

# Cohesity ServiceNow Integration Plugin

## User Guide

Version 1.0

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## Contents

Introduction .....	3
Audience .....	3
Prerequisites.....	3
Cohesity SNOW Workflows .....	4
Viewing the Dashboard.....	6
Viewing Virtual Machines .....	7
Virtual Machine List View.....	7
Virtual Machine Hierarchical View .....	8
Moving a VM to another Protection Job .....	9
Protecting and Unprotecting VM.....	10
Cloning VMs.....	11
Cloning Virtual Machine.....	19
Managing Clones .....	20
Recovery .....	11
Recovering Virtual Machine.....	13
Changing Recovery Options.....	14
Managing Recoveries.....	16
Recover Files and Folders .....	17
Viewing Requested Items.....	21
Backup/Protection Job .....	11

# Introduction

The Cohesity ServiceNow (SNOW) plugin connects ServiceNow and the Cohesity DataPlatform. It enables the ServiceNow user to perform various operations on the VMs hosted on the Cohesity DataPlatform. The plugin fetches data from the Cohesity DataPlatform and facilitates performing operations such as listing VM, cloning VM, recovering VM, import jobs, etc. in ServiceNow using a secure network. The plugin is available in .xml format.

This guide describes the Cohesity ServiceNow (henceforth referred as SNOW or plugin) plugin workflows. This document applies to v1.0 release.

## Audience

The reader of the Cohesity vRO plugin guide must be familiar with the following:

- Understand IP networking practices
- Using ServiceNow UI
- Familiar with Cohesity DataPlatform and DataProtect

## Prerequisites

Software	Version	Provider
ServiceNow	Jakarta (patch2)	ServiceNow
Cohesity DataPlatform	4.x	Cohesity
Web browsers	latest	Mozilla Firefox Google Chrome

- Prior to using the workflows, the following configurations must be set:
- The xml plugin is imported in ServiceNow
- You are added to the Cohesity DataPlatform
- DataPlatform are configured

For details about configurations, refer the Cohesity SNOW Admin Guide.

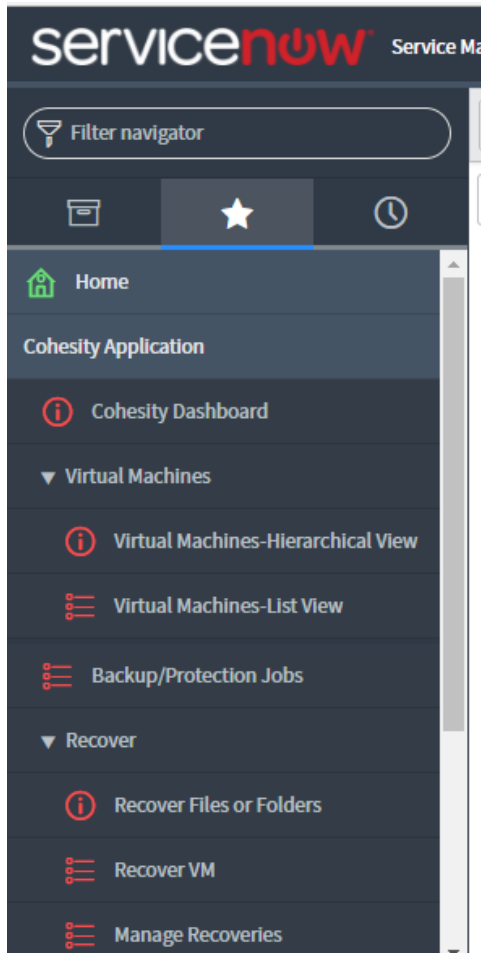
## Cohesity SNOW Workflows

This section provides an overview of the various tasks that you can perform in the plugin. You have the following workflows available in the Cohesity SNOW plugin:

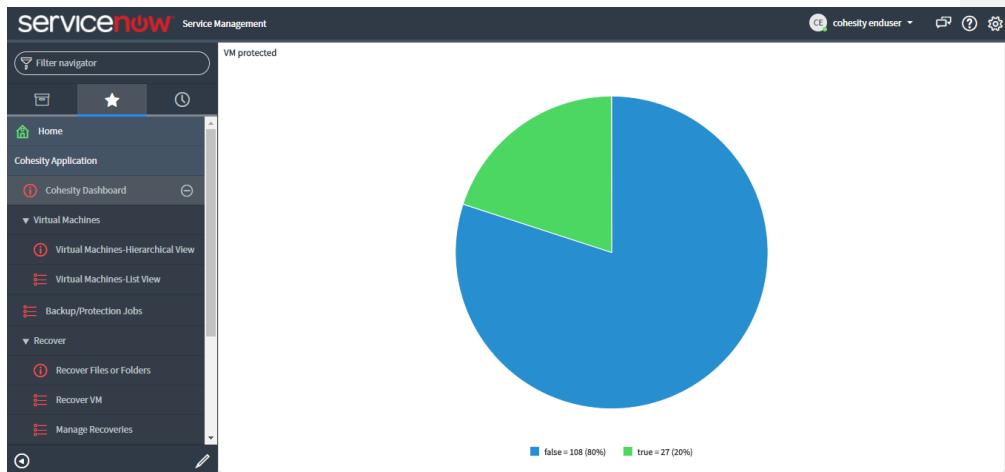
- Dashboard
- Protection Jobs
- Clone VMs and Manage Clones
- Recovery VM, Recover files/folder, Manage Recoveries, VM Recover Points
- Viewing Virtual Machines
- My Requested Items

