Configuring Ivanti Automation for Neurons for Service Management

This document outlines the process of configuring Ivanti Automation for use in Neurons for Service Management.

1. Download the connector

The integration between Ivanti Automation and Neurons for Service Management requires a connector from the Ivanti Marketplace. This connector is called the Ivanti Service Manager Utility Connector. Below is a direct link to the connector.

https://marketplace.ivanticloud.com/packages/Ivanti.Service.Manager.Update.Record.Connector/

To download the connector, click "Manual Download". If you're not already signed in, you will be prompted to sign in. Click "Sign in with your Ivanti Community Account". This will redirect you to the community sign in page. Sign in. After signing in, you will be sent back to the connector page on the marketplace. Click "Manual Download" again to start the download.
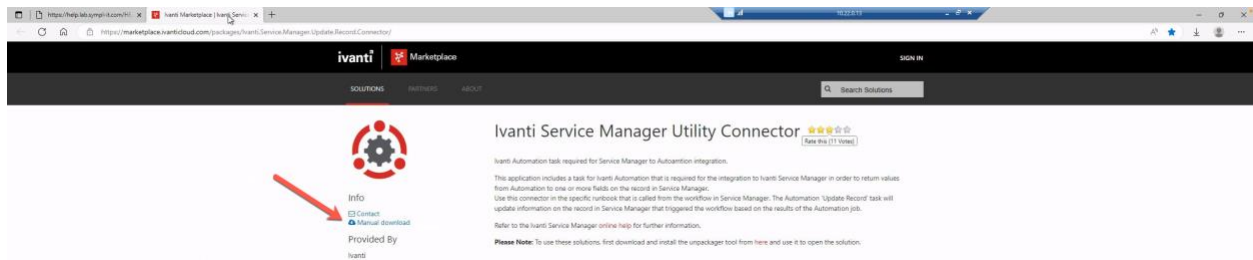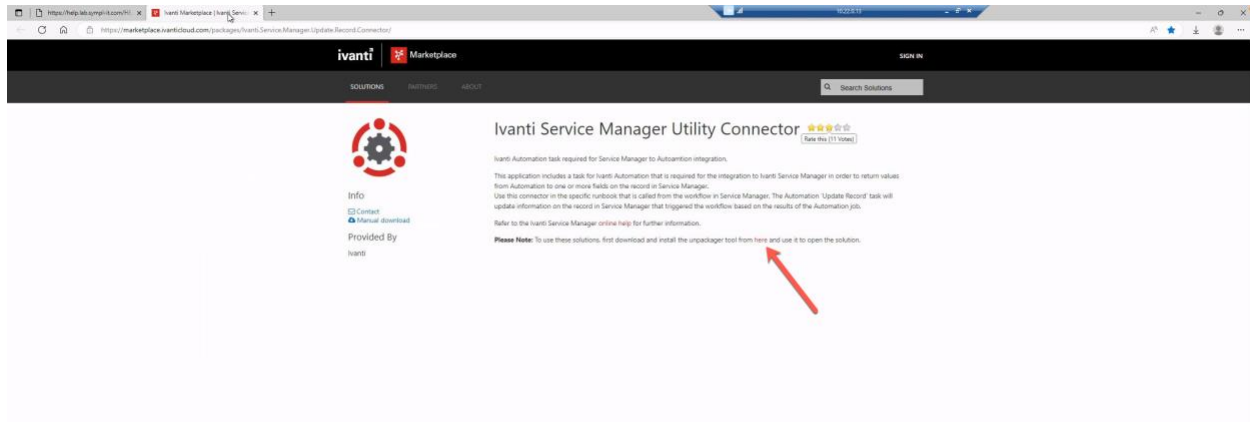
2. Download the unpackager

In addition to the connector, you must also download the unpackager tool. This tool can be downloaded from the same page at the bottom of the screen. Below is a direct link to the unpackager tool.

https://marketplace.ivanticloud.com/Tools/Importer

3. Installing the connector

To install the Ivanti Service Manager Utility Connector, complete the following steps:

To install the Ivanti Service Manager Utility Connector, we need to run the unpackager tool, also referred to as the Ivanti Solution Installer. Locate the Ivanti Solution Installer in your downloads and double click to run. To complete the installer, complete the following steps:
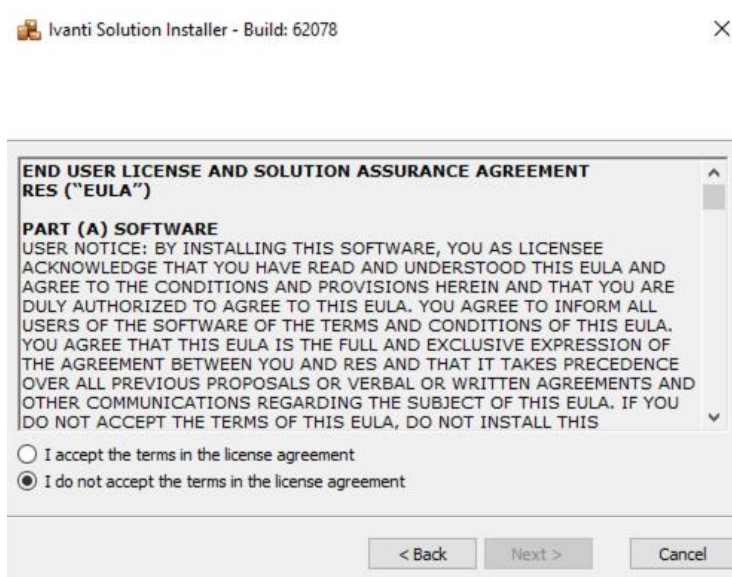
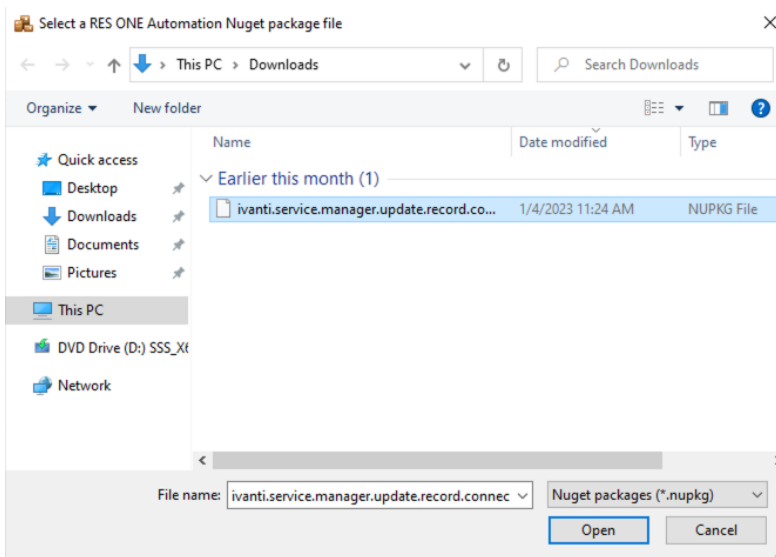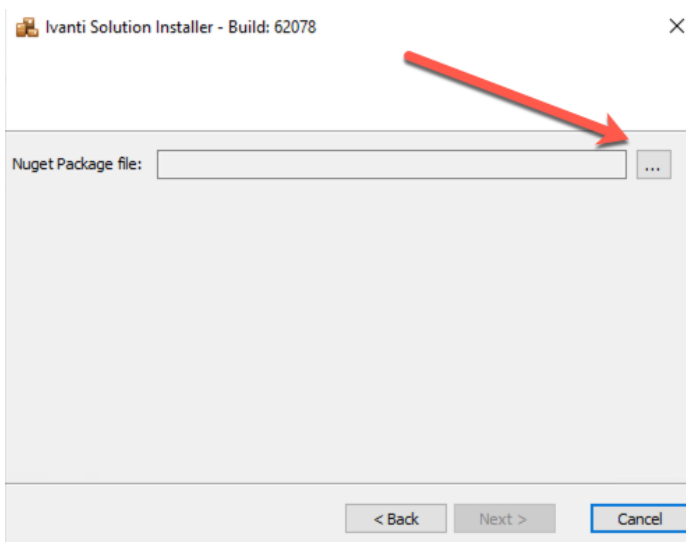1. Locate and run the unpackager tool, also known as the Ivanti Solution Installer.
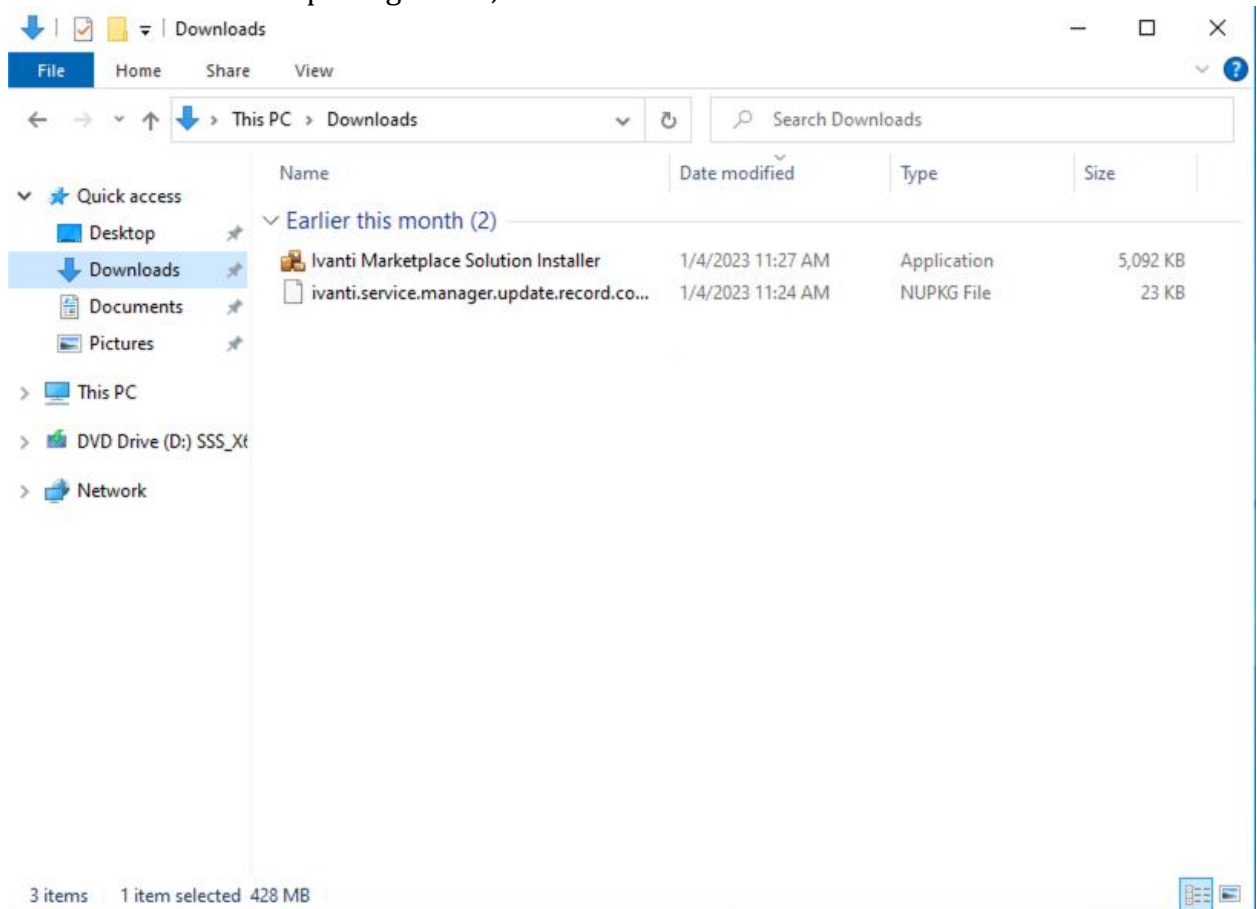
2. Click next.
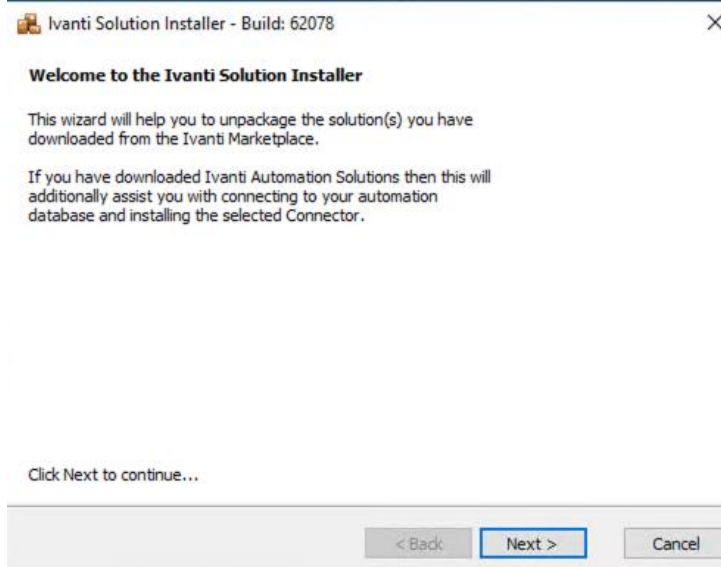
3. Read the EULA and if acceptable check "I accept the terms in the license agreement" and click Next.

