# Supported Applications and APIs

# API Specifications Download

Specifications about the WSDLs and WADLs for all supported and routable applications can be found in the Application Reference Directory. Specific links to the WSDLs and WADLs are found on the Application List page.

# Application Reference Directory

The API Gateway Proxy includes a feature that provides a listing of unique URLs to all supported applications. These unique URLs are built using the principles that are outlined in the Routing section.

You can access the application reference directory on the following URL on your Cisco Hosted Collaboration Mediation Fulfillment install: https://example.com/APIGatewayProxyWebService/proxy/all. This page lists the supported components and their WSDL or WADL links.

**Note**   Replace example.com in the above URL with the hostname or IP address of the WS node of your Cisco Hosted Collaboration Mediation Fulfillment installation or the hostname or IP address of your load balancer.

The top level Supported Applications page lists all the application types that the API Gateway Proxy supports. With each application type this page also has links to each protocol (SOAP, REST) for that application.

When you click on a protocol link for an application, you are taken to a page that lists all properly configured applications on Cisco Hosted Collaboration Mediation Fulfillment for that particular application type and a link to the protocol specification for each application. Each protocol that is supported has its own application list page (SOAP, REST).

Each application has a unique URL that is routed through the API Gateway Proxy. This is consistent with the API Gateway Proxy functioning as a single point of access to all applications. Developers can use this URL to access specifications from a particular application or route requests to a particular application.

With the applications reference directory third-party clients can get a good understanding of the network infrastructure and also get access to all the applications and their specifications.

Note that API Gateway Proxy functions as a directory of API specifications for all applications and as a single point of access to all applications. However, developers must still refer to the application documentation for information about how to use the specifications. See the Related Documentation for more information.

# Cisco Hosted Collaboration Mediation Fulfillment APIs

The Cisco HCS North Bound Web Service Interface is a set of SOAP APIs that expose Cisco Hosted Collaboration Mediation Fulfillment functionality to third parties. These APIs, which provide the ability to configure, service, and control Cisco Hosted Collaboration Mediation Fulfillment services, are divided into the following categories:

- Shared Data Repository Web Service API

- Fulfillment Web Service API

- Service Inventory Web Service API

- Cisco HCS License Manager Web Service API

# Shared Data Repository Web Service API

This web service provides an interface to read, view, and modify data in the Cisco Hosted Collaboration Mediation Fulfillment. This web service contains Create, Read, Update, and Delete APIs to view and modify data in Cisco Hosted Collaboration Mediation Fulfillment. This service is a web interface to the Shared Data Repository.

You can find more reference material about the Shared Data Repository Web Service API on the Cisco Developer Network at: https://developer.cisco.com/web/hcs/fulfillment

The WSDL for the Shared Data Repository Web Service is available on the Cisco Hosted Collaboration Mediation Fulfillment deployment here:

```
https://example.com/APIGatewayProxyWebService/proxy/hcmf/soap/
HCSWebServiceInterface/SharedDataRepositoryWebService?wsdl
```

**Note**    Replace `example.com` in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your Cisco Hosted Collaboration Mediation Fulfillment installation or the hostname or IP address of your load balancer.

# Fulfillment Web Service API

This web service provides an interface to perform fulfillment-related tasks, such as triggering manual syncs, starting manual syncs, restarting jobs, and non- CRUD (create, read, update and delete) Shared Data Repository operations.

You can find further reference material on the Fulfillment Web Service API on the Cisco Developer Network at: https://developer.cisco.com/web/hcs/fulfillment

The WSDL for the Fulfillment Web Service is available on the Cisco Hosted Collaboration Mediation Fulfillment deployment here:

```
https://example.com/APIGatewayProxyWebService/proxy/hcmf/
soap/HCSWebServiceInterface/FulfillmentWebService?wsdl
```

**Note**    Replace `example.com` in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your Cisco Hosted Collaboration Mediation Fulfillment installation or the hostname or IP address of your load balancer.

# Service Inventory Web Service API

This web service provides an interface for scheduling, configuring, and executing the generation of service inventory billing reports. The Java web service allows you to retrieve, process, and generate service inventory reports in a Cisco common format.

You can find further reference material on the Service Inventory Web Service API on the Cisco Developer Network at: https://developer.cisco.com/web/hcs/fulfillment

The WSDL for the Service Inventory Web Service is available on the Cisco Hosted Collaboration Mediation Fulfillment deployment here:

```
https://example.com/APIGatewayProxyWebService/proxy/hcmf/
soap/HCSWebServiceInterface/ServiceInventoryWebService?wsdl
```

**Note**    Replace `example.com` in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your Cisco Hosted Collaboration Mediation Fulfillment installation or the hostname or IP address of your load balancer.

# Cisco HCS License Manager Web Service API

Cisco HCS License Manager Web Service provides an interface to allow the Cisco Hosted Collaboration Mediation Fulfillment administrator to perform license management tasks such as setting the global deployment mode, creating or deleting a Cisco Prime License Manager (PLM) entry in the HLM, assigning a customer Unified Communications cluster to an LM, unassigning a customer Unified Communications cluster from an LM, updating the assigned cluster platform credential, and retrieving the license relationship among LMs, customers, and Unified Communications clusters.

Reference material on the License Manager Web Service API is found on the Cisco Developer Network at: https://developer.cisco.com/web/hcs/fulfillment

The WSDL for the License Manager Web Service is available on the Cisco Hosted Collaboration Mediation Fulfillment deployment here:

```
https://example.com/APIGatewayProxyWebService/proxy/hcmf/
soap/HCSWebServiceInterface/HCSLicenseManagerWebService?wsdl
```

**Note** Replace `example.com` in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your Cisco Hosted Collaboration Mediation Fulfillment installation or the hostname or IP address of your load balancer.

