



Nortel Contact Center

Overview

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New in this release

The following sections detail what is new in *Nortel Contact Center Overview* (NN44400-111) for Release 7.0.

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- [Features \(page 5\)](#)
- [Other changes \(page 5\)](#)

Features

This document describes no new features.

Other changes

See the following sections for information about other changes.

- [Content arrangement \(page 5\)](#)

Content arrangement

The documentation suite for Contact Center 7.0 is rearranged to fulfill the requirements for the Nortel modular format. The content in this document is sorted by job functions and tasks rather than by servers. Use *Nortel Contact Center Documentation Roadmap* (NN44400-113) to determine which documents to read.

Introduction

Nortel Contact Center provides a contact center solution for varied and changing business requirements by offering a suite of applications:

- voice and multimedia contact processing
- agent handling
- management and reporting
- networking
- third-party application interfaces

In addition to the main Contact Center components, the contact center requires a switch for telephony services and voice network connectivity, and an optional front-end IVR system for voice processing capabilities.

This document briefly describes of the components of Nortel Contact Center 7.0.

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Overview

Nortel Contact Center represents the next generation of contact center software. Contact Center is a collection of software components that addresses the business requirements of sophisticated contact center environments. Contact Center is sold as a single software media suite with a licensing mechanism that offers custom functionality and features, either using either corporate or nodal licensing.

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- [Nortel Applications Center elements \(page 8\)](#)

Introduction

Nortel Contact Center integrates seamlessly with Nortel unified messaging solutions (CallPilot and Unified Messaging 2000) and self-service solutions and SIP for synergies that simplify deployment and operation.

Nortel Contact Center delivers contact management capabilities with up-to-date in communications technologies:

- Advanced skill-based routing ensures individual contact treatment and connects customers with an agent who is most qualified to serve the customer, locally or across a network.
- Extensive real-time and historical reporting tools, including a Report Creation Wizard to generate meaningful reports managers use to improve efficiency and productivity.
- Support for multiple platforms such as Time Division Multiplexing (TDM), Internet Protocol (IP), and Session Initiation Protocol (SIP) to enable a full range of functionality covering inbound and outbound voice, and multimedia contact support (e-mail, voice mail, Web chat, text messaging, and short message service (SMS)).
- Universal networking capabilities that provide network skill-based routing, reporting, and management of multiple contact centers across a variety of switch platforms.

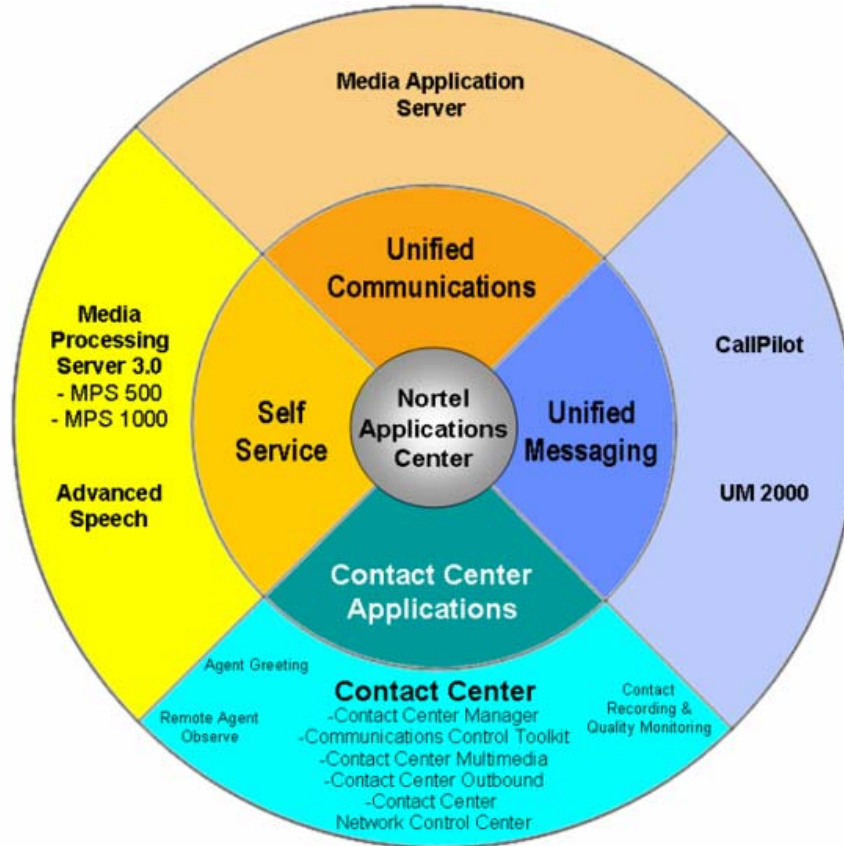
- Graphical tool to create contact flow and treatment rules with click and place capabilities for rapid and flexible programming.
- Multimedia-enabled agent desktop and supervisor tools that you can use to manage multimedia contacts.
- Integrated outbound capability to create, modify, and monitor outbound campaigns.
- Campus and geographic redundancy solutions minimize chances of failure, to provide maximum assurance of business continuity.
- Corporate license management options reduce the cost of ownership by centralizing the control of software licensing for all elements on a node and all nodes in the network.
- Generic database lookup and call data attachment capabilities with no requirements for coding or application programming are available in the Database Integration Wizard.
- Development integration of contact center solutions with business applications using the Communication Control Toolkit.

