

Avanade Intelligent Test Automation User Guide

Microsoft Dynamics 365 for Finance and Operations

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Introduction

Avanade Intelligent Test Automation (AITA) is an intelligent testing tool which helps projects in increasing the efficiency and reliability of testing by automating the execution of test cases. Built on top of the Microsoft Dynamics 365 for Finance and Operations task recorder functionality, it enables recording test guides which are then linked to industry business process hierarchy to enable testing of end to end processes that are part of an implementation.

Avanade Intelligent Test Automation tool allows you to,

- Plan and prepare the tests that you need to perform
- Record processes with Dynamics 365 task recorder
- Establish test cases in Dynamics 365 and link to VSTS
- Recording and playing test guides
- Manage test data and expected test results
- Schedule tests in batch
- Document test results in logs and charts

Intended Audience

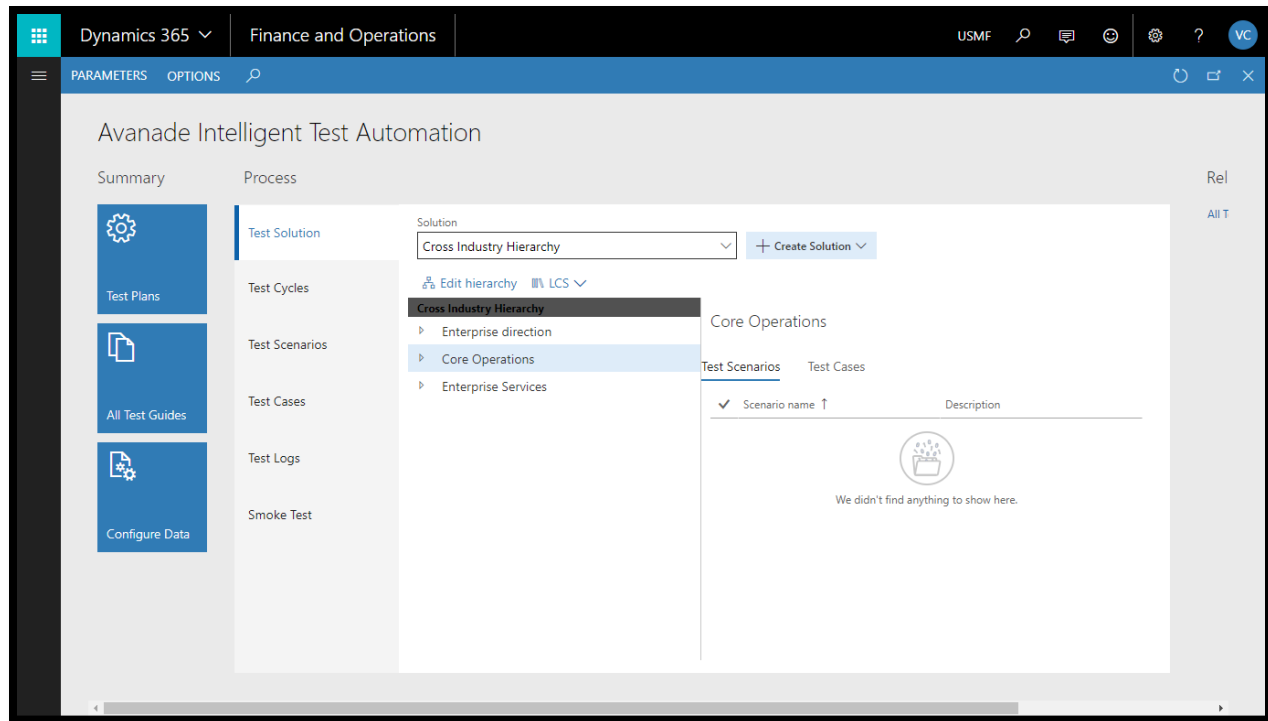
This document is intended for use by technical/functional consultants, business analysts and clients implementing the Avanade Intelligent Test Automation (AITA) tool for Microsoft Dynamics 365 for Finance and Operations version and for first time users who will be utilizing the application for both implementation and operational purposes.

In this document, we would provide you with the detailed steps on how to perform the above-mentioned functionality using the Avanade Intelligent Test Automation tool.

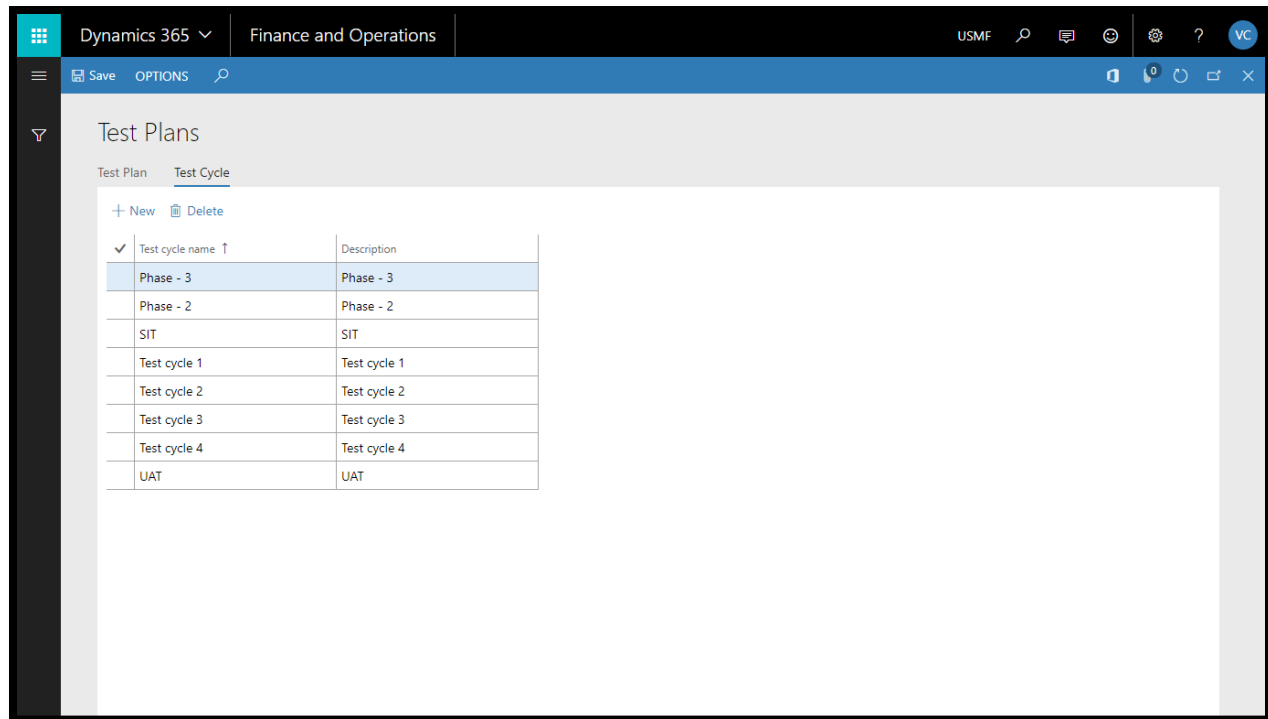
Define Test Plans

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation

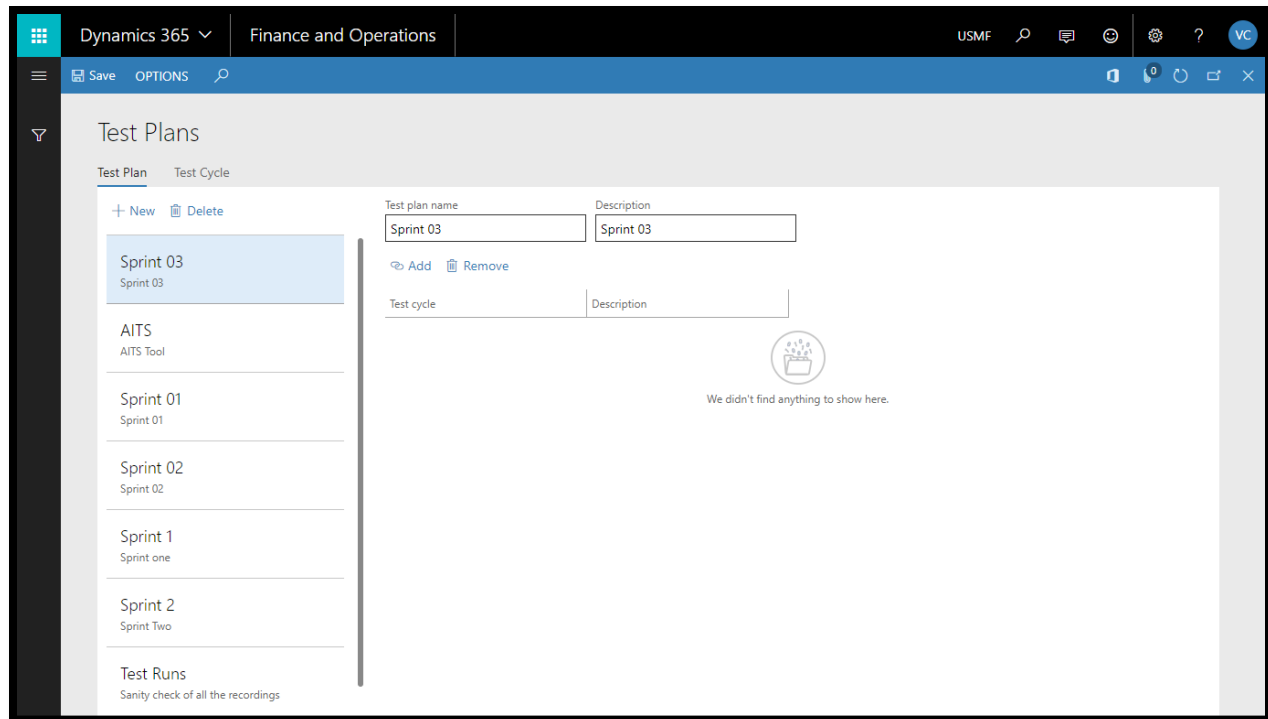




2. Click on test plans tile
3. Click on test cycle tab
4. Click new to create a new test cycle
5. In the test cycle name field, enter a name
6. In the description field, enter a description for the test cycle

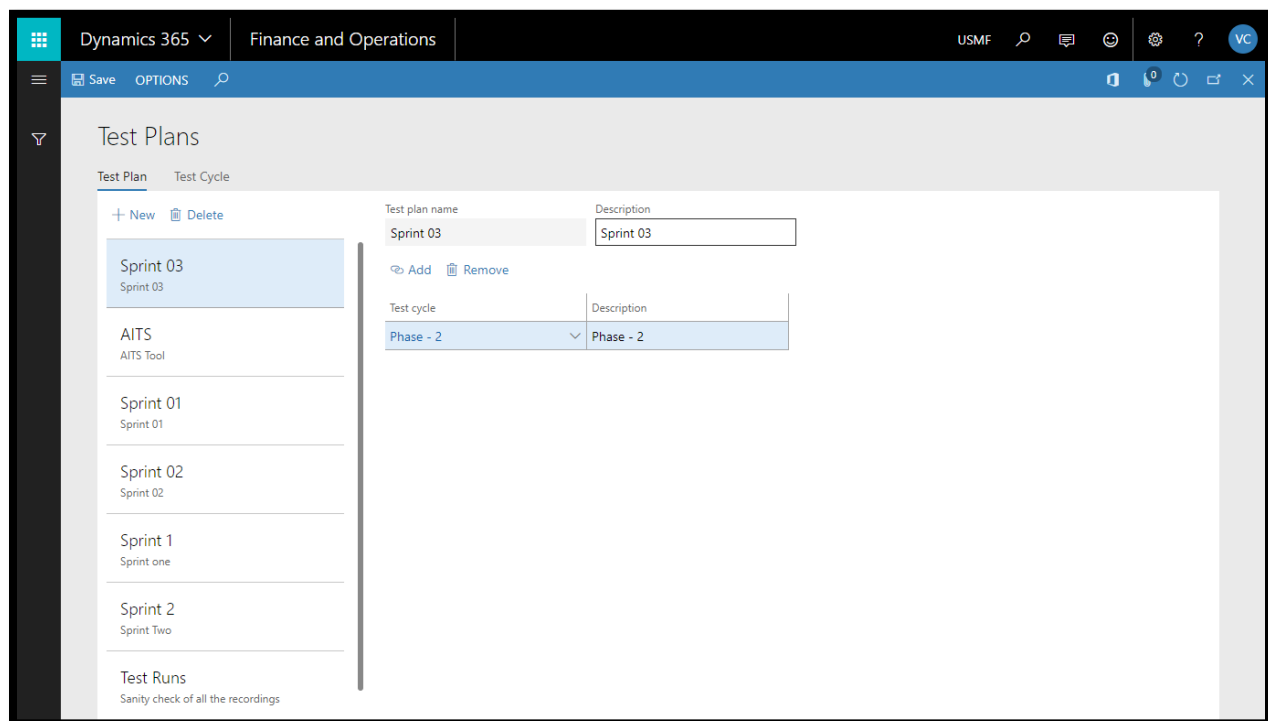


7. Repeat steps 4 to 6 to define more test cycles
8. Click on test plan tab
9. Click new to define a new test plan
10. In the test plan name field, enter a name
11. In the description field, enter a description for the test plan



12. Click add to link test cycles to test plan

13. In the test cycle field, use the drop down and select the test cycle to link

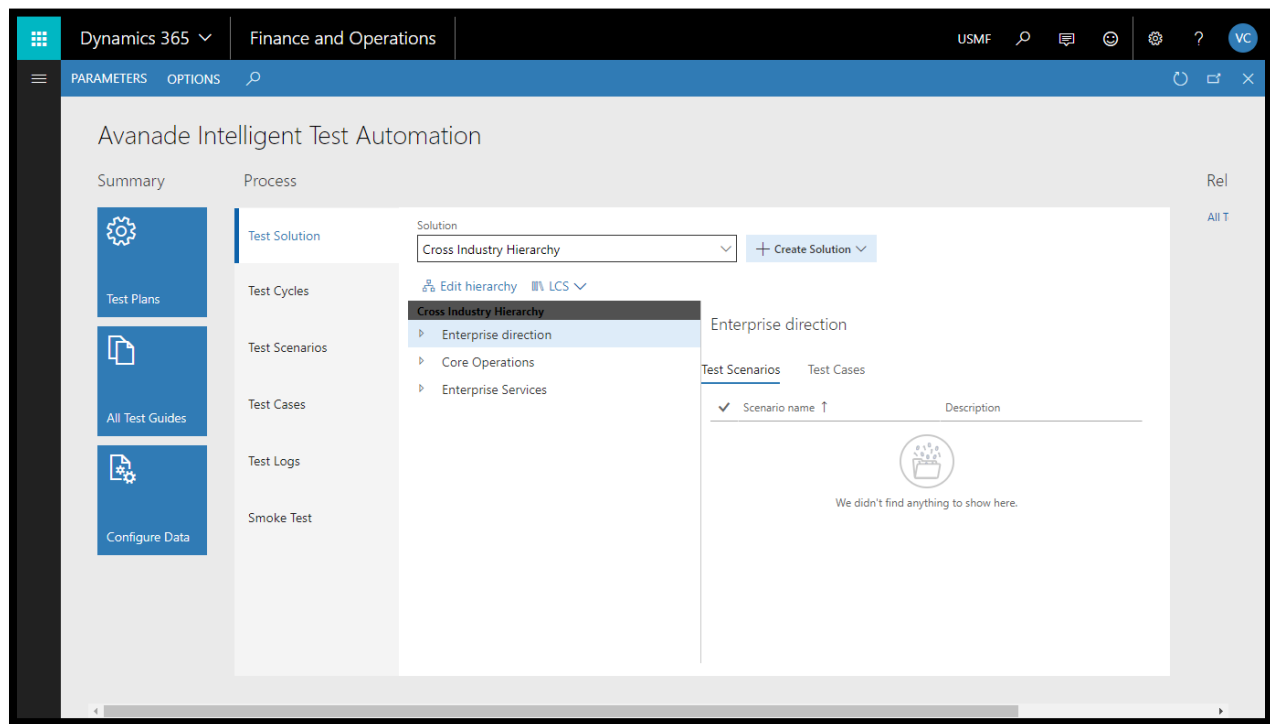


14. Add as many test cycles as per the project plan
15. Click save

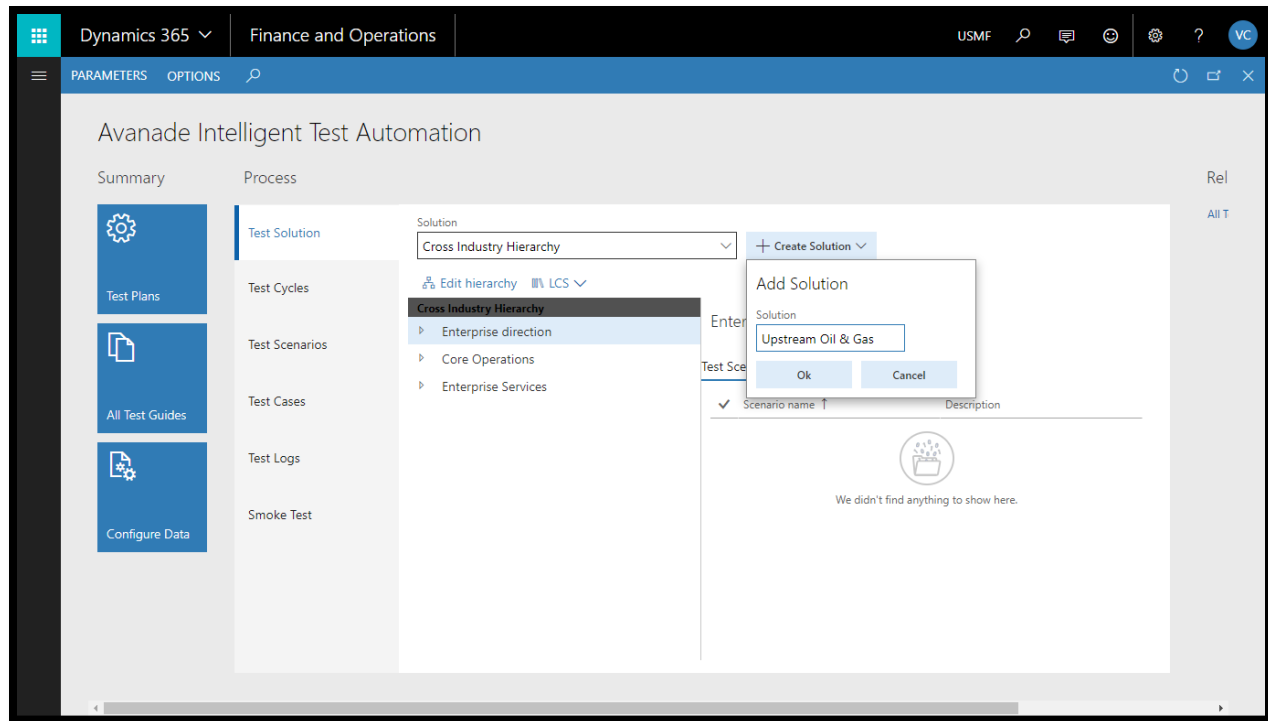
How to Create a Test Solution

Once the test plan is defined, the user can create a new test solution and import business processes from LCS.

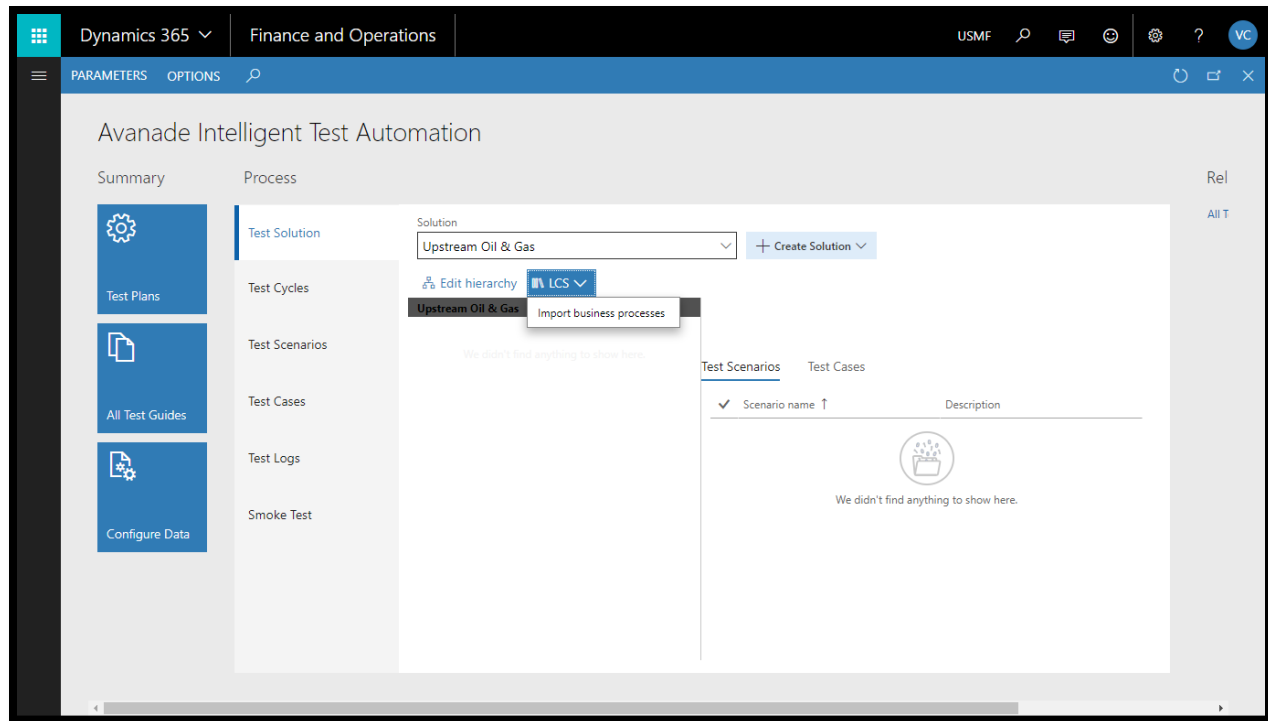
1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



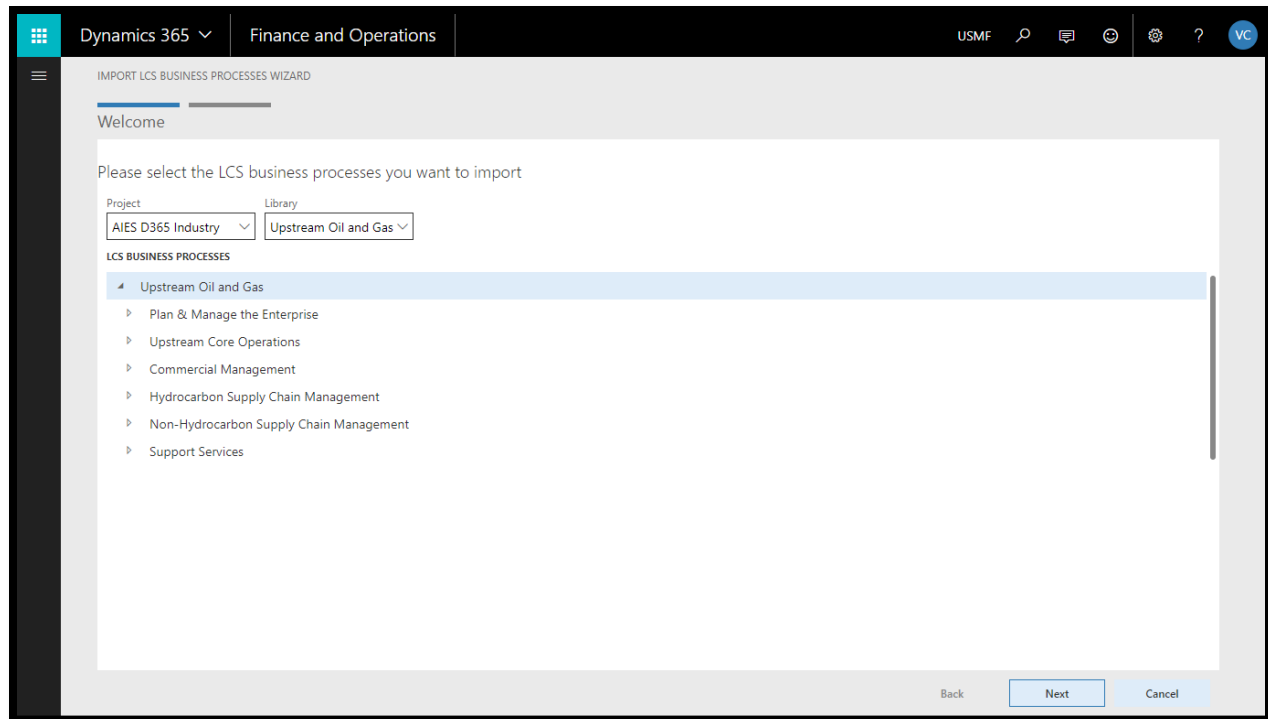
2. Click on test solutions tab
3. Click on create solution button
4. In the drop down, enter the solution name



5. Click ok
6. Click on LCS
7. In the drop down, click on import business processes

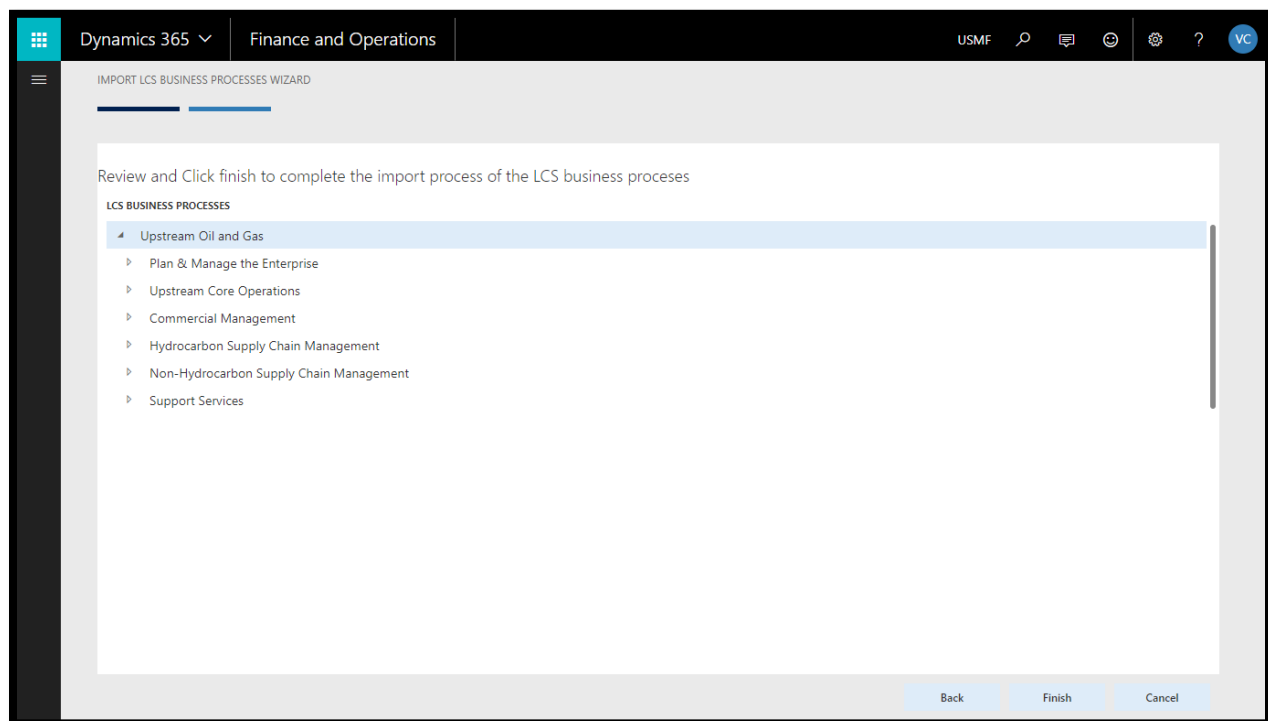


8. Import LCS business process wizard will open
9. In the project field, select the project to be used from the drop down
10. Select the business process to import from the library field



