

Monitoring Cisco Cloud Center

Beta Version

Cisco: Cloud Center PowerPack version 102

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Chapter

Introduction

Overview

This manual describes how to monitor Cisco Cloud Center using the the ScienceLogic platform.

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What is Cisco Cloud Center?

Cisco Cloud Center is a cloud-management platform used for deploying and managing applications in data centers, private clouds, and public clouds.

Prerequisites

Before performing the tasks in this manual, you must have the following information about the Cloud Center Manager that you want to monitor:

- The IP address of the Cloud Center Manager system
- The username and API key for a Cisco Cloud Center Manager user that has root tenant administration privileges. This account must be an API user, not a GUI user. For information about configuring API users in Cisco Cloud Center Manager, see http://docs.cligr.com/display/40API/API+Management+Key.

What Does the Cisco: Cloud Center PowerPack Monitor?

To monitor Cloud Center using the ScienceLogic platform, you must install the Cisco: Cloud Center PowerPack. This PowerPack enables you to collect data about Cloud Center. The Cisco: Cloud Center PowerPack can monitor Cloud Center Manager running version 4.5 and later.

The Cisco: Cloud Center PowerPack includes:

- An example credential you can use as a template to create a Basic/Snippet credential to connect to the Cloud Center Manager
- Dynamic Applications and Run Book Actions to discover, model, and monitor performance metrics and/or collect configuration data for the following Cloud Center components:
 - Cloud Center Manager
 - Cloud Center Orchestrator
 - Cloud Center Heath Monitor
 - Cloud Center Clouds
 - Cloud Center Application Instances
 - Cloud Center Regions
 - Cloud Center Tenants
 - RabbitMQ
- Device Classes for each of the Cloud Center components the ScienceLogic platform monitors
- Event Policies and corresponding alerts that are triggered when Cloud Center components meet certain status criteria

Installing the Cisco: Cloud Center PowerPack

Before completing the steps in this manual, you must import and install version 102 of the Cisco: Cloud Center PowerPack.

NOTE: To install version 102 of the Cisco: Cloud Center PowerPack, your ScienceLogic system must be upgraded to the 8.2.0 or later release.

To download and install a PowerPack:

TIP: By default, installing a new version of a PowerPack overwrites all content in that PowerPack that has already been installed on the target system. You can use the *Enable Selective PowerPack Field Protection* setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent new PowerPacks from overwriting local changes for some commonly customized fields. (For more information, see the *System Administration* manual.)

- 1. Download the PowerPack from the <u>ScienceLogic Customer Portal</u>.
- 2. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 3. In the **PowerPack Manager** page, click the **[Actions]** button, then select *Import PowerPack*.
- 4. The **Import PowerPack** dialog box appears:

Import PowerPack™		×
Browse for file	Browse	

- 5. Click the [Browse] button and navigate to the PowerPack file.
- 6. When the **PowerPack Installer** modal page appears, click the **[Install]** button to install the PowerPack.

NOTE: If you exit the **PowerPack Installer** modal page without installing the imported PowerPack, the imported PowerPack will not appear in the **PowerPack Manager** page. However, the imported PowerPack will appear in the **Imported PowerPacks** modal page. This page appears when you click the **[Actions]** menu and select *Install PowerPack*.

Chapter

Discovering Cloud Center Manager

Overview

The following sections describe the steps required to discover a Cloud Center Manager in the ScienceLogic platform:

- Creating a Credential for Cloud Center Manager
- Discovering Cloud Center Manager
- Verifying Discovery and Dynamic Application Alignment
- Discovering Multiple Tenants
- Merging RabbitMQ and Cloud Center Orchestrator Devices

Creating a Credential for the Cloud Center Manager Root Tenant

To configure the ScienceLogic platform to monitor Cloud Center Manager, you must first create a Basic/Snippet credential. This credential allows the platform (specifically, the Dynamic Applications in the Cisco: Cloud Center PowerPack) to communicate with your Cloud Center Manager.

The PowerPack includes an example Basic/Snippet credential that you can edit for your own use.

To configure a Basic/Snippet credential to access a Cloud Center Manager:

- 1. Go to the **Credential Management** page (System > Manage > Credentials).
- 2. Locate the **Cisco Cloud Center EXAMPLE** credential, then click its wrench icon (***). The **Edit Basic/Snippet Credential** modal page appears.

3. Enter values in the following fields:

Credential Editor [93]			×
Edit Basic/Snippet Credential #93		New	Reset
Basic Settings			
	Credential Name		
Cisco Cloud Center EXAMPLE			
Hostname/IP	Port	Timeout(ms)	
https://%D	443	5000	
U.	sername	Password	
<user_name></user_name>			
	Save Save As		

- Profile Name. Enter a name for the Cloud Center Manager credential.
- **Username**. Enter the username for a Cloud Center Manager user that has root tenant administration privileges. This account must be an API user, not a GUI user.
- Password. Enter the API key for the user you entered in the Username field.
- 4. Leave all other fields set to the default values. Click the [Save As] button.