To view the SNOW workflows:

1. Login to the ServiceNow portal.
2. In the left panel, click the required workflow.



3. Click Cohesity Dashboard to view the dashboard. Following is a sample screen.



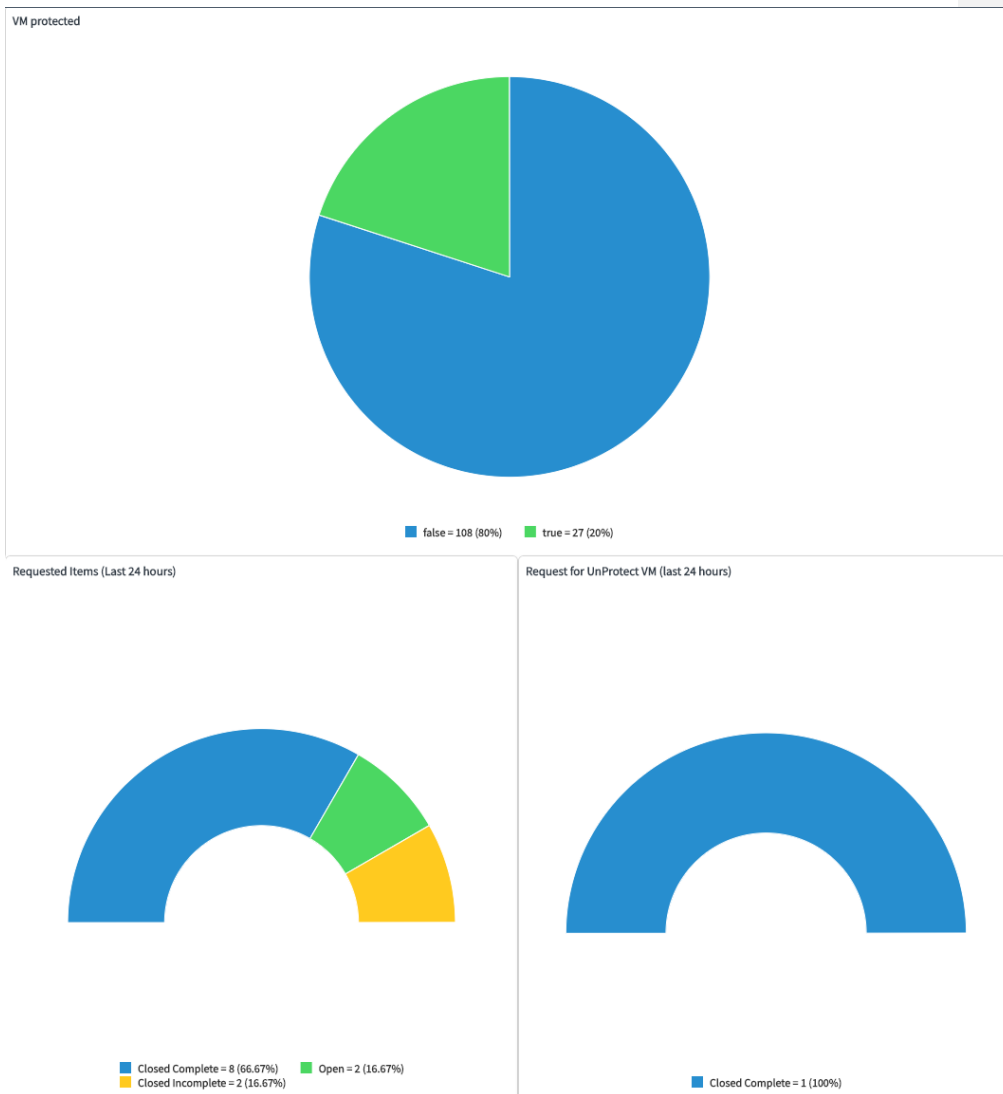
4. Click the required link to view more details and perform various actions.

## Viewing the Dashboard

Dashboards are the primary feature for monitoring the VM details and requests raised within the SNOW plugin. The dashboard synchronizes all the data from requested items and the VM list view. By default, it displays the requested items for last 24 hours.

To view the dashboard:

1. Login to the ServiceNow portal.
2. In the left panel, click Cohesity Dashboard. Following is a sample dashboard screen.



Scroll down to view the graphs of protected and unprotected VMs, requested items, request for unprotect VM, request for recover VM, request for recover file/folder, request for protect VM, request for move VM, request for clone VM, and my approvals.

## Viewing Virtual Machines

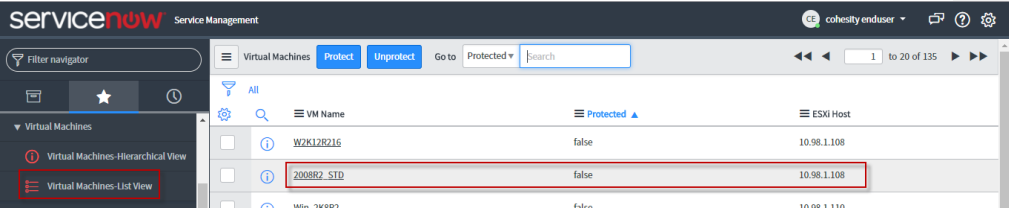
You can view the VMs as a list or in hierarchical view. Following section describes the details of VM listing.