11. Click next

12. Review the business processes

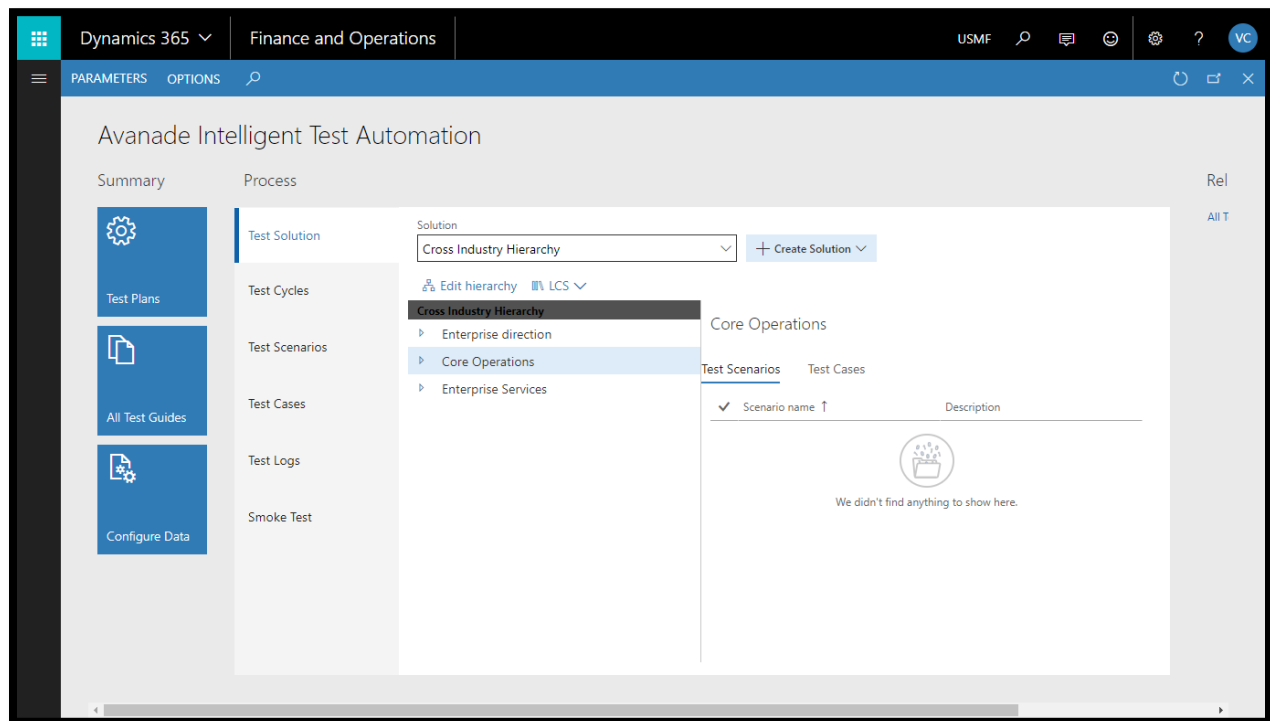


13. Click finish to complete the import of LCS business processes

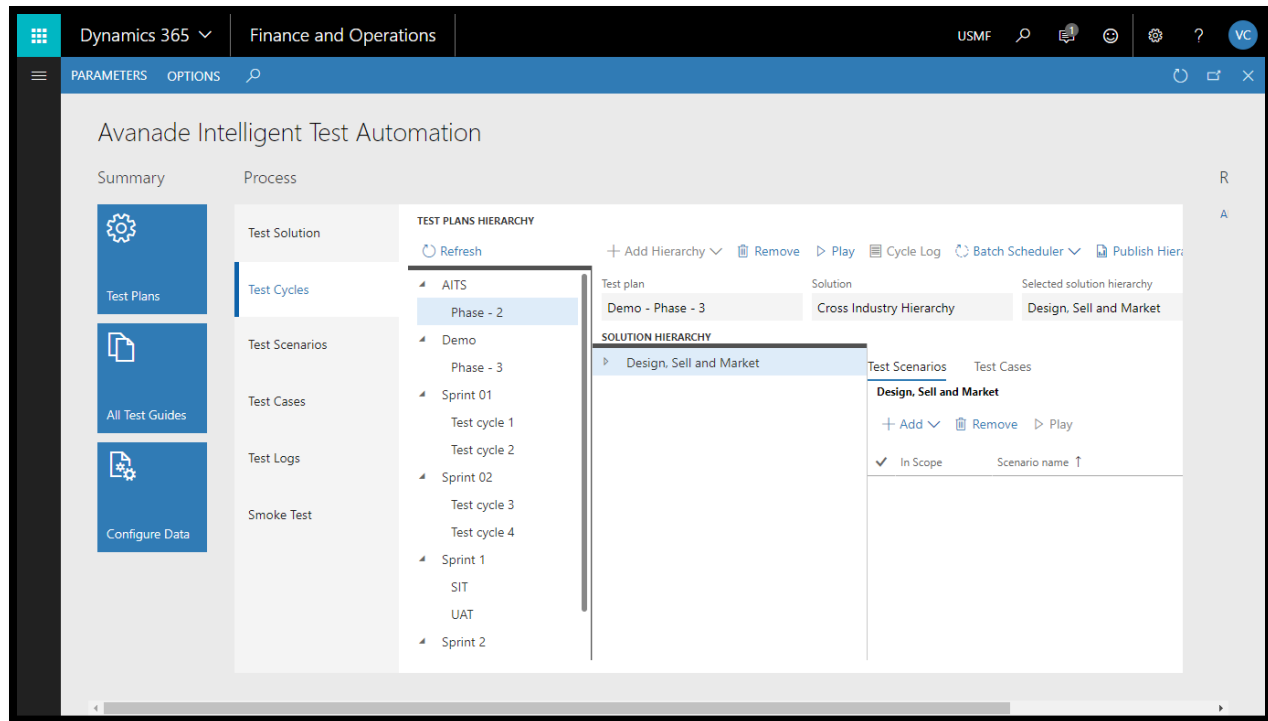
Add Business Process Hierarchy to Test Plan

The next step is to add the solution hierarchy to the test plan.

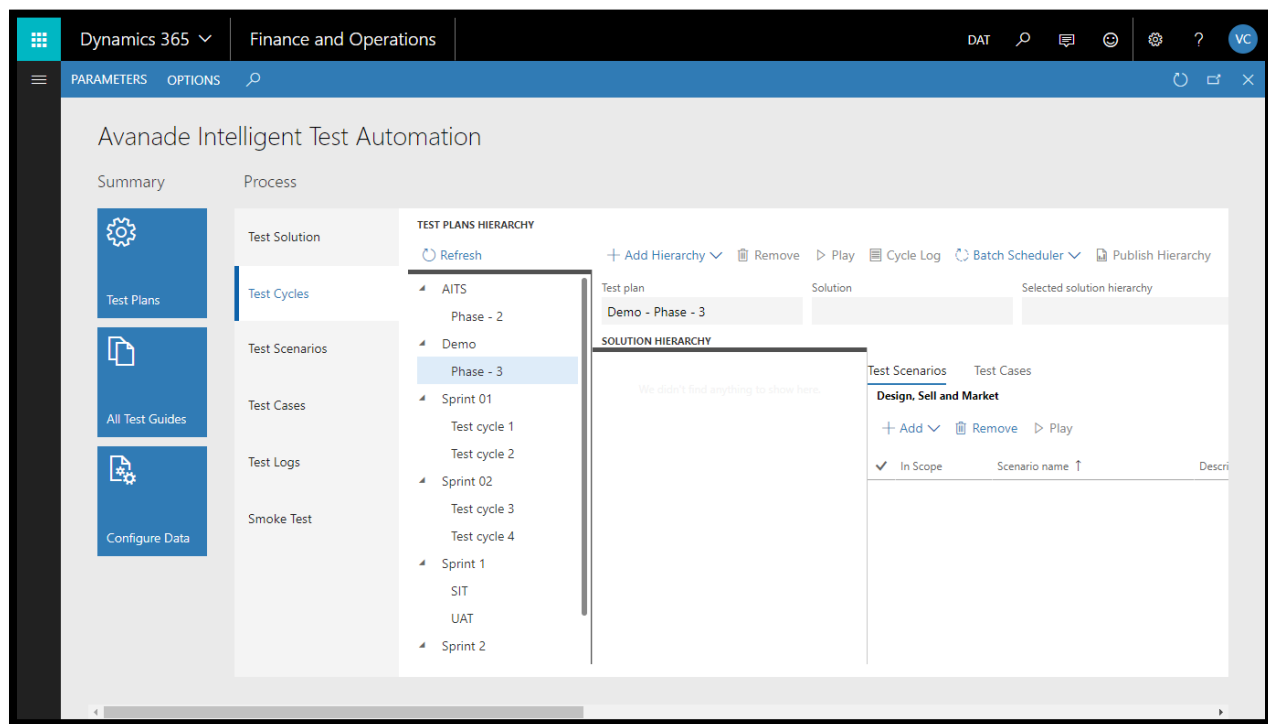
1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



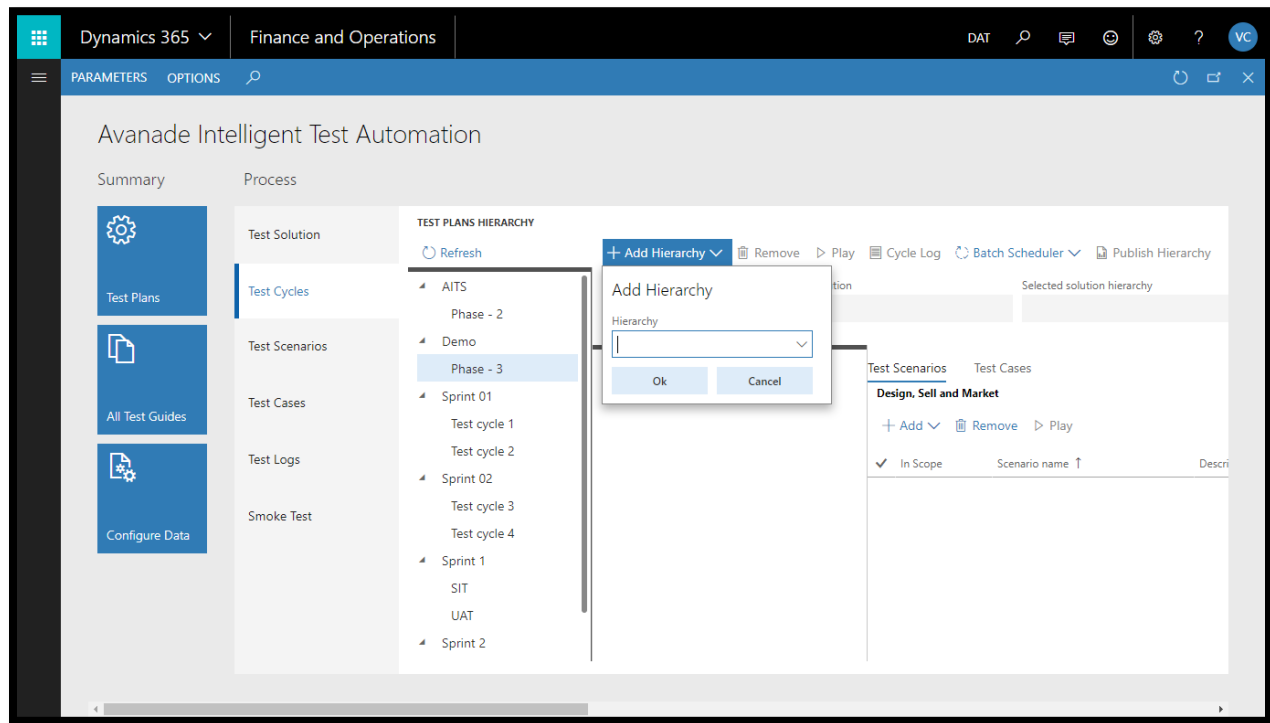
2. Click on test cycles tab



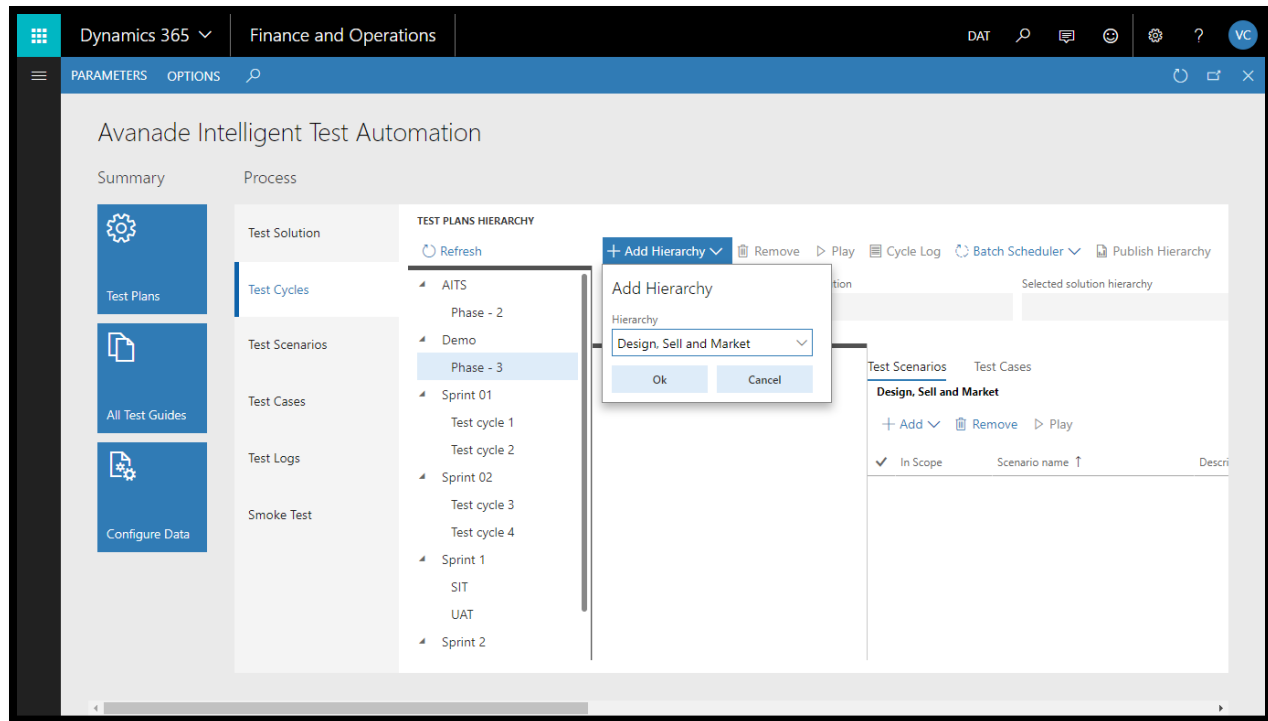
3. In the test plans hierarchy, select the test cycle for which hierarchy should be added



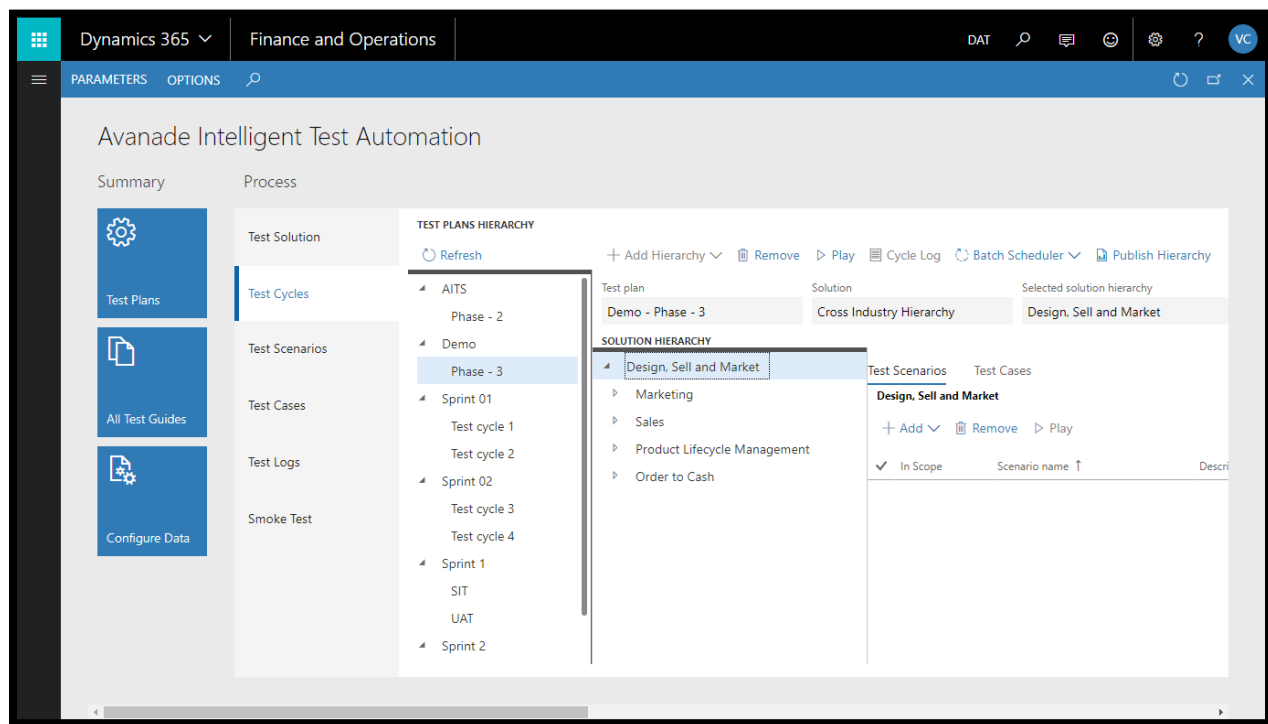
4. Click on add hierarchy



5. In the add hierarchy form, click on the drop down to select the necessary solution hierarchy



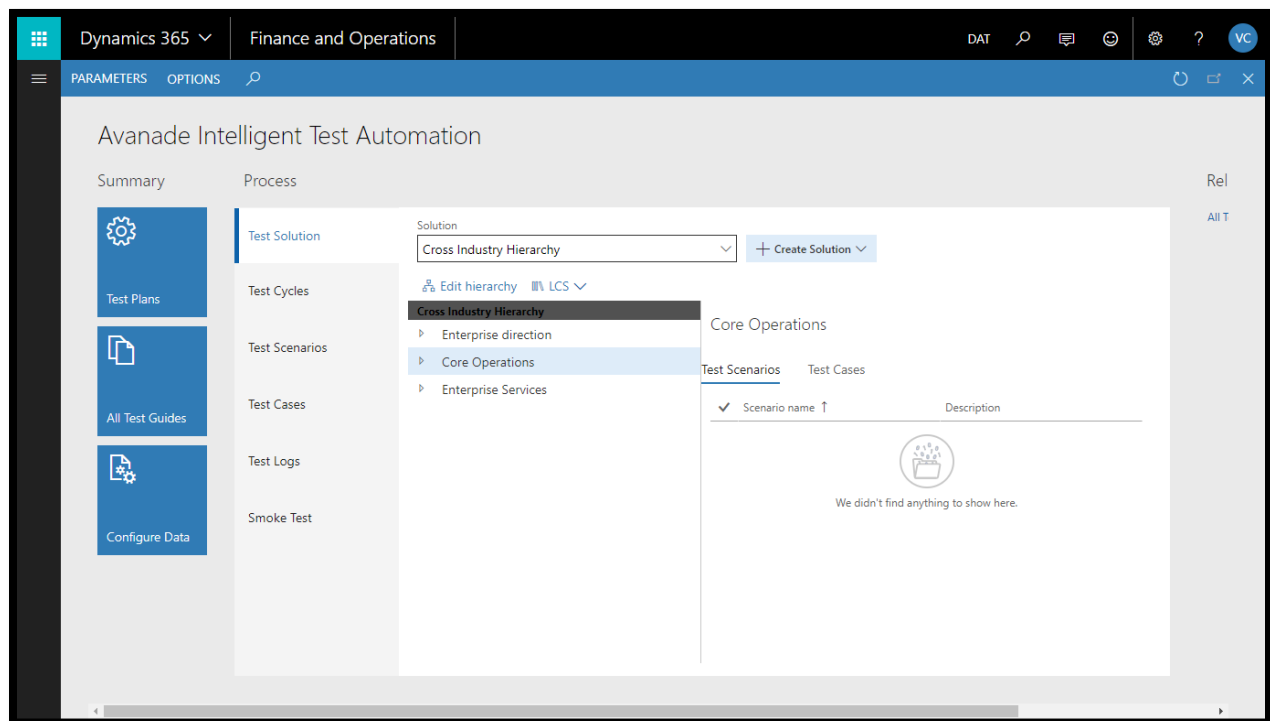
6. Click ok



Create a Test Guide

AITA tool can be used to record action that are performed in the product user interface. When you use task recorder, all the events that you perform in the UI that are executed against the server including adding values, changing settings, removing any data are captured. Now, the steps that you record are collectively referred to as a task recording. Task recordings can be used in many ways. You can create task guides, and a task guide is a controlled guided interactive experience that walk you through the steps of a business process.

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on all test guides tile

Dynamics 365 Finance and Operations

Test Guide

Filter

+ Create Test Guide Duplicate Test Guide Play Test Log Export Import Publish Document CSV Export File

Test guide	Description	Created by	Created date and time	Recorded Comp
A2R_1_Fixed asset creation proc...		Edwin.rajesh	3/29/2018 09:02:37 AM	usmf

CSV FILE IMPORT

Is CSV Import

No

File Name

Upload

PROCEDURE PREVIEW

Edit Refresh Add Loop

✓	Skip	Step no	Action type	Details
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.00	Start	Start Test Guide
<input type="checkbox"/>	<input type="checkbox"/>	2.00	Open form	Go to Fixed assets > Fixed asset...
<input type="checkbox"/>	<input type="checkbox"/>	3.00	Click on	Click New.
<input type="checkbox"/>	<input type="checkbox"/>	4.00	Insert by lookup	In the Fixed asset group field, e...
<input type="checkbox"/>	<input type="checkbox"/>	5.00	Subtask	In the list, select row 6.
<input type="checkbox"/>	<input type="checkbox"/>	6.00	Subtask	In the list, click the link in the sel...
<input type="checkbox"/>	<input type="checkbox"/>	7.00	Insert value	In the Name field, type a value.
<input type="checkbox"/>	<input type="checkbox"/>	8.00	Insert value	In the Unit cost field, enter a nu...
<input type="checkbox"/>	<input type="checkbox"/>	9.00	Click on	Select the check box on the hea...

General

Show details

Step no Action type

1.00 Start

Step details

Start Test Guide

3. Click on create test guide

Dynamics 365 Finance and Operations

USMF

Contoso Entertainment System USA

July 2018

Avanade Intelligent Data Manager

Avanade Intelligent Test Automation

Bank management

Benefits

Budget planning

Business process file share

General journal processing

Invoicing

Ledger budgets and forecasts

Master planning

My business processes

My process guide

Work items assigned to me

My process guide

User focused process guidance powered by RapidValue BPM Suite for Microsoft Dynamics 365 for Finance and Operations.

Recording..

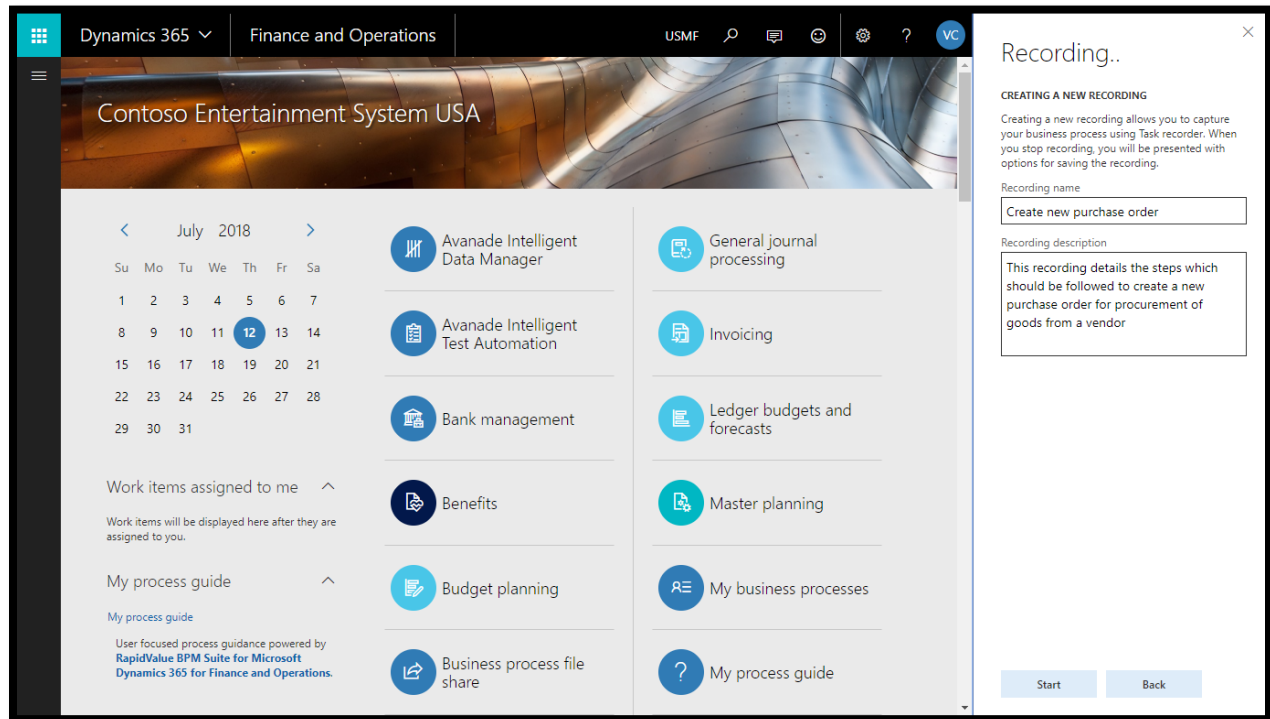
WHAT WOULD YOU LIKE TO DO?

+ Create recording

Any information that you enter into the application while you are recording is captured and included in the recording file. If you decide to share the recording file, others may be able to see the information that was captured.



4. Click on create recording
5. In the recording name field, enter a name
6. In the recording description field, enter a description



7. Click start
8. Perform the steps to be recorded

Create new purchase order

Stop Task recorder

Dynamics 365 Finance and Operations

Save New Delete PURCHASE ORDER PURCHASE MANAGE RECEIVE INVOICE

CREATE CHARGES TAX CALCULATE PREPAY GENERATE ACTIONS ACCOUNTING

Credit note Maintain charges Sales tax Multiline discount Total discount Supplementary items Prepayment Remove prepayment Purchase inquiry Confirmation Pro forma confirmation Confirm Finalize Distribute amounts View distributions

ALL PURCHASE ORDERS

00001427 : 1001 - Acme Offi... Lines Header Open order Confirmed

Purchase order lines

+ Add line + Add lines Add products Remove Purchase order line Financials Inventory

✓	T...	Budget check re...	Line number	Item number	Product name	Procurement category
			10	A0001	HDMI 6' Cables	Computers

Recording..

