

Cisco Unity Connection Provisioning Interface (CUPI) API for Telephony Integrations

- Cisco Unity Connection Provisioning Interface (CUPI) API -- Phone Systems, on page 1
- Cisco Unity Connection Provisioning Interface (CUPI) API -- Port Groups and Ports, on page 8
- Cisco Unity Connection Provisioning Interface (CUPI) API -- Ports, on page 12
- Cisco Unity Connection Provisioning Interface (CUPI) API SIP Certificates , on page 17
- Cisco Unity Connection Provisioning Interface (CUPI) API -- SIP Profiles, on page 20

Cisco Unity Connection Provisioning Interface (CUPI) API --Phone Systems

About Phone Systems

This page contains information on how to use the API to create, list, modify, and delete Phone Systems. The phone system pages in Cisco Unity Connection Administration identify the phone systems that Cisco Unity Connection integrates with. In Connection Administration, a phone system has one or more port groups, which in turn have voice messaging ports. You can manage the phone systems to meet the changing needs of your system.

Listing Phone Systems

Example 1

The following is an example of the GET request that lists the Phone Systems:

https://<connection server>/vmrest/phonesystems

```
<PhoneSystems total="1">
<PhoneSystem>
  <URI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</URI>
   <ObjectId>aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</ObjectId>
   <DisplayName>PhoneSystem</DisplayName>
  <MwiAlwaysUpdate>false</MwiAlwaysUpdate>
   <MwiPortMemory>false</MwiPortMemory>
  <CallLoopSupervisedTransferDetect>false</CallLoopSupervisedTransferDetect>
   <CallLoopForwardNotificationDetect>false</CallLoopForwardNotificationDetect>
   <CallLoopDTMF>A</CallLoopDTMF>
   <CallLoopGuardTimeMs>2500</CallLoopGuardTimeMs>
  <PortCount>0</PortCount>
  <EnablePhoneApplications>false</EnablePhoneApplications>
  <DefaultTRaPSwitch>true</DefaultTRaPSwitch>
   <MwiForceOff>false</MwiForceOff>
   <RestrictDialUnconditional>false</RestrictDialUnconditional>
  <RestrictDialScheduled>false</RestrictDialScheduled>
   <RestrictDialStartTime>0</RestrictDialStartTime>
  <RestrictDialEndTime>0</RestrictDialEndTime>
   <CallLoopExtensionDetect>true</CallLoopExtensionDetect>
<AXLServerURI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/axlservers</AXLServerURI>
<PhoneSystemAssociationLRD>/xmrest/phonesystems/aa603f45-coolf-4fa2-8170-e5c94b51813a/phonesystemassociations
</PhoneSystem>
</PhoneSystems>
Response Code: 200
```

Example 2

The following is an example of the GET request that lists a particular phone system represented by <phonesystemId>:

https:/<connection server>/vmrest/phonesystem/<objectId>

```
<PhoneSystem>
<URI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</URI>
<ObjectId>aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</ObjectId>
<DisplayName>PhoneSystem</DisplayName>
<MwiAlwaysUpdate>false</MwiAlwaysUpdate>
<MwiPortMemory>false</MwiPortMemory>
<CallLoopSupervisedTransferDetect>false</CallLoopSupervisedTransferDetect>
<CallLoopForwardNotificationDetect>false</CallLoopForwardNotificationDetect>
<CallLoopDTMF>A</CallLoopDTMF>
<CallLoopGuardTimeMs>2500</CallLoopGuardTimeMs>
<PortCount>0</PortCount>
<EnablePhoneApplications>false</EnablePhoneApplications>
<DefaultTRaPSwitch>true</DefaultTRaPSwitch>
<MwiForceOff>false</MwiForceOff>
<RestrictDialUnconditional>false</RestrictDialUnconditional>
<RestrictDialScheduled>false</RestrictDialScheduled>
<RestrictDialStartTime>0</RestrictDialStartTime>
<RestrictDialEndTime>0</RestrictDialEndTime>
<CallLoopExtensionDetect>true</CallLoopExtensionDetect>
<AXLServerURI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/axlservers</AXLServerURI>
<PhoneSystemAssociationIRD/vmrest/phoneSystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/phonesystemassociations</p>
</PhoneSystem>
Response Code: 200
```

Adding a New Phone System

The following is an example of the POST request that adds the Phone Systems:

https://<connection_server>/vmrest/phonesystems

The actual response will depend upon the information given by you.

```
<PhoneSystem>
<DisplayName>PhoneSystem1</DisplayName>
</PhoneSystem>
```

Response Code: 201

Note To create a phone system, only the *<*DisplayName*>* parameter is mandatory.

