
vCO ServiceNow Plug-in

User Manual

Interra Information
Technologies



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About This Book

The ServiceNow Plug-in Deployment Guide explains how to deploy the Service Now Plugin in VMware Orchestrator

Intended Audience

This information is intended for anyone who is installing and configuring the ServiceNow Plug-in, and using the workflow library, actions, and API classes. The information in this document is written for experienced users who are familiar with vCenter Orchestrator workflow development, and VMware vSphere. For more information about vCenter Orchestrator, see http://www.vmware.com/support/pubs/orchestrator_pubs.html. For more information about vCenter Server 5.0, see <http://www.vmware.com/support/pubs/vsphere-esxi-vcenter-server-pubs.html>.

Procuring Plug-in & Additional Support Services

For any queries and information on the process for receiving the plug-in and additional services, you may contact ServiceNow Plug-in Sales Support through email:

Email support: Sales_snplugin@interrait.com

Technical Support

For any technical queries, suggestions or more information, you may contact ServiceNow Plug-in Technical Support through email:

Email support: SupportSN@interrait.com

Introduction

Many users require IT operational and service management tasks to be tracked and handled through ServiceNow. A vCO ServiceNow plug-in can offer automation of the common business processes related to IT service management and allow customization of already automated processes.

This user manual explains basic know how of using Service Now Plug-in with vCO.

Components for vCO ServiceNow Plug-in

The vCO implements the following components of the Service Now Plug-in

- a. Incident management,
- b. Problem management,
- c. Task management,
- d. Change management

Once the plug-in will expose the Service Now APIs for Incident management, Problem management, Task management and Change Management, the users can use the Service Now API functionalities in automated way using vCO workflows.

1. Incident Management

The Service-Now platform supports the Incident Management process. Few of the features related to incident management may be automated through vCO by providing following set of operations-

Possible Operations:

- a. Insert Incident: This enables the automatic creation of incidents
- b. Update Incidents:
 1. Resolve Incident: vCO checks for any resolved incident and updates its status to "Resolved"
 2. Update Incident by adding comments.
 3. Update Incident- Add Watch List: Add self or user or an email to Watch list
 4. Update Incident- Add Workflow Notes: Append incident to facilitate communication and serve as updates between the concerned parties
 5. Update Incident by editing its short description
- c. Retrieve Incident: Allow escalating and managing the incidents
- d. Delete Incident: Delete existing Incident

Monitoring ServiceNow for Events in Incident Management

Monitoring the incidents logged in ServiceNow by periodically checking for changes in ServiceNow, where the polling time will be configurable and propagating the events as vCO events. This will allow vCO workflows to be executed using the information from the events.

Execution of workflows under Incident Management

1.1 Insert Incident:

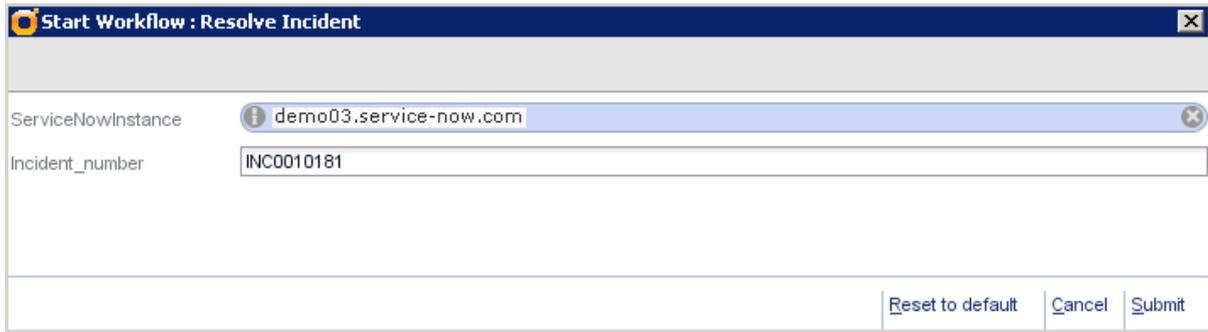
- a. Right Click on Insert Incident and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)

Start Workflow : Insert Incident	
ServiceNowInstance	demo03.service-now.com
AssignedTo	Test@mycompany.com
CallerId	Test
Description	Test
ShortDescription	Test
<input type="button" value="Reset to default"/> <input type="button" value="Cancel"/> <input type="button" value="Submit"/>	

Incident 1

1.2 Resolve Incident:

- a. Right Click on Resolve Incident and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Incident Number



Start Workflow : Resolve Incident

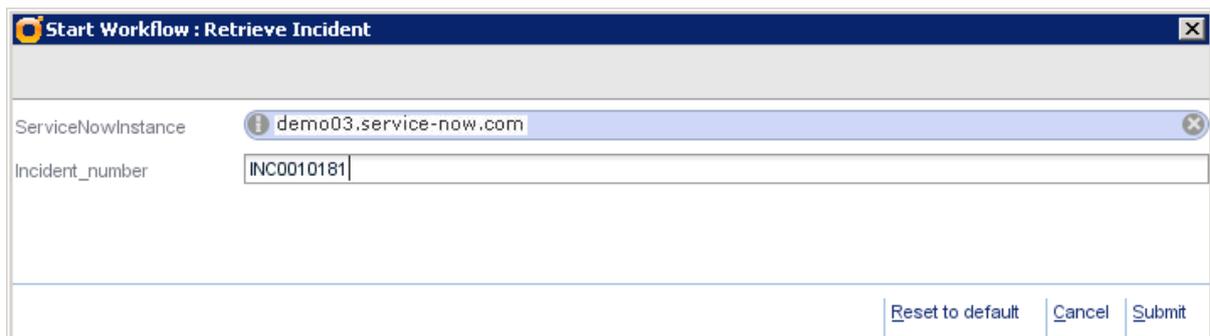
ServiceNowInstance demo03.service-now.com

Incident_number INC0010181

Reset to default Cancel Submit

Incident 2**1.3 Retrieve Incident:**

- a. Right Click on Retrieve Incident and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Incident Number



Start Workflow : Retrieve Incident

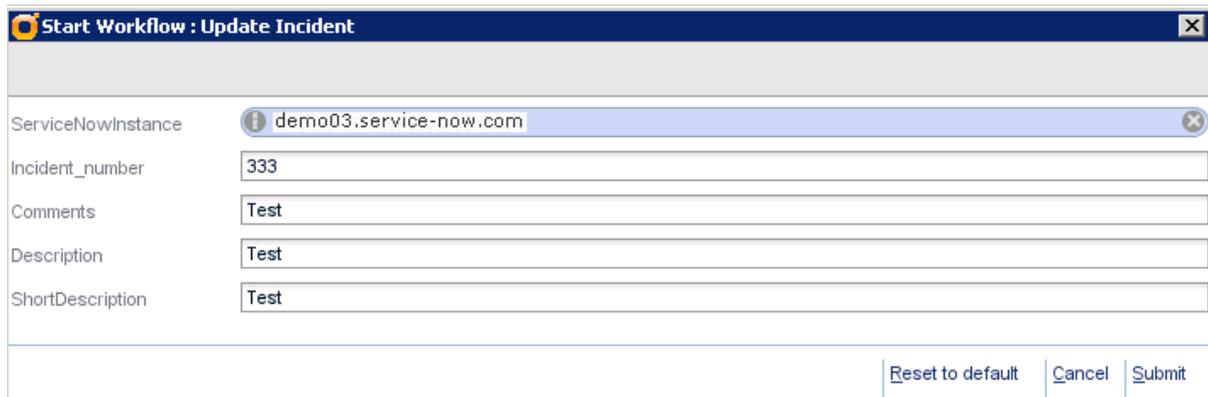
ServiceNowInstance demo03.service-now.com