Nortel Applications Center elements

Nortel contact center solutions are modular and scalable to provide ultimate flexibility and customization for the individual needs of businesses. Customers can purchase only the elements that provide the features they need with options to expand in the future.

The software components of Nortel Contact Center are the core elements of a Nortel contact center solution that provide a range of contact center capabilities from basic telephony-focused features in a single-site environment to complex environments such as multimedia contact centers and virtual contact centers that operate across multiple sites.

Nortel Contact Center is part of the Nortel Applications Center portfolio. The Nortel Applications Center has four main product areas: Contact Center applications, Unified Messaging Applications, Self-Service solutions, and Unified Communications applications. All products in the Nortel Applications Center use a common architecture, open IP software frameworks, and multiple open interfaces for seamless integration with other Nortel Applications Center products, and with third-party applications. You can use common operational, administration, and management tools for simple and efficient operation and deployment.



Hardware requirements

This chapter briefly describes the Contact Center hardware requirements.

Servers, clients and operating systems are sold separately from Nortel Contact Center; see your authorized Nortel distributor for more information.

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Server requirements

The server deploys Nortel Contact Center software on platform vendor-independent, industry-standard servers with the Windows Server 2003 Enterprise or Standard Edition operating system. You can purchase the servers and operating systems separately from the Nortel Contact Center.

The number of servers required depends on the features you purchase, and the capacity of the disk drives on the servers.

The general minimum hardware requirements for each server are listed below:

Configuration	Minimum server requirements	
DVD drive required	Yes (for all servers)	
CPU requirements	Dual Xeon 2.0 GHz/Quad-core EXON 2.8 GHz	
Hard disk requirements (minimum/recommended)	CCMS: 69 GB/230 GB	CCMA: 40 GB/230 GB
	CCMM: 30 GB/510 GB	CCT: 20 GB/60 GB
	Co-resident: 85 GB/230 GB	

Configuration	Minimum server requirements
RAM (recommended)	Stand-alone: 4 GB Co-resident: 8 GB
Operating system	Windows Server 2003 R2 with SP2 Standard edition Windows Server 2003 R2 with SP2 Enterprise edition

You can install multiple Contact Center components on a single server to reduce operations and implementation costs as follows:

- Contact Center Manager Server and Contact Center Manager Administration can co-reside on the same server with License Manager and Server Utility.
- Contact Center Manager Server and Contact Center Manager Administration, and Communication Control Toolkit can co-reside on the same server with License Manager and Server Utility.
- Contact Center Manager, Communications Control Toolkit, License Manager, and Server Utility can co-reside on the same server in a self-service environment.
- Contact Center Network Control Center requires a separate server.
- Contact Center Multimedia requires a separate server.

Client requirements

All Contact Center clients run the software applications from the server through Internet Explorer 6.0 or Internet Explorer 7.0. You must install one of the following operating systems on each client:

- Windows Vista Business SP1
- Windows Vista Enterprise SP1
- Windows XP Professional Service Pack 2 or later
- Windows Server 2003 R2 Standard Edition
- Windows Server 2003 R2 Enterprise Edition

If you use Windows Vista, you must download a patch from Microsoft to view Windows-based help in some of the Contact Center components.

