

Deployment Guide and Sizing Information

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- Check List to Install and Configure Cisco UCS Management Pack, page 3-5

Deployment Guide and Sizing Information

Deployment Scenarios on Trusted Boundary (Domain)

Single Server Deployment of Operations Manager - Recommended Approach

The Management Group (MG1) has one management server - MS1

Step 1	Add an Agent Managed Computer - AM1.
Step 2	Run the Installer on MS1, choose custom install and import only the Management Pack on MS1.
Step 3	Run the installer on AM1 and install the Management Service only.
Step 4	While adding UCS Domain from Operations Manager Console choose AM1 as the Service Machine for monitoring UCS Domain.
Step 5	Enable monitors for faults as documented in the <i>Monitoring Cisco UCS Manager using Syslog</i> document available at the following URL: http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/ucsm_syslog/b_Monitoring_Cisco_UCS M_Using_Syslog.pdf
<u>Note</u>	The Agent Managed Computer's 'Health Service Private Bytes Threshold' and 'Monitoring Host Private Byte Threshold' are set to 400 MB each.

Sizing Information

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The following table displays the sizing information for the above approach.

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Agent Managed Computer	Hardware Specification	No. of Blades Monitored	No. of UCS Components Monitored
AM1	Quad-core CPU and 8GB RAM	80	~4500

Single Server Deployment of Operations Manager - Alternative Approach

Step 1	Run the Installer on MS1 and do a complete install, which imports the Management Pack and installs the Management Service on MS1.
Step 2	While adding UCS Domain from Operations Manager Console choose MS1 as the Service Machine for monitoring UCS Domain.

Sizing Information

The following table displays the sizing information for the above approach

Management Server	Hardware Specification	No. of Blades Monitored	No. of UCS Components Monitored
MS1	Quad-core CPU and 8GB RAM	160	~9000

Multiple Management Server Deployment of Operations Manager - Recommended Approach

The Management Group (MG1) has three management servers: MS1, MS2 and MS3

Step 1	Add an Agent Managed Computer: AM1.
Step 2	Repeat Step 1 to add more Agent Managed Computers for monitoring the UCS Domain.
Step 3	Run the Installer on MS1/MS2/MS3, and choose Custom Install to import only the Management Pack
Step 4	Run the installer on AM1 and install only the Management Service.
Step 5	Repeat Step 4 for all the Agent Managed Computers added in Step 2.
Step 6	While adding the UCS Domain from the Operations Manager Console, choose AM1 as the Service Machine for monitoring UCS Domain.
Step 7	Enable monitors for faults as documented in the <i>Monitoring Cisco UCS Manager using Syslog</i> document available at the following URL: http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/ucsm_syslog/b_Monitoring_Cisco_UCS M_Using_Syslog.pdf
Step 8	Alternatively, you could also select the Agent Managed Computer added in Step 2 and Step 5 as the Service Machine from the Add Monitoring Wizard.



The Agent Managed Computer's 'Health Service Private Bytes Threshold' and 'Monitoring Host Private Byte Threshold' are set to 400 MB each.

Multiple Management Server Deployment of Operations Manager - Alternative Approach

- **Step 1** Run the Installer on MS1/MS2/MS3 and do a complete install, which imports the Management Pack and installs the Management Service also.
- **Step 2** Chose other Management Servers where the Management Service should be installed. Run the installer and chose custom install and install the Management Service only.
- **Step 3** While adding UCS Domain from Operations Manager Console chose the Management Servers where installer was run in Step 1 or 2 as the Service Machine for monitoring UCS Domain

Sizing Information

The following table displays the sizing information for the above approach

Manageme nt Server	Hardware Specification	No. of Blades Monitored	No. of UCS Components Monitored
MS1	Quad-core CPU and 8GB RAM	160	~9000
MS2	Quad-core CPU and 8GB RAM	160	~9000
MS3	Quad-core CPU and 8GB RAM	160	~9000

Deployment Scenarios on Untrusted Boundary (Domain)

Distributed deployment of Operations Manager could have Gateway Servers which are installed on a different Domain un-trusted to the Management Group domain. These Gateway servers monitor the Agent Managed Computers locally and send the monitoring information to the connected Management Server.

The Management Group (MG1) has two management servers: MS1 and MS2. Gateway Server GW1 is connected to MS1. GW1 belongs to a different Active Directory Domain than MS1/MS2. Assuming there are multiple UCS Domain to be monitored, few UCS Domain(s) are on same network as MS1/MS2 and few other UCS Domain(s) belong to the same network as GW1.

Recommended Approach

Step 1 Add an Agent Managed Computer: AM1 to MS1/MS2.

- **Step 2** Add an Agent Managed Computer AM2 to GW1.
- **Step 3** Repeat **Step 1** and **Step 2** to add more Agent Managed Computers to monitor the Cisco UCS Domain.
- **Step 4** Run the Installer on MS1/MS2, choose custom install and import only the Management Pack.
- **Step 5** Run the installer on AM1 and install only the Cisco UCS Management Service.
- **Step 6** Run the installer on AM2 and install only the Cisco UCS Management Service.
- Step 7 Repeat Step 5 and Step 6 for additional Agent Managed Computers added in Step 3.
- **Step 8** While adding Cisco UCS Domain from the Operations Manager Console choose AM1 as the Service Machine for monitoring the Cisco UCS Domain which belongs to the same network as MS1/MS2.
- **Step 9** While adding Cisco UCS Domain from Operations Manager Console choose AM2 as the Service Machine for monitoring Cisco UCS Domain which belongs to the same network as GW1.
- Step 10 Enable monitors for faults as documented in the Monitoring Cisco UCS Manager using Syslog document available at the following URL: http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/ucsm_syslog/b_Monitoring_Cisco_UCS M_Using_Syslog.pdf
- Step 11 Alternatively Agent Managed Computer added in Step 3 and Step 7 could also be selected as Service Machine from Add Monitoring Wizard.