STEPS

Delete step Pause

1	-	In the list, select row 6
2	-	In the list, click the link selected row.
3	6	Click OK.
4	7	In the list, mark the selected row.
5	8	In the Item number field or select a value.
6	-	In the list, select row 1
7	-	In the list, click the link selected row.
8	9	In the Quantity field, enter number.
9	10	On the Action Pane, click Purchase.
10	11	Click Confirmation.
11	12	Click OK.

9. Click stop to complete recording

Dynamics 365 Finance and Operations

Save New Delete PURCHASE ORDER PURCHASE MANAGE RECEIVE INVOICE

CREATE CHARGES TAX CALCULATE PREPAY GENERATE ACTIONS ACCOUNTING

Credit note Maintain charges Sales tax Multiline discount Total discount Supplementary items Prepayment Remove prepayment Purchase inquiry Confirmation Pro forma confirmation Confirm Finalize Distribute amounts View distributions

ALL PURCHASE ORDERS

00001427 : 1001 - Acme Offi... Lines Header Open order Confirmed

VENDOR Cross docking date Purchase

Contact

Purchase order lines

+ Add line + Add lines Add products Remove Purchase order line Financials Inventory

✓	T...	Budget check re...	Line number	Item number	Product name	Procurement category
			10	A0001	HDMI 6' Cables	Computers

Recording..

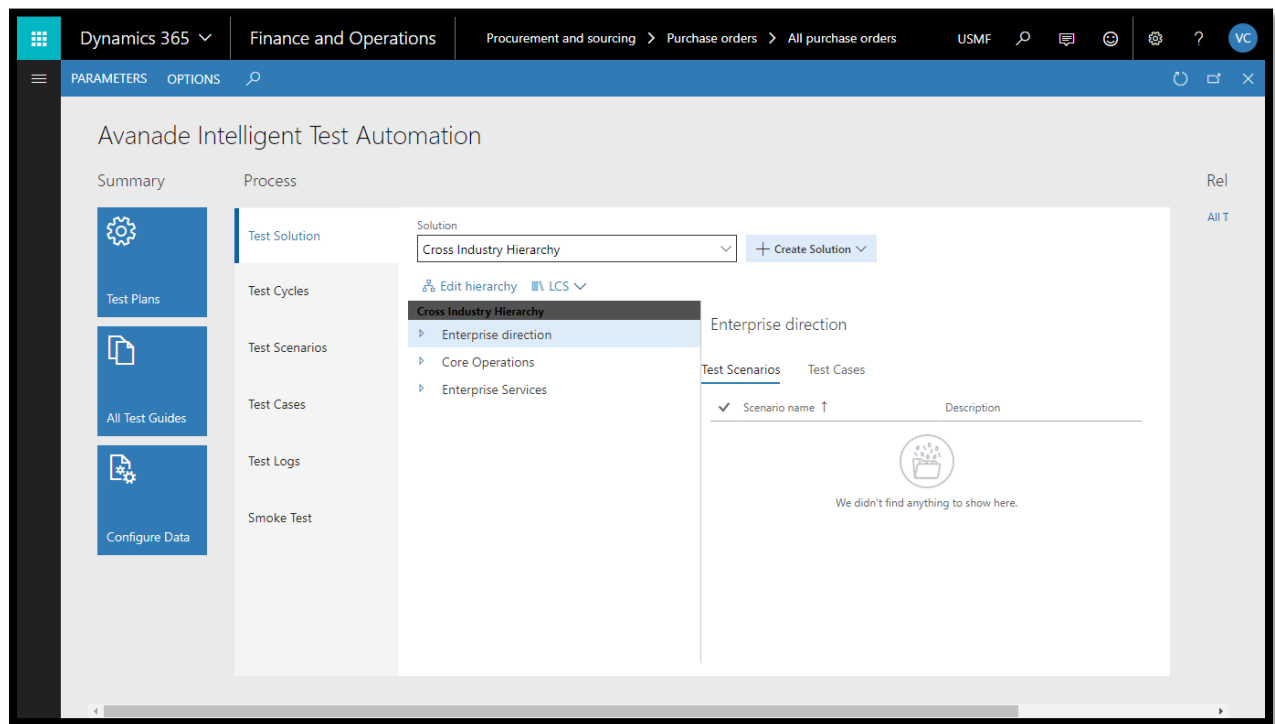
Save to Avanade Intelligent Test Automation

10. Click on save to Avanade Intelligent Test Automation

Create a Test Case and Link Test Guide

Avanade Intelligent Test Automation tool can be used to record action that you perform in the product user interface. Test cases can be batch processed with the help of test guides and the results can be analyzed from test log.

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on test case tab

Dynamics 365 Finance and Operations

PARAMETERS OPTIONS

Avanade Intelligent Test Automation

Summary Process

Test Plans

All Test Guides

Configure Data

Test Solution

Test Cycles

Test Scenarios

Test Cases

Test Logs

Smoke Test

TEST CASES

Save Refresh Add Remove Procedure Test Guide Test log Owner TFS

Test case name	Description	Test guide	Priority
✓ Accrual schemes process A	Accrual schemes process	Accrual schemes process	
Accrual schemes process B	Accrual schemes process	Accrual schemes process - A	
Accrue revenue against the project	Accrue revenue against the proj...	PM&A_54_Accrue revenue agai...	
Add project as financial dimensions	Add project as financial dimensi...	A2R_5_Add project as financial ...	
Add_EditContactCompetencies	Add_EditContactCompetencies	O2C_5_Add_EditContactCompet...	
Addition of charges to fixed asset	Addition of charges to fixed asset	A2R_2_Addition of charges to fi...	
AdditionOfaContactToProspect	AdditionOfaContactToProspect	O2C_3_AdditionOfaContactToPr...	
Advance ledger entries Process	Advance ledger entries Process	Advance ledger entries Process	
Advanced Bank reconciliation	Advanced Bank reconciliation	R2R_20_Advanced Bank reconcil...	Medium
Apply credit against an open invoice	Apply credit against an open inv...	O2C_68_Appl credit against an ...	
Assign customer line discount group to ...	Assign customer line discount g...	O2C_20_Assign customer line di...	
Assign customer multi line discount gro...	Assign customer multi line disco...	O2C_21_Assign customer multi l...	
Assign customer total discount group to ...	Assign customer total discount	O2C_22_Assign customer total d...	

3. Click on add button

Dynamics 365 Finance and Operations

PARAMETERS OPTIONS

Avanade Intelligent Test Automation

Summary Process

Test Plans

All Test Guides

Configure Data

Test Solution

Test Cycles

Test Scenarios

Test Cases

Test Logs

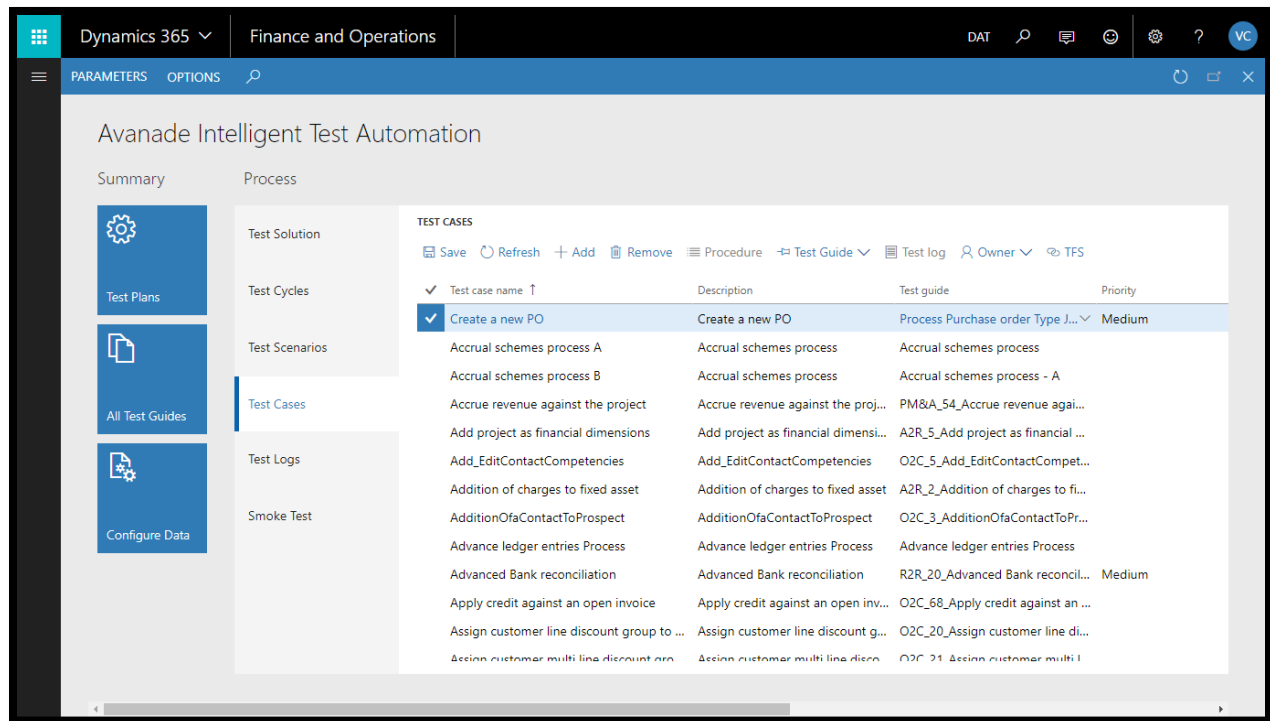
Smoke Test

TEST CASES

Save Refresh Add Remove Procedure Test Guide Test log Owner TFS

Test case name	Description	Test guide	Priority
✓ [New Test Case]			
✓ Accrual schemes process A	Accrual schemes process	Accrual schemes process	
Accrual schemes process B	Accrual schemes process	Accrual schemes process - A	
Accrue revenue against the project	Accrue revenue against the proj...	PM&A_54_Accrue revenue agai...	
Add project as financial dimensions	Add project as financial dimensi...	A2R_5_Add project as financial ...	
Add_EditContactCompetencies	Add_EditContactCompetencies	O2C_5_Add_EditContactCompet...	
Addition of charges to fixed asset	Addition of charges to fixed asset	A2R_2_Addition of charges to fi...	
AdditionOfaContactToProspect	AdditionOfaContactToProspect	O2C_3_AdditionOfaContactToPr...	
Advance ledger entries Process	Advance ledger entries Process	Advance ledger entries Process	
Advanced Bank reconciliation	Advanced Bank reconciliation	R2R_20_Advanced Bank reconcil...	Medium
Apply credit against an open invoice	Apply credit against an open inv...	O2C_68_Appl credit against an ...	
Assign customer line discount group to ...	Assign customer line discount g...	O2C_20_Assign customer line di...	
Assign customer multi line discount gro...	Assign customer multi line disco...	O2C_21_Assign customer multi l...	
Assign customer total discount group to ...	Assign customer total discount	O2C_22_Assign customer total d...	

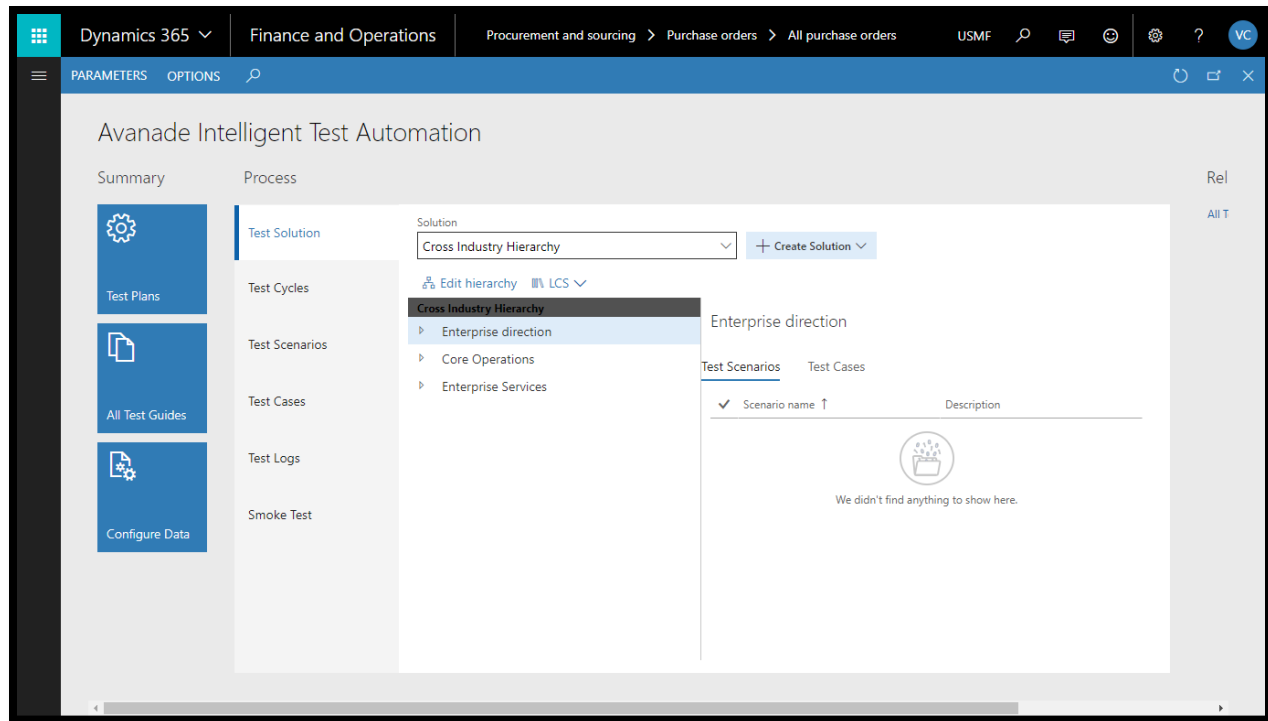
4. In the test case name field, enter a name for the test case
5. In the description field, enter a description for the test case
6. In test guide drop down, select the test guide which was recorded
7. In the priority field, select a value
8. In the owner field, select a user id who is responsible for executing the test case



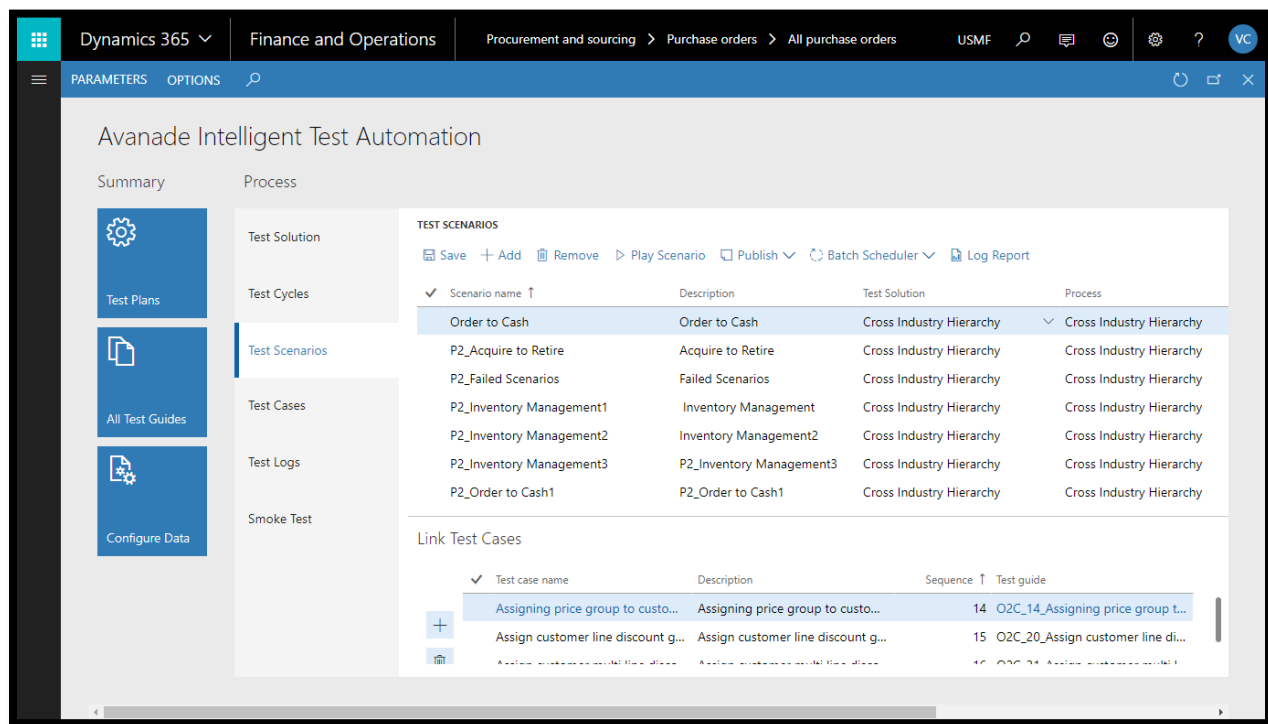
9. Click on TFS button to add work item id to the test case
10. Click Save

Link Test Case to Test Scenario

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on test scenarios tab



3. Select the test scenario to which test case needs to be linked
4. In the link test cases section, click on add button

The screenshot shows the Dynamics 365 Finance and Operations interface. The top navigation bar includes 'Dynamics 365', 'Finance and Operations', and a breadcrumb trail: 'Procurement and sourcing > Purchase orders > All purchase orders'. The user is logged in as 'USMF'. The main window is titled 'Avanade Intelligent Test Automation' and has a sidebar with options: 'Test Solution', 'Test Cycles', 'Test Scenarios' (selected), 'Test Cases', 'Test Logs', and 'Smoke Test'.

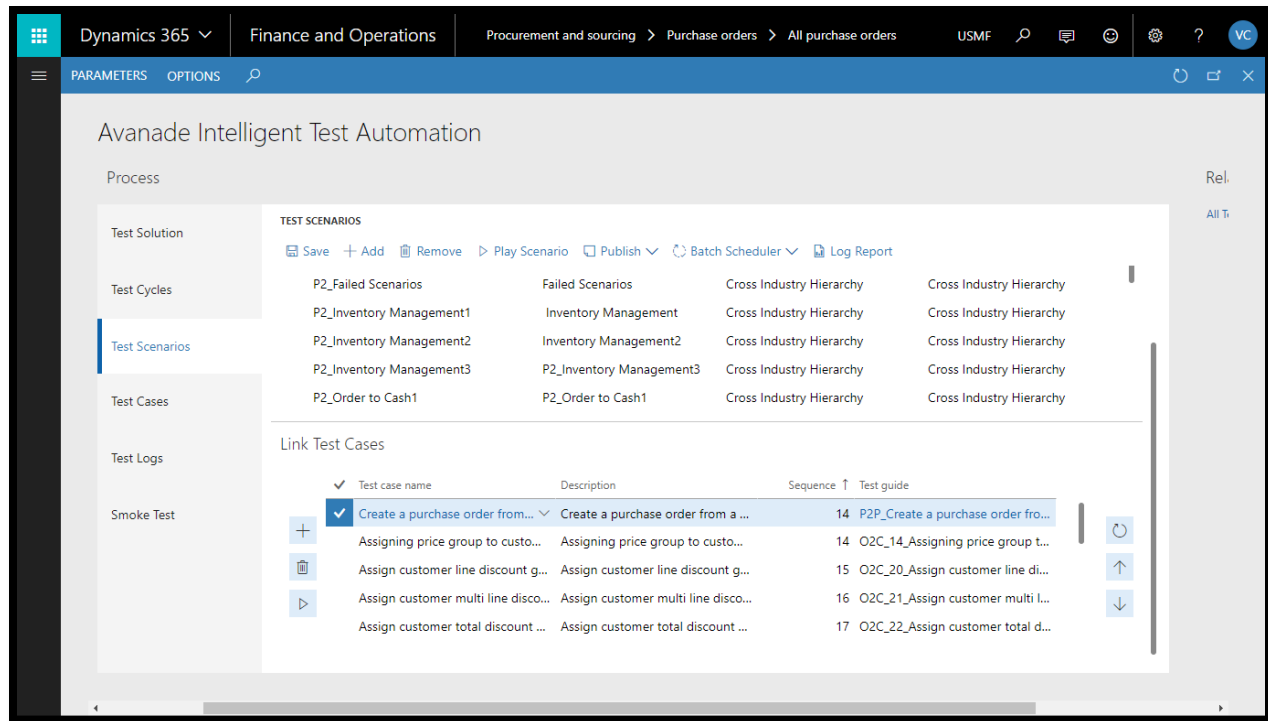
The 'TEST SCENARIOS' section contains a table with the following data:

TEST SCENARIOS	Failed Scenarios	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Failed Scenarios	Failed Scenarios	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Inventory Management1	Inventory Management	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Inventory Management2	Inventory Management2	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Inventory Management3	P2_Inventory Management3	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Order to Cash1	P2_Order to Cash1	Cross Industry Hierarchy	Cross Industry Hierarchy

The 'Link Test Cases' section contains a table with the following data:

Test case name	Description	Sequence	Test guide
Assigning price group to custo...	Assigning price group to custo...	14	O2C_14_Assigning price group t...
Assign customer line discount g...	Assign customer line discount g...	15	O2C_20_Assign customer line di...
Assign customer multi line disco...	Assign customer multi line disco...	16	O2C_21_Assign customer multi l...
Assign customer total discount ...	Assign customer total discount ...	17	O2C_22_Assign customer total d...

5. In the test case name field, select the test case. Select the test cases one after the other based on sequence the test scenario to be run

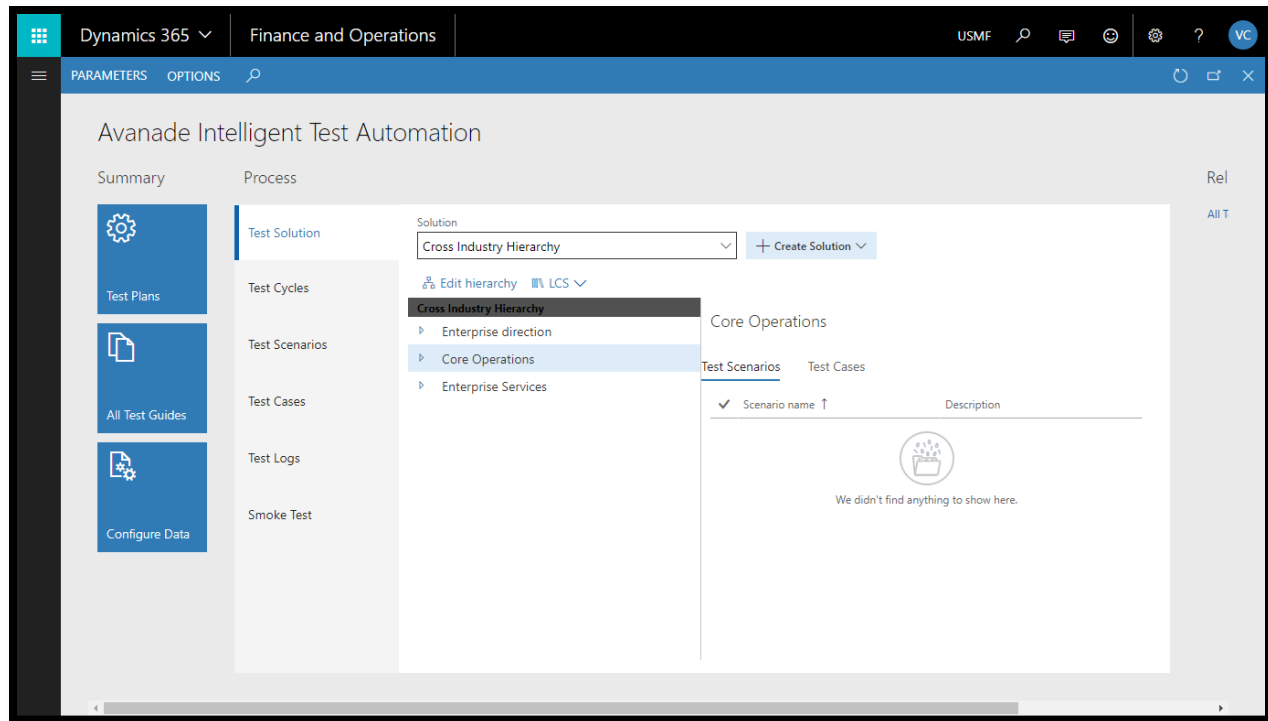


6. Use the up/down button to modify the sequence of test cases
7. Use the delete button to delete any test case which are not part of the test scenario
8. Click save

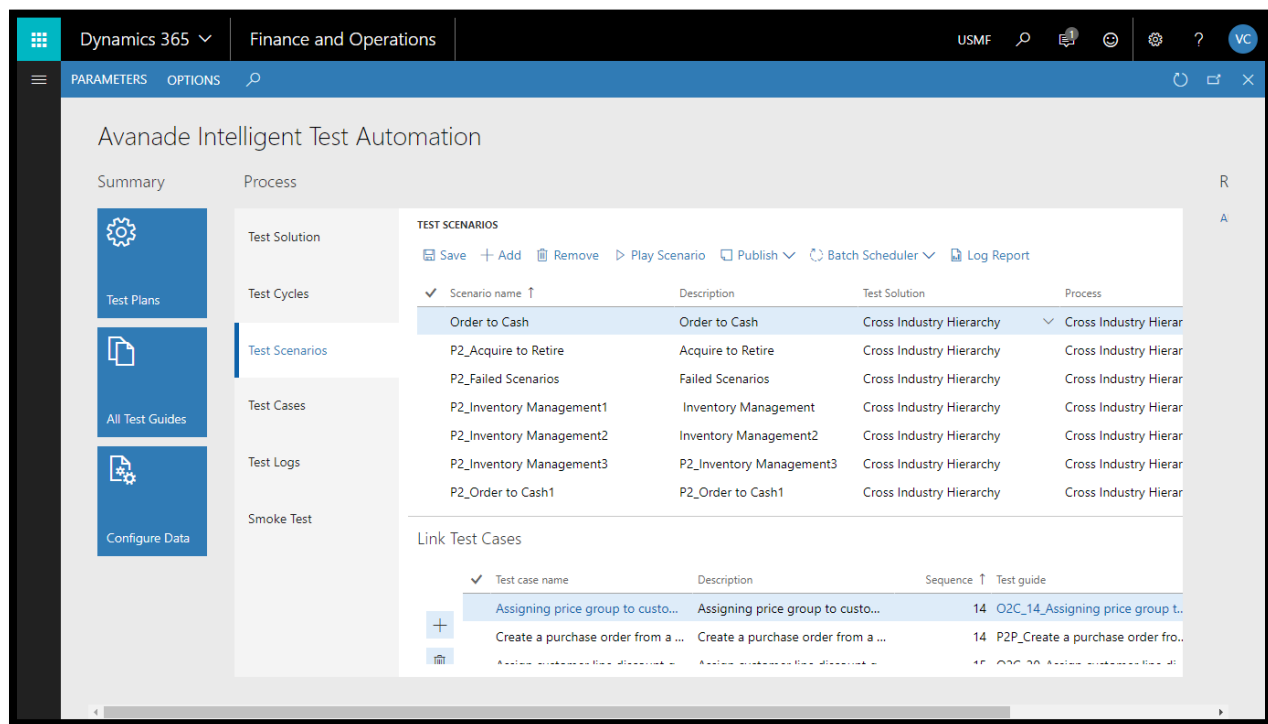
Link Test Scenario to Test Solution

Test scenarios are group of test cases with sequenced test scripts/guides. It helps to run a scenario which executes a series of test cases and completes a process. As an example, you could consider a test scenario of creation of purchase order which has a pre-requisite test cases of vendor group creation, vendor creation, item creation, etc.