### Virtual Machine List View

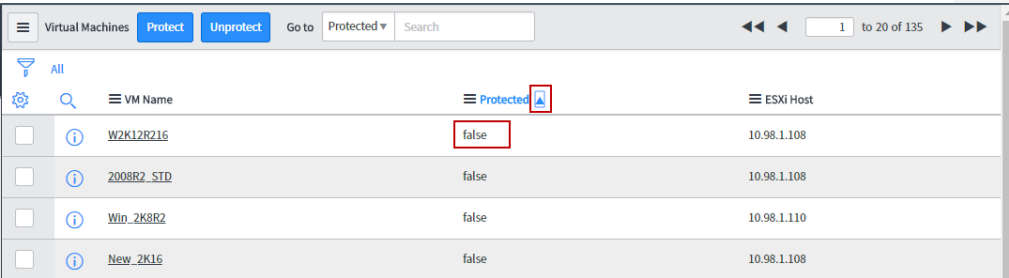
You can view a list of virtual machines. The VMs with the status as “true” are protected machines and with the status as “false” are unprotected.

To view the list view of VMs:

1. Login to the ServiceNow portal.
2. In the left panel, click Virtual Machines > Virtual Machines List View. The following screen displays.



3. To protect an unprotected VM, select the required VM, and then click Protect. Similarly, you can unprotect a VM.



The value as “false” depicts that the VM is unprotected and vice versa. Click the toggle arrow to view the Protected VMs.

## Virtual Machine Hierarchical View

You can view hierarchical lists of the VMs present in Cohesity DataPlatform. They are classified based on whether the VMs are protected or unprotected. The VMs with the “true” value are protected and with “false” are unprotected.

To view the hierarchical view on VMs:

1. Login to the ServiceNow portal.
2. In the left panel, click Virtual Machines > VM Hierarchical View. A graph depicting protected and unprotected VMs is displayed. You can save the graph as a PNG or JPEG or print the chart.





- Click the respective bar to view the list of protected or unprotected VMs. The Protected status as false depicts unprotected VMs and true depicts protected VM. Following is a sample screen.

VM Name	Protected	ESXi Host	Environment
cohesity	false	10.98.1.110	kVMware
cohesity	false	10.98.1.108	kVMware

- Click the required VM to view the details of the selected VM.

Virtual Machines - W2K12R216

VM Name: W2K12R216 ESXi Host: 10.98.1.108

Protected: false

Protect

*Note:* You can further move a VM to another protection job and protect or unprotect a VM. For more details, see the following sections.

## Moving a VM to another Protection Job

You can move a protected VM to another protection job as follows.

To move a VM to another protection job:

- Login to the ServiceNow portal.
- In the left panel, click Virtual Machines > Virtual Machine-List View. A list of VM displays.
- Click on the VM that you want to move to another protection job.

Virtual Machines - snowMid

Move to another Protection job Unprotect

VM Name: snowMid ESXi Host: 10.98.1.104

Protected: true

Move to another Protection job Unprotect

- Click the Move to another Protection job button. The Move VMs screen displays.

Move VMs

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Move VM

Select protection jobs to move VM

VM Name: CBT\_2K12R2

Current Protection Job: NEW GOLD JOB

New Protection Job: Daily-VM-Backup

Reason(Optional)

Order this item Delivery time: 1 Day Order Now

- Select the Current\_Protection\_Job and New\_Protection\_Job from the drop-down list as required.
- Optionally, you can provide the Reason of the moving the VM in the Reason text box.
- Click Order Now on the top right corner of the page. The Order Status page displays.

Order Status

Thank you, your request has been submitted

Order Placed: 2017-12-12 02:43:25

Request Number: REQ0010025

Estimated Delivery Date of Complete Order: 2017-12-12

Description	Delivery Date	Stage	Price (ea.)	Quantity	Total
	2017-12-12			-	
Total					

Back to Catalog Continue Shopping Home

- After placing an order for moving a VM, the administrator needs to approve the request. After the administrator approves the request, the VM is moved to another protection job.

## Protecting and Unprotecting VM

You can unprotect a protected VM and vice versa. The VMs with the "true" value are protected and with "false" are unprotected.

To unprotect a VM:

- Login to the ServiceNow portal.

2. In the left panel, click Virtual Machines > Virtual Machine-List View. A list of VM displays.
3. Click on the VM that you want to unprotect. The Virtual Machine details are displayed.

The screenshot shows the 'Virtual Machines - snowMid' page. It features a header with a back arrow, a menu icon, and the title 'Virtual Machines - snowMid'. On the right, there are buttons for 'Move to another Protection job', 'Unprotect', and a vertical arrow. The main content area displays the VM Name 'snowMid', ESXi Host '10.98.1.104', and Protected status 'true'. At the bottom, there are buttons for 'Move to another Protection job' and 'Unprotect'.

