CUCM INTERFACES

Administrative access is secure—only through HTTPS or SSH. Seven administrative interfaces (6 web page URLs plus the CLI).

Accounts created during installation (others can be created and given similar admin privileges too)

- Platform Administration—for the Disaster Recovery and OS Administration pages

- Application Administration—for CM administration, Serviceability, and Unified Reporting

- Extra "security password" for connection to the publisher database; used by subscriber servers and other UC applications that use that database

Cisco Unified Communications Manager Administration—(https://<ip>/ccmadmin)

MENU	PURPOSE
System	Configure CM groups, Presence groups, Device Mobility groups, Device Pools, Regions, Locations, Enterprise and Service parameters, Survivable Remote Site Telephony (SRST)
Call Routing	Define the call routing system, Call hunting, Class of Control, Intercom, Call Park, Call Pickup, etc.
Media Resource	Music on Hold, annunciator, media termination points, transcoders
Advanced Features	Voicemail integration, Inter-company Media Engine Configuration, Extension Mobility Cross-Cluster, VPN
Device	Gateways, gatekeepers, trunks, IP phones, Remote Destinations, phone buttons, softkey templates
Application	CUCM Assistant Configuration Wizard, Plug-ins
User Management	Applications User, End User, Groups, Roles
Bulk Administration	
Help	

Cisco Unified Serviceability Administration—(https://<ip>/ccmservice)

Network Services—Automatically activated and required for server operation. Cannot be deactivated, but can be started, stopped, and restarted. Examples include Call Manager, Admin Service, DB Replicator, and CDP.

Feature Services—Optional. Can be activated in the Service Activation Page. Based on a server's role in a cluster, not all feature services need be active. Examples include Call Manager, TFTP, IP Voice Media Streaming App.

(Serviceability) Tools → Service Activation

Menu	Purpose
Alarm	Configuration and Definition of alarms to monitor system performance & health
Trace	Configuration & troubleshooting submenus for monitoring the system
Tools	CDR Analysis & Reporting—call logs & report on calls Service Activation—Separate control centers for Network and Feature. Can activate services; and stop, start, or restart activated services Serviceability Reports Archive—reporting interface for system & trend analysis CDR Management—Call Detail Record storage disk utilization Audi Logs—configure what will be included in the logs
SNMP	Connectivity & authentication to network mgmt apps. Three submenus: V1/V2c, V3, and SystemGroup
CallHome	Create automated, proactive problem reporting to internal messaging & monitoring systems, plus direct case generation with Cisco TAC
Help	

Cisco Unified Operating System Administration—(https://<ip>/cmplatform). Can interact with the underlying hardened Linux OS.

- Monitor hardware resource utilization (CPU, HDD)
- Check & upgrade software versions
- IP address
- NTP
- Server security—IPSec and digital certificates
- Create a TAC remote assistance account
- Ping

Disaster Recovery System (DRS)—(https://<ip>/drf)—Backup scheduler & restore using an SFTP server from an individual server or cluster-wide. Access controlled by the platform admin account created at install or later accounts with sufficient rights. Support for local DLT (tape) ended with version 9.x. Yes, the URL really is drf; it stands for "Disaster Recovery Framework."

Cisco Unified Reporting—(https://<ip>/cucreports)—A simplified method to access system reports, which aggregate data from existing logs across the cluster (publisher and subscribers) to provide one-click summaries, highlighting issues that might impact operation. Interface warns if a report run will bog the system or take a long time.

Command Line Interface (CLI)—Usually via SSH, but you can attach a keyboard & monitor. Access via the platform admin account (created at install) or later accounts with correct permissions. Can shut down, restart; change versions after an upgrade; start, stop, restart services; modify network settings; ping, etc.; use Disaster Recovery (above); administer platform admin accounts; show load & process info. Inline help is similar to IOS (question mark).

CUCM USER ROLES & GROUPS

Users are members of access control groups, which are assigned roles, each of which define a collection of privileges. A privilege can be (all or part of) an admin web page, a report tool, etc.

Privilege—No Access, Read (web page loads but uneditable), or Update.

Role—A set of privileges (A/R/U for each of many resources in an application). CUCM 8.0 has 39 standard roles; 10.6 has 46. Custom roles can be defined for several applications; full list on page 219.

Access Control Groups—The CUCM Application has 28 standard groups, each associated with one or more standard roles, and most with no default members.