4. Use the file selector to locate and select the connector downloaded.

Click Open, then next.

5. Click next.
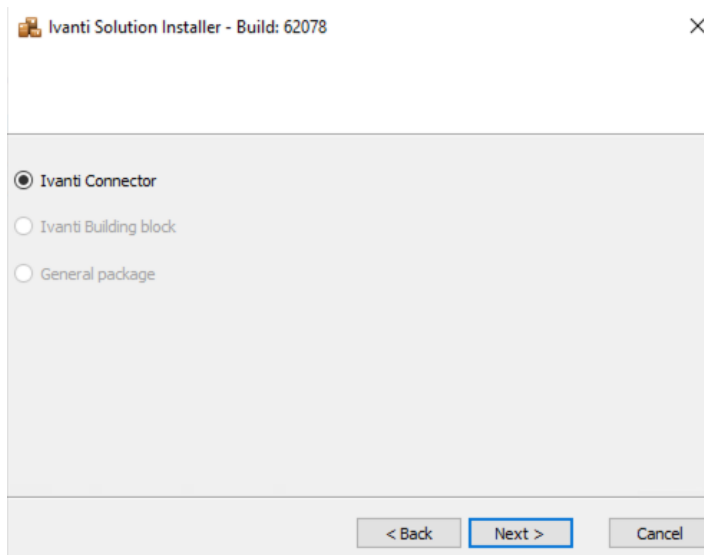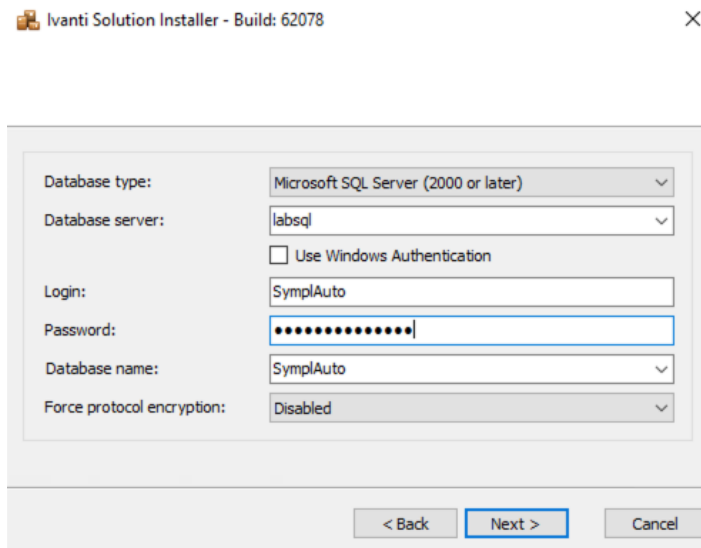
6. Click next.

7. Click next.
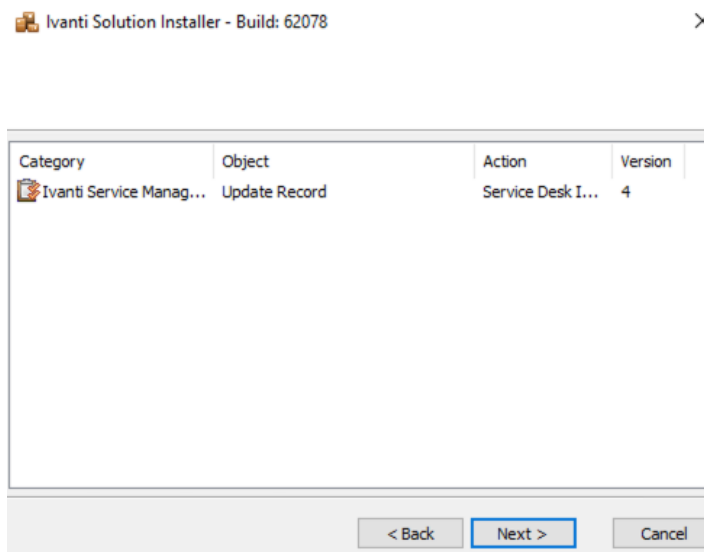
8. Confirm / Enter the database connection details. Click Next.

   You must re-enter the password.
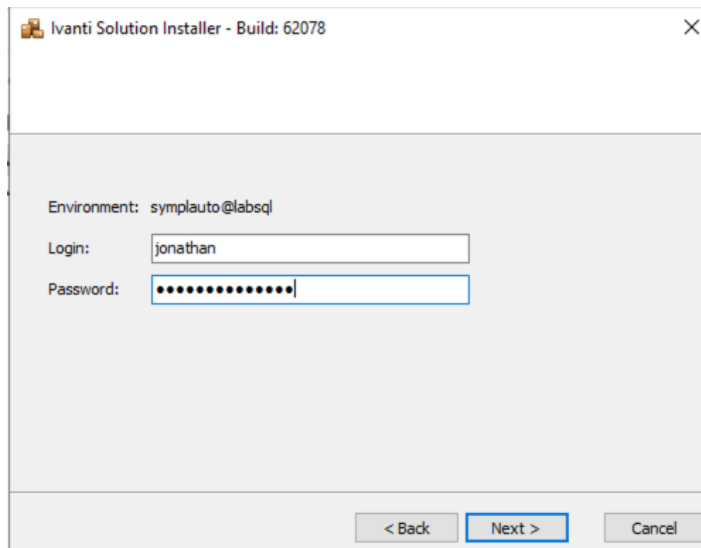
9. If logins are configured for Automation enter the credentials for an administrator. Click Next.
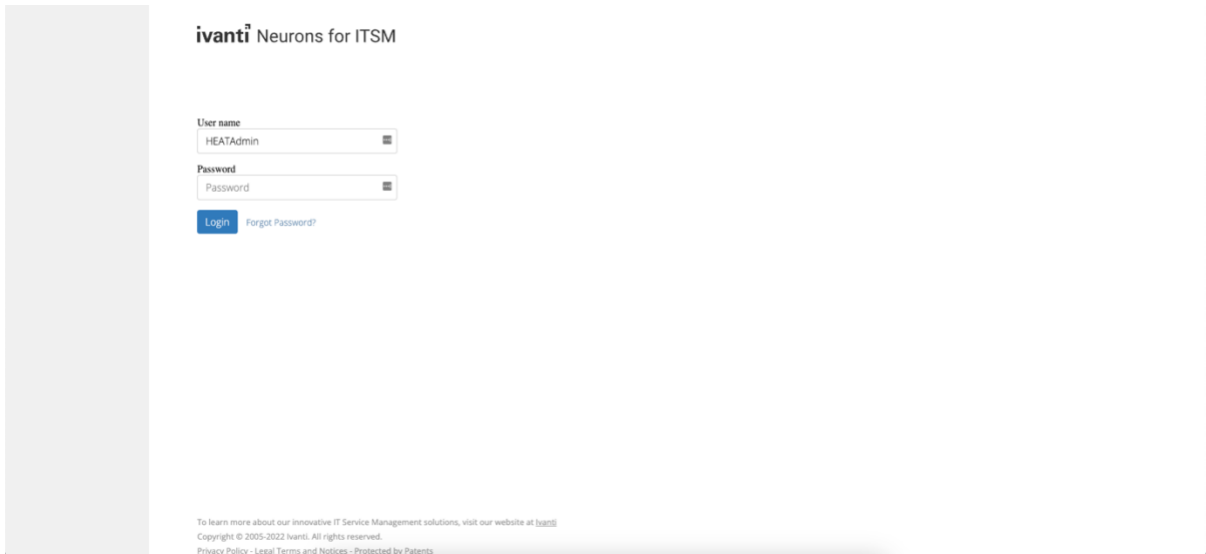
10. Click Upgrade.
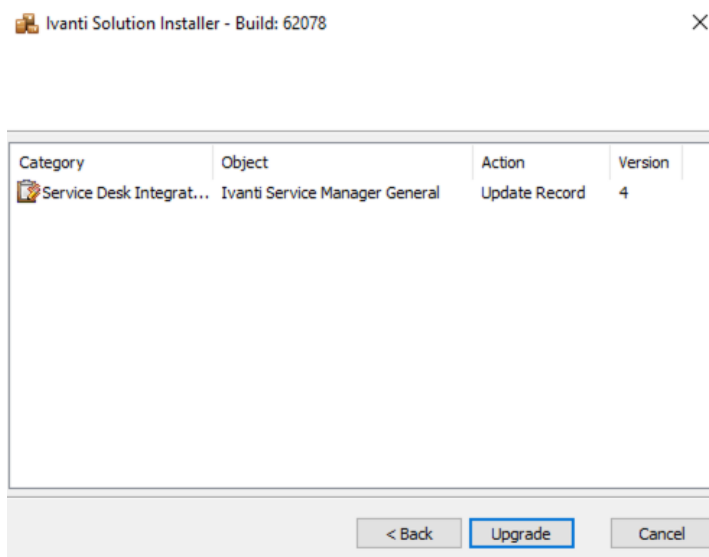
11. Click Next to complete the installation and exit the Ivanti Solution Installer.
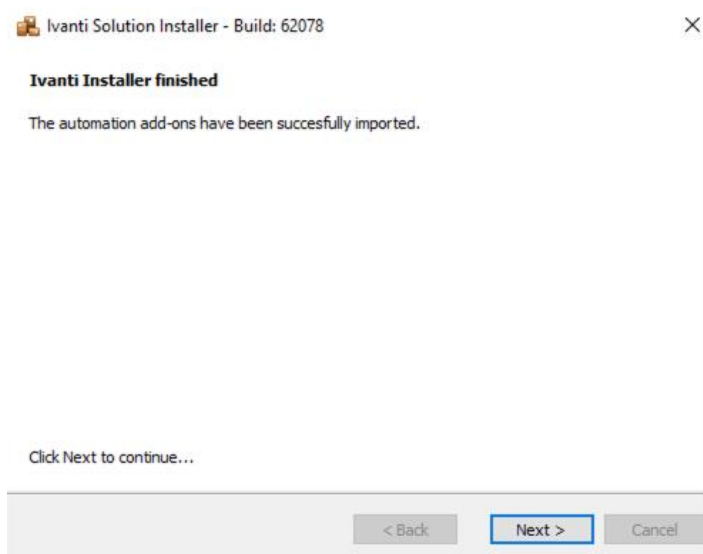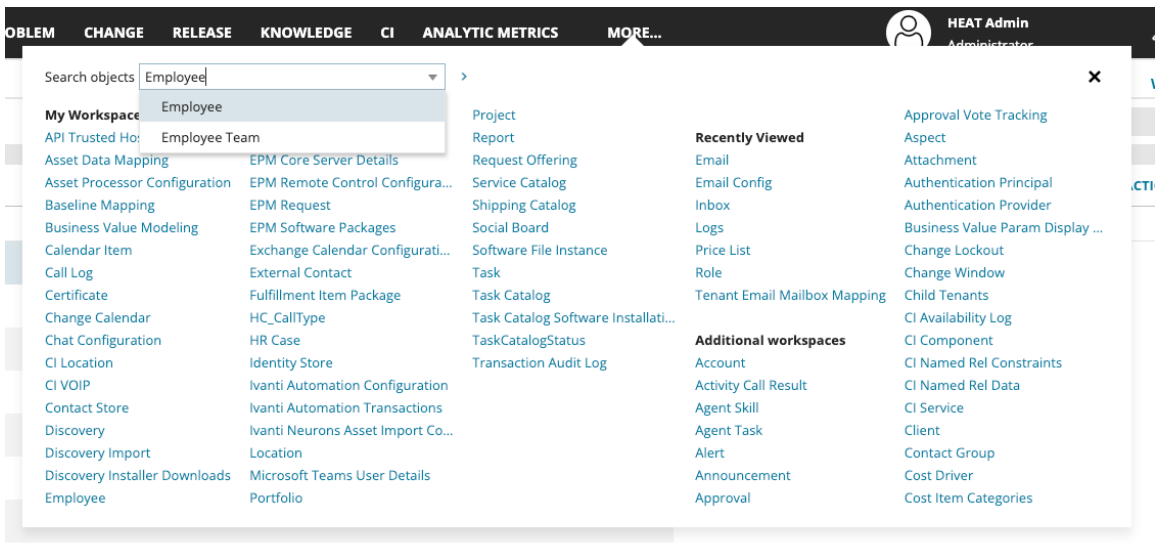
4. Create User in Neurons for Service Management

In order for Ivanti Automation to communicate to Neurons for Service Management a user must be created. Complete the following steps to configure this user:

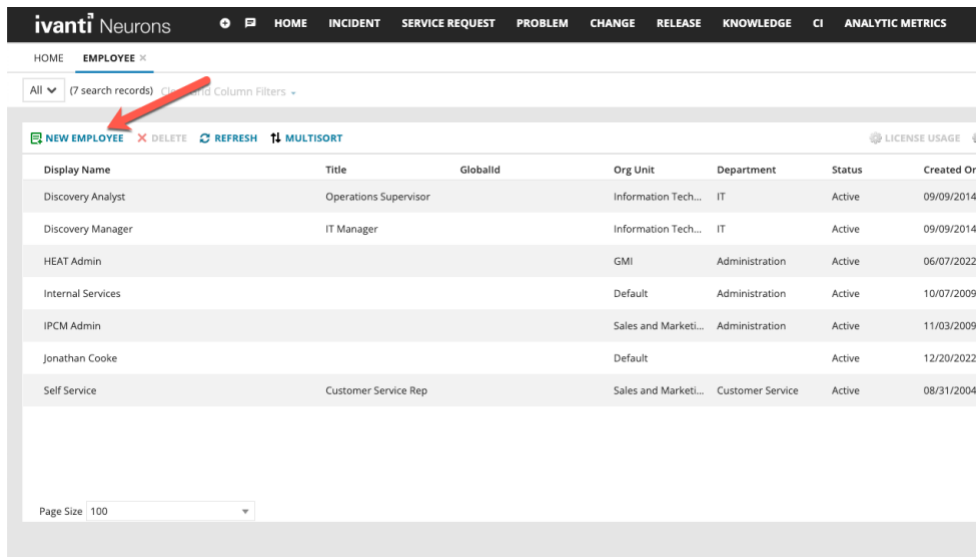1. Log into Neurons for Service Management.

