

User Guide

**Worksoft Certify[®] Integration with
SAP[®] Solution Manager**

Worksoft Certify Integration with SAP Solution Manager User Guide

Version 7.2 SP14

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Patent

Worksoft Certify®

U.S. Patent No. 7,600,220

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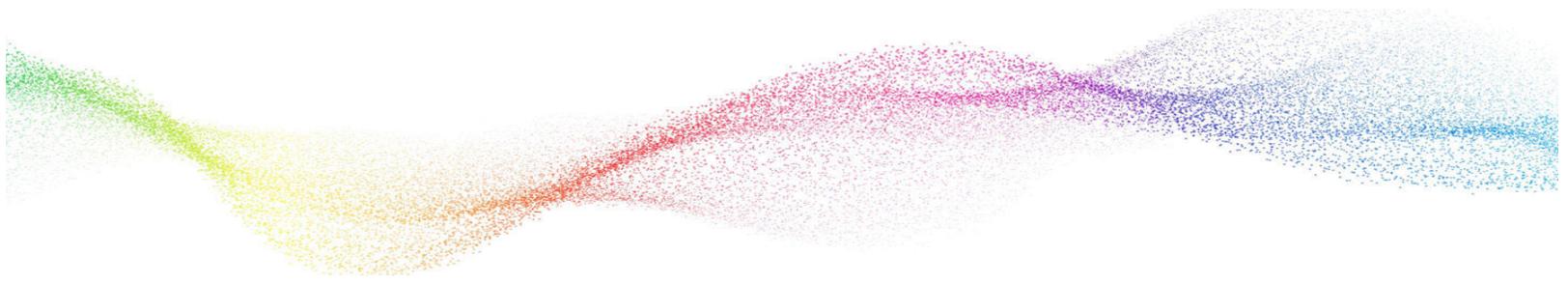


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Chapter 1 Overview

In This Chapter

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Understanding Worksoft Certify and SAP Solution Manager Integration

By integrating Worksoft Certify® with SAP® Solution Manager v7.2, you can create, edit, execute, and view the results of the Certify processes from within SAP Solution Manager.

You can leverage SAP Solution Manager and Certify for the following information:

- ◆ Test organization
- ◆ Test execution
- ◆ Test package status analysis

SAP Solution Manager has test assets and links to business processes to be validated. Certify has automated processes, manual test processes, and the associated test assets to enable test automation.

As your test processes are defined and documented in Certify, you may want to link them back to SAP Solution Manager in order to have an original inventory of business processes and a central point of project governance.

Test Results

If you integrate Solution Manager with Certify, then test results are returned to both Certify and SAP Solution Manager. You can view these results in Solution Manager and store them in a single repository. By saving the results in a repository, you ensure the business requirements are met.

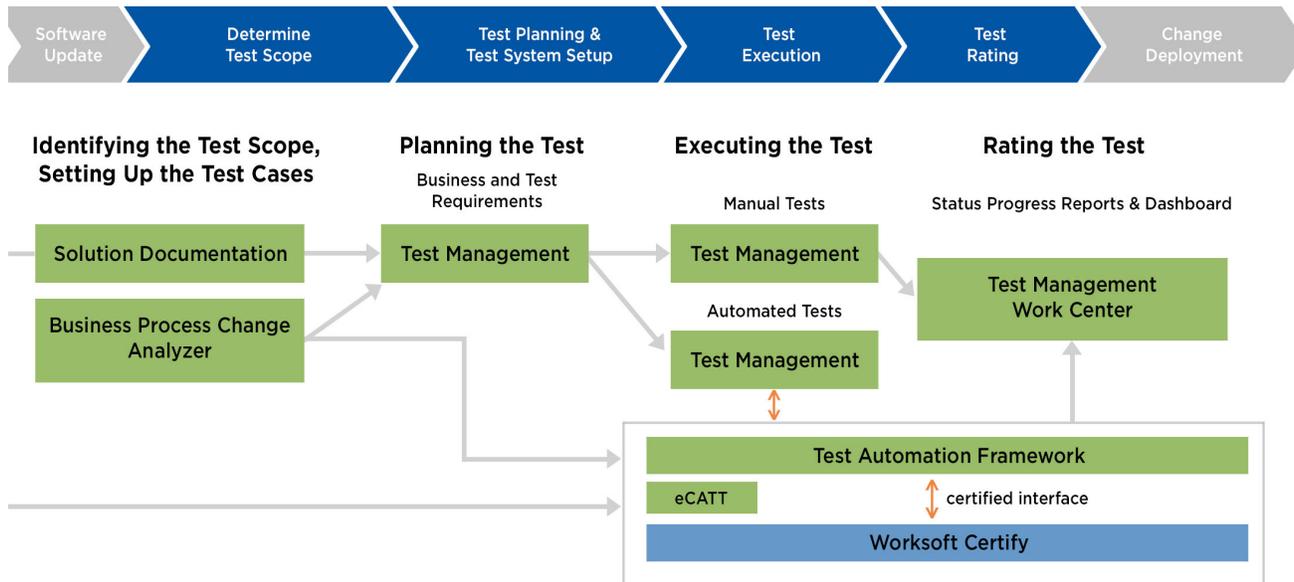
Within Solution Manager, you can open a PDF file that contains test results and screen captures. This file can be archived for long-term storage for audits and compliance.

Certify and Solution Manager Integration

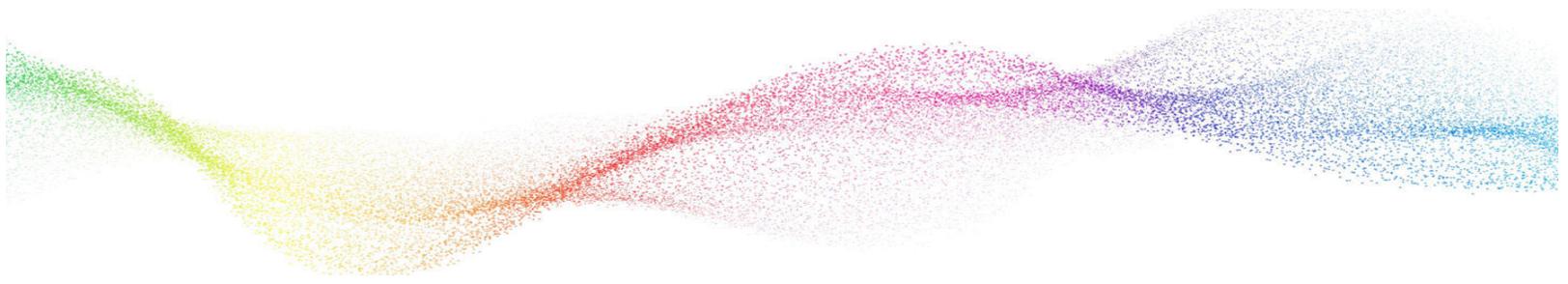
Certify test processes are linked to test configurations and test scripts in Solution Manager. From Solution Manager, you can:

- ◆ Create new Certify processes
- ◆ Edit existing Certify processes
- ◆ Execute Certify processes by invoking Certify for execution
- ◆ Review test results

Test configurations are defined in Solution Manager, and these configurations point to an internal test script and associated Certify process.



To integrate Certify with SAP Solution Manager, you must have a basic understanding of Solution Manager, and Solution Manager business processes must already have been created. For more information about setting up the integration, see the [Worksoft Certify Integration with SAP Solution Manager Installation Guide](#).



Chapter 2 Creating a Test Configuration in Solution Manager

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Overview

After configuring SAP Solution Manager and Worksoft Certify, you will create a test configuration in Solution Manager that will link to test processes in Certify. When you generate the test configuration, an internal test script that links Certify to the Solution Manager is automatically created.

This procedure assumes that you have already created the following items in Solution Manager:

- ◆ Business processes
- ◆ Scenario and process
- ◆ Executable
- ◆ Test profile

Creating a Test Configuration in SAP Solution Manager

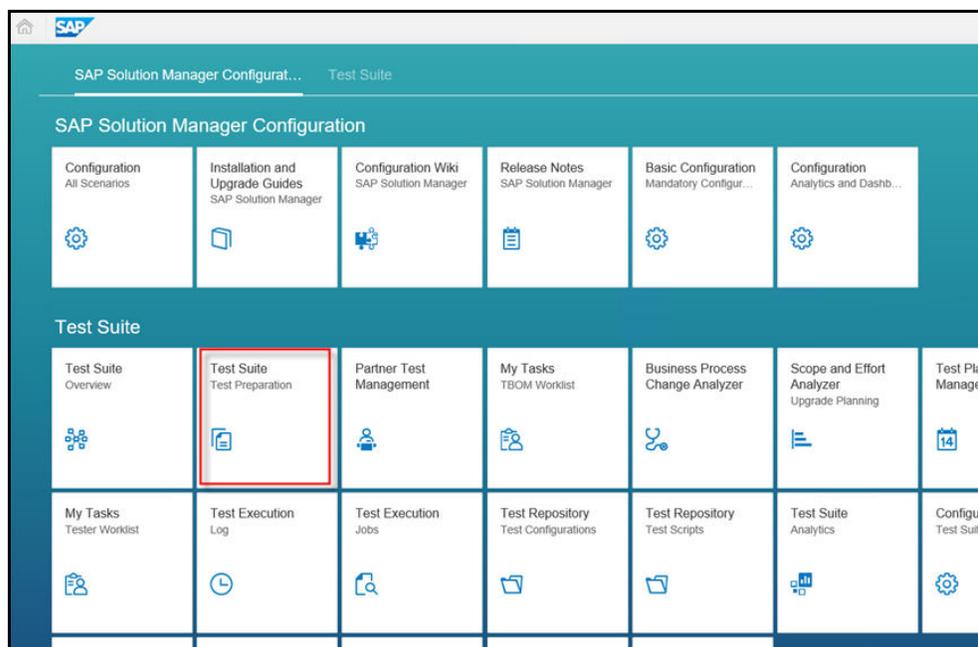
Before you link your Worksoft Certify processes to the Solution Manager script, Certify must be configured to the database that contains the specified Solution Manager project. Also, you will need access to the Solution Manager project in Worksoft Certify.

IntegratedSAP is the default value for the Solution Manager project. A Certify administrator adds this value when configuring Certify for integration. If your organization used a different project name, you will need the name when creating your test configuration. For more information, see the [Worksoft Certify Integration with SAP Solution Manager Installation Guide](#).

► To create a test configuration:

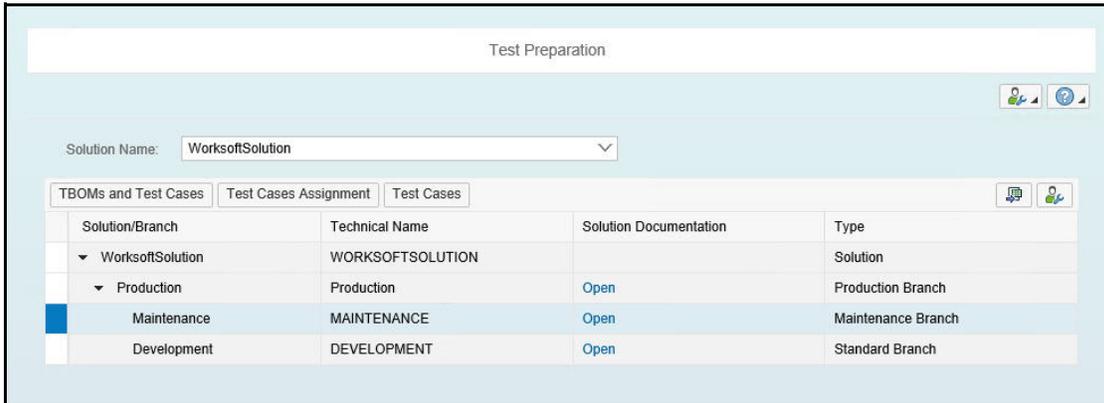
- 1 Sign in to SAP Solution Manager.
- 2 Enter the transaction code `sm_workcenter` in the Command field.

The SAP Solution Manager Workcenter opens.



- 3 In the Test Suite section, click **Test Suite > Test Preparation**.

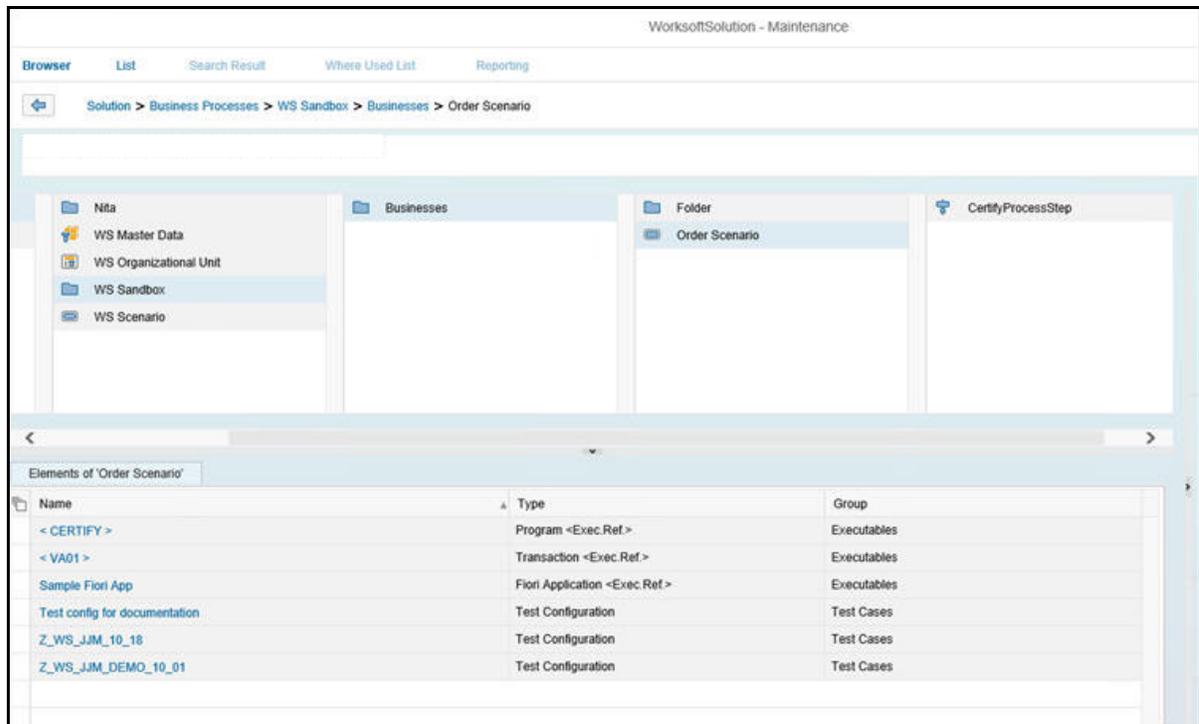
The Test Preparation page opens.



- 4 From the Solution Name field, select your solution.

