

# CHAPTER **7**

# **Infrastructure Manager Configuration**

Infrastructure Manager, which is new for Cisco HCS 8.6(2), allows you to provision and query the Cisco HCS Shared Data Repository. The Cisco HCS Shared Data Repository provides configuration information for HCM - Service Assurance. The Cisco HCS Shared Data Repository is a repository of data that represents the Cisco HCS configuration of data centers, customers and management components in the service provider's network. This repository is then used by HCM - Service Assurance to provide more effective, detailed, and accurate operational alarms and events.

This chapter contains information on the following topics:

- Infrastructure Manager Element Description, page 7-1
- CUCDM Sync Services, page 7-5
- vCenter Sync Services, page 7-6
- General Procedures, page 7-7

# **Infrastructure Manager Element Description**

The following section contains information on the elements available in the Infrastructure Manager. These elements appear as configuration options in the Infrastructure Manager.

| Element     | Description   |
|-------------|---|
| Data Center | Each Data Center in the Shared Data Repository represents a physical Data<br>Center involved in the Cisco HCS deployment. A Data Center will typically<br>house one or more Unified Computing Systems (UCS), one or more Storage<br>Array Networks (SANs), VMware and vCenter infrastructure, several Data<br>Center monitoring applications (DCNM), and networking infrastructure to tie it<br>all together. |

 Table 7-1
 Infrastructure Manager Element Description

| Element               | Description   |
|-----------------------|---|
| UCS Manager           | The Unified Computing System Manager (UCS Manager) provides centralized<br>management for a Unified Computing System, which is comprised of multiple<br>chassis, each with multiple blades. Each Data Center typically contains at least<br>one UCS Manager and associated chassis and blades. These hardware resources<br>are used to run the Virtual Machines for the customer applications such as Cisco<br>Unified Communications Manager.  |
|                       | UCS Managers and their associated chassis and blades should be configured to<br>match the hardware resources in the Data Center. Furthermore, each blade<br>should be linked to an ESXi Host in the vCenter configuration. When this<br>linkage is made in the Infrastructure Manager configuration, the Service<br>Assurance components of Cisco HCS can perform advanced fault correlation by<br>attributing failures in the UCS hardware with alarms from ESXi Hosts, virtual<br>machines, and customer applications. This fault correlation helps system<br>administrators more quickly troubleshoot and isolate problems in the network. |
|                       | A UCS Manager should be configured for each UCS Manager deployed in the Data Center.  |
| vCenter               | A vCenter is the hypervisor manager from VMware. It provides centralized control and visibility at every level of virtual infrastructure and unlocks the power of the vSphere through proactive management.   |
|                       | You can manually configure or automatically synchronize vCenter data with vSphere. If Sync enabled is checked, the VMware Data Center, VMware Cluster, Virtual Machine, and ESXi Host are auto-synced from the vCenter. In addition, if sync is enabled, modifications directly from the GUI are prohibited.  |
|                       | For vCenter Sync to function at least one vCenter, vCenter credentials and vCenter network address information must be added.   |
|                       | A vCenter should be configured for each vCenter server deployed in the Data<br>Center. If the vCenter is managing VMware infrastructure that spans multiple<br>Data Centers, configure the vCenter in the Data Center in which the vCenter<br>server itself is deployed.  |
| VMware Data<br>Center | A VMware Data Center is a logical grouping of VMware Clusters. The VMware<br>Data Center Summary page displays a list of the VMware Data Centers in your<br>Cisco HCS as well as basic details about each one.  |
|                       | If vCenter sync is enabled, and successful, VMware Data Centers are added, edited, and deleted through the vCenter sync. Any configuration changes to VMware Data Centers should be done from the vCenter user interface.   |
|                       | Configure one Data Center for each physical Data Center that hosts equipment<br>in the Cisco HCS deployment. The Data Center may be owned by the service<br>provider or by a customer.  |
| VMware Cluster        | A VMware Cluster is a logical grouping of ESXi Hosts and Virtual Machines in<br>the VMware infrastructure. The VMware Cluster Summary page displays a list<br>of the VMware Clusters in your Cisco HCS as well as basic details about each<br>one.  |
|                       | If vCenter sync is enabled and successful, VMware Clusters are added, edited,<br>and deleted through the vCenter sync. Any configuration changes to VMware<br>Clusters should be done from the vCenter user interface.  |

