Configuration Overview

- Software Overview, on page 1
- Configuration Management, on page 2
- Script Management, on page 2

Software Overview

Cisco Unified Intelligent Contact Management Overview

Unified Intelligent Contact Management provides enterprise-wide distribution of multichannel contacts across geographically separated contact centers. Such multichannel contacts are inbound or outbound telephone calls, web collaboration requests, e-mail messages, and chat requests. Unified ICM is an open standards-based solution whose capabilities include routing, queuing, monitoring, and fault tolerance. Unified ICM forms the basis for the Cisco Unified Communications family of products.

The system software functions across environments and across channels.

The system software functions in the older environment of telephone calls delivered over Time-division multiplexing (TDM) lines, of hardware automatic call distributions (ACDs) and interactive voice responses (IVRs), and of call centers centralized around the hardware. The system software can route calls for a single 800 number or for several different numbers. The system software reads information about each incoming call from the public network. The system software also determines the best destination for that call, and returns information to the public network instructing it where to route the call. This process is known as *call-by-call routing*.

The system software makes routing decisions by executing scripts that can easily be modified. These scripts can use real-time information about activity at the contact centers to find the destination best able to handle the call. You can monitor how the system is handling calls. You can also observe how the system modifies scripts when needed.

The system software functions in the newer environment of multichannel contact delivered through IP connections. These IP connections are of software ACDs and IVRs. The connections are also of contact centers that can be as decentralized as the Internet or as centralized as business practices requirements, not hardware necessities requirements.

The system software functions in the mixed transition environment that involves all of the above.

For detailed information about Unified ICM, refer to the *Pre-installation Planning Guide for Cisco Unified ICM* and the *Administration Guide for Cisco Unified Contact Center Enterprise*.

Cisco Unified Contact Center Enterprise Overview

Cisco Unified Contact Center Enterprise (Unified CCE) delivers intelligent contact routing, call treatment, network-to-desktop computer telephony integration (CTI), and multichannel contact management over an IP infrastructure. It combines multichannel ACD functionality with IP telephony in a unified solution, enabling your company to rapidly deploy a distributed contact center infrastructure.

Unified CCE provides:

- Segmentation of customers and monitoring of resource availability
- Delivery of each contact to the most appropriate resource anywhere in the enterprise
- Comprehensive customer profiles using contact-related data, such as dialed number (DN), and calling line ID
- Routing to the most appropriate resource to meet customer needs based on real-time conditions (such as agent skills, availability, and queue lengths)
- Presence integration to increase caller satisfaction through improved agent performance and knowledge-worker expertise

Unified CCE allows you to smoothly integrate inbound and outbound voice applications with Internet applications such as real-time chat, web collaboration, and email. This integration enables a single agent to support multiple interactions simultaneously regardless of which communications channel the customer has chosen. Because each interaction is unique and may require individualized service, Cisco provides contact center solutions to manage customer interactions based on almost any contact attribute.

For detailed information about Unified CCE, refer to the *Cisco Unified Contact Center Enterprise Installation and Upgrade Guide* and the *Administration Guide for Cisco Unified Contact Center Enterprise*.

Configuration Management

Unified ICM configuration information is permanently stored in the Central Controller database. The system software configuration consists of hardware entities, call targets, announcements, routes, dialed numbers, and regions. Use the tools of the Unified ICM/CCE Configuration Manager (referred to as "Configuration Manager" in this guide) to create and modify configuration data. When you apply a change in Configuration Manager, it is immediately applied to the central database.

Note You cannot open more than 60 configuration windows simultaneously. If more than 60 configuration windows are required, you must add another distributor.

To get started setting up and maintaining your configuration, see **Access Configuration Manager**.

Script Management

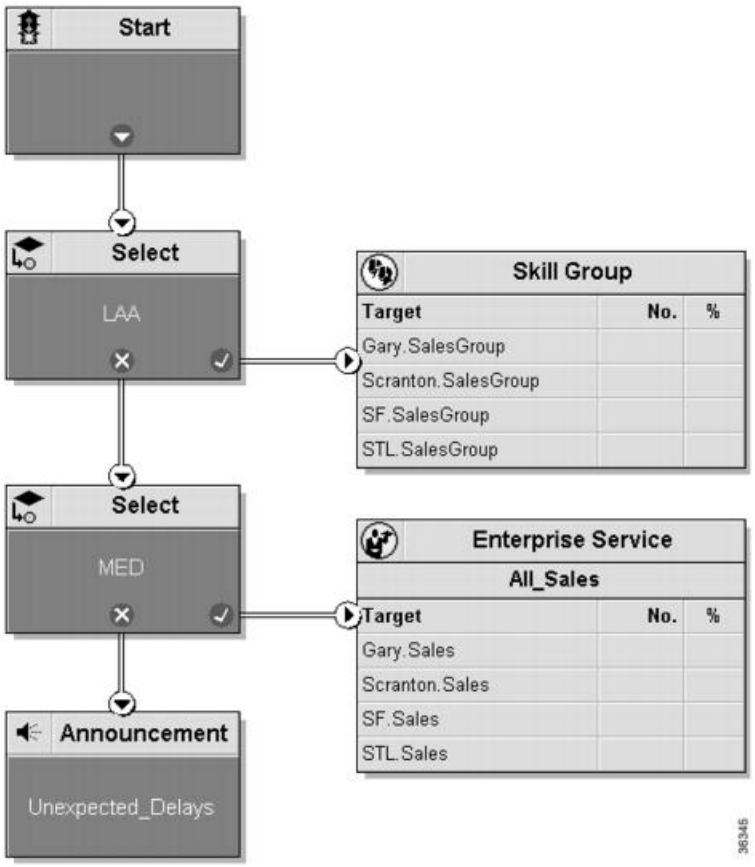
After you have set up your configuration, you can write routing scripts and administrative scripts:

- *A routing script* processes a call routing request from a routing client and determines the best destination for that call. The system software then passes a label associated with the destination back to the routing client.
- *An administrative script* runs periodically to perform a task, such as setting variables.

Use the Script Editor to create, maintain, and monitor scripts.

You can set up different routing scripts to run for different types of tasks. You can define call types in terms of the telephone number the caller dialed, the number the caller is calling from, and additional digits entered by the caller. For each call type, you can schedule different routing scripts to run on different days or at different times of the day. The figure below shows a sample ICM routing script, including longest available agent (LAA), and minimum expected delay (MED).

Figure 1: Sample Routing Script



A routing script typically examines several targets and applies selection rules to find an available qualified agent or a target with the shortest expected delay. You can use any of several predefined selection rules or you can set up your own selection criteria.

Within the Script Editor, you can open a script for browsing, monitoring, or editing. When you open a script for editing, the Script Editor automatically obtains the lock for that script.

To get started using the Script Editor to create or maintain scripts, refer to the *Scripting and Media Routing Guide for Cisco Unified ICM/Contact Center Enterprise*.