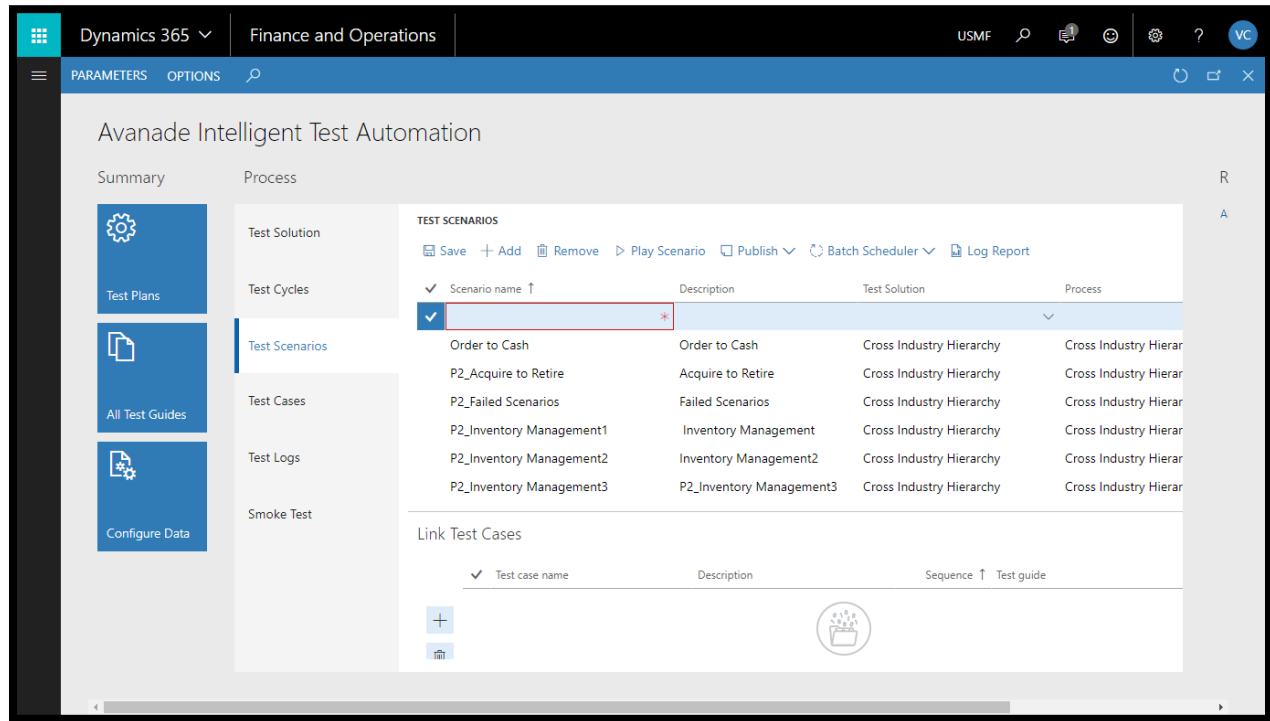
1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



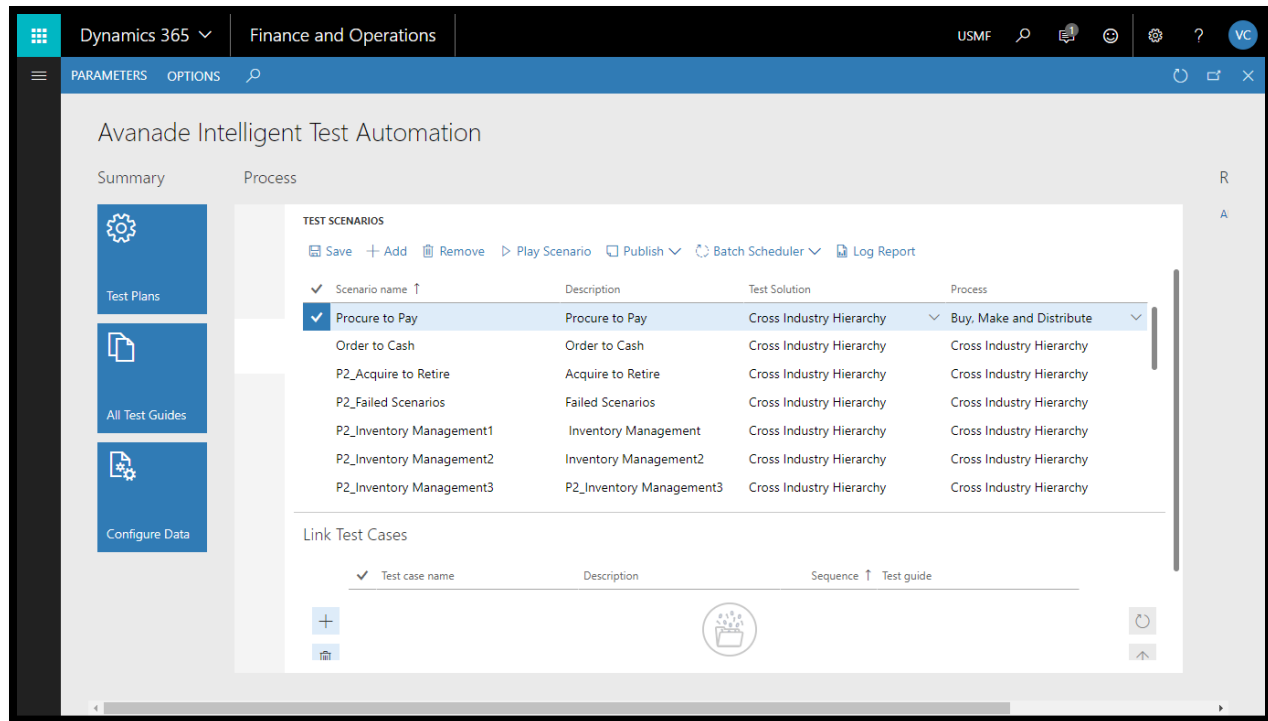
2. Click on test scenarios tab



3. Click on add button



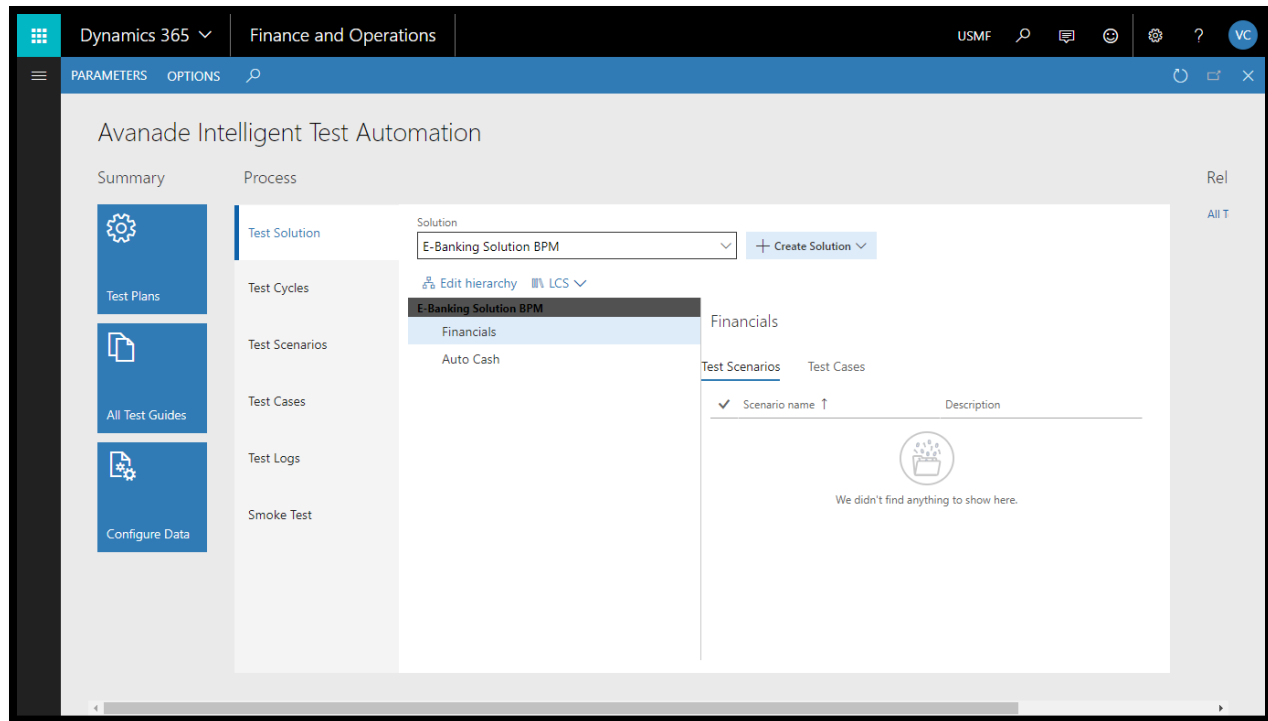
4. In the scenario name field, enter a name for the test scenario
5. In the description field, enter a description
6. In the test solution field, select the solution to which the scenario should be linked
7. In the process field, link the related process by clicking drop down and drilling down to respective industry process and click ok



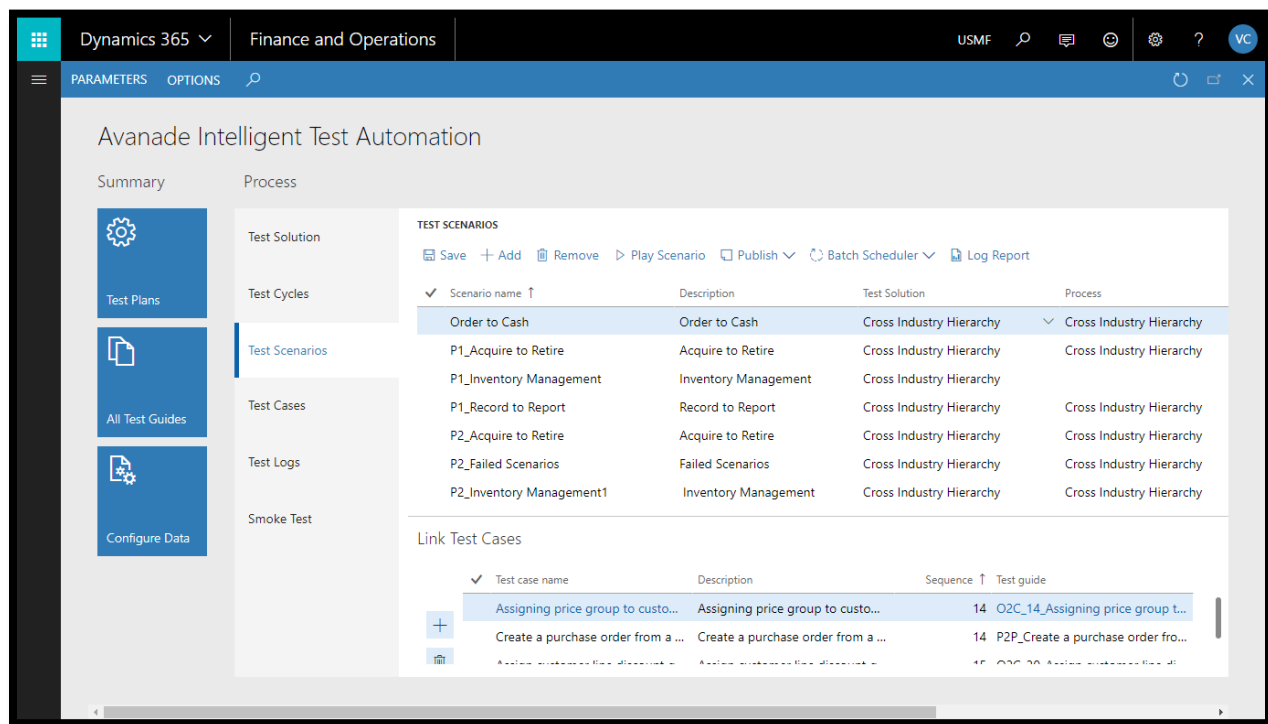
8. Click save

Play Test Scenario

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on test scenarios



3. Select the test scenario to be played
4. Click on play scenario

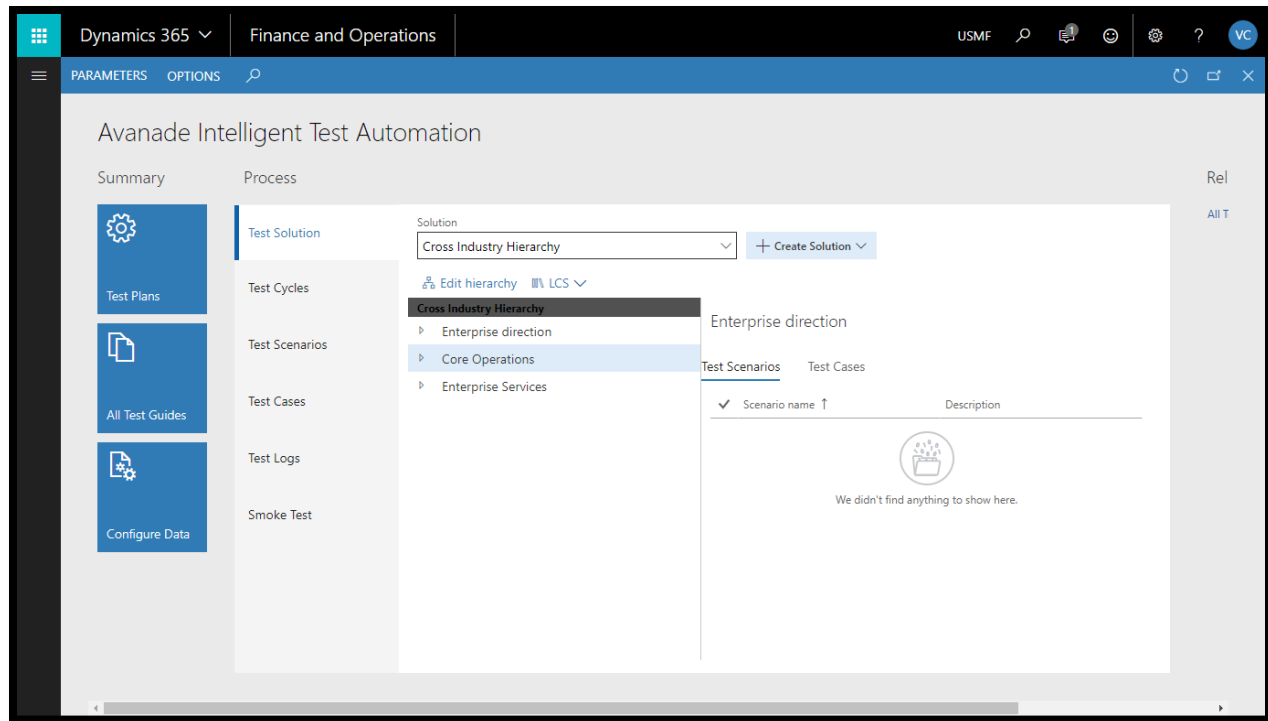
The screenshot shows the Microsoft Dynamics 365 Finance and Operations interface. The top navigation bar includes 'Dynamics 365' and 'Finance and Operations'. Below this is a sub-navigation bar with various functional areas: ACCOUNTS, TRANSACTIONS, BALANCE, FORECAST, SET UP, ATTACHMENTS, CATALOGS, CUSTOMER SERVICE, REGISTRATION, and PROPERTIES. The main content area displays a table of customer records under the heading 'ALL CUSTOMERS'. The table has columns for Account, Name, Invoice account, Customer group, Currency, Telephone, Extension, and Is merged. The first row is highlighted, showing '000007 Pine Shopping' with a customer group of '80' and currency of 'USD'.

Account	Name	Invoice account	Customer group	Currency	Telephone	Extension	Is merged
000007	Pine Shopping		80	USD	452-555-1001		
000008	Raven Shopping		80	USD	635-555-0212		
C00001	ProspectC67		80	USD			
C00002	Contonso 2		20	USD			
C00005	734		80	USD	335-555-1015		
C00023	Fig Wholesale		80	USD	115-555-1135		
C00074	Zinnia Retail		80	USD	254-555-0123		
C000C1	Violet Shopping Center		80	USD	245-555-1143		
C004C5	Cherry Company		80	USD	983-555-1023		
C056C6	Contonso 9		20	USD			
C50404	Contonso 8		20	USD			

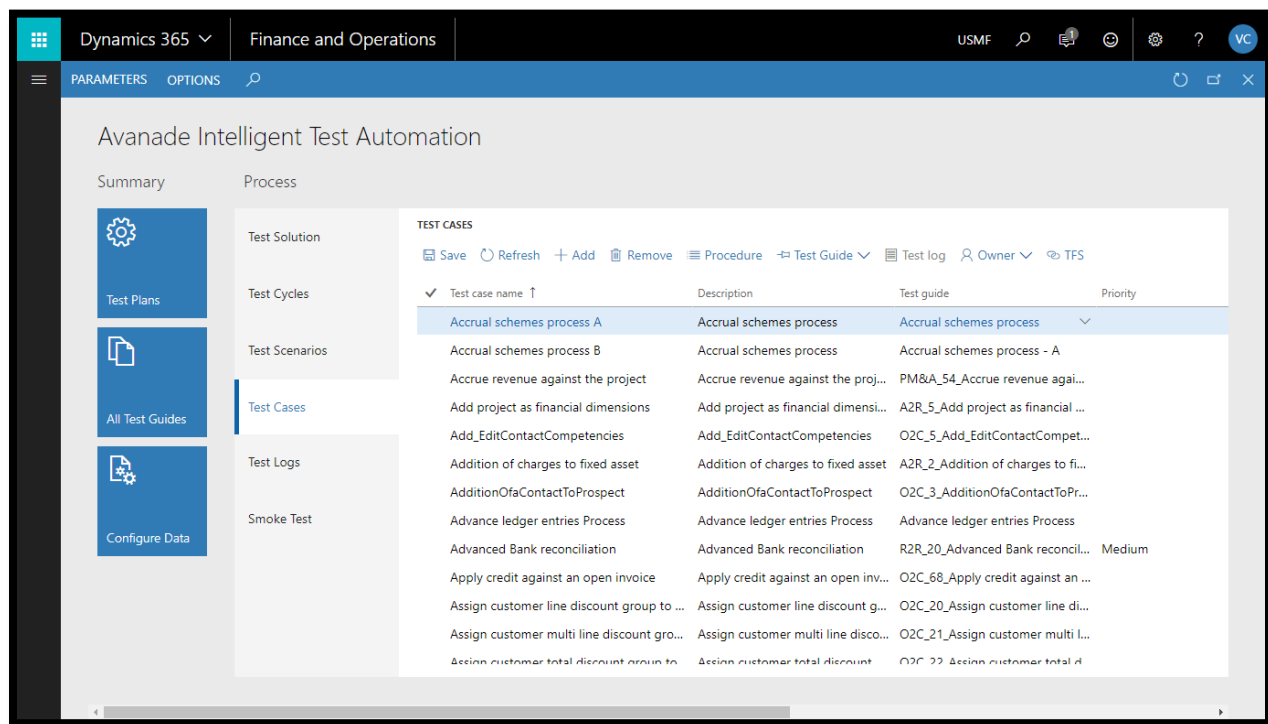
5. On successful completion of execution of all test cases, go to test log and click on log report to analyze the test results of all test cases linked in a single report

How to Run Automated Test Case

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on test cases tab

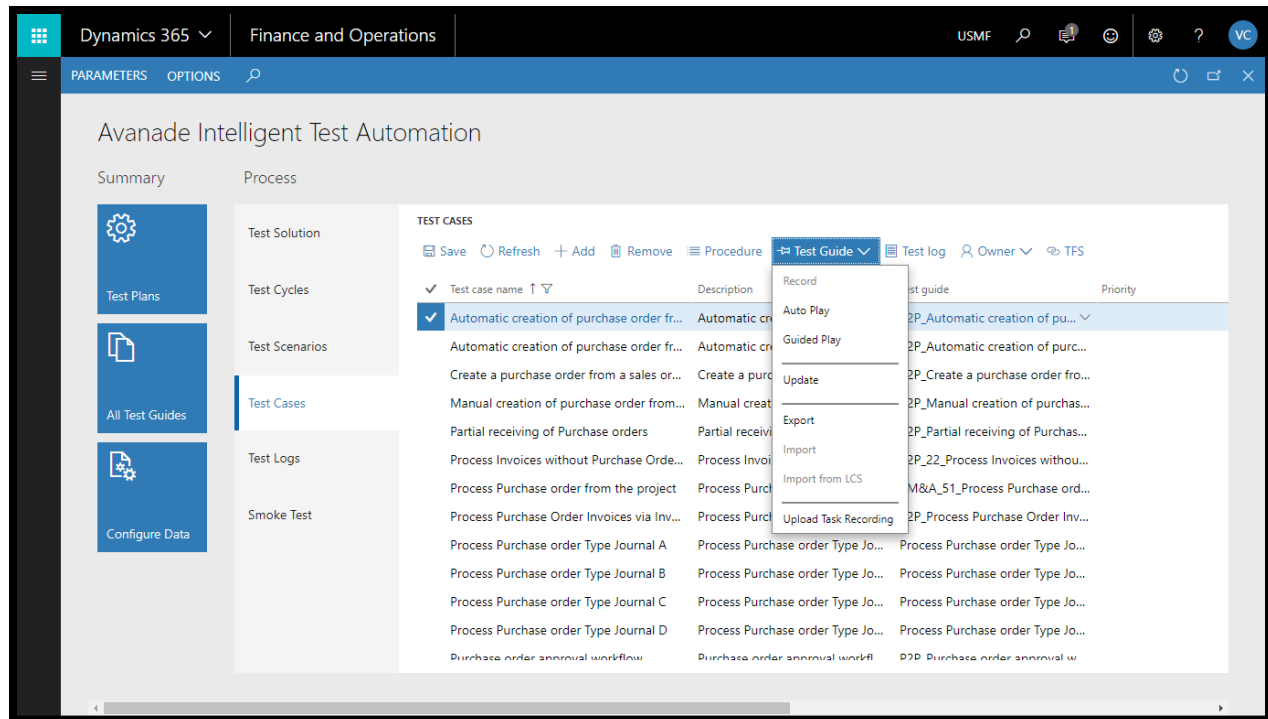


3. Select the test case to be executed

The screenshot shows the Dynamics 365 Finance and Operations interface with the Avanade Intelligent Test Automation tool. The left sidebar contains navigation options: Test Plans, All Test Guides, and Configure Data. The main area displays the 'TEST CASES' table, which lists various test cases. The first test case, 'Automatic creation of purchase order from...', is selected.

Test case name	Description	Test guide	Priority
Automatic creation of purchase order from...	Automatic creation of purchase ...	P2P_Automatic creation of pur...	
Create a purchase order from a sales or...	Create a purchase order from a ...	P2P_Create a purchase order fro...	
Manual creation of purchase order from...	Manual creation of purchase or...	P2P_Manual creation of purchas...	
Partial receiving of Purchase orders	Partial receiving of Purchase ord...	P2P_Partial receiving of Purchas...	
Process Invoices without Purchase Orde...	Process Invoices without Purcha...	P2P_22_Process Invoices withou...	
Process Purchase order from the project	Process Purchase order from th...	PM&A_S1_Process Purchase ord...	
Process Purchase Order Invoices via Inv...	Process Purchase Order Invoices...	P2P_Process Purchase Order Inv...	
Process Purchase order Type Journal A	Process Purchase order Type Jo...	Process Purchase order Type Jo...	
Process Purchase order Type Journal B	Process Purchase order Type Jo...	Process Purchase order Type Jo...	
Process Purchase order Type Journal C	Process Purchase order Type Jo...	Process Purchase order Type Jo...	
Process Purchase order Type Journal D	Process Purchase order Type Jo...	Process Purchase order Type Jo...	
Purchase order approval workflow	Purchase order approval workfl...	P2P_Purchase order approval w...	

4. Click on test guide, in the drop down click on auto play

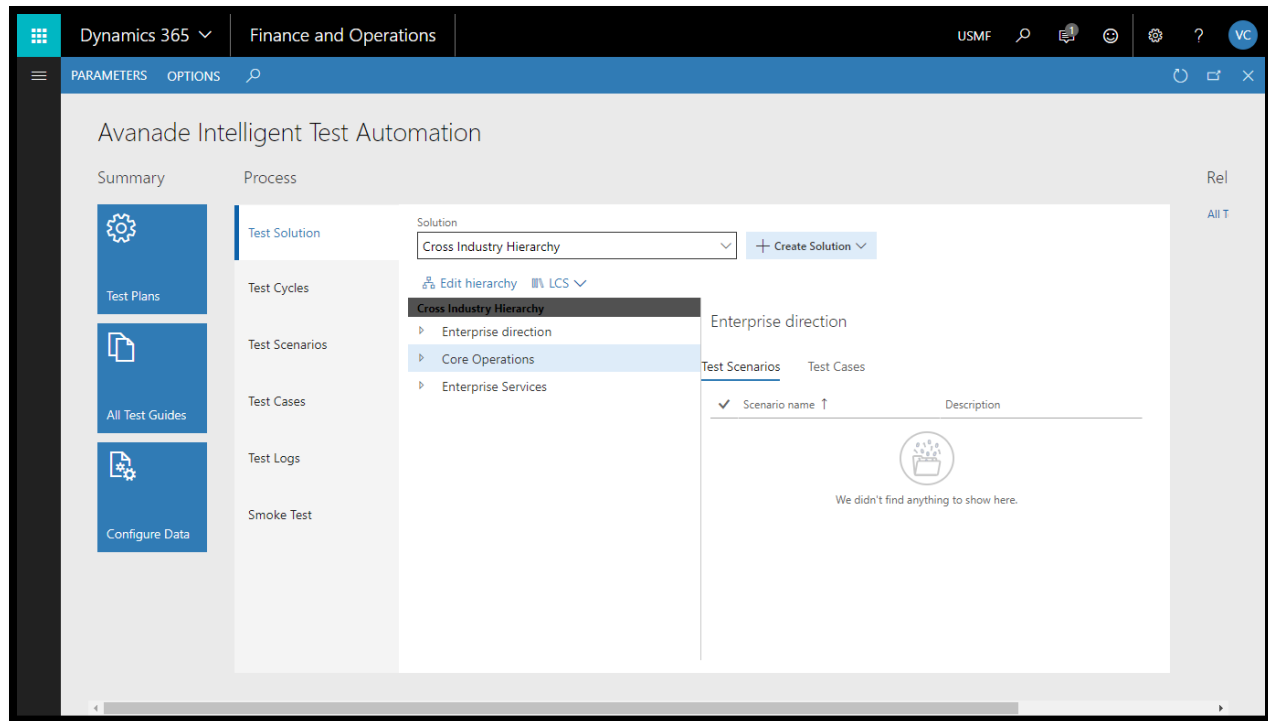


5. Test case will be executed automatically based on test guide steps and generates a test log

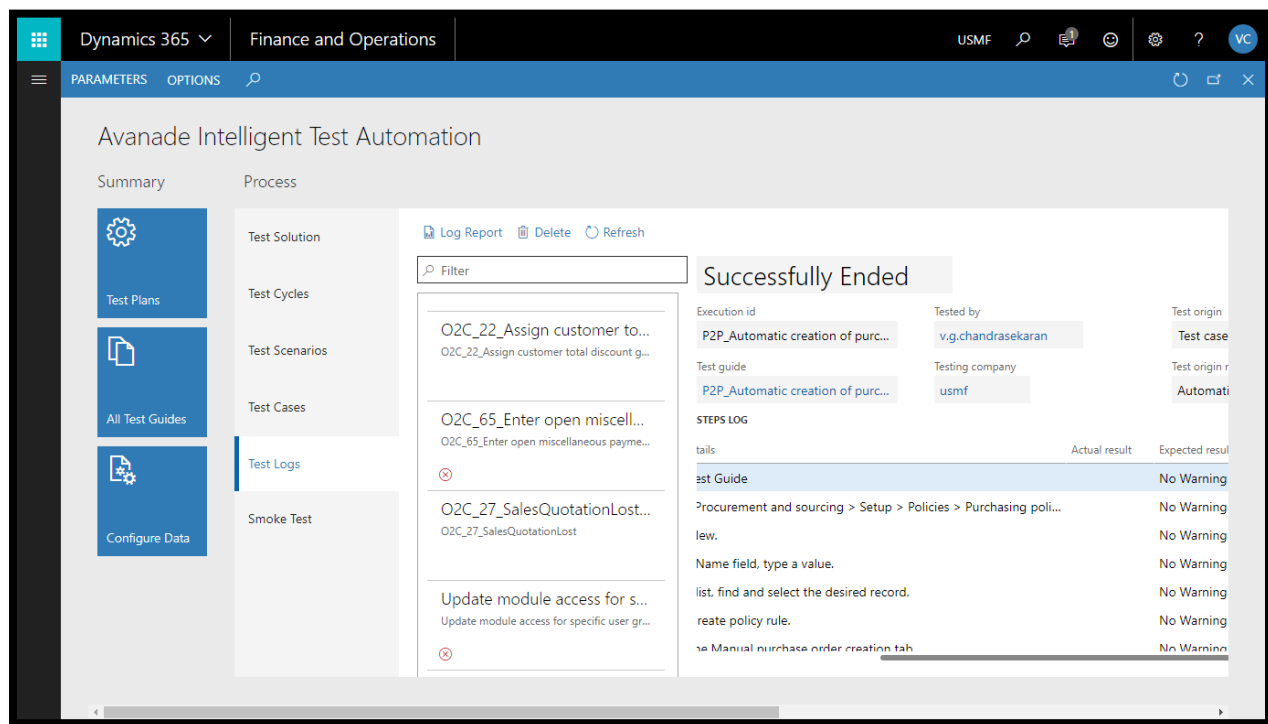
Analyze Test Case Results and Generate Log Report

Post execution of test case you can analyze the test results by clicking on test log for the respective test case from test log form. Test log form provides information about the success or failure of the test case execution. Actual result, expected result and system error messages if any.