Modifying a Phone System

The following is an example of the PUT request that modifies the Phone System as represented by <phonesystemid>:

https:/<Connection server>/vmrest/phonesystem/<objectId>

```
<PhoneSystem>
<MwiAlwaysUpdate>false</MwiAlwaysUpdate>
<MwiPortMemory>false</MwiPortMemory>
<CallLoopSupervisedTransferDetect>false</CallLoopSupervisedTransferDetect>
<CallLoopForwardNotificationDetect>false</CallLoopForwardNotificationDetect>
<CallLoopDTMF>A</CallLoopDTMF>
<CallLoopGuardTimeMs>2500</CallLoopGuardTimeMs>
<PortCount>2</PortCount>
</PhoneSystem>
```

Response Code: 204

You can also update the following in a phone system:

- AXL Servers
- Phone System Associations

AXL Servers

This page contains information on how to use the API to create, list, modify, and delete Phone Systems AXL Servers. AXL servers are supported only for Cisco Unified Communications Manager phone systems and are needed when Cisco Unity Connection must have access to the Cisco Unified CM database for importing Cisco Unified CM users and for changing certain phone settings for users of Connection personal call transfer rules.

With Unity Connection 11.5(1) and later, a new field, **IsPinSyncEnabled** is introduced in this API, which enables synchronization of phone PIN for Cisco Unity Connection with the PIN for Cisco Unified CM. By default, the value of this field is set to false. To enable PIN synchronization, set the value of the field to true.

Note: The IsPinSyncEnabled field is applicable only for primary AXL server.

Listing AXL Servers

The following is an example of the GET request that lists the AXL Servers:

https://<connection_server>/vmrest/phonesystems/<objectId>/axlservers

```
<AXLServers total="2">
<AXLServer>
<URT>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260/axlservers/59daf270-3e88-4d81-8dae-a3b0a5fbebb1
</URI>
<ObjectId>59daf270-3e88-4d81-8dae-a3b0a5fbebb1</ObjectId>
<MediaRemoteServiceEnum>103</MediaRemoteServiceEnum>
<HostOrIPAddress>0:0:0:0:1</HostOrIPAddress>
<Port>443</Port>
<TlsPort>443</TlsPort>
<Precedence>1</Precedence>
<MediaSwitchObjectId>a560c009-e802-466f-b42d-4c64e8ea8260</MediaSwitchObjectId>
<PhoneSystemURI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260
</PhoneSystemURI>
<SkinnyStateMachineEnum>10</SkinnyStateMachineEnum>
<IsPinSyncEnabled>false</IsPinSyncEnabled>
<CcmAXLUser>admin</CcmAXLUser>
<CcmAXLPassword/>
<CcmVersion>5</CcmVersion>
</AXLServer>
<AXLServer>
<URI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260/axlservers/59daf270-3e88-4d81-8dae-a3b0a5fbebb1
</URT>
<ObjectId>59daf270-3e88-4d81-8dae-a3b0a5fbebb1</ObjectId>
<MediaRemoteServiceEnum>103</MediaRemoteServiceEnum>
<HostOrIPAddress>0.0.0.1</HostOrIPAddress>
<Port>443</Port>
<TlsPort>443</TlsPort>
<Precedence>1</Precedence>
<MediaSwitchObjectId>a560c009-e802-466f-b42d-4c64e8ea8260</MediaSwitchObjectId>
<PhoneSystemURI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260
</PhoneSystemURI>
<SkinnyStateMachineEnum>10</SkinnyStateMachineEnum>
<IsPinSyncEnabled>false</IsPinSyncEnabled>
<CcmAXLUser>admin</CcmAXLUser>
<CcmAXLPassword/>
<CcmVersion>5</CcmVersion>
</AXLServer>
</AXLServers>
Response Code: 200
```

Adding New AXL Server

The following is an example of the POST request that adds the AXL servers in the Phone Systems:

https://<connection server>/vmrest/phonesystems/<objectId>/axlservers

The actual response will depend upon the information given by you.

```
<AXLServer>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<MediaRemoteServiceEnum>103</MediaRemoteServiceEnum>
<HostOrIPAddress>10.105.255.1</HostOrIPAddress>
<Port>2001</Port>
<TlsPort>2000</TlsPort>
<Precedence>1</Precedence>
<CcmAXLUser>abcd</CcmAXLUser>
<CcmAXLPassword/>
<CcmVersion>5</CcmVersion>
<IsPinSyncEnabled>false</IsPinSyncEnabled>
</AXLServer>
```

Response Code: 201

Modifying AXL Server

The following is an example of the PUT request that modifies the AXL Server as represented by <axis erverid>:

https://<connection server>/vmrest/phonesystems/<objectId>/axlservers/<objectId>

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:.

```
<AXLServer>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<CcmAXLUser>CiscoCCM</CcmAXLUser>
<CcmAXLPassword/>
<CcmVersion>5</CcmVersion>
</AXLServer>
```

Response Code: 204

Deleting AXL Server

The following is an example of the DELETE request that deletes an AXL Server as represented by < axlserverid >:

https:/<connection server>/vmrest/phonesystems/<objectId>/axlservers/<objectId>

The input for the PUT request will be. The output for this request returns the successful response code.

```
Response Code: 204
```

Phone System Associations

This page contains information on how to use the API to list Phone Systems Associations. Phone Systems Associations are required to view a list of all of the Cisco Unity Connection users who are associated with your phone system. Listing Phone System Associations

Listing Phone Systems Associations

The following is an example of the GET request that lists the Phone Systems Associations:

https://<connection_server>/vmrest/phonesystems/<objectId>/phonesystemassociations

