



# vRealize Orchestrator Integration

Avi Technical Reference (v17.2)

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# vRealize Orchestrator Integration

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## Overview

This article covers connecting VMware's vRealize Orchestrator to vCenter and Avi Vantage deployments. vRO can be used to automate Avi Vantage tasks, such as deploying a new virtual service or editing an existing one.

Refer to VMware's [vRO website](#) for more info on vRealize Orchestrator. The latest vRO ova can be downloaded from [My VMware](#). The image used for initial implementation can be downloaded from Amazon [S3](#).

Avi Network's vRO package, which includes pre-built templates for configuring Avi Vantage, may be downloaded from the [Avi git repo](#). vRO support requires at least version 16.3 of Avi Vantage.

## Connect vRO to vCenter

- Once the vRO appliance is deployed using the ova, browse to `https://<VRO-IP>:8283/vco-controlcenter/#/`
- Login using the root credentials provided during ova deploy.
- Click ?Configure Authentication Provider.?
- Select Authentication mode as vSphere and configure as shown:

The screenshot shows the 'Authentication Provider' configuration page in the vRO control center. The page has two tabs: 'Authentication Provider' (selected) and 'Test Login'. Below the tabs, there is a heading 'Configure the authentication provider.' followed by a form with the following fields and values:

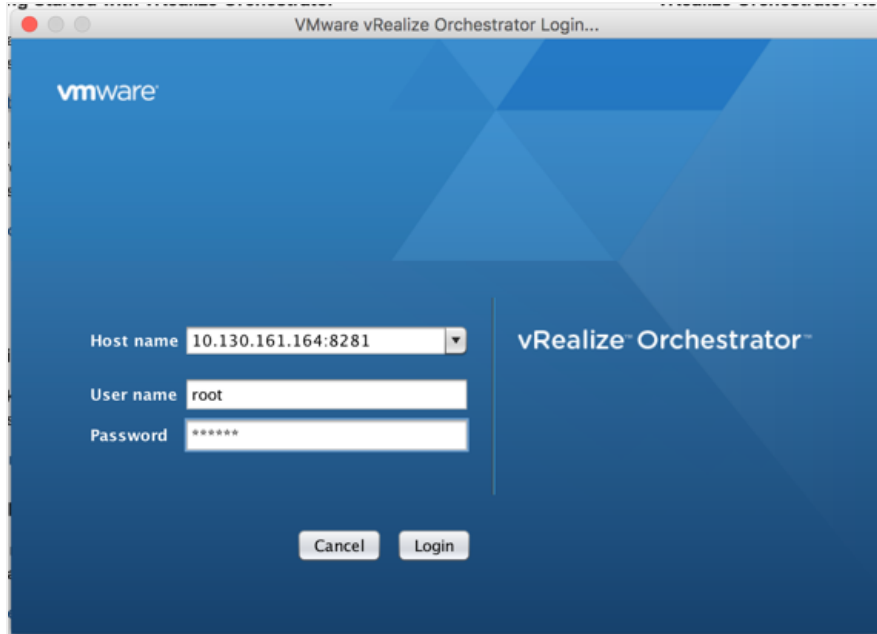
Field	Value	Action
Authentication mode	vSphere	
Host address	10.130.128.200	UNREGISTER
Default tenant	vcenter.local	CHANGE
Admin group	vcenter.local\Users	CHANGE

At the bottom left of the form are two buttons: 'CANCEL' and 'SAVE CHANGES'.

- On the home page, click Startup Options and restart the services.

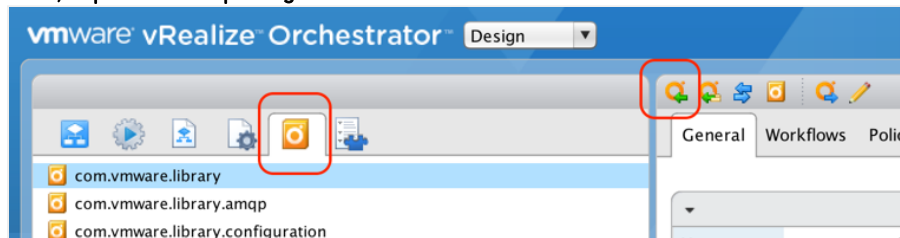
## Log into vRO

- Browse to `https://<VRO -IP>:8281/vco/`
- Click ?Start Orchestrator Client.? The Java client binary will be downloaded.
- Open the client.jnlp file and click ?Run? when prompted.
- Login using vCenter credentials (not VRO login). The host name will be VRO-IP:8281.
- Change the view to ?Design? using the dropdown on top.