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on test logs



3. In the filter option, search the test case which was executed
4. Verify execution status of the test case
5. Check expected result and step result for each step of the test case

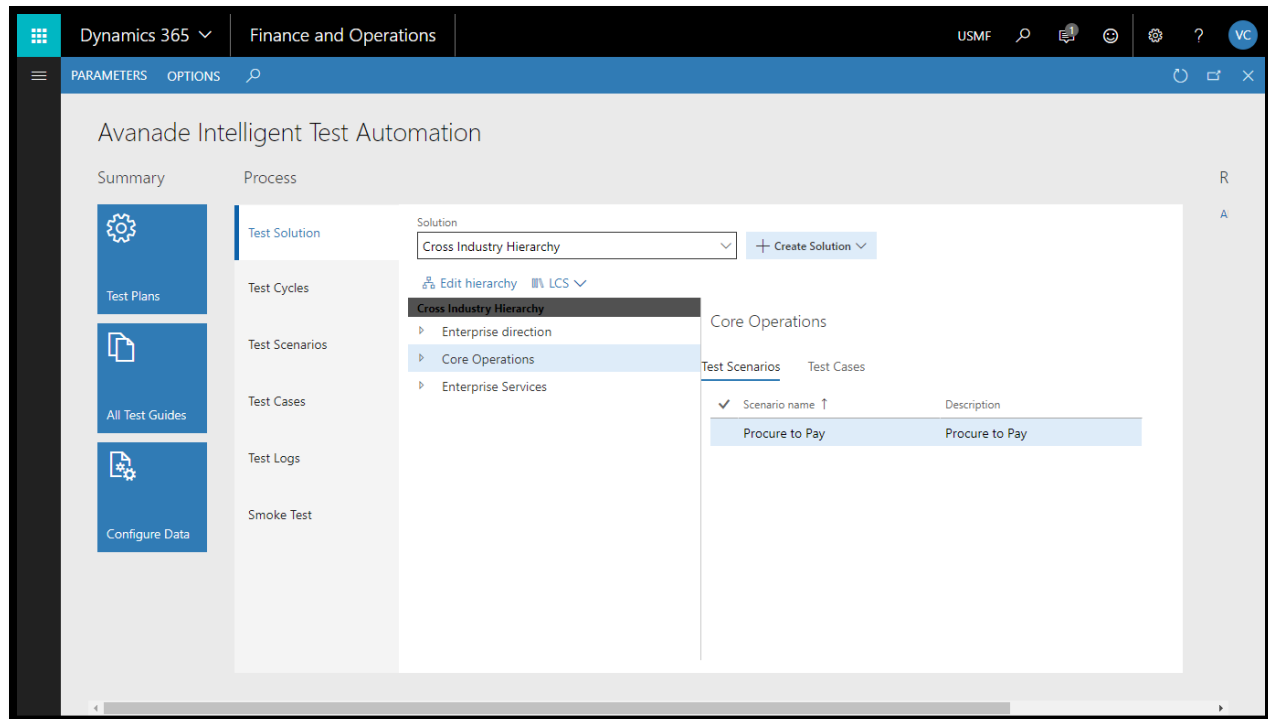
The screenshot displays the Avanade Intelligent Test Automation web application. The top navigation bar includes 'Dynamics 365' and 'Finance and Operations'. The main header shows 'PARAMETERS' and 'OPTIONS'. The page title is 'Avanade Intelligent Test Automation'. Below the header, there are 'Delete' and 'Refresh' buttons. The main content area is titled 'Successfully Ended' and displays the following details:

- Execution id:** P2P_Automatic creation of purc...
- Tested by:** v.g.chandrasekaran
- Test origin:** Test case
- Start date time:** 7/12/2018 09:30:49 AM
- Test guide:** P2P_Automatic creation of purc...
- Testing company:** usmf
- Test origin name:** Automatic creation of purchase ...
- End date time:** 7/12/2018 09:31:28 AM

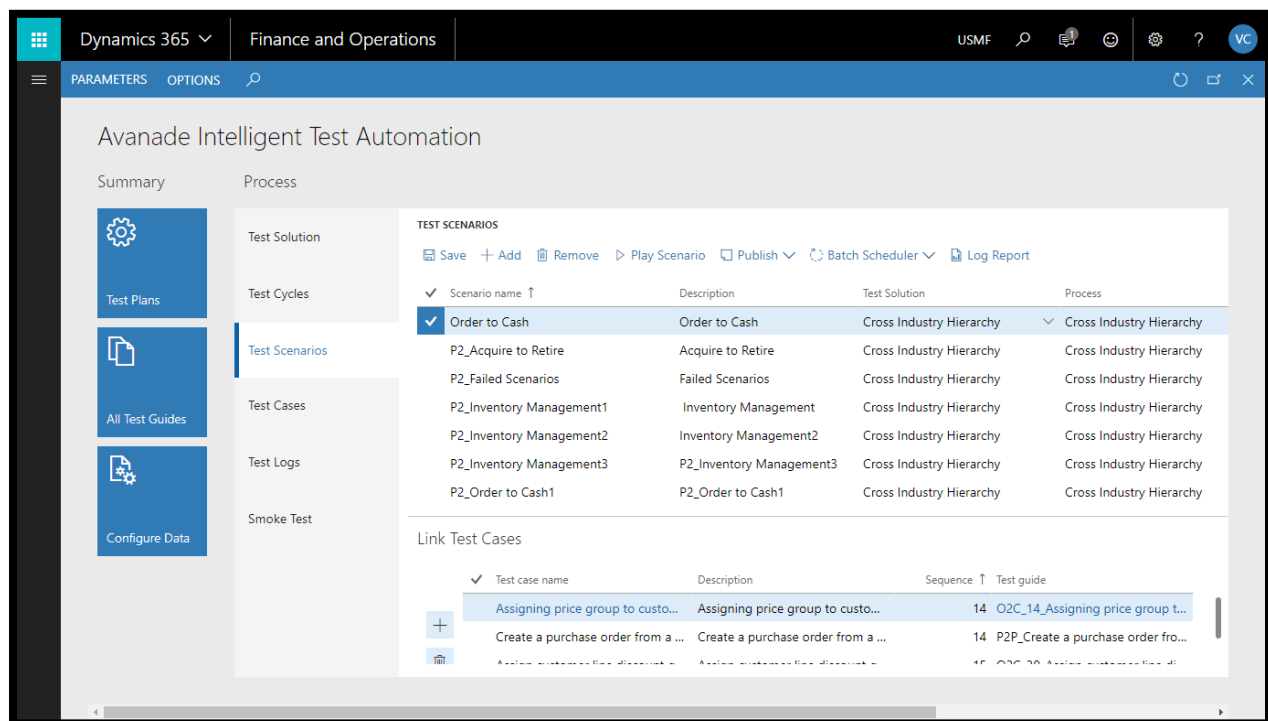
Below the summary, there is a 'STEPS LOG' table with the following columns: 'Actual result', 'Expected result', and 'Step result'. The table contains the following data:

Actual result	Expected result	Step result
No Warning / No Error	No Warning / No Error	Pass
No Warning / No Error	No Warning / No Error	Pass
No Warning / No Error	No Warning / No Error	Pass
No Warning / No Error	No Warning / No Error	Pass
No Warning / No Error	No Warning / No Error	Pass
No Warning / No Error	No Warning / No Error	Pass

6. Click on log report to generate test log report



2. Click on test scenarios tab
3. Select a test scenario



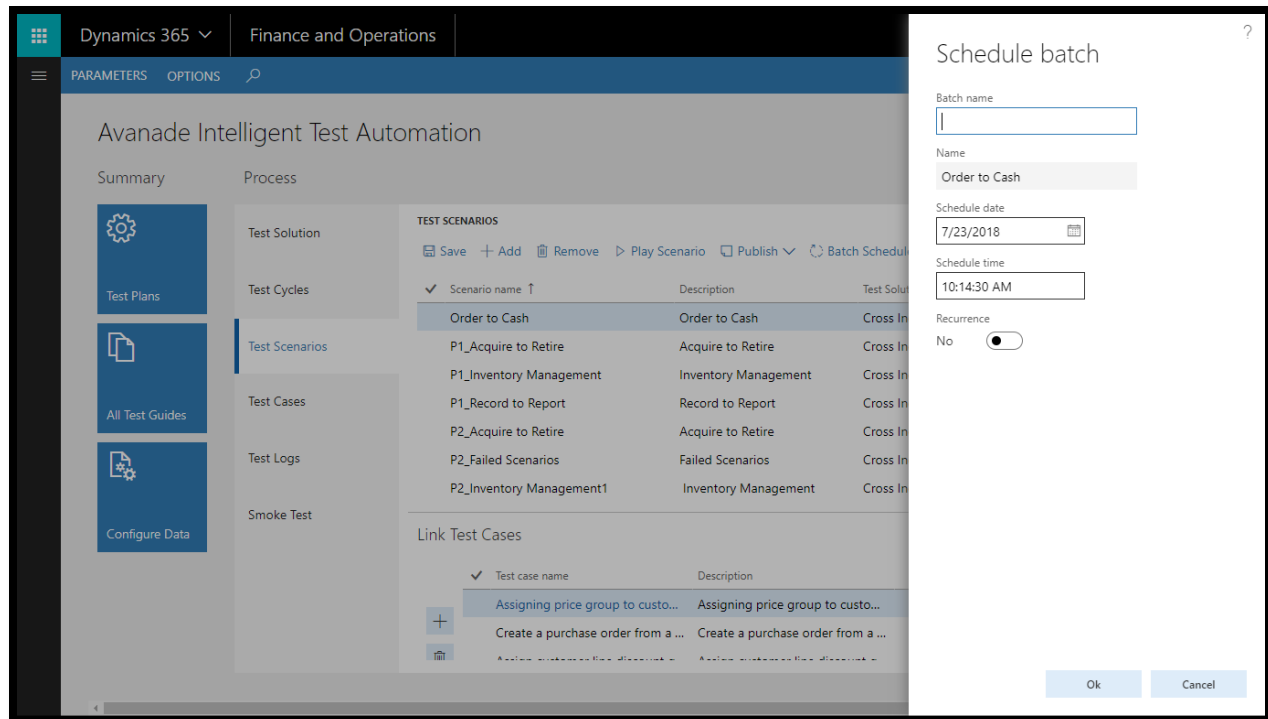
4. Click on batch scheduler button

The screenshot shows the Dynamics 365 Finance and Operations interface with the Avanade Intelligent Test Automation tool. The left sidebar contains navigation options: Test Plans, All Test Guides, and Configure Data. The main area is divided into 'Summary' and 'Process' tabs. The 'TEST SCENARIOS' section is active, displaying a table of test scenarios. The 'Batch Scheduler' button is highlighted in the top right of this section, with a dropdown menu showing 'View' and 'Add' options. The table lists various test scenarios, including 'Order to Cash', 'P2_Acquire to Retire', 'P2_Failed Scenarios', 'P2_Inventory Management1', 'P2_Inventory Management2', 'P2_Inventory Management3', and 'P2_Order to Cash1'. Below the table, there is a 'Link Test Cases' section with a table of linked test cases.

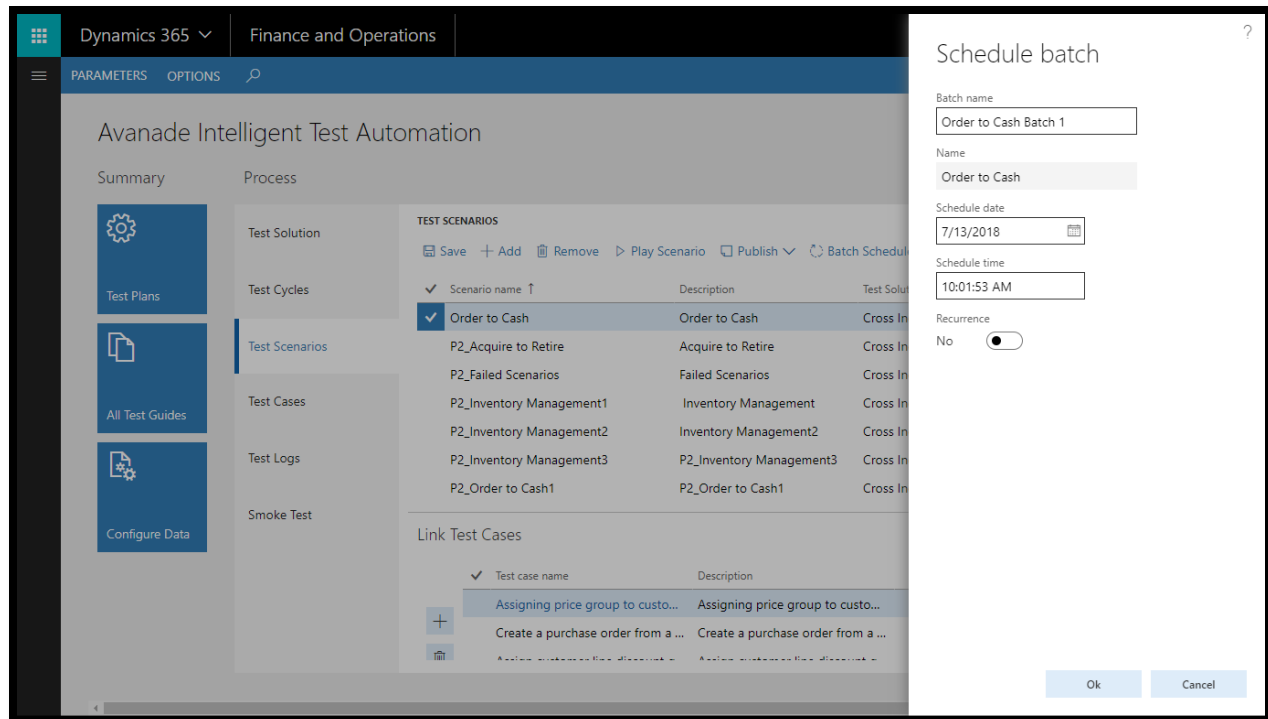
Scenario name	Description	Hierarchy	Process
Order to Cash	Order to Cash	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Acquire to Retire	Acquire to Retire	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Failed Scenarios	Failed Scenarios	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Inventory Management1	Inventory Management	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Inventory Management2	Inventory Management2	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Inventory Management3	P2_Inventory Management3	Cross Industry Hierarchy	Cross Industry Hierarchy
P2_Order to Cash1	P2_Order to Cash1	Cross Industry Hierarchy	Cross Industry Hierarchy

Test case name	Description	Sequence	Test guide
Assigning price group to custo...	Assigning price group to custo...	14	O2C_14_Assigning price group t...
Create a purchase order from a ...	Create a purchase order from a ...	14	P2P_Create a purchase order fro...
Assign customer line discount	Assign customer line discount	15	O2C_15_Assign customer line di...

5. In the drop down, click add



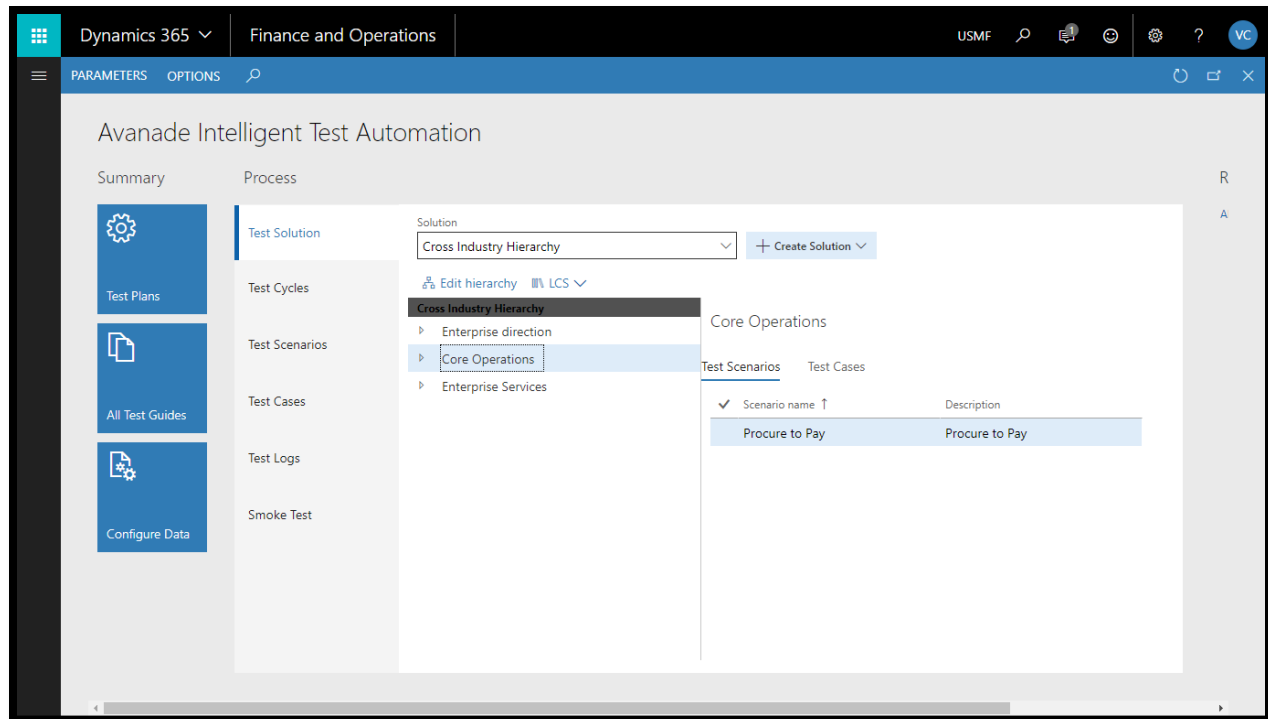
6. In the schedule batch form, enter a name in batch name field
7. In the scheduled date field, select a date on which the batch would execute
8. In the scheduled time field, select a time on which the batch would execute
9. In the recurrence field, select yes if batch must run every night on scheduled time
10. If recurrence field is set to yes, in the end date field select an end date for the batch process. If no end date is specified defined batch will run indefinitely.



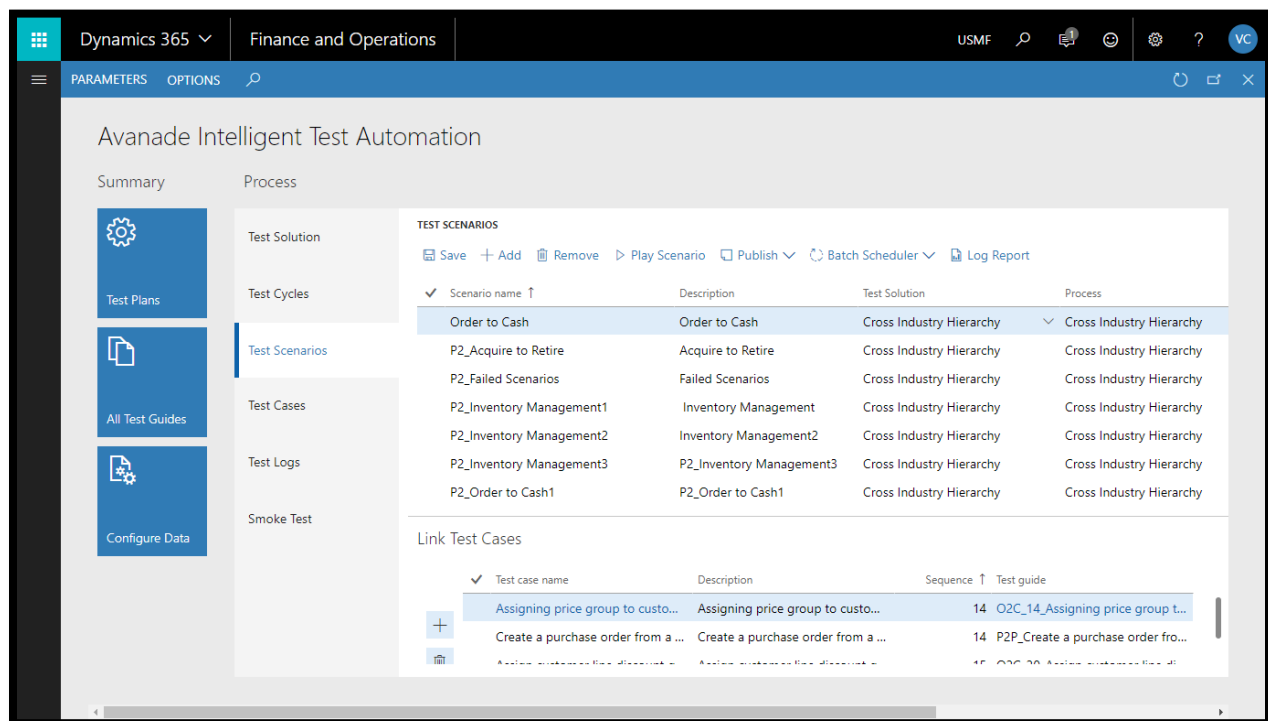
11. Click ok

Publish Test Script in Word

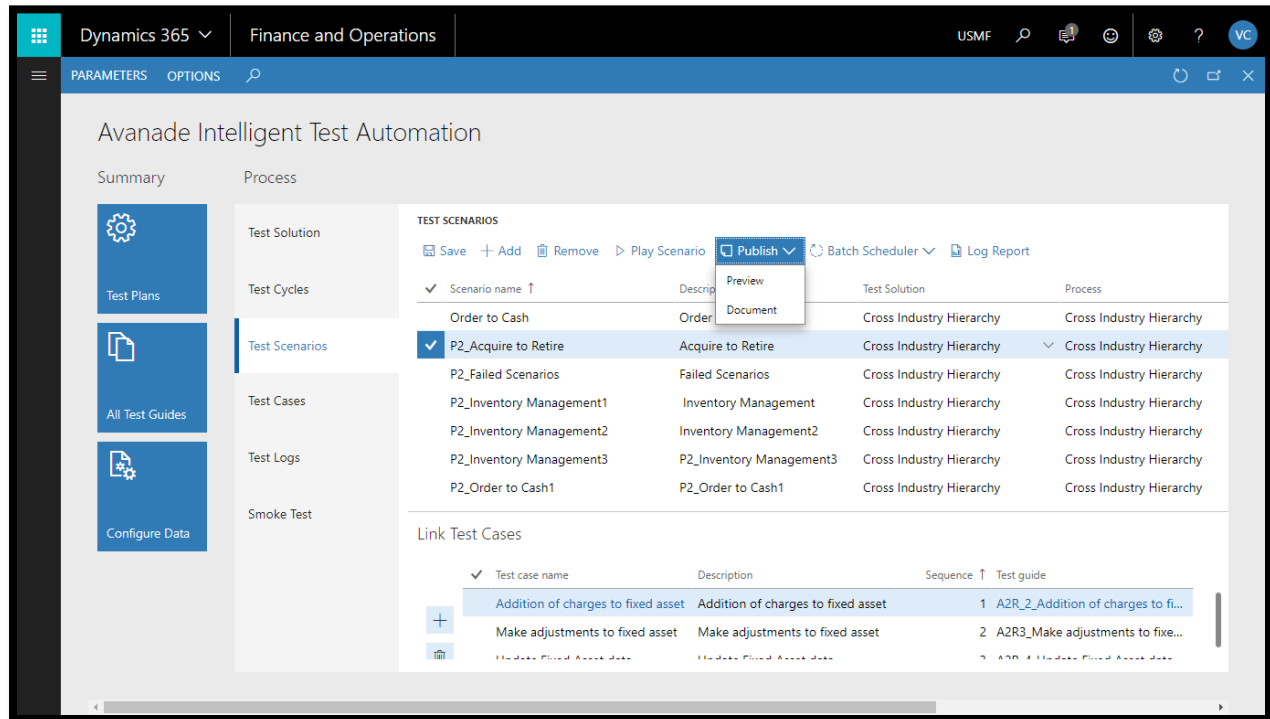
1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on test scenarios tab



