

jeylabs
Digital Transformation Specialists

PowerToolz User Guide

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Date	Revision	Author	Comments

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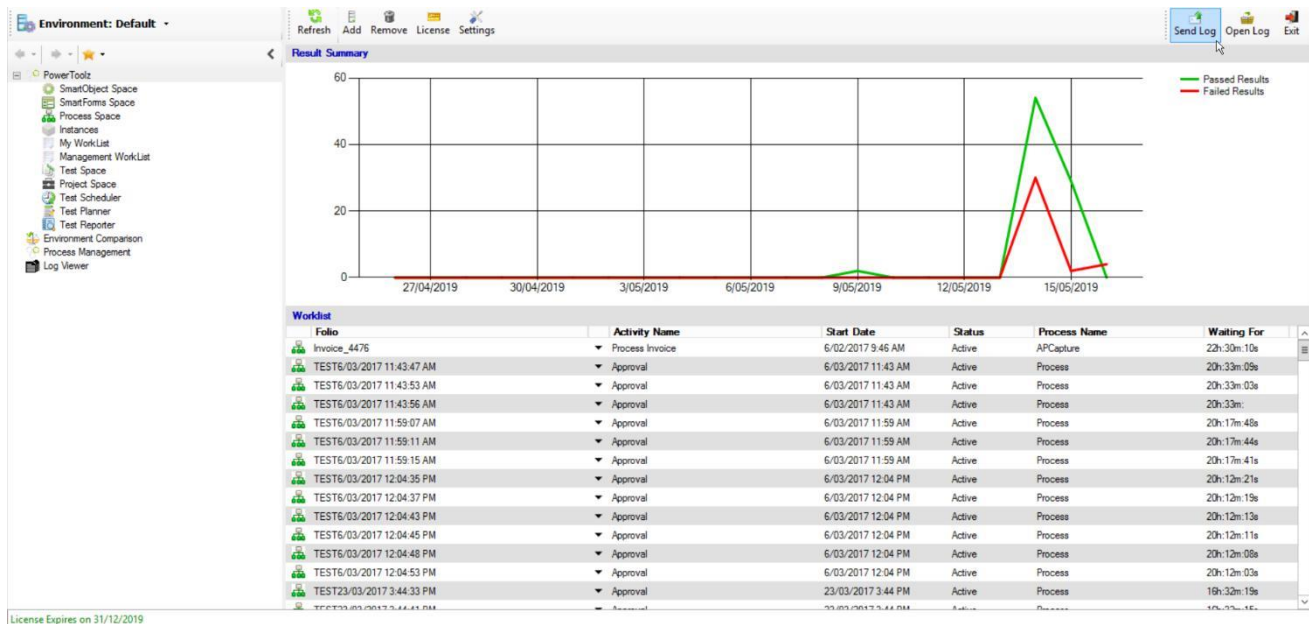
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PowerToolz User Guide

Menu and Features

The main window displays the available environments and detail of a selected environment in a horizontal pane in the right side of the window. The nodes of available features in a vertical pane in the left side of the window. The action options are displayed in the horizontal menu bar.



SmartObject Space: Access to SmartObject administration and testing features.

SmartForm Tester: Access to SmartForm administration and testing features.

Process Space: Access to process (workflow) administration and testing features.

Instances: Access to K2 process instance administration features.

My WorkList: Access to WorkList of the PowerToolz user.

Test Space: Access to bulk execution of process PowerScripts for testing.

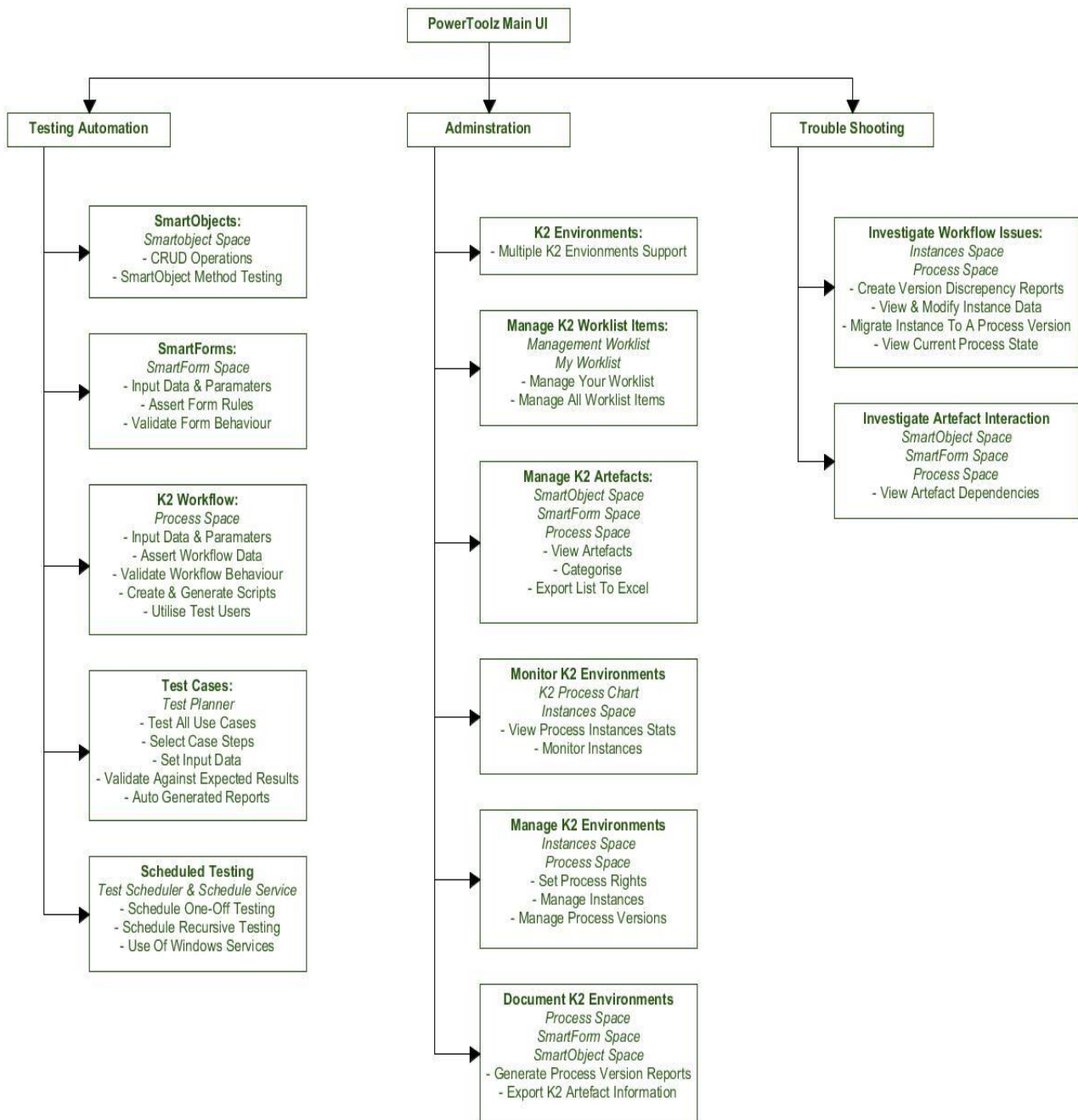
Project Space: Access to administration and execution of test projects.

Test Scheduler: Access to the creation and management of test schedules.

Test Planner: Access to the creation, execution and management of test Plans.

Test Reporter: Access to the reports generated as a result of test plan execution.

PowerToolz Usage Map



PowerToolz Overview

- ☐ PowerToolz provides the capability to conduct Automated K2 Testing as well as facilitating the Administration and Trouble Shooting of K2 applications and artifacts.
- ☐ PowerToolz will facilitate the automation of functional and regression testing of K2 Artefacts such as Smart Objects, Views, Smart Forms and Workflows (Process).
- ☐ Automated Testing is enhanced with our Test Planner, Test Scheduler and Test Reporter to generate reports.
- ☐ Comprehensive and efficient testing can be achieved through PowerToolz with the use of the Test Planner, as every possible use case can be tested simultaneously.
- ☐ Administration features provide the ability to manage K2 environments, Process Instances, Users and more.
- ☐ Trouble shooting will no longer be a pain point using PowerToolz, as features such as the Workflow comparison report generator, Error Fixer, Process migrator and more simplify the administration of K2 environments.
- ☐ Accessible to novice and expert users of K2, PowerToolz is a suitable tool for Testers, K2 developers, UI Developers, K2 Administrators, Consultants and anyone else involved in K2 related software projects.
- ☐ PowerToolz accelerates success by ensuring effective K2 software development incorporating quality validation with functional and regression test automation.
- ☐ Enabling regression testing for feature regression from one build to the next without tying up tester resources.
- ☐ Freeing quality assurance (QA) resources from maintaining and executing basic tests, encouraging the creation of additional, thorough tests.
- ☐ Reducing human error that can occur during activities such as test step execution and test result recording.
- ☐ Reduce the costs associated with function and regression testing.
- ☐ Using SmartBox Smart Object for storage of test scripts, results and configuration data to integrate with K2.

- ☐ PowerToolz allows for the sharing of scripts and reports with other PowerToolz users, creating a testing environment that encourages the leveraging of work completed within a team.
- ☐ PowerToolz Testing feature provides the following capabilities:
- ☐ Test the data validations rules setup for Smart Forms.
- ☐ Produce Dependency report for Smart Forms.
- ☐ Activities in the Process triggered via Smart Forms testing.
- ☐ Test the e-mail escalation in process.
- ☐ Test the Update Data Fields and Assert of the process.
- ☐ Populate the data into the smart form via Test plan and test the process associated to the form.
- ☐ Produce comparison reports for two workflow versions.

Installation Guide

This guide provides the Prerequisites, Licensing and step-by-step instruction for the installation of PowerToolz.

Prerequisites

The tool can be installed on a computer having access to K2 Database and K2 server.

The user should have Administrator permissions to the K2 Server and Read permission on K2 Database.

PowerToolz is currently compatible with Windows 7/8/8.1/10 Windows Server 2008, 2008 R2, 2012 SP1 and 2012 R2 systems.

.Net Framework 4.5.2 or later is required on the computer where user wants to install PowerToolz.

K2 client components is required on the computer where user wants to install PowerToolz.

Visual Studio AddIns support for VS2010, VS2012 and VS2013 and it also need .NET framework 4.5.2 or later.

The current version of PowerToolz is v5.3 and provides support for K2 BlackPearl 4.6.10, 4.6.11, 4.7 and K2 Five.

Licensing

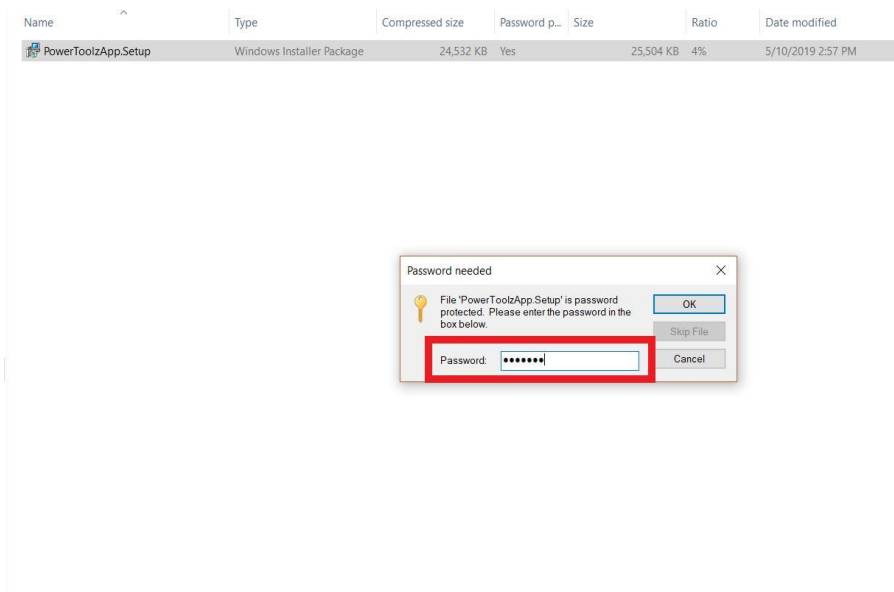
Each user must have jEyLaBs license Key for PowerToolz.

Licenses are distributed on a per-user-per-environment basis.

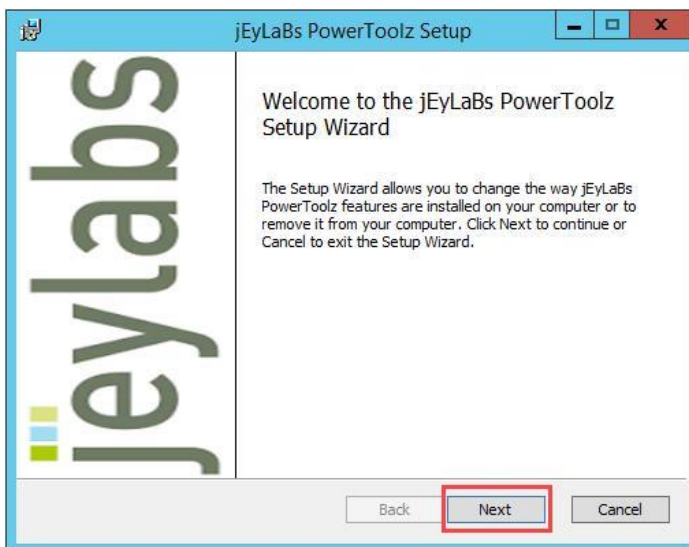
The license key will be generated by jEyLaBs software based on the Product key and required features of PowerToolz.

Installation Steps

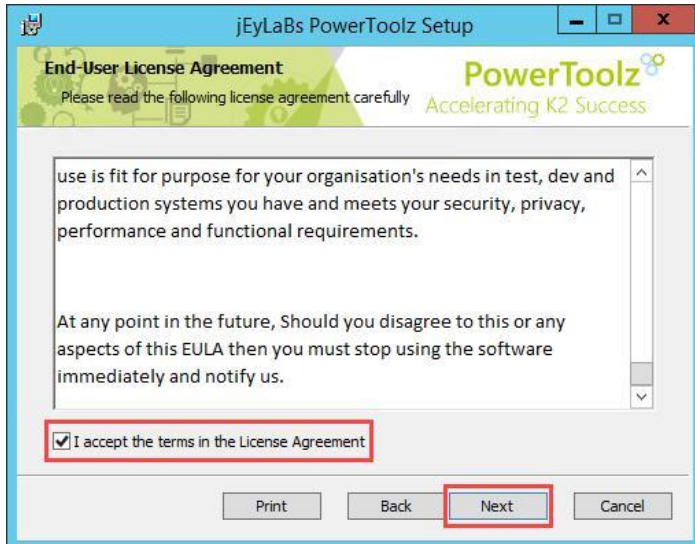
1. You will be provided a download link to the PowerToolz installation file by jEyLaBs as part of the Evaluation or Purchase procedure. Once you have downloaded the ZIP file it can be extracted using the password '**jeylabs**', upon which the executable file can be executed.



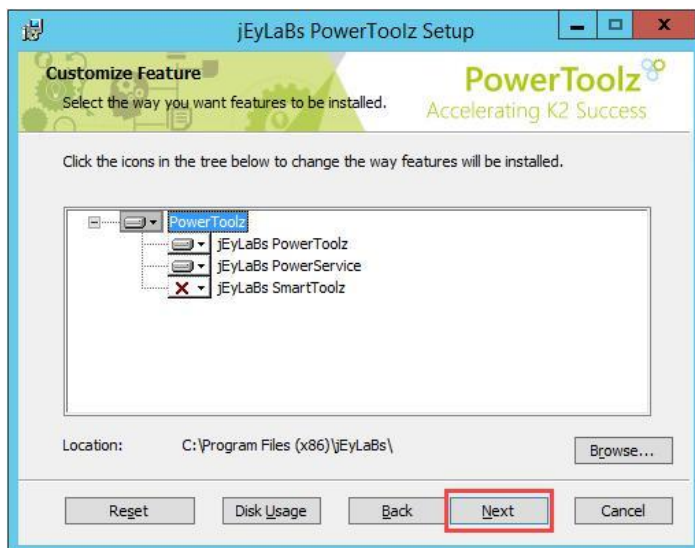
2. The installation home screen will appear, press the **Next button** to move to the next step.



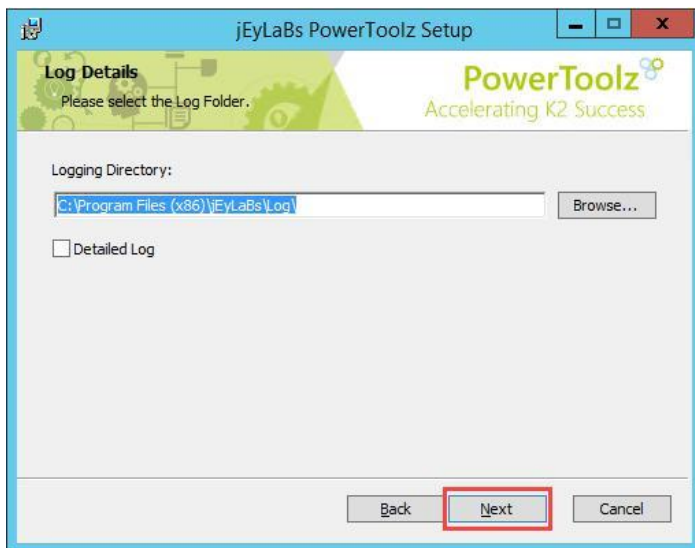
3. The EULA page will be displayed. Accept the license agreement and press the **Next button** to continue to the next step.



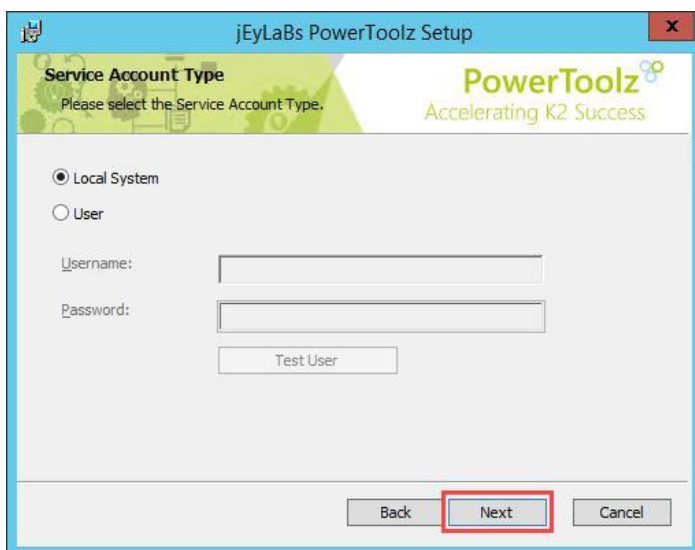
4. Recommended default features be already selected if you wish to change the features installed you may do so in this wizard. Once configured click **Next button** to continue.



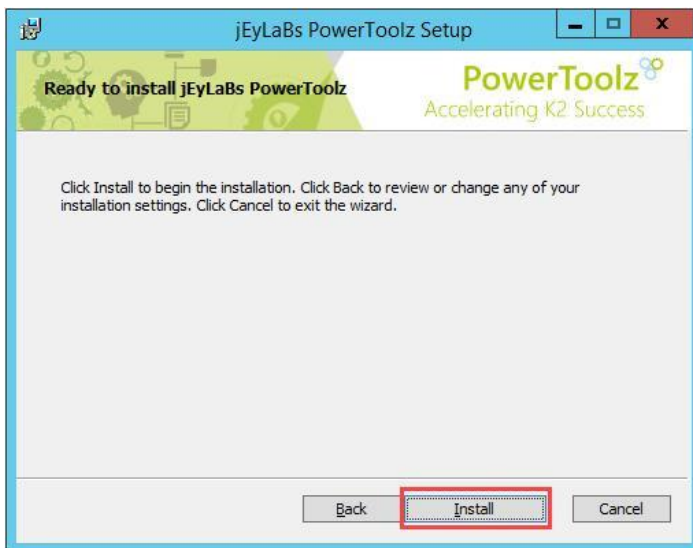
- Browse the logging directly and click **Next button** to continue.



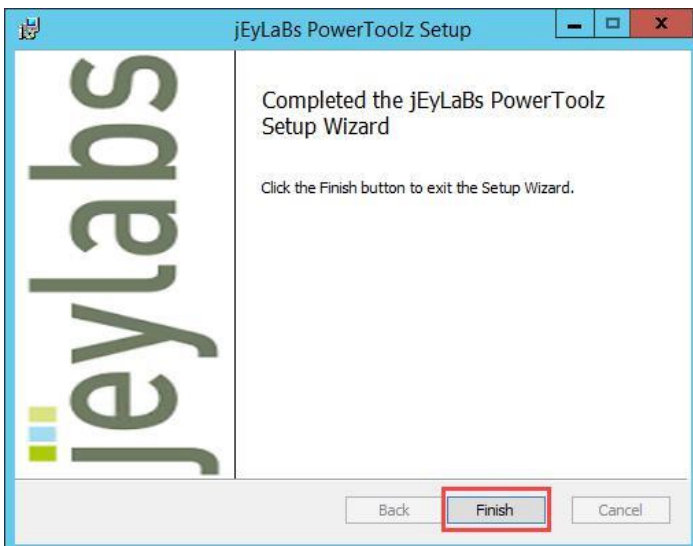
- Select your service account type and click **Next button** to continue.



7. You are now ready to begin the installation! Press the **Install button** to initiate the install process.

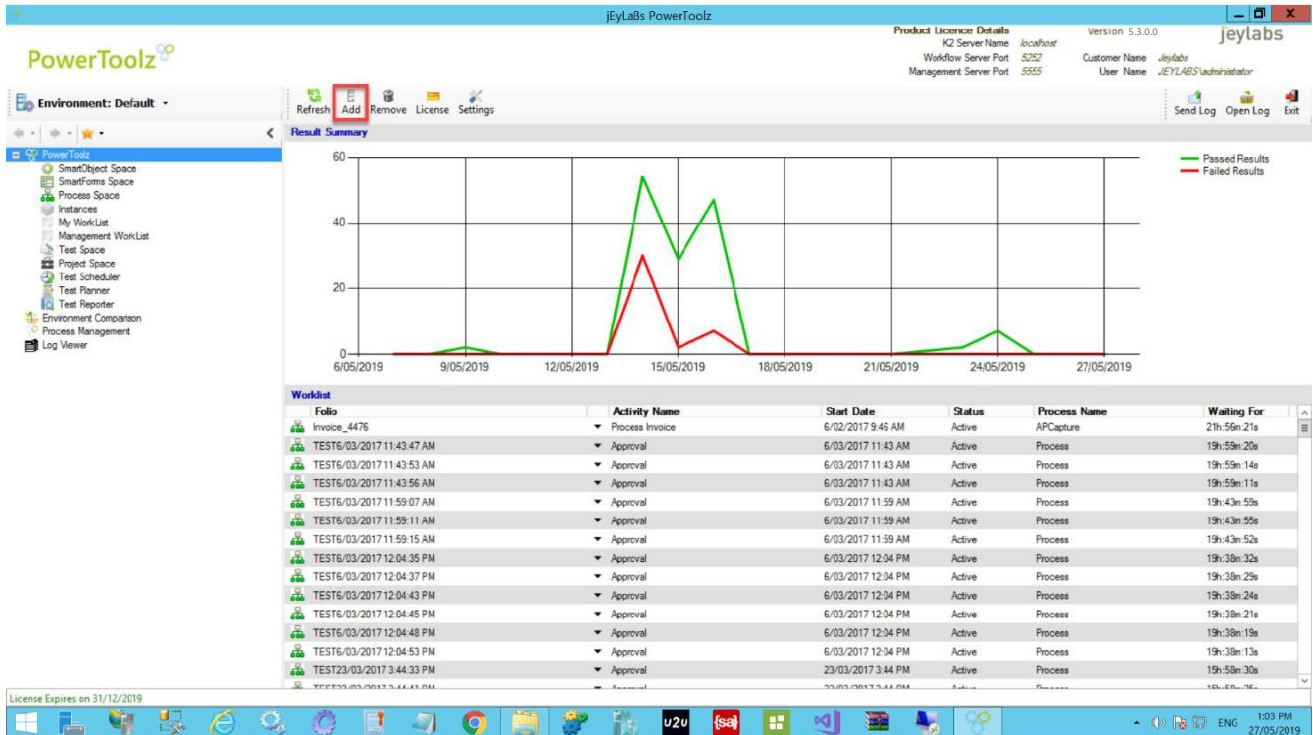


8. Once the installation is complete the Install Completed page. Click the **Finish button** to finalize and close the PowerToolz installation.



Connecting to a K2 environment

1. From the PowerToolz home screen you can initiate the K2 environment setup process by clicking the **Add** button.



2. The license agreement page will be displayed. Tick the agreement checkbox and then click the **Next button** to proceed to the next step.

jEylabS PowerToolz Environment Setup

Please review the Licence terms before installing

jEylabS PowerToolz

END USER LICENSE AGREEMENT

IMPORTANT: THIS SOFTWARE END USER LICENCE AGREEMENT ("EULA") IS A LEGAL AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR, IF PURCHASED OR OTHERWISE ACQUIRED BY OR FOR AN ENTITY, AN ENTITY) AND jEylabS PTY LTD ACN 135 541 598 OF Melbourne, Victoria, AUSTRALIA ("jEylabS").

READ IT CAREFULLY BEFORE COMPLETING THE INSTALLATION PROCESS AND USING THE SOFTWARE. IT PROVIDES A LICENCE TO USE THE SOFTWARE AND CONTAINS WARRANTY INFORMATION AND LIABILITY DISCLAIMERS AND LIMITS. BY INSTALLING AND USING THE SOFTWARE, YOU ARE CONFIRMING YOUR ACCEPTANCE OF THE SOFTWARE AND AGREEING TO BECOME BOUND BY THE TERMS OF THIS AGREEMENT.

IF YOU DO NOT AGREE TO BE BOUND BY THESE TERMS, THEN DO NOT INSTALL THE SOFTWARE AND RETURN THE SOFTWARE PROMPTLY TO YOUR PLACE OF PURCHASE FOR A REFUND.

THIS EULA SHALL APPLY ONLY TO THE SOFTWARE SUPPLIED BY jEylabS REGARDLESS OF WHETHER OTHER SOFTWARE IS REFERRED TO OR DESCRIBED IN THIS EULA.

1. DEFINITIONS

"Software" means only the jEylabS software program(s) and third party software programs, in each case, supplied by jEylabS herewith, and corresponding documentation, associated media, printed materials, and online or electronic documentation.

2. GRANT OF LICENCE

The licences granted in this clause 2 are granted on the terms and conditions set out in this EULA:

(a) Subject to clause 2(b) you may:

(i) install and use the Software on a single computer; or

(ii) install and store the Software on a storage device, such as a network server, used only to install the Software on your other computers over an internal network, provided you have a licence for each separate computer on which the Software is installed and run.

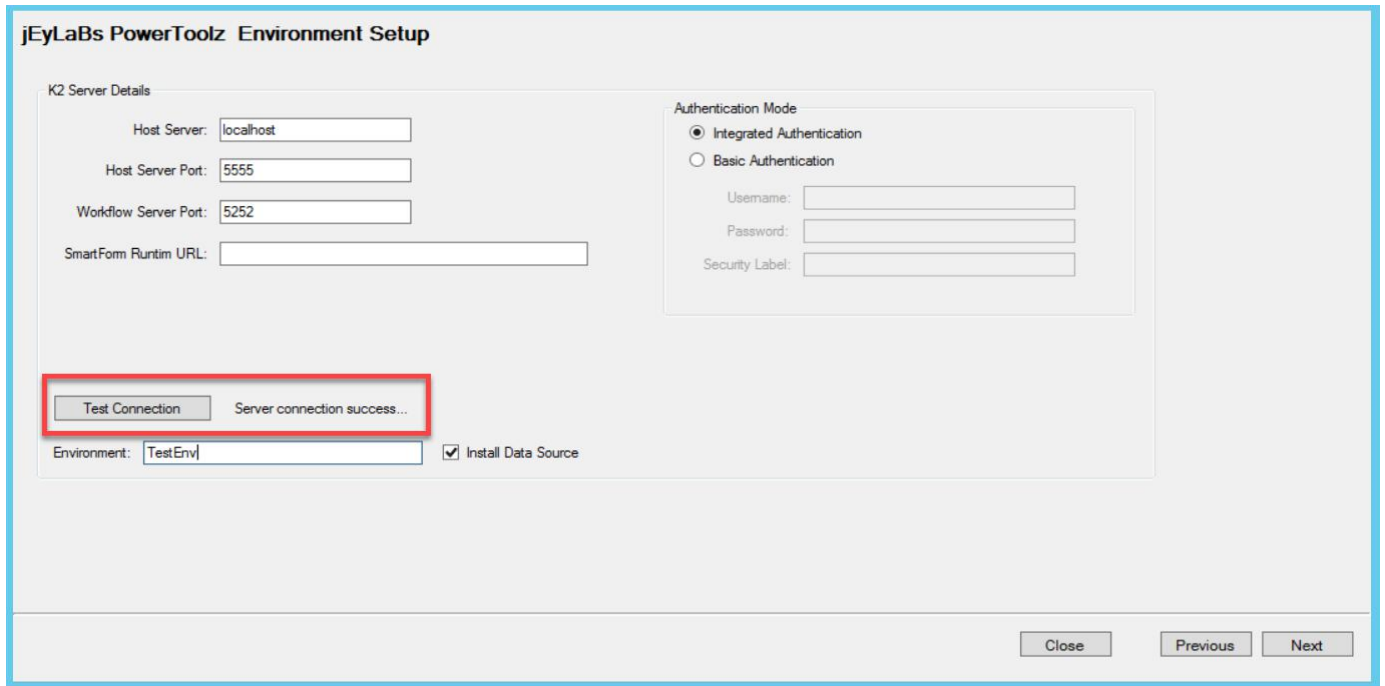
☒ I accept the terms of the Licence Agreement

Close

Previous

Next

- Enter Host Server, Host Server Port, Workflow Server Port and SmartForm Runtime URL (Can be configured after environment has been added). Click the **Test Connection button** to get the message of **Server connection success...** you can enter an environment name, click the **Next button** to continue.



jEyLaBs PowerToolz Environment Setup

K2 Server Details

Host Server:

Host Server Port:

Workflow Server Port:

SmartForm Runtime URL:

Authentication Mode

☒ Integrated Authentication

☐ Basic Authentication

Username:

Password:

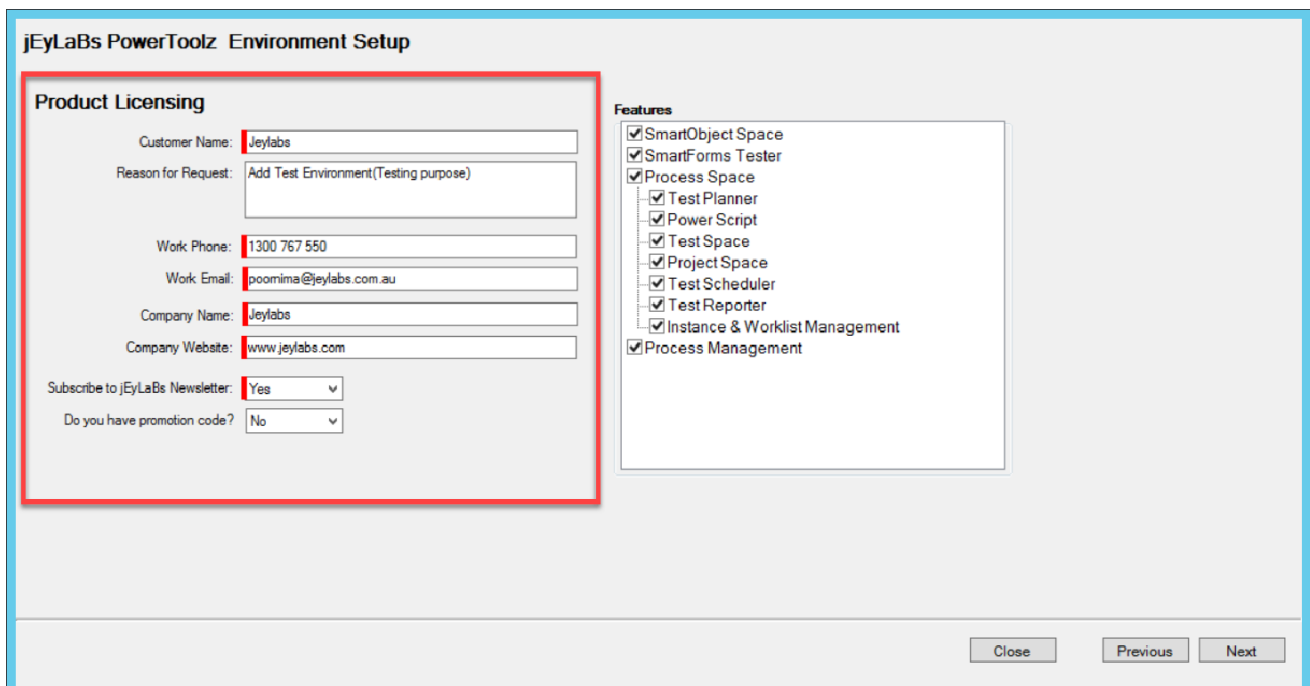
Security Label:

Test Connection Server connection success...

Environment: ☒ Install Data Source

Close Previous Next

- Provide the relevant company details and select the required features to be installed. This information is used to generate the license key, click the **Next button** to continue.



jEyLaBs PowerToolz Environment Setup

Product Licensing

Customer Name:

Reason for Request:

Work Phone:

Work Email:

Company Name:

Company Website:

Subscribe to jEyLaBs Newsletter:

Do you have promotion code?

Features

- ☒ SmartObject Space
- ☒ SmartForms Tester
- ☒ Process Space
 - ☒ Test Planner
 - ☒ Power Script
 - ☒ Test Space
 - ☒ Project Space
 - ☒ Test Scheduler
 - ☒ Test Reporter
- ☒ Instance & Worklist Management
- ☒ Process Management

Close Previous Next

- You will be presented with a Product Key. Click **Copy to Clipboard** and send the product key in an **e-mail to powertoolz@jeylabs.com.au**. You will receive a response with your license key that has been generated using the product key you have provided. Once you have received this information you can click the **Next button** to continue.

jEyLaBs PowerToolz Environment Setup

Product Key:
7NvwgDT3Mulp4/zbSyReX5SDUa7mtINooQ39/+HeqSWFuGb5JHNJDU1XyJhB6YL7ITZJzGRc6zW8KIPW/Ln8/4sajU7E2Xbryzs3dkvE-fvx1U9jw2/L+98Jhi7NdI
+64Rlg7ebwuBoll7DouRjC2Egh61XVLjtGfTbRWYRXFLmX30cl86d3XcSGvbjK/C5HpLRHN5ecujn2cPo0dQlyQy5aXL/fmw91NnR9+dw30E6L01MJgRU6vFBh2CaeAgLeGYl6el3hn1qevh3asQw3XDrblRS2D
WINZpbwi8Qd3+3K+rZbD2WmkXbiHm/xNVHY2TJAewul0BcwH9tTsa00Nk9mvi1ZellHsPak629c5cqYFD5DYjlinUq+yyvGxCHXAb/X41tsCwBAaVKe3x2EUk3ma5qC5
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[PowerToolz](#) [Jeylabs](#) [Jeylabs.lic](#)

Please locate the product key file and send it to powertoolz@jeylabs.com.au

Close Previous Next

- The next screen will require the input of a license key to install PowerToolz. Browse the license Key file sent by Jeylabs and once selected it will be inputted in the text box automatically.

jEyLaBs PowerToolz Environment Setup

License Key:

Please browse the license file that is from jEyLaBs to continue the installation.

Browse License File

Log Location

C:\Program Files (x86)\jEyLaBs\jEyLaBs PowerToolz\Log

☒ Detailed Log

Close Previous Next

jEyLaBs PowerToolz Environment Setup

License Key:

Please browse the license file that is from jEyLaBs to continue the installation.

Browse License File

Log Location

C:\Program Files (x86)\jEyLaBs\jEyLaBs PowerToolz\Log

☒ Detailed Log

Open

Desktop

PowerToolz_201879_Jeylabs_Development.lic

File name: PowerToolz_201879_Jeylabs_Devel jEyLaBs License File (*.lic)

Open Cancel

Close Previous Next

- After product key has been selected click the **Next button** to continue.