#### Table 7-1 Infrastructure Manager Element Description

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| Element             | Description  |
|---------------------|--|
| Virtual Machine     | A Virtual Machine is the machine deployed by VMware within a VMware<br>Cluster. The Virtual Machine Summary page displays a list of the Virtual<br>Machines in your Cisco HCS as well as basic details about each one.   |
|                     | If vCenter sync is enabled and successful, Virtual Machines are added, edited,<br>and deleted through the vCenter sync. Any configuration changes to Virtual<br>Machines should be done from the vCenter user interface.   |
| ESXi Hosts          | The ESXi Host is the VMware Virtual Machine manager (VMM) or hypervisor<br>associated with a specific blade. The ESXi Host Summary page displays a list<br>of the ESXi Hosts in your Cisco HCS as well as basic details about each one.  |
|                     | If vCenter sync is enabled and successful, ESXi Hosts are added, edited, and deleted through the vCenter sync. With the exception of the Blade linkage, any configuration changes to ESXi Hosts should be done from the vCenter user interface. After the ESXi Host information has been automatically synced, the Blade association must be configured manually.  |
| CUBE-SP             | The Cisco Unified Border Element - Service Provider edition (CUBE-SP)<br>provides a network-to-network demarcation interface for signaling<br>interworking, media interworking, address and port translations, billing,<br>security, quality of service (QoS), Call Admission Control (CAC), and<br>bandwidth management. The CUBE-SP Summary page displays a list of the<br>CUBE-SPs in the aggregation layer of your Cisco HCS as well as basic details<br>about each one. |
| Customers           | The customer page displays the details of the customer in your Cisco HCS.  |
|                     | If CUCDM sync is enabled and successful, customers are added, edited and deleted through the CUCDM sync.   |
| Cluster             | A cluster refers to a unified communications application cluster, such as Cisco<br>Unified Communications Manager cluster or Cisco Unified Presence cluster.<br>The Cluster Summary page displays a list of the clusters in your Cisco HCS as<br>well as basic details about each one.   |
|                     | It is recommended to configure Cisco Unified Presence, Cisco Unity<br>Connection, and Cisco Unified Communications Manager clusters on the<br>CUCDM server and have the CUCDM Sync Service add the clusters to the<br>Shared Data Repository. Other cluster types, such as Contact Center, should be<br>added through Infrastructure Manager.  |
| Cluster Application | The Cluster Application Summary page displays a list of the cluster applications in your Cisco HCS as well as basic details about each one.  |
|                     | It is recommended to configure Cisco Unified Presence, Cisco Unity<br>Connection, and Cisco Unified Communications Manager cluster applications<br>on the CUCDM server and have the CUCDM Sync Service add the cluster<br>applications to the Shared Data Repository. Other cluster application types, such<br>as Contact Center, should be added through Infrastructure Manager.  |

