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# Monitoring Cisco Unified Computing System (UCS) Standalone Rack Servers

Cisco: UCS Standalone Rack Server PowerPack Version 101, revision 2

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# Chapter 1

## Introduction

### Overview

This manual describes how to monitor Cisco Unified Computing System (UCS) standalone rack servers in the ScienceLogic platform using the *Cisco: UCS Standalone Rack Server PowerPack*.

The following sections provide an overview of Cisco UCS standalone rack servers and the *Cisco: UCS Standalone Rack Server PowerPack*:

- [What Are Cisco UCS Standalone Rack Servers? ..... 3](#)
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### What Are Cisco UCS Standalone Rack Servers?

Cisco UCS standalone rack servers are rack-mounted Cisco UCS servers that are managed by the Cisco Integrated Management Controller (CIMC) rather than the Cisco UCS Manager. This currently includes Cisco UCS C-Series and E-Series servers.

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## What Does the Cisco: UCS Standalone Rack Server PowerPack Monitor?

To monitor Cisco UCS standalone rack servers using the ScienceLogic platform, you must install the *Cisco: UCS Standalone Rack Server PowerPack*. This PowerPack includes:

- An example Credential that you can use as a template to create SOAP/XML credentials to connect to the Cisco UCS standalone rack servers that you want to monitor
- Dynamic Applications to discover, model, and monitor performance metrics and collect configuration data for Cisco UCS standalone rack servers
- Device Classes for each of the Cisco UCS standalone rack servers that the ScienceLogic platform monitors
- Event Policies and corresponding alerts that are triggered when Cisco UCS standalone rack servers meet certain status criteria
- A Device Template that you can apply during discovery to align Dynamic Applications to the appropriate Device Classes
- A Device Dashboard that displays information about Cisco UCS standalone rack servers

**NOTE:** The CIMC XML API provides inconsistent data to the *Cisco: UCS Standalone Rack Server PowerPack* for servers with firmware versions prior to 2.0(8d). Similarly, the PowerPack cannot collect server utilization metrics for servers with M3 architecture, but it can collect this information for M4 models.

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## Installing the Cisco: UCS Standalone Rack Server PowerPack

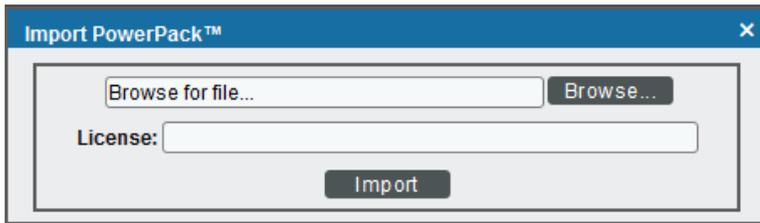
Before completing the steps in this manual, you must import and install the latest version of the *Cisco: UCS Standalone Rack Server PowerPack*.

**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.)

To download and install a PowerPack:

1. Download the PowerPack from the [ScienceLogic Customer Portal](#).
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:



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*.

## Monitoring Cisco UCS Standalone Rack Servers

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### Overview

The following sections describe how to configure and discover a Cisco Unified Computing System (UCS) Rack Server for monitoring by the ScienceLogic platform using the *Cisco: UCS Standalone Rack Server PowerPack*:

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### Prerequisites for Monitoring Cisco UCS Standalone Rack Servers

In order to monitor Cisco UCS standalone rack servers in the ScienceLogic platform using the *Cisco: UCS Standalone Rack Server PowerPack*, you must know the username and password for a web service user on the rack servers you want to monitor.

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### Configuring a SOAP/XML Credential

