

MITEL

Contact Center Solutions



General Information Guide

November 30, 2011
for Version 6.0

NOTICE

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks Corporation (MITEL®). The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Mitel Networks Corporation.

Mitel is a trademark of Mitel Networks Corporation.

Windows and Microsoft are trademarks of Microsoft Corporation.

Adobe Reader is a registered trademark of Adobe Systems Incorporated.

Other product names mentioned in this document may be trademarks of their respective companies and are hereby acknowledged.

® Trademark of MITEL Networks Corporation
© Copyright 2011 MITEL Networks Corporation
All rights reserved.

Table of Contents

Chapter 1:

About this Document

Overview	3
Audience	3
Product Naming Conventions	4
About the Contact Center Solutions Documentation	4

Chapter 2:

Contact Center Solutions

Introduction	9
Overview	9
Contact Center Enterprise Edition	9
Contact Center Business Edition	10
Contact Center Solutions Portfolio	10
Call Accounting	12
Mitel Professional Services - Custom Development	12
Contact Center Solutions Applications	12
Configuration	15
Supported languages	15
North American and LAM Extended Service and Support	16
Contact Center Enterprise Edition	17
Contact Center Business Edition	17
Standard	17
Premium	17
Premium Plus (24/7/365)	17
Graduated discount with the purchase of multiple service and support agreements	18
“Pay per incident” support	18
Contact Center Solutions extended service and support re-enlist penalty	18
Extended Service and Support - Business to Enterprise upgrade	18
Europe, the Middle East, and Africa Extended Upgrade	18
Extended Upgrade Package	19
Contact Center Enterprise Edition	19
Contact Center Business Edition	19
Graduated discount with the purchase of multiple service and support agreements	19
Contact Center Solutions extended service and support re-enlist penalty	19
Extended Upgrades - Business to Enterprise upgrade	19

**Chapter 3:
Automatic Call Distribution**

Introduction23
Overview23
How ACD Works: The ACD Routing Engine24
ACD Support25
Features and Benefits28

**Chapter 4:
Contact Center Management**

Introduction37
Overview37
 Browser-based solution37
 Data collection at local sites38
Applications39
 Historical data management39
 Reporting39
 Report distribution40
 Real-time monitoring41
 Forecasting45
 Data collection monitoring45
 Database programming45
 Services and database administration47

**Chapter 5:
Contact Center Management Enterprise Node**

Introduction51
Overview51
 Data collection at remote sites51
Features52
 ACD and SMDR data collection53
 Data synchronization and storage53
 Telephone system-neutral data collection process53
 Requirements53
Configuration53

**Chapter 6:
Resiliency and ACD Resiliency**

Introduction57
Overview57
Benefits58
Resiliency Support for Contact Center Applications58
Features58

Calls in queue are not lost	58
Calls in progress are maintained	59
Callers are unaware of the outage or system event	59
Agent states are retained	59
Single points of failure are minimized	59
Interactive Contact Center support is maintained on resilient telephone systems	59
Real-time monitors notify you of agents who are in failover mode	59
Reports convey agent performance without breaking up the shift	59
Configuration	59
Basic ACD Resiliency	60
Advanced ACD Resiliency	62
Full ACD Resiliency	65
Chapter 7:	
Virtual Contact Centers	
Introduction	71
Overview	71
Benefits	71
Configuration	72
Configuration 1: Failover to local secondary	72
Configuration 2: Failover to central secondary, then local tertiary	73
Chapter 8:	
Flexible Reporting	
Introduction	77
Overview	77
Benefits	77
Features	77
Create custom reports with an easy-to-use wizard interface	78
Select from existing column headings to build a report	78
Combine like-data across device types	78
Control column order	78
Customize column headings	78
Render reports in Excel .xls and Adobe .pdf formats	78
Select column headers for two or more devices and combine them in one report	78
Add your corporate or third party logo to reports	78
Produce customized reports on a scheduled or on-demand basis	78
Chapter 9:	
Interactive Contact Center	
Introduction	81
Overview	81
Benefits	81
Features	82

Real-time agent state control	82
Real-time path control	82
Real-time agent group presence control	82
Scheduled path control	83
Path control plans	83
Enhanced agent shift reporting	83
Configuration	84
3300 ICP configuration	84
Telephone System Hardware and Software Requirements	85

**Chapter 10:
Interactive Visual Queue**

Introduction	89
Overview	89
Benefits	89
Detailed caller information	89
Call redirection	89
Integration with other applications	90
Features	90
Detailed call statistics	90
Contact prioritization	91
Single-point database administration	91
Integrated agent control	91
Integrated real-time presence	91
Ability to send a call in queue to a specific dialable number	91

**Chapter 11:
Contact Center Softphone & Contact Center PhoneSet Manager**

Introduction	95
Overview	95
Benefits	95
Features	95
Time-saving features	96
5220 IP Phone display features and menus	96
Telephony functions	96
Support for Personal Identification Number (PIN) protection	97
Call notes	97
Single-point data administration	97
Integrated agent control	97
Integrated real-time presence	98
Integrated call control and prioritization	98
Pre-announcement messages	98
Silent monitoring	98
Report creation on calls tagged with account codes and call classification codes	98
Support for hot desking agents	100

Support for external hot desking, home-based, and remote employees	100
Resiliency	100
Chapter 12:	
Workforce Scheduling	
Introduction	103
Overview	103
Schedule Adherence	104
Employee Portal	104
Features	104
Automatic schedules	104
Skill-based schedules	105
Customized agent schedules	107
Easy-to-use interface	107
Multi-client support	107
Accrual-based time-off planning	107
Reporting	107
Benefits	107
Chapter 13:	
Schedule Adherence	
Introduction	111
Overview	111
Features	111
Real-time agent information displayed in a familiar user interface	112
Adherence Detail Grid monitor	112
Adherence Timebars monitor	113
Adherence reports	113
Customizable adherence alarms	113
Benefits	114
Chapter 14:	
Employee Portal	
Introduction	117
Overview	117
Features	117
Benefits	118
Chapter 15:	
Contact Center Screen Pop	
Introduction	121
Overview	121
Benefits	121
Features	121
Access to detailed caller information	122
Customizable display options	122

Seamless Customer Relationship Management (CRM) integration122
Enhanced agent support122

**Chapter 16:
CTI Developer Toolkit**

Introduction125
Overview125
Features125
 CTI Developer Toolkit - Server DLL126
 CTI Developer Toolkit - Client DLL126
Configuration126

**Chapter 17:
IVR Routing**

Introduction133
Overview133
 Call flows133
 Call flow types134
 RAD messages134
 Call flow examples135
Benefits139
Core Features139
 Visual diagramming139
 Hunt group configuration140
 Prompt and playlist editor140
 Network Monitor enhancements140
 Single point of administration140
 Scalability and Resiliency140
 RAD Messages140
 Callbacks141
 Music on hold141
 Time in Queue141
 Updated Position in Queue141
 Port Status Monitor141
 Port Sizing Tool141
 IVR Management142
Configuration142

**Chapter 18:
Multimedia Contact Center**

Introduction145
Overview145
Features146

Advanced routing	146
Agent productivity tools	147
Supervisor management	147
Multimedia Contact Center Social Media Integration	148
Configuration	149
Multimedia Contact Center basic configuration	149
Multimedia Contact Center email routing	149
Multimedia Contact Center chat routing	150
Multimedia Contact Center fax routing	152
Software interfaces	153

Chapter 19: Professional Services Custom Development

Introduction	159
Overview	159
OutBound Dialer	159
Benefits	159
Workforce Management Integration	160
Benefits	160
Customer Relationship Management Integration	160
Contact Center Screen Pop Connector for Microsoft Dynamics CRM	160
Salesforce.com Integration	161
Other Integrations	162

Chapter 20: Third Party Integration

Introduction	165
Overview	165
Software connectors	165
OASYS Tracer	165
Microsoft Lync Server 2010	165
Global Partners	166
Call Recording	166
Interactive Voice Response (IVR)	167
North America Partners	167
Call Recording	167
Speech Analytics	169
Interactive Voice Response (IVR)	169
Multi-Channel Routing	169
Campaign Management	169
Europe, Middle East, Africa (EMEA) Partners	170
Call Recording	170
Multi-Channel Routing	171
Campaign Management	172

Outbound Dialer172

**Chapter 21:
Traffic Analysis**

Introduction175
Overview175
Features175
 Traffic Attendant reports175
 Traffic DTMF Receiver Group reports176
 Traffic Route reports177
 Traffic Trunk reports178

**Chapter 22:
Mitel Border Gateway Connector**

Introduction183
Overview183
Features183
Benefits183
Configuration184

**Chapter 23:
Secure Recording Connector**

Introduction187
Overview187
Features188
 Resiliency188
 Security188
 Recording Beep188
 Compatibility188
Configuration189

Chapter 1
About this Document

Overview

This guide provides an overview of Mitel Contact Center Solutions, a portfolio of applications that enables customers to maximize the efficiency of their contact centers.

The applications covered in this guide are as follows:

- Contact Center Solutions
 - Mitel Automatic Call Distribution (ACD)
 - Mitel Contact Center Management
 - Mitel Contact Center Management Enterprise Node
 - Mitel ACD Resiliency
 - Virtual Contact Centers
 - Mitel Flexible Reporting
 - Mitel Interactive Contact Center
 - Mitel Interactive Visual Queue
 - Mitel Contact Center Softphone & Mitel Contact Center PhoneSet Manager
 - Mitel Workforce Scheduling
 - Mitel Schedule Adherence
 - Mitel Employee Portal
 - Mitel Contact Center Screen Pop
 - Mitel CTI Developer Toolkit
 - Mitel IVR Routing
 - Mitel Multimedia Contact Center
 - Mitel Professional Services
 - Mitel Third Party Integration
 - Mitel Traffic Analysis
 - Mitel Border Gateway Connector
 - Mitel Secure Recording Connector

Audience

This guide is intended for the following users:

- End customers
- Resellers
- Sales executives

Product Naming Conventions

In this document only the first mention of product names include the term "Mitel", for example: Mitel Contact Center Management (first mention) and Contact Center Management (subsequent mention).

About the Contact Center Solutions Documentation

The following guides provide information about Contact Center Solutions:

- *3300 ICP General Information Guide*: provides detailed information on how Contact Center Solutions and ACD interact with the 3300 IP Communications Platform (ICP).
- *Contact Center Solutions User Guide*: provides information on the basics of ACD contact center management and how to use the following applications:
 - Contact Center Management
 - Contact Center Management Enterprise Node
 - ACD Resiliency
 - Flexible Reporting
 - Contact Center Client
 - Interactive Contact Center
 - Interactive Visual Queue
 - Contact Center Softphone and Contact Center PhoneSet Manager
 - Workforce Scheduling
 - Schedule Adherence
 - Employee Portal
 - Contact Center Screen Pop
 - Multimedia Contact Center
 - IVR Routing and Visual Workflow Manager
 - Intelligent Queue
 - Traffic Analysis
 - CTI Developer Toolkit
 - Salesforce.com Integration
 - Mitel Border Gateway Connector
- *Contact Center Solutions Business Edition Reports Guide*: describes all of the report types available and explains how to generate reports included with Contact Center Business Edition.

- *Contact Center Solutions Enterprise Edition Reports Guide*: describes all of the report types available and explains how to generate reports included with Contact Center Enterprise Edition.
- *Contact Center Solutions and Call Accounting System Engineering Guide*: provides detailed information on the hardware and software requirements for server and client computers, data storage requirements, frequently asked questions, and other considerations for Contact Center Solutions and Call Accounting.
- *Contact Center Solutions Deployment Guide*: provides information regarding how to scale up from a simple solution for a deployment that can grow as the contact center grows. High-level requirements, specifications, networking considerations, best practices, and other useful references for planning the deployment of large-scale, complex contact centers are discussed.
- *ACD Resiliency Getting Started Guide*: provides information on ACD Resiliency concepts and how to configure your enterprise in Contact Center Management.
- *Contact Center Management Installation Guide*: provides instructions on how to install Contact Center Management on the Enterprise Server, how to configure client computers for Contact Center Management, and how to install Contact Center Management at remote sites.
- *Multimedia Contact Center Installation Guide*: describes how emails, SMS, chats, and faxes are routed. It includes information on how to set up your site to send and receive Multimedia Contact Center email, SMS, chat and fax contacts.
- *Visual Workflow Manager Quick Start Guide*: describes how to install and configure Visual Workflow Manager.
- *Intelligent Queue Installation Guide*: describes how to install and configure Intelligent Queue.

Chapter 2

Contact Center Solutions

Introduction

This section provides an overview of the Contact Center Solutions portfolio of applications. For more information, refer to the following topics:

- Overview
- Contact Center Enterprise Edition
- Contact Center Business Edition
- Contact Center Solutions Portfolio
- Contact Center Solutions Applications
- Configuration
- North American and LAM Extended Service and Support
- Europe, the Middle East, and Africa Extended Upgrade

Overview

Mitel Contact Center Solutions applications comprise Contact Center Enterprise Edition and Contact Center Business Edition. Contact Center Solutions is browser-based, enabling customers to manage their contact centers from anywhere over the Internet.

Contact Center Solutions enhances ACD functionality and stores information in the industry-standard SQL database format. Contact Center Solutions use Microsoft® SQL Server™ (depending on your configuration) to unify the database across applications.

Contact Center Enterprise Edition

Contact Center Enterprise Edition is designed for the highly sophisticated, formal, multi-site contact center. This scalable, resilient solution combines robust IP Communications Platforms, Automatic Call Distribution (ACD), and a modular suite of feature-rich, Web-based applications for streamlining contact center management and ultimately enabling “agents anywhere” productivity.

Contact Center Enterprise Edition is designed for Contact Center Solutions customers who

- Have a sophisticated, formal contact center
- Want to enable agents and supervisors anywhere, whether at home, in the office, or around the world
- Have multiple sites
- Require support for email, SMS, Web chat, fax, and/or walk-in customer distribution, in addition to voice
- Have more than 25 agents and five supervisors
- Run reports from the entire suite (over 425 report templates) including trace reports and event reports

- Want to customize reports
- Want to identify callers in queue and change their answer priority in real time
- Demand a resilient setup
- Want to create flexible schedules based on forecasted requirements
- Want to measure agent task adherence

Contact Center Business Edition

Contact Center Business Edition focuses on individual contact centers with 25 or fewer agents. This cost effective, out-of-the-box solution allows customers to choose from a number of applications, including historical reporting, real-time monitoring, dynamic agent and queue control, screen pops, and intelligent call processing (maximum eight ports). Customers who purchase Contact Center Business Edition can upgrade to Contact Center Enterprise Edition at any time.

Contact Center Business Edition is designed for Contact Center Solutions customers who

- Have a less elaborate, single-site contact center with 25 or fewer agents and five or fewer supervisors
- Require support for email, SMS, Web chat, and/or fax, in addition to voice
- Are searching for a single server, out-of-the-box deployment designed for functional contact centers
- Need a cost-effective solution (optimize cost savings when you purchase Business Edition in conjunction with Interactive Contact Center Business Edition, Multimedia Contact Center Business Edition, and/or IVR Routing Business Edition)
- Want to run core reports
- Have limited agents who typically do not require real-time desktop displays
- Want to be able to purchase the reporting agent option separately from the real-time agent desktop option
- Are not interested in fault-tolerant IP call control
- Want a solution that can grow as their contact center grows

Contact Center Solutions Portfolio

Contact Center Solutions includes the following applications:

- **Contact Center Management** (Enterprise Edition and Business Edition) is Mitel's core reporting, real-time, and forecasting contact center management solution. It houses numerous additional applications/application areas, such as data mining, historical monitoring (Auditor), wall sign programming, database configuration, and server maintenance. See "Contact Center Management" in this document.

- **Contact Center Management Enterprise Node** (available for Enterprise Edition only) provides multi-telephone system (remote and co-located) enterprise-wide historical reporting and real-time monitoring. It is used if enterprise-wide lists and real-time reporting is required on more than one system. Each additional system requires a Contact Center Network license. See "Contact Center Management Enterprise Node" in this document.
- **ACD Resiliency** (available for Enterprise Edition only) works in conjunction with Contact Center Management, OPS Manager, and the 3300 ICP to provide contact centers with an immediate response to outages and allows IP phones to remain in service in the event their 3300 ICP controller fails. See "Resiliency and ACD Resiliency" in this document.
- **Flexible Reporting** (available for Enterprise Edition only) works in conjunction with Contact Center Management to enable you to design your own report templates. Using the Flexible Reporting Wizard, you can create customized reports with existing statistics (column headings), including only the statistics that are meaningful to your business. You can select like data for two or more device types and combine them in one report. See "Flexible Reporting" in this document.
- **Interactive Contact Center** (Enterprise Edition and Business Edition) integrates with Contact Center Management and Multimedia Contact Center to provide virtual queuing. With Interactive Contact Center, you can readily control agent and queue states on the Contact Center Management real-time monitors. See "Interactive Contact Center" in this document.
- **Interactive Visual Queue** (Enterprise Edition and Business Edition) enables agents to monitor calls within queues and then move calls from busy queues to less active queues. See "Interactive Visual Queue" in this document.
- **Contact Center Soft Phone** (Enterprise Edition and Business Edition) comprises Contact Center PhoneSet Manager and Contact Center Softphone. Both applications enable agents to use their desktop computers as IP-based phones. See "Contact Center Softphone & Contact Center PhoneSet Manager" in this document.
- **Workforce Scheduling** (available for Enterprise Edition only) works with Contact Center Management to provide forecasting and automated agent scheduling based on business rules and required skills. See "Workforce Scheduling" in this document.
- **Schedule Adherence** (module included with Workforce Scheduling, available for Enterprise Edition only) works with Workforce Scheduling to show you what agents are doing in relation to what is scheduled, in order to quickly identify areas of non-adherence. See "Schedule Adherence" in this document.
- **Employee Portal** (module included with Workforce Scheduling, available for Enterprise Edition only) works with Workforce Scheduling to enable employees to make scheduling requests online. Schedulers can then either approve or deny these requests and update schedules accordingly. See "Employee Portal" in this document.
- **Contact Center Screen Pop** (available for Enterprise Edition Advanced Starter Pack or greater and as an add-on to Business Edition) works with IVR Routing with ANI/DNIS and/or Collect Caller Entered Digits options and Contact Center Softphone or Contact Center PhoneSet Manager. Contact Center Screen Pop launches applications or Web pages. In addition, it enables agents to automatically receive caller and account information via pop-ups on their computer monitors every time they receive calls. See "Contact Center Screen Pop" in this document.

- **CTI Developer Toolkit** (Enterprise and Business Edition) is a software development tool that enables in-house developers to automate processes and information sharing, use up-front caller data from third-party IVR applications, build client-side design interfaces, and integrate Customer Relationship Management and Enterprise Resource Planning systems or any OBCD compliant database with Contact Center Management. See "CTI Developer Toolkit" in this document.
- **Multimedia Contact Center** (Enterprise Edition and Business Edition) integrates with Microsoft® Exchange 2003 to provide advanced contact distribution of emails, SMS messages, chats, and faxes to longest idle agents in Microsoft® Outlook®. See "Multimedia Contact Center" in this document.
- **IVR Routing** (Enterprise Edition and Business Edition) is an all-in-one, scalable, integrated voice processing solution that enables users to manage call flows in a drag-and-drop graphic interface, create static and custom recorded announcements to callers in queues, route calls, and report on IVR activity. See "IVR Routing" in this document.
- **Traffic Analysis** (Enterprise Edition and Business Edition) works with Mitel Call Accounting and Contact Center Management to provide reporting on 3300 ICP traffic data streams. See "Traffic Analysis" in this document.

In addition to Contact Center Solutions, Mitel also offers Call Accounting and Mitel Professional Services - Custom Development.

Call Accounting

To optimize your business potential, you need to know if your telecommunications costs are excessive and, if so, why? The Mitel Call Accounting solution answers these questions so you can use your resources more efficiently. Call Accounting enables you to monitor and control telecommunications costs, and gives you a true picture of how much money is being spent and who is spending it. For more information, refer to the *Call Accounting General Information Guide*.

Mitel Professional Services - Custom Development

Mitel Professional Services - Custom Development is a professional service offering that provides customized, cost-effective solutions for VoIP infrastructures and voice-centric business applications.

Contact Center Solutions Applications

Contact Center Management is the core Contact Center Solutions application, which is deployed after configuration of the SX-200, 3300 ICP, 5000, or Axxess telephone systems. The following applications can be purchased to enhance Contact Center functionality:

- Contact Center Management Enterprise Node
- ACD Resiliency
- Flexible Reporting
- Interactive Contact Center

- Interactive Visual Queue
- Contact Center SoftPhone and Contact Center PhoneSet Manager
- Workforce Scheduling
- Schedule Adherence
- Contact Center Screen Pop
- CTI Developer Toolkit
- Multimedia Contact Center
- IVR Routing
- Traffic Analysis
- Mitel Border Gateway Connector

NOTE: The following applications and application areas are not currently supported for use with the 5000 and Axxess telephone systems: IVR Routing, Contact Center Screen Pop, Salesforce.com connector, CRM connector, ACD Resiliency, Contact Center PhoneSet Manager, Contact Center Softphone, Traffic Analysis, OAISYS Tracer call recording connector, CTI Developer Toolkit Server and Client. Support for these applications will be made available in a future release of Contact Center Solutions. For more information regarding the Mitel 5000 and Mitel Axxess telephone systems, refer to the *Mitel Customer Service Manager General Information Guide*.

SIP trunking can be deployed in a Mitel Contact Center and is compatible with all Mitel Contact Center applications.

Figure 1 illustrates the Contact Center Solutions portfolio for Enterprise Edition.

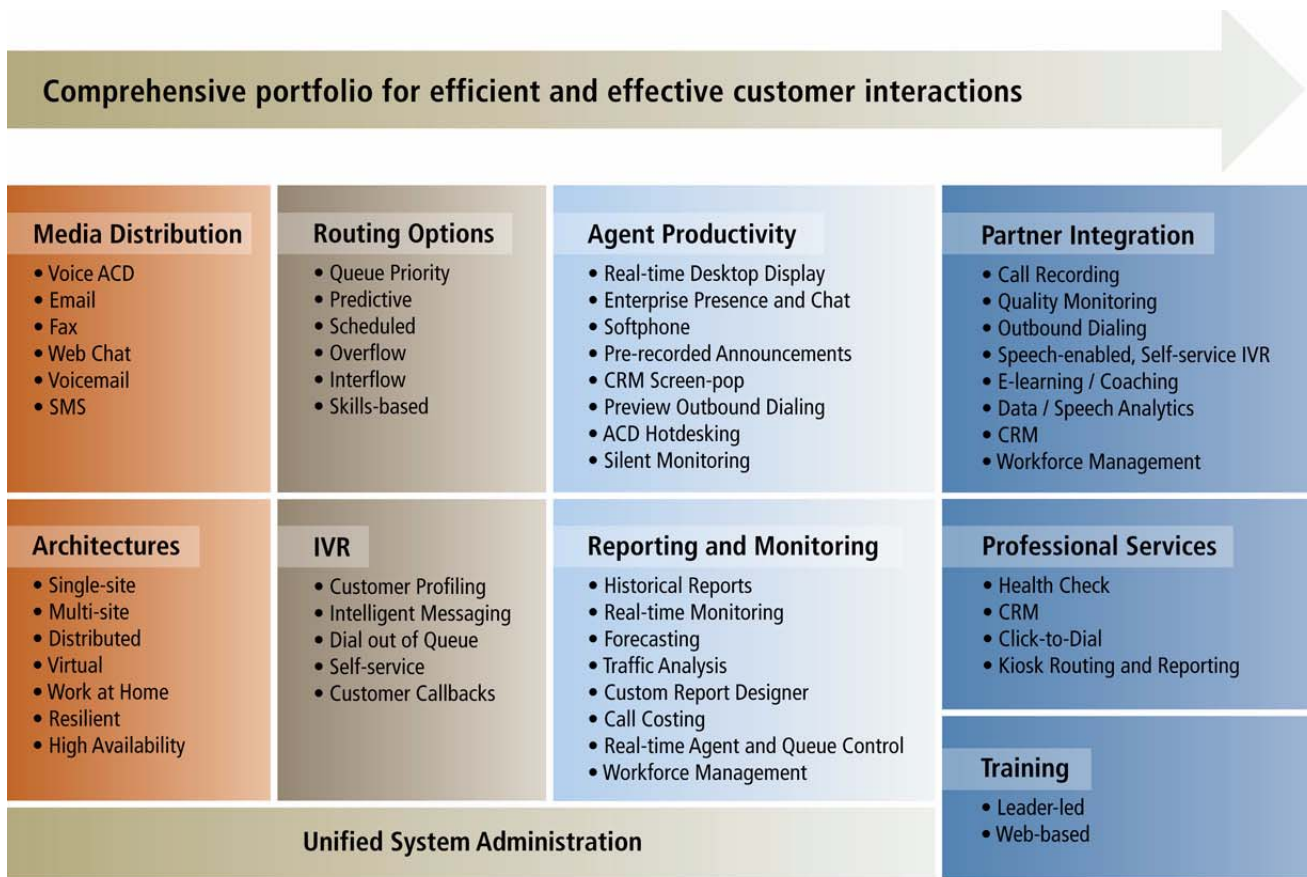


Figure 1 Contact Center Solutions

Configuration

Figure 2 illustrates a typical installation for Contact Center Solutions.