4. Click Unprotect. The Unprotect VM page displays.

The screenshot shows the 'Unprotect VM from protection job' page. The header includes a back arrow, a pencil icon, and a search bar. The main content area has the Cohesity logo and the title 'Unprotect VM'. Below the title, it says 'Select protection job to unprotect VM'. There is a form with a 'Virtual Machine' field containing 'CBT\_2K12R2', a 'Protection Job Name' dropdown menu with 'NEW GOLD JOB' selected, and a 'Reason(Optional)' field. On the right, there is a 'Order this item' box showing 'Delivery time 1 Day' and an 'Order Now' button.

5. Select the Protection Job Name from the list.
6. Optionally, enter the Reason.
7. Click Order Now on the right top corner. The Order Status page displays.

The screenshot shows the 'Order Status' page. The header includes a back arrow, the title 'Order Status', and buttons for 'Back to Catalog', 'Continue Shopping', and 'Home'. A green banner at the top says 'Thank you, your request has been submitted'. Below this, it shows 'Order Placed: 2017-12-12 04:11:35', 'Request Number: REQ0010026', and 'Estimated Delivery Date of Complete Order: 2017-12-12'. A table with columns 'Description', 'Delivery Date', 'Stage', 'Price (ea.)', 'Quantity', and 'Total' is displayed. The table has one row with 'Description' empty, 'Delivery Date' as '2017-12-12', 'Stage' with a progress bar, and 'Total' as '-'. At the bottom, there are buttons for 'Back to Catalog', 'Continue Shopping', and 'Home'.

8. After placing an order for unprotecting a VM, the administrator needs to approve the request. After the administrator approves the request, the VM is unprotected.

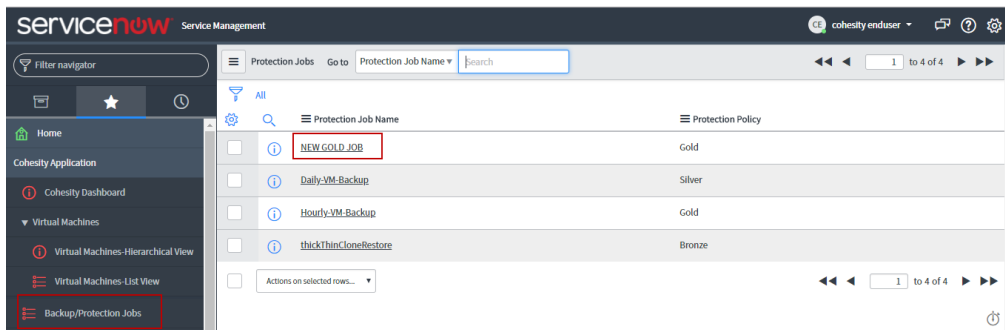
Similarly, you can protect an unprotected VM.

## Backup/Protection Job

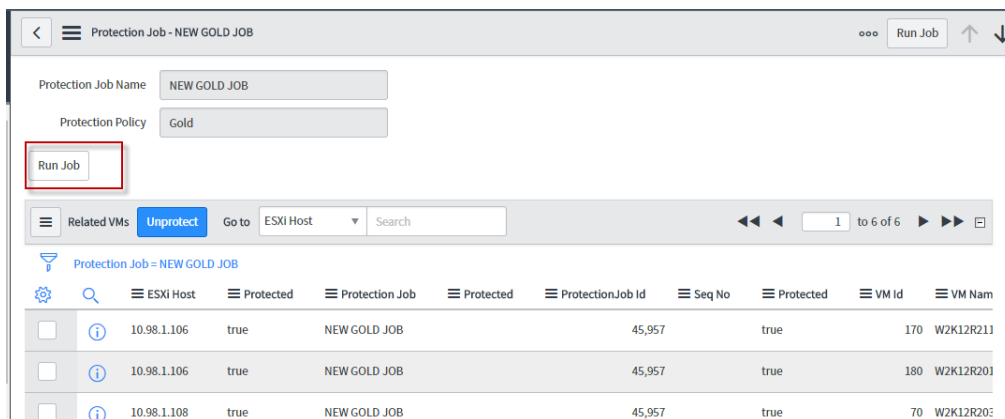
This section describes how to run a job. In addition, you can unprotect a protected VM.

To protect a job:

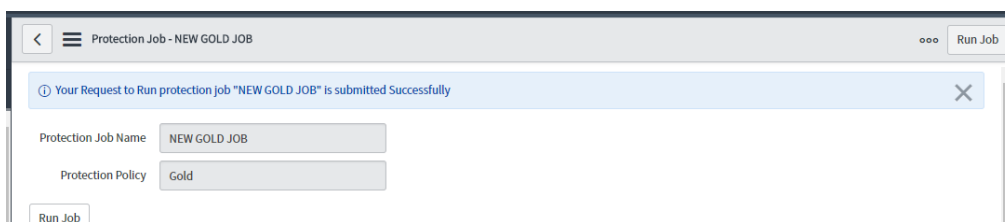
1. Login to the ServiceNow portal.
2. In the left panel, click Backup/Protection Jobs. ServiceNow lists all existing protection jobs. You can also search for a specific protection job that you want to run.