Discovering the Cloud Center Manager Root Tenant

To discover Cloud Center Manager, perform the following steps:

- 1. Go to the **Discovery Control Panel** page (System > Manage > Discovery).
- 2. In the Discovery Control Panel, click the [Create] button.

3. The **Discovery Session Editor** page appears. In the **Discovery Session Editor** page, define values in the following fields:



- IP Address/Hostname Discovery List. Enter the IP address for the Cloud Center Manager.
- **SNMP Credentials**. Optionally, select the SNMP credential for the Cloud Center Manager you are discovering.
- Other Credentials. Select the Basic/Snippet credential you created for the Cloud Center Manager root tenant.
- Discover Non-SNMP. Select this checkbox.
- 4. Optionally, you can enter values in the other fields on this page. For more information about the other fields on this page, see the **Discovery & Credentials** manual.
- 5. Click the [Save] button to save the discovery session and then close the Discovery Session Editor window.
- 6. The discovery session you created appears at the top of the **Discovery Control Panel** page. Click its lightning-bolt icon (*F*) to run the discovery session.
- 7. The **Discovery Session** window appears. When the device is discovered, click the device icon (**W**) to view the **Device Properties** page for the device.

Verifying Discovery and Dynamic Application Alignment

To verify that the ScienceLogic platform automatically aligned the correct Dynamic Applications during discovery:

- 1. From the **Device Properties** page for the Cloud Center Manager device, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
- 2. All applicable Dynamic Applications for Cloud Center Manager are automatically aligned during discovery.

NOTE: It can take several minutes after the discovery session has completed for Dynamic Applications to appear in the **Dynamic Application Collections** page.

Close	Properties	Thresholds Co	ollections	<u>M</u> onitors	Schedule	Notos	Attributos
Logs	xoaiooi	interfaces <u>R</u> ef	auonsnips	lickets	Redifects	Notes	Aundules
Device Name	ccm1-47		Managed Type	Physical Devic	e		altate
IP Address / ID	10.199.88.40 2851		Category	Servers.Softwa	are		CISCO.
Class	Cisco Systems		Sub-Class	Cloud Center I	Manager		V# 🗰 🗌
Organization	CCC		Uptime	0 days, 00:00:	00	0	CCC Manager
Collection Mode	Active		Collection Time	2017-04-12 19	9:27:00	A 1	10 al 📾 🤌
Description			Group / Collector	CUG em7-r21	-ova		ccm1-47
Root Device	Cloud Center Cluster 10.1	199.88.40	Parent Device	Cloud Center C	Cluster 10.199.88.40	-	Comment
Dynamic App	olication [™] Collections				Expand Ac	tions Reset	Guide
	Dynamic App	blication	D	Poll Frequency	Type	Credenti	al 🔽
+ Cisco: Clo	ud Center CCM Component	t to Physical Merge	2046	15 mins	Snippet Configuration	Cisco Cloud Cer	nter https:// 🥖 📃
+ Cisco: Clo	ud Center Cluster Discovery	y	2048	15 mins	Snippet Configuration	Cisco Cloud Cer	nter https:// 🥖 📃
+ Cisco: Clo	ud Center Root Device Rec	lassification	2047	5 mins	Snippet Configuration	Cisco Cloud Cer	nter https:// 🍠 📃
				Sel	ect Action]		Go
			Sav	e			

The following Dynamic Applications should be aligned to the device:

- Cisco: Cloud Center CCM Component to Physical Merge
- Cisco: Cloud Center Cluster Discovery
- Cisco: Cloud Center Root Device Reclassification

If the listed Dynamic Applications have not been automatically aligned during discovery, you can align them manually. To do so, perform the following steps:

1. Click the **[Action]** button and then select Add Dynamic Application. The **Dynamic Application Alignment** page appears:

Dynamic Application	×
Dynamic Application Alignment	Reset
Dynamic Applications	Credentials
Bulk Snippet Configuration: Bulk Snippet Config Example Cisco: ACI Client Endpoint Configuration Cisco: ACI Contract Consumer / Provider Config Cisco: ACI Domain Configuration Microsoft: Azure Cloud Service Configuration Microsoft: Azure SQL Database Configuration Microsoft: Azure Storage Container Configuration Microsoft: Azure Virtual Machine Configuration Microsoft: Azure Virtual Network Configuration NetApp: LUN Config C-Mode NetApp: Volume Config C-Mode NetApp: Volume Config C-Mode Bulk Snippet Performance:	Select A Dynamic Application First
AWS EBS Instance Performance AWS EC2 Instance Performance Cisco: ACI Fabric Switch Module Health Scores Microsoft: Azure SQL Database Performance Microsoft: Azure Storage Account Bibb Perform Microsoft: Azure Storage Account Table Perform Microsoft: Azure Storage Account Table Perform Microsoft: Azure Virtual Machine CPU Performa Microsoft: Azure Virtual Machine CPU Performa	ve

- 2. In the **Dynamic Applications** field, select the Dynamic Application you want to align.
- 3. In the Credentials field, select the Basic/Snippet credential you created for Cloud Center Manager.
- 4. Click the [Save] button.
- 5. Repeat steps 1-4 for the other unaligned Dynamic Applications.