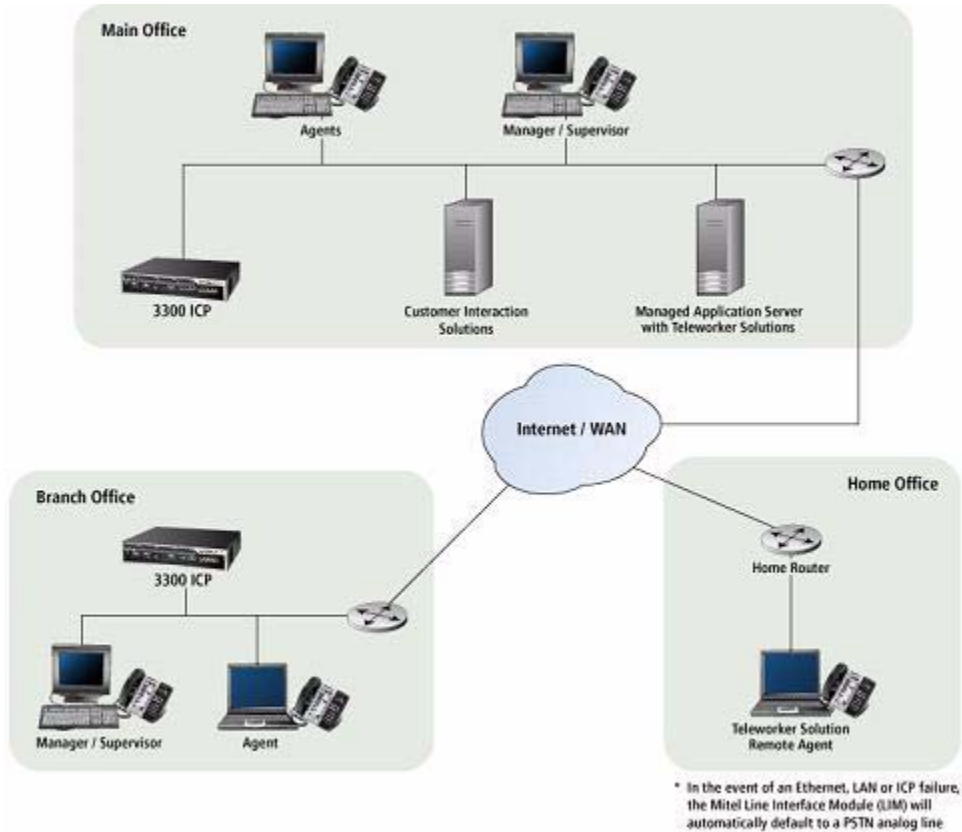


Figure 2 Typical Contact Center Solutions Installation

Contact Center Solutions, IVR Routing, and Call Accounting applications are supported on a variety of virtual and thin-client systems: Citrix, Microsoft Virtual Server, Microsoft Hyper-V, and VMware. For details on thin-client and virtualization support, see the *Contact Center Solutions and Call Accounting System Engineering Guide*.

Supported languages

Applications within the Contact Center Solutions portfolio are translated to the following languages:

- Contact Center Management
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Call Accounting
 - English, Canadian French, Latin American Spanish, Brazilian Portuguese, and Dutch

- IVR Routing
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Interactive Contact Center
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Interactive Visual Queue
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Multimedia Contact Center
 - English and Latin American Spanish
- Contact Center PhoneSet Manager / Contact Center Softphone
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Contact Center Screen Pop
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Workforce Scheduling, Schedule Adherence, and Employee Portal
 - English only
- Traffic Analysis
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese
- Subscriber Services
 - English, Canadian French, Latin American Spanish, Brazilian Portuguese, and Dutch
- Flexible Reporting
 - English, Canadian French, European French, Latin American Spanish, European Spanish, Brazilian Portuguese, Dutch, Italian, German, and Simplified Chinese

North American and LAM Extended Service and Support

Mitel Contact Center Solutions applications include an initial 12-month service and support agreement. When the initial coverage expires, you can purchase renewable extended service and support.

Mitel offers several Contact Center Solutions Extended Service and Support packages for North America and Latin America for the following Contact Center Enterprise Edition and Contact Center Business Edition products:

Contact Center Enterprise Edition

Contact Center Management, Contact Center Management Enterprise Node, ACD Resiliency, Flexible Reporting, Contact Center Screen Pop, CTI Developer Toolkit, Interactive Contact Center, Interactive Visual Queue, Contact Center PhoneSet Manager, Contact Center Softphone, Workforce Scheduling, Schedule Adherence, Multimedia Contact Center, IVR Routing, Traffic Analysis, Call Accounting, and Subscriber Services.

Contact Center Business Edition

Contact Center Management, Contact Center Screen Pop, CTI Developer Toolkit, Contact Center PhoneSet Manager, Contact Center Softphone, IVR Routing, Multimedia Contact Center, Traffic Analysis, Call Accounting, and Subscriber Services.

The following types of coverage are available with Contact Center Solutions:

- Standard
- Premium
- Premium Plus (24/7/365)

Standard

Standard service includes:

- Technical support Monday to Friday from 8 a.m. to 8 p.m. ET
- Emergency after-hours support Monday to Friday from 8 p.m. to 10 p.m. ET
- Software upgrades

Premium

Premium coverage includes:

- Technical support Monday to Friday from 8 a.m. to 8 p.m. ET
- Emergency after-hours support Monday to Friday from 8 p.m. to 10 p.m. ET
- Software upgrades
- Emergency support on weekends and holidays from 8:00 a.m. to 10:00 p.m. ET
- Priority support and escalation

Premium Plus (24/7/365)

Premium Plus (24/7/365) coverage includes:

- Technical support Monday to Friday from 8 a.m. to 8 p.m. ET
- Emergency after-hours support Monday to Friday from 8 p.m. to 10 p.m. ET
- Software upgrades

- Emergency support on weekends and holidays from 8:00 am to 10:00 pm ET
- Priority support and escalation
- Emergency after-hours support 24 hours a day, 7 days a week, 365 days a year

Graduated discount with the purchase of multiple service and support agreements

Mitel offers a discount on the purchase of extended service and support when you purchase two or more years of extended service and support at a time.

“Pay per incident” support

Customers who do not want to purchase extended service and support can purchase “pay per incident” support, which means they pay each time they need technical support. If they need support only once, they only pay once. Pay per incident support does not include software upgrades. If a software upgrade is required to address an issue, the customer will need to purchase extended service and support.

Contact Center Solutions extended service and support re-enlist penalty

Customers who want to purchase service and support, but whose warranty expired more than 90 days ago, will be charged a re-enlist administration fee in addition to the service and support fee. Customers can re-enlist for up to two years from the date their warranty expires. After two years, customers who want service and support must re-purchase the product.

Extended Service and Support - Business to Enterprise upgrade

When companies upgrade from Contact Center Business Edition to Contact Center Enterprise Edition, both the renewal date and the level of the existing Extended Service and Support are transferred to the new Contact Center Enterprise Edition software. For example, if your Contact Center Business Edition with Premium coverage has an expiry date of January 15, 2013, when you upgrade to Contact Center Enterprise Edition, the Contact Center Enterprise Edition Extended Service and Support renewal date remains January 15, 2013 with Premium coverage. You need to purchase Extended Service and Support Premium coverage for any additional software you purchase after the upgrade. All products you purchase have one year of Standard service and support coverage included.

Europe, the Middle East, and Africa Extended Upgrade

The Contact Center Solutions Extended Upgrade package is available for Europe, the Middle East, and Africa.

The Contact Center Solutions applications include an initial 12-month service and support agreement. After this initial coverage expires, customers can purchase renewable, extended upgrade service and support.

Extended Upgrade Package

The Contact Center Solutions Extended Upgrade package includes software upgrades. Customers can purchase this package for Europe, Middle East, and Africa for the following Contact Center Enterprise Edition and Contact Center Business Edition products:

Contact Center Enterprise Edition

Contact Center Management, Contact Center Management Enterprise Node, ACD Resiliency, Flexible Reporting, Contact Center Screen Pop, CTI Developer Toolkit, Interactive Contact Center, Interactive Visual Queue, Contact Center PhoneSet Manager, Contact Center Softphone, Workforce Scheduling, Schedule Adherence, Multimedia Contact Center, IVR Routing, and Traffic Analysis.

Contact Center Business Edition

Contact Center Management, Contact Center Screen Pop, CTI Developer Toolkit, Contact Center PhoneSet Manager, Contact Center Softphone, IVR Routing, and Traffic Analysis.

Graduated discount with the purchase of multiple service and support agreements

Mitel offers a discount on the purchase of extended service and support when you purchase two or more years of extended service and support at a time.

Contact Center Solutions extended service and support re-enlist penalty

Customers who want to purchase service and support, but whose warranty expired more than 90 days ago, will be charged a re-enlist administration fee in addition to the service and support fee. Customers can re-enlist for up to two years from the date their warranty expires. After two years, customers who want service and support must re-purchase the product.

Extended Upgrades - Business to Enterprise upgrade

When companies upgrade from Contact Center Business Edition to Contact Center Enterprise Edition, the renewal date of the existing Extended Upgrade is transferred to the new Contact Center Enterprise Edition software. For example, if your Contact Center Business Edition Extended Upgrade has an expiry date of January 15, 2013, when you upgrade to Contact Center Enterprise Edition, the Contact Center Enterprise Edition Extended Upgrade renewal date remains January 15, 2013. All additional products you purchase have one year Extended Upgrade coverage included.

Chapter 3

Automatic Call Distribution

Introduction

This section provides an overview of Automatic Call Distribution (ACD) and how it works. For more information, refer to the following topics:

- Overview
- How ACD Works: The ACD Routing Engine
- ACD Support
- Features and Benefits

Overview

ACD is used to help businesses optimize their resources. It enables businesses to handle large numbers of incoming customer calls and answer these calls with as few trained agents as possible. An ACD system routes incoming calls to the longest idle agent within a specific group. If no agents are available, calls are queued and forwarded to an agent when one becomes available.

Typically, ACD systems have more incoming calls than there are agents available to answer them. This results in callers having to wait for agents to become available. To prevent waiting callers from hanging up and calling competitors, ACD systems play recorded announcements interspersed with music on hold. Recorded announcements set the expectations of waiting callers and reassure them their calls are important to the business. When an agent becomes available, the first caller in the queue is routed to the agent.

Networked ACD extends ACD functions over multiple telephone systems with a Mitel Switched Digital Network (MSDN). Agent groups on various telephone systems (3300 ICP, SX-200, 5000, Axxess) can answer calls on the network regardless of where the call first entered the network. D-channel signaling is used to queue the calls remotely.

A virtual contact center can evenly distribute calls among agents in a specific agent group, regardless of the agent's geographic proximity to other agents in their group, or the agent controller to which they are registered. See "Virtual Contact Centers" in this document.

ACD Resiliency provides seamless reporting in the event of a network or controller outage. See "Resiliency and ACD Resiliency" in this document.

For more information regarding ACD, see the *Contact Center Solutions Deployment Guide*.

How ACD Works: The ACD Routing Engine

The ACD routing engine (on the 3300 ICP) involves several basic components:

- Incoming lines or trunks that point to an ACD path
- Paths (queues) that point to a group (you can configure one primary answer group and up to three overflow groups)
- Agent groups
- Recorded announcements to greet waiting callers
- Music on hold (to entertain waiting callers between recordings)

Each ACD agent is assigned a unique agent identification (ID) number that is associated with an answering group. The agent ID is similar to a telephone directory number and can be assigned a name in the telephone directory.

Agents can log into any ACD-enabled phone set and receive calls, providing agent mobility.

During the agent login, the set assumes the personal profile of the agent, which includes the assigned name, class of service (CoS), class of restriction (CoR), group memberships, and path memberships.

Central to ACD functionality is the ACD path. A number of possible paths can be defined in the ACD system. The ACD path is a flexible call-routing method that provides the information required for handling incoming calls. Each path has a set of parameters that determine how the system handles queued callers, what system resources to use, when the call is to be answered, and which group will answer the call. Based on customer requirements, each call received is directed to a path. Calls are queued for an agent group based on the path priority and the order of arrival at that path. Each ACD path is assigned a priority number. A call to a path adopts the path's priority, which allows incoming calls to be directed based on their importance and expense.

Calls are routed to the longest idle agent within a group, or optionally, to the longest idle agent with the highest skill level for that group (3300 ICP, SX-200, 5000, Axxess).

ACD Support

Table 1 details ACD support in the SX-200.

Table 1 ACD Support in SX-200

	SX-200
Agent support	Supports up to: <ul style="list-style-type: none"> • 999 agent IDs • 100 agents logged in at one time • 99 paths • one primary agent group per path • three overflow • agent groups per path • 50 agent groups • 100 agent IDs per group
Telephone support	<ul style="list-style-type: none"> • Superset 4015 (by agents only) • Superset 4025

Table 2 details the ACD capacities for using MCD 5.0 across platforms.

Table 2 ACD Dimensions by Platform

	MCD Release 5.0 and Contact Center Release 6.0			
	3300 CX/CXi	MX/MXe	MXe Server	MCD on ISS
Max Agents - Single Node	50	100	200	500
Max Agents - Agents/Queues on separate controllers	50	250	350	800
Total Programmed Agent DNs	2100	2100	2100	2100
Max Programmed Queues (Paths)	999	999	999	999
Max Skill Group	999	999	999	999
Max Skill Levels within a Group	500	500	500	500
Max Agents Programmed per Group	750	750	750	750
Max Skills Active per Group	30	30	30	30

Table 2 ACD Dimensions by Platform

	MCD Release 5.0 and Contact Center Release 6.0			
Max Work Timer Length	4 hours	4 hours	4 hours	4 hours
Max 3 Party Conferences	64	64	64	64
Max Visual Workflow Manager Ports	120 total, 60 per controller	120 total, 60 per controller	120 total, 60 per controller	120 total, 60 per controller

Active agent numbers are baselined on

- 27 ccs (each agent handling roughly 30 cph)
- 2 min handling time
- Each agent in 5 skills
- 1 overflow group
- Full MiTAI monitoring of paths, agents, and IVR ports
- All calls routed through front end IVR

If these attributes change, so to can the supported number of active agents. Please refer to the *Mitel 3300 ICP Engineering Guidelines* and Engineering tool when modeling ACD for specific call center opportunities.

Table 3 details ACD support in the SX-200 ICP.

Table 3 ACD Support in SX-200 ICP

	SX-200 ICP
Agent support	Supports up to: <ul style="list-style-type: none"> • 999 agent IDs • 100 agents logged in at one time • 99 paths • One primary agent group per path • 100 agent IDs per group
Telephone support	<ul style="list-style-type: none"> • 5212 IP Phone • 5224 IP Phone • Superset 4015 • Superset 4025

The following telephone sets support ACD:

- 5340 IP Phone
- 5330 IP Phone
- 5312 IP Phone

- 5324 IP Phone
- 5224 IP Phone
- 5220 IP Phone
- 5220 IP Phone (Dual Mode)
- 5215 IP Phone
- 5215 IP Phone (Dual Mode)
- 5212 IP Phone
- 5207 IP Phone
- 5020 IP Phone
- 5010 IP Phone (**Note:** Silent Monitoring is not supported on this set)
- SUPERSET 4150 telephone
- SUPERSET 4125 telephone
- SUPERSET 4025 telephone
- SUPERSET 4015 telephone (**Note:** Silent Monitoring is not supported on this set)
- SUPERSET 430 telephone
- SUPERSET 420 telephone
- SUPERSET 410 telephone
- Symbol NetVision Phone
- Symbol MiNET Wireless Phone
- SpectraLink NetLink Phones
- Navigator Phone

External hot desk agents may use any phone type when working remotely to receive ACD calls. For full contact center functionality, external hot desk agents should connect to the contact center with Mitel Border Gateway with a phone or USB headset, a computer, a router, and a high-speed Internet connection.



Note: Although they are supported, we do not recommend that you use 5207 IP Phones as ACD sets due to the phone's limited feature set. 5220 IP Phones or higher are recommended.

Features and Benefits

All Mitel telephone sets support the following ACD features (with the exception of the 5010 IP Phone and the SUPERSET 4015 phone, which do not support Silent Monitoring). (See Table 4.)

Table 4 ACD Phone Features and Benefits

Features	Description	Benefit
Logging in and out	With a valid agent ID an agent can log in at any ACD phone.	<ul style="list-style-type: none"> Maximizes space and agent mobility (more than one shift can share the same desk) Can be used as a punch clock to track shifts
Calling an agent	Dial the agent by ID number (when agent ID is the same as the phone number)	Enables mobile agents by calling the agent ID rather than telephone extension
Work timer	A programmable time period after each call that enables an agent to complete required tasks prior to receiving the next ACD call	Allows agents to fine tune their own performance by giving them a set time to complete paperwork and other activities before accepting another call, thus reducing agent frustration
Make Busy with Reason Codes	<ul style="list-style-type: none"> An ACD extension will not receive ACD calls when the agent is unavailable. ACD agents can enter a reason code when phones are put into a Make Busy state. 	<ul style="list-style-type: none"> Allows agents to complete required work before receiving additional calls Accurately tracks all agent non-phone-related activities
Threshold Alerting	Provides audible and/or visual indication to supervisors and agents of the current workload condition of their queues	Allows supervisors and agents to know if they are meeting service level requirements and enables them to make proactive changes to their activities
Displaying Queue Status	ACD-enabled telephones include a queue status key, which is used to view the group name, number of active agents in the group, number of calls waiting in the group queue, and the length of time the longest call has been waiting.	<ul style="list-style-type: none"> Helps agents improve their performance by providing current status information Enables agents to make informed decisions about their time use
Help Key	<ul style="list-style-type: none"> Allows agents to request that a supervisor monitor the call At any time during the silent monitor, the supervisor can conference into the monitored conversation and take over the call or assist the agent if necessary. 	<ul style="list-style-type: none"> Allows agents to request help without disrupting a call Allows the supervision of calls to gain an unbiased opinion of problems
Note: You cannot view group names on the Superset 4015 phone.		

Table 5 describes core ACD features for the SX-200/SX-200 ICP, SX-2000, and 3300 ICP.

Table 5 Core ACD Features and Benefits

Feature	Description	Benefit	SX-200/ SX-200 ICP	3300 ICP
ACD Positions	Structures the handling of ACD calls into a hierarchy of ACD positions. The ACD supports three types of positions: <ul style="list-style-type: none"> Agents, who handle ACD calls Supervisors, who monitor agents Senior supervisors, who monitor supervisors 	<ul style="list-style-type: none"> Shortens the training time and creates career path opportunities 	Yes	No
ACD Path (Queue)	<ul style="list-style-type: none"> Guides a wide variety of incoming calls through the system according to customized routes Defines all information required for each type of call, including how the system will handle queued callers and which grouping of agents will be allocated the calls 	<ul style="list-style-type: none"> Optimizes pooled resources to achieve a more cost-effective work flow Delivers consistent processes and services 	Yes <ul style="list-style-type: none"> Supports up to 99 ACD queues, including one Primary Agent group and three Overflow Agent groups per queue 	Yes <ul style="list-style-type: none"> Supports up to 999 ACD queues (3300), including one Primary Agent group and three Overflow Agent groups per queue
Path (Queue) Priority	Each queue is assigned a priority level with level one being the highest	<ul style="list-style-type: none"> Reduces communication costs and improves customer service with reduced call queue times For example, a queue receiving expensive incoming calls, such as collect long distance calls, can be assigned as a high-priority queue so those callers may be answered first 	Yes <ul style="list-style-type: none"> Assigns priority levels from 1 - 99 Calls arriving on high-priority paths may move directly to the front of the call queues. 	Yes <ul style="list-style-type: none"> Assigns priority levels from 1 - 64
				Page 1 of 4

Table 5 Core ACD Features and Benefits (continued)

Feature	Description	Benefit	SX-200/ SX-200 ICP	3300 ICP
Agent Group	Supports a number of different agent groups, to handle incoming ACD traffic. An Agent Group consists of a logical grouping of agents trained to support a particular line of business.	<ul style="list-style-type: none"> Ensures each call gets to the best available resource to meet the caller's needs Shortens training time and creates career path opportunities 	Yes <ul style="list-style-type: none"> Supports up to 50 agent groups 	Yes <ul style="list-style-type: none"> Supports up to 64 agent groups
Agent Group Presence	Permits an agent to join or leave an agent group instantly without logging in or out.	<ul style="list-style-type: none"> Enables agents and supervisors to quickly change the mix of groups the agents are present/absent in 	No	Yes
Call Flow	If multiple agents are free when an ACD call is presented to a group, the system sends the call to the longest idle agent.	<ul style="list-style-type: none"> Spreads the workload evenly among agents 	Yes	Yes
Service Level	<ul style="list-style-type: none"> Defines a standard time to answer calls, which becomes the criteria for measuring queue performance The service level is programmable with the range of 0 seconds to 54 minutes. 	<ul style="list-style-type: none"> Defines service levels (e.g., percentage of calls answered within a certain time period) Tracks service offered against service levels 	Yes	No
Overflow	<ul style="list-style-type: none"> Supports up to three overflow groups per queue to provide backup resources to the primary answer group Calls that overflow maintain their position in queue at the prime agent group and all overflow groups. Agent group overflow timers determine how long a call waits before overflowing. 	<ul style="list-style-type: none"> Minimizes call queuing time by defining backup resources for the primary agent groups This ensures that the call is answered as quickly as possible, reducing network costs and caller frustration. 	Yes	Yes

Table 5 Core ACD Features and Benefits (continued)

Feature	Description	Benefit	SX-200/ SX-200 ICP	3300 ICP
Predictive Overflow	<ul style="list-style-type: none"> Determines whether a newly queued call should be immediately overflowed to the next agent group If the system predicts that a call will not be answered before the overflow timer expires, the call is placed in overflow before the time expires. 	<ul style="list-style-type: none"> Minimizes call queuing time by defining backup resources for the primary agent groups This ensures that the call is answered as quickly as possible, reducing network costs and caller frustration. 	Yes	Yes
Interflow	<ul style="list-style-type: none"> A time-based or load-based feature that takes an ACD call out of the queue and routes it to an alternate answer point, such as a higher priority queue, voice mail, attendant or extension A call that interflows to another queue adopts the priority of the new queue. 	<ul style="list-style-type: none"> Reduces caller frustration and abandoned calls 	Yes	Yes
Dial out of Path (Queue)	If a caller chooses not to continue holding, dial out of queue allows the caller to be rerouted to an alternate answer point that is programmed on the telephone system.	<ul style="list-style-type: none"> Rather than losing business, this feature provides options when a caller does not have time to wait for an answer. 	Yes	Yes
Path (Queue) Unavailable	When a queue is unavailable, calls can be routed to an alternate answer point, such as an attendant, valid extension, voice mail, recorded announcement device, an ACD queue, or a system speed call number.	<ul style="list-style-type: none"> Gives supervisors a choice in how to handle after-hours calls or calls during vacation days 	Yes	Yes

Table 5 Core ACD Features and Benefits (continued)

Feature	Description	Benefit	SX-200/ SX-200 ICP	3300 ICP
Unavailable Agent Group	A call directed to an unavailable agent group is not queued and is immediately overflowed or interflowed.	<ul style="list-style-type: none"> Reduces caller wait time, frustration, and abandoned calls 	Yes	Yes
Agent No Answer Handling	An agent who fails to answer a call within a programmed amount of time is automatically logged out of ACD. The call is then re-queued at a higher priority.	<ul style="list-style-type: none"> Reduces caller wait time, frustration, and abandoned calls 	Yes	Yes
Recorded Announcements	Up to four recorded messages and their relative start times can be defined per queue. The queue also specifies whether the last programmed recording is repeated and at what interval it is repeated.	<ul style="list-style-type: none"> Increases caller tolerance to wait times Provides general information at low cost Creates an abandoned call, where the caller may hang up without the need to speak to an agent 	Yes	Yes
Music Between Recordings	Between each recording on an ACD path, the incoming caller by default listens to the system music source. An alternate source may also be used.	<ul style="list-style-type: none"> Increases caller tolerance to wait times Lets callers know the line is still active 	Yes	Yes
Silent Monitoring	Allows a supervisor to listen to calls answered by an ACD agent or agent group. The agent and caller do not hear the supervisor. However, the agent's telephone display may indicate that a call is being monitored. At any time during the silent monitor, the supervisor can conference into the monitored conversation and take over the call or assist the agent if required.	<ul style="list-style-type: none"> Allows supervisors to assess agent performance and provide real-time coaching or training 	Yes	Yes

Table 6 describes optional ACD telephone features for the SX-200 and 3300 ICP.