2. Open the Employee workspace.

3. Click New Employee

4. Ensure all required fields are filled in, Internal Auth is enabled, and an Internal Auth PWD is entered.

   1. Required Fields Entered

   2. Internal Auth enabled

   3. Internal Auth PWD provided

   4. Link Administrator Role

      A custom role may be created and assigned but is outside the scope of this document.

Employee: Ivanti Automation

DETAILS   **ROLES (1)**   INCIDENT (0)   CHANGE (0)   CONTACT GROUP (0)   CI (0)   ACTIVITY HISTORY (0)   ATTACHMENT (0)   TEAM (1)   RECURRING SERVICE SUBSCRIPTION

🔗 Link   ✂ Unlink

| Display Name	Internal Name	Last Modified By	Last Modified On	Created By	Created On
Administrator	Admin	Admin	01/06/2022 6:45 AM	Admin	09/30/2009 12:59 PM

5.   Click Save.

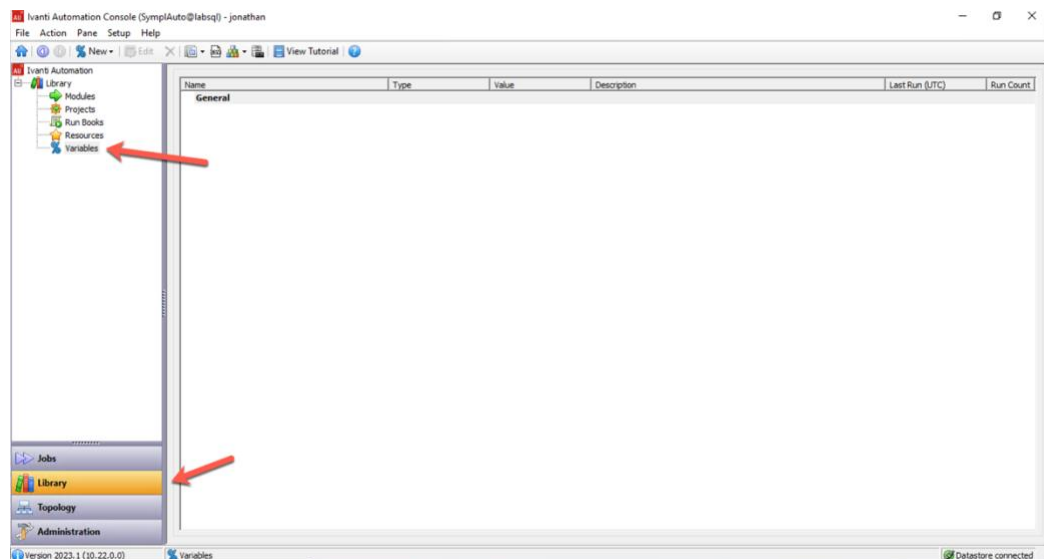## 5. Create Neurons for Service Management Variables

The connection details for Neurons for Service Management will be stored as global variables in Ivanti Automation. This will allow us to reuse these variables in different modules, run books, and projects.

1.   Open the Ivanti Automation Console.

     If using logins, enter your credentials and click OK.
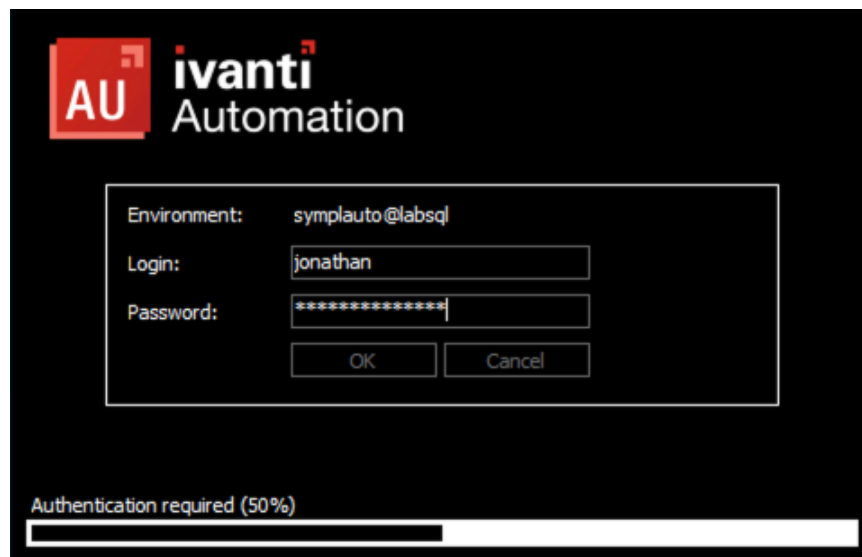
2.   Navigate to Library > Variables

3. Right click an empty spot in the variables content pane and click New Category. Provide a name. E.g. Neurons for Service Management. Click OK.

4. Repeat the following steps for each variable in the table, below:

    1. Right click the new category and select New Variable.

    2. Enter the name from the table. (Other names can be used, just note the name used for later.)

    3. Select the Type and enter the Value.

    4. Click OK.

Name	Type	Value
Ivanti Service Manager Password	Password	The password created for Automation in Neurons for Service Management.
Ivanti Service Manager Tenant	Text	The tenant's name for Neurons for Service Management. E.g. help.lab.sympl-it.com, or test.ivanticloud.com
Ivanti Service Manager Tenant URL	Text	*The URL for accessing the Neurons for Service Management tenant. E.g. https://help.lab.sympl-it.com/HEAT/, or https://test.ivanticloud.com/
Ivanti Service Manager UserName	Text	The username created for Automation in Neurons for Service Management.

If using an on premise install of NSM, you may need to include /HEAT/ in the NSM Tenant URL.

Generate Certificate for Ivanti Automation (Optional)

For Neurons for Service Management to integrate with Ivanti Automation, we must enable the Automation's WebAPI. If using HTTPS and if you don't already have a certificate, you can generate a self-signed certificate by following the steps below.

1. Open PowerShell as an administrator.

2. Run the following command, replacing the following variables with values for your environment / organization.

```
New-SelfSignedCertificate -DnsName "{{Ivanti Automation Hostname}}" `
-CertStoreLocation "{{Cert Location}}" `
-NotAfter (Get-Date).AddYears({{Years Valid}})
```

Name	Value	Example
Ivanti Automation Hostname	Name for the Ivanti Automation Server	auto.lab.sympl-it.com
Cert Location	Path to Certificate Store	cert:\LocalMachine\My *This is the Personal folder of the computer certificates.*
Valid Years	Number of years certificate should be valid for	5

```
Administrator: Windows PowerShell                                    —   □   ×

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\WINDOWS\system32> New-SelfSignedCertificate -DnsName "auto.lab.sympl-it.com" `
>> -CertStoreLocation "cert:\LocalMachine\My" `
>> -NotAfter (Get-Date).AddYears(5)


   PSParentPath: Microsoft.PowerShell.Security\Certificate::LocalMachine\My

Thumbprint                                Subject
----------                                -------
25C2930598D39E89896829E34E6981E57B9A5DA2  CN=auto.lab.sympl-it.com


PS C:\WINDOWS\system32> _
```

3. Note the Thumbprint somewhere safe for later use.

Enable Automation's WebAPI

Complete the following steps to enable the Ivanti Automation WebAPI.

1. Open Ivanti Automation Console and Sign In.

2. Open the Setup Menu and select Global Settings
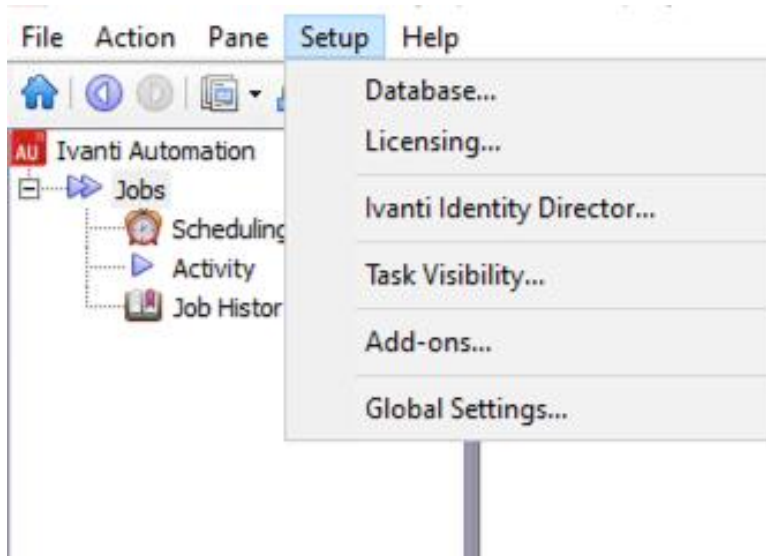
3. Find the WebAPI setting and double click.
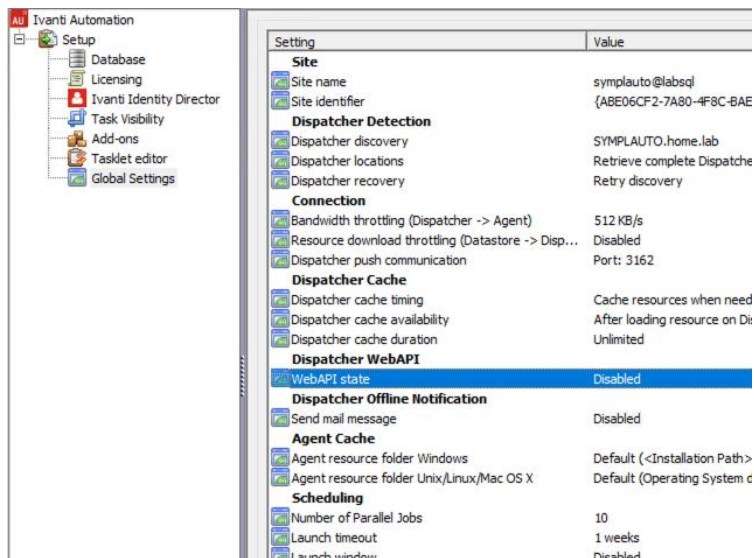
4. Complete

