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Scripted App Design

Last updated April 2024

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## THE SYNTHESYS™ INTERACTION STUDIO

### Introduction

The Synthesys™ Interaction Studio is a powerful integration tool that allows contact centre administrators to set up **Workspaces** under which to build the **Scripted Apps** that will support the individual client campaigns.

### Workspaces and Entities

Workspaces are directories used to store the Primary Entity and scripted apps associated with specific campaigns.

Each workspace can be linked to one Primary Entity, which typically contains the essential customer details that are to be used when creating and managing call lists.

Data from further Entities can then be utilized from within the individual scripted apps, for example by using the Entity Input and Update actions, or Web Services.


### Scripted Apps

A Scripted App, occasionally also referred to as webflow, is a map of all the routes an interaction can take, from a simple transaction to complex interactions that are personalised. Irrespective of their complexity, scripted apps can be built quickly and easily in the Synthesys™ Interaction Studio, using a graphical interface.

Contact centre administrators can use Web Services APIs, to retrieve information from relevant business systems or services across the internet, to ensure that agents have all the necessary information at hand to handle any call in a knowledgeable and professional manner. Web services can also be used to export data captured into external systems, updating business systems and databases with the latest transactions performed in the contact centre.

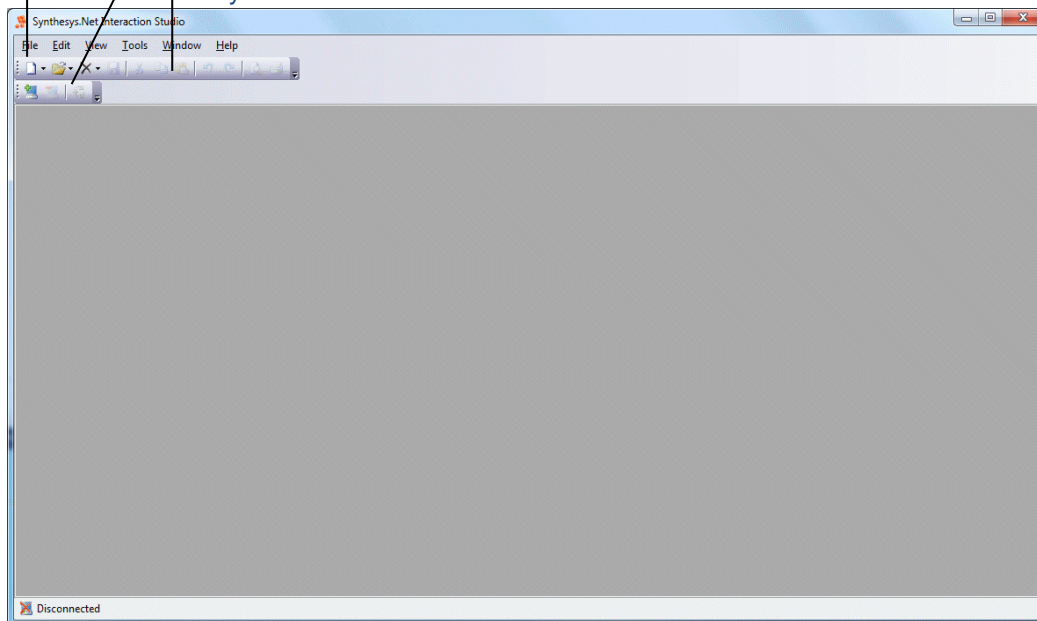
The information captured during customer interactions is readily reusable for business purposes because it is stored in a database.

## STARTING THE SYNTHESYS™ INTERACTION STUDIO

Once installed, open the Synthesys™ Interaction Studio, clicking on the Synthesys™ IDE icon  on your desktop.

The following screen is presented:

Menu Bar    Standard Toolbar  
Connectivity Toolbar



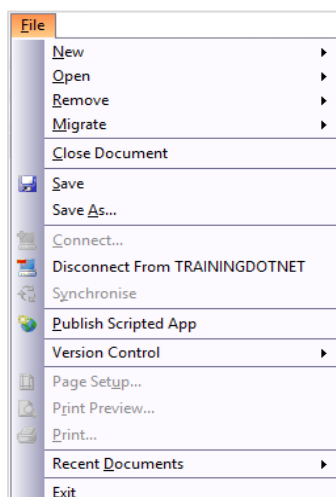
The following section describes in detail the elements indicated above.



## THE MENU BAR

The menu bar at the top of the *Synthesys™* Interaction Studio *Screen* provides access to a series of menu options via pull down menus:

### File Pull Down Menu



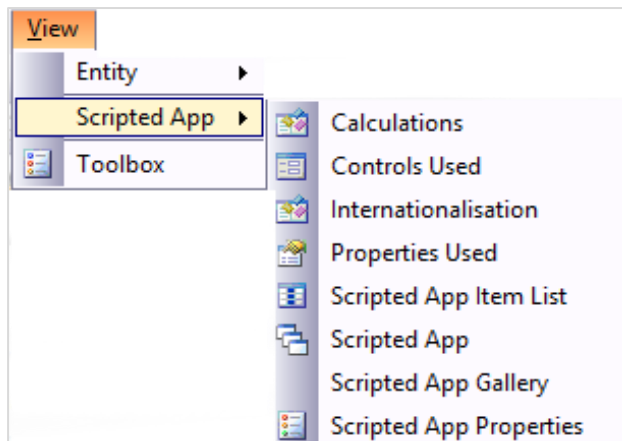
Menu Option	Used To
New	Create a new Scripted App.
Open	Open an existing Scripted App.
Remove	Option to delete existing Scripted App.
Close Document	Close the currently displayed Scripted App.
Save	Save the currently displayed Scripted App.
Save As	Save the currently displayed Scripted App on a different server and/ or under a different workspace.
Connect	Connect the local client machine to the server.
Disconnect	Disconnect the local client machine from the server.
Synchronise	Synchronising the local client with the server to pick up the latest published Scripted Apps and updates of Web controls.
Publish Scripted App	Publish the currently displayed Scripted App to make the latest version available in the Synthesys™ Portal in the Web Browser.
Version Control	Allow the rollback to a previous or older Version of the Scripted App, and to check Scripted Apps in and out.
Page Setup	Display the standard Windows <i>Printer Set-up</i> window.
Print Preview	Preview how the Scripted App displayed will look when it is printed.
Print	Print the currently displayed Scripted App.
Recent Documents	Select a previously opened file.
Exit	Close the Synthesys™ Interaction Studio screen.

## Edit Pull Down Menu



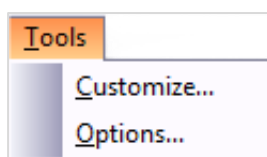
Menu Option	Used To
Cut	Remove the currently highlighted selection and place it on the Windows clipboard.
Copy	Copy the currently highlighted selection and place it on the Windows clipboard.
Paste	Paste the contents of the Windows clipboard at the cursor/ insertion point.
Delete	Delete the currently highlighted selection.
Undo	Undo the last action that was performed on the system.
Redo	Redo the last action that was performed on the system.

## View Pull Down Menu



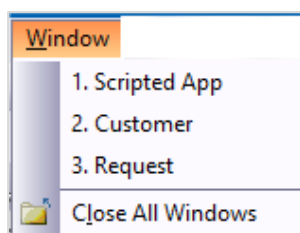
Menu Option	Used To
Scripted App	
Calculations	Display calculations used in the current Scripted App.
Controls used	Display the Web controls used in the current Scripted App.
Internationalisation	Shows all translatable elements of the selected scripted app.
Properties used	Display any properties, for example branching, associated with the current Scripted App.
Scripted App Item List	Display the number of sections, conclusions, decisions images and Input & Output actions used in the currently opened Scripted App, together with associated details.
Scripted App	Display the Scripted App
Scripted App Gallery	To store Scripted App objects to a centrally located gallery and allow users to reuse the stored items, which can include Sections, Actions, Decisions and Collections of the former.
Scripted App Properties	Display the Properties of the currently opened Scripted App, including Scripted App Name, Help URL and Parameters used, the History showing published versions, Encryption status, Abort Reasons, Dashboard and Parked & Held information as configured for the Scripted App and Default Styles used in the current Scripted App. Please see the section <b>Scripted App Property Options</b> for more information.
Toolbox	<p>Restore the Toolbox if it has been closed. In the Scripted App design view, the Toolbox displays the available Scripted App Blocks.</p> <p>In the Section view, the Toolbox displays the Core Controls and Custom Controls available.</p>

## Tools Pull Down Menu



Menu Option	Used To
Customize	Create and configure toolbars as required.
Options	<p><b>Environment:</b> To configure the layout of the Synthesys™ Interaction Studio environment (i.e., tabbed, or windowed).</p> <p><b>Scripted Apps:</b> To browse for the Scripted App path</p> <p><b>Servers:</b> To add or delete servers.</p>

## Window Pull Down Menu



Menu Option	Used To
1. Scripted App	Show the section tabs displayed in the Scripted App design area.
2. Customer	
3. Request	
Close All Windows	Close all open windows currently displayed in the Scripted App design area.

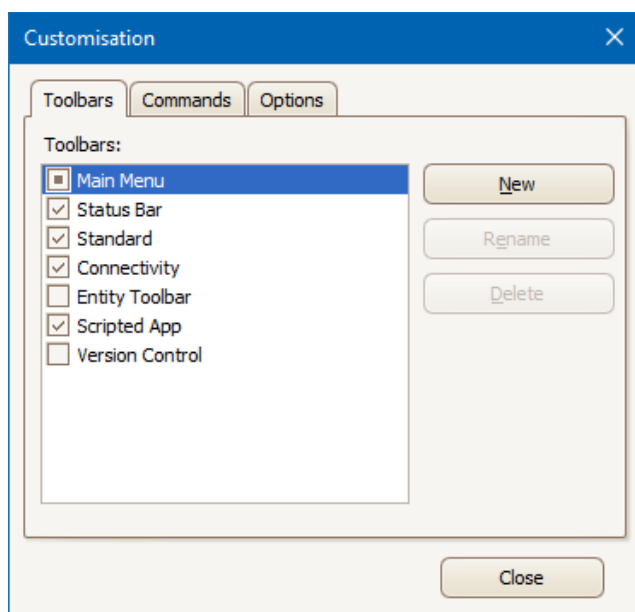
## Help Pull Down Menu

Menu Option	Used To
About	Display details about the Synthesys™ Interaction Studio.

## TOOLBARS

The **Standard** and **Connectivity** toolbars are automatically displayed on opening the Synthesys™ Interaction Studio screen.

The **Scripted App** and **Version Control** toolbars can be added to the Synthesys™ Interaction Studio screen via **Tools /Customise**, by placing a tick in the check box next to the toolbar name.



How to create your own personalized toolbars is described in the section 'Creating your own Toolbars'.














*The toolbars can be placed anywhere in the Synthesys™ Interaction Studio Screen. They can also be positioned at the top, bottom, or to the left or right of the Scripted App design area.*

*Displaying all existing toolbars, many of the operations will be available via the toolbar, rather than the file menu.*

## The Standard Toolbar




The Standard Toolbar is positioned below the Menu Bar in the Synthesys™ Interaction Studio screen.



Button	Used To
	Create a new document, to create a new Synthesys™ Scripted App.
	<i>Open an existing Document</i> , to open an existing Scripted App.
	Option to delete a Scripted App.
	Save the currently displayed Scripted App. Scripted Apps are automatically saved to the central server using a fixed format file name. The file name is generated using the workspace prefix and the name of the Scripted App.
	Remove the currently highlighted selection and place it on the Windows clipboard.
	Copy the currently highlighted selection to the Windows clipboard.
	Paste the contents of the Windows clipboard at the cursor/ insertion point.
	Undo the last action that was performed on the system.
	Redo the last action that was performed on the system.
	Preview how the currently displayed Scripted App will look when it is printed.
	Display the <i>Print</i> window for your default Windows printer.





## Connectivity Toolbar



Button	Used To
	Connect the local client machine to the remote server.
	Disconnect the local client machine from the remote server.
	Synchronise the local client machine with the remote server, picking up the latest Scripted Apps and any updates to Web controls.






## Scripted App Toolbar



Button	Used To
	Publish the currently displayed Scripted App to make the latest version available in the Synthesys™ Portal in the Web Browser.
	Display the properties of the currently open Scripted App.
	Zoom in / out of the currently open Scripted App.
	Display the <i>Print</i> window for your default Windows printer.

## Version Control Toolbar



Button	Used To
	Open the Select Version Control dialog.
	Check in a Scripted App. To be able to publish a Scripted App it must be checked in.
	Check out a Scripted App. To be able to work with and edit a Scripted App, you need to check it out.
	Undo Check out.
	Get the latest Version of the Scripted App.

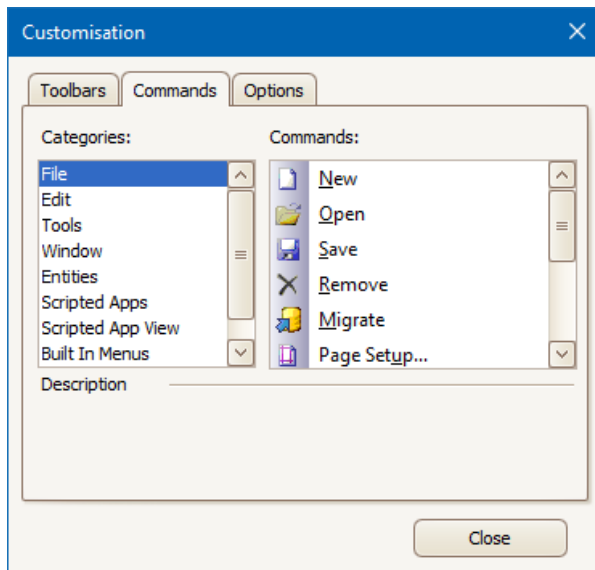
## Creating your own Toolbars

You can also create and configure your own toolbars as required.

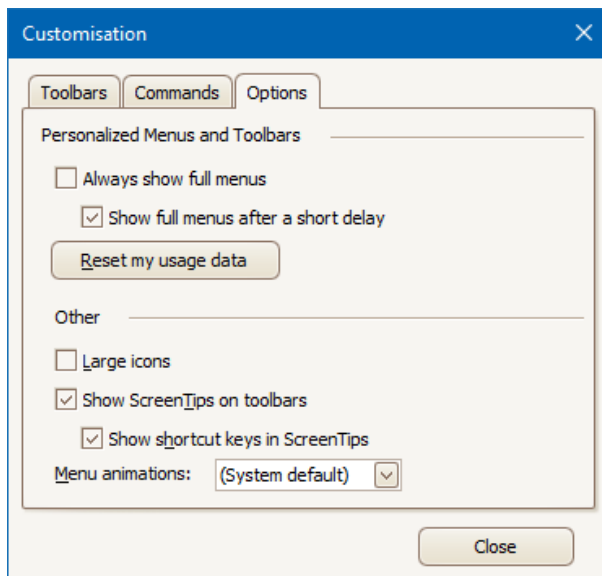
Go to **Tools /Customise** and click the **New** button in the Customization window. Enter a name for your toolbar and click **Close** to display the new toolbar.

Next, go to **Tools /Customise** again, but this time, click the '**Commands**' tab in the Customization window.

Select and drag the required icons onto your toolbar.



Further options to personalize your toolbar are available via the '**Options**' tab.



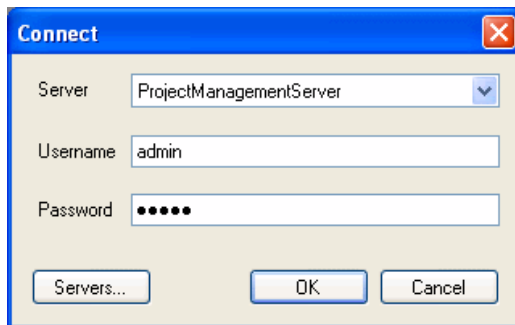


## CONNECTING TO A SERVER

You can now choose to design your Scripted App off-line, and only connect to the server to publish your Scripted App before taking a call in the Web browser, or you can connect to the server immediately.

To connect the Interaction Studio to a Synthesys™ server, go to **File / Connect**.

This will open the *Connect* dialog.

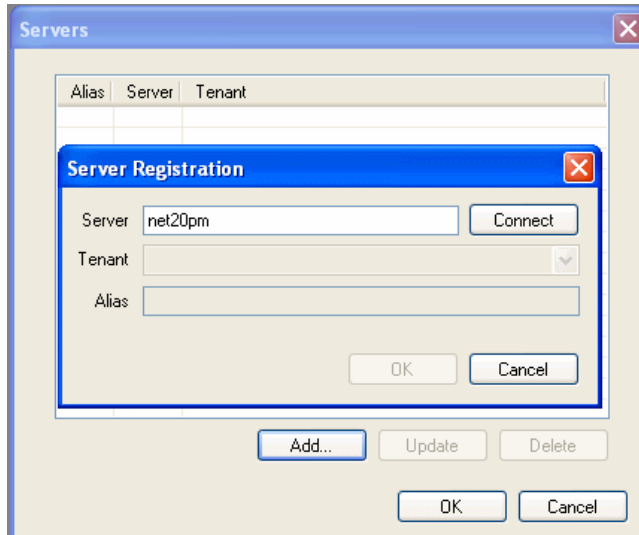


Select the required server from the drop-down menu.

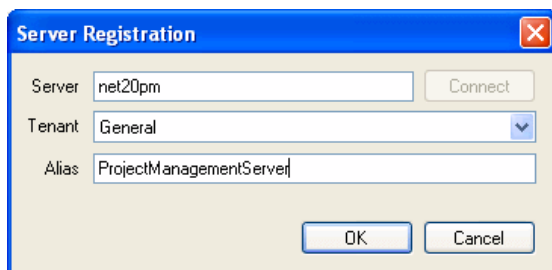
Enter your **username** and **password** in the Username and Password fields displayed.

## Creating a new Server

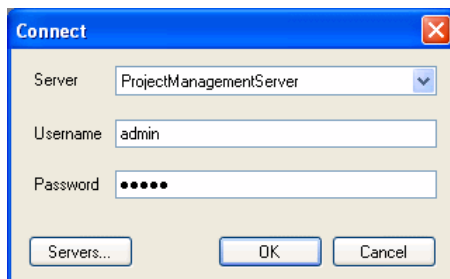
To create a new server, go to **File / Connect**, select **Servers** in the *Connect* window and click the **Add** button.



Enter the name of the server and select **Connect**. Once connected select tenant "General" and then give the server an appropriate name that you can remember.



Select **OK** and connect to the server by entering your username and password as given to you by your administrator.

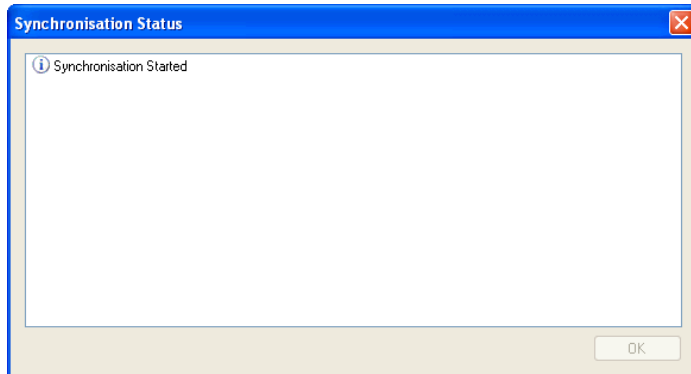


## Synchronising with the Server

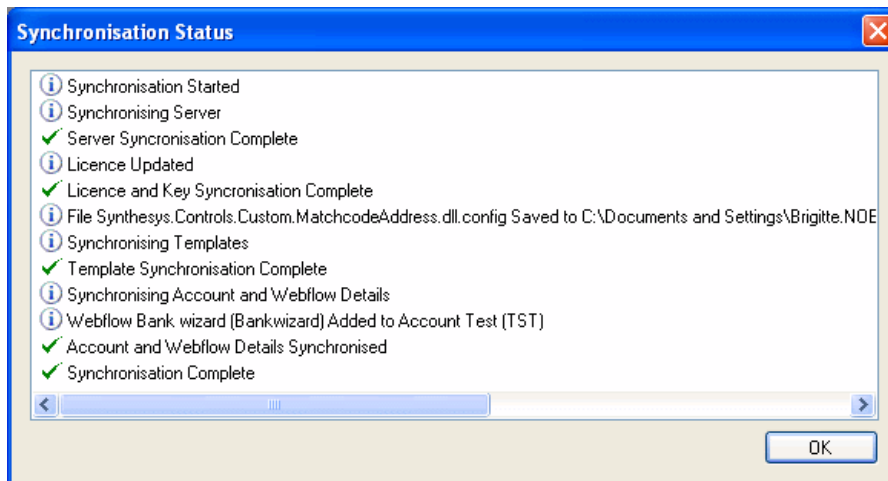
Once you have connected to the server, you need to synchronize the client machine with the server, to pick up the latest Scripted Apps and any updates to Web controls.

Go to **File / Synchronise**, or alternatively click the Synchronize  icon.

Initially, the **'Synchronisation Started'** line will appear.



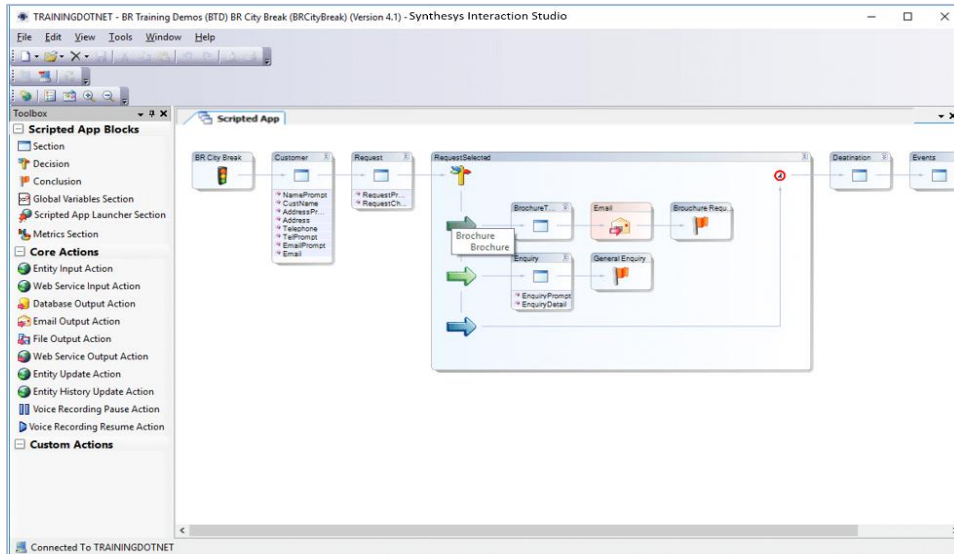
After a short while further lines appear, with the last line reading **'Synchronisation Complete'**.



Click OK to exit the *Synchronisation Status* screen.

## SYNTHESYS™ SCRIPTED APPS

A Scripted App is a map of all the routes an interaction can take, from a simple transaction to complex interactions that are personalised.



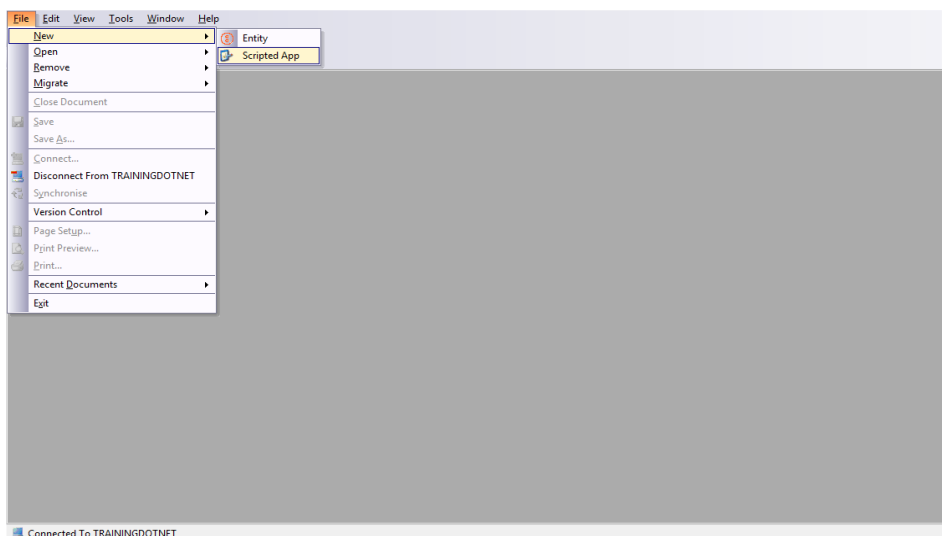
Scripted apps are created and stored under the relevant Workspaces.

## CREATING A NEW WORKSPACE

A workspace is a directory, under which contact centre administrators build the scripted apps to support the customer campaigns and where they select the Primary Entity, typically containing the essential customer details used for managing call lists.

To create a new Workspace, go to:

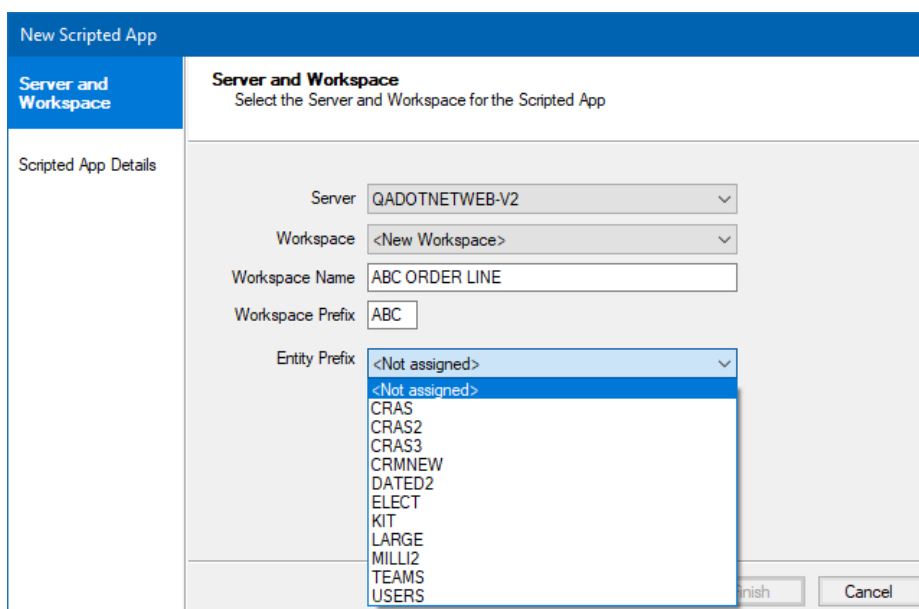
- File / New / Scripted App



## Entering Workspace Details

To set up a new workspace

- Select the **Server name** and then **<New Workspace>**.
- Enter a name for the new workspace into the **Workspace Name** field.
- Into the **Workspace Prefix** field, enter a unique prefix for the workspace, consisting of three alphanumeric characters.
- The Prefix is used to identify all data held against the workspace and allows easy identification of data held in database tables.



**New Scripted App**

**Server and Workspace**  
Select the Server and Workspace for the Scripted App

Scripted App Details

Server: QADOTNETWEB-V2

Workspace: <New Workspace>

Workspace Name: ABC ORDER LINE

Workspace Prefix: ABC

Entity Prefix: <Not assigned>

Entity Prefix options:  
 <Not assigned>  
 CRAS  
 CRAS2  
 CRAS3  
 CRMNEW  
 DATED2  
 ELECT  
 KIT  
 LARGE  
 MILLI2  
 TEAMS  
 USERS

Finish Cancel

## Selecting the Primary Entity for the Workspace

Each workspace can be linked to one main Entity which typically contains the essential customer details that are to be used when creating and managing call lists.