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<PhoneSystemAssociations total="2">
 <PhoneSystemAssociation>
<URD/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b/phonesystemassociations/2190e340-a3a5-428c-8dc6-4776690b69ee</p>
   <Alias>undeliverablemessagesmailbox</Alias>
   <DisplayName>Papa Recommended Web Application Authentication Rule</DisplayName>
   <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
   <MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phoneSystemS/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>
   <numNotificationDevice>4</numNotificationDevice>
   <numNotificationMWI>1</numNotificationMWI>
   <numPrimaryCallHandler>1</numPrimaryCallHandler>
   <ObjectId>219ce340-a3a5-428c-8dc6-4776690b69ee</ObjectId>
 </PhoneSystemAssociation>
<PhoneSystemAssociation>
URD/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b/phonesystemassociations/6b455973-13d1-4b10-871e-1d1d55f160d2</URD</p>
   <Alias>operator</Alias>
   <DisplayName>Operator</DisplayName>
   <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
   <MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>
   <numNotificationDevice>4</numNotificationDevice>
   <numNotificationMWI>1</numNotificationMWI>
   <numPrimaryCallHandler>1</numPrimaryCallHandler>
   <ObjectId>6b455973-13d1-4b10-871e-1d1d55f160d2</ObjectId>
</PhoneSystemAssociation>
</PhoneSystemAssociations>>
```

Response Code: 200

Deleting a Phone System

The following is an example of the DELETE request that deletes Phone System as represented by <phonesystemid>:

https://<server-ip>/vmrest/phonesystems/<objectId>

The input for the PUT request will be. The output for this request returns the successful response code.

Response Code: 204

Cisco Unity Connection Provisioning Interface (CUPI) API --Port Groups and Ports

About Port Groups and Ports

This page contains information on how to use the API to:

- · List, view, and update port groups
- List and view ports



Port groups cannot be created or deleted via the API, and only two fields (MwiOnCode & MwiOffCode) can be updated by using the PUT method.

Listing and Viewing

The following is an example of a GET that lists all port groups:

GET http://<connection-server>/vmrest/portgroups

The following is the response from the above GET request:

```
200
ΟK
<?xml version="1.0" encoding="UTF-8"?>
<PortGroups total="1">
 <PortGroup>
   <URI>/vmrest/portgroups/035853ce-f4e6-4de2-bda2-84acf827a555</URI>
<MediaPortGroupTemplateObjectId>90dd306f-b8af-46b6-8289-f13437cc1e5e</MediaPortGroupTemplateObjectId>
    <MediaSwitchObjectId>05186ad4-572c-48d1-aaa6-ac22280c8702</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/05186ad4-572c-48d1-aaa6-ac22280c8702</PhoneSystemURI>
   <TelephonyIntegrationMethodEnum>1</TelephonyIntegrationMethodEnum>
    <EnableMWI>true</EnableMWI>
    <DisplayName>PhoneSystem-1</DisplayName>
   <CcmDoAutoFailback>true</CcmDoAutoFailback>
    <MwiOnCode/>
    <MwiOffCode/>
    <MwiRetryCountOnSuccess>0</MwiRetryCountOnSuccess>
    <MwiRetryIntervalOnSuccessMs>5</MwiRetryIntervalOnSuccessMs>
    <ObjectId>035853ce-f4e6-4de2-bda2-84acf827a555</ObjectId>
   <SipTransportProtocolEnum>10</SipTransportProtocolEnum>
   <SipRegisterWithProxyServer>false</SipRegisterWithProxyServer>
   <SipDoAuthenticate>false</SipDoAuthenticate>
    <SkinnyDevicePrefix>test-VI</SkinnyDevicePrefix>
    <MwiMinRequestIntervalMs>0</MwiMinRequestIntervalMs>
   <MwiMaxConcurrentRequests>0</MwiMaxConcurrentRequests>
   <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
   <PortCount>2</PortCount>
   <SipDoSRTP>true</SipDoSRTP>
    <SipTLSModeEnum>11</SipTLSModeEnum>
   <ResetStatusEnum>0</ResetStatusEnum>
  </PortGroup>
</PortGroups>
```

Sorting can be done on columns that are indexed, such as display name. To retrieve a sorted list of all port groups, add the following query parameter: sort=(column [asc|desc])

For example, to retrieve a list of all port groups sorted by display name in descending order:

GET http://<connection-server>/vmrest/portgroups?sort=(DisplayName%20desc)

To retrieve a specific port group by its object ID:

GET http://<connection-server>/vmrest/portgroups/<objectid>

Similarly, to retrieve a list of all ports, use:

GET http://<connection-server>/vmrest/ports

The following is the response from the above GET request:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<Ports total="2">
 <Port>
   <URI>/vmrest/ports/2806ecdc-0a3d-43f3-a2c8-93d786fa506b</URI>
    <ObjectId>2806ecdc-0a3d-43f3-a2c8-93d786fa506b</ObjectId>
    <MediaPortGroupObjectId>035853ce-f4e6-4de2-bda2-84acf827a555</MediaPortGroupObjectId>
    <PortGroupURI>/vmrest/portgroups/035853ce-f4e6-4de2-bda2-84acf827a555</PortGroupURI>
    <TelephonyIntegrationMethodEnum>1</TelephonyIntegrationMethodEnum>
    <PortNumInGroup>1</PortNumInGroup>
    <SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
    <SkinnyDoMediaEncryption>false</SkinnyDoMediaEncryption>
    <VmsServerObjectId>a7ba129e-6420-4d44-b060-93b638ba866a</VmsServerObjectId>
    <HuntOrder>0</HuntOrder>
    <DisplayName>PhoneSystem-1-001</DisplayName>
    <SkinnyDeviceName>test-VI1</SkinnyDeviceName>
    <PimgPortNumber>1</PimgPortNumber>
    <CapAnswer>true</CapAnswer>
    <CapNotification>true</CapNotification>
    <CapMWI>true</CapMWI>
    <CapEnabled>true</CapEnabled>
    <CapDeliverAmis>false</CapDeliverAmis>
    <CapTrapConnection>true</CapTrapConnection>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <MediaSwitchObjectId>05186ad4-572c-48d1-aaa6-ac22280c8702</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/05186ad4-572c-48d1-aaa6-ac22280c8702</PhoneSystemURI>
    <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
    <MediaPortGroupEnableMWI>true</MediaPortGroupEnableMWI>
    <MediaPortGroupMwiReqPortSpecific>true</MediaPortGroupMwiReqPortSpecific>
    <SipSendPort>0</SipSendPort>
    <VmsServerName>cuc-install-55</VmsServerName>
  </Port>
  <Port>
    <URI>/vmrest/ports/f87ad180-7d06-48c9-b9bd-e6b5cd2311bc</URI>
    <ObjectId>f87ad180-7d06-48c9-b9bd-e6b5cd2311bc</ObjectId>
    <MediaPortGroupObjectId>035853ce-f4e6-4de2-bda2-84acf827a555</MediaPortGroupObjectId>
    <PortGroupURI>/vmrest/portgroups/035853ce-f4e6-4de2-bda2-84acf827a555</PortGroupURI>
    <TelephonyIntegrationMethodEnum>1</TelephonyIntegrationMethodEnum>
    <PortNumInGroup>2</PortNumInGroup>
    <SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
    <SkinnyDoMediaEncryption>false</SkinnyDoMediaEncryption>
    <VmsServerObjectId>a7ba129e-6420-4d44-b060-93b638ba866a</VmsServerObjectId>
    <HuntOrder>0</HuntOrder>
    <DisplayName>PhoneSystem-1-002</DisplayName>
    <SkinnyDeviceName>test-VI2</SkinnyDeviceName>
    <PimgPortNumber>2</PimgPortNumber>
    <CapAnswer>true</CapAnswer>
    <CapNotification>true</CapNotification>
    <CapMWI>true</CapMWI>
    <CapEnabled>true</CapEnabled>
    <CapDeliverAmis>false</CapDeliverAmis>
    <CapTrapConnection>true</CapTrapConnection>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <MediaSwitchObjectId>05186ad4-572c-48d1-aaa6-ac22280c8702</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/05186ad4-572c-48d1-aaa6-ac22280c8702</PhoneSystemURI>
    <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
    <MediaPortGroupEnableMWI>true</MediaPortGroupEnableMWI>
    <MediaPortGroupMwiReqPortSpecific>true</MediaPortGroupMwiReqPortSpecific>
    <SipSendPort>0</SipSendPort>
```

```
<VmsServerName>cuc-install-55</VmsServerName>
</Port>
</Ports>
```

Finally, to retrieve a specific port by its object ID, use:

```
GET http://<connection-server>/vmrest/ports/<objectid>
```

Searching

To retrieve a list of port groups or ports that meet a specified search criteria, add the following query parameter to a GET: query=(column [is|startswith] value)

Note that the search column must either be an indexed column or contain boolean values.

For example, to find all port groups with a display name that starts with "PhoneSystem":

GET http://<connection-server>/vmrest/portgroups?query=(displayname%20startswith%20PhoneSystem)

The next example finds all port groups with a EnableMwi that is set to 1 (i.e., enabled):

GET http://<connection-server>/vmrest/portgroups?query=(EnableMWI%20is%201)

Updating

Ports are read-only resources and cannot be updated. Port groups, however, contain two fields, MwiOnCode and MwiOffCode, that can be updated.

The following is an example of a PUT request that modifies these fields of an existing port group:

```
PUT https://<connection-server>/vmrest/portgroups/<objectid>
<PortGroup>
    <MwiOnCode>678</MwiOnCode>
    <MwiOffCode>876</MwiOffCode>
</PortGroup>
```

The following is the response from the above PUT request:

204 No Content null

Cisco Unity Connection Provisioning Interface (CUPI) API --Ports

About Ports

This page contains information on how to use the API to create, list, modify, and delete Ports. The voice messaging ports let Cisco Unity Connection receive calls (for example, to record a message) and let Connection make calls (for example to send message notifications or to set MWIs). Each voice messaging port can belong to only one port group. Port groups, when there are several, each have their own voice messaging ports. The total voice messaging ports belonging to all port groups must not exceed the maximum number of voice messaging ports that are enabled by the Connection license files.