#### Table 7-1 Infrastructure Manager Element Description

| Flomont                   | Description   |
|---------------------------|---|
| Element                   |   |
| SIP Trunk                 | The SIP Trunk Summary page displays information about the SIP trunks<br>belonging to a Cisco Unified Communications Manager application instance<br>and those associated with one or more CUBE-SP (Cisco Unified Border Element<br>- Service Provider) instances in your Cisco HCS.   |
|                           | SIP Trunk data must be entered manually in Infrastructure Manager as it is not synced from CUCDM.   |
| Customer<br>Equipment     | The Customer Equipment Summary page displays a list of the your customers' equipment, such as routers, gateways, SRST, media devices, and CUBE, in your Cisco HCS as well as basic details about each one.  |
|                           | If CUCDM sync is enabled, and successful, routers, gateways, SRST, and media devices configured as IOS Devices on the CUCDM are added, edited, and deleted through the CUCDM sync.  |
| Management<br>Application | The Management Application Summary page displays a list of the management<br>applications in your Cisco HCS as well as basic details about each one. The<br>applications include CUOM, CUSM, CUCDM, Fulfillment_CDM,<br>DCNM_LAN, DCNM_SAN, and DCNM_DB.  |
|                           | Some CUCDM data can be manually configured or automatically synced with CUCDM sync. If sync enabled is checked, the Service Provider, Customer, Cluster, Cluster Application, and Customer equipment are auto-synced from the CUCDM. In addition, if sync is enabled, modifications directly from the GUI are prohibited.   |
|                           | CUCDM must be manually configured in the management application section to<br>allow CUCDM to start syncing. Disabling auto sync allows for modification and<br>deletion of synced data.   |
| Jobs                      | The Jobs Summary page displays a list of the all the automatic and manual jobs added to your Cisco HCS as well as basic details about each one.   |
| Sync Request              | You can configure manual syncs on the Sync Request page for the following entities:   |
|                           | • Service Provider: All Data Centers and customers in the system are synced.  |
|                           | • <b>Customer:</b> Only the selected customers are synced.  |
|                           | • Data Center: All VCenters in the Data Center are synced.  |
|                           | • VCenter: Only the selected vCenter is synced.   |
| Default Credentials       | Default credentials are user IDs and passwords for accessing applications<br>through the Web, CLI, or SNMP, as applicable. The appropriate default<br>credentials are assigned to each equipment type that is configured, either<br>manually or through CUCDM sync. Configure a default credential for each user<br>ID that is common across all equipment of a certain type. For example, if all<br>Cisco Unified Communications Manager applications have the same SNMP V2<br>community string, configure a default credential for the Cisco Unified<br>Communications Manager equipment type with the common SNMP V2<br>community string. This SNMP credential will then apply to all Cisco Unified<br>Communications Manager applications that are synced from CUCDM. |

| Table 7-1 | Infrastructure | Manager | Element | Description |
|-----------|----------------|---------|---------|-------------|
|-----------|----------------|---------|---------|-------------|

| Element          | Description   |
|------------------|---|
| Service Provider | The service provider page displays the details of the service provider in your Cisco HCS.   |
|                  | If CUCDM sync is enabled and successful, customer equipment is added, edited, and deleted through the CUCDM sync.   |
| Settings         | The Settings page provides some thresholds for Cisco Unified Operations<br>Manager assignments that can be configured. Each customer is assigned to a<br>Cisco Unified Operations Manager, and each Cisco Unified Operations Manager<br>can service multiple customers and the subscribers associated with those<br>customers. The Settings page allows the administrator to specify the maximum<br>number of customers, devices and subscribers each Cisco Unified Operations<br>Manager can service. The Settings page also allows the administrator to specify<br>the warning threshold for the same. When a maximum is reached, no further<br>assignments can be made to that Cisco Unified Operations Manager. When a<br>warning threshold is reached, the Usage is highlighted on the Management<br>Application page. |

| Table 7-1 | Infrastructure | Manager | Element | Description |
|-----------|----------------|---------|---------|-------------|
|-----------|----------------|---------|---------|-------------|

# **CUCDM Sync Services**

The CUCDM sync service, which maintains synchronization of provisioned Cisco HCS data between CUCDM and the Cisco HCS Shared Data Repository, copies data from CUCDM to the Cisco HCS Shared Data Repository. The sync service supports automatic and manual synchronization. The CUCDM sync service allows Cisco HCS Fulfillment and DMA-CUOM to use the CUCDM configuration to push data to CUOM, which supports monitoring of Cisco Unified Communications Manager, Cisco Unity Connection, Cisco Unified Presence, and Cisco IOS gateway and media resource devices. Service Assurance uses the CUCDM configuration in conjunction with vCenter configuration to perform fault correlation and event enrichment.

### Synced Data for CUCDM Sync Services

The following section outlines the data that is synced from CUCDM.

- Service Provider: Name, Account ID, Description, Contact Name, Contact Address 1, Contact Address 2, Contact City, Contact State, Contact Country, Contact Zip Code, Contact Phone Number, Contact email.
- **Customer:** Name, Extended Name, Account ID, External Customer ID, Contact Name, Contact Address 1, Contact Address 2, Contact City, Contact State, Contact Country, Contact Zip Code, Contact Phone Number, Contact email.
- **Cisco Unified Communications Manager Cluster:** Name, Description, Country Code, Email, Call Processing ID, CUCDMAAppVersion, Manual Mode (T or F), Customer association.
- **Cisco Unified Communications Manager Application Instance:** Name, Description, IS Publisher (T or F), Network Address, Host Name, Admin ID, Admin Password.
- **Cisco Unified Presence Cluster:** Name, Description, Email, Cluster ID, CUCDMAAppVersion, Manual Mode (T or F), Customer Association.