jEyLaBs PowerToolz Environment Setup

License Key:

```

W9bqqvdWTHvOMBJ118HcMEEQZQ40GAGQICz01GGzMWFalprDngH6F5Q/XUejuwm6whsNbk/k64IoNSa/9rRT2a2Wel69P/3Q4cX4vLrHzLXz0mT
+FDmkiNpPbmAxlWqRyJTxAUQrCATE371cAZX9w71DMzWWZINR97xVsTqcEmKKzHIGY5wddQetMsG8BrUyGgc7jYdSR1X+VFYdPNK43FvLxMaRSzPlsa6mF/WmIFx+ksQ0tQBUsjgZHFATXVPiP0MinIDx
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```

Please browse the license file that is from jEyLaBs to continue the installation.

Browse License File

Log Location

C:\Program Files (x86)\jEyLaBs\jEyLaBs PowerToolz\Log

☒ Detailed Log

Close Previous **Next**

- A message confirming successful installation should appear on screen. Click **Finish** to close finalize the environment setup. You may tick the check box, if you wish to open the newly added environment straight away.

jEyLaBs PowerToolz Environment Setup

Environment has been added successfully!

☐ Connect to the added environment after setup complete

Close Previous **Finish**

- The main PowerToolz Menu should now be available on the left-hand side of the main UI. You can now begin the PowerToolz Experience!

PowerToolz

Environment: Default

Product License Details: jeyLABS, Version: 5.3.0.0, Customer Name: jeyLABS, User Name: jeyLABS\Administrator

Result Summary

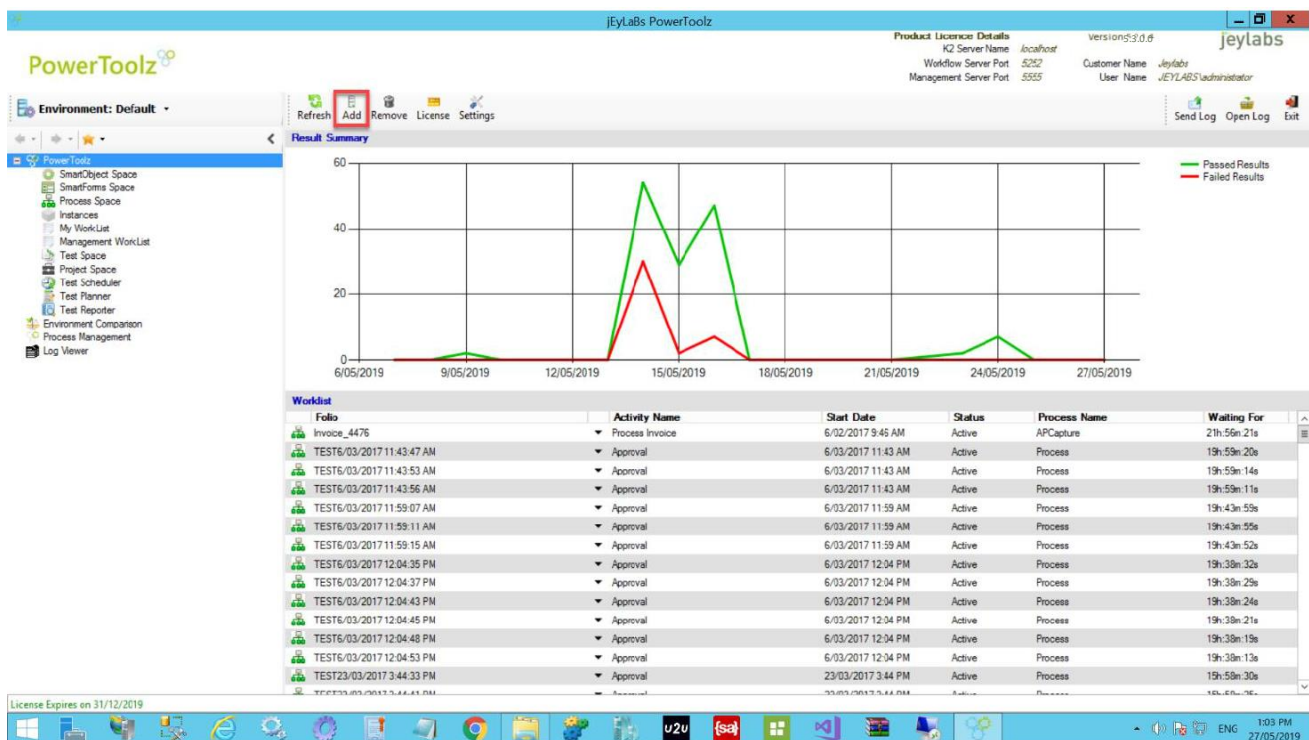
Activity Name	Start Date	Status	Process Name	Waiting For
TESTS-03/2017 11:43:47 AM	6/03/2017 11:43 AM	Approval	Process	22h-13m-34s
TESTS-03/2017 11:43:53 AM	6/03/2017 11:43 AM	Approval	Process	22h-13m-34s
TESTS-03/2017 11:43:56 AM	6/03/2017 11:43 AM	Approval	Process	22h-13m-34s
TESTS-03/2017 11:58:07 AM	6/03/2017 11:58 AM	Approval	Process	22h-13m-34s
TESTS-03/2017 11:58:11 AM	6/03/2017 11:58 AM	Approval	Process	22h-13m-34s
TESTS-03/2017 11:58:15 AM	6/03/2017 11:58 AM	Approval	Process	22h-13m-34s
TESTS-03/2017 12:04:35 PM	6/03/2017 12:04 PM	Approval	Process	22h-13m-34s
TESTS-03/2017 12:04:37 PM	6/03/2017 12:04 PM	Approval	Process	22h-13m-34s
TESTS-03/2017 12:04:43 PM	6/03/2017 12:04 PM	Approval	Process	22h-13m-34s
TESTS-03/2017 12:04:45 PM	6/03/2017 12:04 PM	Approval	Process	22h-13m-34s
TESTS-03/2017 12:04:48 PM	6/03/2017 12:04 PM	Approval	Process	22h-13m-34s
TESTS-03/2017 12:04:53 PM	6/03/2017 12:04 PM	Approval	Process	22h-13m-34s
TESTS-03/2017 3:44:33 PM	23/03/2017 3:44 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:44:41 PM	23/03/2017 3:44 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:17 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:26 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:24 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:29 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:32 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:39 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-03/2017 3:53:57 PM	23/03/2017 3:53 PM	Approval	Process	18h-43m-17s
TESTS-04/2017 11:53:30 AM	21/04/2017 11:53 AM	Approval	Process	22h-13m-34s
Form Start R - 12:14:22.902	21/04/2017 12:14 PM	Approval	Process	22h-13m-34s
Form Start R - 12:14:25.020	21/04/2017 12:14 PM	Approval	Process	22h-13m-34s

License Expires on 25/07/2018

PowerToolz Environment Characteristics Settings

This section illustrates how to configure PowerToolz environment settings. These settings apply on an individual environment basis.

1. From the main PowerToolz user interface, on the home screen clicking the settings button will open the configuration settings page.



- Click Email settings and provide the required information. PowerToolz uses this information to send email notifications and communicate documents such as automated testing reports.

The screenshot shows the PowerToolz configuration window with several sections:

- Outgoing Email Settings (highlighted with a red box):**
 - SMTP Host:
 - Port:
 - Username:
 - Password:
 - From Email:
 - Retype Password:
 - From User:
 - Schedule Report Email To:
- IMAP Settings:**
 - Host:
 - Port:
- LDAP Path:**
 - LDAP:
 - NET BIOS NAMES:
- SmartForms Settings:**
 - Runtime URL:
- Customer Logo:**
 - PowerToolz logo with a 'Remove Logo' button.
- PowerScript Prefix:**
 - Process:
 - SmartForm:
 - SmartObject:
 - Generic:
- SmartObject Space:**
 - ☐ Do not load records at start
 - ☐ Load all records at start
 - ☒ Load latest records at start
 -
- Report:**
 - ☒ Generate Report
- True Test Automation:**
 - ☐ Auto Generate Tests
 - ☐ Auto Execute Auto Generated Tests
 - ☐ Auto Deploy Test Interface
 - ☐ Execute TTA Enabled Scripts

At the bottom right, there are 'OK' and 'Cancel' buttons.

- Click SmartForms and provide Runtime URL. This setting is used by PowerToolz when displaying a live runtime view of SmartForms and K2 views.

Outgoing Email Settings

SMTP Host :
Port :

Username :
Password :

From Email :
Retype Password :

From User :

Schedule Report Email To:

IMAP Settings

Host:
Port :

LDAP Path


LDAP:

NET BIOS NAMES:

SmartForms Settings

Runtime URL:

Customer Logo



PowerScript Prefix

Process:

SmartForm:

SmartObject:

Generic:

SmartObject Space

☐ Do not load records at start

☐ Load all records at start

☒ Load latest records at start

Report

☒ Generate Report

True Test Automation

☐ Auto Generate Tests

☐ Auto Execute Auto Generated Tests

☐ Auto Deploy Test Interface

☐ Execute TTA Enabled Scripts

4. Additionally, you can configure PowerScript Prefix, SmartObject Space, Reporting, and Logo. Once completed click **ok** to save the changes.

Outgoing Email Settings

SMTP Host : Port :

Username : Password :

From Email : Retype Password :

From User :

Schedule Report Email To:

IMAP Settings

Host: Port :

LDAP Path


LDAP:

NET BIOS NAMES:

SmartForms Settings

Runtime URL:

Customer Logo



PowerScript Prefix

Process:

SmartForm:

SmartObject:

Generic:

SmartObject Space

☐ Do not load records at start
☐ Load all records at start
☒ Load latest records at start

Report

☒ Generate Report

True Test Automation

☐ Auto Generate Tests
☐ Auto Execute Auto Generated Tests
☐ Auto Deploy Test Interface
☐ Execute TTA Enabled Scripts

PowerToolz User Interface

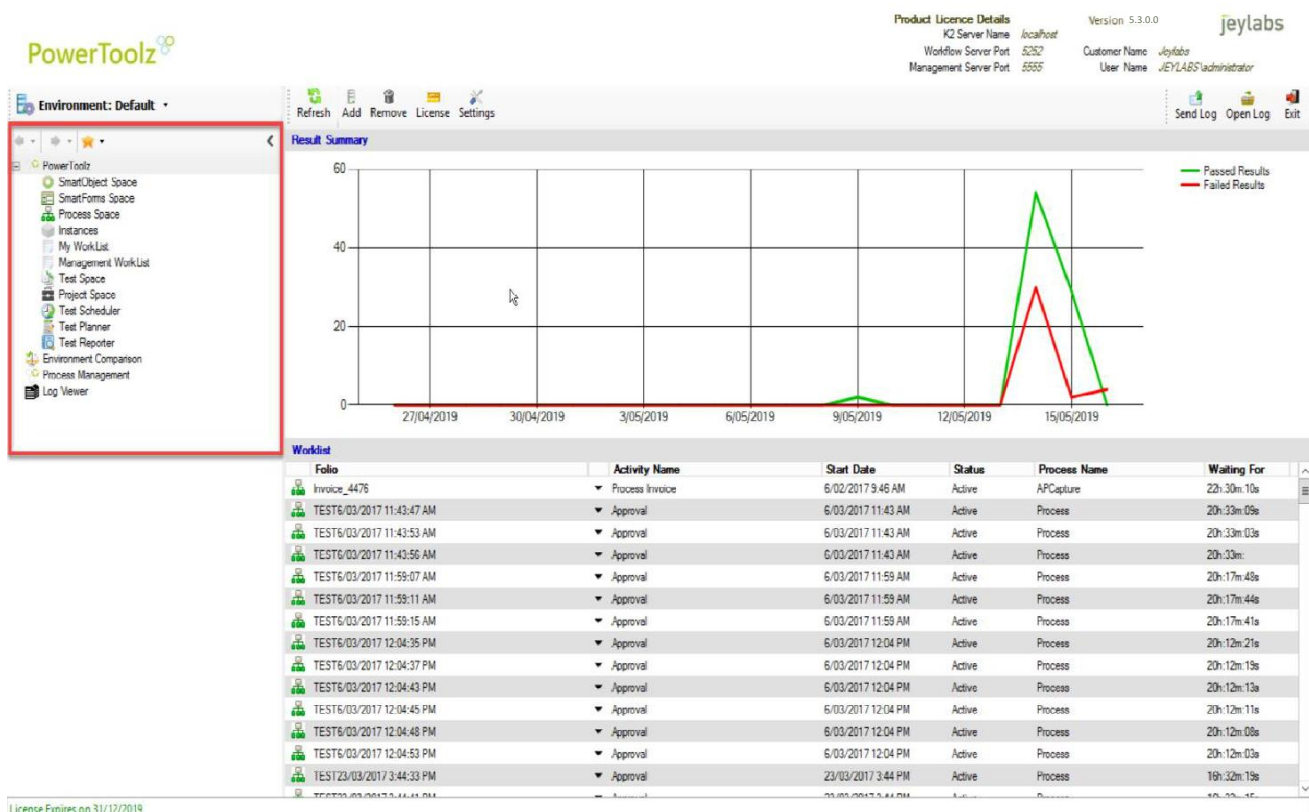
Introduction

PowerToolz provides a user-friendly interface to affording Developers, Testers and Administrators effective functionality and efficient traversal of the system. A cascading main menu tree occupies the left section of the interface, with all of the PowerToolz spaces accessible from the menu. Navigation buttons provide a means to move forward and backward between the sequentially viewed screens within the tool, which operate similarly to the navigation features of commonly used internet browsers.

Search bars are available on particular PowerToolz spaces, making it easy for the location of a desired K2 artefact, particularly useful for larger K2 environments. Action buttons can be found within each PowerToolz space, with meaningful names and icons, allowing the user to quickly familiarize themselves with the system.

Main Menu Tree

The main menu tree is located on the left hand side of the PowerToolz interface. This menu cascades to allow all features to be accessed efficiently, with K2 categories also able to be investigated.



Navigation Buttons

The PowerToolz navigation buttons provide a means to move forward and backward between the sequentially viewed screens within the tool, which operate similarly to the navigation features of commonly used internet browsers. Clicking on the back or forward arrows will simply move to the previous or next viewed screen respectively. Clicking on the drop-down arrow under one of these arrows will display the thread of viewed screens, allowing the user to select the desired option.

The screenshot displays the PowerToolz application interface. On the left, a navigation pane shows a tree structure with 'PowerToolz > SmartForms Space' highlighted. The main area features a table of PowerScript items with columns: PowerScript Name, PowerScript ID, Created On, Created By, Shared, Process Name, Process Version, and Type. Below the table, there are navigation buttons: '<', '>', and 'Save Order'. At the bottom right, there are 'Select All' and 'Deselect All' buttons.

PowerScript Name	PowerScript ID	Created On	Created By	Shared	Process Name	Process Version	Type
<input type="checkbox"/> Approve_Reject_Path	PS-200382	1/10/2018 12:00:00 AM	Administrator	False	New Supplier/New Supplier Process	3	Workf
<input type="checkbox"/> SFS_SubmitTest	PS-200383	25/02/2019 12:00:00 AM	Administrator	False	NS Form Submit	2	Smart
<input type="checkbox"/> SMS_MailMethod	PS-200392	4/10/2018 12:00:00 AM	Administrator	False	NS_SMO_Supplier	0	Smart
<input type="checkbox"/> SFS_AssentFail	PS-210396	2/08/2018 12:00:00 AM	administrator	False	NS Form Submit	5	Smart

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Search Bars

Search bars are available on particular PowerToolz spaces, making it easy for the location of a desired K2 artefact, particularly useful for larger K2 environments. These search bars are most useful when selecting a SmartObject, SmartForm or K2 workflow to test using the PowerToolz PowerTester.

Product Licence Details

K2 Server Name	localhost	Version	5.3.0.0
Workflow Server Port	5252	Customer Name	Jeylabs
Management Server Port	5353	User Name	JEYLABS\Administrator

Environment: Default

- PowerToolz
- SmartObject Space
- SmartForms Space
- Process Space
- Instances
- My WorkList
- Management WorkList
- Test Space
- Project Space
- Test Scheduler
- Test Planner
- Test Reporter
- Environment Comparison
- Process Management
- Log Viewer

Refresh
Categorize
Select All
Delete
Delete Category
Report

Name	GUID	Version	Created By	Created On	Category	Methods
A0 Group	b39ba4e5-40db-4bae-95dc-d3acbf5f5e02	0	K2SQL\System	25/07/2016 11:50:10 AM	Active Directory	5
A0 User	39fe75c2-551-fb-93-bd74-7a6cf91aed1b	0	K2SQL\System	25/07/2016 11:50:10 AM	Active Directory	6
A0 User	f14a52ce-6dae-4ce8-9346-cb0a854e809ea	1	K2JEYLABS\Administrator	28/07/2016 10:52:50 AM	Active Directory ...	6
Activity Data Audit	10943ae0-f81f-4f3f-a4db-e5fa7437b5f3	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Graph	1fc0a939-abca-4250-a169-e0d47d5c5664	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Instance	2c2f0139-af35-43c5-a3c4-1e3e55ff4149	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Instance Audit	bbe93f3e-11e3-4242-83d9-0ab2caa6a64	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Instance XML Audit	c6380796-8992-45af-8c3f-39a436c22595	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Statistics	072537ef-5d46-411c-83d9-21b67541de1	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Statistics Graph	fd225a29-834c-41f5-bebc-3054bef8c5b	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
com K2 System: SmartForms UIRewriter Routes	690544f6-abe5-4533-b0d8-9e1c6b7a033c	0	K2SQL\System	9/02/2019 9:54:00 AM	All SmartObjects	5
Event Instance	800a7ccb-ed72-4495-9b41-9rad2c01fb2f	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Interval Graph	123bc7d1-32cc-44cf-a49c-59bd8915a2ff	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
K2 Generic Settings Personal Setting	7f9f8e75-9032-402f-b521-433de7344ac8	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	5
K2 Generic Settings Shared Setting	ab923847-ed01-4526-52c1-42023c703ae8	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	5
Process Activities	cf12af05-9296-4189-9eb1b-2b93393d1e95	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Activity Instances	7922079b-bd87-4f04-bafe-e5cae583ec7	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Data	8bf3c87f-9a85-43ad-8cb5-07bb8c138619	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Graph	b65b088e-0522-4ced-6236-07030b6cd10	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Information	b865621c-4140-43eb-ca19-461d53c4e24b	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Instance	ocf2ed39-e7a7-430c-8141-0528353afb38	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Instance Audit	ebfdcf59-2559-4048-a12b-4d52c258f50	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Instance XML Audit	550de5cf-9e00-4754-8dd8f548d9961ffa	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Sets	491637d1-21cf-4850-b460-97d7473ce435	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Statistics	adaef3f5-1d59-4330-ae93-b0ded5515de9	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Statistics Graph	d07d029-3cdd-4d5c-9ebb-3e4a27df13af7	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Version Count	1e5a34aa-3edb-463c-ed05-eea4e3ef63e8	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
ProcessPerformanceDayOnDay	2e1654d5-24c4-45d5-859f-8ae25020b65	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1
ProcessPerformanceDayOnDayActivity	c40edf78-1f42-411c-93ae-792d2840f23d	0	K2SQL\System	25/07/2016 11:50:10 AM	All SmartObjects	1

Selected SmartObject

Category

GUID

Name

SmartObjects

Number of SmartObjects

736

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Action Buttons

Action buttons can be found within each PowerToolz space, with meaningful names and icons, allowing the user to quickly familiarize themselves with the system. These action buttons can be found within the different spaces available via the main menu and are found at the top of the screen.

The screenshot displays the PowerToolz application interface. At the top, there is a header with the PowerToolz logo, product details (K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555), and version information (Version 5.3.0.0). The user is logged in as jeylabs with the user name jeylabs\administrator. A red box highlights the action buttons at the top of the main content area: Refresh, Categorize, Select All, Report, Owners, Lock, Unlock, Delete, and Delete Category. The main content area is a table listing various forms and views, including Approval form, Approval2 form, Form Submit, Leave Request View, Leave Request2 Item View, ManagerApproval2 View, Manager Approval, MoistureLevel Form, MoistureLevel View, PictureList, PictureUpload, PumpWater form, Pumpwater View, Submit2 form, Test1, Test2, Test3, TreeControl, TreeControl1, TreeDetails, TreeItemWithToolBar, WaterPump Form, and WaterPump ListView. The table columns include Name, Description, Created By, Created On, Modified By, Modified On, Version, Check, and Checked Out By. A sidebar on the left shows the navigation menu with options like Environment: Default, SmartObject Space, Process Space, Instances, My WorkList, Management WorkList, Test Space, Project Space, Test Scheduler, Test Planner, Test Reporter, Environment Comparison, Process Management, and Log Viewer. At the bottom, there is a section for 'Number of Views' (902) and a 'Selected Form or View' section with fields for Category, GUID, and Name.

Name	Description	Created By	Created On	Modified By	Modified On	Version	Check	Checked Out By
Approval form		K2 JEYLABS\S Ranjit	21/10/2016 11:03:34 AM	K2 JEYLABS\S Ranjit	26/10/2016 9:58:31 AM	9	No	
Approval2 form		K2 JEYLABS\S Ranjit	21/10/2016 4:02:35 PM	K2 JEYLABS\S Ranjit	26/10/2016 12:06:58 PM	11	No	
Form Submit		K2 JEYLABS\S Ranjit	21/10/2016 11:00:48 AM	K2 JEYLABS\S Ranjit	26/10/2016 10:04:36 AM	7	No	
Leave Request View		K2 JEYLABS\S Ranjit	21/10/2016 10:42:05 AM	K2 JEYLABS\S Ranjit	26/10/2016 10:11:02 AM	6	No	
Leave Request2 Item View		K2 JEYLABS\S Ranjit	21/10/2016 3:42:39 PM	K2 JEYLABS\S Ranjit	21/10/2016 3:43:48 PM	1	No	
ManagerApproval2 View		K2 JEYLABS\S Ranjit	21/10/2016 3:53:01 PM	K2 JEYLABS\S Ranjit	28/10/2016 10:21:37 AM	2	No	
Manager Approval		K2 JEYLABS\S Ranjit	21/10/2016 3:18:10 PM	K2 JEYLABS\S Ranjit	26/10/2016 10:11:05 AM	3	No	
MoistureLevel Form		K2 JEYLABS\S Ranjit	21/10/2016 3:26:05 PM	K2 JEYLABS\S Ranjit	21/10/2016 3:26:09 PM	1	No	
MoistureLevel View		K2 JEYLABS\S Ranjit	21/10/2016 10:57:50 AM	K2 JEYLABS\S Ranjit	21/10/2016 12:26:55 PM	3	No	
PictureList		K2 JEYLABS\S Ranjit	26/10/2016 11:22:33 AM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:54 AM	8	No	
PictureUpload		K2 JEYLABS\S Ranjit	26/10/2016 11:09:44 AM	K2 JEYLABS\S Ranjit	26/10/2016 11:09:52 AM	1	No	
PumpWater form		System	25/07/2016 3:09:35 PM	K2SQL\System	8/02/2019 6:54:34 AM	18	No	
Pumpwater View		System	25/07/2016 3:09:34 PM	K2SQL\System	8/02/2019 6:54:30 AM	18	No	
Submit2 form		K2 JEYLABS\S Ranjit	26/10/2016 2:55:59 PM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:54 AM	4	No	
Test1		K2 JEYLABS\S Ranjit	26/10/2016 2:41:35 PM	K2 JEYLABS\S Ranjit	28/10/2016 9:27:29 AM	3	No	
Test2		K2 JEYLABS\S Ranjit	21/10/2016 4:00:46 PM	K2 JEYLABS\S Ranjit	26/10/2016 1:03:19 PM	4	No	
Test3		K2 JEYLABS\Administrator	6/02/2017 2:25:18 PM	K2 JEYLABS\Administrator	3/07/2017 11:15:35 AM	4	Yes	K2 JEYLABS\Administrator
TreeControl		K2 JEYLABS\Administrator	6/02/2017 2:25:03 PM	K2 JEYLABS\Administrator	3/07/2017 11:14:29 AM	5	No	
TreeControl1		K2 JEYLABS\Administrator	6/02/2017 2:25:58 PM	K2 JEYLABS\Administrator	3/07/2017 11:14:29 AM	2	No	
TreeDetails		K2 JEYLABS\Administrator	6/02/2017 5:02:30 PM	K2 JEYLABS\Administrator	7/02/2017 12:05:48 PM	2	No	
TreeItemWithToolBar		K2 JEYLABS\Administrator	3/07/2017 11:12:46 AM	K2 JEYLABS\Administrator	5/07/2017 11:07:31 AM	3	Yes	K2 JEYLABS\Administrator
WaterPump Form		K2 JEYLABS\Administrator	16/01/2017 10:44:46 AM	K2 JEYLABS\Administrator	25/01/2017 9:37:09 AM	3	No	
WaterPump ListView		K2 JEYLABS\Administrator	16/01/2017 10:40:16 AM	K2 JEYLABS\Administrator	16/01/2017 5:27:12 PM	1	No	
		K2 JEYLABS\Administrator	16/01/2017 10:55:20 AM	K2 JEYLABS\Administrator	16/01/2017 5:27:12 PM	1	No	
		K2 JEYLABS\Administrator	16/01/2017 10:41:19 AM	K2 JEYLABS\Administrator	16/01/2017 5:27:12 PM	1	No	
		K2 JEYLABS\Administrator	25/01/2017 9:35:59 AM	K2 JEYLABS\Administrator	25/01/2017 9:36:13 AM	1	No	
		K2 JEYLABS\S Ranjit	26/10/2016 11:17:57 AM	K2 JEYLABS\S Ranjit	26/10/2016 1:03:10 PM	4	No	
		K2 JEYLABS\S Ranjit	26/10/2016 10:58:26 AM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:04 AM	2	No	

PowerToolz Testing

Introduction

This section covers how to create and execute a PowerToolz script to automate testing.

It provides the detailed steps to build and execute the **Power Script** which drives the automated testing for K2 Smart Objects, Smart Forms and Workflow Process.

PowerScript

The testing is automated by a script in a XML file in PowerToolz. The data either can be entered by user or auto generated by some key values and injected into an XML file. As this concept is used in PowerToolz, the automated testing script is called a PowerScript which will be stored under the node "PowerTester" for each K2 Artefact.

The screenshot shows the PowerToolz application interface. The toolbar at the top includes buttons for 'New Script', 'Import', 'Refresh', 'Sync UI', 'Start', 'Open', 'Export', 'Rename', 'Delete', 'Share Script', 'Enable TTA', 'Tag', and 'Schedule'. The 'New Script' button is highlighted with a red box. Below the toolbar, there is a tree view on the left showing the application structure, with 'PowerTester' selected under the 'Test' node. The main area displays a table of existing PowerScripts.

PowerScript Name	PowerScript ID	Object Version	Created On	Created By	Shared	TTA Enabled
SMS_CreateRandomValue	PS-250488	0	15/05/2019	administrator	False	False
SMS_Addsysusertest	PS-250489	0	15/05/2019	administrator	False	False
SMS_AllMethods	PS-250490	0	15/05/2019	administrator	False	False
SMS_sampletest	PS-250491	0	15/05/2019	administrator	False	False
SMS_FailureTest	PS-250492	0	15/05/2019	administrator	False	False

Below the table, there is a section for 'Existing Results' and 'Test Result'.

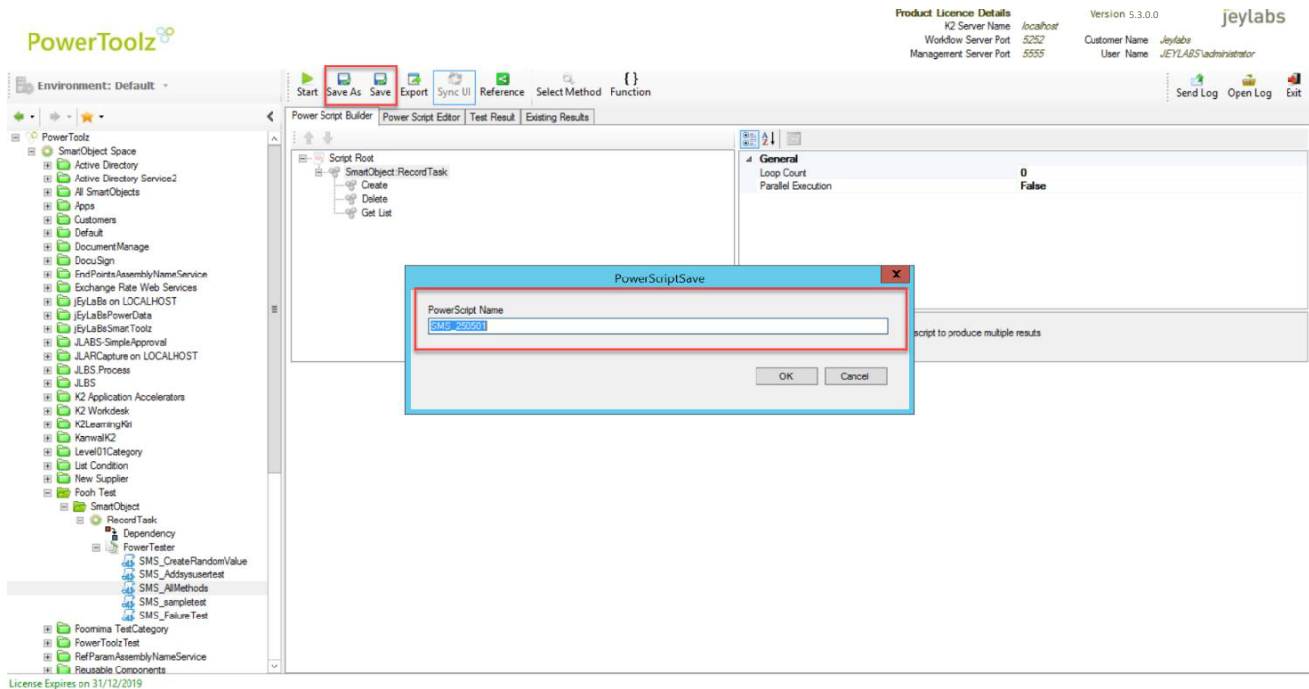
Generated At	Generated By	Server	Instances	StartTime	EndTime	Duration
15/05/2019 11:1...	JEYLABS\admin...	localhost	1	11:17:4...	11:17:4...	00:00:01

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Save a PowerShell

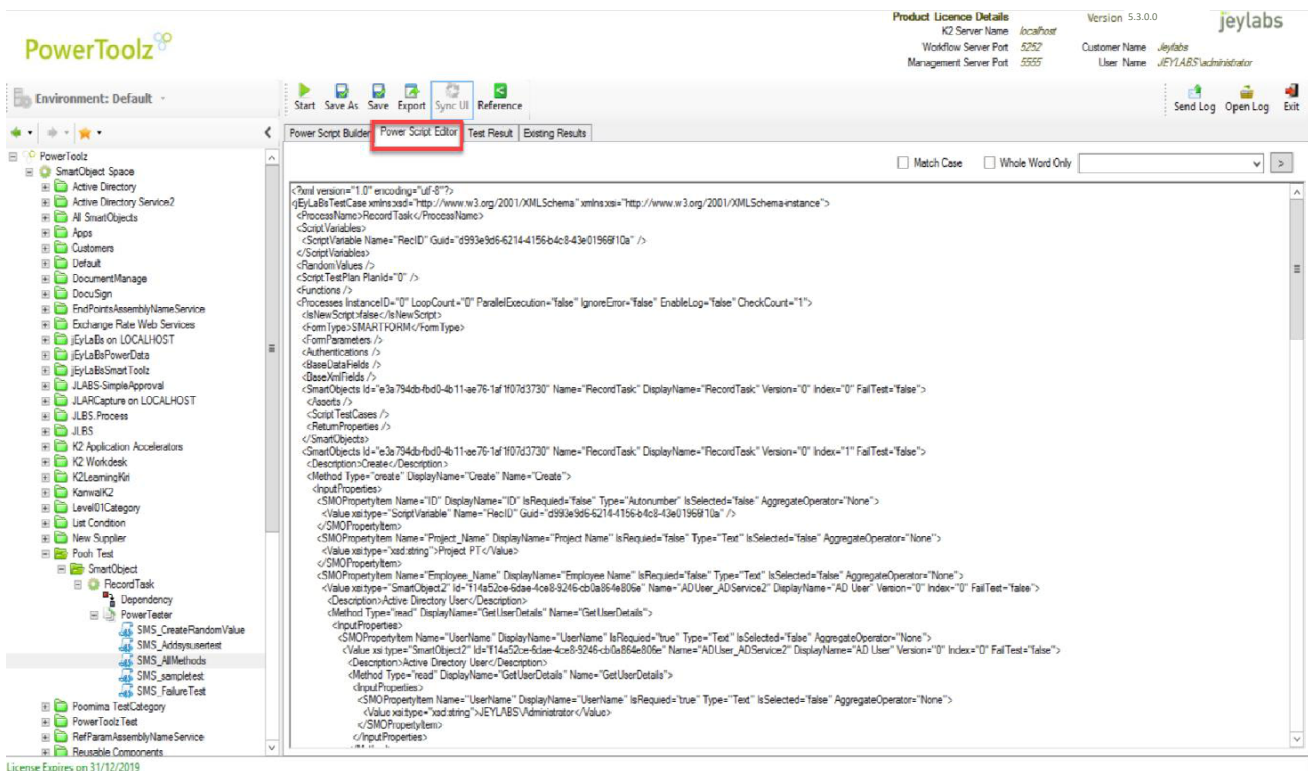
User can save the PowerShell for future use. Once the New PowerShell is built, click the Save As button in the toolbar and enter a name for the script.

Power Script Name should be defaulted to `XXX_n` where `XXX_` PowerShell Prefix setup under the Environment variables and `n` is the next available number but the name could be changed by the user and save under PowerTester node.



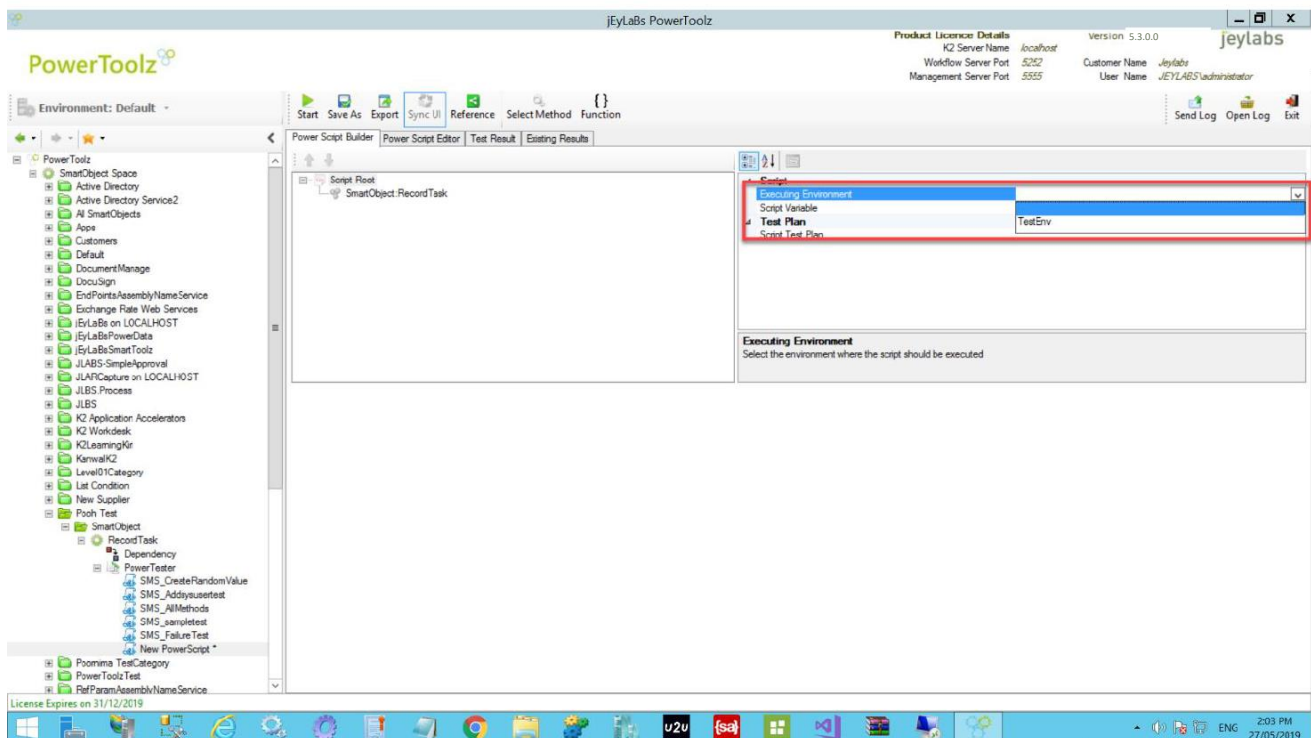
Edit a PowerScript

PowerToolz provides freehand PowerScript Editor to edit the PowerScript. This editor allows the user to edit the PowerScript in XML format. After editing the PowerScript, it could be saved as a new PowerScript or replace the existing PowerScripts. PowerToolz keeps the original PowerScript as older version and the modified PowerScript as the new version.



Cross Environment Script Execution

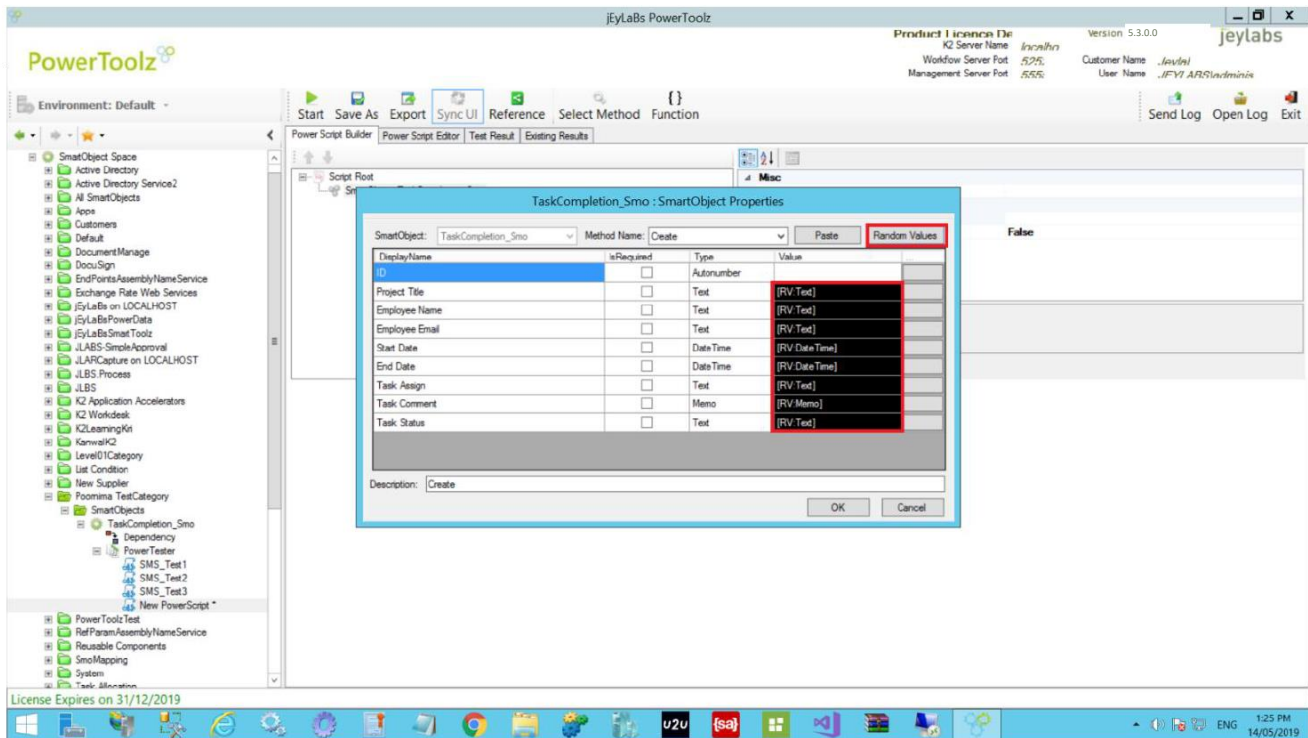
When multiple environments are connected to PowerToolz, the test script Executing Environment attribute can be set. A script could be created and executed against a given environment until the user is satisfied, and then executed against another environment to check for result consistency across K2 environments. For example, a script can be created and executed on the test K2 environment, and a simple change of the environment attribute can then be used to test the production environment. Select the script root and the Executing Environment attribute can be set from a dropdown list of connected environments.



Test Data Randomization

PowerToolz provides Data Randomization capabilities for K2 SmartObject, SmartForm and Workflow testing.

This can be used to inject random inputs into functions, Form and View controls, variables etc. The techniques for achieving data randomization can be found within the sub sections for SmartObject, SmartForm and workflow testing respectively.



This 'Random Values' option on the top right corner of the SmartObject Property box generate a random value for the the smartobjects matching each of its TypeProperty. For a smartobject that has type 'Text', RandomValue creates [RV:Text] stating the random data that will be entered is of type 'Text'.

View Test Script Results

There are multiple avenues available within PowerToolz to view individual test script results. When a test script is executed the live results will be displayed.

When multiple instances are executed, corresponding tabs can be selected. For example, multiple process instances could occur in a test script, each instance will be allocated a tab allowing the user to view the relevant test results. Test result summaries are also made available, giving a quick glance overview of testing results.

The screenshot shows the jEylabs PowerToolz application interface. The top menu bar includes options: Start, Save As, Save, Export, Sync UI, Reference, and Stop. The main area displays the 'Test Result' tab, which contains a table of test results. A red box highlights the '1 - Create' tab, and another red box highlights a row in the table with a tooltip that says 'Table Result. Double click to show the table.' Below the table, there is a detailed view of a specific test result for ID 43, showing project details, employee information, and task status.

Status	Result Time	Duration	Result Description
14/05/2019 1:51:24 PM	00:00:01.0640922	Executing method Create	
14/05/2019 1:51:24 PM	00:00:00.4691153	Table Result. Double click to show the table.	
14/05/2019 1:51:24 PM	00:00:00.5841334	Records returned: 1	
14/05/2019 1:51:24 PM	00:00:00.6981566	SmartObject Execution Completed	

ID	Project Title	Employee Name	Employee Email	Start Date	End Date	Task Assign	Task Comment	Task Status
43	SampleProject	JEYLABSAdmin	admin@jeylabs.c...	11/09/2000 12:0	12/09/2000 12:0	T1	task1	submitted

View Test Script Result Matrix

Result test matrix documents will be automatically created based on an executed test script. These can be accessed from the same panel that the test results and test summary are located.

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Version: 5.3.0.0, Customer Name: jeylabs, User Name: JEYLABSAdministrator

Status	Start Time	End Time	Duration	Description
Passed	16/05/2019 11:41:55 AM	16/05/2019 11:41:55 AM	00:00:00.4770368	RecordTask: SmartObject Executed
Passed	16/05/2019 11:41:56 AM	16/05/2019 11:41:56 AM	00:00:00.3510198	RecordTask: SmartObject Executed
Passed	16/05/2019 11:41:57 AM	16/05/2019 11:41:57 AM	00:00:00.3470196	RecordTask: SmartObject Executed

These documents can be exported to pdf, printed and emailed through PowerToolz via the toolbar found on the result matrix tab of the test result window.

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Version: 5.3.0.0, Customer Name: jeylabs, User Name: JEYLABSAdministrator

Test Result Matrix

Script Name : SMS_AllMethods
 Date Tested : 16/05/2019 11:41:55 AM
 Tested By : JEYLABS\Administrator
 K2 Server : localhost

Instance Summary

Folio/Name	Component	Status	Duration	Description
RecordTask (Create)	SmartObject	Complete	00:00:00:00	RecordTask SmartObject Executed
RecordTask (Delete)	SmartObject	Complete	00:00:00:00	RecordTask SmartObject Executed
RecordTask (GetList)	SmartObject	Complete	00:00:00:00	RecordTask SmartObject Executed

View Existing Test Results

There are multiple avenues in which results can be viewed retrospectively through PowerToolz.

Using the PowerTester, selecting a test script will display historical results on the bottom half of the PowerToolz interface.

The Test Result, Test Summary and Test Matrix tabs are available displaying the same data that can be found during a live test execution.

Historical test results can also be accessed through the PowerShell editor, via the Existing Results tab. The same information is available as what is presented by the Power Tester.

PowerToolz Product Licence Details: K2 Server Name: localhost, Version: 5.3.0.0, Customer Name: jeylabs, User Name: JEYLABSAdministrator

Environment: Default

Start Save As Save Export Sync UI Reference

PowerToolz

Generated At: 16/05/2019 11:41:59 AM, Generated By: JEYLABSAdministrator, Server: localhost, Instances: 3, Start Time: 11:41:55, End Time: 11:41:55, Duration: 00:00:02

Test Run By: JEYLABSAdministrator, K2 Server: localhost, SmartObject Name: RecordTask, PowerShell Name: SMS_AllMethods

Status	Result Time	Duration	Result Description
Success	16/05/2019 11:41:55 AM	00:00	Loading PowerShell...
Success	16/05/2019 11:41:55 AM	00:00:00.2243920	Please wait for test to start...
Success	16/05/2019 11:41:55 AM	00:00:00.4664044	Executing method Create
Success	16/05/2019 11:41:55 AM	00:00:00.6174132	Create
Success	16/05/2019 11:41:55 AM	00:00:00.7344196	Table Result: Double click to show the table.
Success	16/05/2019 11:41:55 AM	00:00:00.8364359	Records returned: 1
Success	16/05/2019 11:41:55 AM	00:00:00.9434412	SmartObject Execution Completed
Success	16/05/2019 11:41:56 AM	00:00:01.4684602	Executing method Delete
Success	16/05/2019 11:41:56 AM	00:00:00.5914763	Delete
Success	16/05/2019 11:41:56 AM	00:00:00.6034742	Table Result: Double click to show the table.
Success	16/05/2019 11:41:56 AM	00:00:00.7144733	Records returned: 1
Success	16/05/2019 11:41:56 AM	00:00:00.8184793	SmartObject Execution Completed
Success	16/05/2019 11:41:57 AM	00:00:01.4665243	Executing method GetList
Success	16/05/2019 11:41:57 AM	00:00:00.5895364	GetList
Success	16/05/2019 11:41:57 AM	00:00:00.6035400	Table Result: Double click to show the table.
Success	16/05/2019 11:41:57 AM	00:00:00.7105432	Records returned: 38
Success	16/05/2019 11:41:57 AM	00:00:00.8145507	SmartObject Execution Completed

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SmartObjects

Explore Smart Objects

This section will demonstrate the steps required to search and view SmartObjects.

1. Looking to the main menu on the left-hand side, click on SmartObjects Space Node which lists all the smart objects deployed for the environment selected.
2. Search for the smart objects containing the selective text entered on Search Tab on the right-hand corner. The following screen shots illustrate some examples searches. Clicking Refresh Tab will list all the Smart Objects.
3. Click on Categorize Tab to list the Smart Objects by K2 Category. Clicking Refresh Tab will list all the Smart Objects. These categories directly correlate to those listed in the K2 designer and SmartObject tester provided with K2.

The screenshot displays the PowerToolz application interface. On the left, a tree view shows the 'SmartObjects Space' selected under the 'Environment: Default' node. The main area shows a table of Smart Objects with columns: Name, GUID, Version, Created By, Created On, Category, and Methods. A red box highlights the 'Refresh', 'Categorize', 'Select All', 'Delete', 'Delete Category', and 'Report' buttons in the top toolbar. The bottom right shows a 'Selected SmartObject' summary for 'SmartObjects' with a count of 736.

Name	GUID	Version	Created By	Created On	Category	Methods
AD Group	b99ba4ea-40db-4b0a-95cb-d9e5b5ff5e02	0	K2SQL System	25/07/2016 11:50:10 AM	Active Directory	5
AD User	36fe5762-c551-4b33-bd74-7e0d91edf1b	0	K2SQL System	25/07/2016 11:50:10 AM	Active Directory	6
AD User	f14a52ce-6d8e-4c88-9246-cb0a864e806e	1	K2.JEYLABS administrator	28/07/2016 10:52:50 AM	Active Directory	6
Activity Data Audit	10949a09481f-4f3a-4db-ee5a7437b793	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Graph	1c0a939-abca-42b0-a169-e04172d5c554	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Instance	2c20139-af35-48c5-a3c4-1e3e551f4149	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Instance Audit	bbe933e-11e3-4242-82d5-0ab26c5a6a64	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Instance XML Audit	c6380798-69245ef-bc3f-33e-436c-22555	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Statistics	072537ef-5d46-411e-8869-21b87641d1e1	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Activity Statistics Graph	f4225a29-094c-4115-bebc-3094ef8fcb	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
com.K2.System SmartForms UIRewriter Floutes	600544f6-abe5-4533-9a0b-9e1d6b7a033c	0	K2SQL System	8/02/2019 6:54:00 AM	All SmartObjects	5
Event Instance	800a7ac6-ad72-443c-9e41-9fad2c01b2f	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Interval Graph	123bc7d1-32cc-44df-a48c-59ed8916a21f	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
K2 Generic Settings Personal Setting	79f8e75-9032-402b-b521-483de744ac8	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	5
K2 Generic Settings Shared Setting	ab528847-ad01-4526-92c1-12023c703e68	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	5
Process Activities	c12af105-9296-4189-881b-28f933d1e95	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Activity Instances	7822078b-bd87-4f64-bafe-a6c5ae583ec7	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Data	6ef3e87-9a85-49ed-8eb5-07b9e318619	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Information	b05b008a-0522-4ced-8236-07000360cd10	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Instance	b065621d-4140-434c-ba19-45d1e53c4e74b	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Instance Audit	dcf2ad39-e7a7-43ce-8141-0928353af38	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Instance XML Audit	ebfdcf63-2959-4048-a12b-8f52a258f90	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Sets	550dc5fd-9e00-4754-8dd8-f548d9f61fa	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Statistics	491637d1-21cf-4850-b460-97074f30e435	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Statistics Graph	ad5e9f95-1d59-4330-aa93-b0dad5515de9	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
Process Version Count	d07bf02f-9cdd-46ce-8eb3-e4a27ff13aff	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
ProcessPerformanceDayOnDay	1e6a94aa-3cdd-453c-ad05-c04c3e195b8	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
ProcessPerformanceDayOnDayActivity	2e10c4d5-24c4-45d5-859f-aa0e20020b65	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1
ProcessPerformanceDayOnDayActivity	c40eaf78-1f42-411e-93ae-752d28407231	0	K2SQL System	25/07/2016 11:50:10 AM	All SmartObjects	1

Selected SmartObject

Category	GUID	Name
SmartObjects		Number of SmartObjects

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- Double click a SmartObject to view SmartBox's data and SmartObject details.

The screenshot shows the PowerToolz application interface. On the left, a tree view lists various SmartObjects, with 'RecordTask' under 'Pooch Test' highlighted. The main window displays a table of 'RecordTask' data. The table has columns: ID, Project_Name, Employee_Name, Employee_Email, Task, Start_Date, End_Date, and Task_Status. The data includes several rows for 'TestsProject' and 'ImpPjt' tasks.

ID	Project_Name	Employee_Name	Employee_Email	Task	Start_Date	End_Date	Task_Status
40	TestsProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Approved
39	TestsProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Submitted
38	TestsProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Approved
36	TestsProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Approved
35	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
34	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
33	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
32	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
31	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
30	TestsProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Submitted

- Click on the Object Details tab to view the SmartObject definition in XML format.

The screenshot shows the PowerToolz application interface with the 'RecordTask' SmartObject selected. The 'Object Details' tab is active, displaying the SmartObject definition in XML format. The XML defines the 'RecordTask' SmartObject with various properties and methods.

