

IMPLEMENTATION DETAILS

IMPAX 6.2.1

Launch TraumaCad 2.X

via

**Wizard Scripts
Ad Hoc search**

Introduction

An Image Area Wizard can be defined for launching TraumaCad with the specific study that is being displayed in the corresponding IMPAX Image Area, and a List Area Wizard can also be defined for launching TraumaCad with a specific study that is being selected in the Ad Hoc Search Results.

We propose here both options, even if the first solution (Image Area) will obviously be the preferred one. Both options could be implemented together, but please be aware that users could eventually be confused about which of the 2 wizards should be used when selecting a specific study in the Ad Hoc Search Results.

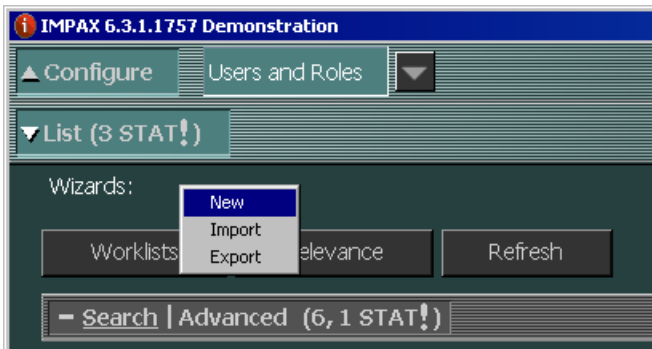
Roles requiring the TraumaCad Image Area Wizard will need – at least – the permission named **'Image Area Wizards > Run Wizards'**.

Roles requiring the TraumaCad List Area Wizard will need – at least – the permission **'Scripting > Run Scripts'**.

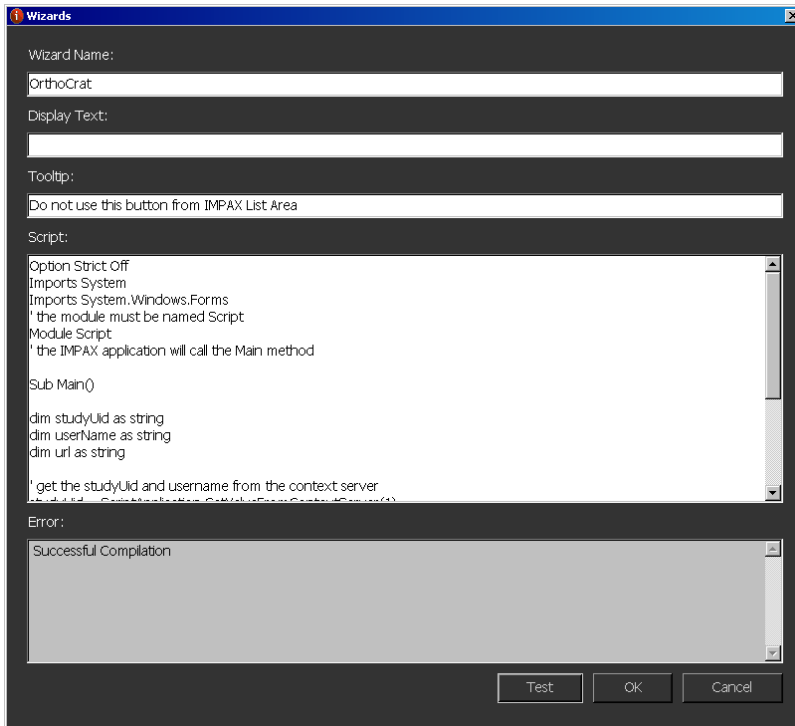
a. Launching TraumaCad from IMPAX Image Area

In order to add a Script Wizard in the **Image Area**, you will actually first need to create a Wizard in the **List Area**. You will probably want to impersonate the relevant role(s), e.g. Orthopaedics Surgeon, and create the Wizards at role level.

Remark: Existing IMPAX users (users that already have a user account defined in IMPAX) who would need the TraumaCad Wizard Scripts will have to add these script buttons on their own or the PACS Administrator will have to impersonate each of these specific users.



