'Test Condition: Put the export destination folder on your desktop and empty it. i.e., Desktop\ProjectExport\RF Reconstruction

'Test Condition: Open and close the export destination folder to make its location won't block the .bat files, i.e., cmd.exe windows

Sub Main()

'Import data from the Export.xls's

Dim RowCount As Integer

Dim ColumnCount As Integer

Dim RFreconstruction() As String 'Dynamic array stores the data from "RFreconstruction" sheet

'Import data from "RFreconstruction" sheet

RowCount = Function\_ExcelSheetRowCount.ExcelSheetRowCount(ExcelFilePath\_Export, "RFreconstruction")

ColumnCount = Function\_ExcelSheetColumnCount.ExcelSheetColumnCount(ExcelFilePath\_Export, "RFreconstruction")

ReDim RFreconstruction(1 To RowCount, 1 To ColumnCount) As String 'Array is sized dynamically

RFreconstruction() = Function\_GetExcelSheetData.GetExcelSheetData(ExcelFilePath\_Export, "RFreconstruction")

'For "RFreconstruction" sheet

Dim Study As String 'Study names

Dim Series As String 'Series names

Dim ImageLabel As String 'Image names

Dim ExportButton As String 'which Export Button to use

Dim ExportType As String 'ExportType

Dim DestinationFolder As String 'Destination Folder

Dim SaveAs As String 'Save As File Name

Dim FileType As String 'FileType

Dim i As Integer 'row number in the "RFreconstruction" sheet

'Open Vevo2100 workstation

ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

ListView("Index=1").Select "Vevo 2100", tpMouseDoubleClick

'From Study Browser, load Images from correct Study and Series

For i = 2 To RowCount 'First Line is Header Line

Study = RFreconstruction(i, 1)

Series = RFreconstruction(i, 2)

ImageLabel = RFreconstruction(i, 3)

ExportButton = RFreconstruction(i, 4)

ExportType = RFreconstruction(i, 5)

DestinationFolder = RFreconstruction(i, 6)

SaveAs = RFreconstruction(i, 7)

FileType = RFreconstruction(i, 8)

'Close and Reopen workstation after finish exporting each Series (inorder to release memory)

If i > 2 Then

If RFreconstruction(i, 2) <> RFreconstruction(i - 1, 2) Then

Window.Close

Pause 3, tpPauseSeconds 'Pause 3 seconds

ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

ListView("Index=1").Select "Vevo 2100", tpMouseDoubleClick

End If

End If

JumpC:

'Attach to VisualSonics Vevo 2100

Pause 3, tpPauseSeconds 'Pause 3 seconds to wait for the workstation to open

Window(Vevo).Attach

'Expand the Study in the Study Browser

On Error GoTo ErrorHandlerB

'If can not find the Series, then the Study needs to be expanded

If ListView("Parent.Caption='Study Browser'").FindItem(Series) = 0 Then

On Error GoTo ErrorHandlerA

ListView("Parent.Caption='Study Browser'").Select (Study), tpMouseDoubleClick

End If

'Expand the Series in the Study Browser

On Error GoTo ErrorHandlerB

'If the mode column (i.e., the 6th column in the "Study Browser") of the row after Series is empty

'then the row is either a Series or a Study

'the Series needs to be expanded to see all the Images

Count = ListView("Parent.Caption='Study Browser'").FindItem(Series)

If ListView("Parent.Caption='Study Browser'").GetItem(Count + 1, 6) = "" Then

On Error GoTo ErrorHandlerB

ListView("Parent.Caption='Study Browser'").Select (Series), tpMouseDoubleClick

End If

'Select or load the Image from Study Browser, then open the "Export Image" brwoser

If ExportButton = "Study Browser" Then

ListView("Parent.Caption='Study Browser'").Select (ImageLabel)

Button("Caption=&Export").Click 'Export from Study Brwoser

ElseIf ExportButton = "Image Area" Then

ListView("Parent.Caption='Study Browser'").Select (ImageLabel), tpMouseDoubleClick