5. If not using SSL, uncheck the SSL enabled box. (Optional)

6. Set the Port

7. If using SSL, set the certificate thumbprint and certificate store. To capture thumbprint, follow these steps.

    7a.   Open the certificate manager. (certlm.msc)
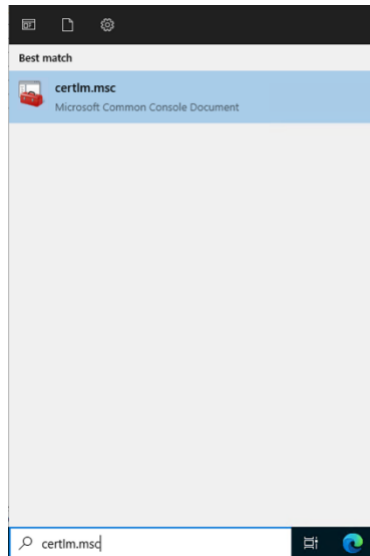
    7b.   Click Yes on the UAC prompt.
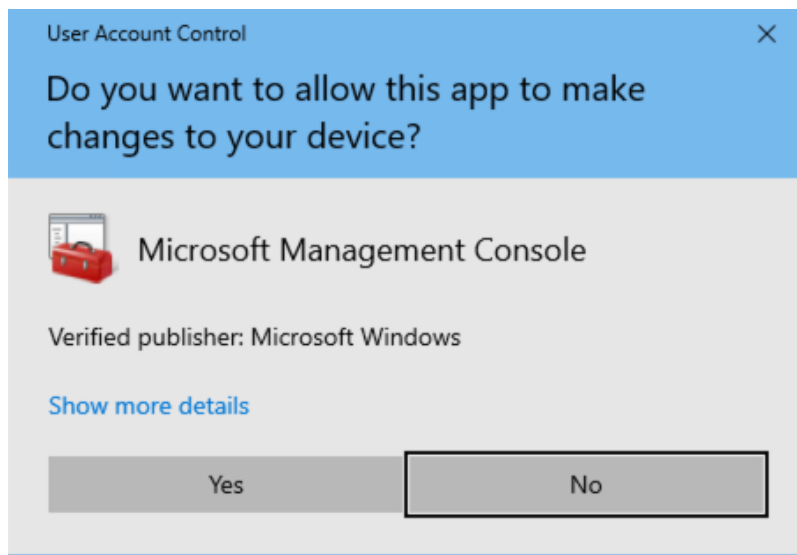
7c.   Navigate to your certificate.
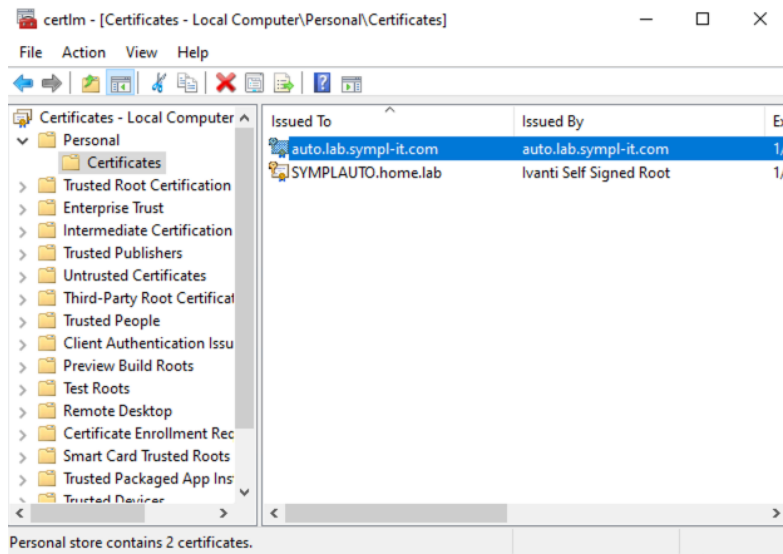
7d.   Double click on the certificate, to open.
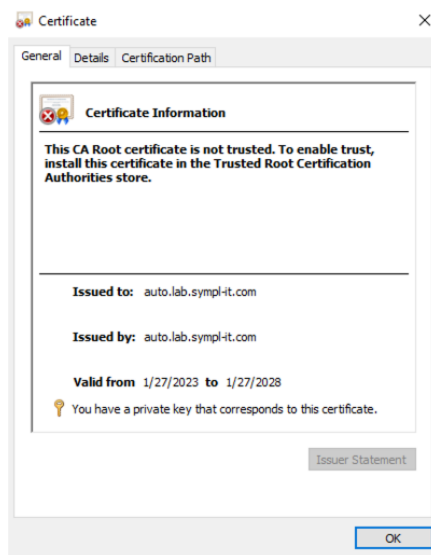
7e. Switch to the details tab.
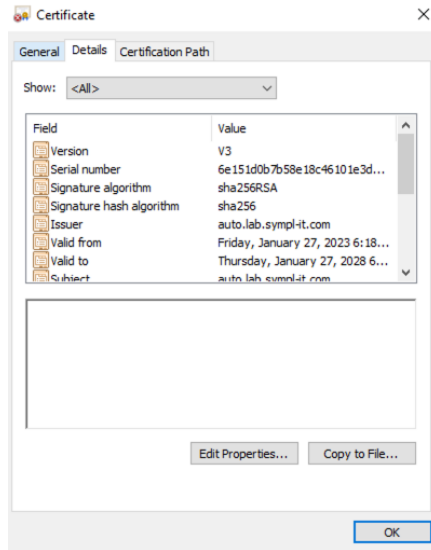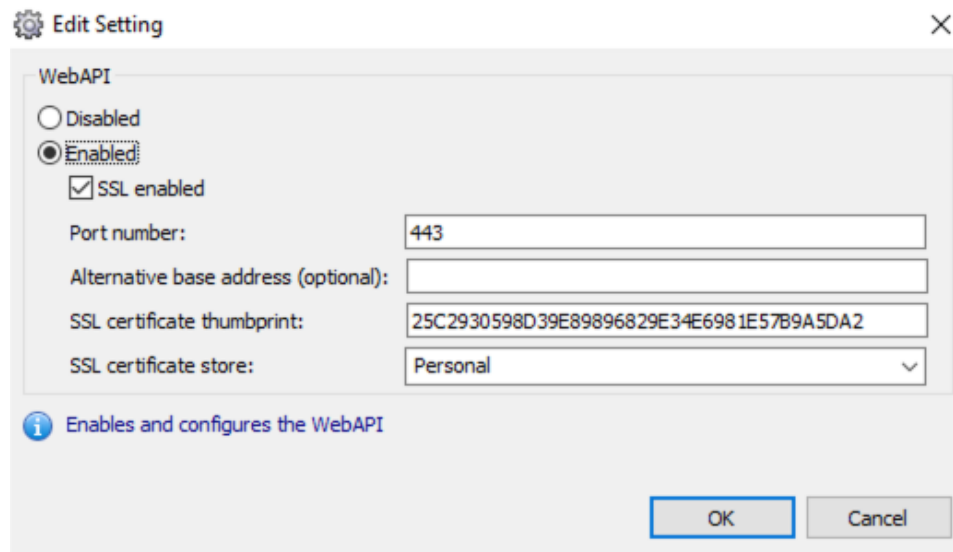
7f. Scroll to the thumbprint and copy that value.
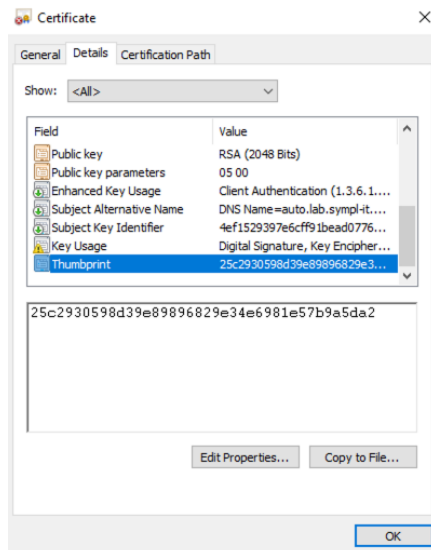
8. Return to the Ivanti Automation Console.

9. Enter the thumbprint and select the certificate store.

   The certificate stores listed are for the local machine and not the current user.

10. Click OK.

Add User for Neurons for Service Management

Neurons for Service Management requires a login for accessing the Ivanti Automation WebAPI. If you are not currently using logins, it is recommended that you create another login to serve as the administrator account. Repeat steps

1. Click Exit Setup Mode.
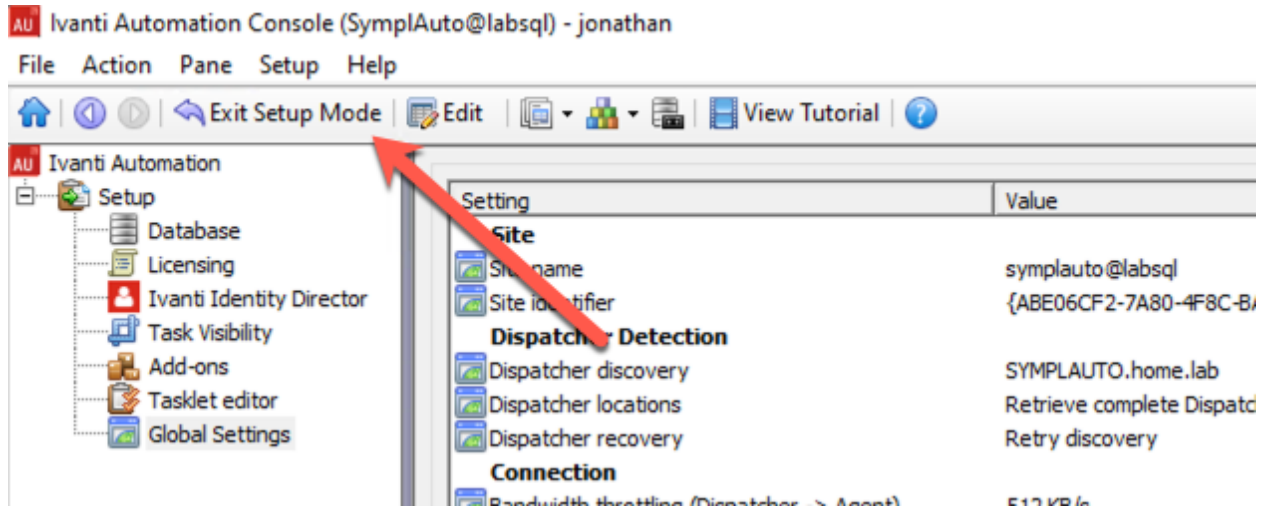
2. Navigate to Administration → Security
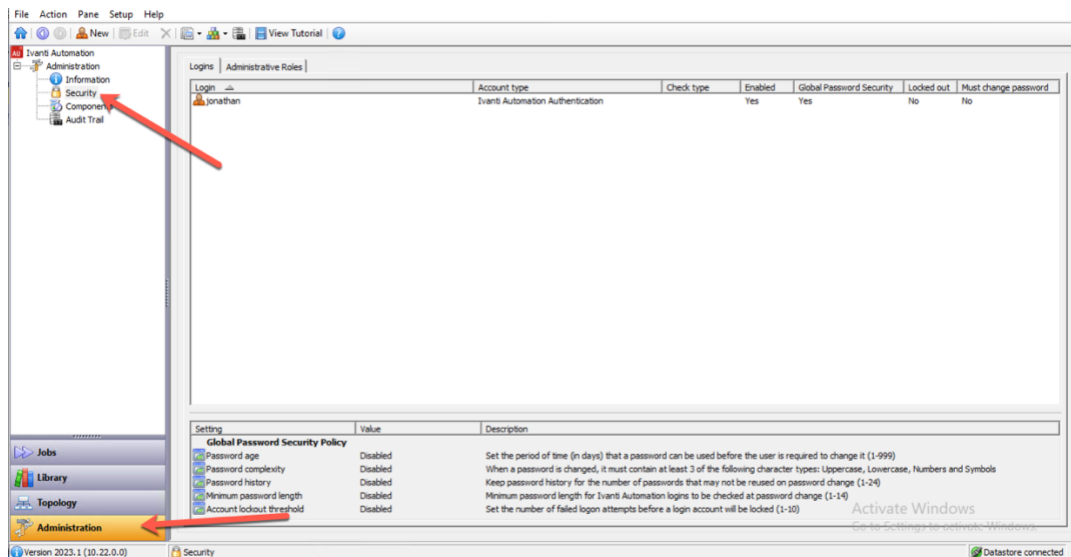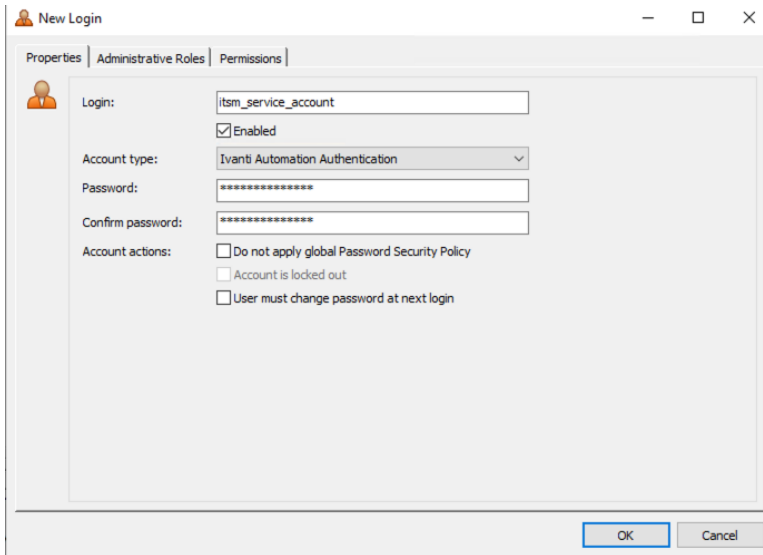
3. Right click on an empty area in the Logins section.
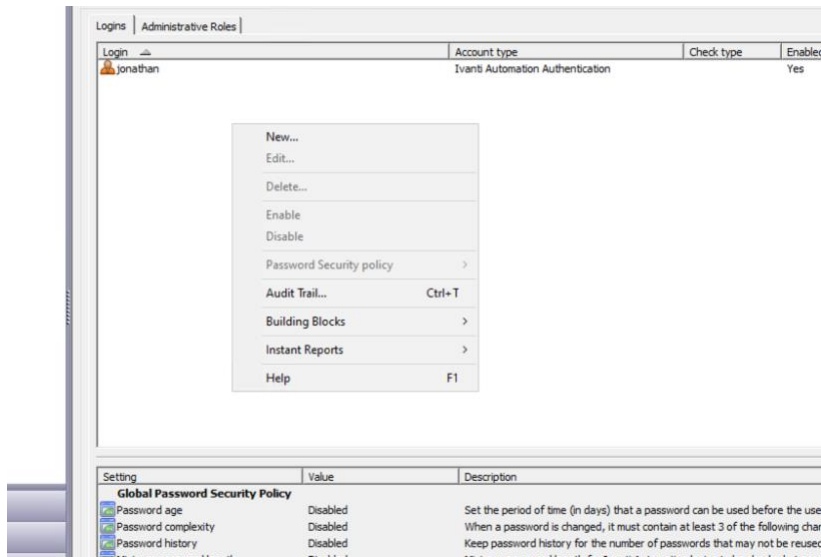
4. Select New
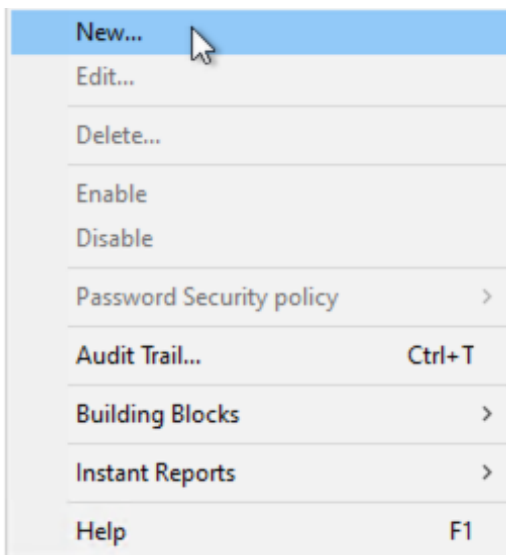
5. Enter a username for the account in the Login field, and a password in the Password field.