- Cisco Unified Presence Application Instance: Name, IS Publisher, Network Address, Host Name, Admin ID, Admin Password.
- **Cisco Unity Connection Cluster:** Name, Description, Email, Country Code, Call Processing ID, CUCDMAAppVersion, Manual Mode (T or F), Customer Association.
- **Cisco Unity Connection Application Instance:** Name, IS Publisher (T or F), Network Address, Host Name, Admin ID, Admin Password.
- **Customer Equipment:** Name, Role, Network Address, Host Name, Admin ID, Admin Password, Customer Association.

# **Configuration Checklist for CUCDM Sync Services**

The following table lists the steps that you must perform to CUCDM Sync Services up and running.

Table 7-2 Configuration Checklist for CUCDM Sync Services

|        | Tasks  | For More Information                |
|--------|--|-------------------------------------|
| Step 1 | Start the CUCDM Sync Services.   | Starting the Services, page 7-7     |
| Step 2 | Configure Cisco Unified Communications Domain Manager as the Management Application. | Adding New Elements, page 7-8       |
| Step 3 | Verify configuration by performing a manual sync for the Service Provider.           | Performing a Manual Sync, page 7-14 |
| Step 4 | Verify configuration by viewing the job status.                                      | Viewing Jobs, page 7-15             |

# vCenter Sync Services

The Cisco HCS VCenterSync Service monitors configuration data on one or more vCenter servers, copies data from the vCenter servers to the Cisco HCS Shared Data Repository, and maintains synchronization between the vCenter servers and the Cisco HCS Shared Data Repository. Cisco HCM-Service Assurance uses the vCenter configuration to perform fault correlation and event enrichment.

### Synced Data for vCenter Sync Services

The following section outlines the data that is synced from vCenter:

- VMware Data Center
- VMware Clusters
- Virtual Machines
- ESXi Hosts

# **Configuration Checklist for vCenter Sync Services**

The following table lists the steps that you must perform to vCenter Sync Services up and running.

| Table 7-3 | Configuration Checklist for CUCDM Sync Services |
|-----------|---|
|-----------|---|

|        | Tasks   | For More Information                |
|--------|---|-------------------------------------|
| Step 1 | Start the vCenter Sync Services.                                  | Starting the Services, page 7-7     |
| Step 2 | Configure a Data Center.  | Adding New Elements, page 7-8       |
| Step 3 | Configure a vCenter.  | Adding New Elements, page 7-8       |
| Step 4 | Verify configuration by performing a manual sync for the vCenter. | Performing a Manual Sync, page 7-14 |
| Step 5 | Verify configuration by viewing the job status.                   | Viewing Jobs, page 7-15             |

# **General Procedures**

The following section contains the general procedures related to Infrastructure Manager.

# **Starting the Services**

| Step 1 | From the CLI, activate the services by entering the following:            |
|--------|---|
|        | admin: utils service activate Cisco HCS VCenterSync Service               |
|        | admin: utils service activate Cisco HCS Fulfillment Service               |
|        | admin: utils service activate Cisco HCS CUCDMSync Service                 |
|        | admin: utils service activate Cisco HCS DMA-CUOM Service                  |
|        | admin: utils service activate Cisco HCS North Bound Interface Web Service |
|        | admin: utils service activate Cisco HCS SI UI                             |
|        | admin: utils service activate Cisco HCS Service Inventory                 |
|        | admin: utils service activate Cisco Platform Manager Service              |
|        | admin: utils service activate Platform Administrative Web Service         |
| Step 2 | Verify the services are active and running, by entering the following:    |
|        | admin: utils service list.  |

# **Viewing and Editing Elements**

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| Step 1 | In the side menu, navigate to the element you want to view or edit. |
|--------|---|
| Step 2 | Click the link of the element in the Name column.                   |
| Step 3 | View or edit information about the element on the Edit page.        |

For more field descriptions, refer to online help.