Data from further Entities can then be utilized from within the individual scripted apps, for example by using the Entity Input and Update actions.

To assign the Primary Entity to the selected workspace

- Select the **Entity Prefix** that you wish to use from the **Entity Prefix** drop down list.

Click **Next>** to move to the *New Scripted App* window, where you can enter a name for the scripted app that will support the new campaign.

## Adding a new Scripted App

In the Scripted App Details window

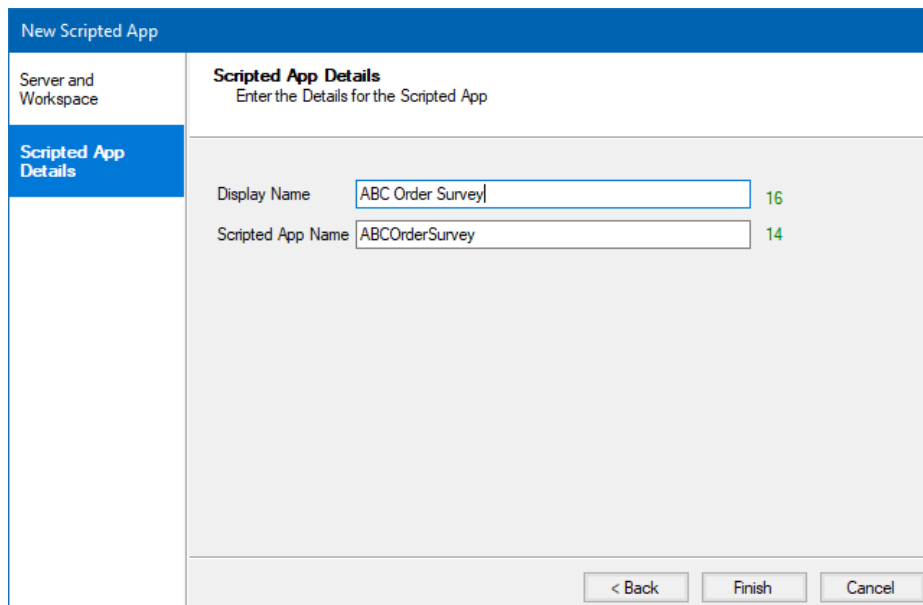
- Enter a descriptive name for your scripted app into the **Display Name field**.



*The display name should represent the campaign it is designed to support.*

*You can enter up to a maximum of 255 characters into the Display Name field. The entry in the Scripted App Name field, which is stored in the database, is restricted to 40 characters.*

In our example, we used the name 'ABC Order Survey' for our scripted app.



New Scripted App	
Server and Workspace	<b>Scripted App Details</b> Enter the Details for the Scripted App
<b>Scripted App Details</b>	Display Name <input type="text" value="ABC Order Survey"/> 16 Scripted App Name <input type="text" value="ABCOrderSurvey"/> 14
<input type="button" value=" &lt; Back"/> <input type="button" value=" Finish"/> <input type="button" value=" Cancel"/>	

Click **Finish** to display the Scripted App design area, within the Synthesys™ Interaction Studio screen.

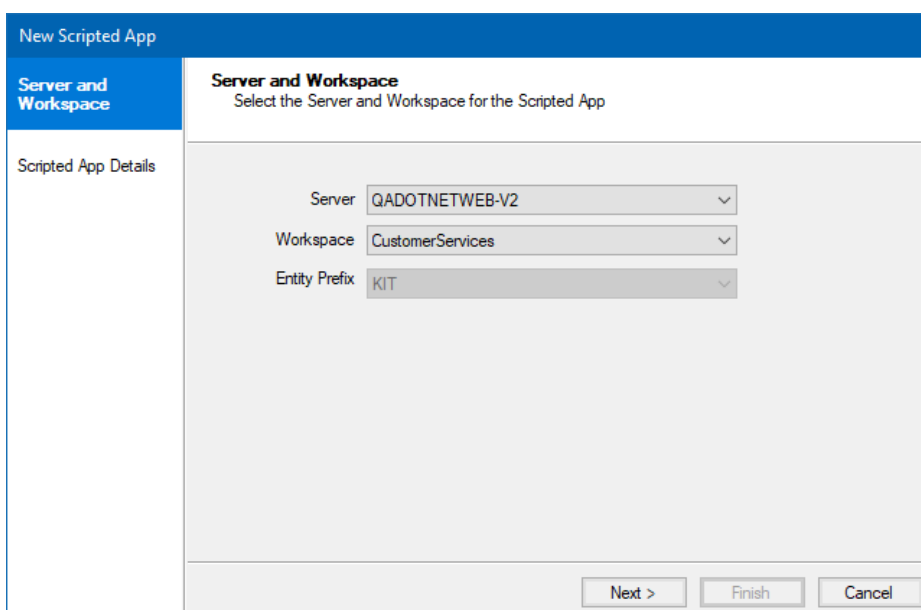
## ADDING NEW SCRIPTED APPS TO EXISTING WORKSPACES

For existing workspaces, where the Primary Entity has already been assigned, the Entity Prefix field will show the Entity in use. The option to select an Entity is disabled, as each workspace can only be allocated one main Entity.

Script designers can however utilize information from further Entities as part of their scripted apps, for example by using the Entity Input and Update actions.

To set up a new scripted app for a workspace with an allocated Entity

- Select the name of the server from the **Server name** drop down list.
- In the Workspace field, select the workspace under which you wish to create your new scripted app.
- If no Entity has been assigned to the workspace yet, you can select the Entity Prefix that you wish to use.
- If an Entity has already been assigned to the selected workspace the Entity Prefix field will be greyed out, displaying the Entity in use.



Go to the Scripted App Details page and

- Enter a descriptive name for your scripted app into the **Display Name field**.

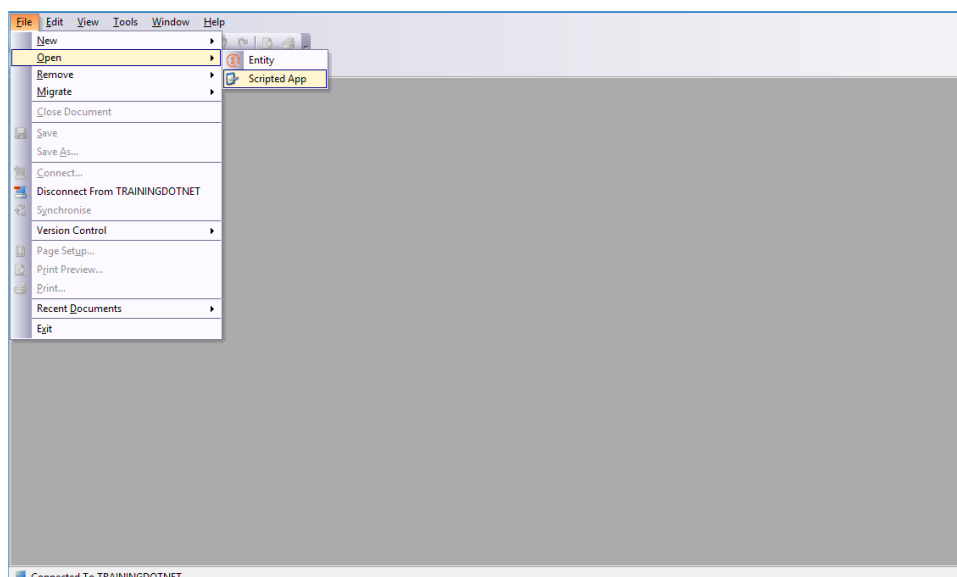
Click **Finish** to display the Scripted App design area, within the Synthesys™ Interaction Studio screen.

## OPENING EXISTING SCRIPTED APPS

In the Synthesys™ Interaction Studio, you can create a new Scripted App or select and open an existing Scripted App.

To open an existing Scripted App, go to:

- File / Open / Scripted App.



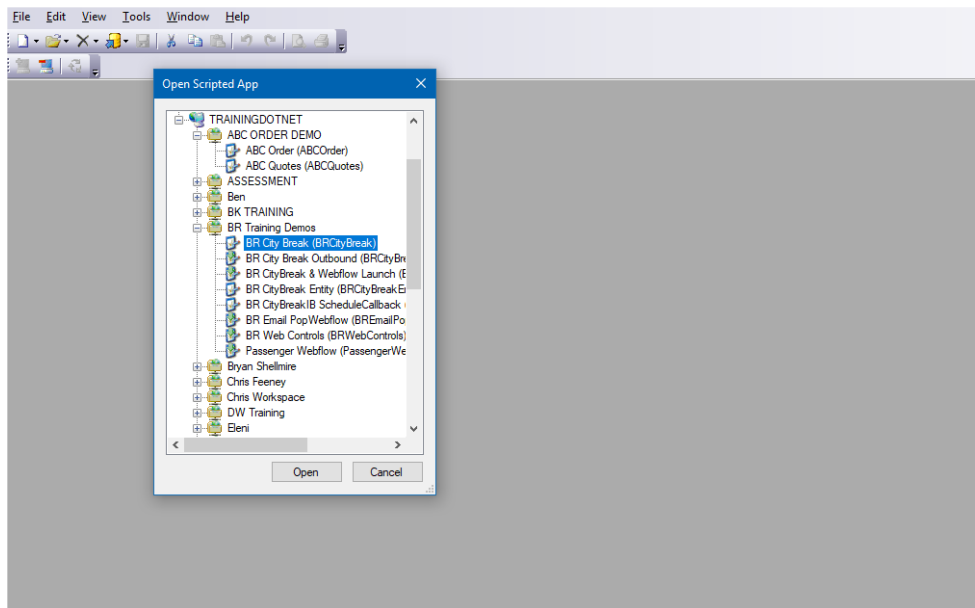




## Understanding the Open Scripted App Screen

The Open Scripted App screen shows a tree structure, like the one in your Windows Explorer and graphically represents the customer workspaces and scripted apps that are stored within the system.



A Scripted App is created to support the campaigns that you are managing and is stored under the appropriate customer workspace.

The *Open Scripted App* window, where all Synthesys™ Scripted App are held.



**Server.** The name of the Server is shown to the right of the icon. A  sign next to the server icon indicates that one or more workspaces have been created for that server. Click on  to display the workspaces.



**Workspace.** Displays each workspace, also referred to as account, set up on the system. A  sign next to the workspace icon indicates that one or more scripted apps have been created for that workspace. Click on  to display the Scripted Apps.



**Scripted App** designed to support the interaction between agents and customers is displayed under the appropriate workspace.

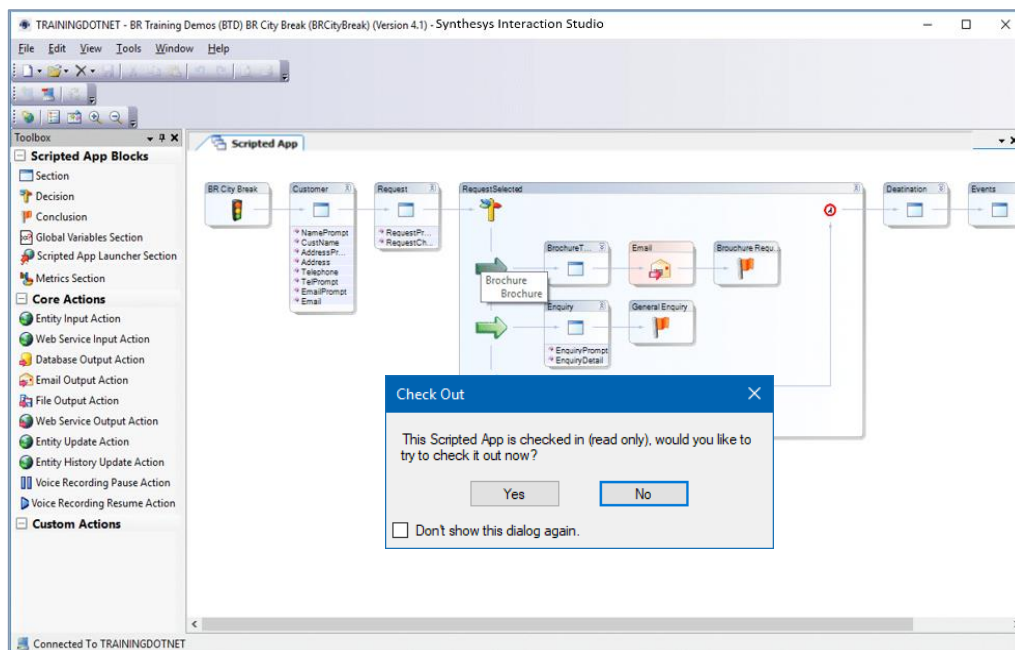
## Checking Out Scripted Apps

Scripted apps can be opened in a 'view only' mode or they can be checked out for editing.

When opening a scripted app that has previously been published or checked in, the *Check Out* dialog will open, asking users if they wish to check out the scripted App:

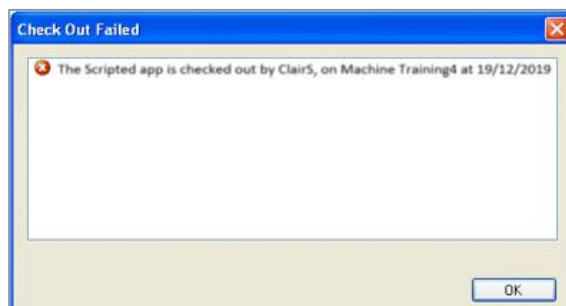
'This Scripted App is checked in (read only), would you like to try to check it out now?'

- Click **Yes** to check out the Scripted App so that you can edit it.
- Click **No** if you only wish to view the Scripted App in read only mode.



If the Scripted App that you wish to edit is already checked out on another machine, the checkout will fail.

The message associated with the failed check out shows the name of the user and of the machine on which the Scripted App is currently checked out, and the date it was checked out.

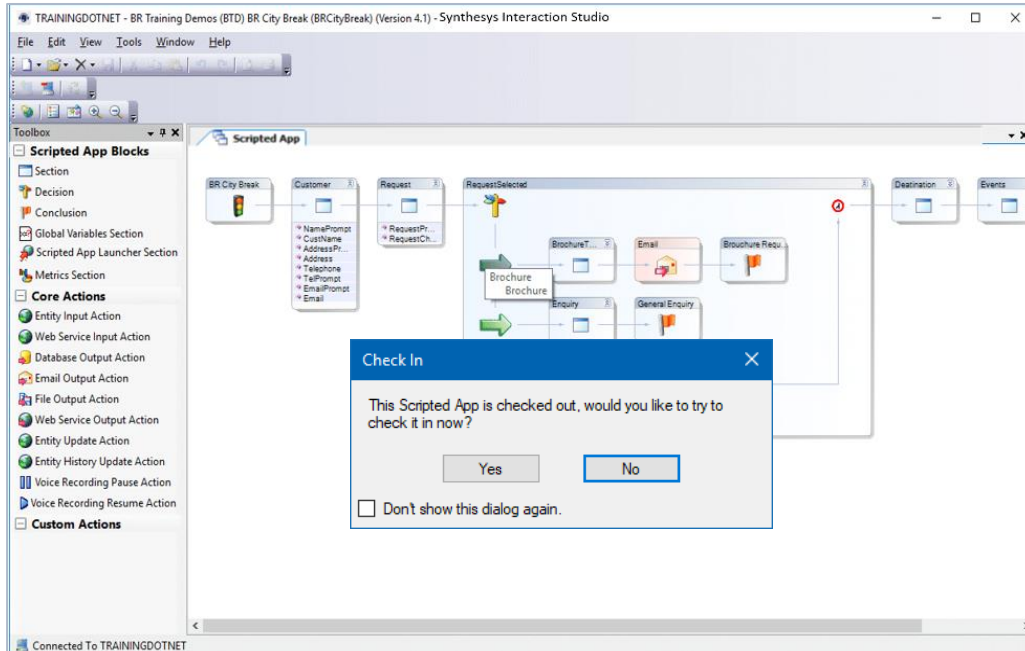


The Scripted App needs to be checked in by the listed user, on the named machine, before you can check it out for editing.

## Checking In Scripted Apps

On closing a Scripted App or on exiting the Synthesys™ Interaction Studio, users will be asked, if they wish to check in the Scripted App:

'The Scripted App is checked out would you like to try to check it in now?



It is advisable to click Yes and check the Scripted App in to ensure that it can be checked out again for editing, on the current machine by other users or on another machine.



*Remember that users can only check out, edit, and publish Scripted Apps that are not currently checked out on another machine or by another user.*

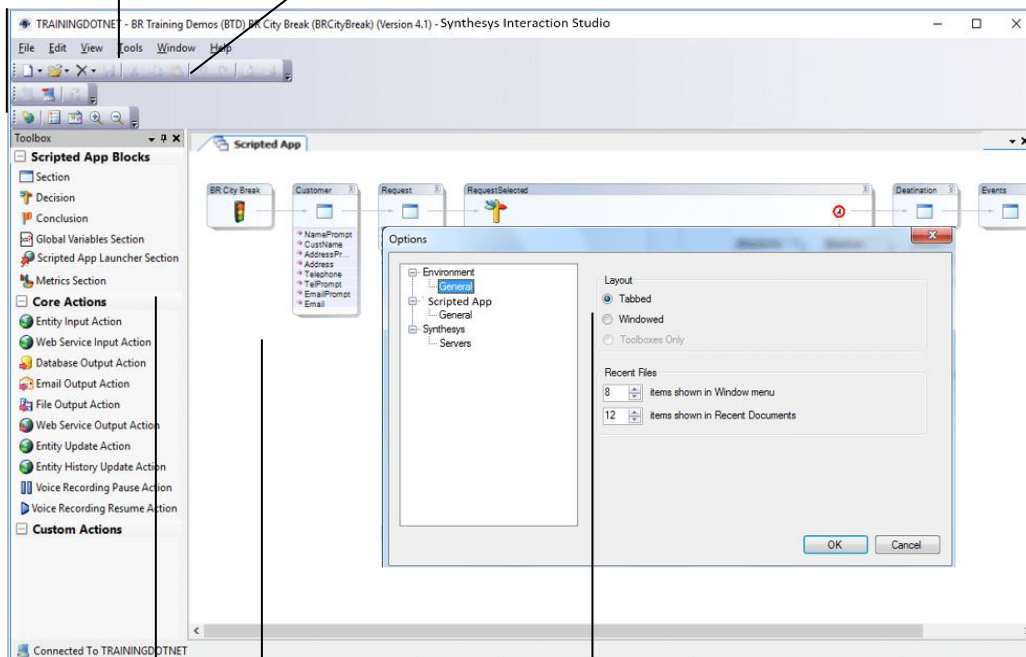
## THE SCRIPTED APP SCREEN

The top of the Synthesys™ App (Interaction) Studio window now displays the workspace and scripted app details, together with the version number.

The design area contains two sections. The first section displays a traffic light to indicate the start of the Scripted App; the other a Finish flag, to signal the end.

Workspace & Scripted App details

Menu Bar      Toolbars as selected and configured



Scripted App Blocks & Core Actions  
Scripted App Design Area

Scripted App Layout: Tabbed Environment
















To display tab headings in the Scripted App design area, go to **Tools – Options**. In the **Options** dialog, under the **Environment** directory, select **General** and click **Tabbed** in the **Layout** section on the right.

To display the toolbox, go to **View on the menu bar** and select – **Toolbox**.

## Scripted App Blocks & Core Actions

The individual Scripted App Blocks and Core Actions are used to build Scripted Apps quickly and easily. The following standard Features are available:

Scripted App Blocks	Used To
 Section	Add a new section to the current Scripted App and add the questions to be asked at run time in the web browser.
 Decision	Add a new decision to the Scripted App, to allow the Scripted App to react to questions in different ways and to determine the path through a Scripted App.
 Conclusion	Add a new conclusion point, to end the Scripted App.
 Global Variables Section	Allow users to set and/or create global variables and decide its type, i.e., integer, double, character, string, datetime, boolean & listitemcollection.
 Scripted App Launcher Section	Allow users to launch Scripted Apps within a Scripted App and pass parameters between the Scripted Apps.

Core Actions	Used To
 Entity Input Action	Utilize specific CRM/ Entity details within a Scripted App, for example to enable branching, in calculations or the dashboard.
 Web Service Input Action	Enable connection to a web service to return data for use in a Synthesys™ Scripted App at runtime.
 Database Output Action	Allow data from a Web call to be exported to a selected Database.
 Email Output Action	Enable users to send an instant email as part of the Scripted App.
 File Output Action	Export data from a Web call as a comma separated file.
 Web Service Output Action	Enable connection to a web service to export data from a Synthesys™ Scripted App at runtime.
 Entity Update Action	Allows data to be written back to the Entity table.
 Entity History Update Action	Allows data to be written back to the History table.

## Working with Scripted Apps

The design area displays a section with the name given to the scripted app, to mark the starting point of your Synthesys™ Scripted App. The end is signalled by a Finish flag,

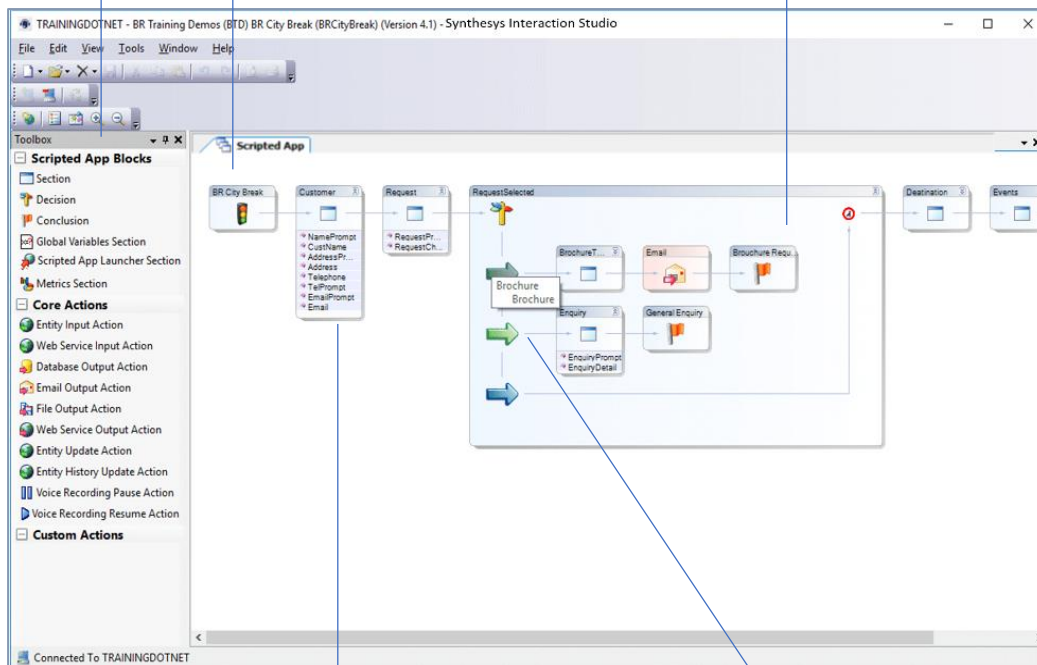
To build a Scripted App, and to develop the paths that can be taken, drag the sections and decisions from the Scripted App Blocks column and place them between the traffic light and the finish flag.

The Scripted App in our example contains sections, decisions with branches, conclusion points and some output actions.

Scripted app Blocks

Scripted app Properties Section

Conclusion Flags




Sections containing the questions to be asked during the live operation of the scripted app

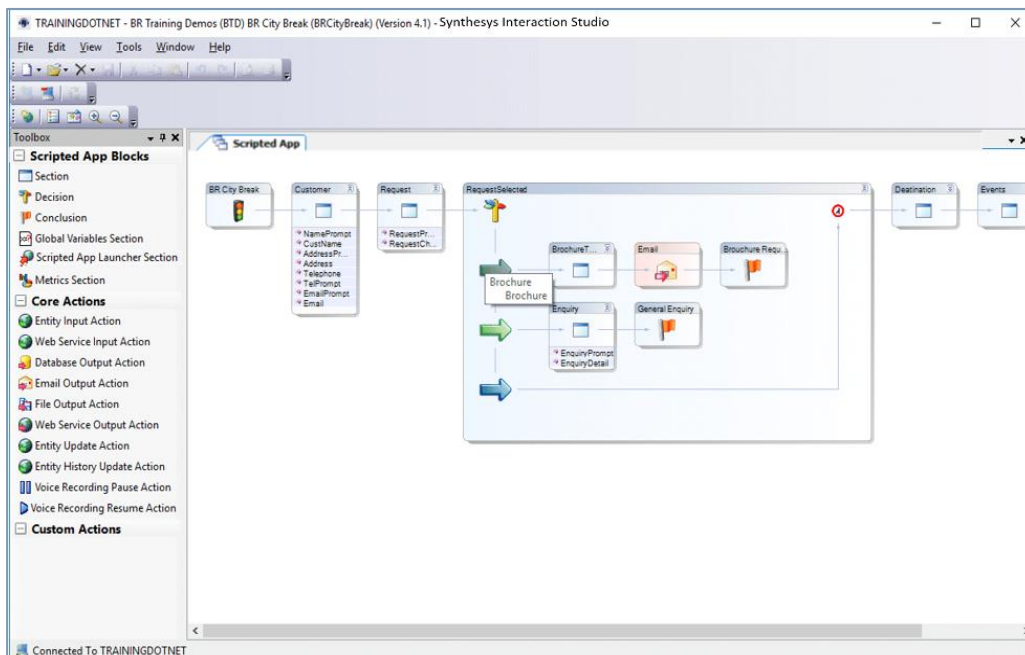
Branches that determine the path through the scripted app

## Viewing Scripted App Content


### Section Content

To view a summary of the section content, click the  icon at the top left of the section. A drop-down list displays the names of the web controls that have been placed into the section.

To open a section, click on the corresponding section tab displayed in Scripted App Flow View, or double click on the section itself.



### Display Branches

Click the  icon at the top right of the decision point, to expand or collapse the branches of a Scripted App.

To view the names of individual branches, move your cursor over the branch arrow. A tooltip will appear, showing the branch name.

## Working with a Section

Sections contain the questions that are displayed when the Scripted App is running in a web browser. A section will contain all the necessary web controls to enable the user to perform the task required on the page.

A Section Wizard will guide you through the steps of setting up the section.

Initially, you will be prompted to enter a name for the section. Next, you can choose to add a Help Page to the section clicking Next>, or to drop the section without adding a Help Page, clicking Finish.

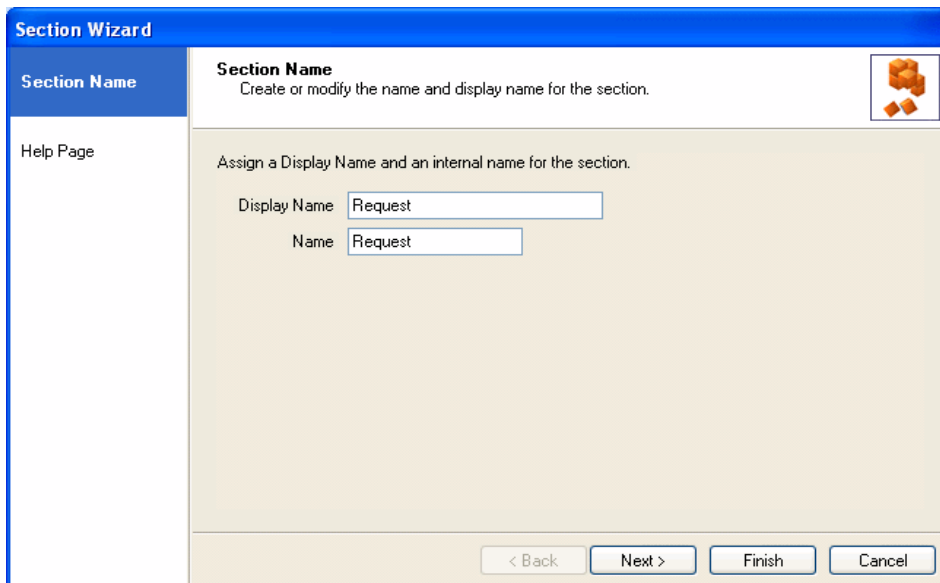
To save your Scripted App, click the **Save**  icon.