```

<smartobjectroot name="RecordTask" guid="e3a794db-fbd0-4b11-ae76-1af107d3730" version="0" isextendible="False" >
  <metadatas>
    <display>
      <displayname>
        RecordTask
      </displayname>
    </display>
    <description>
      The key used to identify a specific record.
    </description>
  </metadatas>
  <service>
    <key name="serviceinstance">
      e5609413-d844-4325-98c3-d830acbd406d
    </key>
    <key name="serviceobject">
      RecordTask
    </key>
  </service>
  </metadatas>
  <types>
    <type name="user" />
  </types>
  <properties>
    <property name="ID" type="autonumber" unique="true" system="false">
      <metadatas>
        <display>
          ID
        </display>
        <description>
          The key used to identify a specific record.
        </description>
      </metadatas>
    </property>
    <key name="uniqueid">
      </key>
    </key>
    <key name="autonumber">
      </key>
    </key>
  </properties>
</smartobjectroot>
  
```

View a Smart Object's Dependencies

This section will demonstrate the steps required to investigate a SmartObject's dependencies.

1. From the SmartObject space as mentioned in the previous section a SmartObject can be selected.
2. Once a SmartObject has been selected, the SmartObject will be cascaded in the main PowerToolz menu on the left-hand side.
3. The dependency menu item can be selected. From this screen the SmartObject's associations with SmartForms, Views and K2 workflows can be investigated

The screenshot shows the PowerToolz application interface. The left sidebar contains a tree view of the application structure. The 'SmartObject' menu item is selected, and the 'Dependency' sub-item is highlighted. The main panel displays a table of dependencies for the 'RecordTask' SmartObject.

Name	Id	Type	Dependencies	Version	Created By	Created On	Modified By	Modified On
RecordTask	b8d2571-7516-4d37-9058-c40617eb1b4d	View	1	2	K2:JEYLABSIA...	15/05/2019 9:5...	K2:JEYLABSIA...	16/05/2019 8:4...
RecordTask Form	c6830668-24c7-417a-804-9c132d615d83	SmartForm	4	2	K2:JEYLABSIA...	15/05/2019 9:5...	K2:JEYLABSIA...	15/05/2019 11...
RecordTask	b8d2571-7516-4d37-9058-c40617eb1b4d	View	1	2	K2:JEYLABSIA...	15/05/2019 9:5...	K2:JEYLABSIA...	16/05/2019 8:4...
RecordTask List view	24b5e274-376d-40e7-8d64-e211f3abf63e	View	1	1	K2:JEYLABSIA...	15/05/2019 9:5...	K2:JEYLABSIA...	15/05/2019 10...
Workflow/RecordTask	00000000-0000-0000-0000-000000000000	Process	0	0				
Workflow/RecordTask1	00000000-0000-0000-0000-000000000000	Process	0	0				
RecordTask List view	24b5e274-376d-40e7-8d64-e211f3abf63e	View	1	1	K2:JEYLABSIA...	15/05/2019 9:5...	K2:JEYLABSIA...	15/05/2019 10...

Test a Smart Object

This section outlines the steps required to create, execute and manage test scripts for SmartObjects. From the SmartObject PowerTester test scripts can be created and executed to monitor the SmartObjects methods such as Create, Load, GetList, Delete etc.

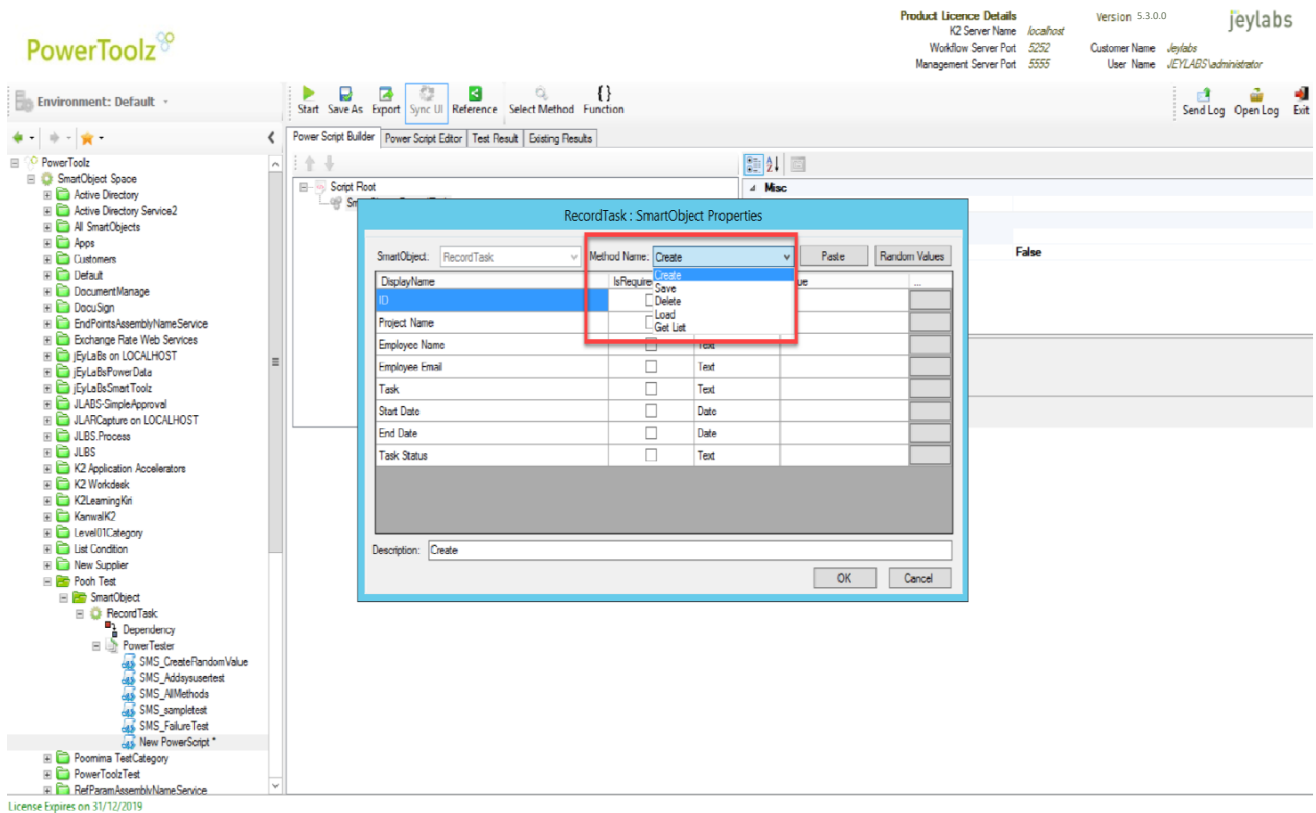
1. To access a SmartObject's PowerTester double click on a SmartObject in the SmartObject Space as mentioned above. Alternatively, expand the SmartForm Space node on the Main Menu and select the desired SmartObject with categories displayed folders that can also be expanded.
2. Once the PowerTester has been opened, click New Script to create a PowerScript to populate the data into a smart object.

The screenshot shows the PowerToolz application interface. On the left, the 'SmartObject Space' is expanded, showing a list of SmartObjects. The 'PowerTester' window is open, displaying a table of PowerScripts. The 'New Script' button is highlighted in the top toolbar. The 'Existing Results' and 'Test Result' tabs are visible at the bottom of the PowerTester window.

PowerScript Name	PowerScript ID	Object Version	Created On	Created By	Shared	TTA Enabled
SMS_CreateRandomValue	PS-250488	0	15/05/2019	administrator	False	False
SMS_AddDaysuorcast	PS-250489	0	15/05/2019	administrator	False	False
SMS_AIMethods	PS-250490	0	15/05/2019	administrator	False	False
SMS_sampletest	PS-250491	0	15/05/2019	administrator	False	False
SMS_FailureTest	PS-250492	0	15/05/2019	administrator	False	False

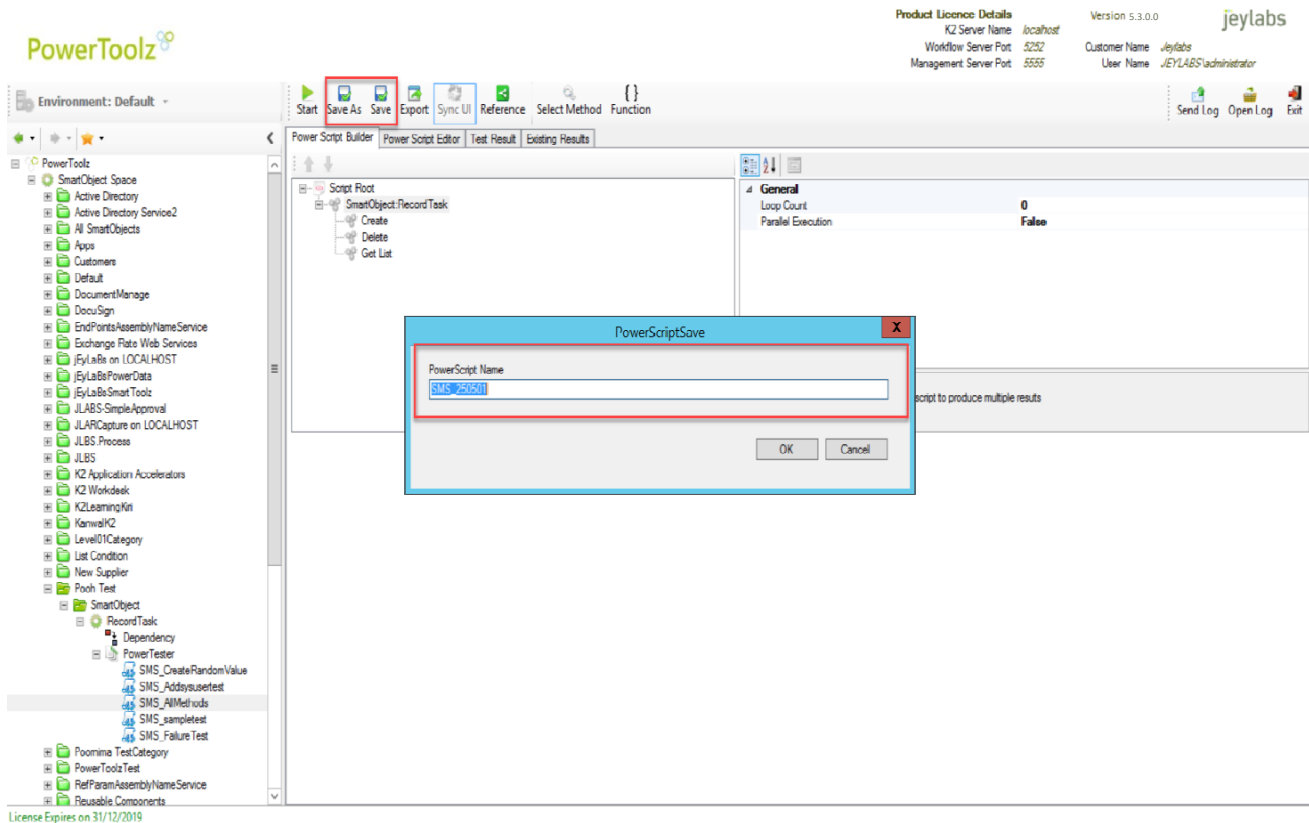
Generated At	Generated By	Server	Instances	Start Time	End Time	Duration
15/05/2019 11:1...	JETLABS\admin...	localhost	1	11:17:4...	11:17:4...	00:00:01

3. Click New Script to create a PowerScript with a selective method (Create, Save, Delete, Load and Get List).
4. Expand SmoMethod and select the required MethodName from the dropdown list. The available methods to test are the methods that are associated with the given SmartObject.

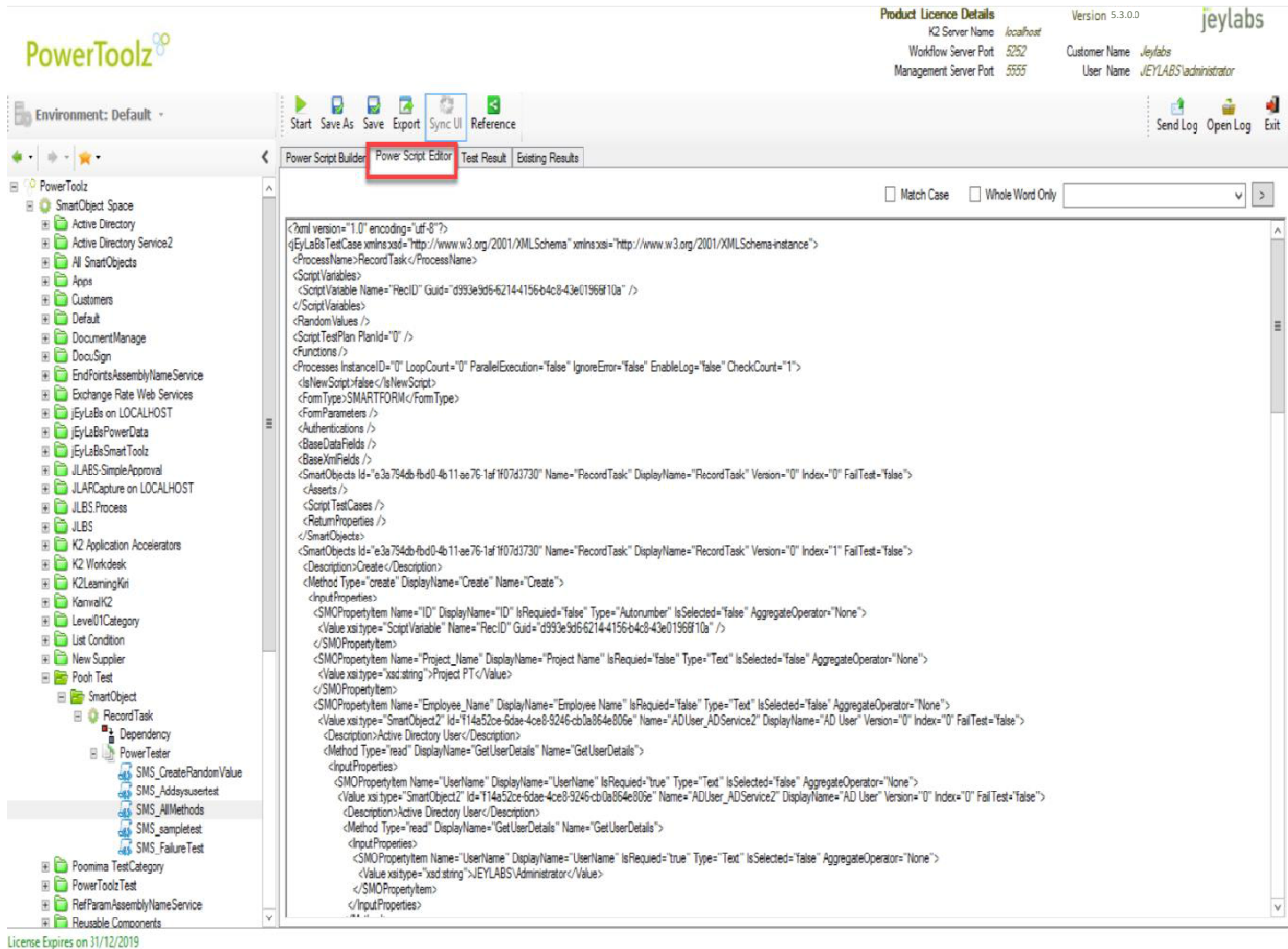


License Expires on 31/12/2019

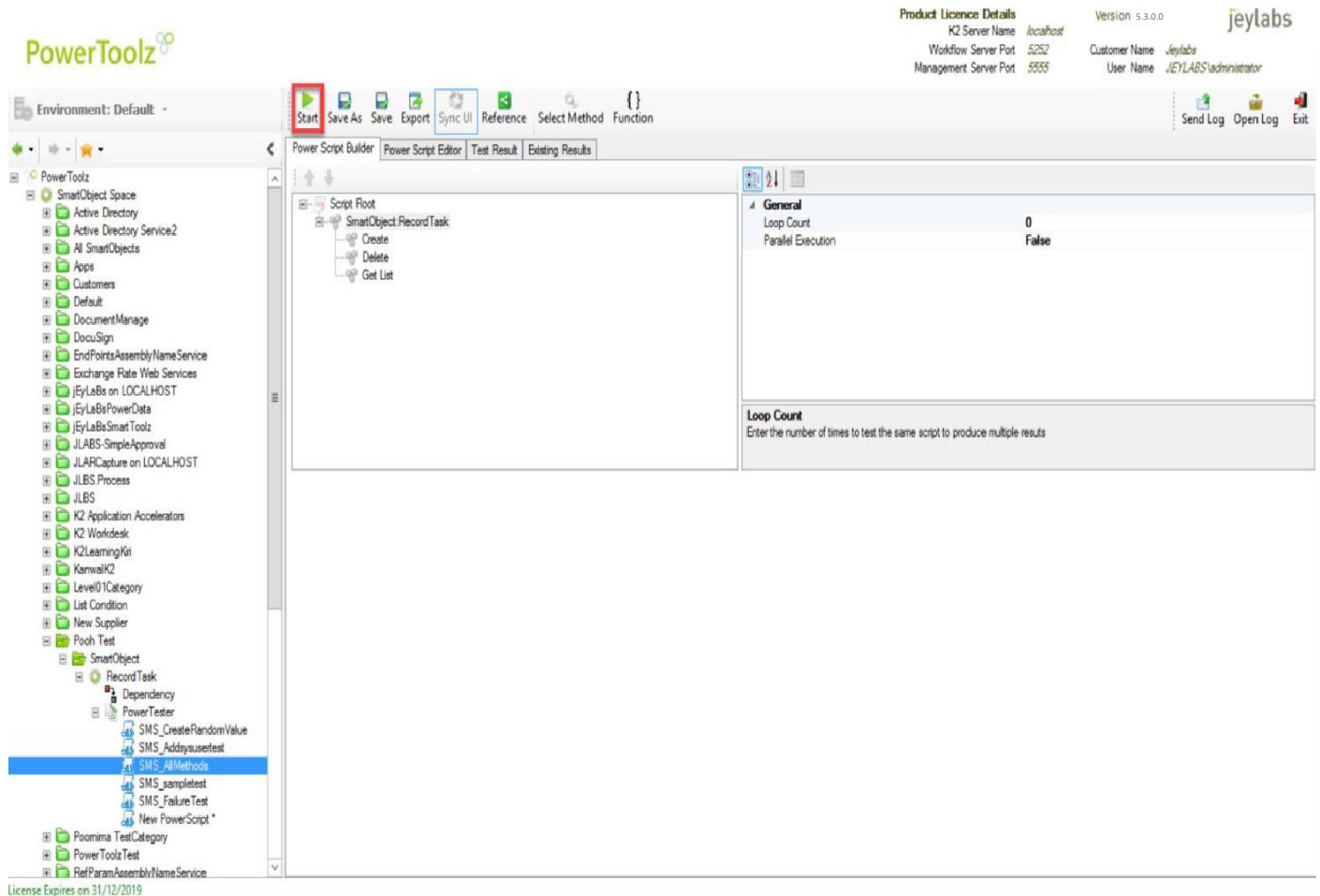
5. Select the relevant method and enter relevant data to be populated into the SmartObject when the PowerShell is executed. For example, when using the load method enter the ID of the SmartObject to be loaded.
6. To save the PowerShell click on Save button to save the PowerShell by entering a relevant name then pressing the OK button. This will allow for this test scripts results to be stored, failing to do so will result in PowerToolz only displaying the current test results without storing the data.



- To edit the PowerShell in XML format the PowerShell editor can be used, found as a tab within the PowerTester.



- Click **Start** to Run a PowerScript and view the Test results.



- Double Click on Table Result Double Click to show the Table. It will display the record being added by the PowerShell.

PowerToolz

Environment: Default

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Version 5.3.0.0, Customer Name: jeylabs, User Name: JEYLABS\Administrator

Test Result

Status	Result Time	Duration	Result Description
Success	16/05/2019 11:41:57 AM	00:00:01.4665243	Executing method GetList
Table Result	16/05/2019 11:41:57 AM	00:00:00.6035400	Table Result. Double click to show the table.
Success	16/05/2019 11:41:57 AM	00:00:00.7105432	Records returned: 38
Success	16/05/2019 11:41:57 AM	00:00:00.8145507	SmartObject Execution Completed

License Expires on 31/12/2019

- Existing results can be viewed by selecting the Existing Results tab. This will display a list of all tests that have been executed with this PowerShell and their results.

PowerToolz

Environment: Default

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Version 5.3.0.0, Customer Name: jeylabs, User Name: JEYLABS\Administrator

Existing Results

Generated At	Generated By	Server	Instances	Start Time	End Time	Duration
16/05/2019 11:41:59 AM	JEYLABS\Administrator	localhost	3	11:41:5...	11:41:5...	00:00:02
16/05/2019 9:20:01 AM	JEYLABS\Administrator	localhost	3	9:19:56...	9:19:59...	00:00:03
15/05/2019 11:30:10 AM	JEYLABS\Administrator	localhost	3	11:30:0...	11:30:0...	00:00:02

Test Run By: JEYLABS\Administrator

K2 Server: localhost

SmartObject Name: RecordTask

PowerScript Name: SMS_AllMethods

Status	Result Time	Duration	Result Description
Success	16/05/2019 11:41:55 AM	00:00	Loading PowerShell...
Success	16/05/2019 11:41:55 AM	00:00:00.2243920	Please wait for test to start...
Success	16/05/2019 11:41:55 AM	00:00:00.4664044	Executing method Create
Success	16/05/2019 11:41:55 AM	00:00:00.6174132	Create
Table Result	16/05/2019 11:41:55 AM	00:00:00.7344196	Table Result. Double click to show the table.
Success	16/05/2019 11:41:55 AM	00:00:00.8364359	Records returned: 1
Success	16/05/2019 11:41:55 AM	00:00:00.9434412	SmartObject Execution Completed
Success	16/05/2019 11:41:56 AM	00:00:01.4684602	Executing method Delete
Success	16/05/2019 11:41:56 AM	00:00:00.5914763	Delete
Table Result	16/05/2019 11:41:56 AM	00:00:00.6034742	Table Result. Double click to show the table.
Success	16/05/2019 11:41:56 AM	00:00:00.7144733	Records returned: 1
Success	16/05/2019 11:41:56 AM	00:00:00.8184793	SmartObject Execution Completed
Success	16/05/2019 11:41:57 AM	00:00:01.4665243	Executing method GetList
Success	16/05/2019 11:41:57 AM	00:00:00.5895364	GetList
Table Result	16/05/2019 11:41:57 AM	00:00:00.6035400	Table Result. Double click to show the table.
Success	16/05/2019 11:41:57 AM	00:00:00.7105432	Records returned: 38
Success	16/05/2019 11:41:57 AM	00:00:00.8145507	SmartObject Execution Completed

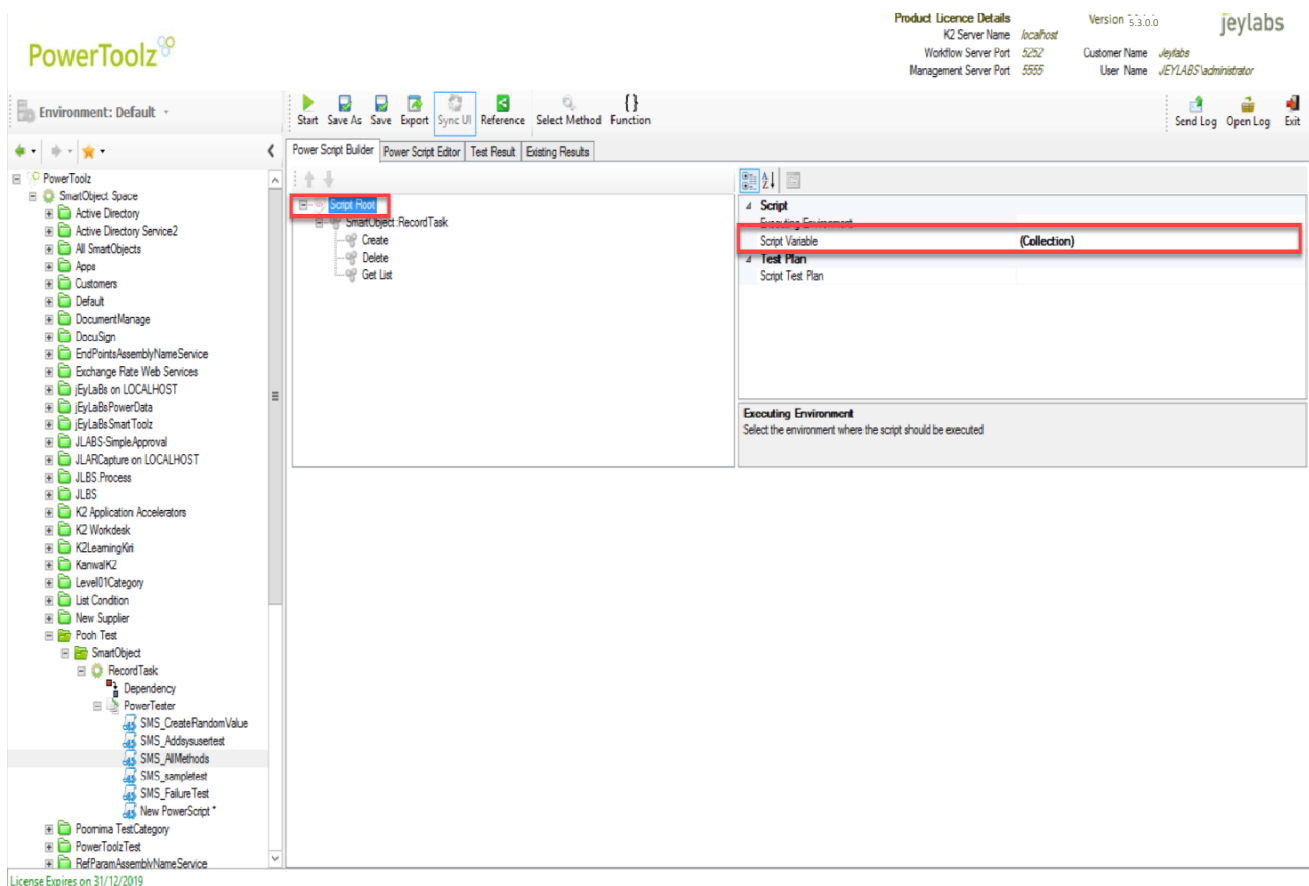
License Expires on 31/12/2019

Using Test Script Variables

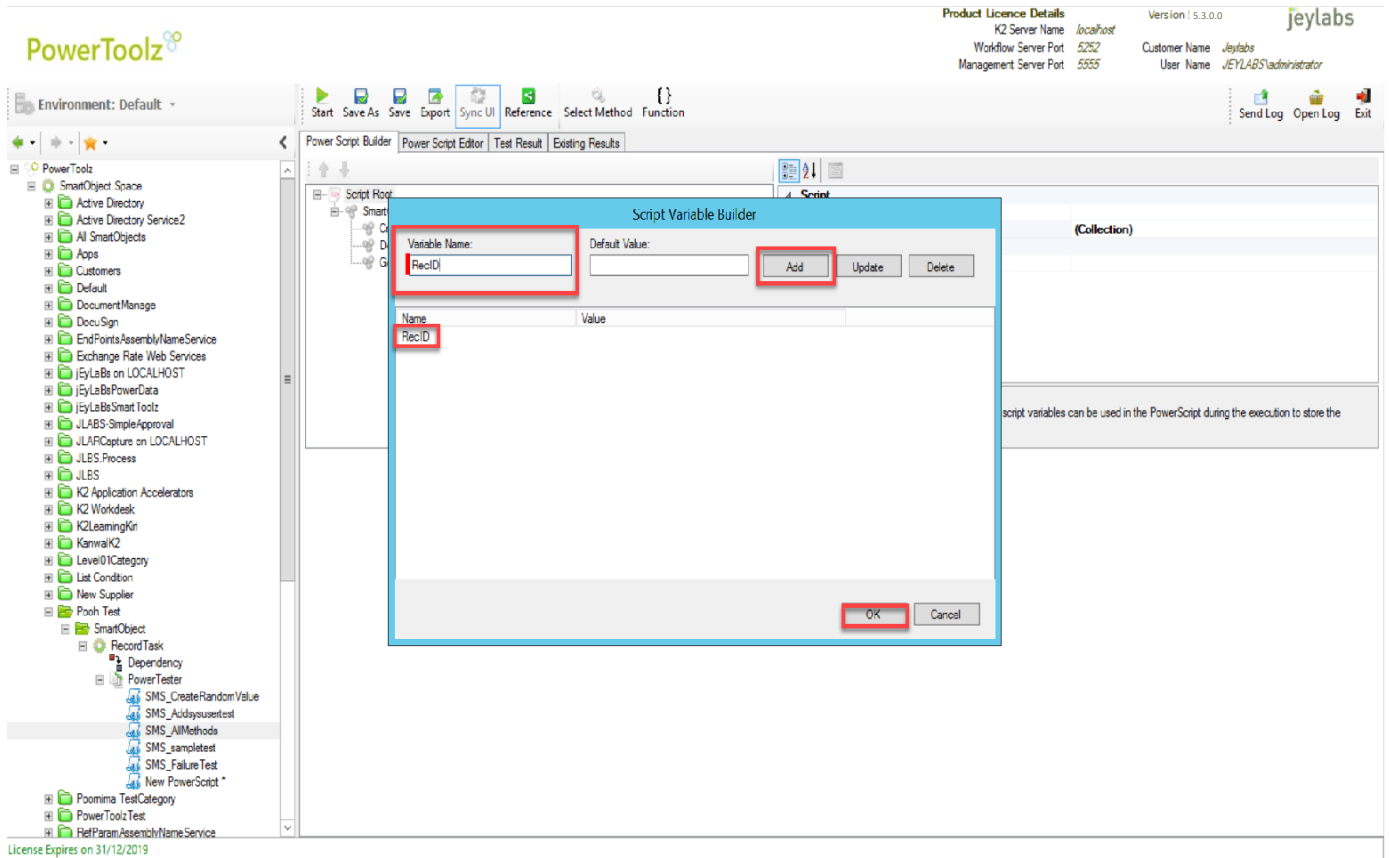
Variables can be used as part of the SmartObject testing process, allowing for the capture of SmartObject output data. A common example of this feature in use is the capture of a SmartObject ID value, which can then be used throughout the test script. For example, the Create method could be tested with the returned ID field captured using a test script variable. This script could then be used to test the Load, Update, GetList and Delete methods. This contributes to the self-clean functionality of PowerToolz, as the use of the delete method will remove the test data automatically, ensuring the K2 environment is not bloated with evidence of testing.

Adding a variable to a test script

1. Using the test script editor, clicking on the script root node will allow the user to view test script variables, by selecting the drop down arrow on the right hand side.

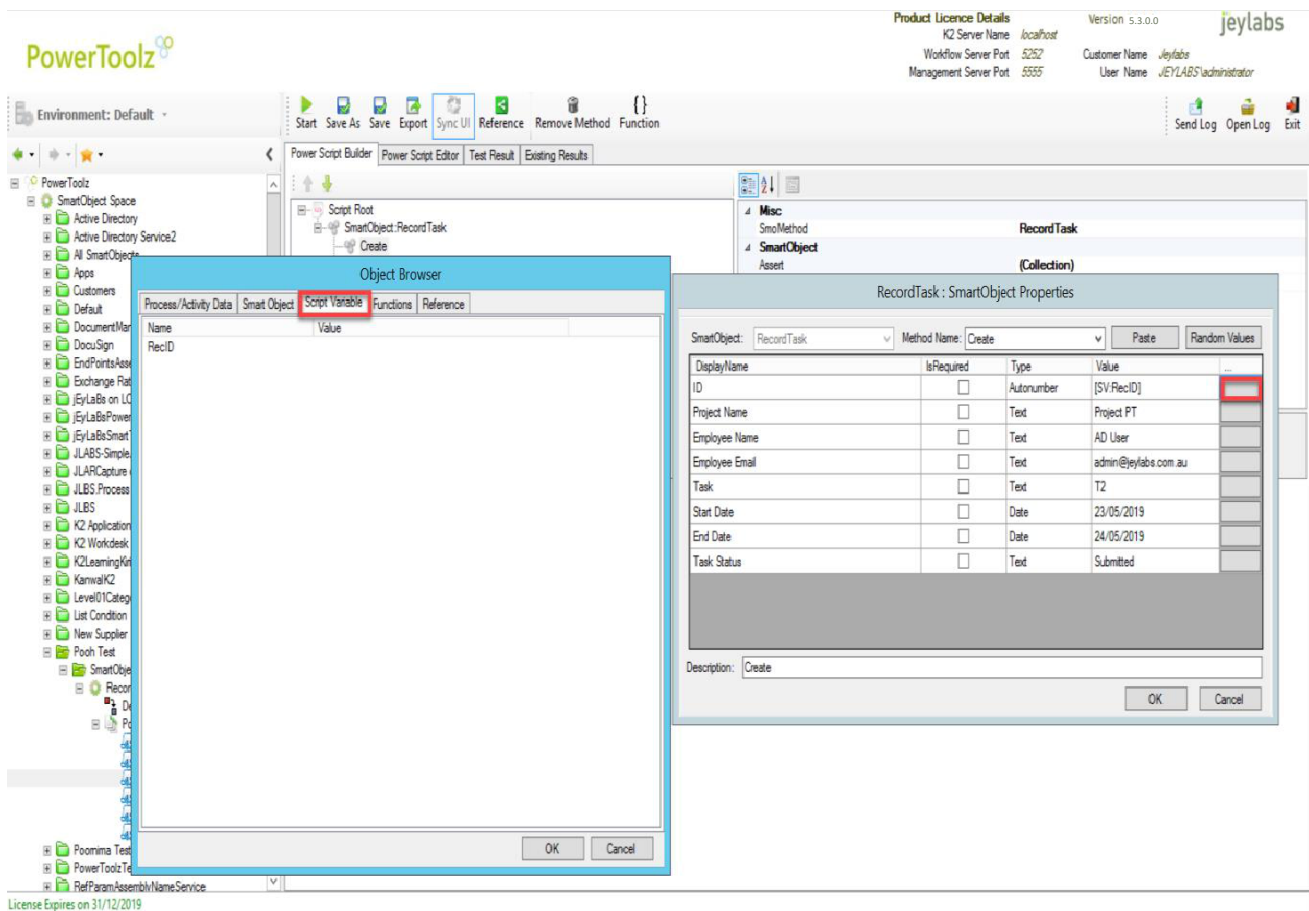


- The script variable builder window will appear. From here script variables can be added, modified and deleted. A default value can also be set from this window.



Using a test script variable

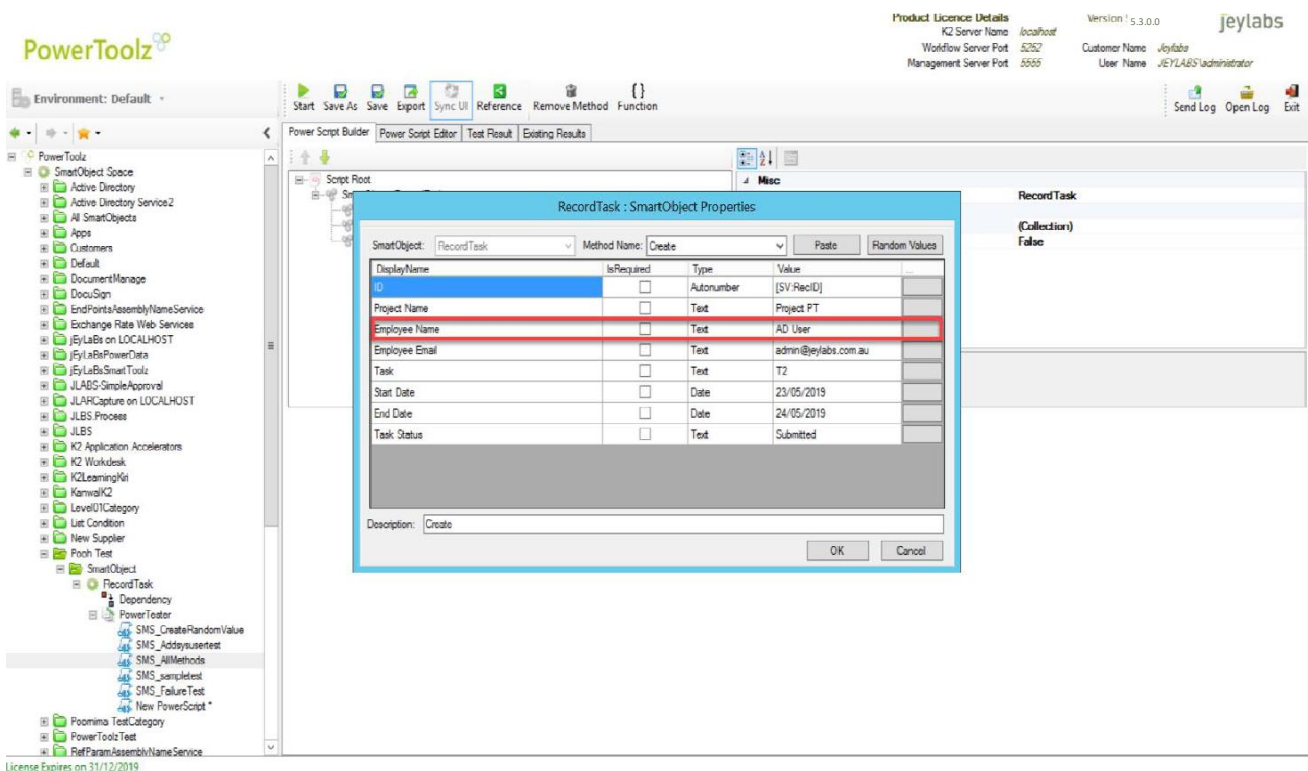
1. Once a variable has been created it can be used throughout the test script, whether it be the updating of the variable's value, or the passing of data to SmartObject methods using said value. An example has been provided below, demonstrating the use of a script variable to capture a SmartObject ID value.
2. The returned SmartObject ID value has been stored in the SmartObjectID variable that was created. This variable can now be passed to other SmartObject methods, such as the load method, to test the SmartObject that was just created.



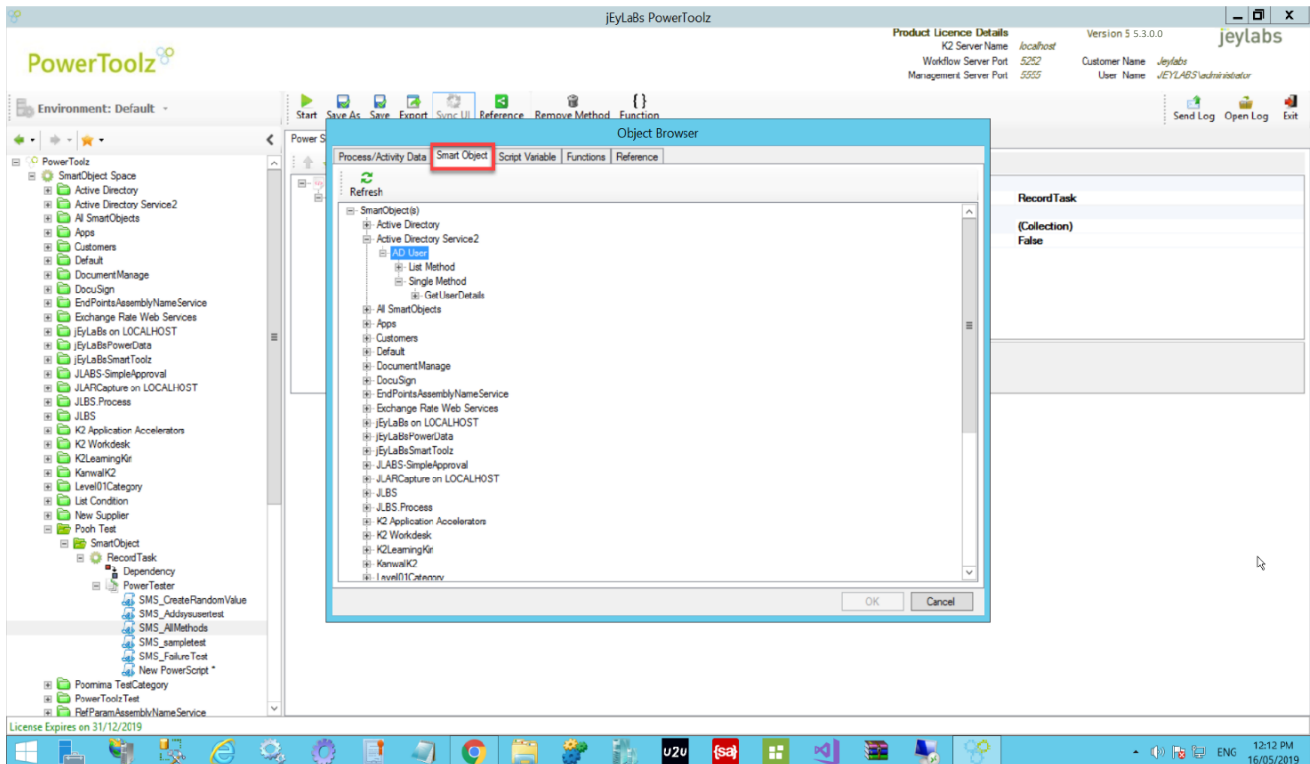
Retrieve Information from Chained SmartObjects

A common example of this is the use of the AD User SmartObject to retrieve the Display Name of the current user, which is then used to create another SmartObject such as a Leave Request.

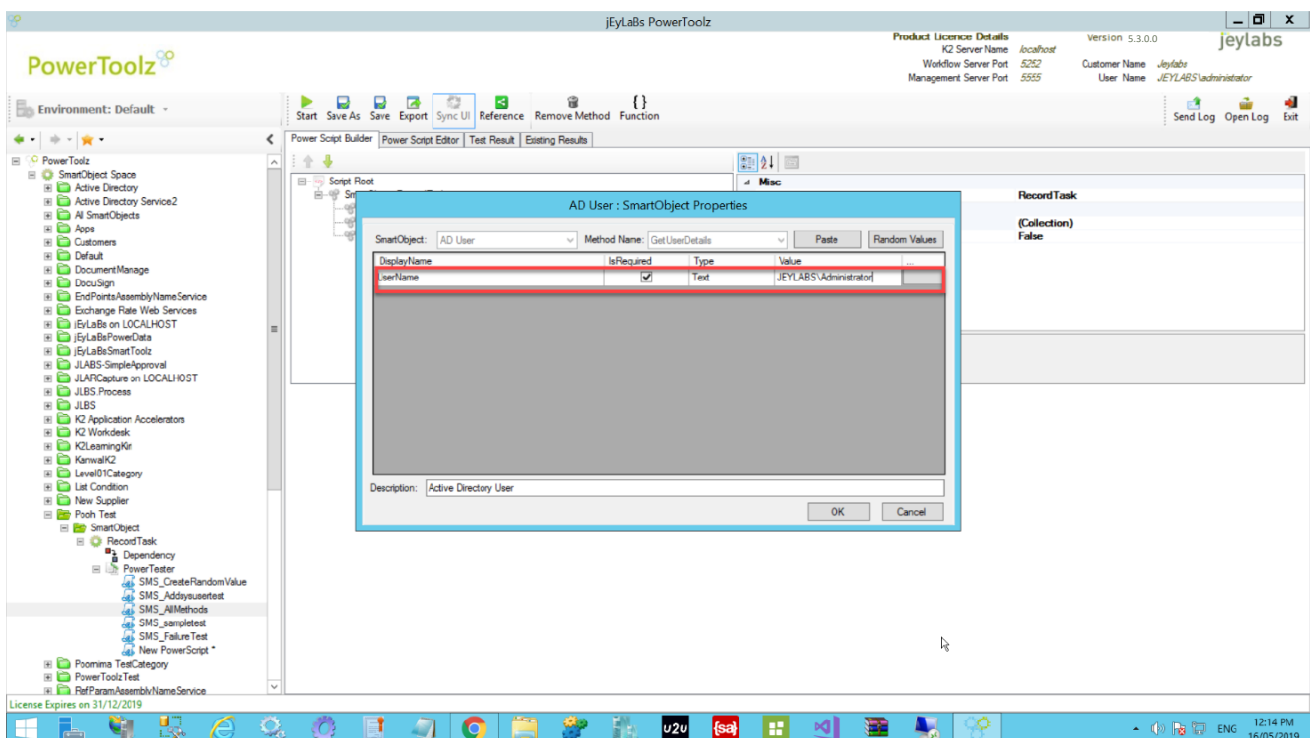
1. Data can be entered for field as part of the execution of a SmartObject method within a PowerScript. Alternatively, another piece of data can be used, such as the result of the execution of a different SmartObject method (SmartObject chaining). This can be achieved by clicking on the grey button to the right of the input value box as shown below.



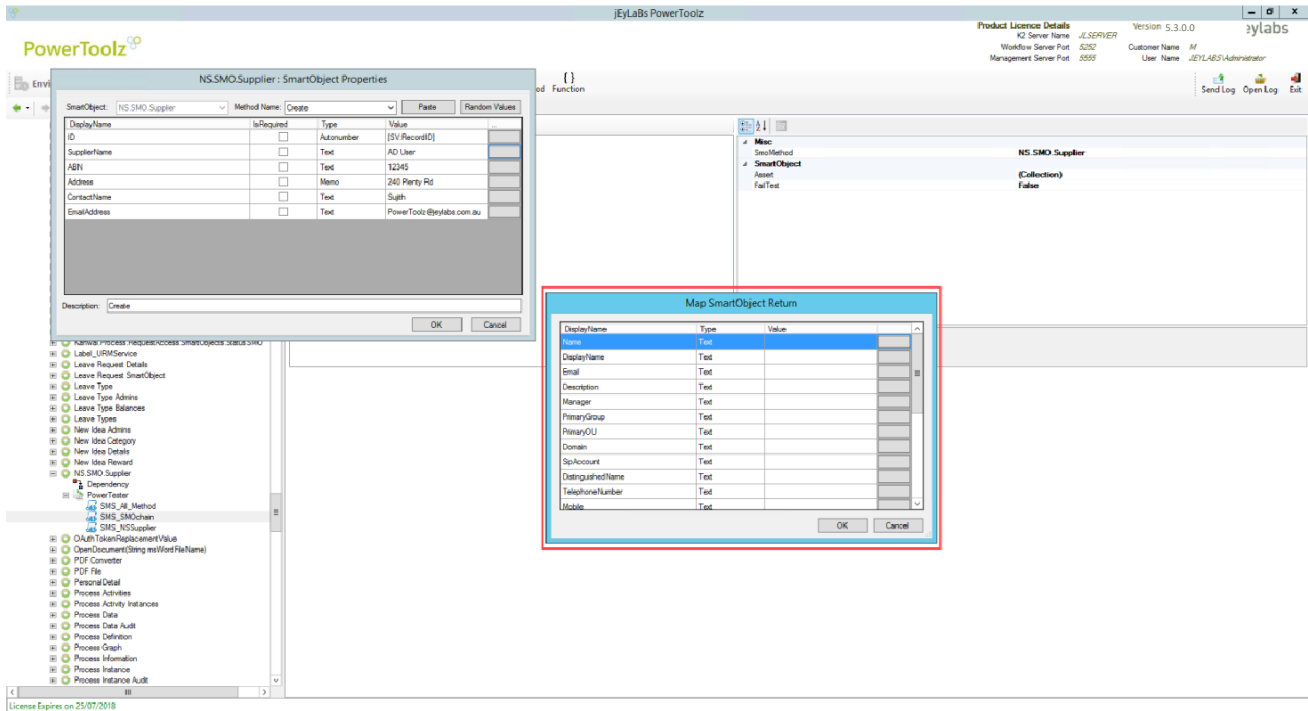
2. A window will appear from which the desired SmartObject method to retrieve data from can be selected, such as the load method which can be seen below.



3. Enter the Input Value to retrieve from the chained smart object and click OK.



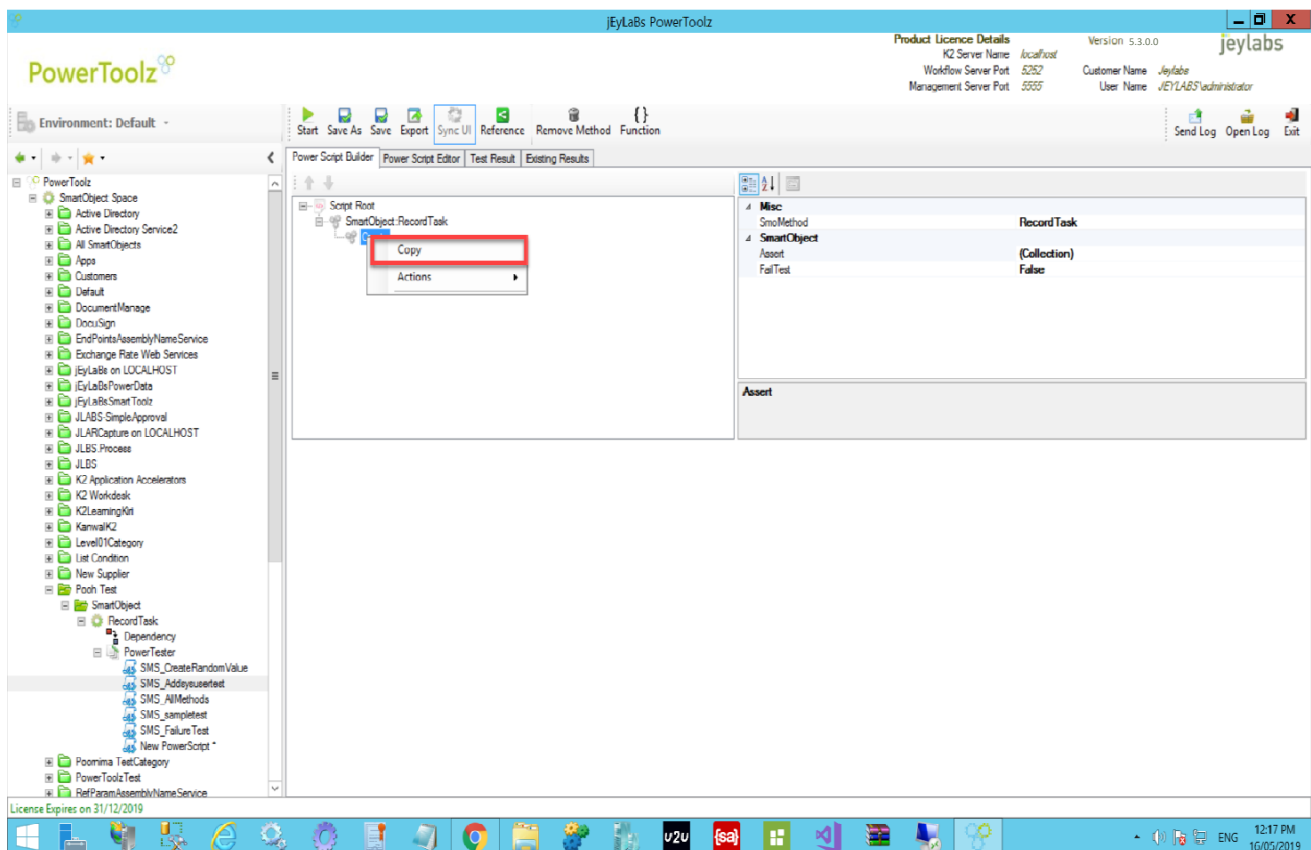
4. Select the Output field from the chained smart object and click OK. Save the PowerScript Start Test and view the result.



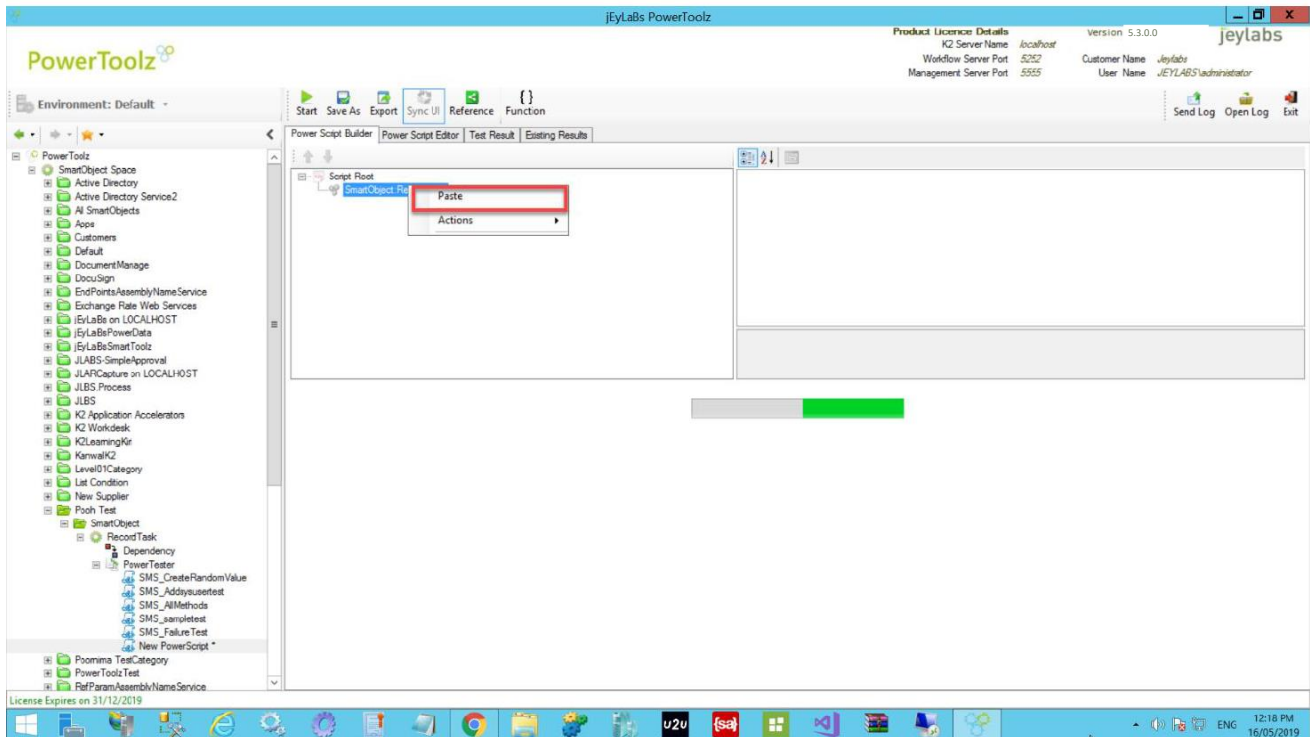
SMO Copy Method Feature

This section outlines the steps required to copy and paste methods within a test script. This saves time as opposed to starting from scratch each time.

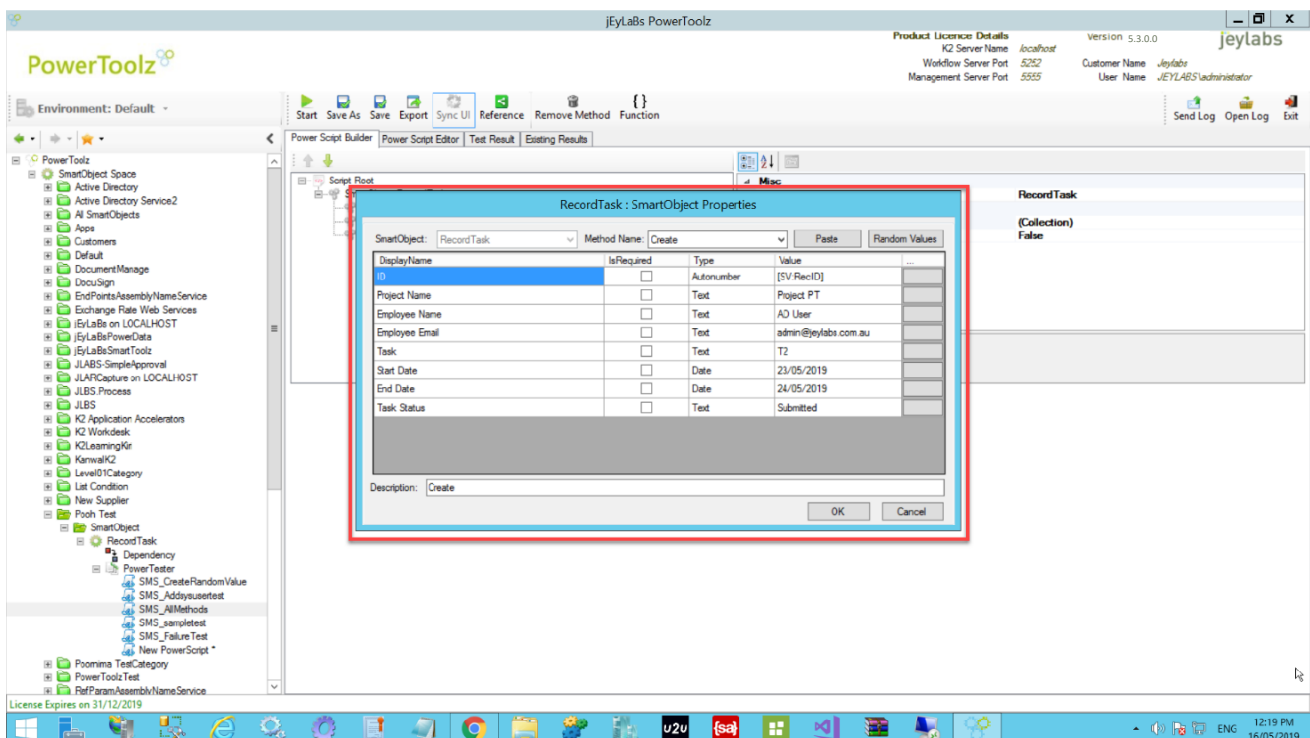
1. Copy a SMO method from an existing PowerShell script which created a record in the selected SMO.
2. Right click on the desired method to re-use and select the Copy option.



3. Create a New PowerShell with the copied SMO method. Right click on the SmartObject Course nonde and select the Paste option for the method.



4. From here modify the methods properties to suit requirements.



5. Click on Save button to save the PowerShell by entering a relevant name then pressing the **OK button**.
6. Click Start to **Run** the PowerShell and review the result.

Note: SMO Copy feature allows to copy the SMO methods in a new PowerShell and also copy the existing data and change the values and save as a new record in a SMO.

Redirect SMO Service to SQL Service

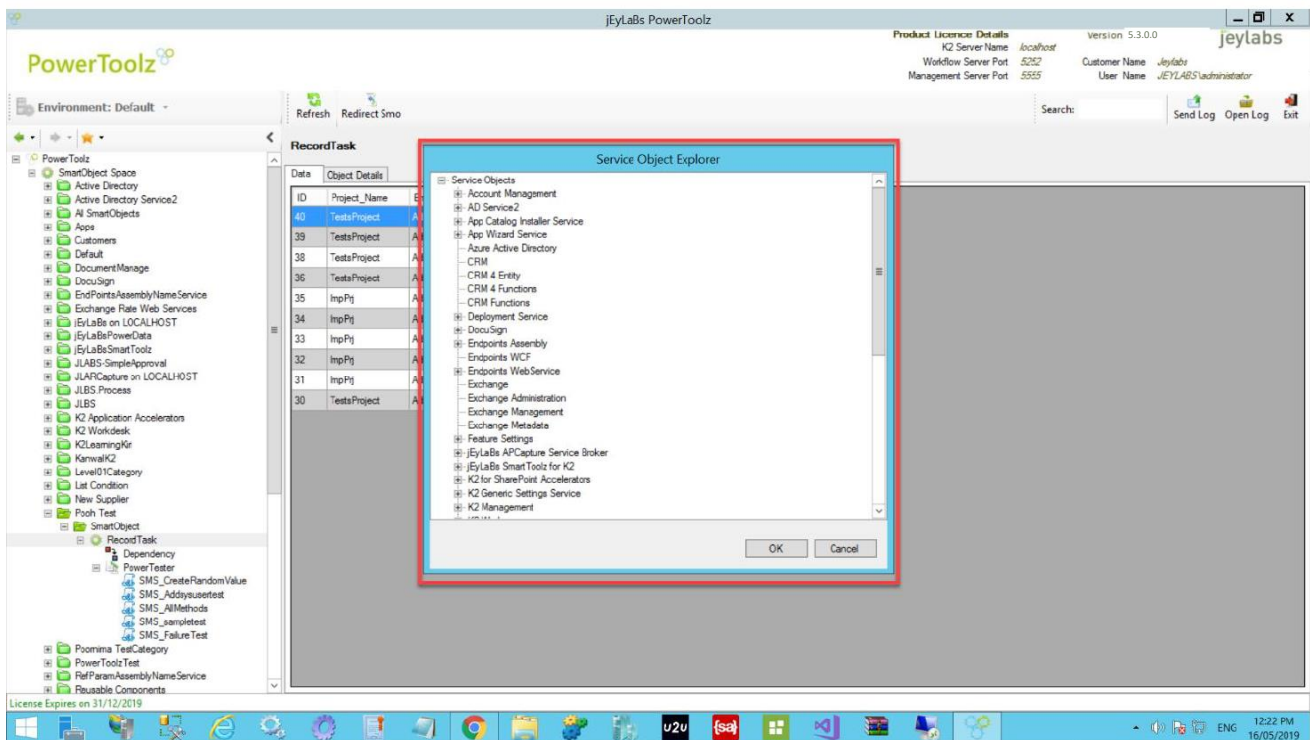
PowerToolz provides the ability to redirect SmartObject Service to SQL Server Service which means data from SQL Server can be directly imported into SmartBox SmartObject and vice versa. It is useful when the required database is not accessible, so creating the similar fields into SmartBox SmartObject helps to import data with few clicks.

1. Select the SmartObject for which you want to import data and press Redirect Smo to select the SQL Server Service.

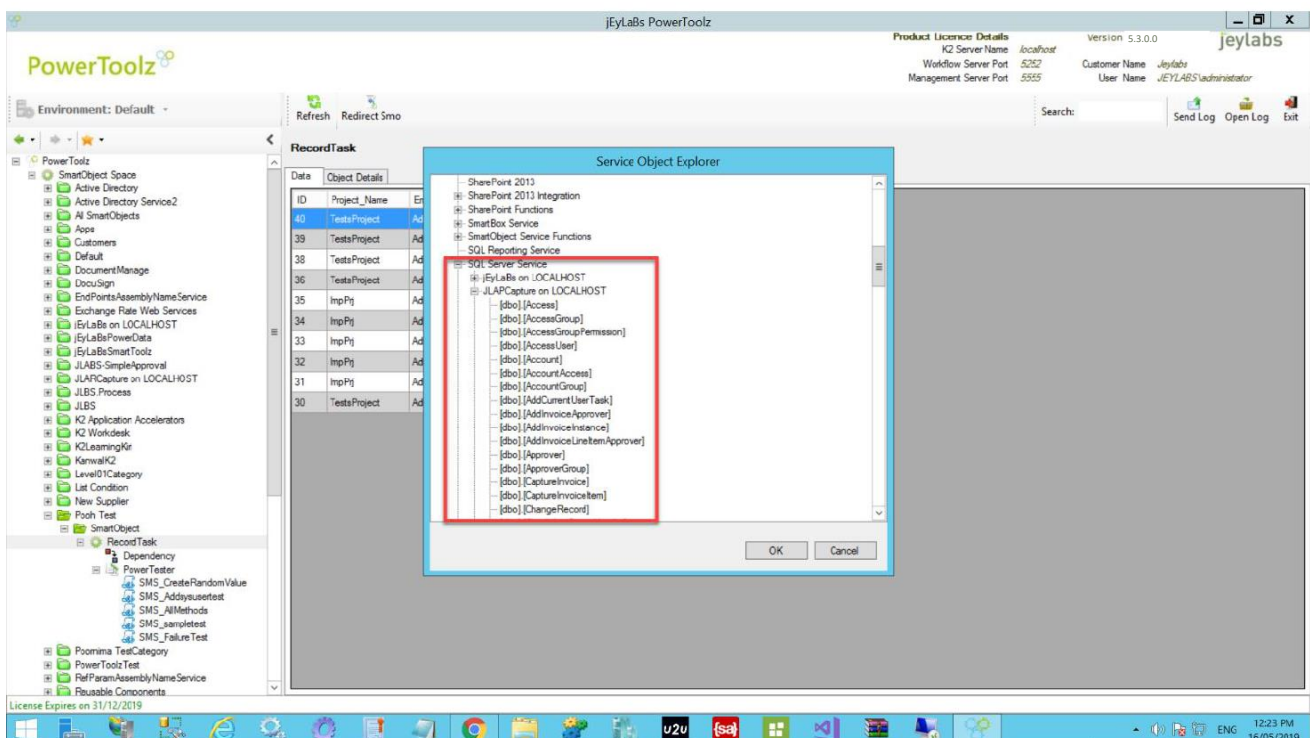
The screenshot shows the jEYLaBs PowerToolz application. The 'Redirect Smo' button is highlighted with a red box. The main window displays a table of task records.

ID	Project_Name	Employee_Name	Employee_Email	Task	Start_Date	End_Date	Task_Status
40	TestProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Approved
39	TestProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Submitted
38	TestProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Approved
36	TestProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Approved
35	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
34	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
33	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
32	ImpPjt	Administrator	Administrator@jeylabs.com				Submitted
31	ImpPjt	Administrator	Administrator@jeylabs.com	T1			Submitted
30	TestProject	Administrator	Administrator@jeylabs.com	T2	6/03/2019	6/04/2019	Submitted

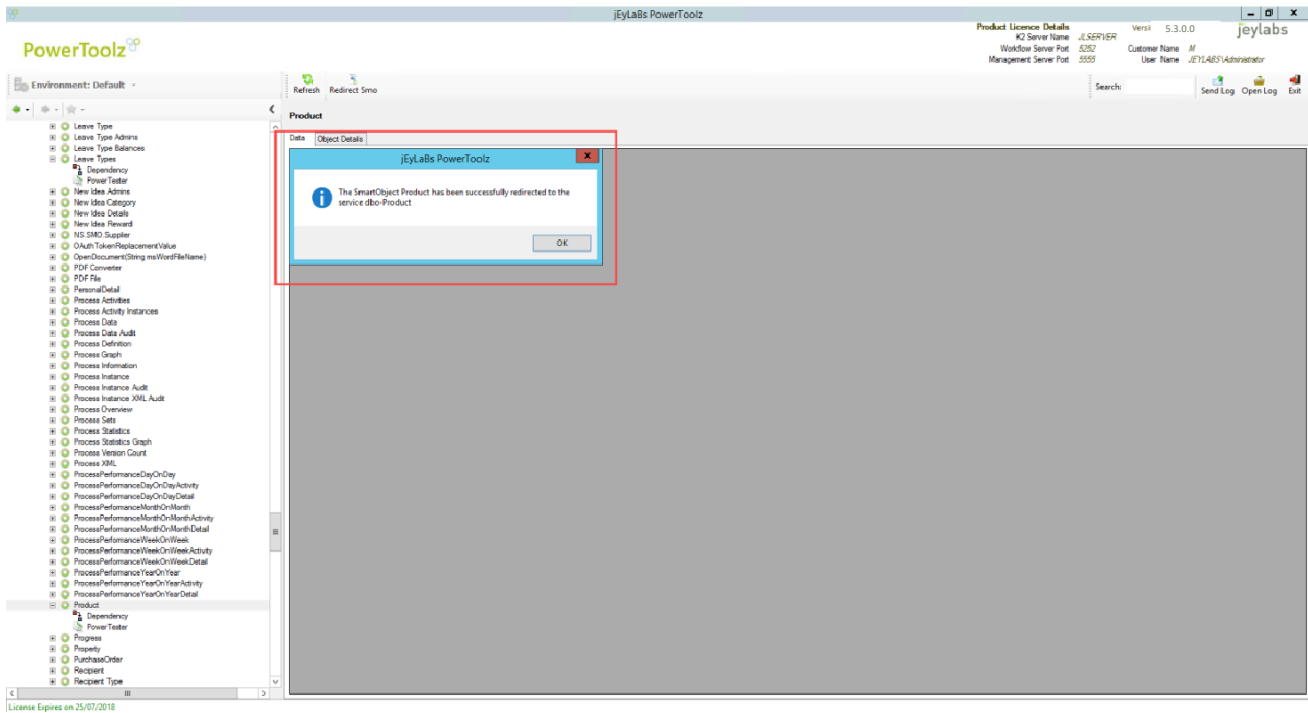
2. Select Service Objects and select the SQL Server Service under which SQL Service Instance is created.



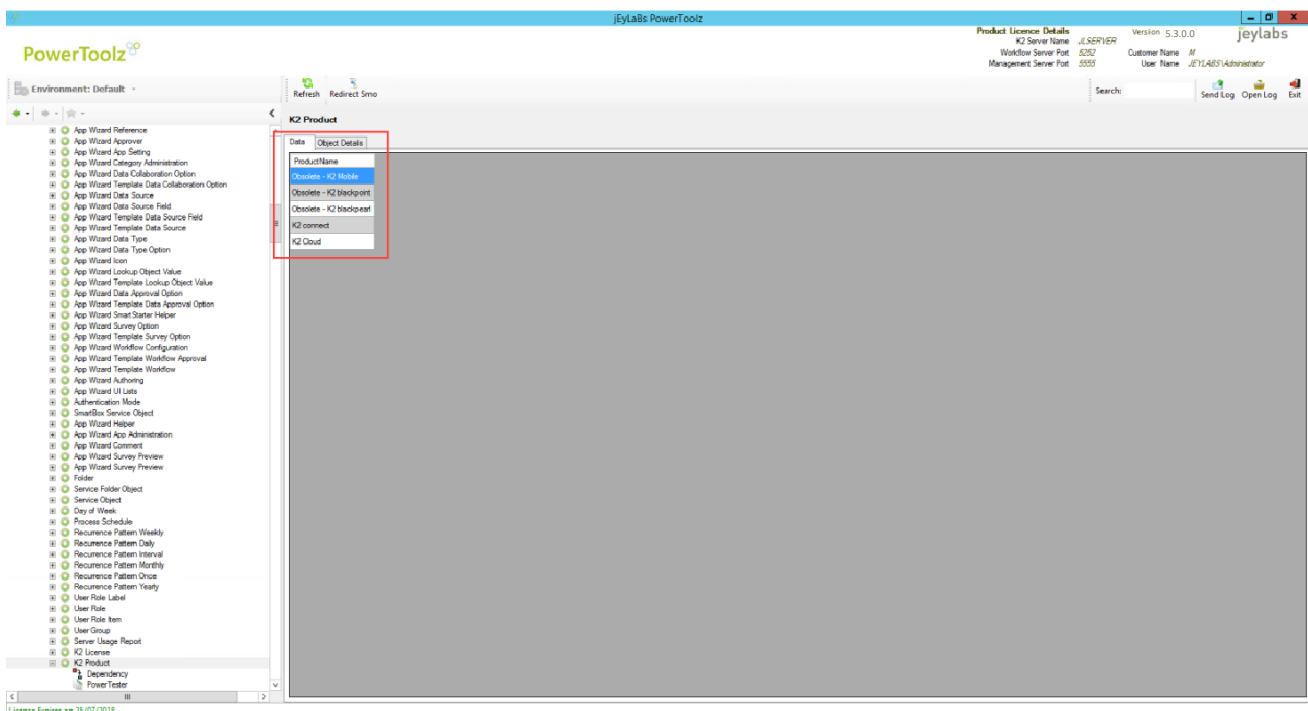
3. Select the table from SQL Service Instance to import data into SmartBox SmartObject.



- Press Ok and Click the Refresh Button on the top menu bar to view the imported data from SQL.



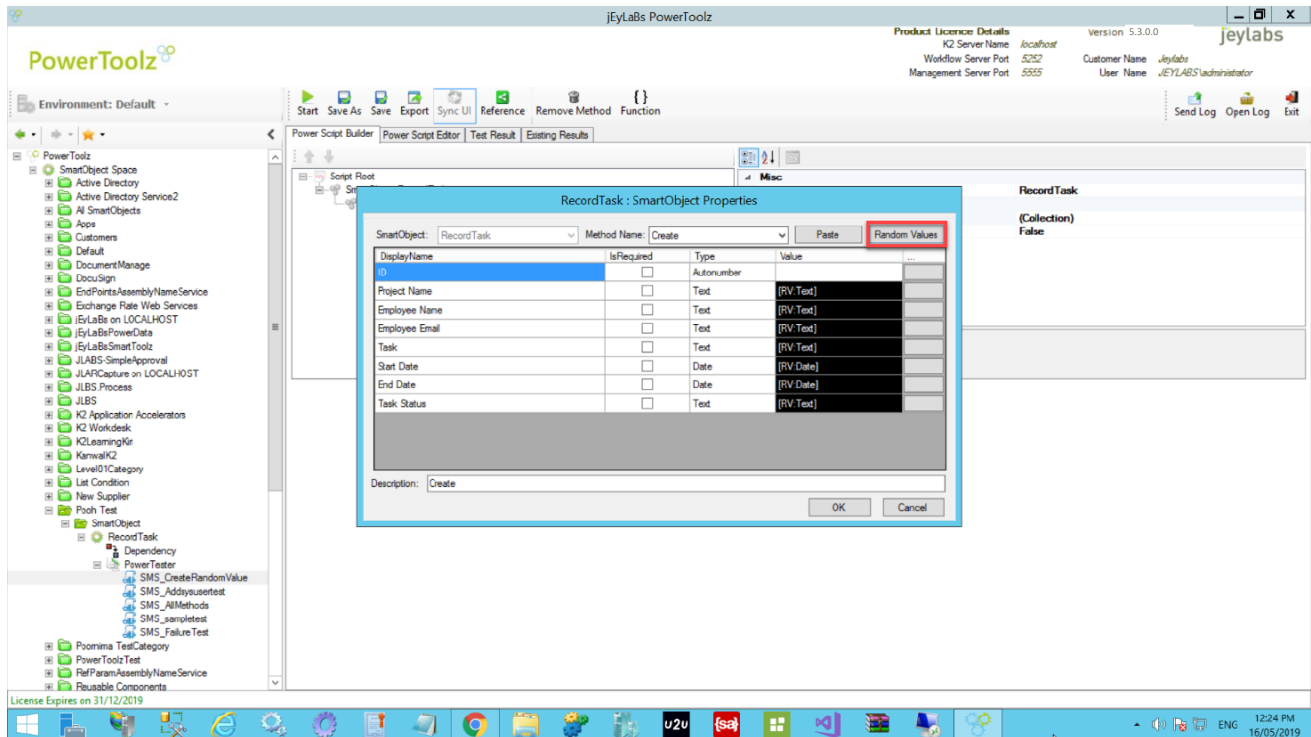
- The data imported from SQL Server can be confirmed as expected.



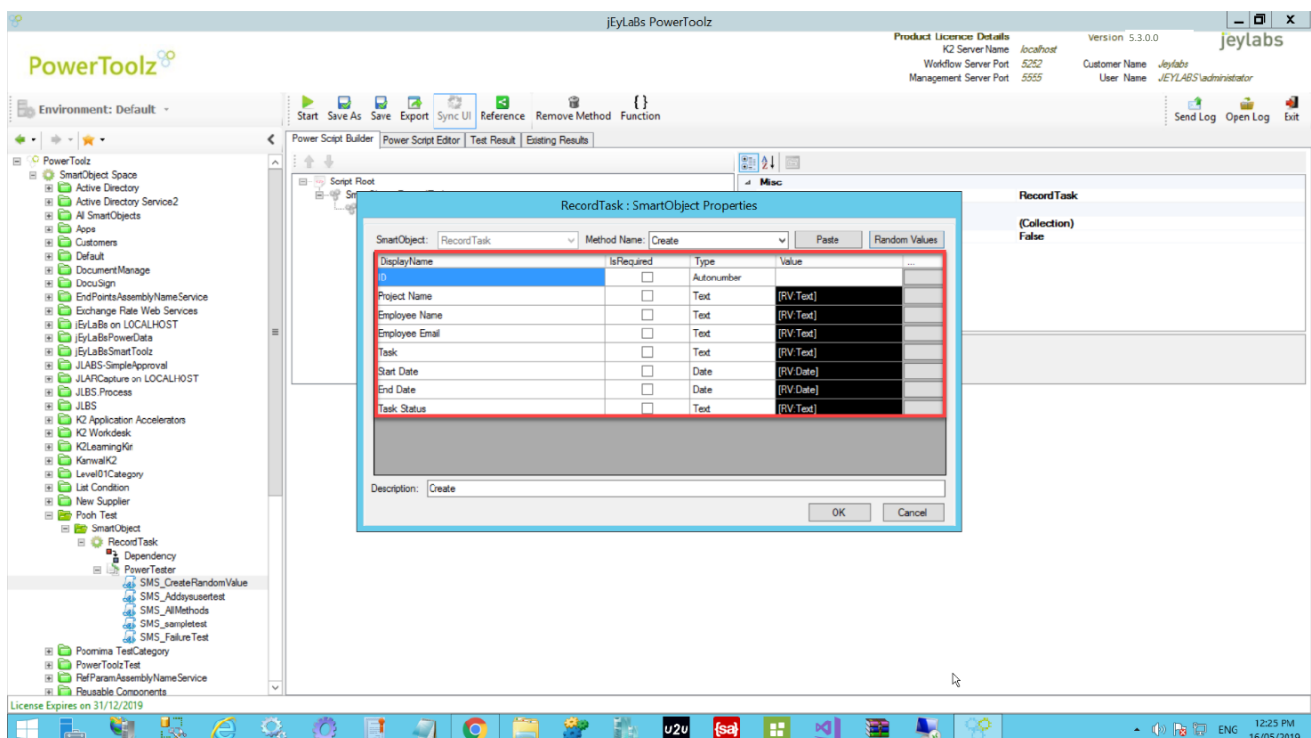
Note: You need to have same name and number of fields to import data from SQL to SmartBox SMO.

Data Randomisation

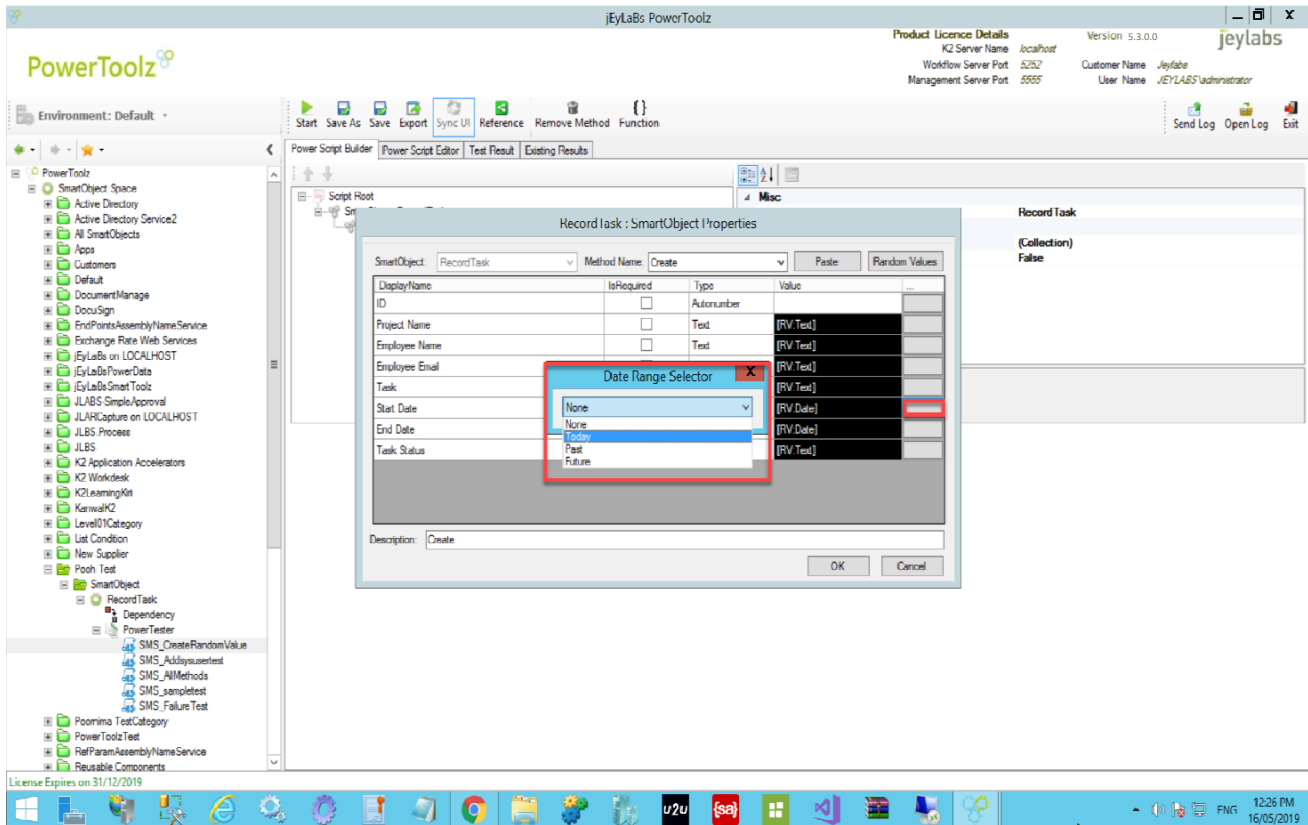
1. When creating SmartObject tests, input data can be randomized using the *Random Values* button.



2. Random values will then be set by PowerToolz into the data inputs.



- Random date values can be further refined. Press the *button to the right of the value* to open the *date range selector*. Select the relevant value from the drop down list.



Smart Forms and Views

Explore Smart Forms and Views

1. Expand 'SmartForms Space' node in the main menu tree. All the Smart Forms and Views deployed for the environment selected should be listed under the 'SmartForms Space' node. Green icons represent Smart Forms with blue representing Views.

The screenshot displays the jeylabs PowerToolz application. The left-hand menu tree has the 'SmartForms Space' node expanded, highlighted with a red box. The main window shows a table of deployed Smart Forms and Views. The table has columns for Name, Description, Created By, Created On, Modified By, Modified On, Version, Check, and Checked Out By. The forms and views listed include 'Approval form', 'Approval2 form', 'Form Submit', 'Leave Request View', 'Leave Request Item View', 'Leave Request2 View', 'Manager Approval', 'Moisture Level Form', 'Moisture Level View', 'Picture List', 'Picture Upload', 'Pump Water form', 'Pump Water View', 'Submit2 form', 'Test1', 'Test2', 'Test3', 'Test3 Details', 'TreeControl', 'TreeControl1', 'TreeDetails', 'TreeItemWithToolBar', 'Water Pump Form', and 'Water Pump List View'. The bottom status bar indicates the license expires on 31/12/2019 and shows the system clock at 17:27 PM on 16/05/2019.

Name	Description	Created By	Created On	Modified By	Modified On	Version	Check	Checked Out By
Approval form		K2 JEYLABS\S Ranjit	21/10/2016 11:03:34 AM	K2 JEYLABS\S Ranjit	26/10/2016 9:58:31 AM	9	No	
Approval2 form		K2 JEYLABS\S Ranjit	21/10/2016 4:02:35 PM	K2 JEYLABS\S Ranjit	26/10/2016 12:06:58 PM	11	No	
Form Submit		K2 JEYLABS\S Ranjit	21/10/2016 11:00:48 AM	K2 JEYLABS\S Ranjit	26/10/2016 10:04:36 AM	7	No	
Leave Request View		K2 JEYLABS\S Ranjit	21/10/2016 10:42:05 AM	K2 JEYLABS\S Ranjit	26/10/2016 10:11:02 AM	6	No	
Leave Request Item View		K2 JEYLABS\S Ranjit	21/10/2016 3:42:39 PM	K2 JEYLABS\S Ranjit	21/10/2016 3:43:48 PM	1	No	
Leave Request2 View		K2 JEYLABS\S Ranjit	21/10/2016 3:53:01 PM	K2 JEYLABS\S Ranjit	28/10/2016 10:21:37 AM	2	No	
Manager Approval		K2 JEYLABS\S Ranjit	21/10/2016 3:18:10 PM	K2 JEYLABS\S Ranjit	26/10/2016 10:11:05 AM	3	No	
Moisture Level Form		K2 JEYLABS\S Ranjit	21/10/2016 3:26:05 PM	K2 JEYLABS\S Ranjit	21/10/2016 3:26:09 PM	1	No	
Moisture Level View		K2 JEYLABS\S Ranjit	21/10/2016 10:57:50 AM	K2 JEYLABS\S Ranjit	21/10/2016 12:26:55 PM	3	No	
Picture List		K2 JEYLABS\S Ranjit	26/10/2016 11:22:33 AM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:54 AM	8	No	
Picture Upload		K2 JEYLABS\S Ranjit	26/10/2016 11:09:44 AM	K2 JEYLABS\S Ranjit	26/10/2016 11:09:52 AM	1	No	
Pump Water form		System	25/07/2016 3:09:35 PM	K2SQL System	8/02/2019 6:54:30 AM	18	No	
Pump Water View		System	25/07/2016 3:09:34 PM	K2SQL System	8/02/2019 6:54:30 AM	18	No	
Submit2 form		K2 JEYLABS\S Ranjit	26/10/2016 2:55:59 PM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:54 AM	4	No	
Test1		K2 JEYLABS\S Administrator	6/02/2017 2:25:18 PM	K2 JEYLABS\S Administrator	3/07/2017 11:15:35 AM	4	Yes	K2 JEYLABS\S Administrator
Test2		K2 JEYLABS\S Administrator	6/02/2017 2:26:03 PM	K2 JEYLABS\S Administrator	3/07/2017 11:14:29 AM	5	No	
Test3		K2 JEYLABS\S Administrator	6/02/2017 2:26:58 PM	K2 JEYLABS\S Administrator	3/07/2017 11:14:29 AM	2	No	
Test3 Details		K2 JEYLABS\S Administrator	6/02/2017 5:02:30 PM	K2 JEYLABS\S Administrator	7/02/2017 12:05:48 PM	2	No	
TreeControl		K2 JEYLABS\S Administrator	3/07/2017 11:12:46 AM	K2 JEYLABS\S Administrator	5/07/2017 11:07:31 AM	3	Yes	K2 JEYLABS\S Administrator
TreeControl1		K2 JEYLABS\S Administrator	16/01/2017 10:44:46 AM	K2 JEYLABS\S Administrator	25/01/2017 9:37:09 AM	3	No	
TreeDetails		K2 JEYLABS\S Administrator	16/01/2017 10:40:16 AM	K2 JEYLABS\S Administrator	16/01/2017 5:27:12 PM	1	No	
TreeItemWithToolBar		K2 JEYLABS\S Administrator	16/01/2017 10:55:20 AM	K2 JEYLABS\S Administrator	16/01/2017 5:27:12 PM	1	No	
Water Pump Form		K2 JEYLABS\S Administrator	16/01/2017 10:41:19 AM	K2 JEYLABS\S Administrator	16/01/2017 5:27:12 PM	1	No	
Water Pump List View		K2 JEYLABS\S Administrator	25/01/2017 9:35:59 AM	K2 JEYLABS\S Administrator	25/01/2017 9:36:13 AM	1	No	
		K2 JEYLABS\S Ranjit	26/10/2016 11:17:57 AM	K2 JEYLABS\S Ranjit	26/10/2016 1:03:10 PM	4	No	
		K2 JEYLABS\S Ranjit	26/10/2016 10:58:26 AM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:04 AM	2	No	

- The user can search for the smart Forms containing the selective text entered on Search Tab on the right-hand corner. The following screen shots illustrate some examples searches. Clicking Refresh Tab will list all the Smart Forms.

The screenshot displays the jeylabs PowerToolz application window. The title bar reads "jeylabs PowerToolz". The interface includes a sidebar on the left with a tree view showing categories like "PowerToolz", "SmartObject Space", "Process Space", "My WorkList", "Management WorkList", "Test Space", "Project Space", "Test Scheduler", "Test Planner", "Test Reporter", "Environment Comparison", "Process Management", and "Log Viewer". The main area features a table with columns: Name, Description, Created By, Created On, Modified By, Modified On, Version, Check..., and Checked Out By. A search bar is located in the top right corner, highlighted with a red box. Below the table, there is a section for "Number of Views" showing "902" and a "Selected Form or View" section with fields for Category, GUID, and Name. The bottom status bar indicates "License Expires on 31/12/2019".

Name	Description	Created By	Created On	Modified By	Modified On	Version	Check...	Checked Out By
Approval form		K2 JEYLABS'S Ranjit	21/10/2016 11:03:34 AM	K2 JEYLABS'S Ranjit	26/10/2016 9:58:31 AM	9	No	
Approval2 form		K2 JEYLABS'S Ranjit	21/10/2016 4:02:35 PM	K2 JEYLABS'S Ranjit	26/10/2016 12:06:58 PM	11	No	
Form Submit		K2 JEYLABS'S Ranjit	21/10/2016 11:00:48 AM	K2 JEYLABS'S Ranjit	26/10/2016 10:04:36 AM	7	No	
Leave Request View		K2 JEYLABS'S Ranjit	21/10/2016 10:42:05 AM	K2 JEYLABS'S Ranjit	26/10/2016 10:11:02 AM	6	No	
LeaveRequestItemView		K2 JEYLABS'S Ranjit	21/10/2016 3:42:39 PM	K2 JEYLABS'S Ranjit	21/10/2016 3:43:48 PM	1	No	
LeaveRequest2ItemView		K2 JEYLABS'S Ranjit	21/10/2016 2:53:01 PM	K2 JEYLABS'S Ranjit	28/10/2016 10:21:37 AM	2	No	
LeaveRequest2 View		K2 JEYLABS'S Ranjit	21/10/2016 3:18:10 PM	K2 JEYLABS'S Ranjit	26/10/2016 10:11:05 AM	3	No	
ManagerApproval View		K2 JEYLABS'S Ranjit	21/10/2016 3:26:05 PM	K2 JEYLABS'S Ranjit	21/10/2016 3:26:09 PM	1	No	