Incident_number INC0010181

Reset to default Cancel Submit

Incident 3**1.4 Update incident:**

- a. Right Click on Update Incident and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)



The screenshot shows a dialog box titled "Start Workflow : Update Incident". It contains the following fields:

- ServiceNowInstance: demo03.service-now.com
- Incident_number: 333
- Comments: Test
- Description: Test
- ShortDescription: Test

At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Incident 4

1.5 Update Incident Add Comments:

- Right Click on Update Incident Add Comments and select Start Workflow
- Input the parameters as requested(Please refer screenshot for the same)
- Specify the ServiceNow Instance
- Mention Incident Number
- Write a comment



The screenshot shows a dialog box titled "Start Workflow : Update Incident Add Comments". It contains the following fields:

- Service Now Instance: demo03.service-now.com
- Incident_number: INC0010181
- Comments: Test

At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Incident 5

1.6 Update Incident Add Watch List:

- Right Click on Update Incident Add Watch List and select Start Workflow
- Input the parameters as requested(Please refer screenshot for the same)
- Specify the ServiceNow Instance
- Mention Incident Number
- Add a watch list

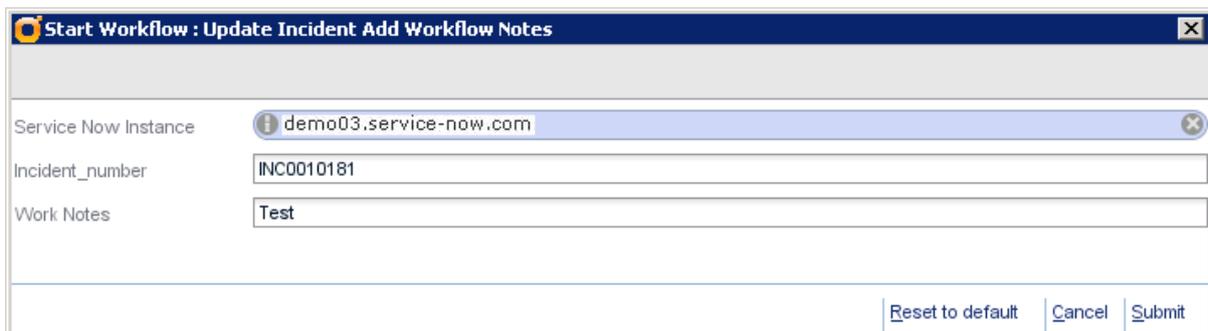


The screenshot shows a dialog box titled "Start Workflow : Update Incident Add Watch List". It contains three input fields: "Service Now Instance" with the value "demo03.service-now.com", "Incident_number" with the value "INC0010181", and "Watch List" with the value "Test". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Incident 6

1.7 Update Incident Add Workflow Notes:

- Right Click on Update Incident Add workflow Notes and select Start Workflow
- Input the parameters (as depicted in the screenshot)
- Specify the ServiceNow Instance
- Mention Incident Number
- Add Work Notes



The screenshot shows a dialog box titled "Start Workflow : Update Incident Add Workflow Notes". It contains three input fields: "Service Now Instance" with the value "demo03.service-now.com", "Incident_number" with the value "INC0010181", and "Work Notes" with the value "Test". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Incident 7

1.8 Update Incident Short Description:

- Right Click on Update Incident Short Description and select Start Workflow
- Input the parameters as requested(Please refer screenshot for the same)
- Select the ServiceNow Instance
- Mention Incident Number
- Add a Short description

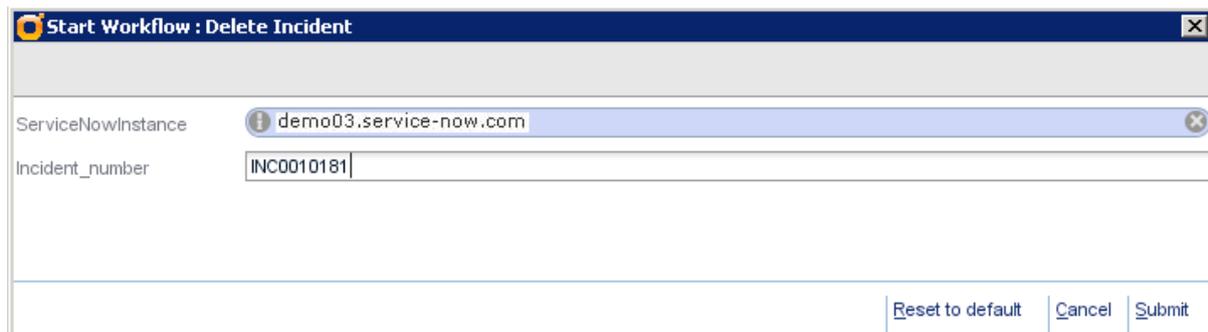


The screenshot shows a dialog box titled "Start Workflow : Update Incident Short Desc". It contains three input fields: "Service Now Instance" with the value "demo03.service-now.com", "Incident_number" with the value "INC0010181", and "ShortDescription" with the value "Test". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Incident 8

1.9 Delete Incident:

- a. Right Click on Delete Incident and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Incident Number



The screenshot shows a dialog box titled "Start Workflow : Delete Incident". It contains two input fields: "ServiceNowInstance" with the value "demo03.service-now.com" and "Incident_number" with the value "INC0010181". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Incident 9

2. Change Management

Service-Now helps implement your Change Management process by providing on-demand capabilities for creating, assessing, approving and implementing changes to your environment.

Possible Operations:

- a. Insert a new change: Enabling the automatic creation of incidents
- b. Allow assigning of change to appropriate groups and or users
- c. Updating change:
- d. Retrieve Change: Allow escalating and managing the change
- e. Delete Change: Delete existing Change

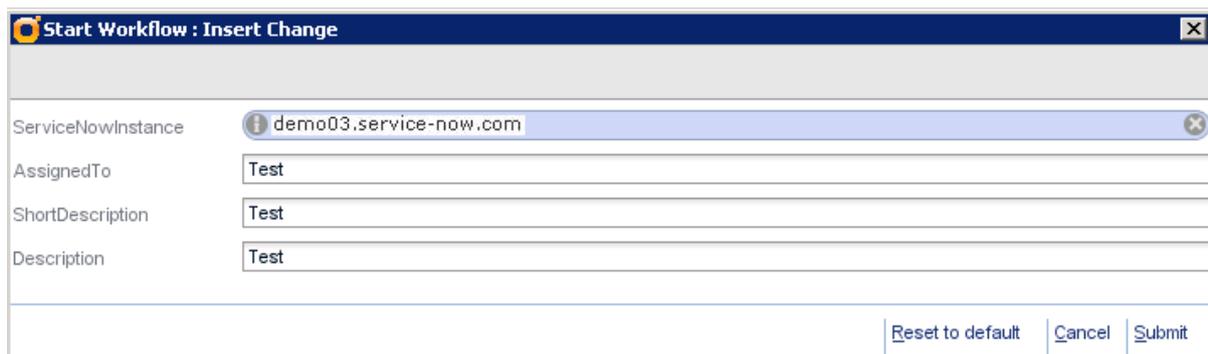
Monitoring ServiceNow for Events in Change Management

Monitoring the change requests logged in ServiceNow by periodically checking for changes in ServiceNow, where the polling time will be configurable and propagating the events as vCO events. This will allow vCO workflows to be executed using the information from the events.