# Cisco Unified Communications Domain Manager

As part of the functionality that is associated with the API Gateway Proxy, the Cisco Unified Communications Domain Manager includes the synchronous web service *ucFulfillment* and the asynchronous web service *asyncNotification*.

The API Gateway Proxy supports Cisco Unified Communications Domain Manager 8.1(x).You can find more information about the Cisco Unified Communications Domain Manager here: http://www.cisco.com/en/US/partner/products/ps11363/prod_maintenance_guides_list.html

# Cisco Unified Communications Domain Manager ucFulfillment

The consumer of the *ucFulfillment* service needs to implement and publish the *notificationWebService* service (using the wsdl that is provided as part of the integration project) for the web service application to send notifications of changes to the status of asynchronous transactions.

The *ucFulfillment* web service includes a *notificationReplyTo* address in the SOAP header, specifying the web service endpoint address to which the asynchronous notifications are sent.

The WSDL is available on the API Gateway Proxy at: https://example.com/APIGatewayProxyWebService/proxy/cucdm/soap/webservices/[CUCDMversion]/ucFulfillment?wsdl

**Note** Replace "example.com" in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your HCM-F installation or the hostname or IP address of your load balancer.

Replace [CUCDMVersion] with the supported version of the CUCDM web service.

# Cisco Unified Communications Domain Manager asyncNotification

After completion of the asynchronous operation, the web service layer invokes the *transactionStatusResponse* message of the *transactionStatusNotification* operation to notify the provider of the *notificationWebService* web service (the consumer of the web service) that the asynchronous operation is complete. The *transactionstatusNotification* operation contains the *transactionUUID* and, if specified in the request, the *externalTransactionUUID* and *externalReference*.

The WSDL is available on the API Gateway Proxy at: https://example.com/APIGatewayProxyWebService/proxy/cucdm/soap/webservices/[CUCDMVersion] /asyncNotification?wsdl

**Note** Replace "example.com" in the preceding URL with the hostname or IP address of the Web Service (WS) node of your Cisco HCM-F installation or the hostname or IP address of your load balancer.

Replace [CUCDMVersion] with the actual version of the CUCDM web service.

# Cisco Contact Center Domain Manager

As part of the Web Service APIs that the Cisco Unified Contact Center Domain Manager exposes, the Web Services APIs allow resource and hierarchy management operations to be performed remotely from a third-party client application. The Web Services APIs also allow the client to subscribe to and receive notifications of state changes in contact center resources.

The API Gateway Proxy supports the version of Cisco Unified Contact Center Domain Manager that is available with Cisco HCS. More reference material about the Cisco Unified Contact Center Domain Manager web services is available at: https://communities.cisco.com/docs/DOC-33790.

# Resource Management Service

This web service allows third-party client applications to invoke provisioning operations on the underlying equipment and to create system resources.

The Resource Management Web Service APIs have the following high-level functions with provisioning operations based on:

- Resources, such as Agents and Call Types
- Resource Memberships which define the relationship between these Resources.

New resource types can be added without needing to regenerate the WSDL (SOAP) or to change existing clients (REST).

### SOAP

The WSDL file for Resource Management is available on the API Gateway Proxy at:

```
https://example.com/APIGatewayProxyWebService/proxy/ccdm/soap/
ResourceManagement?wsdl
```

**Note** Replace `example.com` in the preceding URL with the hostname or IP address of the Web Service (WS) node of your HCM-F installation or the hostname or IP address of your load balancer.

### REST

The REST protocol for each type and API is given in the section describing the type or API.

# Subscription Manager Service

The Subscription Manager service allows the client application to subscribe to receive notifications when specified items change state in the Cisco Unified Contact Center Enterprise

### SOAP

The WSDL file for the Subscription Manager service is available on the API Gateway Proxy at:

```
https://example.com/APIGatewayProxyWebService/proxy/ccdm/soap/
SubscriptionManager?wsdl
```

**Note**    Replace `example.com` in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your Cisco HCM-F installation or the hostname or IP address of your load balancer.

The Subscription Manager service implements the WS-Eventing interface which is specified at: http://www.w3.org/Submission/WS-Eventing/.

### REST

The Subscription Manager service does not support the REST protocol.

# Notification Manager Service

The Notification Manager service allows the client application to cancel an existing subscription. This will prevent further notifications to the subscribing party about the subscribed event. This service is also responsible for notifying the client application about changes that the client has previously subscribed to be notified about.

When specified change occurs, the Notification Manager service informs all subscribers of the change. The notification includes the identity, name and status of the item.

### SOAP

The WSDL files for the Notification Manager service are located on the API Gateway Proxy at:

```
https://example.com/APIGatewayProxyWebService/proxy/ccdm/soap/
NotificationManager?wsdl
```

**Note**    Replace `example.com` in the preceeding URL with the hostname or IP address of the Web Service (WS) node of your HCM-F installation or the hostname or IP address of your load balancer.

### REST

The Notification Manager service does not support the REST protocol.

### Notification web service

The notifications web service represents the client-side application which receives the notifications for subscribed events. This service is similar to the event sink as defined in the WS-Eventing specification http://www.w3.org/Submission/WS-Eventing.

### SOAP

An example WSDL specifying the notifications service details can be found in the Unified CCDM Web Services Reference document. See https://communities.cisco.com/docs/DOC-33790.