# **Adding New Elements**

| Step 1 | In the side menu, navigate to the element you want to add.   |
|--------|--|
| Step 2 | Click Add New.   |
| Step 3 | Enter the required information, refer to "Add New Elements Descriptions" section on page 7-8 for more information. |
| Step 4 | Click Save.  |

### **Add New Elements Descriptions**

The following tables outline the different options for adding new elements.

| Field  | Description   |  |
|--|---|--|
| General Information                              |   |  |
| Name   | Enter the name of the new Data Center.                  |  |
| Owner  | Select the owner of the new Data Center.                |  |
| Data Center                                      |   |  |
| Address 1  | Enter the address for the new Data Center.              |  |
| Address 2  | Enter the address for the new Data Center.              |  |
| City   | Enter the city for the new Data Center.                 |  |
| State  | Enter the state for the new Data Center.                |  |
| Zip Code   | Enter the zip code for the new Data Center.             |  |
| DCNM (Data Center Network Management) Monitoring |   |  |
| DCNM-DB  | Select the DCNM-DB for monitoring the new Data Center.  |  |
| DCNM-LAN   | Select the DCNM-LAN for monitoring the new Data Center. |  |
| DCNM-SAN   | Select the DCNM-SAN for monitoring the new Data Center. |  |

Table 7-4 Data Center

#### Table 7-5UCS Manager

| Field                       | Description  |  |
|-----------------------------|--|--|
| General Information         |  |  |
| Name                        | Enter the name for the new UCS manager.  |  |
| Data Center                 | Select the Data Center for the UCS manager.  |  |
| IPv4                        | Enter the IPv4 for the USC manager. You can find this IP<br>address in the Cisco UCS Manager GUI under the Admin tab,<br>Properties section, Virtual IP Address field. |  |
| Fabric Interconnects        |  |  |
| Interconnect A IPv4 Address | Enter the appropriate IP address.  |  |

#### Table 7-5UCS Manager

| Field                       | Description                       |
|-----------------------------|-----------------------------------|
| Interconnect B IPv4 Address | Enter the appropriate IP address. |

#### Table 7-6 Add Credentials

| Field             | Description  |
|-------------------|--|
| Credential Type   | Select the credential type related to the UCS manager<br>Depending on the credential type, enter the remaining fields.<br>To configure the administration credentials, choose the<br><b>Admin</b> credential type. |
| User ID           | Enter the user ID related to the UCS manager.  |
| Password          | Enter the password for the user ID for the UCS Manager.  |
| Re-enter Password | Enter the password for the user ID for the UCS Manager.  |
| Community String  | Enter the community string related to the UCS manager.   |
| Access Type       | Select the access type related to the UCS manager.   |

#### Table 7-7 Chassis

| Field        | Description                                |
|--------------|--|
| Chassis ID   | Enter the chassis ID.                      |
| UCS Manager  | Select the UCS manager of the new chassis. |
| Product Name | Enter the product name of the new chassis. |

#### Table 7-8 Blade

| Field              | Description                                     |
|--------------------|---|
| Distinguished Name | Enter the distinguished name for the new blade. |
| Chassis ID         | Select the chassis for the new blade.           |
| Product Name       | Enter the product name for the new blade.       |
| Slot               | Enter the slot number for the new blade.        |

#### Table 7-9 vCenter

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| Field           | Description  |
|-----------------|--|
| Name            | Enter the name for the new vCenter.                                      |
| Description     | Enter the description for the new vCenter.                               |
| Data Center     | Select the required Data Center in which the vCenter server is deployed. |
| Virtual Machine | Select the Virtual Machine that is hosting the vCenter server.           |
| Sync Enabled    | Check to enable vCenter sync. (Optional)                                 |

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#### Table 7-10 Network Address Information

| Field         | Description  |
|---------------|--|
| Network Space | Select SP_Space for service provider.                |
| IPV4 Address  | Enter either the correct IP address or the hostname. |
| IPV6 Address  |  |
| Hostname      |  |
| Domain        | Enter the domain if using hostname.                  |
| SRV address   | Check if you want SRV address displayed.             |

#### Table 7-11VMware Data Center

| Field   | Description   |
|---------|---|
| Name    | Enter the name of the new VMware Data Center.             |
| VCenter | Select the related vCenter of the new VMware Data Center. |