Table 6 Optional ACD Features and Benefits

Feature	Description	Benefit	SX-200	3300 ICP
Skills Based Routing	Agents are programmed in agent groups/skill groups, which enables the system to route calls to the next available, highest-skilled agent within a skill group.	<ul style="list-style-type: none"> Ensures that each call is routed to the best available resource to meet the customer's needs Shortens training time and creates career path opportunities 	No	Standard
Skill Level Routing	Skill level routing enables the system to route calls to the next available, highest-skilled agent within a skill group, but gives priority to agents who have higher skill level assignments in any given group. Each agent in a group is assigned a skill level from 1 - 500. Agents appearing in more than one group may be assigned a different skill level for each group. Calls to a group are routed to the most skilled available agent. If agents of equal skill are available, the call is routed to the longest idle agent.	<ul style="list-style-type: none"> Ensures that each call is routed to the best available resource to meet the customer's needs Shortens training time and creates career path opportunities 	No	Standard
Agent Skills Group	Supports a number of different agent groups (A logical grouping of agents trained to support a particular line of business)	<ul style="list-style-type: none"> Ensures each call is routed to the best available resource to meet the customer's needs Shortens training time and creates career path opportunities 	No	Standard

Page 1 of 2

Table 6 Optional ACD Features and Benefits (continued)

Feature	Description	Benefit	SX-200	3300 ICP
Networked ACD	<ul style="list-style-type: none"> Enables incoming calls to be simultaneously queued against local and/or remote agent groups within a queue This allows multi-site customers to design call-routing schemes that can optimize all their call-handling resources and locations. 	<ul style="list-style-type: none"> Optimizes call flow between sites to minimize bandwidth and telecom costs Lowers operating costs by allowing access to agents at multiple sites Maintains or improves customer service by extending hours of operation, increasing market coverage without adding staff and providing peak traffic or emergency support with existing resources Allows the use of a single point of command and control for routing across sites 	No	Standard
ACD Management System	Mitel Contact Center Solutions is a suite of applications that enhances ACD functionality. Contact Center Solutions is purely browser-based so customers can manage their contact centers from anywhere over the Internet.	<ul style="list-style-type: none"> Effectively measures and manages resources, which leads to more cost-effective operations and better performance 	Optional	Optional
Agent hot desking	Agents configured as hot desk agents can log into any ACD-enabled device and receive calls. During the agent login, the set assumes the personal profile of the agent.	<ul style="list-style-type: none"> Enables agents to freely move around an organization and log in at any phone or headset Removes the need for dedicated headset 	No	Standard

Chapter 4
Contact Center Management

Introduction

This section provides an overview of the Mitel Contact Center Management solution and how it works. For more information, refer to the following topics.

- Overview
- Applications

Overview

Contact Center Management is Mitel's core reporting, real-time, and forecasting contact center management solution. Contact Center Management houses numerous additional applications and application areas, such as data mining, historical monitoring (Auditor), wall sign programming, database configuration, and server maintenance.

The Contact Center Management solution enables you to work with Contact Center information from the

- Past
 - Automatic report generation on all contact center elements and contact types over any date and time horizon
 - Scheduled reports
 - Historical events viewed in simulated real time
 - Data mining
- Present
 - Real-time monitoring of contact center activities including queue and agent states, average wait times, and real-time queue statistics
 - Real-time agent and supervisor online chat
 - Reader Board messaging
- Future
 - Agent forecasting based on historical information, average talk times, wrap-up times, and service level objectives
 - "What-if" scenarios

Browser-based solution

Contact Center Solutions is a browser-based solution:

- You can log on to the Contact Center Management Enterprise Server from anywhere on the Internet and use the Contact Center Solutions applications as if you are on site.
- The Enterprise Server automatically deploys all files and updates to all client PCs.
- Only Microsoft® Internet Explorer (IE) 6.0+ and Microsoft® Excel® are required on client PCs.

- You can log on to any PC with your user name and password and generate and view reports. Contact Center Management security authenticates user access to all of the Contact Center Solutions applications.
- Connecting to Contact Center Management is like browsing to any other website.
- There is no setup application to run on the desktop. You can download the setup from the website with an Internet browser.
- There are unlimited supervisor clients with Contact Center Management.

Data collection at local sites

Install Contact Center Management software on the local server where data collection occurs.

3300 ICP and SX-200 ICP

For the 3300 ICP and SX-200 ICP, data is collected via two network cards: a dedicated NIC (Network Interface Card) for ACD/SMDR connectivity and a dedicated NIC for network data transmission. MiTAI™, SMDR, and ACD data collection are provided using a network connection. It is recommended to use the NIC interface between the 3300 ICP or SX-200 ICP and Contact Center Management over a TCP/IP connection. This guarantees network delivery of SMDR, ACD real-time, and MiTAI data without having to traverse the customer corporate network. (See Figure 3.)

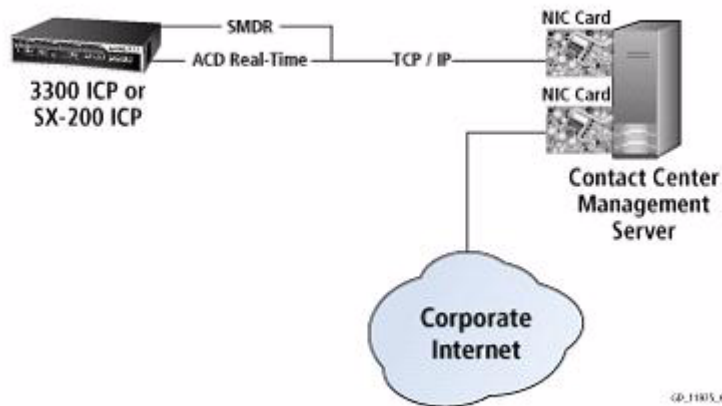


Figure 3 3300 ICP/SX-200 Connectivity to Contact Center Management

SX-200

The SX-200 telephone system is co-located with the Enterprise Server. Data is collected using datasets. By default, Contact Center Management configures Com port 2 to accept the ACD data stream and Com port 1 to accept the SMDR data stream. All components are connected over RS-232 serial cable. (See Figure 4.)

Contact centers with only one 1103 dataset and one DNIC port on the SX-200 system have a single VT100 terminal session available on the CyberTerminal Server for viewing real-time System Activity, Path Summary, Agent Group Summary, and Agent Information ACD Monitor sessions. In order to view more than one session simultaneously, additional 1103 datasets and DNIC ports are required.

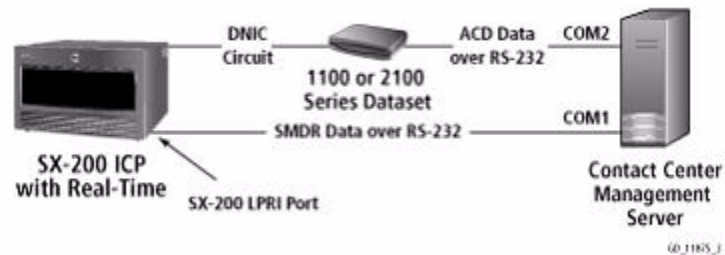


Figure 4 SX-200 ICP Connectivity

Applications

The Contact Center Management applications provide:

- Historical data management
- Reporting
- Report distribution
- Real-time monitoring
- Forecasting
- Data-collection monitoring
- Database programming
- Services and database administration

Historical data management

Historical data management enables you to analyze when and why past service problems occurred so that you will know how to react in similar future situations. Historical data management allows you to measure and demonstrate contact center performance against service level objectives, and optimize contact center operations.

Reporting

The Reporter and Scheduled Reports applications provide detailed performance statistics. Reporter is used to produce run-on-demand reports, and Scheduled Reports is used to set up timetables for generating reports. You can run reports for 15-, 30-, or 60-minute intervals across any series of days specified, and for over-midnight shifts. These reports are provided in presentation-quality tables and graphs in a Microsoft Excel spreadsheet.

Generating Lifecycle reports

Lifecycle reports provide detailed information on all events related to the life of a specific call, from the moment a call enters the telephone system to call termination. Lifecycle reports can be generated on the following devices: agent, agent group, queue, queue group, DNIS, DNIS group, extension, extension group, trunk, trunk group, enterprise, media server, and site. Lifecycle reports can be filtered by call direction, DNIS, trunk, queue, duration in queue, agent, account code, hold duration, call duration, phone number, and extension. Lifecycle reports also detail call notes and include a link to call-specific call recordings. See "Virtual queue groups" in this document.

Report distribution

Reporting Service is a server-side service that replaces Report Distributor. There is no longer a need to install and configure Report Distributor on client computers. Reporting Service uses the SMTP mail server to email reports. You can edit the SMTP mail server settings at any time (YourSite=>Enterprise, local site).The Reporting Service prints and emails the reports.

Figure 5 illustrates the reporting capability of Contact Center Management, providing performance statistics for agents during a specific period.

Report: <i>Agent Group Performance by Agent</i>											
Site: Prairiefyre Software Inc. 101+ agents											
Device: [3300] 101 - Voice											
Agent ID	Agent name	ACD calls handled	Non ACD calls handled	Calls external outbound	Calls requested	Account codes	Total shift time (hh:mm:ss)	ACD handling time (hh:mm:ss)	Average ACD handling time (hh:mm:ss)	Percent of shift	Non ACD handling time (hh:mm:ss)
2007	Michael Burnett	21	20	26	2	0	18:58:37	3:26:52	0:09:51	18.2	2:00:11
2004	Andie Bourque	20	22	16	1	0	18:19:34	3:59:04	0:11:57	21.7	2:42:13
2005	Josh Bradley	18	12	11	1	0	17:05:46	3:06:39	0:10:22	18.2	2:29:03
2003	Ahmed Gebara	0	17	4	0	0	15:59:37	0:00:00	0:00:00	0.0	1:43:36
2009	Habib Mankal	0	0	0	0	0	0:00:00	0:00:00	0:00:00	0.0	0:00:00
Total		59	71	57	4	0	70:23:34	10:32:35	0:10:43	15.0	8:55:03

Figure 5 Agent Group Report by Agent

Data mining

The ACD Inspector and SMDR Inspector data mining tools are loaded with filter and search parameters that can find virtually any contact center event. For example, you can find the exact time an agent logs off at lunch, the duration agents spend in the Do Not Disturb state from 1:00 p.m. to 2:00 p.m. on Monday, or the maximum number of callers who waited in queue on a specific day.

The data mining tools search through all of the enterprise call records generated by the telephone system. You can readily identify the series of agent and queue events that led to a

breakdown in customer service, and search non-ACD extensions to review call activities. The search results are displayed in easy-to-interpret tables that can be printed or saved to file.

Viewing historical events in simulated real-time

The Auditor application is used to view historical data in simulated real time over any date and time horizon. You can readily analyze when and why past service problems occurred. As you are viewing events, you can move forward and backward through the events of the day.

Real-time monitoring

The Contact Center Client application provides agents and supervisors with dynamic, real-time displays of agent and queue activity, customizable display profiles, and alarm thresholds. Contact Center Client enables agents and supervisors to respond immediately to changing call volumes and queue conditions. For example, supervisors can reassign inactive agents to busier queues to ensure that service levels are being met.

Contact Center Client provides instant messaging capabilities. Agents can view the phone availability and online presence of other contact center employees before they transfer calls or send online chat messages.

With Contact Center Client, you can

- Display monitors on overlapping tabbed panels to maximize real estate and readily navigate between monitors
- View real-time caller information on agent, employee, and extension by position, and by time monitors
- Expand the Queue Now monitor and view statistics on the agent groups associated with a queue, and performance statistics on the agents in a particular agent group
- Build marquee monitors to broadcast real-time performance statistics and messages
- Specify which users can manage personal and/or global profiles
- Include multiple users in one online chat session
- Set alarms so there is notification of changes in contact center performance by visual, auditory, and email notification
- Set one or more alarm thresholds for each performance variable
- Customize charts to display performance statistics of the manager's choosing
- Filter device variables and display a subset of data on a monitor
- Freeze and unfreeze columns of statistics so pertinent information is always in view (for example, the media server, queue number, and queue name) when scrolling across a monitor
- Specify monitor styles or apply a skin (set of predefined styles) to a monitor
- Enable grouping and specify the order in which rows of data appear. For example, group the data by the ACD count statistic and readily see which agents handled the most and least calls

- Dock Contact Center Client at the top, bottom, left, or right of your desktop
- Customize how content in real-time monitors is displayed

Real-time monitoring for supervisors

Contact Center Client provides real-time and cumulative agent statistics and real-time (by 15-minute intervals) and over-the-business-day queue statistics. With Contact Center Client, supervisors can view real-time statistics across multiple queues or agents.

Contact Center Client provides 12 real-time monitors. Figure 6 displays the Agent State by Position monitor, the Marquee monitor, and the Queue Now monitor. These monitors provide agents and supervisors with essential statistics.

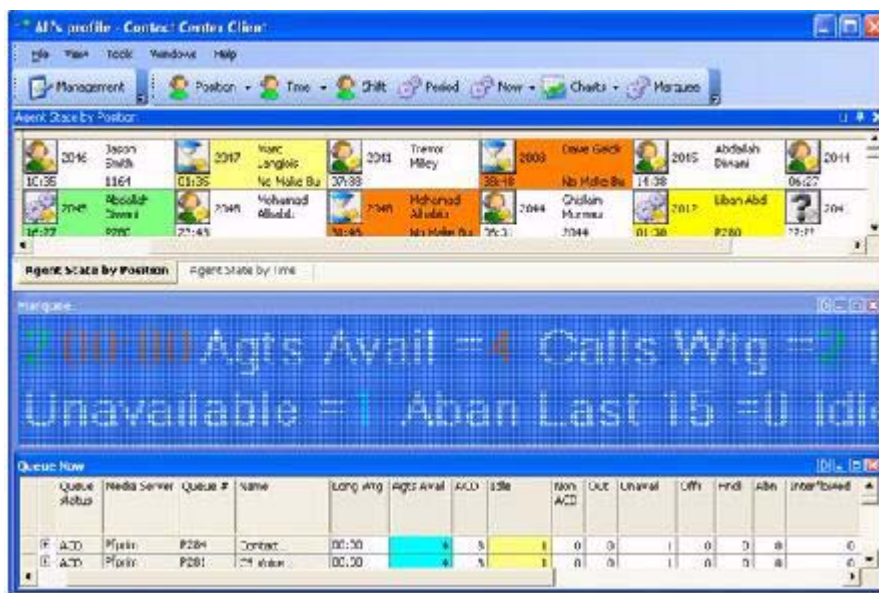


Figure 6 Contact Center Real-time Monitors

Real-time monitoring for agents

The Contact Center Client agent monitors provide real-time agent statistics, cumulative agent and employee statistics for the shift and real-time, and over-the-business-day queue statistics. These displays change color when predefined performance thresholds are exceeded to keep agents informed of significant changes in the service provided to callers. Contact Center Client empowers agents with information they require to meet personal and center-wide service level objectives.

The agent, employee, and extension by position and by time monitors can display real-time caller information: the caller name and number (ANI), and the number the caller/employee dials for incoming/outgoing calls.

The agent, employee, and extension state by position monitors provide real-time information in cells that you can arrange to mirror your floor plan. You can view agents, employees, or

phone extensions by their physical position in your contact center. In addition, these monitors enable you to view the current status of general business extensions.

Communicating in real time

Using Contact Center Client, agents can view the phone availability and online presence of other contact center employees before they transfer calls or send online chat messages. If an agent views an employee on a real-time monitor and notes the employee is online, the agent can right-click the employee and send an instant message.

Using the Contact Center Client online chat feature, agents can request help while on calls and supervisors can provide timely feedback. Supervisors can communicate important instructions to all agents simultaneously so they can respond to changing call and queue conditions.

The WallBoarder application displays text messages and contact center statistics on one or more Spectrum Light Emitting Diode (LED) wall signs. The wall signs provide real-time ACD statistics to agents and supervisors (for example, the number of calls in queue, the wait time of the longest-waiting caller, and the number of available agents). You can customize the color of the displayed statistics and the way they move across the wall sign. WallBoarder empowers contact center employees with information they require to meet personal and center-wide service level objectives.



Note: Mitel supports both traditional Com port-based reader boards and IP-based reader boards from SPECTRUM Corporation.

Viewing extensions

Contact Center Solutions supports agent hot desking. In your business, you can monitor

- Traditional or hot desking ACD agents who sit at different desks each day and who log on using their agent ID
- General business, traditional extensions (non-contact center employees) who sit at the same desks each day, are assigned their own desk phone extensions, and do not log on to their phones (their phones are programmed with their personal settings and are always active)
- General business, hot desking extensions (non-contact center employees) who log on to any phone in the enterprise with a virtual extension configured with their personal settings. When the employee logs on to the extension it becomes active. When the employee logs off of the extension it goes out of service.

You can set up your real-time monitor profile to include two or more Extension by Position monitors, one with cells that are arranged to show the whereabouts of agents in your contact center, and another that shows the status of general business extensions (active/inactive, inbound/outbound).

Hot desking

When an agent is configured as a Mitel hot desking agent, the agent can sit at any extension on the network and log on to the extension. After the agent is logged on, the agent takes control of the extension. The agent's Contact Center Client and soft phone real-time profile settings are available. Any previous associations with the extension are taken out of service. When an agent logs off, the agent disconnects from the extension and the default settings for the extension are restored automatically.

ACD hot desking agents are not restricted to phones that are specifically programmed as ACD. General and ACD hot desk agents can log in to any hot desk enabled phone.

Hot desking agents can toggle in and out of up to 30 agent skill groups. Hot desking agents can move between agent skill groups by using feature access keys on their phone (if Class of Service is enabled), or via supervisor intervention with Interactive Contact Center. The agent's hot desk primary line remains in service while they are logged in, even if they are not present in any of their ACD skill groups and, therefore, not receiving ACD calls.

External hot desking

External hot desking associates a hot desking agent with any external dialable number, enabling the system to ring an agent working remotely using any phone type, such as a standard PSTN phone at home, a third-party PBX endpoint, or a cellular phone. External hot desking agents are recognized by the system as standard hot desking agents when they log in internally (locally) and as external hot desk agents when they log in externally. When used with Mitel Border Gateway Connector, external hot desking agents can function with the full suite of Contact Center applications. In order to be fully integrated remotely into the contact center, an external hot desking agent requires a phone or USB headset (for soft phone), a computer, a router, and a high-speed Internet connection.

Enabling home-based and remote employees to use Contact Center Client

Using Mitel Border Gateway Connector and Contact Center Client, home-based and remote agents and supervisors can perform telephony functions without the use of a Virtual Private Network (VPN). This may also be achieved using a standard VPN.

Home-based and remote agents can

- Use IP desk phones
- Automate desk phones using Contact Center PhoneSet Manager
- Use Contact Center Softphone, which provides complete desk phone functionality

In addition, using Contact Center Client, home-based and remote employees can view real-time monitors, enable real-time alarming, and perform many Contact Center Solutions management functions.

Forecasting

The Forecasting tool takes historical telephone system data and predicts future traffic volumes and patterns and agent requirements. It uses default service level percent (80%), service level time (20 second), and wrap-up time (15 second) values in calculating the agents required. These values can be changed in the resultant spreadsheet and the number of agents required can be recalculated.

Forecast reports are configurable based on parameters on the Reporter Filter tab. These parameters include Service Level %, Service Level Time, Wrap Up Time, Agent Efficiency, Average Talk Time, Calls Offered, and time format. Supervisors can generate, print, email, and schedule Forecast reports in Contact Center Management.

Data collection monitoring

The Network Monitor application provides information on the status of media server real-time data collection.

Network Monitor

Alarms can be configured for notification if the prairieFyre.Net Collector is not receiving data or if the server disk space is low. In Network Monitor, you can verify if the alarms are enabled for your media servers, and if the media servers are reporting any alarms.

Network Monitor displays critical and warning alarms. Critical alarms are activated when Collector Service is not receiving data, the Enterprise Server disk space is low, and whenever the Enterprise Server is prevented from functioning optimally. Warning alarms are activated when license violations occur, when duplicate records are created, and for other non-critical issues. You can configure pop-ups, audio alerts, and emails to notify you of critical alarms.

Network Monitor provides information on the status of media server real-time data collection. You can verify if alarms are enabled for your media servers and if the media servers are reporting any alarms.

Database programming

Information in the YourSite database can be configured for the following application areas:

- **Enterprise**—set up the site structure
- **Configuration**—set up the YourSite database to mirror the resources, trunks, routing and timing options, and agent positions in use on the telephone system so that reports can be generated
- **Network Monitor**—specify the days and times during which data alarms are activated
- **Schedules**—create schedules that accurately reflect the business hours of the operation
- **Security**—restrict user access to specific devices and Contact Center Management website application areas

Configuring the YourSite database

You can configure the YourSite database in the following ways:

- **Quick Configuration Wizard**—configures Contact Center Management quickly for contact centers. You start Management Console in Contact Center Client.
- **Quick Setup**—adds a range of devices (employee, employee group, agent login, agent group, queue, queue group, extension, extension group, trunk, trunk group, DNIS, DNIS group, Account Code, Make Busy Reason Codes, and Team).
- **Synchronization**—configure and write 3300 ICP and 5000/Axxess queues, agents (including skill level), agent groups, trunks, and extensions and validate/edit contact center related Class of Service, Class of Restriction, System Options, and SMDR Options settings using synchronization. During synchronization, the queues, agents (including skill level), agent groups, trunks, and extensions configured in YourSite Explorer are written to the telephone system. Validation of device and assignment form settings ensures quality data collection and accurate reporting. After running synchronization, Class of Service and Class of Restriction settings programmed in the telephone system can be edited in YourSite Explorer. In Mitel 3300 release MCD 4.0 SP2, configuring your network using SDS Directory synchronization mode is optional. Customers can continue to operate in the Classic mode, with OPS Manager if operating in a clustered environment. In Mitel 3300 release MCD 4.1, configuring your network using SDS Directory synchronization mode is mandatory for all sites operating with 20 nodes or less.