Manager Approval		K2 JEYLABS'S Ranjit	21/10/2016 10:57:50 AM	K2 JEYLABS'S Ranjit	21/10/2016 12:26:55 PM	3	No	
MoistureLevel Form		K2 JEYLABS'S Ranjit	26/10/2016 11:22:33 AM	K2 JEYLABS'S Ranjit	3/11/2016 9:48:54 AM	8	No	
MoistureLevel View		K2 JEYLABS'S Ranjit	26/10/2016 11:09:44 AM	K2 JEYLABS'S Ranjit	26/10/2016 11:09:52 AM	1	No	
PictureList		System	25/07/2016 3:09:35 PM	K2SQL System	8/02/2019 6:54:34 AM	18	No	
PictureUpload		System	25/07/2016 3:09:34 PM	K2SQL System	8/02/2019 6:54:30 AM	18	No	
PumpWater form		K2 JEYLABS'S Ranjit	26/10/2016 2:55:59 PM	K2 JEYLABS'S Ranjit	3/11/2016 9:48:54 AM	4	No	
Pumpwater View		K2 JEYLABS'S Ranjit	26/10/2016 2:41:35 PM	K2 JEYLABS'S Ranjit	28/10/2016 9:27:29 AM	3	No	
Submit2Form		K2 JEYLABS'S Ranjit	21/10/2016 4:09:46 PM	K2 JEYLABS'S Ranjit	26/10/2016 1:03:19 PM	4	No	
Test1		K2 JEYLABS'S Administrator	6/02/2017 2:25:18 PM	K2 JEYLABS'S Administrator	3/07/2017 11:15:35 AM	4	Yes	K2 JEYLABS'S Administrator
Test2		K2 JEYLABS'S Administrator	6/02/2017 2:26:03 PM	K2 JEYLABS'S Administrator	3/07/2017 11:14:29 AM	5	No	
Test3		K2 JEYLABS'S Administrator	6/02/2017 2:26:58 PM	K2 JEYLABS'S Administrator	3/07/2017 11:14:29 AM	2	No	
Test3Details		K2 JEYLABS'S Administrator	3/07/2017 11:12:46 AM	K2 JEYLABS'S Administrator	5/07/2017 11:07:31 AM	3	Yes	K2 JEYLABS'S Administrator
TreeControl		K2 JEYLABS'S Administrator	16/01/2017 10:44:46 AM	K2 JEYLABS'S Administrator	25/01/2017 9:37:09 AM	3	No	
TreeControl1		K2 JEYLABS'S Administrator	16/01/2017 10:40:16 AM	K2 JEYLABS'S Administrator	16/01/2017 5:27:12 PM	1	No	
TreeControl1		K2 JEYLABS'S Administrator	16/01/2017 10:55:20 AM	K2 JEYLABS'S Administrator	16/01/2017 5:27:12 PM	1	No	
TreeDetails		K2 JEYLABS'S Administrator	16/01/2017 10:41:19 AM	K2 JEYLABS'S Administrator	16/01/2017 5:27:12 PM	1	No	
TreeItemWithToolBar		K2 JEYLABS'S Administrator	25/01/2017 9:35:59 AM	K2 JEYLABS'S Administrator	25/01/2017 9:36:13 AM	1	No	
WaterPump Form		K2 JEYLABS'S Ranjit	26/10/2016 11:17:57 AM	K2 JEYLABS'S Ranjit	26/10/2016 1:03:10 PM	4	No	
WaterPump ListView		K2 JEYLABS'S Ranjit	26/10/2016 10:58:26 AM	K2 JEYLABS'S Ranjit	3/11/2016 9:48:04 AM	2	No	

- Click on Categorize button to list the Smart Forms by K2 Category. Clicking Refresh Tab will list all the Smart Forms.

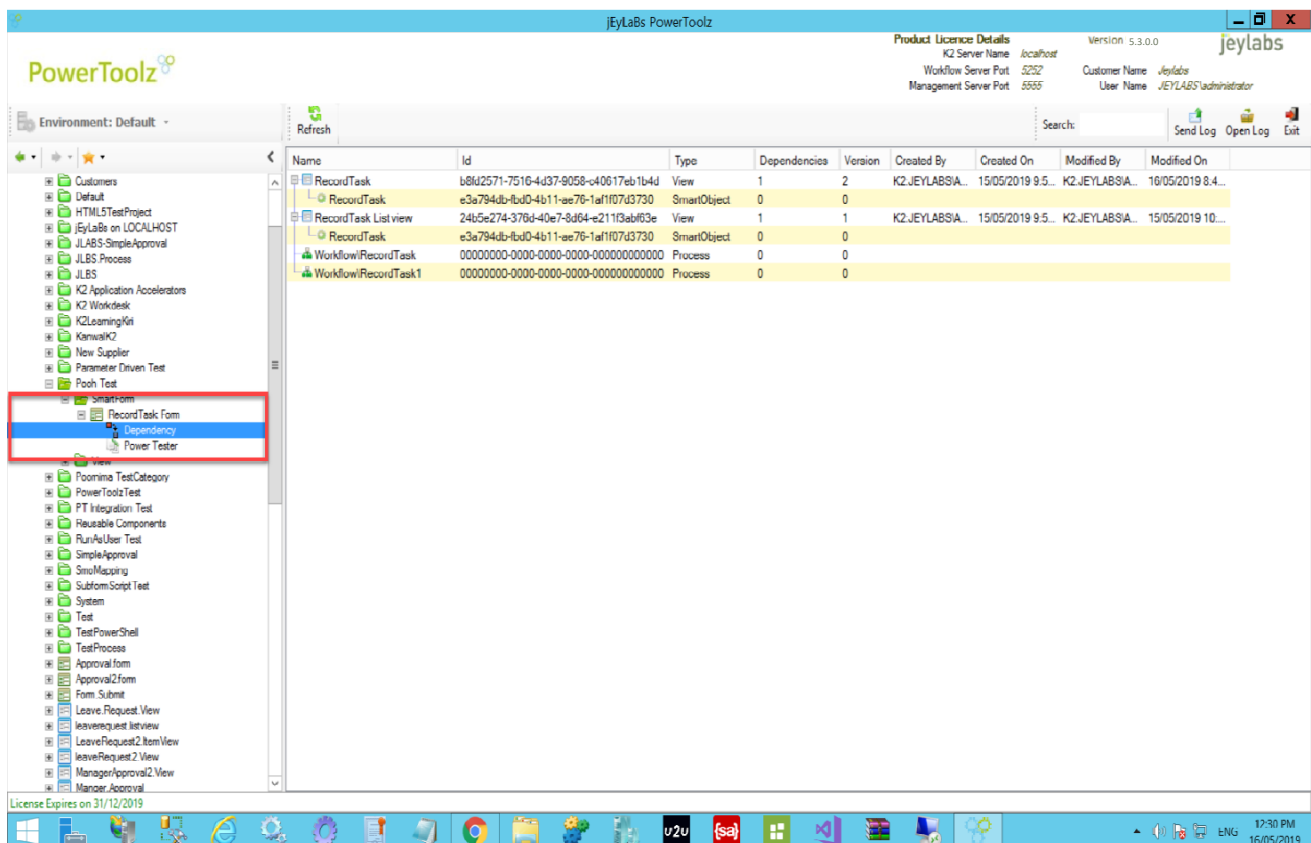
The screenshot shows the jEylabs PowerToolz application. The 'Categorize' button in the top toolbar is highlighted with a red box. The main window displays a table of Smart Forms with columns: Name, Description, Created By, Created On, Modified By, Modified On, Version, Check..., and Checked Out By. The table lists various forms like 'Approval form', 'Approval2 form', 'Form Submit', etc. The bottom status bar shows 'License Expires on 31/12/2019'.

Name	Description	Created By	Created On	Modified By	Modified On	Version	Check...	Checked Out By
Approval form		K2 JEYLABS\S Ranjit	21/10/2016 11:03:34 AM	K2 JEYLABS\S Ranjit	26/10/2016 9:58:31 AM	9	No	
Approval2 form		K2 JEYLABS\S Ranjit	21/10/2016 4:02:35 PM	K2 JEYLABS\S Ranjit	26/10/2016 12:06:58 PM	11	No	
Form Submit		K2 JEYLABS\S Ranjit	21/10/2016 11:00:48 AM	K2 JEYLABS\S Ranjit	26/10/2016 10:04:36 AM	7	No	
Leave Request View		K2 JEYLABS\S Ranjit	21/10/2016 10:42:05 AM	K2 JEYLABS\S Ranjit	26/10/2016 10:11:02 AM	6	No	
leave request list view		K2 JEYLABS\S Ranjit	21/10/2016 3:42:39 PM	K2 JEYLABS\S Ranjit	21/10/2016 3:43:48 PM	1	No	
LeaveRequest2 Item View		K2 JEYLABS\S Ranjit	21/10/2016 3:53:01 PM	K2 JEYLABS\S Ranjit	28/10/2016 10:21:37 AM	2	No	
leaveRequest2 View		K2 JEYLABS\S Ranjit	21/10/2016 3:18:10 PM	K2 JEYLABS\S Ranjit	26/10/2016 10:11:05 AM	3	No	
Manager/Approval2 View		K2 JEYLABS\S Ranjit	21/10/2016 3:26:05 PM	K2 JEYLABS\S Ranjit	21/10/2016 3:26:09 PM	1	No	
Manager Approval		K2 JEYLABS\S Ranjit	21/10/2016 10:57:50 AM	K2 JEYLABS\S Ranjit	21/10/2016 12:26:55 PM	3	No	
MoistureLevel Form		K2 JEYLABS\S Ranjit	26/10/2016 11:22:33 AM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:54 AM	8	No	
MoistureLevel View		K2 JEYLABS\S Ranjit	26/10/2016 11:09:44 AM	K2 JEYLABS\S Ranjit	26/10/2016 11:09:52 AM	1	No	
PictureList		System	25/07/2016 3:09:35 PM	K2SQL-System	8/02/2019 6:54:34 AM	18	No	
PictureUpload		System	25/07/2016 3:09:34 PM	K2SQL-System	8/02/2019 6:54:30 AM	18	No	
PumpWater form		K2 JEYLABS\S Ranjit	26/10/2016 2:55:59 PM	K2 JEYLABS\S Ranjit	3/11/2016 9:48:54 AM	4	No	
Pumpwater View		K2 JEYLABS\S Ranjit	26/10/2016 2:41:35 PM	K2 JEYLABS\S Ranjit	28/10/2016 9:27:29 AM	3	No	
Submit2 form		K2 JEYLABS\S Ranjit	21/10/2016 4:00:46 PM	K2 JEYLABS\S Ranjit	26/10/2016 1:03:19 PM	4	No	
Test1		K2 JEYLABS\Administrator	6/02/2017 2:25:18 PM	K2 JEYLABS\Administrator	3/07/2017 11:15:35 AM	4	Yes	K2 JEYLABS\Administrator
Test2		K2 JEYLABS\Administrator	6/02/2017 2:26:03 PM	K2 JEYLABS\Administrator	3/07/2017 11:14:29 AM	5	No	
Test3		K2 JEYLABS\Administrator	6/02/2017 2:26:58 PM	K2 JEYLABS\Administrator	3/07/2017 11:14:29 AM	2	No	
Test3Details		K2 JEYLABS\Administrator	6/02/2017 5:02:30 PM	K2 JEYLABS\Administrator	7/02/2017 12:05:48 PM	2	No	
TreeControl		K2 JEYLABS\Administrator	3/07/2017 11:12:46 AM	K2 JEYLABS\Administrator	5/07/2017 11:07:31 AM	3	Yes	K2 JEYLABS\Administrator
TreeControl1		K2 JEYLABS\Administrator	16/01/2017 10:44:45 AM	K2 JEYLABS\Administrator	25/01/2017 9:37:09 AM	3	No	
TreeControl2		K2 JEYLABS\Administrator	16/01/2017 10:40:16 AM	K2 JEYLABS\Administrator	16/01/2017 5:27:12 PM	1	No	
TreeControl3		K2 JEYLABS\Administrator	16/01/2017 10:55:20 AM	K2 JEYLABS\Administrator	16/01/2017 5:27:12 PM	1	No	
TreeDetails		K2 JEYLABS\Administrator	16/01/2017 10:41:19 AM	K2 JEYLABS\Administrator	16/01/2017 5:27:12 PM	1	No	

View a SmartForm's Dependencies

This section will demonstrate the steps required to investigate a SmartForms's dependencies.

1. From the SmartForm space as mentioned in the previous section a SmartForm can be selected.
2. Once a SmartForm has been selected, the SmartForm will be cascaded in the main PowerToolz menu on the left-hand side.



- The dependency menu item can be selected. From this screen the SmartForm's associations with SmartObjects, Other SmartForms, Views and K2 workflows can be investigated.

PowerToolz

Environment: Default

Product Licence Details
K2 Server Name: localhost
Workflow Server Port: 5252
Management Server Port: 5555
Version: 5.3.0.0
Customer Name: jeylabs
User Name: jEYLABS\Administrator

Search: [] Send Log Open Log Exit

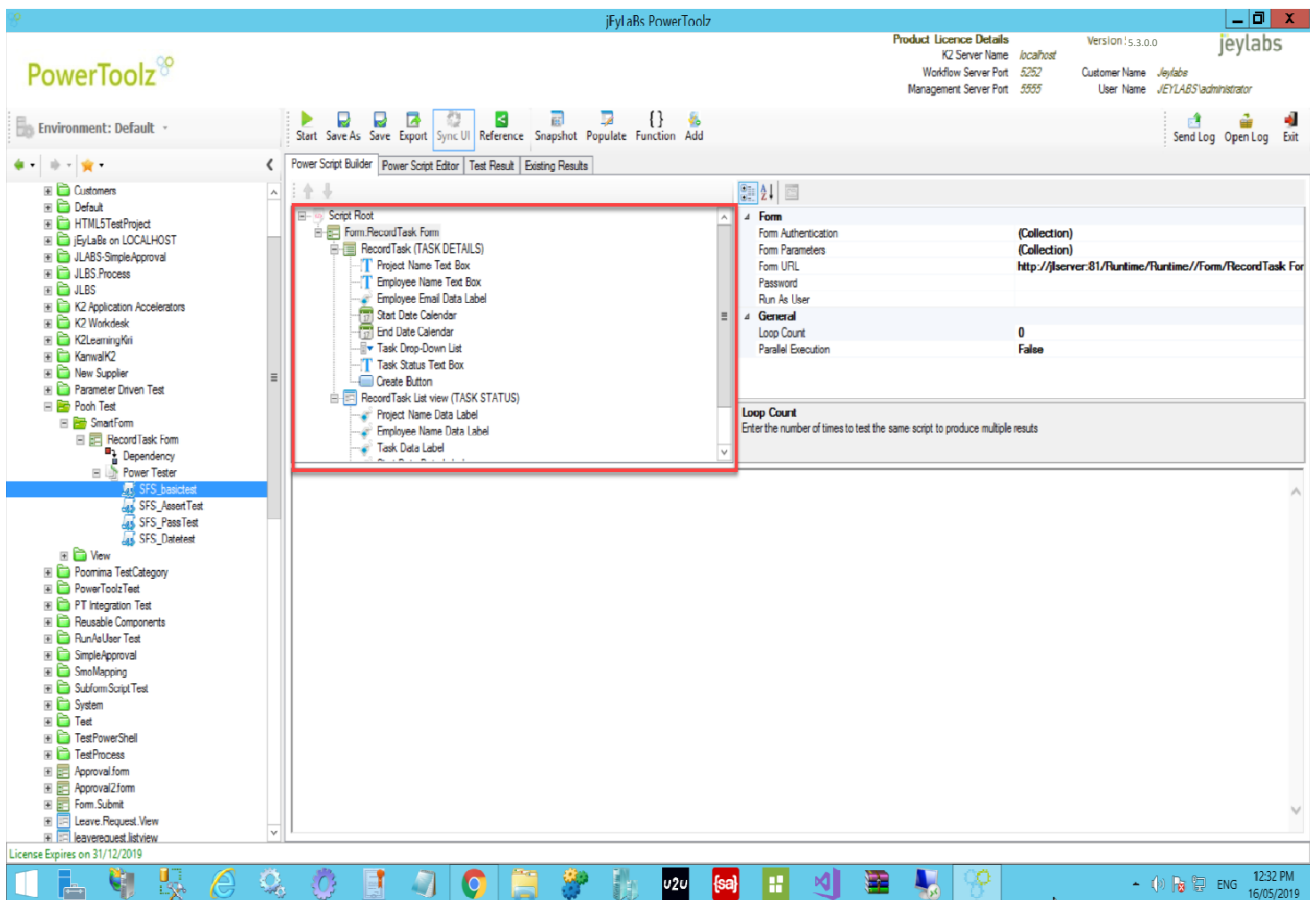
Name	Id	Type	Dependencies	Version	Created By	Created On	Modified By	Modified On
RecordTask	b8d2571-7516-4d37-9058-c40617eb1b4d	View	1	2	K2.JEYLABSIA...	15/05/2019 9:5...	K2.JEYLABSIA...	16/05/2019 8:4...
RecordTask	e3a794db-fbd0-4b11-ae76-1af107d3730	SmartObject	0	0				
RecordTask List view	24b5e274-378d-40e7-8d64-e21103ab03e	View	1	1	K2.JEYLABSIA...	15/05/2019 9:5...	K2.JEYLABSIA...	15/05/2019 10...
RecordTask	e3a794db-fbd0-4b11-ae76-1af107d3730	SmartObject	0	0				
Workflow/RecordTask	00000000-0000-0000-0000-000000000000	Process	0	0				
Workflow/RecordTask1	00000000-0000-0000-0000-000000000000	Process	0	0				

License Expires on 31/12/2019

12:30 PM 16/05/2019

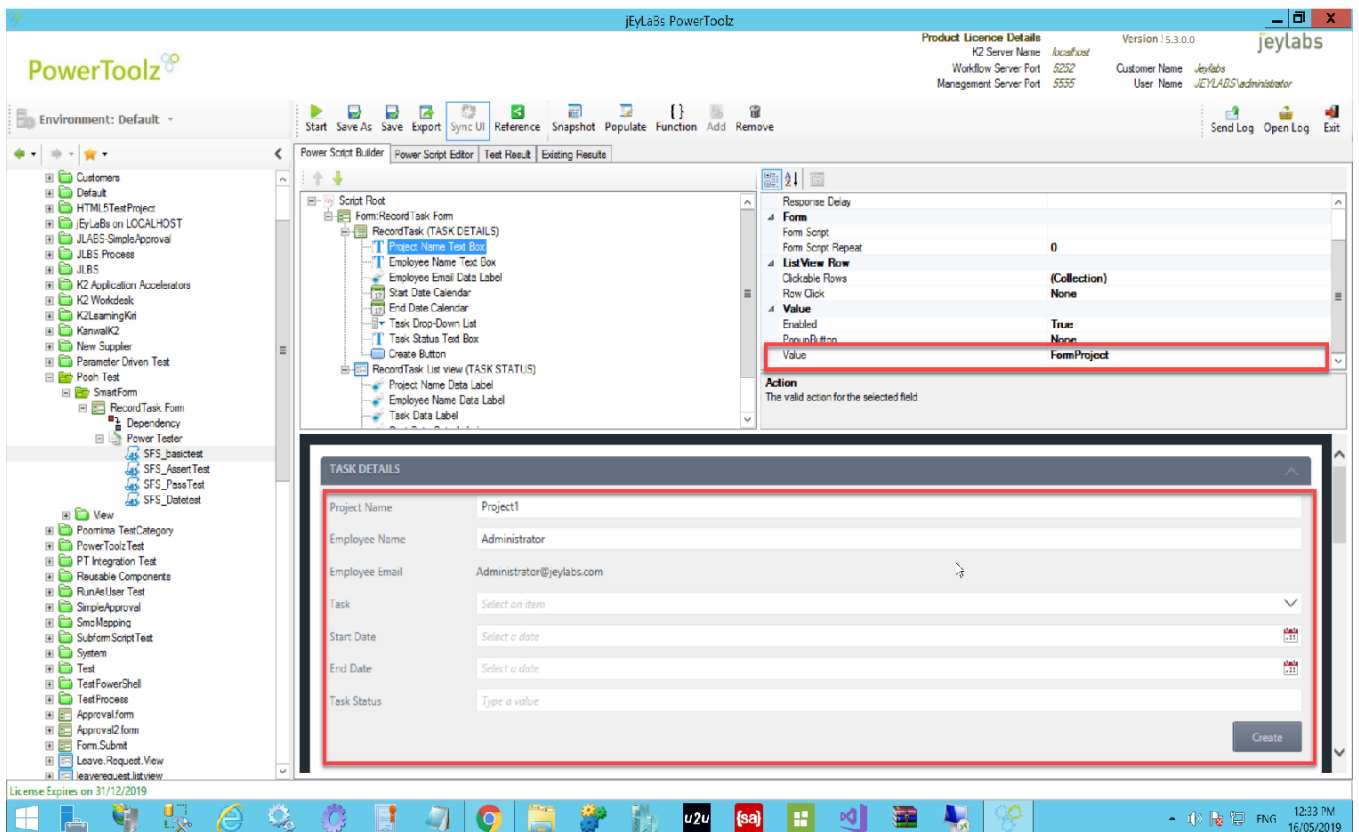
Build Basic PowerScript and Test Detail View in a Form

1. Select the Smart Form name and expand it to build Power Script for that form and click the PowerTester node in the tree. Click New Script button on the toolbar.
2. The Power Script builder will open. In the Power Script tree, the form and its views will be displayed, with their controls (such as text boxes and buttons) will be displayed in cascading form



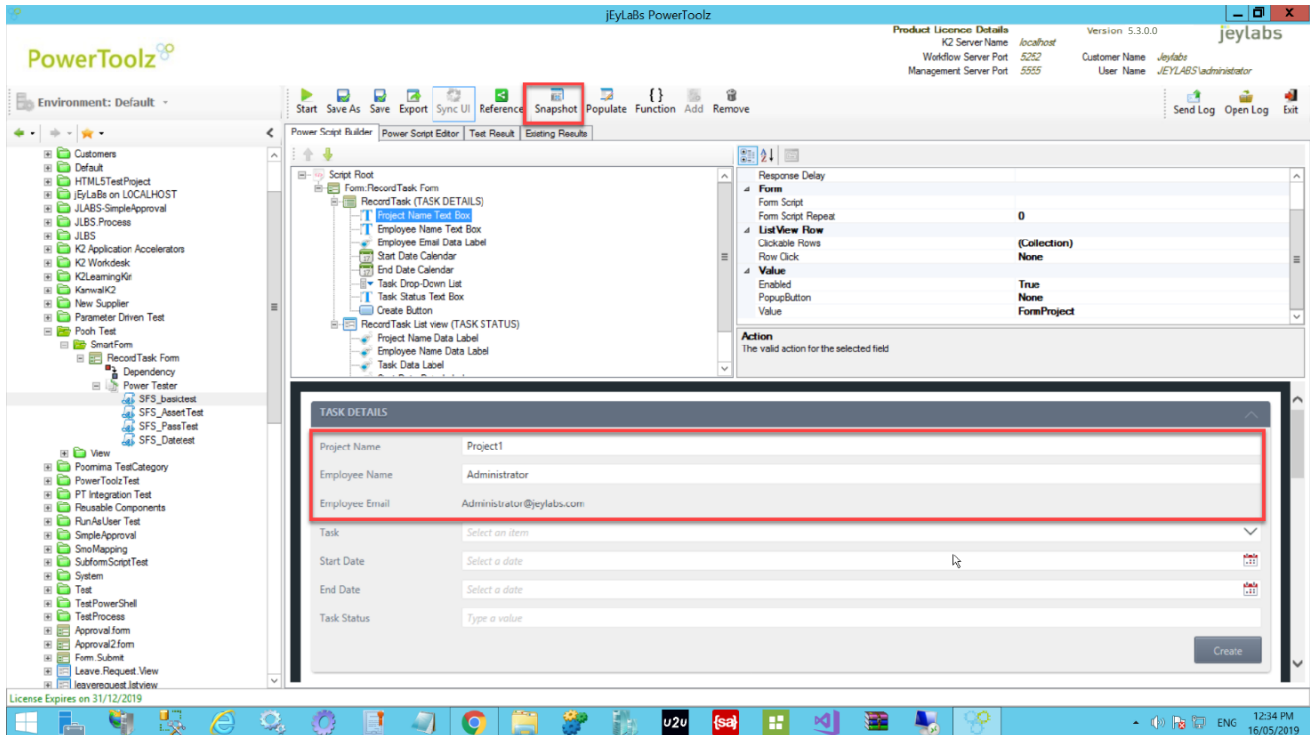
- There are two options for entering data as part of a SmartForm test. Each control can be selected, and the relevant test data can be entered into the 'value' attribute on the top right hand side.

Alternatively, test data can be entered into the form at the bottom half of the PowerToolz window, using the form runtime. If the runtime of the form cannot be seen this will be due to incorrect SmartForm runtime settings found within the PowerToolz settings page.

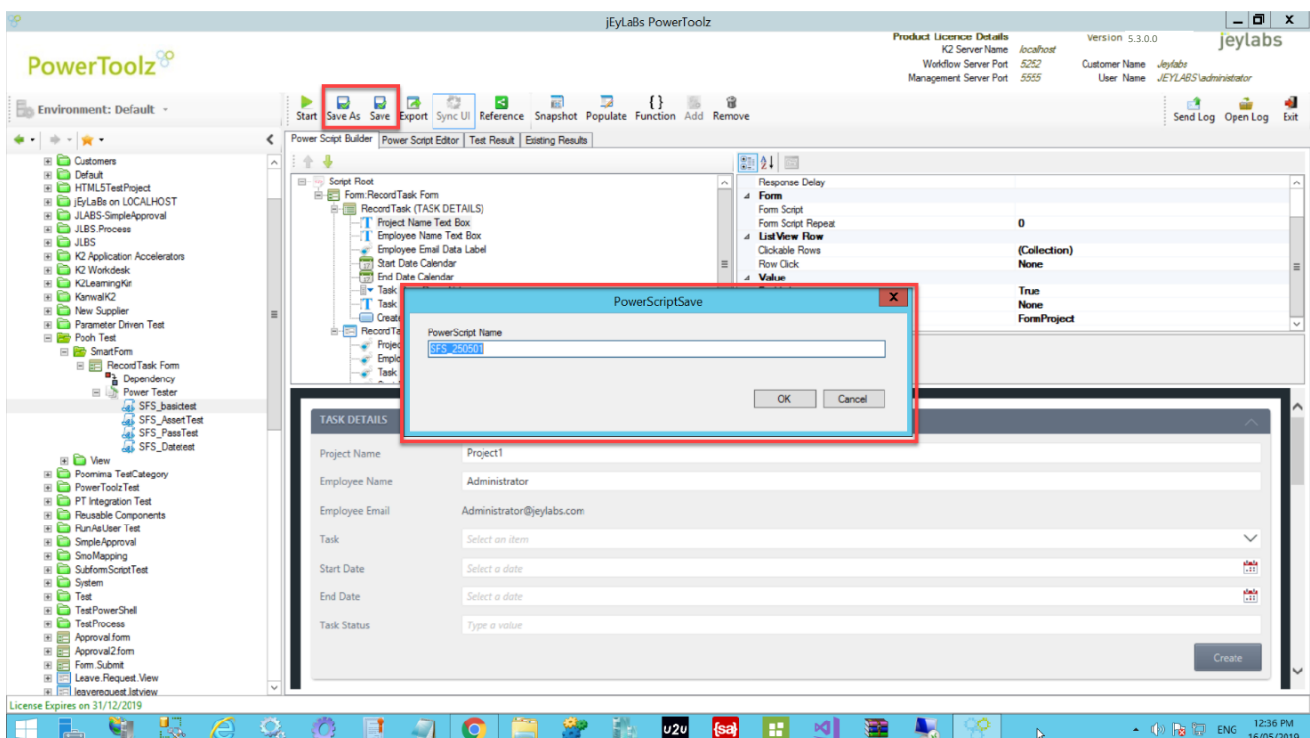


Note: When the data is entered in Value, Enabled will become True.

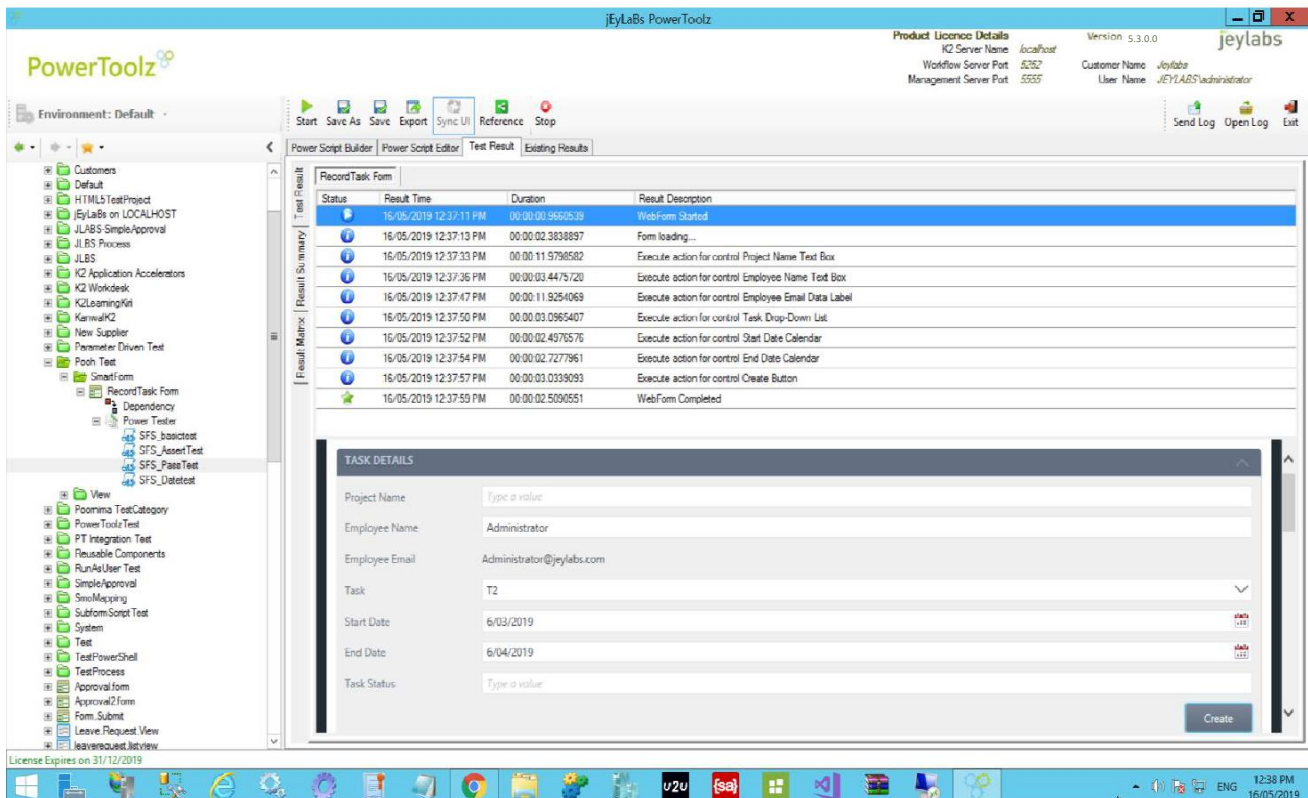
- Once data has been entered into the form using the Runtime view the **Snapshot** button can be used to record this data into the relevant controls for testing.



- Click **Save** button to save the data entered for the form.



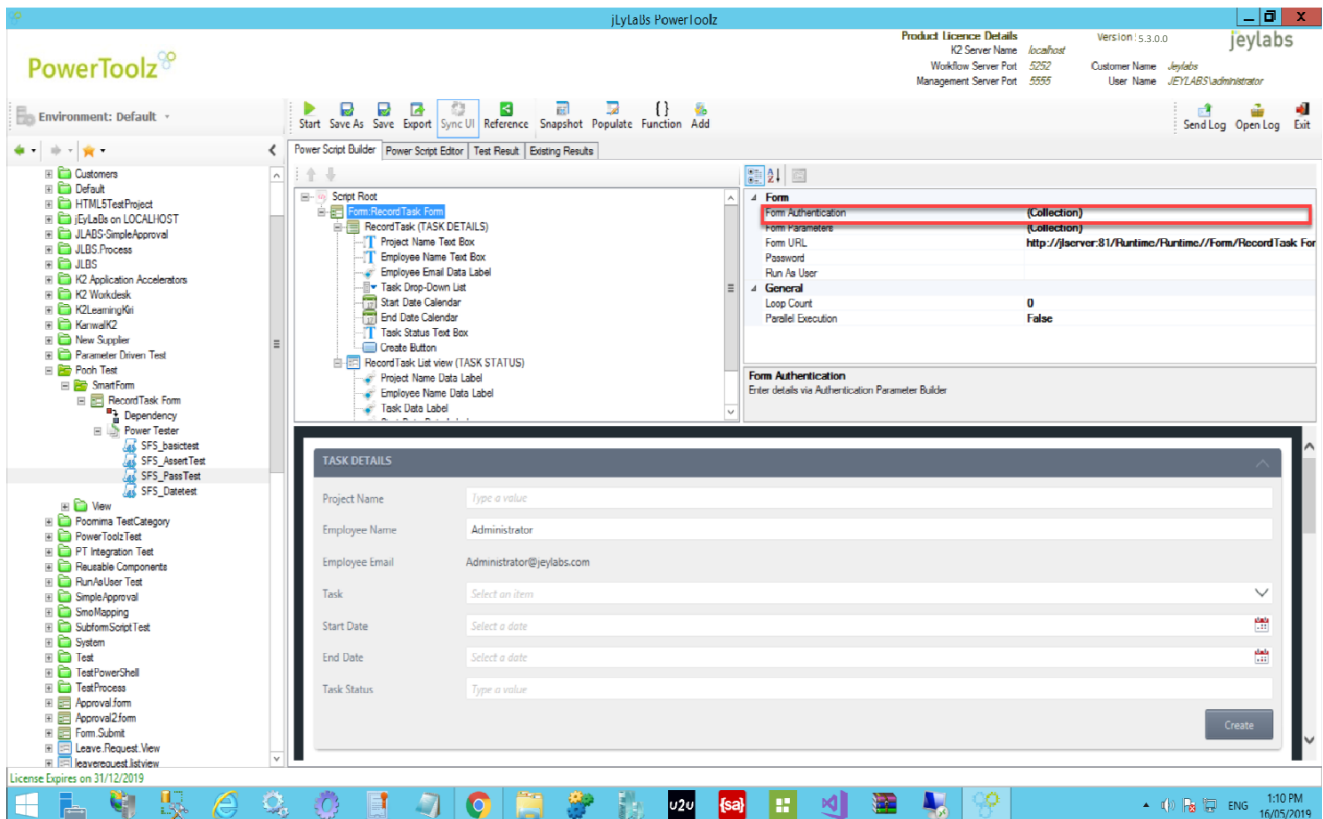
- Click Start button on the toolbar to run the PowerScript and view the result.



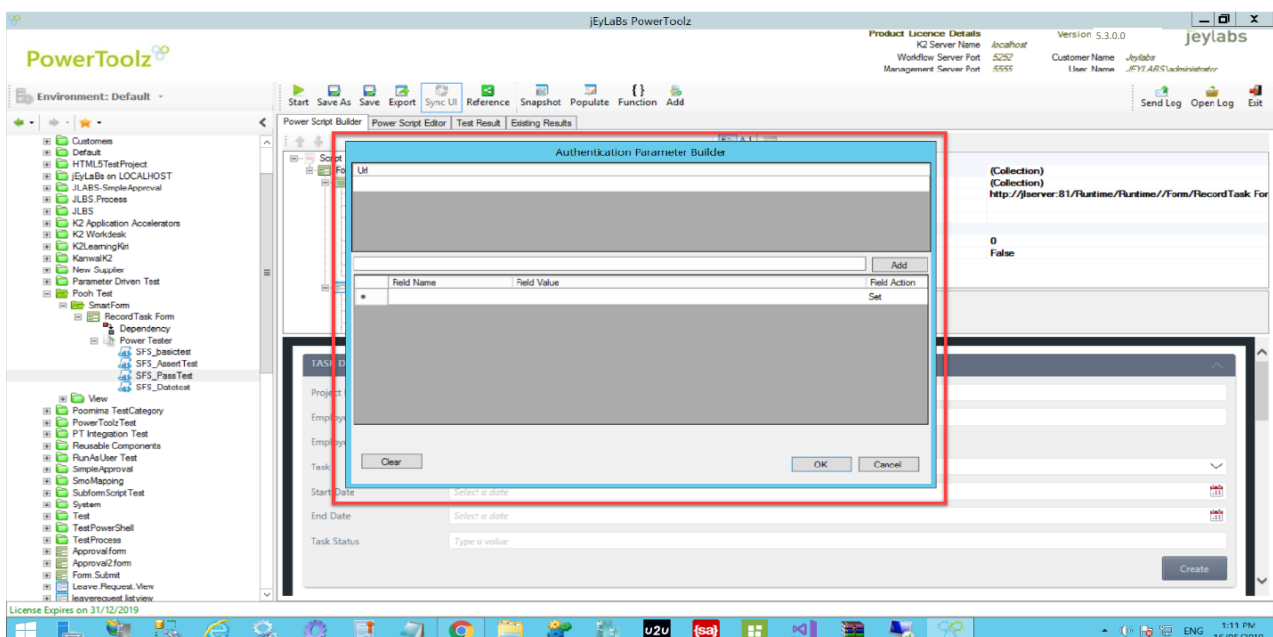
Note: The List view will be populated automatically with the data from the PowerScript.

Form Authentication and Authorisation

1. Click on Form Authentication to capture the required information.

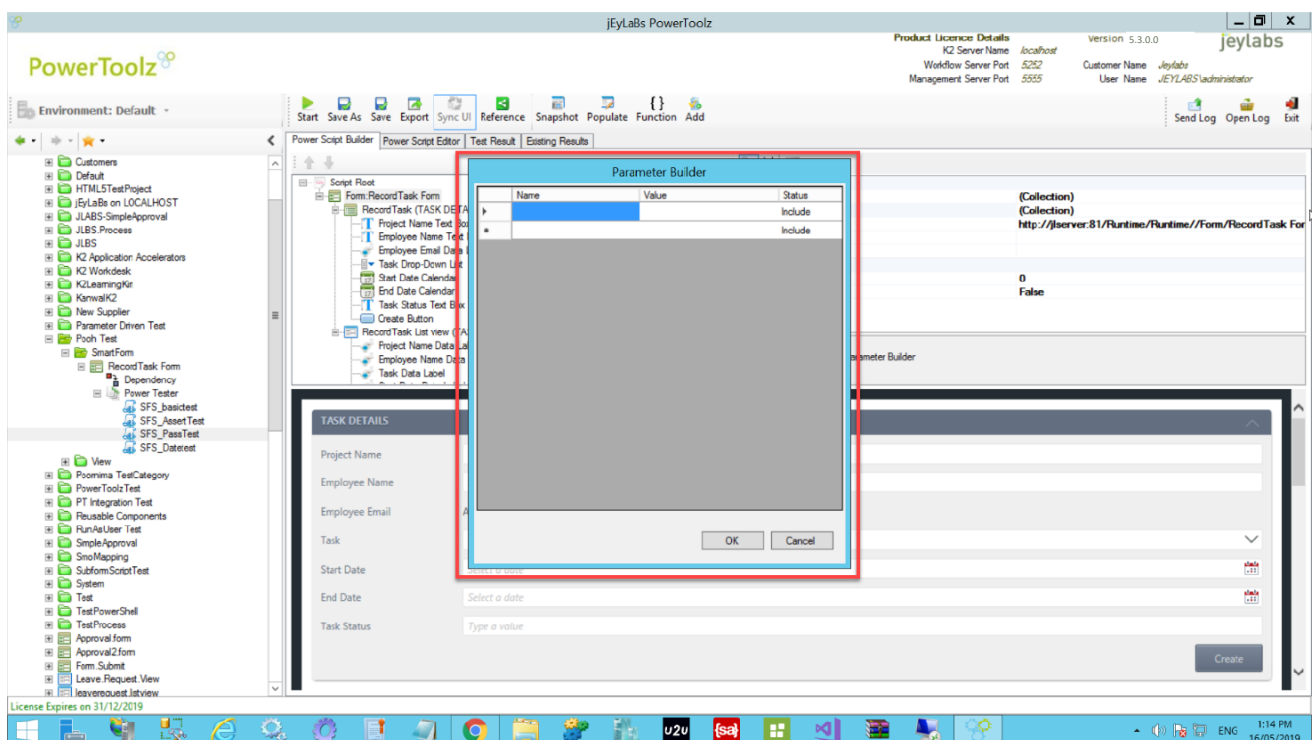
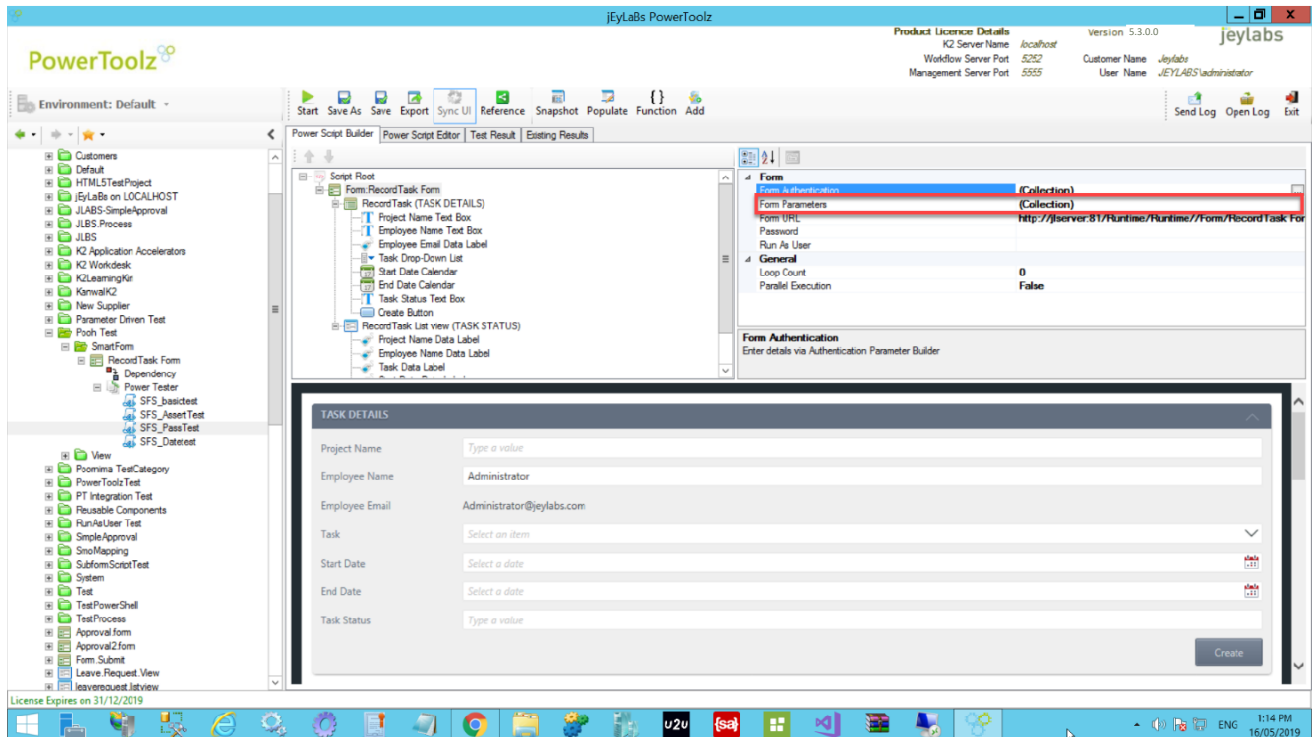


2. While creating the PowerScript, the Url and required Field Names can be entered (login e-mail or User Id and Password) and corresponding values in the Authentication Parameter Builder. These authentication values will be used as part of the test.



Form Parameters

1. Click on Form Parameter to enter parameter values. For example, a SmartObject ID may be used as a form parameter.

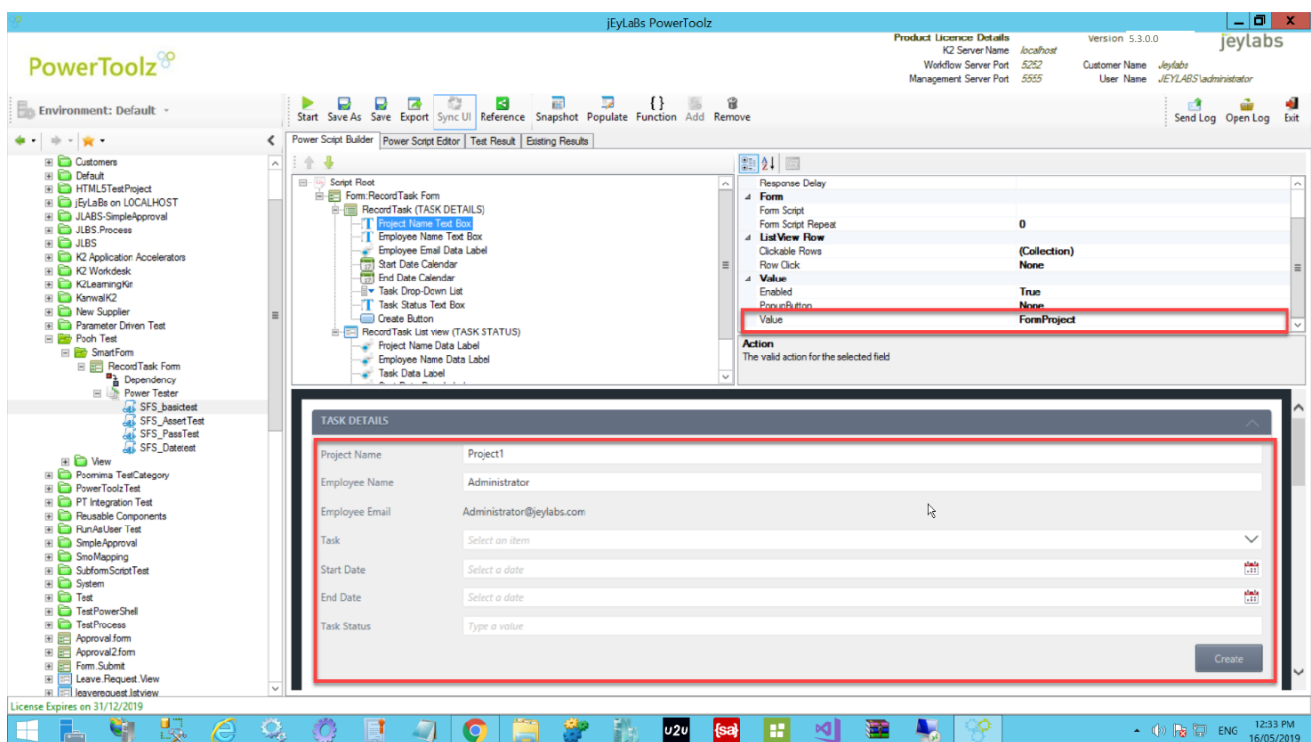


Configure Update Fields

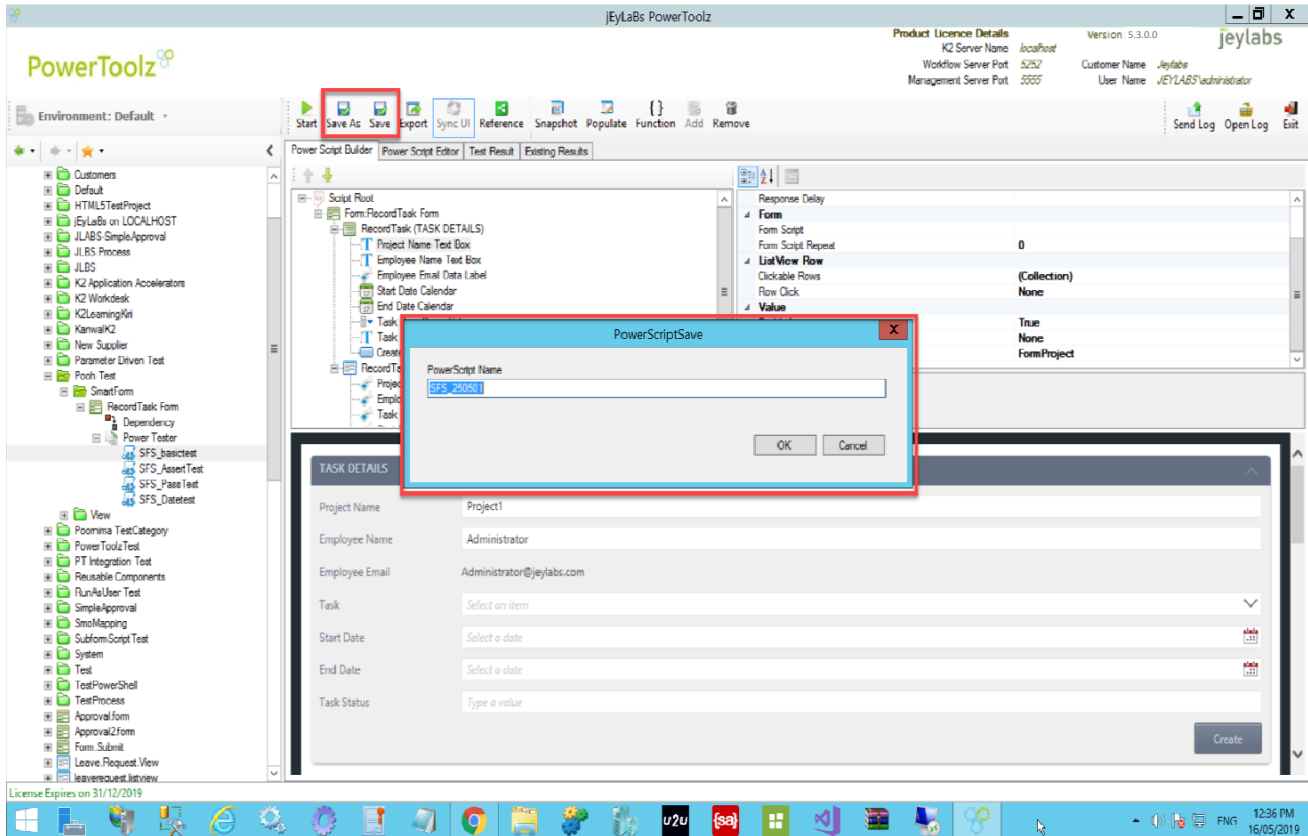
PowerToolz allows the user to update data found on a SmartForm's views during testing. For example, the multiple values for the List View could be entered via Repeating Data builder.

Configure Data Fields values

1. Click on the required field of the form shown under power script builder and change the value.

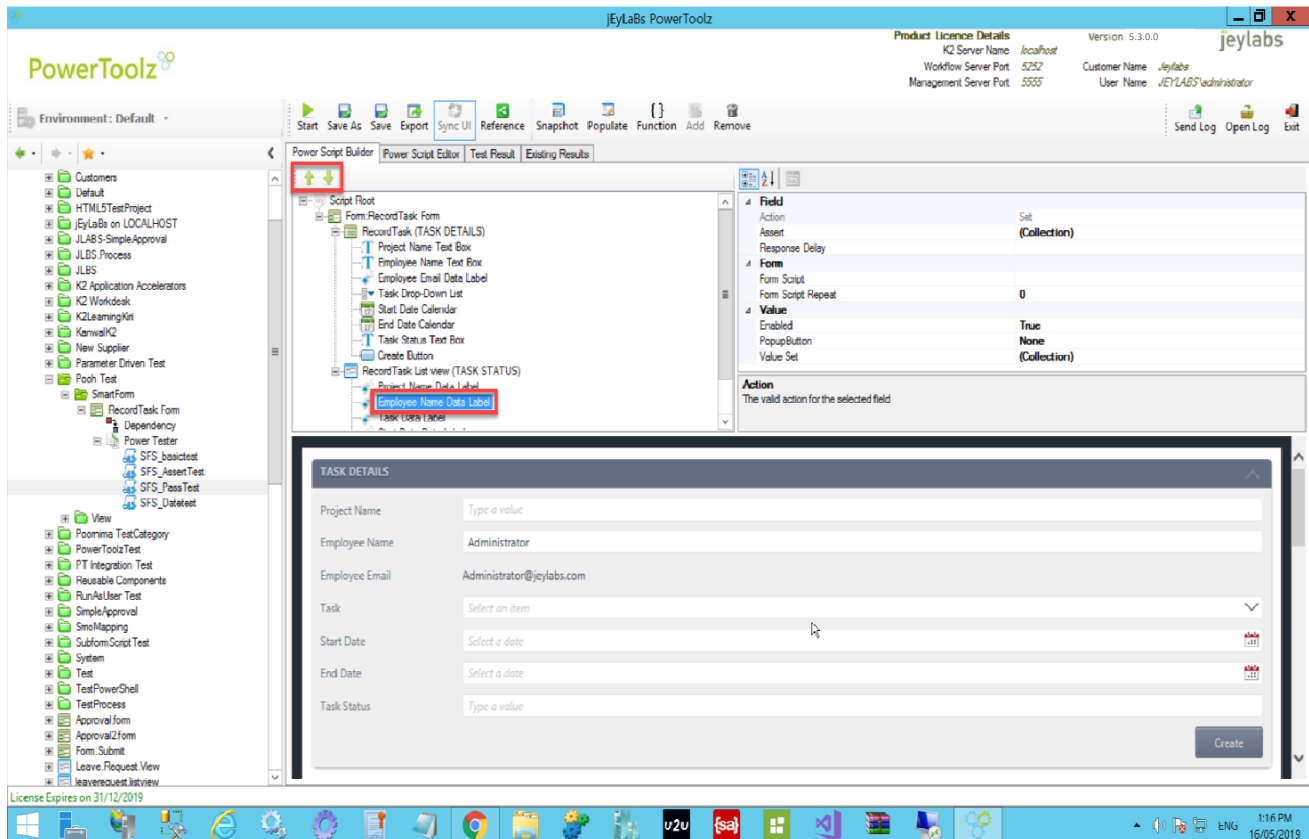


- After changing the data press save button to retain the changes. The changed data should be saved in a new power script and the data in the original power script should remain unchanged.



SmartForm Scripting UI

PowerToolz provides the improved UI to list controls under specific Views and group them by Views. The desired Tab can be selected and positioned accordingly by selecting the Up and Down Arrow Button under the PowerScript Builder.



Supported Smart Form Controls

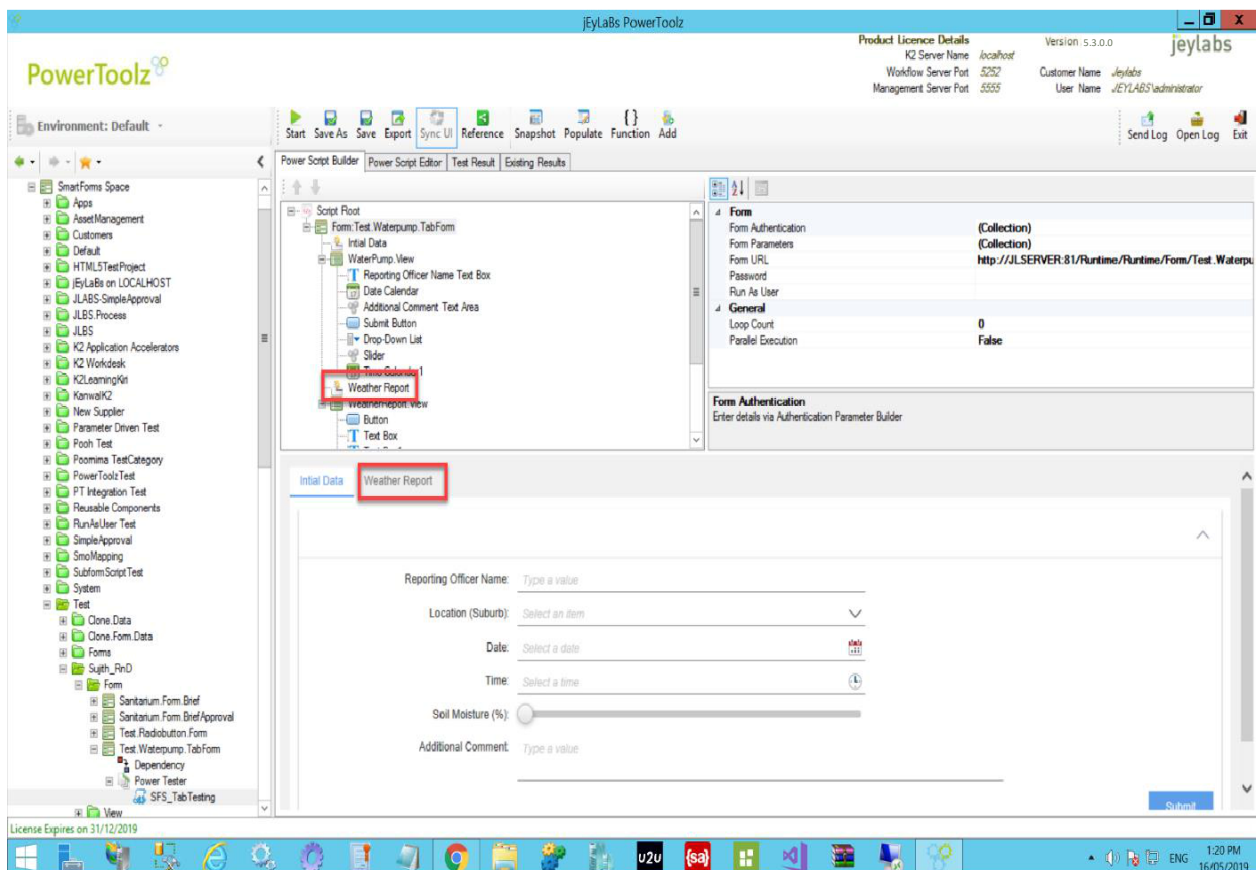
All controls included in the supported standard K2 release (see overview section) are supported by PowerToolz including:

- ☐ Calendar
- ☐ Check Box
- ☐ Check Box List
- ☐ Choice
- ☐ Data Label
- ☐ Drop Down List
- ☐ Hyperlink
- ☐ Picker
- ☐ Radio Button
- ☐ Radio Button Group
- ☐ Radio Button List
- ☐ Rating
- ☐ Slider
- ☐ Text Area
- ☐ Text Box
- ☐ Data Label
- ☐ Toolbar Button
- ☐ Button

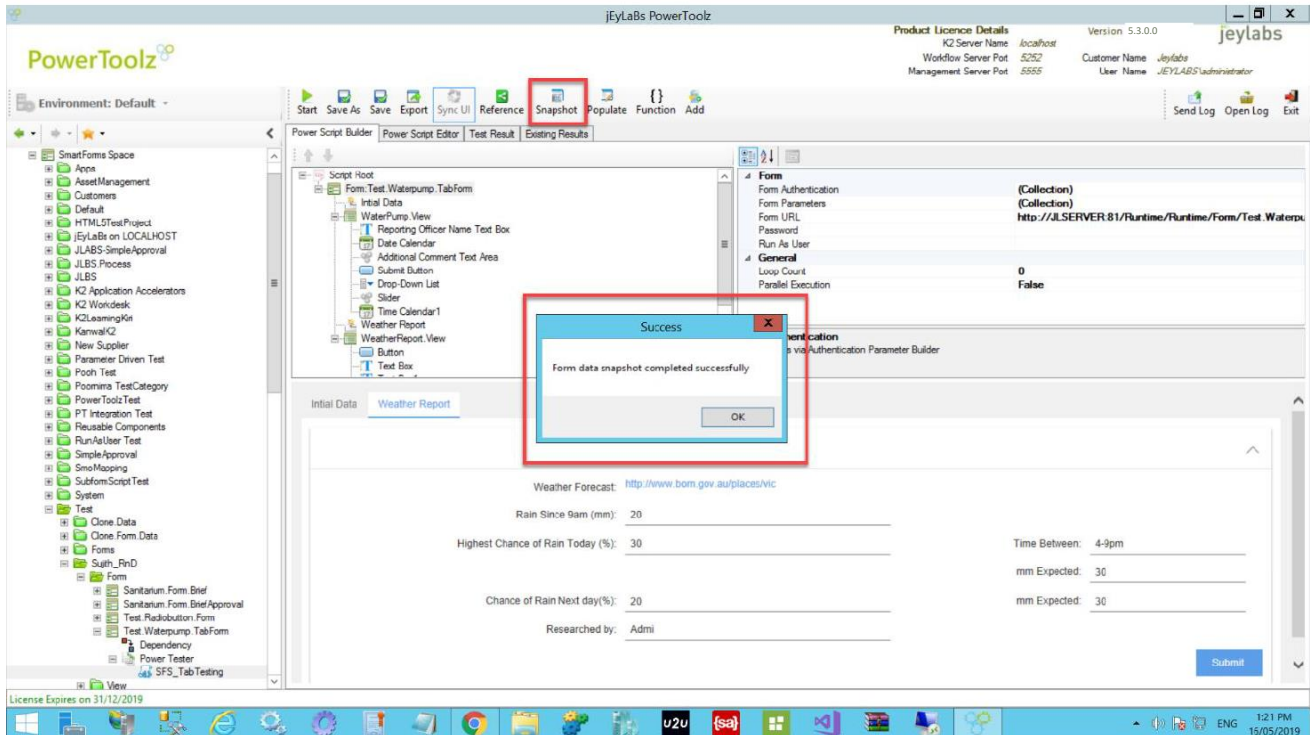
SmartForms Multi Tab Control Support

PowerToolz automatically detect the SmartForms Multi-tab Control. As the tabs are the last control created in the form so PowerToolz select and test the tabs in the specified order. To test the SmartForm with the MultiTab Control:

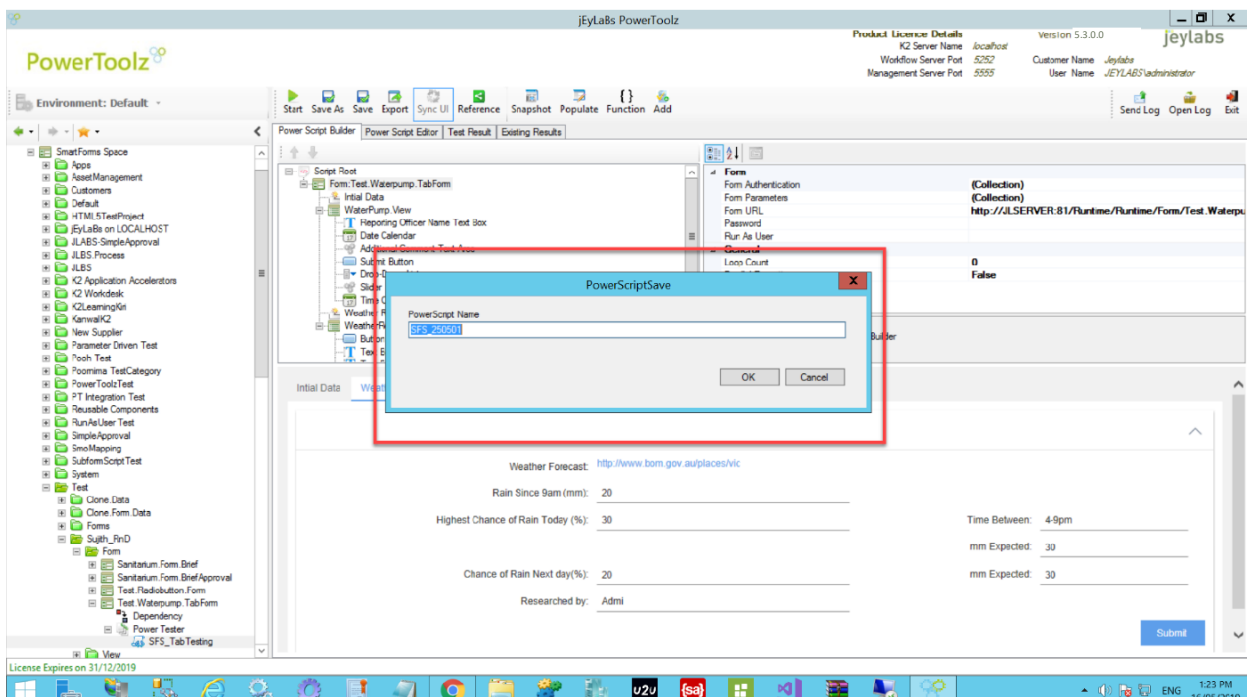
1. Create a New PowerScript for the SmartForm with the Multi Tab Control. Enter the relevant details for the First Tab.



- Click on the **Snapshot Button** on the Actions Button Bar and PowerToolz will capture the values entered in the First Tab.



- Select another Tab to enter the relevant details and take a **Snapshot**. Then, click on the **Save Button** to save the PowerScript.



- Test the Generated Script by clicking the Start Button on the Header. It will test the SmartForm with Multi Tab Control.

jEYLABS PowerToolz

Product Licence Details: K2 Server Name: JILSERVER, Workflow Server Port: 5252, Management Server Port: 5555, Customer Name: jeylabs, User Name: JEYLABS\Administrator, Version: 5.3.0.0

Environment: Default

Test Results Summary:

Status	Result Time	Duration	Result Description
Success	15/07/2018 4:08:39 PM	00:00:00.0000000	WebForm Started
Success	15/07/2018 4:08:41 PM	00:00:02.237025	Form loading...
Success	15/07/2018 4:08:53 PM	00:00:09.546705	Execute action for Tab: Initial Data
Success	15/07/2018 4:08:55 PM	00:00:02.7703795	Execute action for control: Reporting Officer Name: Text Box
Success	15/07/2018 4:08:57 PM	00:00:02.9510545	Execute action for control: Date Calendar
Success	15/07/2018 4:09:00 PM	00:00:03.420361	Execute action for control: Additional Comment: Text Area

Initial Data: Weather Report

Reporting Officer Name: Sujith

Location (Suburb): Select an item

Date: 11/07/2018

Time: 11:11:15 AM

Soil Moisture (%): 2.3, 3.4, 5.7, 6.8, 10.1, 15.1, 17.2, 18.1, 19.2, 22.1, 25.2, 29.2, 31.1

Additional Comment: 29.30 31

Submit

jEYLABS PowerToolz

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Customer Name: jeylabs, User Name: JEYLABS\Administrator, Version: 5.3.0.0

Environment: Default

Test Results Summary:

Status	Result Time	Duration	Result Description
Success	16/05/2019 1:23:44 PM	00:00:00.3762486	WebForm Started
Success	16/05/2019 1:23:45 PM	00:00:01.8079226	Form loading...
Success	16/05/2019 1:24:06 PM	00:00:14.1778913	Execute action for Tab: Initial Data
Success	16/05/2019 1:24:08 PM	00:00:03.5760394	Execute action for control: Reporting Officer Name: Text Box
Success	16/05/2019 1:24:10 PM	00:00:02.9647805	Execute action for control: Date Calendar
Success	16/05/2019 1:24:13 PM	00:00:03.3169006	The system is waiting for the response of the control: Date Calendar

Initial Data: Weather Report

Weather Forecast: <http://www.bom.gov.au/places/vic>

Rain Since 9am (mm): Type a value

Highest Chance of Rain Today (%): Type a value

Chance of Rain Next day(%): Type a value

Researched by: Type a value

Time Between: Type a value

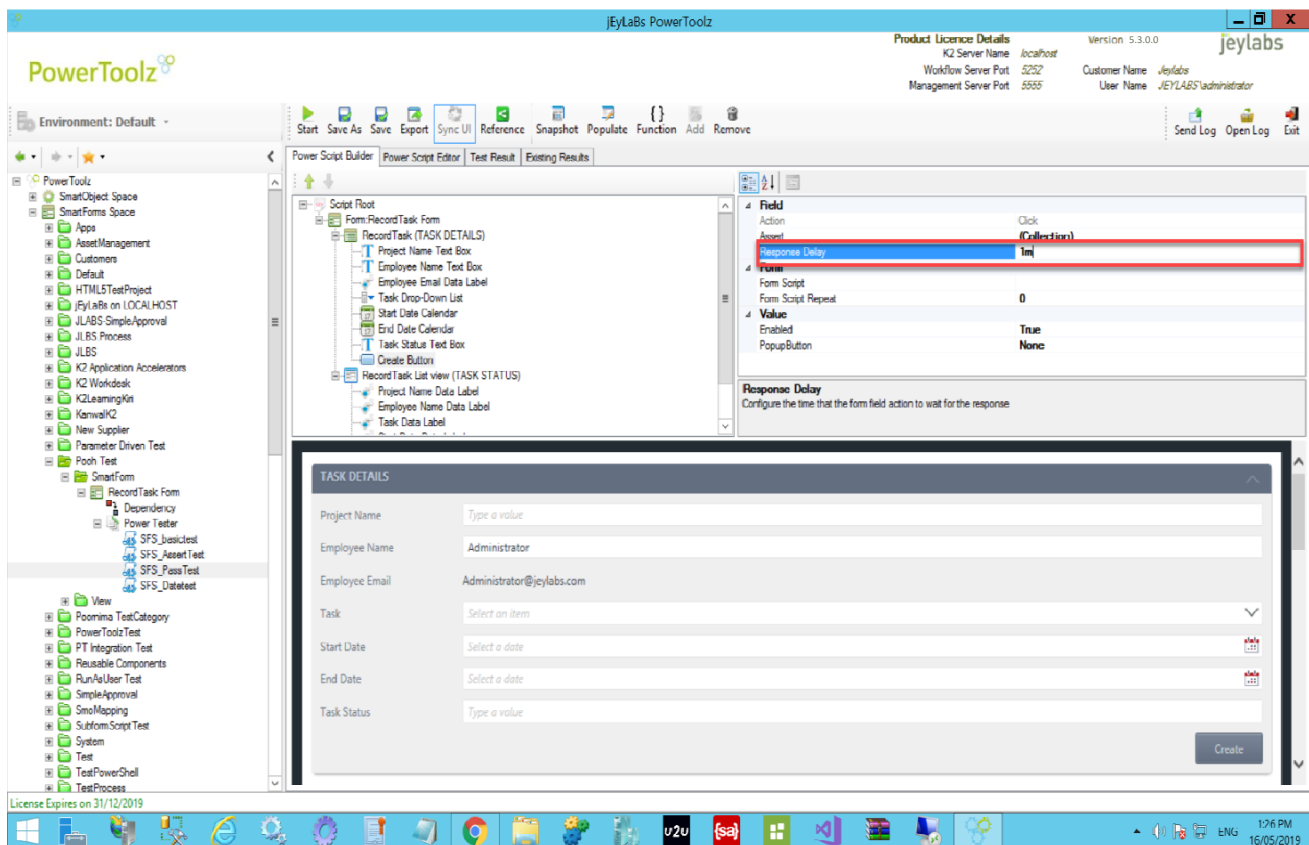
mm Expected: Type a value

mm Expected: Type a value

SmartForm Control Activation Delay

PowerToolz allows to add the delays into the test script by configuring Control Activation Delay such that real end user behaviour can be mimicked very closely. This delay configuration allows for SmartForm controls to be activated and PowerScript will wait for longer period of time before activating the next control as required by the test scenario.

1. The Activation delay can be added to any of the SmartForm Control by specifying the time period for the Response Delay.



- Once the Delay has been added, the control will wait for particular time period for the next execution. For the above-mentioned instance, there is an Activation Delay of 2m30s for Create Button. The PowerScript will wait for 1m to continue the execution.

The screenshot displays the jeylabs PowerToolz application interface. The top bar shows the product name 'PowerToolz' and version '5.3.0.0'. The left sidebar contains a tree view of various test categories and scripts. The main window is divided into two panes. The top pane, titled 'Test Result', shows a table of test results. The bottom pane, titled 'TASK DETAILS', shows the details of the selected task.

Status	Result Time	Duration	Result Description
Success	16/05/2019 1:27:22 PM	00:00:00.3221058	Web-Form Started
Success	16/05/2019 1:27:23 PM	00:00:01.7530134	Form loading...
Success	16/05/2019 1:27:45 PM	00:00:15.6010808	Execute action for control Project Name Text Box
Success	16/05/2019 1:27:47 PM	00:00:02.9441922	Execute action for control Employee Name Text Box
Success	16/05/2019 1:27:50 PM	00:00:03.5153497	Execute action for control Employee Email Data Label
Success	16/05/2019 1:27:52 PM	00:00:02.6724684	Execute action for control Task Drop-Down List
Success	16/05/2019 1:27:55 PM	00:00:03.0806006	Execute action for control Start Date Calendar
Success	16/05/2019 1:27:57 PM	00:00:02.4137265	Execute action for control End Date Calendar
Success	16/05/2019 1:27:59 PM	00:00:02.6458535	Execute action for control Create Button
Success	16/05/2019 1:28:02 PM	00:00:03.1525077	The system is waiting for the response of the control Create Button

The 'TASK DETAILS' pane shows the following information:

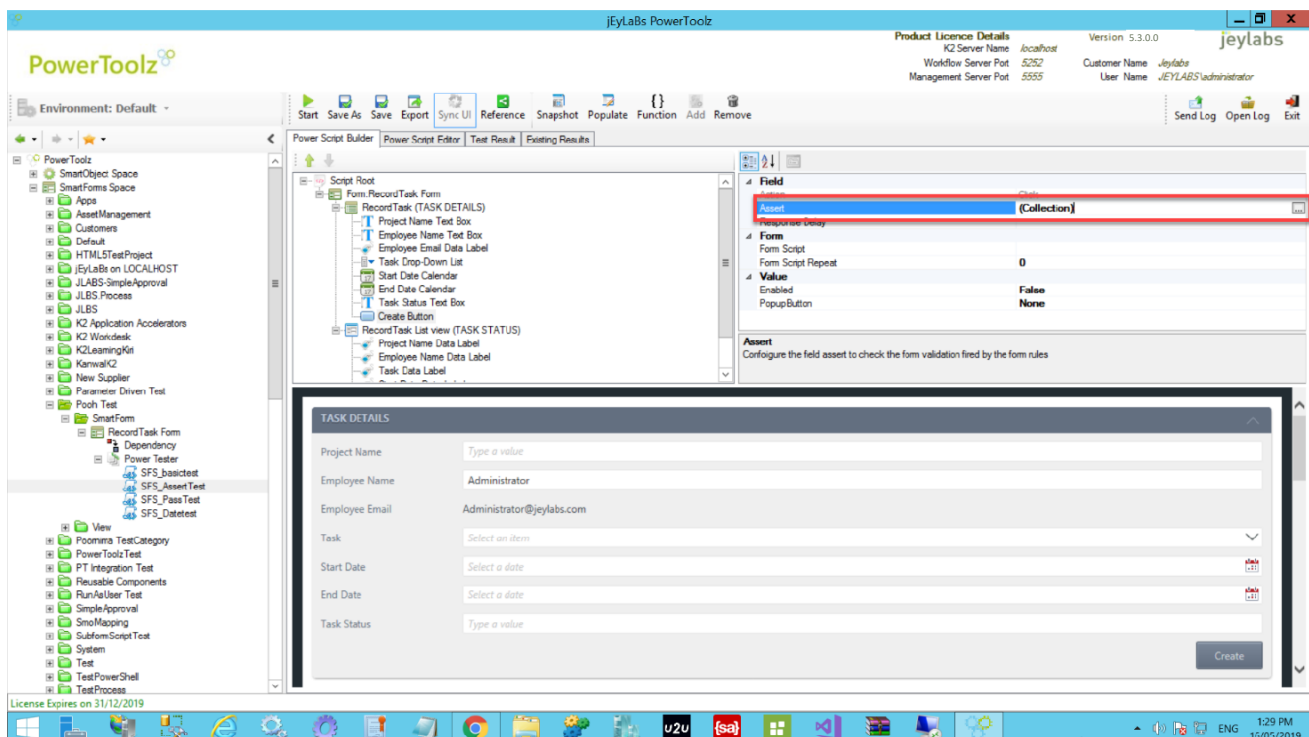
- Project Name: TestsProject
- Employee Name: Administrator
- Employee Email: Administrator@jeylabs.com
- Task: T2
- Start Date: 6/03/2019
- End Date: 6/04/2019
- Task Status: Type a value

A red box highlights the last row in the test result table, indicating the system is waiting for the response of the control Create Button.

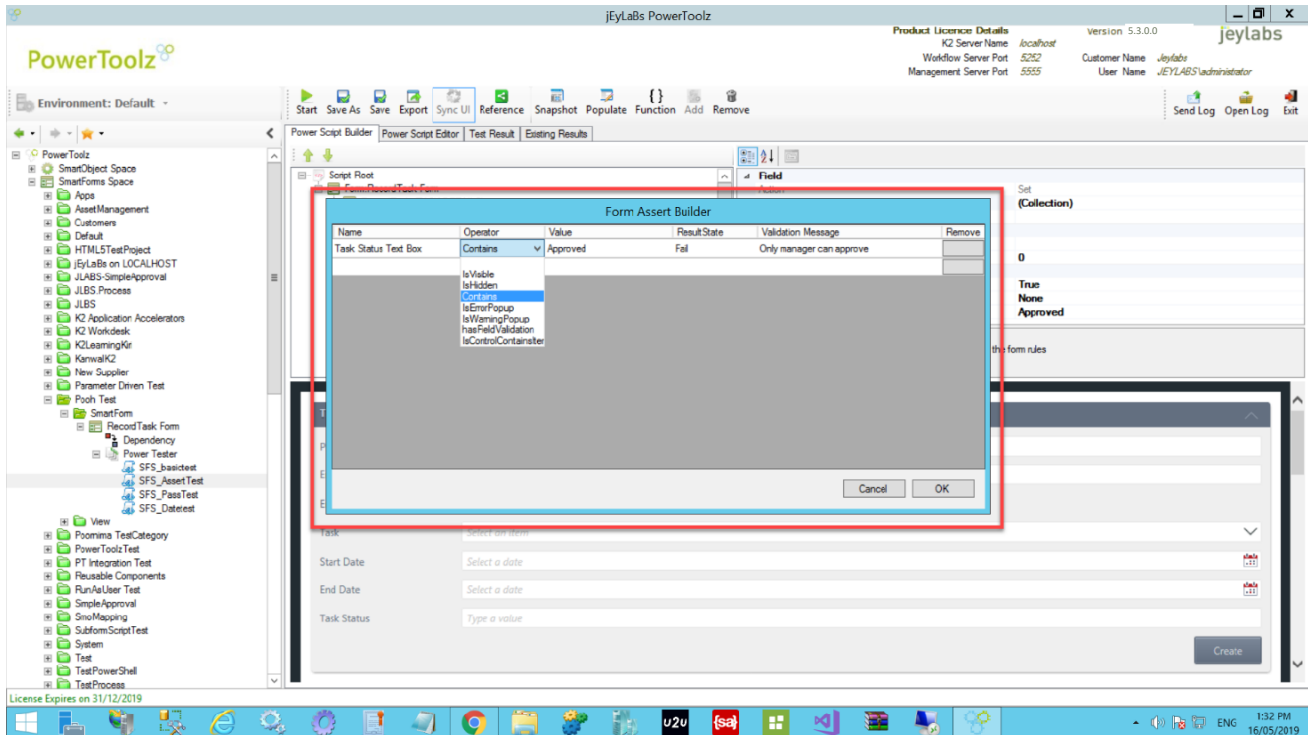
SmartForm Test Asserts

Test asserts can be used to validate SmartForm testing results as well as SmartForm behaviour.

1. Select a node on a SmartForm test script (represents a SmartForm element). Once this has been selected the test assert attribute will be available on the right-hand side. Clicking the assert button will open the assert builder window.



- The assert builder can be used to add, update and delete test asserts. These asserts will be examined at the time the test node selected is executed. For example, if the test asserts are set on the last test node, they will be examined at the end of the script. The same assert could be set at multiple nodes, to check if a certain field has changed where expected. A variety of operators are available when creating asserts, as shown below, such as testing whether a form control is visible, contains a specified value etc.

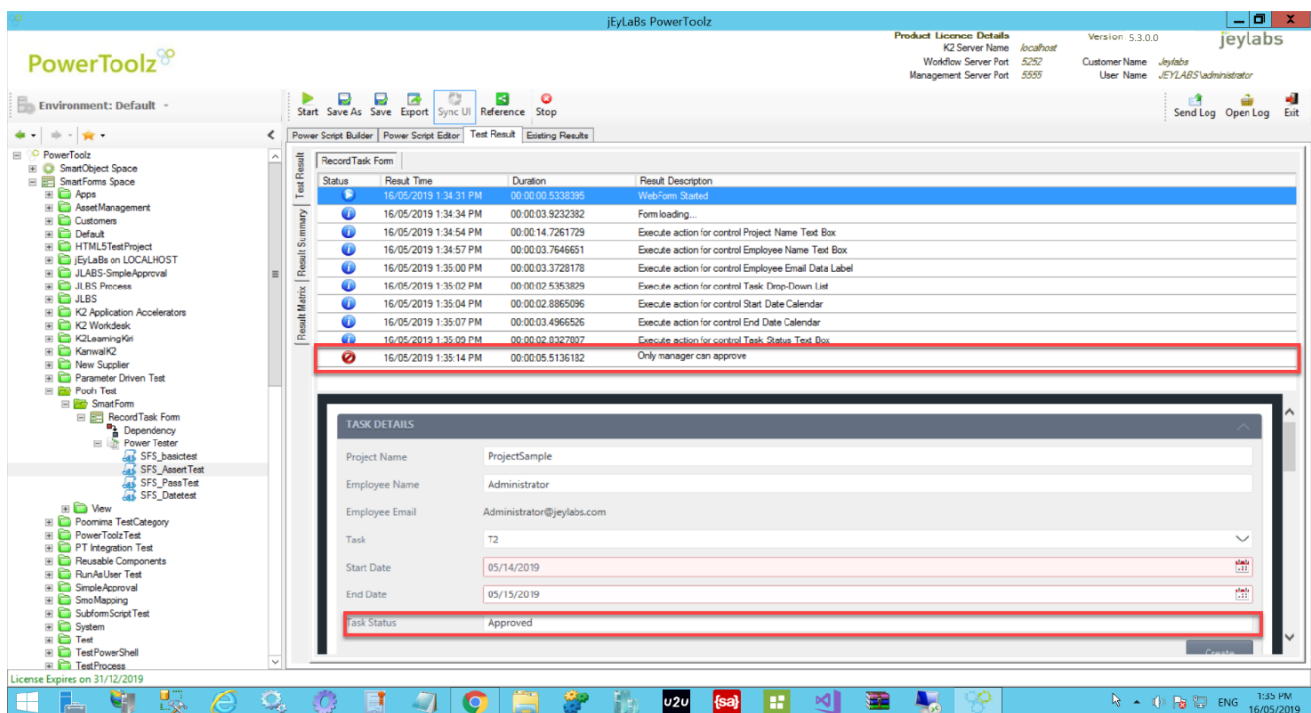
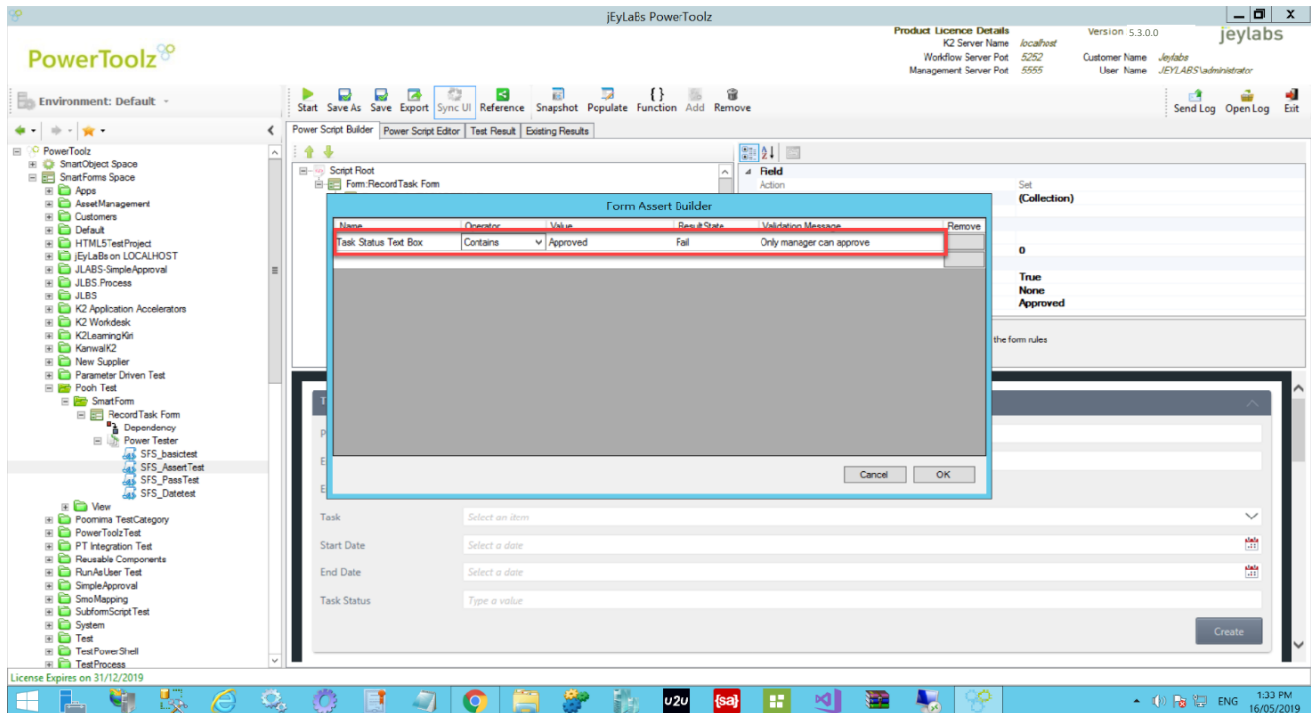


The unlimited assertions can also be setup against any SmartForm control.

SmartForm Control Assertion Failure

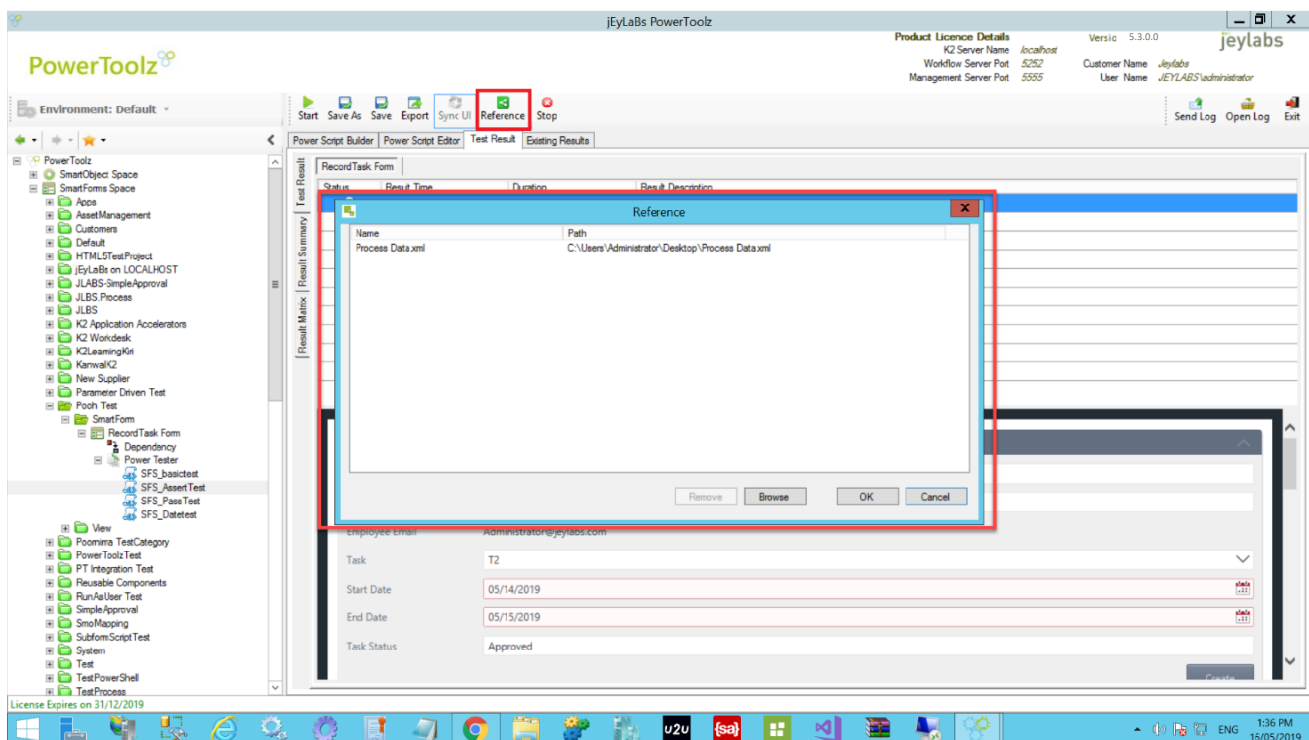
PowerToolz allows to customize the SmartForm control assertion failure messages as per the requirement. The Validation Message can be added against any SmartForm Control Assert.

1. The Validation Message displays the customized Assertion Failure message.



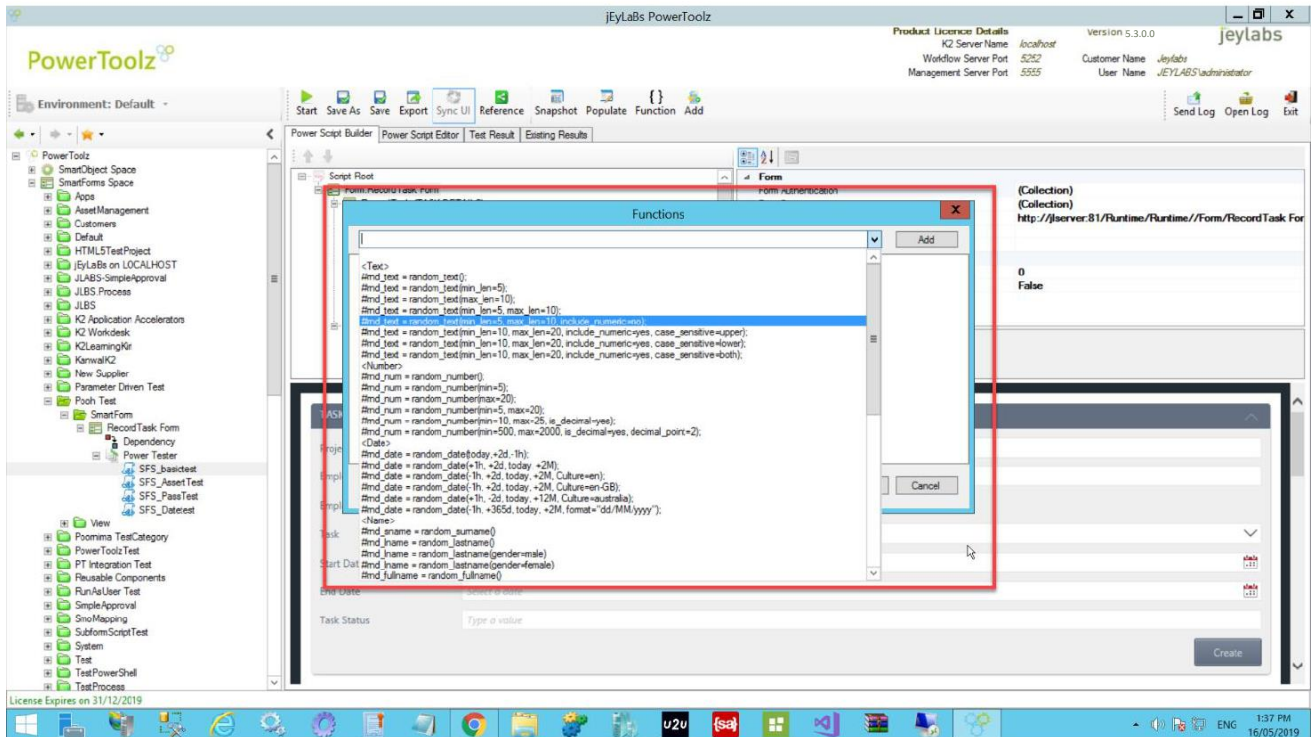
Reference Custom DLL

While creating a PowerScript, custom DLLs can be referenced. This is particularly useful when testing highly customized environments with unique situations such as a customized service broker. References can be managed using the reference button found on the toolbar accessible from the PowerScript Editor. References can be added by using the PowerToolz file browser and can be removed where necessary.

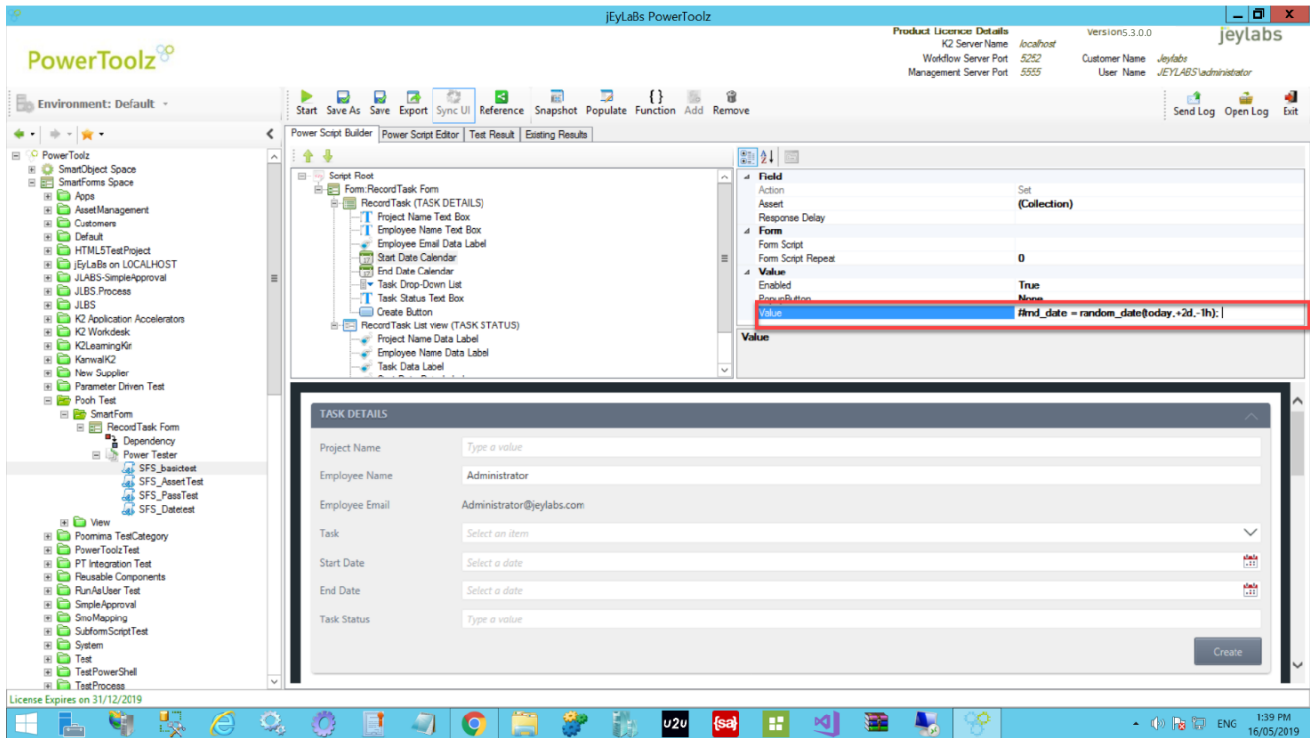


Data Randomization

1. When creating SmartForm tests, input data can be randomized using the Function button on top Action Bar.



- PowerToolz will assign random data values to each of the form controls. The random data type will match the data type of the control.
- Random data is available in the format of Text, Number, Date, Name, Phone, Email, Country, State and Address that can be selected for the relevant control. The function can be added by clicking the Add Button. The function name on the extreme left can be assigned to the relevant control.



- Once the values are assigned for the relevant controls, the Form can be tested by Clicking Start Button.

Workflows

Search Workflow

1. Click on Process Space Node which lists all the Work Flows (Processes) deployed for the environment selected. It will display the Process Map of first workflow in the list.

The screenshot displays the jEYLABS PowerToolz application window. The interface includes a sidebar with a tree view of environments, a main table of workflows, and a detailed process map view for a selected workflow.

Environment: Default

Process Space Node (Highlighted):

Process Name	Proc Id	ProcSet Id	Default Version	Export User	Deployed Date	Active	Error	Completed	Deleted	Folder
AccountingProcess	1029	17	9	K2JEYLABS\Administrator	7/09/2016 3:12:25 PM	0	0	0	0	AccP
AccountingProcess	2033	18	6	K2JEYLABS\Administrator	8/09/2016 11:37:08 AM	0	0	0	0	AccP
PractiseProcProcess	2046	19	8	K2JEYLABS\Administrator	12/09/2016 7:58:09 PM	0	0	0	0	AccP
ApprovalProcess	6194	46	8	K2JEYLABS\Administrator	10/11/2016 3:13:11 PM	3	7	0	0	APPr
CaptureProcess	6195	47	8	K2JEYLABS\Administrator	10/11/2016 3:13:11 PM	1	0	0	0	APPr
AssetApproval	5193	48	1	K2JEYLABS\k2_service	7/11/2016 5:17:21 PM	0	0	0	0	Asset
AssetCapture	5194	49	1	K2JEYLABS\k2_service	7/11/2016 5:27:34 PM	0	0	0	0	Asset
Catering and Room Setup Request Hawthorn	10270	2075	1	K2JEYLABS\Administrator	22/02/2019 11:31:10 AM	0	0	0	0	Cateri
TestProcess	10269	2074	1	K2JEYLABS\Administrator	22/02/2019 11:17:40 AM	0	0	0	0	Cateri
Child Category Workflow 01	9253	2067	1	K2JEYLABS\Administrator	11/07/2018 5:09:31 PM	0	0	0	0	Child
Child Category01 Workflow	9251	2063	2	K2JEYLABS\Administrator	10/07/2018 11:54:38 AM	0	0	0	0	Child
Child Category02 Workflow	9249	2064	1	K2JEYLABS\Administrator	15/06/2018 11:59:05 AM	0	0	0	0	Child
Application Deletion Workflow	9243	2059	1	K2JEYLABS\Administrator	10/05/2018 8:37:49 AM	0	0	0	0	com.f
Application Deletion Smart Starter Workflow	9244	2060	1	K2JEYLABS\Administrator	10/05/2018 8:37:55 AM	0	0	0	0	com.f
Application Generation Workflow	9245	2061	1	K2JEYLABS\Administrator	10/05/2018 8:39:12 AM	0	0	0	0	com.f
Add Document	8235	1054	1	K2JEYLABS\Administrator	5/01/2018 4:18:49 PM	0	0	0	0	Docu
CapEx Approval	6	4	1	K2JEYLABS\Administrator	24/08/2016 3:35:24 PM	0	0	0	0	Finan

TestProcess Process Map:

```

graph TD
    Start([Start]) --> DefaultActivity1[DefaultActivity1]
    DefaultActivity1 --> ClientEvent[ClientEvent]
  
```

The process map shows a linear flow starting from a 'Start' node, followed by a 'DefaultActivity1' node, and ending at a 'ClientEvent' node.

- The user can search for the Process containing the selective text entered on Search Tab on the right hand corner. The following screen shots illustrate some examples searches. Clicking Refresh Tab will list all the Processes.

PowerToolz Version 5.3.0.0

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Customer Name: jeylabs, User Name: jeylabs\administrator

Environment: Default

Refresh Categorize Select All Report

Search: Send Log Open Log Exit

Process Name	Proc Id	ProcSet Id	Default Version	Export User	Deployed Date	Active	Error	Completed	Deleted	Folder
AccountingProcess	1029	17	9	K2.JEYLABS\Administrator	7/09/2016 3:12:25 PM	0	0	0	0	AccP
AccountingProcess	2033	18	6	K2.JEYLABS\Administrator	8/05/2016 11:37:08 AM	0	0	0	0	AccP
PracticeAccProcess	2046	19	8	K2.JEYLABS\Administrator	12/09/2016 7:58:09 PM	0	0	0	0	AccP
ApprovalProcess	6194	46	8	K2.JEYLABS\Administrator	10/11/2016 3:13:11 PM	3	7	0	0	APPr
CaptureProcess	6195	47	8	K2.JEYLABS\Administrator	10/11/2016 3:13:11 PM	1	0	0	0	APPr
AssetApproval	5193	48	1	K2.JEYLABS\k2_service	7/11/2016 5:17:21 PM	0	0	0	0	Asset
AssetCapture	5194	49	1	K2.JEYLABS\k2_service	7/11/2016 5:27:34 PM	0	0	0	0	Asset
Catering and Room Setup Request Workflow	10270	2075	1	K2.JEYLABS\Administrator	22/02/2019 11:31:10 AM	0	0	0	0	Cateri
TestProcess	10269	2074	1	K2.JEYLABS\Administrator	22/02/2019 11:17:40 AM	0	0	0	0	Cateri
Child Category Workflow 01	9253	2067	1	K2.JEYLABS\Administrator	11/07/2018 5:09:31 PM	0	0	0	0	Child
Child Category 01 Workflow	9251	2063	2	K2.JEYLABS\Administrator	10/07/2018 11:54:38 AM	0	0	0	0	Child
Child Category 02 Workflow	9249	2064	1	K2.JEYLABS\Administrator	15/06/2018 11:59:05 AM	0	0	0	0	Child
Application Deletion Workflow	9243	2059	1	K2.JEYLABS\Administrator	10/05/2018 8:37:40 AM	0	0	0	0	com.f
Application Deletion Smart Starter Workflow	9244	2060	1	K2.JEYLABS\Administrator	10/05/2018 8:37:55 AM	0	0	0	0	com.f
Application Generation Workflow	9245	2061	1	K2.JEYLABS\Administrator	10/05/2018 8:39:12 AM	0	0	0	0	com.f
Add Document	8235	1054	1	K2.JEYLABS\Administrator	5/01/2018 4:18:49 PM	0	0	0	0	Docu
CapEx Approval	6	4	1	K2.JEYLABS\Administrator	24/08/2016 3:35:24 PM	0	0	0	0	Finan

TestProcess Refresh

Process Map Data Fields XML Fields

```

graph TD
    Start([Start]) --> DefaultActivity1[DefaultActivity1]
    DefaultActivity1 --> ClientEvent[ClientEvent]
  
```

License Expires on 31/12/2019

- Click on the categorize button to list the Processes by K2 Category. Clicking Refresh Tab will list all the Processes.

PowerToolz Product Licence Details Version 5.3.0.0

K2 Server Name: localhost
Workflow Server Port: 5252
Management Server Port: 5555
Customer Name: jeylabs
User Name: jEYLABS\Administrator

Environment: Default

Refresh Categorize Select All Report

Search: Send Log Open Log Exit

Process Name	Proc Id	ProcSet Id	Default Version	Export User	Deployed Date	Active	Error	Completed	Deleted	Folder
AccountingProcess	1029	17	9	K2:JEYLABS\Administrator	7/09/2016 3:12:25 PM	0	0	0	0	AccP
AccountingProcess	2033	18	6	K2:JEYLABS\Administrator	8/09/2016 11:37:08 AM	0	0	0	0	AccP
PracticeAccProcess	2046	19	8	K2:JEYLABS\Administrator	12/09/2016 7:58:09 PM	0	0	0	0	AccP
ApprovalProcess	6194	46	8	K2:JEYLABS\Administrator	10/11/2016 3:13:11 PM	3	7	0	0	APPR
CaptureProcess	6195	47	8	K2:JEYLABS\Administrator	10/11/2016 3:13:11 PM	1	0	0	0	APPR
AssetApproval	5193	48	1	K2:JEYLABS\k2_service	7/11/2016 5:17:21 PM	0	0	0	0	Asset
AssetCapture	5194	49	1	K2:JEYLABS\k2_service	7/11/2016 5:27:34 PM	0	0	0	0	Asset
Catering Room Setup Request										
Catering and Room Setup Request Hawthorn	10270	2075	1	K2:JEYLABS\Administrator	22/02/2019 11:31:10 AM	0	0	0	0	Cateri
TestProcess	10269	2074	1	K2:JEYLABS\Administrator	22/02/2019 11:17:40 AM	0	0	0	0	Cateri

TestProcess Refresh

ProcessMap DataFields XMLFields