Network requirements

The following provides information about the networking requirements for the Contact Center suite.

The network architecture of Contact Center Manager Server has three requirements:

- single network interface card Contact Center Manager Server configuration
- routed ELAN subnet
- Nortel server subnet

Network interface card binding order

Configure the binding order of the network interface cards so that the NIC connected to the Nortel server subnet card is first, followed by others such as the virtual adapters for remote access.

If more than one network interface card is enabled, you can experience delays in Request/Response messages between the clients and the server.

Routed ELAN subnet

You must connect the ELAN subnet to the Nortel server subnet with one router only.

In a Contact Center environment, Communication Control Toolkit communicates with the switch either directly or through a router in the Nortel server subnet:

- client communication
- IVR messages
- call data networking messages between Communication Control Toolkit servers

The Embedded LAN is an Ethernet link for server communications with the PBX. The ELAN subnet must be simple, protected, and local. For example, do not extend the ELAN subnet over a WAN.

Nortel server subnet

Use the Nortel server subnet for inter-server communications, such as Communication Control Toolkit with Contact Center Manager Server. The Nortel server subnet connects to the ELAN subnet using a routed solution that adheres to the Elan Engineering requirements in the Communication Server 1000 documentation.

For more information about the Communication Server 1000 documentation, see *Converging the Data Network with VoIP Fundamentals* (NN43001-260) and *Communication Server 1000M and Meridian 1 Large System Planning and Engineering* (NN43021-220).

Supported switches

Contact Center 7.1 and Contact Center Express 7.1 provides support for the Communication Server 1000 software releases and switching platforms for AML or standard Contact Center Manager Server as shown in the following table.

AML-compatible Switch	Supported versions
Communication Server 1000E	4.5, 5.0, 5.5, 6.0
Communication Server 1000E SA Co-res	4.5, 5.0, 5.5, 6.0
Communication Server 1000E SA	4.5, 5.0, 5.5, 6.0
Communication Server 1000E HA	4.5, 5.0, 5.5, 6.0
Communication Server 1000M Single Group	4.5, 5.0, 5.5, 6.0
Communication Server 1000M Multi Group	4.5, 5.0, 5.5, 6.0
Meridian 1 PBX 11C - Chassis	4.5, 5.0, 5.5, 6.0
Meridian 1 PBX 11C - Cabinet	4.5, 5.0, 5.5, 6.0
Meridian 1 PBX 61C	4.5, 5.0, 5.5, 6.0
Meridian 1 PBX 51C	4.5, 5.0, 5.5, 6.0
Nortel Meridian 1 PBX Option 81C	4.5, 5.0, 5.5, 6.0

Contact Center 7.1 and Contact Center Express 7.1 provides support for the Communication Server 1000 software releases and switching platforms for a converged OCS CS1000 with SIP as shown in the following table.

SIP-compatible Switch	Supported versions
Communication Server 1000E	5.0, 5.5, 6.0
Communication Server 1000E SA Co-res	5.0, 5.5, 6.0
Communication Server 1000E SA	5.0, 5.5, 6.0
Communication Server 1000E HA	5.0, 5.5, 6.0
Communication Server 1000M Single Group	5.0, 5.5, 6.0
Communication Server 1000M Multi Group	5.0, 5.5, 6.0

All other switches are not supported.

Supported Telephones

Agents and supervisors use digital telephones with built-in displays, add-on modules, optional data adapters, and connections for a choice to use a headset or handset. Additionally, agents and supervisors in an IP contact center environment can use IP telephones.

Nortel Contact Center primarily supports three models of telephones:

- IP Phone 1150E
- M3905 Call Center Telephone
- M2216 ACD Digital Phone

Nortel Contact Center also supports other models of telephones:

- IP Softphone 2050
- IP Phone 1140E
- IP Phone 1120E
- IP Phone 2002
- IP Phone 2004
- IP Phone 2007
- M3904 Professional Telephone
- M2616 Performance Plus Phone
- M2008 Standard Business Phone

Software applications

This chapter provides a brief, high-level description of the Contact Center 7.0 software applications.