Users—can be members of multiple groups.

Effective Access Privileges for Overlapping User Groups and Roles—an enterprise parameter that tells how to handle disagreeing privileges that are inherited by a user's membership in multiple groups. In the "Maximum" setting, update + read = update. The "minimum" setting yields "read." Changing this enterprise parameter affects all groups except the standard CCM Super Users group. Remember: "Maximum" = minimum security.

CUC (UNITY CONNECTION) INTERFACES

Cisco Unity Connection Administration—(https://<ip>/cuadmin)—See also chap 13 Voicemail…

MENU	PURPOSE
Users	Create, edit, import, and sync users
Class of Service	Controls features available to the user. Many classes of service can be created
Templates	Common settings for Users, Contacts, Call handlers
Contacts	A system contact is a CUC account without a mailbox. A directory entry that users can send messages to, that then bounces them to a different system, elsewhere.
Distribution Lists	There is a class of service setting to prevent users from sending to lists
Call Management	Defines call handlers, which can answer calls, play greetings, route calls, and take messages. Directory handlers allow users to search a directory. Interview handlers collect answers into a single message
Message Storage	Mailbox quotas
Networking	Multiple CUC systems in either a digital networking or VPIM environment
Dial-Plan	Partitions and search spaces can hide parts of the CUC system from certain users or functions
System Settings	Global Configurations—licenses, holiday schedules, incorporating information from external services (Microsoft Exchange calendars & contact lists) into call routing rules, pull conference information from Cisco Unified MeetingPlace so users can view and join meetings), redirect authentication to LDAP, SMTP e-mail notification of new msgs
Telephony Integrations	
Tools	Bulk administration interface and the Task Management system (automated maintenance & troubleshooting)

Cisco Unified Serviceability—(https://<ip>/ccmservice) Same URL and similar functionality to the app of the same name in CUCM

Cisco Unity Connection Serviceability—(https://<ip>/cuservice) Very different. A troubleshooting tool. Defines alarms, traces, and logs, plus service controls—(de)activate, start/stop/restart—for CUC-specific feature services. In an active/active redundant cluster, management tools are here.

Cisco Unified Operating System Administration—(https://<ip>/cmplatform)

Disaster Recovery System—(https://<ip>/drf)

Command Line Interface

CM IM AND PRESENCE SERVER

CM-IMP—Formerly called CUPS (…Presence Server).

CM-IM and Presence Administration—(https://<ip>/cupadmin)

MENU	PURPOSE
System	Integration configuration—in/out ACLs, plus licensing status
Presence	Gateway definitions for presence info from CUCM or calendar integration w/ Outlook. Interdomain federation across different presence domains using SIP (usually for Microsoft Office Communications Server (OCS)) or XMPP (often Google Talk)
Messaging	Retention Regulation Compliance (persistent messaging) via external databases (PostgresSQL compliant) or third-party servers
Application	Configure Desk Phone Control and IP Phone Messenger
Bulk Administration	Including scheduler
Diagnostics	Status & Troubleshooting tools, plus dashboard

Cisco Unified Serviceability—(https://<ip>/ccmservice)—Same URL and similar to functionality, again.

- Alarms & Events monitoring for troubleshooting purposes
- Access to cm-imp service trace logs
- Monitor real-time cm-imp component behavior via cucm rtmt
- Feature Service (de)activation and control, network service control
- Reports archive
- SNMP configuration
- Disk usage monitoring for log partition on local and cluster servers

Cisco Unified IM and Presence OS Administration—(https://<ip>/cmplatform)

Disaster Recovery System—(https://<ip>/drf)

Reporting—(https://<ip>/cucreports) Author attributes this URL to both "Cisco Unified Reporting" and "IM and Presence Reporting"

Command Line Interface

Once user accounts are created, end users can manage associated phones on their own. Chapter 9 has more info on the "Self-Care Portal." Examples:

- Change own password & PIN
- Manage own speed dials
- Download phone user guide
- In-house phone directory with click-to-dial
- Subscribe the IP phone to "services"

R E M A I N I N G   Q U E S T I O N S

Top of page 217 (Valentine), lists Cisco Call Manager as both a network service that cannot be deactivated, just started, stopped, and restarted. It also lists it as a feature service that might be active or inactive depending on the server. Are there a network service and a feature service sharing the same name?