Sizing Information

The following table displays the sizing information for the above approach

Agent Managed Computer	Hardware Specification	No. of Blades Monitored	No. of UCS Components Monitored
AM1	Quad-core CPU and 8GB RAM	80	~4500
AM2	Quad-core CPU and 8GB RAM	80	~4500



The Agent Managed Computer's 'Health Service Private Bytes Threshold' and 'Monitoring Host Private Byte Threshold' are set to 400 MB each.

Alternative Approach

- **Step 1** Run the Installer on MS1/MS2 and do a complete install, which imports the Management Pack and installs the Management Service also.
- Step 2 Run the installer on GW1 and select custom install and choose to install only the Cisco UCS Management Service.
- Step 3 While adding UCS Domain from Operations Manager Console choose MS1/MS2 as the Service Machine (where the installer was run in Step 1) for monitoring UCS Domain which belongs to the same network as MS1/MS2.

Step 4 While adding UCS Domain from Operations Manager Console choose GW1 as the Service Machine for monitoring UCS Domain which belongs to the same network as GW1.

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Note You can add Cisco UCS domains only from the Operations Manager Console application where Cisco UCS Management Pack installer was run to install the Management Pack or the Management Service, or both.

Manageme nt Server	Hardware Specification	No. of Blades Monitored	No. of UCS Components Monitored
GW1	Quad-core CPU and 8GB RAM	160	~9000
MS1	Quad-core CPU and 8GB RAM	160	~9000

Check List to Install and Configure Cisco UCS Management Pack

Serial No.	Title
1.	Ensure that logged in user has one of the following privileges on Management Server for executing installer
	• Domain Administrator and Domain user with local administrative privileges
2.	Ensure that logged in user has one of the following privileges on Management Server or Gateway Server or Agent Managed computers (trusted or untrusted boundaries) administrator privileges (local or domain) on gateway server or agent managed computer (trusted and untrusted boundaries).
	Domain Administrator
	• Domain user with local administrative privileges
3.	Ensure that the computer used for installing Cisco UCS Management Pack and UCS Management Service is part of domain.
4.	Validate the Operating System of computer / server with one of the following
	a. Windows Server 2008 R2
	b.Windows Server 2012
	c.Windows Server 2012 R2

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Serial No.	Title
5.	Validate the Operations Manager version with one of the following:
	a.Operations Manager 2012 RTM (Updated with latest CUs)
	b.Operations Manager 2012 SP1 (Updated with latest CUs)
	c.Operations Manager 2012 R2 (Updated with latest CUs)
6.	Ensure that UCS Management Pack must be installed / imported on Management Server only through installer.
7.	Install Cisco UCS Management Service on following server(s) / computer(s)
	a.Agent Managed Computers (trusted boundary) - Recommended
	b.Management Server
	c.Agent Managed Computers (Untrusted boundary) - Recommended
	d.Gateway Server
8.	Ensure.Net framework 4.0 (minimum) is installed on server / computer used for Cisco UCS Management Service (Verified by installer also)
9.	Ensure PowerShell 2.0 (minimum) is installed on server / computer used for Cisco UCS Management Service (Verified by installer also)
10.	Ensure that the option "Allow this server to act as a proxy and discover managed objects on other computers" is enabled for following server / computer hosting Cisco UCS Management Service.
	a. Agent Managed Computers (trusted boundary)
	b.Management Server
	c.Agent Managed Computers (Untrusted boundary)
	d.Gateway Server
11.	Ensure that all server(s) / computer(s) hosting Cisco UCS Management Service are discovered in Operations Manager – Console – Administration – Device Management – (Agent Managed / Management Server).
12.	Ensure that all server(s) / computer(s) hosting Cisco UCS Management Service are visible in Operations Manager – Console – Monitoring – Cisco Unified Computing System – Cisco UCS Management Service – State View.
	If not visible, refer to point 10.
13.	Ensure the Operations Manager – Console – Authoring - Add Monitoring Wizard is been launched on servers or computers hosting Cisco UCS Management Service for adding Cisco UCS domain or Management Server where management pack is imported.

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Serial No.	Title
14.	If Cisco UCS domain is added on a Gateway Server or agent managed computer (untrusted boundary) is selected for service machine, ensure that Cisco UCS domain is reachable from Gateway Server or agent managed computer (untrusted boundary).
15.	Ensure that after adding Cisco UCS domain through Add Monitoring Wizard, appropriate Run As Account has been associated with correct Run As Profile.
16.	Ensure, if Run As Account distribution is set to More Secure, the computer hosting Cisco UCS Management Service must appear in Selected Computers list and it must be same as selected for monitoring Cisco UCS domain.
17.	Ensure that Operations Manager "Action Account" must have read and write privileges on TEMP (%SystemRoot%\Temp) folder.

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