Listing Ports

Example 1

The following is an example of the GET request that lists the Ports:

https://<connection_server>/vmrest/ports

```
<Ports total="2">
<Port>
   <uRl>/vmrest/ports/ec664876-5879-4cff-a022-4929b37bd575</URl>
   <ObjectId>ec664876-5879-4cff-a022-4929b37bd575</ObjectId>
   <MediaPortGroupObjectId>1edf504a-e9a1-4876-bcfc-bb674da8e385</MediaPortGroupObjectId>
   <PortGroupURI>/vmrest/portgroups/1edf504a-e9a1-4876-bcfc-bb674da8e385</PortGroupURI>
   <TelephonyIntegrationMethodEnum>2</TelephonyIntegrationMethodEnum>
   <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
   <DisplayName>PhoneSystem-1-001</DisplayName>
   <CapAnswer>true</CapAnswer>
   <CapNotification>true</CapNotification>
   <CapMWI>true</CapMWI>
   <CapEnabled>true</CapEnabled>
   <CapTrapConnection>true</CapTrapConnection>
   <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
   <MediaSwitchObjectId>a8eb65f5-795b-41cd-98b1-934f6b987313</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/a8eb65f5-795b-41cd-98b1-934f6b987313</PhoneSystemURI>
   <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
   <VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>
<Port>
  <URI>/vmrest/ports/761fa322-63ae-47d9-9fbf-b35142b11eef</URI>
   <ObjectId>761fa322-63ae-47d9-9fbf-b35142b11eef</ObjectId>
   <MediaPortGroupObjectId>ledf504a-e9a1-4876-bcfc-bb674da8e385</MediaPortGroupObjectId>
   <PortGroupURI>/vmrest/portgroups/1edf504a-e9a1-4876-bcfc-bb674da8e385</PortGroupURI>
   <TelephonyIntegrationMethodEnum>2</TelephonyIntegrationMethodEnum>
   <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
   <DisplayName>PhoneSystem-1-002</DisplayName>
   <CapAnswer>true</CapAnswer>
<CapNotification>true</CapNotification>
   <CapMWI>true</CapMWI>
   <CapEnabled>true</CapEnabled>
   <CapTrapConnection>true</CapTrapConnection>
   <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
   <MediaSwitchObjectId>a8eb65f5-795b-41cd-98b1-934f6b987313</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/a8eb65f5-795b-41cd-98b1-934f6b987313</PhoneSystemURI>
   <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
   <VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>
```

Response Code: 200

Example 2

The following is an example of the GET request that lists the Ports configuration:

```
<Port>
 <URI>/vmrest/ports/e4a48f12-d22b-438c-89eb-0b25f2f73d12</URI>
 <ObjectId>e4a48f12-d22b-438c-89eb-0b25f2f73d12</ObjectId>
  <MediaPortGroupObjectId>668e5869-7c16-48d6-8858-cd0e00fdd47c</MediaPortGroupObjectId>
  <PortGroupURI>/vmrest/portgroups/668e5869-7c16-48d6-8858-cd0e00fdd47c</PortGroupURI>
 <TelephonyIntegrationMethodEnum>2</TelephonyIntegrationMethodEnum>
  <VmsServerObjectId>d190d99e-e9e8-4d63-8c6c-9aca4956afff</VmsServerObjectId>
 <DisplayName>PhoneSystem-1-002</DisplayName>
  <CapAnswer>true</CapAnswer>
  <CapNotification>false</CapNotification>
  <CapMWI>true</CapMWI>
 <CapEnabled>true</CapEnabled>
 <CapTrapConnection>true</CapTrapConnection>
 <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
  <MediaSwitchObjectId>0d15753c-e1b4-4865-b00b-999a1ccf56ce</MediaSwitchObjectId>
 <PhoneSystemURI>/vmrest/phonesystems/0d15753c-e1b4-4865-b00b-999a1ccf56ce</PhoneSystemURI>
 <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
 <VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>
```

Adding Ports

This section contains information on how to add ports:

- Adding SCCP Ports
- · Adding SIP Ports
- Adding PIMGTIMG Ports

Note: Before adding ports to port group, you need to know the id of the vmservers. The vmservers id is required as you need to mention the machine on which the ports need to be added.

The following is an example of the GET request that lists the vmservers:

```
https://<connection server>/vmrest/vmsservers
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<VmsServers total="1">

<VmsServer>

<URI>/vmrest/vmsservers/574ca5d3-9041-4ff9-8e7d-727c32d80dab</URI>

<ServerName>ucbu-aricent-vm413</ServerName>

<VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>

</VmsServer>

</VmsServers>
```

Note

Make sure that you always add ports in even number and not in odd number.