6. Switch to the Administrative Roles tab.

7. Click Add

8. Select the Administrative Role
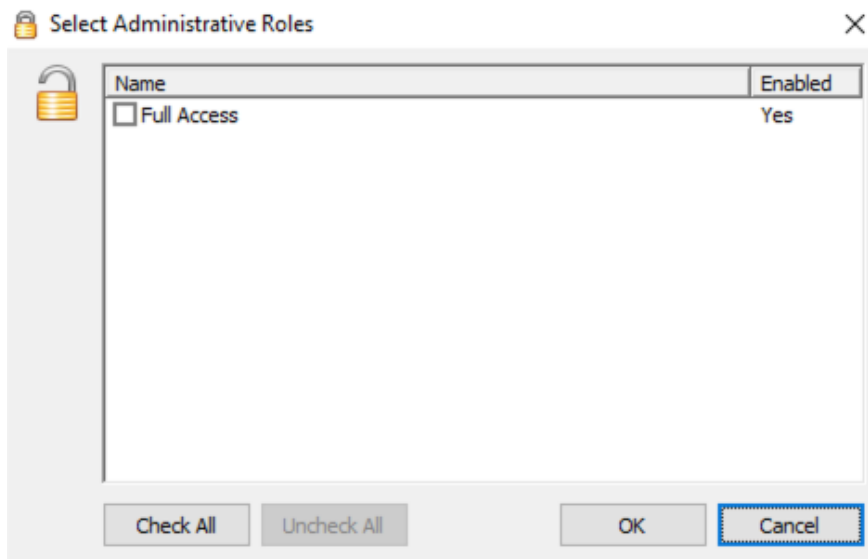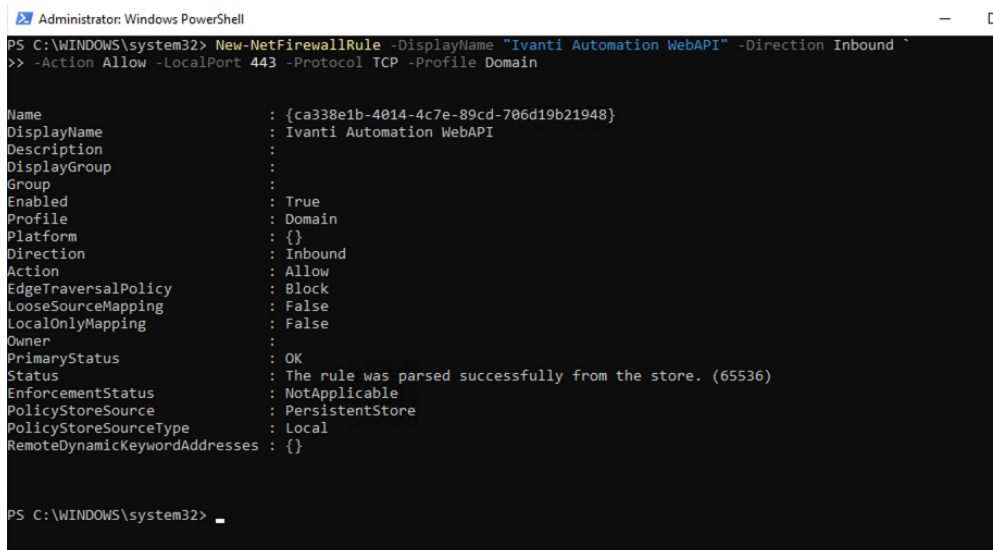
9. Click OK

10. Click OK

Open the WebAPI Port

Enabling the WebAPI for Ivanti Automation does not automatically open the port on the local machine's firewall, nor the corporate firewall. If using a cloud tenant of NSM, without a VPN, a port must be opened for the NSM tenant to establish a connection to Ivanti Automation.

1. Open PowerShell as an Administrator

2. Run the following command replacing {{port}} for the port enabled for the WebAPI.

```
New-NetFirewallRule -DisplayName "Ivanti Automation WebAPI" `
-Direction Inbound -Action Allow -LocalPort {{port}} -Protocol TCP `
-Profile Domain
```

Neurons for Service Management Ivanti Automation Configuration

Ivanty Neurons for Service Management must be configured with the URL and login to access Ivanti Automation. Follow the steps below to update the Ivanti Automation Configuration in NSM.

1. Log into Neurons for Service Management, as an Administrator.
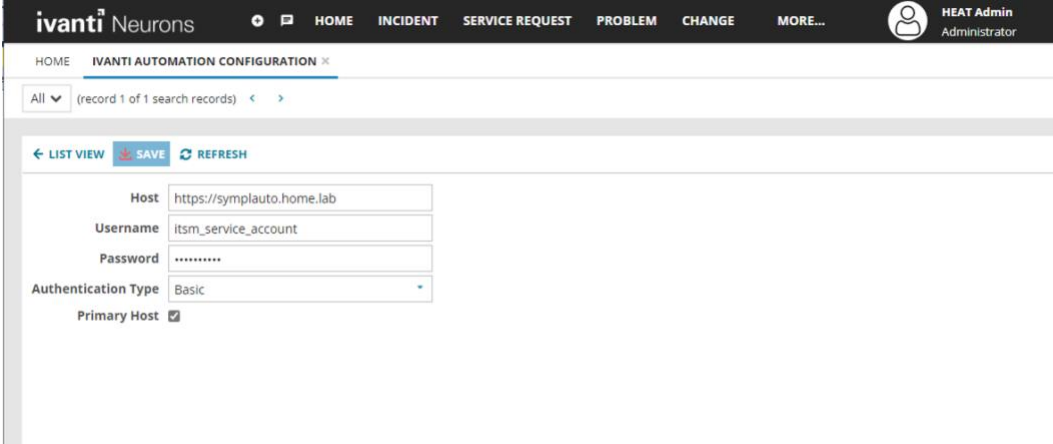
2. Click More on the header.
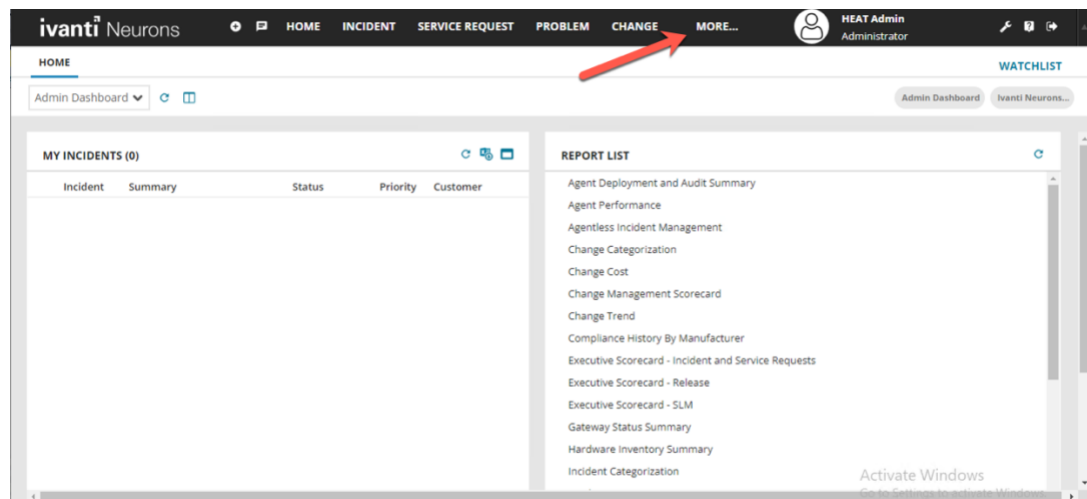
3. Click Ivanti Automation Configuration to open the workspace.
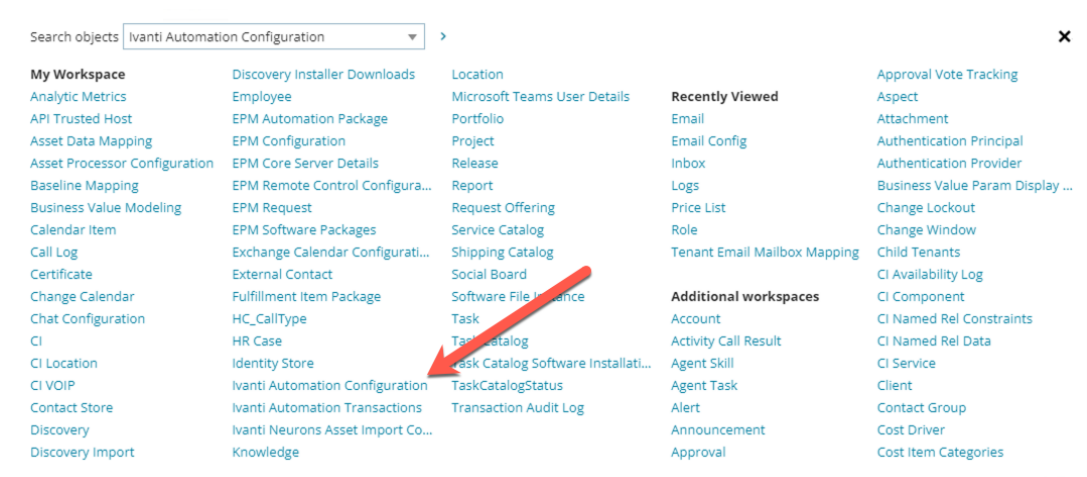
4. Enter the Host, Username, and Password. The Host field should contain http(s):\\Host and the username and password should match those created for this integration.

Creating the NSM Module

Neurons for Service Management is now configured to import run books from Ivanti Automation. Before we can import a run book, we will need a module that uses the *Update Record* task from the connector. This module will be used in run books to call the NSM API and update the Service Request with the results of the run book job.