#### Table 7-1 VMware Cluster

| Name               | Enter the name of the new VMware Cluster.                     |
|--------------------|---|
| VMware Data Center | Select the related VMware Data Centers of the VMware Cluster. |

#### Table 7-12 Virtual Machine

| Field          | Description  |
|----------------|--|
| Name           | Enter the name of the new Virtual Machine.                     |
| VMware Cluster | Select the related VMware Clusters of the new Virtual Machine. |
| Hostname       | Enter the hostname of the new Virtual Machine.                 |
| Domain Name    | Enter the domain name of the new Virtual Machine.              |

#### Table 7-13 ESXi Host

| Field          | Description  |
|----------------|--|
| Name           | Enter the name of the new ESXi Host.   |
| IPV4           | Enter the IPV4 of the new ESXi Host.   |
| VMware Cluster | Select the VMware Cluster of the new ESXi Host.  |
| Blade          | Select the blade of the new ESXi Host. This field is not automatically synced and must be manually configured. |

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#### Table 7-14 CUBE-SP

| Field                   | Description   |
|-------------------------|---|
| Service Provider        | This field is auto populated. Displays the service provider of the new CUBE-SP. |
| Name                    | Enter the name of the new CUBE-SP.  |
| Description             | Enter the description of the new CUBE-SP.                                       |
| SIP Trunks              |   |
| Name                    | Displays the name of the SIP Trunk.   |
| Description             | Displays the description of the SIP trunk.                                      |
| Associated with Cube-SP | Displays any associations with CUBE-SP.   |

#### Table 7-15 Customer

| Field   | Description  |  |
|---|--|--|
| General Information   |  |  |
| Name  | Enter the new customer name. The name must be unique to the Shared Data Repository.  |  |
| External Customer ID  | Enter the new customer ID.   |  |
| Extended Customer Name  | Enter the new extended customer name.  |  |
| Contact Information   |  |  |
| Address 1   | Enter the new customer address.  |  |
| Address 2   | Enter the new customer address.  |  |
| City  | Enter the new customer city.   |  |
| State   | Enter the new customer state.  |  |
| Country   | Enter the new customer country.  |  |
| Zip Code  | Enter the new customer zip code.   |  |
| Contact Name  | Enter the new customer contact name.   |  |
| Contact Telephone Number  | Enter the new customer contact telephone number.   |  |
| Contact Email   | Enter the new customer contact email.  |  |
| Customer Specific Information                                       |  |  |
| Number of End User Subscribers                                      | Enter the new customer's number of end user subscribers. The DMA-Cisco Unified Operations Manager service will update the number of End User Subscribers based on inventory results on the Unified CM. |  |
| CUOM (Cisco Unified Operations Manager)<br>Monitoring this Customer | Select a Cisco Unified Operations Manager from the list that monitors this customer.   |  |

| Field  | Description  |
|--|--|
| General Information  |  |
| Name   | Enter the new cluster name.  |
| Customer   | Select the new cluster customer.   |
| Description  | Enter the new cluster description.   |
| CPID   | Enter the new cluster CPID.  |
| Cluster Type   | Select the new cluster type.   |
| CUCDM (Cisco Unified Communications<br>Domain Manager) AppVersion  | Displays the CUCDM application version and is<br>auto-populated if cluster data is synced using CUCDM Sync<br>Service. |
| Manual Mode  | Select manual mode if required.  |
| CUOM (Cisco Unified Operations Manager)<br>Monitoring this Cluster | Select the new cluster Cisco Unified Operations Manager monitoring this cluster.                                       |
| Contact Information  |  |
| Email  | Enter the new cluster contact email.   |
| Country Code   | Enter the new cluster contact country code.  |

Table 7-16 Cluster

#### Table 7-17Cluster Application

| Field  | Description  |  |
|--|--|--|
| Application Type                                     | Enter the new cluster application type.                    |  |
| Name   | Enter the new cluster application name.                    |  |
| Description  | Enter the new cluster application description.             |  |
| Node Type  | Enter the new cluster application node type.               |  |
| Cluster  | Enter the new cluster application related cluster.         |  |
| Virtual Machine                                      | Enter the new cluster application related Virtual Machine. |  |
| SIP Trunks (SIP Trunk data is not synced from CUCDM) |  |  |
| Name   | Displays the name of the SIP trunk.                        |  |
| Description  | Displays the description of the SIP trunk.                 |  |
| Associated with Cube-SP                              | Displays any associations with CUBE-SP.                    |  |