Using YourSite Explorer and the 3300 ICP in Classic mode, you can add, edit, and delete standard agents, agent groups, and queues, as well as ACD related Class of Service (COS), Class of Restriction (COR), SMDR Options, and System Options. When not in a clustered environment, you can also continue to add hot desk agents and all synchronization device names. Adding hot desk agents in a clustered environment requires the use of Mitel OPS Manager.

Using YourSite Explorer and the 3300 ICP in SDS Directory synchronization mode, you can now add, edit and delete standard and hot desk agents, agent groups, queues, trunks, trunk groups, and extensions, synchronize device names, as well as ACD related Class of Service (COS), Class of Restriction (COR) SMDR options and System Options in both a single site and in a clustered environment. When operating in SDS Directory synchronization mode, you can configure Network ACD queue set up on the 3300 ICP without any manual configuration previously required using Mitel OPS Manager.

Configuring devices using YourSite Explorer

YourSite Explorer simplifies data management by enabling you to configure and administer devices for Contact Center Solutions and Call Accounting in one application. When device associations to device groups are updated in YourSite Explorer (whether the device is renamed, added, or removed), users have their Contact Center Client real-time monitors automatically updated to reflect the edit in real time, without having to close and re-open the applications, delete devices from a list, or reselect devices or device group filters.

Virtual queue groups

Virtual queue groups are comprised of one or more queues across one or more telephone switches that all send ACD calls to the same pool of agent groups. Virtual queue group functionality has been designed to help supervisors monitor groups of agents to ensure service levels and other productivity measurements are being met and to balance call loads across telephone switches.

Once programmed, virtual queue groups display in the Interactive Visual Queue, Visual Queue – Queue Now and Queue Group Now, and Agent State by Time for Queue monitors in Contact Center Client. For more information see “Adding queue groups” in the Contact Center Solutions User Guide.

Recording calls

Contact Center Management integrates with OAISYS Tracer call recording software to enable 24/7 call recording. Using OAISYS Tracer, Call Accounting can optionally record calls based on predefined schedules.

For enhanced call security, Call Accounting also integrates with the Mitel Secure Recording Connector software to encrypt Voice over IP calls. OAISYS Tracer can optionally be used in conjunction with the Mitel Secure Recording Connector. See “Secure Recording Connector” on page 185.

When a call recording is complete, a hyperlink to the recording is appended to call-specific Lifecycle reports. See “Generating Lifecycle reports” on page 40 in this document.

Services and database administration

Database administration consists of stopping and starting Contact Center Management services and mandatory system services, administering the database, and performing maintenance functions.

Management Console

Using the Management Console application, you can

- Run the maintenance routine immediately
- Back up and restore the YourSite database
- Summarize data (in order to produce a report)
- Configure the YourSite database
- Change the IP address universally
- Package files to send to prairieFyre to resolve problems
- Restart services
- Manage licensing for Contact Center Management and Workforce Scheduling

Chapter 5
Contact Center Management
Enterprise Node

Introduction

This section provides an overview of Mitel Contact Center Management Enterprise Node and how it works. For more information, refer to the following topics:

- Overview
- Features
- Configuration

Overview

Contact Center Management Enterprise Node is an add-on product to Contact Center Management, enabled with the Contact Center Network License, that provides multi-site contact center capabilities using a single-server configuration. You will require Contact Center Management Enterprise Node if your business has more than one telephone system that collects ACD data and you want to view real-time data and run reports on data generated from those additional telephone systems.

Contact Center Management Enterprise Node enables you to collect data from co-located or geographically dispersed telephone systems. Contact Center Management Enterprise Node files data from the remote media server to the local hard drive of the Contact Center Management Enterprise Server. Data streams to the Enterprise Server over TCP/IP. Redundant data collection provides added security in the case of network outages.

The Enterprise Server installed at the local site supports all local and remote agents throughout the enterprise. Implementing Contact Center Management Enterprise Node at remote sites eliminates the need for SQL, IIS, or other server support applications, and there are no configuration requirements. Supervisors can manage operations over the Internet from any location on the company's LAN/WAN and intranet via TCP/IP, and can view up-to-the-minute reports and real-time agent and queue displays on an enterprise-wide basis.

Data collection at remote sites

SX-200 (pre 17)

For the SX-200 (pre 17 Release 4.0), data is delivered over a single data connection using RS-232. A separate dataset provides real-time data using the VT-100 connection to the SX-200 telephone system. (See Figure 7.)

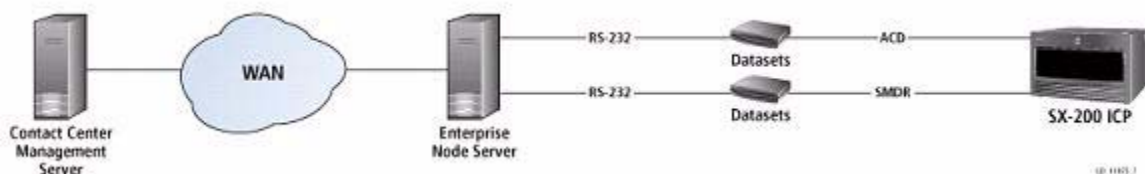


Figure 7 Data Collection at Remote Sites on the SX-200 Pre 17

SX-200 (post 17)

For the SX-200 (post 17 Release 4.0), the SMDR and ACD real-time data streams are delivered over RS-232 using datasets. To collect data from a remote SX-200, Contact Center Management Enterprise Node software must be installed on the remote server.

3300 ICP and SX-200 ICP

In a co-located environment where an ICP and main Contact Center Management server are at the same site

- The 3300 ICP streams SMDR data over TCP/IP to the main Contact Center Management server.
- The SX-200 ICP streams SMDR data over TCP/IP to the main Contact Center Management server.

3300 ICP

In a distributed environment where the main Contact Center Management server is co-located with one 3300 ICP and remote to a second 3300 ICP (See Figure 8.)

- The local 3300 ICP streams SMDR data over TCP/IP to the main Contact Center Management server.
- The remote 3300 ICP streams SMDR data over TCP/IP (WAN) to the main Contact Center Management server. A Contact Center Management Enterprise Node license is required for data collection from the remote 3300 ICP.

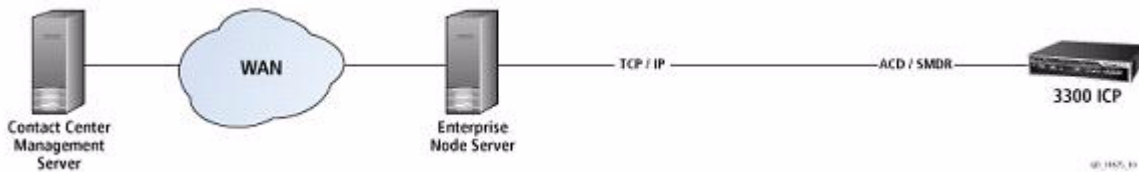


Figure 8 Data Collection at Remote Sites on the 3300-ICP

Features

Contact Center Management Enterprise Node has the following features:

- Multi-site contact center capability
- ACD and SMDR data collection
- Statistic synchronization and storage
- Telephone system-neutral data collection

ACD and SMDR data collection

In multi-site enterprises, ACD and SMDR data is stored on the Enterprise Server.

When the Enterprise Server is a 3300 ICP or SX-200 ICP, it is recommended that you install a server at the remote site to ensure data integrity. If there is no server at the remote site and the WAN goes down, data is lost because of limited telephone system buffering. Data cannot be sent to the Enterprise Server for storage. If the WAN goes down when there is a server at the remote site, no data is lost. The remote server will buffer data until the WAN is restored and then send the data to the Enterprise Server.

When the Enterprise Server is an SX-200, it requires a server at the remote site.

If the WAN goes down, no data is lost. Redundant data collection provides increased reliability.

Data synchronization and storage

All contact center statistics are automatically synchronized and stored on the Enterprise Server. This ensures accurate, multi-site historical reporting.

Telephone system-neutral data collection process

The data collection process is compatible with Mitel's SX-200, 3300 ICP, and SX-200 ICP platforms. This compatibility enables the manager to collect data and run reports on contact centers with different Mitel telephone systems.

Requirements

If you are running additional applications on the same server, the hardware requirements will change.

Configuration

Figure 9 illustrates a possible multi-site Contact Center Management configuration.

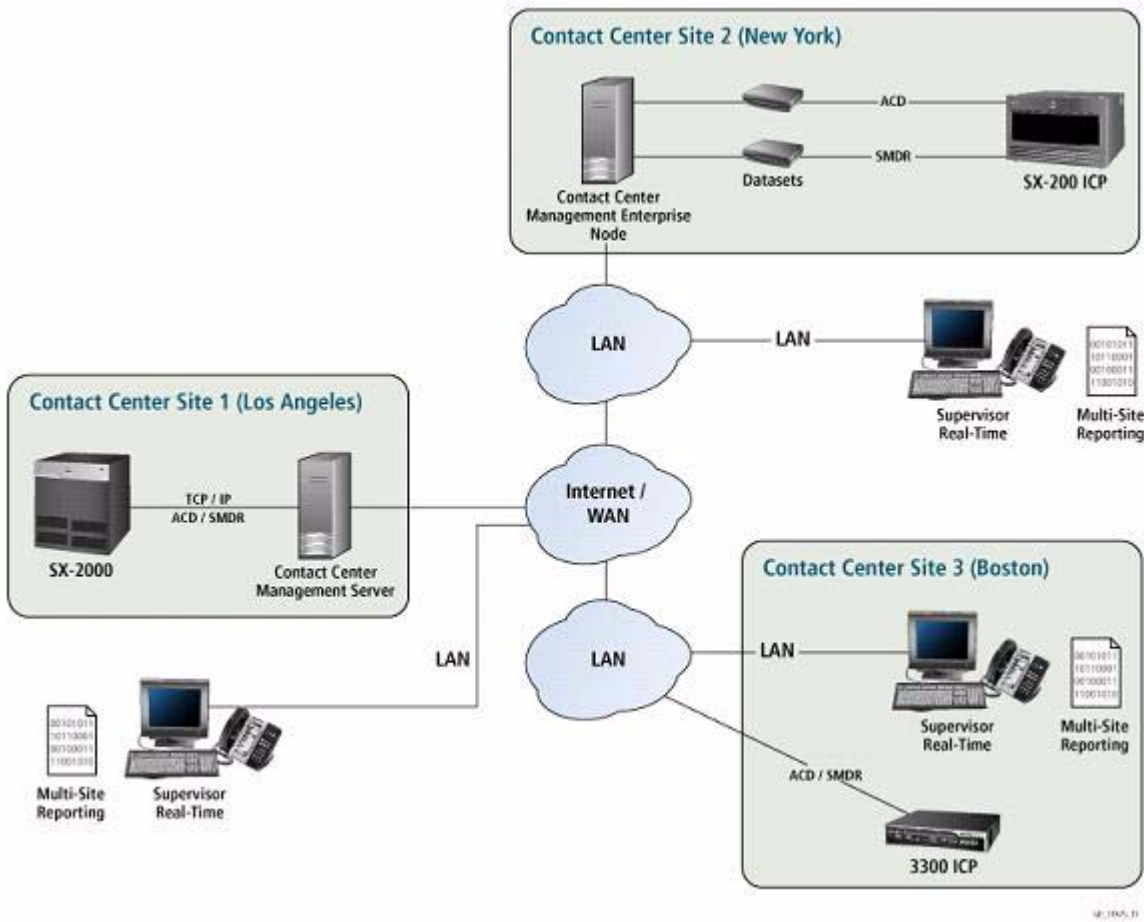


Figure 9 Possible Multi-site Contact Center Management Configuration

Chapter 6

Resiliency and ACD Resiliency

Introduction

This section provides an overview of Resiliency and ACD Resiliency and how they work. For more information, refer to the following topics:

- Overview
- Benefits
- Resiliency Support for Contact Center Applications
- Features
- Configuration

Overview

Resiliency is a network configuration, available with the Contact Center Advanced Starter Pack or greater and Call Accounting, that ensures high reliability or availability of a communications system. The network configuration provides ACD agent resiliency and an immediate response to outages, and allows IP phones to remain in service in the event that their 3300 ICP controller fails.

In the event of a controller or network failure, IP phones automatically switch over to re-register with a secondary 3300 ICP controller, so agents continue to receive calls. Resiliency also means in-progress voice communications are not disrupted during network or component failure.

A resilient ACD configuration typically consists of a queueing gateway or gateways, a primary controller, and a secondary controller programmed within a cluster. The ACD paths are configured on the queueing gateways to direct calls to the resilient ACD agent groups that are configured on both the primary and secondary controllers. During normal operation, the queueing gateways direct the ACD calls to the primary agent controller. If the primary agent controller fails, calls are redirected to the secondary agent controller. The resilient agents and resilient agent groups fail over to the secondary agent controller and can process the incoming ACD calls.

ACD paths are not resilient. However, you can achieve a level of ACD path resiliency by programming two paths with the same configuration information on separate controllers. You configure each path with a unique directory number within the cluster.

ACD Release 7+ (Release 9 is recommended) features support for virtual resilient ACD, including distribution of functions into agent controllers and queue controllers, either or both of which can be resilient.

ACD Resiliency supports the resiliency, scalability, and virtual contact center models of the Mitel telephone platforms. It is an add-on option to Contact Center Enterprise Edition or Mitel Call Accounting. ACD Resiliency provides seamless reporting in the event of a network or controller outage.

Benefits

Contact centers often provide the primary customer-to-company interface. From a customer satisfaction and revenue perspective, downtime costs money. In other words, lost calls mean lost customers. Resiliency ensures that the contact center is always available.

Contact centers that operate 24/7 cannot be taken offline. Resiliency enables sites to upgrade or service their phone systems while agents continue to take calls.

ACD Resiliency enables seamless reporting and uninterrupted real-time monitoring during outages, so call data is not lost and supervisors can continue to monitor agent activity.

Resiliency Support for Contact Center Applications

The following Contact Center Solutions applications support ACD Resiliency:

- Contact Center Management
- Interactive Contact Center
- IVR Routing
- Mitel Border Gateway Connector

Features

Resiliency includes the following features:

- Calls in queue are not lost.
- Calls in progress are maintained.
- Callers are unaware of the outage or system event.
- Agent states are retained.
- Single points of failure are minimized.

ACD Resiliency includes the following features:

- Interactive Contact Center support is maintained on resilient telephone systems.
- Real-time monitors notify you of agents who are in failover mode.
- Reports convey agent performance without breaking up the shift.

Calls in queue are not lost

In the event of an outage impacting a primary agent controller, the calls in queue are not affected. Such calls are immediately directed to the failover controller.

Calls in progress are maintained

Agents on calls are not interrupted if there is a network or controller outage. In the event of an outage, agents and customers remain on the line until they conclude their conversations. Only after a call ends does an agent's phone automatically re-register with the failover controller.

Callers are unaware of the outage or system event

Failover occurs seamlessly. Customers do not experience any delay in service or interruptions while on calls with agents. Only after an agent hangs up does the agent's phone re-register with the failover controller.

Agent states are retained

Agents do not have to log back in. Upon failover and failback, controllers maintain the agent states. Their states are retained, which means idle agents are ready to handle calls.

Single points of failure are minimized

The Mitel 3300 ICP resiliency solution is highly distributed, spreading trunk density and agents across several nodes. It provides a high level of agent resiliency and ensures that there is no single point of failure.

Interactive Contact Center support is maintained on resilient telephone systems

Real-time monitoring and Interactive Contact Center agent and queue control are not affected.

Real-time monitors notify you of agents who are in failover mode

Supervisors can quickly identify agents as soon as their phones re-register with the failover controller. Real-time monitors indicate which agents have re-registered.

Reports convey agent performance without breaking up the shift

Contact Center Solutions applications provide seamless historical reporting and real-time monitoring through a network or controller outage. The date and time of the primary controller is maintained to ensure reports are accurate.

Configuration

ACD resiliency configurations are classed based on the level of resiliency achieved:

- Basic ACD Resiliency
- Advanced ACD Resiliency
- Full ACD Resiliency

Basic ACD Resiliency

This section provides two basic ACD Resiliency configurations.

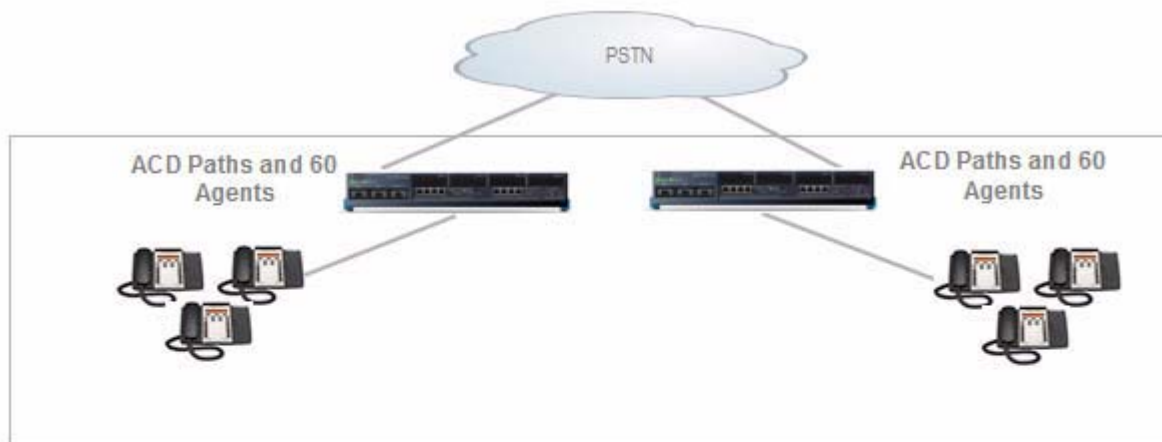
Basic configuration 1: Two controllers with up to 120 agents

As shown in Figure 10, the ACD agents and paths are programmed on both 3300 agent controllers, so that the public exchange calls (PSTN) are split evenly between the controllers. Each controller is both a primary and secondary agent controller in the event of a failure on either controller. This configuration enables automatic failover to the secondary agent controller, upon outage, and automatic failback to the primary agent controller, upon return to service.

This configuration

- Supports agent device resiliency
- Does not support ACD group resiliency

The E2T boundary limits the agent total to 120 or 192, depending on the controller variant.



On Failure



Figure 10 Basic ACD Resiliency - Configuration 1

Basic configuration 2: Two controllers with up to 120 agents

In Figure 11, calls land on the queueing gateway and queue to ACD paths. The gateway also acts as a secondary agent controller in the event of a failure. This configuration provides automatic failover to the secondary agent controller, upon outage, and failback to the primary agent controller, upon return to service.

This configuration supports

- Agent device resiliency
- ACD group resiliency

The E2T boundary limits the agent total to 120 or 192, depending on the controller variant.



Figure 11 Basic ACD Resiliency - Configuration 2

Advanced ACD Resiliency

This section provides two advanced ACD Resiliency configurations.

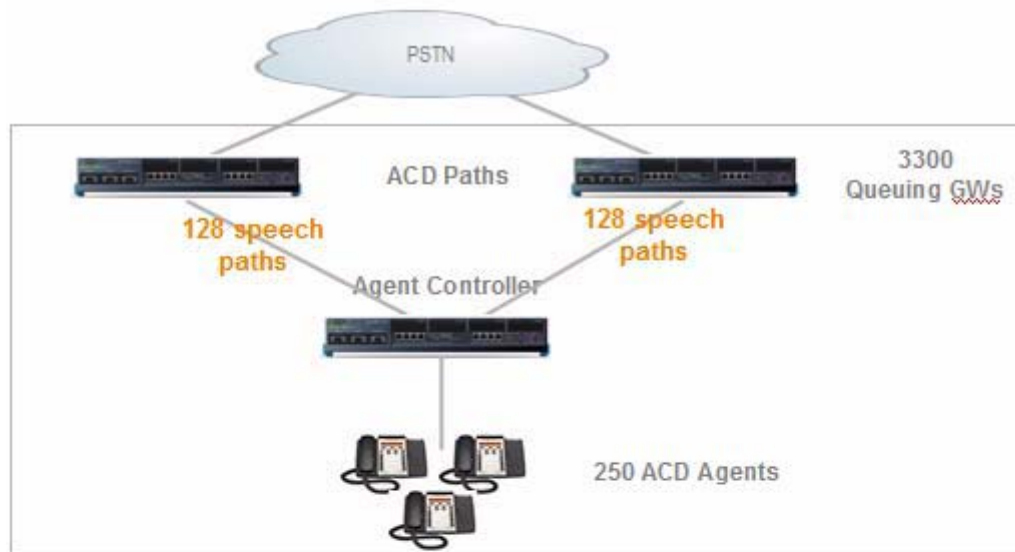
Advanced configuration 1: Three controllers with up to 120 agents

In the advanced configuration shown in Figure 12, calls are evenly split between the two 3300 Queueing Gateways where the paths are programmed. In this configuration, if one gateway fails, all incoming traffic can be diverted to the other gateway. If the Agent Controller fails, calls and agents are diverted to the secondary controller, which also serves as a queueing gateway.

The ACD path calls queue on the gateways and are routed to the agent controller when agents become available. In the following configuration the second gateway is used for trunking (and path) resiliency rather than for incremental E2T.

This configuration supports

- Path resiliency
- Group resiliency
- Agent device resiliency
- 120 or 192 agents, depending on the controller variant. Additional gateways can be added to scale to a maximum of 350 agents.



On Failure

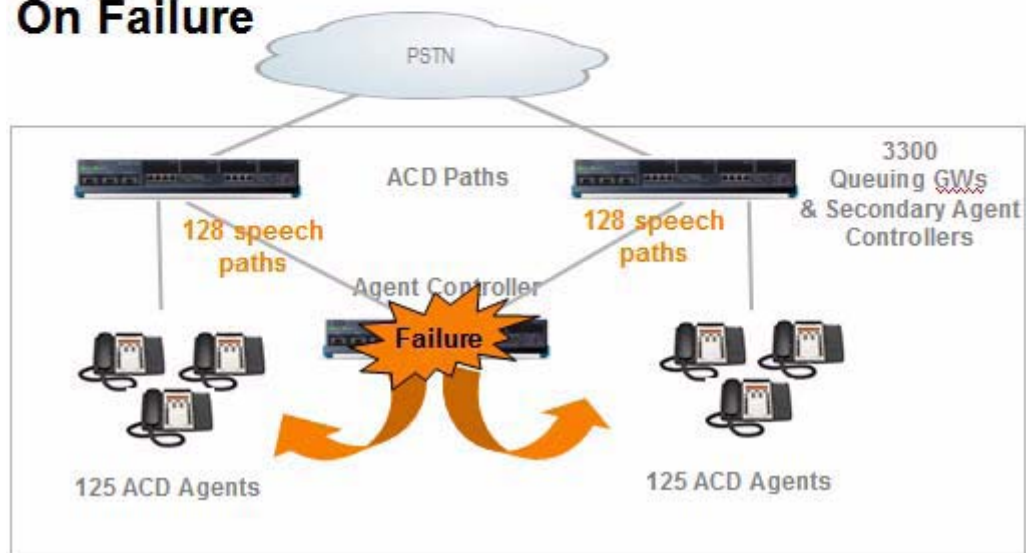


Figure 12 Advanced ACD Resiliency - Configuration 1

Advanced configuration 2: Three controllers scaling to greater than 120 agents

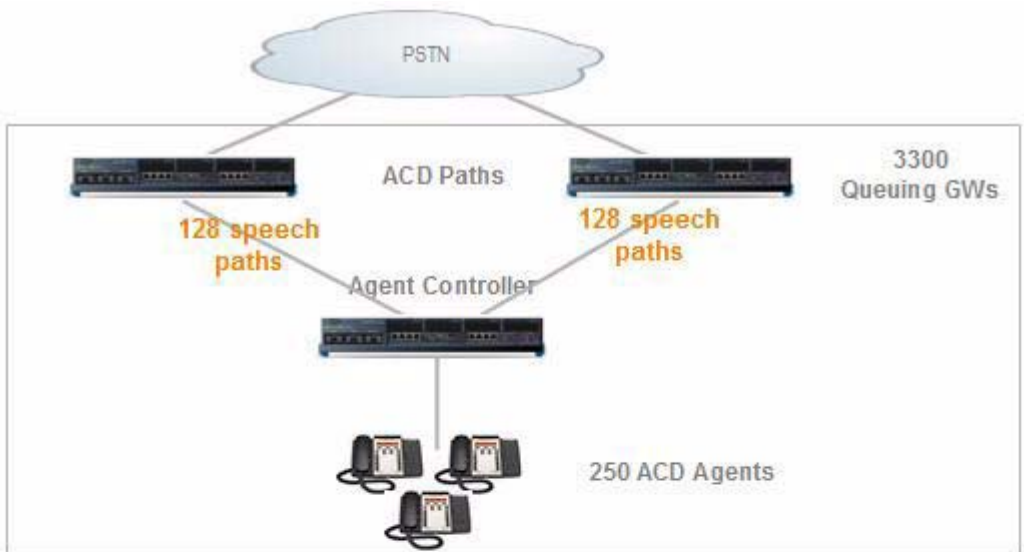
In the advanced configuration shown in Figure 13, the ACD paths and PSTN calls are split evenly between two queuing gateways, and all 250 agents are hosted on the agent controller.