1. Return to the Ivanti Automation Console.

2. Navigate to Library > Modules
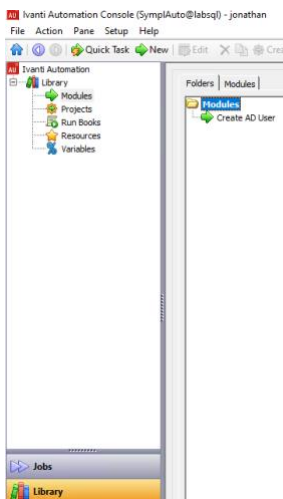
3. Right click an empty space in the modules component pane.
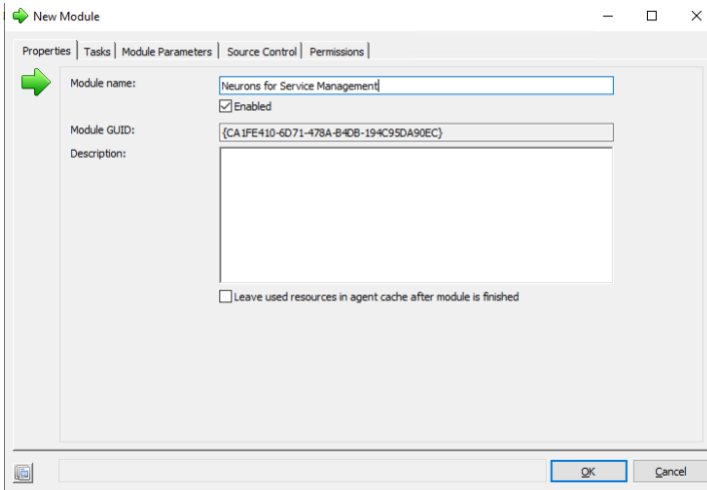
4. Click New…

5. Enter a name for the module. E.g. Neurons for Service Management
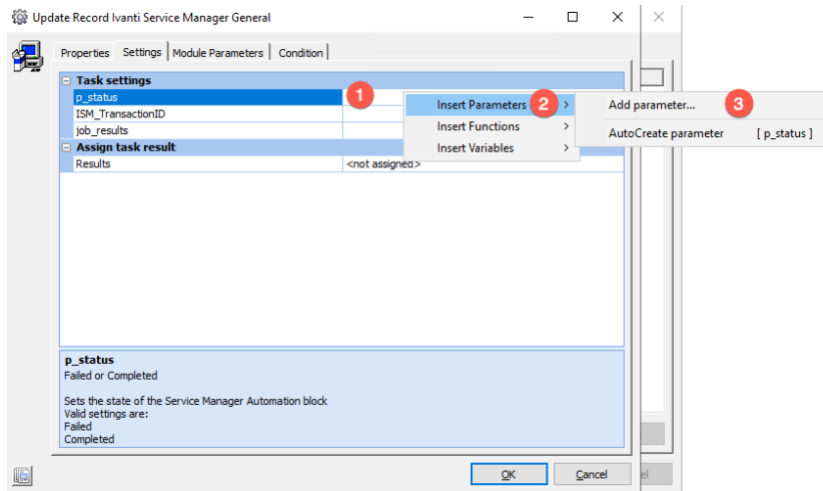

6. Click the Tasks tab.

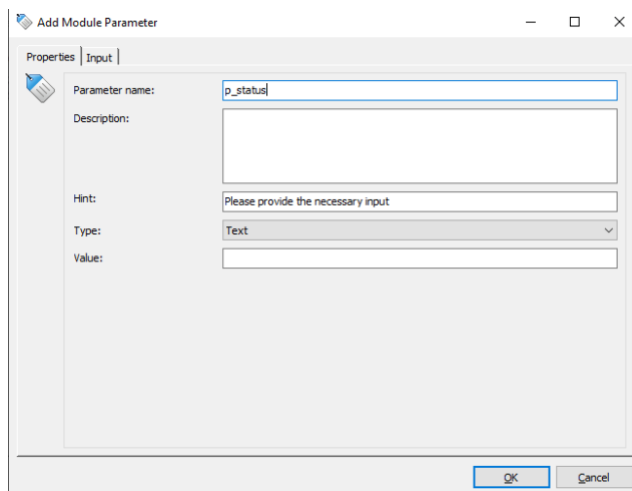7. Right click an empty space in the tasks pane.
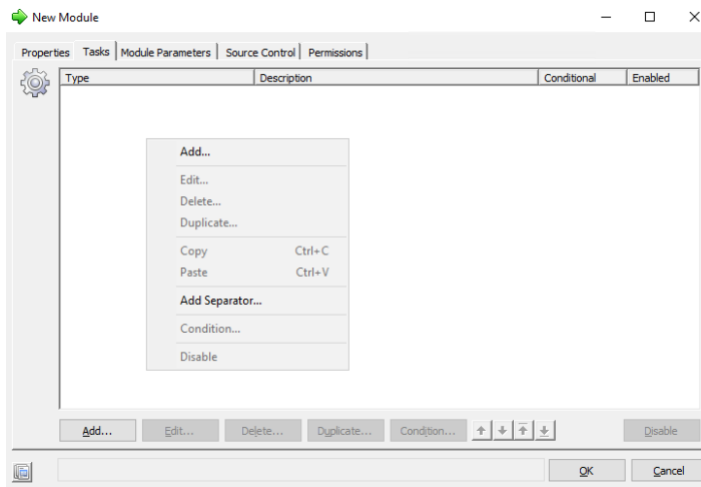
8. Click Add...

9. Expand Service Desk Integration and click the *Update Record* task of Ivanti Service Manager General.
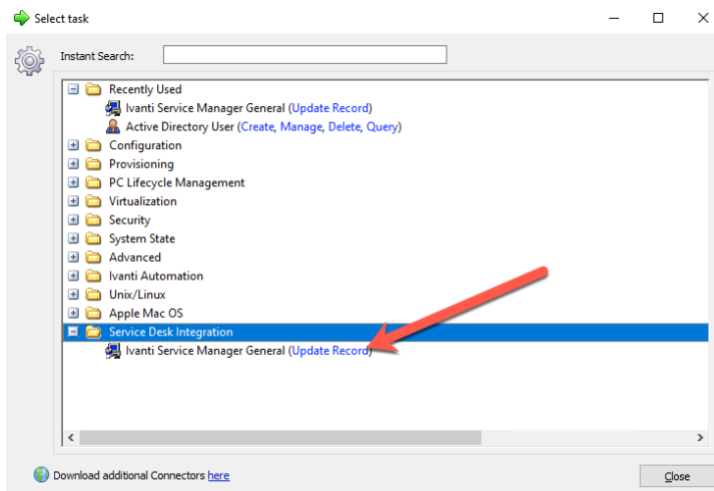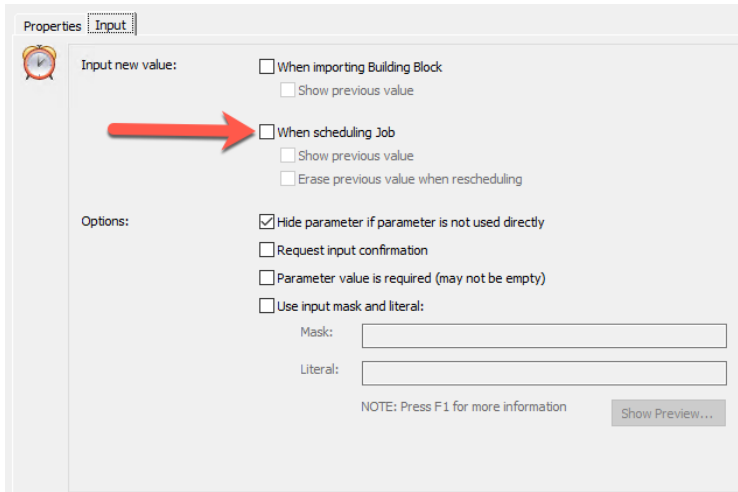
10. Right click the empty space for the p_status setting, expand Insert Parameters and click Add Parameter.

11. Enter p_status as the Parameter Name.

12. Switch to the Input tab and uncheck the *When scheduling job* checkbox.

13. Click OK.

14. Repeat steps 10 and 13, skipping step 12 for ISM_TransactionID, using ISM_TransactionID as the parameter name.

15. Repeat steps 10 through 13, including step 12, for job_results using job_results as the parameter name.

16. Optionally, create a parameter for Results.

   1. Left click the *<not assigned>* dropdown.

   2. Select Add Parameter.

   3. Enter Results as the parameter name

   4. Switch to the Input tab and uncheck the *When scheduling job* checkbox.

   5. Click OK.

17. Click OK.

18. Click OK.

Creating a Run Book for NSM

The following steps will illustrate how to create a run book that is called from Nuerons for Service Management using an existing module and the newly created Neurons for Service Management Module.

1. Navigate to Library > Run Books

2. Right click on an empty space in the Run Books pane.

3. Click New…
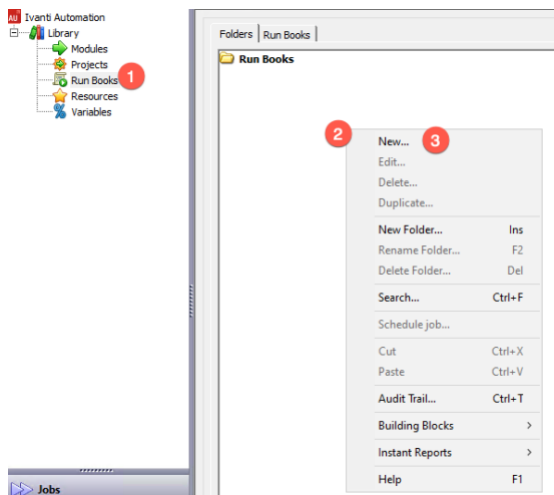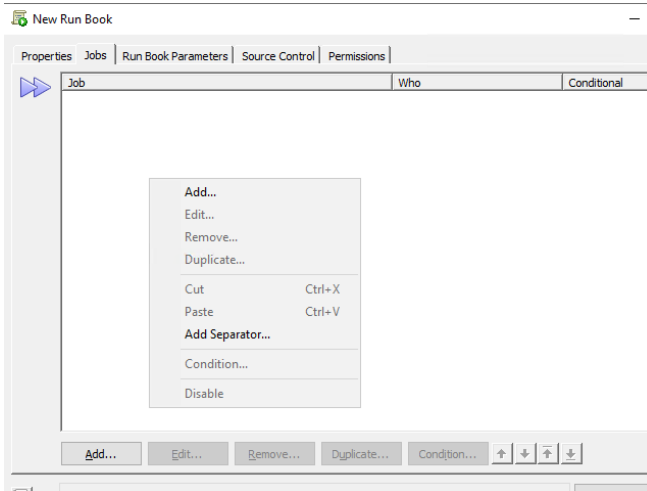
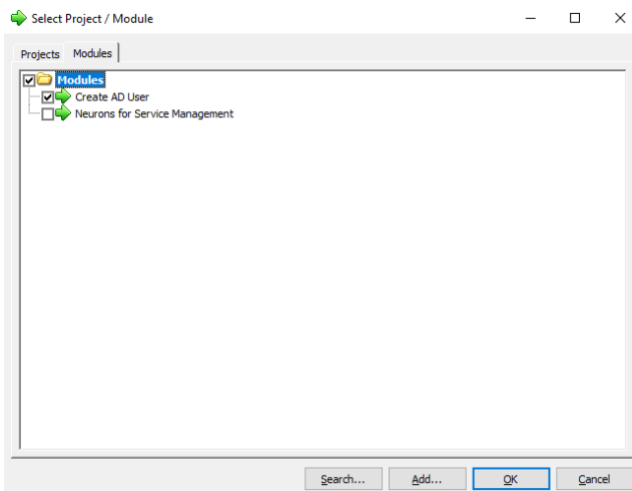4. Enter a name for the run book. E.g., NSM Create AD User
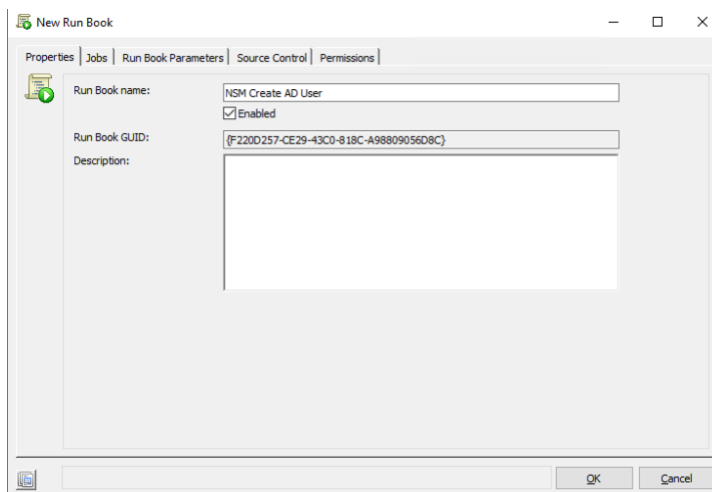
5. Switch to the Jobs tab.