Adding SCCP Ports

The following is an example of the POST request that lists the SCCP Ports:

https:/<server ip>/vmrest/ports

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<Port>

<MediaPortGroupObjectId>3c011243-e3e2-42f7-b658-d9fbdc966f26</MediaPortGroupObjectId>

<VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>

<HuntOrder>0</HuntOrder>

<CapAnswer>true</CapAnswer>

<CapAnswer>true</CapAnswer>

<CapNotification>true</CapNotification>

<NumberOfPorts>10</NumberOfPorts>

<CapEnabled>true</CapEnabled>

<CapTrapConnection>true</CapTrapConnection>

<VmsServerName>ucbu-aricent-vm413</VmsServerName>

</Port>
```

RESPONSE Code: 201

Adding SIP Ports

The following is an example of the POST request that lists the SIP Ports:

https:/<server ip>/vmrest/ports

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<Port>
<MediaPortGroupObjectId>575f43be-f5d0-4af7-a689-06d968227ff7</MediaPortGroupObjectId>
<VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
<HuntOrder>0</HuntOrder>
<DisplayName>PhoneSystem-Rohit-001</DisplayName>
<CapAnswer>true</CapAnswer>
<CapAnswer>true</CapAnswer>
<CapNotification>true</CapNotification>
<NumberOfPorts>4</NumberOfPorts>
<CapEnabled>true</CapEnabled>
<CapTrapConnection>true</CapTrapConnection>
<VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>
```

RESPONSE Code: 201

Adding PIMGTIMG Ports

The following is an example of the POST request that create the PIMGTIMG Ports:

https:/<server ip>/vmrest/ports

```
<Port>

<MediaPortGroupObjectId>2c24f5a9-fb22-47fe-a74b-da9c72d6e7f3</MediaPortGroupObjectId>

<HuntOrder>0</HuntOrder>

<DisplayName>PhoneSystem-Rohit-002</DisplayName>

<CapAnswer>true</CapAnswer>

<CapAnswer>true</CapAnswer>

<CapNotification>true</CapNotification>

<NumberOfPorts>2</NumberOfPorts>

<CapEnabled>true</CapEnabled>

<CapTrapConnection>true</CapTrapConnection>

</Port>
```

```
RESPONSE Code: 201
```

The number of ports should be in even number and not in odd number.

Modifying Ports

This section contains information on how to modify Ports:

- Modifying SCCP Ports
- Modifying SIP Port

Modifying SCCP Ports

The following is an example of the PUT request that modifies the SCCP Ports:

https://<connection server>/vmrest/ports/<sccpobjectId>

The actual response will depend upon the information given by you.

```
<Port>
<CapAnswer>true</CapAnswer>
<CapNotification>true</CapNotification>
<CapMWI>true</CapMWI>
<CapTrapConnection>true</CapTrapConnection>
<HuntOrder>0</HuntOrder>
<SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
<CapEnabled>true</CapEnabled>
</Port>
```

RESPONSE Code: 204

Modifying SIP Ports

The following is an example of the PUT request that modifies the SIP Ports:

https://<connection server>/vmrest/ports/<sipobjectId>

The actual response will depend upon the information given by you.

```
<Port>
<CapAnswer>true</CapAnswer>
<CapNotification>true</CapNotification>
<CapMWI>true</CapMWI>
<CapTrapConnection>true</CapTrapConnection>
<HuntOrder>0</HuntOrder>
<SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
<CapEnabled>true</CapEnabled>
</Port>
```

RESPONSE Code: 204

Deleting ports

The following is an example of the DELETE request that deletes a Port as represented by <portId>:

https://<connection_server>/vmrest/ports/<objectId>

The output for this request returns the successful response code.

RESPONSE Code: 204

Cisco Unity Connection Provisioning Interface (CUPI) API – SIP Certificates

About SIP Certificates

This section contains information on how to list, modify, and delete SIP Certificates. The SIP certificate is used only by SIP trunk integrations with Cisco Unified CM 7.0 and later, and is required for authentication of the Cisco Unity Connection voice messaging ports.

Listing SIP Certificates

Example 1

The following is an example of the GET request that lists the SIP Certificates:

https://<connection_server>/vmrest/sipcertificates

```
<SipCertificates total="1">
<SipCertificate>
<URI>
 /vmrest/sipcertificates/c55ef2c3-2475-4505-9566-bcea04a6bb6e
</URT>
<ObjectId>c55ef2c3-2475-4505-9566-bcea04a6bb6e</ObjectId>
<Certificate>
----BEGIN CERTIFICATE---- MIICVzCCAcCgAwIBAgIQQmAlZbMuRhSQnNHI4sqpDjANBgkqhkiG9w0BAQUFADA6
 MTgwNgYDVQQDEy9DaXNjb1VuaXR5LWJlMjc5NzZjLTZ1NmUtNDE5Zi04NTNkLWIz
NzY0ODgxZGZiMDAeFw0xMjA3MTgxMzE1MTdaFw0xOTA3MTAwOTAwNThaMDsxGzAZ
BgNVBAoTEkNpc2NvIFN5c3RlbXMgSW5jLjEOMAwGA1UECxMFRUNTQ1UxDDAKBgNV
BAMTA2FhYTCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAwslps1QPmb/mtfSD
mHQ8tdnAPcIWriAqF283p7eQcGKdj9ji+YpDGmMFbaKG5NyPBzVCA2EXgNSrh2tX
8PTTUDUOlfGeqrol0H3kT1viFPxNIVVfnn6fuq4A8thoH54+QGlnOWqfuR6+Y4EZ
yT4yhygh5yhRIDW6PTHCyhUnMuUCAwEAAaNdMFswHQYDVR00BBYEFJ2AaJ5nN36z
W6BaE5jVTEmAj54/MAsGA1UdDwQEAwIDqDAdBgNVHSUEFjAUBggrBgEFBQcDAQYI
KwYBBQUHAwIwDgYDVR0RBAcwBYYDYWFhMA0GCSqGSIb3DQEBBQUAA4GBAJffZqLV
7pmQ+1HEBUO3dVnNdDr7V6izeh3KgoUHW7cEzUuM5wjsRLV7Mh8H9YvGyQP2sMMc
iDRpJp4oNpnXZtwd8WEQcToaXvDOR9TfMr5tX9NdkAQGvb8pvt3kPd5cv3s79/Zy
DRhjKYIr7A0dKZEpNAFUhTTHbTeNQiOibaGF ----END CERTIFICATE----
 </Certificate>
<PrivateKey>
</PrivateKey>
<SubjectName>test</SubjectName>
<DisplayName>test</DisplayName>
</SipCertificate>
</SipCertificates>
Response code: 200
```