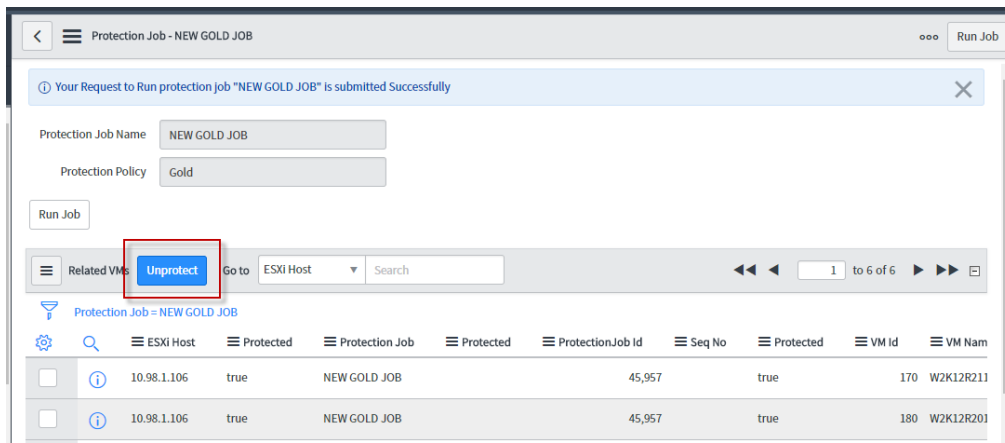
3. Click the required protection job name.



4. Click Run Job. A success notification displays as follows.



5. To unprotect a specific job, select the job and click the Unprotect button.



## Recovery

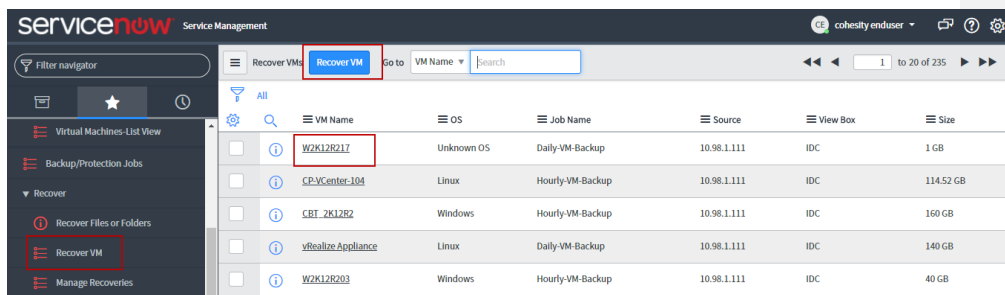
This section describes how to recover VM, files/folders, and manage recovery.

### Recovering Virtual Machine

This section describes the steps to recover a VM.

To recover VM:

1. Login to the ServiceNow portal.
2. In the left panel, click Recovery > Recover VM. ServiceNow lists all VMs that can be recovered.



3. Select the VM you want to recover from the list and click Recover VM.

4. Select the Recover Points from the list.
5. If you do not want to change the Recovery Options, click Order Now else, change the Recovery Options and proceed. For details about changing Recovery Options, see Changing Recovery Options.
6. After clicking Order Now, the following request notification page displays.

Description	Delivery Date	Stage	Price (ea.)	Quantity	Total
Select virtual machine to recover,	2017-11-21	▶ ✓✓✓		-	
<b>Total</b>					-

The administrator need to approve your request for items, see My Approvals.

You can view the list of items you have requested as follows.

To approve a request:

1. Open the required instance and login using the Admin credentials.
2. In the left panel, click My Approvals under Cohesity application. Following is a sample screen.

<Need inputs>

Include how to get approval in this section as well.


Viewing Requested Items.

## Changing Recovery Options

This section describes the details to change the recovery points while recovering a VM.


To change the recovery options:

1. Select the "Change Recover Options" checkbox. The following details displays.



**Recover Options**


☒ Change Recover Options



**Rename Recovered VMs**

Rename Recovered VMs

No ▾




**Recovery Location**

Recovery Location

☒ Recover back to original location

☐ Recover to a new location




**Networking Options**

Networking Options

☒ Keep original NIC(s) and attach it to original network

☐ Detach network



**Additional Options**

☒ Leave Recovered VMs powered off

☐ Continue recovery even if errors occur when recovering VMs

2. Select Yes from the drop-down to rename the recovered VM else, go to step step 3. To rename the VM, enter the Prefix and Suffix as required in the following screen.

#### Rename Recovered VMs

Rename Recovered VMs

Yes

Add Prefix

Add Suffix

3. To recover the VM to a new location select "Recover to a new location", else go to the next step.  
On selecting recover to a new location, select the Source, Resource Pool, and Datasore.