6. Right click an empty space in the Jobs pane and click Add…, or click Add… on the bottom of the screen.

7. Left click the *What* field and select the module you want to include in this run book.

8. Click OK.

9. Left click the *Who* field and select the agent that should run the task. (You may have to click Search to see agents in the list.)
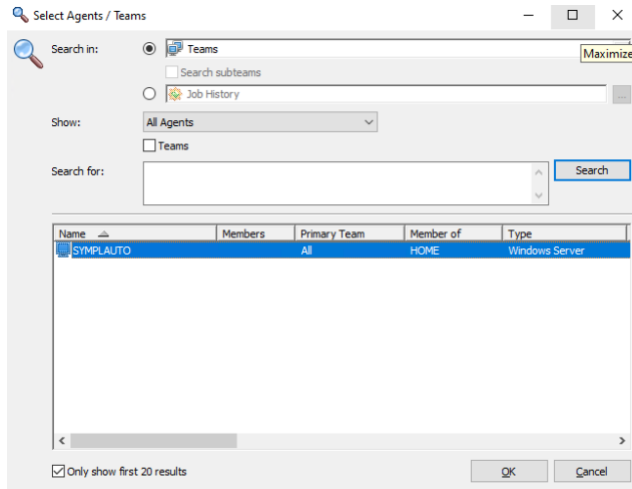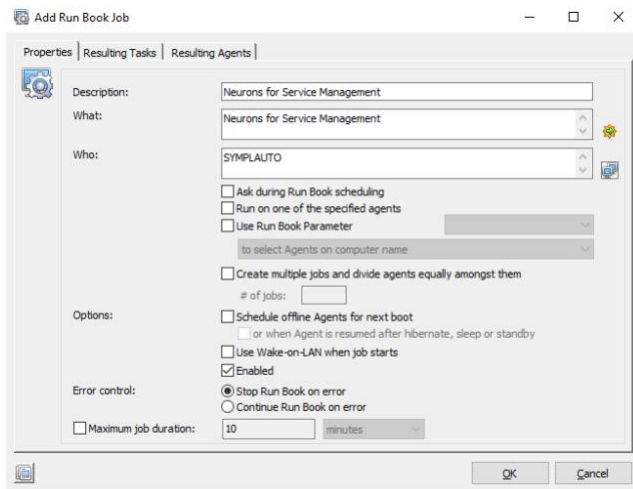

10. Click OK.

11. Optional, if using a Team of agents check the *Run on one of the specified agents* checkbox.

12. Change *Error control* to Continue Run Book on error.
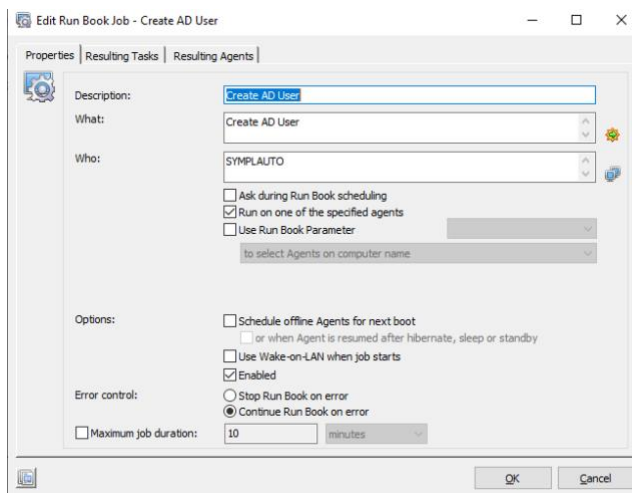
13. Click OK.

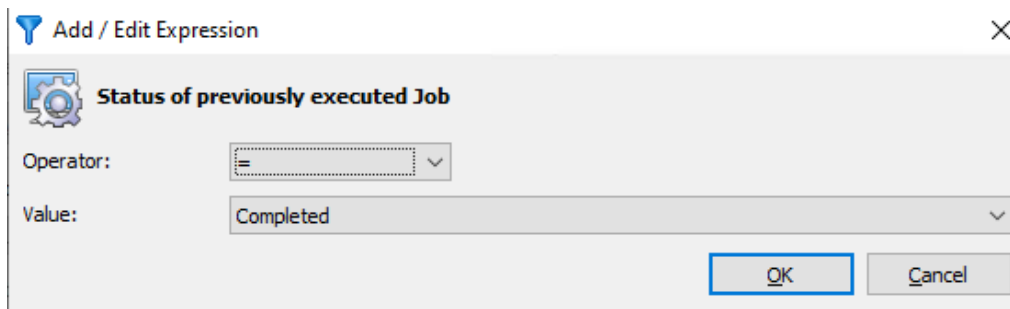14. Repeat steps 6 through 13 skipping step 12 and selecting the newly created Neurons for Service Management module for step 7.

15. Select the newly created job and click Condition.
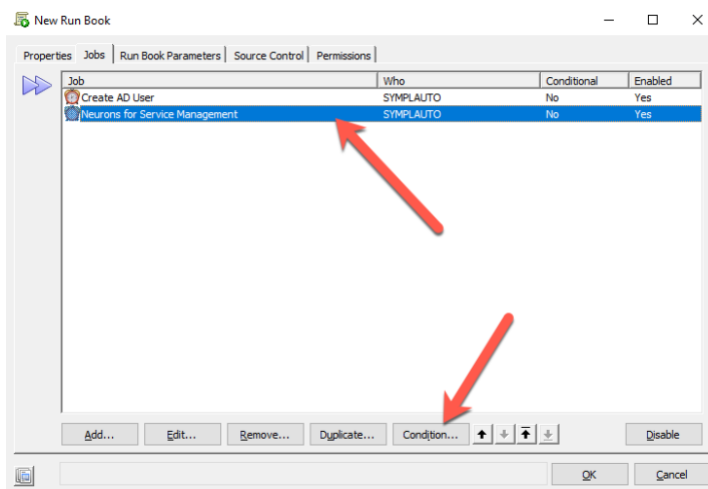
16. Right click in the expressions plane, expand Add…, and select *Status of previously executed job*.
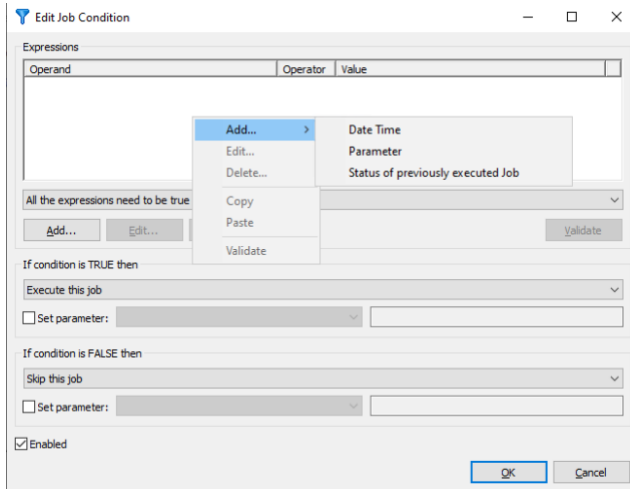
17. Leave the default settings and click OK.

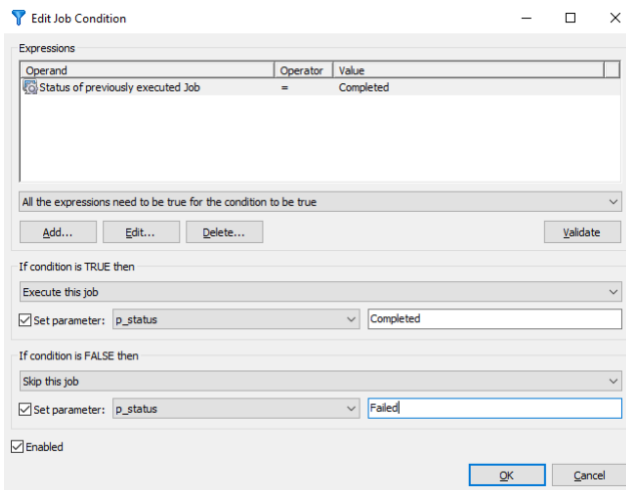18. In the true condition section check the Set Parameter and in the parameter dropdown select Add parameter.
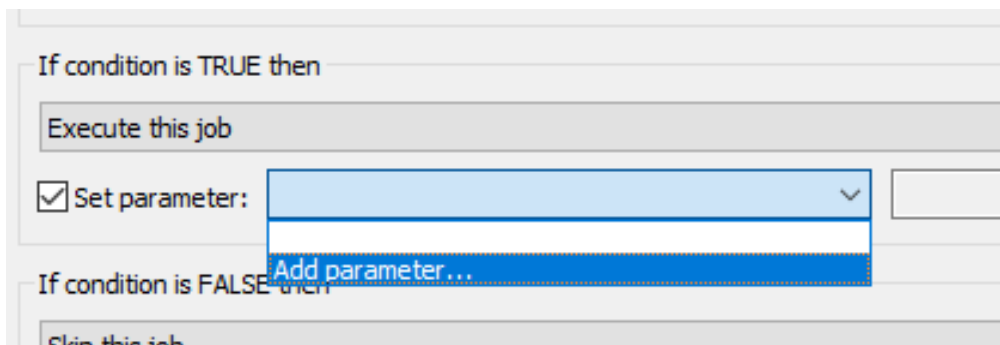
19. Enter p_status as the Parameter name.

20. Switch to the Input tab and uncheck the *When scheduling job* checkbox.

21. Click OK.

22. In the parameter value field enter "Completed". (This value will be case sensitive and must contain Completed.)

23. In the false condition section:

    1. Set the dropdown to Execute this Job.

    2. Check the set parameter box.

    3. Verify p_status is selected in the parameter dropdown.

    4. Enter "Failed" in the value field. (This value is case sensitive and must contain "Failed".)

24. Click OK.

25. Switch to the Run Book Parameters tab.

26. Click AutoCreate.

27. Select Yes to confirm auto linking.
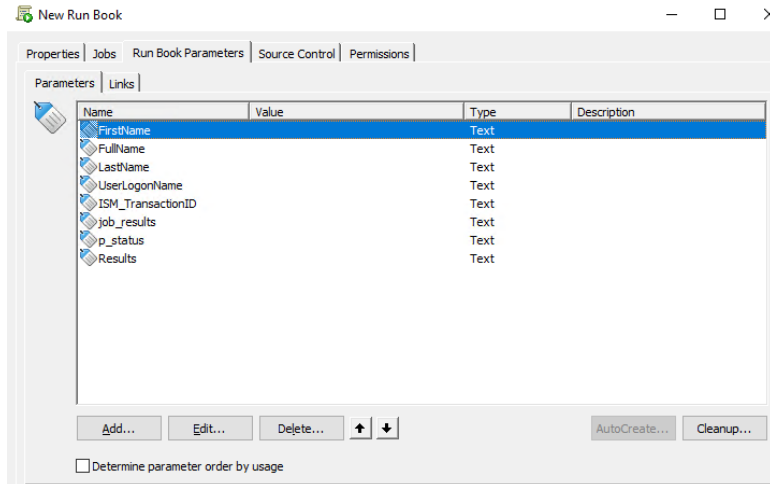
28. Click OK.

Import Runbook into NSM

Run books are imported in NSM using a Web Service Connection that calls the Ivanti Automation WebAPI.