1. Right-click on the **Wizards** toolbar from the List Area and select **New**.
2. Enter a **Wizard Name**, e.g. 'TraumaCad'
3. Enter a **Display Text**, e.g. <space>
4. Enter a **Tooltip**, e.g. 'Do not use this button from IMPAX List Area'
5. Paste the TraumaCad Image Area script definition (see below)
6. Click **Test** to verify that the script can be compiled
7. Click **Ok**



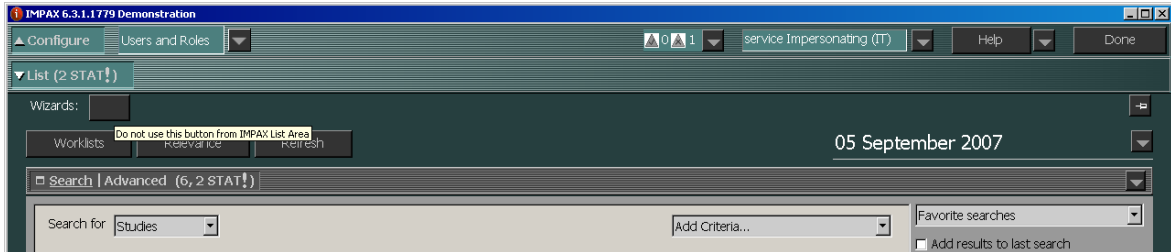
Please use TraumaCad instead of OrthoCrat as in the screenshot above

Here is the script definition that needs to be defined as List Area Wizard in order to enable users to launch TraumaCad from the ImageArea, using the DICOM Study InstanceUID of the study that is currently being displayed.

```
Option Strict Off
Imports System
Imports System.Windows.Forms
' the module must be named Script
Module Script
' the IMPAX application will call the Main method

Sub Main()
    dim studyUid as string
    dim userName as string
    dim url as string
    ' get the studyUid and username from the context server
    studyUid = ScriptApplication.GetValueFromContextServer(1)
    userName = ScriptApplication.GetValueFromContextServer(4)
    ' build the url
    url =
"http://<traumacad_server_ip_address>/TraumaCadServer/Main/index.aspx?autostart=1&STUDYuid="+StudyUid+"&new
case=1&userid="+userName
    ' show the url
    System.Diagnostics.Process.Start(url)
End Sub
End Module
```

Remark: **<traumacad_server_ip_address>** needs to be replaced with the correct IP address of your TraumaCad server instance.



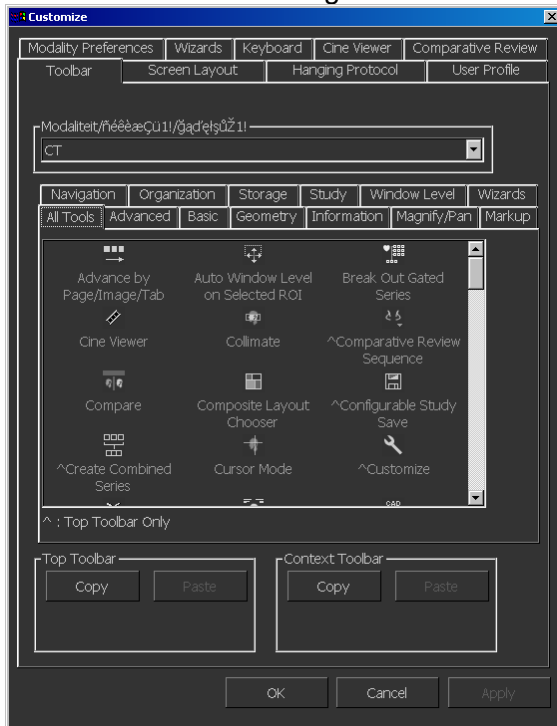
Warning

- *This Wizard script button will be apparent in the List Area but it should only be triggered from the **Image Area**, when the study that is required in TraumaCad is displayed in IMPAX.*
- *If the user attempt launching TraumaCad by selecting a study in the List Area and clicking on this Wizard script button, the url that will be generated will not contain the studyUId of the study that they have selected in the List Area but the studyUId of the study that is currently being displayed (or no studyUId if there is no study in display).*
- *For this reason, and in order to avoid any confusion, we propose to simply blank (with a single whitespace) the Display Text of this List Area Wizard (cfr. Screenshot). Users should be trained in using List Area Wizard script buttons that have a readable name.*

Remark: It is 'theoretically' possible to hide the Wizard toolbar in the List Area (by removing the '**Scripting > Run Scripts**' permission at role level), but it also implies that all Wizard scripts (e.g. Enterprise Search) that have been defined in the List Area will also become unavailable to the corresponding role.