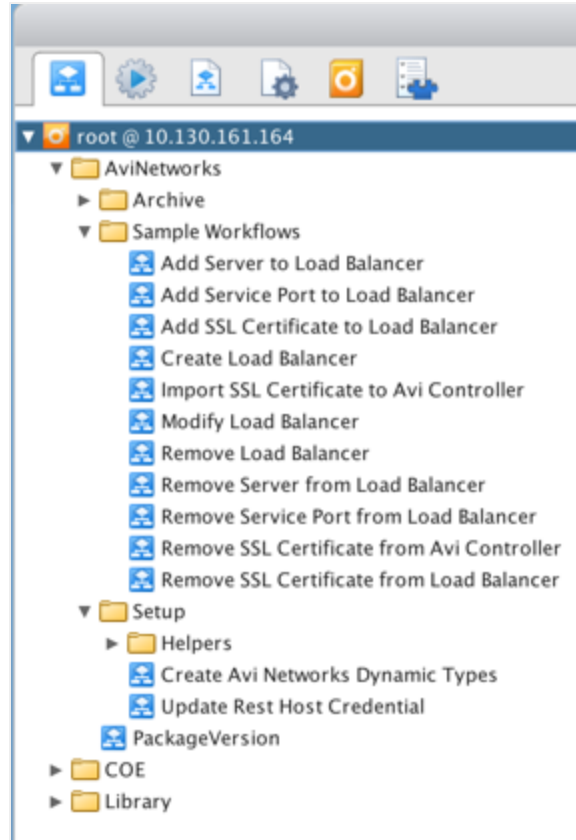


## Import the Avi-VRO Package

- Download the latest com.vmware.avinetworks.plugin.dynamictypes.package from the Git repo [avinetworks/avi\\_vrealize](https://github.com/avinetworks/avi_vrealize).
- On the Packages tab, import the Avi package.



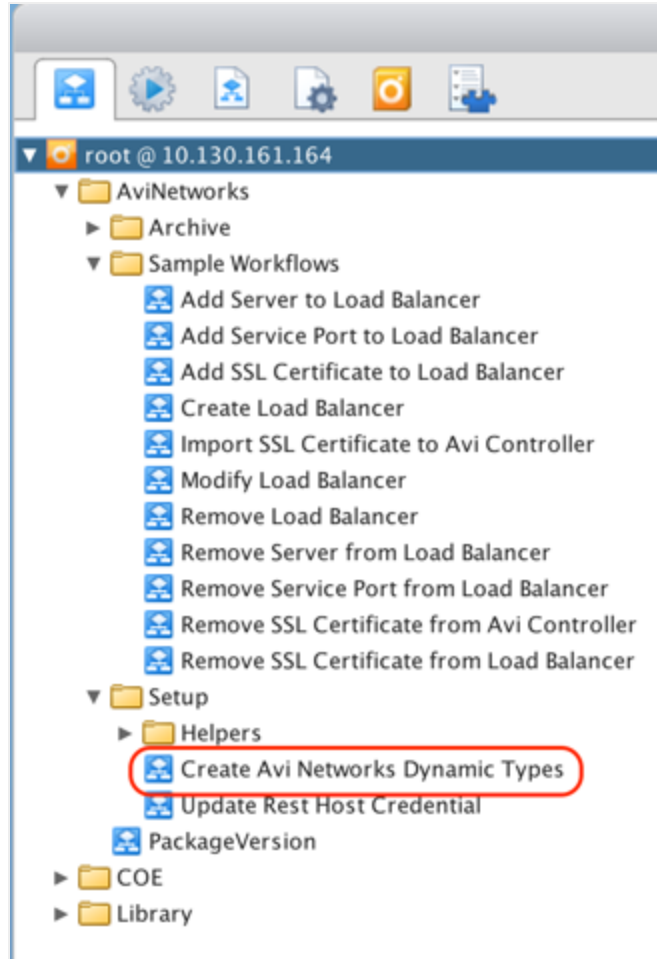
- Navigate to the Workflows tab and check that the Avi Networks folder is created with all supported workflows.