#### Table 7-18 SIP Trunk

| Field       | Description  |
|-------------|--|
| Name        | Enter the new SIP trunk name   |
| Description | Enter the new SIP trunk description.   |
| CUCM        | Enter the Cisco Unified Communications Manager related to the new SIP trunk. |
| CUBE-SPs    |  |

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#### Table 7-18 SIP Trunk

| Field                   | Description  |
|-------------------------|--|
| Name                    | Displays the name of the CUBE-SP.                    |
| Description             | Displays the description of the CUBE-SP.             |
| Associate with Siptrunk | Check the check box to associate with the SIP trunk. |

#### Table 7-19Customer Equipment

| Field  | Description  |
|--|--|
| Name   | Enter the new customer equipment name.   |
| Customer   | Enter the name of the customer.  |
| Customer Equipment Roles   | Enter the new customer equipment roles.  |
| CUOM (Cisco Unified Operations Manager)<br>Monitoring this Cluster | Enter the related Cisco Unified Operations Manager monitoring this cluster for the new customer equipment. |

#### Table 7-20 Management Application

| Field            | Description  |
|------------------|--|
|                  |  |
| Application Type | Enter the new management application type.   |
| Name             | Enter the new management application name.   |
| Description      | Enter the new management application description.  |
| Virtual Machine  | Enter the Virtual Machine hosting the management<br>application. If the correct Virtual Machine is not visible in the<br>list, ensure the vCenter server managing the Virtual Machine<br>is configured and the automatic synchronization is<br>functioning properly. |

#### Table 7-21 Management Application - CUCDM

| Field                   | Description                                     |
|-------------------------|---|
| Application type        | Select CUCDM.                                   |
| Name                    | Enter the name.                                 |
| Software Version        | Select the software version for the CUCDM.      |
| Port                    | Enter the webservice port.                      |
| Description             | Enter a description.                            |
| Virtual Machine         | Select the Virtual Machine for the CUCDM.       |
| Host ID                 | Enter the host ID.                              |
| Sync Enabled            | Check to enable sync with the CUCDM server.     |
| Sync Interval (Minutes) | Enter the time interval for syncing with CUCDM. |

| Field                        | Description                            |  |
|------------------------------|--|--|
| Equipment type               | Select the equipment type.             |  |
| Credential type              | Select the credential type.            |  |
| Access type                  | Select the access type.                |  |
| User ID information          |  |  |
| User ID                      | Enter the user ID.                     |  |
| Password                     | Enter the password for the user ID.    |  |
| Re-enter Password            | Re-enter the password for the user ID. |  |
| Community String Information |  |  |
| Community String             | Enter the community string.            |  |
| Re-enter Community String    | Re-enter the community string.         |  |

| Table 7-22 | Default Credentials |
|------------|---------------------|
| Table 7-22 | Default Credentials |

### **Deleting Elements**

Note

Elements not added through the Infrastructure Manager cannot be deleted unless the sync service for the element is disabled.

- **Step 1** In the side menu, navigate to the element you want to delete.
- **Step 2** Check the check box for the element you want to delete.
- Step 3 Click Delete Selected.

# **Performing a Manual Sync**

| Step 1 | In the side menu, | select | Administration | > S | ync Ree | quest. |
|--------|-------------------|--------|----------------|-----|---------|--------|
|--------|-------------------|--------|----------------|-----|---------|--------|

- **Step 2** Select the Job Entity from the drop down list.
- **Step 3** Select the item you want to sync.
- Step 4 Click Sync Selected.

You can configure manual syncs on the Sync Request page for the following entities:

- Service Provider: All Data Centers and customers in the system are synced.
- **Customer:** Only the selected customers are synced.
- **Data Center:** All VCenters in the Data Center are synced.
- VCenter: Only the selected vCenter is synced.