In this configuration, if one gateway fails, all incoming traffic can be diverted to the other gateway. ACD path calls queue on the gateways and are routed to the agent controller when agents become available. The E2T boundary is doubled and therefore supports 250 agents. Additional gateways can be added to scale to a maximum of 350 agents.

This configuration provides automatic agent failover to the secondary agent controllers (the queuing gateways) upon outage, and failback to the primary agent controller upon return to service.

This configuration supports

- Path resiliency
- Group resiliency, depending on how the resiliency groups are configured
- Agent device resiliency
- 250 agents, but additional gateways can be added to scale to a maximum of 350 agents



On Failure

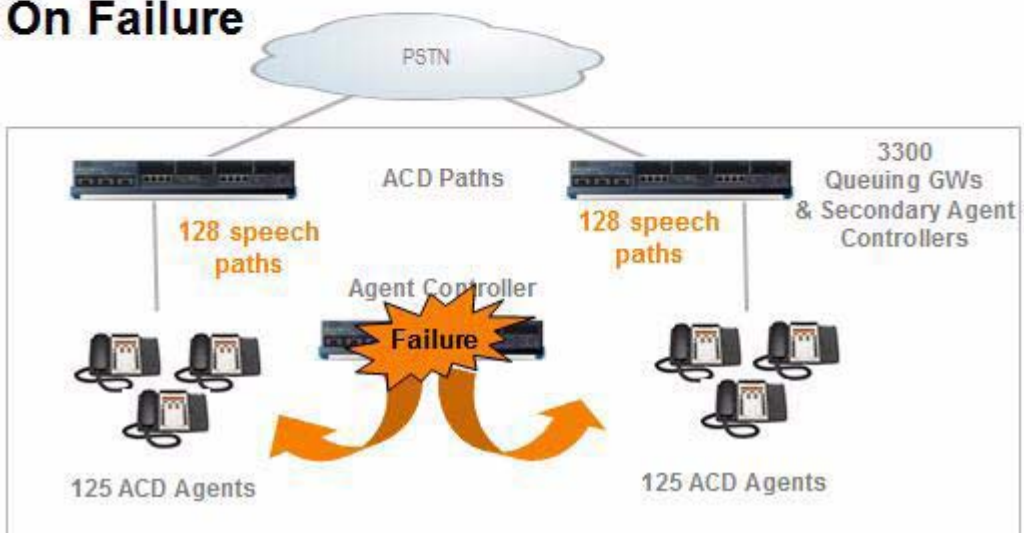


Figure 13 Advanced ACD Resiliency - Configuration 2

Full ACD Resiliency

This section provides two full ACD Resiliency configurations.

Full configuration 1: Four controllers scaling to greater than 120 agents

In the configuration shown in Figure 14, the ACD paths are programmed on multiple queueing gateways, and the PSTN calls are split evenly between the gateways. If one gateway fails, all incoming traffic can be diverted to another gateway. The ACD path calls queue on the gateways and are routed to the agent controller when agents become available. This configuration provides automatic agent failover to the secondary agent controller, upon outage, and fallback to the primary agent controller upon return to service.

This configuration supports

- Path resiliency
- Group resiliency
- Agent device resiliency
- 250 agents, but additional gateways can be added to scale to a maximum of 350 agents

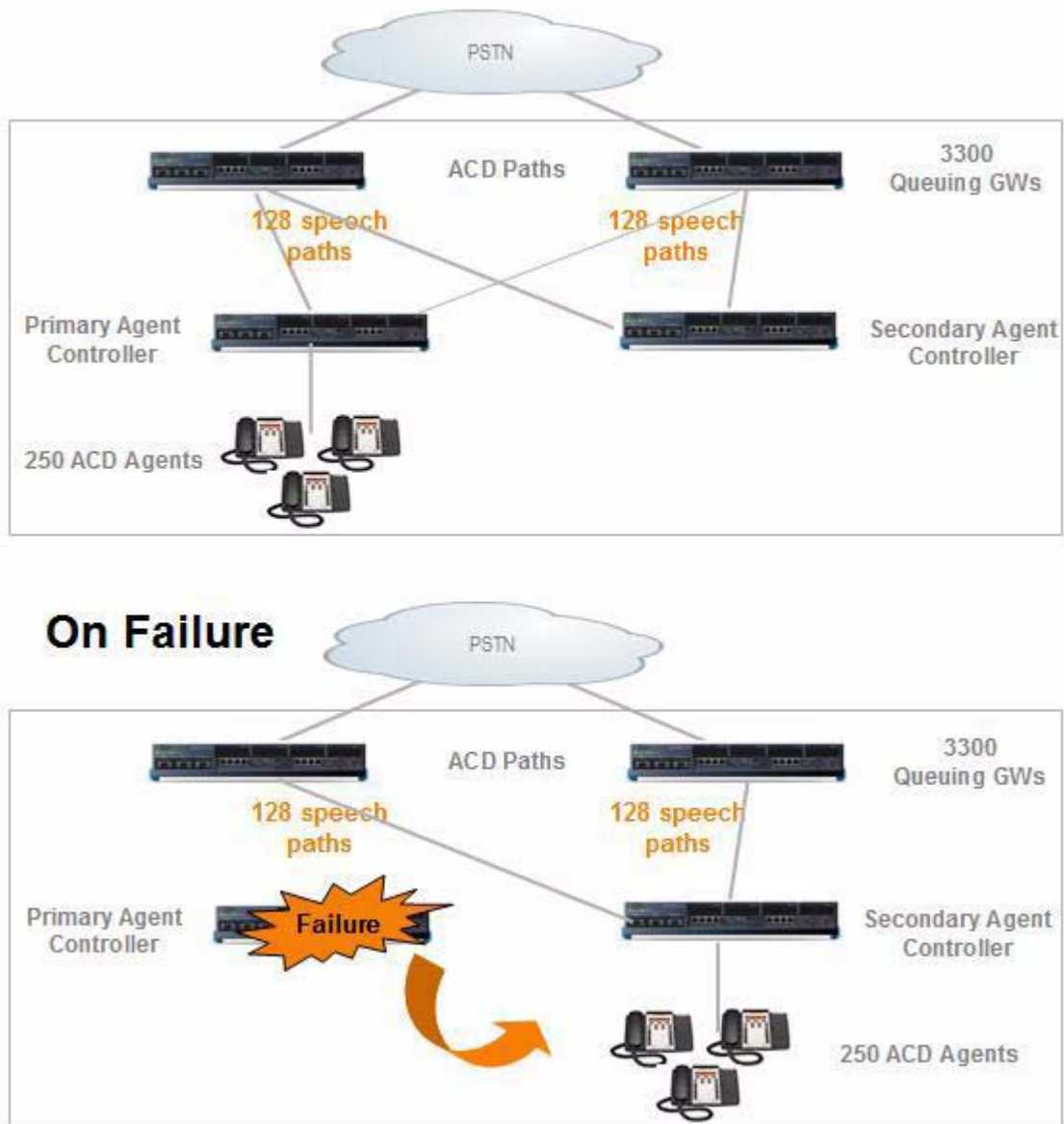


Figure 14 Full ACD Resiliency - Configuration 1

Full configuration 2: Four controllers with up to 250 agents

In the configuration shown in Figure 15, the ACD paths are programmed on multiple queuing gateways, and the PSTN calls are split evenly between the gateways. If one gateway fails, incoming traffic can be diverted to another gateway. The ACD path calls queue on the gateways and are routed to the agent controller when agents become available. This configuration

provides automatic agent failover to either secondary agent controller upon outage, and failback to the primary agent controller upon return to service.

This configuration supports

- Path resiliency
- Group resiliency
- Agent device resiliency

For silent monitoring, supervisors must reside on the same controller as the agents they wish to monitor.

Longest idle agent call distribution across all agents can only be achieved by putting all agents on a single controller.

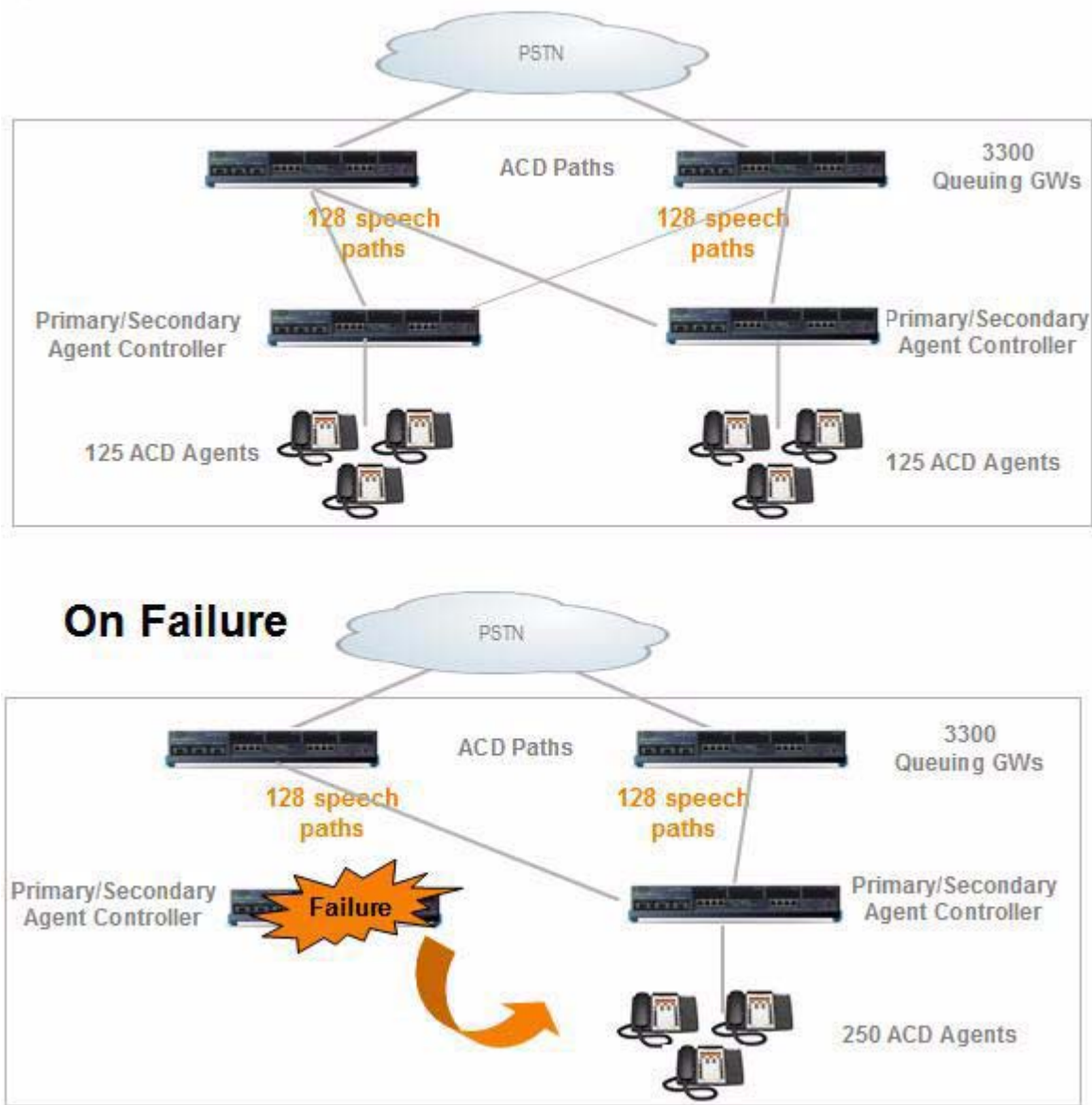


Figure 15 Full ACD Resiliency - Configuration 2

Chapter 7
Virtual Contact Centers

Introduction

This section provides an overview of virtual contact centers and how they work. For more information, refer to the following topics:

- Overview
- Benefits
- Configuration

Overview

Networked ACD is based on ACD overflow functionality. Overflow permits a call originating in a particular geographic location to overflow to an agent on a different system in a different geographic location in the event of high call volumes.

Traditionally, one of the limitations of networked contact centers has been that while the load of the primary agent group is lightened, the overflow groups only receive calls when all of the agents in the primary group are busy. Also, networked contact centers are not suitable for evenly distributing calls among geographically dispersed agents.

Virtual contact centers remove these limitations by enabling

- Geographically dispersed agent devices to be registered on the same 3300 Agent Controller across an IP network and to be placed in the common agent group(s) on the same controller
- Calls to be evenly distributed, based on which agent has been idle the longest, regardless of their physical proximity to the 3300 Agent Controller they are registered on and/or to other agents in their group

In a virtual contact center, the agents work in different geographical locations, but the contact center functions as if the agents are all located locally in the same office. A virtual contact center can be created by combining Networked ACD and ACD resiliency.

Benefits

A virtual contact center can evenly distribute calls among agents in a specific agent group, irrespective of the agent's geographic proximity to

- Other agents in their group
- The agent controller to which they are registered

Configuration


Networked ACD is used to enable virtual ACD deployments. All paths are programmed on the 3300 Queueing Gateways and all agents are programmed on the 3300 Agent Controller(s).

This section describes two configurations for resilient, virtual ACD contact centers.

- Configuration 1: Failover to local secondary
- Configuration 2: Failover to central secondary, then local tertiary

Configuration 1: Failover to local secondary

Figure 16 shows a resilient virtual ACD call center distributed across Dallas, New York, and Los Angeles. The primary controller is in Dallas, and queueing gateways in all three locations act as secondary agent controllers.

 **Note:** In this configuration, ACD group resiliency support will depend on how the ACD groups are configured. There are scenarios where group resiliency will not be supported when groups fail over to local secondary nodes.

Resilient Virtual Contact Center Config 1: Resilient Support for 350 Virtual IP Agents

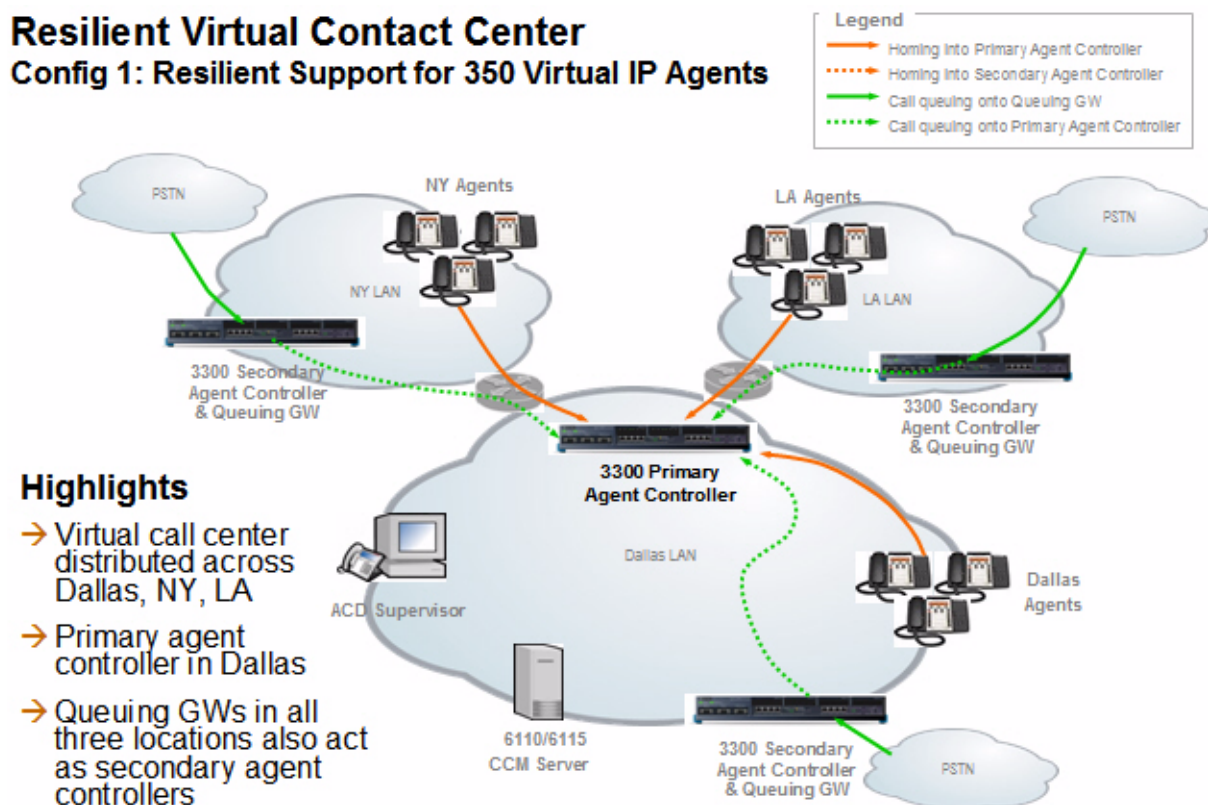


Figure 16 Resilient Virtual Contact Center - Configuration 1

In Figure 17, the Agent Controller fails, causing agents to rehome to their secondary controller, which is local to them. A WAN outage initiates the same failover behavior. In this case their secondary controller also serves as a queuing gateway for path calls.

Resilient Virtual Contact Center

Config 1: Resilient Support for 350 Virtual IP Agents

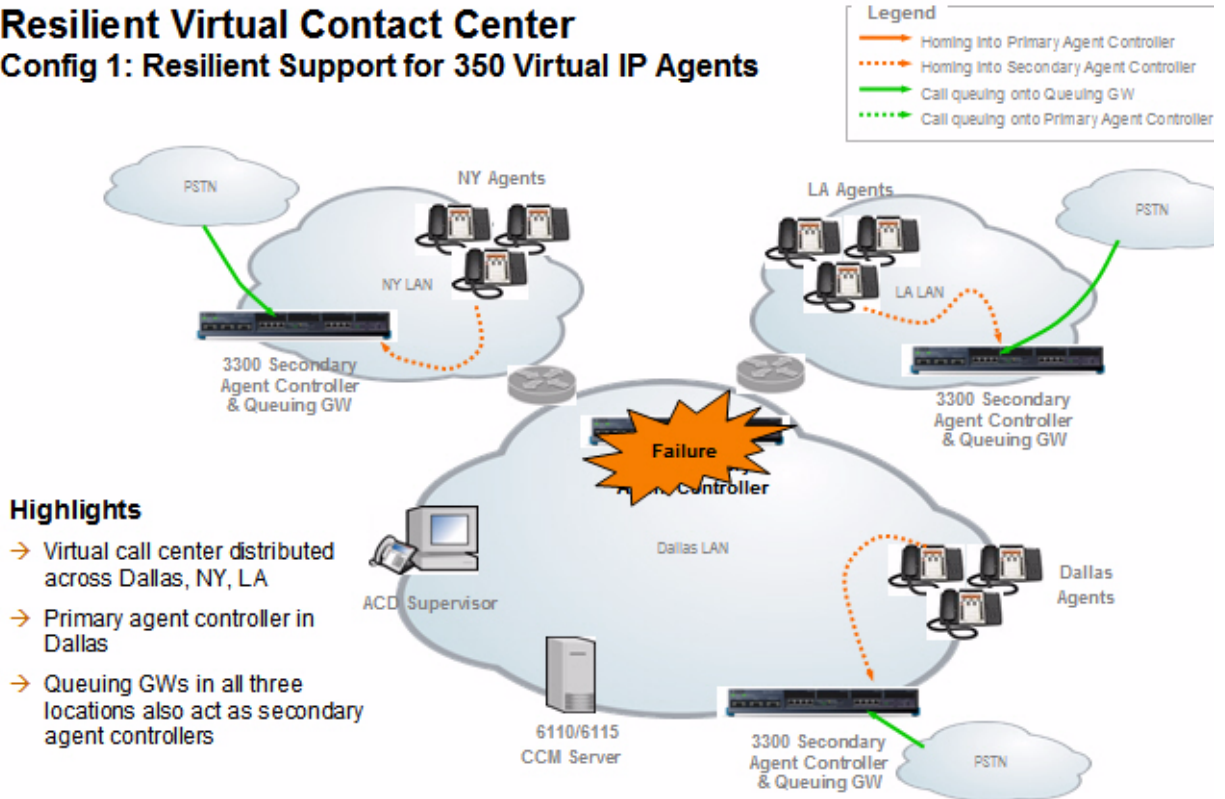


Figure 17 Configuration 1 - Failover to Local Secondary Controller

Configuration 2: Failover to central secondary, then local tertiary

The following figure shows a resilient virtual call center, distributed across Dallas, New York, and Los Angeles. The primary and secondary agent controllers are in Dallas, and queuing gateways in all three locations also act as tertiary agent controllers. If the primary controller fails in Dallas, the agents fail over to the secondary agent controller in Dallas. (See Figure 18.) If that secondary controller fails before the primary controller returns to service, then agents fail over to their local tertiary controllers. (See Figure 19.)