### # Add Avi Controller and Create Dynamic Objects

Before running any of the workflows, first create an Avi Controller object. Make sure support for HTTP basic authentication is enabled on the Avi Controller; it is disabled by default. See the following [Basic Auth KB](#) to enable. Next, write access to vCenter Cloud must be configured for the same vCenter server to which vRO is connected.

- Select ?Create Avi Networks Dynamic Types? workflow under Avi Networks > Setup > Helpers.



- Run the Workflow and follow steps as below:

The screenshot shows the first step of a workflow: "1 Common parameters". The left sidebar lists the steps: 1 Common parameters (selected), 2 Set Namespace Name, 3 Add a REST host (with sub-steps 3a Host Properties and 3b Proxy Settings), and 4 Host Authentication (with sub-step 4a Authentication Type). The main area contains the following settings:

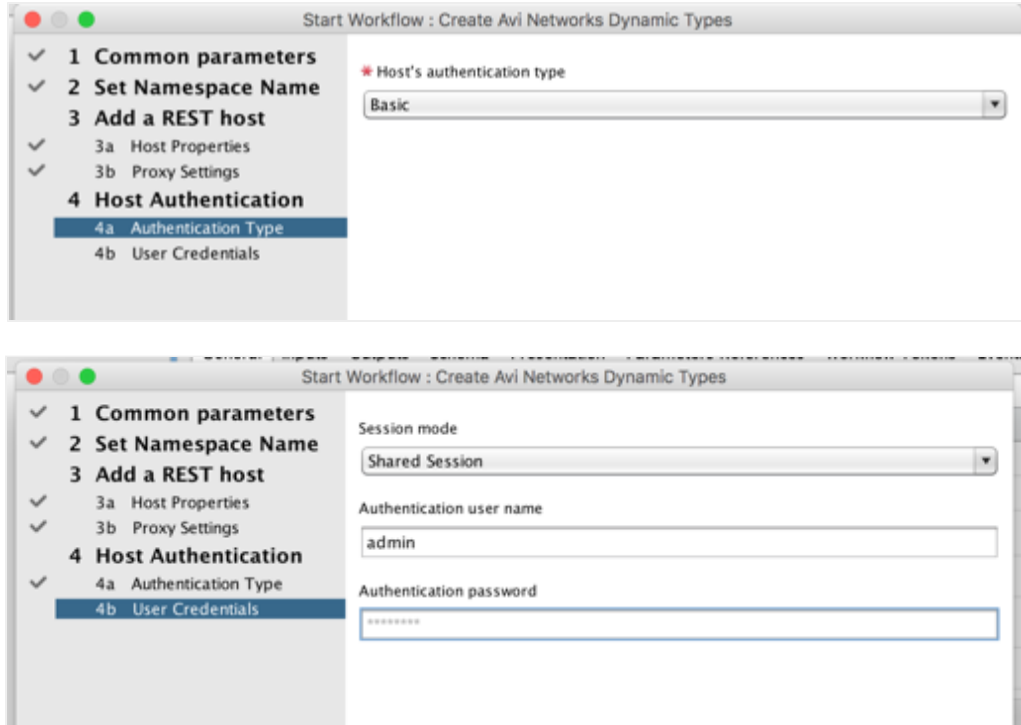
- hostVerification:  Yes  No
- key:
- autoUrlRedirection:  Yes  No
- ignoreWarnings:  Yes  No

At the bottom right, there are four buttons: Cancel, Back, Next, and Submit.