Pause 3, tpPauseSeconds 'Pause 3 seconds to wait for the image to open

Button("Caption=Forw").Click 'Stop PlayBack

Button("Caption=Home").Click 'Move to first frame

Button("Caption=Export").Click 'Export from Mode window

End If

'In the the "Export Image" brwoser, select "Export Type"

If ExportType = "Cine Loop" Then

RadioButton("Caption='&" & ExportType & "'").Click

Else

RadioButton("Caption=&" & ExportType).Click

End If

'In the the "Export Image" brwoser, select export destination folder and file name in "Save As" Edit box

TreeView("Parent.Caption='Export Image'").SelectItem "\Desktop\ProjectExport"

EditBox("Label='Save As'").SetText DestinationFolder & "\" & SaveAs

'In the the "Export Image" brwoser, choose "File Type"

ComboBox("Label='File Type'").Select FileType

'In the the "Export Image" brwoser, click [OK] button to export

Button("Caption=OK").Click

'Handle the "Export Image (Overwrite) Window"

On Error GoTo ErrorHandlerC

'If the same named export file already exists then overwrite

If Window("Export Image Window", tpAttachNoWait).Exists = True Then

Window("Export Image Window").Attach

Button("Caption=&Yes").Click

End If

JumpB:

'Handle the "Image Export Report Window"

On Error GoTo ErrorHandlerD

Window(Vevo).Attach

'wait up to 10 mins for the "Image Export Report Window" to pop up

If Wait(600, "Image Export Report Window Exists", tpWaitSeconds) = True Then

Window("Image Export Report Window").Attach

If InStr(1, ListView("Index=1").CaptureText, "successfully exported") Then

UserCheck "ExportReport", True, SaveAs & " is successfully exported to " & FileType & " (" & ExportType & ") format."

Else

UserCheck "ExportReport", False, SaveAs & " is failed to exported to " & FileType & " (" & ExportType & ") format."

End If

Button("Caption=OK").Click 'Close the "Image Export Report Window"

End If

'Switch back to Study Brwoser (if needed) to be able to export next image

Window(Vevo).Attach

If ExportButton = "Image Area" Then

Button("Caption=S").Click 'Switch to Study Browser

End If

JumpA:

Next 'Next row in the "Load" sheet

'Close application to reset its original state

Window.Close

'Erase arrays

Erase RFreconstruction

'Run .bat files to reconstruct on server

Pause 10, tpPauseSeconds

ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

ListView("Index=1").Select "ProjectExport", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExport Window").Attach

ListView("Index=1").Select "RF Reconstruction", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "B-Mode", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionB-Mode Window").Attach

ListView("Index=1").Select "Runme B-Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "Color", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionColor Window").Attach

ListView("Index=1").Select "Runme Color Doppler Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "LC", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionLC Window").Attach

ListView("Index=1").Select "Runme Linear Contrast Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "M-Mode", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionM-Mode Window").Attach

ListView("Index=1").Select "Runme M-Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "NLC", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionNLC Window").Attach

ListView("Index=1").Select "Runme NonLinear Contrast Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "PA", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionPA Window").Attach

ListView("Index=1").Select "Runme PhotoAcoustics Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "Power", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionPower Window").Attach

ListView("Index=1").Select "Runme Power Doppler Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

ToolBar("Index=2").Select "Up"

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF Reconstruction Window").Attach

ListView("Index=1").Select "PW Doppler & PW Tissue Doppler", tpMouseDoubleClick

Window("CDocuments and SettingsqagenMSPDCSERVERDesktopProjectExportRF ReconstructionPW Doppler Window").Attach

ListView("Index=1").Select "Runme PW Doppler Mode.bat", tpMouseDoubleClick

Pause 3, tpPauseSeconds

Window.Close

Pause 1200, tpPauseSeconds 'wait 20 minutes for multiple .bat files to finish running

''Run .bat files to reconstruct on laptop

'Pause 10, tpPauseSeconds

'ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

' ListView("Index=1").Select "RF Reconstruction", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "B-Mode", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionB-Mode Window").Attach

' ListView("Index=1").Select "Runme B-Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "Color", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionColor Window").Attach

