Monitoring Inventory

This chapter includes the following sections:

Inventory Management

Cisco UCS Central collects the inventory details from all registered Cisco UCS domains. You can view and monitor the components in the registered Cisco UCS domains from the domain management panel.

When a Cisco UCS domain is successfully registered, Cisco UCS Central starts collecting the following details:

- Physical Inventory
- Service profiles and service profile templates
- Fault information

The default data collection interval is 10 minutes. You can customize the interval based on your requirements. If the connection between Cisco UCS domain and Cisco UCS Central fails, whenever the disconnected Cisco UCS domain is detected again, Cisco UCS Central start collecting current data and displays in the domain management panel.

The **General** tab in **Domain Management** panel, displays a list of registered Cisco UCS domains. You can click on the tabs to view details on each component. You can also launch the individual Cisco UCS Manager or the KVM console for a server from this panel.

Physical Inventory

The physical inventory details of the components in Cisco UCS domains are organized under domains. The Cisco UCS domains that do not belong to any domain groups are placed under ungrouped domains. You can view detailed equipment status, and the following physical details of components in the domain management panel:

- Fabric interconnects - switch card modules

- Servers - blades/rack mount servers

- Chassis - io modules

- Fabric extenders

Service Profiles and Templates

You can view a complete list of service profiles and service profile templates available in the registered Cisco UCS domains from the **Servers** tab. The **Service Profile** panel displays a aggregated list of the service profiles. Service profiles with the same name are grouped under the organizations they are assigned to. Instance count next to the service profile name will provide the number of times that particular service profile is used in Cisco UCS domains.

From the **Service Profile Template** panel, you can view the available service profile templates, organization and the number of times each service profile template is used in the Cisco UCS Domain.

Viewing Inventory Details for a UCS Domain

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCSC(resource-mgr)/domain-mgmt/UCS domain # **show detail**.	Displays a list of all equipments in the specified UCS domain.

The following example shows how to view the details of a registered Cisco UCS Domain from Cisco UCS Central:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # show detail
UCS System:
    ID: 1006
    Name: doc-mammoth96
    Total Servers: 6
    Free Servers: 0
    Owner:
    Site:
    Description:
    Fault Status: 1407460783489057
    Current Task:
UCSC(resource-mgr) /domain-mgmt/ucs-domain #
```

Viewing Inventory Details of a Server

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCS(resource-mgr) /domain-mgmt /ucs-domain # **chassis 1**	Enters the chassis mode
Step 5	UCS(resource-mgr) /domain-mgmt /ucs-domain /chassis # **server 1**	Enters the server mode
Step 6	UCS(resource-mgr) /domain-mgmt /ucs-domain /chassis /server # **show inventory**	Displays inventory details of a server.

The following example shows how to view inventory details of a server within a chassis:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope doamin-mgmt
UCSC(resource-mgr)/doamin-mgmt# scope ucs-domain 1007
UCSC(resource-mgr)/doamin-mgmt/ucs-domain# scope chassis 1
UCSC(resource-mgr)/doamin-mgmt/ucs-domain/chassis# scope server 1
UCSC(resource-mgr)/doamin-mgmt/ucs-domain/chassis/server# show inventory
Server 1/1:
    Name:
    User Defined Description:
    Acknowledged Product Name: Cisco UCS B200 M1
    Acknowledged PID: N20-B6620-1
    Acknowledged VID: V01
    Acknowledged Serial (SN): QCI1415A3Q7
    Acknowledged Memory (MB): 8192
    Acknowledged Effective Memory (MB): 8192
    Acknowledged Cores: 8
    Acknowledged Adapters: 1
UCSC(resource-mgr)/doamin-mgmt/ucs-domain/chassis/server#
```

Viewing Local Service Profile

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope org** *org-name*	Enters the organizations mode for the specified organization. To enter the root mode type/ as the*org-name*.
Step 3	UCSC(resource-mgr) /org # scope local-service-profile **local-service-profile_name**	Enters the specified local service profile.
Step 4	UCSC(resource-mgr) /org /local-service-profile # **show instance**	Displays information of the instance in the specified local service profile.