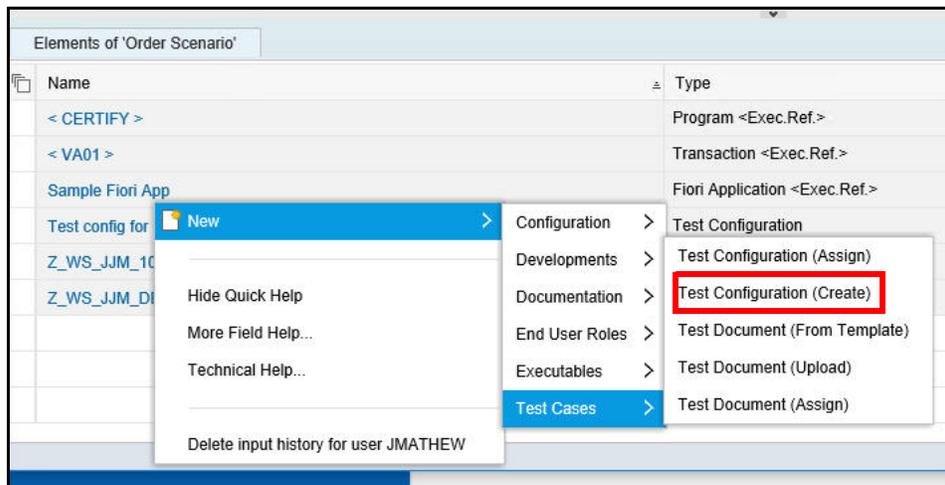
- 5 Click **Open** next to a branch in which you want to add the test configuration.

The Branch page opens.

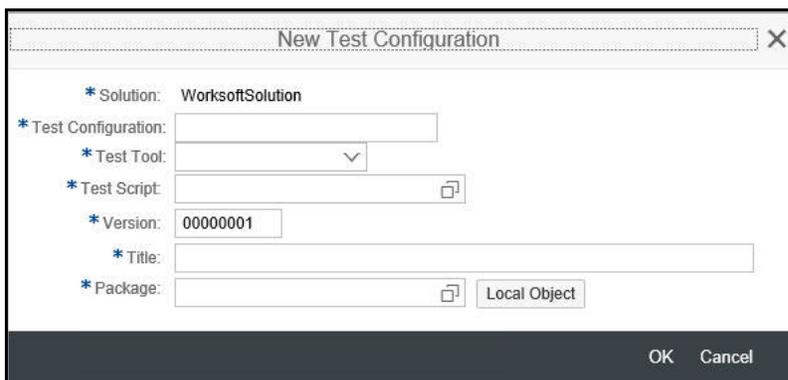


- 6 Select a scenario or a process.

- 7 Right-click in the Elements section and select **New > Test Cases > Test Configuration (Create)**.

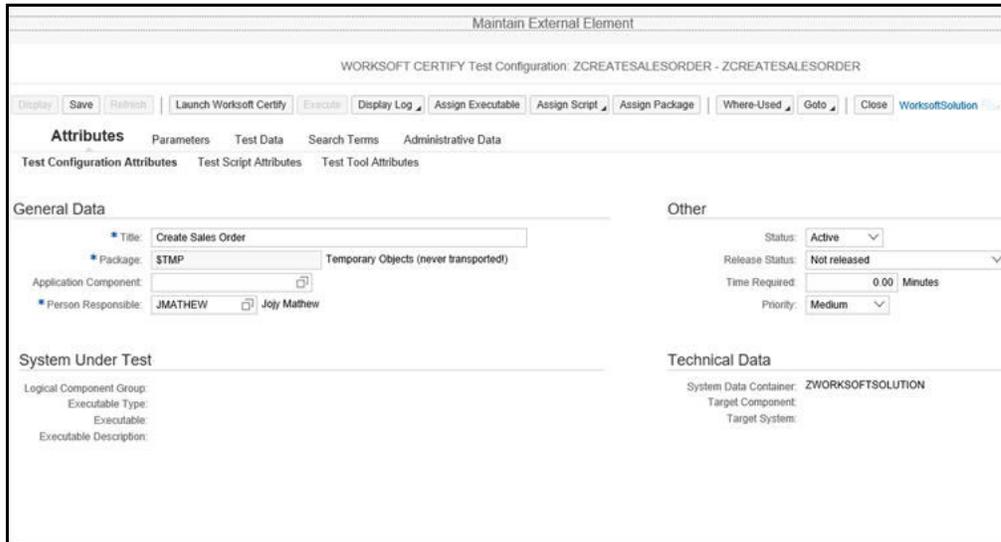


The New Test Configuration dialog opens.



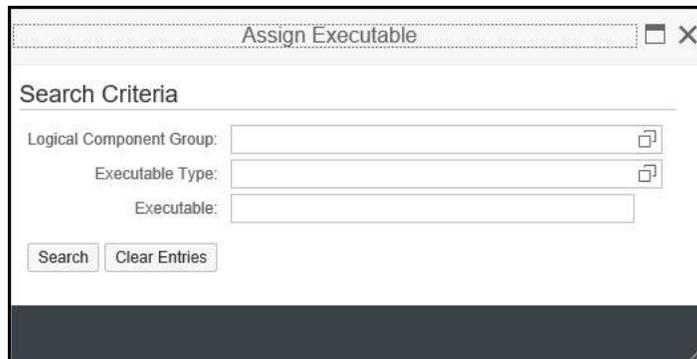
- 8 In the Test Configuration field, enter in a name that starts with the letter **Z**.
- 9 From the Test Tool drop-down list, select **Worksoft Certify**.
- 10 In the Test Script field, select or enter a name for a new script.
- 11 In the Version field, assign a version or use the default value.
- 12 In the Title field, enter a title name which is a description for the test configuration.
- 13 Click **Local Object** or select a package.
- 14 Click **OK**.

The Maintain External Element dialog opens.



15 Click **Assign Executable**.

The Assign Executable dialog opens.



16 Click the **Logical Component Group** or **Executable Type** button to select a group or type.

17 Click **Search**.

The Results List opens.

Logical Component Group	Executable Type	Executable
ZERP	Fiori Application <Exec.Orig.>	#Sample Fiori Object-Sample Fiori Action
ZERP	Transaction <Exec.Orig.>	VA01

18 Select an executable from the Results list.

The Maintain External Element dialog opens with the System Under Test information displayed.

19 In the Additional Test Options section, select a test profile.

20 Click **Save**.

Your test configuration is now complete.



Chapter 3 Creating Certify Processes Through Solution Manager

In This Chapter

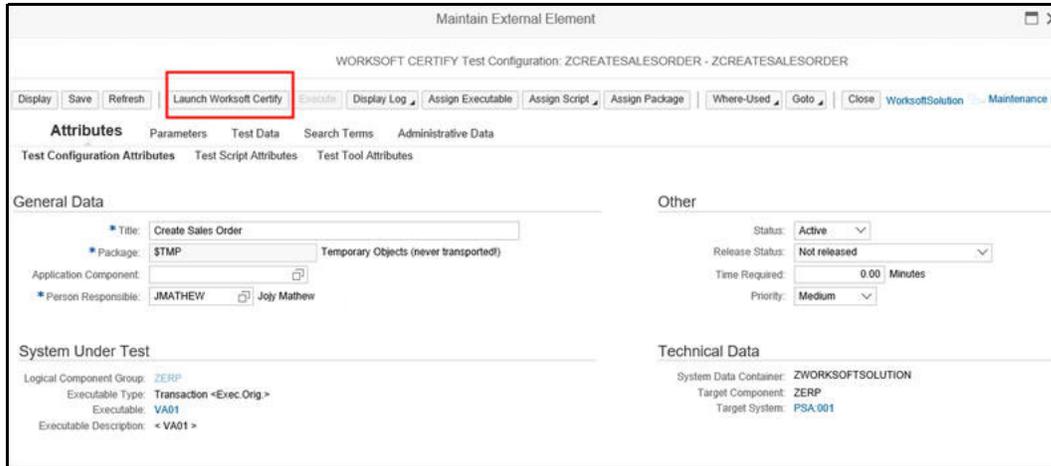
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Creating Certify Processes

After your integration, you are able to launch the Certify Process and Data Editor from Solution Manager to create Certify processes.

► **To create Certify processes in Solution Manager:**

- 1 From the Test Configuration screen in SAP Solution Manager, click the **Launch Worksoft Certify** button.



- 2 Click **Open** when your browser asks to open the external tool.



The User Entries for the External Tool dialog opens. Sometimes this dialog is hidden behind other windows.



- 3 Enter in the following information to sign in to Certify:

Field	Value
User Name for External Tool	Certify user name
Password for External Tool	Password for the Certify user
Project Name for External Tool	Certify project name

- 4 Click the **Continue** button.

The Certify Process and Data Editor opens.

- 5 Add steps to your new process or edit your existing process. For information on how to add steps to processes, see the [Worksoft Help Portal](#).

- 6 After you have updated your process, select **SAP > Save and Return to SAP** from the Certify Process and Editor menu.

The Process and Data Editor closes, and the Test Configuration screen in Solution Manager reopens.

- 7 Click **Refresh**.

You are now ready to execute your process in Solution Manager. For more information, see [Chapter 4 "Executing Certify Processes from Solution Manager"](#)

Saving Existing Certify Processes to Solution Manager

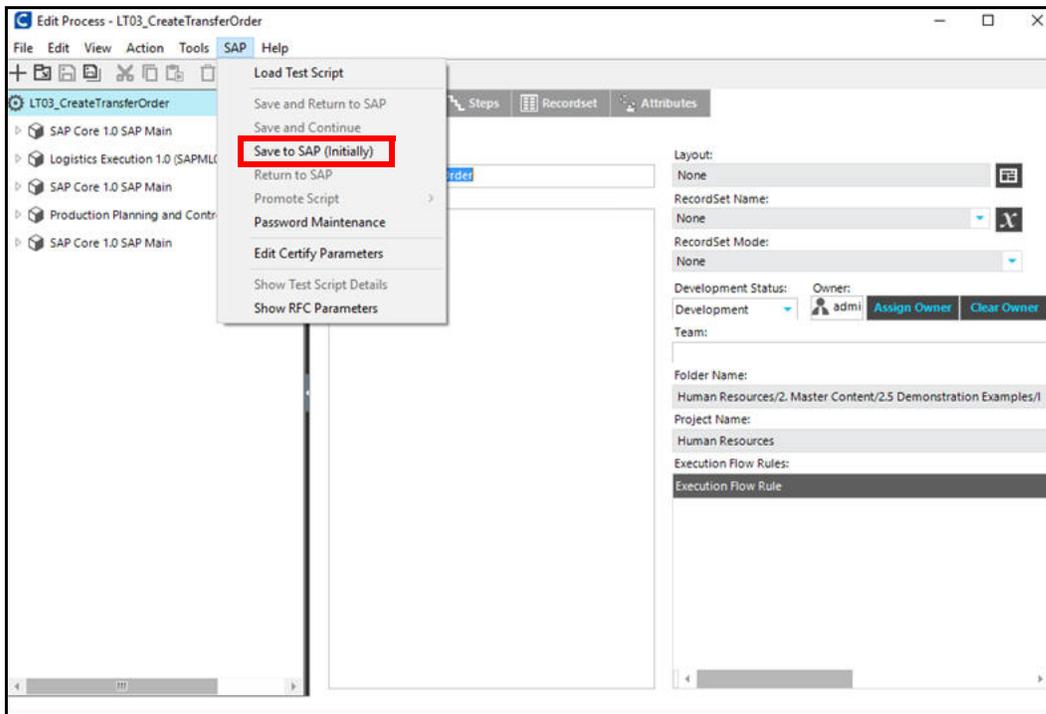
With Solution Manager integration, you can save existing Certify processes to Solution Manager.

► **To save your existing Certify process to Solution Manager:**

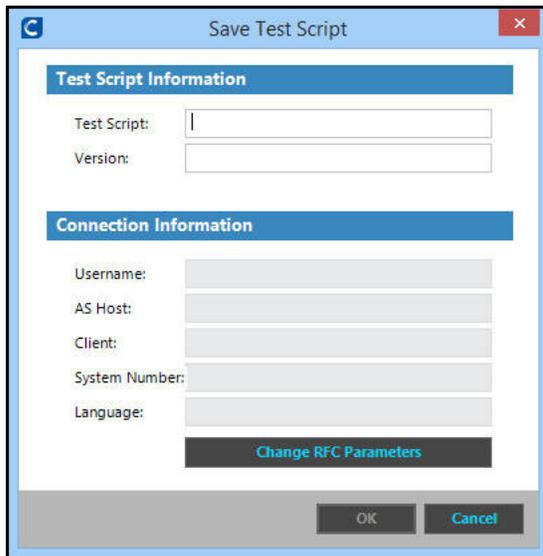
- 1 In the Certify Processes window, open up an existing Certify process.

The Process and Data Editor opens.

- 2 From the SAP menu, select **SAP > Save to SAP (Initially)**.



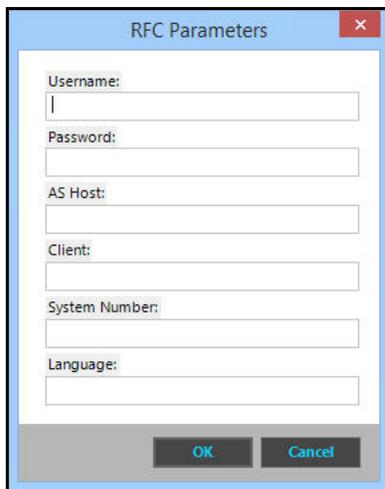
The Save Test Script dialog opens.



The 'Save Test Script' dialog box is shown. It has a title bar with a close button. The dialog is divided into two sections: 'Test Script Information' and 'Connection Information'. The 'Test Script Information' section contains two text input fields: 'Test Script:' and 'Version:'. The 'Connection Information' section contains five text input fields: 'Username:', 'AS Host:', 'Client:', 'System Number:', and 'Language:'. Below these fields is a button labeled 'Change RFC Parameters'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

- 3 In the Test Script text field, enter a test script name.
- 4 In the Version text field, enter the script version.
- 5 Click **Change RFC Parameters**.

The RFC Parameters dialog opens.



The 'RFC Parameters' dialog box is shown. It has a title bar with a close button. The dialog contains six text input fields: 'Username:', 'Password:', 'AS Host:', 'Client:', 'System Number:', and 'Language:'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

6 Enter the following information:

- User name
- Password
- Host
- Client
- System Number
- Language

7 Click **OK**.

The Save Test Script dialog opens with the RFC connection information.

8 Click **OK**.

Your test script is saved to Solution Manager.