Resilient Virtual Contact Center Config 2: Resilient Support for 350 Virtual IP Agents

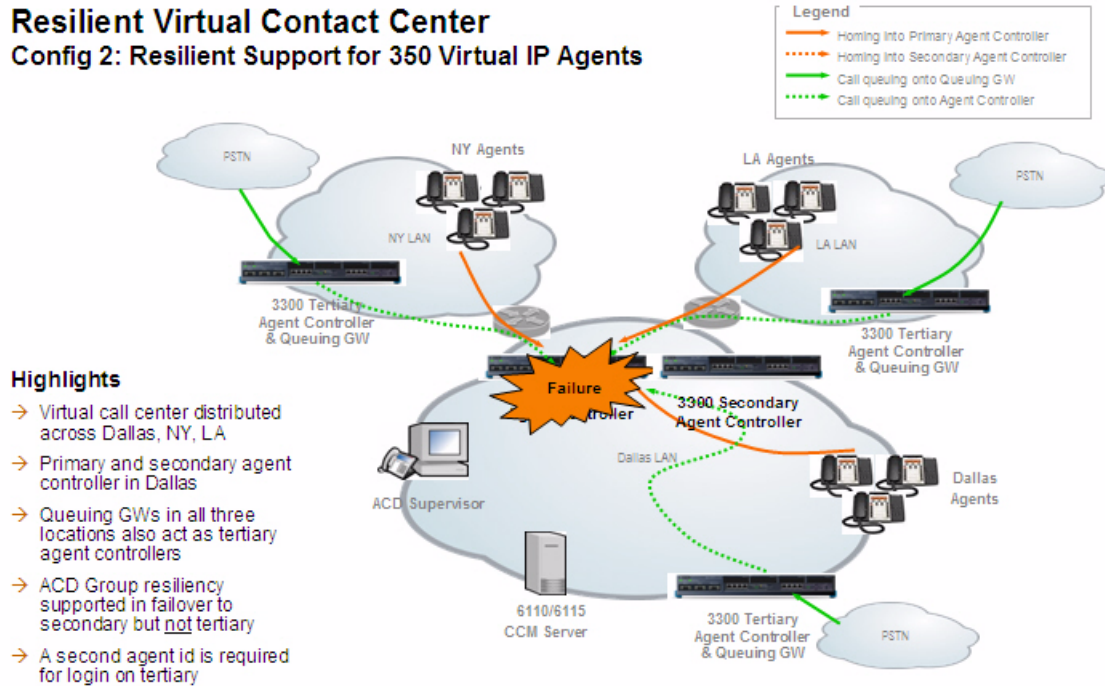


Figure 18 Configuration 2 - Failover to Central Secondary Controller

Resilient Virtual Contact Center Config 2: Resilient Support for 350 Virtual IP Agents

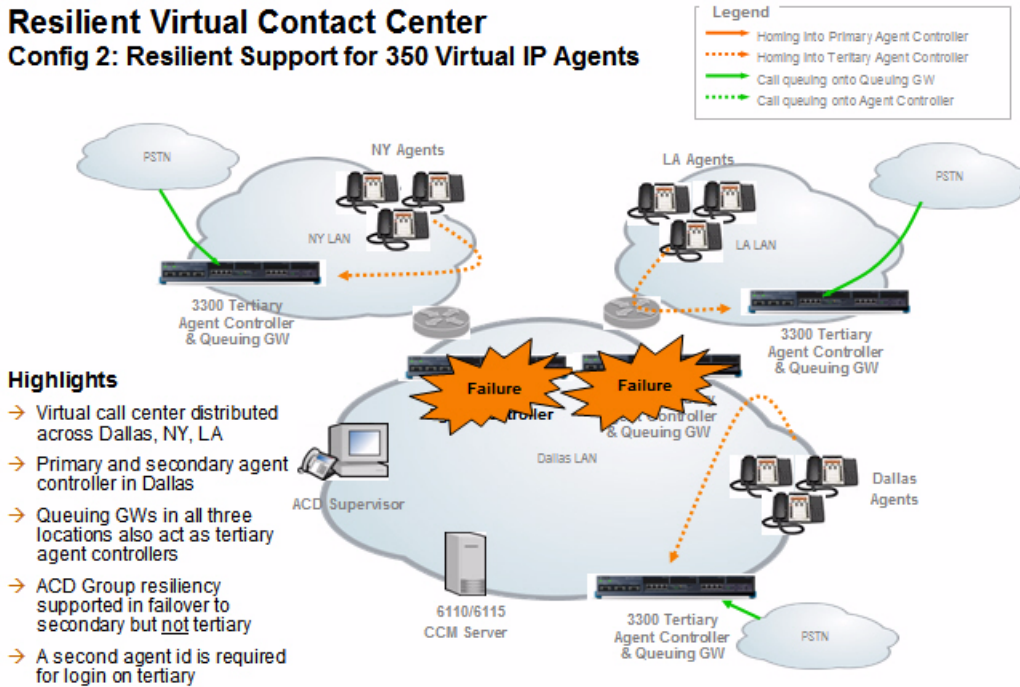


Figure 19 Configuration 2 - Failover to Tertiary Controller

Chapter 8

Flexible Reporting

Introduction

This section provides an overview of Mitel Flexible Reporting and how it works. For more information, refer to the following topics:

- Overview
- Benefits
- Features

Overview

Mitel Contact Center Solutions provides over 425 reports. Flexible Reporting is an add-on product to Contact Center Management, included in Contact Center Enterprise Edition Standard Starter Pack or greater, that enables you to combine voice data from multiple reports and design your own report templates using report headings from existing reports.

Benefits

Flexible Reporting provides contact centers with the following capabilities:

- Build reports that meet your specifications and business needs.
- Readily compare performance of multiple device types over a particular period.
- Focus on data that helps you manage your business effectively and efficiently.
- Save time by not having to select report preferences when you re-run reports.
- Know what custom reports will look like before you actually generate them.

Features

Flexible Reporting provides the following features:

- Create custom reports with an easy-to-use wizard interface.
- Select from existing column headings to build a report.
- Combine like-data across device types.
- Control column order.
- Customize column headings.
- Render reports in Excel .xls and Adobe .pdf formats.
- Select column headers for two or more devices and combine them in one report.
- Add your corporate or third party logo to reports.
- Produce customized reports on a scheduled or on-demand basis.

Create custom reports with an easy-to-use wizard interface

Create customized reports with existing statistics (column headings) using the Flexible Reporting wizard. The wizard guides you through the process of building custom reports.

Select from existing column headings to build a report

Select from existing column headings to build a report that includes only the column headings you require. Position the columns in the order that suits your reporting needs.

Combine like-data across device types

Select column headers for two different devices and combine them in one report. For example, select "by period" column headings for agents and queues and combine them in the same report.

Control column order

Arrange the columns in the order in which you want to view the statistics.

Customize column headings

Specify the names of statistics (column headings) so they are meaningful to your department, business, and industry.

Render reports in Excel .xls and Adobe .pdf formats

After you run a report in Flexible Reporting, you can export the report to Microsoft Excel .xls or Adobe .pdf format and customize it to suit your business needs. Exporting to .pdf eases file sharing as Adobe Reader is a product that can be obtained free of charge and used by anyone.

Select column headers for two or more devices and combine them in one report

You can select "by period" column headings for agent groups and queue groups and combine them in the same report, enabling you to report on multiple devices in one report.

Add your corporate or third party logo to reports

Create personalized, professional-looking reports to send to customers.

Produce customized reports on a scheduled or on-demand basis

Create and then save customized report templates so you can reproduce them at any time, either on a scheduled or on-demand basis.

Chapter 9

Interactive Contact Center

Introduction

This section provides an overview of Mitel Interactive Contact Center and how it works. For more information, refer to the following topics:

- Overview
- Benefits
- Features
- Configuration
- Telephone System Hardware and Software Requirements

Overview

Mitel Interactive Contact Center, included in Contact Center Enterprise Edition Standard Starter Pack or greater or as an add-on product to Contact Center Business Edition, enables supervisors to control the availability of agents and ACD paths in response to changing call volumes.

Using Interactive Contact Center, supervisors can control agents and paths using the following methods:

- Manually
 - Supervisors can control the availability of agents and enable Do Not Disturb on specific paths, diverting callers to alternative answering points in Contact Center Client.
 - Agents can control their own states in Contact Center Client.
- Using a schedule
 - Supervisors can schedule paths to automatically open or close based on business hour schedules.
- Using a path control plan
 - Supervisors can set and remove queues from Do Not Disturb automatically based on predefined criteria. Each path control plan monitors one path and, based on the activity of the monitored path, either places the path in or removes the path from Do Not Disturb.



Note: Interactive Contact Center works in conjunction with Contact Center Management to give supervisors more control over their agents' states and to give agents more control over their own states.

Benefits

Interactive Contact Center functionality

- Provides support for an immediate response to changing call volumes
- Ensures that contact center resources are effectively deployed
- Responds to and controls situations involving individual agents and/or groups of agents

Features

Interactive Contact Center includes supervisor- and agent-specific features:

- Real-time agent state control
- Real-time path control
- Scheduled path control
- Path control plans
- Enhanced agent shift reporting

Real-time agent state control

Using Interactive Contact Center and Contact Center Client, supervisors can log agents on and off, move agents from quiet paths into busier paths, and place agents in Make Busy or Do Not Disturb. Supervisors can control and deploy agents instantaneously to respond to call volumes and allow agents to take breaks while maintaining coverage for their position.

Using Interactive Contact Center and Contact Center Client, agents can control their call states from their desktops in Contact Center Client. Agents can log themselves on and off, place themselves in and remove themselves from Do Not Disturb, and apply Make Busy Reason Codes. Agents can instantaneously respond to changing call volumes to meet service level objectives.

Real-time path control

Using Interactive Contact Center and Contact Center Client, supervisors can place paths in and remove paths from Do Not Disturb in response to changing call volumes and conditions.

Real-time agent group presence control

Mitel Communications Director (MCD) 4.0 SP2 and 4.1 enables agents to be programmed with a single agent ID that can be associated with multiple agent groups allowing agent presence to be controlled "on the fly" using a phone set Feature Access Key, soft phone Feature Access Code, or Interactive Contact Center. Using this enhanced functionality, agents no longer need to log out and back into the system using a different agent ID in order to change their presence in agent groups, as was previously required. Agent ACD hot desk prime lines remain in service while they are logged in as ACD hot desking users, even if they are not present in any of their associated agent groups and not receiving ACD calls.

When logged into Contact Center Client, agents can dynamically change their presence in any of the agent groups they are members of using Interactive Contact Center. Optionally, supervisors can dynamically change the presence of agents in agent groups using Interactive Contact Center. Agent group presence functionality requires Contact Center Management, Interactive Contact Center, and the correct telephone system Class of Service settings and Contact Center Management security settings. If you do not own Interactive Contact Center, you can view agent presence in Contact Center Client, but you will be unable to dynamically change agent presence in agent groups.

Scheduled path control

Supervisors can pre-schedule paths to open or close, based on the business' hours of operation. Path control schedules open queues during business hours and close them after business hours. This feature eliminates the need to open and close paths manually.

Path control plans

The supervisor can place paths in and remove paths from Do Not Disturb automatically, based on predefined criteria. Each path control plan monitors one path and, based on the activity within the path, either places it in or removes it from Do Not Disturb.

Enhanced agent shift reporting

Make Busy Reason Codes are configured in the telephone system and agents enter the codes on their phone sets to enter Make Busy. Agents can select Make Busy Reason Codes from their desktops in Contact Center Client. With Contact Center Management, there can be up to 11 Make Busy Reason Codes. When Contact Center Management and Interactive Contact Center are both present, there can be up to 99 Make Busy Reason Codes.

Supervisors can run historical reports on the Make Busy Reason Codes available (availability depends on whether you are using Contact Center Management alone or in conjunction with Interactive Contact Center). The historical reports indicate why agents used Make Busy and the duration for which they used it. Figure 20 illustrates how a supervisor places an agent in the Make Busy state using a Make Busy Reason code.

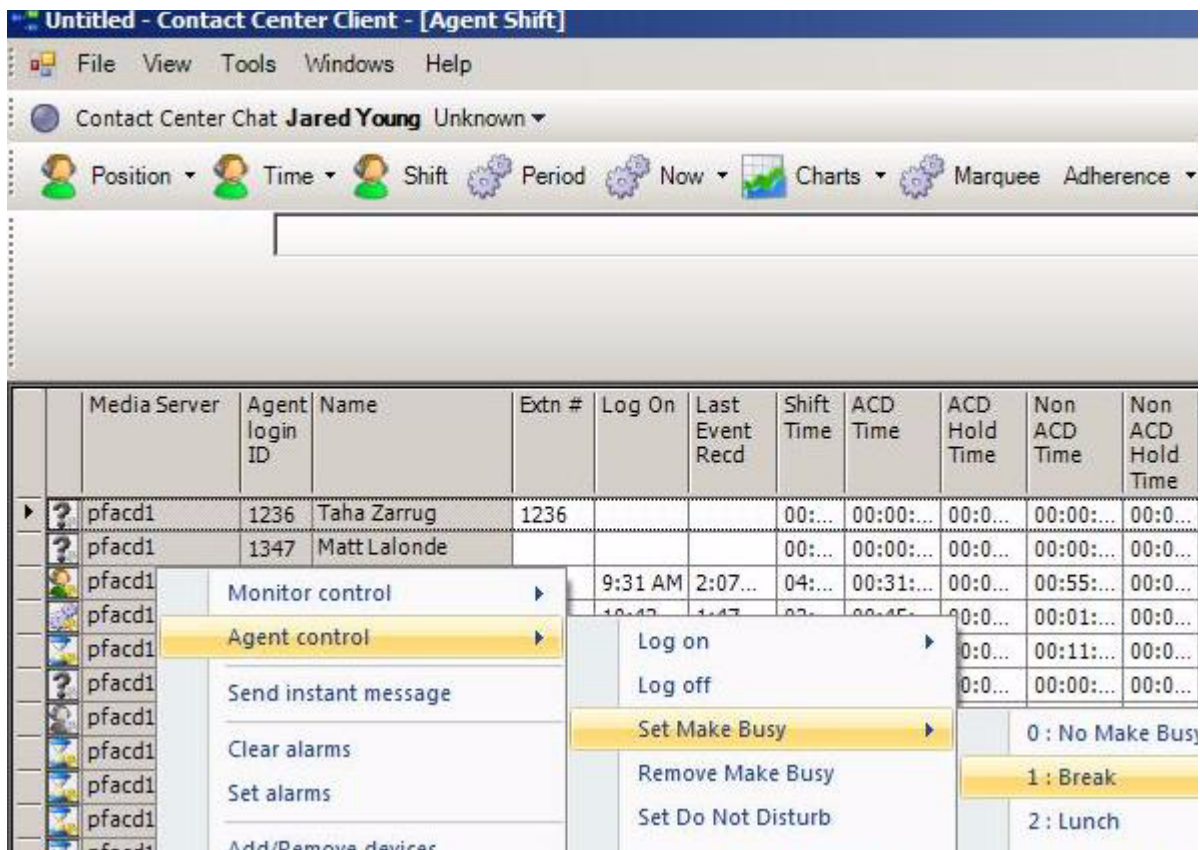


Figure 20 Using the Make Busy Reason Code

Configuration

The following section describes 3300 ICP configuration for Interactive Contact Center.

3300 ICP configuration

In this single-server configuration, two network cards must be installed: a dedicated NIC for ACD/SMDR connectivity and a dedicated NIC for network data transmission. (See Figure 21.)

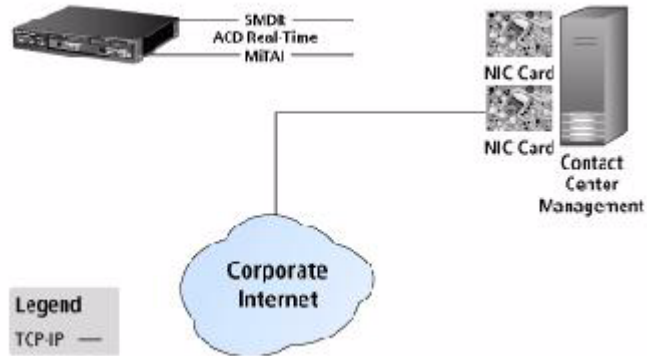


Figure 21 Interactive Contact Center connectivity with the 3300 ICP

Telephone System Hardware and Software Requirements

Table 7 lists the 3300 ICP hardware and software components required for Interactive Contact Center.

Table 7 Telephone System Requirements for Interactive Contact Center

Component	Using a 3300 ICP
Interactive Contact Center software	Required
MiTAI/HCI - Basic Telephony Feature package software option	Required
MiTAI/HCI - Advanced Telephony Feature package software option	Required
Mitel Applications Capacity Level (MiTAI/HCI Traffic) option	Required
Fiber Interface Module (FIM)	N/A

Chapter 10
Interactive Visual Queue

Introduction

This section provides an overview of Interactive Visual Queue and how it works. For more information, refer to the following topics.

- Overview
- Benefits
- Features

Overview

Interactive Visual Queue, included in Contact Center Enterprise Edition Advanced Starter Pack or greater, works in conjunction with Mitel Contact Center Management and Interactive Contact Center to enable supervisors and agents to monitor calls within queues and then move calls from busy queues to less active queues using a drag-and-drop operation.

Benefits

Interactive Visual Queue enables supervisors and agents to see caller-associated information, redirect calls between queues, and enjoy the benefits of integration with other applications.

Detailed caller information

Detailed information for each call enables supervisors and agents to

- Identify key customers and ensure that these priority calls are answered in a timely manner
- View the priority and answer positions of calls
- Track the number of times a call has changed queues
- Identify callers who have been waiting in the system or in the current queue for an extended period of time

Call redirection

Calls can be moved between queues in two ways. You can configure queue settings on the telephone system to automatically move a call from one queue to another after a specific duration or you can manually redirect a call from a queue to another queue or a dialable number.

Controlling calls enables supervisors to:

- Minimize caller wait time
- Ensure that priority calls are answered first
- Provide an immediate response to changing call volumes
- Disperse calls effectively

Integration with other applications

Interactive Visual Queue works in conjunction with Contact Center Management, Interactive Contact Center, and Contact Center Client to enable

- Supervisors to benefit from single-point administration of extensions, agents, and other devices
- Agents and supervisors to view queue activity and the availability of team members and act quickly to serve callers with current resources
- Agents and supervisors to control ACD calls, agents, and queues to provide premium service to preferred customers by ensuring priority calls are answered first

Features

Interactive Visual Queue includes the following features:

- Detailed call statistics
- Contact prioritization
- Single-point data administration
- Integrated agent control
- Integrated real-time presence
- Ability to send a call in queue to a specific dialable number

Detailed call statistics

Using Interactive Visual Queue, agents and supervisors have access to the following information:

- **Position (#)**—the answer position relative to other calls in the queue
- **Caller Number**—the originating phone number of the call
- **Caller Name**—the name associated with the phone number (if available)
- **Priority**—the priority of the call in the queue (the lower the number, the higher the priority)
- **Time Offered to Queue**—the time the call entered the current queue
- **Time in Queue**—the call's total time in the current queue
- **Time Offered to System**—the time the call first entered the system
- **Time in System**—the call's total time in the system
- **Queue Hops**—the number of times a call has changed queues
- **Call ID**— a unique identification number that is assigned by the telephone system to the call

Contact prioritization

Interactive Visual Queue provides contact prioritization, enabling the agent or supervisor to

- Move calls between queues (that are associated with different agent groups) to balance the call load
- Move calls from low-priority queues to high-priority queues, or vice versa, to change their answer position
- Forward calls to extensions, callback ports, voice mail ports, or other answer points

Single-point database administration

Supervisors benefit from single-point data administration. Because Interactive Visual Queue is automatically updated with any database changes, agents always have the latest information at hand.

Integrated agent control

Interactive Visual Queue and Interactive Contact Center provide integrated control of ACD calls, agents, and queues. A supervisor can temporarily place agents in Make Busy or Do Not Disturb, or place queues in Do Not Disturb to enable priority calls to be answered first.

Using Interactive Visual Queue, agents can readily control their availability and inform other agents of their whereabouts with Make Busy Reason codes. Agents can log on and off, place themselves in and remove themselves from Do Not Disturb, and select Make Busy Reason codes.

Integrated real-time presence

Interactive Visual Queue and Contact Center Client share the same user interface. Supervisors can view ACD queue conditions and the real-time activities of team members before transferring calls to them.

Supervisors can create alarms to measure thresholds in the Interactive Visual Queue monitor. For example, an alarm can be set that causes a row to change color when a call is received from a high-priority customer.

Ability to send a call in queue to a specific dialable number

An agent can select a queued call on the Interactive Visual Queue monitor and forward it to a specific dialable number, for example, an extension, callback port, or voice mail port. Agents who have Contact Center Softphone can forward calls directly to their own soft phone extensions by selecting Send to=>Me.

Figure 22 illustrates a supervisor transferring a queued call to an extension in Interactive Visual Queue.

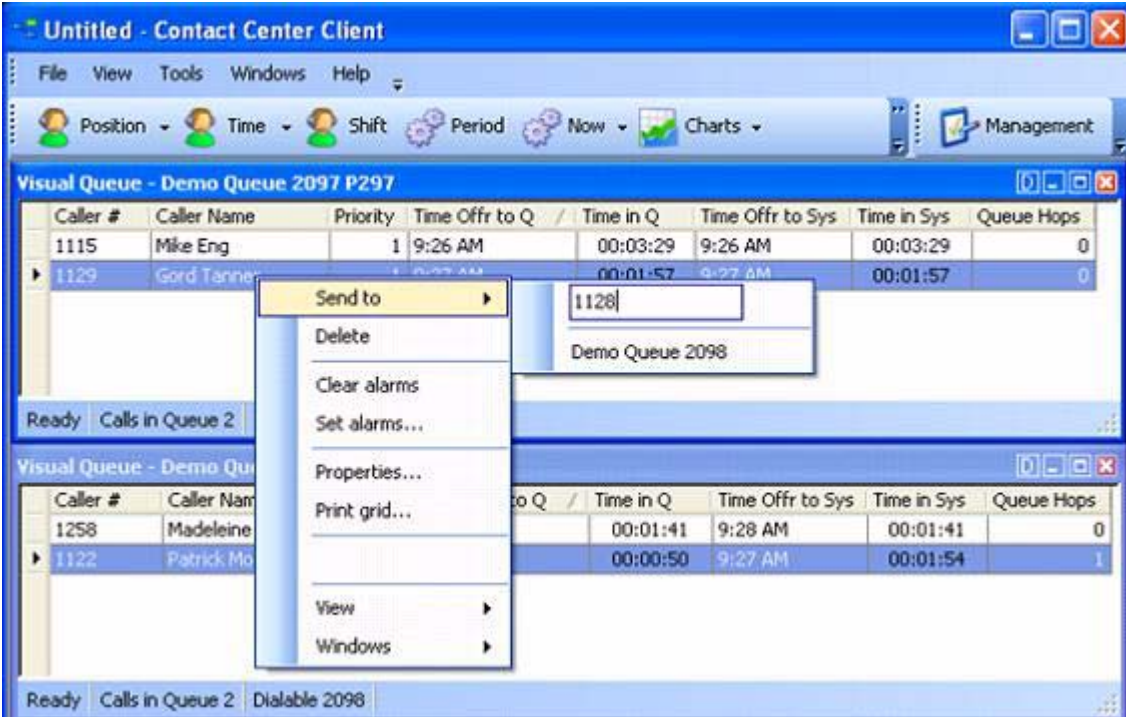


Figure 22 Supervisor Transferring a Priority Call to an Agent

Chapter 11

Contact Center Softphone & Contact Center PhoneSet Manager

Introduction

This section provides an overview of Mitel Contact Center PhoneSet Manager and Mitel Contact Center Softphone and how they work. For more information, refer to the following topics.

- Overview
- Benefits
- Features

Overview

Contact Center PhoneSet Manager (included in Contact Center Enterprise Edition Advanced Starter Pack or greater and as an add-on to Business Edition) and Contact Center Softphone (available as an add-on to Enterprise Edition and Business Edition) provide ACD agent functions and enable agents to use their desktop computers as IP-based phones.

Contact Center PhoneSet Manager and Contact Center Softphone are designed for the 3300 ICP telephone system (used with the Mitel 5235, 5330, 5340, and Navigator).