```

graph TD
    Start([Start]) --> DefaultActivity1[DefaultActivity1]
    DefaultActivity1 --> ClientEvent[ClientEvent]
  
```

License Expires on 31/12/2019

1:43 PM 16/05/2019

View a K2 Workflow's Dependencies

This section will demonstrate the steps required to investigate a Workflow's dependencies.

1. From the Workflow space as mentioned in the previous section a Workflow can be selected.
2. Once a Workflow has been selected, the Workflow will be cascaded in the main PowerToolz menu on the left hand side.
3. The dependency menu item can be selected. From this screen the Workflow's associations with SmartObjects, SmartForms and Views and can be investigated.

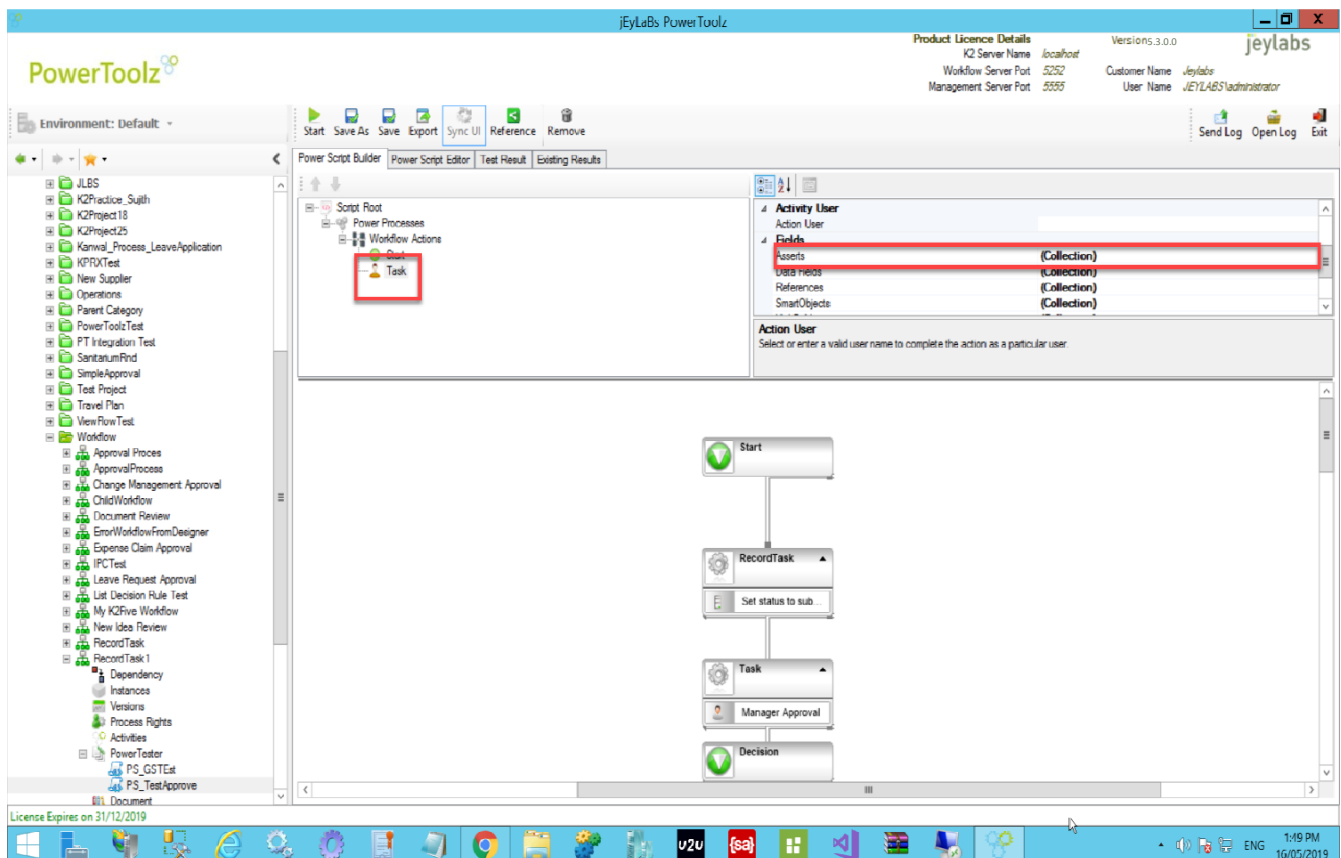
The screenshot shows the jeylabs PowerToolz application. The left-hand menu is expanded to show the 'RecordTask' workflow. The 'Dependency' menu item is highlighted. The main table displays the following data:

Name	Id	Type	Dependencies	Version	Created By	Created On	Modified By	Modified On
RecordTask Form	c6830f68-24c7-417f-a804-9c132d615d83	SmartForm	4	2	K2.JEYLABSIA...	15/05/2019 9:5...	K2.JEYLABSIA...	15/05/2019 11...
RecordTask	b86d2571-7516-4d37-9056-c40617eb1b4d	View	1	2	K2.JEYLABSIA...	15/05/2019 9:5...	K2.JEYLABSIA...	16/05/2019 8.4...
RecordTask	e3a794db-fbd0-4b11-ae76-1af1f07d3730	SmartObject	0	0				
RecordTask List view	24b5e274-376d-40e7-8d64-e211f3ab6f3e	View	1	1	K2.JEYLABSIA...	15/05/2019 9:5...	K2.JEYLABSIA...	15/05/2019 10...
RecordTask	e3a794db-fbd0-4b11-ae76-1af1f07d3730	SmartObject	0	0				
Workflow/RecordTask	00000000-0000-0000-0000-000000000000	Process	0	0				

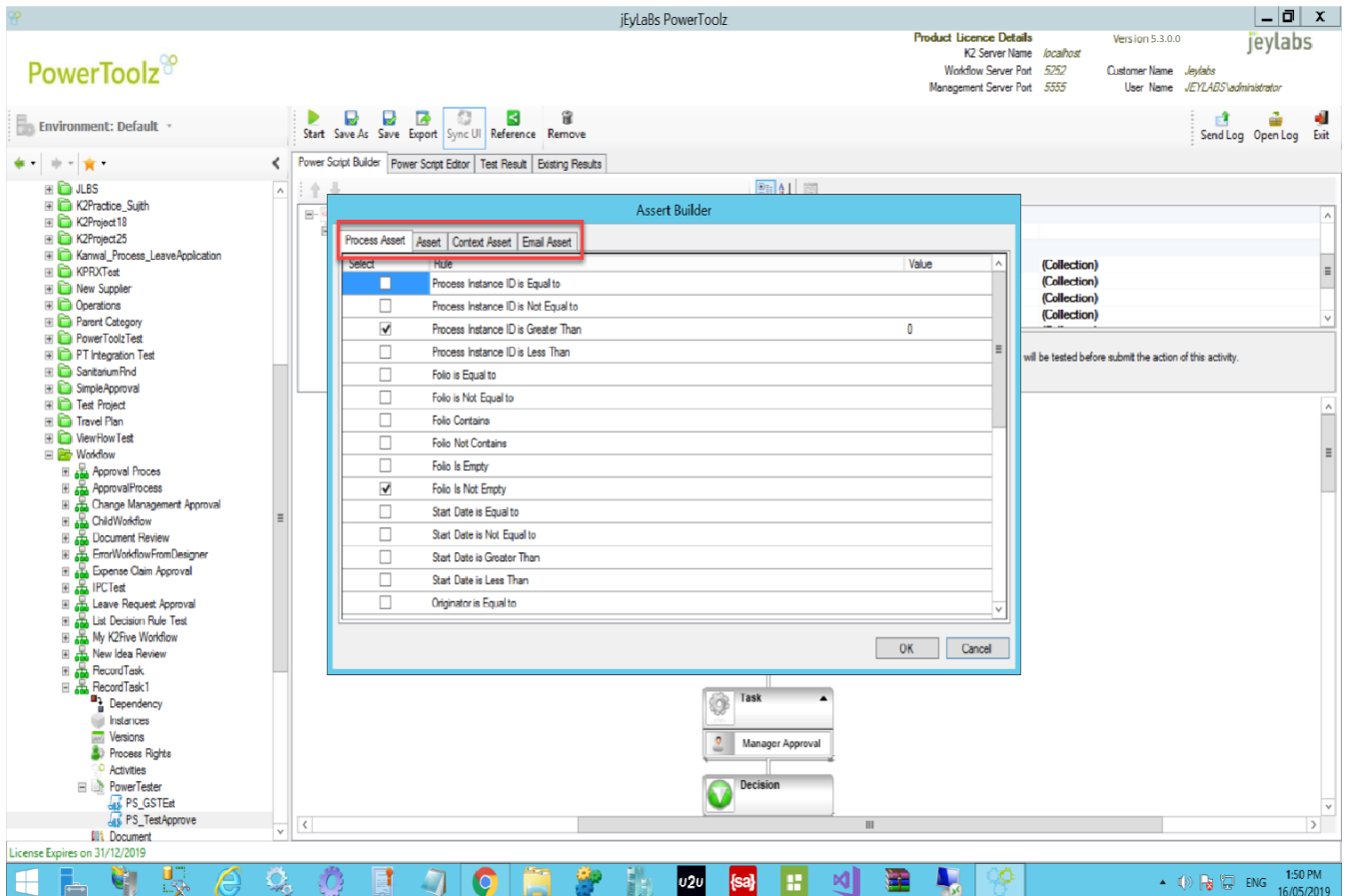
Workflow Test Asserts

Test asserts can be used to validate workflow testing results as well as workflow behaviour.

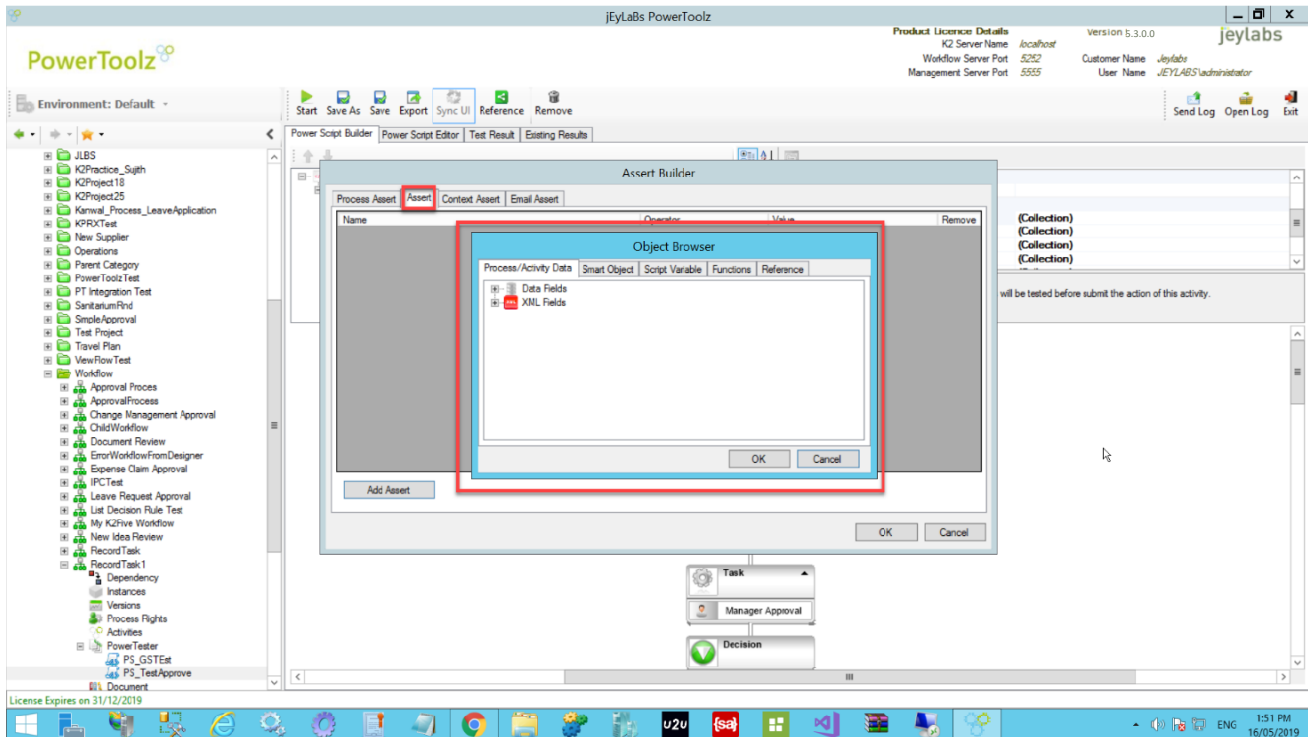
1. Select a node on a workflow test script (represents a workflow activity). Once this has been selected the test assert attribute will be available on the right hand side. Clicking the assert button will open the assert builder window.



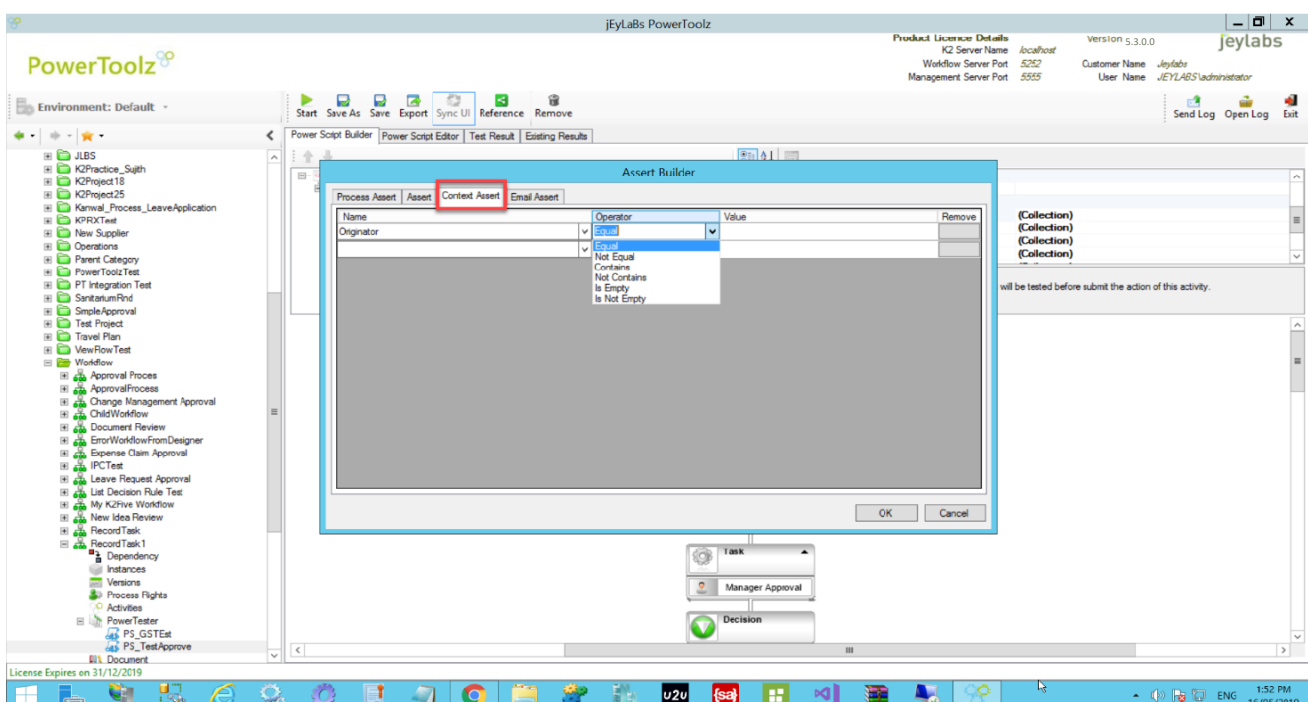
2. The assert builder can be used to add, update and delete test asserts. These asserts will be examined at the time the test node selected is executed. There are multiple test assert types for K2 workflow tests, which can be added, updated and deleted using the corresponding tab.
3. Process asserts can be set using the Process Assert tab. These asserts are used to validate process instance information. Some are set as default, such as the instance ID being greater than zero.



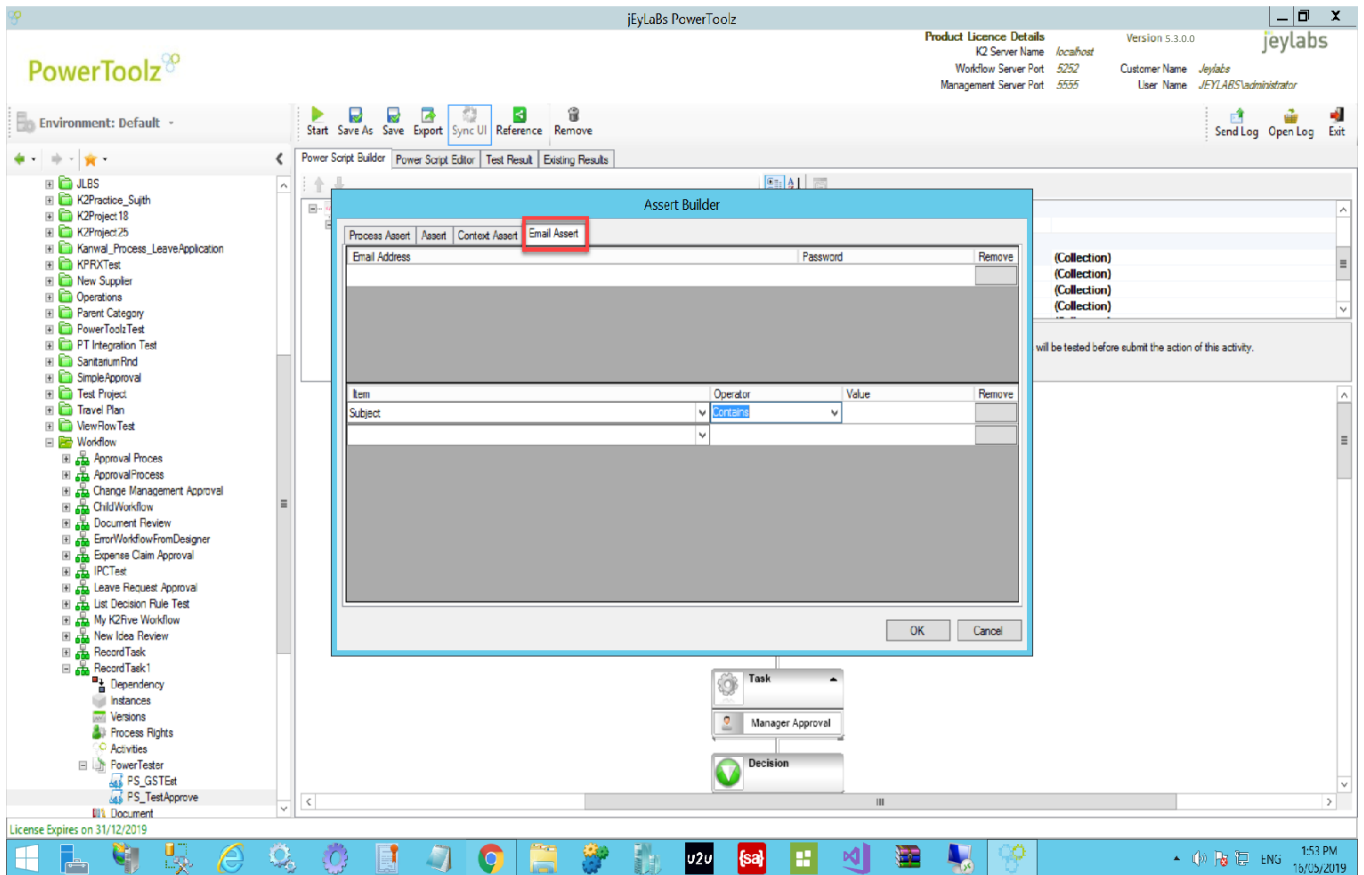
- General asserts can be set using the Assert Tab. Workflow data fields, XML data fields, SmartObject methods and script variables can be asserted using this tab.



- Context Asserts can be set using the Context Assert tab. This allows for the validation of basic status information for a process instance, such as the originator, process status, destination user etc.

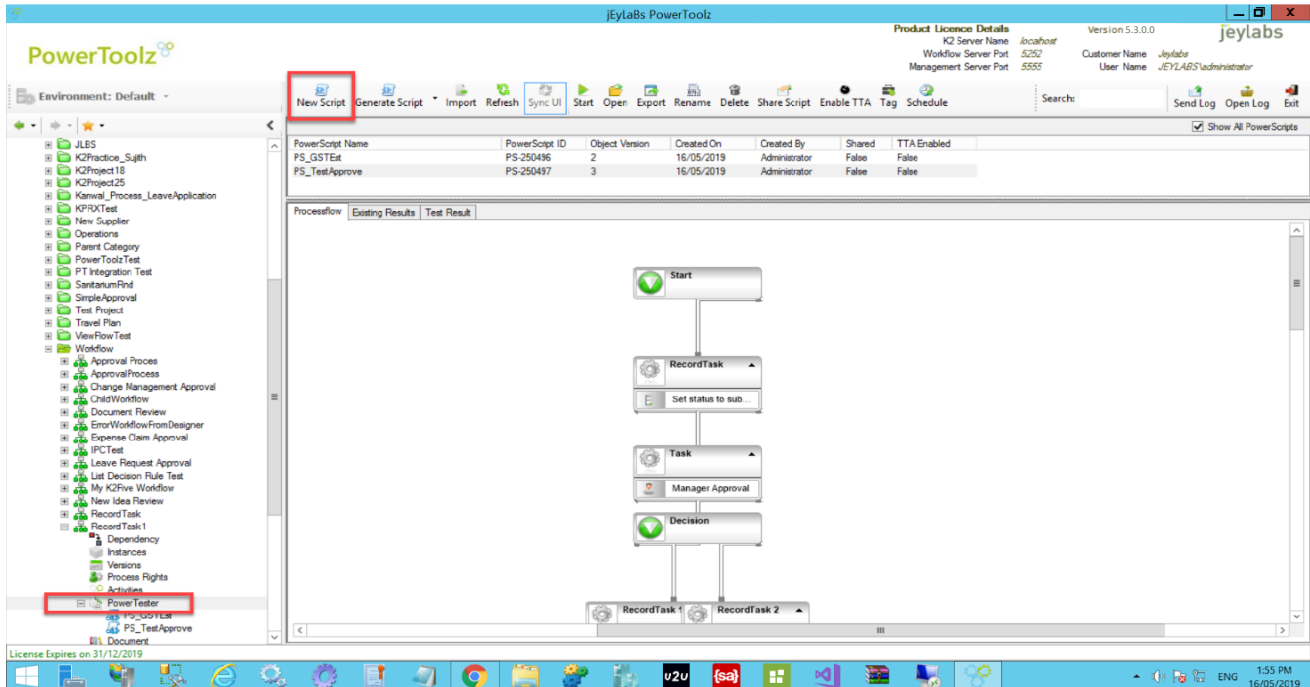


- Email asserts can be set using the Email Assert tab. This allows the user to validate the email communications made by the K2 workflow.

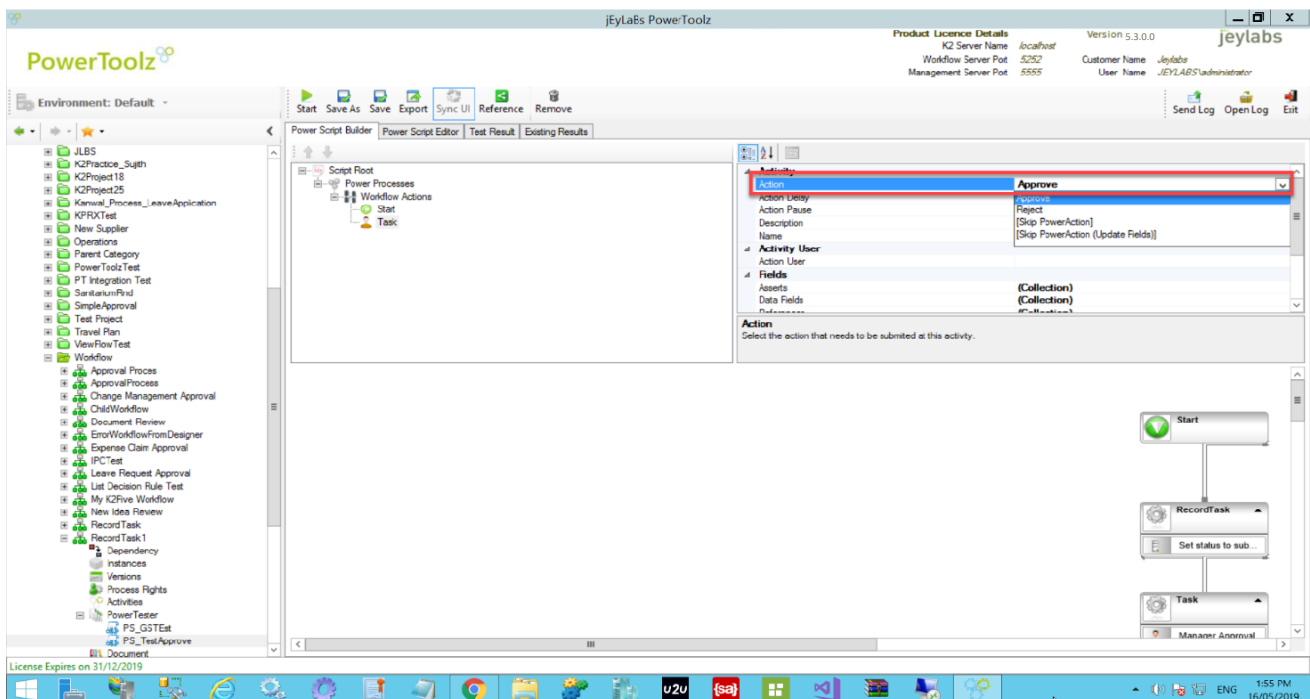


Build Basic PowerShell and Test K2 Workflow

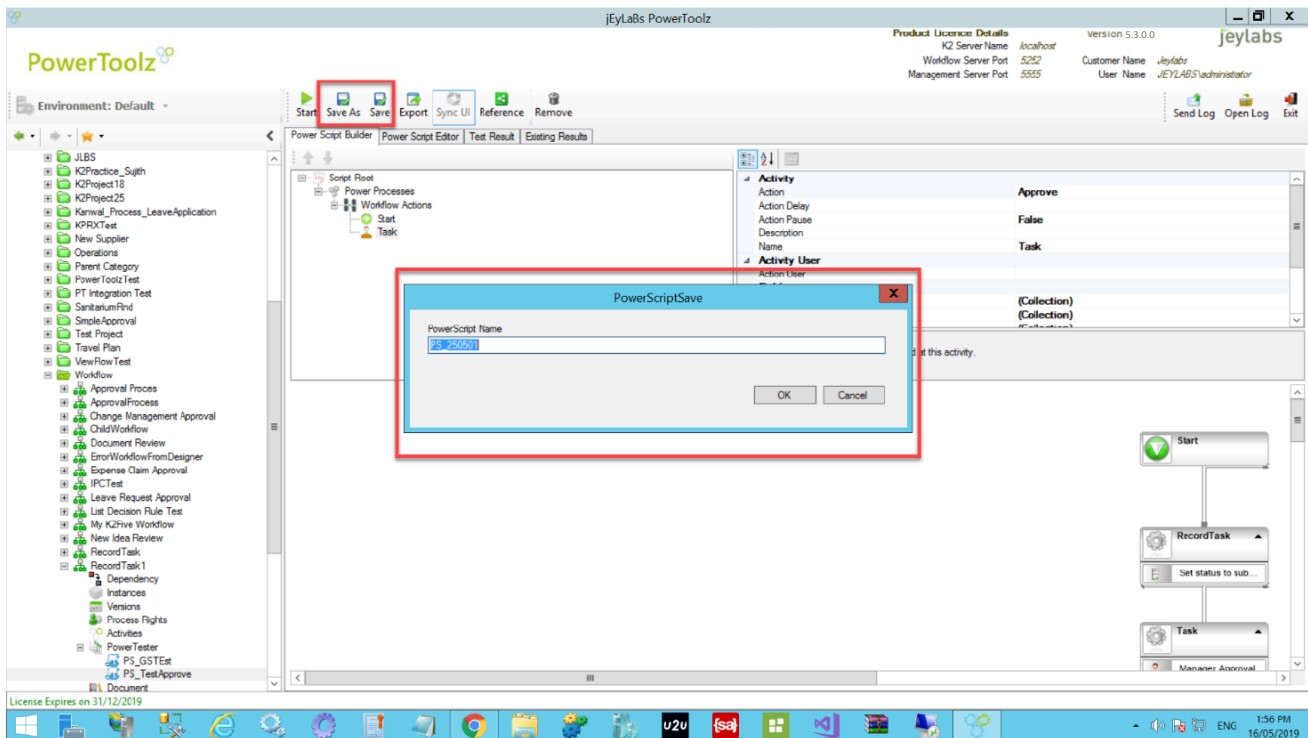
1. Select the process name and expand it to build Power Script for that process and click the PowerTester node in the tree. Click New Script button on the toolbar.



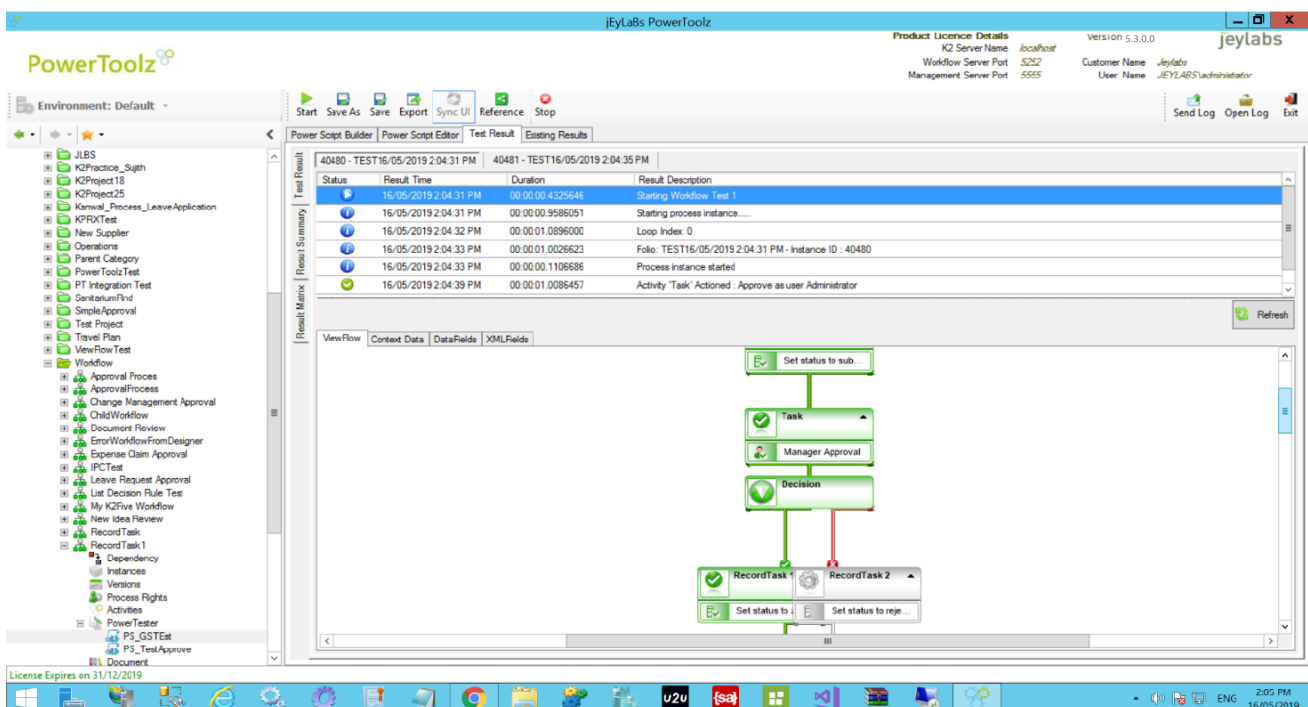
2. Configure the action property for the activities according to the scenario to be tested. A common example is for the action to be set to approve or reject at a manager approval activity.



- Click Save to save the PowerScript.



- Click Start to run the PowerScript.
- The workflow progress is shown to the bottom of the screen. This allows the user to view live progression, as the actions that have been set in the previous step are used by the PowerScript. The overall test result will be shown once all testing steps have been completed.

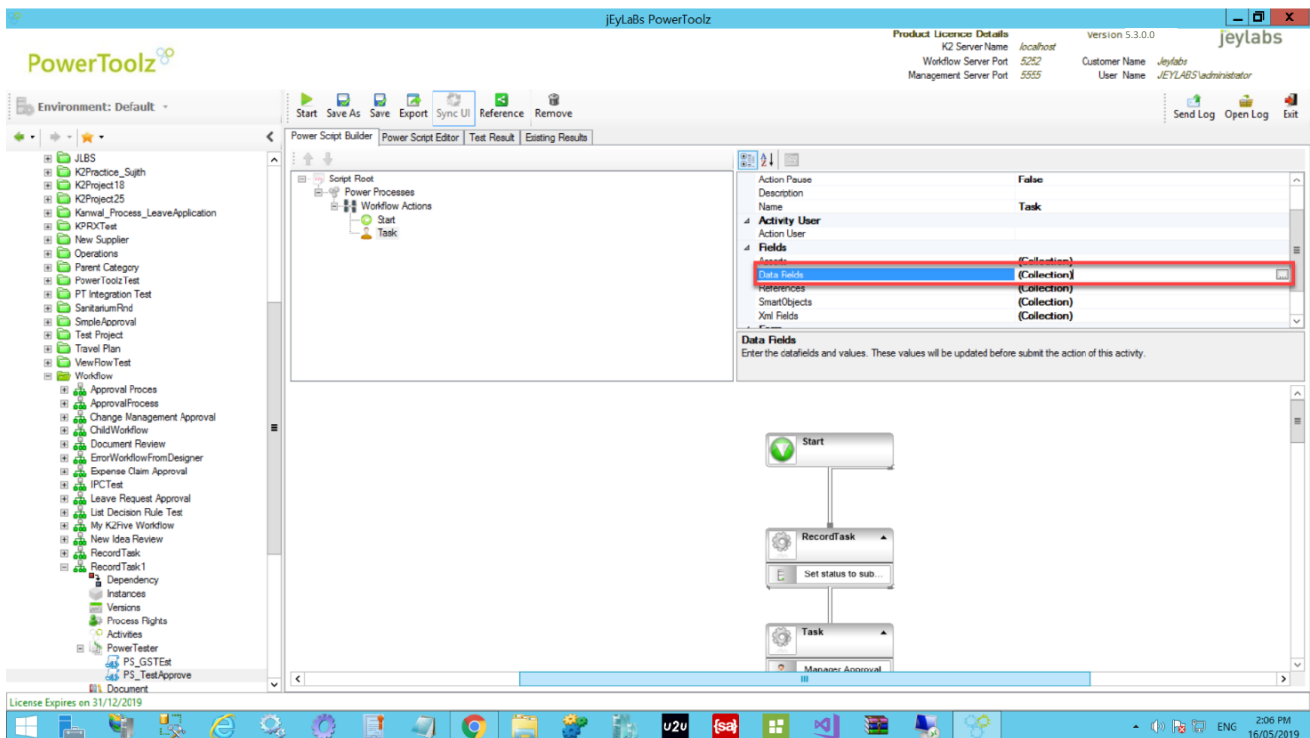


Update Fields and Asserts

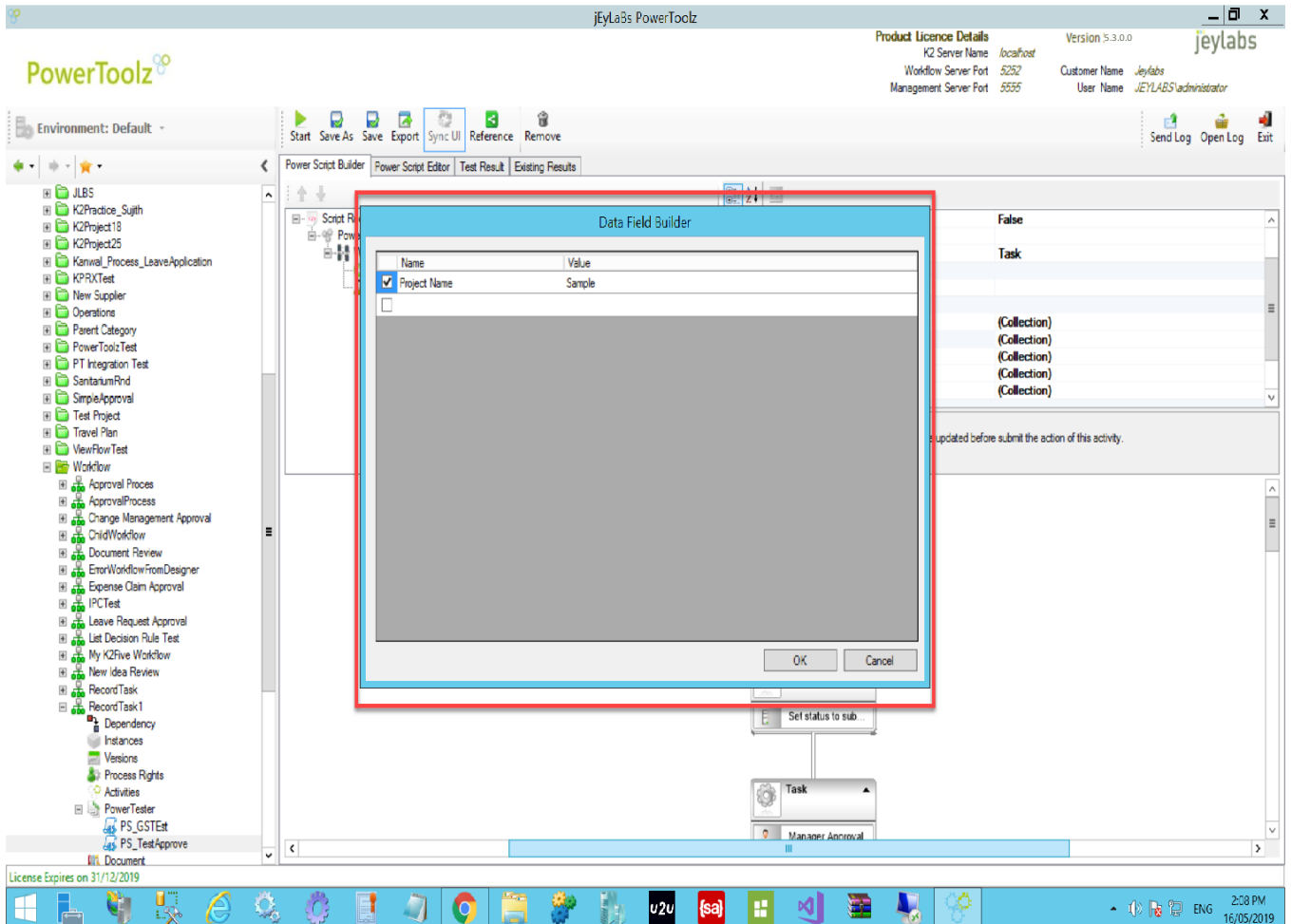
PowerToolz allows the user to update Data and XML fields of a process during the testing activities. The values for the data and xml fields can be set in each client activity. PowerToolz will assign the values to the relevant fields during the execution before the committing the Worklist action. The tool also allows the user to configure Asserts, Data Fields, XmlFields and SmartObjects (SMO).

Configure Data Fields values

1. Click the browse button of the Data Fields property of the activity.

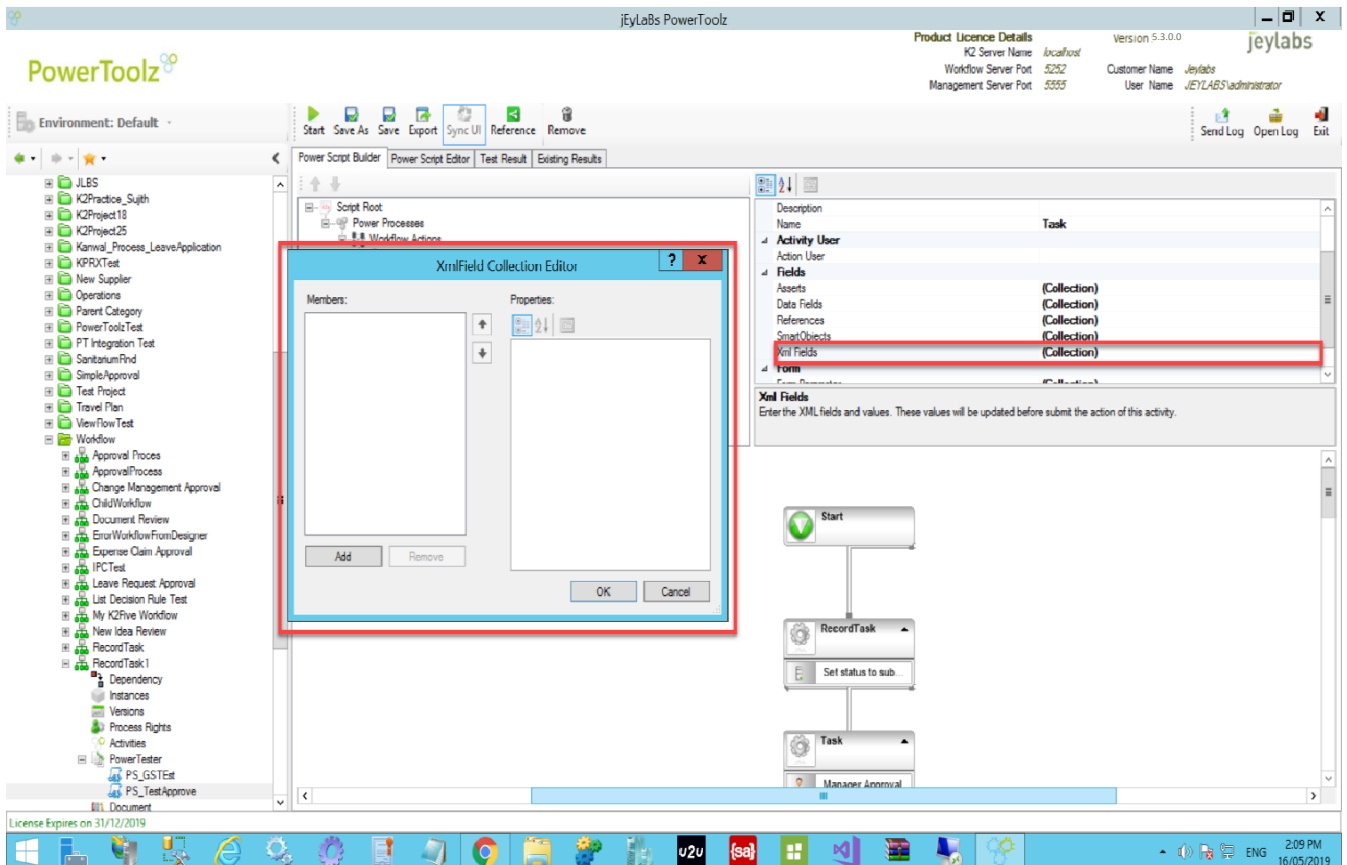


- The Data Field Builder popup will open. In this popup window, the values for the data fields whether to include them (checkbox) can be selected. Pressing the ok button will commit the changes and close the pop up window. These data field values will be used when the test script is executed.

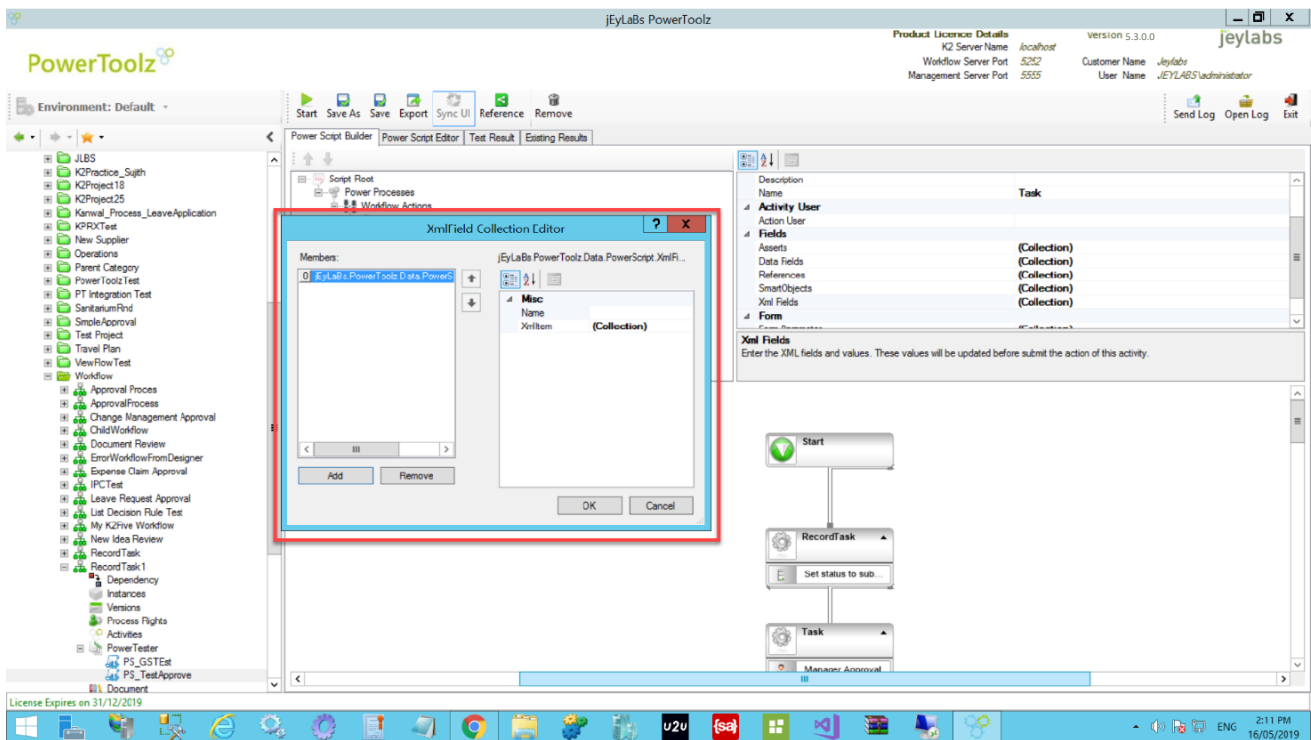


Configure XML Fields Values

1. Click the browse button of the XmlFields property of the activity. XMLField Collection Editor Popup window will open. From this window, relevant XML fields can be added and their values set. This will be used when the test script is executed. To add an XML field, click the add button.

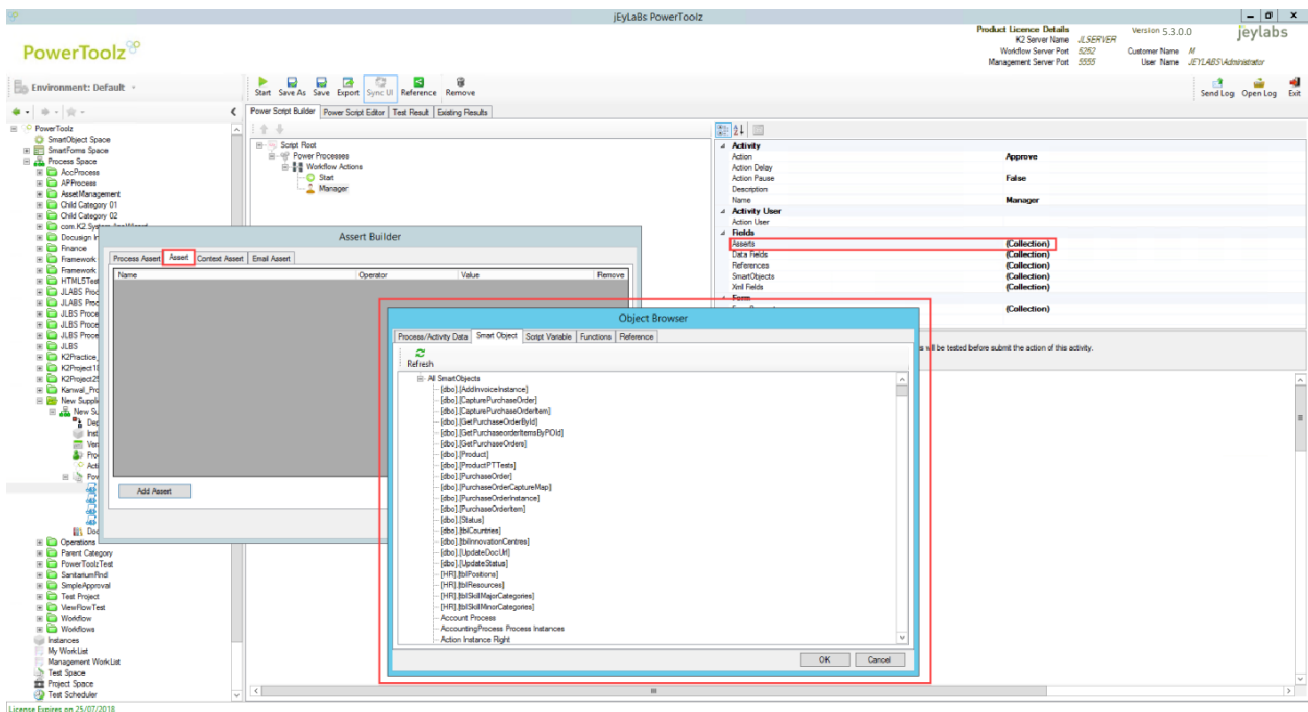


2. The XML Field Builder popup will open. In the popup, set the values for the XPath and select the checkbox for the XPath and click OK.

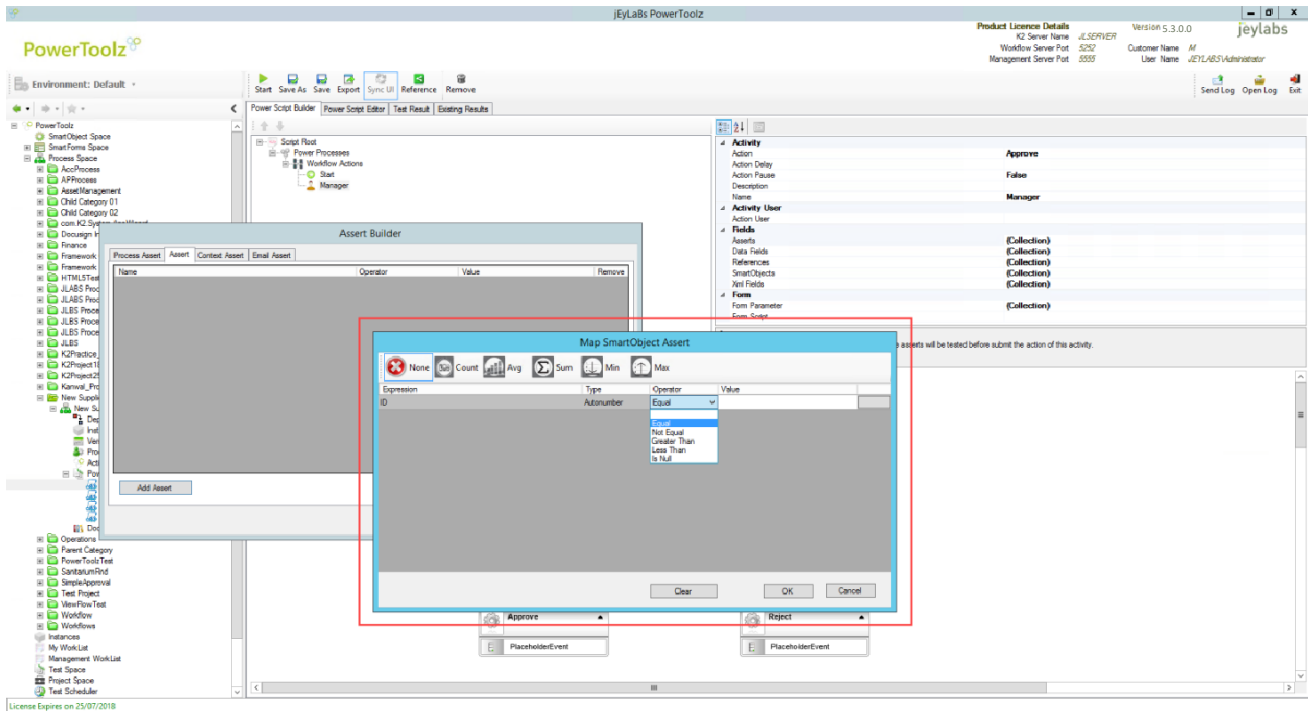


Configure Field and SMO Assert

1. Click the browse button of the Assert property of the activity. Assert Builder popup will open.
2. From the Assert Builder window, a range of test asserts can be set to validate testing to ensure more thorough testing is completed.
3. (eg: Start Date is Greater Than 30/10/2014, Originator is Equal to Denalix\codi)
4. The top of the window contains a range of tabs that can be used to navigate the Assert Builder. Using the Assert Tab, clicking the “Add Assert” button will open the Object Browser. From here a relevant data field, xml field or SMO for assert can be selected.



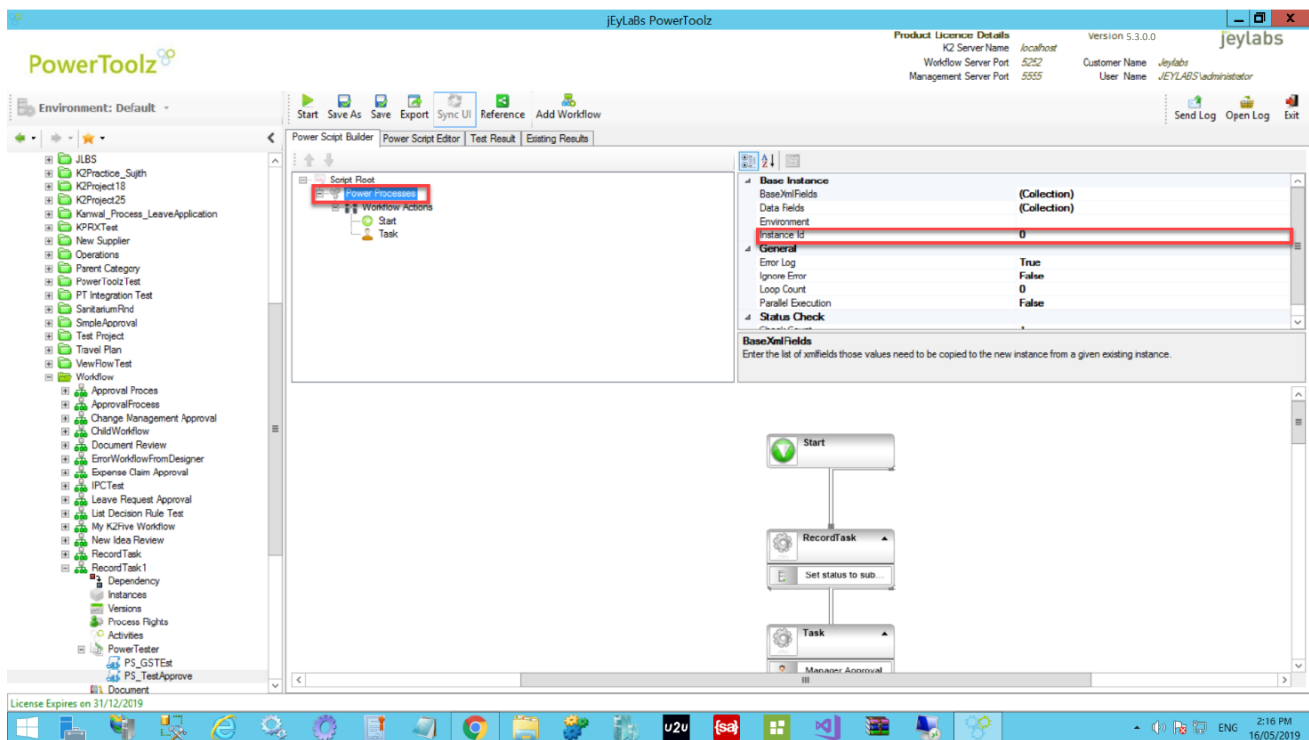
- Once the relevant assert field has been selected an operator and assessing value can be entered. Once all information has been entered clicking the ok button will temporarily save the assert values. Clicking the save script button will commit the changes.



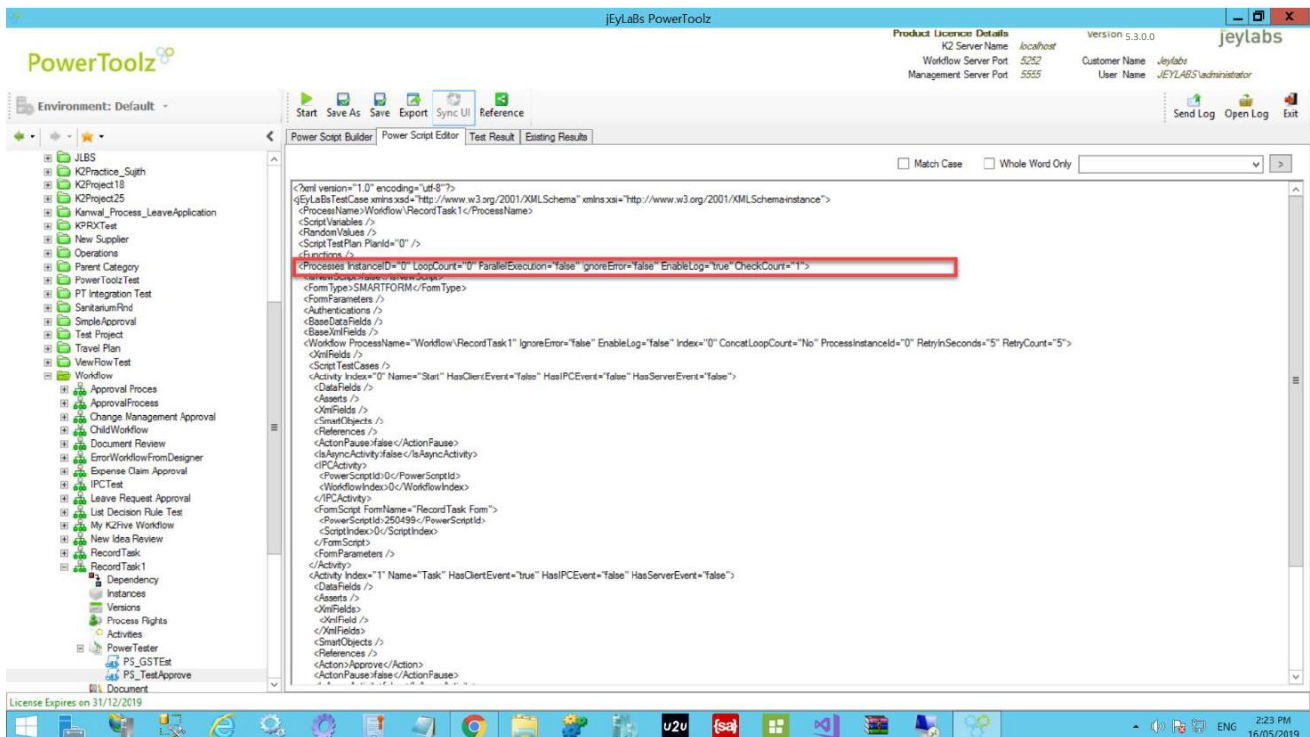
Load XML Content from an Existing Process Instance

This enables the user to run the PowerScript with the Process data from a given previous instance created for the same process, a useful feature when performing regression testing. The Instance ID is required to retrieve the data from an existing instance.

1. Select the PowerProcess node in the PowerScript tree. In the property panel, under the Base Instance select the BaseXmlField name and enter the InstanceId.



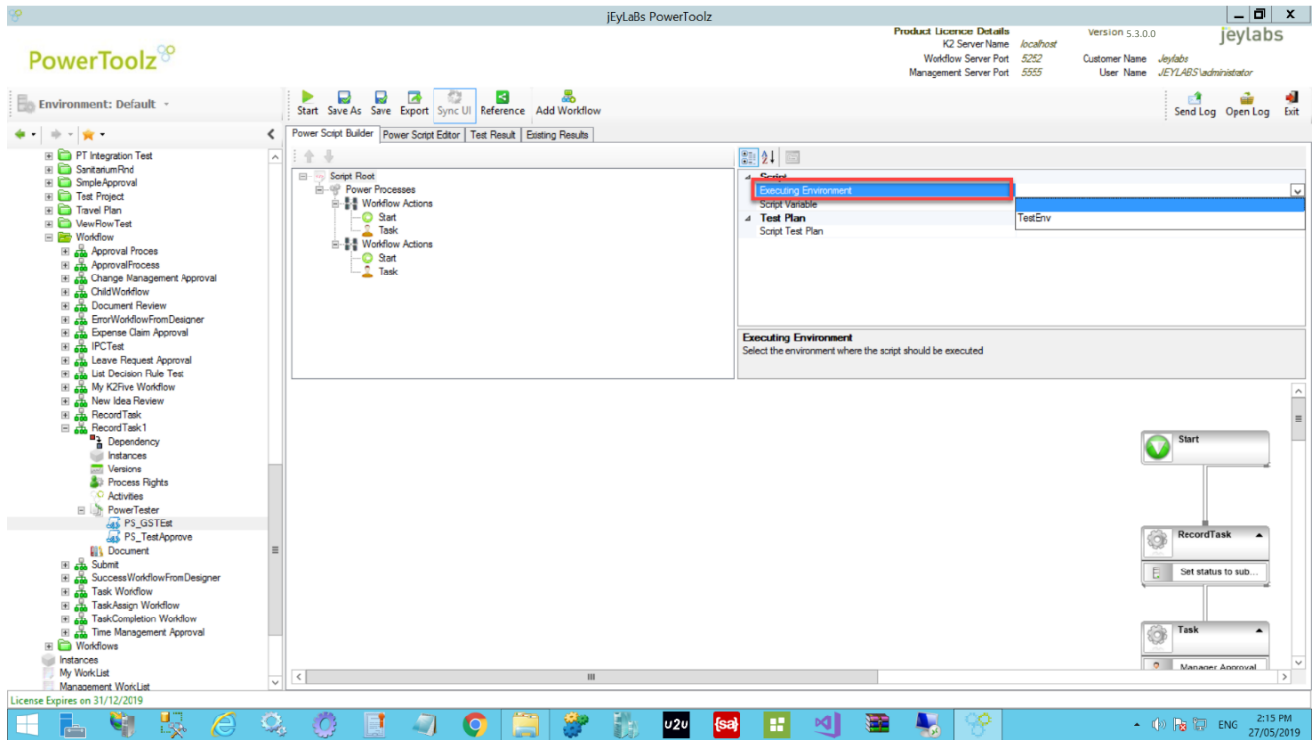
2. When the PowerScript execution is started with Base Instance XmlField and Base InstanceID, the PowerToolz should start the new instance with XML content from the existing instance.
3. Click the browser button on Data Fields and select the data fields to be copied from the given Instance Id into the new instance created by the PowerScript.
4. The selected PowerScript will be modified as shown below and can be saved as a new PowerScript.



Note: The optional selection of Base XmlFields, Data Fields and Environment are also available. If nothing is selected, then all the existing values will be copied into the new instance by the PowerScript.

Load Instance Data from Different Environment

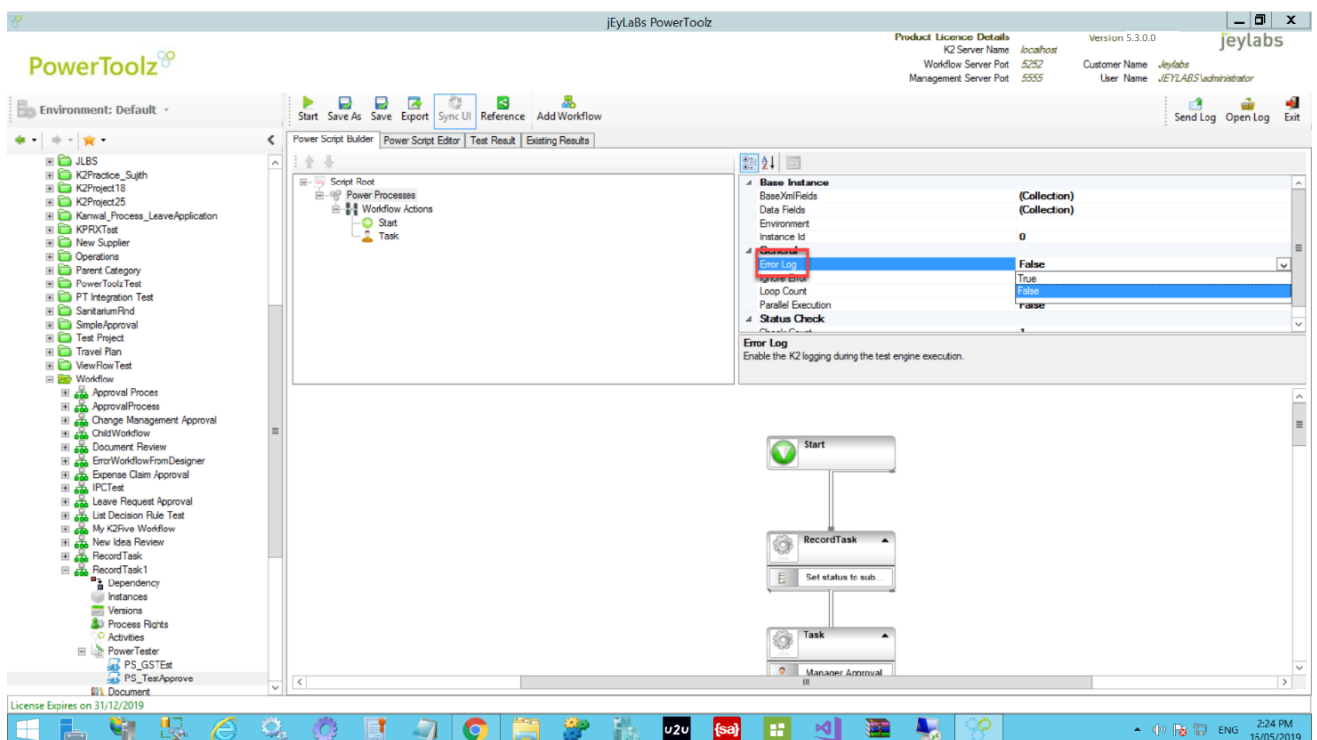
1. If a same PowerShell is run on the different environment, then the Instance Data should be loaded from the selected environment.



Enable Power Logging

The Power Logging option can be enabled for certain workflow action by setting the Error Log option to “True” in Workflow level.

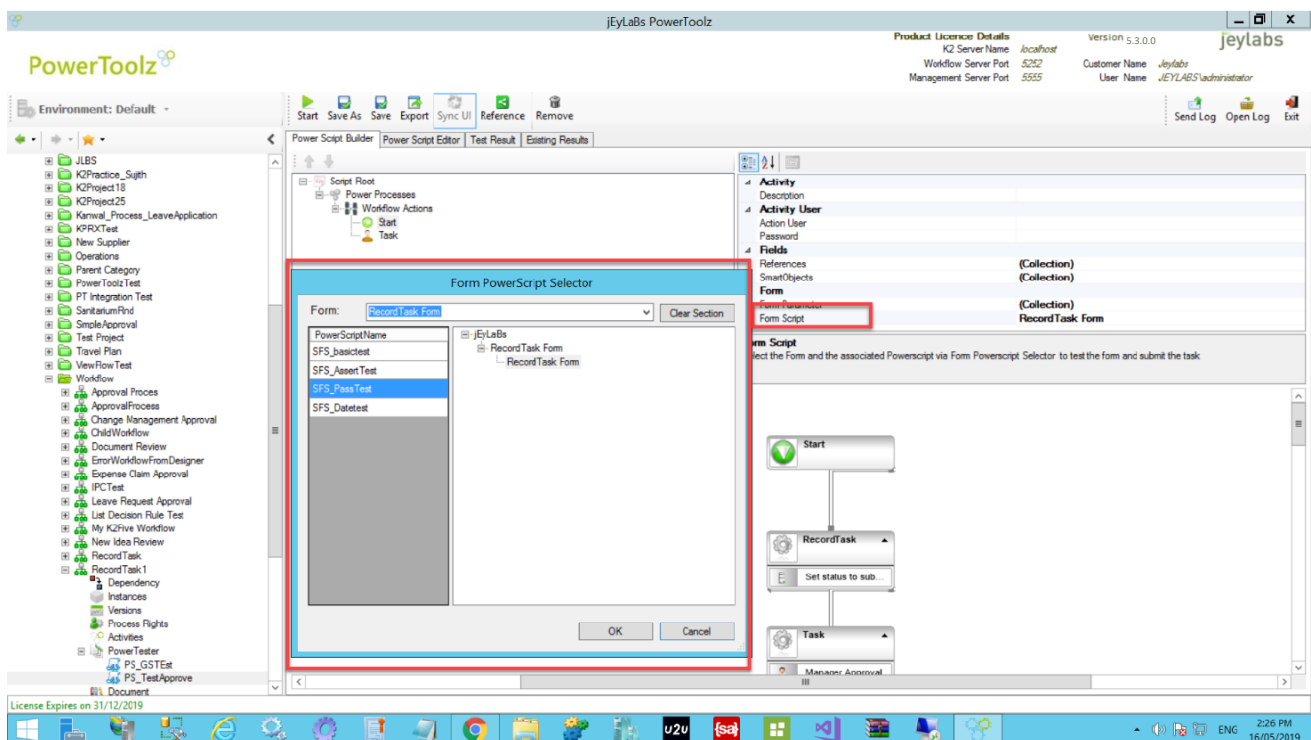
- ❑ Enabling error log will provide additional log detail in the Test Result.
- ❑ We can set the Error Log option on the Process level to record K2 log messages for Workflows of the process.



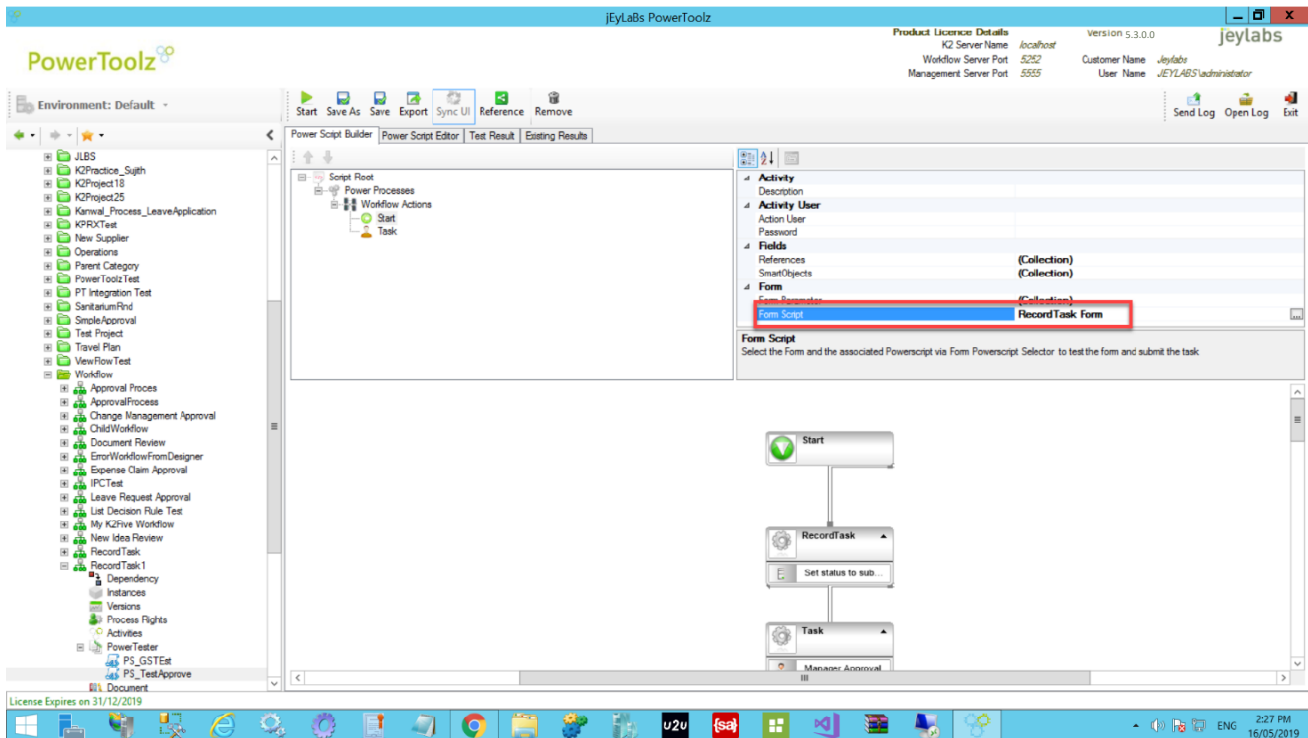
Activities Triggered via Form Scripts (SmartForm and Process Test Integration)

Note: The initial Submit Smart form that triggers the workflow and the Process to be tested should be designed in the following manner to automate testing of Process triggered via SmartForm Power Scripts:

- ☐ The hidden text field PITID to be defined in the initial submit Smart Form.
 - ☐ The String data field PITID to be defined in the Process.
 - ☐ The Submit Smart Form rule to be configured to set the PITID hidden text field value from Smart Form to K2 Process data field PITID.
1. Select the PowerTester of the process to be tested. Click New Script button on the toolbar to begin creating a new test script.
 2. Select the Activity name (eg: Start) and connect the relevant Form Script created under SmartForm Tester as following:
 1. Click on the browser button for the Form Script attribute of the start activity. Select the required PowerScript from Form PowerScript Selector, by first choosing the relevant SmartForm using the drop-down list, and then choosing the specific test script to use on the left-hand side.



3. Select the Activity name (eg: Manager) and can connect the relevant Form Script created using SmartForm Tester. Repeat sub step 1 under step 2(If there are multiple activities that need to be integrated) for the following activity, to select the relevant SmartForm script to be integrated.



- Click Start to run the process PowerScript that has now been integrated with relevant SmartForm test scripts. PowerToolz will now execute Smart Form Power scripts to action each of the activities of the process. The Test Results will be shown as below. You can view the results for the Workflow and the Forms integrated with the Workflow.

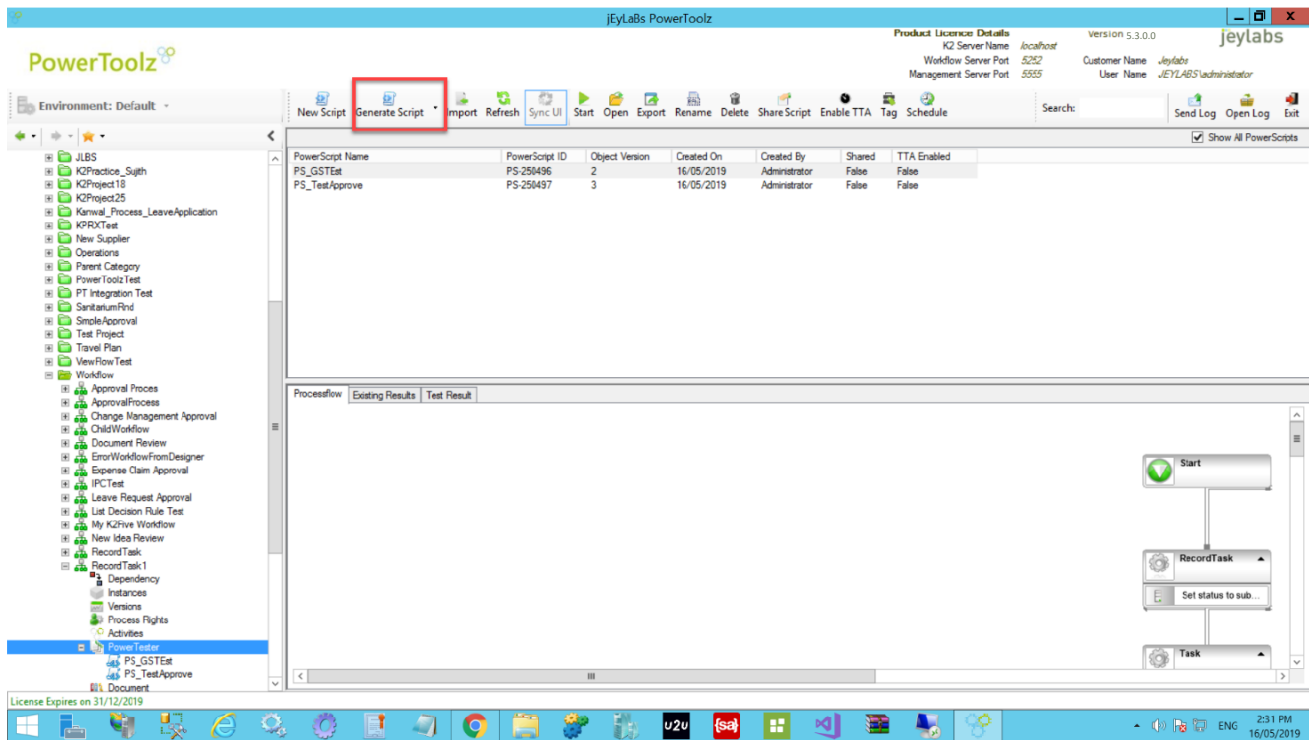
The screenshot displays the jeylabs PowerToolz application window. The interface includes a top menu bar with options like Start, Save As, Save, Export, Sync UI, Reference, and Stop. A left sidebar lists various test scripts and workflows. The main area shows a 'Test Result' tab with a table of test results for 'Workflow 1'.

Status	Result Time	Duration	Result Description
Success	16/05/2019 2:28:43 PM	00:00:01.2033684	Workflow Started
Success	16/05/2019 2:28:44 PM	00:00:00.6424540	Form loading...
Success	16/05/2019 2:28:55 PM	00:00:07.2365262	Execute action for control Project Name Text Box
Success	16/05/2019 2:28:57 PM	00:00:02.3820466	Execute action for control Employee Name Text Box
Success	16/05/2019 2:29:03 PM	00:00:06.3443710	Execute action for control Employee Email Data Label
Success	16/05/2019 2:29:05 PM	00:00:02.4845039	Execute action for control Task Drop-Down List
Success	16/05/2019 2:29:07 PM	00:00:02.8126227	Execute action for control Start Date Calendar
Success	16/05/2019 2:29:10 PM	00:00:03.0637436	Execute action for control End Date Calendar
Success	16/05/2019 2:29:12 PM	00:00:02.2808847	Execute action for control Create Button
Success	16/05/2019 2:29:14 PM	00:00:02.5779956	The system is waiting for the response of the control Create Button

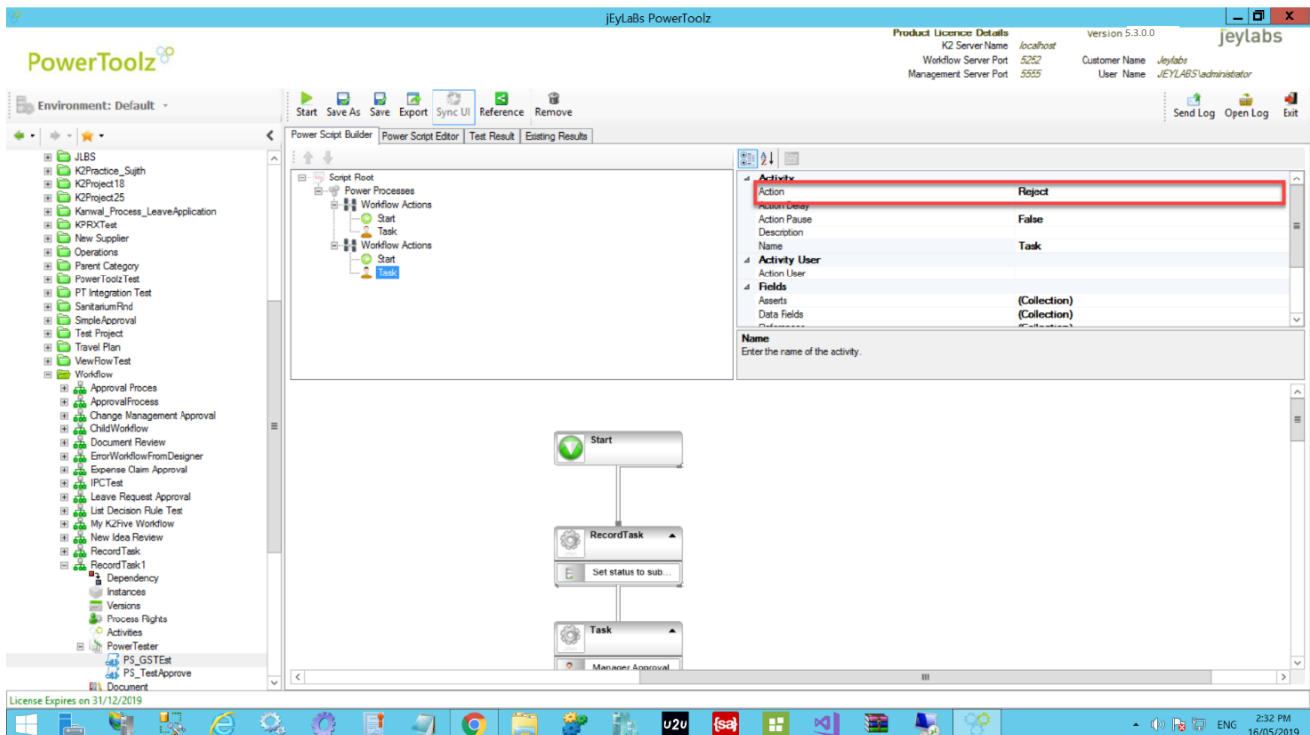
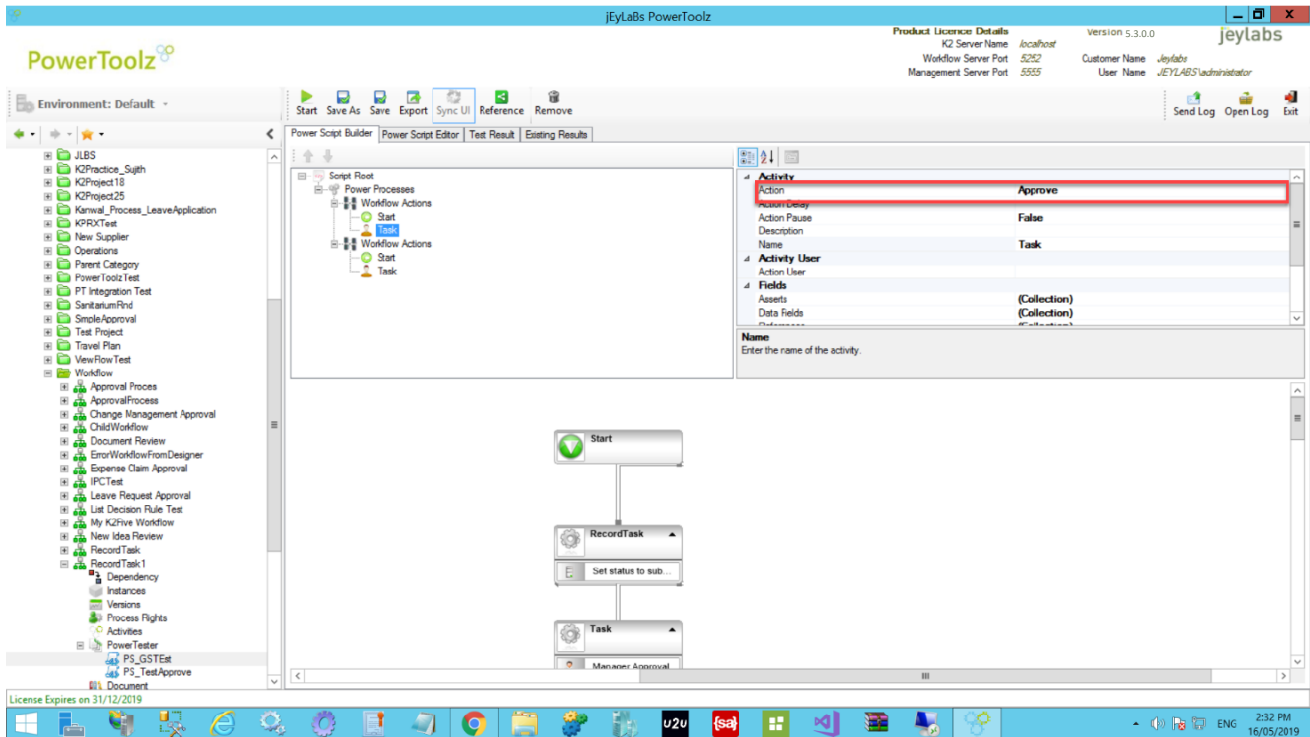
Below the table, a 'TASK DETAILS' panel shows fields for Project Name, Employee Name, Employee Email, Task, Start Date, End Date, and Task Status, with a 'Create' button at the bottom.

Auto Generate PowerShell

1. Click Generate Script to automatically generate script for a selected process.

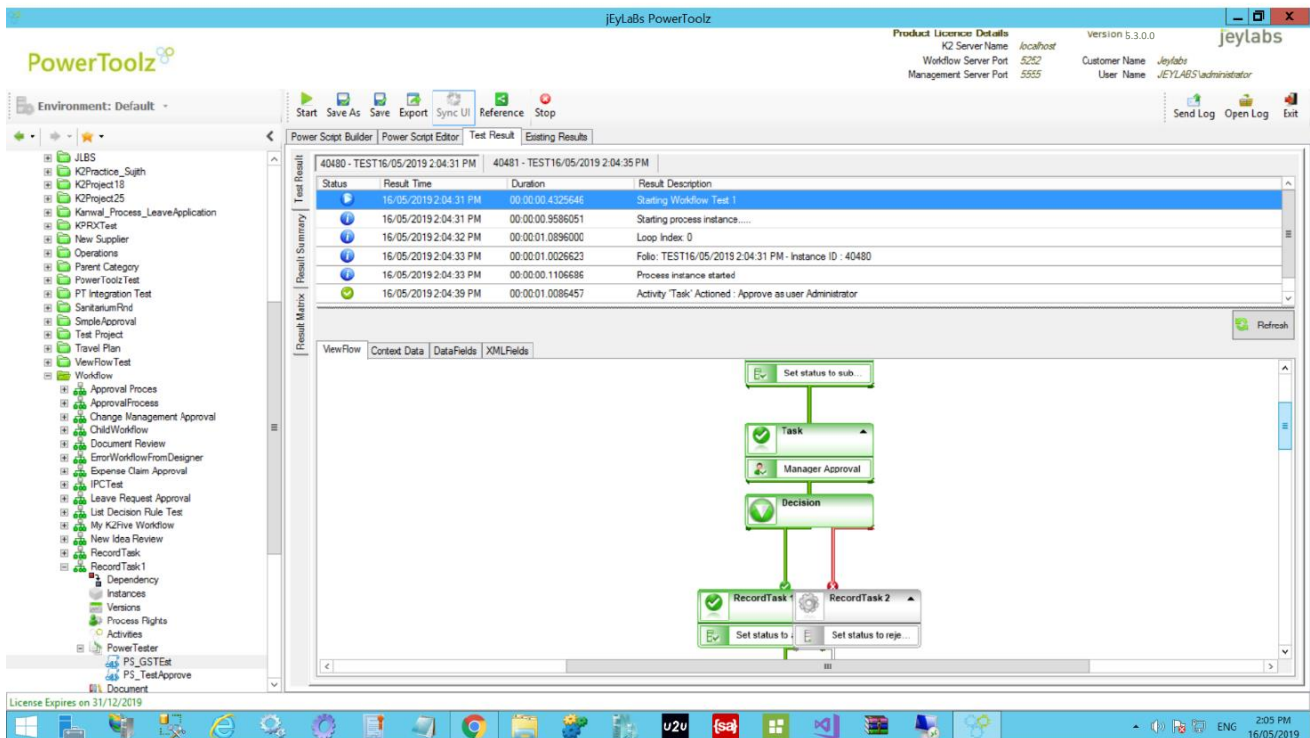


- PowerToolz will analyze the process to identify all possible paths, creating respective workflow test nodes. Powertoolz will automatically set relevant activity actions for each node, to ensure the appropriate path is taken. Other activity attributes such as Action users and test asserts can also be set with the same steps used when creating manual test scripts.



Note: Generated PowerScript will create workflows based on number of outgoing lines for each activity. There might be outgoing lines with no line actions but defined line rules could exist on them. Such generated workflows in the script should be manually corrected before executing the generated scripts.

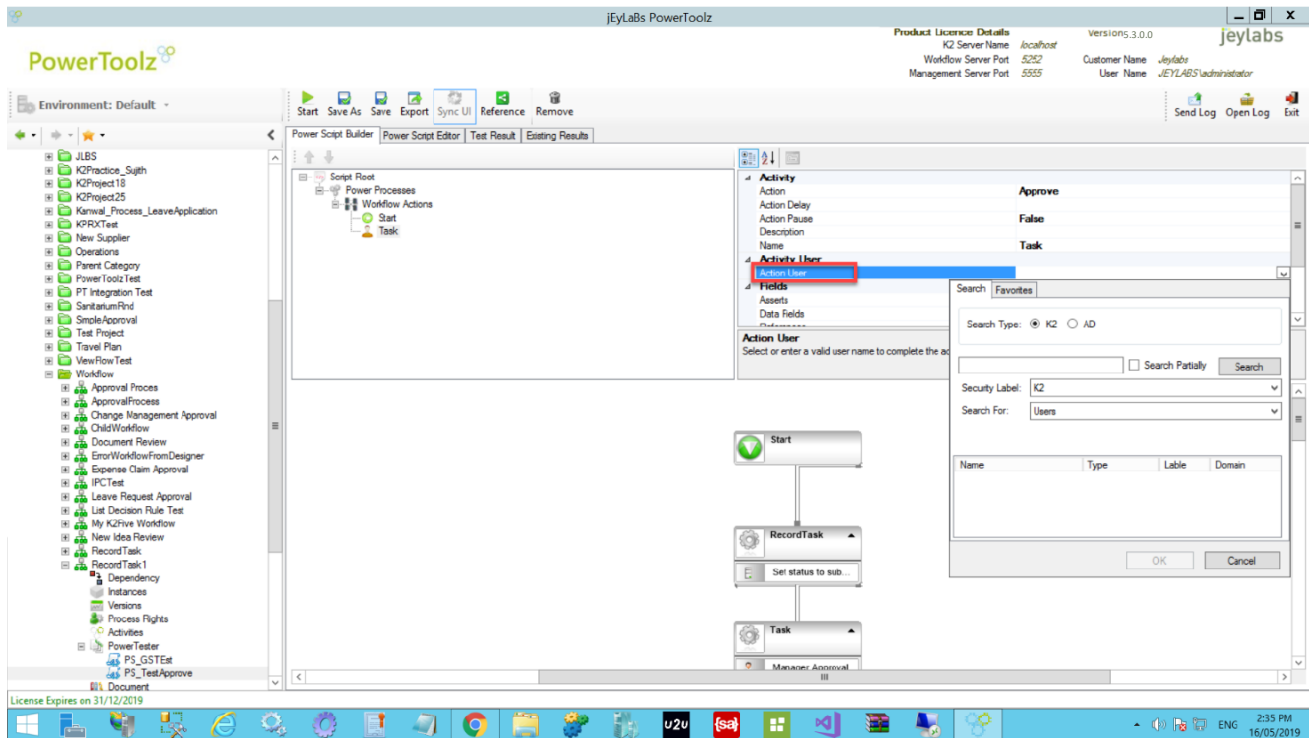
3. Save the PowerScript and click Start button to run the PowerScript and review the Test Summary
4. Once the test is complete, the test result for each workflow that has been created can be viewed in greater detail.



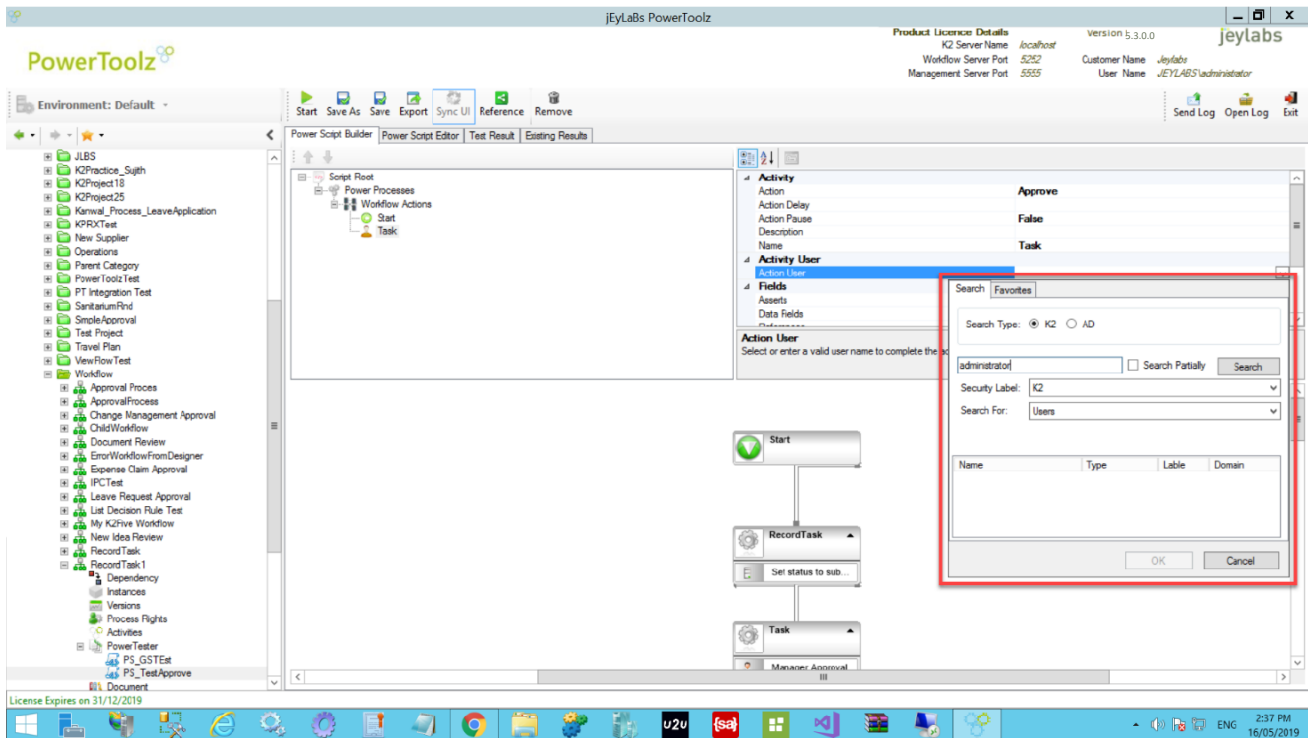
Action User for an Activity

While creating a PowerScript, Action user could be selected either from the K2 SmartObject for Active Directory users or directly from AD itself. Clicking on an activity node, will allow the user to set the action user attribute on the right hand side as shown below.

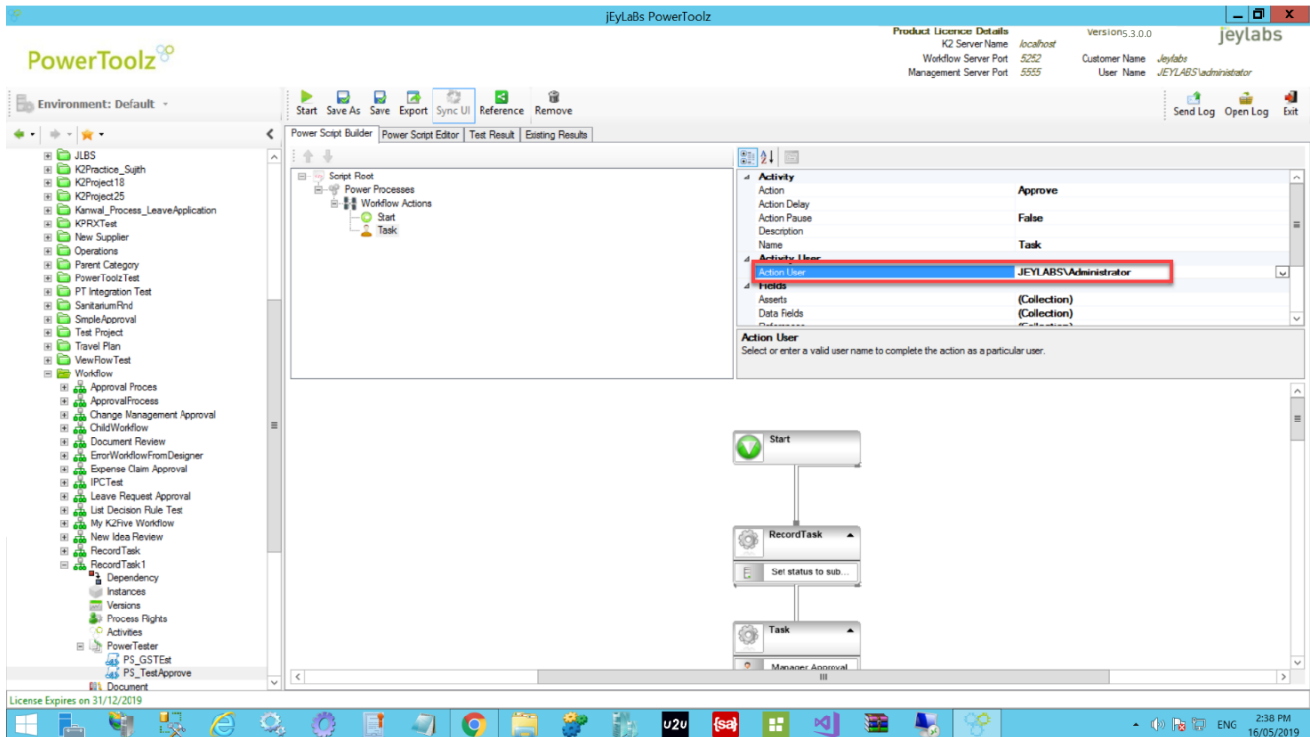
1. Clicking on the dropdown will allow for search and selection of users.



2. Enter a User Name and Press Search to find a user with a list of results to select from provided.



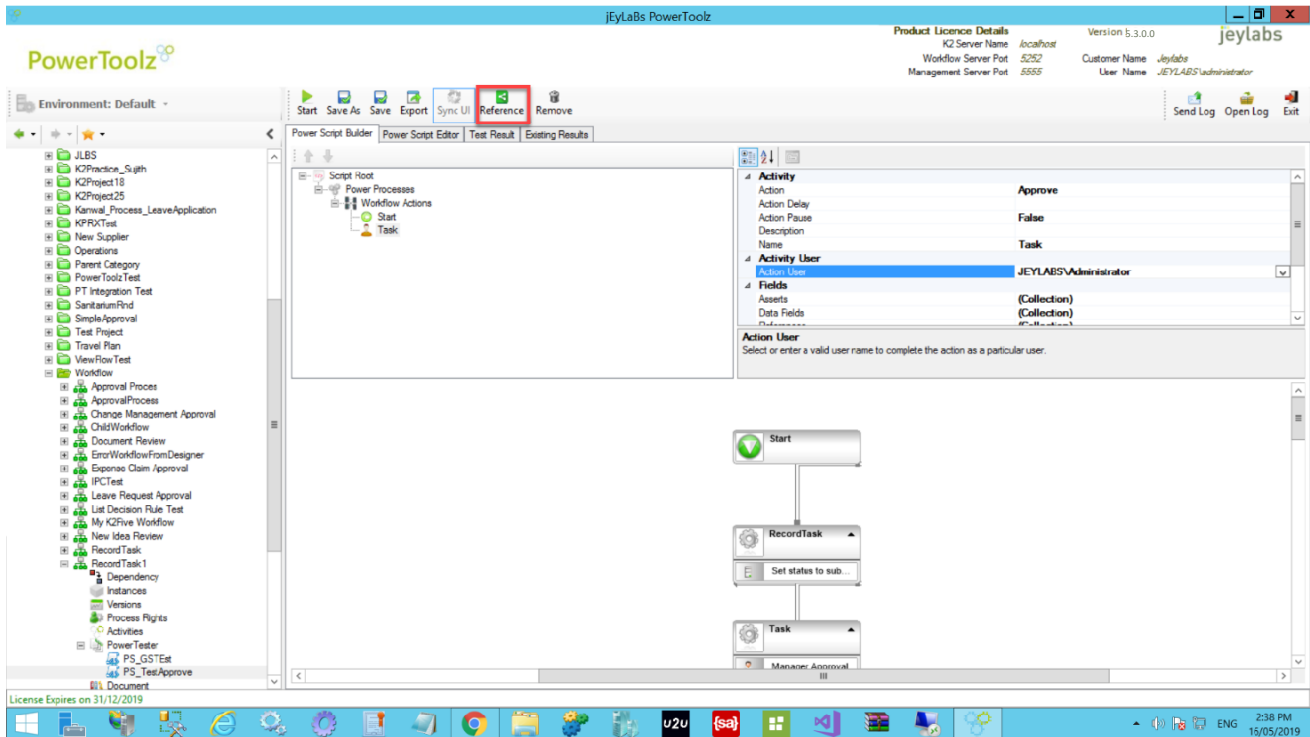
- Once the OK is pressed, PowerToolz will set the Action User attribute value to the user selected from K2.



- Repeat steps 1 to 3 for each activity node within the test script to set the respective Action Users. as shown in the previous steps.

Reference Custom DLL

While creating a PowerShell, custom DLLs can be referenced. This is particularly useful when testing highly customized environments with unique situations such as a customized service broker. References can be managed using the reference button found on the toolbar accessible from the PowerShell Editor.



References can be added by using the PowerToolz file browser and can be removed where necessary.

TEST SPACE

Test Space allows users to execute multiple PowerScripts. Users can select multiple PowerScripts and execute them against multiple processes in a single click in the following manner.

- ☐ Select the multiple process by pressing CTRL + Click.
- ☐ Select the required PowerScripts by clicking check box.
- ☐ Execute the selected PowerScript one after the other by Clicking Start Script.
- ☐ Deploy to another environment.
- ☐ Export to a Folder
- ☐ Tag to a Project Space which allows the management of a set of Power scripts.
- ☐ Schedule

jEyLaBs PowerToolz

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Version 5.3.0.0, Customer Name: jeylabs, User Name: jEYLABSAdministrator

Environment: Default - Refresh

Search: Send Log Open Log Exit

PowerToolz

Process

PowerScript Name PowerScript ID Object Name Object Version Created On Created By

PowerScript Name	PowerScript ID	Object Name	Object Version	Created On	Created By
PS_1	PS-1	Workflow/Expense Claim Approval	1	25/08/2016 12:...	Administrat...
SFS_2	PS-2	Submit Form1	3	16/09/2016 12:...	Administrat...
PS_3	PS-3	Test Project\Test Process	5	12/09/2016 12:...	Administrat...
PS_4	PS-4	Test Project\Test Process	5	12/09/2016 12:...	Administrat...
PS_5	PS-5	Test Project\Test Process	5	12/09/2016 12:...	Administrat...
SMS_6	PS-6	Employee	0	12/09/2016 12:...	Administrat...
SMS_7	PS-7	Employee	0	12/09/2016 12:...	Administrat...
SFS_8	PS-8	Submit Form1	3	15/09/2016 12:...	Administrat...
SFS_9	PS-9	Submit Form1	3	21/09/2016 12:...	Administrat...
SFS_10	PS-10	SubmitForm	3	15/09/2016 12:...	Administrat...
SFS_11	PS-11	SubmitForm	3	15/09/2016 12:...	Administrat...
SFS_12	PS-12	SubmitForm	3	15/09/2016 12:...	Administrat...
SFS_13	PS-13	SubmitForm	3	15/09/2016 12:...	Administrat...

License Expires on 31/12/2019

jEyLaBs PowerToolz

Product Licence Details: K2 Server Name: localhost, Workflow Server Port: 5252, Management Server Port: 5555, Version 5.3.0.0, Customer Name: jeylabs, User Name: jEYLABSAdministrator

Environment: Default - Refresh

Search: Send Log Open Log Exit

PowerToolz

Process

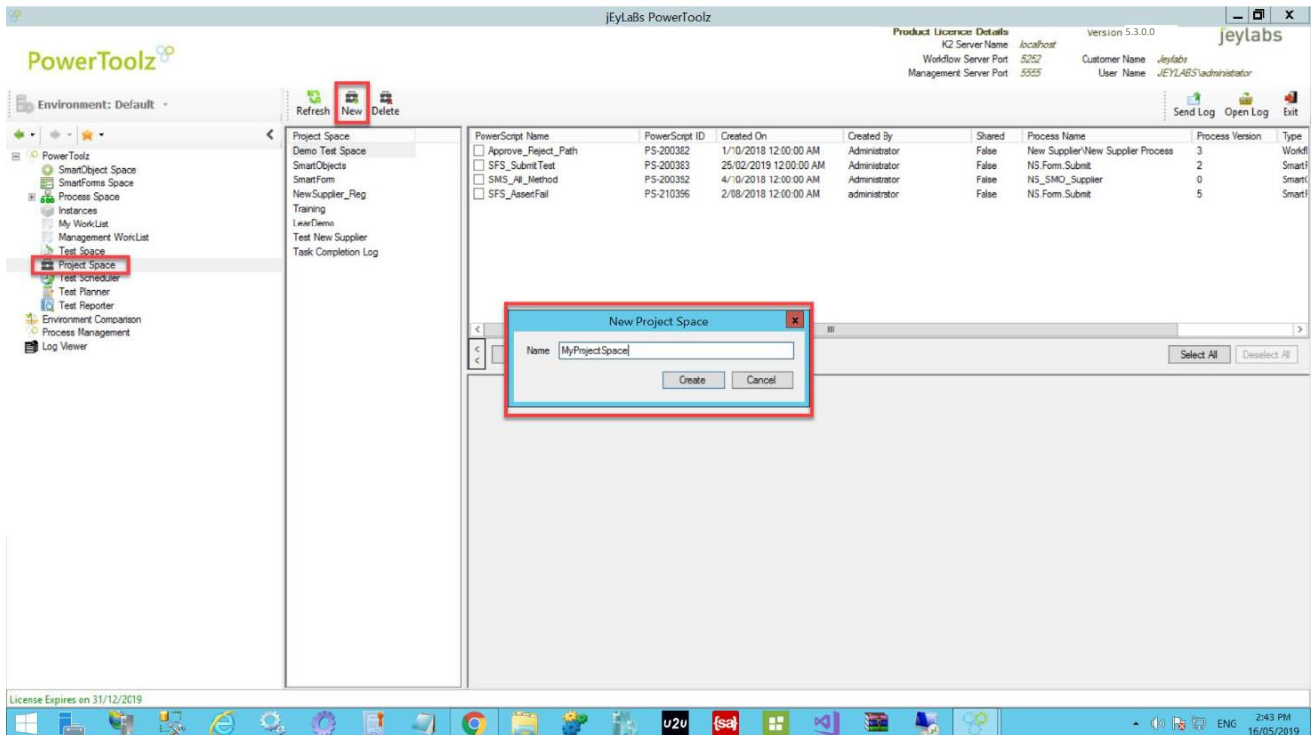
PowerScript Name PowerScript ID Object Name Object Version Created On Created By

PowerScript Name	PowerScript ID	Object Name	Object Version	Created On	Created By
PS_ReworkLoop	PS-60067	APProcess/ApprovalProcess	4	2/11/2016 12:0...	Administrator
PS_200387	PS-200387	APProcess/ApprovalProcess	8	3/11/2017 12:0...	administrator

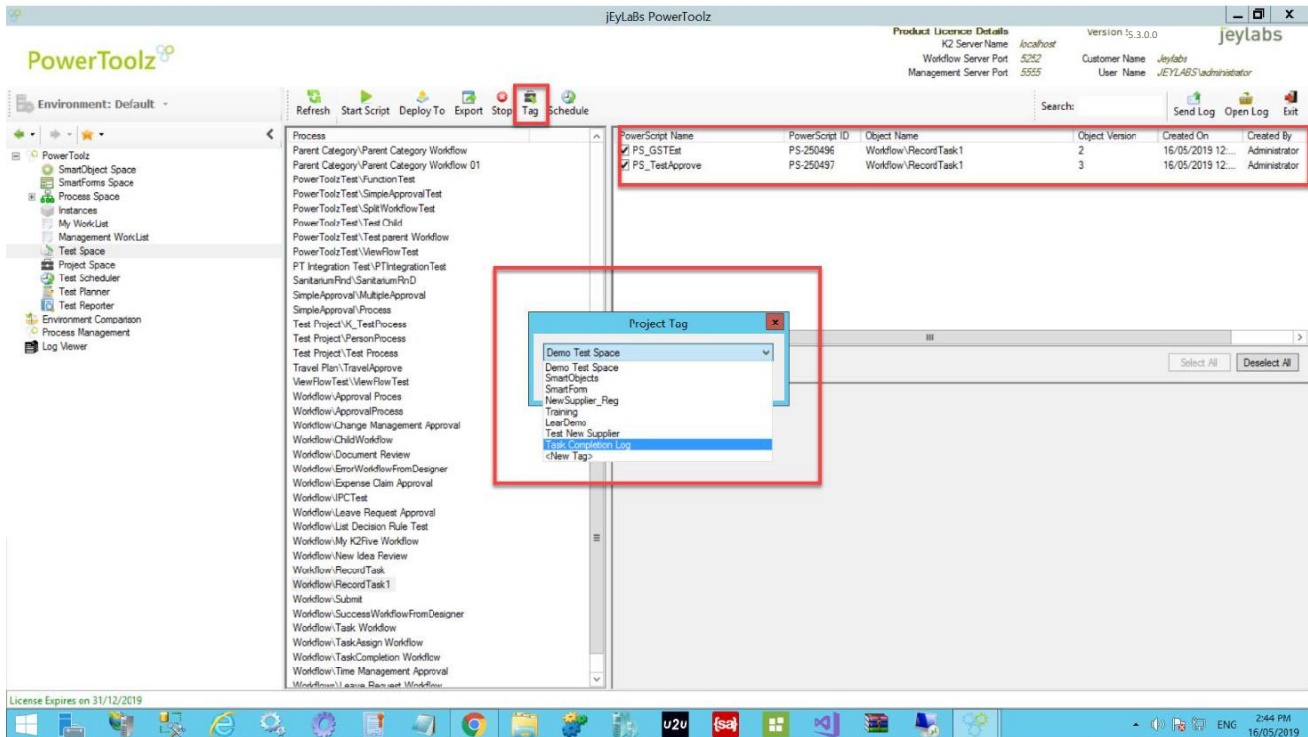
License Expires on 31/12/2019

PROJECT SPACE

1. The project space allows the management of a set of PowerScripts in the test space tagged to a project space.
2. A new project space can be created by clicking the New button in toolbar and providing a new name for the project space.



3. Select the set of PowerScripts to be tagged from the Test Space and Click the Tag option in toolbar and choose the Project Space from the drop down.



The other options available are

- ☐ Delete - Deletes the selected project space.
- ☐ Start Script - Starts the set of selected PowerScripts.
- ☐ Deploy To - Deploys the PowerScripts to a selected environment that PowerToolz has been connected to.
- ☐ Export - Exports any PowerScripts available in xml format.
- ☐ Stop - Stops the execution of the running PowerScripts.
- ☐ Untag - Untags the selected PowerScript(s) from the Project.

TEST SCHEDULER

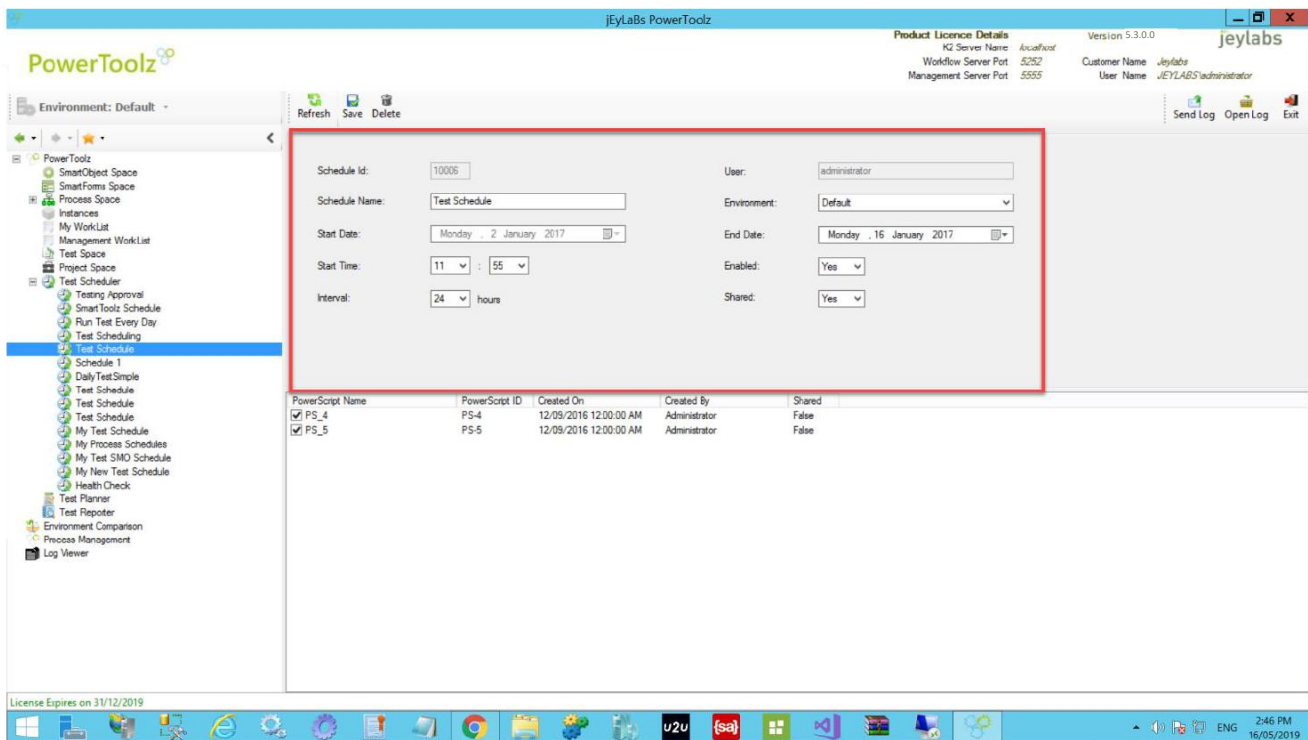
This allows the user to run the required PowerScripts as scheduled jobs. As the same PowerScript is run in a set period repeatedly, the test result can be compared for the same process as regression testing results.

1. Select TestScheduler node and create a New Schedule, Also, the new schedule can be created when the PowerScripts are selected under TestSpace node.
2. Select the required PowerScripts to be run in a scheduler.
3. Scheduler maintenance – from here schedules can be enabled/disabled, deleted and updated.

The screenshot shows the jeylabs PowerToolz application interface. The left sidebar has the 'Test Scheduler' node selected. The main window displays a table of scheduled jobs and a list of PowerScripts.

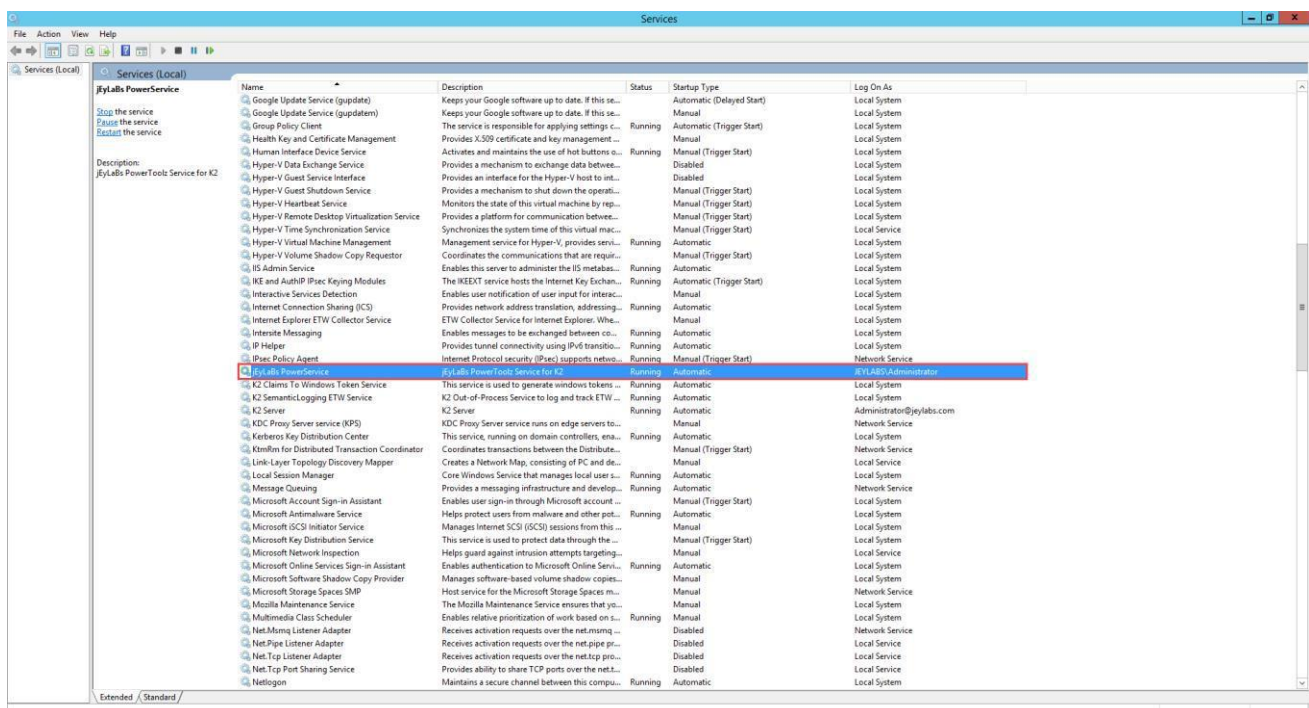
Schedule Name	Id	Start Date	Start Time	End Date	Enabled	Environ...	User	Shared	Interval
Testing Approval	2	12/01/2017	2:25 PM	19/01/2017	True	Default	Administr...	True	24
SmartToolz Schedule	3	8/01/2017	12:30 PM	10/01/2017	True	Default	JEYLAB...	True	5
Run Test Every Day	10004	14/11/2016	11:50 AM	15/12/2016	True	Default	administr...	True	2
Test Scheduling	10005	17/10/2016	11:50 AM	9/01/2017	True	Default	administr...	True	24
Test Schedule	10006	2/01/2017	11:55 AM	16/01/2017	True	Default	administr...	True	24
Schedule 1	10007	18/01/2017	11:55 AM	19/01/2017	True	Default	administr...	True	24
DailyTestSimple	10008	25/05/2017	4:40 PM	26/05/2017	True	Default	administr...	True	10
Test Schedule	10009	25/05/2017	4:55 PM	26/05/2017	True	Default	Administr...	True	24
Test Schedule	10010	25/05/2017	5:00 PM	26/05/2017	True	Default	Administr...	True	24
Test Schedule	10011	25/05/2017	5:00 PM	26/05/2017	True	Default	Administr...	True	24
My Test Schedule	10012	26/05/2017	12:40 PM	27/05/2017	True	Default	administr...	True	24
My Process Schedules	10013	26/05/2017	1:15 PM	27/05/2017	True	Default	administr...	True	24
My Test SMO Schedule	10014	26/05/2017	1:20 PM	27/05/2017	True	Default	administr...	True	24