Chapter 4 Executing Certify Processes from Solution Manager

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Executing Certify Processes from Solution Manager

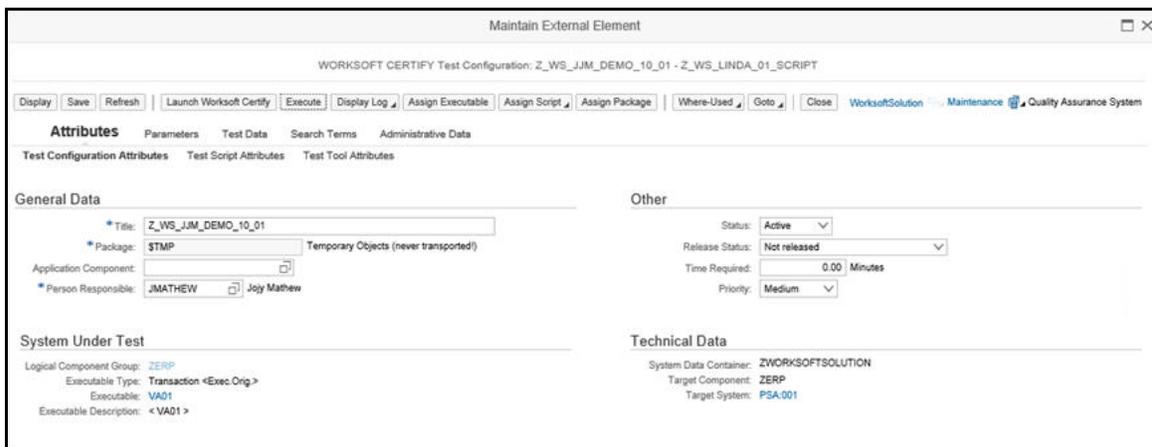
You can execute your Certify processes from Solution Manager and review detailed results. Solution Manager has the following three modes in which to run your Certify processes:

Mode Option	Description
Normal	Process executes without interruption from the user, and the Certify Result View opens with the results. This option is like Unmanaged mode when running the process in Certify.
Debug Mode	Debug a process during execution. When Certify Configuration dialog opens, select Managed mode to step through process execution. For more information, see "To execute your test configuration in the Debug mode:" on page 23.
With User Interface of External Tool	View the Certify UI during the test execution. For more information, see "To execute your test configuration in the With User Interface of External Tool mode:" on page 24.

This chapter show how to run processes in each of these modes.

► **To execute your test configuration in the Normal mode:**

- 1 From the Test Configuration screen in the Solution Manager, click the **Execute** button.



- 2 Click **Open** when your browser asks to open the external tool.



The Start Options Test Configuration screen opens.

Start Options - Test Configuration: Z_WS_JJM_DEMO_10_01

Test Configuration: Z_WS_JJM_DEMO_10_01 | Z_WS_JJM_DEMO_10_01
 Test Tool: Worksoft Certify

General | Variants | **UI Control** | Cov. Measurement

Execution

Error Behavior: **No Termination, Continue with Next Script Command**
 Execution Control

SAP Solution Manager Context

Solution: WorksoftSolution
 Branch: Maintenance
 Site:
 System Role: Quality Assurance System

System Data

System Data: ZWORKSOFTSOLUTION | Generated a system data container for SLAN 'WORKSOFTSOLUTION'
 Target System: ZERP

Log

Log Display

- 3 Click the **UI Control** tab.

Start Options - Test Configuration: ZCREATESALESORDER

Test Configuration: ZCREATESALESORDER | Create Sales Order
 Test Tool: Worksoft Certify

General | Variants | **UI Control** | Cov. Measurement

External Tool

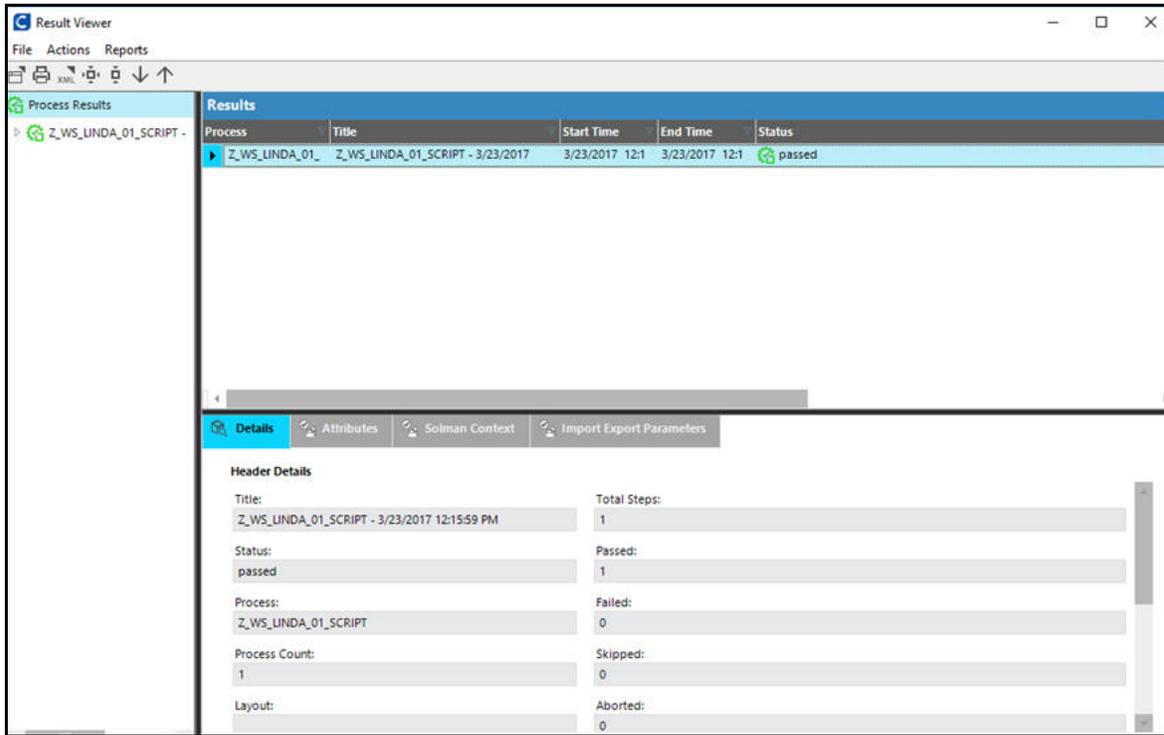
Mode for External Tool: **N Normal**
 Delete Execution DB: N Normal
 User Name: D Debug Mode
 Password: A With User Interface of External Tool
 Transfer Log

- 4 From the Mode for External Tool drop-down list, select **Normal**.

- 5 Click the **Execute**  button.

When execution begins, a Certify icon appears in your taskbar. Execution may take some time to complete.

After the test completes, the Certify Result Viewer opens with the test configuration results.

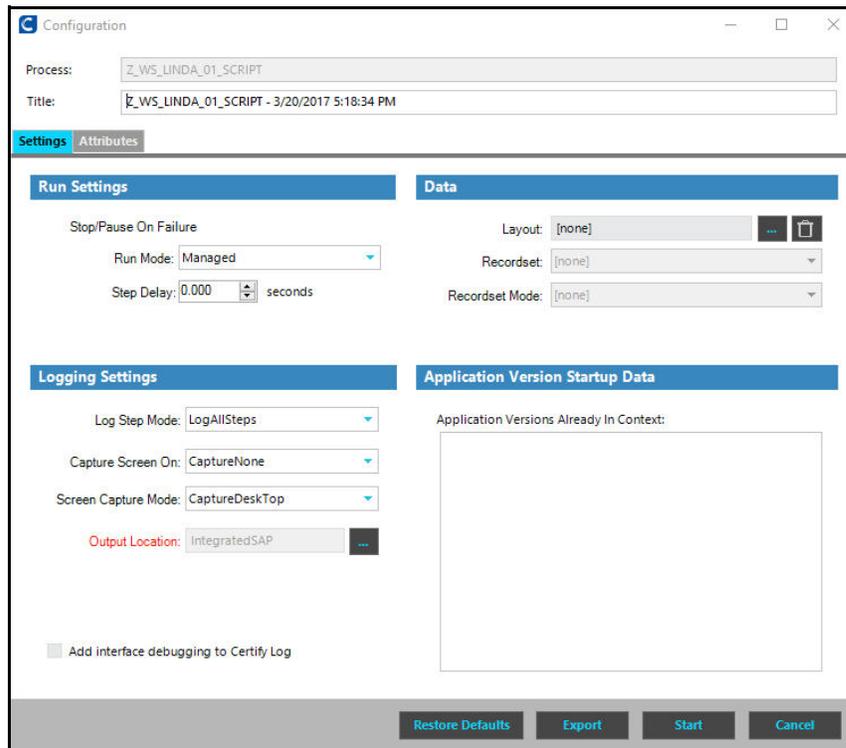


► **To execute your test configuration in the Debug mode:**

- 1 Complete Steps 1 through 4 from the [To execute your test configuration in the Normal mode](#) procedure.
- 2 In the UI Control tab, select **Debug Mode** from the Mode for External Tool drop-down list.

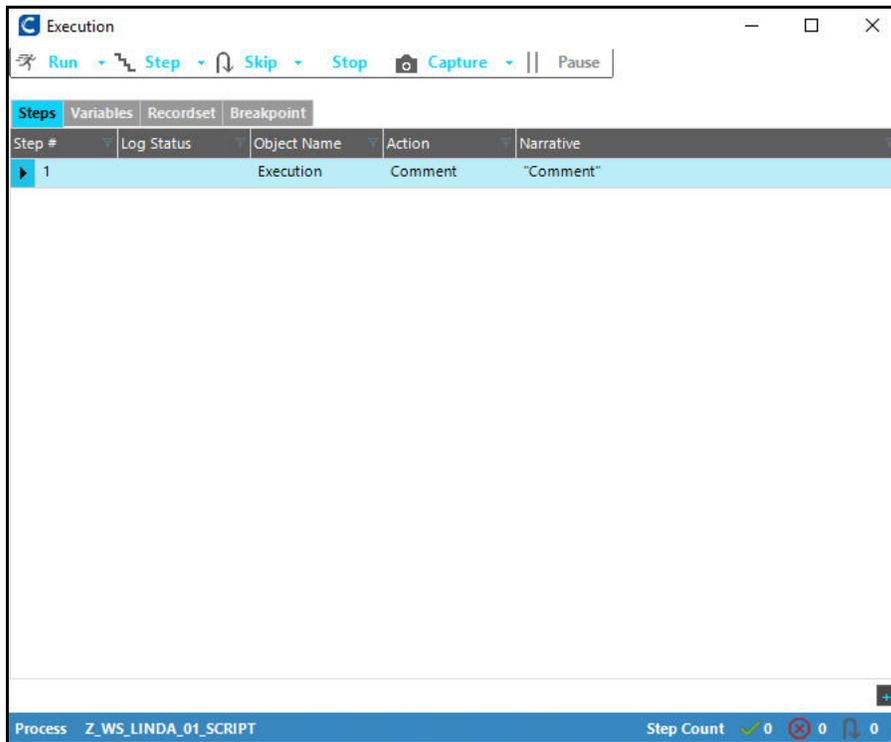
- 3 Click the **Execute**  button.

The Certify Configuration dialog opens.



- 4 Configure your process execution. For more information, see the [Worksoft Certify Online Help](#).
- 5 Click **Start** to begin your process execution.

The Certify Execution dialog opens.



- 6 At the top of the Execution dialog, click the **Step** button to begin process execution.
- 7 Continue to click the **Step** button for each process step.
- 8 After all the process steps are executed, the Certify Result Viewer opens with the results.

► **To execute your test configuration in the With User Interface of External Tool mode:**

- 1 Complete Steps 1 through 4 from the [To execute your test configuration in the Normal mode:](#) procedure.
- 2 In the UI Control tab, select **With User Interface of External Tool** from the Mode for External Tool drop-down list.

- 3 Click the **Execute**  button.

The Certify Execution dialog opens and runs the test.

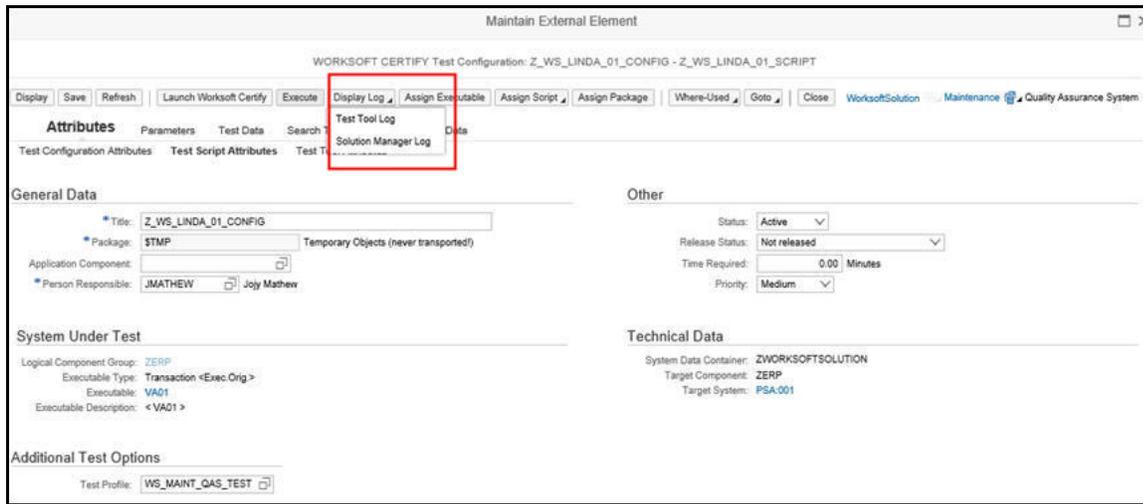
The process is executed, and the Certify Result Viewer opens with the results.

Viewing Test Results in Solution Manager

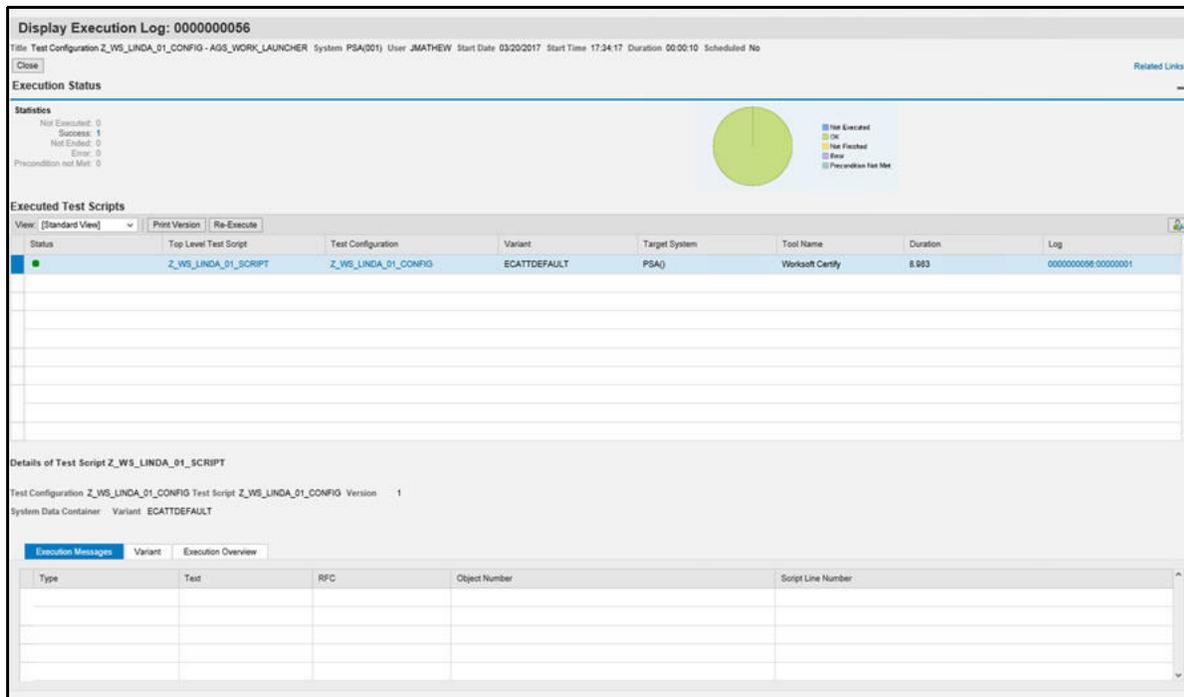
Test results are stored and viewed in both Solution Manager and Certify.