## Adding a New Section to your Scripted App

To add a new section, select the section  symbol from the *Scripted App Blocks* column of the Toolbox, on the left-hand side.

- Press the left mouse button and drag the new section into the Scripted App design area on the right. Your mouse pointer will change to a small black arrow.
- Point the arrow to the line between the traffic lights and the conclusion flag and release the left mouse button, to drop the section.
- The Section Wizard is displayed, prompting you to enter a name for the section, in our example, the section name in our example is 'Request'. If the name is already in use, a warning icon will prompt you to rename the section.
- To attach a Help Page to a section, click the Help Page option, or the Next> button.



*Descriptive section names help users to navigate through the Scripted App.*

*The **Display Name** is shown as section heading in the Scripted App. The **internal name** in the **Name** field is stored in the database and can't contain spaces.*

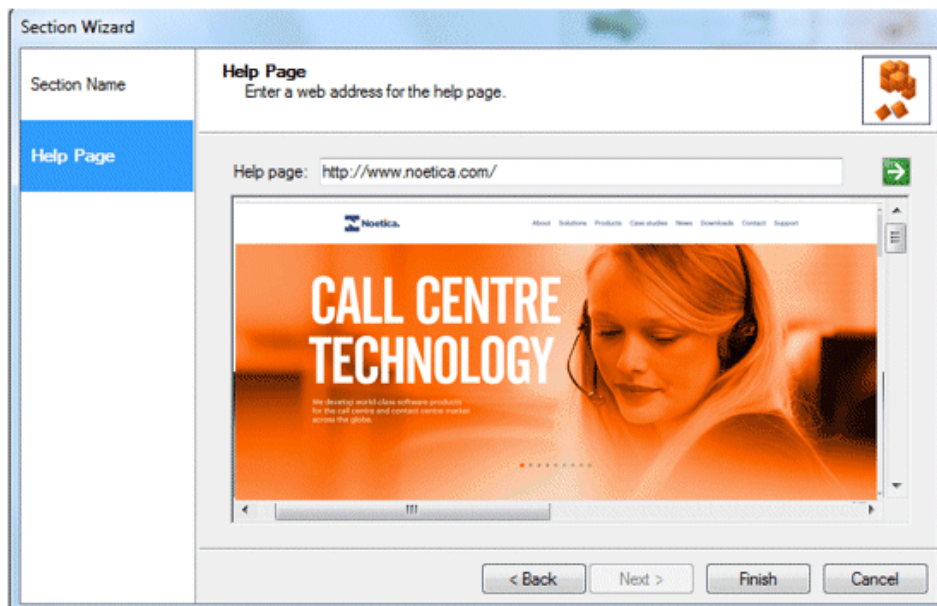
*The display name and internal name can be different. The maximum entry for each field is 50 characters.*

*It is not advisable to rename the internal name in the Name field, especially once your campaign is live, as this will put new columns into the Database and your reports will have to be re-created to point to the new fields.*

## Adding a Help Page to a Section

In the Help Page option of the Section Wizard, you can now assign a Help Page. This can be any page that is accessible via the intranet or the Internet.

- Enter the web address for the required Help Page.
- Next, press Enter on the keyboard, or click the **green arrow** to **test the link** and to display the Help Page for this section.
- Enter the web address and press the green arrow to test the link.

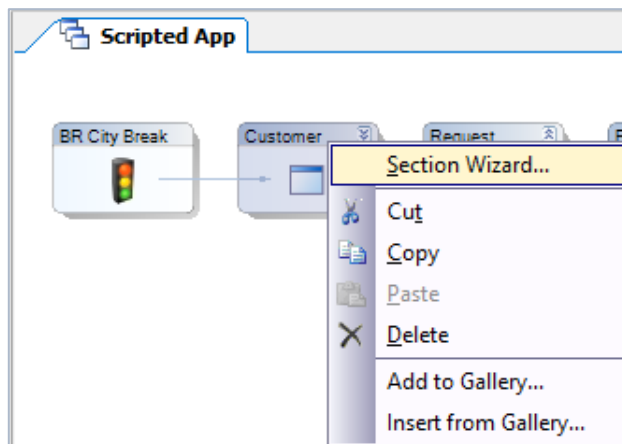


Click **Finish** to add the section to your Scripted App.

## Editing Section Details

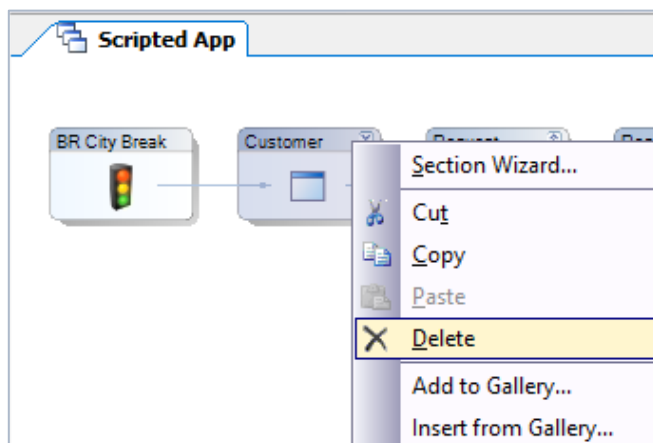
To edit a section, for example to change the section name or to add a Help Page:

- **Right click** on the section and select the **Section Wizard** option.
- In the Section Wizard that will subsequently open, you can make your changes, as required.



## Deleting a Section

- To delete a section, **right click** on the section and select the **Delete** option.













## SYNTHESYS™ WEB CONTROLS




Web controls are used to create the questions and prompts within a section that guide the user through a Scripted App, ensuring that all relevant information is completed.

Web controls are self-contained tools that can perform a variety of tasks, from a simple data capture “Edit” control to more advance bespoke Web controls that interact with other applications or databases.

Web control	Used To
	<b>Address control:</b> capture postal address details.
	<b>Check Box:</b> display a group of Windows style check boxes. Any number of boxes can be created, and multiple items can be ticked.
	<b>Cascading Drop Down:</b> create up to 10 drop down lists within the control, which allow a mutually exclusive selection to be made from several entries.
	<b>Date Time Picker:</b> allow the capture of a past or future date from a diary page, as well as allowing the capture of the time.
	<b>Drop Down List:</b> display a Windows style drop down list, which allows a mutually exclusive selection to be made from several entries.
	<b>Edit:</b> accommodate numerical, currency, text or alphanumeric input.
	<b>Entity control:</b> pick up a specific CRM/ Entity table and to determine how the information is displayed to users at run time.
	<b>File Upload:</b> upload files when taking calls in the Synthesys™ Portal. Using calculations, users can specify which files to upload and the location to store and view the files.
	<b>Hyperlink:</b> launch a webpage via a hyperlink in the Scripted App
	<b>IFrame:</b> launch a webpage as part of the Scripted App, when users reach the section that contains the control.
	<b>Image:</b> allow the display of images as part of the Scripted App.
	<b>List Box:</b> display a list.
	The <b>Macro</b> web control allows users to invoke client-side macros.  The Macro itself, a saved sequence of commands or keystrokes, is written by the client to simplify tasks, for example the transfer of selected data to a target application.
	<b>Memo:</b> allows the entry of large amounts of text with formatting.

Web control	Used To
	<b>Multi Edit:</b> display of multiple edit fields in multiple columns and rows that can accommodate numerical, currency, text or alphanumeric input.
	<b>Multi Memo:</b> enter large amounts of text with formatting. Users can split the memo control into up to three memo fields displayed next to each other and define a width for each field. Entries in each memo field will be stored to its own database column.
	<b>Name:</b> allows the capture of title, initials, forename, and surname.
	<b>Prompt:</b> is used to prompt agent dialogue during a call. All characters are acceptable but the combination of <% text %> is reserved exclusively for calculation substitutions.
	The <b>Multi Tab Prompt</b> web control is used to hold multiple data sets of information on one screen. Text can be formatted in the control or users can format the content using Html.
	The <b>Next/ Previous</b> web control is used to navigate between sections. The control consists of two images that are displayed side by side, the size is determined at design time.
	<b>Radio:</b> allows a mutually exclusive selection to be made from several configurable buttons.
	The <b>TransferToIVR</b> web control allows the transfer of a call to a specified telephone number.
	The <b>Transfer</b> web control is used for the transfer (blind transfer or initiate a consultation or conference call) of a customer from within a Scripted App to a specified telephone number.
	<b>Reference Number:</b> generates a unique reference number at runtime according to a predefined configurable format.
	<b>Scripted App Launcher:</b> to insert a Scripted App into another.

## Custom

Web Controls	Used to
	<b>EigerDebit:</b> verifies bank account details given by a customer. The control is integrated with the BANK WIZARD® (Software to be provided by Eiger), to provide reliable bank data for your systems.
	<b>Matchcode Address</b> allows the capture of a postal address. Using Matchcode Address, the address will be completed automatically based on the entry of a postcode.
	<b>Media Code control:</b> allows the capture of a media source code. Based on a reference number of media name, full source details can be displayed on screen. The control is used primarily for the purpose of market research.

## Working with Web Controls

The available Web controls are displayed in the section editor under the **Core Controls** column of the Toolbox.

A **Control Wizard** will enable you to configure the control as required.

Each Web control has its own set of available properties and the control wizard will systematically guide you to each option, when you click the Next> button.


Available Option	Used to
<b>Name</b>	Enter a name for the control. The name must only contain alpha numeric characters and no spaces.
<b>Settings</b>	Choose and select from the options available, or add to, remove, or modify items in a list
<b>Items</b>	Add to, remove, or modify items in a list
<b>Value</b>	Enter free text, for example for the prompt control
<b>Fields/ Titles</b>	Select from the available fields and add or remove existing titles for the name control
<b>Validation</b>	Set compulsory fields to instruct the user to complete and put data in the Web control, before moving on to the next section. A star will indicate which fields are set to compulsory.
<b>Advanced</b>	Change the appearance and behaviour of a control, for example set back and border colours or set properties using calculations.

## ADDING & CONFIGURING WEB CONTROLS

To add a Web control to a section

- Double click on the section, to open the Section Editor.

The available Web controls are displayed under the **Core Controls** column of the Toolbox on the left-hand side.

- Select the desired control symbol, for example a Radio  Web control, and drag it into the Section design area.
- Release the left mouse button, to add the control.

All controls will be aligned to the left and one above another. If you put many controls onto a page, the page will have scroll bars at runtime, allowing the user to scroll up and down the page.



*Each Web control has a set of available properties. When you click the Next> button, the Control Wizard will systematically guide you to each option.*

*Alternatively, simply click the desired option in the panel on the left-hand side.*

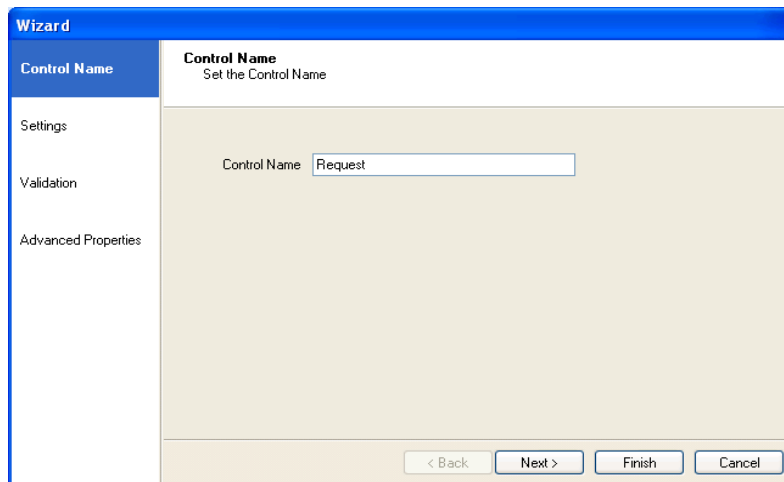
## Web Control Name

The first page of the **Control Wizard** displayed prompts you to enter a name for the control.



*The control name must be different from the section name. If you use the same name, an error message will be displayed, when you click Finish.*

*It is not advisable to change the control name once the campaign is live, as this will put new columns into the Database and your reports will have to be re-created to point to the new fields.*



The screenshot shows a window titled "Wizard" with a sidebar on the left containing "Control Name", "Settings", "Validation", and "Advanced Properties". The "Control Name" page is active, showing the instruction "Set the Control Name" and a text input field labeled "Control Name" containing the text "Request". At the bottom, there are four buttons: "< Back", "Next >", "Finish", and "Cancel".

Click **Next>**, to move to the **Settings page** of the Wizard, to continue the configuration of the Radio web control.

Alternatively, simply click the Settings option on the left-hand side of the Wizard screen.



## Web Control Settings

In the *Settings* window of our Radio web control, we can replace the existing options 'Yes and No' with our own options, as required.

**Display Text** shows the text for the options that are displayed to the user.

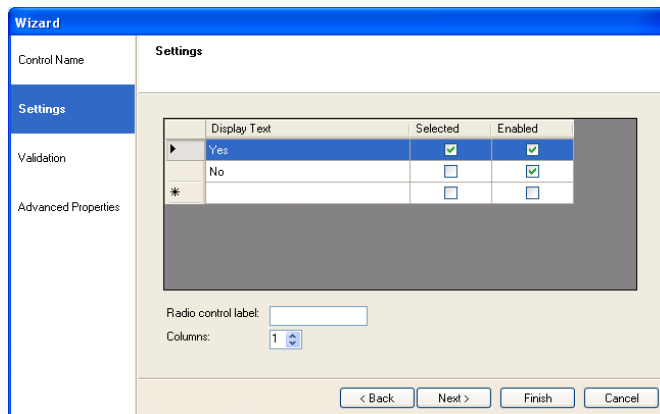
**Selected:** if ticked indicates that the specific option will by default be selected.

**Enabled:** if ticked indicates that this option is available for the user to select.

**Label:** if you like, you can attach a label to the control.

**Columns:** you can select the number of columns to be displayed, i.e., '1' column.

The focus is on the first line of the *Display Text* section.

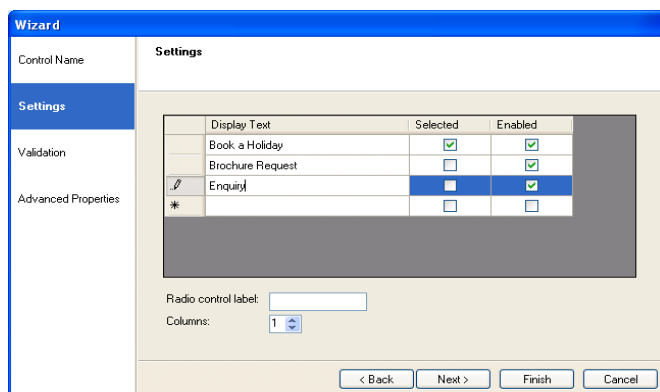


Display Text	Selected	Enabled
Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>	<input checked="" type="checkbox"/>
*	<input type="checkbox"/>	<input type="checkbox"/>

Radio control label:

Columns:

- Enter your first option that is relevant to your campaign.
- Press **Return** to move to the next line and enter your next option.
- Continue the process, until all entries have been made.
- To edit the text entered, double click the option in the display text and type in the new text. To add new options, double click in the display text column next to the \*.



Display Text	Selected	Enabled
Book a Holiday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Brochure Request	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Enquiry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
*	<input type="checkbox"/>	<input type="checkbox"/>

Radio control label:

Columns:

- You can add a label for the control and select the number of columns to be displayed.
- To delete an entry, highlight the row and click **Delete** on the keyboard.

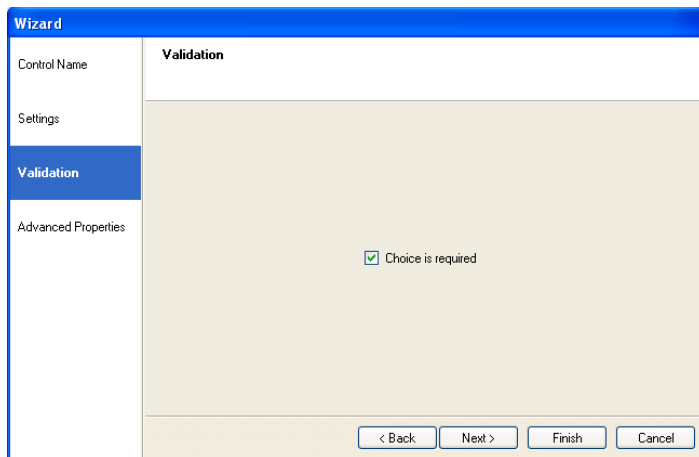
Click **Next**, to move to the Validation page of the Wizard.

## Validation of Web Controls

To record specific information, necessary to produce accurate and meaningful reports, you may wish to **make selected fields** within the control **compulsory**.

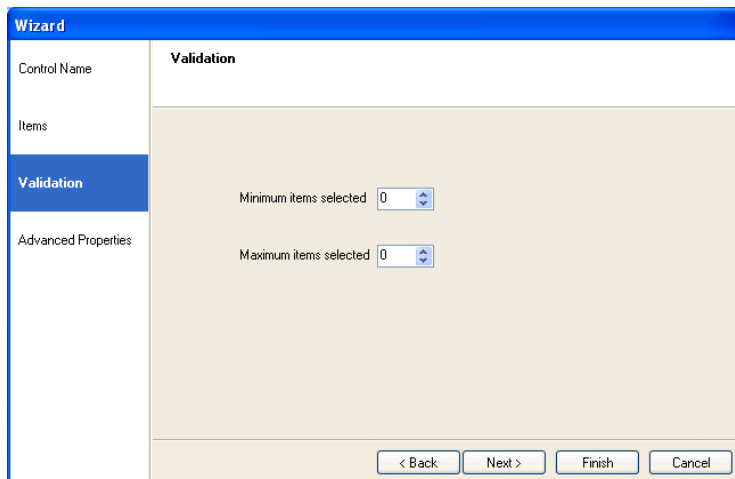
In the **Validation page** of the Web control, you can instruct the user to complete and put data in the Web control, before allowing them to move on to the next section, by **marking selected fields or options as compulsory**.

In case of the **Radio web control**, if 'Choice is required' is ticked, an option must be selected to be able to continue.



The screenshot shows a 'Wizard' window with a 'Validation' tab selected. The left sidebar contains 'Control Name', 'Settings', 'Validation', and 'Advanced Properties'. The main area is titled 'Validation' and contains a single checkbox labeled 'Choice is required' which is checked. At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

In case of the **Check Box web control**, you can select the minimum and maximum of items that can be selected.

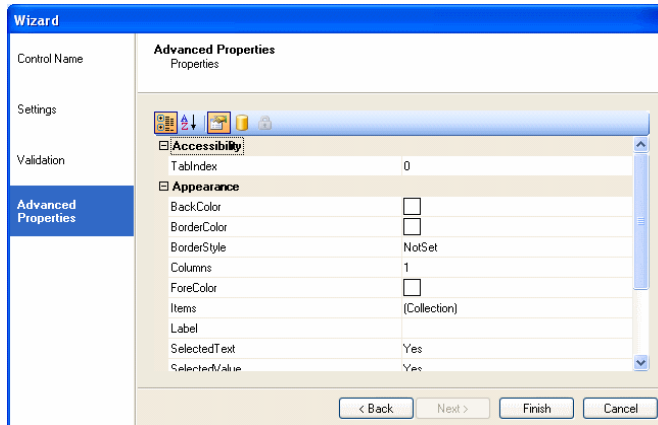


The screenshot shows a 'Wizard' window with a 'Validation' tab selected. The left sidebar contains 'Control Name', 'Items', 'Validation', and 'Advanced Properties'. The main area is titled 'Validation' and contains two spinners: 'Minimum items selected' and 'Maximum items selected', both set to the value '0'. At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

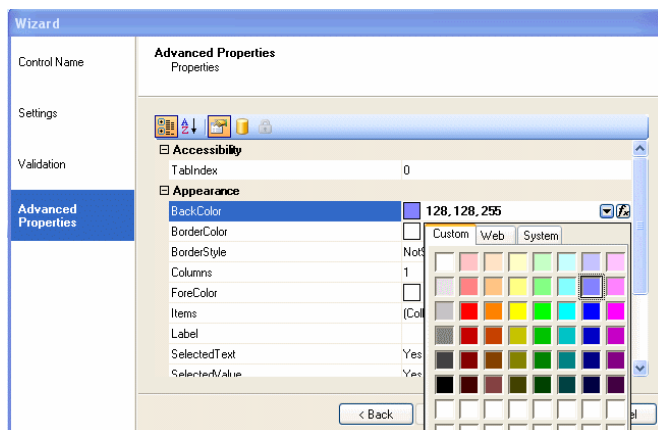
Click **Next>**, to move to the **Advanced Properties page** of the Wizard.

## Advanced Properties of Web Controls

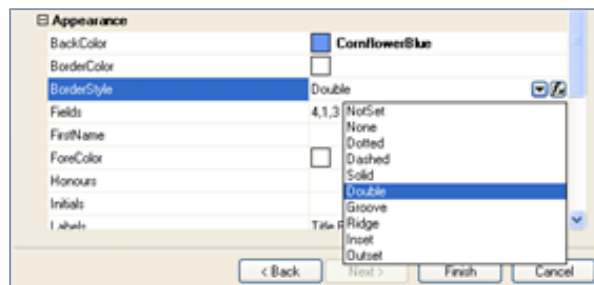
In the **Advanced Properties** page of a Web control, you can change the appearance and behaviour of a control, for example, set background and border colours.



To display, for example a background colour, tick the '**Backdoor**' box. Now use the drop-down menu subsequently displayed to open the colour panel, from where you can select the desired colour.



To display border colours, tick the respective box 'BorderColor', select the desired colour and then set a Border Style.

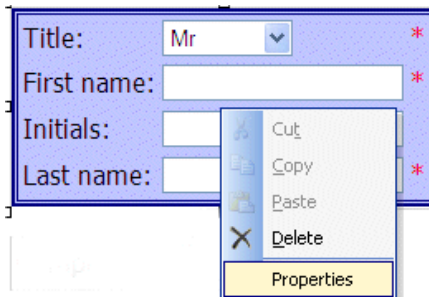


Click **Finish**, to display the configured web control in the Scripted App design area.

## Editing a Web Control

To edit a Web control, for example to change some of the entries or settings:

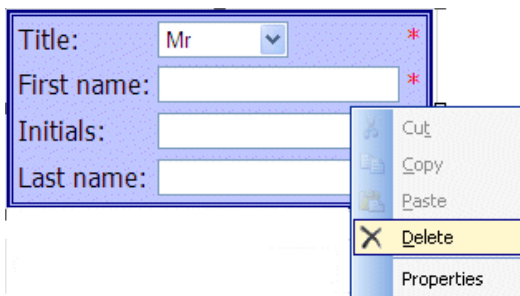
- **Right click** on the control and select the **Properties**.
- In the section control Wizard that will open, you can make any changes as required.
- The **stars** indicate fields that have been set to be **compulsory** in the *Validation page* of the control properties.



## Deleting a Web Control

To delete web controls

- **Right click** on the web control and select the **Delete** option.
- The **stars** indicate fields that have been set to be **compulsory** in the *Validation page* of the control properties.

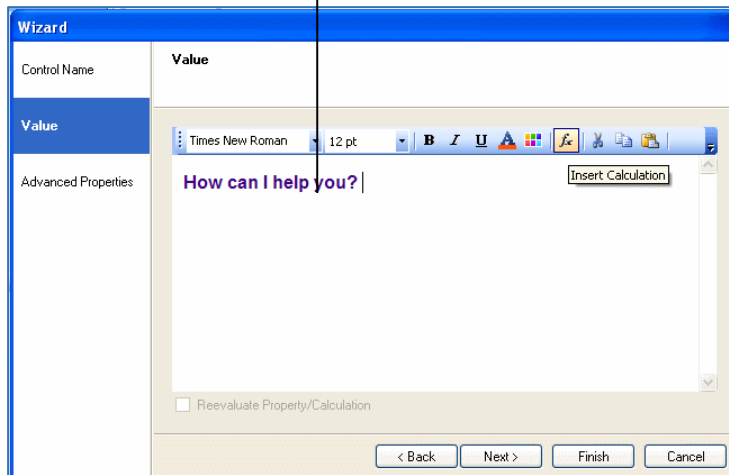


## ADDING AGENT DIALOGUE

To enter the appropriate text prompt to accompany the control, you need to use the **Prompt Web control**.

The prompt control is used to add text to any page within your Scripted App.

In the **Value page** of the Prompt control, you can enter your free text as required, for example, 'How can I help you?' or 'Can I take your name, please?'



*All characters are acceptable in the Prompt control. Note however, that the combination `<% text %>` is reserved exclusively for calculation substitutions.*












Click **Finish**, to display the configured Web control in the Scripted App design area.

Information regarding the *Prompt* control 'Formatting' toolbar is described on the next page.

## Prompt Control - Formatting Toolbar


The *Formatting Toolbar* is used to apply formatting to text entered in the *Text Prompt Box*:

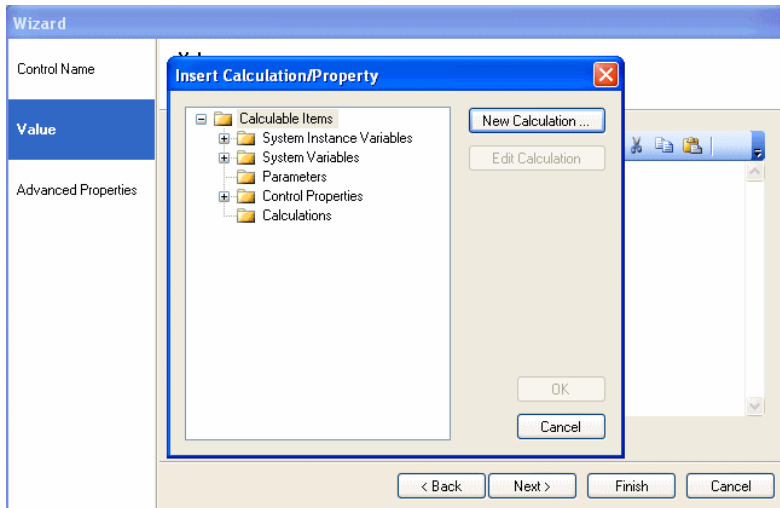


Option	Used to...
	Change the typeface of the currently selected text.
	Change the font size of the selected text.
	Apply bold to the selected text. Click on the button again to remove bold from the selected text.
	Apply italics to the selected text. Click on the button again to remove italics from the selected text.
	Apply underlining to the selected text. Click on the button again to remove the underlining from the selected text.
	Change the Foreground colour of the selected text. You can choose from the standard colour palette that comes with Windows.
	Change the Background colour. You can choose from the standard colour palette that comes with Windows.
	Insert Calculation. Add a calculation to the text prompt.
	Remove the currently highlighted selection and place it on the Windows clipboard.
	Copy the currently highlighted selection to the Windows clipboard.
	Paste the contents of the Windows clipboard at the cursor/insertion point.