Discovering Multiple Tenants

The Cisco: Cloud Center PowerPack can be used to monitor a Cloud Center Manager that includes multiple tenants. To discover multiple tenants, you must follow the steps in the following sections for each tenant in order (in other words, parents must be discovered before their children):

- Creating a Credential for a Cloud Center Manager tenant
- Discovering an additional Cloud Center Manager tenant

For each tenant, you must use the administrator account for that tenant when you create the credential.

2

Creating a Credential for a Cloud Center Manager tenant

To configure a Basic/Snippet credential to access an additional Cloud Center Manager tenant:

- 1. Go to the **Credential Management** page (System > Manage > Credentials).
- 2. Locate the credential you used to discover the root tenant, then click its wrench icon (*P*). The **Edit Basic/Snippet Credential** modal page appears.
- 3. Enter values in the following fields:

dit Basic/Snippet Credential #93		New	Reset
Basic Settings			
	Credential Name		
Cisco Cloud Center EXAMPLE			
Hostname/IP	Port	Timeout(ms)	
https://%D	443	5000	
U	sername	Password	
<user_name></user_name>		•••••	

- Profile Name. Enter a new name for the Cloud Center Manager tenant credential.
- **Username**. Enter the username for a Cloud Center Manager user that is an administrator for the tenant you want to discover. This account must be an API user, not a GUI user.
- **Password**. Enter the API key for the user you entered in the **Username** field.
- 4. Leave all other fields set to the default values. Click the [Save As] button.

Discovering an additional Cloud Center Manager tenant

To discover an additional tenant:

1. From the **Device Properties** page for the Cloud Center Manager device, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.

Clos	е	Properties	T <u>h</u> resholds	<u>C</u> olle	ections	<u>M</u> onitors	Schedule				
Log	\$	rodiooi	interfaces	Relati	onsnips	Lickets	Redirects	<u>1</u>	votes	Attribu	tes
Device Na	ime co	cm1-47			Managed Type	Physical Devic	e		-		
IP Address	/ ID 1(0.199.88.40 2851			Category	Servers.Softwa	ire				sco.
CI	ass C	isco Systems			Sub-Class	Cloud Center N	lanager				F []
Organiza	tion C	CC			Uptime	0 days, 00:00:0	00			CCC Manage	er
Collection M	de A	ctive			Collection Time	2017-04-12 19	:27:00			A 🙁 🖬 🖶	3 8
Descrip	tion				Group / Collector	CUG em7-r21-	ova			ccm1-47	
Root De	vice Cl	loud Center Cluster 10	.199.88.40		Parent Device	Cloud Center C	luster 10.199.88.4	10			_
Dynamic	Applic	cation [™] Collections					Expand	Actions	Rese	et Gui	de
		Dynamic A	pplication		D	Poll Frequency	Type		Cre	dential	\checkmark
+ Cisco:	Cloud	Center CCM Compone	nt to Physical Merge		2046	15 mins	Snippet Configura	ation C	Cisco Cloud	Center https:	:h 🕖 🗖
+ Cisco:	Cloud	Center Cluster Discove	ery		2048	15 mins	Snippet Configura	ation C	cisco Cloud	Center https:	:// 🍠 🔲
+ Cisco:	Cloud	Center Root Device Re	classification		2047	5 mins	Snippet Configura	ation C	Cisco Cloud	Center https:	:h 🍠 🔳
						[Sel	ect Action]			G	0
					Sav	e					

- 2. Select the checkbox for the Cisco: Cloud Center Cluster Discovery Dynamic Application.
- 3. In the Select Action drop-down list, select the credential you created for the tenant.
- 4. Click **[Go]**.

Merging RabbitMQ and Cloud Center Orchestrator Devices

The Dynamic Applications in the Cisco: Cloud Center PowerPack create component devices for the RabbitMQ system and Cloud Center Orchestrator. Optionally, you can discover these devices as physical SNMP devices and merge the component device record and physical device record.

To merge individual devices:

- 1. Go to the **Device Manager** page (Registry > Devices > Device Manager).
- 2. Click the wrench icon (*P*) for the physical device that you want to merge with a component device.