Benefits

Some of the benefits of Contact Center PhoneSet Manager and Contact Center Softphone are

- Improved first contact resolution
- Increased efficiency and productivity
- Control of agent availability

Features

Contact Center PhoneSet Manager and Contact Center Softphone include the following features:

- Time-saving features
- 5020 IP Phone display features and menus
- Telephony functions
- Support for Personal Identification Number (PIN) functionality
- Call notes
- Single-point data administration
- Integrated agent control
- Integrated real-time presence
- Integrated call control and prioritization
- Pre-announcement messages

- Silent monitoring
- Report creation on calls tagged with account codes and call classification codes
- Support for hot desking agents
- Support for home-based and remote employees
- Resiliency

Time-saving features

Contact Center PhoneSet Manager and Contact Center Softphone boost ACD agent productivity while optimizing desktop real-estate use. They provide the following time-saving features and productivity enhancements:

- Agents perform all agent actions from within one application on their desktops rather than on their phone sets
- Automated actions allow agents to perform actions using fewer steps
- Customizable user interface, configurable ring tones, shortcut keys for telephony features, pre-programmed call forward destinations, and speed call numbers
- Pop-up windows, click to select telephony options, and pick lists (with contacts for transferring and conferencing calls, account codes, call classification codes, and Make Busy Reason codes)
- Contact Center PhoneSet Manager and Contact Center Softphone are embedded in the task bar for quick access. The Contact Center PhoneSet Manager and Contact Center Softphone menus are available in the System Tray
- Unified address book: Contact Center PhoneSet Manager and Contact Center Softphone users can access YourSite database phone extensions and Outlook Personal Contact or Global Address List phone numbers during call handling

5220 IP Phone display features and menus

Contact Center Softphone incorporates the Mitel 5220 IP Phone superkey and phone book functionality. The Contact Center Softphone user interface (UI) closely resembles the 5220 IP Phone. The UI displays Redial, Cancel, and Message buttons and provides hyperlinks that emulate the 5220 IP Phone soft buttons used to navigate the 5220 IP Phone menu system.

Telephony functions

Using Contact Center PhoneSet Manager or Contact Center Softphone, agents can readily answer calls or forward them to extensions or phone numbers. Agents can select people from contact and speed dial lists, and perform the following actions: Redial, Transfer, Conference, Mute, Forward, Request help, Hold, Retrieve, Split, Swap, Camp on, Leave a message, Retrieve a message, Call me back, Hang up, and Cancel.

Support for Personal Identification Number (PIN) protection

Similar to general hot desk user logins, ACD hot desk agent logins now offer the ability to password protect the agent login with a PIN. Contact Center PhoneSet Manager and Contact Center Softphone now prompt users participating in the use of PINs to enter their PIN upon login. Hot desk users who use Interactive Contact Center to login will also be prompted for their PIN. However, supervisors who use Interactive Contact Center to login agents will not be prompted for the agent's PIN as they will have a higher permission level, controlled by Class of Service, that does not require them to specify PINs when using interactive agent controls. Contact Center Client users who do not want to participate in the use of PINs will continue to operate as usual. Supervisors marked as Advanced or Premium supervisors are not prompted to enter a PIN when logging in to the system.

Call notes

When agents are speaking with customers, they can add notes to calls to share with other contact center employees involved in the call. This ensures agents and supervisors have context for calls and know what information has been provided to customers upon call transfer. When a call is being transferred to an agent or supervisor, the soft phone pop-up displays the most recent note associated with the call. When the agent answers the call, Contact Center Client appears on top of all other open applications and displays the Call Notes monitor. The monitor includes all of the call notes associated with the current call.

Agents can add notes each time a call is transferred and agents on conference calls can add notes simultaneously. Each set of notes includes the agent's name and a date/time stamp. When an agent completes a call and answers a new call or closes the Call Notes monitor, all call note information is saved and appended to the Lifecycle reports.

Single-point data administration

Managers benefit from single-point data administration. Contact Center PhoneSet Manager and Contact Center Softphone are automatically updated with any database changes, so agents always have the most recent information at hand. Contact Center PhoneSet Manager and Contact Center Softphone provide pick lists for the account codes, call classification codes, extensions, agents, and Make Busy Reason codes configured in Contact Center Management.

Integrated agent control

Using Contact Center PhoneSet Manager or Contact Center Softphone, agents can readily control their availability and inform other agents of their whereabouts with Make Busy Reason codes. Agents can log on and off, place themselves in and remove themselves from Do Not Disturb, and select Make Busy Reason codes.

Integrated real-time presence

Contact Center PhoneSet Manager and Contact Center Softphone integrate with Contact Center Client to provide real-time presence. Supervisors can readily identify which employees are idle and process calls efficiently from within Contact Center Client. They can open an agent, employee or extension monitor, or the Queue Now monitor and right-click an agent to transfer a call to the agent.

Integrated call control and prioritization

Contact Center PhoneSet Manager and Contact Center Softphone integrate with Interactive Visual Queue to provide integrated call control and prioritization. On an Interactive Visual Queue monitor, a user can identify callers waiting in queue and view their answer priority and wait time. They can select a queued call and answer it, or forward it to an extension, callback port, voice mail port, or other answer point.

Pre-announcement messages

Agents who have Contact Center PhoneSet Manager or Contact Center Softphone can record introductions that are played to callers, for example, "Hi. This is Paul Jones in Customer Support. Could you please tell me your customer site key?". The introduction that is played is based on the queue the call arrives on and the time of day it is received. The recorded message provides customers with a consistent greeting and gives the agent extra time to retrieve customer information. Pre-announcement messages can be stopped at any time.

Silent monitoring

Silent monitoring enables a supervisor to listen to calls answered by an ACD agent or agent group. The agent and caller do not hear the supervisor. However, the agent's telephone display may indicate that the call is being monitored. At any time during the silent monitor, the supervisor can conference into the monitored conversation and either take over the call or assist the agent if required. Silent monitoring enables supervisors to assess agent performance and provide real-time coaching or training.

Report creation on calls tagged with account codes and call classification codes

Supervisors can generate reports on calls tagged with account codes and call classification codes. They can assess the impact of advertising campaigns and see the distribution of inquiries across products and services.

Figure 23 illustrates an agent applying a Make Busy Reason code in Contact Center Softphone.

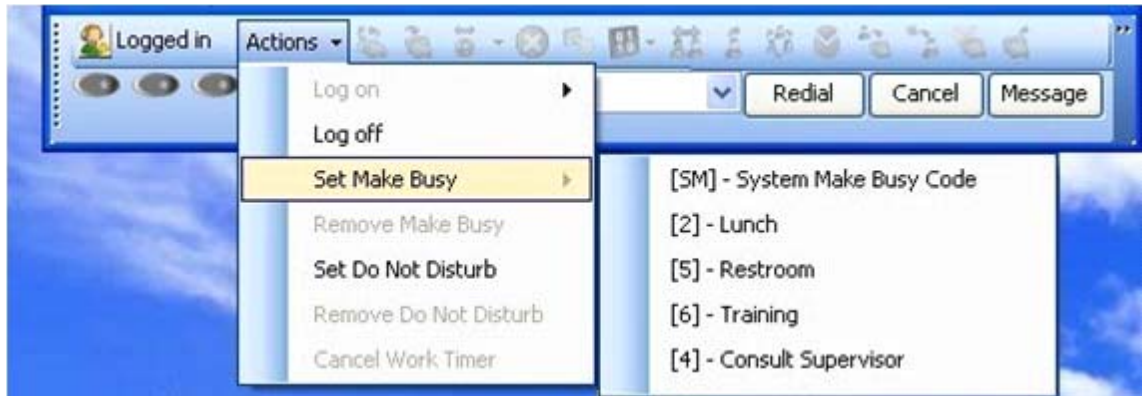


Figure 23 Make Busy Reason Code in Contact Center Softphone

Figure 24 illustrates an agent transferring a call. Agent availability can be viewed by right-clicking on the agent prior to transfer.

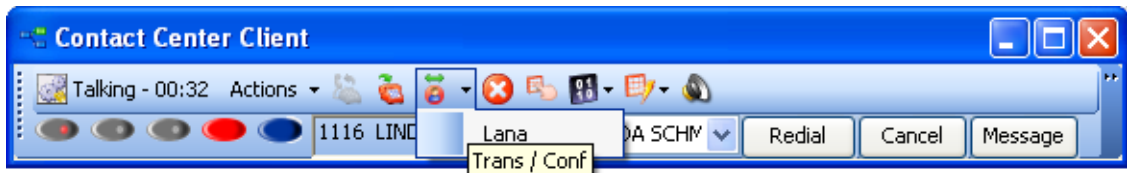


Figure 24 Agent transferring a call in Contact Center Softphone

Figure 25 illustrates how Contact Center Softphone integrates with Contact Center Client to provide real-time presence. An agent views the availability of other agents and right-clicks an idle agent to send an instant message to that agent.

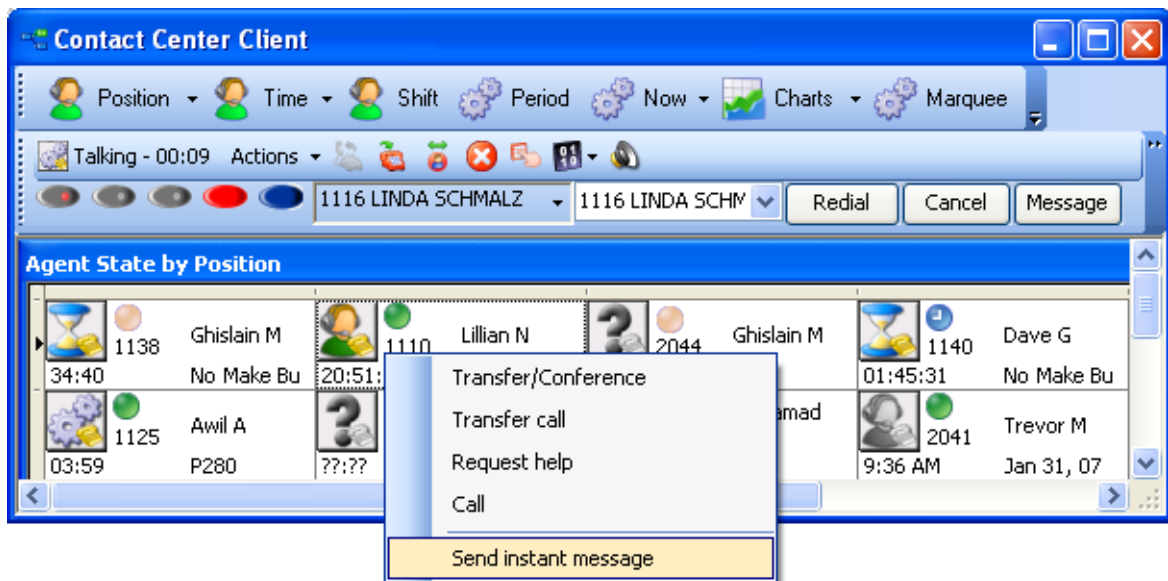


Figure 25 Integration of Contact Center Softphone with Contact Center Client

Support for hot desking agents

Contact Center PhoneSet Manager and Contact Center Softphone support hot desking agents. When an agent is configured as a Mitel hot desking agent, the agent can sit at any extension on the network and log on to the extension. After the agent is logged on, the agent takes control of the extension. The agent's Contact Center Client and soft phone real-time profile settings are available.

Support for external hot desking, home-based, and remote employees

When an agent is configured as an external hot desking agent, they are associated with any external dialable number, enabling the system to ring an agent working remotely. Using Mitel Border Gateway Connector, external hot desking agents can use the full suite of Contact Center applications. In order to fully integrate with the contact center, external hot desking agents requires a phone or USB headset (for soft phone), a computer, a router, and a high-speed Internet connection.

Home-based agents, remote agents, and supervisors can perform telephony functions without the use of a Virtual Private Network (VPN) using Mitel Border Gateway Connector and Contact Center Client. They can use IP desk phones, automate desk phones using Contact Center PhoneSet Manager, or use Contact Center Softphone, which provides complete desk phone functionality.

Resiliency

Contact Center PhoneSet Manager and Contact Center Softphone support resiliency which provides uninterrupted ACD telephony service during network and power outages. For more information regarding resiliency, see "Resiliency and ACD Resiliency" in this document.

Chapter 12

Workforce Scheduling

Introduction

This section provides an overview of Mitel Workforce Scheduling and how it works. For more information, refer to the following topics:

- Overview
- Features
- Benefits

Overview

Workforce Scheduling is an optional client/server application available for Contact Center Enterprise Edition that works in conjunction with Contact Center Management to schedule agents. This application enables you to automatically schedule agents to meet forecasted activity levels based on shift, daily, weekly, and monthly time periods. You can build schedules, based on the call load predicted by the Forecasting tool, and efficiently schedule agents by assigning tasks to them based on their skill sets.

Workforce Scheduling enables you to optimize employee resources, reduce the time required to schedule employees by up to 75%, and respond quickly and efficiently to planned and unplanned employee schedule changes. Workforce Scheduling helps to ensure you have the right agents at the right place at the right time.

Workforce Scheduling enables you to perform the following tasks:

- **Schedule agents**—You can schedule agents, their lunches, breaks, and unavailable time. You can manage complex work schedules, time off, jobs/tasks, breaks/lunches, and availability from one user interface based on your business rules. You can assign jobs to specific employees and track job costs. You can schedule employees part time or full time, and for split shifts and recurring shifts.
- **Set proficiency requirements**—You can automatically assign employees to shifts according to skill sets and proficiency levels. In addition, you can set proficiency requirements for different jobs. For example, you may require someone who speaks French fluently, holds an Emergency Medical Technician certification, has a Class III driver's license, or has completed your company's required training course. When you assign a job to a particular employee, Workforce Scheduling compares the skills required to do the job with the employee's skill set, and assigns the job to the employee only if the employee is suitably qualified.
- **View schedules**—You can instantly view and control budget impact and overtime hours resulting from schedule changes. The timebar view updates each employee's schedule information as you make changes. You can easily adjust your schedule by dragging the timebars or by typing information in the schedule details pane. You can view a time range from 12 hours to one month.

The Contact Center Management Forecasting application predicts the call load based on historical data, average talk times, wrap-up times, and service level objectives. Workforce Scheduling uses forecast data to schedule agents, which optimizes coverage and labor costs.

You can use the Contact Center Management Forecasting application to generate run-on-demand forecast agent work schedules. Forecasting uses the industry-standard Erlang C formula to access historical telephone system data and calculate the number of agents required to achieve a customer-defined service level. For example, you may want to calculate the number of agents required to answer 80% of calls in 30 seconds based on last month's call volume. The resulting forecast schedule is formatted and displayed as a standard report in Microsoft Excel.

Schedule Adherence

Schedule Adherence is a optional application included with the Workforce Scheduling license that enables supervisors to see what agents are doing in relation to what is scheduled and quickly identify areas of non-adherence. For more information, see "Schedule Adherence" on page 109 in this document.

Employee Portal

Employee Portal is a optional application included with the Workforce Scheduling license that enables employees to make scheduling requests and schedulers to view employee requests, perform what-if scenarios, quickly approve or deny requests, and automatically update the schedule using an online user interface. For more information, see "Employee Portal" on page 115 in this document.

Features

Workforce Scheduling includes the following features:

- Automatic schedules
- Skill-based schedules
- Customized agent schedules
- Easy-to-use interface
- Multi-client support
- Accrual-based time-off planning
- Reporting

Automatic schedules

To save time, you can automatically generate schedules with Schedule Builder.

Once Schedule Builder knows how many agents to schedule, it then considers the following business rules to define how the schedule is created:

- What are the business hours of operation?
- What is the shift type? For example, does the company use split shifts?
- Are there breaks? If so, when do they occur and how long are they?

- Are breaks covered? Is another employee replacing the employee who is taking a break?
- Are employees scheduled to perform the jobs that need to be completed?
- Do you use employee filtering, so that the employee who best suits the schedule is selected first?
- Are all employees included in the pool of available agents? Which employees are included or excluded?
- Do you want to override the minimum or maximum hours the employee can work?
- Do you want to override the times the employee is unavailable?
- Which is more important to the company:
 - That shifts fit the schedule?
 - That employee shift preferences are met?

When Schedule Builder is used in conjunction with the Forecasting application, you can avoid the costs and payroll expenses incurred by scheduling too many agents. You can load historical data and modify performance variables, such as average talk time and agent efficiency, to project scheduling needs. This ensures your contact center has the optimal number of agents scheduled to serve customers.

The Schedule Builder Wizard can be used to automate the scheduling process by guiding you through the steps required to generate intelligent schedules.

Skill-based schedules

When you select Employee Filtering, Schedule Builder ensures that the agent who best suits the schedule is selected first. You can filter the agents selected by Schedule Builder by agent group, by skill, and/or by employee. Skill-based schedules enable supervisors to ensure that service levels are met by having the right agents logged in at the right time.

Figure 26 illustrates a schedule with a description of employees and their shifts.

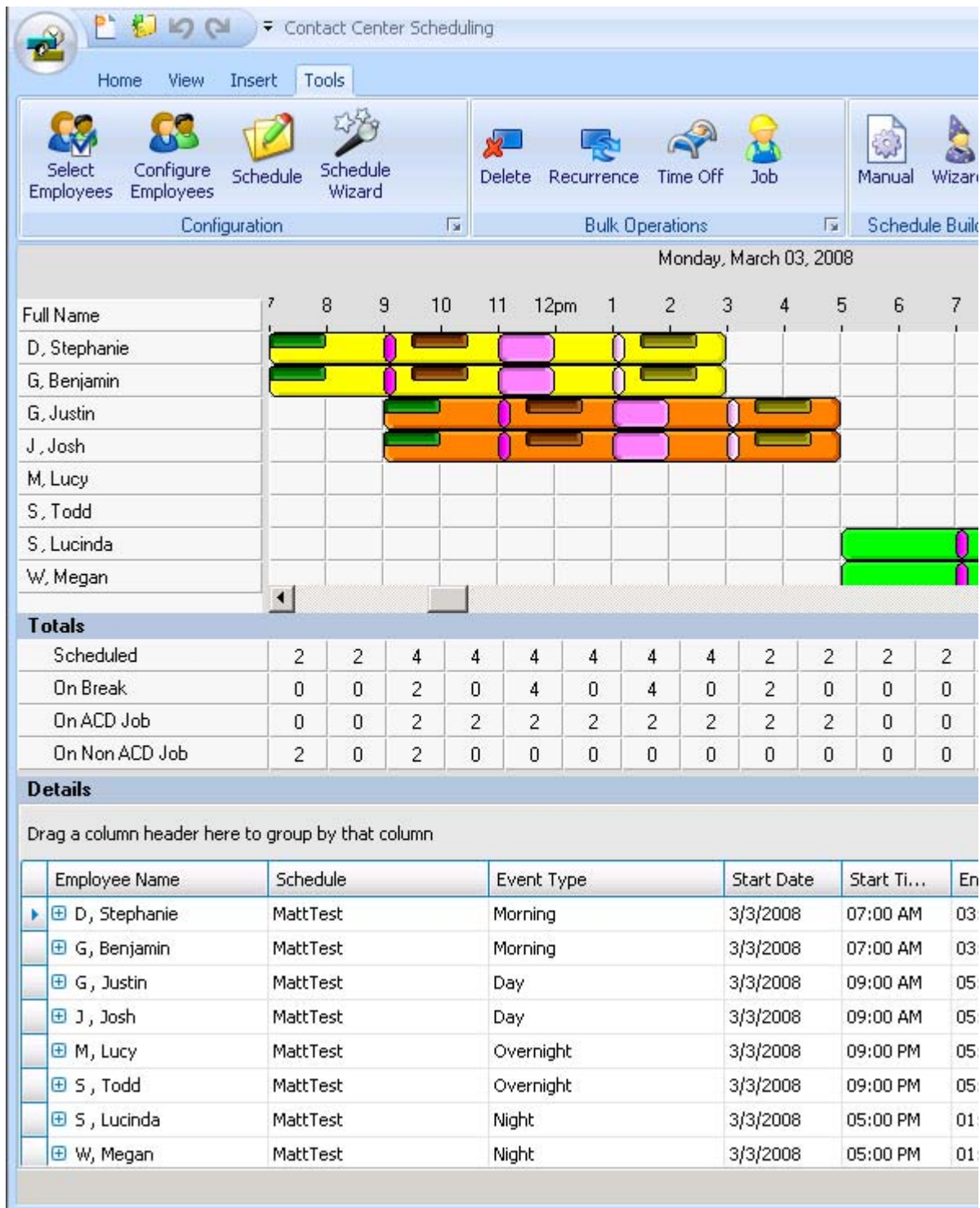


Figure 26 Workforce Scheduling: Employees and Shifts

Customized agent schedules

You can create customized schedules based on agent availability and shift preferences. Tailoring schedules to the individual needs of agents can increase employee morale and reduce turnover by ensuring flexible, consistent schedules.

Easy-to-use interface

Workforce Scheduling's streamlined configuration reduces the amount of time schedulers spend creating and updating schedules. It provides tools for quickly building, updating, and mass replicating schedules. You can readily convert an agent's scheduled shift to unavailable time, locate staff replacements, and optimize the placement of breaks and offline work in relation to the forecasted demand or budget constraints. You can also assign offline work to agents based on their level of expertise.

Multi-client support

Workforce Scheduling supports multiple users and roles, such as scheduler, supervisor, and employee. This enables a user to work on multiple schedules or multiple users to work on schedules simultaneously.

Accrual-based time-off planning

Accrual-based time-off planning automatically tracks agent hours and accrued time-off. It ensures agent time-off is scheduled for minimal impact on contact center staffing levels, operations, and service level objectives.

Reporting

Workforce Scheduling integrates with Contact Center Management's reporting capabilities to provide a variety of reports. Using Contact Center Management's familiar user interface, you can manage, schedule, and automatically email Workforce Scheduling reports to employees.

Benefits

Workforce management enables you to

- Save time with automatic scheduling
- Anticipate call volume with forecasts to eliminate over and understaffing.
- Forecast staffing requirements to meet service level objectives.
- Customize shift patterns and balance offline work to accommodate a fluctuating workload.
- Consider employee skill sets and individual preferences to produce optimal schedules.
- Use data from reports to assist with performance reviews and training.

Chapter 13
Schedule Adherence

Introduction

This section provides an overview of Mitel Schedule Adherence and how it works. For more information, refer to the following topics:

- Overview
- Features
- Benefits

Overview

Schedule Adherence is an optional application included with the Workforce Scheduling license that works in conjunction with Contact Center Management and Workforce Scheduling. Schedule Adherence resides in the Contact Center Client real-time monitors and enables you to view the real-time state of contact center agents scheduled in Workforce Scheduling. Schedule Adherence compares the current activities of agents to the configured schedule and provides alerts in real-time when agents are out of adherence. Agents are considered out of adherence if they are early or late for their scheduled events or if they are not performing scheduled activities.

Supervisors need to know what their agents are doing in relation to what has been scheduled. They need to know how many agents are available to receive incoming contacts, how many agents are on break, and if the agents on break have activated Make Busy or Do Not Disturb. With Schedule Adherence, supervisors can quickly identify instances of non-adherence and take corrective actions.

Workforce Scheduling creates daily schedules for your contact center by assigning shifts, breaks, lunches, and jobs to each employee in your business. Schedule Adherence builds adherence parameters from scheduled events including the start and end of shifts, breaks, lunches, and jobs and associates them to ACD contact center events. For example, Schedule Adherence can associate an agent's start of shift event to a login event on the phone set.

Features

Schedule Adherence includes the following features:

- Real-time agent information displayed in a familiar user interface
- Adherence Detail Grid monitor
- Adherence Timebars monitor
- Adherence reports
- Customizable adherence alarms

Real-time agent information displayed in a familiar user interface

For ease of use, Schedule Adherence resides in the familiar Contact Center client user interface. Schedule Adherence includes two Contact Center Client monitors that enable supervisors to monitor agent adherence in real time.

Adherence Detail Grid monitor

The Adherence Detail Grid monitor provides a drill-down view of agent scheduled activities, expected states, and event totals. It enables you to easily compare expected agent states and actual agent states in real time. (See Figure 27).