## CALCULATION SUBSTITUTIONS

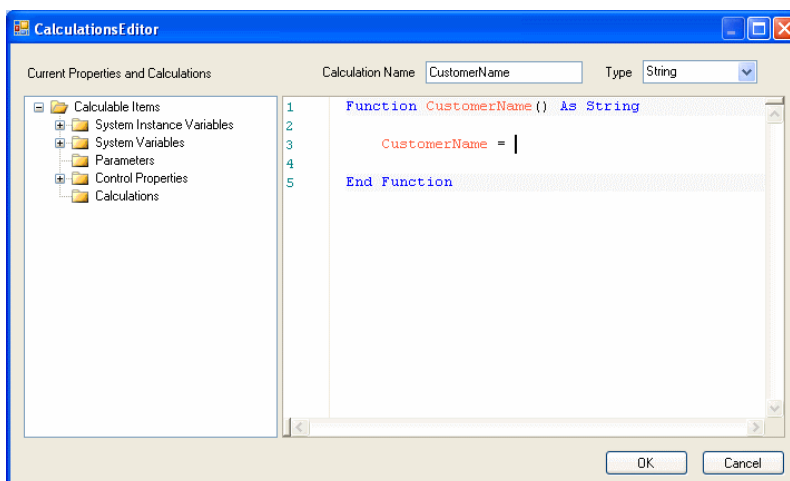
You can use a calculation substitution to bring forward the customer's name that has been taken in a previous section.

- Click on the 'Insert Calculation'  icon, and then click the *New Calculation* button, to display the Calculation Editor window.



### Enter a Name for the Calculation

- Enter the name for your calculation into the **Calculation Name** field, i.e., **CustomerName**.
- Click your cursor into the calculation window, next to the equal = sign, to display the new calculation name.

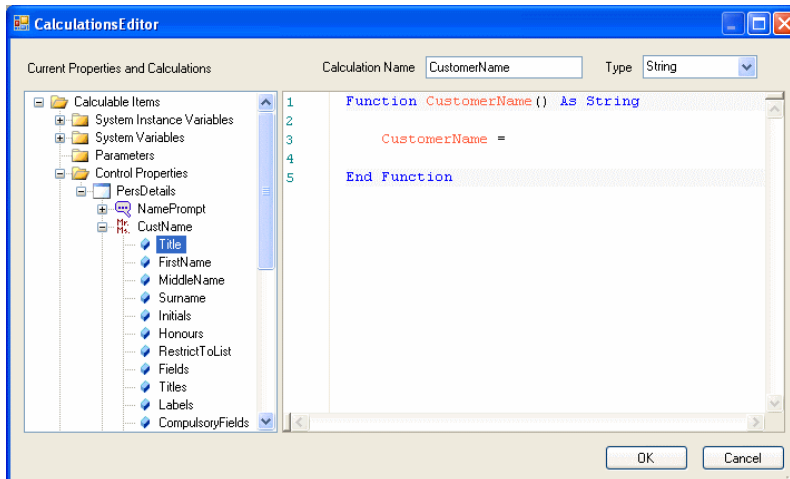


## Selecting Calculation Properties

To select the required property for the calculation

- Go to the **Control Properties** folder and select the **section** that contains the **control** and the **field** within the control used to collect the customer's name.

In our example, we have selected the **PersonalDetails** section, **CustomerName** control and the **Title**.



- Double click your left mouse button on 'Title' to add the information from the *Control Properties* folder on the left to the calculation section on the right.
- The operators "+" "+" will be added automatically on selecting the second option, i.e., the *Surname*. See the calculation example below:

Function *CustomerName*() As String

```

Calculation1 =
Synthesys™.Property.WeekendBreaks.PersonalDetails.CustomerName.Title+"
"+Synthesys.Property.WeekendBreaks.PcalersonalDetails.CustomerName.Surname

```

End Function

- Click OK, to enter your CustomerName calculation substitution into the agent dialogue box.

Enter the remainder of your agent dialogue as required and remember to SAVE and PUBLISH your Scripted App, before testing your substitution in the Web browser.



## CREATING CUSTOM CALCULATIONS

The more technical users of Synthesys™ can also create dll's (**Dynamic-link library**) in an external application and embed them within the Synthesys™ calculations engine.

This will allow users to create code in **VB.Net or C#** and then make it available within the calculation engine as **Custom Calculations**.

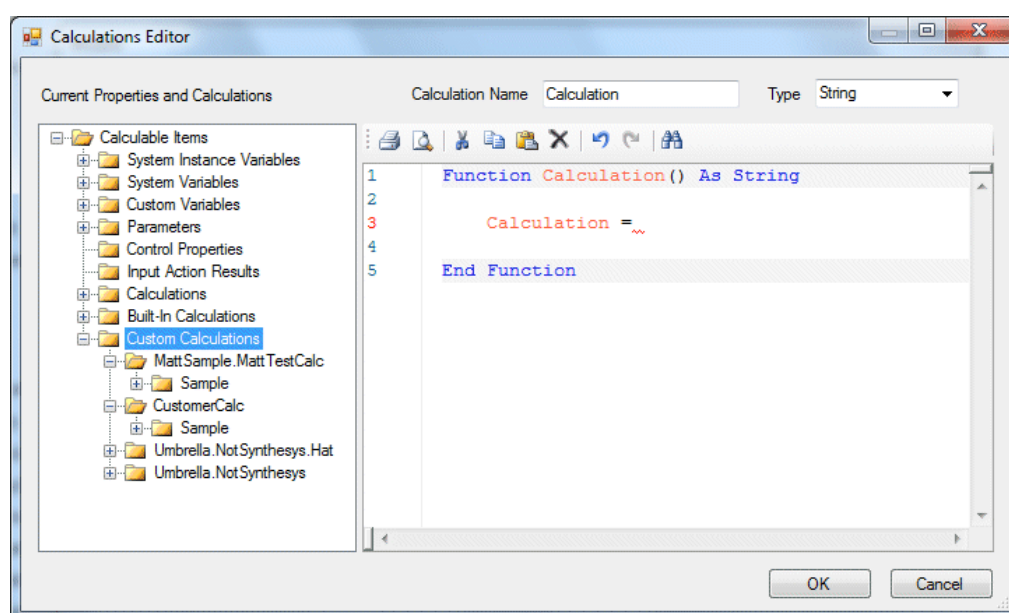
### Creating DLLs for Custom Calculations

In order to create a custom calculation

A dll should be created and placed on the Synthesys™ server. There will be a directory on the Synthesys™ applications server [\\<applicationserver>\<Drive>\Program Files\Noetica\Synthesys.NET\v2.2\Tenants\General\Gallery\Calculations](#).

Any dll's put into this directory will be synchronised with the Synthesys™ Interaction Studio when the user synchronises the client machine with the server.

**Once Synchronised**, users will see the dll's in the tree within the **Calculations Editor**.



Please see next page for more information.

Synthesys™ will interrogate each dll and use the information within the DLL to generate the tree for the end user to use.

The **Namespace** will be shown as the top level in the tree (*SPB.Synthesys Custom Functions*)

Any **Public classes** defined will be the next level in the tree (*Customer Functions*)

Any **Public Static methods** will be the final level in the tree.

### Example

Here an example code that would result in the above tree elements being created:

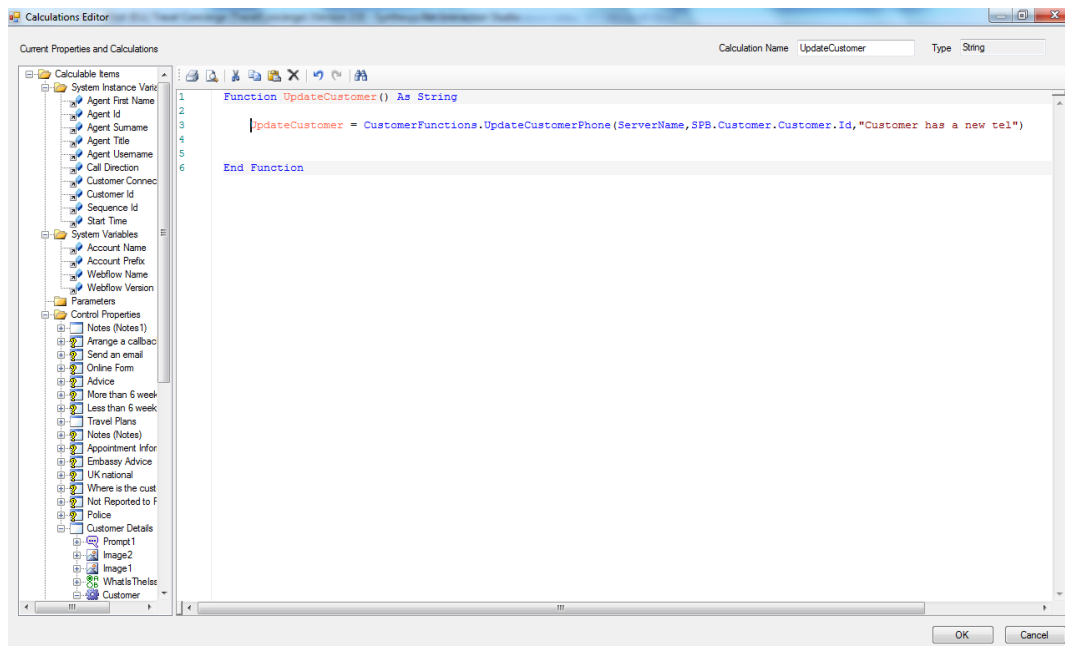
```
namespace SPB.Synthesys.CustomFunctions
{
    public class CustomerFunctions
    {
        public static bool AddCustomerAudit(string UriBase, string CustomerId, string Audit)
        {
            try
            {
                Uri uri = new Uri(UriBase, "/AddAuditItem");
                // ... Code to invoke web service and check return
            }
            catch (Exception ex)
            {
                // Log exception
                return false;
            }
            return true;
        }
        public static bool UpdateCustomerPhone(string UriBase, string CustomerId, string Number)
        {
            //...
            return true;
        }
    }
}
```

## Using Custom Calculation in the Scripted App

To use a **custom calculation**, users select and double click on the calculation containing the required Method to pass in the parameters needed by the function.

Parameters can be anything available from the calculation's engine, e.g.

- Script objects.
- Parameters.
- Results of web service calls.
- Results of other calculations.
- Etc.



## Maintaining Custom Calculations

If a change is required to a DLL, then the following process is adopted:

1. Change the DLL in the directory on the server.
2. Resynchronise the Interaction Studio.
3. Re-release script.



*If changes have been made and, for example, an extra parameter is required, the release will fail, and the calculation will have to be amended.*

## REGULAR EXPRESSIONS

Regular expressions are used within the *Edit* and *Multi Edit* web controls to create input masks for data entered at runtime. The **Regular expressions library** allows users to add their own regular expressions to a global library and to use these within a Scripted App.

### XML File with Regular Expressions

Users need to create an XML file on the server that will hold the regular expression, together with a short description. Authorised users can then add new regular expressions to this file manually.

The XML file should look like the following example:

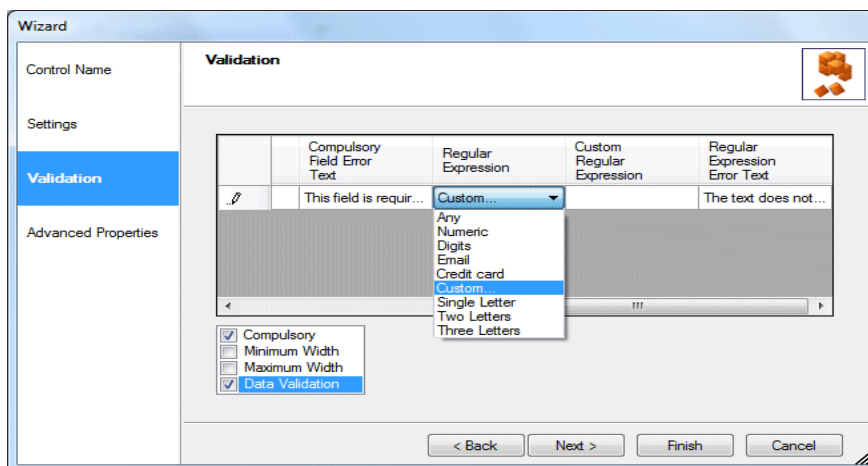
```
<Regular Expressions>
  <Regular Expression Name = "My First Regular Expression" RegEx = "[0-9][A-Z][0-1]"/>
</Regular Expressions>
```

### Using Regular Expressions in a Scripted App

At design time in the *Synthesys™ Interaction Studio* all regular expressions from the XML file will be shown in the **Regular Expression column** of the *Edit* and *Multi Edit* controls.

To pick up a regular expression

- Tick the *Data Validation* check box.
- Select the required regular expression from the drop-down menu.



If you wish to enter, rather than select a regular expression, select **Custom** in the Regular Expression column and enter details into the Custom Regular Expression column.

## DEFINING BRANCHING IN SCRIPTED APPS

A decision point and associated branches will determine the flow of the call.

Depending on the answer entered, or the result of a calculation, a different path can be followed through the Scripted App, asking necessary questions, or passing on specific information.



A decision must be placed after the section that contains the web control on which you want to branch.

Branches can contain multiple conditions, reflecting the path that should be taken through the Scripted App.


When dropping a *Decision*, the **Decision Wizard** will open and guide you through the steps of adding a name, defining the basis for the decision, and adding the required branches. The default branch will be created automatically.

Branches	Description
Default branch	The default branch is created automatically on dropping a decision point. It is the fallback logic that automatically gets used when NO OTHER logic (branching based on answers) gets triggered.
BLUE branch arrow	The default branch displays a BLUE branch arrow.
Other branches	Branches are created by the user to define the call paths through a Scripted App, based on the response to certain questions.
GREEN branch arrow	A GREEN branch arrow is displayed if the branch contains one or multiple conditions.
RED branch arrow	A RED branch arrow is displayed to remind users that <u>conditions still need to be assigned</u> to the branch.

Please see next page for information about adding decisions and branching.

## Adding a Decision to a Scripted App

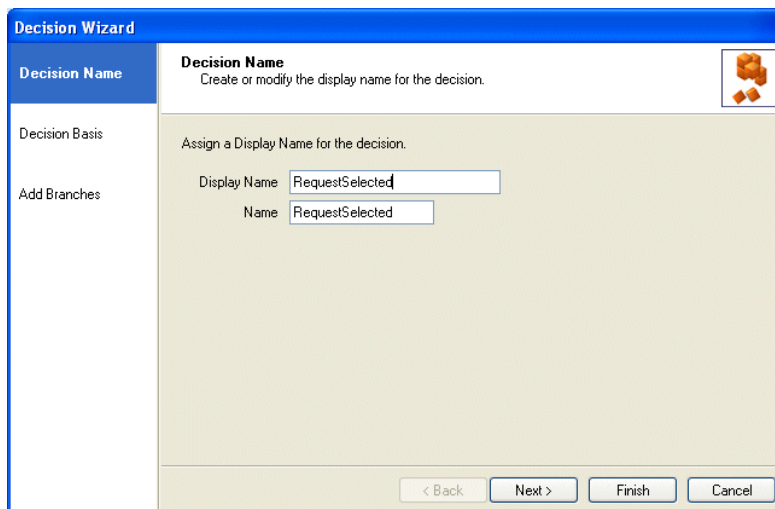
In our example, the path through the Scripted App is to change, depending on the option a user selects in the **Radio Web control** in the **Request section**. To enable branching, we must drop a Decision on the line after the **Request** section.

- Select the **Decision**  symbol from the Scripted App Blocks column of the Toolbox.
- Holding down the left mouse button, drag the decision into the Scripted App design area on the right, then release the left mouse button to drop the decision symbol.

The Decision wizard will open to guide you through the process of adding a **Decision Name**, selecting the **Decision Basis**, i.e., the control properties or calculation results on which the decision is to be based and of adding the required branches and associated conditions in the **Add Branches** page.

## Adding a Decision Name

- In the first page of the wizard, the **Decision Name** page, enter a short logical name for your decision into the **Display Name** field.



- Click **Next>**, to move to the **Decision Basis** page of the wizard, to define the decision.

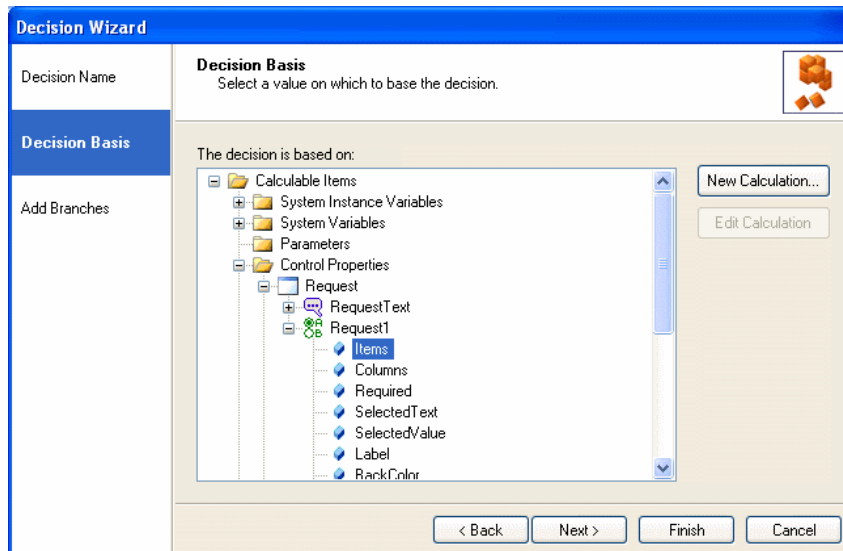
Please see next page for more information.

## Decision Basis

**Decisions** can be based on the properties of a control or calculation results.

In our example, we base the decision on the **items** selected in our **Radio Web control** 'Request'.

- Open the **Control Properties folder**, select the **Section** and **Web control**, on which the decision is to be based, and select **Items**.



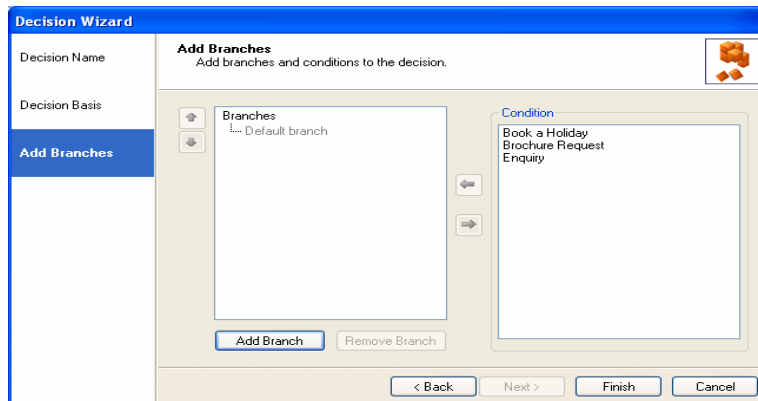
- Click **Next>** to move to the 'Add Branches' page of the Wizard, or alternatively simply click the 'Add Branches' option on the left side of the Wizard.

In the **Add Branches** page of the Wizard add any branches and conditions, as required. Please see next page for further information.

## Adding Branches & Conditions

In the **Add Branches** page of the Wizard, a default branch has been created automatically on dropping a decision point. The default branch will be used for options not assigned to any of the other branches created for this decision.

- To add a **new branch** to the list under the Branches heading, click the **Add Branch** tab and enter a name for the branch.
- To rename a branch, double click on the branch and enter a new name.



## Adding Conditions to Branches

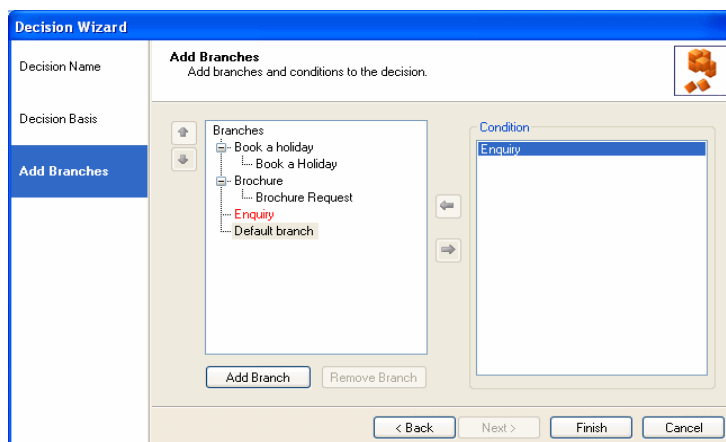
- **Highlight** your **branch**, **select** the appropriate **condition(s)** on the right-hand side, and **use the arrow** button to move the condition into the branch.



*It is possible to add multiple conditions to a branch, reflecting the path that should be taken through the Scripted App.*

*Branches that do not yet contain a condition are displayed in red.*


- To rename a branch, double click on the branch and enter the new name.
- You can also drag and drop criteria from one branch to another branch, if required.



- When you have assigned the relevant conditions to the branches, click *Finish*.



## DEFINING DECISION VARIABLES

Decisions can be defined by comparing a variable (such as a control property, calculation result, input action return value, etc.) to an *immediate value*, or against a *variable value*. The name of a variable is defined through the calculation  dialog.



- Drop a new Decision into your Scripted App.
- Enter a name for the Decision and then move to the *Decision Basis* page of the wizard, to select the value on which to base the decision.

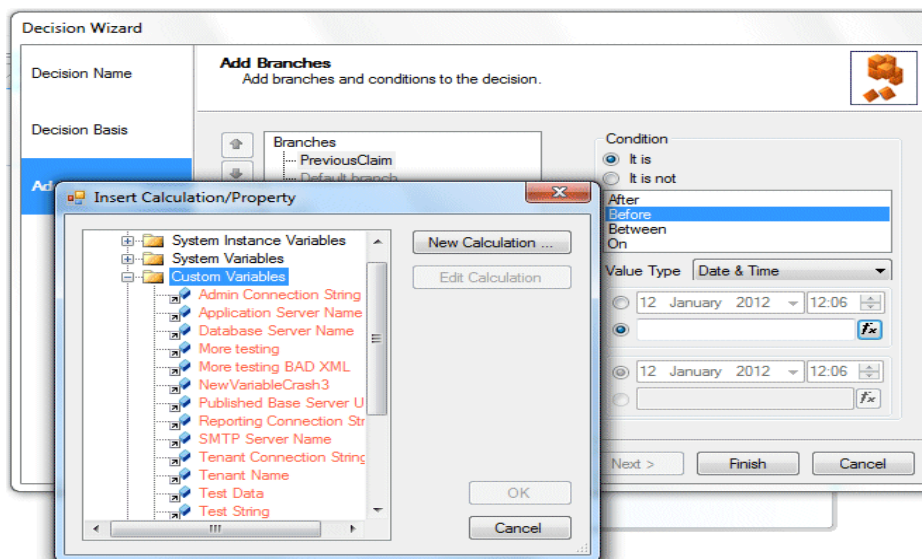
In the **Add Branches** page of the wizard you have the option to compare a variable to an immediate or a variable value.

**To use an immediate value**, for example when using a *Date Time* control

- Select the **Condition** *It is*, or *It is not*, followed by either *After*, *Before*, *Between*, *On* and the **Value Type**, i.e. *Date & Time* and then select the required date time range.

**To use a variable value**, for example to compare two *Date Time* (DT) controls, in order to move through a particular branch, if the date selected in DT1 is before DT2:

- Select the **Condition** *It is*, followed by *Before* and the **Value Type**, i.e., *Date*, or *Date & Time*.
- Next, select the  field and click on the Calculation  icon to open the *Insert Calculation Property* dialog.
- Here you can now **select or create the relevant calculation** to define the variable for the condition on which to branch.



- Add any branches, as required, move the associated condition into the branch and click *Finish* to save the information.


## DEFINING GLOBAL VARIABLES

Using the **Global Variables Section** users can set and create global variables, which subsequently can be used to access the information set elsewhere in a Scripted App, for example to accumulate price information or to build a list of items.

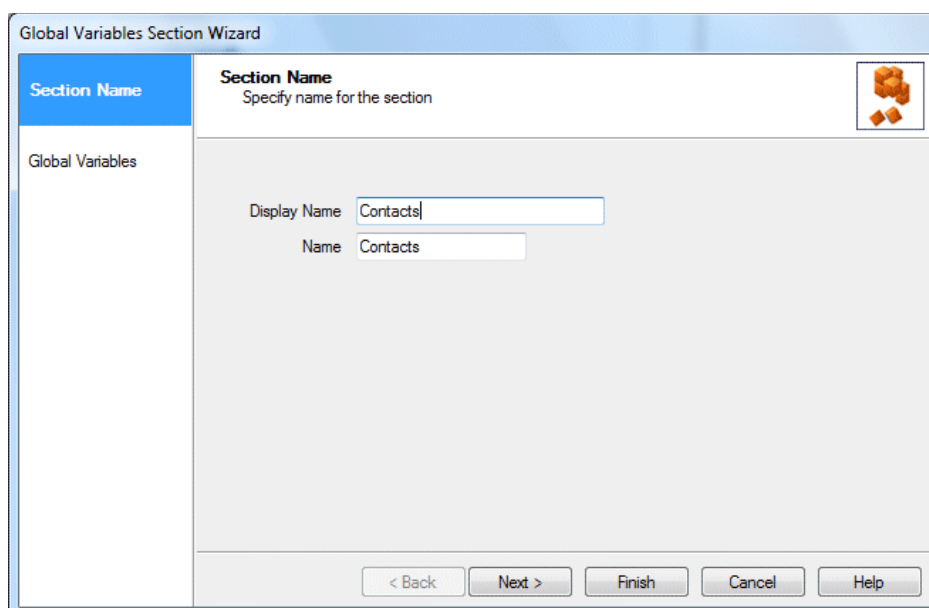
When creating new global variables, users first select its type, i.e. integer, double, character, string, datetime, boolean or listitemcollection from a drop-down menu, and then define the variable by selecting the relevant information via the *Insert Calculation Property* dialog.

## Adding Global Variables Sections

To add a new *Global Variables Section* to the Scripted App

- Select the  **Global Variables Section** symbol from the **Scripted App Blocks** column of the Toolbox in the Synthesys™ Interaction Studio.

The **Global Variables Section Wizard** will open, prompting you to enter a descriptive name for the section.

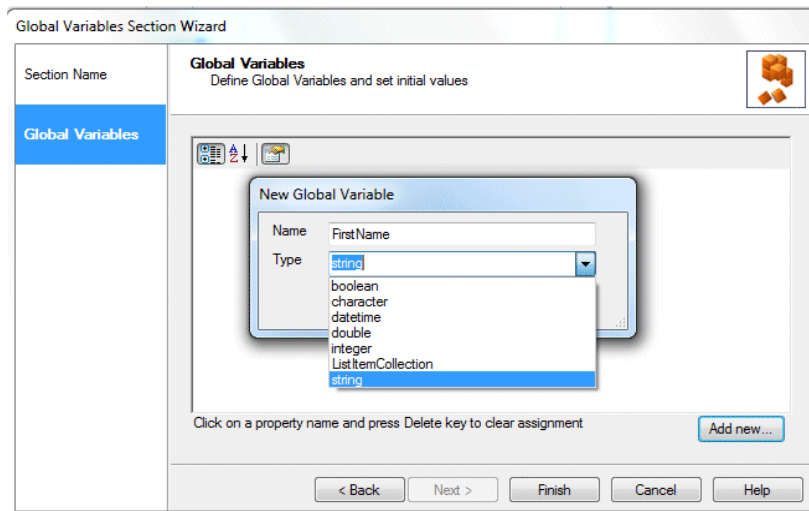


Click **Next>**, to move to the **Global Variables page** of the Wizard, to continue the configuration of the Radio web control.