A single DVD provides all Contact Center components, including the documentation. During installation, the system prompts you to select the components you want to install. You can choose one or more applications to install together, if you can install the software co-resident.

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Contact Center Manager Server

Contact Center Manager Server is the core contact center component that provides the intelligent routing capability for voice and multimedia contacts to route the contacts to the most qualified agent. The most qualified agent is the agent with the appropriate ability to handle the type of contact.

Rules for contact treatment (what happens while the customer waits for a response) and contact routing (what happens to the contact) can be simple or complex. Use the Contact Center Manager Server to create the applications that provide queuing, routing, reporting, and management of voice, outbound, e-mail, Web communications and instant message (SIP) contacts.

You can use Contact Center Manager Server in a SIP-enabled contact center, in which communication sessions are established over Internet Protocol (IP) networks for interactive communication between two or more entities.

The comprehensive reporting tools of Contact Center Manager Server help managers and supervisors accurately track agent performance, resource usage, and trends. You can use the system real-time and historical reporting to plan staffing levels in peak periods, or forecast business requirements and human resource needs over the long term.

Contact Center Manager Server provides a number of open interfaces that third-party developers can use to build applications that work with Contact Center Manager Server. Real Time Statistics Multicast (RSM) and Real-Time Interface (RTI) provide real-time information to applications such as wall boards. Use the Host Data Exchange (HDX) to connect the application processing contacts to the information in an external database. With the Open Database Connectivity (ODBC) interface, an application extracts information from the Contact Center Manager Server database. The Meridian Link Service Manager (MLSM) interface provides messaging and control of resources on the telephony switch. Use the MLSM interface to implement telephone features.

Network Control Center server

The Network Control Center server manages the Network Skill-Based Routing (NSBR) configuration and communication between servers in a Contact Center Manager Server network. You need the Network Control Center server when servers in multiple Contact Center Manager Server sites are networked and operate as a single distributed contact center. The Network Control Center server runs the Network Control Center (NCC) software application, a feature of the Contact Center Manager Server application software.

License Manager

Nortel uses a License Manager for the central licensing and control of all Contact Center components and features across the Contact Center suite (Contact Center Manager, Contact Center Manager Administration, Communication Control Toolkit, and Contact Center Multimedia).

You must install the License Manager on the Contact Center Manager Server or on the primary Contact Center Manager Server in a networked contact center. If you work in a Knowledge Worker environment, where no Contact Center Manager Server exists, install the License Manager on the Communication Control Toolkit server.

A Corporate License feature is available with Contact Center. Licensing for the entire contact center network is centralized on a License Manager server, thereby reducing administration overhead. With corporate licensing, you can enable the concurrent agent licenses across a contact center network. For example, if an agent logs off in California, the seat (agent license) becomes available for use by an agent based in Texas, thereby making the most efficient use of your corporate license investment.

You can install a backup License Manager server on another Contact Center Manager Server to ensure business continuity if the primary License Manager server fails.

Server Utility

You can use the Server Utility to monitor and maintain Contact Center Manager Server. The Server Utility provides functionality that is not available through Contact Center Manager Administration.

With the Server Utility, you can

- Monitor and maintain user accounts.
- Use the Provider application to receive Contact Center routing information over the Host Data Exchange (HDX) interface. Additionally, you can configure the Provider application to return information to the Contact Center.
- Use the Service Monitor application to monitor the status of Contact Center Manager Server services from a stand-alone computer. The information returned is similar to the information provided by SMONW.
- Use PC Event Browser to view events that occur on the client where the Server Utility runs.

Contact Center Manager Administration

Contact Center Manager Administration is a browser-based tool for contact center administrators and supervisors. You can use Contact Center Manager Administration to manage and configure a contact center and users, define access to data, and view real-time and historical reports. You can install the Contact Center Manager Administration component on the same server as Contact Center Manager Server, or on a separate networked server.