1. Open Neurons for Service Management as an Administrator.

2. Open the Configuration console.
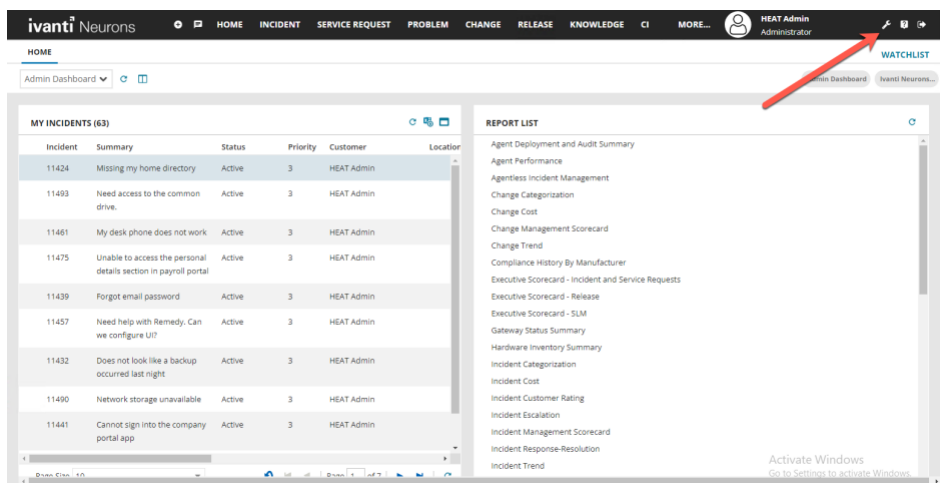
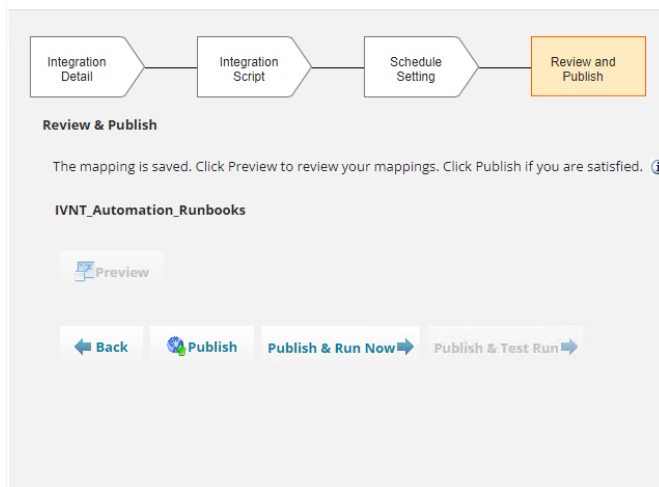3. Navigate to Integration Tools > Web Service Connections.
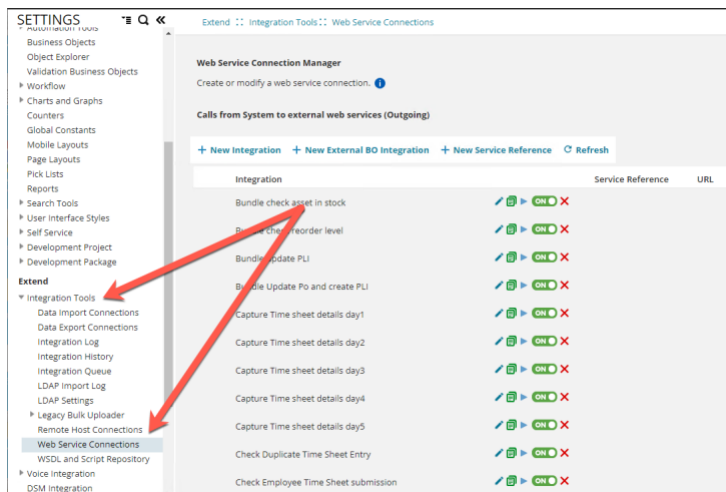
4. Locate and open the connection titled IVNT_Automation_Runbooks.
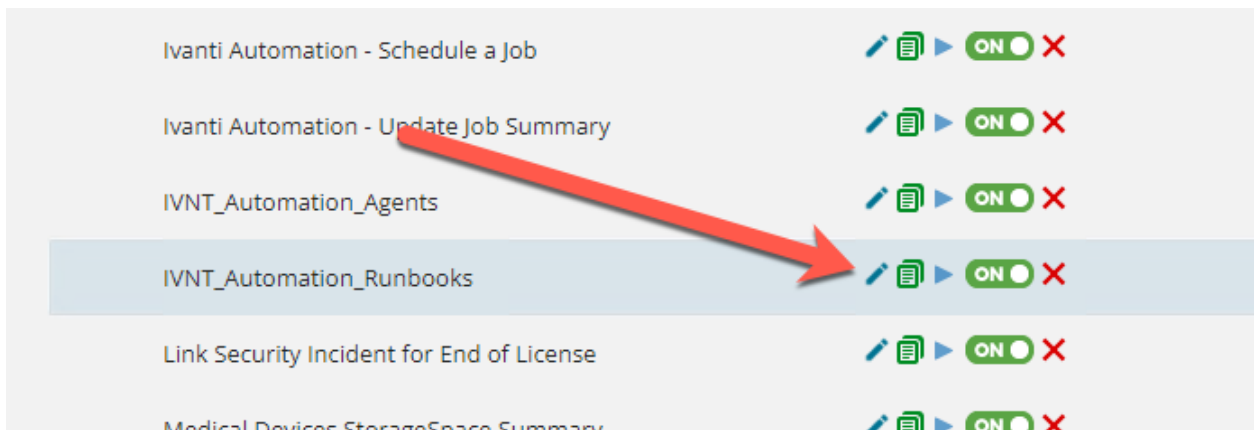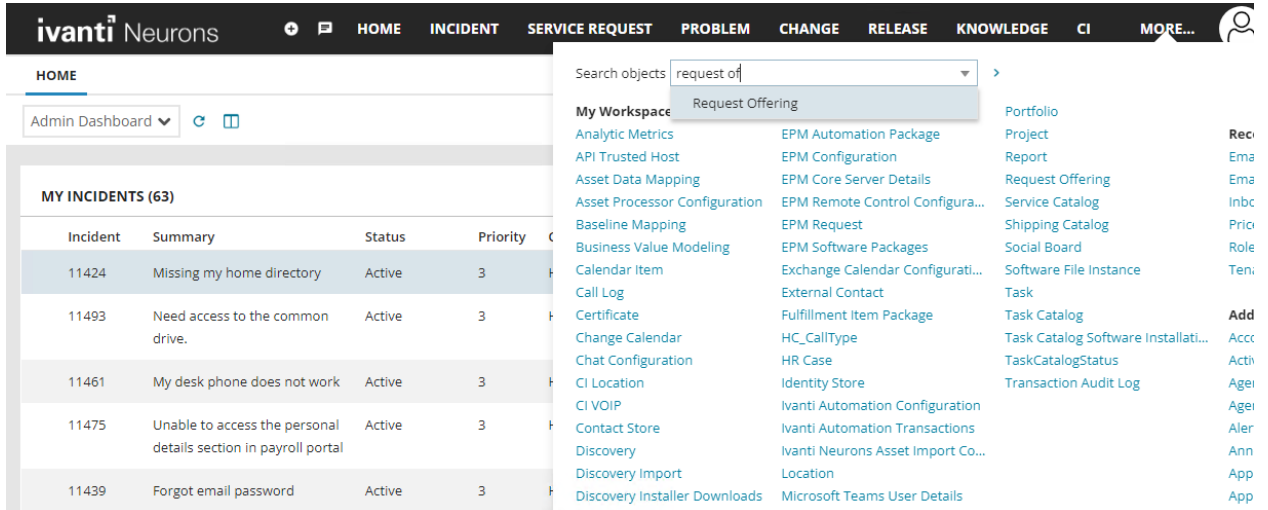
5. Click Next through the step until you get to Review and Publish, clicking yes when prompted to skip scheduling. (You may choose to schedule this connection, though it is out of scope for this document.)

6. Click Publish and Run Now.

Add a Run Book to a Request Offering

Ivanti Automation Run Books can be called from Neurons from Service Management as part of a request offering.
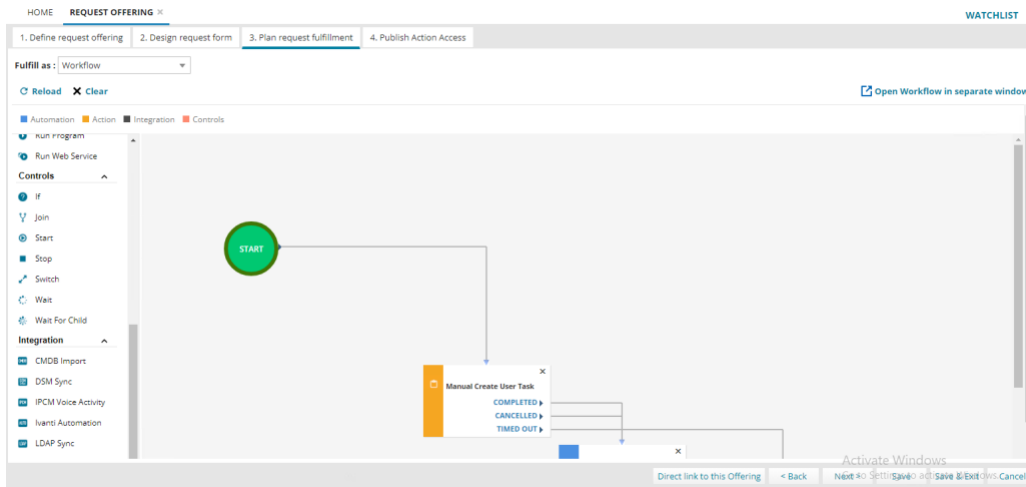
1. Open the Request Offering Workspace

2. Open the Request Offering you are adding the automation to and switch to the Plan request fulfillment tab.

3. From the Block selector scroll down to the Integration section.

4. Drag the Ivanti Automation block onto the workflow and link it into your workflow.
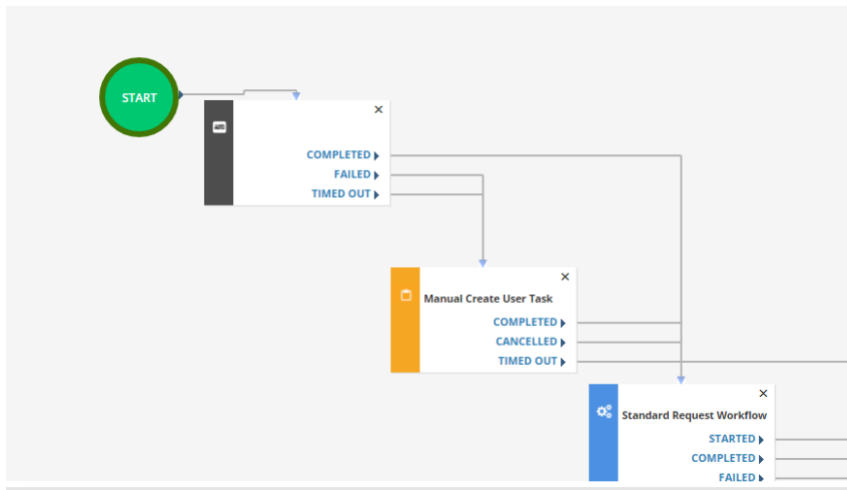
5. Double click on the automation block.

6. Provide a Title. E.g., Automation – Create AD User

7. Select your runbook from the dropdown.

8. Provide a Timeout Duration.
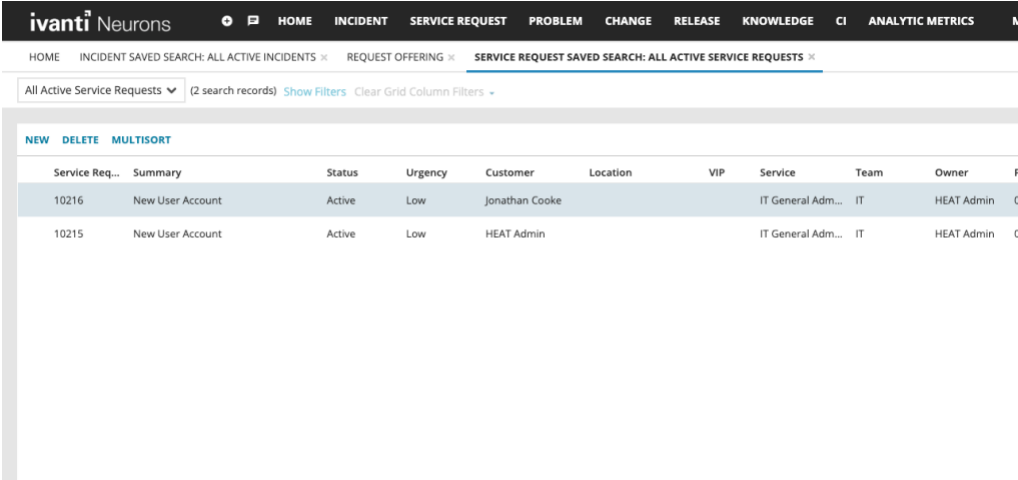
9. Map your fields to the runbook parameters. (Be sure to leave ISM_TransactionID blank.)

10. Save the workflow.

11. Save and exit the request offering.

12. Optional, test the request offering by submitting a service request.

    1. Open the Service Request Workspace.

    2. Click New.

    3. Fill in the request form.
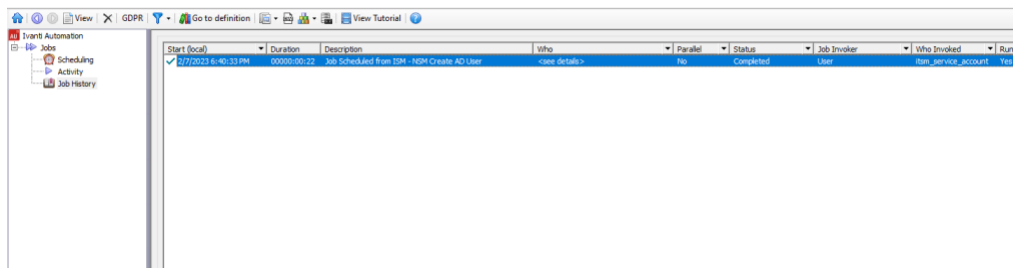
    4. Select an offering from the catalog.

    5. Fill in the required parameters.

6. Click Save.

7. Open the Ivanti Automation console.

8. Navigate to Jobs.

9. Validate that a job was created. (The job should be running or have run. Check Scheduling, Activity, and Job history for the job.)