## Configuring Global Variables

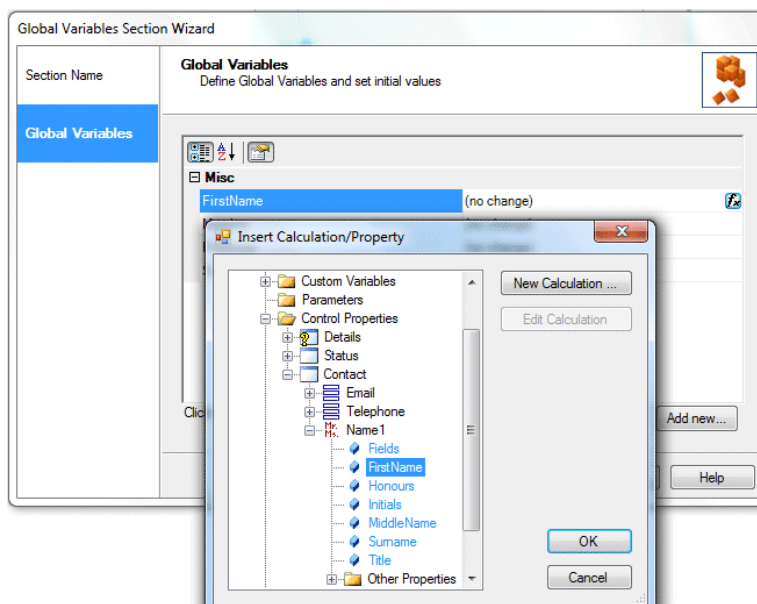
In the Global Variables page of the wizard

- Click the **Add New** button and enter a **name** for your first global variable.
- From the **Type** drop down menu select the required type, i.e., integer, double, character, string, datetime, boolean & listitemcollection.




To define the variable, *click on the calculations*  icon.

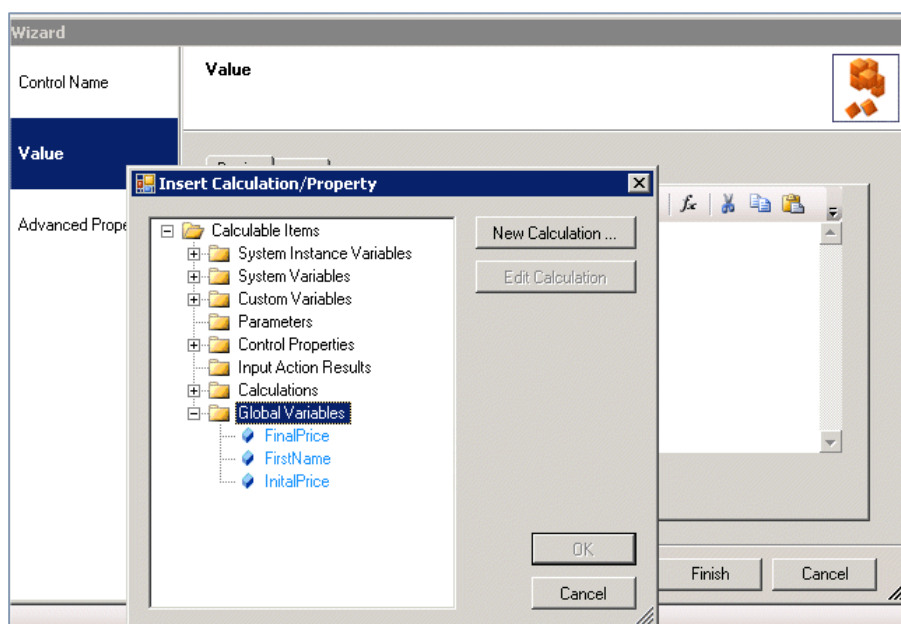
- Locate and select the relevant information in the **Insert Calculation Property** dialog
- or create a **New Calculation** to define the variable.



## Using existing Global Variables

To pick up existing Global variables for use anywhere in the Scripted App:

- Click on the calculations  icon.
- In the **Insert Calculation Property** dialog locate the Global Variables folder.
- Select the **Variable(s)** that you wish to use at this point in the Scripted App.



## AUTOMATIC TYPE CONVERSION

This allows the Synthesys™ Interaction Studio to feed all/any available values into a property of a control. ALL properties are presented in the **fx** "Insert Calculation/Property" dialog, regardless of the destination type.

Non-matching properties will be displayed using a different colour (blue = ok, red = non-matching), but be still useable.

When using a non-matching property (or calculation, or Web Service Input Action return value, or system variable...) the system provides an implicit type conversion from the source variable to the type of the destination variable.

## Error handling

Should some type conversions result in errors, for instance an attempt to convert a non-numeric string to an integer or a non-date string to a date, an error message will be displayed containing the Scripted App name, source string, source and destination types and any other relevant information, and will also be recorded in the logs in order to facilitate the debugging of the Scripted App.

However, an error should not preclude the subsequent run of the Scripted App as it should simply generate a default value (such as an empty or “error” string or a zero or 9999 value).

## Logic for Conversion of types

Synthesys™ will attempt to convert any/all values by using the relevant TypeConverter and call it's ConvertFrom() method to convert it to the desired type.

Converting a small number type to a larger type e.g., Short (2 Bytes) to Long (8 Bytes) or converting any value type to a string, for example, should always work.

If the conversion fails (for example the Short to Long conversion may fail going the other way if the Long is too big to fit into the Short), then an exception will be thrown and the default value for that type will be used, as described above.

## List of basic data types and their size in Bytes.

Going from less Bytes to more will always work, but not necessarily the other way round.

**Key- X – Same no conversion, Y – Will convert, N – Will not convert, M – Will try to convert (in unsuccessful then default values will be set 0 for all the default numbers, "" empty, default string and 01/01/0001 for default date**


		To								
		bool	byte	sbyte	char	decimal	double	float	int	
From	bool	X	Y	Y	N	Y	Y	Y	Y	
	byte	Y	X	Y	Y	Y	Y	Y	Y	
	sbyte	Y	Y	X	Y	Y	Y	Y	Y	
	char	N	Y	Y	X	N	N	N	Y	
	decimal	Y	M	M	N	X	Y	Y	M	
	double	Y	M	M	N	M	X	M	M	
	float	Y	M	M	N	M	Y	X	M	
	int	Y	M	M	M	Y	Y	Y	X	
	uint	Y	M	M	M	Y	Y	Y	Y	
	long	Y	M	M	M	Y	Y	Y	M	
	ulong	Y	M	M	M	Y	Y	Y	M	
	short	Y	M	M	Y	Y	Y	Y	Y	
	ushort	Y	M	M	Y	Y	Y	Y	Y	
	string	M	M	M	M	M	M	M	M	
	datetime	N	N	N	N	N	N	N	N	
		To								
		uint	long	ulong	short	ushort	string	datetime		
From	bool	Y	Y	Y	Y	Y	Y	N		
	byte	Y	Y	Y	Y	Y	Y	N		
	sbyte	Y	Y	Y	Y	Y	Y	N		
	char	Y	Y	Y	Y	Y	Y	N		
	decimal	M	M	M	M	M	Y	N		
	double	M	M	M	M	M	Y	N		
	float	M	M	M	M	M	Y	N		
	int	Y	Y	Y	M	M	Y	N		
	uint	X	Y	Y	M	M	Y	N		
	long	M	X	Y	M	M	Y	N		
	ulong	M	Y	X	M	M	Y	N		
	short	Y	Y	Y	X	Y	Y	N		
	ushort	Y	Y	Y	Y	X	Y	N		
	string	M	M	M	M	M	X	M		
	datetime	N	N	N	N	N	Y	X		

## SCRIPTED APP LAUNCHER SECTION

Using the **Scripted App Launcher section** in the *Synthesys™ Interaction Studio*, users can launch Scripted Apps within a Scripted App and pass parameters between the Scripted Apps.

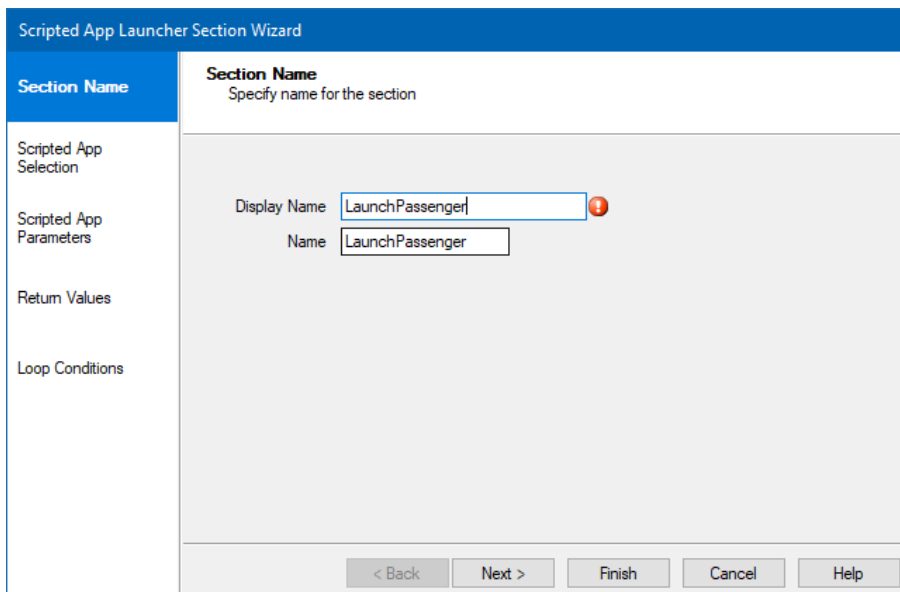
When running calls in the Synthesys™ Portal in the Web Browser, users initially go through the sections of the main Scripted App. At the appropriate point, the embedded Scripted App will open. Having taken the relevant details, users will then return to the main Scripted App to complete the call.

To add the *Scripted App Launcher* section to your Scripted App

- Pick up the  **Scripted App Launcher Section** icon from the *Scripted App Blocks* column of the *Toolbox*, drag it into the *Section* design area and release the left mouse button.

### Section Name

- Enter a name into the Name field, in our example 'LaunchPassenger'.
- If the name is already in use, a warning icon will prompt you to rename the section.



Scripted App Launcher Section Wizard


**Section Name**  
Specify name for the section

Scripted App Selection

Scripted App Parameters

Return Values

Loop Conditions

Display Name: LaunchPassenger 

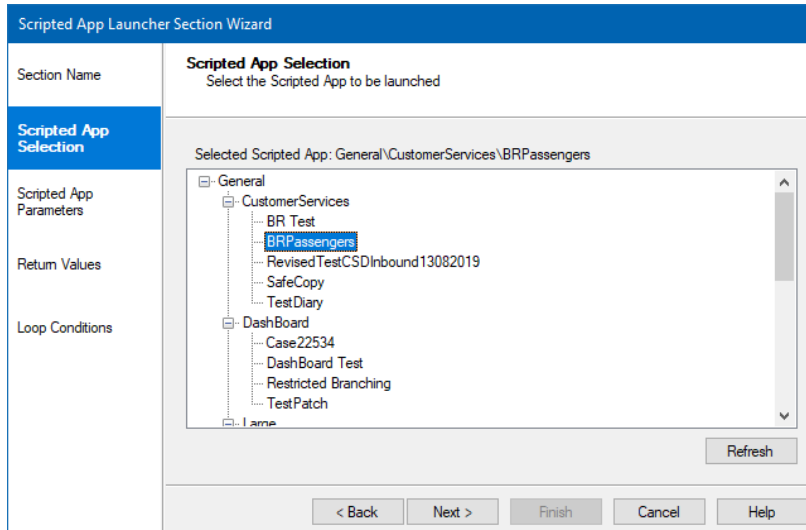
Name: LaunchPassenger

< Back   Next >   Finish   Cancel   Help

## Scripted App Selection


In the Scripted App Selection page of the *Scripted App Launcher Section Wizard*

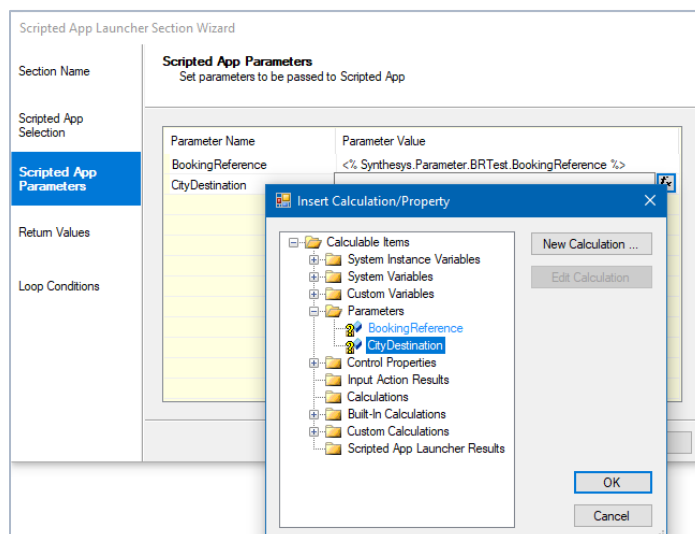
- Locate and select the Scripted App that you wish to launch in the scripted App section.
- Click *Next>*, to move to the *Scripted App Parameters* page.



## Scripted App Parameters

To pass information from the main Scripted App into existing parameters of the launched Scripted App


- Click into the **Parameter Value** field and then the calculation  icon.
- In the *Insert Calculation/Property* dialog select the folder (e.g., *Parameters* or *Control Properties*) and fields that contain the information to be displayed in the popped Scripted App.

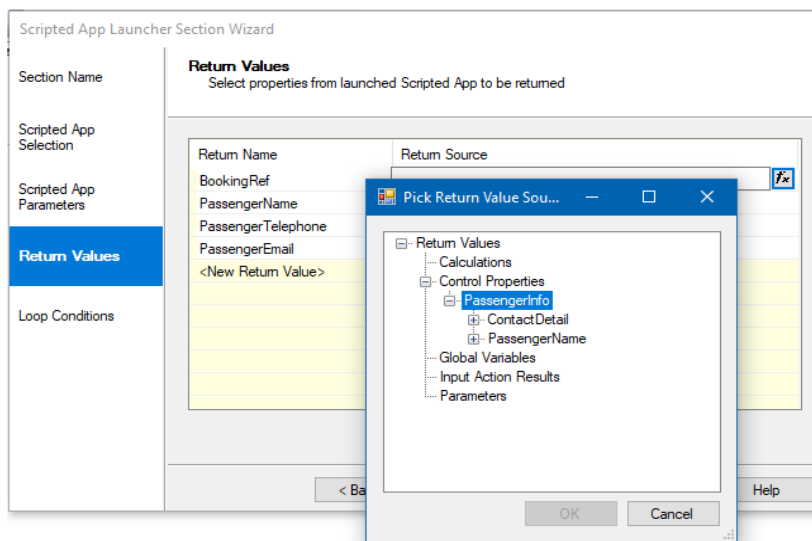




## Return Values

To pass information from the launched Scripted App back into the main Scripted App

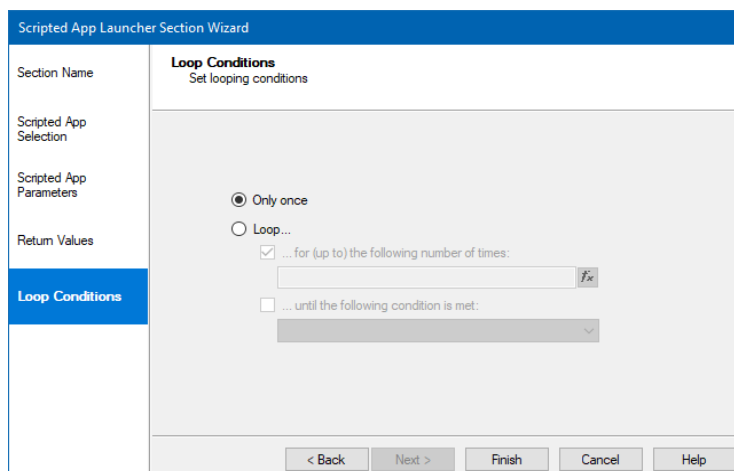
- Click into the Return Name field and enter a logical name to reflect the data that is to be passed.
- Click into the Return Source field and then the calculation  icon.
- In the Insert Calculation/ Property dialog select the folder (e.g., Parameters or Control Properties) and fields that contain the information to be returned to the main Scripted App.



## Loop Condition

In the Loop condition dialog users specify the number of times that a selected Scripted App is to be launched.

- Select **Once only**, or **Loop** to enter or create a calculation to determine how many times the Scripted App is to be launched.
- Tick. **until the following condition is met:** to base the decision on an option created in the Return Values page.

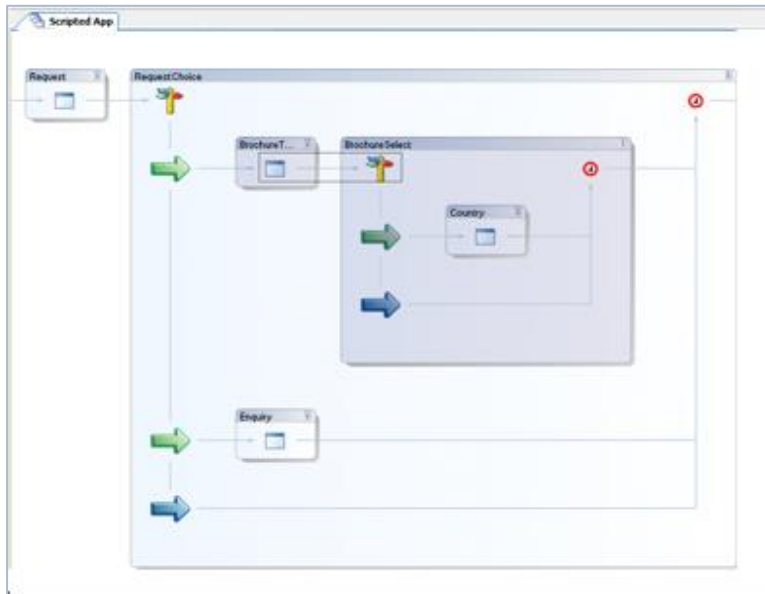




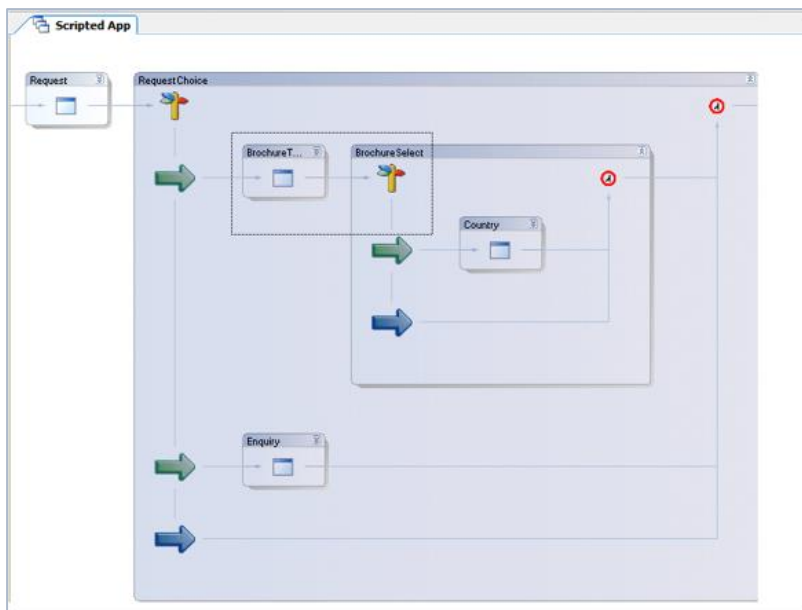
## Copying Decisions within Decisions

When copying a section and decision inside another decision, make sure that the line created when you drag the mouse stays within the boundaries of that section, i.e., inside the top, bottom, and left border of the section, as shown in the screen print.

Once selected, you can cut / copy and paste the *'inner decision'* to another part of the Scripted App.



If your selection goes outside of the boundaries of the section as shown below, the *'outer decision'* will be selected and copied.



## Copying between Scripted Apps

As well as copying and pasting sections and decisions within a Scripted App, users can copy and paste part of or even whole Scripted Apps from one scripted app to another.



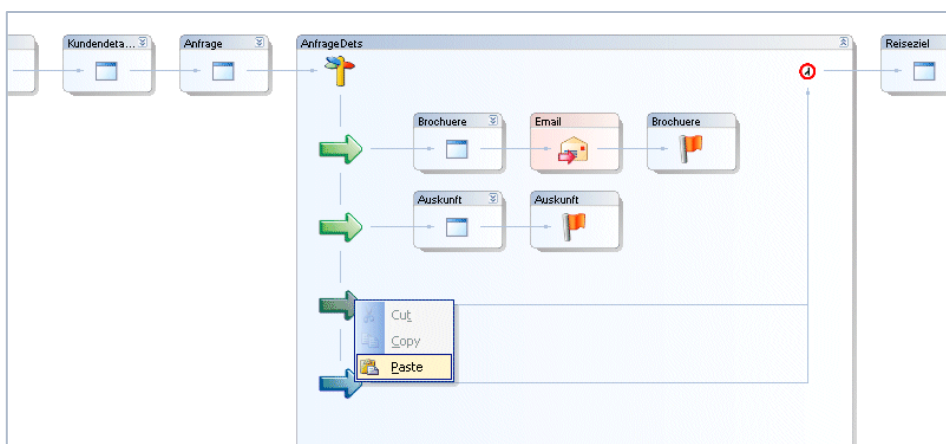
When copying and pasting between two scripted apps, two instances of the Synthesys™ Interaction Studio can be opened on the PC, one for accessing the Scripted App with the information to be copied, the other for opening the target Scripted App into which the selection is to be pasted.

In the first Scripted App, hold down the left mouse button and drag a line through the areas of the Scripted App that you wish to copy.

- Right click on the selection and select *Copy* from the drop-down list.

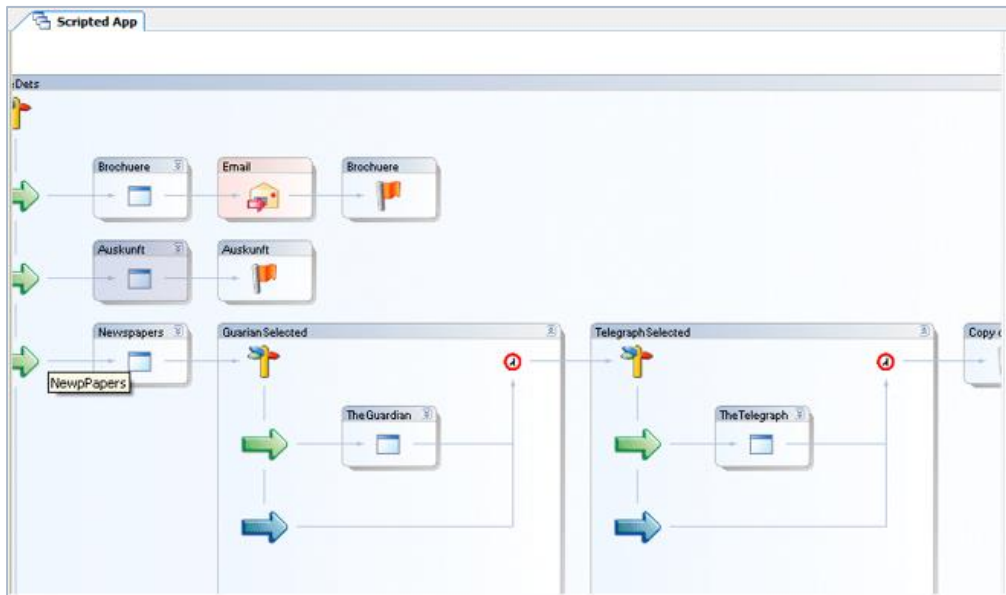


In the target Scripted App, click your right mouse button on the **section or green/ blue branch arrow** after which you want to paste the selection and select *Paste* from the drop-down menu.



### Example

In our example, we have copied information concerning newspapers from the first Scripted App onto a branch of the second Scripted App.



When copying and pasting sections that contain **calculations**, the section on which the calculation is based must be pasted as well, otherwise the paste option will be greyed out in the target Scripted App.

A selection that includes **Conclusion** flags can only be pasted onto a branch without a conclusion. If the branch already contains a conclusion, the paste option will be greyed out.



When selecting sections and branches to copy a complete Scripted App, do not include the **Scripted App Properties** section in the selection, or the paste option will be greyed out in the target Scripted App.

To reuse a Scripted App including the Scripted App Properties section in another scripted app, use the 'Save As' function described on the next page.

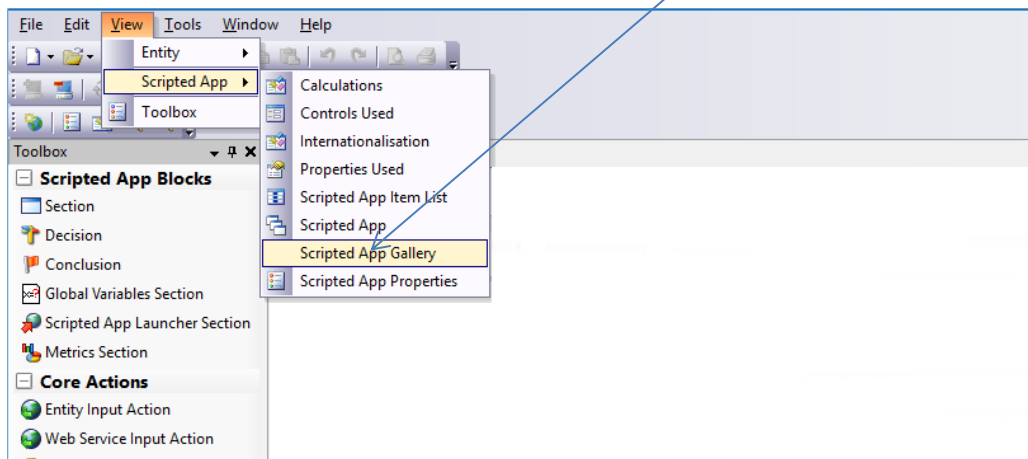
## SCRIPTED APP GALLERY

The *Gallery Items* feature allows users to save Scripted App objects to a centrally located **Scripted App Gallery** to enable the reuse of these items. The types of objects that can be stored are *Sections*, *Actions*, *Decisions* and *Collections* of the former.

### Accessing the Gallery

The Gallery items view is accessed from the **Synthesys™ Interaction Studio**.

Go to **View → Scripted App** and select *Scripted App Gallery*.



This will enable the **Gallery view**.

Scripted App Gallery					
Name	Object Type	Description	User	Webflow	Date
CustBooking	Section	Date time and edit controls	brigitte	ZZTestSubInfo	2019-04-18 12:24
Customer	Section	Section with Name, Address and edit controls	brigitte	PatriksHolidayWebflow	2020-01-14 13:35
Event Types	Section	Event type with the box deelle	Jim	JCCityBreak	2018-01-09 12:59
JC Brochure	Section	list box with brochure options	Jim	JCCityBreak	2018-01-09 12:46
JC Enquiry	Section	Section with memo control	Jim	JCCityBreak	2018-01-09 12:47
Request	Section	Section with Radio control, Booking Brochure and Enquiry options	brigitte	PatriksHolidayWebflow	2020-01-14 13:36

The data held in the gallery includes:

Field	Description
Name	The name given to the item when it was added to the gallery.
Object Type	Describes what type of gallery item it is, i.e., <i>Section</i> ; <i>Decision</i> ; <i>Action</i> or <i>Collection</i> (which includes multiple items from a Scripted App).
Description	Information entered when the item was added to the gallery.
User	Displays the user who added the item to the gallery.
Scripted App	The original Scripted App from which the item was added.
Date	The date and time that the item was added to the gallery.