#### Recovery Location

Recovery Location

☐ Recover back to original location

☒ Recover to a new location

\* Source

-- None --

Resource Pool

-- None --

Datastore

-- None --

4. Select the Networking Options as required.

#### Networking Options

Networking Options

☒ Keep original NIC(s) and attach it to original network

☐ Detach network

5. Select the Additional Options are required.

#### Additional Options

☒ Leave Cloned VMs powered off

☐ Continue clone even if errors occur when cloning VMs

Reason(Optional)

6. Click Order Now and proceed to step number 6 in the Order Now section.

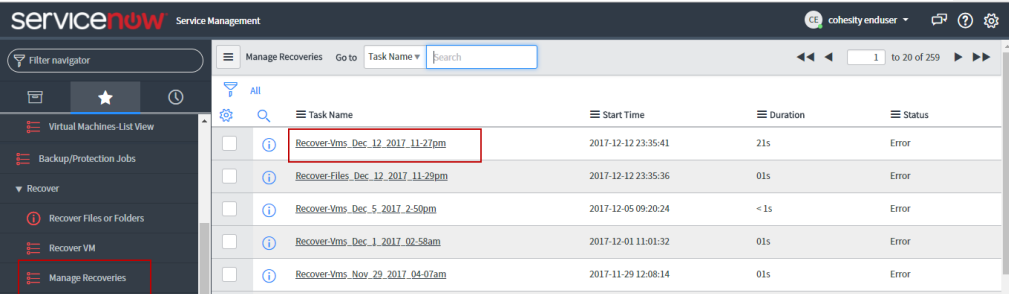
## Managing Recoveries



You can view the details of the recovered VMs that will list the success and error if any while recovering the VM.

To manage recovery:

1. Login to the ServiceNow portal.
2. In the left panel, click Recover > Manage Recoveries. The VMs for which recovery was requested displays. It displays the status as "success" or "error" as the status of the recovery request.



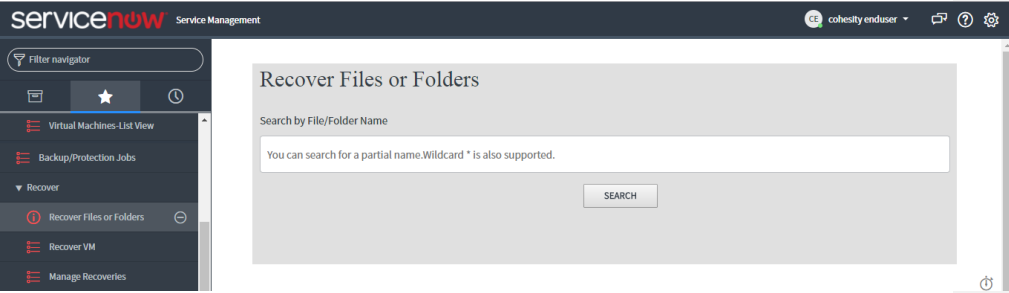
3. You can search for recoveries in the Manage recoveries section. Click the required recovery to view the details.

## Recover Files and Folders

You can recover files and folders as follows.

To recover file or folder:

1. Login to the ServiceNow portal.
2. In the left panel, click Recover > Recover Files or Folders.



3. Enter the file or folder search criteria in the Search box and click SEARCH. A list of files or folders displays.

The screenshot shows the results of a search for files and folders. The table lists files with their names, paths, server names, server types, and protection jobs.

Type	File/Folder Name	Path	Server Name	Server Type	Protection Job
File	pnacI_public_x86_64_libgcr_a	/C:/Users/Administrator/PARTNER/AppData/L...	laasvm	VirtualMachine	_DELETED_
File	component.man	/C:/InstalledRepository/Microsoft-Windows...	CP02-W2K8R2-01	VirtualMachine	Hourly-VM-Backup
File	pnacI_public_x86_64_libpnacI_int_shim_a	/C:/Users/Administrator/PARTNER/AppData/L...	laasvm	VirtualMachine	_DELETED_
File	msocx40.dll	/C:/build/flarepository/Microsoft-Window...	CP02-W2K8R2-01	VirtualMachine	Hourly-VM-Backup

4. Select the required file or folder and click Recover Files or Folders. The Recover File/Folder page displays.

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Recover File/Folder

Select options for File/Folder recovery

**Recover Options**

File or Folder Name: pnacl\_public\_x86\_64\_libgcc\_a

Type: File

File or Folder Path: /C:/Users/Administrator.PARTNER/AppData/Local/Google/Chrome/User Data/pnacl/0.57.44.2492/\_platform\_specific/x86\_64/pnacl\_public\_x86\_64\_libgcc\_a

\* Select a Recover Point for this file or folder: -- None --

\* Task Name: Recover-Files\_Dec\_10\_2017\_8-58pm

**Target Information**

\* Server Name:

5. Enter the Recover Options as required. Select the Recover Point and Provide the Task Name as required.

**Recover Options**

File or Folder Name: pnacl\_public\_x86\_64\_libgcc\_a

Type: File

File or Folder Path: /C:/Users/Administrator.PARTNER/AppData/Local/Google/Chrome/User Data/pnacl/0.57.44.2492/\_platform\_specific/x86\_64/pnacl\_public\_x86\_64\_libgcc\_a

\* Select a Recover Point for this file or folder: 2017-10-13 02:34:01

\* Task Name: Recover-Files\_Dec\_10\_2017\_8-58pm

6. Enter the Target Information as required. Select the Server Name, enter the Username and Password and provide the Recover to Original Location details as required. You can overwrite the existing file/folder as well.

### Target Information

\* Server Name

laasVm

\* Username

\* Password

Recover to Original Location

Yes

☐ Overwrite Existing File/Folder

7. Enter the Additional Options as required. You can preserve the file/folder attributes and continue the recovery options in case there are some errors by selecting the required check box.