► To view test results in Solution Manager:

From the Test Configuration Screen in Solution Manager, select **Display Log > Solution Manager Log**.



The Display Execution Log screen opens.

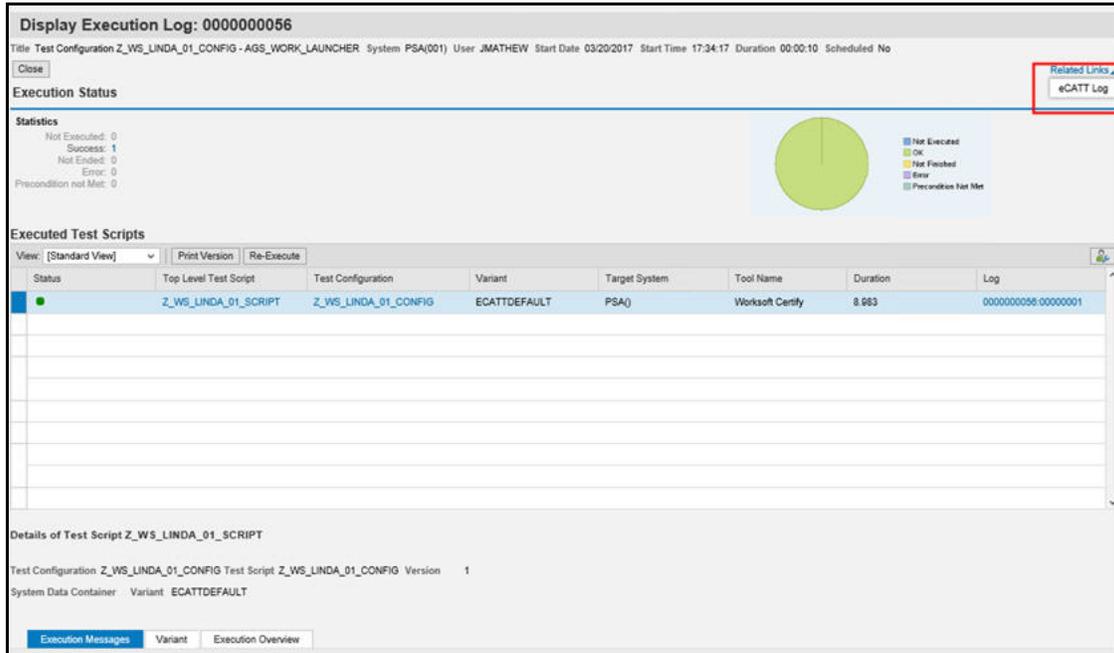


Viewing eCATT Logs

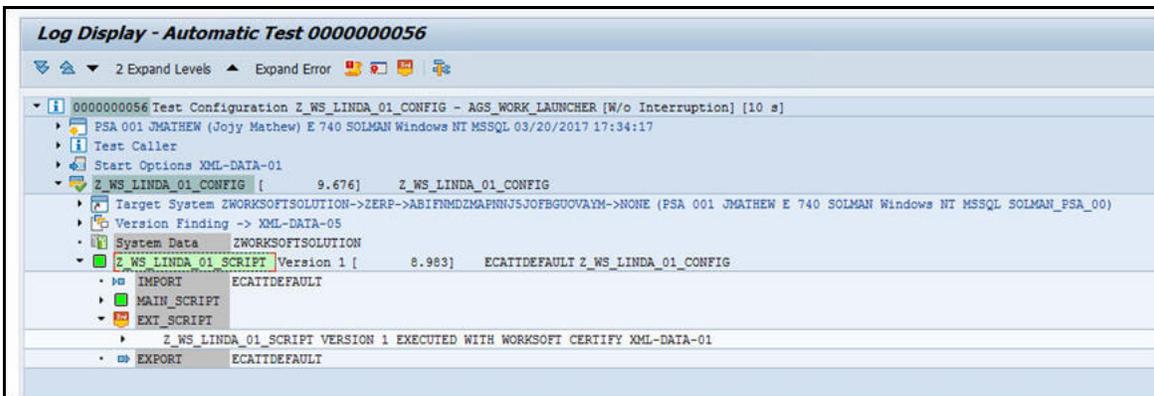
eCATT logs are generated when a test script or test configuration is executed.

► To view eCATT logs:

- 1 From the Display Execution Log screen, select **Related Links > eCATT Log** on the upper right of the screen.



- 2 Click **Open** when your browser asks to open the external tool.
The Log Display screen opens.

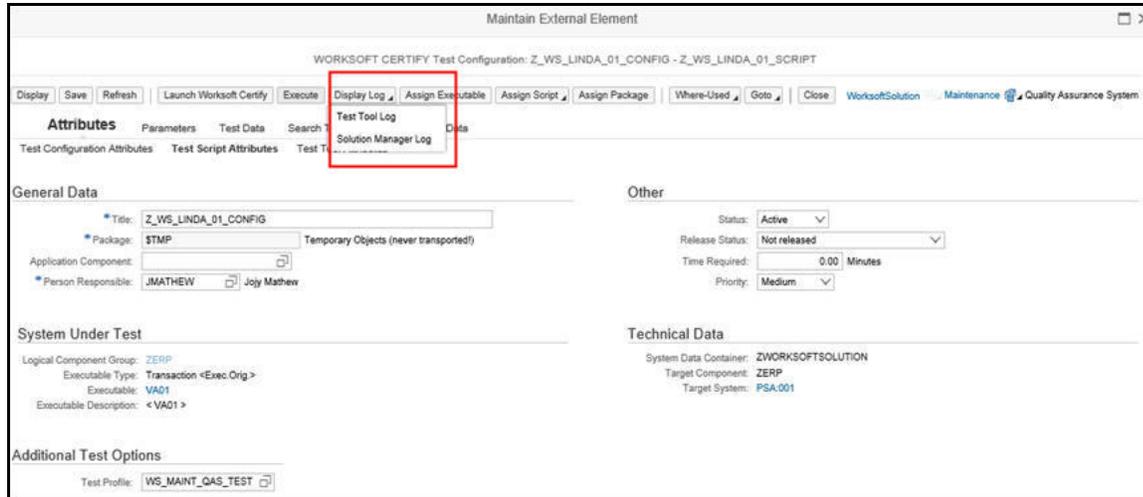


Viewing Test Package Results

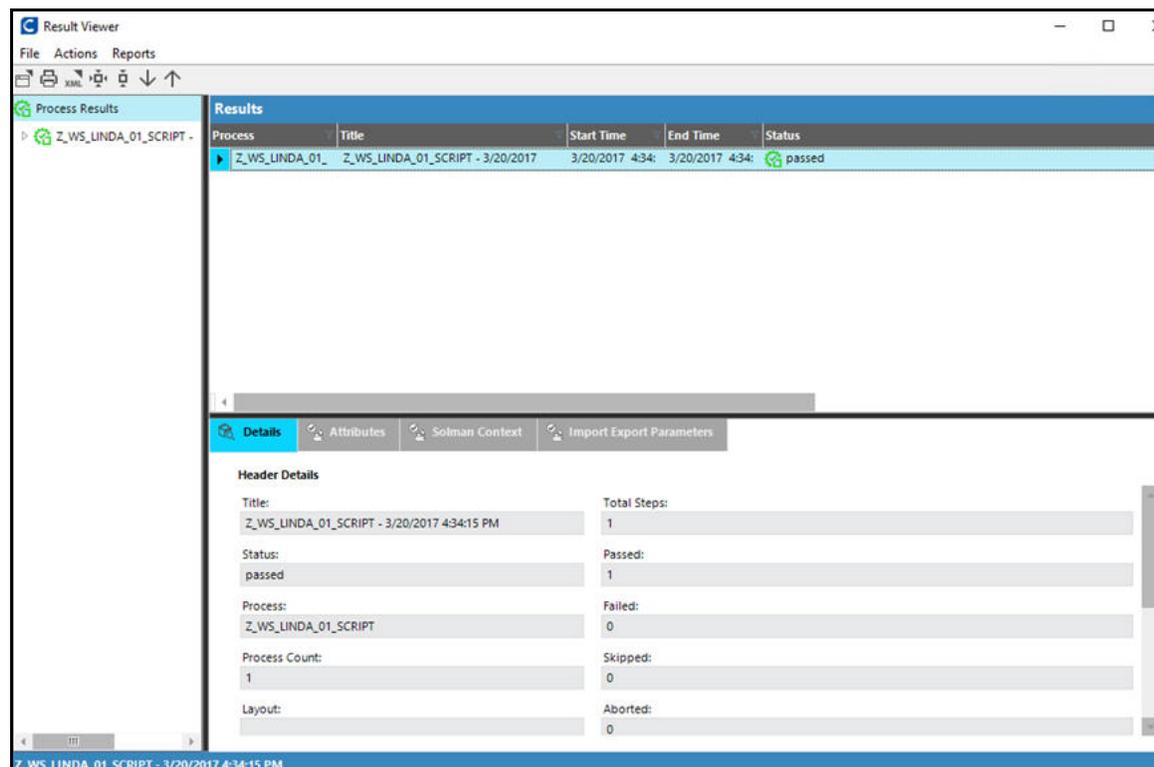
With test packages, you can view test results from the integrated script and assign testers to execute these Certify processes in Solution Manager.

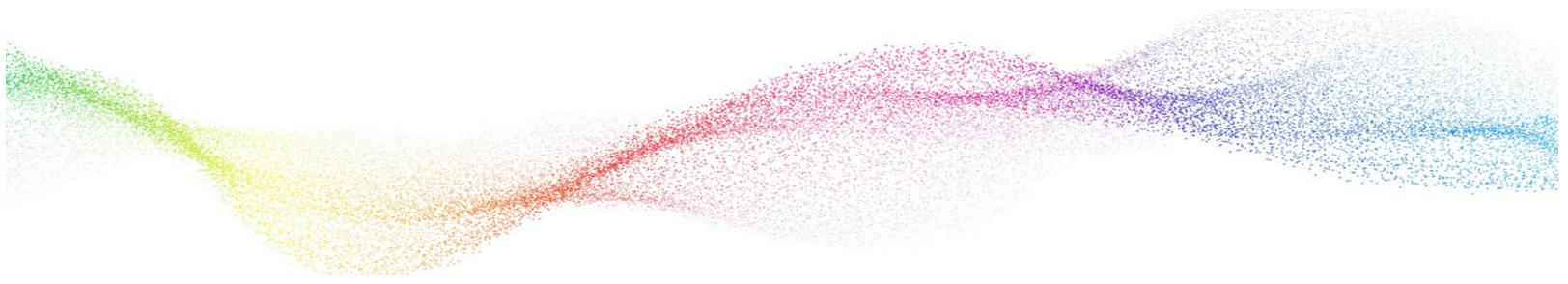
Viewing Test Results in Certify

From the Test Configuration Screen in Solution Manager, select **Display Log > Test Tool Log**.



The Certify Results Viewer opens.





Chapter 5 Continuous Testing

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Setting Up Continuous Testing

If you want the capability to execute and automate Certify integrated tests at scheduled times continuously with minimal supervision, additional configuration is needed.

To set up continuous testing, complete the following tasks:

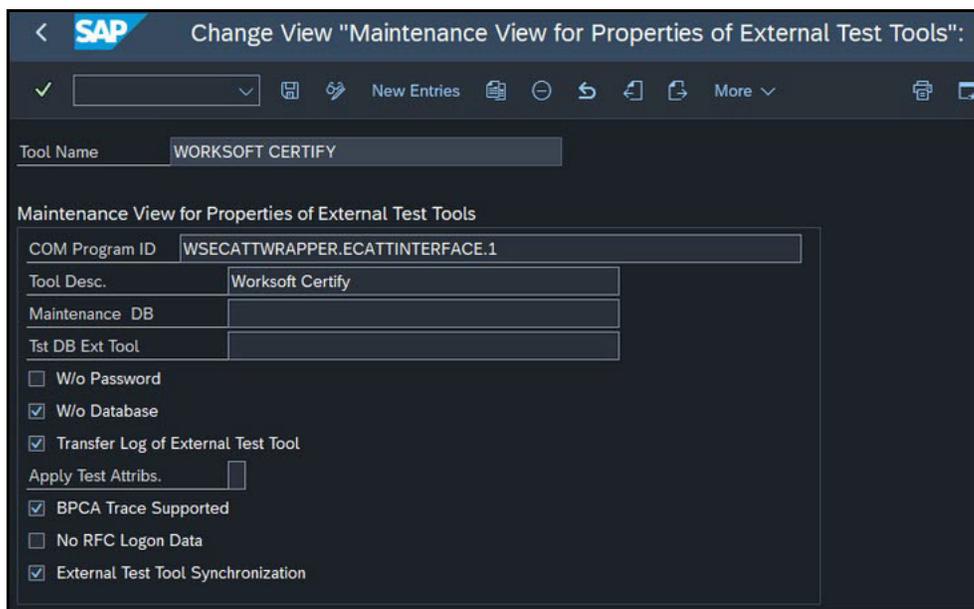
- ◆ Disable the user name and password prompt
- ◆ Create a Certify project
- ◆ Update ECATTUSER in Certify

Registering Worksoft Certify as a Third-Party Tool

If your machine prompts for a user name and password, it is not possible to use Certify in a continuous test.

When you register Certify as a third-party test tool in Solution Manager, disable the password.

In the Maintenance View for Properties of External Test Tools screen, select the **W/o Password** option to disable the password challenge.



Creating a Certify Project

IntegratedSAP is the default value for the Solution Manager project. A Certify administrator adds this value when configuring Certify for integration. For more information, see the [Worksoft Certify Integration with SAP Solution Manager Installation Guide](#).

If you already have a Certify project or decide to use a project that is not named IntegratedSAP, then additional configuration is required in Certify. You must be a Certify administrator in order to make this update.

► **To configure a Certify project for continuous testing:**

- 1** Launch Worksoft Certify.
- 2** From the Certify menu, select **Configure > Certify > Certify Global**.
- 3** In the DefaultSolmanProject field, highlight the field and enter the name of the Certify project that you want to use in Solution Manager integration.
If you intend to use IntegratedSAP as your project name, select the **Default** value.
- 4** Click **OK** to save your configuration.