With the Contact Center Manager Administration Web-based platform, you can perform the following functions based on the CS 1000/Meridian 1 or SIP configuration of your contact center:

- **Contact Center Management:** Configure access levels for agent to skillset and agent to supervisor assignments.
- **Access and Partition Management:** Create a Contact Center Manager administrator, partitions and access classes for agents and supervisors. Partitions define what a user can view; access classes define what the user can create, change, or modify.
- **Configuration:** Configure data such as users and skillsets for the contact center. You can use templates in Microsoft Excel spreadsheets to upload Contact Center Manager information.
- **Application development:** Create, modify, and validate contact routing and tracking instructions for the contact center using the Service Creation Environment.
- **Real-Time Reporting:** Display real-time skillset reports, select filters for real-time displays, and configure threshold warning colors for both networked and single-node contact centers.
- **Historical Reporting:** View and print historical report schedules, modify report templates on a network drive, and print access and partition management information.
- **Report Creation Wizard:** Create, maintain, and modify custom historical or real-time reports through a user-friendly interface.
- **Emergency Help:** View notifications of agent emergencies. Agents can click an Emergency button on the Contact Center Agent Desktop to alert supervisors of contact emergencies.
- **Audit Trail:** View a record of all actions performed in the Contact Center Manager Administration configuration application.
- **Outbound:** Configure outbound campaigns if you install the Multimedia/Outbound server software. For more information about the Multimedia/Outbound server, see [Contact Center Multimedia \(page 20\)](#).

Service Creation Environment

Use the Service Creation Environment in a stand-alone application to create contact flows to route and treat contacts off-line before you install and configure the Contact Center environment. You can use the off-line version of the Service Creation Environment to create the script or flow applications, validate the application, obtain approval for the application, and then implement the application after the remainder of the Contact Center software suite is configured.

Agent Desktop Display

The Agent Desktop Display application is an application that optionally provides real-time skillset monitoring on agent desktops.

Security Framework

The Security Framework provides identity management that enables integration with your directory services infrastructure (for example Active Directory) for authentication and authorization of application users. The identify framework helps to reduce the administrative costs and eliminates the redundant user information associated with per-application solutions. Single sign-on is a core feature of the framework that minimizes the necessity for end users to provide credentials after they log on.

Communication Control Toolkit

The Communication Control Toolkit server is an application that helps you implement Computer-Telephony Integration (CTI) for browser-based client integrations. For switches, the Communication Control Toolkit facilitates the integration of contact center, Knowledge Worker, and self-service solutions with your client applications. In the SIP-enabled contact center, the Communication Control Toolkit integrates the contact center users with the SIP CTI on the Microsoft Office Communication Server (OCS).

The Communication Control Toolkit contains the Communication Control Toolkit server, which is the component responsible for managing client sessions. The Communications Control Toolkit server contains the following subcomponents:

- **Contact Management Framework:** An infrastructure component manages the states of contacts, agents, terminals, and addresses for assigning contacts.
- **Telephony Application Program Interface (TAPI) Connector:** A connector converts Communication Control Toolkit requests to TAPI calls, and TAPI events to Communication Control Toolkit events. The TAPI Connector sits between the Nortel TAPI Service Provider and the Contact Management Framework. The TAPI Connector is not used in SIP-enabled contact centers.
- **TAPI Service Provider:** A Microsoft TAPI client that handles CTI operations of all lines controlled by the Communication Control Toolkit platform that are initialized by TAPI. Do not use the TAPI Service Provider in SIP-enabled contact centers.
- **SIP Connector:** SIP-enabled contact centers require a Communication Control Toolkit Connector to accommodate Contact Center Manager Server agent logons from the Contact Center Agent Desktop application. SIP-enabled contact centers also require the functionality of a

Communication Control Toolkit Connector that is built into the Contact Center Manager Server product as a SIP service.

- Communication Control Toolkit API: An application programming interface (API) controls voice resources. The API is published as a Microsoft .NET type and distributed as a Windows assembly, which is referenced by application developers.
- Client applications: Third-party components including software phones, agent telephony toolbars, or call management applications. The Contact Center Agent Desktop is a Nortel software application that provides the agent telephony toolbar functions.

Contact Center Multimedia

The Contact Center Multimedia server contains contact center applications that expand the contact center to allow agents to view, respond to, and track requests over the Internet. E-mail and outbound contacts are directed to the first available agent in the skillset who can handle the contact type. If more than one agent is available, the contact is routed to the agent with the highest priority for the skillset. Supervisors and administrators view real-time displays and run historical reports to determine volume and completion statistics.