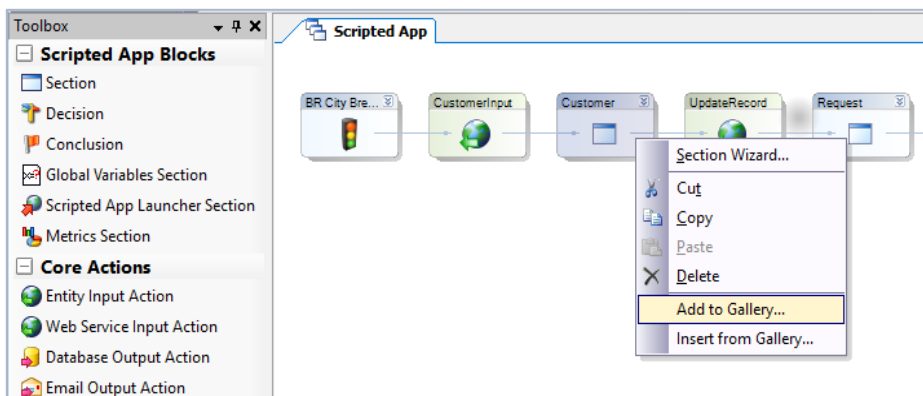
## Adding Items to the Gallery

Users can add an individual item, i.e., a section, a decision, or an action to the gallery, or they can add multiple items.

### Adding an individual Item

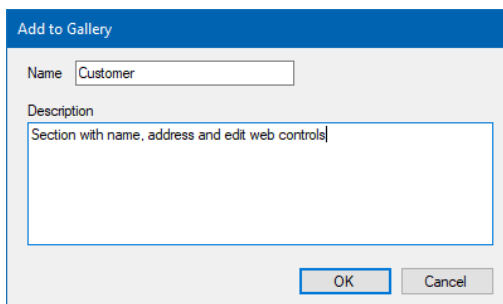
To add an individual item, i.e., a section, a decision or an action to the gallery

- Right click on the item that you wish to add and select **Add to Gallery** from the drop-down menu.



The **Add to Gallery** dialog will open, with the name of the selected item displayed in the *Name* field.

- Confirm or change the name for the Scripted App item, as required.
- Enter a logical description to identify the item to be saved.



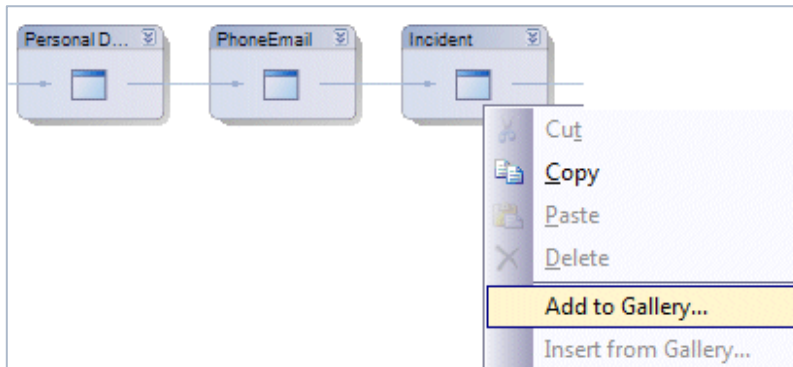
*Ensure that the description tells the user all they need to know about the gallery item to make it as easy as possible to later identify and reuse it.*

Press **OK** to commit this item to the gallery or **Cancel** to close the dialog without saving the changes.

## Adding Multiple Items

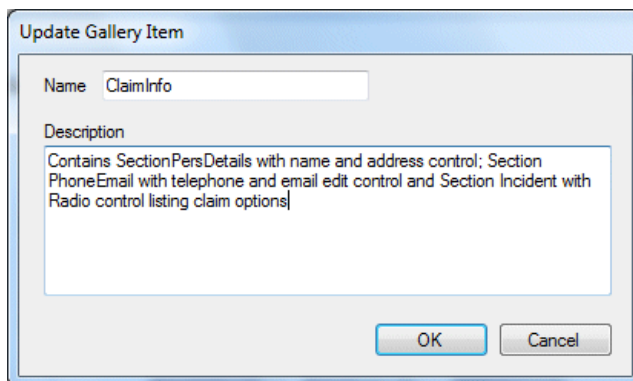
To add a collection of items to the gallery

- Select all items that you wish to add to the gallery.
- Right click on the items and select **Add to Gallery** from the drop-down menu.



In the **Add to Gallery** dialog now displayed:

- Add a name for the items selected.
- Enter a logical description to identify the items to be saved.



Press OK to commit the collection of items to the gallery or **Cancel** to close the dialog without saving the changes.



Ensure that the description tells the user all they need to know about the gallery item to make it as easy as possible to later identify and reuse it

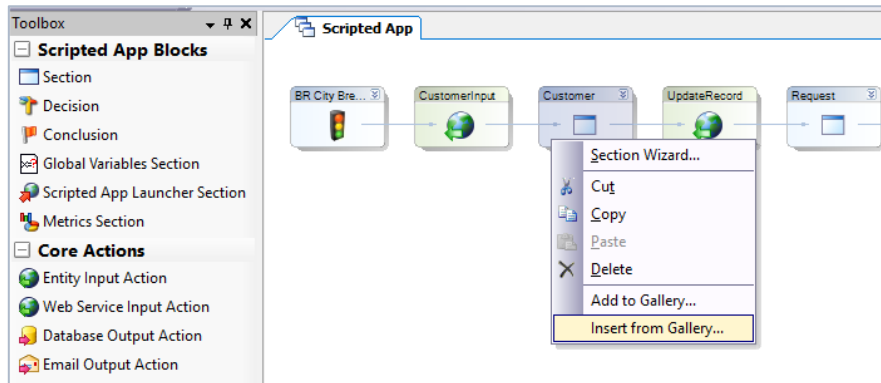
The next page will describe how you can pick up existing items from the gallery and use them in your Scripted App.



## Using Items from the Gallery

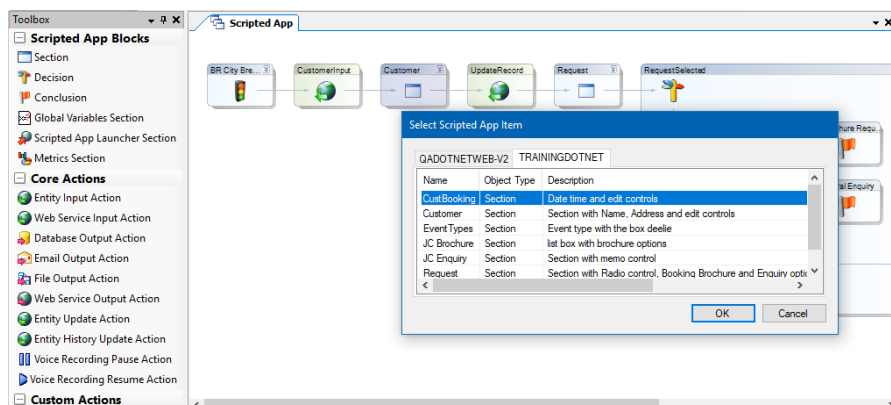
To pick up and reuse an existing gallery item in a Scripted App:

- Right click on the section, action, or decision that the gallery item should follow.
- Select **Insert From Gallery** from the drop-down menu.



In the **Select Scripted App Item** dialog now displayed:

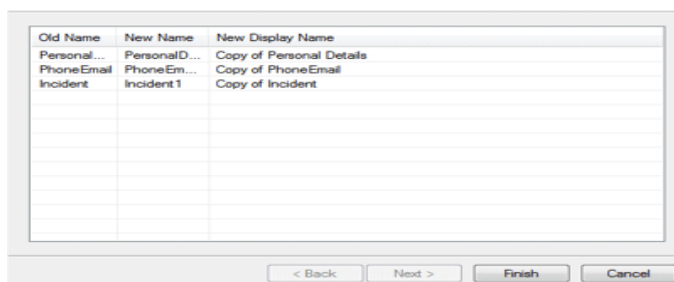
- Select the item you wish to add from the list displayed and press OK.



## Renaming Items

If the Scripted App already contains an item with the same name, the **Paste Wizard** dialog will open, prompting you to rename the item to be added.

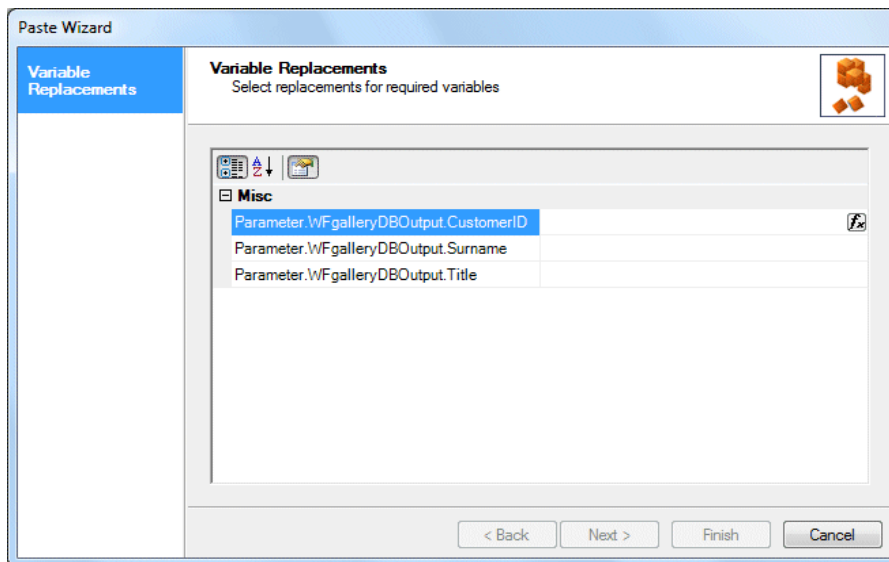
- Enter the new name(s) into the **New Name** and **New Display Name** fields.



## Updating Variables

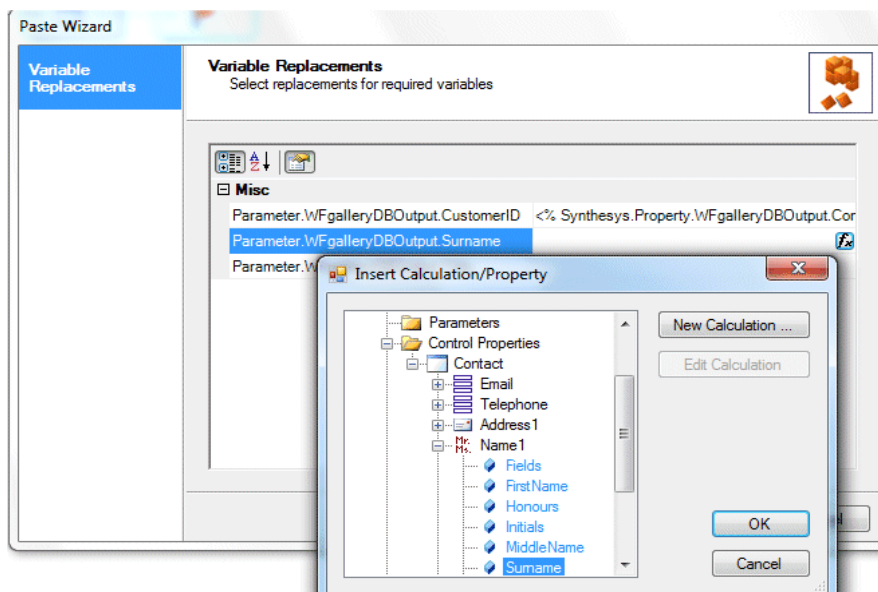
If the item that is inserted from the gallery requires data that is not contained in the gallery item, i.e., when picking up a Database Output action or a section containing a calculation, then

- The **Variable Replacements** page will open, prompting users to provide a source for this data by assigning values to variables.



- Update the table below by clicking the  icon and select the item that should populate (i.e. provide a value for) each variable.

In our example, we need to populate the CustomerID, Title and Surname fields.

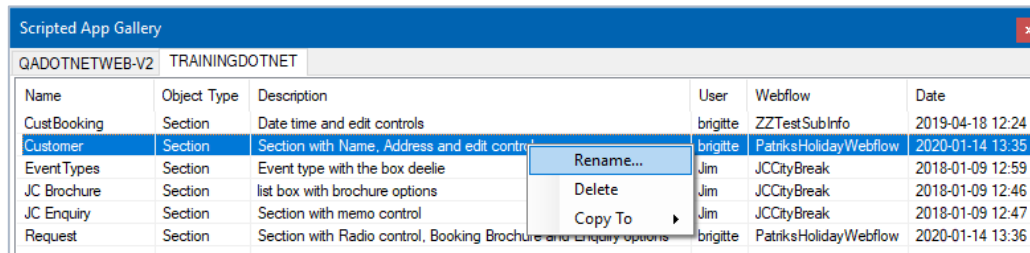


## Editing a Gallery Item

It is not possible to edit the description within a gallery item, but users can **Rename** or **Delete** an item.

In the Synthesys™ Interaction Studio

- Go to **View** → **Scripted App** and select *Scripted App Gallery*.
- Right click on the gallery item and select either Rename or Delete, as required.

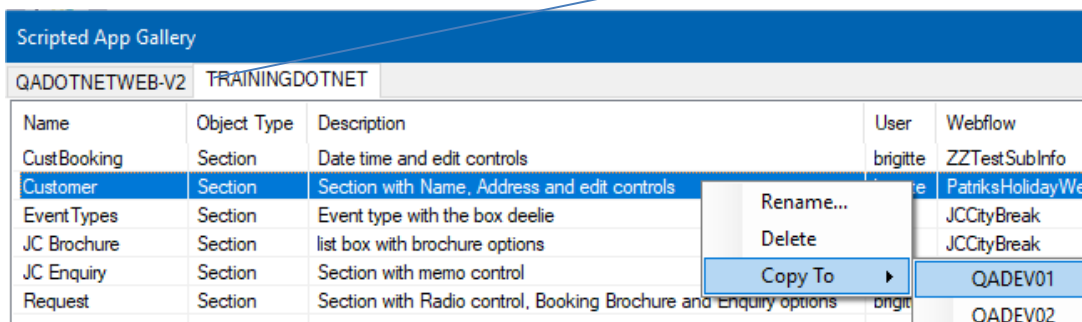


Name	Object Type	Description	User	Webflow	Date
CustBooking	Section	Date time and edit controls	brigitte	ZZTestSubInfo	2019-04-18 12:24
Customer	Section	Section with Name, Address and edit controls	brigitte	PatriksHolidayWebflow	2020-01-14 13:35
Event Types	Section	Event type with the box deelle	Jim	JCCityBreak	2018-01-09 12:59
JC Brochure	Section	list box with brochure options	Jim	JCCityBreak	2018-01-09 12:46
JC Enquiry	Section	Section with memo control	Jim	JCCityBreak	2018-01-09 12:47
Request	Section	Section with Radio control, Booking Brochure and Enquiry options	brigitte	PatriksHolidayWebflow	2020-01-14 13:36

## Multiple Server Connectivity

If you have multiple servers configured within your Interaction Studio you can use gallery items from either server within your Scripted App.

The **Gallery** view will change to a tabbed view, showing each server on a separate tab, as below.



Name	Object Type	Description	User	Webflow
CustBooking	Section	Date time and edit controls	brigitte	ZZTestSubInfo
Customer	Section	Section with Name, Address and edit controls	brigitte	PatriksHolidayWe
Event Types	Section	Event type with the box deelle		JCCityBreak
JC Brochure	Section	list box with brochure options		JCCityBreak
JC Enquiry	Section	Section with memo control		QADEV01
Request	Section	Section with Radio control, Booking Brochure and Enquiry options	brigitte	QADEV02

If you have multi server connectivity, you can copy gallery items from one environment to another. Simply right click on the item to copy and select **Copy To** → **ServerName**.

## SAVE AS OPTION

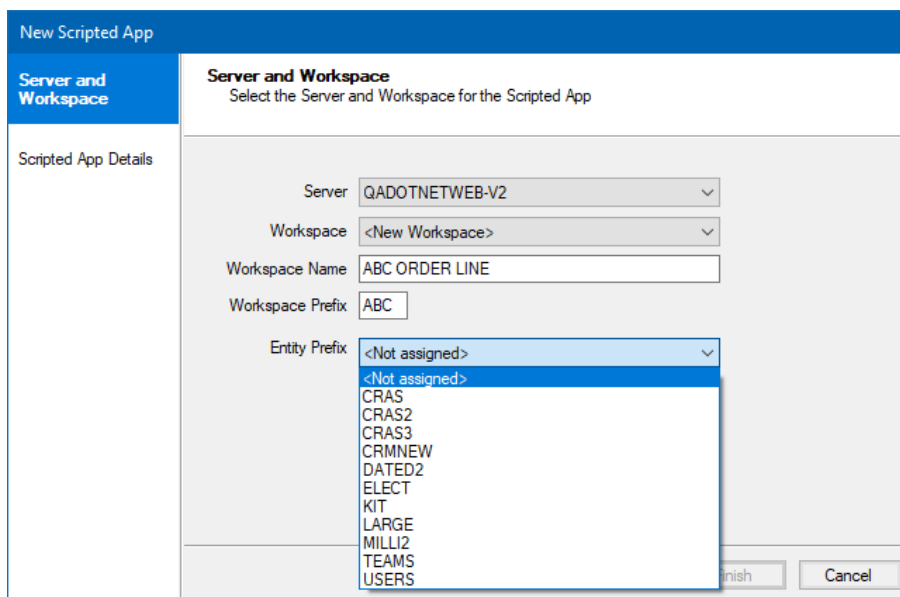
Using the **Save As** option, existing scripted apps can be saved to another server under a new or existing Workspace, or the option can be used to overwrite existing Scripted Apps.

On the Menu bar in the Synthesys™ Interaction Studio, go to **File – Save As**.

### Selecting the Server and Workspace for the Scripted App

In the **Server and Workspace** section of the Save Scripted App As dialogue, select the name of the server on which you want to save the currently open Scripted App.

- To save the Scripted App under an existing workspace, select the relevant Workspace name. The Entity previously assigned to the selected workspace will be displayed, with the Entity field greyed out.
- To save the Scripted App under a new workspace, select <New Workspace> and enter a name and prefix for a new workspace. To link the new workspace to a customer Entity, select the Entity to be used from the Entity Prefix drop down list.



Click *Next*, to move to the Scripted App Details page.

- To replace an existing Scripted App, select the name of the Scripted App that you wish to overwrite and then click *Finish*.
- To create a new Scripted App, select <New Scripted App> and enter a name for the new Scripted App and then click *Finish*.



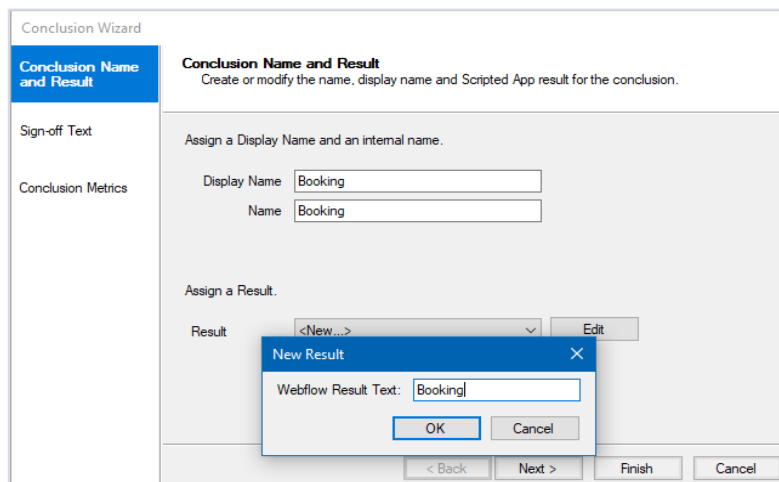
'Save As' will save the current version of the Scripted App that you have open. To replace an existing Scripted App, the destination Scripted App must be checked out by you on your local machine.

## ADDING CONCLUSIONS

A conclusion is the last section in the web flow.

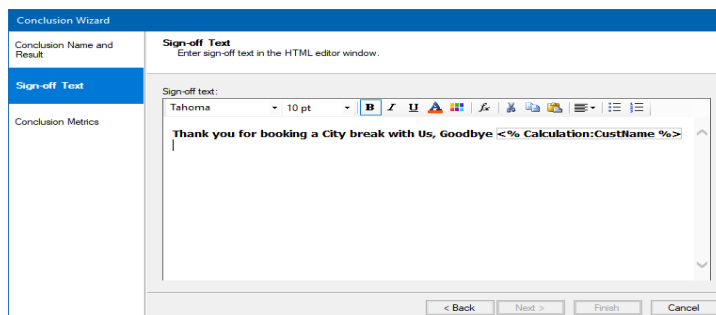
To create a conclusion, drag the conclusion flag  from the *Scripted App Blocks* toolbar and drop it into the Scripted App.

- Enter a name for the Conclusion into the **Display Name** and **Name** field.
- Next, go to the **Assign a Result** section and select **New** to enter a new logical name for the Conclusion, or select an already existing Conclusion name, if relevant.
- To edit an existing *Result* name, select the relevant name and click the Edit button.



## Sign Off Text

- Click **Next>** or select **Sign off Text** on the left side of the wizard, to the Sign off Text page of the Conclusion Wizard.
- Enter the conclusion text to be presented to the user into the Sign off text page.



- Click on Conclusion Metrics and then on the activated Finish button.
- Configuring Conclusion Metrics is optional, please see pages 94-96 (Reporting Metrics in Synthesys™) for more information.
- To edit Conclusion details, right click on the conclusion flag and select *Conclusion Wizard*.

## EDITING LIVE SCRIPTED APPS IN TEST ENVIRONMENT

It is advisable to edit and test live Scripted Apps on a test server, before copying and releasing them on the live server.



'To ensure that you work with the latest version of the respective Scripted Apps, both the test Scripted App and the live Scripted App need to be checked out by you on your local machine first

1. Connect to Test server.
2. Check out Scripted App ABC 'for update'.
3. Close the Scripted App.
4. Disconnect from Test server.
  
5. Connect to the Live server.
6. Check out Scripted App ABC to be updated.
7. Use '**Save As**' to move the live Scripted App into the test Scripted App.

(**File – Save As.** In the '**Open Scripted App**' dialog select the **Test Server** – Workspace & Scripted App to be updated, to replace the test Scripted App with the current live Scripted App).

8. Disconnect from Live server.
9. Connect to the Test server.
10. Edit – Save & Publish the edited Scripted App.
11. Test changes made in the Web Browser / Synthesys™ Portal.

You can keep the edited Scripted App open in the Synthesys™ Interaction Studio, while you do the testing. Once you are happy with the changes made:

12. Use 'Save As' to move the test Scripted App into the live Scripted App.

(**File – Save As.** In the '**Open Scripted App**' dialog, this time, select the **Live Server** – Workspace – Scripted App, to replace the current live Scripted App with the updated test Scripted App)

13. Disconnect from Test server.
14. Connect to the Live server.
15. Save & Publish the Scripted App.

## SCRIPTED APP PROPERTY OPTIONS

### *Properties – Adding CRM Parameters*

CRM parameters are created in the *Properties* section of a Scripted App in the Synthesys™ Interaction Studio, to enable branching and calculations on selected CRM information and to display CRM/ Entity details in the *Dashboard* of the Scripted App. For information about creating CRM/ Entity parameters, please see the next page of this document.

The CRM/ Entity (Customer Relationship Management) module is designed to manage customer data, providing agents with the best possible help to deal with customers' requests. For information about designing an Entity/ CRM table, importing customer data, and creating Outbound campaigns and call lists, please use the document: *Synthesys CRM and Outbound*.

### *Dashboard and Parked & Held Information*

The *Dashboard* and *Parked & Held Info* options are used to display selected information from a Scripted App to agents in the Web Browser. Information added to the *Dashboard* is displayed in each section; information added using the *Parked & Held Info* option is displayed in the *Parked* or *Held* calls window.

The *Dashboard* and *Parked & Held Info* parts are constructed from the **Calculable Items** directory in the Toolbox, selecting the required details from the appropriate folders, i.e., the *System Instance Variables*, *System Variables*, *Parameters*, *Control Properties*, *Input Action results* and *Calculations* folders.

Please see the sections *Dashboard Configuration* and *Configuration of Parked & Held Info* on the next few pages for information.

### *Abort Reasons*

This section contains the aborted reasons for the selected scripted App, which are displayed to the agent at run time in the Web Browser, when aborting Inbound and Outbound calls.

### *Creating Style Templates*

Style templates are configured in the **Scripted App Properties** section of a Scripted App, selecting the **Default Styles** page. Users can set the colour and font style for input fields, control labels, buttons, and borders of web controls, using drop down menu options and *Change* buttons.

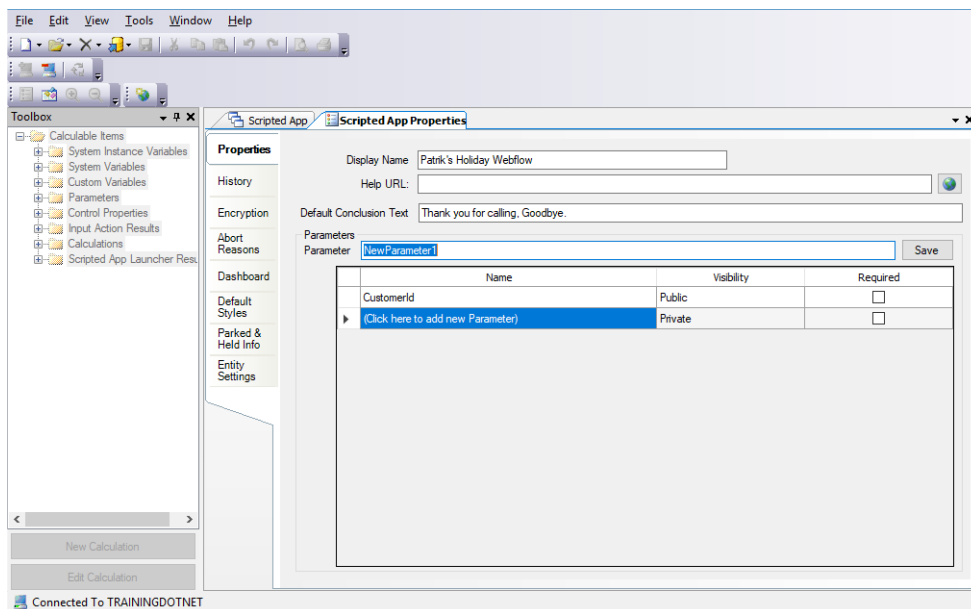
### *Entity Settings*

With the **Allow Entity Edit** setting enabled in the Interaction Studio, agents will be able to edit and update Customer Entity details instantly, anywhere in the selected scripted app, via the **Contact** option on the Scripted App toolbar in the Agent Portal.

## Properties - Creating CRM Parameters

To use CRM/ Entity details as part of your Scripted App, the corresponding parameters need to be configured in the Synthesys™ Interaction Studio, in the **Scripted App Properties** section of your Scripted App.

- Double click on the Properties section displaying a traffic light, to open the section and then select 'Properties' to display the Parameter page.
- In the Parameter section, select the field '(Click here to add new Parameter)'.
- Next, move your cursor back up to the Parameter field and replace the option 'New Parameter1' with the name of the required parameter. The names entered in the Parameter field must exactly match the names of the CRM fields to be used.
- Click the Save button to move the parameter name entered to the list of parameters.
- If you wish to make a parameter field compulsory, tick the 'Required' option.
- Repeat the above steps to enter the next parameter.