3. Select a test scenario
4. Click on publish button

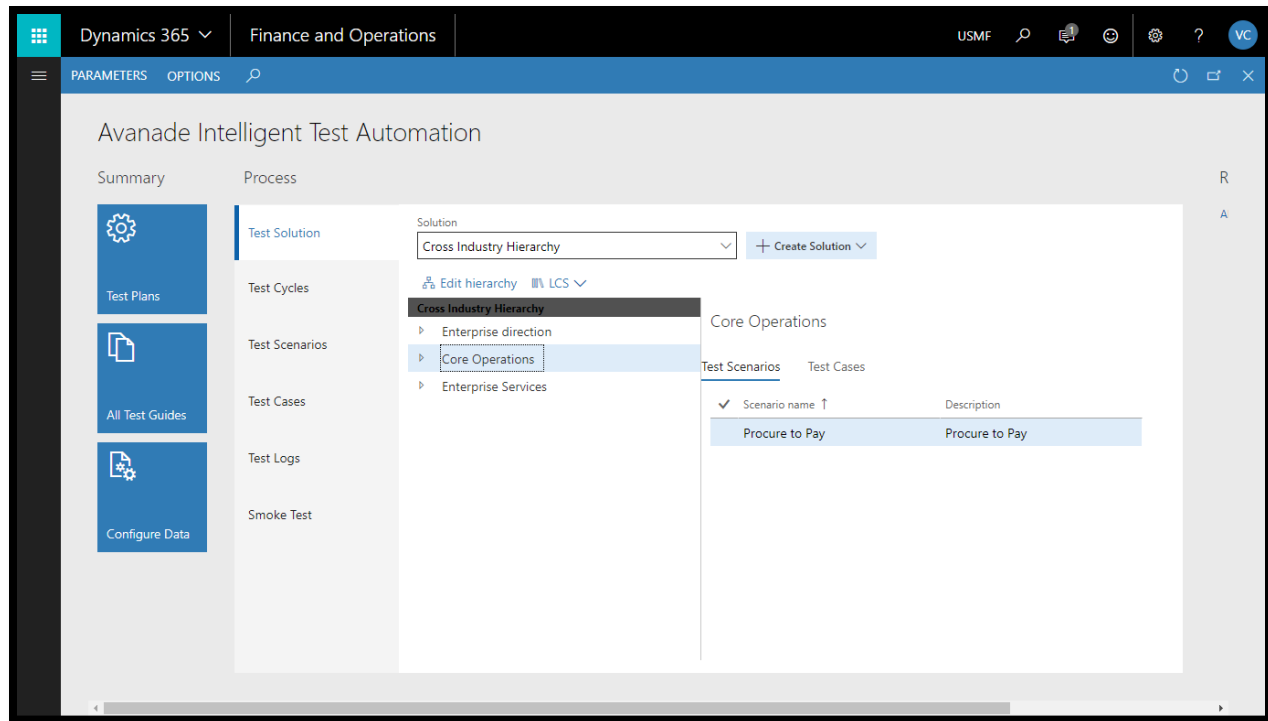


5. In the drop down, click on document
6. The selected test scenario steps will be downloaded in a word document

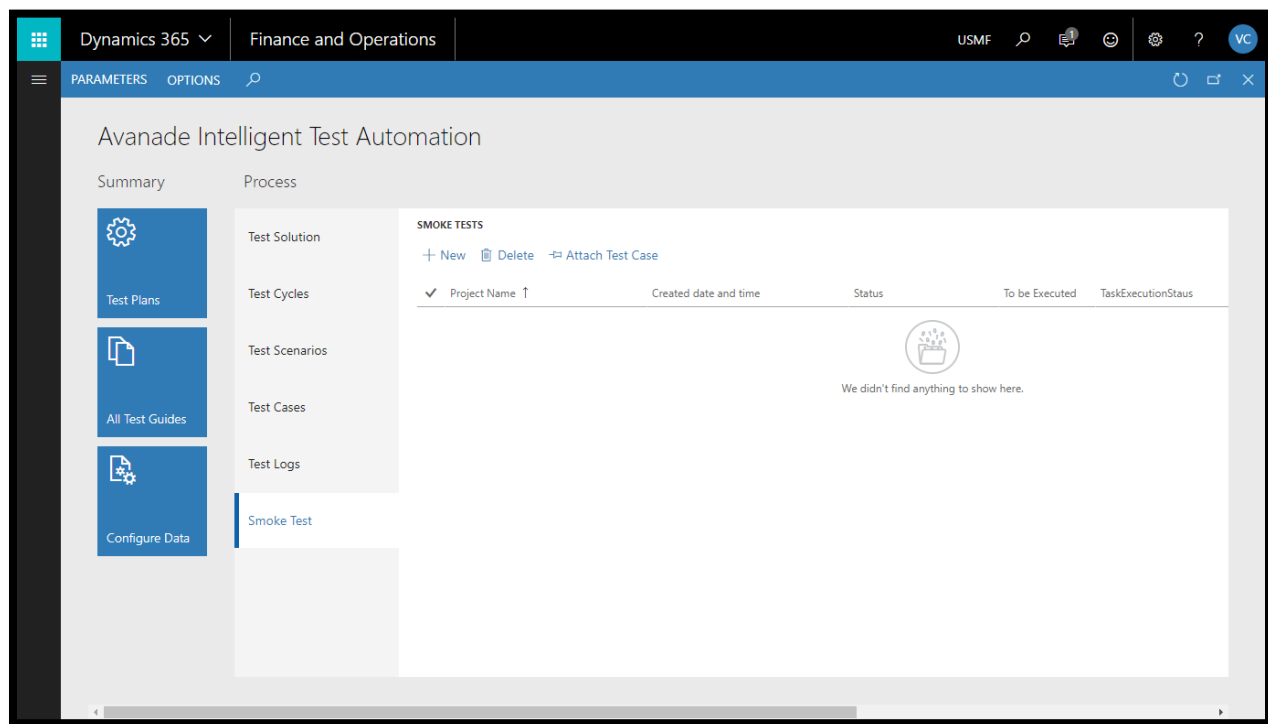
How to Create a Smoke Test

Smoke testing should be performed on each build without fail as it helps to find defects in early stages. Smoke test activity is the final step before the software build enters the system stage. Smoke tests must be performed on each build that is turned to testing.

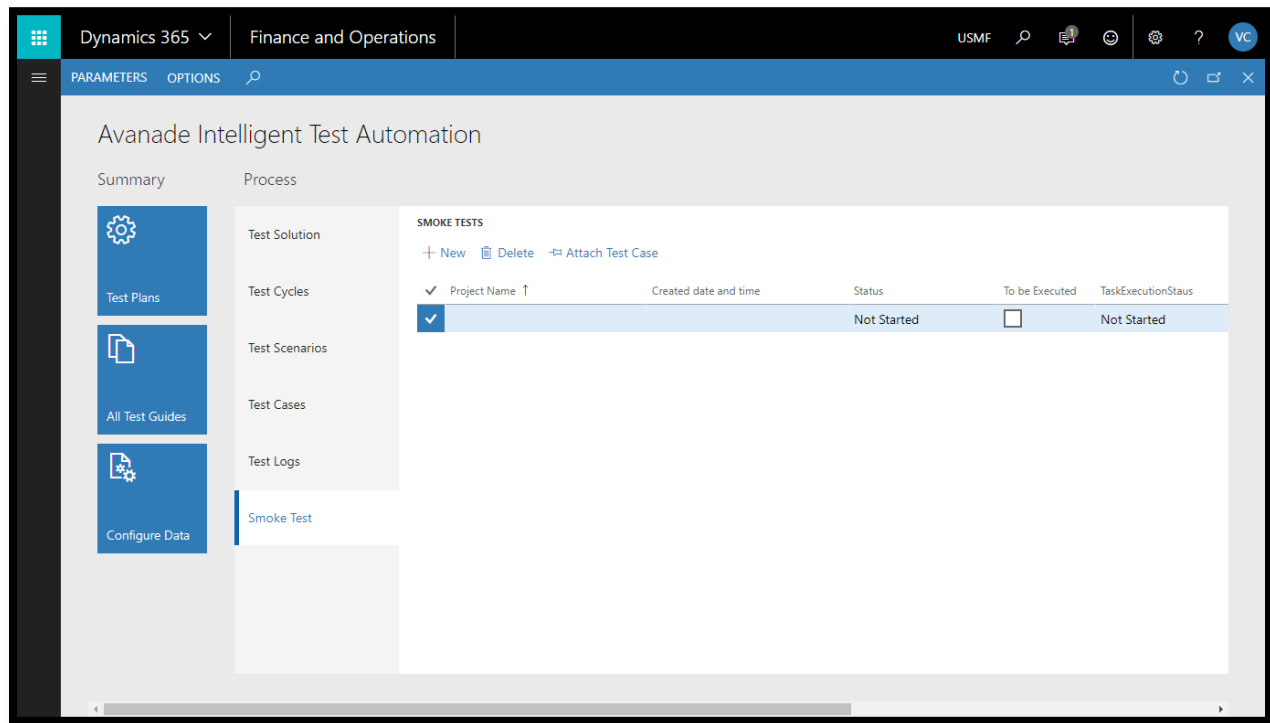
1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



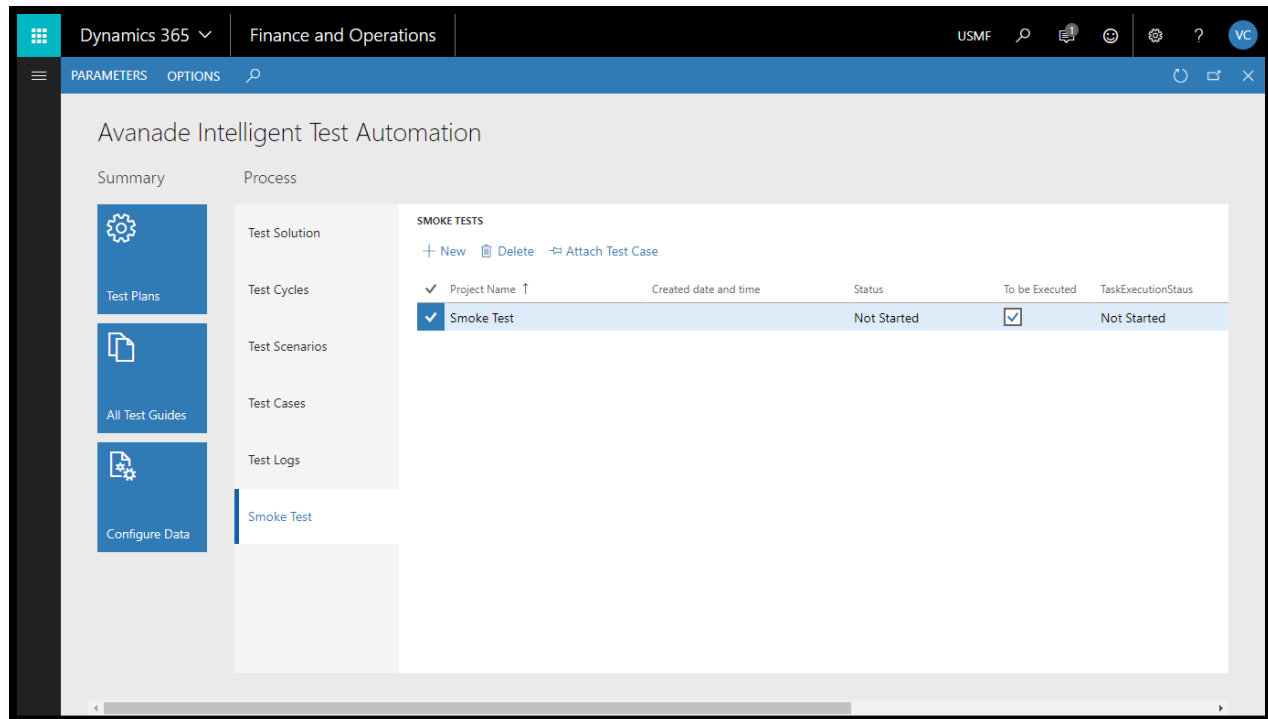
2. Click on smoke test tab



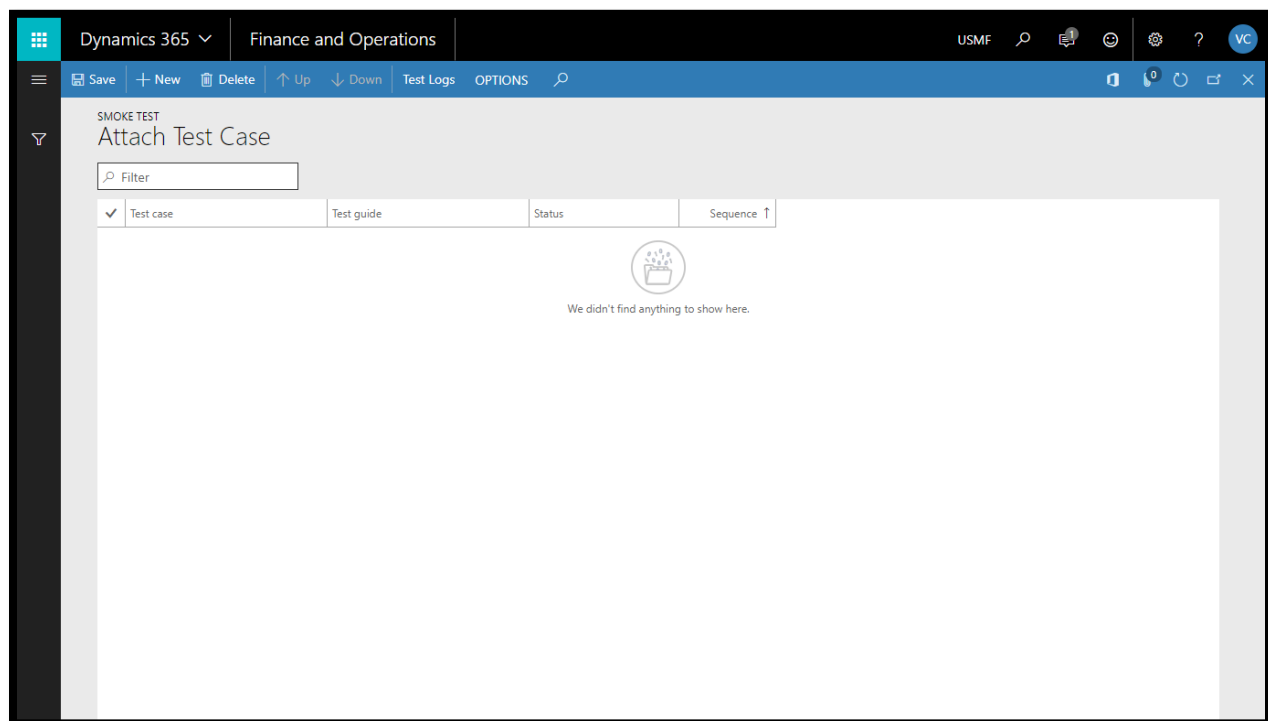
3. Click new



4. In the project name field, enter a name for the project



5. Click on attach test case to link the test case which is the root cause for the new build release



6. Click new

The screenshot shows the Dynamics 365 user interface for the 'Attach Test Case' task within a 'SMOKE TEST' context. The top navigation bar includes 'Dynamics 365' and 'Finance and Operations'. The main toolbar contains 'Save', '+ New', 'Delete', 'Up', 'Down', 'Test Logs', and 'OPTIONS'. A filter input field is present above a table. The table has four columns: 'Test case', 'Test guide', 'Status', and 'Sequence'. The 'Test case' column includes a dropdown arrow. The first row of data shows a test case selected (indicated by a blue checkmark), with a status of 'Not Started' and a sequence of '0'.

Test case	Test guide	Status	Sequence
▼		Not Started	0

7. In the test case dropdown, select the test case

Dynamics 365 Finance and Operations

USMF

Save + New Delete Up Down Test Logs OPTIONS

SMOKE TEST Attach Test Case

Filter

Test case	Test guide	Status	Sequence ↑
Creation of Vendor	P2P_100_Creation of Vendor	Not Started	0

8. Repeat steps 8 to 9 to add more test case

Dynamics 365 Finance and Operations

USMF

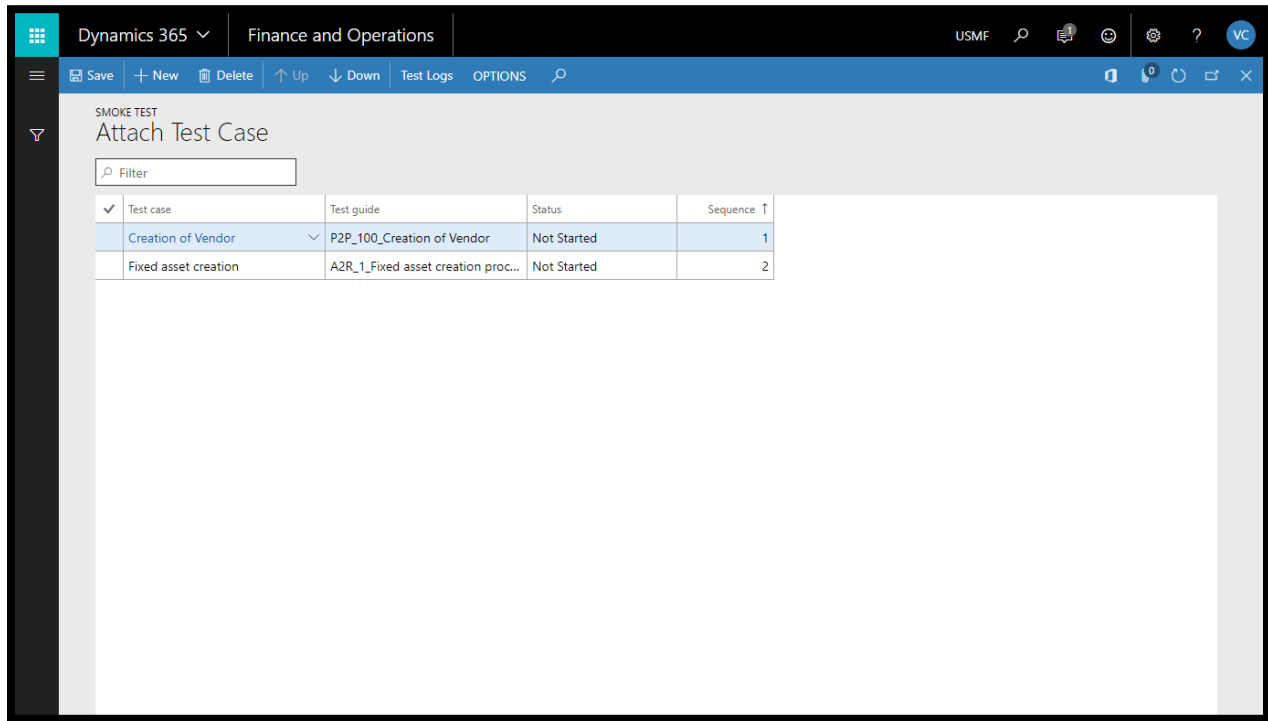
Save + New Delete Up Down Test Logs OPTIONS

SMOKE TEST Attach Test Case

Filter

Test case	Test guide	Status	Sequence ↑
Fixed asset creation	A2R_1_Fixed asset creation proc...	Not Started	0
Creation of Vendor	P2P_100_Creation of Vendor	Not Started	1

9. Use the up/down button to modify the test case sequence

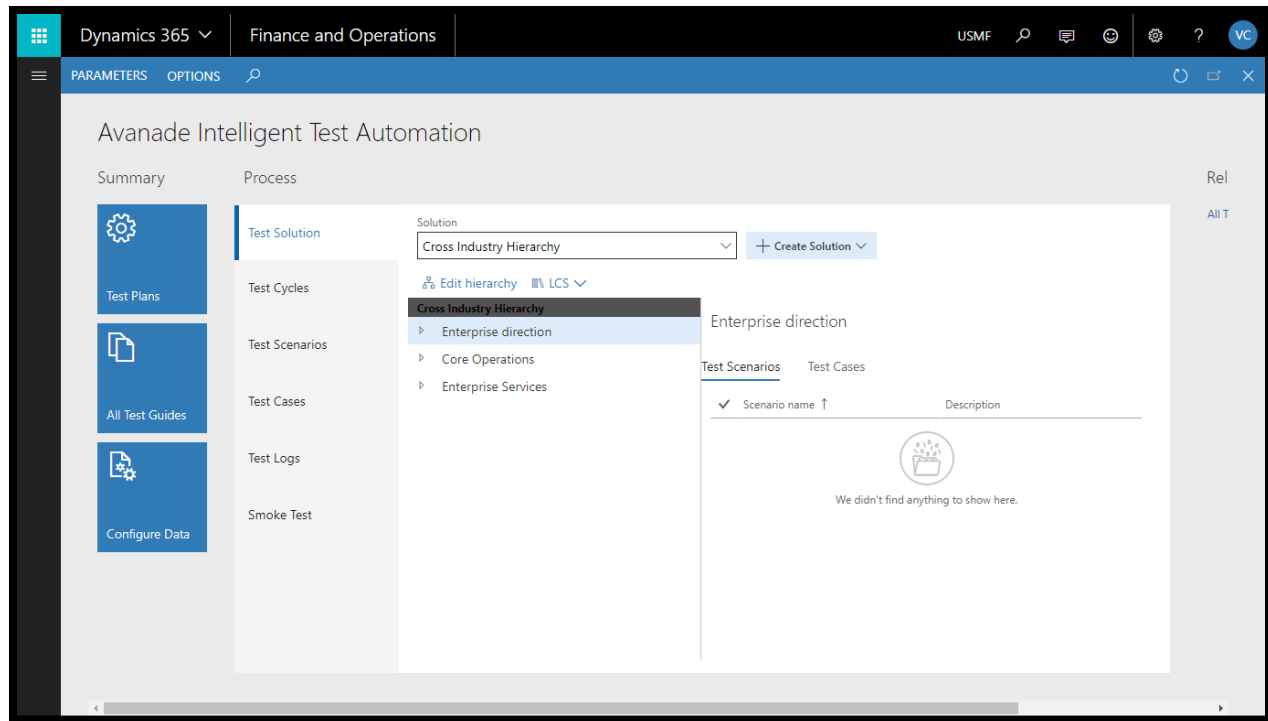


10. Using the hyperlink in the test case field navigate to test case and execute test case
11. Post successful execution of test cases, navigate back to smoke test screen
12. Click on package status column dropdown and select “Proceed with deployment” if the tests are passed or select “Rollback” if they fail
13. Click Yes/No to process email on Deployment success or rollback.
14. Click save

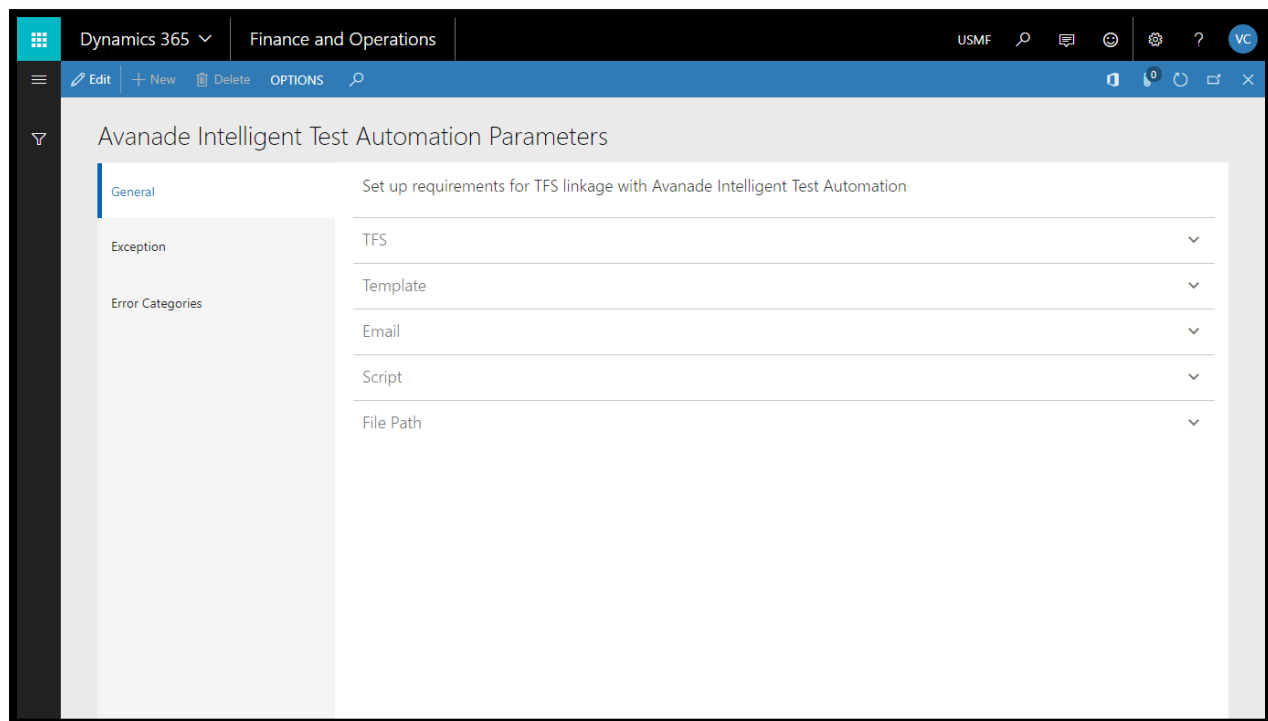
Email Configuration for Smoke Testing

After smoke testing is completed, it is important to trigger email notification upon success or failure. Email setup should be completed in AITA parameters section before smoke testing can be carried out.

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click Parameters



3. In the general section, expand the email fast tab



Dynamics 365 Finance and Operations

USMF

Avanade Intelligent Test Automation Parameters

Set up requirements for TFS linkage with Avanade Intelligent Test Automation

General

Exception

Error Categories

TFS

Template

Email

SMOKE TEST

Sender Email

Recipient Email

Success Email Template

Failure Email Template

Rollback Email Template

Script

4. Click edit

Dynamics 365 Finance and Operations

USMF

Avanade Intelligent Test Automation Parameters

Set up requirements for TFS linkage with Avanade Intelligent Test Automation

General

Exception

Error Categories

TFS

Template

Email

SMOKE TEST

Sender Email

Recipient Email

Success Email Template

Failure Email Template

Rollback Email Template

Script

5. In the sender email field, enter an email



6. In the recipient email field, enter an email
7. In the success email template drop down, select a template
8. In the failure email template, select a template
9. In the rollback email template, select a template

Dynamics 365 Finance and Operations

USMF

Save + New Delete OPTIONS

Avanade Intelligent Test Automation Parameters

Set up requirements for TFS linkage with Avanade Intelligent Test Automation

General

Exception

Error Categories

TFS

Template

Email

SMOKE TEST

Sender Email

v.g.chandrasekaran@accenture...