The following example shows how to view local service profile named localSP2:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope org /
UCSC(resource-mgr)/org# scope local-service-profile localSP2
UCSC(resource-mgr)/org/local-service-profile# show instance
Compute Instance:
    ID      Name          Status          Assoc State   Config State   Physical Ref
    -----  -----------  ---------------  ------------  ------------   ------------
    1007   samc02     Config Failure   Unassociated   Failed         localSP2/1007
UCSC(resource-mgr) /org/local-service-profile #
```

Viewing Organization Details

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope org** *org-name*	Enters the organization mode for the specified organization. To enter the root organization mode type/ as the *org-name*.
Step 3	UCSC(resource-mgr) /org # **show org**	Displays details of an organization.

The following example shows how to view root organization details:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope org /
UCSC(resource-mgr)/org # show org
Organizations:
```

```
        Name
        ----
        /org1
UCSC(resource-mgr)/org #
```

Viewing Chassis Information

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCSC(resource-mgr)/domain-mgmt/UCS domain # **show chassis**.	Displays a list of chassis in the specified UCS domain.

The following example shows how to view the chassis information in a registered Cisco UCS Domain from Cisco UCS Central:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # show chassis
UCS System chassis:
    Chassis Id Model      Status                  Operability
    ---------- ---------- ----------------------- -----------
             1 N20-C6508  Inoperable              Operable
UCSC(resource-mgr) /domain-mgmt/ucs-domain #
```

Viewing Fabric Interconnects

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCSC(resource-mgr)/domain-mgmt/UCS domain # **show fabric-interconnect**.	Displays a list of fabric-interconnect in the specified UCS domain.

The following example shows how to view the fabric interconnects in a registered Cisco UCS Domain from Cisco UCS Central:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # show fabric-interconnect
ID Operability IP Address      Model       Serial
-- ----------- -------------- ---------- ------
A  Operable    10.193.66.180   UCS-FI-6296UP FOX1512G07K
UCSC(resource-mgr) /domain-mgmt/ucs-domain #
```

Viewing Fabric Extenders

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCSC(resource-mgr)/domain-mgmt/UCS domain # **show fex**.	Displays a list of fabric extenders in the specified UCS domain.

The following example shows how to view the fabric extenders in a registered Cisco UCS domain from Cisco UCS Central:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # show fex
UCS System Fabric-extender:
    Fex Id     Model       Status                     Operability
    ---------- ---------- ------------------------ -----------
          2 N2K-C2232PP-10GE
                          Accessibility Problem    N/A

UCSC(resource-mgr) /domain-mgmt/ucs-domain #
```

Viewing Servers

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.

	Command or Action	Purpose
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCSC(resource-mgr)/domain-mgmt/UCS domain # **show server**.	Displays a list of servers in the specified UCS domain.

The following example shows how to view the rack servers in a registered Cisco UCS Domain from Cisco UCS Central:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # show server
UCSC(resource-mgr) /domain-mgmt/ucs-domain #
```

To view the blade servers, you have to scope into the chassis:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # scope chassis 1
UCSC(resource-mgr) /domain-mgmt/ucs-domain/chassis # show server
Blade Server in a UCS Chassis:
    Chassis Id Slot Id Status Cores  Memory (MB)    LS Ref
    ---------- ------- ------ ------ -------------- ------
    1               1 Inoperable
                               12          131072
    1               2 Ok        8            6144
org-root/req-BIOS-2/inst-100
6
    1               3 Discovery
                                0               0
    1               5 Ok        8           24576
org-root/req-BIOS-5/inst-100
6
    1               6 Ok        8           12288
org-root/req-BIOS-6/inst-100
6
    1               7 Ok       32           32768
org-root/org-LisasOrg/req-Li
sasOrg_SPClone/inst-1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain/chassis #
```

Viewing FSM Operation Status

Procedure

	Command or Action	Purpose
Step 1	UCSC# **connect resource-mgr**	Enters resource manager mode.
Step 2	UCSC(resource-mgr) # **scope domain-mgmt**	Enters the UCS domains.

	Command or Action	Purpose
Step 3	UCSC(resource-mgr) /domain-mgmt # **scope ucs-domain** *name*	Enters the specified UCS domain.
Step 4	UCSC(resource-mgr)/domain-mgmt/UCS domain # **show fsm status**.	Displays the fsm operation status for the specified UCS domain.

The following example shows how to view the FSM operation status in a registered Cisco UCS Domain from Cisco UCS Central:

```
UCSC# connect resource-mgr
UCSC(resource-mgr)# scope domain-mgmt
UCSC(resource-mgr) /domain-mgmt # scope ucs-domain 1006
UCSC(resource-mgr) /domain-mgmt/ucs-domain # show fsm status

ID: 1006
    FSM 1:
        Status: 0
        Previous Status: 0
        Timestamp: Never
        Try: 0
        Progress (%): 100
        Current Task:
UCSC(resource-mgr) /domain-mgmt/ucs-domain #
```