Example 2

The following is an example of the GET request that lists a specified SIP Certificate:

https://<connection_server>/vmrest/sipcertificate/<objectId>

```
<SipCertificate>
<URI>
  /vmrest/sipcertificates/c55ef2c3-2475-4505-9566-bcea04a6bb6e
</URI>
<ObjectId>c55ef2c3-2475-4505-9566-bcea04a6bb6e</ObjectId>
<Certificate>
----BEGIN CERTIFICATE---- MIICVzCCAcCqAwIBAqIQQmAlZbMuRhSQnNHI4sqpDjANBqkqhkiG9w0BAQUFADA6
MTgwNgYDVQQDEy9DaXNjb1VuaXR5LWJlMjc5NzZjLTZ1NmUtNDE5Zi04NTNkLWIz
NzY00DgxZGZiMDAeFw0xMjA3MTgxMzE1MTdaFw0xOTA3MTAwOTAwNThaMDsxGzAZ
BgNVBAoTEkNpc2NvIFN5c3RlbXMgSW5jLjEOMAwGA1UECxMFRUNTQ1UxDDAKBgNV
BAMTA2FhYTCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAwslps1QPmb/mtfSD
mHQ8tdnAPcIWriAqF283p7eQcGKdj9ji+YpDGmMFbaKG5NyPBzVCA2EXqNSrh2tX
8PTTUDUOlfGeqrol0H3kT1viFPxNIVVfnn6fuq4A8thoH54+QGlnOWqfuR6+Y4EZ
yT4yhygh5yhRIDW6PTHCyhUnMuUCAwEAAaNdMFswHQYDVR00BBYEFJ2AaJ5nN36z
W6BaE5jVTEmAj54/MAsGA1UdDwQEAwIDqDAdBgNVHSUEFjAUBggrBgEFBQcDAQYI
KwYBBQUHAwIwDgYDVR0RBAcwBYYDYWFhMA0GCSqGSIb3DQEBBQUAA4GBAJffZqLV
7pmQ+1HEBUO3dVnNdDr7V6izeh3KgoUHW7cEzUuM5wjsRLV7Mh8H9YvGyQP2sMMc
iDRpJp4oNpnXZtwd8WEQcToaXvDOR9TfMr5tX9NdkAQGvb8pvt3kPd5cv3s79/Zy
DRhjKYIr7A0dKZEpNAFUhTTHbTeNQiOibaGF ----END CERTIFICATE----
</Certificate>
<PrivateKey>
   </PrivateKey>
<SubjectName>test</SubjectName>
<DisplayName>test</DisplayName>
</SipCertificate>
Response code: 200
```

Modifying SIP Certificates

The following is an example of the PUT request that modifies the SIP Certificates:

https://<connection server>/vmrest/ sipcertificates/<objectid>

The actual response will depend upon the information given by you.

```
<SipCertificate>
<SubjectName>test2</SubjectName>
<DisplayName>test2</DisplayName>
</SipCertificate>
```

Response code: 204

Deleting SIP Certificates

The following is an example of the DELETE request that deletes a specified SIP Certificates as represented by <sipcertificateid>:

https://<connection server>/vmrest/sipcertificates/<objectId>

The output for this request returns the successful response code.

```
Response code: 204
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- SIP Profiles

Listing SIP Profiles

Generic Examples to List SIP Profiles

Example 1

The following is an example of the GET request that lists the SIP Profiles:

https:/<server ip>/vmrest/sipsecurityprofiles

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<SipSecurityProfiles total="2"><SipSecurityProfile>
<URI>/vmrest/sipsecurityprofiles/87cab9a5-c68d-447a-ab4f-7cd2837aa240</URI>
<ObjectId>87cab9a5-c68d-447a-ab4f-7cd2837aa240</ObjectId><Port>5069</Port>
<DoTLS>false</DoTLS>CDisplayName>5069</DisplayName>
</SipSecurityProfile>
<URI>/vmrest/sipsecurityprofiles/4d7e055a-cdcf-43ff-a922-4ce743939a23</URI>
<ObjectId>4d7e055a-cdcf-43ff-a922-4ce743939a23</ObjectId><Port>5066</Port>
<DoTLS>true</DoTLS>CDisplayName>5066/TLS</DisplayName>
</SipSecurityProfile></SipSecurityProfile>>
```

