     ''' <summary>
11     ''' Initializes a new instance of the OpenGsaFile class.
12     ''' </summary>
13     Public Sub New()
14         MyBase.New("Open Gsa File", "Open", _
15             "Opens Gsa File and Passes to Subsequent Tasks", _
16             "GsaComTools", "I/O")
17     End Sub
18
19     ''' <summary>
20     ''' Registers all the input parameters for this component.
21     ''' </summary>
22     Protected Overrides Sub RegisterInputParams(pManager As GH_Component.GH_InputParamManager)
23         pManager.AddBooleanParameter("Run", "Run", "Run", GH_ParamAccess.item)
24         pManager.AddTextParameter("Path", "Path", "Gsa Path", GH_ParamAccess.item)
25     End Sub
26
27     ''' <summary>
28     ''' Registers all the output parameters for this component.
29     ''' </summary>
30     Protected Overrides Sub RegisterOutputParams(pManager As GH_Component.GH_OutputParamManager)
31         pManager.AddGenericParameter("File", "File", "Gsa File", GH_ParamAccess.item)
32     End Sub
33
34     ''' <summary>
35     ''' This is the method that actually does the work.
36     ''' </summary>
37     ''' <param name="DA">The DA object is used to retrieve from inputs and store in outputs.</param>
38     Protected Overrides Sub SolveInstance(DA As IGH_DataAccess)
39
40         Dim Run As Boolean
41         Dim FileName As String
42         Dim GsaObj As ComAuto
43         Dim myDataCollector As New DataCollector
44
45         'Import GSA File Name
46         If (Not DA.GetData(0, Run)) Then Return
47         If (Not DA.GetData(1, FileName)) Then Return
48
49         If Run = False Then Return
50
51         Try
```

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52         GsaObj = New ComAuto()
53     Catch ex As System.Runtime.InteropServices.COMException
54         Throw New System.Exception("Cannot initialise GSA object. " & ex.Message)
55     End Try
56     If GsaObj Is Nothing Then
57         Throw New System.Exception("Cannot initialise GSA object")
58     End If
59     ' we parse using the EN_GB locale
60     GsaObj.SetLocale(Locale.LOC_EN_GB)
61
62     GsaObj.Open(FileName)
63
64     'Send Usage Data
65     myDataCollector.UsageStatistics("GetElementNumbers")
66
67     ' Assign the data to the output parameter.
68     DA.SetData(0, GsaObj)
69
70 End Sub
71
72 ''' <summary>
73 ''' Provides an Icon for every component that will be visible in the User Interface.
74 ''' Icons need to be 24x24 pixels.
75 ''' </summary>
76 Protected Overrides ReadOnly Property Icon() As System.Drawing.Bitmap
77     Get
78         Return My.Resources.IO_OpenGsaFile
79         Return Nothing
80     End Get
81 End Property
82
83 ''' <summary>
84 ''' Gets the unique ID for this component. Do not change this ID after release.
85 ''' </summary>
86 Public Overrides ReadOnly Property ComponentGuid() As Guid
87     Get
88         Return New Guid("{53525f48-34b2-4871-b792-062a2485554a}")
89     End Get
90 End Property
91 End Class
```