The Contact Center Multimedia server contains the following components:

- Multimedia/Outbound database: The server component includes the Caché database, or multimedia database, that stores all incoming e-mail contacts, outbound campaigns, and associated responses in a structured format within the database.
- Outbound Campaign Management Tool: You access the Outbound Campaign Management Tool from the Contact Center Manager Administration application. Administrators use the integrated Outbound Campaign Management Tool to create, modify, and monitor outbound campaigns. An outbound campaign is a series of outbound calls to customers for one specific purpose, for example, a customer survey or a sales promotion.
- Contact Center Agent Desktop: Agents use Internet Explorer to connect to a new Web service-based unified Agent Desktop interface on the Contact Center Multimedia server. The Communication Control Toolkit pushes e-mail, Web requests, outbound contacts, and voice calls to the Agent Desktop interface. Agents use the Agent Desktop interface to retrieve e-mail and outbound campaign information, customer details, and history from the Multimedia database. Agents also use the Agent Desktop application to send e-mail replies and save outbound call details in the multimedia database. The Agent Desktop is deployed using .NET smart technology and accessed by the agent by entering a URL address in Windows Explorer or Internet Explorer.

Contact Center Agent Desktop

If your contact center is licensed to handle telephony calls, you can install the Agent Desktop telephony toolbar on the Communication Control Toolkit server to provide the Agents with a softphone on their desktop.

Standby servers

Contact Center supports warm standby configurations for all main server software so that the secondary server (standby server) can run your contact center if the primary server (active server) fails. Each secondary server contains the same data, configuration, and software as the primary server. Installing standby servers reduces the risk of costly downtime for the contact center. Data is mirrored onto the standby server using the internal Caché shadowing feature.

Ensure that the active and standby servers have the same software applications installed in the same configuration on the same drives.

When configuring your standby configurations, you must initialize the database so that it is identical to the active server database. Back up the active server database and restore the backup on the Standby Server database. The active server can continue operating while your standby system is configured. Database updates continue in the active server database as part of normal contact center operations before and after the database is shadowed on the standby server.

Network configurations

This chapter provides an overview of the Contact Center system network configurations.

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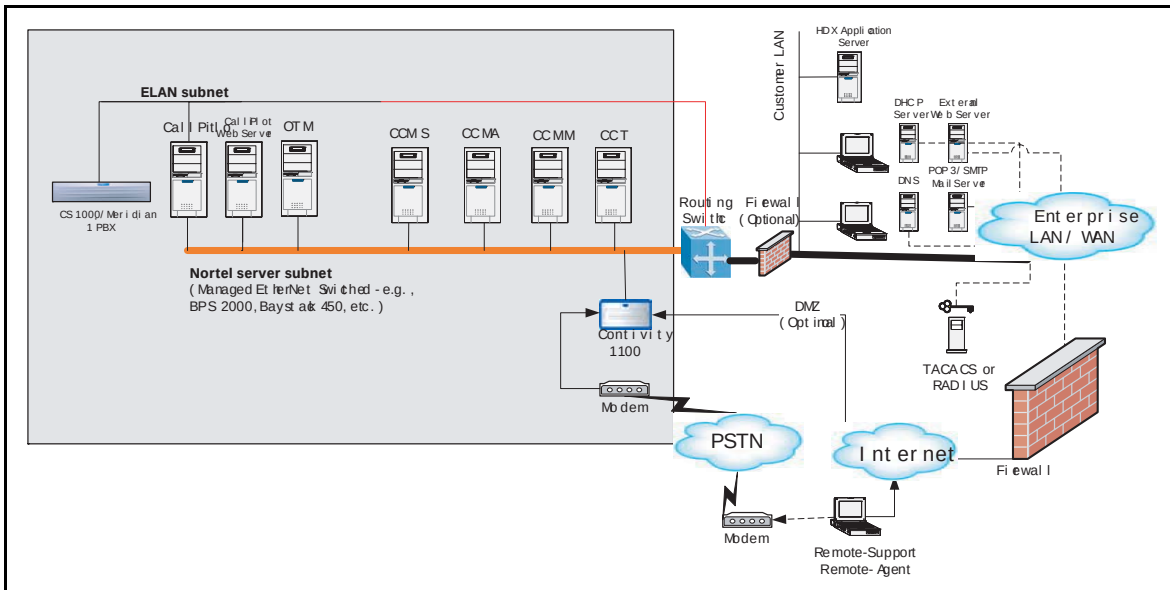
Network configurations

Several network configurations for Contact Center are available, such as

- [Communication Server 1000/Meridian 1 PBX in a nodal environment \(page 22\)](#)
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Communication Server 1000/Meridian 1 PBX in a nodal environment

The following illustration shows a contact center that is based on a Communication Server 1000/Meridian 1 PBX telephone switch in a nodal environment.