Execution of workflows under Change Management

2.1 Insert Change:

- a. Right Click on Insert Change and select Start Workflow.
- b. Input the parameters as requested(Please refer screenshot for the same)



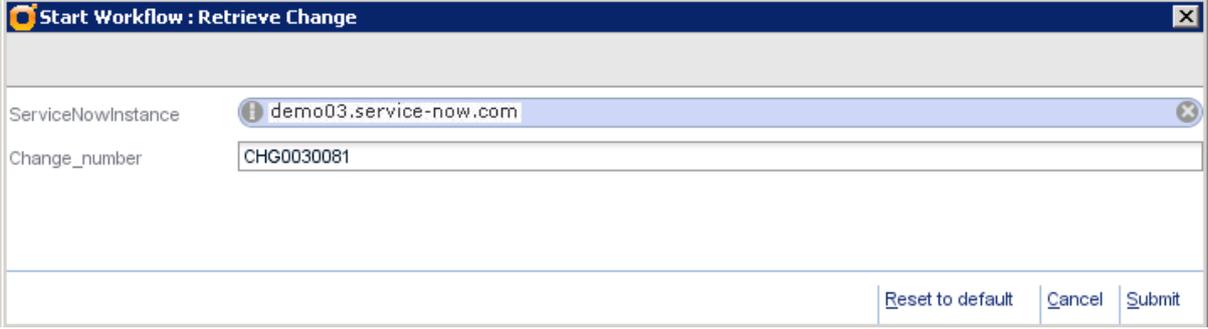
Start Workflow : Insert Change	
ServiceNowInstance	demo03.service-now.com
AssignedTo	Test
ShortDescription	Test
Description	Test
Reset to default Cancel Submit	

Change 1

2.2 Retrieve Change:

- a. Right Click on Retrieve Change and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance

- d. Mention Change Number

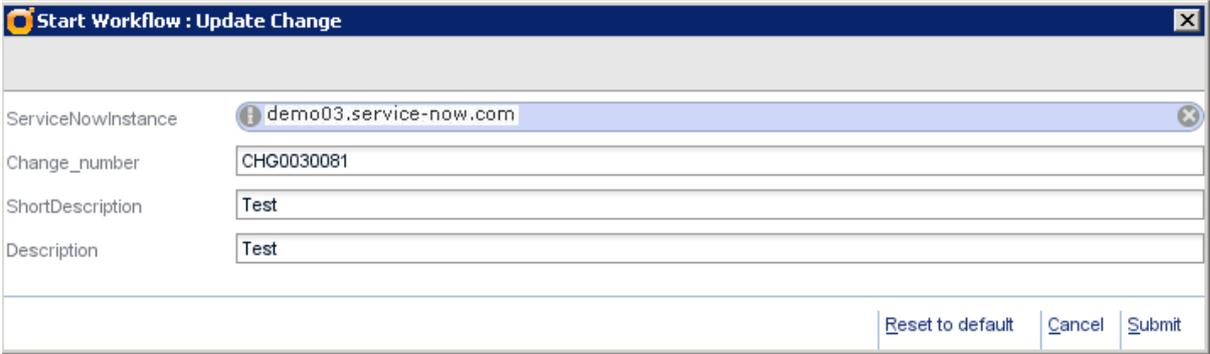


The screenshot shows a dialog box titled "Start Workflow : Retrieve Change". It contains two input fields: "ServiceNowInstance" with the value "demo03.service-now.com" and "Change_number" with the value "CHG0030081". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Change 2

2.3 Update Change:

- a. Right Click on Update Change and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Change Number
- e. Add a Short description
- f. Add a Description



The screenshot shows a dialog box titled "Start Workflow : Update Change". It contains four input fields: "ServiceNowInstance" with the value "demo03.service-now.com", "Change_number" with the value "CHG0030081", "ShortDescription" with the value "Test", and "Description" with the value "Test". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Change 3

2.4 Delete Change:

- a. Right Click on Delete Change and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the Service Now Instance
- d. Mention Change Number

The screenshot shows a dialog box titled "Start Workflow : Delete Change". It has a dark blue header with a close button (X) on the right. Below the header, there are two input fields. The first is labeled "ServiceNowInstance" and contains the text "demo03.service-now.com". The second is labeled "Change_number" and contains the text "CHG0030081". At the bottom right of the dialog, there are three buttons: "Reset to default", "Cancel", and "Submit".

Change 4

3. Problem Management

Problem Management helps to identify the cause of an error in the IT infrastructure reported as occurrences of related incidents. The ServiceNow platform supports the Problem Management process with capabilities to record problems, create knowledge from problems, request changes, assign to appropriate groups, escalate, and manage through to resolution and reporting.

Possible Operations:

- a. Insert a new Problem: Enabling the automatic creation of incidents
- b. Allow assigning of problem to appropriate groups and or users
- c. Updating Problem:
- d. Retrieve Problem: Allow escalating and managing the problem
- e. Delete Problem: Delete existing Problem

Monitoring ServiceNow for Events in Problem Management

Monitoring the problems logged in ServiceNow by periodically polling for changes in ServiceNow, where the polling time will be configurable and propagating the events as vCO events. This will allow vCO workflows to be executed using the information from the events.

Execution of workflows under Problem Management

3.1 Insert Problem:

- a. Right Click on Insert Problem and select Start Workflow.
- b. Input the parameters as requested(Please refer screenshot for the same)

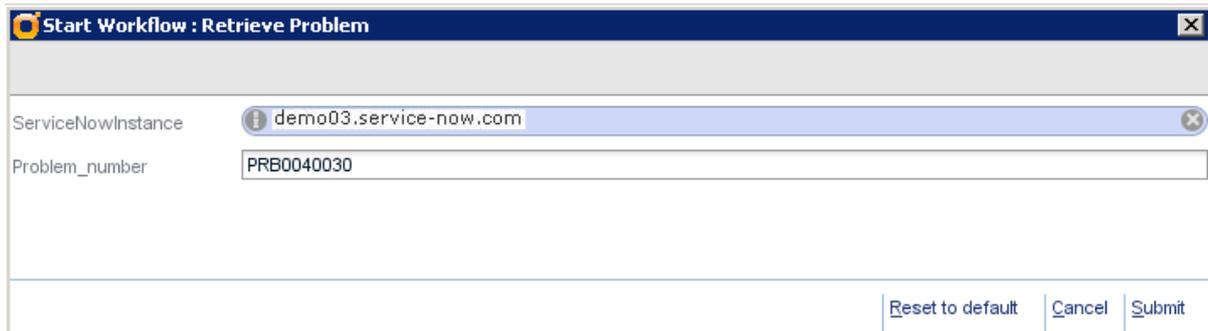


Start Workflow : Insert Problem	
ServiceNowInstance	demo03.service-now.com
AssignedTo	Test
ShortDescription	Test
Description	Test
State	1.0
Reset to default Cancel Submit	

Problem 1

3.2 Retrieve Problem:

- a. Right Click on Retrieve Problem and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Problem Number

