Imports System

Imports System.Runtime.InteropServices

Module Module1

 Sub Main()

 Dim MatLab As Object

 Dim MatLab2 As Object

 Dim MatLab3 As Object

 Dim Result As String

 ' the following works fine

 ' it is commented out for testing of

 'MatLab = CreateObject("Matlab.Desktop.Application")

 'MatLab.Visible = 1

 'MatLab2 = GetObject(, "MatLab.Desktop.Application")

 'Result = MatLab2.Execute("cd C:\Users\d3b063\Desktop\testvb")

 'Result = MatLab2.Execute("test")

 'MsgBox("Click when done examining test output")

 'Result = MatLab2.Execute("exit")

 'MsgBox("Click when cmd window is finished")

 ' below creates comsolserver.exe and matlab.exe as confirmed in task manager

 ' a variety of syntaxes are shown

 'Result = Shell("C:\Program Files\COMSOL\COMSOL42\bin\win64\comsolserver.exe matlab")

 Result = Shell("C:\Program Files\COMSOL\COMSOL42\bin\win64\comsolserver.exe matlab /Automation")

 MsgBox("Click when matlab is fully open") ' crude wait routine while license is checked etc.

 MatLab3 = GetObject(, "Matlab.Application")

 'MatLab3 = GetObject(, "Matlab.Desktop.Application")

 'MatLab3 = Marshal.GetActiveObject("Matlab.Application")

 'MatLab3 = Marshal.GetActiveObject("Matlab.Desktop.Application")

 Result = MatLab3.Execute("cd C:\Users\d3b063\Desktop\testvb")

 Result = MatLab3.Execute("test")

 MsgBox("Click when done examining test output")

 Result = MatLab3.Execute("exit")

 MsgBox("Click when cmd window is finished")

 End Sub

End Module

'error for MatLab = GetObject(, "Matlab.Application")

'Unhandled Exception: System.Exception: Cannot create ActiveX component.

' at Microsoft.VisualBasic.Interaction.GetObject(String PathName, String Class)

' at ComsolML\_Test.Module1.Main() in C:\Users\myname\Desktop\testvb\ComsolML\_Test\ComsolML\_Test\Module1.vb:line 25

'error for MatLab = Marshal.GetActiveObject(, "Matlab.Application")

'Unhandled Exception: System.Runtime.InteropServices.COMException: Operation unavailable

' (Exception from HRESULT: 0x800401E3 (MK\_E\_UNAVAILABLE))

' at System.Runtime.InteropServices.Marshal.GetActiveObject(Guid& rclsid, IntPtrreserved, Object& ppunk)

' at System.Runtime.InteropServices.Marshal.GetActiveObject(String progID)

' at ComsolML\_Test.Module1.Main() in C:\Users\myname\Desktop\testvb\ComsolML\_Test\ComsolML\_Test\Module1.vb:line 27

'C:\Users\myname\Desktop\testvb>