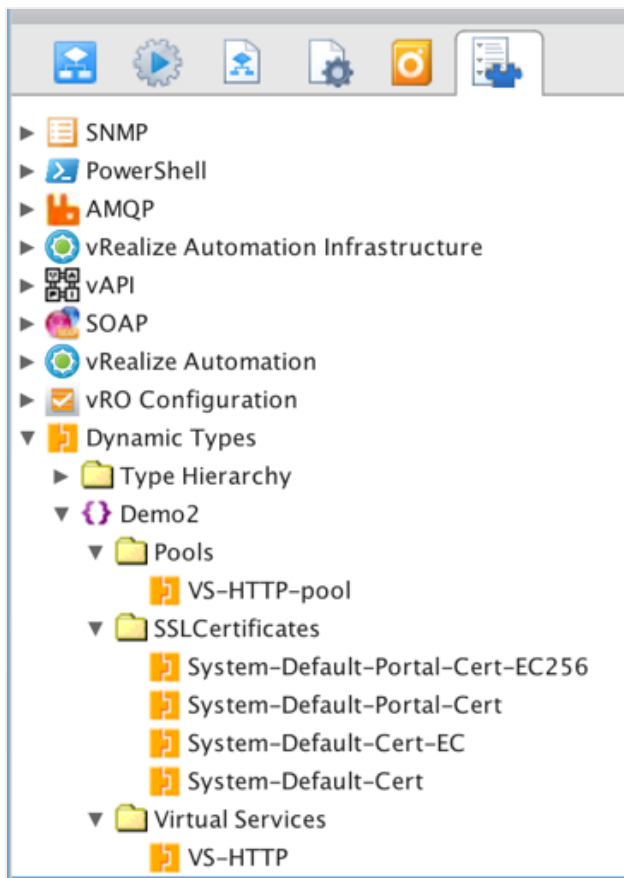
The screenshot shows the second step: "2 Set Namespace Name". The left sidebar shows steps 1 through 4, all with checkmarks. The main area has a red asterisk next to the label "namespaceName" and a text input field containing the value "Demo1".

The screenshot shows the third step, sub-step "3a Host Properties". The left sidebar shows steps 1 through 4, all with checkmarks. The main area has a red asterisk next to the label "AVI Network URL" and a text input field containing "https://10.130.161.165". Below this are two more text input fields: "Connection timeout" with the value "30.0" and "Operation timeout" with the value "60.0".

(Note: Enter the Avi Controller URL as > , with no / at the end) https://<IP



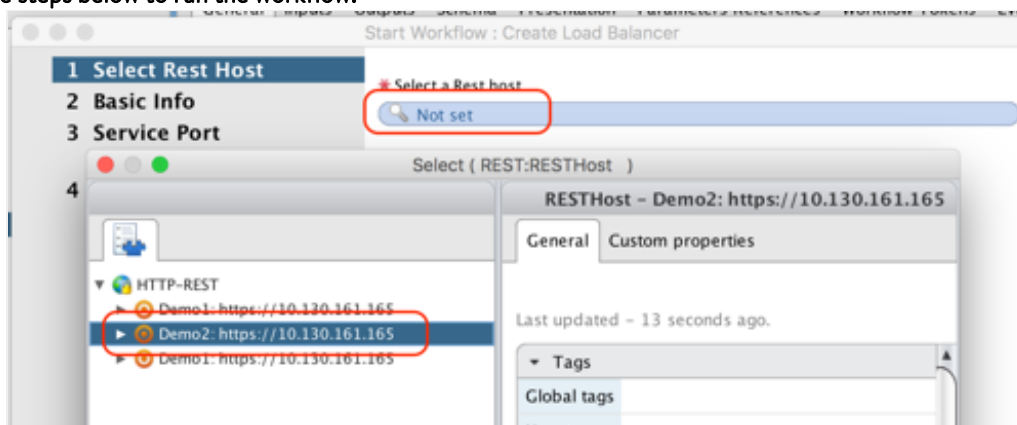
- On the Inventory tab, Dynamic Types objects will be auto-created for all existing virtual services, pools and certificates:



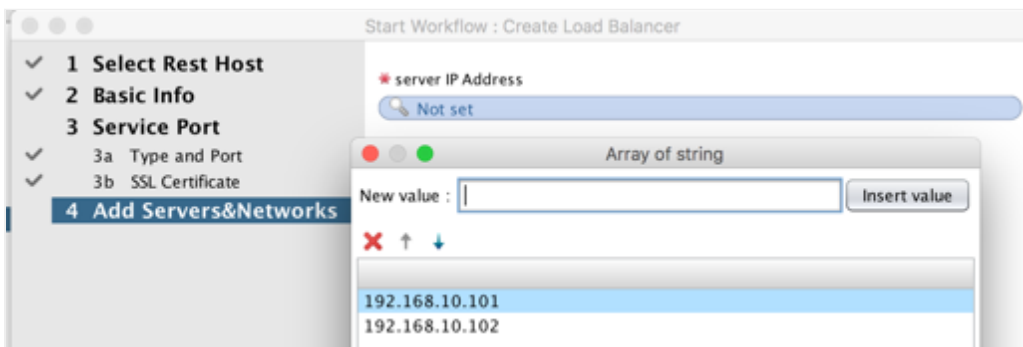
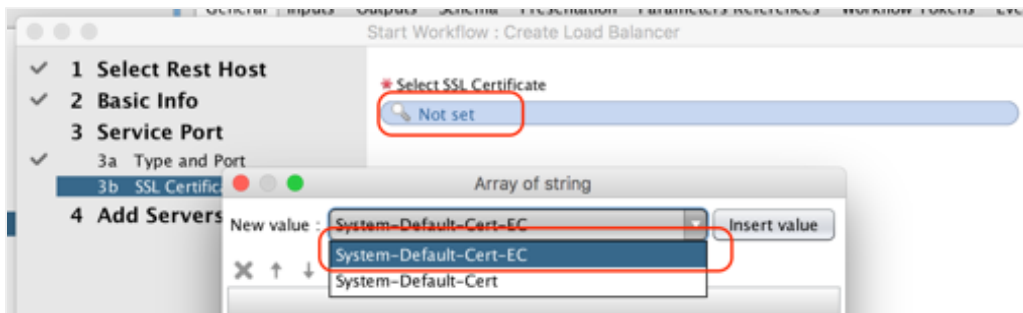
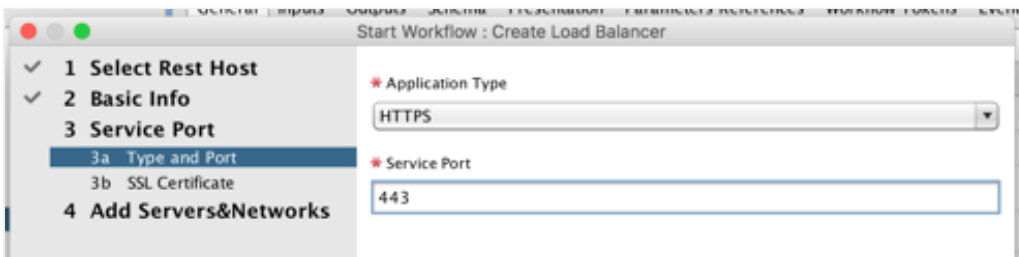
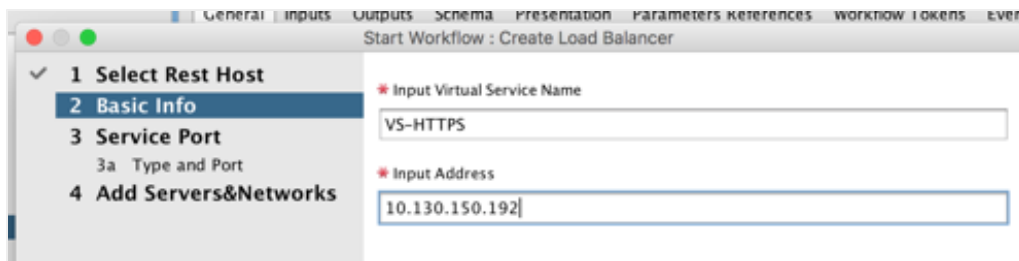
## Running Workflows

Steps for running all workflows is same. This section walks through HTTPS VS creation workflow.

- Navigate to the Workflows tab.
- Run the ?Create Load Balancer? under Avi Networks > Sample Workflows
- Follow the steps below to run the workflow:







- Check that the Dynamic type object for the virtual service is created on Inventory tab under your selected namespace. Refresh if it is not visible.
- Check the VS on the Avi Controller UI.