3. On the **Device Properties** page, click the **[Actions]** menu and then select Merge Device.

Close	Proper	ies	T <u>h</u> resholds	<u>C</u> oll	ections	Monitors		<u>S</u> chedule	Logs				
T <u>o</u> olbox	Interfac	es <u>R</u>	elationships	Ii	ickets	Redirects		<u>N</u> otes	Attributes				
Device Name IP Address / ID Class Organization Collection Mode Description Device Hostname	em7_ao 10.100.100.7 ScienceLogic, System Unavailable ScienceLogic	677 Inc. EM7 G3 - All-	In-One			Manage C Su Collectio Group / C	ed Type ategory b-Class Uptime on Time ollector	Physical Device System.EM7 OEM 5 days, 02:06:30 2015-08-26 11:00 CUG em7_ao	0:00				af ⊫ ∻ em7_ao
Device Properties	3										Action	Organization IS Reset	Asset Guide
Identification em7_a	Device	Name	- AA		[10.10	IP Add 00.100.7 - verified	iress	▼ +		[System]	My Bo Add IP Select	okmarks (Ctrl+Alt 9 Address 9 Primary IP Addre	+B) esses
Monitoring & M Devic	lanagement e Class Scier	nceLogic, Inc.	OEM					2			Clear Create Custor	Device Cache e a Ticket (Ctrl+Al m Navigation	t+Enter)
SNMP Rea Availabi	d/Write [EM	17 Default ∨2 P]]	• [1	None] 161 - SNMP]		•)) 🖉			Device Device	e Class e Children	
Laten	icy Port [ICI	1P]			CMP]		۲)			Notep	ad Editor	
Avail+Latend User Mainte	vy Alert [Dis	able] abled]		• • [N	Maintenance C	Collection Enabled	•	1			Produ Repor	ct Catalog t Creator	
Co	lection [En	abled]		• [0	CUG]		۲)			Resou	rce Usage (Ctrl+)	Alt+U)
Col	L Type [Sta	ndard]		•						- I	Merge	Device	
Dast	areing (Dis nboard Nor	e		•								Preserve Ho	ostname
Even	t Mask [Gro	oup in blocks e	very 10 minutes]	T								Disable Asset	t Update
					s	ave						Bypass Interface	e Inventory

4. A list of component devices that are available for merging with the physical device displays. Click the merge icon (35) for the component device you want to merge with the physical device. Information for the component device then displays in the **Selected Device** panel.

Cala	atad Davias							_
Sele	cted Device							
1	7-5_AIO_10.100.100.8	VMware	VMw	are Virtual Mach	ine 5	4 System		
Avai	lable Devices							-
20070	2	0			10	0		
	Device Name *	Category	Cla	ss Sub-class		Urganization		~
			-			1		
1.	7-5_AIO_10.100.100.8	VMware	VMware	Virtual Machine	54	System		
2.	7-5_DB_1	VMware	VMware	Virtual Machine	45	System	<u>ಹ</u>	
3.		VMware	VMware	Virtual Machine	55	System	355	
4.	BAnderton_test	VMware	VMware	Virtual Machine	50	System	<u>ಹ</u>	
5.	Cluster 1	Infrastructu	VMware	Network	40	System	355	
6.	CU-Device	Infrastructu	VMware	Network	38	System	<u>ಹ</u>	
7.	Datastores	Infrastructu	VMware	Folder	33	System	3 5	
8.	doc_svn_PRODUCTION_100.2	VMware	VMware	Virtual Machine	46	System	<u>ಹ</u>	
9.	mem7_ao	VMware	VMware	Virtual Machine	48	System	35	
10.	ha-datacenter	Infrastructu	VMware	Datacenter	31	System	<u>ಹ</u>	
11.	Hosts	Infrastructu	VMware	Folder	32	System	35	
12.	Hughes_AIO_10.100.100.9	VMware	VMware	Virtual Machine	43	System	<u>क</u>	~
13.	KVM_100.40	VMware	VMware	Virtual Machine	49	System		

5. Click the [Merge] button. A pop-up message appears that asks you to confirm the merge.

Message fr	rom webpage
?	This action will also merge historical log data from each device, which cannot be unmerged. Are you sure you want to merge these two devices?
	OK Cancel

6. Click the **[OK]** button.

NOTE: To view an updated list of devices that includes your merged devices, click the **[Reset]** button on the **Device Manager** page.

Relationships Between Component Devices

The ScienceLogic platform can automatically build relationships between Cloud Center component devices and other associated devices:

- If you discover a vCenter device using the Dynamic Applications in the VMware vSphere Base Pack PowerPack version 207 or later, the platform will automatically create relationships between Cloud Center Applications and VMware Virtual Machines.
- If you discover an AWS account using the Dynamic Applications in the Amazon Web Services PowerPack version 103 or later, the platform will automatically create relationships between Cloud Center Applications and AWS EC2 Instances.

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