Recipient Email

tarun.singh@accenture.com

Success Email Template

CnfmOrder

Failure Email Template

PmtFailur

Rollback Email Template

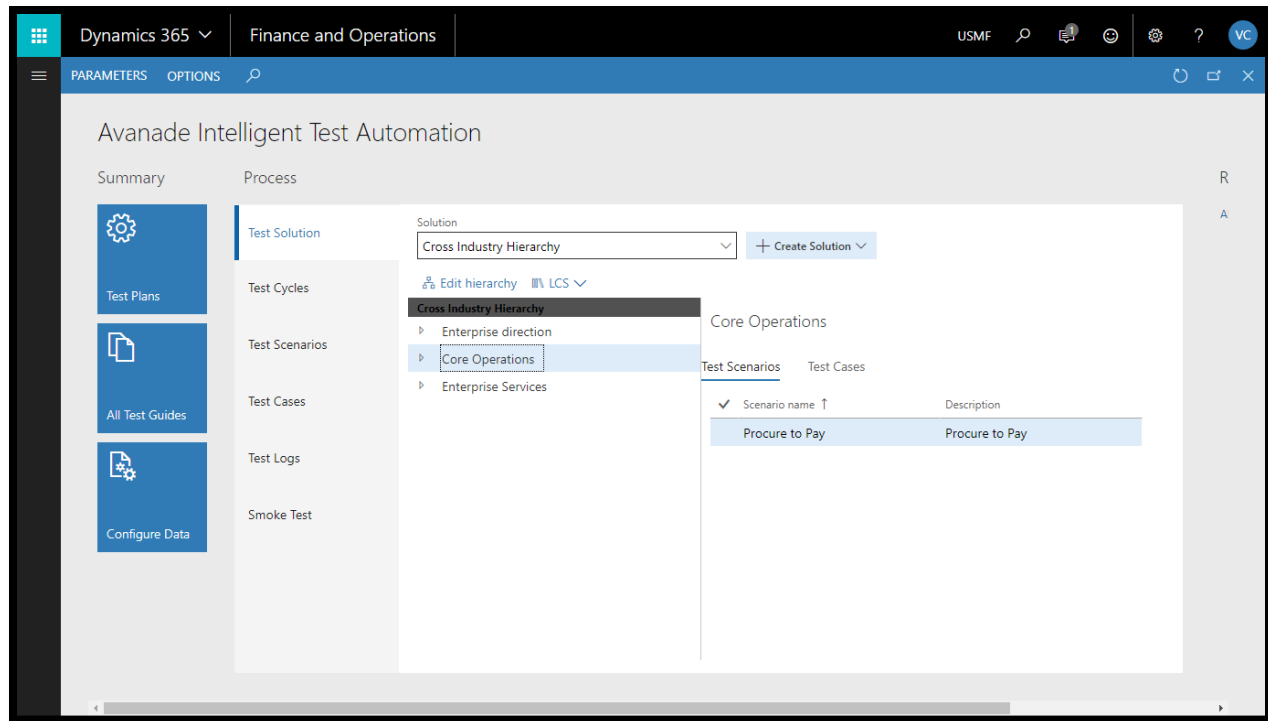
NewOrder

Script

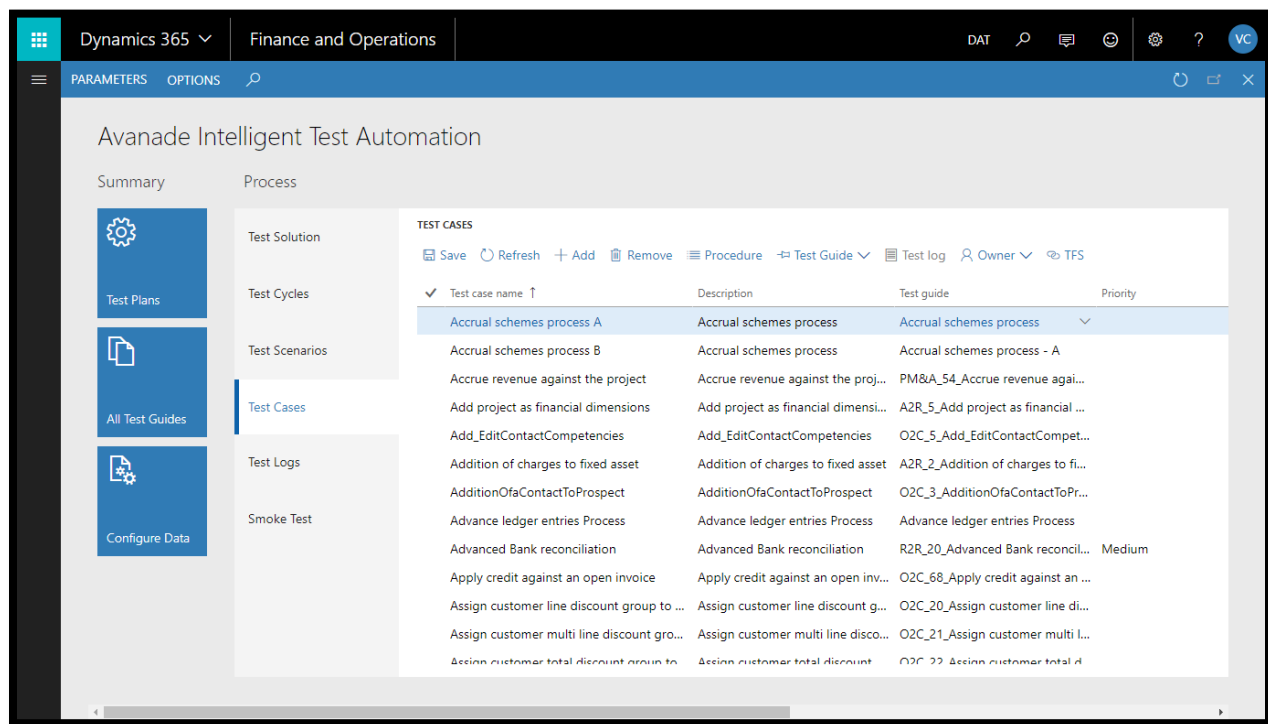
10. Click save

Generate Random Input Values for Test Case

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



1. Click on test cases tab

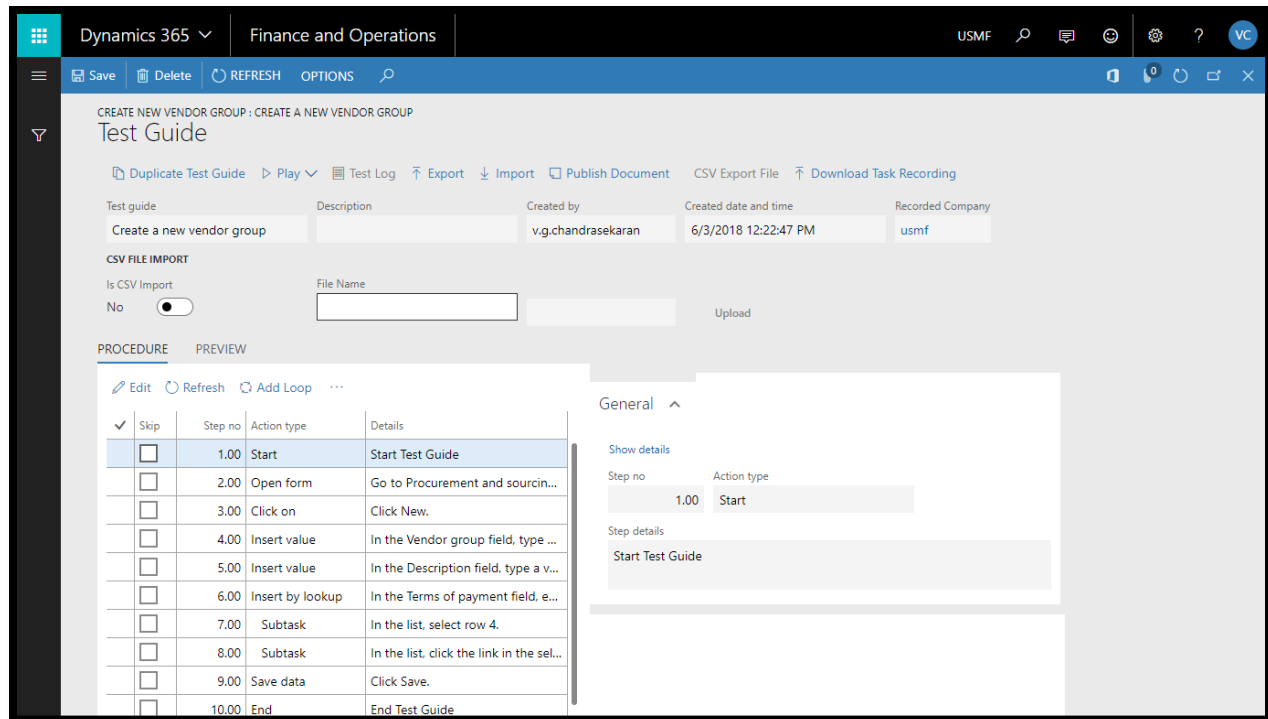


2. Select a test case

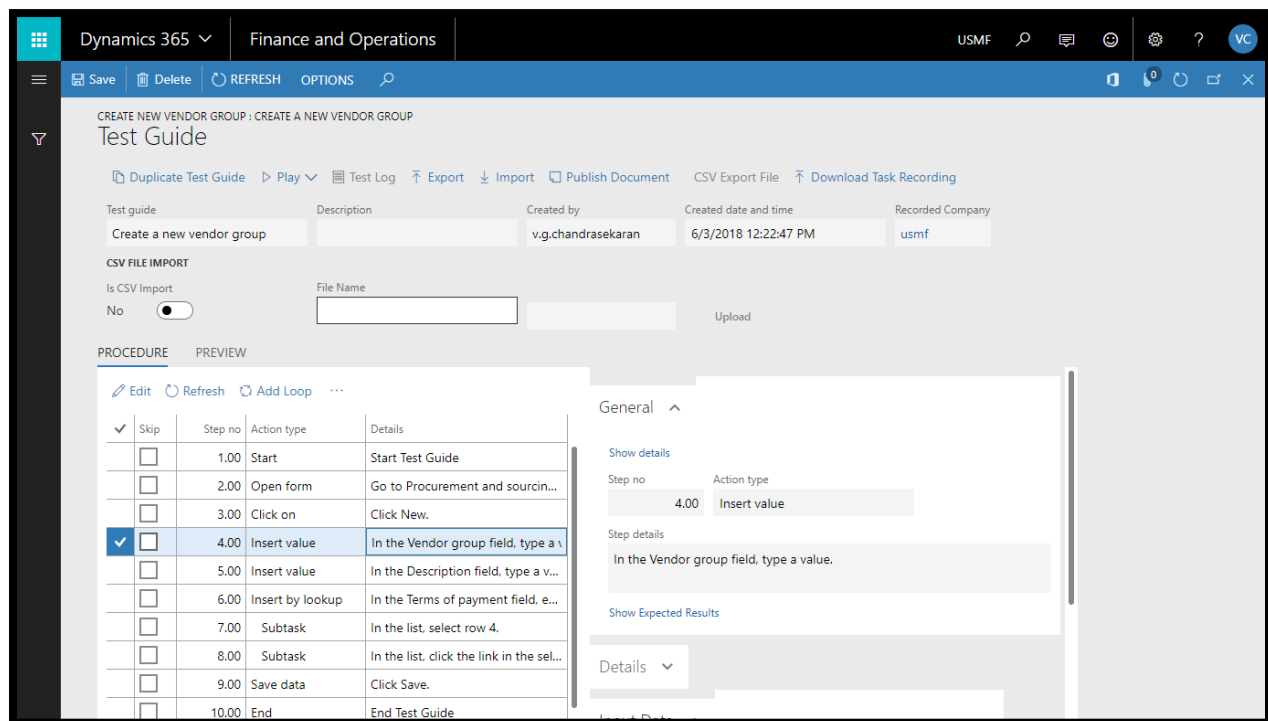
The screenshot shows the Dynamics 365 Finance and Operations interface with the Avanade Intelligent Test Automation tool. The left sidebar contains navigation options: Test Plans, All Test Guides, and Configure Data. The main area displays the 'TEST CASES' table, which is filtered by 'Test case name'. The table has columns for 'Test case name', 'Description', 'Test guide', and 'Priority'. The row 'Create new vendor group' is selected, and its 'Test guide' is 'Create a new vendor group'.

Test case name	Description	Test guide	Priority
✓ Create a purchase order from a sales or...	Create a purchase order from a ...	P2P_Create a purchase order fro...	
Create collection letters	Create collection letters	O2C_97_Create collection letters	
Create interest notes	Create interest notes	O2C_94_Create interest notes	
✓ Create new vendor group	Create a new vendor group	Create a new vendor group	
Create sales order exceeding customer c...	Create sales order exceeding cu...	O2C_37_Create sales order exce...	
Create sales order with supplementary it...	Create sales order with suppl...	O2C_38_Create sales order with ...	
Create voucher template	Create voucher template	R2R_6_Create voucher template	

3. Click on procedure



4. Select the step for which the input value should be changed



5. Expand the input data fast tab



6. In the value type field, select format value
7. In the random format field, enter a value

The screenshot shows the Dynamics 365 Test Guide interface for a test guide titled "CREATE NEW VENDOR GROUP : CREATE A NEW VENDOR GROUP". The interface includes a top navigation bar with "Dynamics 365" and "Finance and Operations" tabs. Below the navigation bar, there are buttons for "Save", "Delete", "REFRESH", "OPTIONS", and a search icon. The main content area is divided into several sections:

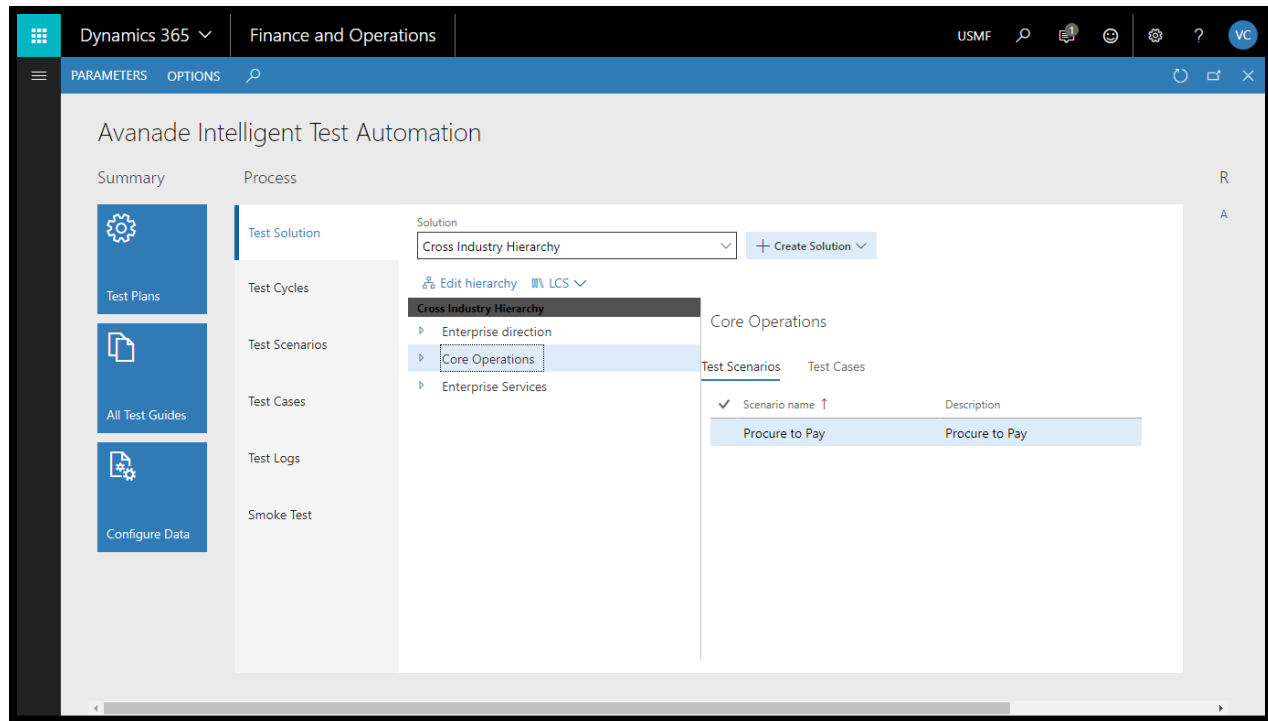
- Test Guide Header:** Displays the test guide name, description, created by (v.g.chandrasekaran), created date and time (6/3/2018 12:22:47 PM), and recorded company (usmf).
- CSV FILE IMPORT:** Includes a toggle for "Is CSV Import" (set to No) and a "File Name" input field with an "Upload" button.
- PROCEDURE PREVIEW:** A table showing the test steps:

PROCEDURE	PREVIEW
<input checked="" type="checkbox"/>	4.00 Insert value In the Vendor group field, type ...
<input type="checkbox"/>	5.00 Insert value In the Description field, type a v...
<input type="checkbox"/>	6.00 Insert by lookup In the Terms of payment field, e...
<input type="checkbox"/>	7.00 Subtask In the list, select row 4.
<input type="checkbox"/>	8.00 Subtask In the list, click the link in the sel...
<input type="checkbox"/>	9.00 Save data Click Save.
<input type="checkbox"/>	10.00 End End Test Guide
- Step details:** A section showing the details for the selected step (4.00). It includes a "Show Expected Results" link and a "Details" dropdown.
- Input Data:** A section for defining input data for the selected step. It includes fields for "Recorded Value" (1005), "Field type" (String), "Value type" (Format value), and "Random format" (1005###).

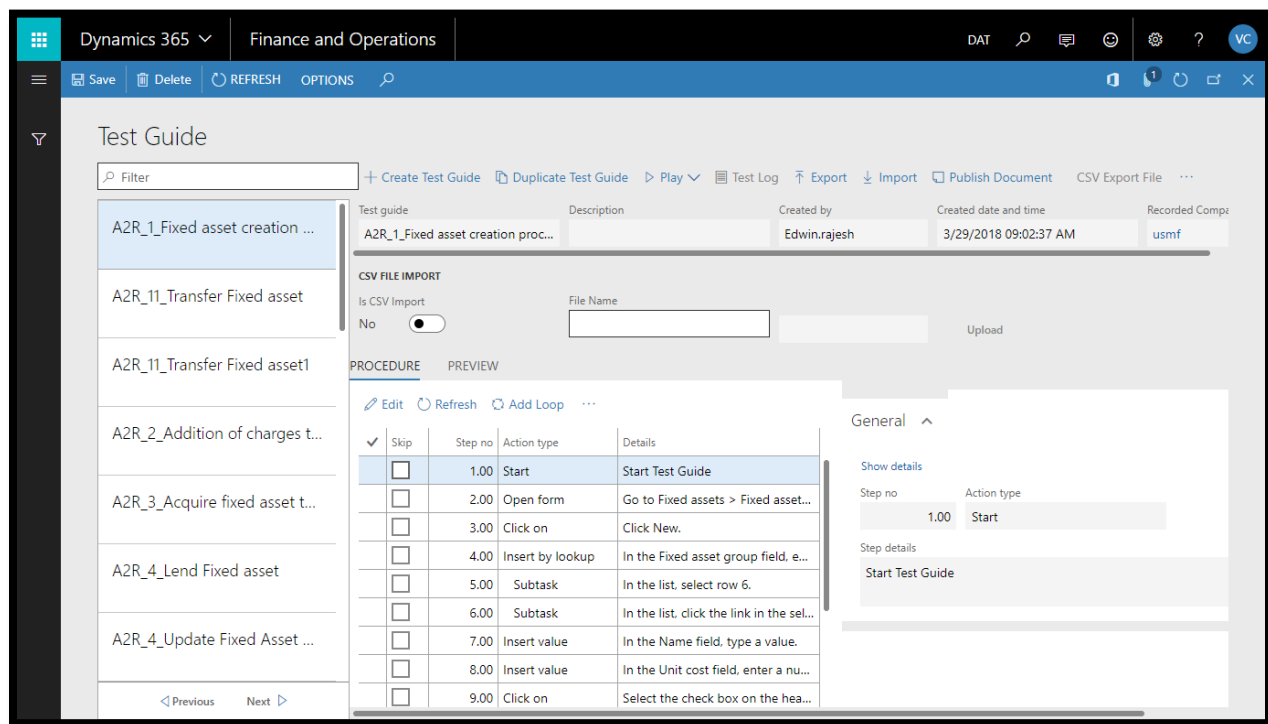
8. Click save

Importing/Exporting Test Cases from One Environment to Another

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation in environment 1



2. Click on “All Test Guides” tile



3. Select the test guide which needs to be exported

The screenshot shows the Dynamics 365 Finance and Operations interface for a Test Guide. The left sidebar lists several test guides, with 'A2R_11_Transfer Fixed asset' selected. The main area displays the details for this test guide, including a table of steps and a 'General' tab on the right.

Test guide	Description	Created by	Created date and time	Recorded Comp...
A2R_11_Transfer Fixed asset		Mahesh.Kumar.Kothuri	5/25/2018 09:24:13 AM	usmf

CSV FILE IMPORT

Is CSV Import: ☐ No ☒ Yes

File Name:

Upload

PROCEDURE **PREVIEW**

Edit Refresh Add Loop ...

✓	Skip	Step no	Action type	Details
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.00	Start	Start Test Guide
<input type="checkbox"/>	<input type="checkbox"/>	2.00	Open form	Go to Fixed assets > Fixed asset...
<input type="checkbox"/>	<input type="checkbox"/>	3.00	Select record	In the list, find and select the de...
<input type="checkbox"/>	<input type="checkbox"/>	4.00	Click on	Click Transfer fixed assets.
<input type="checkbox"/>	<input type="checkbox"/>	5.00	Select record	In the Transfer from account fiel...
<input type="checkbox"/>	<input type="checkbox"/>	6.00	Subtask	In the list, select row 8.
<input type="checkbox"/>	<input type="checkbox"/>	7.00	Subtask	In the list, click the link in the sel...
<input type="checkbox"/>	<input type="checkbox"/>	8.00	Select record	In the Transfer to account field, ...
<input type="checkbox"/>	<input type="checkbox"/>	9.00	Subtask	In the list, select row 9.

General **Step details**

Step no: 1.00 Action type: Start

Step details: Start Test Guide

4. Click on export button

Dynamics 365 Finance and Operations

Test Guide

Filter

+ Create Test Guide Duplicate Test Guide Play Test Log Export Import Publish Document CSV Export File

Test guide	Description	Created by	Created date and time	Recorded Compi
A2R_11_Transfer Fixed asset		Mahesh.Kumar.Kothuri	5/25/2018 09:24:13 AM	usmf

CSV FILE IMPORT

Is CSV Import ☐ No ☐ Yes

File Name

Upload

PROCEDURE PREVIEW

Edit Refresh Add Loop

✓	Skip	Step no	Action type	Details
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.00	Start	Start Test Guide
<input type="checkbox"/>	<input type="checkbox"/>	2.00	Open form	Go to Fixed assets > Fixed asset...
<input type="checkbox"/>	<input type="checkbox"/>	3.00	Select record	In the list, find and select the de...
<input type="checkbox"/>	<input type="checkbox"/>	4.00	Click on	Click Transfer fixed assets.
<input type="checkbox"/>	<input type="checkbox"/>	5.00	Select record	In the Transfer from account fiel...
<input type="checkbox"/>	<input type="checkbox"/>	6.00	Subtask	In the list, select row 8.
<input type="checkbox"/>	<input type="checkbox"/>	7.00	Subtask	In the list, click the link in the sel...

General

Show details

Step no Action type

1.00 Start

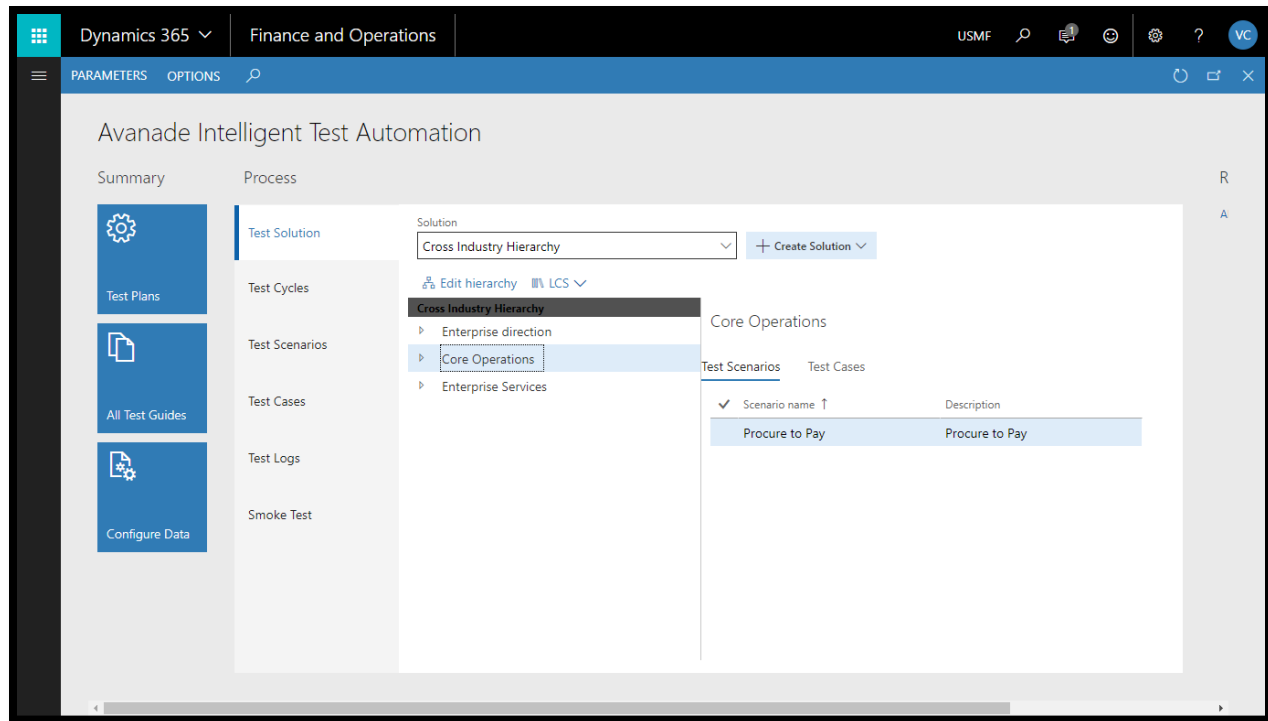
Step details

Start Test Guide

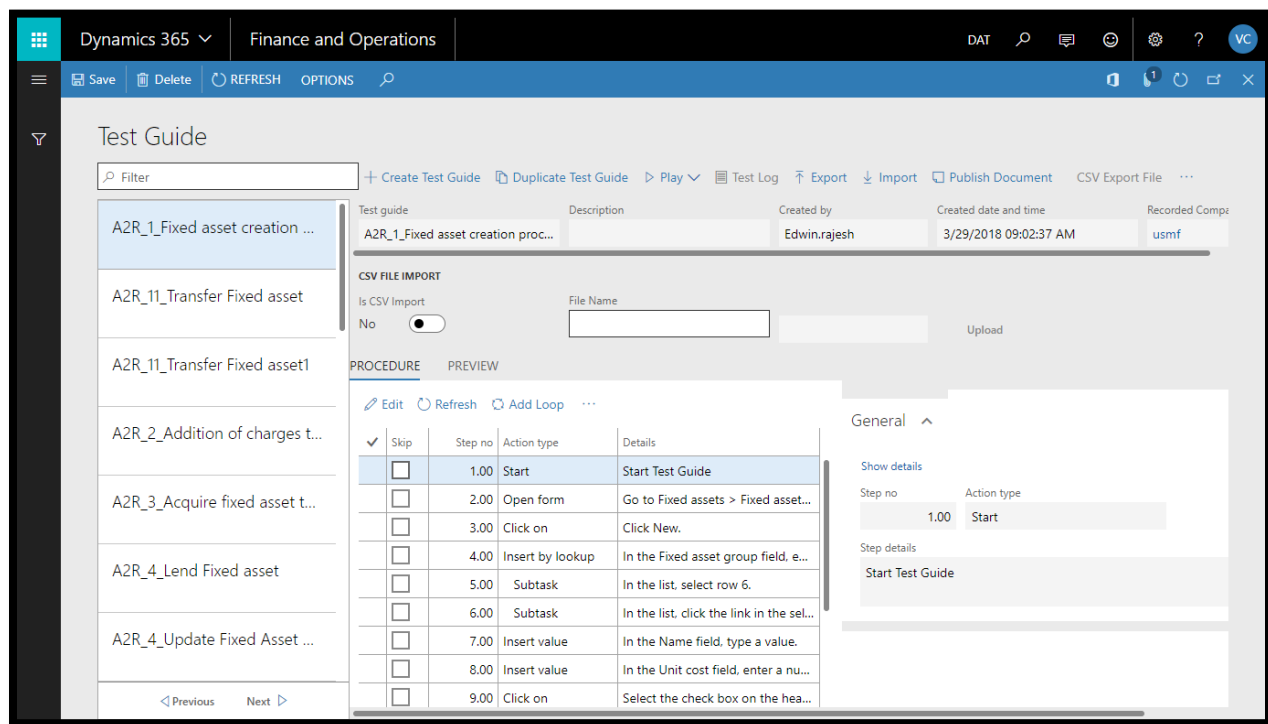
A2R_11_Transfer Fi...xml

Show all

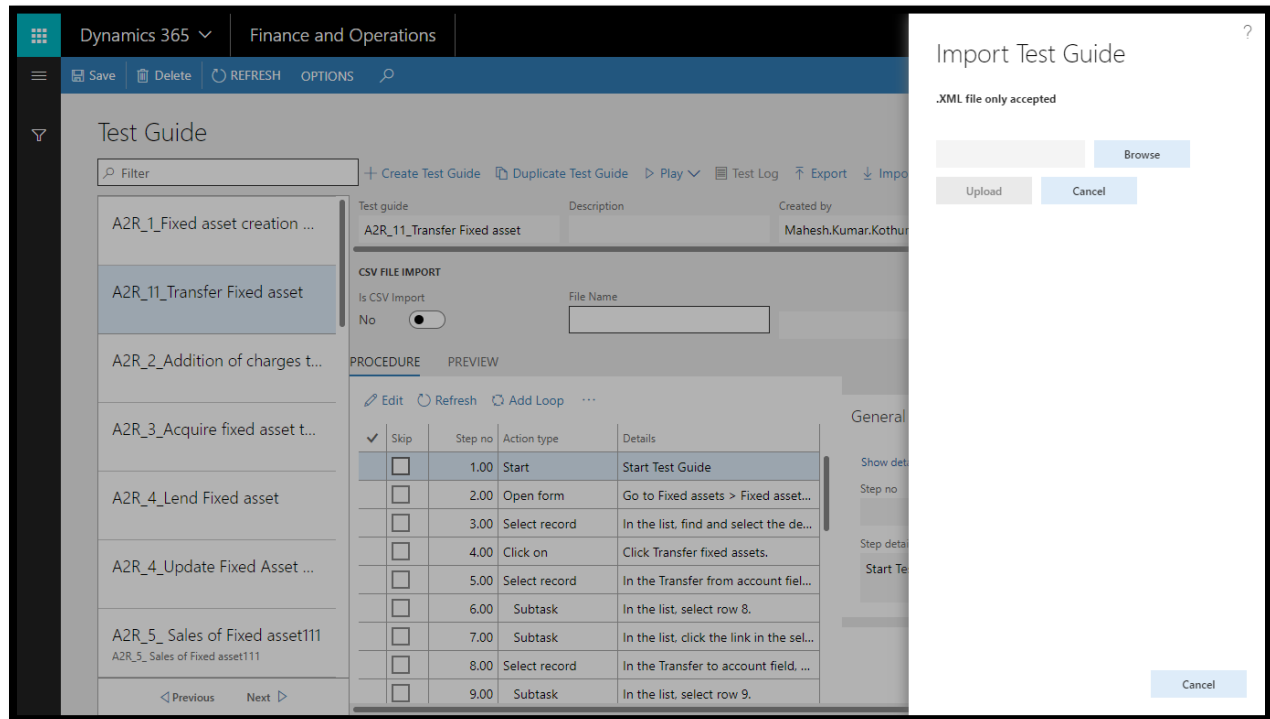
5. Selected test guide will be downloaded as a XML file
6. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation in environment 2



7. Click on “All Test Guide” tile



8. Click on import button
9. In the popup, click browse and select the XML file which was downloaded from environment 1



10. Click upload

The screenshot shows the Dynamics 365 Finance and Operations Test Guide interface. A dialog box titled "Import Test Guide" is open, indicating that only .XML files are accepted. The dialog shows a file named "A2R_1_Fixed asset cre..." and buttons for "Browse", "Upload", and "Cancel".