Then you will have to create another Wizard in the **Image Area** for all modalities. This Image Area Wizard will simply refer to the List Area Wizard that you have just created.

1. Display a study (in order to display the Image Area)
2. Press **F12** in the Image Area.



3. In the **Customize** dialog, switch to the **Wizards** tab.



4. Click **Add**.
5. In the **Add New Wizard** dialog, type a **Name** for this wizard, e.g. Ortho.
6. Type a **Description** of the image wizard. The description is used as the tooltip for wizard tool buttons (e.g. TraumaCad Pre-operative Planning).
7. From the **Trigger** list, select **Toolbar**.
8. Optionally, under **Icon Options**, in the **Load Bitmap from File System** field, type or browse for a 22x22 BMP-format graphic to use as the wizard button.

***Warning:** The file used is loaded from the file system of the local computer. Therefore, it will not be available on other workstations, unless the other workstations also have the same file saved in the same file location. When the file cannot be found, or if no file is selected, a default bitmap displaying the wizard name is used instead.*

9. Under **Wizard Behavior**, from the **Default** list, select **Enabled**. To allow users to override this setting, select the **Let User Override Default** checkbox.
10. From the **Action** list, select **Script**.
11. Under **Wizard parameters**, in the **Name** list, type the **Wizard Name** that you have previously created in the List Area, e.g. TraumaCad.

Please use TraumaCad instead of OrthoCrat as in the screenshot above

Remark: If you ever have to change the Wizard Name in the List Area, you will also have to change the Wizard name that was provided as Wizard Parameters > Name in the definition of the Image Area Wizard.

12. Click **Save**.
13. In the **Customize** dialog, switch to the **Toolbar** tab.
14. On the **Toolbar** tab, switch to the **Wizards** tab.
15. Drag the new script wizard button to the top or context toolbar.
16. To save the changes and close the Customize dialog, Click **OK**.
17. To run the List area script wizard in the Image area, click the added wizard button.
18. You can also optionally create a keyboard shortcut for launching TraumaCad from the Image Area.
 - a. Press **F12** in the Image Area
 - b. In the **Customize** dialog, switch to the **Keyboard** tab.
 - c. Click **New**.
 - d. In the **Keyboard** dialog, from the **Key** list, select the key to use as a shortcut, e.g. CTRL+O. Listed keys are based on the keyboard layout selected in Windows for this workstation. Almost any keyboard key can have an action associated with it, with the exception of some reserved keyboard shortcuts.

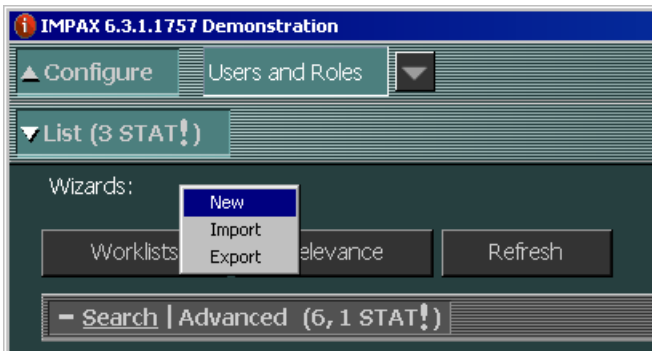
- e. Select the **Action** to be performed by the keyboard shortcut, e.g. Wizards
- f. Select the **Wizard Name** for launching TraumaCad from Image Area, e.g. Ortho.
- g. Click **OK**.
- h. To save the changes and close the Customize dialog, click **OK**.