Updating ECATTUser in Certify

When conducting continuous testing, the ECATTUser that you created in Certify must have **ECATTUser** as its password.



Chapter 6 Certify Menu Options and System Actions Supporting Integration

In This Chapter

- Solution Manager Menu Options in Certify 32
- Using Certify System Class Solman Actions 34
- Maintaining Passwords with the Logon SDC Action 36
- Creating a Technical Bill of Materials Process 37

Solution Manager Menu Options in Certify

After you have created a test configuration in Solution Manager that will link test processes in Certify, you are now ready to create processes. Certify has many menu options for users to support the integration.

Certify Processes Summary Pane

Two Solution Manager right-click menu options appear in the Certify Processes Summary pane:

Option	Description
SAP > Load Process From SAP	To load a process associated with SAP Solution Manager, you will need to provide the following information: <ul style="list-style-type: none"> • Test script name and version • Connection information, including RFC parameters
SAP > Unlink Process From SAP	Unlink the process from your SAP system.

Certify Process and Data Editor

Within the Certify Process and Data Editor, you are able to do the following tasks from the SAP menu:

Option	Description
Load Test Script	Load and edit a process associated with Solution Manager. You will need to provide a test script name and version, as well as RFC information that is needed to connect to SAP. This option is enabled if the Process and Data Editor was started from Certify.
Save and Return to SAP	Save your process changes and return control to SAP. This option is enabled if the Process and Data Editor is launched from Solution Manager. For more information, see Chapter 3 "Creating Certify Processes Through Solution Manager"
Save and Continue	Save your process changes and continue editing the current process. This option is enabled if the Process and Data Editor is launched from Solution Manager.
Save to SAP (Initially)	Save your process changes to SAP. This option is enabled if the Process and Data Editor was started from Certify. For more information, see Chapter 3 "Creating Certify Processes Through Solution Manager"

Option	Description
<p>Return to SAP</p>	<p>Return to SAP.</p> <p>If there are any unsaved changes, you will be prompted to save them or not.</p> <p>This menu option is enabled if the Process and Data Editor is launched from Solution Manager.</p>
<p>Promote Script</p>	<p>Use with the Multiple SolMan Configuration feature.</p> <p>Support test script versioning feature of Solution Manager by auto-detecting a new version of a test script from Solution Manager and creating a corresponding new Certify process.</p>
<p>Logon Default System</p>	<p>Set the default SAP logon information that will be used with the Logon SDC action. You will enter the user name, password, and SAP system. For more information, see "Logon SDC Action" on page 35.</p> <p>This menu option is enabled if the Process and Data Editor is launched from Solution Manager.</p>
<p>Logon Selected System</p>	<p>Enter an SAP system login information that will be used with the Logon SDC action. You will enter the user name, password, and SAP system. For more information, see "Logon SDC Action" on page 35.</p> <p>This menu option is enabled if the Process and Data Editor is launched from Solution Manager.</p>
<p>Password Maintenance</p>	<p>Maintain SAP passwords for system data container users.</p>
<p>Edit Certify Parameters</p>	<p>Create a list of parameters that are exchanged between eCATT and Worksoft Certify. For more information, see Chapter 7 "Exchanging Complex Data with eCATT"</p>
<p>Edit SAP Parameters</p>	<p>Close Certify and control is returned to SAP to allow you to edit structured parameters. After you have completed your editing, control is returned to Certify where you will continue to construct your process. For more information, see Chapter 7 "Exchanging Complex Data with eCATT"</p> <p>This menu option is enabled if the Process and Data Editor is launched from Solution Manager.</p>
<p>Map SAP Parameters</p>	<p>Map structured parameters to Certify layouts and variables. For more information, see Chapter 7 "Exchanging Complex Data with eCATT"</p> <p>This menu option is enabled if the Process and Data Editor is launched from Solution Manager.</p>

Option	Description
Show Test Script Details	View the details about the test script and RFC connection. This menu option is enabled if the Process and Data Editor is launched from Solution Manager.
Show RFC Parameters	View the RFC parameters. This menu option is enabled if the Process and Data Editor is launched from Solution Manager.
Show SMT Context	Show the Service Mapping Tool (SMT) object. This menu option is enabled if the Process and Data Editor is launched from Solution Manager.

Using Certify System Class Solman Actions

System classes and actions are available across all platforms and supplied with every Certify installation. The System class **Solman** provides actions for Solution Manager processes. You must launch the Certify Process and Data Editor from the Solution Manager in order to create steps with the following actions:

- ◆ Set Returned PDF
- ◆ TBOM Trace
- ◆ Logon SDC

Set Returned PDF Action

The Set Returned PDF action is used to control the type of PDF document returned from Certify to SAP at the end of an execution. A PDF document will only be generated and transferred only if the Transfer Log option is selected in SAP. A step with this action can appear anywhere within the process.

TBOM Trace Action

The TBOM Trace action is used to turn on and off Technical Bill of Materials tracing during a Certify process execution. For more information, see ["Creating a Technical Bill of Materials Process" on page 37](#).

Logon SDC Action

The Logon SDC action is used to log on to SAP systems using information provided in a system data container.

Parameter	Description
System	<p>This parameter is a combo box.</p> <p>System data containers may contain information about more than one system. You will select a system from the system data container. If you select Default as the value, then the system marked as the default system is selected.</p>
User	<p>This parameter is a combo box in which you are able to use values entered into this parameter.</p> <p>Each entry in the system data container has a user associated with it. If you select Default as the value, then Certify will use the user associated with the selected system data container.</p>
Certify Maintained Password	<p>This parameter is a combo box with the values True and False.</p> <p>SAP does not provide passwords to Certify, but passwords are required when you log on. If the value is True, then the password will be extracted from a table maintained in Certify. For more information, see "Maintaining Passwords with the Logon SDC Action" on page 36.</p> <p>If the value is False, then the Password parameter is used.</p>
Password	<p>This parameter is a text box.</p> <p>The Password parameter is used only if Certify Maintained Password parameter is set to False.</p>
Destination Type	<p>This parameter is a combo box. The values for this parameter are Default, RFC, and HTTP.</p> <p>Each system data container entry allows you to log on to an SAP GUI session, an HTTP session, or both sessions. Typically, a system data container entry will have only one destination type, and the value you should select is Default.</p>
Report Type	<p>This parameter is a combo box. The values for this parameter are</p> <ul style="list-style-type: none"> • Results - Detail • Results - Summary • Results - Recordset <p>The generated PDF will correspond to the report type that you select.</p>

Maintaining Passwords with the Logon SDC Action

SAP does not provide passwords to Certify, but passwords are required when you log on to a system within a system data container. The user name can come from a system data container, but the password does not.

When you have a step that uses the **Logon SDC** action, you will need to maintain the passwords for system data container users within Certify. The SAP Password Maintenance dialog in Certify allows you to maintain these SAP passwords. You will indicate if the password will be extracted from this dialog with the **Certify Maintained Password** parameter of the Logon SDC action.

You can access this dialog in the Process and Data Editor menu bar **SAP > Password Maintenance**. The SAP Password Maintenance dialog contains a single table that shows the passwords maintained in Certify. Within the context menu, you are able to add, remove, or export passwords. When you select **Add New Entry**, a row appears in the table, and you can enter a new password. Each row has the following fields:

- ◆ Description
- ◆ User name
- ◆ Client
- ◆ System number
- ◆ Server
- ◆ System ID
- ◆ Group
- ◆ Destination type
- ◆ Password
- ◆ Port

Details from the selected system data container will be compared against entries in this table. If a matching entry is found, then the password from that matching entry will be used in the Logon SDC step.

Different combinations of fields are checked:

- ◆ HTTP destination must match user name, server, and port.
- ◆ RFC must match.
- ◆ User name and system ID must match or user name, server, and system number must match.

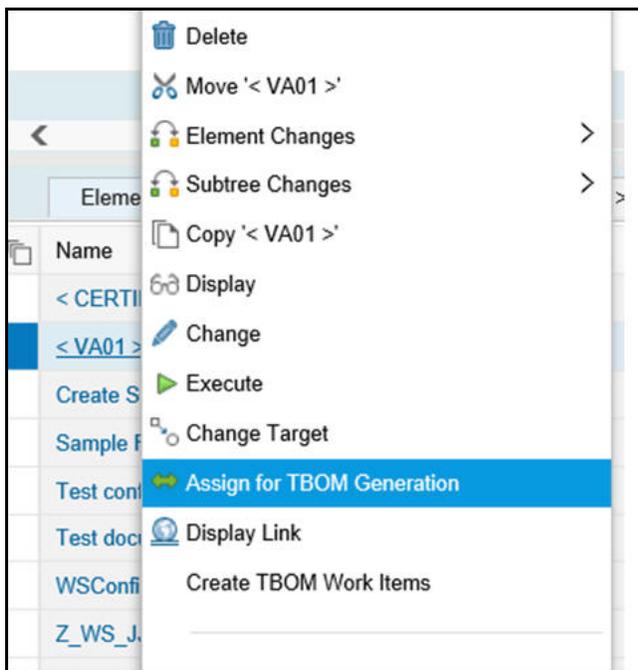
Creating a Technical Bill of Materials Process

Before you create a Technical Bill of Materials (TBOM) process, you will need to do the following tasks in Solution Manager:

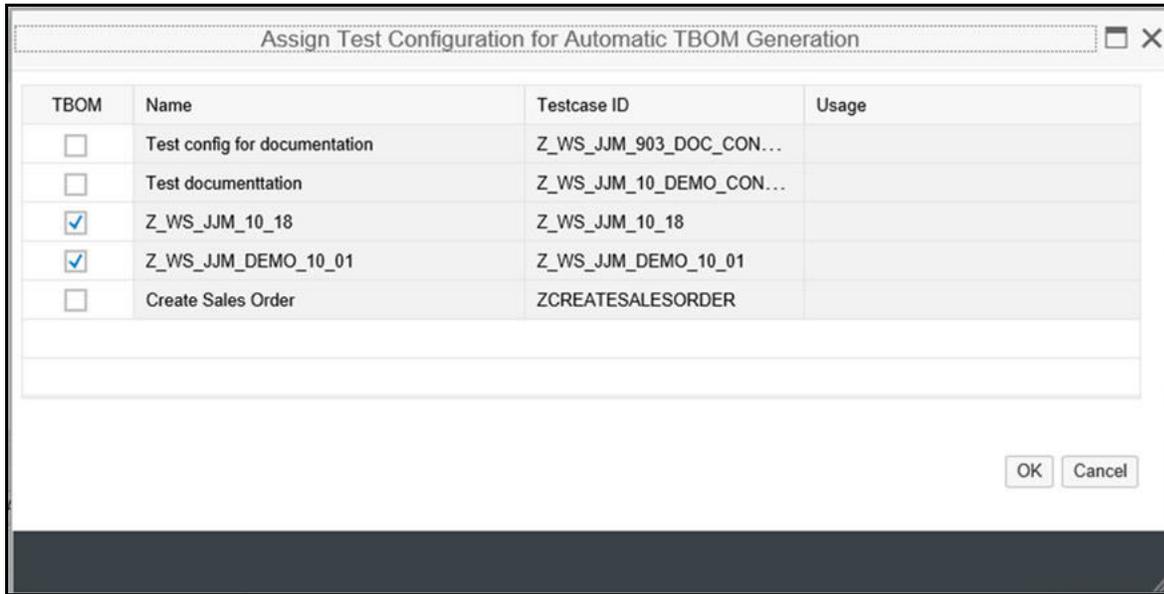
- ◆ Select test configurations
- ◆ Create a test plan and test package
- ◆ Execute the test package

In Solution Manager v7.1, you selected test configurations in SAP Solution Manager before creating a TBOM process. The Certify process was called from a test configuration that has a system data container assigned to it. Using transaction code **solar02**, test configurations were selected in the Attributes Maintenance dialog (TBOM tab) from the Transactions tab.

With Solution Manager v7.2, right-click on an executable in your Branch page and select **Assign for TBOM Generation** to assign test configurations.



The Assign Test Configuration page opens.



Using the Certify TBOM Trace Action

You must launch the Certify Process and Data Editor from the Solution Manager in order to create a TBOM process.

You will use the Certify System Solman action **TBOM Trace** for your processes. The TBOM Trace action is used to turn on and off the TBOM tracing during a Certify process execution. At the beginning of your process, add a step with the TBOM Trace action to turn on the TBOM recording against the system of interest. At the end of your process, add a step with the TBOM Trace to turn off the TBOM recording.

If Solution Manager indicates that tracing is turned off, the step with this action will always pass. If Solution Manager indicates that tracing is turned on, the step with this action will try to turn on tracing in the selected back end system identified in the system data container.

TBOM Trace Parameters

Listed in the table below are the parameters for the TBOM Trace action:

Parameter	Description
System	<p>This parameter is a combo box.</p> <p>System data containers may contain information about more than one system. You will select a system from the system data container. If you select Default as the value, then the system marked as the default system is selected.</p>
User	<p>This parameter is a combo box in which you are able to use values entered into this parameter.</p> <p>Each entry in the system data container has a user associated with it. If you select Default as the value, then Certify will use the user associated with the selected system data container.</p>
Start/Stop	<p>This parameter is a combo box with values of START and STOP.</p> <p>It will turn on tracing for a selected system/user combination. You must stop tracing on one system before you are able to start tracing on another system.</p>
Destination Type	<p>This parameter is a combo box. The values for this parameter are Default, RFC, and HTTP.</p> <p>Each system data container entry allows you to log on to an SAP GUI session, an HTTP session, or both sessions. Typically, a system data container entry will have only one destination type, and the value you should select is Default.</p>



Chapter 7 Exchanging Complex Data with eCATT

In This Chapter

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Selecting Asset Names	43

Overview

The following SAP menu options in the Certify Process and Data Editor allow you to exchange complex data between Worksoft Certify and eCATT:

- ◆ Edit Certify Parameters
- ◆ Edit SAP Parameters
- ◆ Map SAP Parameters

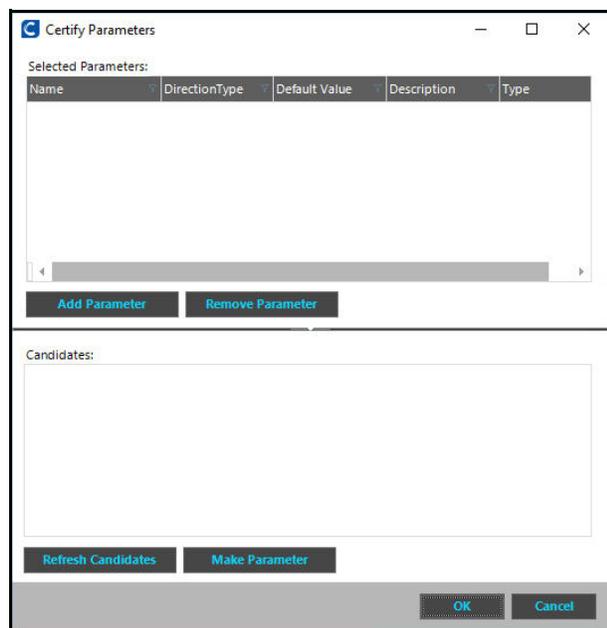
During process execution, Certify normally receives data from the Certify database. For mapped assets, values will come from data provided by SAP, and the values in the Certify database will be ignored.