### Additional Options

☐ Preserve file/folder attributes

☐ Continue recovery operation even if one of the objects encounters an error

Reason(Optional)

8. Click Order Now on the top right corner of the page.

After placing an order for recover of file/folder, the administrator needs to approve the request. After the administrator approves the request, the recovered file/folder is available for use.

## Cloning VMs

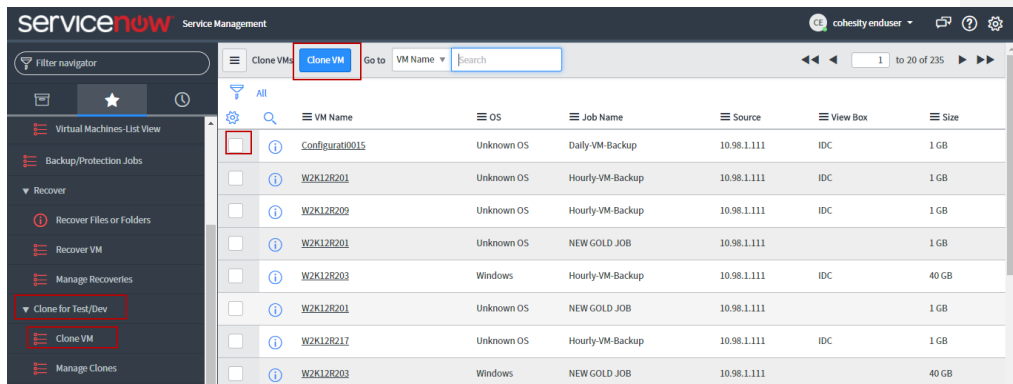
This section describes how to clone and manage clones.

### Cloning Virtual Machine

This section describes the steps to clone a VM.

To clone VMs:

1. Login to the ServiceNow portal.
2. In the left panel, click Clone > Clone VM. The following screen displays.



3. Select the check box of the required VM from the list and click Clone VM. The Clone VM page displays.

**Clone VM**

Task Name: Clone-Window\_11\_2017\_10-30pm

**Rename Cloned VM**

Rename Cloned VM: Yes

Add Prefix:

Add Suffix:

**Selected Virtual machine**

Virtual Machine: 208882\_3TD

Recover Points: 2017-11-14 04:30:00

**Clone Location**

Select Source: 10.98.1.111

Select View: CohesityBackupFlow

Select Resource Pool: Resources

**Networking Options**

Detach Network: ☐

Attach to a new network: ☒

Network Port Group: VM Network

**Additional Options**

Leave cloned VMs powered off: ☒

4. In the Rename Cloned VM field, select Yes from the drop down list to rename the cloned VM. Add Prefix and Suffix as required.
5. Select the Recover Point for the selected VM.
6. Select Source, View, and Resource Pool in the Clone Location section.
7. Select the Attach a new network checkbox to select network ports in the Network Options.
8. Optionally, select the following as required.

## Additional Options

- ☒ Leave cloned VMs powered off
- ☐ Continue clone even if errors occur when cloning VMs

9. Click Order Now from the top right corner of the page.

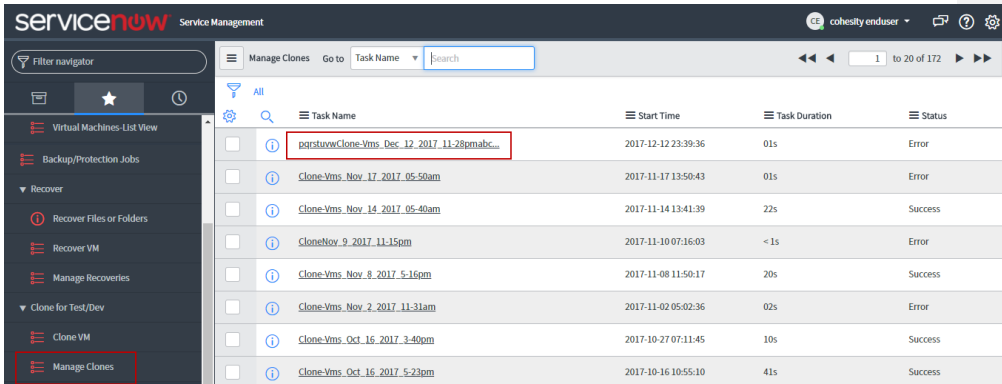
After placing an order for cloning a VM, the administrator needs to approve the request. After the administrator approves the request, the cloned VM is available for use.

## Managing Clones

You can view the details of the cloned VMs that will list the success and error if any while cloning a VM.

To manage a clone:

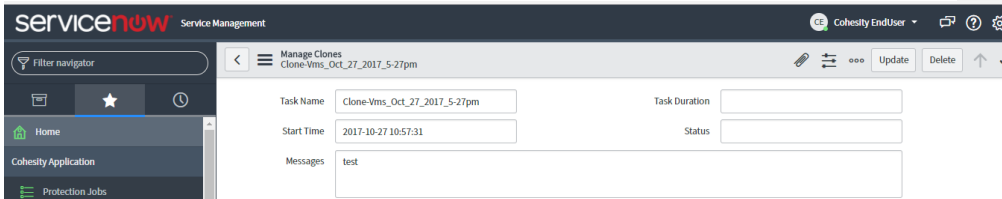
1. Login to the ServiceNow portal.
2. In the left panel, click Clone > Manage Clones. The following screen displays.