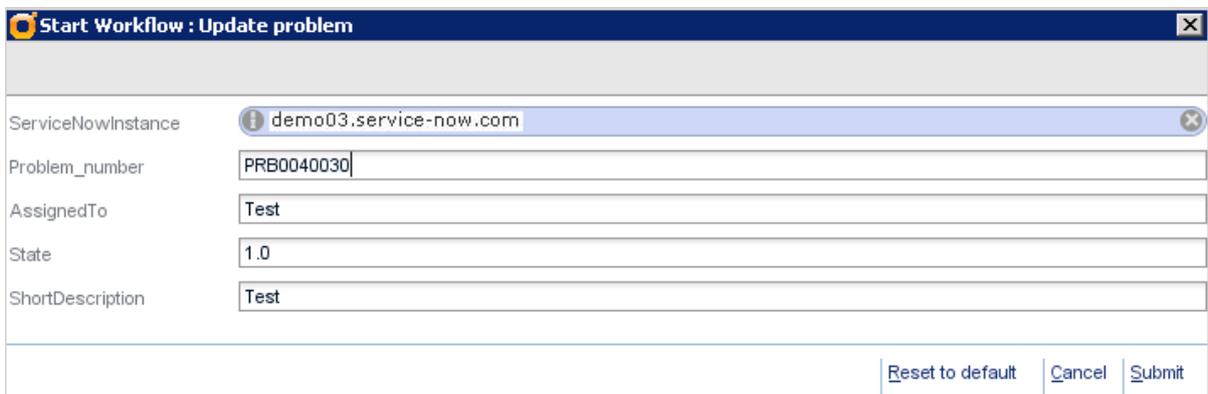


ServiceNowInstance	demo03.service-now.com
Problem_number	PRB0040030

Reset to default Cancel Submit

Problem 2**3.3 Update Problem:**

- a. Right Click on Update Problem and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)



ServiceNowInstance	demo03.service-now.com
Problem_number	PRB0040030
AssignedTo	Test
State	1.0
ShortDescription	Test

Reset to default Cancel Submit

Problem 3**3.4 Delete Problem:**

- a. Right Click on Delete Problem and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Problem Number

Start Workflow : Delete Problem

ServiceNowInstance demo03.service-now.com

Problem_number PRB0040030

Reset to default Cancel Submit

Problem 4

4. Task Management

Task Management is about harmonizing the processes creating tasks. Tasks are basic units of repeatable IT activities. High frequency, repeatable and consistent activities are candidates for automation via vCO.

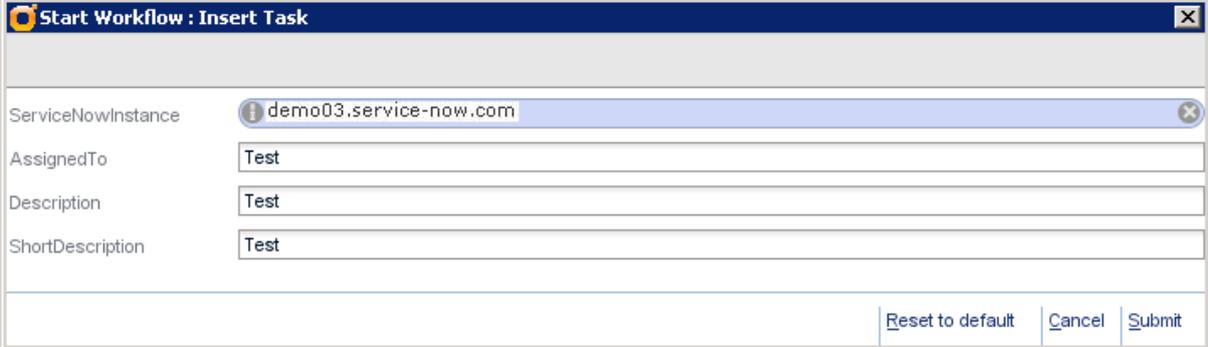
Possible Operations:

- a. Insert a new Task: Enabling the automatic creation of incidents
- b. Allow assigning of task to appropriate groups and or users
- c. Updating Task:
- d. Retrieve Task: Allow escalating and managing the incidents
- e. Delete Task: Delete existing Incident

Execution of workflows under Task Management

4.1 Insert Task:

- a. Right Click on Insert Task and select Start Workflow.
- b. Input the parameters as requested(Please refer screenshot for the same)

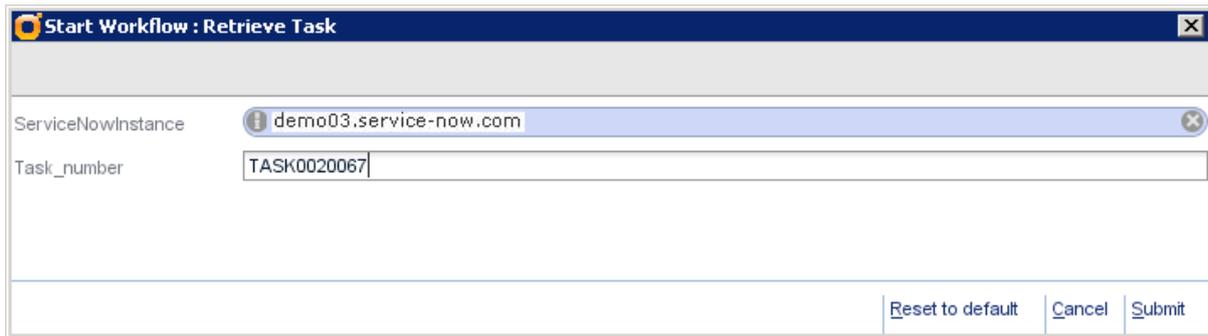


Start Workflow : Insert Task	
ServiceNowInstance	demo03.service-now.com
AssignedTo	Test
Description	Test
ShortDescription	Test
<input type="button" value="Reset to default"/> <input type="button" value="Cancel"/> <input type="button" value="Submit"/>	

Task 1

4.2 Retrieve Task:

- a. Right Click on Retrieve Task and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Task Number

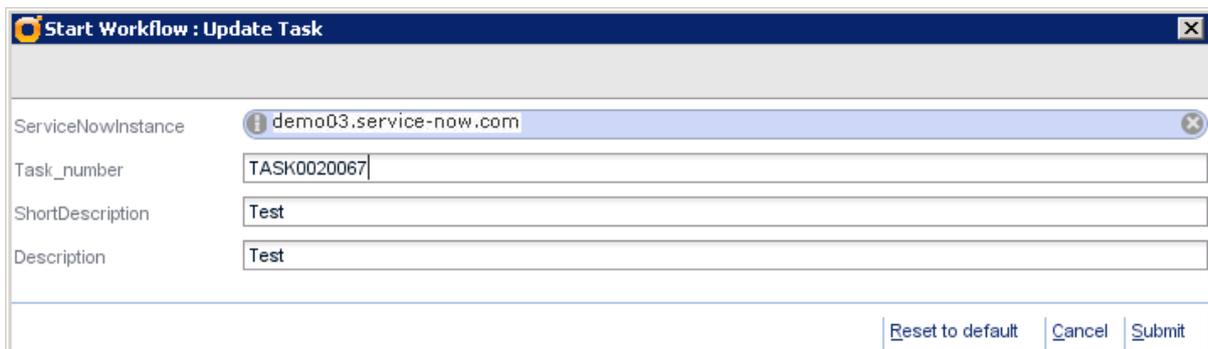


The screenshot shows a dialog box titled "Start Workflow : Retrieve Task". It contains two input fields: "ServiceNowInstance" with the value "demo03.service-now.com" and "Task_number" with the value "TASK0020067". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Task 2

4.3 Update Task:

- a. Right Click on Update Task and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Task Number
- e. Add a Short Description
- f. Add a Description



The screenshot shows a dialog box titled "Start Workflow : Update Task". It contains four input fields: "ServiceNowInstance" with the value "demo03.service-now.com", "Task_number" with the value "TASK0020067", "ShortDescription" with the value "Test", and "Description" with the value "Test". At the bottom right, there are three buttons: "Reset to default", "Cancel", and "Submit".