The following table lists the available options on the Sync Request page in your Cisco HCS.

| Field              | Description   |
|--------------------|---|
| Job Entity         | Select one of the following to sync:  |
|                    | Service Provider  |
|                    | Data Center   |
|                    | • vCenter   |
|                    | • Customer  |
| Service Provider   |   |
| Name               | Displays the name of the service provider.  |
| Account Number     | Displays the account number of the service provider.                              |
| Data Center        |   |
| Name               | Displays the name of the Data Center.   |
| Owner              | Displays the name of the service provider for the Data Center.                    |
| Monitored by DCNMs | Displays the number of DCNMs related to the Data Center.                          |
| UCS Managers       | Displays the number of UCS managers related to the Data Center.                   |
| VCenters           | Displays the number of VCenters related to the Data Center.                       |
| vCenter            | I   |
| Name               | Displays the name of the vCenter.   |
| Data Center        | Displays the Data Center name related to the vCenter.                             |
| VMware Data Center | Displays the number of VMware Data Centers related to the vCenter.                |
| Customer           |   |
| Name               | Displays the name of the customer.  |
| Extended Name      | Displays the extended name of the customer.                                       |
| Service Provider   | Displays the name of the service provider.  |
| Monitored by CUOM  | Displays the number of Cisco Unified Operations Managers related to the customer. |
| Clusters           | Displays the number of clusters related to the customer.                          |
| Data Centers       | Displays the number of Data Centers related to the customer.                      |
| Customer Equipment | Displays the number of customer equipment related to the customer.                |

### **Viewing Jobs**

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The Jobs Summary page displays a list of the all the automatic and manual jobs added to your Cisco HCS as well as basic details about each one. Follow this procedure to view jobs.

**Step 1** In the side menu, select **Administration > Jobs**.

**Step 2** Hover the cursor over the cross-hairs next to the Job Type and the description of the job or the reason for the sync failure will be displayed. Select the item you want to sync.

The following table describes the fields that are displayed.

#### Table 7-23 Viewing Jobs

| Field               | Description   |  |
|---------------------|---|--|
| Job Type            | Displays the job type.  |  |
| Job Entity          | Displays the job entity.  |  |
| Entity List         | Displays the entity list.   |  |
| Date Time Initiated | Displays the initiated job date and time.   |  |
| Date Time Completed | Displays the completed job date and time.   |  |
| Status              | Displays the job status.  |  |
| Actions             | Displays the job actions.   |  |
| Show                | View content using Quick Filter, Advanced Filter, or All<br>selection from the drop-down list. You can Manage Preset<br>filters from this drop-down list as well. |  |

If a sync is already in progress, rules are applied to determine if a new sync request is initiated or if the sync in progress is considered to have covered the data requested in the new sync request. The following table outlines the condition and the action for jobs.

| Condition  | Action  |
|--|---|
| SP sync req while SP sync in progress  | Complete in-progress sync. Update results for all jobs. |
| All customer sync req while SP sync in progress                                      | Complete in-progress sync. Update results for all jobs. |
| Single customer sync req while SP sync in progress                                   | Complete in-progress sync. Update results for all jobs. |
| List of customers sync req while SP sync in progress                                 | Complete in-progress sync. Update results for all jobs. |
| SP sync req while customer sync in progress  | Complete in-progress sync. Initiate new sync.           |
| SP sync req while customer list sync in progress                                     | Complete in-progress sync. Initiate new sync.           |
| Customer sync req while same customer sync in progress                               | Complete in-progress sync. Update results for all jobs. |
| Customer sync req while customer list sync in progress containing requested customer | Complete in-progress sync. Update results for all jobs. |
| Customer list sync req while customer list sync in progress                          | Complete in-progress sync. Initiate new sync.           |
| Customer list sync req while customer sync in progress                               | Complete in-progress sync. Initiate new sync.           |

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# **Related Topics**

Γ

- Introduction to Cisco Hosted Collaboration Mediation Fulfillment, page 1-1
- The Cisco HCM-F Administrative Interface, page 5-1
- Infrastructure Manager Element Description, page 7-1
- CUCDM Sync Services, page 7-5
- vCenter Sync Services, page 7-6
- General Procedures, page 7-7
- Command Line Interface for Cisco HCM-F, page 10-1