A recordset in Certify is a table of data from the Certify database. During process execution, a copy of the recordset is made in memory, and actions are performed against it. For mapped recordsets, Certify will interrogate the data supplied by SAP, and it will build an in-memory copy from the SAP-supplied data.

If a table in SAP contains child tables that are mapped to a different recordset than the parent table, then when a row is advanced in the parent table, a different set of child records will be used. The child recordsets are cleared and forced to pull their data again. This process allows the child recordset to be refreshed within the context of the correct parent row.

Editing Certify Parameters

The **Edit Certify Parameters** option in the Certify Process and Data Editor allows you to exchange complex data between Worksoft Certify and eCATT. When you select this option, the Certify Parameters dialog opens.



Selected Parameters Pane

The Selected Parameters pane displays the parameters exchanged between eCATT and Worksoft Certify. You can add or remove parameters by selecting the option from the right-click menu or clicking the dialog's **Add Parameter** and **Remove Parameter** buttons.

Parameters that were authored in Certify can be added or removed.

You are unable to edit or remove parameters that were authored in SAP. Parameters authored in SAP will appear in the list if they exist. These parameters will display **custom** in the Default Value and Type columns.

Candidates Pane

The Candidates pane lists variables that may be used as parameters. Click the **Refresh Candidates** button to refresh the variables list. Variables that will be added to the Candidates pane must meet the following criteria:

- ◆ Variable is not already in a parameter list.
- ◆ Variable is not mapped to part of a complex parameter.

To make a variable into a parameter, select a variable candidate and click the **Make Parameter** button. The candidate now opens in the Selected Parameters pane.

Editing SAP Parameters

The **Edit SAP Parameters** option only appears in the SAP menu if you open Certify from Solution Manager. When you select this option, Certify closes and control is returned to SAP to allow you to edit structured parameters. After you have completed your editing, control is returned to Certify where you will continue to construct your process.

Mapping SAP Parameters

The **Map SAP Parameters** option only appears in the SAP menu if you open Certify from Solution Manager. When you select this option, a dialog for mapping structured parameters to Certify layouts and variables opens.

The Map SAP parameters dialog consists of the following five columns:

Column	Description
Match	<p>The Match column will be empty or will show one of the following icons:</p> <ul style="list-style-type: none"> This icon appears after mapping has completed, and the parameter is matched to a Certify asset. This icon appears when the mapping has been edited. It identifies the changes that will be saved when you click the OK button. <p>If no icon appears, then a Certify asset has not been mapped to this entry.</p>
Name	Displays the SAP name of the complex item.

Column	Description
Asset Name	Displays the name of the Certify asset that is mapped. You will select the asset from a drop-down list or a pop-up dialog. If the Certify asset is a variable, the variable name is listed. If the asset is a recordset, then the layout name and recordset name are listed and separated by a colon.
Asset Type	Identifies the kind of Certify asset that can be mapped to this SAP asset. If the SAP asset is a table or structure, then it can be mapped to a layout and recordset. If the SAP asset is a field, then it can be mapped to a variable.
Description	Displays the description from the SAP data dictionary for the related SAP asset.

Selecting Asset Names

To map your SAP parameters, you will need to select a name from the Asset Name drop-down list. The Asset Name lists are dependent on the Asset Type column.

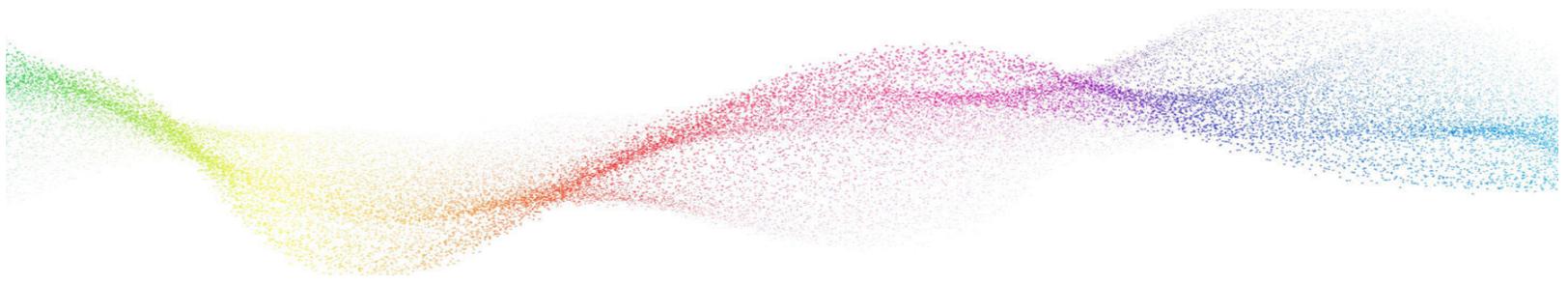
If the asset type is **Layout and Recordset**, the drop-down list contains the following:

- ◆ Current mapping to a layout and recordset
- ◆ An empty value so that the mapping may be cleared
- ◆ Option to select your recordset from the Select Recordset dialog
When you select this option, the dialog opens.

If the asset type is **Variable**, the drop-down list contains the following:

- ◆ Current Mapping to a variable
- ◆ An empty value so that the mapping may be cleared
- ◆ Option to select your variable from the Select Variable dialog
When you select this option, the dialog opens.

If this variable is part of a table that is mapped to a layout and recordset, the drop-down list will also include all the variables in the layout so that you can map to an SAP table.



Chapter 8 Synchronizing Solution Manager Test Packages with Certify

In This Chapter

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Viewing Synchronized Solution Manager Test Packages in Certify	47
Executing Test Packages or Test Scripts from Certify.....	48
Synchronizing Updated Test Packages.....	52

Starting Synchronization from Solution Manager

By synchronizing Solution Manager with Certify, you can run Solution Manager test packages in Certify, and the test results appear in Solution Manager.

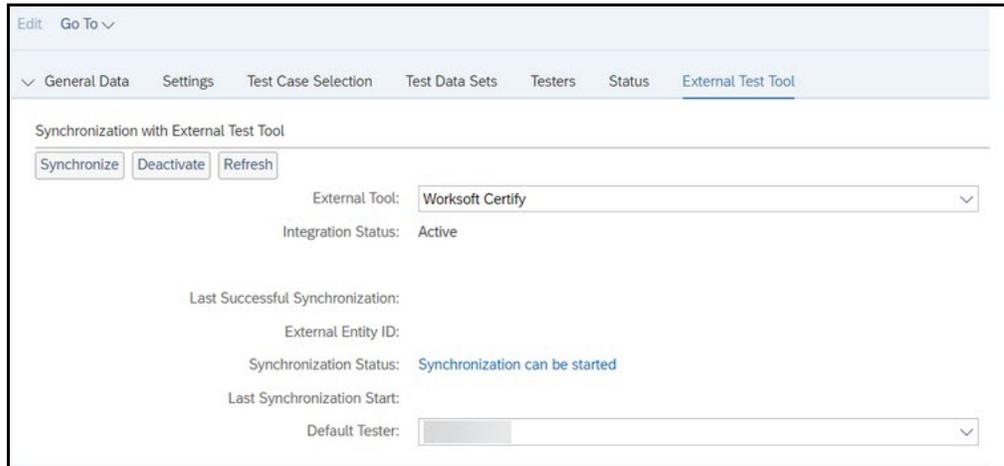
► *To synchronize Solution Manager test packages with Certify:*

- 1 Create a test plan and test package in Solution Manager.
- 2 Verify that all test cases in the test packages are linked to Certify processes.
- 3 Open the test package.
- 4 Click the **External Test Tool** tab.
The External Test Tool tab opens.
- 5 Click **Edit**.
The Synchronization with External Test Tool screen opens.

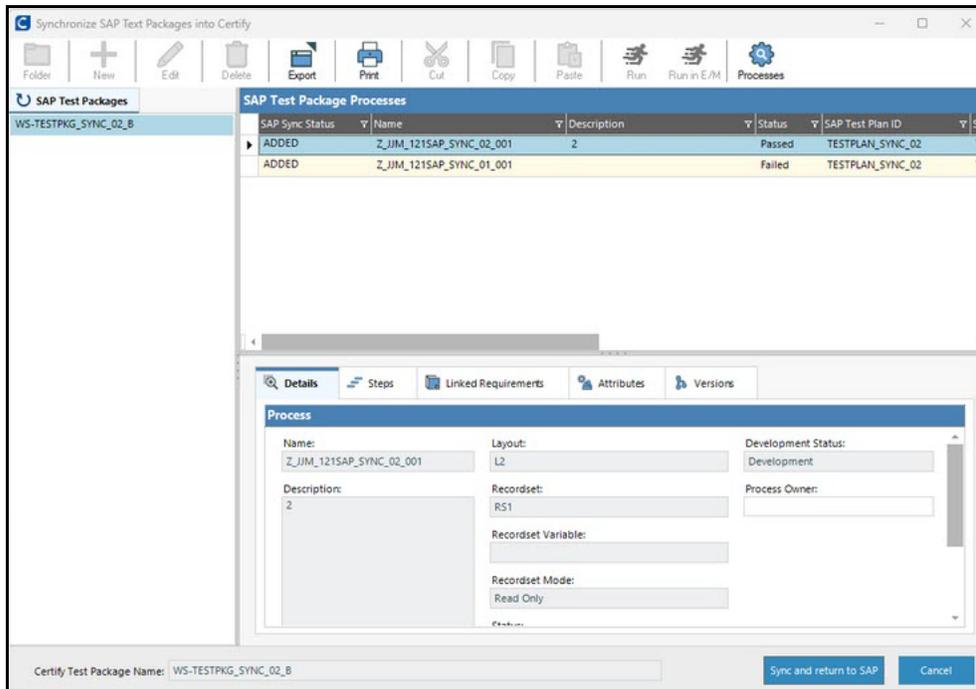
The screenshot displays the 'Synchronization with External Test Tool' configuration screen. At the top, there is a navigation bar with tabs: 'General Data', 'Settings', 'Test Case Selection', 'Test Data Sets', 'Testers', 'Status', and 'External Test Tool'. Below the navigation bar, there are three buttons: 'Synchronize', 'Activate', and 'Refresh'. The 'External Tool' dropdown menu is open, showing 'Worksoft Certify' as the selected option. The 'Integration Status' is 'Worksoft Certify'. The 'Synchronization Status' is 'Synchronization cannot be started'. Other fields include 'Last Successful Synchronization', 'External Entity ID', 'Last Synchronization Start', and 'Default Tester'.

- 6 From the External Tool drop-down list, select **Worksoft Certify**.
- 7 Click **Save**.
- 8 Click **Edit** again.

The Synchronization with External Test Tool screen opens again. The Synchronization Status shows that Worksoft Certify is ready for synchronization.



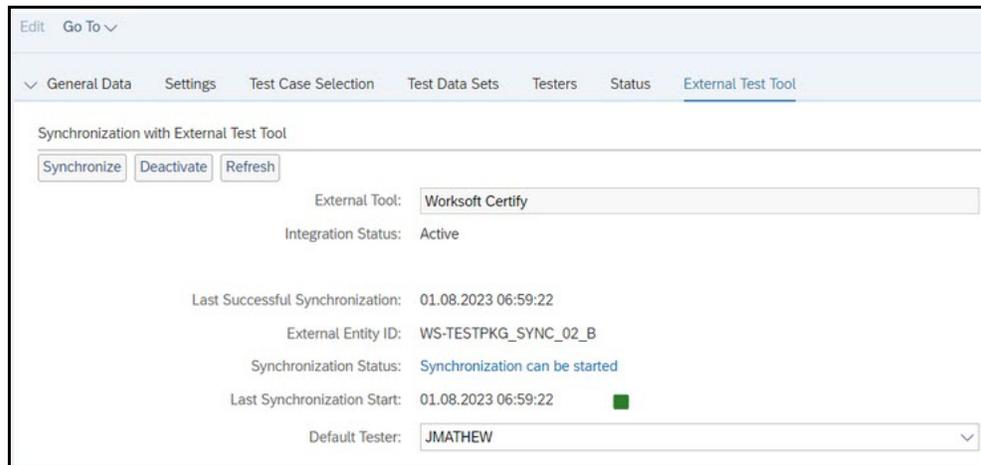
- 9 Click **Synchronize**.
Worksoft Certify opens.



The Synchronize SAP Test Packages in Certify screen displays the test package details, test cases, test scripts, and the Certify processes linked to the test scripts.

- 10 If needed, edit the name in the Certify Test Package Name field at the bottom of the screen.
- 11 Click **Sync and return to SAP** to complete the synchronization and return to Solution Manager.

The Solution Manager opens.



12 Click **Refresh** for the test package.

The test package now displays the updated synchronization status.

Viewing Synchronized Solution Manager Test Packages in Certify

You can view synchronized Solution Manager test packages in Certify.

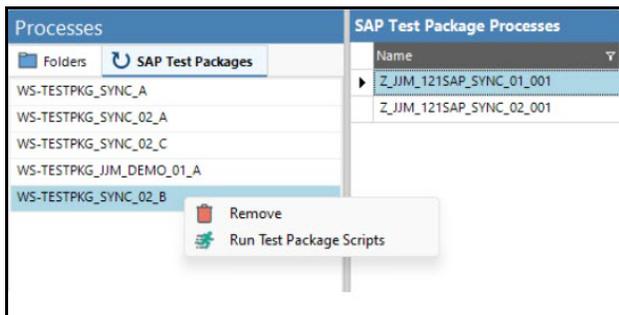
► **To view synchronized test packages in Certify:**

Open the Processes window in Worksoft Certify.

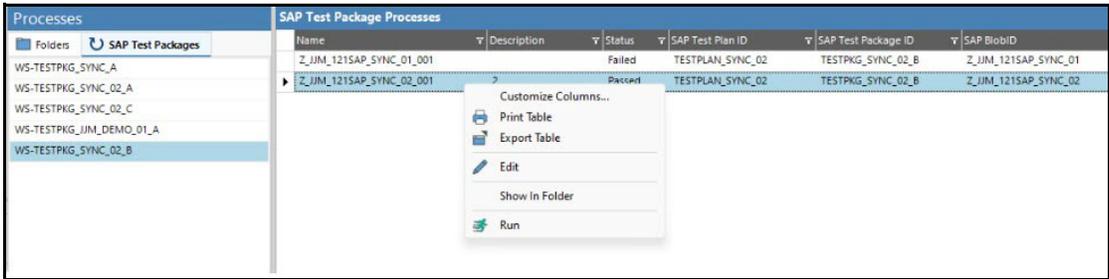
Name	Description	Status	SAP Test Plan ID	SAP Test Package ID	SAP BlobID	FolderPath
Z_JJM_121SAP_SYNC_01_001		Failed	TESTPLAN_SYNC_02	TESTPKG_SYNC_02_B	Z_JJM_121SAP_SYNC_01	Main/Format
Z_JJM_121SAP_SYNC_02_001	2	Passed	TESTPLAN_SYNC_02	TESTPKG_SYNC_02_B	Z_JJM_121SAP_SYNC_02	Main/Solman/FS1

In the Navigation pane, an **SAP Test Packages** tab was added with the synchronization. The tab displays the process, test plan, test package, and test script details.