Task 3

4.4 Delete Task:

- a. Right Click on Delete Task and select Start Workflow
- b. Input the parameters as requested(Please refer screenshot for the same)
- c. Specify the ServiceNow Instance
- d. Mention Task Number

The screenshot shows a dialog box titled "Start Workflow : Delete Task". It has a dark blue header bar with a close button (X) on the right. Below the header, there are two input fields. The first is labeled "ServiceNowInstance" and contains the text "demo03.service-now.com". The second is labeled "Task_number" and contains the text "TASK0020067". At the bottom right of the dialog, there are three buttons: "Reset to default", "Cancel", and "Submit".

Task 4

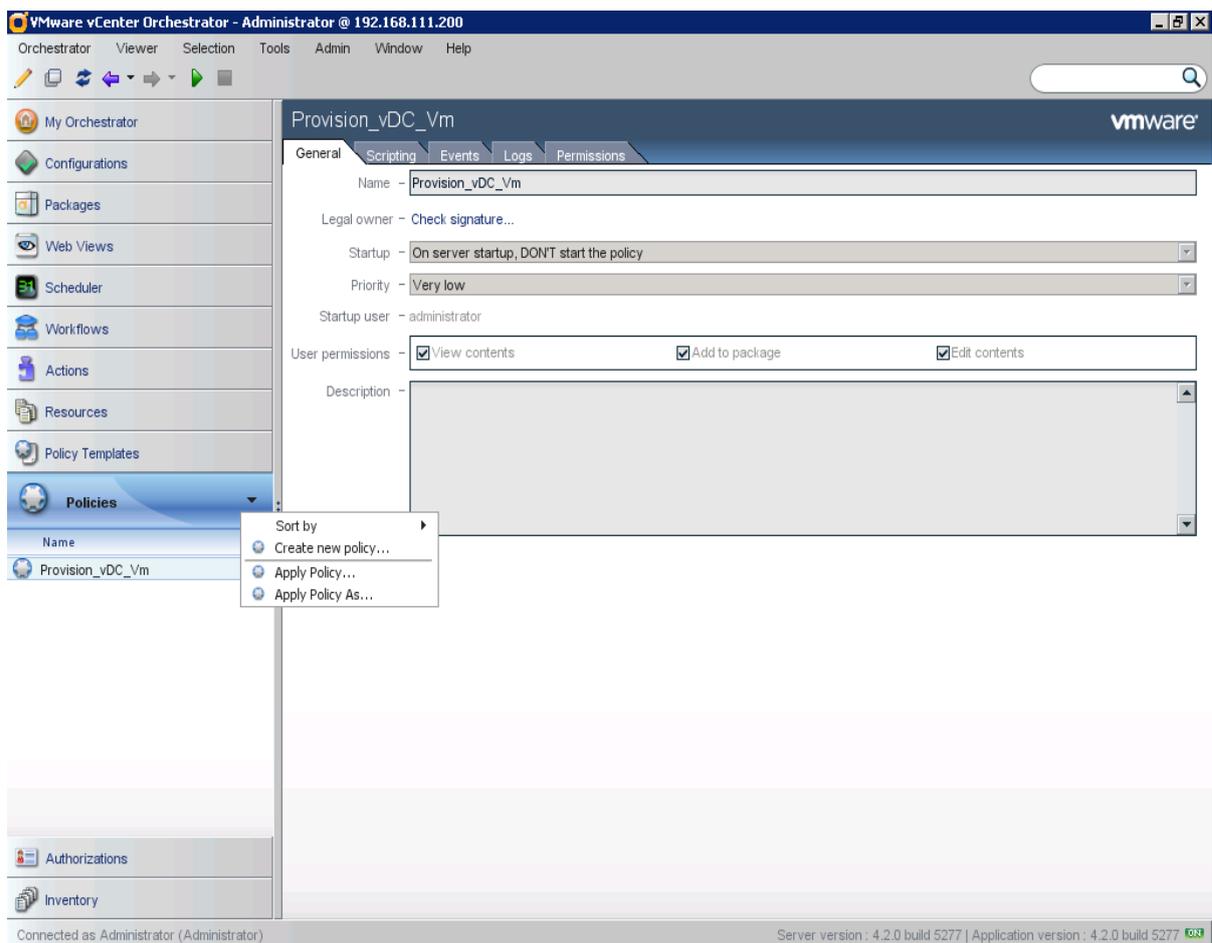
5. Policy Engine

The policy engine allows monitoring and event generation to react to changing conditions. Policies can aggregate events from the platform or any of the plug-ins, which allows you to handle changing conditions on any of the integrated technologies.

Monitor certain events in the plugged-in technology and start operations in the Orchestrator server if the events occur. Policies can monitor policy triggers and policy gauges. Policy triggers define an event in the plugged-in technology that, when it occurs, causes a running policy to start an operation in the Orchestrator server, for example running a workflow.

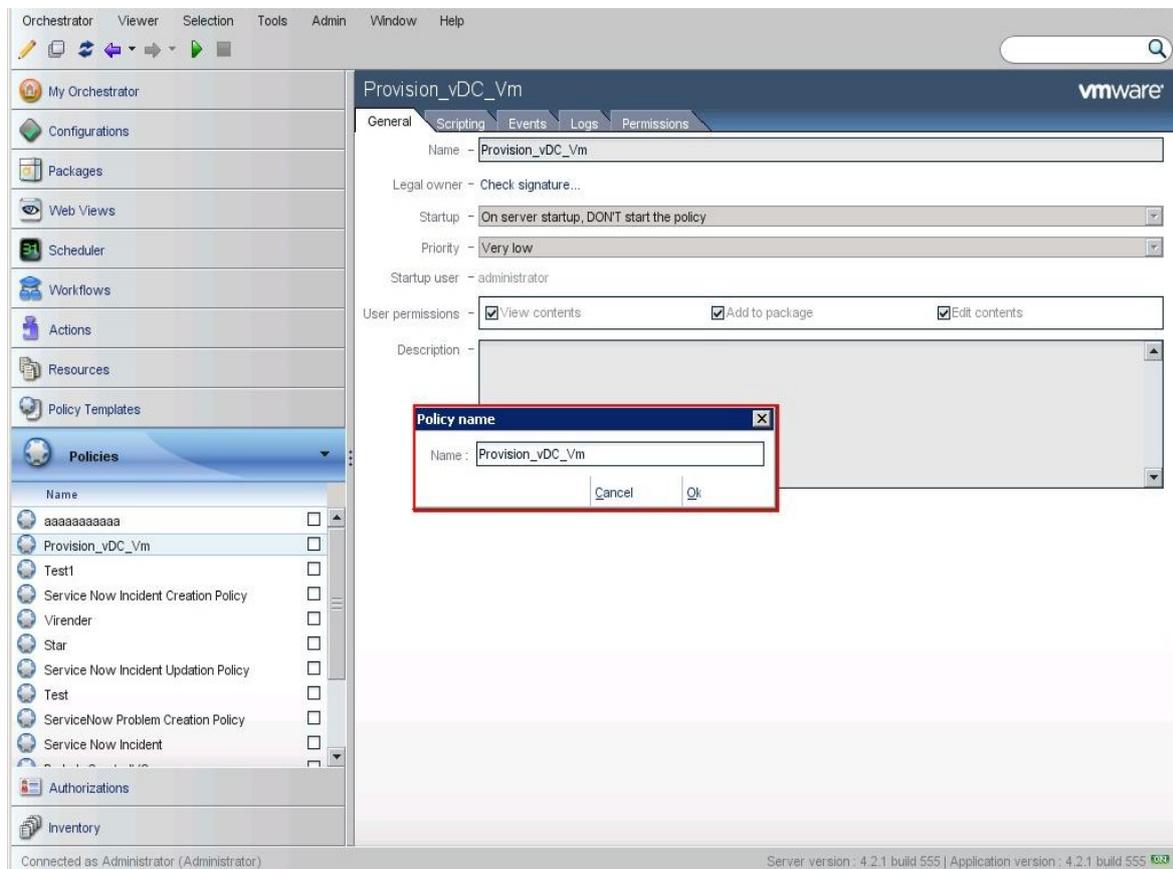
Steps to create a policy:

- a. Navigate to policy tab
- b. Click on the drop down arrow
- c. Select Create New Policy



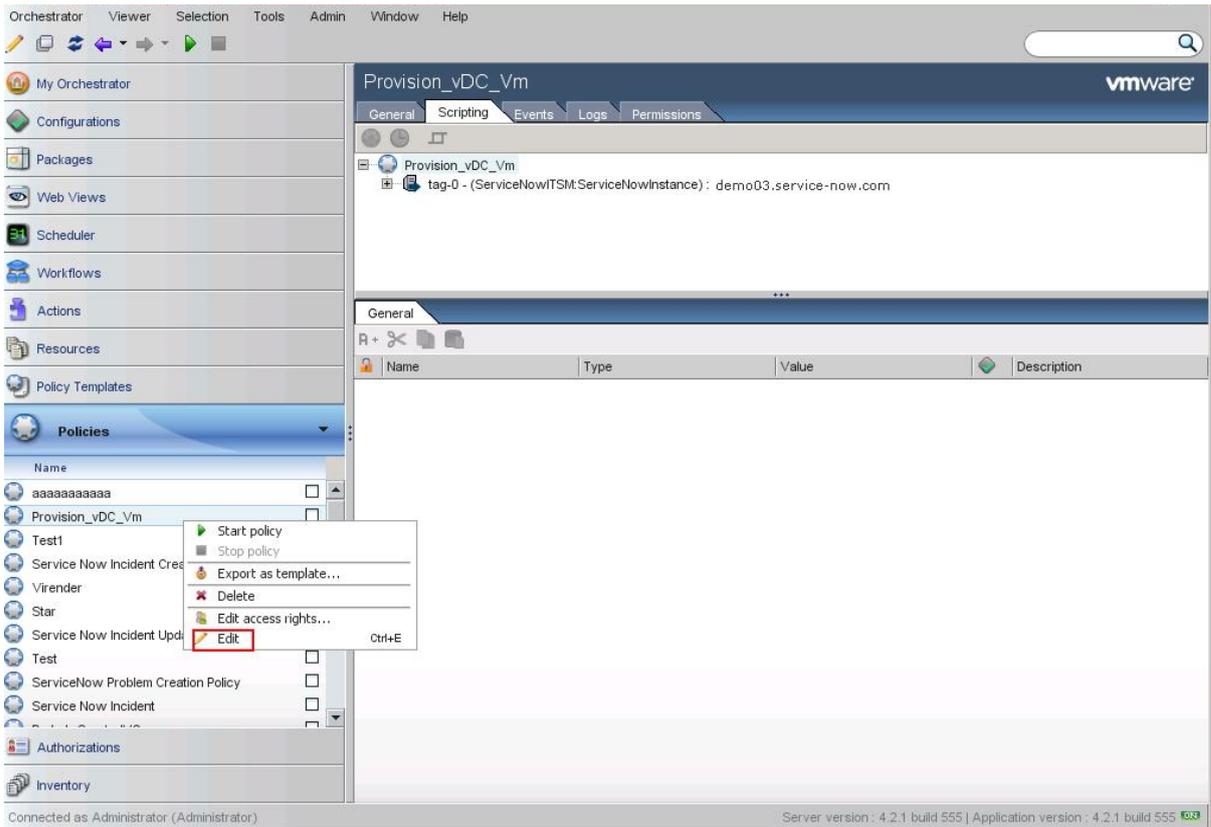
Policy Engine 1

d. Input Policy Name



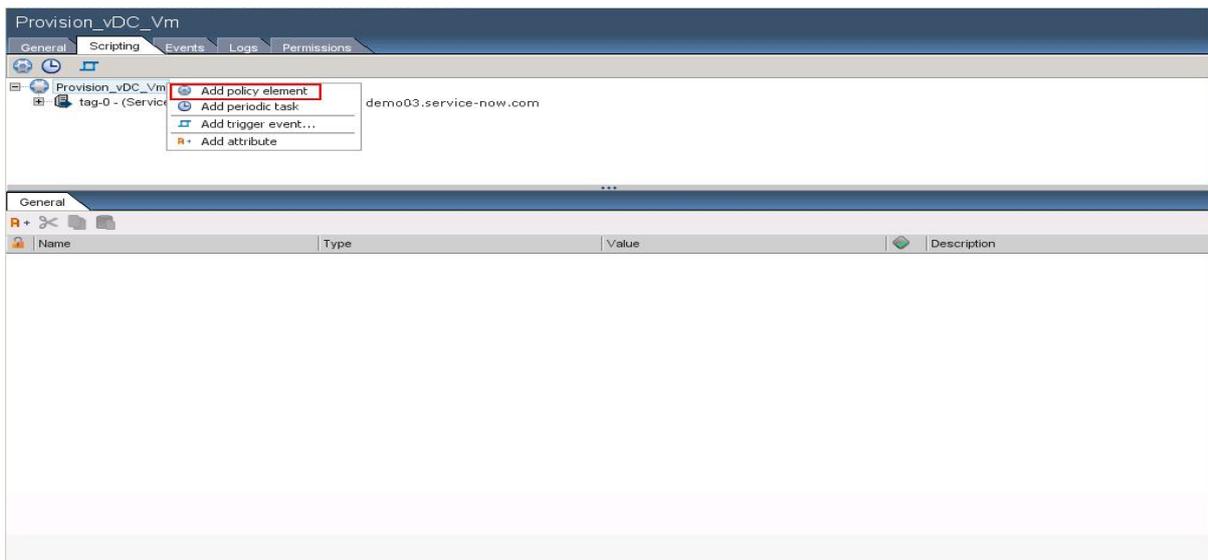
Policy Engine 2

- e. Click on OK
- f. A new policy will be created
- g. Right click on the newly created policy
- h. Click on Edit