<Pre> RESPONSE Code: 200

Example 2

The following is an example of the GET request that lists a specified SIP Profile:

https://<connection server>/vmrest/sipsecurityprofiles/<objectId>

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<SipSecurityProfile>
<URI>/vmrest/sipsecurityprofiles/87cab9a5-c68d-447a-ab4f-7cd2837aa240</URI>
<ObjectId>87cab9a5-c68d-447a-ab4f-7cd2837aa240</ObjectId><Port>5069</Port>
<DoTLS>false</DoTLS><DisplayName>5069</DisplayName>
</SipSecurityProfile>
```

Response code: 200

JSON Examples to List SIP Profiles

Example 1

The following is a JSON example of the GET request that lists the SIP Profiles:

https:/<connection server>/vmrest/sipsecurityprofiles

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
"@total": "6",
  "SipSecurityProfile":
  {
   "URI": "/vmrest/sipsecurityprofiles/08aef04e-8775-4ea5-916b-f7e36cbdb3d4",
   "ObjectId": "08aef04e-8775-4ea5-916b-f7e36cbdb3d4",
    "Port": "5065",
    "DoTLS": "true"
    "DisplayName": "5065/TLS"
 },
  {
   "URI": "/vmrest/sipsecurityprofiles/b3c533a4-bc28-4c70-9912-c22edf81910e",
    "ObjectId": "b3c533a4-bc28-4c70-9912-c22edf81910e",
    "Port": "5062",
    "DoTLS": "true"
   "DisplayName": "5062/TLS"
  },
   {
    "URI": "/vmrest/sipsecurityprofiles/e667342c-3ce2-49f7-ae2b-27daf850b159",
     "ObjectId": "e667342c-3ce2-49f7-ae2b-27daf850b159",
    "Port": "5088",
    "DoTLS": "true"
    "DisplayName": "5088/TLS"
  },
   {
    "URI": "/vmrest/sipsecurityprofiles/9062519a-05d4-42f2-933e-250d5a24efb5",
    "ObjectId": "9062519a-05d4-42f2-933e-250d5a24efb5",
    "Port": "5067",
     "DoTLS": "false"
     "DisplayName": "5067"
  },
   {
    "URI": "/vmrest/sipsecurityprofiles/9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
     "ObjectId": "9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
     "Port": "5077",
     "DoTLS": "false"
     "DisplayName": "5077"
  },
   {
     "URI": "/vmrest/sipsecurityprofiles/15a3a4d9-65a0-456a-be38-4a4aff36554c",
     "ObjectId": "15a3a4d9-65a0-456a-be38-4a4aff36554c",
     "Port": "5060",
    "DoTLS": "false"
    "DisplayName": "5060"
   }
}
 RESPONSE Code: 200
```

Example 2

The following is a example of the GET request that lists a specified SIP Profile:

https://<connection server>/vmrest/sipsecurityprofiles/<objectId>

```
"URI": "/vmrest/sipsecurityprofiles/9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
"ObjectId": "9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
"Port": "5077",
"DoTLS": "false",
"DisplayName": "5077"
}
```

RESPONSE Code: 200

Adding a new SIP Profiles

Example 1

The following is an example of the POST request that lists the SIP Profiles:

https://<connection server>/vmrest/sipsecurityprofiles

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<SipSecurityProfile>
<Port>5070</Port>
<DoTLS>true</DoTLS>
</SipSecurityProfile>
```

Response code: 201

Example 2

The following is a JSON example of the POST request that lists the SIP Profiles:

https://<connection_server>/vmrest/sipsecurityprofiles

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
"Port": "5080",
"DoTLS": "true"
}
```

Response code: 201

Modifying SIP Profiles

Example 1

The following is an example of the PUT request that modifies the SIP Profile:

https://<connection server>/vmrest/sipsecurityprofiles/<objectId>

The actual response will depend upon the information given by you.

```
<SipSecurityProfile>
<Port>5070</Port>
<DoTLS>true</DoTLS>
</SipSecurityProfile>
```

Response code: 204

Example 2

The following is a JSON example of the PUT request that modifies the SIP Profile:

https://<connection server>/vmrest/sipsecurityprofiles/<objectId>

The actual response will depend upon the information given by you.

```
{
    "Port": "5077",
    "DoTLS": "true"
}
```

Response code: 204

Deleting SIP Profiles

The following is an example of the DELETE request that deletes a specified SIP Profiles as represented by <sipsecurityprofileid>:

https://<server-ip>/vmrest/ sipsecurityprofiles/<objectId>

The output for this request returns the successful response code.

Response Code: 204

Cisco Unity Connection Provisioning Interface (CUPI) API for Telephony Integrations