Test packages display in the Navigation pane. With the right-click menu, you can remove or execute a test package scripts.



The Summary pane displays the test scripts and Certify processes of the selected test package.

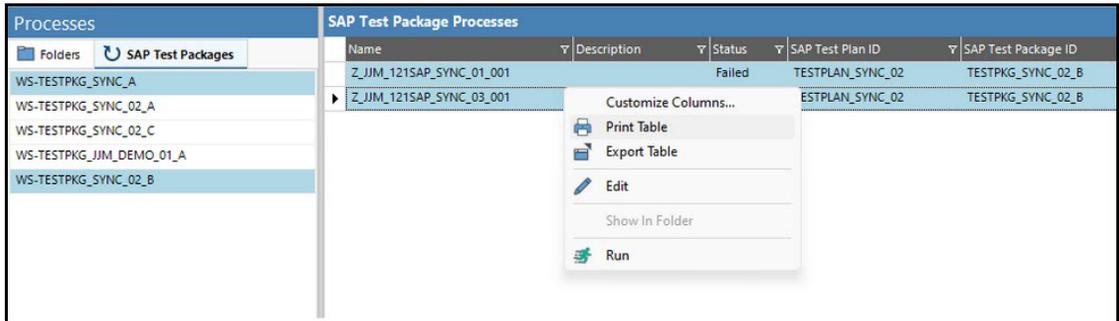


You can execute multiple processes at the same time in the Summary pane.

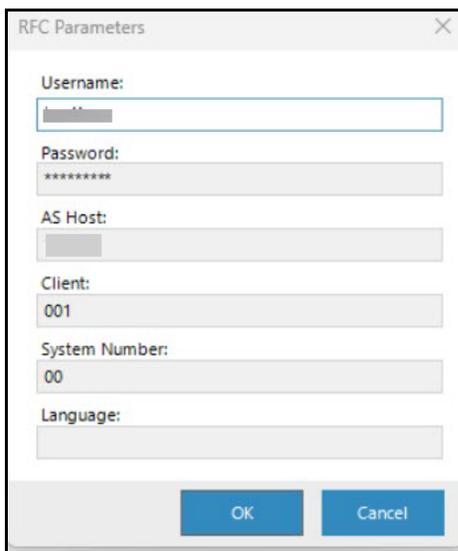
Executing Test Packages or Test Scripts from Certify

- 1 In the Certify Processes window, click the **SAP Test Packages** tab.

The SAP Test Packages tab opens.

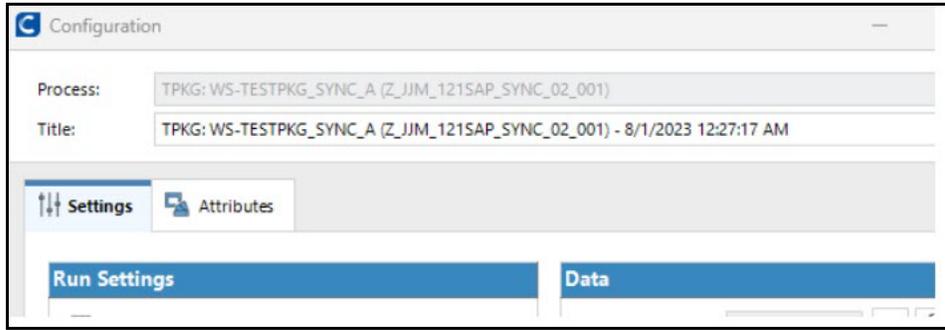


- 2 In the Navigation pane, select a test package.
- 3 In the Summary pane, right-click on one or more processes and select **Run**.
- 4 The RFC Parameters dialog opens.



- 5 Click **OK**.

The Certify Configuration dialog opens.



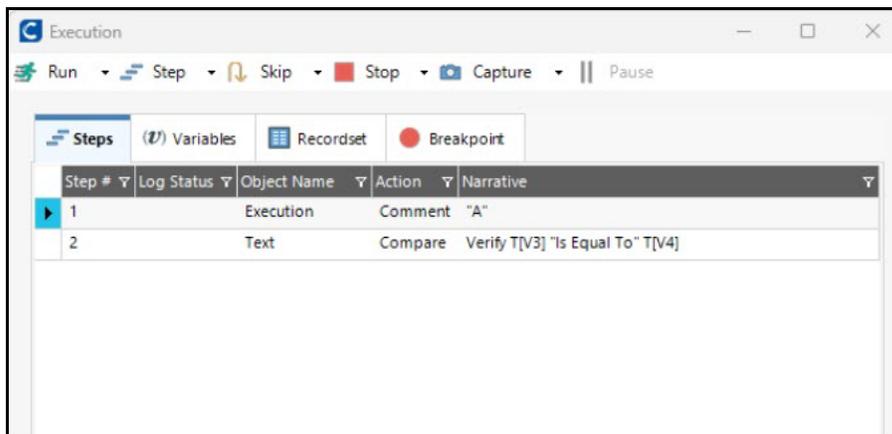
In the Title field, the name displays in the following format with the prefix of TPKG:

TPKG <Test package name> <Process name or count of processes selected> - timestamp



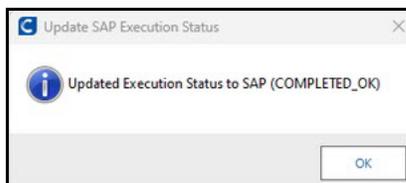
Note: If the prerequisite check for Solution Manager fails, the Configuration dialog will not open.

- 6 Click **Start** to begin execution.



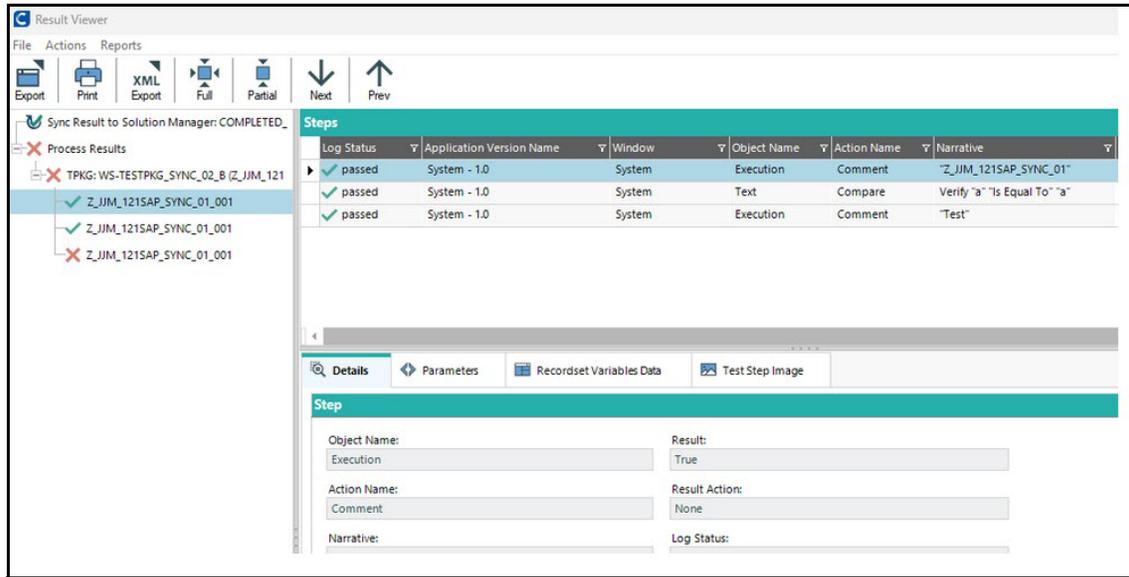
At the end of execution, Certify establishes a connection with Solution Manager and updates the final result status.

A confirmation message opens.



- 7 Click **OK**.

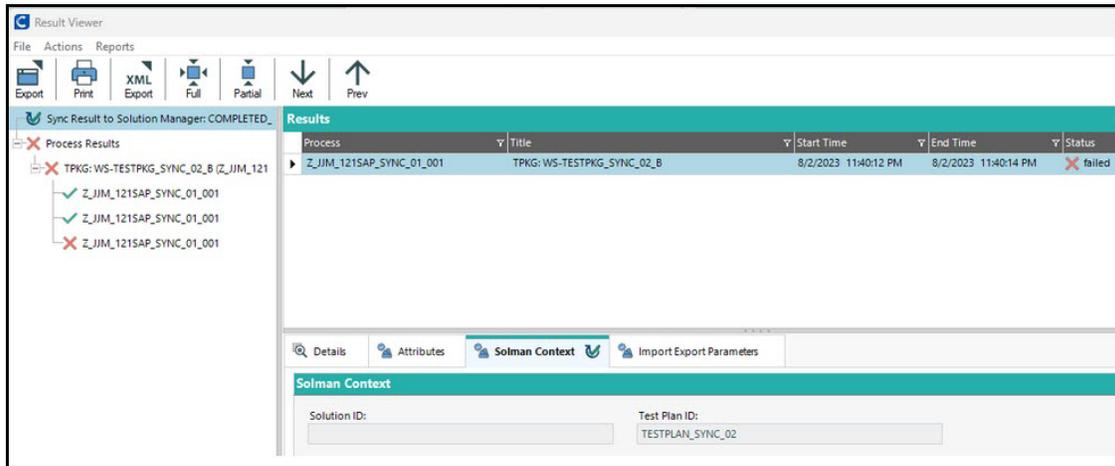
The Results Viewer opens with the process results.



In the Navigation pane, the Sync Result to Solution Manager displays the status of the results. These statuses are defined in Solution Manager.

8 Click **Sync Result to Solution Manager**.

The Solman Context tab appears in the Details pane.



The Solman Context tab displays the following information:

The Solman Context tab displays the following information:

- Solution ID:** [Empty field]
- Solution Description:** [Empty field]
- Project ID:** [Empty field]
- Project Description:** [Empty field]
- Language:** [Empty field]
- Used Systems:** [Empty field]
- Synchronization Message:** [Empty field]
- Test Plan ID:** TESTPLAN_SYNC_02
- Test Plan Description:** [Empty field]
- Test Package ID:** TESTPKG_SYNC_02_B
- Test Package Description:** [Empty field]
- SAP Proc ID:** 000D3A9EEB5D1EDE8CB6FA52985742FE
- Certify Test Package Name:** WS-TESTPKG_SYNC_02_B
- Synchronization Status:** COMPLETED_OK

► **To view execution status in Solution Manager:**

- 1 From SAP Solution Manager Launchpad, navigate to Tester Worklist.
- 2 Select the test plan and view the test cases in the second lower grid.

My Packages - Ready to Test

Test Plan ID	Test Package ID	Planned Start D...	Planned End ...	Priority	Ready To Test	Initial	In Process	Errors	OK	My Open
<input type="checkbox"/> TESTPLAN_SYNC_02	TESTPKG_SYNC_02_A	25.07.2023	24.07.2026		✓		3	0	0	0
<input type="checkbox"/> TESTPLAN_SYNC_02	TESTPKG_SYNC_02_C	25.07.2023	24.07.2026		✓		1	0	0	0
<input type="checkbox"/> TESTPLAN_2010	TESTPKG_2010	21.03.2023	20.03.2026	Very high	✓		0	0	2	0
<input type="checkbox"/> TESTPLAN_TEST0B	TESTPKG_TEST0B	21.11.2022	31.12.2022	High	✓		0	0	1	1
<input checked="" type="checkbox"/> TESTPLAN_SYNC_02	TESTPKG_SYNC_02_B	25.07.2023	24.07.2026	Medium	✓		1	0	1	0
<input type="checkbox"/> TESTPLAN_TEST0B	TESTPKG_TEST0B_2	21.11.2022	31.12.2022	Medium	✓		1	0	0	0

Test Cases

Test Case	Test Case...	Priority	Ready To...	Assigned ...	Overall S...	Executi...	Log Id	Chang...	Chang...	Test En...	Test N...	All Op...	My Def...	Damag...	Comm...
<input type="checkbox"/> Z_JM_121SAP_SYNC_01		Medium	✓	JMATHW	●	●	935	03.08.20...	JMATHW						
<input type="checkbox"/> Z_JM_121SAP_SYNC_03		Medium	✓	JMATHW	●	●		03.08.20...	JMATHW						

You can view the Certify execution statuses against each test. The Log Id provides a link to a UNC path, but is not supported in Certify.

If needed, you can create a PDF report with the full results from the Certify Result Viewer.

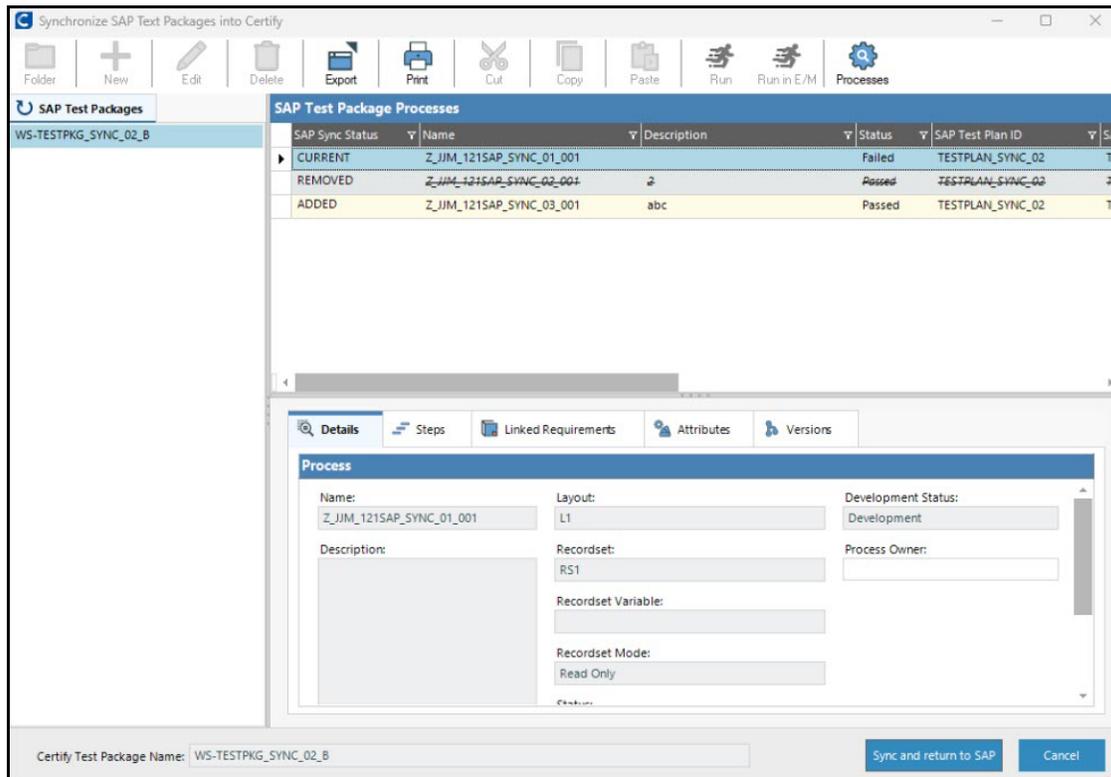
Synchronizing Updated Test Packages

After you update a test package in Solution Manager, you need to resynchronize the Certify connection.