Communication Server 1000/Meridian 1 PBX in a multinode environment

Your contact center can use multiple Communication Server 1000/Meridian 1 switches. Each switch connects to a Contact Center Manager Server and Communication Control Toolkit server to route contacts. Only one Network Control Center is required to administer all sites.

Mixed switch network environment

In a mixed switch network environment, you can have multiple switches handling contacts. For each switch, you must configure a Contact Center Manager Server and a Communication Control Toolkit server. Nortel Contact Center supports Release 6.0 and Release 7.0 servers in a networked environment.

You need only one Network Control Center server for the entire environment.

SIP-based Contact Center environment

The Voice over IP community adopted Session Initiation Protocol (SIP) as the protocol of choice for signalling. SIP is used for establishing sessions in an IP network. A session can be a simple two-way telephone call or it can be a collaborative multimedia conference session. SIP sessions support a host of services, such as voice-enriched e-commerce, Web page click-to-call, instant messaging, buddy lists, presence, and IP services.

Knowledge worker environment

In a knowledge worker environment, Communication Control Toolkit communicates over the Nortel server subnet and, in turn, over the ELAN subnet to the switch.

In a knowledge worker environment, skill-based routing is not required. The telephone switch directs incoming calls to agents. Communication Control Toolkit delivers caller information, such as ANI/DNIS, or CLID.

In the knowledge worker environment, Communication Control Toolkit connects directly to the telephone switch over the Nortel server subnet and the ELAN subnet, if the Communication Control Toolkit is not connected to the Nortel server subnet through a router. Communication Control Toolkit connects to clients and application servers over the enterprise IP network.

Self-service environment

In contact center and self-service environments, the Contact Center Manager Server communicates to other servers through the Nortel server subnet and to the PBX through both the Nortel server subnet and the ELAN subnet.

In a self-service environment, callers use an IVR system to answer queries or request services. For example, bank customers use self-service applications to find their account balance or to transfer funds. Voice contacts are not handled by agents. Communication Control Toolkit and the IVR server connect to the telephone switch through Contact Center Manager Server. Communication Control Toolkit connects to the IVR system over the enterprise IP network.

Network traffic

Contact Center Manager Server uses remote method calls between the client machine and the Communication Control Toolkit server. Nortel recommends that you design and develop the applications to minimize the number of remote calls and thereby reduce the demands on the underlying network and increase application responsiveness.

Other products that work with Contact Center

This chapter provides a brief, high-level description of software that works with Contact Center.

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Nortel Agent Greeting

Nortel Agent Greeting automates the agent greeting to enable each agent to pre-record single or multiple greetings by skillset that the system can play to callers before the agent handles the call.

Nortel Remote Agent Observe

With Nortel Remote Agent Observe, contact centers monitor and record calls in real time from a remote location using a Dual-Tone Multi-Frequency (DTMF)-enabled telephone. For example, companies can remotely observe the quality of service provided in a contact center. Remote Agent Observe simplifies quality assurance activities and provides a flexible monitoring solution.

Nortel Contact Recording

Nortel Contact Recording is a call-recording solution for organizations that need bulk or selective call-recording abilities for reasons such as compliance, risk reduction, fraud prevention, business verification, business optimization, or quality monitoring.

Nortel Contact Recording delivers the ability to

- scale from one to many thousands of channels within an enterprise
- be independent of the data infrastructure functionality such as port mirroring
- record IP voice communications full time
- record traditional digital phone lines
- make recording decisions in real time based on configurations
- be administered and supported locally at any enterprise level

Nortel Quality Monitoring

Nortel Quality Monitoring records agent interactions with customers and the agent's corresponding desktop activities, such as data entry, screen navigation, and data retrieval. By capturing both voice and desktop activity and by synchronizing them during replay, contact centers achieve thorough customer interaction recording for use in continuous performance improvement initiatives.