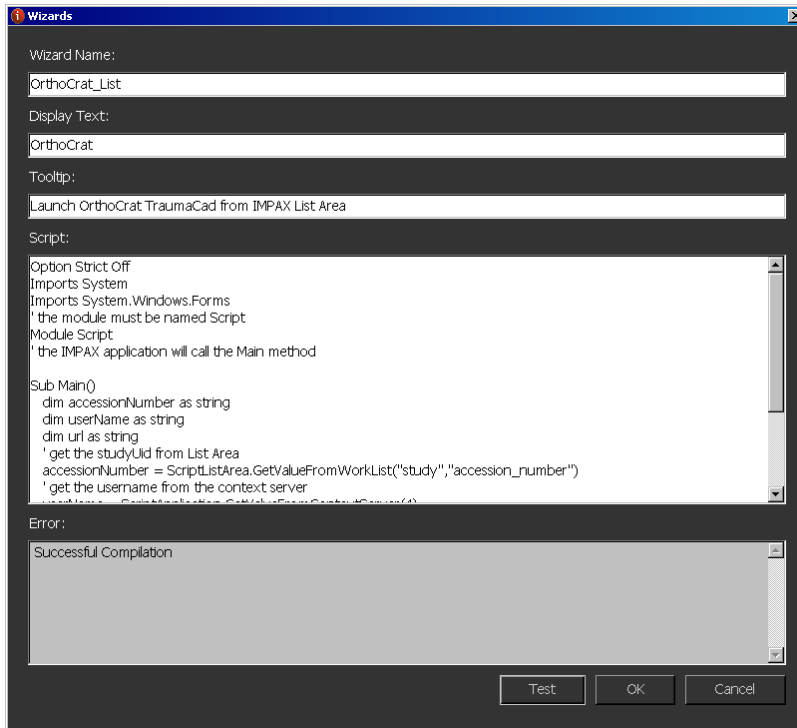
b. Launching TraumaCad from IMPAX Ad Hoc Search

If you want to enable users to launch the TraumaCad application by selecting a specific study in the Ad Hoc Search Results, you will have to add a Script Wizard in the **List Area**. You will probably want to impersonate the relevant role(s), e.g. Orthopaedic Surgeon, and create the Wizard at role level.

Remark: Existing IMPAX users (users that already have a user account defined in IMPAX) who would need the TraumaCad Wizard Scripts will have to add these script buttons on their own or the PACS Administrator will have to impersonate each of these specific users.

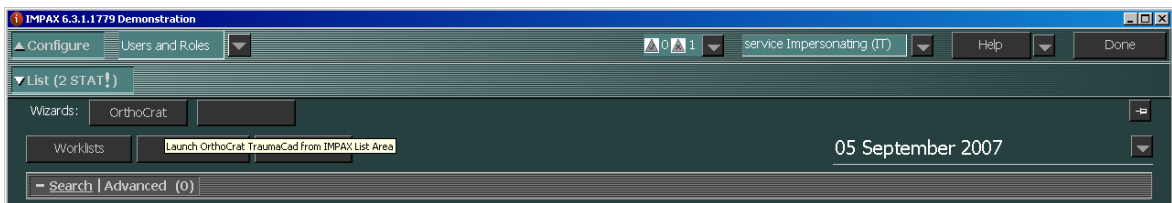


8. Right-click on the **Wizards** toolbar from the List Area and select **New**.
9. Enter a **Wizard Name**, e.g. 'TraumaCad'
10. Enter a **Display Text**, e.g. 'TraumaCad'
11. Enter a **Tooltip**, e.g. 'Launch TraumaCad from IMPAX Ad Hoc Search'
12. Paste the TraumaCad List Area script definition (see below)
13. Click **Test** to verify that the script can be compiled



Please use TraumaCad instead of OrthoCrat as in the screenshot above

14. Click Ok



Here is the script definition that needs to be defined as List Area Wizard in order to enable users to launch TraumaCad from Ad Hoc Search, using the accession number of the study that is currently being selected in the result list.

```
Option Strict Off
Imports System
Imports System.Windows.Forms
' the module must be named Script
Module Script
' the IMPAX application will call the Main method

Sub Main()
    dim accessionNumber as string
    dim userName as string
    dim url as string
    ' get the Accession Number from List Area
    accessionNumber = ScriptListArea.GetValueFromWorkList("study","accession_number")
```

```
' get the username from the context server
userName = ScriptApplication.GetValueFromContextServer(4)
' build the url
url =
"http://<traumacad_server_ip_address>/TraumaCadServer/Main/index_flash.aspx?autostart=1&accession="+accessionN
umber+"&newcase=1&userid="+userName
' show the url
System.Diagnostics.Process.Start(url)
End Sub
End Module
```

Remark: <traumacad_server_ip_address> needs to be replaced with the correct IP address of your TraumaCad server instance.

Known Limitations

1. The List Area Wizard cannot be used in Standard or Scheduled Worklists: it can only be used when selecting a specific study in the **Ad Hoc Search** results.
2. The List Area Wizard cannot be used for launching multiple studies in TraumaCad.
3. Even if the Ad Hoc search for local studies has resulted in one single study, the user must explicitly select the study and then click on the TraumaCad Script button.

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