► **To resynchronize the Certify and Solution Manager connection:**

- 1 In Solution Manager, open the updated test package.
- 2 Click the **External Test Tool** tab.
The External Test Tool tab opens.
- 3 Click **Edit**.
The Synchronization with External Test Tool screen opens.
- 4 Click **Synchronize**.

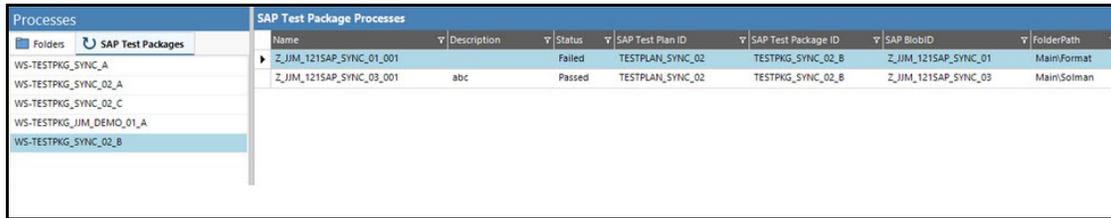
Certify opens and displays the updated test package in the Synchronize SAP Test Packages in Certify screen.



The SAP Sync Status column displays which test cases and test scripts were unchanged, removed, and added to the test package.

- 5 Click **Sync and Return to SAP** to complete the synchronization.

Certify displays the new set of test cases in the test package.



The screenshot shows a software interface with a left-hand navigation pane and a main data table. The navigation pane is titled 'Processes' and contains a tree view under 'SAP Test Packages' with the following items: WS-TESTPKG_SYNC_A, WS-TESTPKG_SYNC_02_A, WS-TESTPKG_SYNC_02_C, WS-TESTPKG_JIM_DEMO_01_A, and WS-TESTPKG_SYNC_02_B. The main table is titled 'SAP Test Package Processes' and contains the following data:

Name	Description	Status	SAP Test Plan ID	SAP Test Package ID	SAP BlobID	FolderPath
Z_JIM_121SAP_SYNC_01_001		Failed	TESTPLAN_SYNC_02	TESTPKG_SYNC_02_B	Z_JIM_121SAP_SYNC_01	MainFormat
Z_JIM_121SAP_SYNC_03_001	abc	Passed	TESTPLAN_SYNC_02	TESTPKG_SYNC_02_B	Z_JIM_121SAP_SYNC_03	MainSolman



Appendix A Error Messages

User Authentication Error Messages

Certify will not authenticate the user against the Certify database for the following reasons:

- ◆ If an invalid user name is used, Certify displays the message, "Invalid user name: xxx." Certify returns a code to eCATT indicating an invalid user.
- ◆ If an invalid password is used, Certify displays the message "Invalid password." Certify returns a code to eCATT indicating an invalid password.

If there is any other error, Certify returns a code indicating unknown error.

Project Validation Error Messages

Certify will not validate the project for the following reasons:

- ◆ If the project does not exist, Certify displays the error message, "Project xxx does not exist." Certify returns a code indicating an unknown error.
- ◆ If the project exists, but the user does not have permission to edit processes in the project, Certify displays the error message, "You do not have permission to edit processes in project XXX." Certify returns a code indicating invalid permissions.

If there is any other error, then Certify returns a code indicating unknown error.

Process Validation Error Messages

Certify will not validate the process for the following reasons:

- ◆ If the process is found in a different project, then Certify displays the error message, "This process was found in project xxx, not yyy. Specify project xxx or change the existing Certify process to avoid a collision." Certify returns a code indicating unknown error.
- ◆ If you open an existing process and do not save, you can not connect to eCATT. If Certify cannot connect to eCATT, Certify displays the error message, "Cannot connect to eCATT using RFC," and Certify returns a code indicating an RFC error.

If there is any other error, then Certify returns a code indicating unknown error.

Process Execution Error Messages

Certify displays error codes for the following reasons:

- ◆ If the execution status is failed or aborted, Certify returns a code indicating execution failed.
- ◆ If Certify has trouble connecting to eCATT to store results, Certify displays the error message, "Cannot connect to eCATT using RFC," and Certify returns a code indicating an RFC Error.

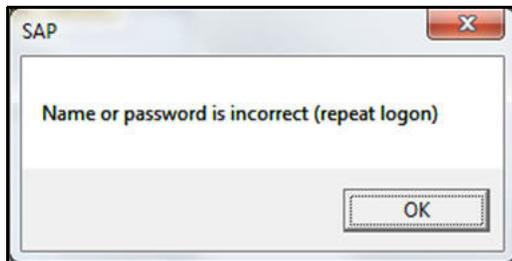
If any other error occurs, Certify returns a code indicating unknown error.

Appendix B Troubleshooting

This Appendix provides guidance on how to troubleshoot your integration between Worksoft Certify and SAP Solution Manager.

Resolving Password Errors

When trying to save a process in Certify and returning to Solution Manager, you may get a user name and password error.



User names are not case-sensitive, but passwords are case-sensitive. The ABAP code in Solution Manager uses the well-known password **ecatt_et**. The password must be lower case.

► **To disable the Certify password feature:**

- 1 Before you enable detailed logging, you must shut down Certify and all SAP GUI sessions.
- 2 Use the Windows Task Manager to verify that the **wsecattwrapper.exe** process is not running. If this process is running, turn it off.
- 3 Locate the Certify configuration file that is in the following directory:
`C:\Program Files (x86)\Worksoft\Certify\Client\Worksoft.Certify.exe.config`
- 4 Open the **Worksoft.Certify.exe.config** file in Notepad or another text editor.
- 5 In the configuration file, scroll down to the **<appSettings>** section.

- 6 Just beneath the `<appSettings>` tag, copy and paste the following line into the configuration file:

```
<add key="LeaveEcattPasswordUnchanged" value="True" />
```

Example:

```
<appSettings>
    <add key="LeaveEcattPasswordUnchanged" value="True" />
```

- 7 Save the updated configuration file.

Solution Manager Passwords

To prevent password problems, do not change the password for the **ecatt_et_usr** user in Solution Manager. If you need to change the password, it is best that you delete the `ecatt_et_usr` user and recreate the `ecatt_et_usr` again.

If you are still having problems, add an entry to the Certify configuration file to override the values of the Solution Manager user name and password as a workaround.

► To add an entry to the Certify configuration file:

- 1 Before you enable detailed logging, you must shut down Certify and all SAP GUI sessions.
- 2 Use the Windows Task Manager to verify that the **wsecattwrapper.exe** process is not running. If this process is running, turn it off.

- 3 Locate the Certify configuration file that is in the following directory:

```
C:\Program Files (x86)\Worksoft\Certify\Client\Worksoft.Certify.exe.config
```

- 4 Open the **Worksoft.Certify.exe.config** file in Notepad or another text editor.
- 5 In the configuration file, scroll down to the **<appSettings>** section.
- 6 Just beneath the `<appSettings>` tag, copy and paste the following lines into the configuration file:

```
<add key="EcattDebugRFCUser" value="ecatt_et_usr" />
<add key="EcattDebugRFCPassword" value="correct password" />
```

Example:

```
<appSettings>
    <add key="EcattDebugRFCUser" value="ecatt_et_usr" />
    <add key="EcattDebugRFCPassword" value="correct password" />
```

- 7 Save the updated configuration file.

Certify will now override the values for the user name and password provided by Solution Manager, and it will use the values from the configuration file.

Enabling Certify Detailed Logging

To help you troubleshoot the integration, you may want to enable detailed logging.

► **To enable Certify detailed logging:**

- 1 Before you enable detailed logging, you must shut down Certify and all SAP GUI sessions.
- 2 Use the Windows Task Manager to verify that the **wsecattwrapper.exe** process is not running. If this process is running, turn it off.
- 3 Locate the Certify configuration file that is located in the following directory:

```
C:\Program Files (x86)\Worksoft\Certify\Client\Worksoft.Certify.exe.config
```

- 4 Open the **Worksoft.Certify.exe.config** file in Notepad or another text editor.
- 5 In the configuration file, scroll down to the **<appSettings>** section.
- 6 Just beneath the **<appSettings>** tag, copy and paste the following line into the configuration file:

```
<add key="VerboseEcattLogging" value="True" />
```

Example:

```
<appSettings>  
    <add key="VerboseEcattLogging" value="True" />
```

- 7 Save the updated configuration file.
Log files will now contain more detailed information.

Testing Connectivity

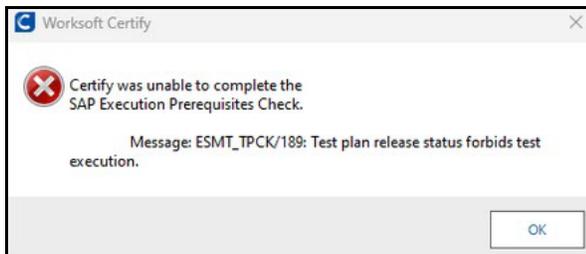
To test your connectivity, create a new test configuration and a corresponding Certify process. Do not use an existing test configuration. For information on creating a new test configuration, see [Chapter 2 "Creating a Test Configuration in Solution Manager"](#)

Synchronization Troubleshooting

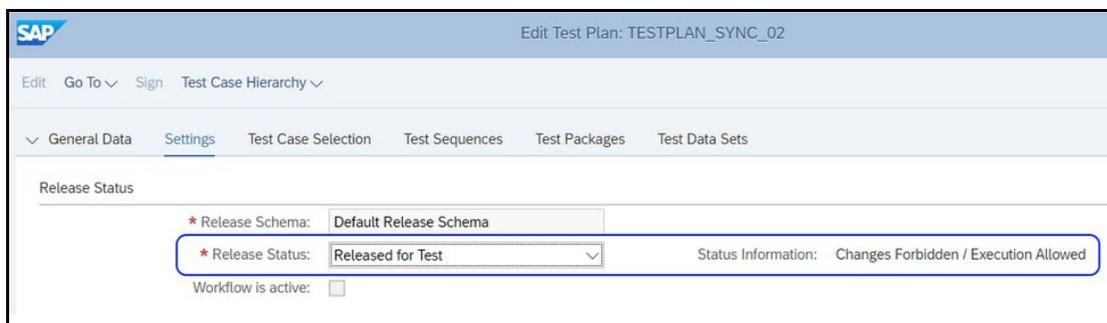
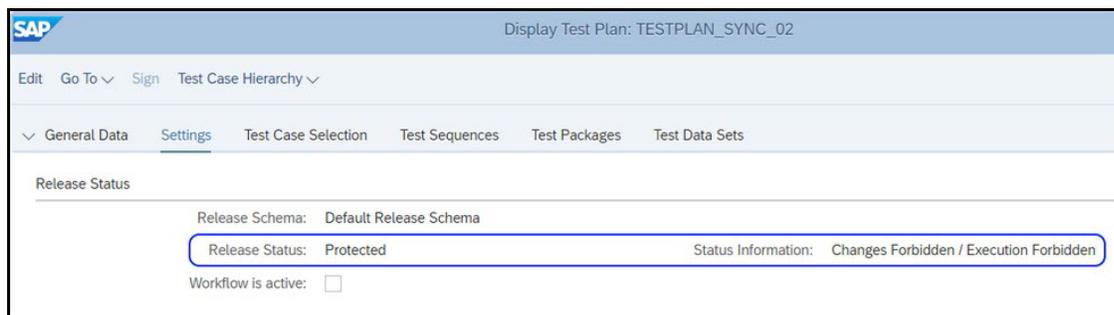
Here are a few scenarios that may prevent successful synchronization.

Unable to Execute a Process from Certify

If you notice the following error in Certify, it could be caused by the Release Status of the test plan is marked Protected.



To allow execution, modify the test plan Release Status to one that allows execution.



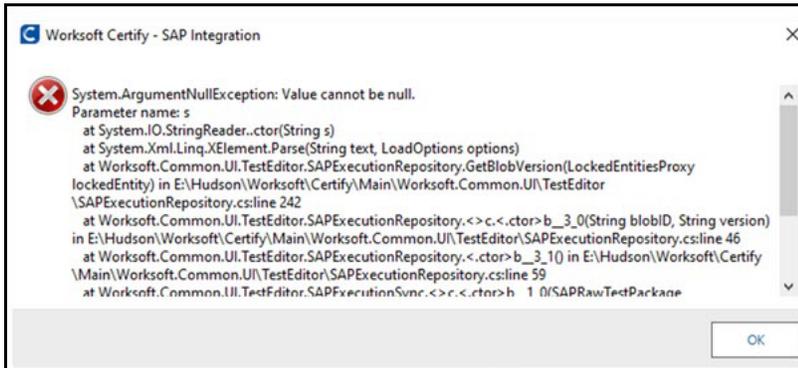
Result Status Fails to Update in Solution Manager

If the result status fails to update in Solution Manager at the end of execution, sign in to Solution Manager and use transaction codes **SLG1** or **SM367** to debug.

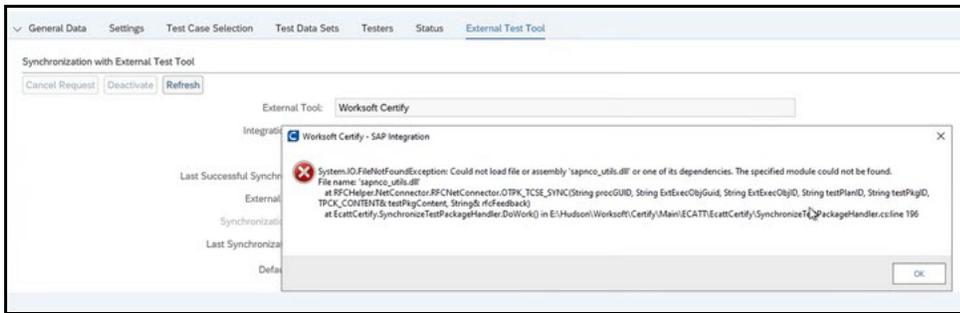
To debug from Certify, navigate to the `%appdata%/Worksoft` folder and inspect **log-file.txt** and **log-file-solman.txt**.

Test Cases Not Linked to Certify Processes

If synchronization fails, you receive the following error in Certify.



You receive the following error in Solution Manager.



These errors indicate that the prerequisite Microsoft Visual C++ redistributable is not installed, so synchronization fails. Install the software to fix synchronization.