Shared Management and Aggregation

Unified Contact Center Domain Manager

Cisco Unified Contact Center Domain Manager (Unified CCDM) is a browser-based management application that is designed for use by Contact Center/system administrators, business users, and supervisors. It is a dense, multi-tenanted provisioning platform that overlays the Contact Center equipment. The Contact Center equipment consists of configuration items, generally known as resources, such as agents or skill groups, and events that are logged when the resources are used by the equipment, such as call record statistics. CCDM also manages CVP Day 2 operations (Media files and VXML applications).

Unified CCDM partitions the resources in the equipment using a familiar folder paradigm. These folders are then secured using a sophisticated security structure that allows administrators to specify which users can perform which actions within the specified folders. Unified CCDM supplies a number of tools that operate on the configuration and statistics data and allow users to modify both the Contact Center and Unified CCDM itself. The tools are all inherently multi-tenanted and the following tools are currently supported:

- Information Notices tool provides a *"Message of the Day"* functionality

- Resource Manager tool enables users to create and modify resources such as agents or call types and organize them into a hierarchical folder structure

- Security Manager tool enables administrators to set up and manage security permissions

Unified CCDM focuses on supplying multi-tenancy functionality, playing to the business plans of hosts and large enterprises by enabling distributed or disparate Contact Center equipment to be partitioned:

- Unified CCDM abstracts and virtualizes the underlying Contact Center equipment, thereby allowing centralized deployment and decentralized control, which in turn gives economies of scale while supporting multi-level user command and control.

- Unified CCDM allows the powerful and flexible primary provisioning operations to be abstracted into simple, high-level tasks that enable business users to rapidly add and maintain Contact Center services across the virtualized enterprise (or portion thereof).

- Unified CCDM users can see only the resources in the platform that they are entitled to see, thereby giving true multi-tenancy.

- Unified CCDM users can only manipulate resources visible to them, by using the tools and features they are authorized to use, thereby giving role-based task control.

The advantages of CCDM are :

- Provides Northbound APIs (SOAP and REST).

- Can be used at the shared management level across multiple customer instances.

- OVAs are sized for 50000 active and 300000 configured agents across multiple customer instances.

Unified CCDM maintains a complete data model of the Contact Center equipment to which it is connected. This data model is periodically synchronized with the equipment. In addition to the configuration information such as agent and skill groups, Unified CCDM records the events logged by the equipment, such as call records, for management information and reporting.

Unified CCDM provisions multiple Contact Center customer instances. It also provides the northbound REST and SOAP interfaces for multiple instances from a shared Unified CCDM.

Install the Unified CCDM servers on a Service Provider Management AD domain and create a trust relationship with the Unified CCDM domain and each customer instance domain.

Unified Communication Domain Manager

In HCS, Unified Communications Domain Manager provisions Unified Communications applications and devices, such as Cisco Unified Communications Manager (Unified Communications Manager).

Unified Communications Domain Manager is a multi-tenant application, so you can use the Unified Communications Domain Manager server to provision all HCS customers. HCS supports multinode Unified Communications Domain Manager instance per HCS installation.

Figure 1: Unified Communication Domain Manager
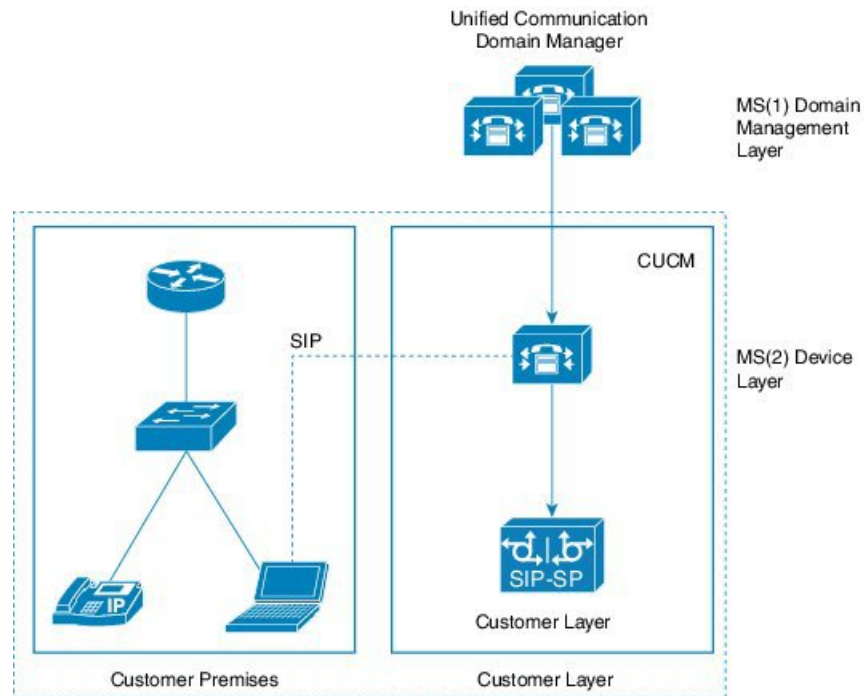
Note Unified Communications Domain Manager is optional for HCS for Contact Center solutions. (Unified CM can provide management on a by instance or customer basis.), You can replace Unified Communications Domain Manager with third-party provisioning solutions. See the Hosted Collaboration Solution documentation for guidance.

Session Border Controller

The Cisco Hosted Collaboration Solution (HCS) uses Session Border Controllers in an aggregation layer for centralized management and call distribution to customer instances. Cisco HCS for Contact Center can use the HCS aggregation SBC. It can also use supported direct-to-PSTN solutions, such as Local Branch Office gateways for call ingress and egress.

For more information on aggregation, see chapter on system architecture in *Cisco Hosted Collaboration Solution Solution Reference Network Design Guide* at https://www.cisco.com/c/en/us/support/ unified-communications/hosted-collaboration-solution-hcs/products-implementation-design-guides-list.html document.