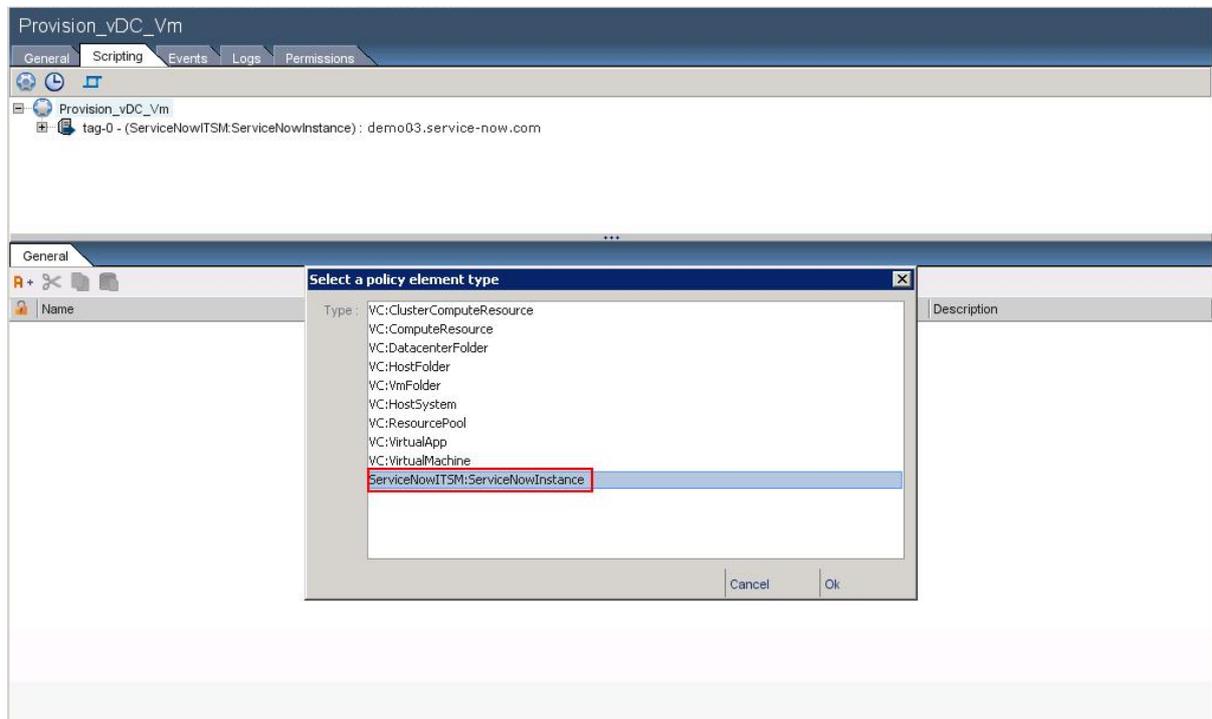
Policy Engine 3

- i. Navigate to the Scripting Tab
- j. Right Click on the policy and select Add Policy Element