My New Test Schedule	10015	8/06/2017	9:25 AM	31/07/2017	True	Default	Administr...	True	1
Health Check	10016	10/05/2018	11:00 PM	31/12/2018	True	Default	Administr...	True	24

PowerScript Name	Shared	CreatedOn	CreatedBy	PowerScriptId
PS_10026	False	19/09/2016	Administrator	10026
PS_10028	False	19/09/2016	Administrator	10028



SCHEDULE SERVICE

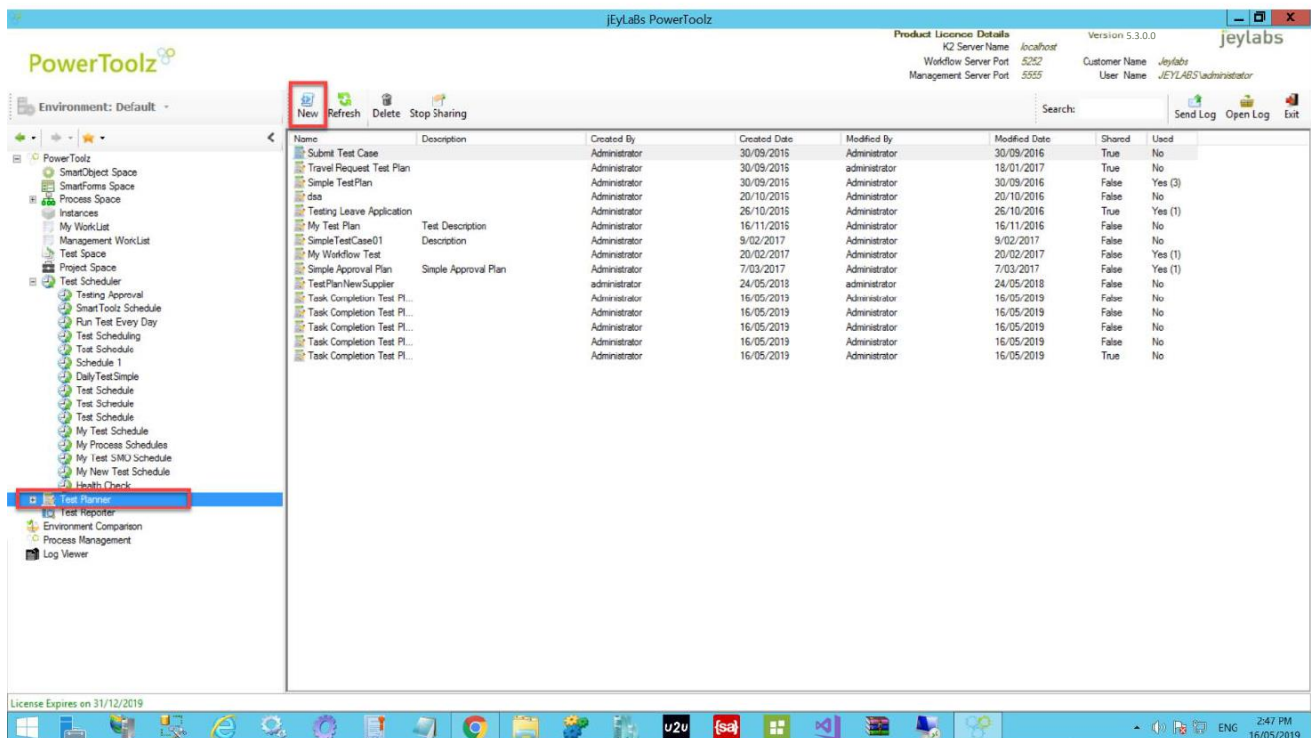
A PowerToolz schedule service is available, allowing scheduled tests to be executed without need for the tool to be open, facilitated by windows services. This feature can be used in alongside to the PowerToolz application via an additional installer available on the PowerToolz site.



TEST PLANNER

Creating a new test plan

Expand 'Test Planner' node in the main menu tree. All the Test Plans should be listed under the 'Test Planner' node. Click New TestPlan button on the toolbar.



1. From the test plan configuration screen, test cases and their respective steps can be configured. Activities, dependencies, input data and result expectations can be set. Clicking the save button will save the test plan.

Environment: Default

Refresh Save Import

Name: Task Completion Test Plan

Description:

Component: Process

Workflow/Record Task1

Share

Test Case	Issue Id	Test Case Name	Priority	Sprint
TC1		Start the process	Critical	1
TC2		Test Case 2	Critical	1

Test Step	Description	Activity Name	Dependency Step	Input Data	Expected Result
TC1.1	Test the input values are entered correctly	Task	Select	Select	Select
TC1.2	On click of create button, task status must be updated to submitted	Task	Select	Select	Select

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Environment: Default

Refresh Save Import

Name: Task Completion Test Plan

Description:

Component: Process

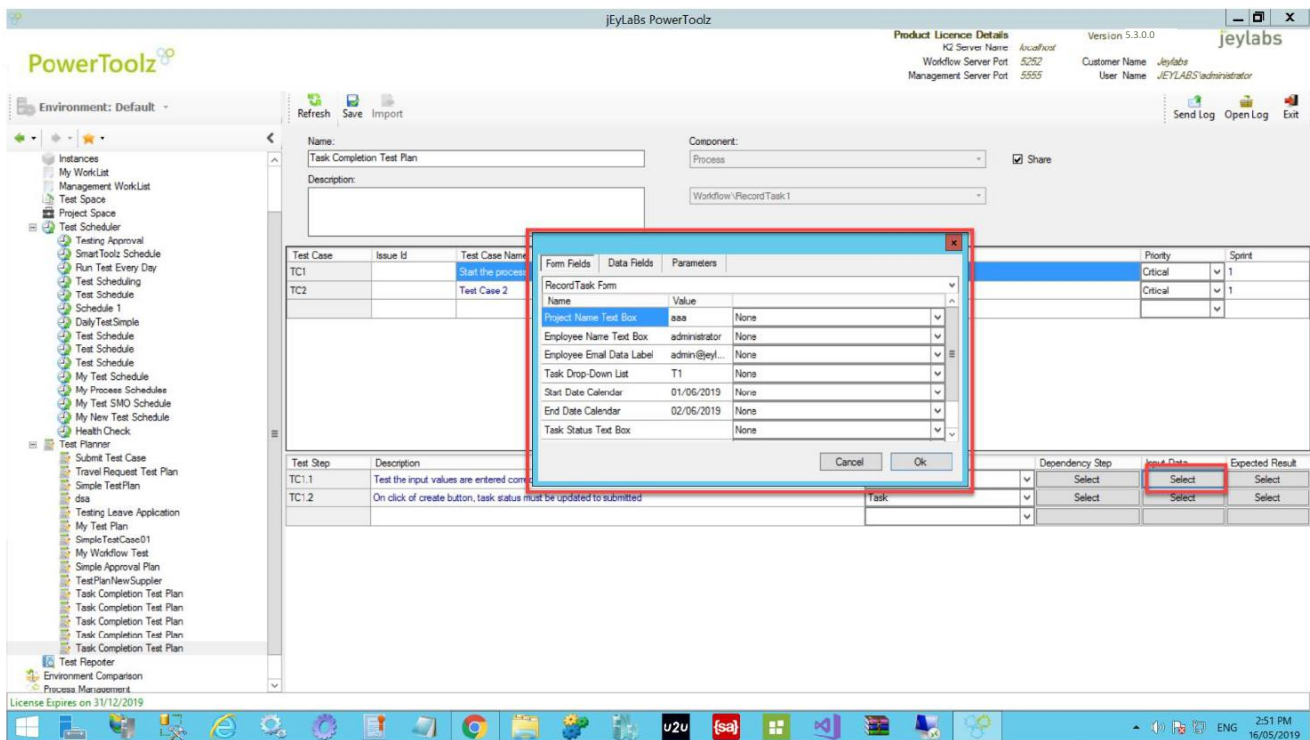
Workflow/Record Task1

Share

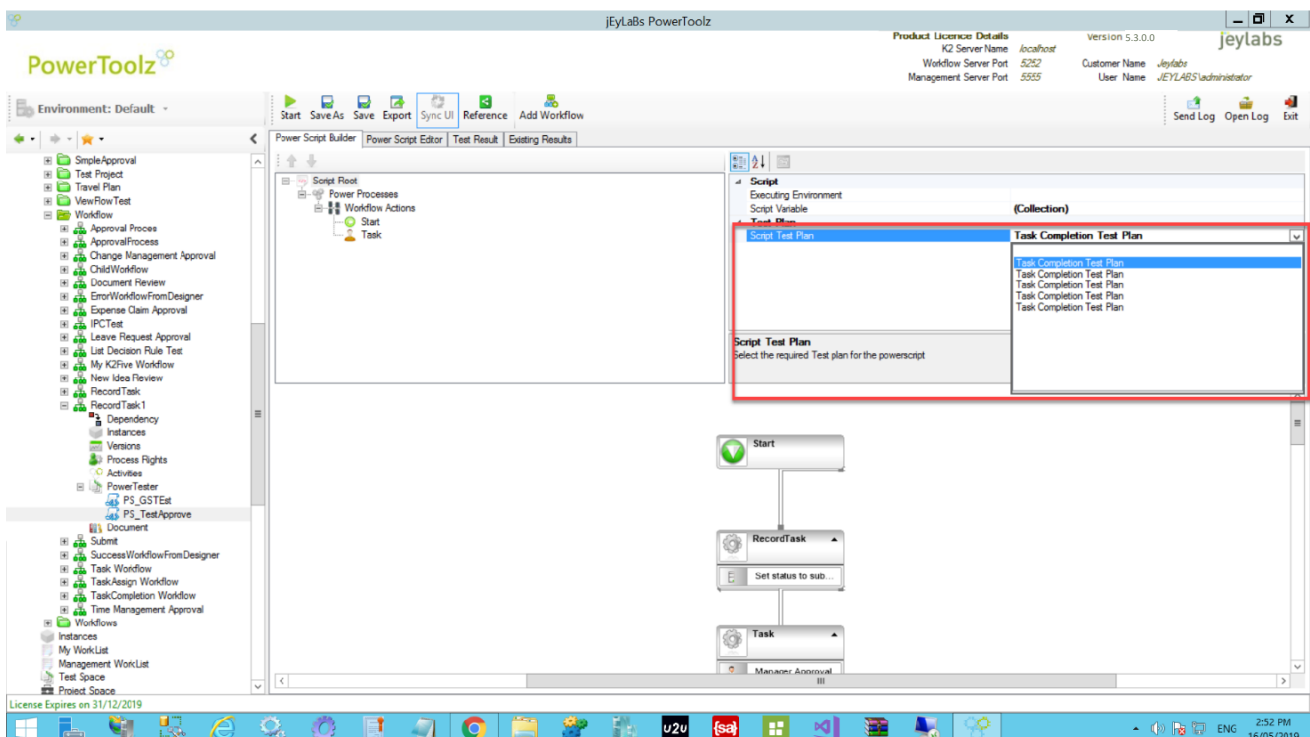
Test Case	Issue Id	Test Case Name	Priority	Sprint
TC1		Start the process	Critical	1
TC2		Test Case 2	Critical	1

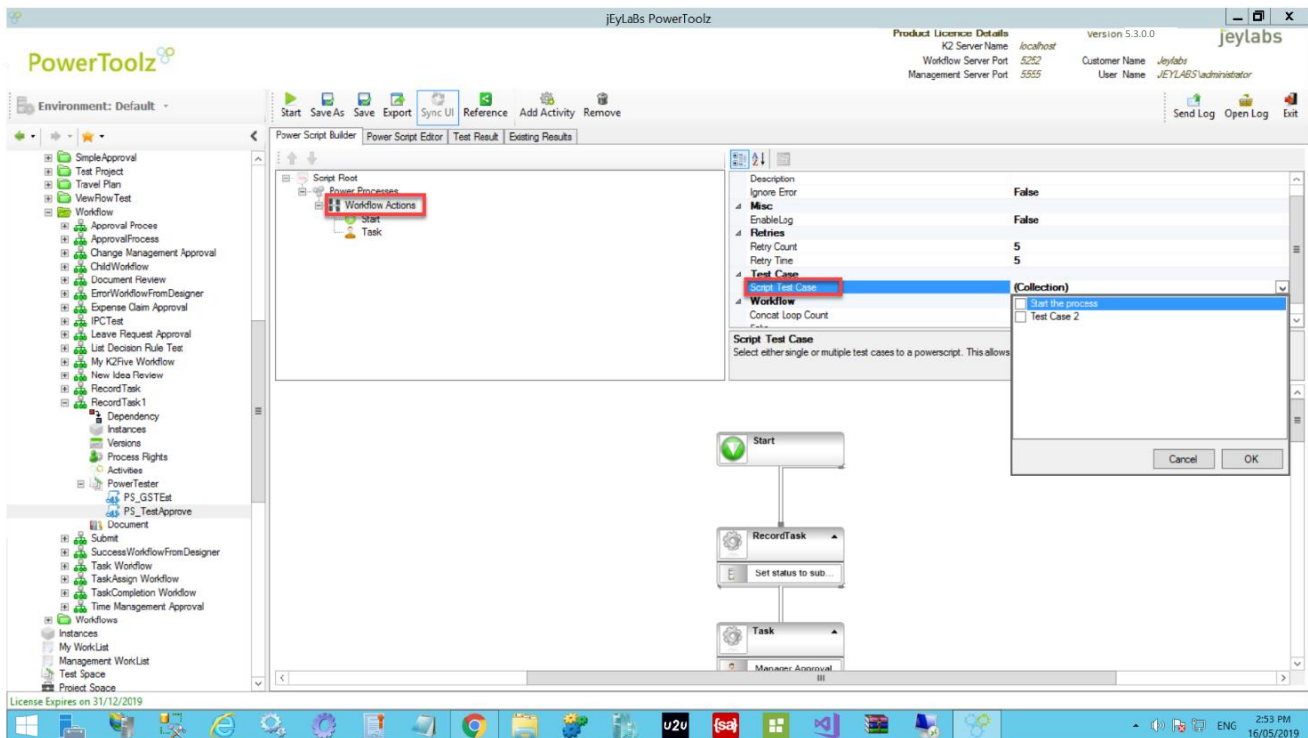
Test Step	Description	Activity Name	Dependency Step	Input Data	Expected Result
TC1.1	Test the input values are entered correctly	Task	Select	Select	Select
TC1.2	On click of create button, task status must be updated to submitted	Task	Select	Select	Select

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2. The process for the selected submit form could be tested with this Test plan by attaching to Script Root. After the completion of test, PowerToolz will generate a report, accessible under Test Report node on the main menu.
3. The Test Case can be assigned to Workflow Actions.





4. Press Start to test the Test script created for the Test case selected. The test report will show the result.
5. If the Test Result for the test case is “Failed” then Test script could be modified and saved under the same name and re tested. (If the error is due to the K2 design error then redeploy the process after fixing the error). If the error has been resolved, the test plan should return a pass result.

TEST REPORTER

Test Reports will be produced if the PowerScripts are integrated with Test Plan. It can be exported to both Excel and PDF file formats. If the e-mail address is setup for PowerToolz, the report will be emailed.

Simple Approval Plan

Description: Simple Approval Plan
User: JEYLABS\Administrator
Component Type: Process
Component Name: Process

Test Results Summary for Process on 7/03/2017

Priority	Number of Test Cases				QA Status
	Created	Executed	QA Passed	QA Failed	
Critical	2	2	0	2	Retest 2 step(s)

Details:

Test Case	Sprint	Issue	Priority
TC1	1		Critical

Step	Description	Activity	Dep.	Input Data	Expected Result	ActualResult	Status
TC1.1	Step01	Approval		ID:0 Data Fields	ID:0 Data Fields	ID:0 Data Fields	Failed

Test Case: TC1, Sprint: 1, Issue: , Priority: Critical

ADMINISTRATION

Comparison of Version

This enables the user to compare between two versions of same process deployed in the different time period. It will provide the ability to compare Process Maps, Data Fields and XML fields.

1. Select Process under Process Space node and click the Version node. Click on the process to be compared from the list.
2. Select another Process by pressing CTRL + Click, which will be compared with the previously selected process. In the example below, version 3 and version 4 have been compared.

If the “Sync UI” is not enabled, then the scrolling will display the different part of the work flows.

If the “Sync UI” is enabled, then the scrolling will be synchronized for the workflow version views.

The screenshot displays the jEYLABS PowerToolz application window. The top bar shows the product name and version (5.3.0.0). The left sidebar contains a tree view of the process space, with the 'Versions' node under 'Workflow' highlighted. The main area features a table of process versions:

Version	Proc ID	Deployed On	Deployed By	Is Default
1	10297	15/05/2019 8:15:37 AM	K2 JEYLABS Administrator	True
2	10296	15/05/2019 11:08:42 AM	K2 JEYLABS Administrator	False
3	10295	15/05/2019 10:59:20 AM	K2 JEYLABS Administrator	False

Below the table, two side-by-side process maps are shown for 'Version 3' and 'Version 1'. Both maps show a similar flow: a 'RecordTask' followed by a 'Task' (containing 'Set status to sub...') and a 'Manager Approval' task. The 'Sync UI' button in the top toolbar is highlighted with a red box.

Comparison of Process Instances

Process Instances can be listed by the process status (Running, Active, Error, Completed).

The screenshot displays the jeylabs PowerToolz application interface. At the top, there's a header with 'jeylabs PowerToolz' and 'Product Licence Details'. Below this, a table lists various process instances. The table has columns for 'Folio', 'ProcessID', 'ProcessID', 'Start Date', 'Status', 'Originator', 'Version', and 'Detail'. Several rows are highlighted in red, indicating specific instances of interest.

Folio	ProcessID	ProcessID	Start Date	Status	Originator	Version	Detail
Joylabs Process Workflow	31944	8234	23/02/2018 3:27:00 PM	Active	K2-JEYLABS-Administrator	4	
TEST24/05/2018 10:25:32 AM	34045	8233	24/05/2018 10:25:00 AM	Active	K2-JEYLABS-Administrator	3	
TEST24/05/2018 10:26:52 AM	34046	8233	24/05/2018 10:26:00 AM	Active	K2-JEYLABS-Administrator	3	
TEST24/05/2018 10:27:28 AM	34047	8233	24/05/2018 10:27:00 AM	Active	K2-JEYLABS-Administrator	3	
TEST24/05/2018 10:32:14 AM	34050	8233	24/05/2018 10:32:00 AM	Active	K2-JEYLABS-Administrator	3	
Test Process Workflow	34056	8234	7/05/2018 5:28:00 PM	Active	K2-JEYLABS-Administrator	4	
South Process Workflow	34059	8234	13/05/2018 10:45:00 AM	Active	K2-JEYLABS-Administrator	4	
com K2 System App Wizard	34064	8234	13/05/2018 10:57:00 AM	Active	K2-JEYLABS-Administrator	4	
Design Integration	35070	8234	10/07/2018 12:55:00 PM	Active	K2-JEYLABS-Administrator	4	
Test Process Workflow	31863		16/10/2017 11:43:10 AM	Completed	K2-JEYLABS-Administrator		
Test2 Process Workflow	31864		16/10/2017 12:01:10 PM	Completed	K2-JEYLABS-Administrator		
Ben Process Workflow	31867		16/10/2017 12:42:13 PM	Completed	K2-JEYLABS-Administrator		
TEST16/10/2017 3:13:09 PM	31868		16/10/2017 3:13:10 PM	Completed	K2-JEYLABS-Administrator		
TEST16/10/2017 3:14:35 PM	31869		16/10/2017 3:14:36 PM	Completed	K2-JEYLABS-Administrator		
TEST16/10/2017 3:14:38 PM	31870		16/10/2017 3:14:38 PM	Completed	K2-JEYLABS-Administrator		
Joylabs Process Workflow	31871		16/10/2017 5:20:05 PM	Completed	K2-JEYLABS-Administrator		
Joylabs Process Workflow	31872		16/10/2017 5:20:25 PM	Completed	K2-JEYLABS-Administrator		
Process Workflow	31873		17/10/2017 12:16:45 PM	Completed	K2-JEYLABS-Administrator		
Joylabs Process Workflow	31878		22/02/2018 1:08:52 PM	Completed	K2-JEYLABS-Administrator		
TEST23/02/2018 8:08:39 AM	31940		23/02/2018 8:08:39 AM	Completed	K2-JEYLABS-Administrator		
TEST23/02/2018 8:08:45 AM	31941		23/02/2018 8:08:45 AM	Completed	K2-JEYLABS-Administrator		

Below the table, two detailed workflow diagrams are shown for comparison. The left diagram, titled 'ProcessInstance: 31944 - Folio: Joylabs Process Workflow (Active)', shows a flow starting with 'Start', followed by 'Manager', 'Manager Approval', and then branching into 'Approve' and 'Reject' paths, each leading to a 'PlaceholderEvent'. The right diagram, titled 'ProcessInstance: 31863 - Folio: Test Process Workflow (Completed)', shows a similar flow but with a different sequence of steps and a 'Reject' path that leads to a 'PlaceholderEvent'.

Re initiate process instances

Select a Process from the drop down for Process Name

Click Overwrite Fields to change Data Field values if necessary and Click Overwrite button.

Click Re-Initiate Process button on the right hand corner of the grid.

The screenshot shows the jEylabs PowerToolz application. The 'Re-Initiate Process' window is open, displaying a list of process instances. The 'Process Name' dropdown is set to 'Workflow/RecordTask1'. The 'Process XML Fields' dropdown is set to 'ItemReferences'. The 'Process Status' dropdown is set to 'All'. The 'Re-Initiate As' section has 'Originator' selected. The table below shows the list of process instances.

Overwrite Fields	Search	Re-Initiate Process	Refresh	Select All			
PID	Folio	Status	Start Date	Finish Date	Originator	Priority	View Flow
<input type="checkbox"/>	40473	Active	16/05/2019 9:21:25 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40472	Completed	16/05/2019 9:20:30 AM	16/05/2019 9:20:47 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40471	Completed	16/05/2019 8:52:22 AM	16/05/2019 8:52:32 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40470	Active	16/05/2019 8:47:13 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40469	Active	16/05/2019 8:43:23 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40468	Active	16/05/2019 8:42:14 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40467	Active	16/05/2019 8:42:03 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40466	Active	16/05/2019 8:39:41 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40465	Active	16/05/2019 8:37:18 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40464	Active	16/05/2019 8:35:02 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40463	Active	16/05/2019 8:32:21 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40462	Active	16/05/2019 8:30:32 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40461	Active	16/05/2019 8:22:03 AM	1/01/1900 12:00:00 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40460	Completed	TEST16/05/2019 8:18:31 AM	16/05/2019 8:18:39 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...
<input type="checkbox"/>	40459	Completed	TEST16/05/2019 8:18:17 AM	16/05/2019 8:18:36 AM	K2 JEYLABS Administrator	Medium	http://JLSERVE...

Previous 1 of 1 Next

Update Process

PowerToolz allows for updating of fields for the selected process instance. This could be useful to solve errors relating to incorrect process variable values.

1. Select a Process, Click the Update Process and Click Update Fields.
2. Click OK and Press Update Process button on the right hand corner of the grid.

PowerToolz Product Licence Details: K2 Server Name: localhost, Version: 5.3.0.0, Customer Name: jeylabs, User Name: jeylabs\administrator

Update Process

Process Name: Workflow/RecordTask1
Process XML Fields: ItemReferences
Process Status: All

Update Fields Search: [] Update Process Refresh Select All

PIID	Folio	Status	Start Date	Finish Date	Originator	Priority	View Flow
40473		Active	16/05/2019 9:21:25 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40472		Completed	16/05/2019 9:20:30 AM	16/05/2019 9:20:47 AM	K2.JEYLABS\administrator	Medium	http://JLSERVE...
40471		Completed	16/05/2019 8:52:22 AM	16/05/2019 8:52:32 AM	K2.JEYLABS\administrator	Medium	http://JLSERVE...
40470		Active	16/05/2019 8:47:13 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40469		Active	16/05/2019 8:43:23 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40468		Active	16/05/2019 8:42:14 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40467		Active	16/05/2019 8:42:03 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40466		Active	16/05/2019 8:39:41 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40465		Active	16/05/2019 8:37:18 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40464		Active	16/05/2019 8:35:02 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40463		Active	16/05/2019 8:32:21 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40462		Active	16/05/2019 8:30:32 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40461		Active	16/05/2019 8:22:03 AM		K2.JEYLABS\administrator	Medium	http://JLSERVE...
40460	TEST16/05/2019 8:18:31 AM	Completed	16/05/2019 8:18:31 AM	16/05/2019 8:18:39 AM	K2.JEYLABS\administrator	Medium	http://JLSERVE...
40459	TEST16/05/2019 2:33:43 PM	Completed	16/05/2019 2:33:43 PM	16/05/2019 2:33:51 PM	K2.JEYLABS\administrator	Medium	http://JLSERVE...

Previous 1 of 1 Next

Bulk Operation

The bulk operation allows actions to be performed on multiple instances such as the Retry of error instances, go to activity, deleting of process instance and the stopping process instances.

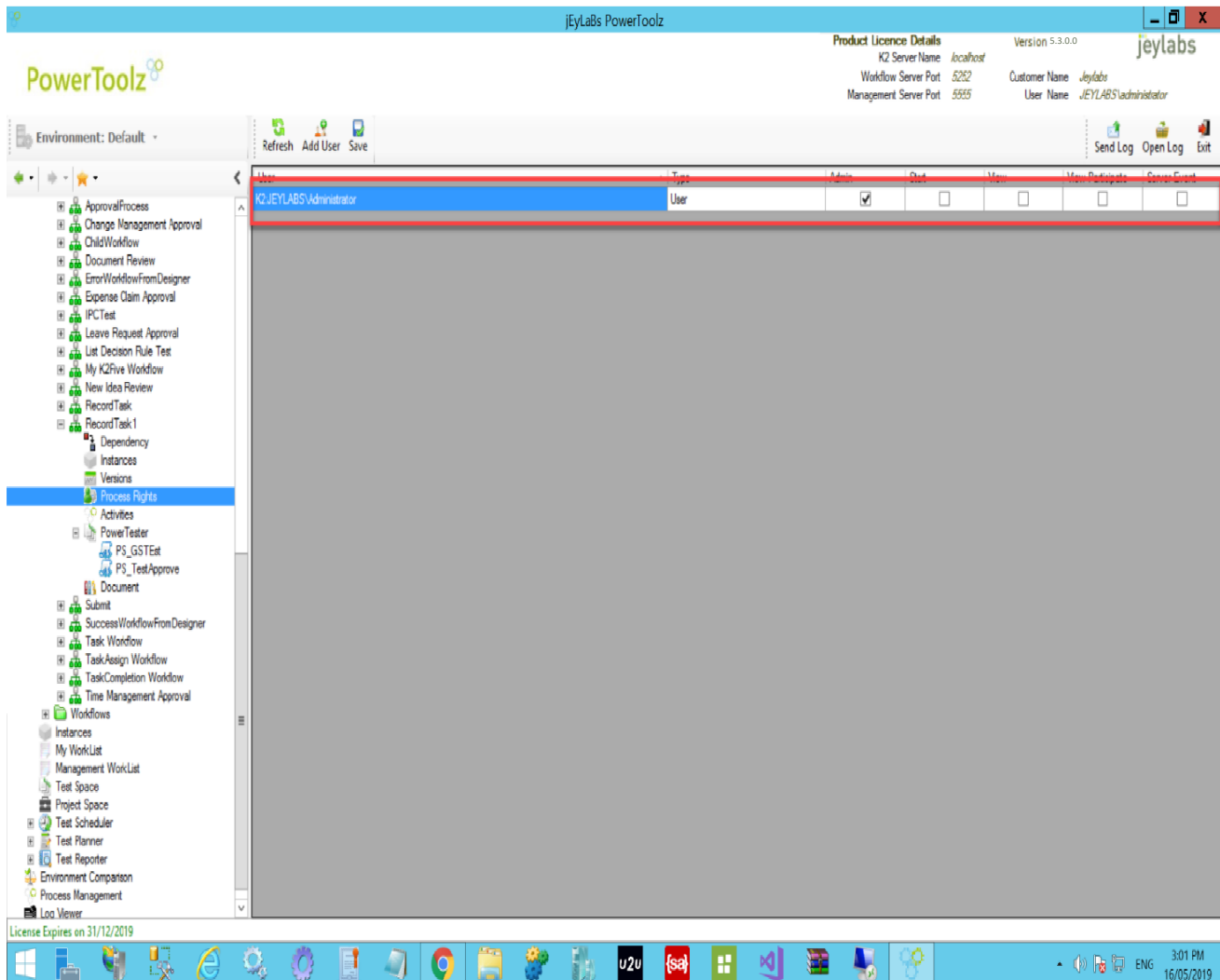
The screenshot displays the jEylabs PowerToolz application window. The title bar reads "jEylabs PowerToolz". The interface includes a sidebar with a tree view of navigation items: Environment (Default), SmartObject Space, SmartForms Space, Process Space, Instances, My WorkList, Management WorkList, Test Space, Project Space, Test Scheduler, Test Planner, Test Reporter, Environment Comparison, Process Management, and Log Viewer. The main area is titled "Manage Multiple Processes". At the top of this area, there are buttons for "Re Initiate", "Process Update", and "Bulk Operation" (which is highlighted with a red box). Below these buttons, there are input fields for "Process Name" (containing "Workflow/RecordTask1") and "Process Status" (set to "All"). A "Filter" button is next to the Process Name field. Below the input fields, there are buttons for "Load" (highlighted with a red box), "Retry process instance/s", "Go to an activity", "Delete process instance/s", and "Stop process instance/s". A table of process instances is displayed below, with columns for PID, Folio, Status, Start Date, Finish Date, Originator, Priority, and View Flow. The table contains 18 rows of data. At the bottom of the window, a taskbar shows various application icons and the system clock indicating 7:55 AM on 20/05/2019.

PID	Folio	Status	Start Date	Finish Date	Originator	Priority	View Flow
40473		Active	15/05/2019 9:21:25 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40472		Completed	15/05/2019 9:20:30 AM	16/05/2019 9:20:47 AM	K2 JEYLABS administrator	Medium	http://ILSERVE...
40471		Completed	15/05/2019 8:52:22 AM	16/05/2019 8:52:32 AM	K2 JEYLABS administrator	Medium	http://ILSERVE...
40470		Active	16/05/2019 8:47:13 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40469		Active	15/05/2019 8:43:23 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40468		Active	15/05/2019 8:42:14 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40467		Active	15/05/2019 8:42:03 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40466		Active	15/05/2019 8:39:41 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40465		Active	15/05/2019 8:37:18 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40464		Active	15/05/2019 8:35:02 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40463		Active	15/05/2019 8:32:21 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40462		Active	15/05/2019 8:30:32 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40461		Active	15/05/2019 8:22:03 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...
40460	TEST15/05/2019 8:18:31 AM	Completed	15/05/2019 8:18:31 AM	16/05/2019 8:18:39 AM	K2 JEYLABS administrator	Medium	http://ILSERVE...
40459	TEST15/05/2019 8:18:17 AM	Completed	15/05/2019 8:18:18 AM	16/05/2019 8:18:35 AM	K2 JEYLABS administrator	Medium	http://ILSERVE...
40458	TEST15/05/2019 8:12:55 AM	Error	15/05/2019 8:12:56 AM		K2 JEYLABS administrator	Medium	http://ILSERVE...

Process Rights

The process rights for each process can be defined using the process rights configuration page within PowerToolz.

Select the Process and click on Process Rights node and select the check box for required rights.

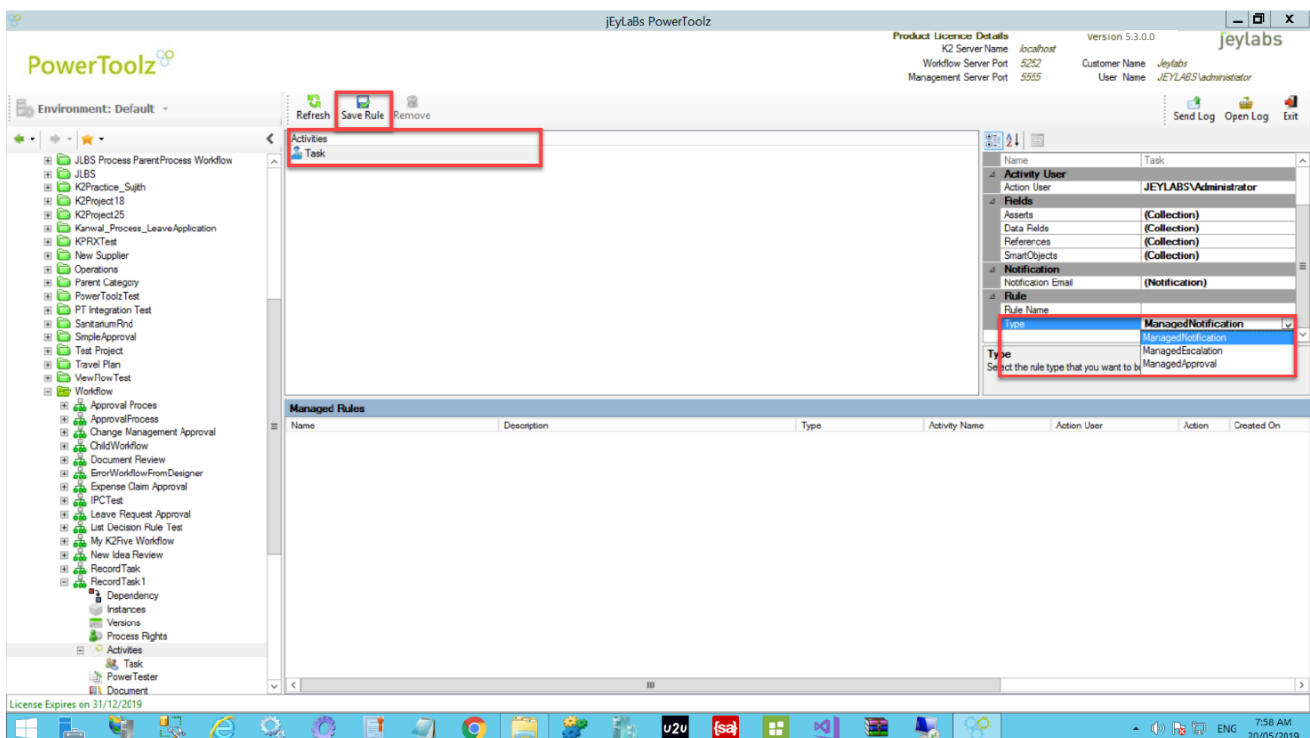


Managed Process Rules

PowerToolz provides functionality to allow for the management of K2 process rules at the activity level. Users can set additional escalation, notifications and approval action(s) using the manage rule creator. These rules are managed and executed by PowerToolz and do not modify the workflow itself, but run as an additional layer.

This could be particularly useful when temporary rules are desired, as no changes are required to the workflow and there's no need to develop, test then re-deploy. If a new rule is required quickly, a PowerToolz managed rule could be implemented in production, to bridge the gap for the time taken to make the change in the development environment, deploy the new version in the test environment, test the new version and then deploy to production.

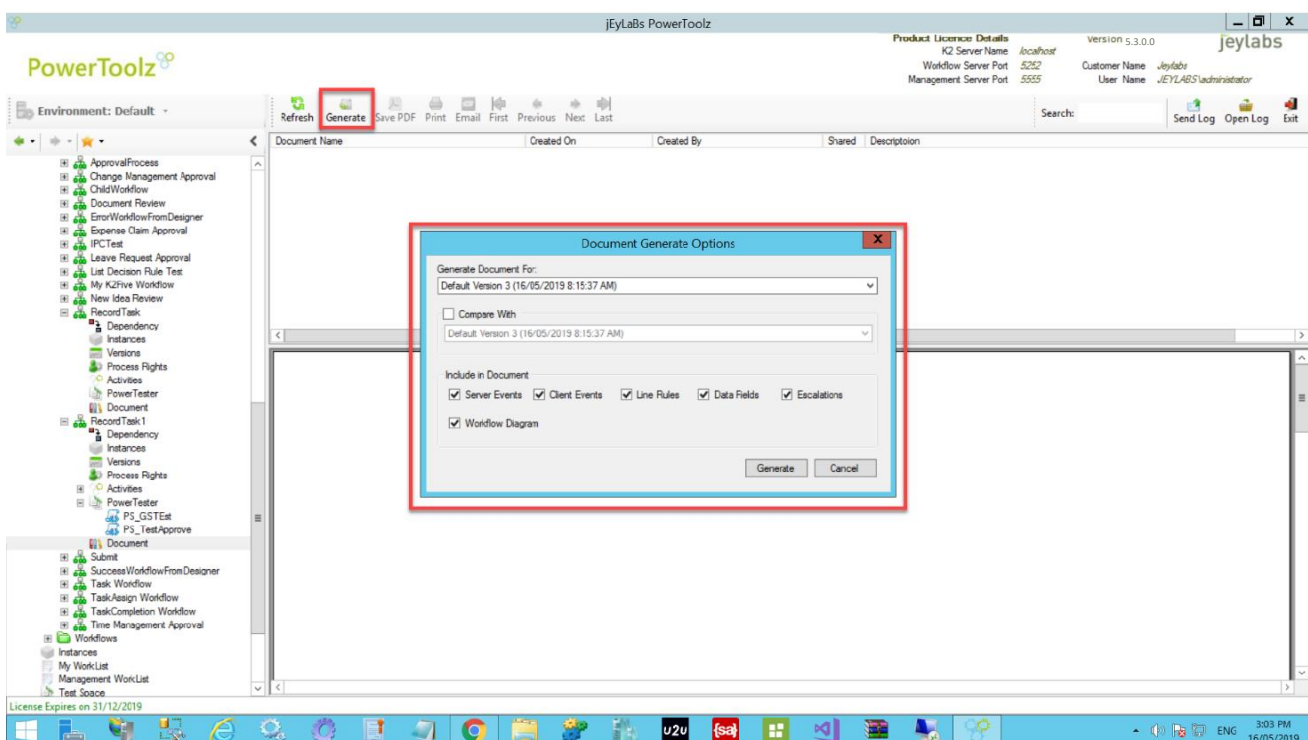
1. From the Process Space, the activity node can be accessed for a particular process. This screen will display each activity from within the process.
2. At each activity, Additional Escalation, Notification and Approval rules can be created and configured, using the rule attribute. Selecting the desired activity and rule will allow for the configuration of the rule using the attributes provided.
3. The Save button will save the new rule/changes made. Once a rule has been saved it will appear under the existing managed rules list. Deleting a rule can be achieved using the Remove button.
4. Activity action rules can be set, such as the auto action after a given period of time.
5. Additional notifications can be instance using the ManagedNotification rule creator. The specific details of the notification such as the receiver, when to notify etc.
6. The notification message itself can also be configured, using the Notification Email attribute editor.



Generate Process Version Documentation

PowerToolz allows for the generation of process version documentation, that involves analysing the workflow, and report creation based on elements selected by the user.

1. From a selected process (within the process space), the document generator can be accessed on the main menu on the left hand side of the application.
2. The elements to be included in the report can be selected, with all elements chosen by default. Clicking the generate button will cause PowerToolz to analyse the process version and generate the report. Once generated PowerToolz will request a name for the document and whether to share the document with other PowerToolz users.
3. Once created and named, the report can be viewed anytime using PowerToolz. This document can be printed, saved ect using the adobe pdf viewer functions. PowerToolz also allows the user to email a selected document.



Using Process Version Comparison Documentation With K2 4.6.9 +

The following configuration entries should be added into the <configuration> section of the PowerToolz config file to use the documentation feature with K2 4.6.9 or later.