The names entered in the Parameter field must exactly match the field names in the corresponding CRM table.

When using Synthesys™ in conjunction with the Synthesys™ Dialler Platform, open the **CRM Maintenance table** to check the CRM field names, before adding or copying and pasting them into the Parameter field.

Special keywords that are reserved in programming language, i.e., a word like "**Custom**" can't be saved.



## Dashboard Configuration

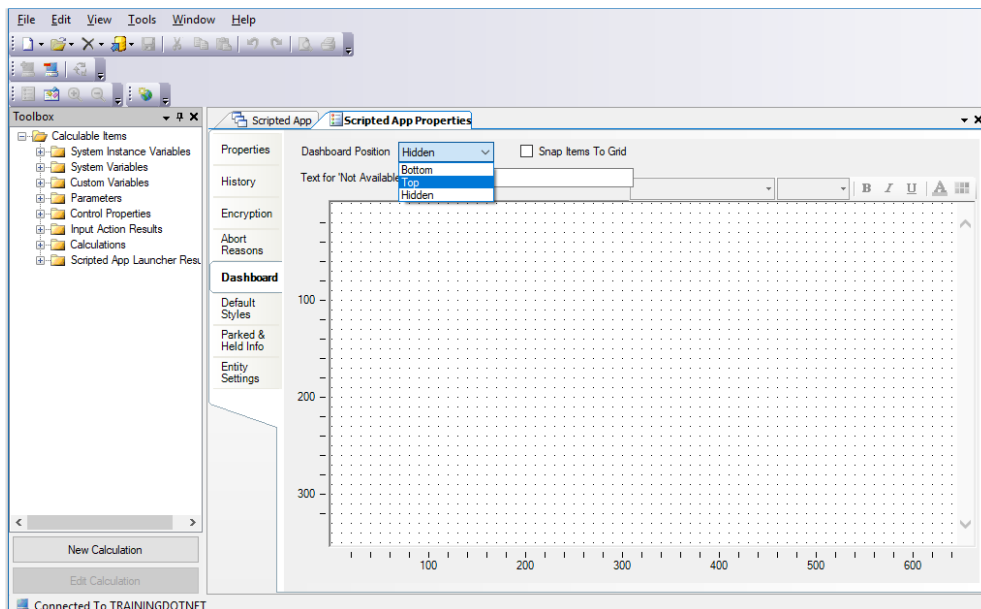
The Dashboard is used to display selected Information from the Scripted App to agents in run time, in the Web Browser.

### Introduction

The Dashboard is configured in the Synthesys™ Interaction Studio, in the **Scripted App Properties** section of your Scripted App.

Initially, the dashboard is set to 'hidden'. From the **Dashboard Position** drop down menu, choose if you wish to display the Dashboard at the top or bottom of the Scripted App screen.

**Dashboard Position** drop down menu.



### Calculable Items Directory

The required items to construct your Dashboard can be selected from the **Calculable Items** directory in the Toolbox on the left-hand side.

## Calculable Items Directory

Available folders include: System Instance Variables, System Variables, Parameters, Control Properties, Input Action results and Calculations folders.

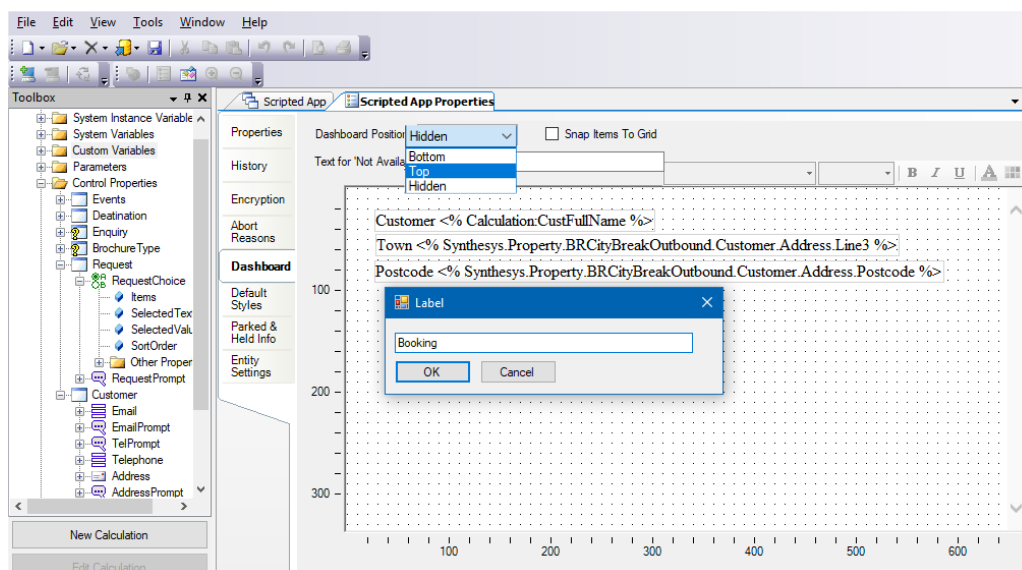
From the **System Instance Variables** folder, for example, you can select information about the Agent i.e., agent name and ID and information related to the Call, including Sequence ID, call duration and scripted App results. From the **System Variables** folder, you can select the Workspace name and prefix and scripted App name and version. Existing calculations can be selected from the **Calculations** folder.

The **Control Properties** folder contains all sections and controls of the Scripted App, together with any associated call information, which can be displayed on your dashboard via the **SelectedText** option of a Web control.

## Configuring the Dashboard

To display, for example, call information collected in a specific web control, locate the web control in the relevant section folder under **Control Properties**.

- Select the **Dashboard Position**, i.e., **Top**, to display relevant information at the top of the screen at run time in the Agent Portal.
- Select and drag the **required field** into the dashboard area on the right side, entering a name in the **Label** box subsequently displayed. Click OK to add the information.



Add any further details as required, each time selecting the information from the appropriate folders, i.e., the **System Instance Variables**, **System Variables**, **Parameters**, **Control Properties**, **Input Action results** or **Calculations** folder.

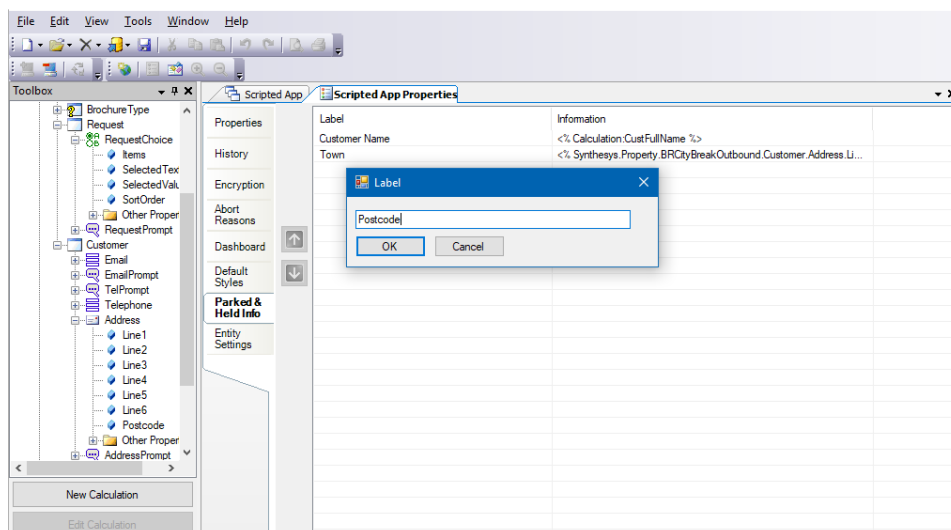
## Configuration of Parked & Held Info

The *Parked & Held Info* option is used to display selected information from a Scripted App to the agents in the *Parked* or *Held* calls window in the Web Browser.

*Parked & Held Info* is configured in the Synthesys™ Interaction Studio, in the **Scripted App Properties** section of your Scripted App.

The required details to be displayed as part of the *Parked* or *Held* calls window in the Web Browser are selected from the **Calculable Items** directory in the Toolbox on the left-hand side.

- To add, for example, customer name and email address, go to the **Control Properties** folder and locate the sections and web controls used to collect these details.
- Next, select the relevant fields, i.e., **FirstName & Surname**, or in case of the email address the **Text1** field of the Edit control and drag them into the section on the right.
- Enter a suitable name in the **Label** box subsequently displayed and click OK to add the details into the Label and Information columns.



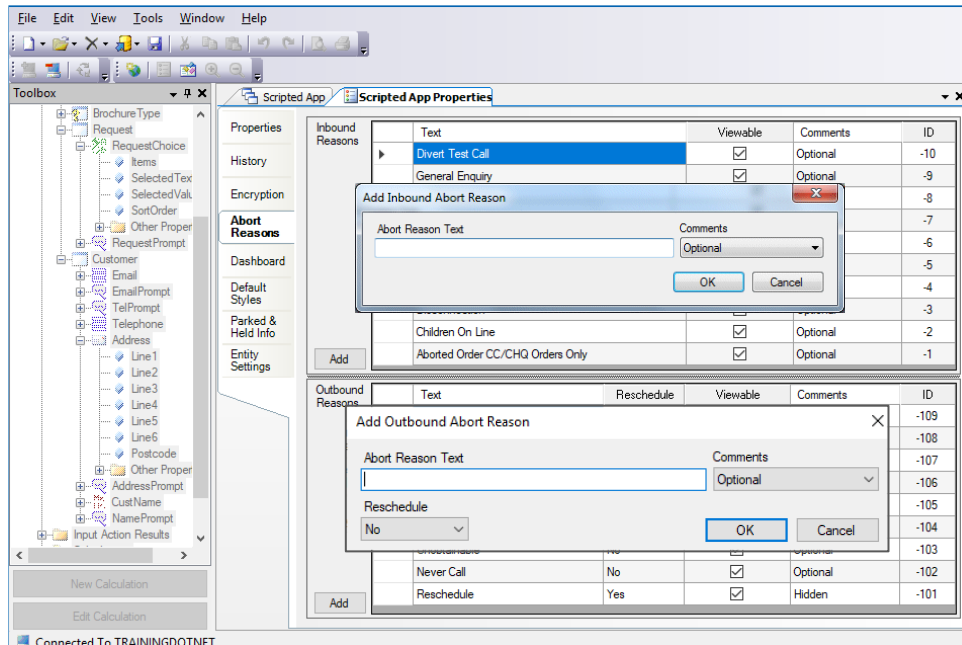
### Calculable Items Directory

Add any further details as required, each time selecting the information from the appropriate folders: System Instance Variables, System Variables, Parameters, Control Properties, Input Action results and Calculations.

For more information about the content of the **Calculable Items** directory, please see the previous page.

## Abort Reasons

The section *Abort Reasons* contains the options available for aborting Inbound and Outbound calls for the selected Scripted App.



To add further Inbound and Outbound abort reasons, as required

- Double click on the Scripted App Properties section displaying a traffic light, to open the *Scripted App Properties* page and go to **Abort Reasons**.
- Select **Inbound Reasons** and click **Add** to enter a new inbound abort option.
- Select **Outbound Reasons** and click **Add** to enter a new outbound abort option.
- Place a tick into the **Visibility** column, to display the option entered to the agents in the Synthesys™ Portal at run time in the Web Browser.
- Select **Optional** or **Hidden** from the **Comments** drop down menu to show or hide a comment box with the aborted type at run time, select **Required** if you want agents to enter a reason when selecting the aborted type.



*Please contact Noetica, if any of the new Outbound abort options entered are to be used as part of call recycling, as the new reasons will have to be added to the Phoenix Recycling Result table.*

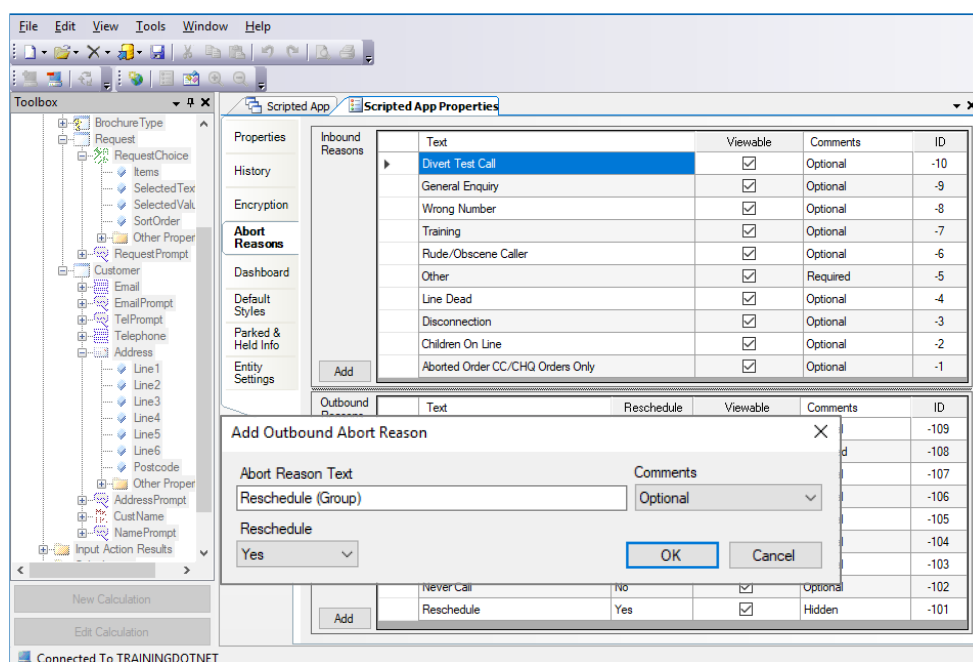
## Reschedule Personal and Group Call-backs

Personal and Group call backs are achieved in recycling by creating custom outbound abort reasons in the Scripted App Properties dialog.

The Reschedule (Personal) and Reschedule (Group) abort options will override the Operator Bias and Reschedule Flags outbound list settings. Any other reschedule results will continue to look at these advanced property settings as normal.

To add Personal and Group call backs

- In the Synthesys™ Interaction Studio, double click on the Scripted App Properties section displaying a traffic light, to open the *Scripted App Properties* page.
- Select **Abort Reasons** and go to the **Outbound Reasons** section.
- Click the **Add** button, to open the *Add Outbound Abort Reason* dialog.
- Enter **Reschedule (Personal)** into the *Abort Reason Text* dialog, and select **Reschedule Yes**, to enable personal call-backs.
- Enter **Reschedule (Group)** into the *Abort Reason Text* field and select **Reschedule Yes**, to enable group call-backs.



**When taking calls in the Synthesys™ Portal, selecting Reschedule (Personal) will always reschedule the current call to the current agent, even if P is used as part of the reschedule flags setting, and regardless of whether Operator Bias is enabled, or not.**

**Selecting Reschedule (Group) will always reschedule the current call to None, i.e., without assigning an Agent ID, regardless of whether Operator Bias is enabled, or not. When P is used as part of reschedule flags, the call will be slept, no agent assigned.**

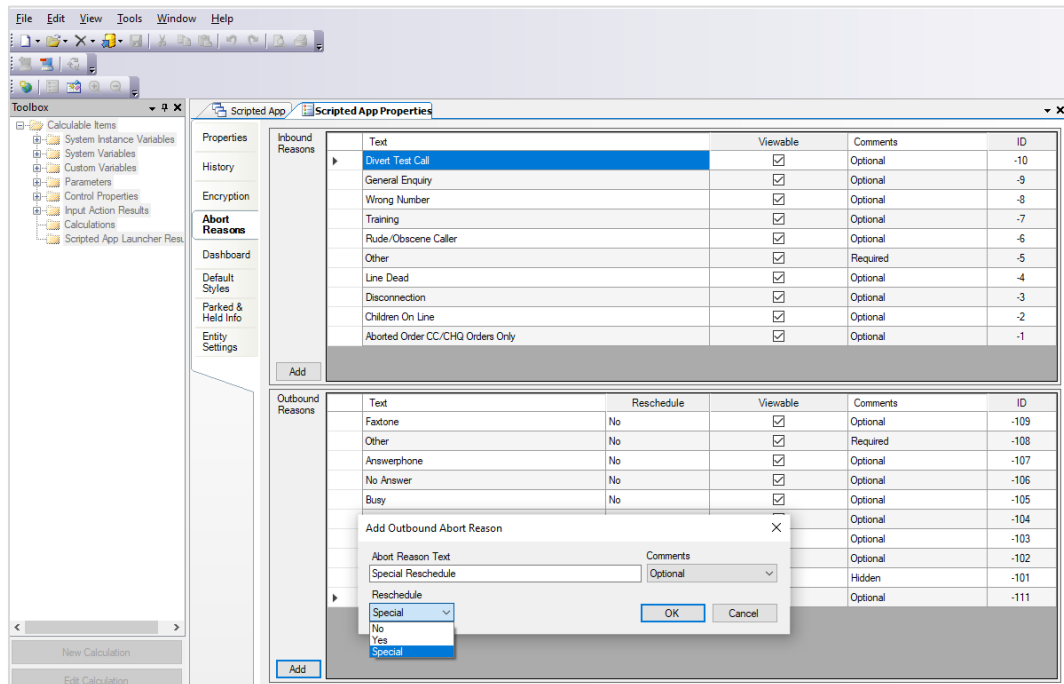
## Special Reschedule

Using the Special Reschedule option, calls can be rescheduled with the call data taken.

When the record is presented to the agent again, the scripted app will open at the point at which the call was rescheduled, with the call information already collected being retained.

The agent can now finish the partially completed call, without having to re-enter information.

- In the Interaction Studio, double click on the Scripted App Properties section displaying a traffic light, to open the *Scripted App Properties* page.



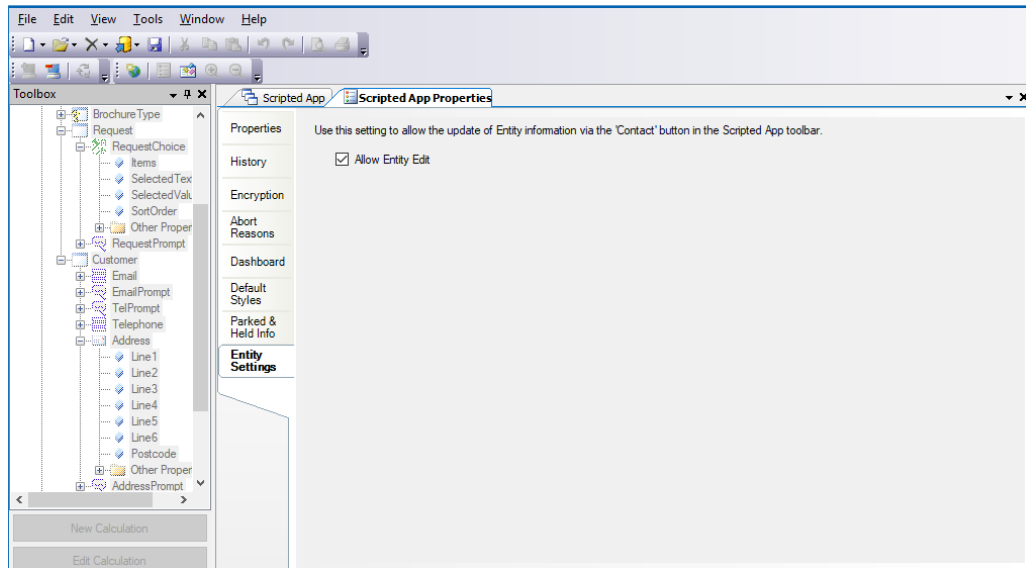
- Select **Abort Reasons** and go to the **Outbound Reasons** section.
- Click the **Add** button, to open the *Add Outbound Abort Reason* dialog.
- Enter **Special Reschedule** into the Abort Reason Text field.
- Select Reschedule **Special**, to enable call-backs with access to call data already collected.

## Entity Settings

With the **Allow Entity Edit** setting enabled in the Interaction Studio, agents will be able to edit and update Customer Entity details instantly, anywhere in the selected scripted app, via the **Contact** option on the Scripted App toolbar in the Agent Portal.

To activate the **Allow Entity Edit** setting for a selected scripted app.

- Go to File / Open/ Scripted App and select the relevant scripted app.
- Double click on the traffic light icon, to open the **Scripted App Properties** section.



- In the Scripted App Properties dialog, move to the **Entity Settings** section.
- Place a tick into the **Allow Entity Edit** checkbox.

Publish the scripted app to commit the changes, before taking a call in the Agent Portal.

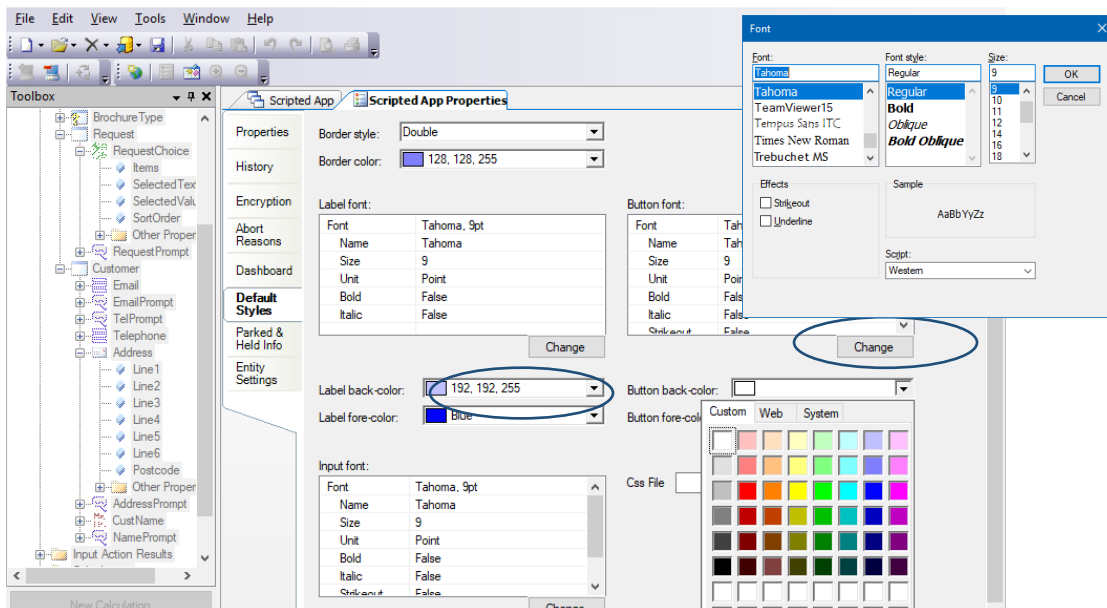
## Creating Style Templates

Style templates can be configured in the Synthesys™ InteractionViewer Studio, in the **Scripted App Properties** section of a Scripted App.

Selecting the **Default Styles** page, users can set the colour and font style for the input fields, control labels, buttons, and borders of web controls, using the drop-down menus and *Change* buttons.

Option	Used to
Border	set the style and colour of the border line around a web control.
Label	change font, font style, size, script style, background, and forefront colour of the labels for a web control
Button	change the font, font style, size, script style, background, and forefront colour of the buttons for a web control
Input	Set the font, font style, size, script style, background, and forefront colour of the Input fields for a web control

Change colour and font style via the drop-down menus and *Change* button.



The style configured in the **Scripted App Properties** section will be applied automatically to all sections, controls, and dialogs of the current **Scripted App**.

Should users wish to display different styles for selected web controls, the styles can be set up, as required, in the **Advanced Properties** section of the relevant web controls.




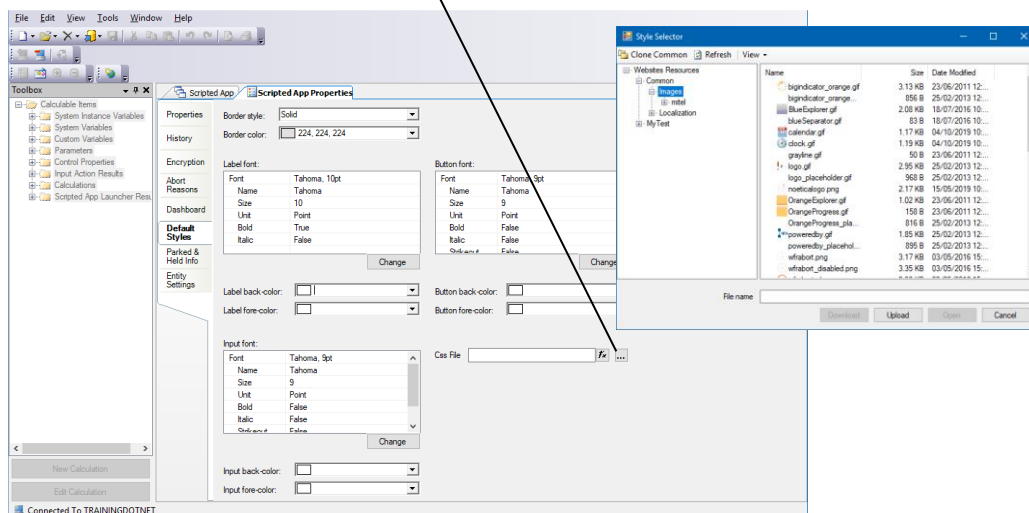
## Using Cascading Style Sheets (CSS)

Synthesys™ uses CSS (Cascading Style Sheets) to manage the look and feel of the Scripted Apps at runtime. Users can define their own CSS file, to allow Synthesys™ to align with any corporate style, as required.

### Creating a new CSS file

Cascading Style Sheets (CSS) can be configured in the Synthesys™ Interaction Studio, in the **Scripted App Properties** section of a Scripted App.

- Select the **Default Styles** page in the **Scripted App Properties** section.
- Click the Browse button  next to the **CSS File** field to open the **Style Selector** dialog.

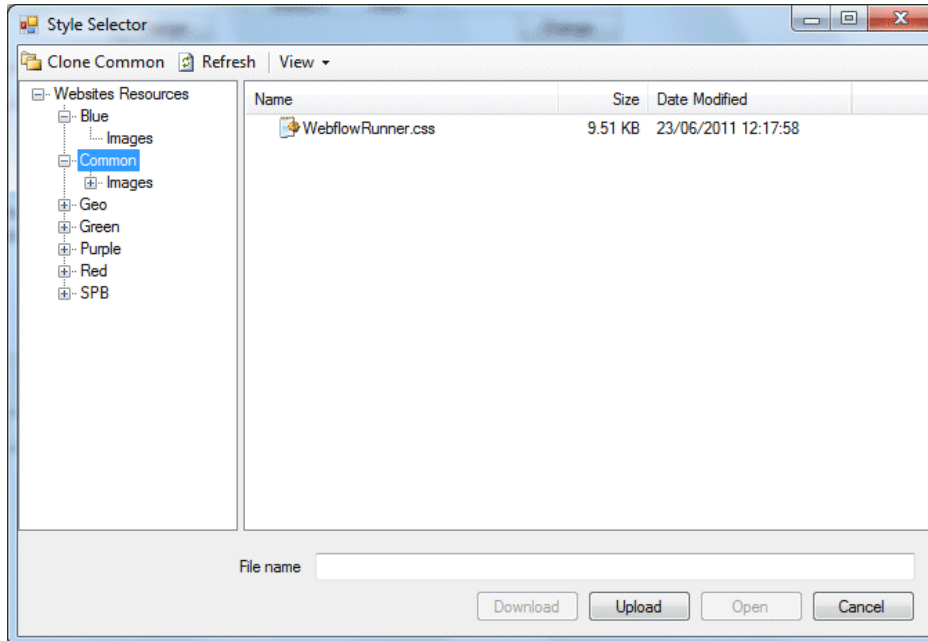


The **Style Selector** dialog displays the list of available CSS and image collections on the system.