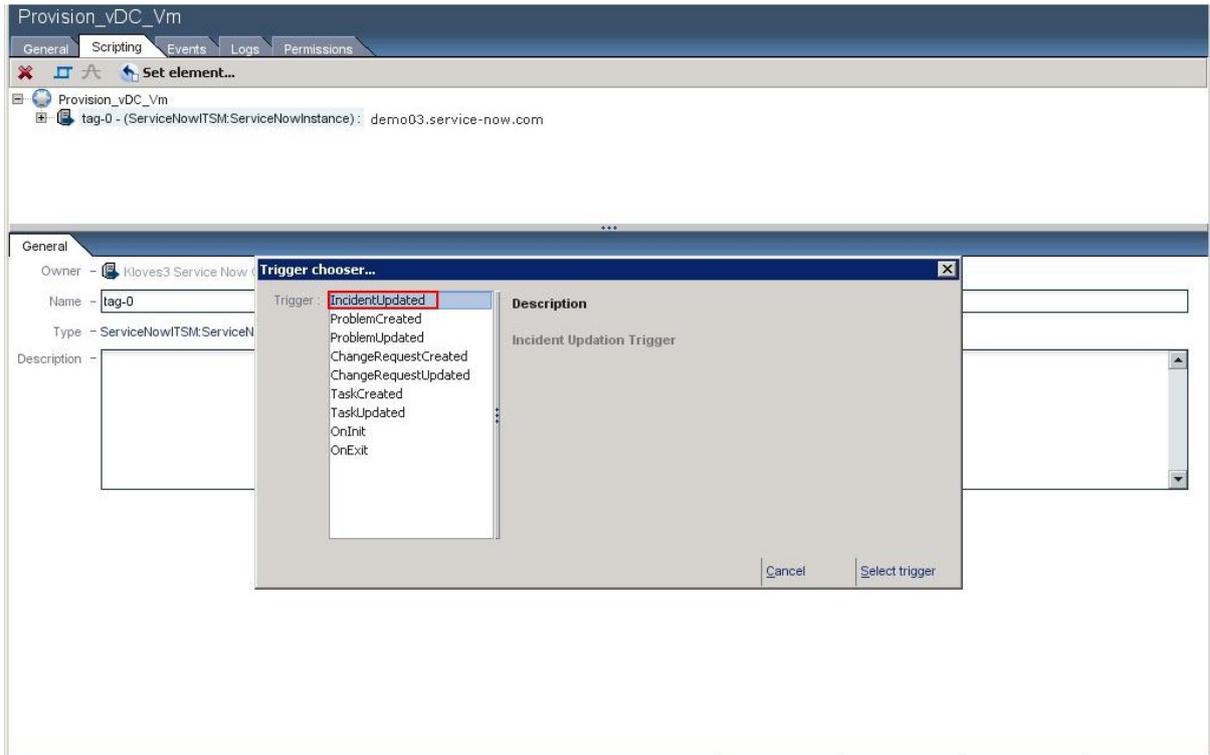
Policy Engine 4

- k. Select the ServiceNow Instance



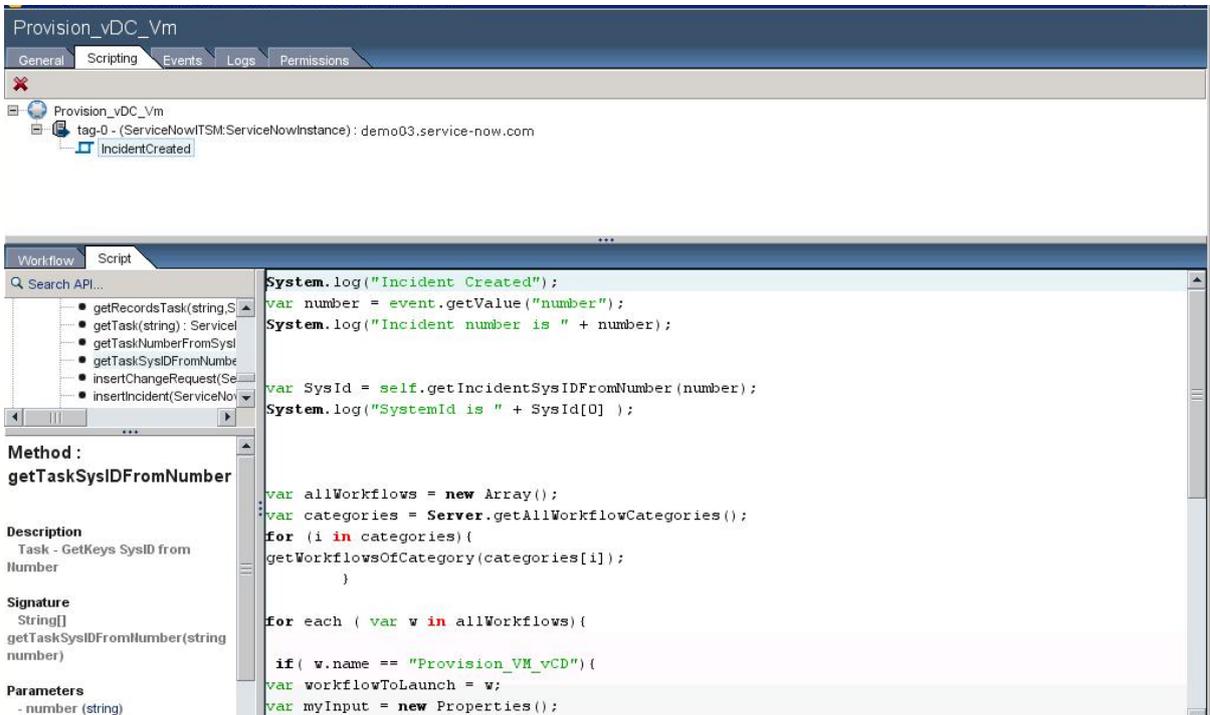
Policy Engine 5

- l. Right Click on the ServiceNow Instance and select add trigger event



Policy Engine 6

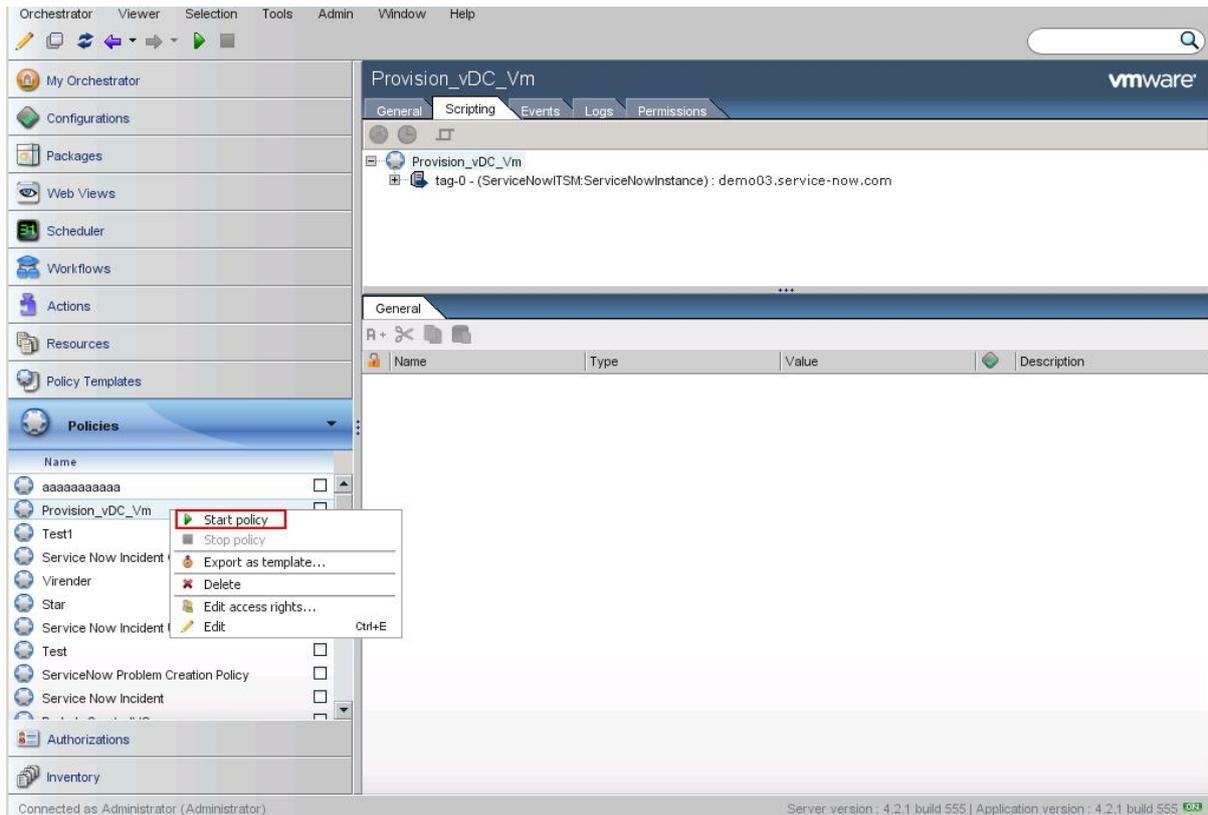
m. In the screen below write a script and save it



Policy Engine 7

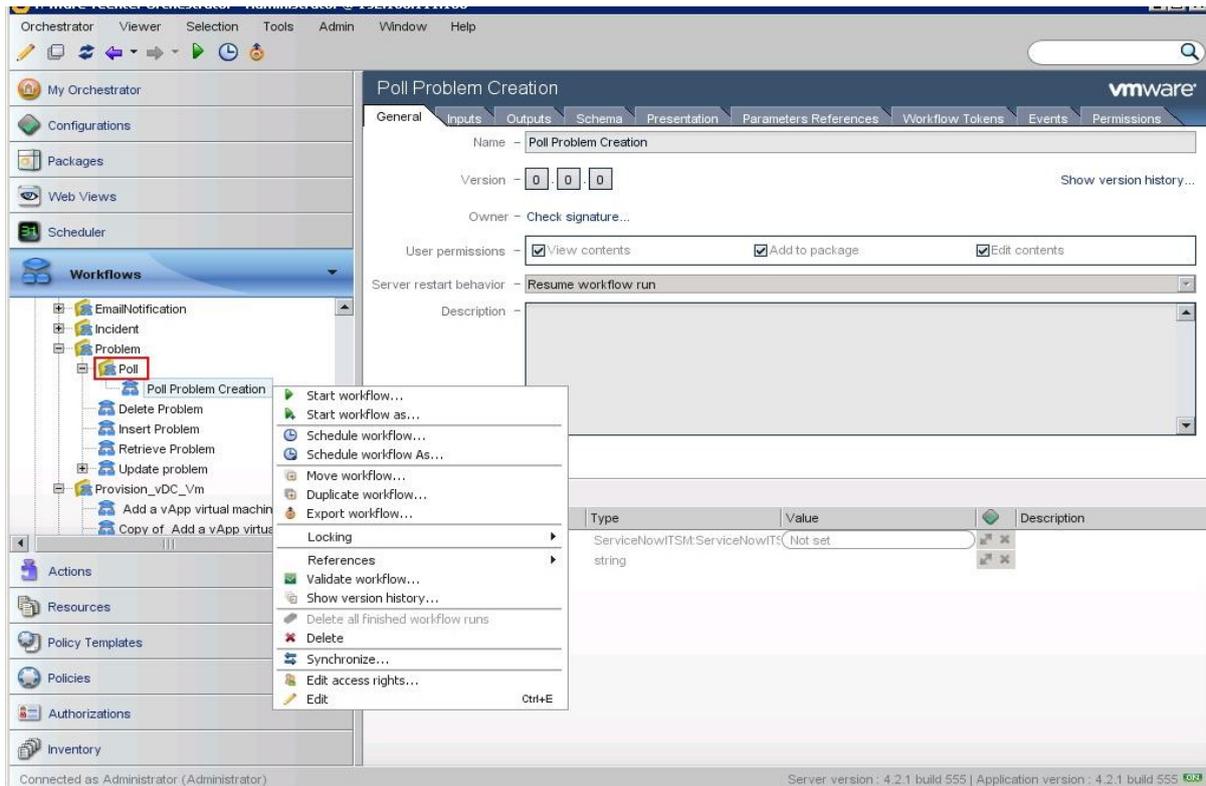
Working of the Policy:

- a. Create Policy as mentioned in the above section **“Steps to create a policy”**
- b. Right click on the policy and select **“Start Policy”**



Policy Engine 8

- c. Go to the Workflow Tab
- d. Start the Poll workflow for Incident Creation



Policy Engine 9

- e. Poll would check if there is any new instance created in the ServiceNow Instance
- f. If an instance is created, it would generate an event which will be listened by the policy
- g. After execution of the above step, triggering starts
- h. On initiation of the trigger, Provision_VM_vDC workflow would be called and hence user interaction would be required
- i. This would in turn create a VM

6. Email Notification:

Service now provides a subscription-based notification mechanism, allowing users to pro-actively subscribe to different items within the system that may be of interest to them. Subscription-based notification enables users with the appropriate role to subscribe to certain notifications and configure conditions and schedules for those notifications. When subscription-based notification is enabled, the system checks the user's subscription preferences before a message is delivered. If the system finds an appropriate subscription record, it checks any filter and schedule preferences relevant to the message. If the preferences permit delivery, the system sends the notification to the device specified email.

How it Works?

- 1) ServiceNow Instance (configured to send email) will send an email to the Email Box
- 2) vCO has in-build Email Plug-in which polls the Mail Box using POP3 Protocol
- 3) Email Plug-in does the following:
 - a) Parse the Email
 - b) Extract the number/details.
 - c) Go to the ServiceNow Instance and get the Details of the various components.