In the background, the Test Guide for "A2R_1_Fixed asset creation proc..." is visible. It includes a list of test guides on the left and a table of steps in the main area.

Test guide	Description	Created by
A2R_1_Fixed asset creation proc...		Mahesh.Kumar.Kothuri

CSV FILE IMPORT	
Is CSV Import	File Name
No	

PROCEDURE	
✓ Skip	Step no
<input type="checkbox"/>	1.00
<input type="checkbox"/>	2.00
<input type="checkbox"/>	3.00
<input type="checkbox"/>	4.00
<input type="checkbox"/>	5.00
<input type="checkbox"/>	6.00
<input type="checkbox"/>	7.00
<input type="checkbox"/>	8.00
<input type="checkbox"/>	9.00

11. Verify whether the test guide has been imported successfully

The screenshot shows the Dynamics 365 Finance and Operations Test Guide interface after a successful import. A blue banner at the top indicates "Import completed". The test guide "A2R_1_Fixed asset creation process" is now listed in the left sidebar.

The main area shows the details of the test guide, including a table of steps and a "General" tab.

Test guide	Description	Created by	Created date and time	Recorded Compi
A2R_1_Fixed asset creation proc...		Mahesh.Kumar.Kothuri	7/17/2018 11:32:29 AM	

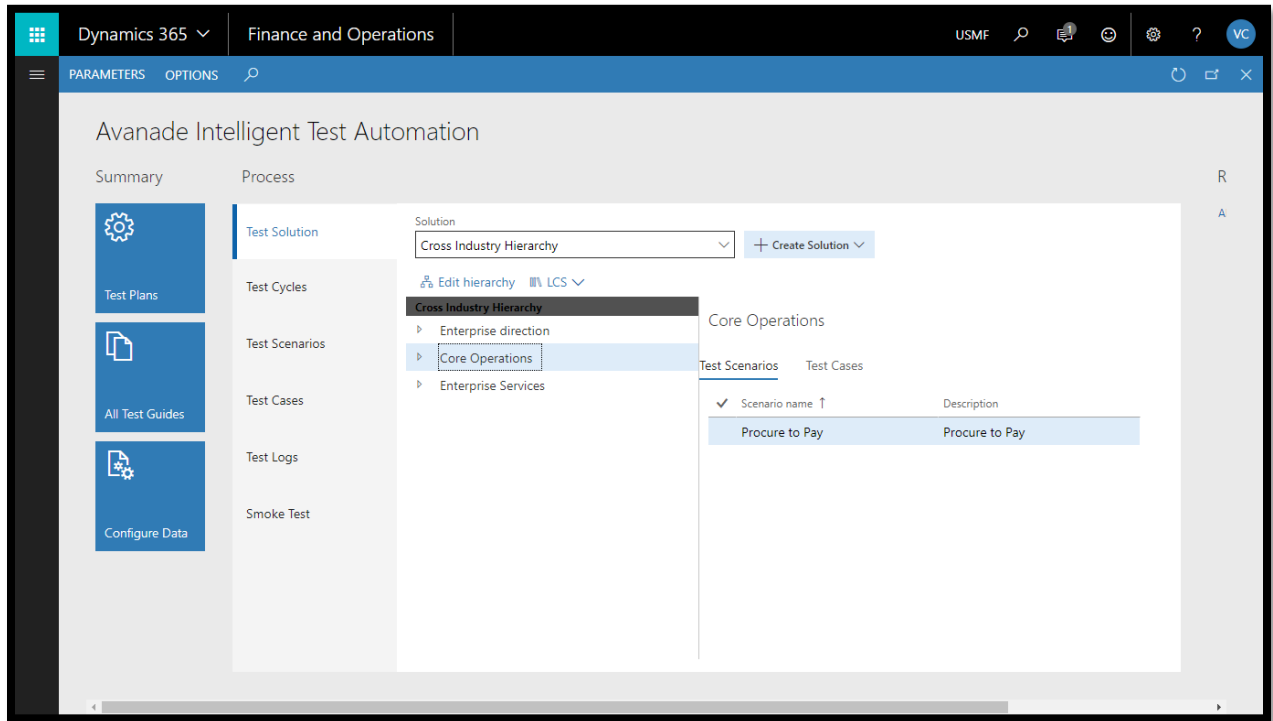
CSV FILE IMPORT	
Is CSV Import	File Name
No	

PROCEDURE	
✓ Skip	Step no
<input type="checkbox"/>	1.00
<input type="checkbox"/>	2.00
<input type="checkbox"/>	3.00
<input type="checkbox"/>	4.00
<input type="checkbox"/>	5.00
<input type="checkbox"/>	6.00
<input type="checkbox"/>	7.00
<input type="checkbox"/>	8.00

General	
Step no	Action type
1.00	Start

How to Duplicate a Test Guide

1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



2. Click on “All Task Guides” tile

Dynamics 365 Finance and Operations

Test Guide

Filter

+ Create Test Guide Duplicate Test Guide Play Test Log Export Import Publish Document CSV Export File

Test guide	Description	Created by	Created date and time	Recorded Compi
A2R_1_Fixed asset creation proc...		Edwin.rajesh	3/29/2018 09:02:37 AM	usmf

CSV FILE IMPORT

Is CSV Import: No

File Name:

Upload

PROCEDURE PREVIEW

Edit Refresh Add Loop

✓ Skip	Step no	Action type	Details
<input type="checkbox"/>	1.00	Start	Start Test Guide
<input type="checkbox"/>	2.00	Open form	Go to Fixed assets > Fixed asset...
<input type="checkbox"/>	3.00	Click on	Click New.
<input type="checkbox"/>	4.00	Insert by lookup	In the Fixed asset group field, e...
<input type="checkbox"/>	5.00	Subtask	In the list, select row 6.
<input type="checkbox"/>	6.00	Subtask	In the list, click the link in the sel...
<input type="checkbox"/>	7.00	Insert value	In the Name field, type a value.
<input type="checkbox"/>	8.00	Insert value	In the Unit cost field, enter a nu...
<input type="checkbox"/>	9.00	Click on	Select the check box on the hea...

General

Show details

Step no: 1.00 Action type: Start

Step details: Start Test Guide

3. Select the test guide which needs to be duplicated

Dynamics 365 Finance and Operations

Test Guide

Filter

+ Create Test Guide Duplicate Test Guide Play Test Log Export Import Publish Document CSV Export File

Test guide	Description	Created by	Created date and time	Recorded Compi
A2R_4_Lend Fixed asset		Edwin.rajesh	3/29/2018 09:17:28 AM	usmf

CSV FILE IMPORT

Is CSV Import: No

File Name:

Upload

PROCEDURE PREVIEW

Edit Refresh Add Loop

✓ Skip	Step no	Action type	Details
<input type="checkbox"/>	1.00	Start	Start Test Guide
<input type="checkbox"/>	2.00	Open form	Go to Fixed assets > Fixed asset...
<input type="checkbox"/>	3.00	Subtask	In the list, find and select the de...
<input type="checkbox"/>	4.00	Click on	Click Lend.
<input type="checkbox"/>	5.00	Click on	Click New.
<input type="checkbox"/>	6.00	Select record	In the list, mark the selected row.
<input type="checkbox"/>	7.00	Insert value	In the Lending date field, enter ...
<input type="checkbox"/>	8.00	Insert by lookup	In the Loaned to field, enter or s...
<input type="checkbox"/>	9.00	Subtask	In the list, select row 7.

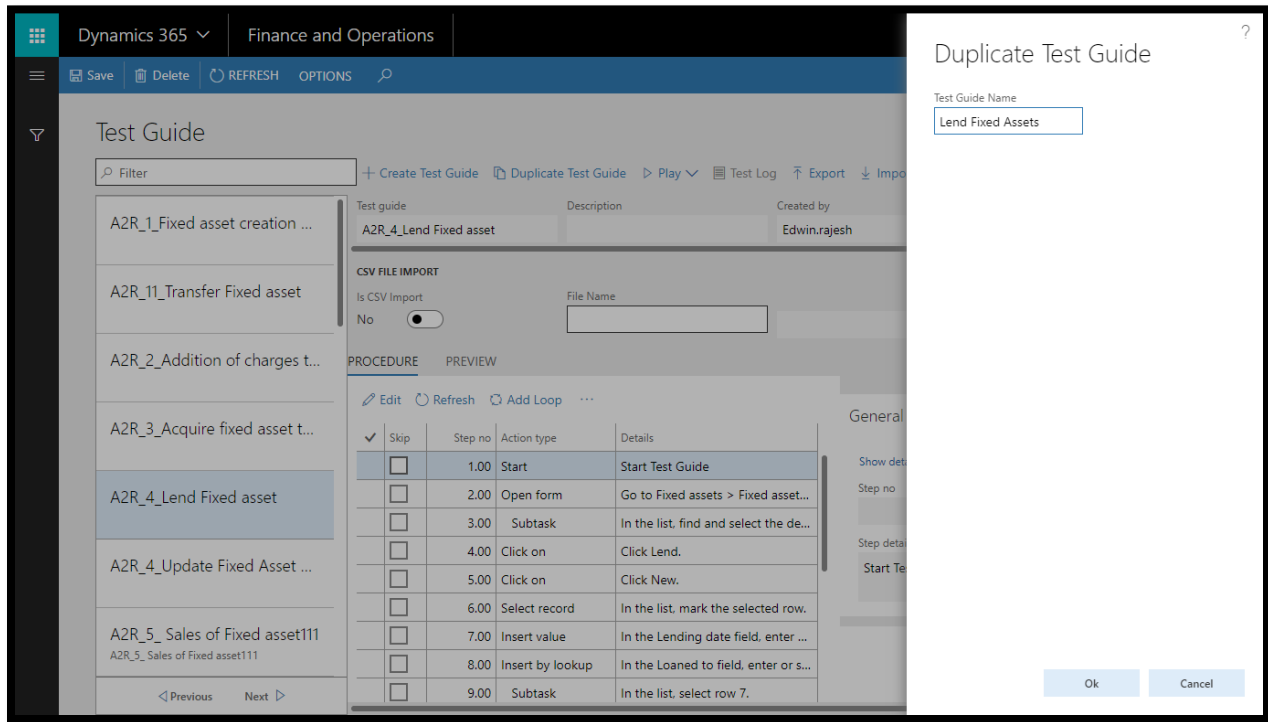
General

Show details

Step no: 1.00 Action type: Start

Step details: Start Test Guide

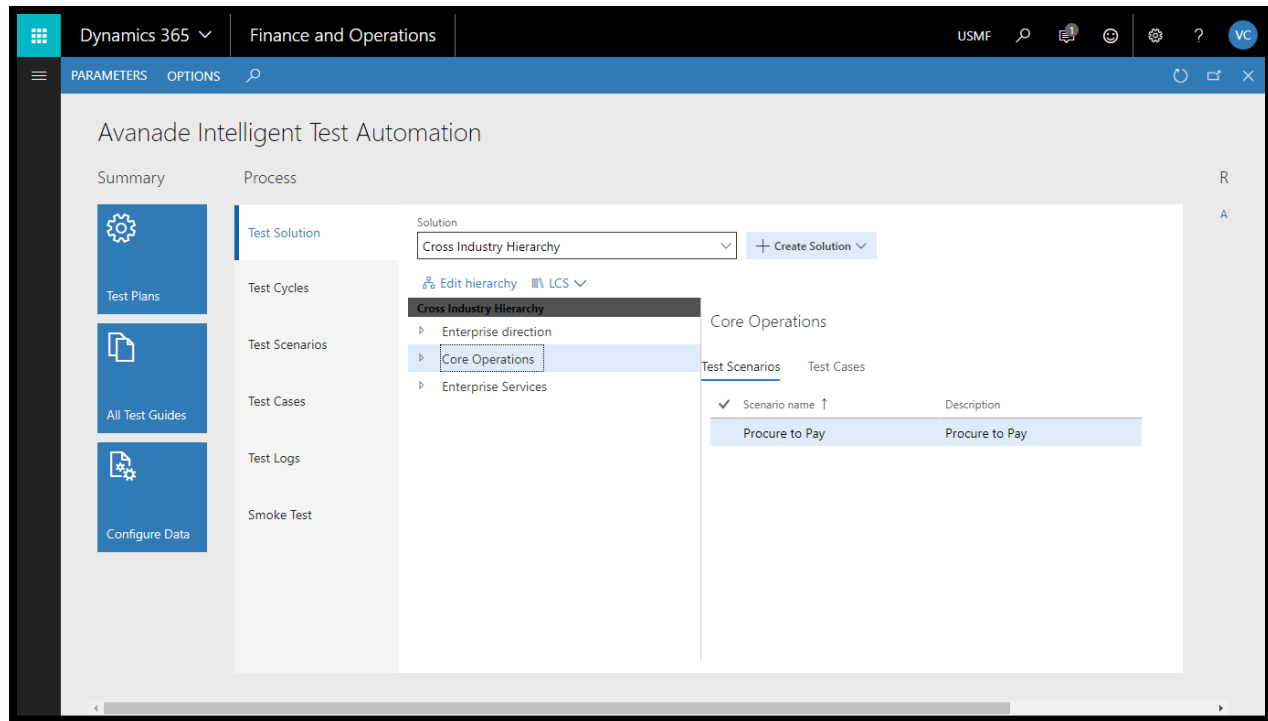
4. Click on duplicate test guide
5. In the popup, in the test guide name enter a name



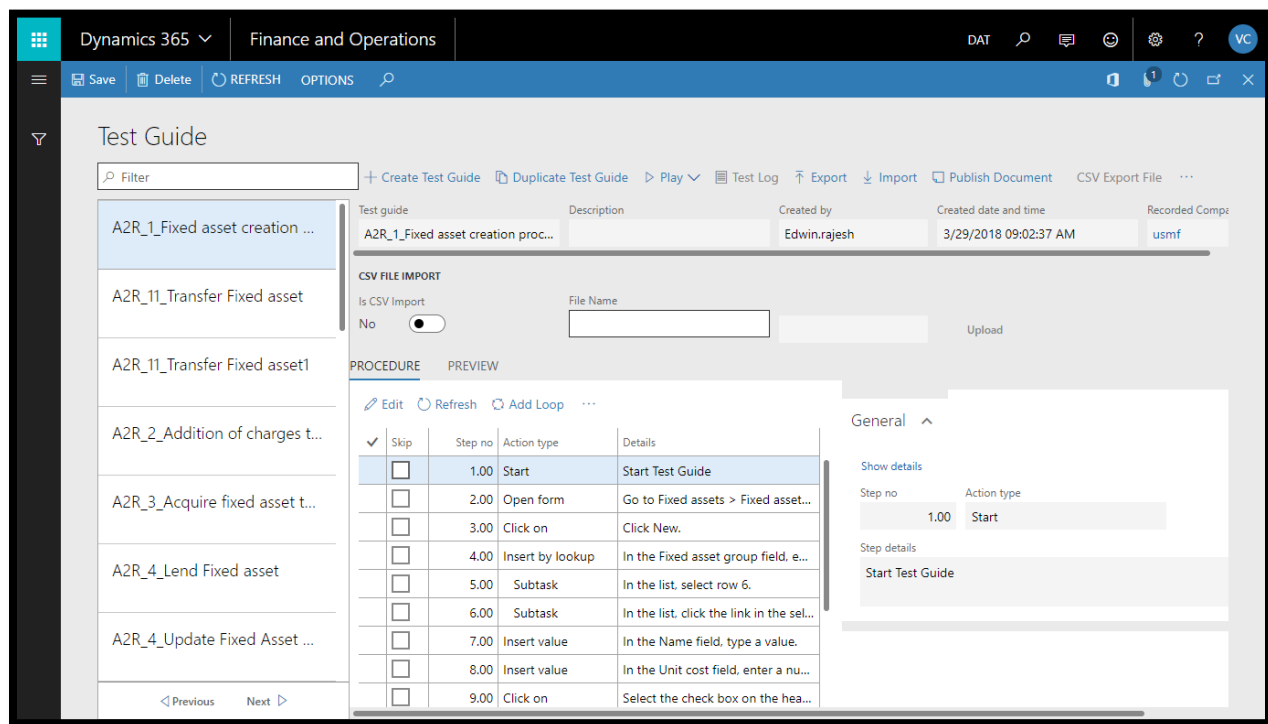
6. Click Ok

How to Loop steps within a Test Guide

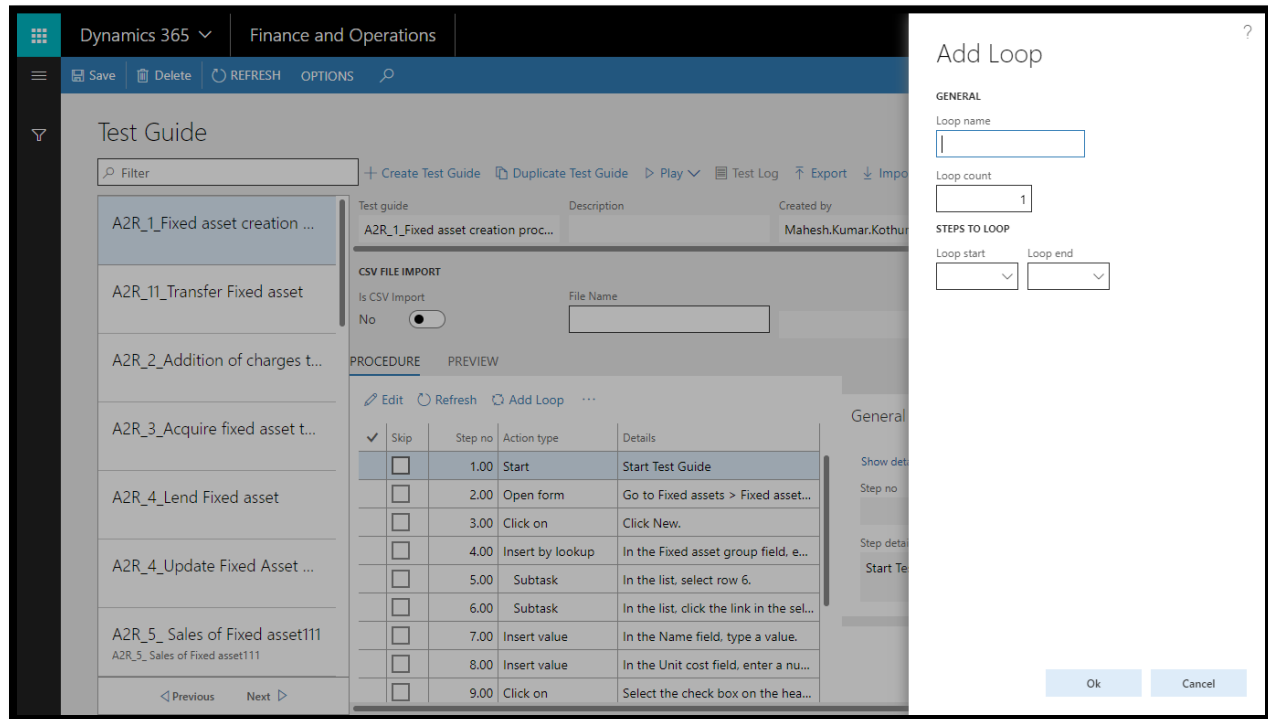
1. Navigate to System Administration > Workspaces > Avanade Intelligent Test Automation



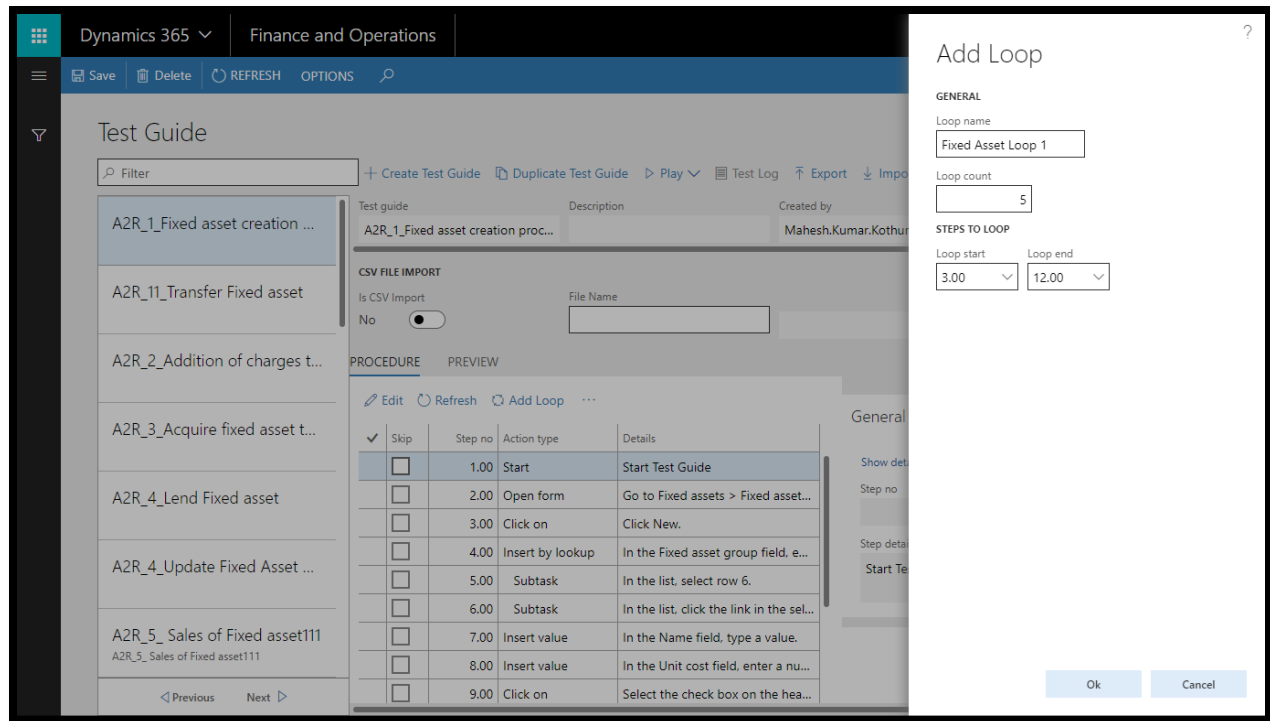
2. Click on “All Test Guide” tile



3. Select a test guide
4. In the procedure section, click on add loop



5. In the add loop popup, enter a loop name
6. In the loop count field, enter a value
7. In the loop start drop down, select a step
8. In the loop end drop down, select the end step



9. Click Ok

Pre- automated Test Suite

The purpose of pre-automated test suite is a readily available set of 300 core out of the box scenarios of Dynamics 365 for Finance and Operations which can be used on any Dynamics 365 environment out of the box implementations for verifying the key process flows and gives you a quality check of your implementation. It also helps in regressing the builds and acts as a Build Verification Testing (BVT). Below is the summary of process wise automated test cases.

S. No.	Process Name	Test Case Available
1	Procure to Pay	88
2	Order to Cash	106
3	Record to Report	29
4	Inventory Management	36
5	Acquire to Retire	22
6	Project Management and Accounting	16
7	Warehousing - Inbound/Outbound	03
Total		300

Cross Industry BPM

Cross Industry Business Process Model covers end to end business process flows across different industries. While creating the test scenarios, emphasis was on standard process of Dynamics 365 for Finance and Operations. Identified process of cross functional business processes are listed below and detailed scripts are available in the test scripts reference section at the bottom of this document.

Procure to Pay

Procure to Pay process covers all the vendor related information such as purchase requisition creation, RFQ creation, PO creation, return order, debit note creation, vendor payment, postdated cheques etc. All the P2P processes are mapped with CIC level 5, level 4 & level 3 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Order to Cash

Order to cash process cover all the customer related information such as customer contacts, customer prospects, leads, opportunities, sales order creation, sales return order, credit note, supplementary invoice, customer payment, postdated cheques etc. All the O2C process mapped with CIC level 5, level 4 & level 3 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Record to Report

Record to report process cover all the general ledger related information such as creation of chart of accounts, currency setup, fiscal calendar setup, account structure process, journal names creation, voucher creation, allocation, intercompany process, bank account creation, bank reconciliation process etc. All the R2R process mapped with CIC level 5 & level 4 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Inventory Management

Inventory management process cover all the product related information such as creation of product, release item, product dimension setup, inventory journal process, BOM item creation



process, non-inventoried item, quality item, stock transfer process etc. All the inventory management processes are mapped with CIC level 5, level 4 & level 3 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Acquire to Retire

Acquire to retire process cover all the fixed asset related information such as creation of fixed assets, fixed asset transactions, transfer fixed assets, split of fixed assets, fixed asset budget journal, inventory to fixed asset journal etc. All the acquire to retire processes are mapped with CIC level 5 & level 4 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Project Management and Accounting

Project management and accounting process cover all the project related information such as creation of project, creation of project contract, project quotations, project invoicing, project transactions, resource allocation on project, etc. All the project management and accounting processes are mapped with CIC level 5 & level 4 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Warehousing – Inbound/Outbound

Warehouse management process cover some of the warehouse related information such as consolidation of shipments, product receipts, receive and put away of goods, etc. Warehouse management processes are mapped with CIC level 5 & level 4 with reference no. Please refer to [test scenarios reference file](#) to access the test scripts.

Test Scenarios Reference File

We have identified the standard processes in Dynamics 365 for Finance & Operations and created a repository of 300 ready to use test cases. Detailed scripts file is attached below for your reference.

