



Monitoring Cisco Unified Computing System (UCS) Standalone Rack Servers

Cisco: UCS Standalone Rack Server PowerPack Version 102

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Chapter

1

Introduction

Overview

This manual describes how to monitor Cisco Unified Computing System (UCS) standalone rack servers in SL1 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*:

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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.

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

To monitor Cisco UCS standalone rack servers using SL1, 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 type of Cisco UCS rack server that SL1 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
- A Device Dashboard that displays information about Cisco UCS standalone rack servers
- A Run Book Action/Policy that assigns Cisco UCS rack servers to the correct Device Classes when they are discovered

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.

Installing the Cisco: UCS Standalone Rack Server PowerPack

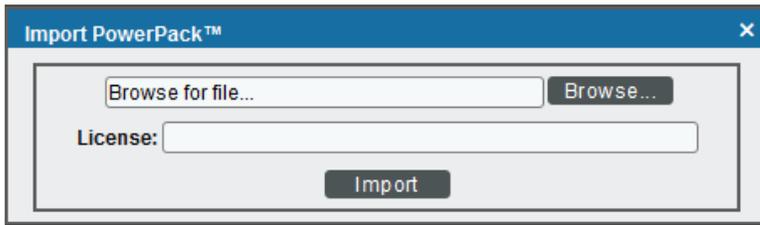
Before completing the steps in this manual, you must import and install the latest version of the *Cisco: UCS Standalone Rack Server PowerPack*.

TIP: By default, installing a new version of a PowerPack overwrites all content from a previous version of 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*.

Chapter

2

Configuration and Discovery

Overview

The following sections describe how to configure and discover a Cisco Unified Computing System (UCS) Rack Server for monitoring by SL1 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 SL1 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.

Configuring a SOAP/XML Credential

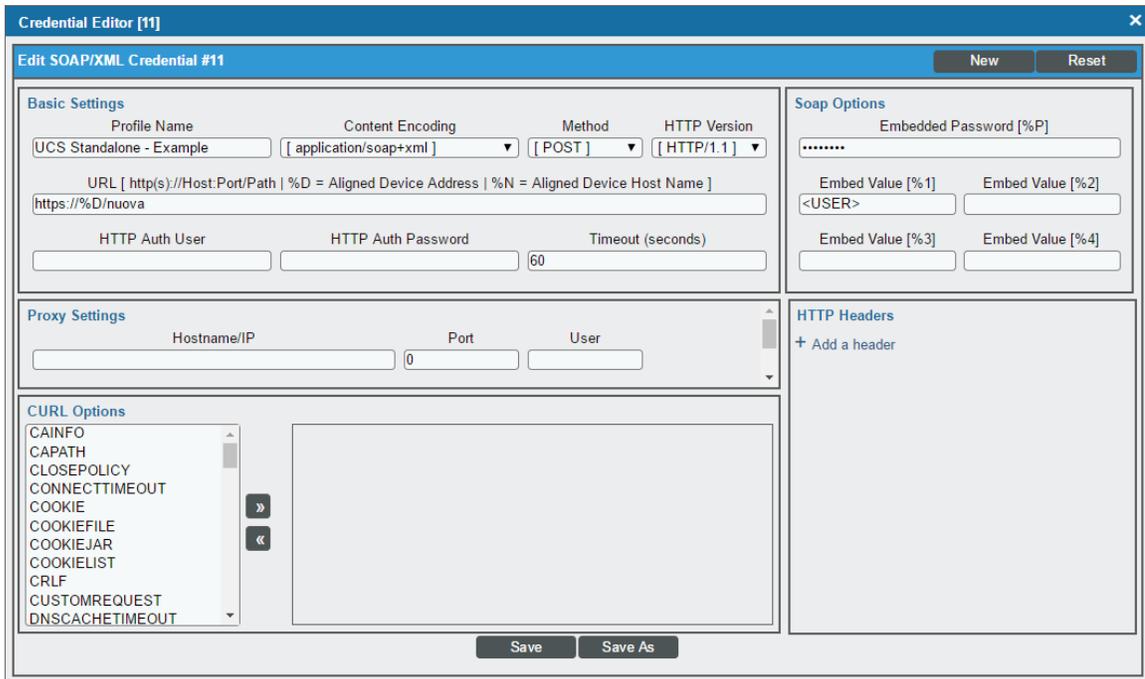
To monitor Cisco UCS rack servers, you must configure a SOAP/XML credential for the UCS web service. This credential enables the Dynamic Applications in the *Cisco: UCS Standalone Rack Server PowerPack* to automatically discover and align to your UCS rack servers.

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.



The screenshot shows the 'Credential Editor [11]' window with the following fields and options:

- 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
 - URL: https://%D/nuova
 - HTTP Auth User: [empty]
 - HTTP Auth Password: [empty]
 - Timeout (seconds): 60
- Proxy Settings:**
 - Hostname/IP: [empty]
 - Port: 0
 - User: [empty]
- CURL Options:**
 - Options list: CAINFO, CAPATH, CLOSEPOLICY, CONNECTTIMEOUT, COOKIE, COOKIEFILE, COOKIEJAR, COOKIELIST, CRLF, CUSTOMREQUEST, DNSCACHETIMEOUT
 - Buttons: » (right), « (left)
 - Text area: [empty]
- Soap Options:**
 - Embedded Password [%P]: [empty]
 - Embed Value [%1]: <USER>
 - Embed Value [%2]: [empty]
 - Embed Value [%3]: [empty]
 - Embed Value [%4]: [empty]
- HTTP Headers:**
 - + Add a header

Buttons at the bottom: 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 has a title bar with 'New' and 'Reset' buttons. The main content is organized into four columns:

- Identification Information:** Name and Description text boxes.
- IP and Credentials:** IP Address/Hostname Discovery List (text box), Upload File (Browse for file...), and two lists of credentials: **SNMP** (including c0sm0s, Cisco SNMPv2-Example, etc.) and **Other Credentials** (including Cisco CUCM Example, etc.).
- Detection and Scanning:** Initial Scan Level (System Default), Scan Throttle (System Default), Port Scan All IPs (System Default), Port Scan Timeout (System Default), Detection Method & Port (list including UDP: 161 SNMP, TCP: 1-topmux, etc.), Interface Inventory Timeout (ms) (600000), Maximum Allowed Interfaces (10000), and Bypass Interface Inventory (checkbox).
- Basic Settings:** Discover Non-SNMP (checkbox), Model Devices (checked), DHCP (checkbox), Device Model Cache TTL (h) (2), Collection Server PID (ayoung-dist-cu-251), Organization ([System]), Add Devices to Device Group(s) (list with None Servers), and Apply Device Template ([Choose a Template]).

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.
 - **Other Credentials.** Select the SOAP/XML credential that you created for the UCS Rack Server.
 - **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.
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. After several minutes, the UCS Rack Server should be discovered with the appropriate Dynamic Applications aligned to it. Click its device icon () to view the **Device Properties** page for the UCS Rack Server server.

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