```
<configSections>
  <section
    name="sourcecode.configuration"
    type="SourceCode.Configuration.ConfigurationManager,
SourceCode.Framework,
    Version=4.0.0.0, Culture=neutral,
PublicKeyToken=16a2c5aaaa1b130d" /> </configSections>

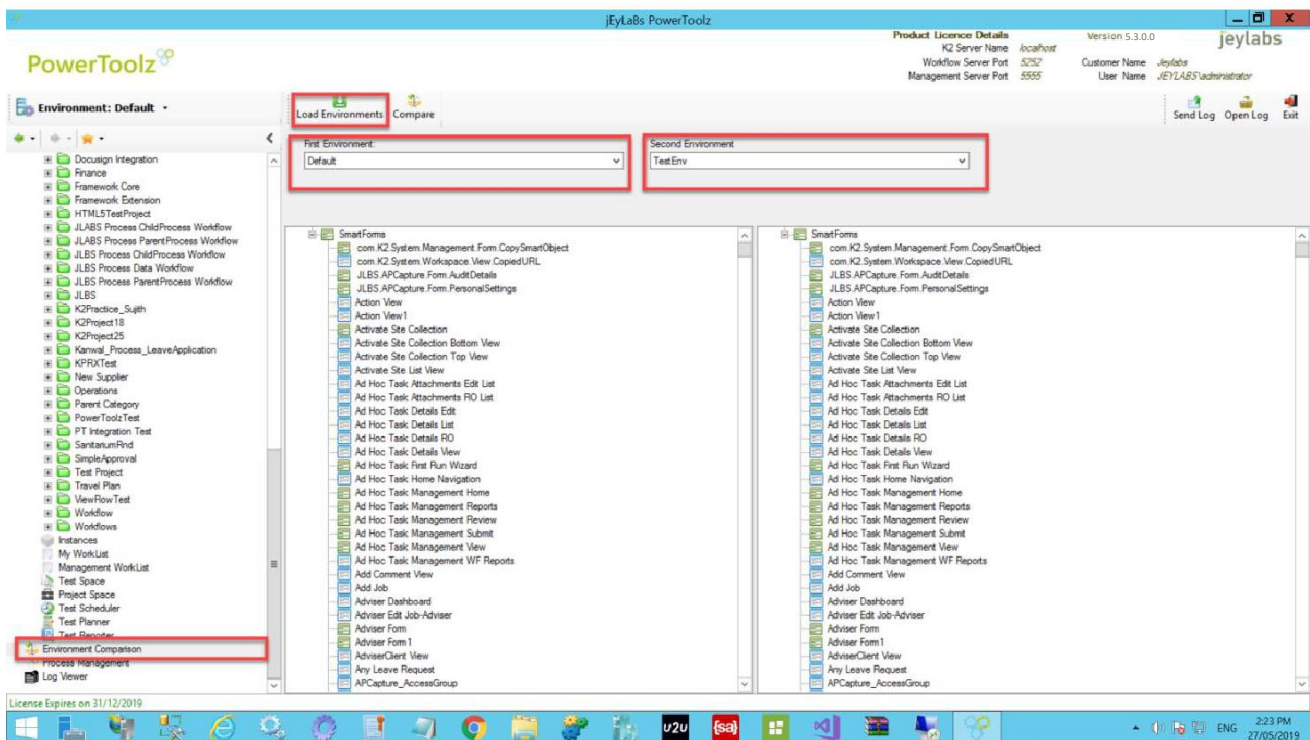
<sourcecode.configuration
  managerConfigFile="C:\Program Files (x86)\K2
blackpearl\Configuration\ConfigurationManager.config"
  productPath="C:\Program Files (x86)\K2 blackpearl\Bin"
  templateConfigFile="" />
<connectionStrings>
  <add
    name="HostServer"

connectionString="Integrated=True;IsPrimaryLogin=True;Authenti
cate=True;EncryptedPassword=False;Host=localhost;Port=5555"
    providerName="K2BLACKPEARL" /> </connectionStrings>
```


Environment Comparison

The environment comparison tool is accessible via the *main menu on the left hand side* of the PowerToolz interface. The environment comparison feature will only work when multiple environments have been connected to PowerToolz.

1. Select an environment from each of the dropdown lists provided.
2. Press the *load environments button* to load the K2 artefacts for each environment in a side-by-side view.
3. Pressing the *Compare button* will initiate the comparison process.
4. PowerToolz will iterate through the selected environments and analyze all artefacts found within.



TROUBLE SHOOTING

Error Fixer for Process View Instance

This allows the user to fix the Data value, XML value to fix the Process in Error stage.

1. Select the process and click Error Fixer button.

The screenshot shows the jeyLABS PowerToolz application interface. The top menu bar includes options like Refresh, Change View, Sync UI, Error Fixer (highlighted with a red box), View Data, Version Upgrade, Remove, and Retry. The main window displays a table of process instances. The 'Error Fixer' button is highlighted in the top menu bar. Below the table, the 'ProcessInstance: 31861 - Folio: Empty Folio (Error)' is selected, and the 'ViewFlow' tab is active, showing a workflow diagram with a 'CookCenter Approval' stage and a 'Rework' stage.

Folio	PinID	ProcessID	Start Date	Status	Originator	Version	Process Name	Detail
1	31843	6227	15/09/2017 5:20:00 PM	Error	KQJ.EYLABS\Administrator	1	SimpleApprovalMultipleApproval	An Activity with a client event should at least have one des...
Empty Folio	31861	6194	26/05/2017 6:47:50 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	String was not recognized as a valid Data Type...
Empty Folio	31874	6194	3/11/2017 5:55:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	Message: The server could not be contacted : ServiceIna...
Empty Folio	31875	6194	3/11/2017 5:55:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	There is no connection string for the destination email add...
Empty Folio	31877	6194	3/11/2017 5:55:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	There is no connection string for the destination email add...
Empty Folio	31878	6194	3/11/2017 5:58:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	Message: The server could not be contacted : ServiceIna...
Empty Folio	31879	6194	3/11/2017 5:58:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	There is no connection string for the destination email add...
Empty Folio	31881	6194	3/11/2017 5:58:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	There is no connection string for the destination email add...
Empty Folio	31883	6194	3/11/2017 5:58:00 PM	Error	KQJ.EYLABS\Administrator	8	APProcessApprovalProcess	There is no connection string for the destination email add...
TEST1/02/2018 4:01:28 PM	31929	6238	1/02/2018 4:01:00 PM	Error	KQJ.EYLABS\Administrator	3	PowerToolzTestViewFlowTest	There is no connection string for the destination email add...

- The updated data can be entered into the appropriate data fields. This information can then be saved by pressing the update button, which will commit the updated data fields to the K2 environment.

PowerToolz

Environment: Default

Product License Details: K2 Server Name: JESERVER, Workflow Server Port: 5262, Management Server Port: 5555, Customer Name: JETLABS, User Name: Administrator

Version: 5.3.0.0

Search: [] Send Log Open Log Exit

Select All	ID	Process ID	Start Date	Status	Operator	Version	Process Name	Detail	
<input type="checkbox"/>	11943	527	15/09/2017 5:39:50 PM	Error	K2JETLABS Administrator	1	SimpleApproval/MultipleApproval	An Activity with a client event should at least have one destination	
<input type="checkbox"/>	Empty Folo	31851	6/194	26/09/2017 6:47:50 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	String was not recognized as a valid Date Time
<input type="checkbox"/>	Empty Folo	31876	6/194	3/11/2017 5:55:00 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	Message: The server could not be contacted. ServiceName: Account Managem...
<input type="checkbox"/>	Empty Folo	31879	6/194	3/11/2017 5:55:00 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	There is no connection string for the destination email address jeylabs2@gmail.c...
<input type="checkbox"/>	Empty Folo	31877	6/194	3/11/2017 5:55:00 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	There is no connection string for the destination email address jeylabs2@gmail.c...
<input type="checkbox"/>	Empty Folo	31878	6/194	3/11/2017 5:55:00 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	Message: The server could not be contacted. ServiceName: Account Managem...
<input type="checkbox"/>	Empty Folo	31879	6/194	3/11/2017 5:55:00 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	There is no connection string for the destination email address jeylabs2@gmail.c...
<input type="checkbox"/>	Empty Folo	31881	6/194	3/11/2017 5:55:00 PM	Error	K2JETLABS Administrator	8	APProcess/ApprovalProcess	There is no connection string for the destination email address jeylabs2@gmail.c...
<input type="checkbox"/>	TEST11/02/2018 4:01:28 PM	31929	5238	1/02/2018 4:01:00 PM	Error	K2JETLABS Administrator	3	PowerToolzTest/ViewFlowTest	There is no connection string for the destination email address jeylabs2@gmail.c...

DataFields: XSLFields

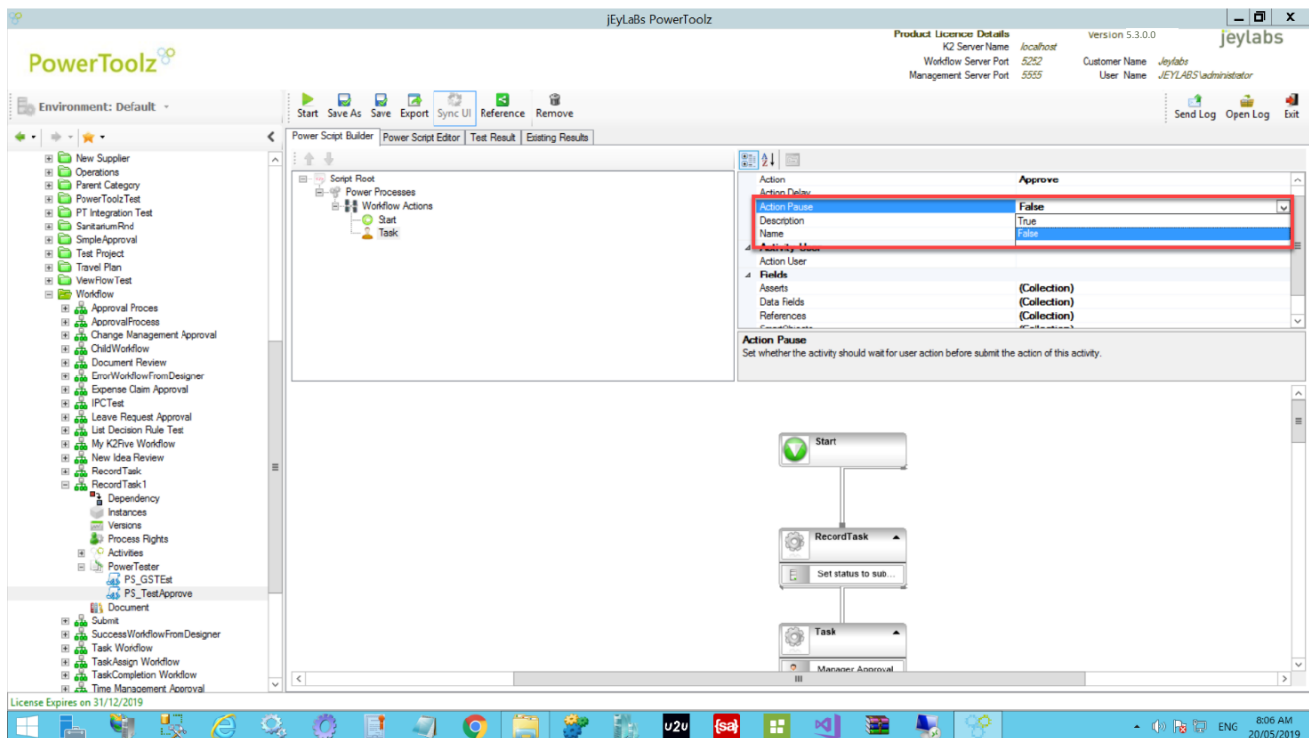
Field Name	Field Value
FinanceManager	

License Expires on 25/07/2018

Action Pause

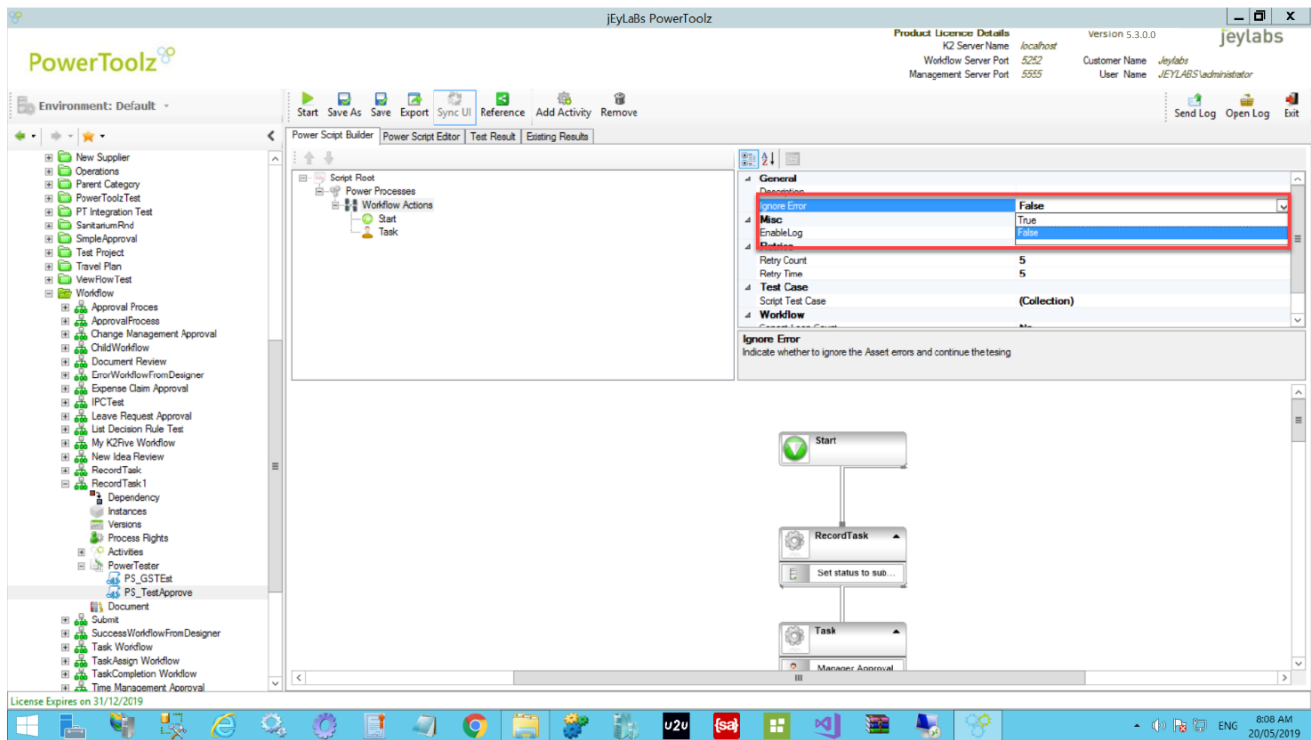
This will provide enough time to analyze errors and test escalations. Automated PowerShell action can be paused for user response to continue by configuring the ActionPause property.

1. Set the ActionPause property value to TRUE to pause the automated PowerShell action for user response.



Ignore Error

This will enable to isolate the workflows, Activities which are failing due to errors for Asserts and Data values.



Process Instance Version Migration

This will provide the functionality to migrate the existing process instances to another version of process. Also, PowerToolz facilitates the fixing of error instances by migrating to a new version of the process which will resolve the error.

1. Select an Instance and migrate it to the latest version of process.
2. Click Version Upgrade and select the required version and the required Activity to kick off the process from.

The screenshot shows the jeylabs PowerToolz application. In the top toolbar, the 'Version Upgrade' button is highlighted with a red box. The main window displays a table of process instances. The instance 'TEST24/05/2018 10:25:32 AM' with ProcessID 34045 is selected. Below the table, a BPMN diagram is shown, illustrating the process flow from 'Start' through a 'Manager' task and a 'Manager Approval' gateway to 'Approve' and 'Reject' paths.

The screenshot shows the jeylabs PowerToolz application. In the top toolbar, the 'Migrate' button is highlighted with a red box. The main window displays a table of process instances. The instance 'TEST24/05/2018 10:25:32 AM' with ProcessID 34045 is selected. Below the table, a table shows the migration details for the selected instance, including Version Number, Instance ID, Date Time, and Process ID.

Version Number	Instance ID	Date Time	Process ID
4	JETLABS administrator	10/16/2017 12:40:47 PM	8234
3	JETLABS administrator	10/16/2017 12:03:58 PM	8232
2	JETLABS administrator	10/16/2017 12:03:58 PM	8232
1	JETLABS administrator	10/16/2017 10:39:08 AM	8231

- Click Migrate to migrate the selected process instance to the selected version.
- Click Yes to confirm the migration the instance

The screenshot shows the jeylabs PowerToolz interface. A 'Confirm migration' dialog box is open, asking 'Are you sure you want to migrate the selected instances?'. The dialog has 'Yes' and 'No' buttons. The background table shows various process instances with columns for PinetID, ProcessID, Start Date, Status, Originator, and Version.

PinetID	ProcessID	Start Date	Status	Originator	Version	Detail
TEST24/05/2018 10:26:32 AM	34046	24/05/2018 10:26:00 AM	Active	KQJELABS Administrator	3	
TEST24/05/2018 10:26:52 AM	34046	24/05/2018 10:26:00 AM	Active	KQJELABS Administrator	3	
TEST24/05/2018 10:27:28 AM	34047	24/05/2018 10:27:00 AM	Active	KQJELABS Administrator	3	
TEST24/05/2018 10:32:14 AM	34050	24/05/2018 10:32:00 AM	Active	KQJELABS Administrator	3	
Test Process Workflow	34056	7/06/2018 6:28:00 PM	Active	KQJELABS Administrator	4	
South Process Workflow	34059	13/06/2018 10:45:00 AM	Active	KQJELABS Administrator	4	
TEST13/06/2018 10:57:51 AM	34064	13/06/2018 10:57:00 AM	Active	KQJELABS Administrator	4	
Test Process Workflow	35070	10/07/2018 12:56:00 PM	Active	KQJELABS Administrator	4	
Test Process Workflow	31863	16/10/2017 11:43:15 AM	Completed	KQJELABS administrator		
Test2 Process Workflow	31864	16/10/2017 12:01:10 PM	Completed	KQJELABS administrator		
Ben Process Workflow	31867	16/10/2017 12:42:13 PM	Completed	KQJELABS administrator		
TEST16/10/2017 3:12:09 PM	31868	16/10/2017 3:12:09 PM	Completed	KQJELABS administrator		
TEST16/10/2017 3:14:35 PM	31869	16/10/2017 3:14:35 PM	Completed	KQJELABS administrator		
TEST16/10/2017 3:14:38 PM	31870	16/10/2017 3:14:38 PM	Completed	KQJELABS administrator		
Jeylabs Process Workflow	31871	16/10/2017 3:14:38 PM	Completed	KQJELABS administrator		
Jeylabs Process Workflow	31872	16/10/2017 3:14:38 PM	Completed	KQJELABS administrator		
Process Workflow	31873	17/10/2017 12:16:45 PM	Completed	KQJELABS administrator		
Jeylabs Process Workflow	31838	22/02/2018 1:09:52 PM	Completed	KQJELABS administrator		
TEST23/02/2018 8:08:39 AM	31940	23/02/2018 8:08:00 AM	Completed	KQJELABS Administrator		
TEST23/02/2018 8:08:45 AM	31941	23/02/2018 8:08:00 AM	Completed	KQJELABS Administrator		

- The selected Instance has been migrated to the new version

The screenshot shows the jeylabs PowerToolz interface after the migration. The 'Migrated Instance' is highlighted in the table. The 'Confirm migration' dialog box is no longer present.

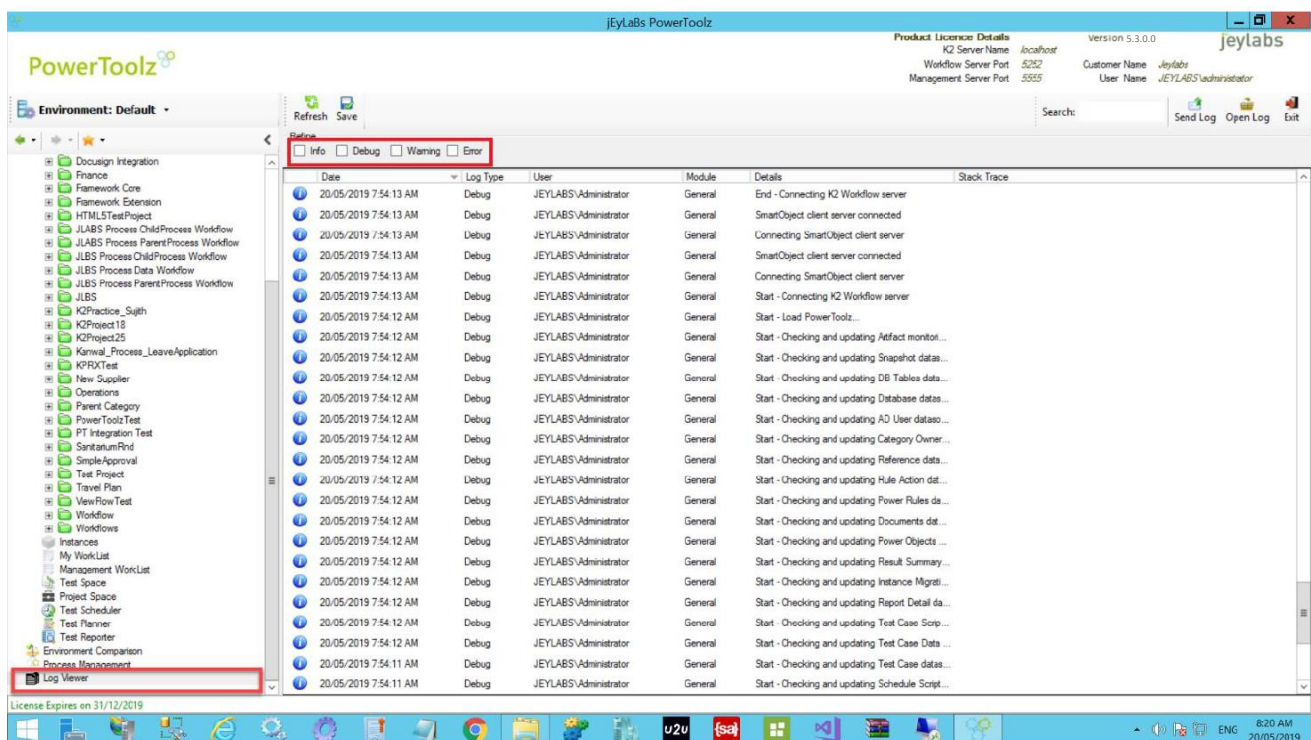
PinetID	ProcessID	Start Date	Status	Originator	Version	Detail
TEST24/05/2018 10:26:32 AM	34046	24/05/2018 10:26:00 AM	Active	KQJELABS Administrator	3	
TEST24/05/2018 10:26:52 AM	34046	24/05/2018 10:26:00 AM	Active	KQJELABS Administrator	3	
TEST24/05/2018 10:27:28 AM	34047	24/05/2018 10:27:00 AM	Active	KQJELABS Administrator	3	Migrated Instance
TEST24/05/2018 10:32:14 AM	34050	24/05/2018 10:32:00 AM	Active	KQJELABS Administrator	3	
Test Process Workflow	34056	7/06/2018 6:28:00 PM	Active	KQJELABS Administrator	4	
South Process Workflow	34059	13/06/2018 10:45:00 AM	Active	KQJELABS Administrator	4	
TEST13/06/2018 10:57:51 AM	34064	13/06/2018 10:57:00 AM	Active	KQJELABS Administrator	4	
Test Process Workflow	35070	10/07/2018 12:56:00 PM	Active	KQJELABS Administrator	4	
Test Process Workflow	31863	16/10/2017 11:43:15 AM	Completed	KQJELABS administrator		
Test2 Process Workflow	31864	16/10/2017 12:01:10 PM	Completed	KQJELABS administrator		
Ben Process Workflow	31867	16/10/2017 12:42:13 PM	Completed	KQJELABS administrator		
TEST16/10/2017 3:12:09 PM	31868	16/10/2017 3:12:09 PM	Completed	KQJELABS administrator		
TEST16/10/2017 3:14:35 PM	31869	16/10/2017 3:14:35 PM	Completed	KQJELABS administrator		
TEST16/10/2017 3:14:38 PM	31870	16/10/2017 3:14:38 PM	Completed	KQJELABS administrator		
Jeylabs Process Workflow	31871	16/10/2017 3:14:38 PM	Completed	KQJELABS administrator		
Jeylabs Process Workflow	31872	16/10/2017 3:14:38 PM	Completed	KQJELABS administrator		
Process Workflow	31873	17/10/2017 12:16:45 PM	Completed	KQJELABS administrator		
Jeylabs Process Workflow	31838	22/02/2018 1:09:52 PM	Completed	KQJELABS administrator		
TEST23/02/2018 8:08:39 AM	31940	23/02/2018 8:08:00 AM	Completed	KQJELABS Administrator		
TEST23/02/2018 8:08:45 AM	31941	23/02/2018 8:08:00 AM	Completed	KQJELABS Administrator		

View and Retrieve Log Files

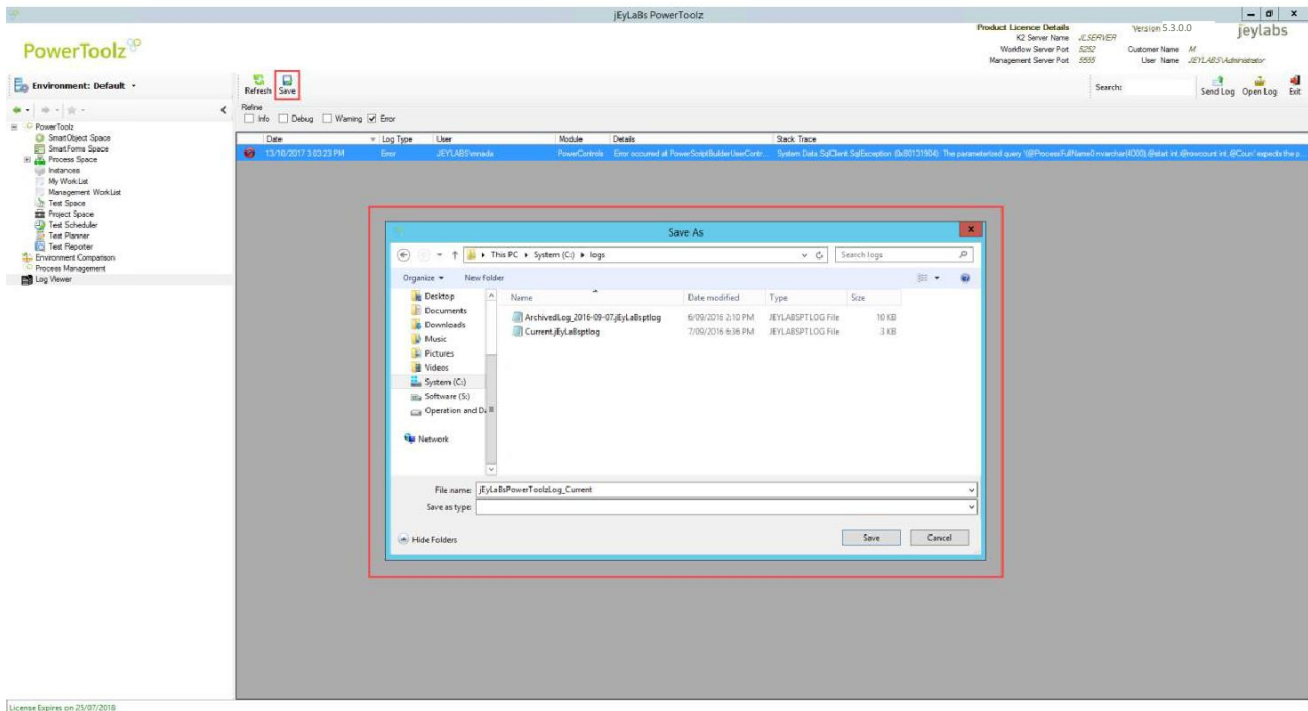
PowerToolz maintains log files, which can be of assistance to the error diagnostic process. These logs can be viewed and saved, so as to be distributed when necessary such as provide log files to the PowerToolz support team.

View Work Logs

1. From the PowerToolz home screen, the Log Viewer can be selected from the main menu on the left hand side of the screen.



2. A list of logs are visible from the log viewer, which can be filtered using the checkboxes provided. The location where the logs are store can be opened in windows explorer by pressing the open log and control keyboard button(s) simultaneously.



Send Log Files

Along with viewing the Log files, PowerToolz also allows to send the log files. In case of errors, logs can be forwarded to PowerToolz Support Team by clicking the Send Log Button on the top right corner.