' ListView("Index=1").Select "Runme Color Doppler Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "LC", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionLC Window").Attach

' ListView("Index=1").Select "Runme Linear Contrast Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "M-Mode", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionM-Mode Window").Attach

' ListView("Index=1").Select "Runme M-Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "NLC", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionNLC Window").Attach

' ListView("Index=1").Select "Runme NonLinear Contrast Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "PA", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionPA Window").Attach

' ListView("Index=1").Select "Runme PhotoAcoustics Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "Power", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionPower Window").Attach

' ListView("Index=1").Select "Runme Power Doppler Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' ToolBar("Index=2").Select "Up"

'

'Window("CDocuments and Settingsjqi2DesktopRF Reconstruction Window").Attach

' ListView("Index=1").Select "PW Doppler & PW Tissue Doppler", tpMouseDoubleClick

'

'Window("CDocuments and Settingsjqi2DesktopRF ReconstructionPW Doppler & PW Tissue Doppler Window").Attach

' ListView("Index=1").Select "Runme PW Doppler Mode.bat", tpMouseDoubleClick

' Pause 3, tpPauseSeconds

' Window.Close

'

'Pause 1200, tpPauseSeconds 'wait 20 minutes for multiple .bat files to finish running

Exit Sub

'"System Error Window" may pop up when the virtual memory usage for the workstation is higher than 1.5GB.

'The memory leak is caused by Testpartner not the workstation.

ErrorHandlerA:

Window(Vevo).Attach

If Window("System Error Window", tpAttachNoWait).Exists = True Then

UserCheck "SystemError", False, "A system error poped up after export " & SaveAs & " to " & FileType & " (" & ExportType & ") format."

'Close and Reopen workstation to release memory

Window.Close

Pause 3, tpPauseSeconds

ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

ListView("Index=1").Select "Vevo 2100", tpMouseDoubleClick

'after reopen the workstation, restart export from the m row of the "Export" sheet

Begin = m

Resume JumpC

Else

UserCheck "CanNotFindStudy", False, "The " & RFreconstruction(i, 1) & " does NOT exist in the Study Browser. (Series = " & RFreconstruction(i, 2) & " & ImageLabel = " & RFreconstruction(i, 3) & ")"

Resume JumpA

End If

ErrorHandlerB:

Window(Vevo).Attach

If Window("System Error Window", tpAttachNoWait).Exists = True Then

UserCheck "SystemError", False, "A system error poped up after export " & SaveAs & " to " & FileType & " (" & ExportType & ") format."

'Close and Reopen workstation to release memory

Window.Close

Pause 3, tpPauseSeconds

ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

ListView("Index=1").Select "Vevo 2100", tpMouseDoubleClick

'after reopen the workstation, restart export from the m row of the "Export" sheet

Begin = m

Resume JumpC

Else

UserCheck "CanNotFindSeries", False, "The " & RFreconstruction(i, 1) & "\" & RFreconstruction(i, 2) & " does NOT exist in the Study Browser. (ImageLabel = " & RFreconstruction(i, 3) & ")"

Resume JumpA

End If

ErrorHandlerC:

'"Image Export Report Window" pop up before TestPartner move to line "If Window("Export Image Window", tpAttachNoWait).Exists = True Then"

Resume JumpB

ErrorHandlerD:

Window(Vevo).Attach

If Window("System Error Window", tpAttachNoWait).Exists = True Then

UserCheck "SystemError", False, "A system error poped up when exporting " & SaveAs & " to " & FileType & " (" & ExportType & ") format."

Else

UserCheck "ImageExportReportWindow", False, "Can not identify the list view inside Image Export Report Window properly when " & SaveAs & " is exported to " & FileType & " (" & ExportType & ") format."

End If

'Close and Reopen workstation to release memory

Window.Close

Pause 3, tpPauseSeconds

ProgramManagerWindow("Application=EXPLORER.EXE Caption='Program Manager'").Attach

ListView("Index=1").Select "Vevo 2100", tpMouseDoubleClick

'after reopen the workstation, restart export from the m row of the "Export" sheet

Begin = m

Resume JumpC

End Sub