Nortel Quality Monitoring delivers the ability to

- trigger recordings based on customized business rules
- record interactions randomly to use CTI, outbound CRM, or custom integration
- monitor synchronized voice and data interactions
- evaluate and analyze agent performance using customizable evaluation forms
- organize recorded interactions according to user-defined categories
- share recordings throughout the enterprise

Nortel Self-Service

The following Nortel IVR hardware and software solution works with Contact Center.

Nortel Media Processing Server (Interactive Voice Response)

The Nortel Media Processing Server (MPS) provides DTMF, speech, and Web self-service solutions for both enterprise and carrier. With the MPS, you can reduce the number of contacts that agents handle, increase overall operating system efficiency, and dramatically enhance customer offerings by linking customers directly to your business. Customers can have quick, automated access to information and services without waiting in a queue to speak to a contact center agent.

The MPS uses advanced speech technologies to increase customer satisfaction by offering friendly self-service while improving contact center efficiencies:

- Large vocabulary recognition (LVR) with natural language understanding (NLU): The MPS accurately recognizes tens of thousands of words to automate many transaction types.
- Speaker Verification: The MPS can compare live speech samples to stored voice prints for quick and accurate approval or denial of caller identity.
- Text to Speech (TTS): The MPS can convert ordinary text into intelligible speech. This technology communicates information to customers when possible selections include large numbers of items from databases that must be spoken to callers.

The MPS also offers options for writing self-service applications:

- the enhanced and industry-standard markup language of VoiceXML
- the intuitive, graphical development environment of MPS Developer

The MPS supports IP or TDM, and can support mixed implementations of IP and TDM digital voice protocols to provide hybrid digital and VoIP options. With hybrid digital and VoIP options, businesses can standardize on one self-service system across multiple switching environments, or grow their self-service solutions with IP technology without abandoning legacy systems until they are ready.

Unified messaging products

The following unified messaging products work with Contact Center.

Nortel CallPilot

Nortel CallPilot is a unified messaging tool that combines voice mail, e-mail, and fax to create a feature-rich message-management system. In a contact center environment, Nortel CallPilot integrates with Contact Center Manager Server to send customers to interactive voice sessions while retaining their place in queue. Additional voice services available with Nortel CallPilot include

- playing broadcast announcements to callers
- playing expected wait time and position in queue announcements
- prompting and collecting information from callers that the system can use as routing criteria
- leaving queued messages for call-backs

Unified Messaging 2000

Nortel Unified Messaging 2000 (UM) is a carrier-grade unified messaging tool for large enterprises which unifies voice mail, e-mail, and fax. In a contact center environment, UM 2000 integrates with Contact Center Manager Server to provide expected wait-time and position in queue messaging and to ensure the use of customer context in contact center routing.

Customer service

Visit the Nortel Web site to access the complete range of services and support that Nortel provides. Go to www.nortel.com, or go to one of the pages listed in the following sections.

Navigation

- [Updated versions of documentation \(page 29\)](#)
- [Getting help \(page 29\)](#)
- [Express Routing Codes \(page 29\)](#)
- [Additional information \(page 30\)](#)

Updated versions of documentation

To get the latest updates for documentation go to www.nortel.com/documentation and navigate to the Contact Center 7.0 collection.

Getting help

If you purchased a service contract for your Nortel product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

If you purchased a Nortel service program, you can get help by contacting one of the Nortel Technical Solutions Centers found at www.nortel.com/callus; or visit our Technical Support site at www.nortel.com/support.

Express Routing Codes

An Express Routing Code (ERC) is available for many Nortel products.

When you use an ERC, your call is routed to a technical support person who specializes in supporting that particular product or service. To locate an ERC for any product or service, go to www.nortel.com/erc.

Additional information

Use the information in the following table to access other areas of the Nortel Web site.

For information about	Contact
Contact Us	www.nortel.com/contactus
Documentation feedback	www.nortel.com/documentfeedback
Products (marketing)	www.nortel.com/products
Partner Information Center (PIC)	www.nortel.com/pic
Register	www.nortel.com/register
Search	www.nortel.com/search
Services	www.nortel.com/services
Training	www.nortel.com/training

Nortel Contact Center

Overview

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