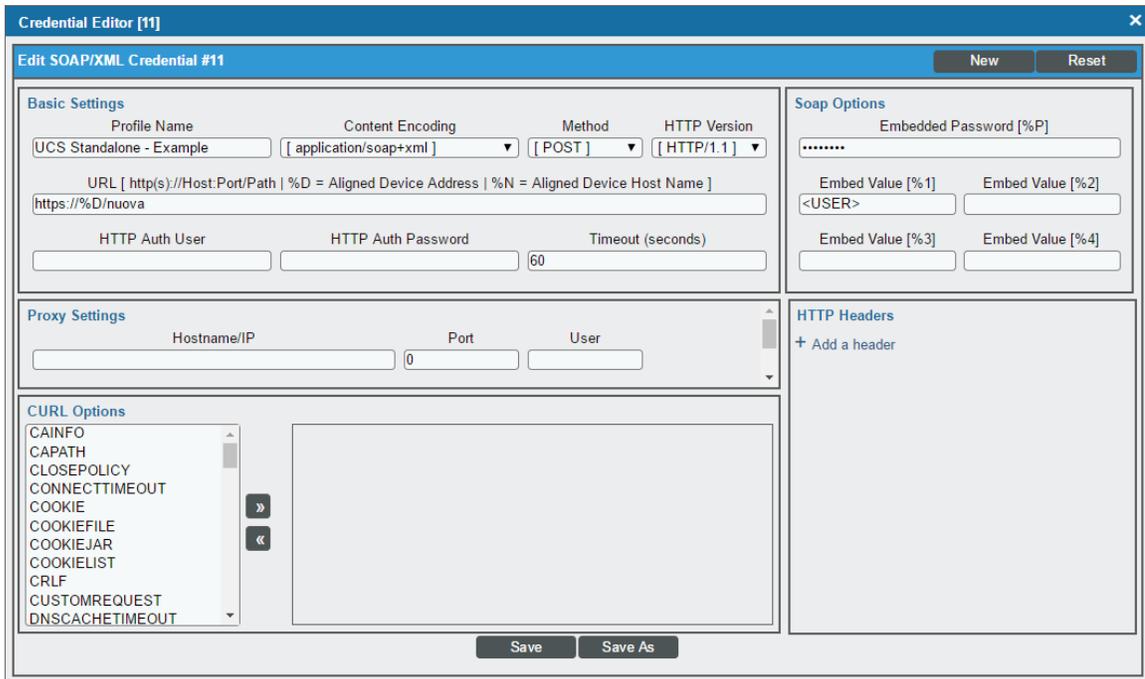
To use the Dynamic Applications in the *Cisco: UCS Standalone Rack Server PowerPack*, you must configure a SOAP/XML credential for the UCS web service.

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

To do so:

1. Go to the **Credential Management** page (System > Manage > Credentials).

2. Locate the **UCS Standalone - Example** credential and click its wrench icon (  ). The **Edit SOAP/XML Credential** modal page appears.



**Credential Editor [11]**

**Edit SOAP/XML Credential #11** New Reset

**Basic Settings**

Profile Name: UCS Standalone - Example  
Content Encoding: [ application/soap+xml ]  
Method: [ POST ]  
HTTP Version: [ HTTP/1.1 ]

URL [ http(s)://Host:Port/Path | %D = Aligned Device Address | %N = Aligned Device Host Name ]  
https://%D/nuova

HTTP Auth User:   
HTTP Auth Password:   
Timeout (seconds): 60

**Soap Options**

Embedded Password [%P]:

Embed Value [%1]:  Embed Value [%2]:   
<USER>

Embed Value [%3]:  Embed Value [%4]:

**Proxy Settings**

Hostname/IP:  Port: 0 User:

**CURL Options**

CAINFO  
CAPATH  
CLOSEPOLICY  
CONNECTTIMEOUT  
COOKIE  
COOKIEFILE  
COOKIEJAR  
COOKIELIST  
CRLF  
CUSTOMREQUEST  
DNSCACHETIMEOUT

**HTTP Headers**

+ Add a header

Save Save As

3. Supply values in the following fields:
  - **Profile Name**. Type a name for the credential.
  - **URL**. Type "https://%D/nuova".
  - **Embed Value [%1]**. Type the username for a web service user on your UCS Rack Server.
  - **Embedded Password [%P]**. Type the password for the user account on your UCS Rack Server.
4. Click the **[Save As]** button.

# Discovering a UCS Rack Server

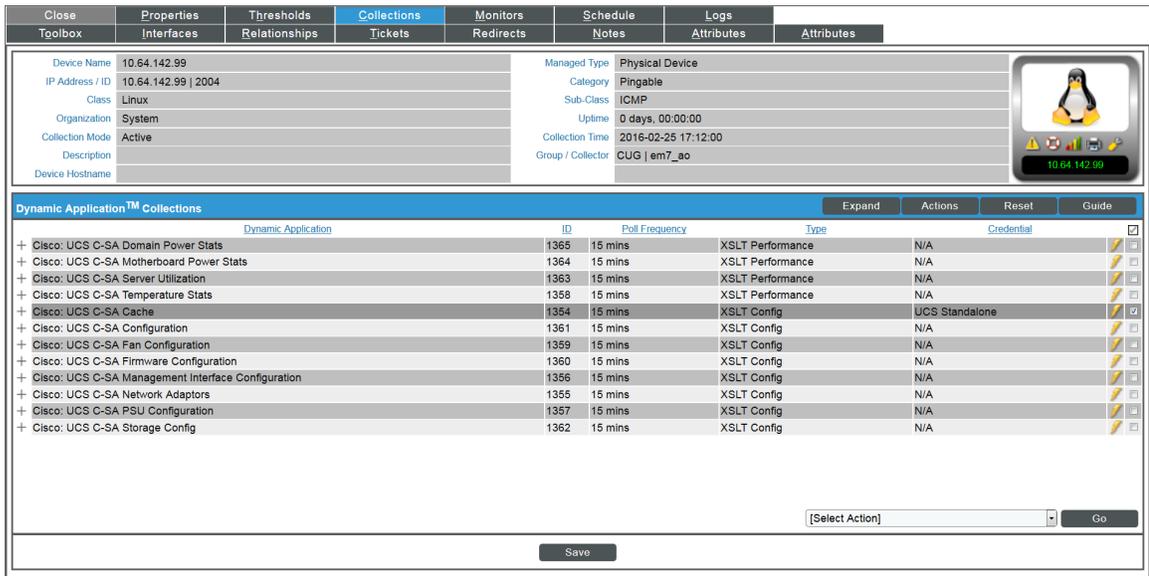
To create and run a discovery session that will discover a UCS Rack Server, perform the following steps:

1. Go to the **Discovery Control Panel** page (System > Manage > Discovery).
2. Click the **[Create]** button to create a new discovery session. The **Discovery Session Editor** window appears:

The screenshot shows the 'Discovery Session Editor | Create New' window. It is divided into three main sections: 'Identification Information', 'IP and Credentials', and 'Detection and Scanning'. The 'Identification Information' section has fields for 'Name' and 'Description'. The 'IP and Credentials' section has a text area for 'IP Address/Hostname Discovery List', an 'Upload File' button, and a list of 'SNMP Credentials' including 'Cisco SNMPv2 - Example', 'Cisco SNMPv3 - Example', 'EM7 Default V2', 'EM7 Default V3', 'IPSLA Example', and 'LifeSize: Endpoint SNMP'. The 'Detection and Scanning' section has dropdown menus for 'Initial Scan Level' (System Default), 'Scan Throttle' (System Default), 'Port Scan All IPs' (System Default), and 'Port Scan Timeout' (System Default). It also has a dropdown for 'Detection Method & Port' (Default Method) and input fields for 'Interface Inventory Timeout (ms)' (600000) and 'Maximum Allowed Interfaces' (10000). The 'Basic Settings' section has checkboxes for 'Discover Non-SNMP', 'Model Devices', and 'DHCP'. It also has input fields for 'Device Model Cache TTL (h)' (2), 'Collection Server PID' (em7ao), and 'Organization' ([ System ]). At the bottom, there is a 'Save' button and a 'Log All' checkbox.

3. Supply values in the following fields:
  - **IP Address Discovery List.** Type the IP address for the UCS Rack Server.
  - **SNMP Credentials.** If SNMP is enabled on your UCS Rack Server, select the appropriate SNMP credential.
  - **Initial Scan Level.** Select 5. *Deep Discovery*.
  - **Detection Method & Port.** Select 443 - *HTTPS*. You can select additional ports, but you must include port 443 - *HTTPS*.
  - **Discover Non-SNMP.** Select this checkbox.
  - **Apply Device Template.** Select *Cisco: UCS Standalone Template*.
4. Optionally, you can supply 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 and then close the **Discovery Session Editor** window.

6. The discovery session you created displays at the top of the **Discovery Control Panel** page. Click its lightning-bolt icon (  ) to run the discovery session.
7. The **Discovery Session** window appears. When the UCS Rack Server is discovered, click its device icon (  ) to view the **Device Properties** page for the UCS Rack Server server.
8. Click the **[Collections]** tab. The **Dynamic Application Collections** page appears:



Dynamic Application	ID	Poll Frequency	Type	Credential	
+ Cisco: UCS C-SA Domain Power Stats	1365	15 mins	XSLT Performance	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Motherboard Power Stats	1364	15 mins	XSLT Performance	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Server Utilization	1363	15 mins	XSLT Performance	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Temperature Stats	1358	15 mins	XSLT Performance	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Cache	1354	15 mins	XSLT Config	UCS Standalone	<input checked="" type="checkbox"/>
+ Cisco: UCS C-SA Configuration	1361	15 mins	XSLT Config	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Fan Configuration	1359	15 mins	XSLT Config	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Firmware Configuration	1360	15 mins	XSLT Config	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Management Interface Configuration	1356	15 mins	XSLT Config	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Network Adaptors	1355	15 mins	XSLT Config	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA PSU Configuration	1357	15 mins	XSLT Config	N/A	<input type="checkbox"/>
+ Cisco: UCS C-SA Storage Config	1362	15 mins	XSLT Config	N/A	<input type="checkbox"/>

9. Select the checkbox for the *Cisco: UCS C-SA Cache* Dynamic Application.
10. In the **Select Action** drop-down list, locate the *Assign SOAP/XML* section and select the credential you [created in the previous section](#).
11. Click the **[Go]** button.

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