The screenshot shows the ServiceNow 'Manage Clones' interface. The left sidebar contains a 'Filter navigator' and a list of options: Virtual Machines List View, Backup/Protection Jobs, Recover (with sub-items: Recover Files or Folders, Recover VM, Manage Recoveries), Clone for Test/Dev (with sub-item: Clone VM), and Manage Clones (highlighted with a red box). The main area displays a table of clones with columns: Task Name, Start Time, Task Duration, and Status. The first row, 'portstuvClone-Vms\_Dec\_12\_2017\_11-28pmabc...', is highlighted with a red box.

Task Name	Start Time	Task Duration	Status
portstuvClone-Vms_Dec_12_2017_11-28pmabc...	2017-12-12 23:39:36	01s	Error
Clone-Vms_Nov_17_2017_05:50am	2017-11-17 13:50:43	01s	Error
Clone-Vms_Nov_14_2017_05:40am	2017-11-14 13:41:39	22s	Success
CloneNov_9_2017_11:15pm	2017-11-10 07:16:03	< 1s	Error
Clone-Vms_Nov_8_2017_5:16pm	2017-11-08 11:50:17	20s	Success
Clone-Vms_Nov_2_2017_11:31am	2017-11-02 05:02:36	02s	Error
Clone-Vms_Oct_16_2017_3:40pm	2017-10-27 07:11:45	10s	Success
Clone-Vms_Oct_16_2017_5:23pm	2017-10-16 10:55:10	41s	Success

3. Click the required Task Name to view the details of the cloned task. It displays the VMs that are cloned with the status as Success or Error.



The screenshot shows the 'Clone-Vms' details page in ServiceNow. The left sidebar is the same as the previous screenshot. The main area displays the details for the task 'Clone-Vms\_Oct\_27\_2017\_5:27pm'. The fields are: Task Name (Clone-Vms\_Oct\_27\_2017\_5:27pm), Task Duration (empty), Start Time (2017-10-27 10:57:31), Status (empty), and Messages (test). There are buttons for 'Update', 'Delete', and a refresh icon.

Task Name	Task Duration
Clone-Vms_Oct_27_2017_5:27pm	

Start Time	Status
2017-10-27 10:57:31	

Messages: test

4. Edit the required changes and click Update.

## My Approvals

You can view the list of items you have requested as follows.

To approve a request:

- 3. Open the required instance and login using the Admin credentials.
- 4. In the left panel, click My Approvals under Cohesity application. Following is a sample screen.

<Need inputs>

Comment [PK1]: Need inputs

Include how to get approval in this section as well.

## Viewing Requested Items

You can view the list of items you have requested as follows.

To list requested items:

- 1. Login to the ServiceNow portal.
- 2. In the left panel, click My Requested Items. Following is a sample screen listing requested items.

service now Service Management								cohesity enduser			
Filter navigator		Requested Items		Go to	Number	Search	1 to 11 of 11				
Files/Folder > Request Requested for = cohesity enduser											
		Number	Item	Stage	Request	Requested for	Opened by	Due date	Quantity		
		RITM0010011	Add VMs to Protection Job	Request Approved	REQ0010011	cohesity enduser	cohesity enduser	2017-12-13 16:34:32	1		
		RITM0010010	Recover Files/Folder	Request Approved	REQ0010010	cohesity enduser	cohesity enduser	2017-12-13 13:32:57	1		
		RITM0010009	Move VMs	Request Approved	REQ0010009	cohesity enduser	cohesity enduser	2017-12-13 13:32:20	1		
		RITM0010008	Move VMs	Request Approved	REQ0010008	cohesity enduser	cohesity enduser	2017-12-13 13:31:13	1		
		RITM0010007	Clone VM	Request Approved	REQ0010007	cohesity enduser	cohesity enduser	2017-12-13 13:30:12	1		
		RITM0010006	Clone VM	Request Approved	REQ0010006	cohesity enduser	cohesity enduser	2017-12-13 13:29:37	1		
		RITM0010005	Recover VM	Request Approved	REQ0010005	cohesity enduser	cohesity enduser	2017-12-13 13:28:42	1		
		RITM0010004	Recover VM	Request Approved	REQ0010004	cohesity enduser	cohesity enduser	2017-12-13 13:28:20	1		

Along with other details, it lists the stage of the request such as request approved, fulfilment, waiting for approval and completed.

- 3. Click the required item to view the details.

Requested Item - RITM0010011

Follow

Update

Delete

Number

RITM0010011

Item

Add VMs to Protection Job

Request

REQ0010011

Requested for

cohesity enduser

Due date

2017-12-13 16:34:32

Configuration item

Watch list

Opened

2017-12-13 02:34:32

Opened by

cohesity enduser

Stage

Waiting for Approval

State

Open

Quantity

1

Estimated Delivery

Backordered

☐

Order Guide

Variables

\* Select Protection Job

Daily VM Backup