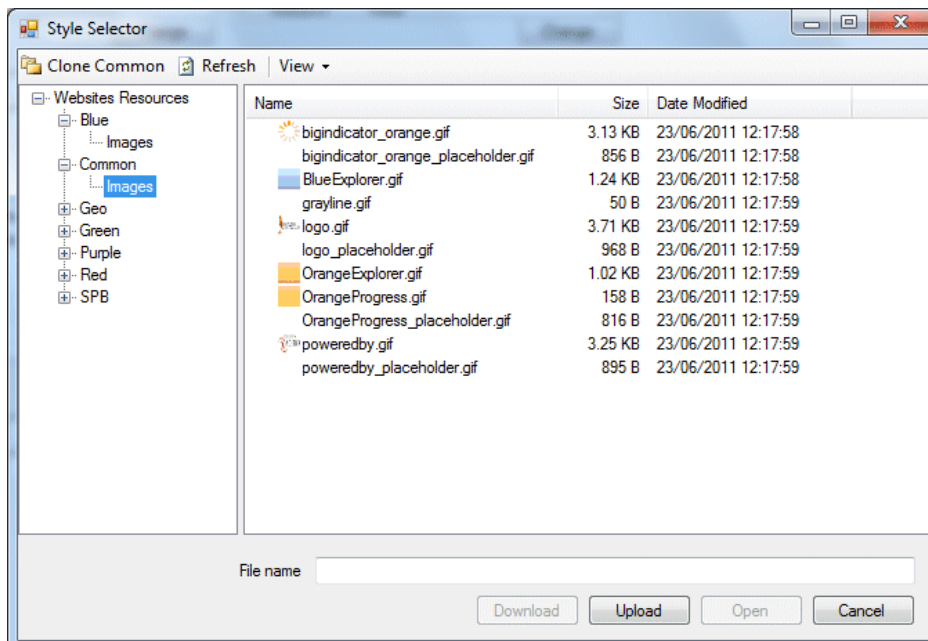
Please see next page for more information.

## The Style Selector

The **Common folder** holds the default CSS and images that are used for all Scripted Apps by default.



Each folder has a **CSS file** which is always called **WebflowRunner.css** and a sub folder that holds all the images.

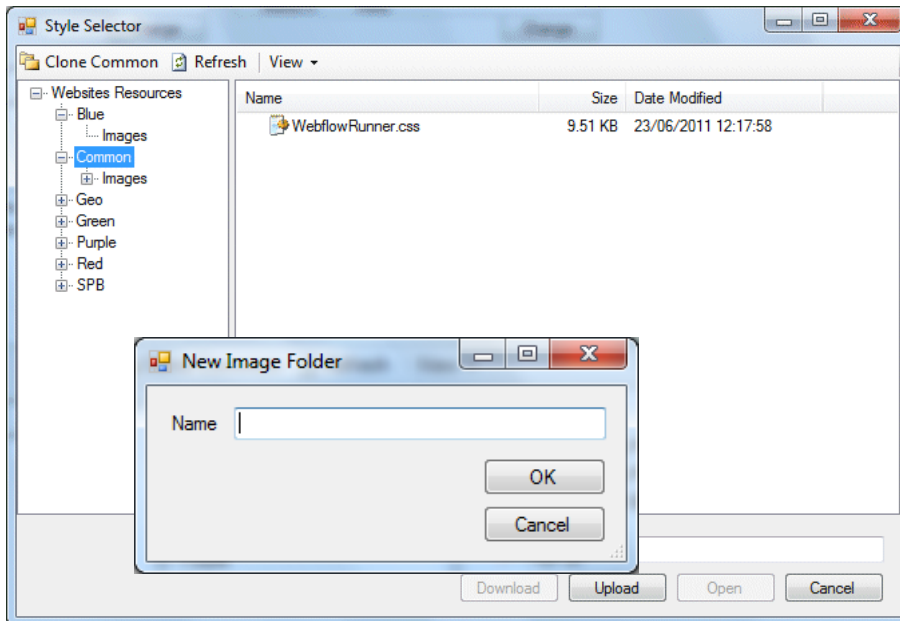


The next section will describe how you can create a new image folder and how to edit files.

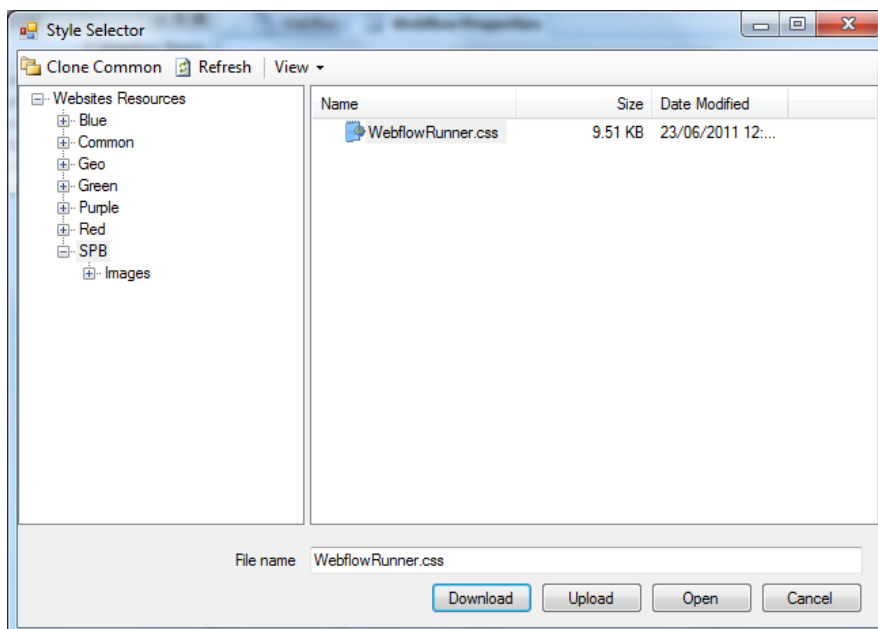
## Creating a new Folder

To create a new folder the following steps are to be followed:

- Press **Clone Common** on the toolbar in **Style Selector** dialog.
- Enter a name for the new folder.



- Press **OK** to display the new folder in the tree.

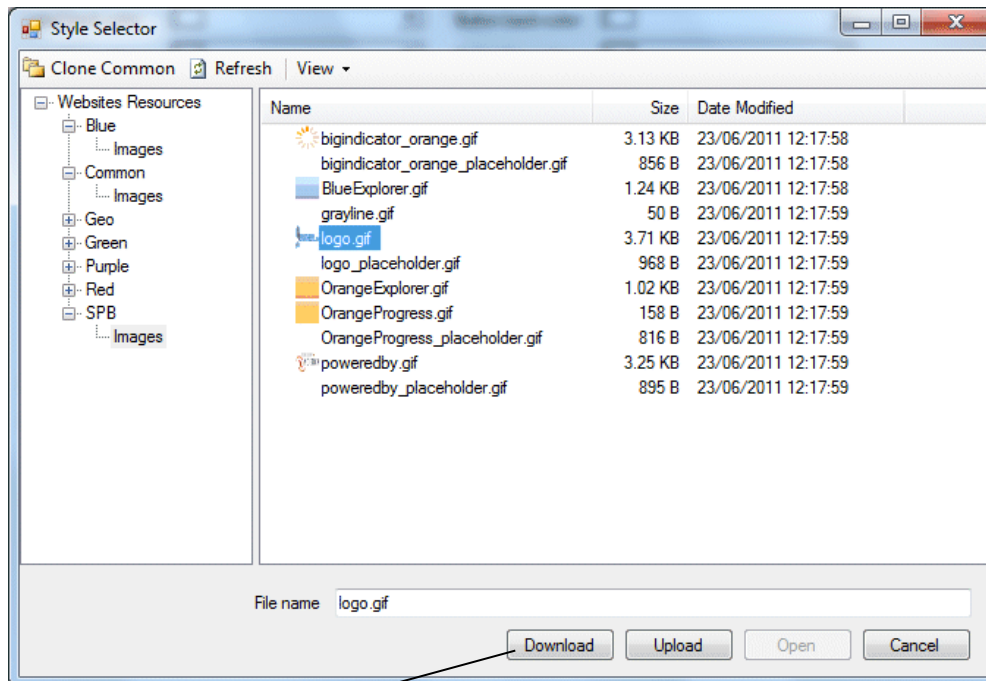


The system has automatically copied all files from common to your new folder and you can now start to edit the CSS file or any of the images.

## Editing existing files

In the **Style Selector** dialog

- Locate and select the file and/ or images that you wish to edit.



- Press **Download**, to download the files to your machine.
- Edit the files as required and then press **Upload** to select the edited files.

Please see next page for all the elements that can be configured from within the css file.

## Contents of WebflowRunner.css

Below a list of all elements that can be configured from within the css file.

ContentsItem		CTI:
sectionsContentsBody	waiting For ExternalValuesModal	CTIContentsBody
ContentsTitle	Timer	CTITitle
SectionTitle	Bar	CTIImageButton
MainView	PercentageBar	CTIPanelTitleCell
DashBoard	SessionTimeoutTitle	CTIPanelTitleLabel
Toolbar	SessionTimeoutContents	CTIModalBackground
ToolbarButtonCell	SessionTimeoutButton	CTIModalPopup
ToolBarButton	BaseBar	CTIModalPopup table
ImgLogo	errorLabel	ModalPopupDialog
PoweredByLogo	FooterRow	standardTextBox
Hseparator	BigIndicator	standardTextBox_error
Separator	default_section	standardLabel
DashboardSeparator	default_webcontrol	
ProgressBar	default_border	
ProgressBarContainer	default_label	
DialogBody	default_input	
CTIPanelTitleCell	default_button	
CTIPanelTitleLabel		
modalBackground		
modalPopup		
standardButton		
DialogStyle		
DialogText		
DialogHeader		

## REPORTING METRICS IN SYNTHESYS™

### Introduction

Reporting metrics in Synthesys™ allow contact centre administrators to group Scripted App outcomes such as *Decision Maker Contact (DMC)*, *Sales* and *Enquiries*, to simplify running reports and to assist with dialler performance.


Reporting metrics are defined in the Synthesys™ Scripted Interaction Studio, using either the **Metrics section** or the **Conclusion wizard**. Both display the same grid with pre-defined metric names. Scripted App administrators can assign a value to one or more of these metric names, as required.

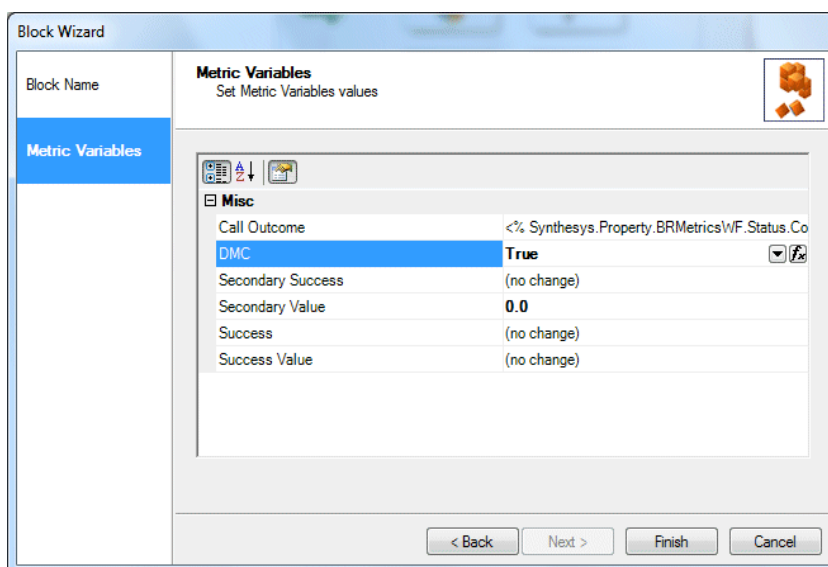
The specified metrics are written to the **Phoenix\_Metrics** table at run time, when agents pass through the Metrics section, or on finishing a call.

Using the Phoenix\_Metrics table, together with the Phoenix\_Metrics\_Definition and Phoenix\_Statistics table, users can run call-centre wide reports on defined outcomes across campaigns (e.g., number of calls, number of DMC contacts, number of sales and value of sales), without having to look at Scripted App specific tables.

## Assigning Values in the Metrics Section

To add a metrics section to your Scripted App

- Select the  Metrics Section icon from the Scripted App Blocks column of the Toolbox.
- Enter a name for the metrics section in the **Block Name** page of the wizard.
- In the **Metric Variables** page, you can set one or more of the metric values, as required, selecting the relevant option from the drop-down menu, or using a calculation (ensuring data type match).




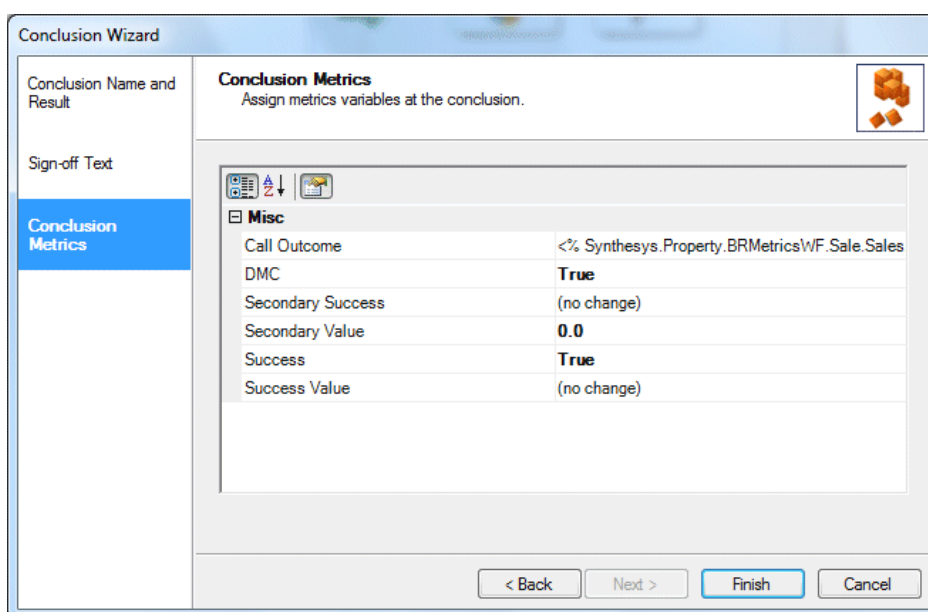
The available reporting metrics are as follows:

Option	Data Type	Description
Call Outcome	String	The Call Outcome Metric can be used to standardize the outcome of a Scripted App across multiple campaigns. I.e., in all campaigns mark the outcome to Sale, if a sale has been made, as you can then total up the Sales for an Agent in the database, irrespective of the campaign the call was made in.
DMC	Boolean	True/ False. To specify if agents spoke to DMC (Decision Maker Contact).
Secondary Success	Boolean	True/ False. Call was successful by some secondary measure (for example upsell made).
Secondary Value	Numeric	Numeric. Value of sale, for example.
Success	Boolean	True/ False. Call was successful (for example sale made, brochure requested, appointment made).
Success Value	Numeric	Numeric. Value of upsell for example.

## Assigning Values in the Conclusion Wizard

Metrics can also be defined in the conclusion flags, setting metric values in the **Conclusion Metrics** page of the conclusion wizard.

- Select the  **Conclusion** icon from the Scripted App Blocks column of the Toolbox.
- Enter a name for the conclusion in the **Conclusion Name and Result** page of the wizard.
- In the **Conclusion Metrics** page, set one or more of the metric values, as required, selecting the relevant option from the drop-down menu, or using a calculation (ensuring data type match)



**Conclusion Wizard**

Conclusion Name and Result

Sign-off Text

**Conclusion Metrics**

**Conclusion Metrics**  
Assign metrics variables at the conclusion.

Metric	Value
Call Outcome	<% Synthesys.Property.BRMetrics\WF.Sale.Sales
DMC	<b>True</b>
Secondary Success	(no change)
Secondary Value	<b>0.0</b>
Success	<b>True</b>
Success Value	(no change)

< Back   Next >   **Finish**   Cancel

Once the call has been concluded at run time in the Synthesys™ Portal, the results are written to the **Phoenix\_Metrics** table containing the sequence ID, the Metric ID, and the value assigned.

This enables users to report on DMC, Sales, Sales value etc. in a standard manner across campaigns, from a central location that stores the metrics assigned.



## PUBLISHING SCRIPTED APPS

Before you can test your Scripted App in the Web browser, you must publish the Scripted App.

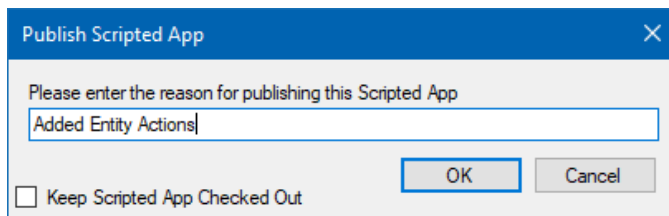


*To publish a Scripted App, you need to be connected to the server and you must have the Scripted App checked out.*

Go to **File – Publish** or use the Publish  icon to open the Publish Scripted App dialog.

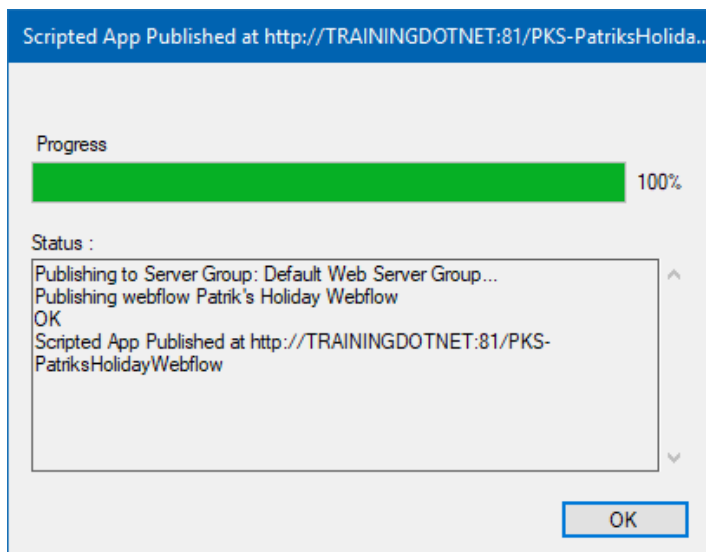
Enter a reason for publishing the Scripted App and click OK. The entries will be recorded on the Scripted App Version Control page.

If you wish to continue to edit the Scripted App after publishing it, tick the option 'Keep Scripted App Checked Out'.



Once the Progress bar shows that the publication is 100% complete, click OK.

The Status section shows the name of the scripted App published and the server path.




*If publishing the Scripted App should fail for some reason, a message dialog will be displayed, providing further information.*

*When the Scripted App is successfully published, the version number will go up to the next full number, from Version 1.3 to Version 2.0 or from Version 2.1 to Version 3.0*

## SCRIPTED APP VERSIONS

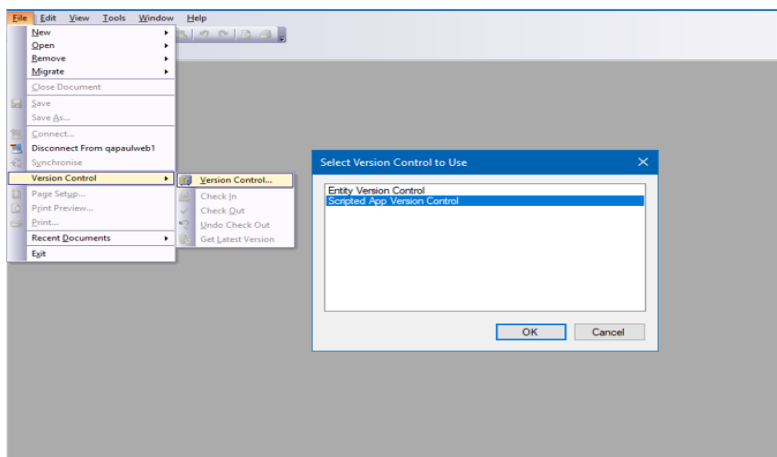
In the *Scripted App Version Control* dialog, you can access comments that were entered on checking in or publishing Scripted Apps and if required, check out an earlier version.



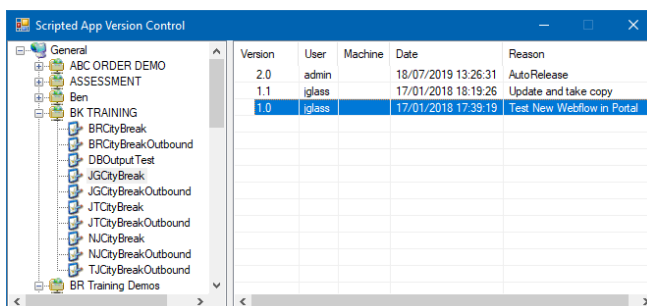
*Every time a Scripted App is checked in, the version number will increase by 0.1, i.e. from Version 1 to Version 1.1; 1.2; 1.3 etc.*

*When publishing a Scripted App, the version number will go up to the next full number, from Version 1.3 to Version 2.0 or from Version 2.1 to Version 3.0*

- In the Synthesys™ Interaction Studio, connect to the server, go to **File** on the menu bar and select **Version Control**, then **Scripted App Version Control**.



- In the *Scripted App Version Control* dialog, select a Scripted App, to display the associated version details on the right-hand side.



- Right click on a *Version* number, to display the following options:
  - Refresh                      Update the list of published versions
  - Get Version                 to open the selected version of the Scripted App to view
  - Check Out                    to check out the selected version of the Scripted App to edit

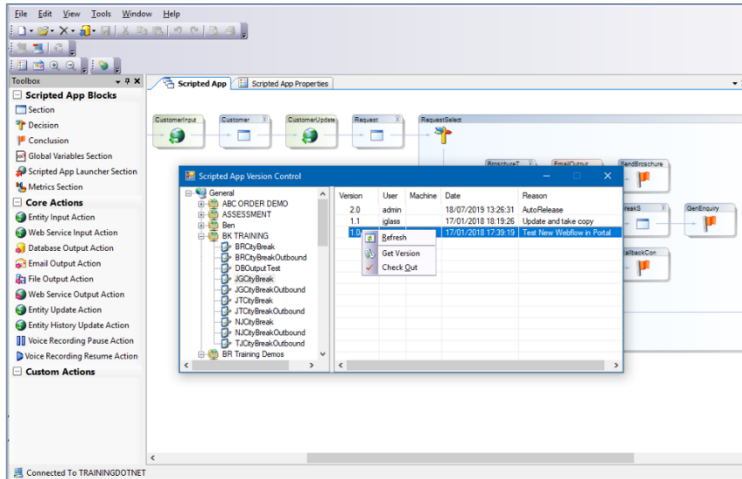


Selecting the scripted app version that you wish to view or edit will **not** automatically open the scripted app. To open the selected version of the scripted app, go to: File / Open / Scripted App.

## Checking out a previous Scripted App Version

To check out an earlier version of a currently open Scripted App

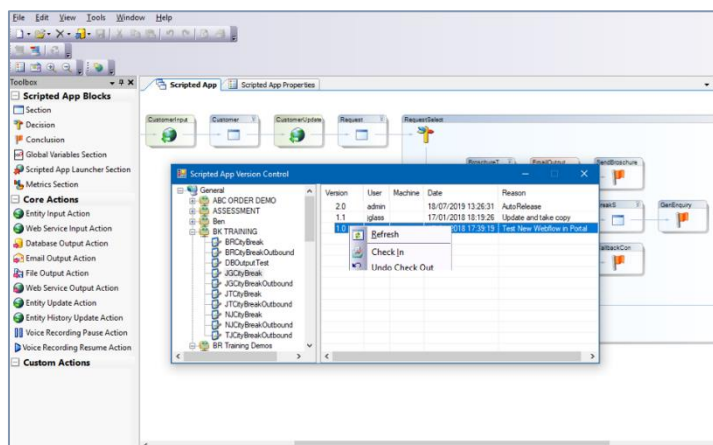
- Right click on the version that you wish to check out and select the **Check Out**.
- If the message 'The Current Scripted App Has Changed. Do you want to Reload?' is displayed, click **Yes**.



The selected version of the Scripted App will open.

If you right click on the version of the checked out Scripted App, you can select:

- Check In to check in the scripted app immediately or after editing
- Refresh to refresh the list
- Undo Check Out to undo the check-out action




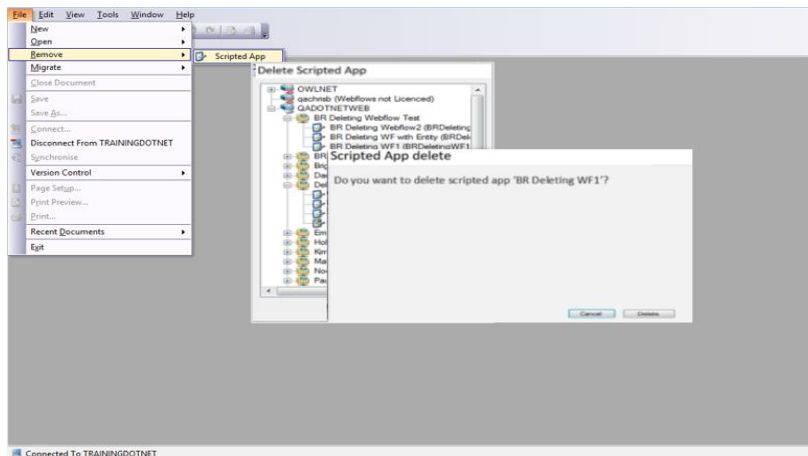
When the Scripted App is checked in again, the version number will increase by 0.1, from 2.3 to 2.4. When publishing the Scripted App, the version number will go up to the next full number, version 3.0.

## DELETING SCRIPTED APPS

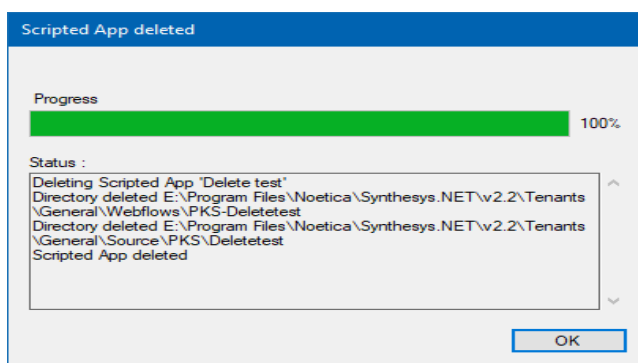
Deleting an existing Scripted App will remove the Scripted App entirely, including all Scripted App data, all entries for that Scripted App in Teams and all related Scripted App tables.

Scripted Apps are deleted in the Synthesys™ Interaction Studio.

- Go to File/ Remove/ Scripted App or use the *Remove*  a *Scripted App* icon.
- In the *Delete Scripted App* dialog, select the Scripted App that you wish to delete.



- Click **Delete** to remove the Scripted App, or **Cancel**, to cancel the action.
- Click OK, to close the *Scripted App deleted* dialog.



If there are currently any ACTIVE outbound lists using the Scripted App, a message will inform you that: 'This Scripted App cannot be deleted, because the following active lists are using it', showing the names of the relevant outbound lists.

If there are any parked/ held/ special rescheduled calls using this Scripted App, you need to clear these first, before deleting the scripted app.

**Please note however**, that Scripted Apps with assigned DE-ACTIVATED Outbound lists CAN BE deleted, and that we do NOT check if this Scripted App is used as the target of a pop-script or link launcher etc.

If you want to delete the workspace associated with the scripted apps as well, you need to do this in the Synthesys™ Campaign Manager. Here, you first need to remove any schedules, call lists and related campaigns, before deleting the workspace.