The Adherence Detail Grid monitor displays:

- State (in or out of adherence)
- Expected state and actual state
- Scheduled start and actual start
- Scheduled end
- Current and total out of adherence time
- Shift time
- Out of adherence percent

Adherence Details						
Employee	Is In Adherence	Scheduled	Expected States	Actual State	Scheduled Start	
▶ Scott G	<input checked="" type="checkbox"/>	Unscheduled		Idle		
Shift			Expected States	Scheduled Start	Actual Start	Scheduled End
Day		Outbound Hold,...		9:20 AM		5:20 PM
Embedded			Expected States	Scheduled Start	Actual Start	Scheduled End
One		Make Busy, Make...		10:00 AM		10:15 AM
Start		End	Expected States	Actual State	Time Out Of...	
Lunch				12:10 PM		12:40 PM
Start		End	Expected States	Actual State	Time Out Of...	
Two				4:05 PM		4:20 PM
Start		End	Expected States	Actual State	Time Out Of...	
Start		End	Expected States	Actual State	Time Out Of Adherence	
▶ Peter S	<input checked="" type="checkbox"/>	Unscheduled		Idle		

Figure 27 Adherence Detail Grid monitor

Adherence Timebars monitor

The Adherence Timebars monitor provides a schedule time bar, based on the agent time bar and event colors configured in Workforce Scheduling, for each agent's scheduled activities. (See Figure 28.)

The Adherence Timebars monitor displays adherence to schedule, out-of-adherence alarms, and the current time. The current time is identified by a green line on the employee timebar and past events are shaded purple.

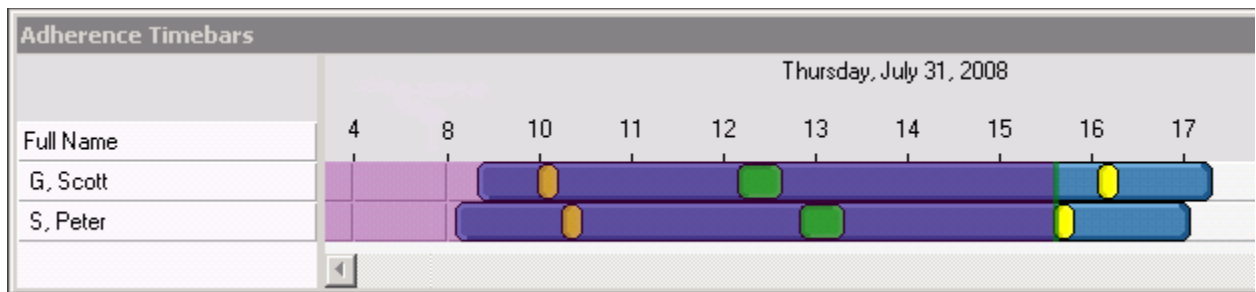


Figure 28 Adherence Timebars monitor

Adherence reports

Adherence reports are produced in Microsoft Excel format. Supervisors can use the data in these reports to coach and provide feedback to agents and to determine agent efficiency levels. The following reports are available:

- Employee and Employee Group Adherence Trace
- Employee Group Time Out of Adherence by Employee by Day of Week
- Employee Group Time Out of Adherence by Day of Month
- Employee Group Adherence by Period

Customizable adherence alarms

Out-of-adherence alarms alert supervisors to take immediate action to ensure service levels are not affected. You can set alarms on either the Adherence Timebar monitor or on the Employee State by Position/Time monitors.

You can define colors to represent tolerance thresholds (in minutes) for adherence parameters. Timebar events change color to alert you to instances of non-adherence.

Benefits

The following are some of the benefits of Schedule Adherence:

- Schedule Adherence helps ensure agents are in the right queues performing the right tasks.
- Schedule Adherence enables supervisors to quickly answer the following questions:
 - Which agents are not adhering to schedules?
 - Which agents are not working efficiently?
 - What is the real-time voice status of agents?
 - Which agent has been out of adherence the longest?
- Schedule Adherence helps supervisors evaluate service levels and resource allocation:
 - Determine if the Service Level is decreasing due to out of adherence agents.
 - Take corrective action with agents who are out of adherence.
 - Review events that precede instances where agents are out of adherence.
 - Score agents and provide them with feedback.

Chapter 14
Employee Portal

Introduction

This section provides an overview of Mitel Employee Portal and how it works. For more information, refer to the following topics:

- Overview
- Features
- Benefits

Overview

Employee Portal is an optional application included with the Workforce Scheduling license. Employee Portal is an online scheduling tool that employees can use to make scheduling requests, such as trading or taking other's shifts and requesting schedule changes and time off. Supervisors can use Employee Portal to view employee scheduling requests and perform what-if scenarios to understand the impact of approving or denying these requests. Once a supervisor has approved or denied a request, the schedule is automatically updated. Employee access to specific areas of Employee Portal is controlled by YourSite Security options.

Features

With Employee Portal, employees can

- View and trade shifts
- Communicate schedule preferences
- Request changes to schedules for time off, shifts, and availability

With Employee Portal, supervisors can

- View employee requests
- Perform what-if scenarios
- Quickly approve or deny requests
- Automatically update schedules

Figure 29 shows the Employee Portal Web-based user interface where employees can

- View schedules and offer shifts for take or trade on the Bulletin board
- View any pending scheduling requests
- Request time off
- Request availability changes
- View important messages from supervisors and other employees on the Home page

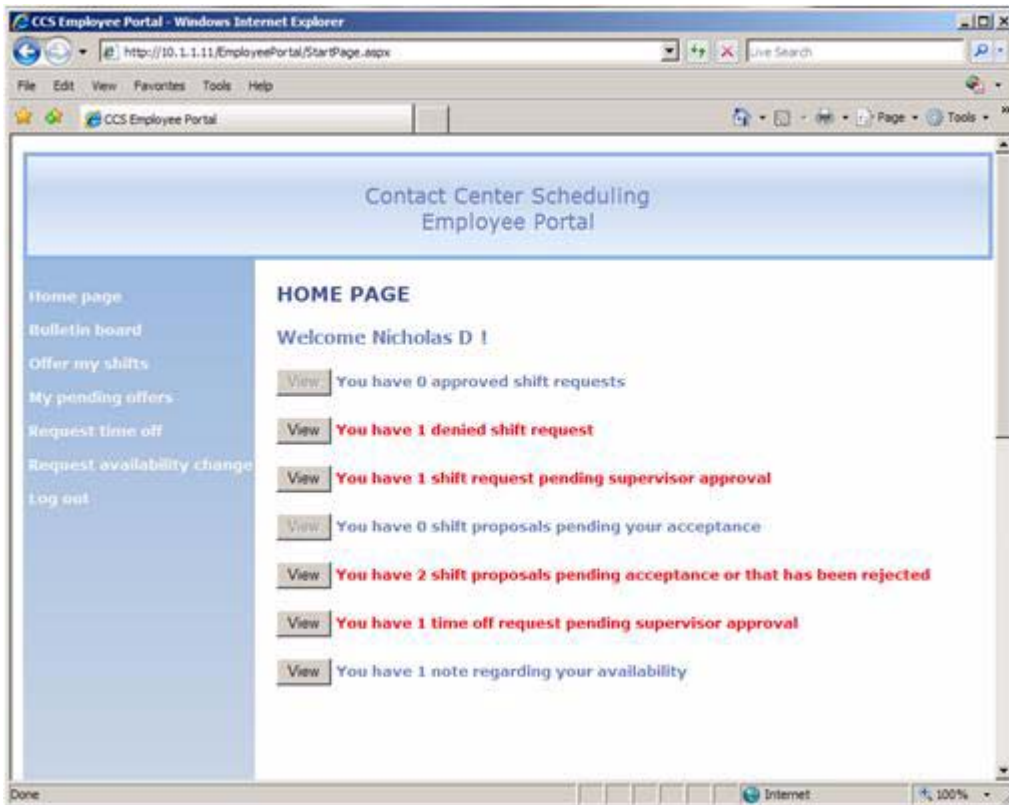


Figure 29 Employee Portal

Benefits

Employee Portal increases employee morale and reduces turnover by offering flexible, consistent schedules that take employee preferences into account.

Efficiency is increased because employees can readily communicate scheduling requests to supervisors and supervisors can use what-if scenarios to help them decide whether to accept or deny schedule requests. Employee Portal expedites the time it takes to process employee requests and update schedules, saving time while producing accurate yet employee-friendly schedules.

Chapter 15
Contact Center Screen Pop

Introduction

This section provides an overview of Mitel Contact Center Screen Pop and how it works. For more information, refer to the following topics:

- Overview
- Benefits
- Features

Overview

Contact Center Screen Pop, included with Contact Center Enterprise Edition Advanced Starter Pack or greater or as an add-on to Business Edition, integrates with Contact Center Management to launch applications or Web pages when agents answer calls. By default, Contact Center Screen Pop either launches Microsoft Outlook contact information or a caller-specific Inbound Trace report Web page. Alternatively, Contact Center Screen Pop can launch a Web page or application you create.

Contact Center Screen Pop enables agents to automatically receive caller information via pop-ups on their computer monitors when they receive calls. Contact centers can generate personalized pop-ups for each caller using a customer database. The pop-ups can display the caller name, DNIS (the telephone number the caller dials), ANI (the telephone number of the caller), the queue from which the call originated, and caller entered digits (digits the caller enters for identification purposes), such as a customer site key.

Benefits

Contact Center Screen Pop enables you to

- Enhance agent efficiency by providing agents with caller information before they answer calls
- Quickly identify callers and answer or transfer calls accordingly
- Customize Contact Center Screen Pop to display customer information most important to your business
- Provide agents with customer call history and journal entries so they can provide enhanced customer service

Features

Contact Center Screen Pop includes the following features:

- Access to detailed caller information
- Customizable display options
- Seamless Customer Relationship Management (CRM) integration

- Enhanced agent support

Access to detailed caller information

When an ACD call arrives, Contact Center PhoneSet Manager or Contact Center Softphone provides the agent with a pop-up window that contains the caller's name and the queue name or number (for ACD calls). With Contact Center Screen Pop, you can display additional information such as the DNIS, ANI, and caller entered digits. With caller information readily available, agents can identify callers and know whether to answer or redirect calls.

Customizable display options

With the help of Professional Services, you can use your company's existing customer database to customize the data that appears in the pop-up. With detailed customer information at hand, agents can reduce the amount of time required to serve callers and increase the efficiency of your business.

Seamless Customer Relationship Management (CRM) integration

With the purchase of the CRM connector, Contact Center Screen Pop can launch a CRM application or Web page. Agents view both the pop-up and the CRM database or Web page simultaneously and gain access to relevant caller and account information before they answer the call.

Enhanced agent support

The Contact Center Screen Pop Inbound Trace report Web page enables agents to create, view, and edit journal entries and make educated decisions when answering or redirecting calls. This minimizes instances of customers repeating the same information over and over again.

Chapter 16

CTI Developer Toolkit

Introduction

This section provides an overview of Mitel Computer Telephony Integration (CTI) Developer Toolkit and how it works. For more information, refer to the following topics:

- Overview
- Features
- Configuration

Overview

CTI Developer Toolkit is a software development tool, available for Contact Center Enterprise and Business Edition, that enables in-house developers to

- Automate processes and information sharing within their business
- Use up-front caller data from third-party IVR applications
- Build powerful client-side design interfaces to automate agent computers and telephones
- Integrate Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) systems or any OBCD compliant database with Contact Center Management



Note: If you have previous integrations with Agent Portal developed by Mitel Professional Services, there is a favorable commercial upgrade price to migrate to CTI Developer Toolkit.

Features

CTI Developer Toolkit offers server and client-side programmable, Visual C#, .NET dynamic link libraries (DLLs) that can be used in any .NET (release 2.0+) application or website.

DLLs provide

- Notification of call received events
- Storage and access to call detail information
- Call control

CTI Developer Toolkit is shipped with a test application that enables in-house developers to verify their programming before making any custom work live on their system. The test application includes source code, to help developers understand how code can be written for their own custom applications.

CTI Developer Toolkit also includes a Windows CHM help file that documents the methods and properties that are programmatically exposed by the Application Programming Interface (API).

CTI Developer Toolkit - Server DLL

CTI Developer Toolkit - Server DLL

- Enables you to gather and send call detail information to the client DLL.
- Gathers caller information from the PSTN, IVR Routing, third-party IVRs, database lookup, etc.
- Enables caller data to be stored in the Contact Center Management database with a unique ID and to be included in call records
- Stores user-defined caller information which can be accessed and displayed on agent desktops

CTI Developer Toolkit - Client DLL

CTI Developer Toolkit - Client DLL receives call records from the contact center, such as ANI/DNIS (from the PSTN), Collect Caller Entered Digits (from IVR Routing), and other caller data from third-party IVRs.

CTI Developer Toolkit - Client DLL can be used to

- Screen pop an application based on the call information received
- Enter call notes and enable telephone control for functions such as log in, log out, answer, hang up, make call, hold, set/remove Make Busy, and set/remove Do Not Disturb
- Store call received event data in an alternate database

Configuration

The following configurations incorporate the CTI Developer Toolkit to provide screen pops on agent desktops.

In Figure 30, the contact center is using a CRM database and will integrate with their own third-party screen pop application. Screen pops are based on ANI/DNIS collected from the service provider (PSTN). This configuration requires Contact Center Management and CTI Developer Toolkit - Client DLL license.

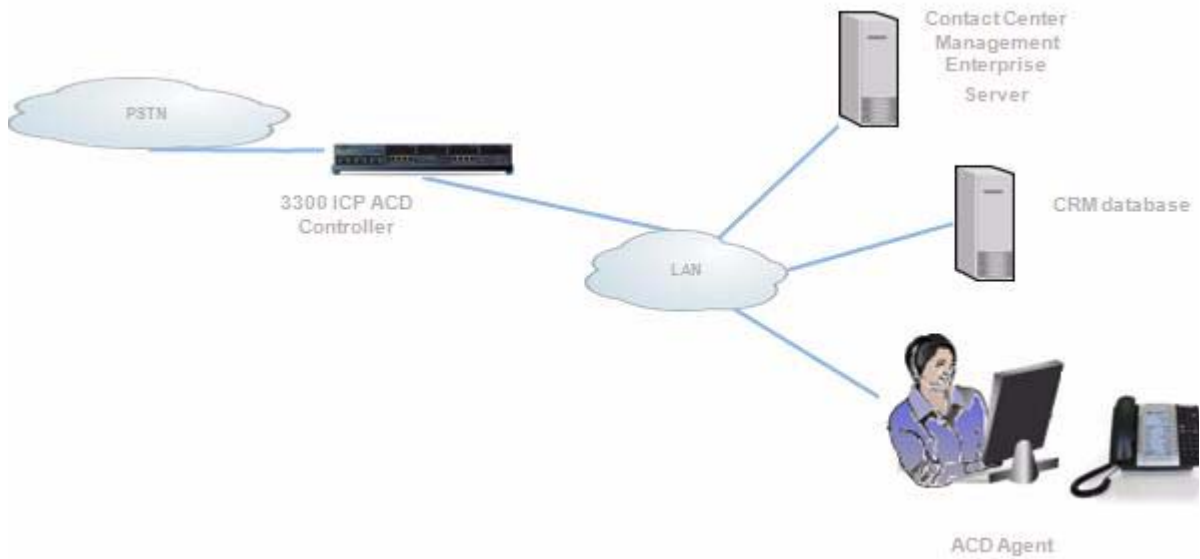


Figure 30 Third-party Screen Pop Based on ANI/DNIS

In Figure 31, the contact center is using a CRM database and will integrate their third-party client screen pop application with CTI Developer Toolkit - Client DLL. Screen pops are based on IVR Routing Collect Caller Entered Digits. This configuration requires Contact Center Management, IVR Routing with Collect Caller Entered Digits, and CTI Developer Toolkit - Client DLL license.

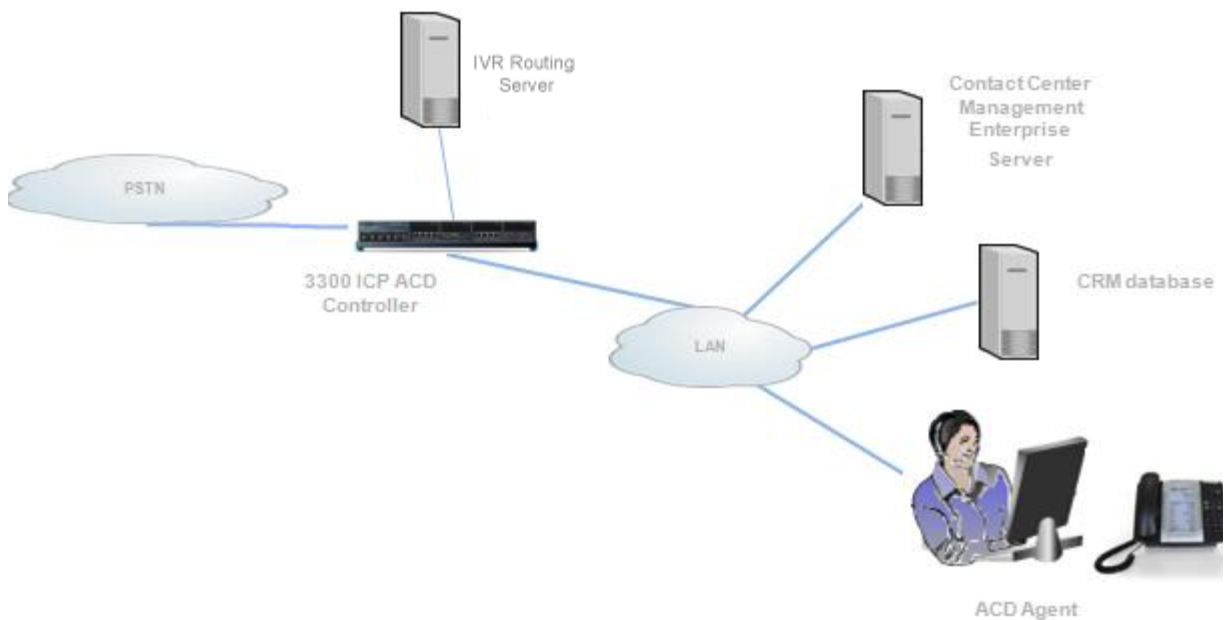


Figure 31 Third-party Screen Pop Based on IVR Routing Collect Caller Entered Digits

In Figure 32, the contact center is using a CRM database and will integrate their third-party client screen pop application and third-party IVR with the CTI Developer Toolkit - Client and Server DLL. Screen pops are based on collected digits from a third-party IVR. This configuration requires Contact Center Management, CTI Developer Toolkit - Client DLL license, and CTI Developer Toolkit - Server DLL license.

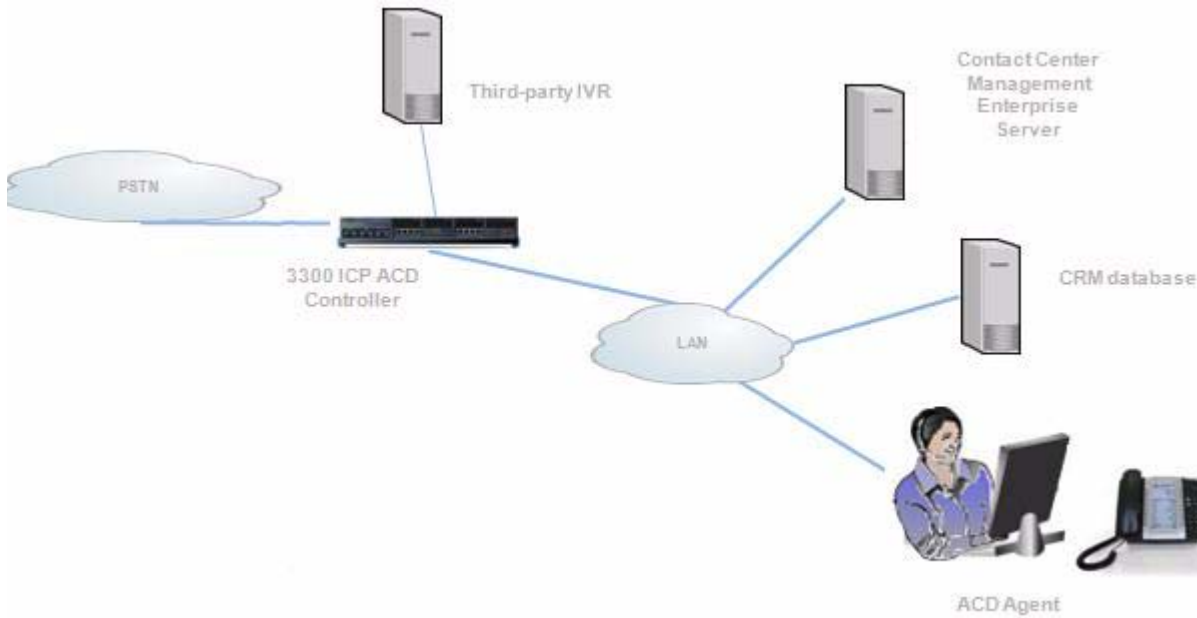


Figure 32 Third-party Screen Pop Based on Third-party IVR Collected Digits

In Figure 33, the contact center is using a CRM database and will integrate their third-party IVR collected digits with Contact Center PhoneSet Manager, Contact Center Screen Pop, and the CTI Developer Toolkit - Server DLL. Screen pops are based on collected digits from a third-party IVR. This configuration requires Contact Center Management, Contact Center PhoneSet Manager, Contact Center Screen Pop, and CTI Developer Toolkit - Server DLL license.

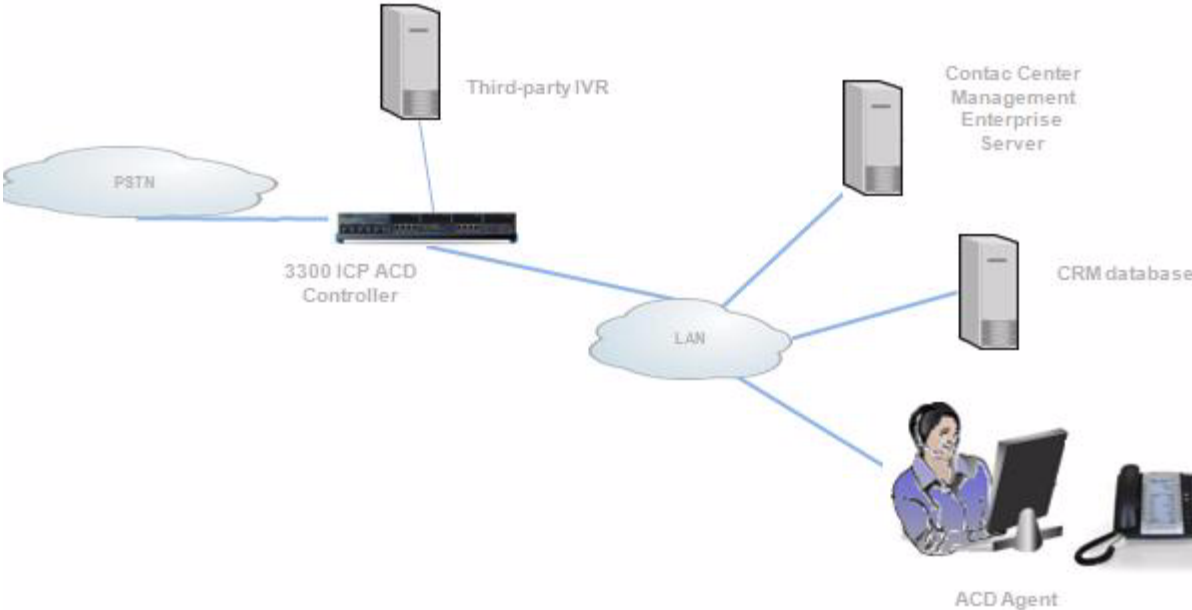


Figure 33 Contact Center Screen Pop Based on Third-party IVR Collected Digits

Chapter 17

IVR Routing

Introduction

This section provides an overview of Mitel IVR Routing and how it works. For more information, refer to the following topics:

- Overview
- Benefits
- Features
- Configuration

Overview

IVR Routing is an all-in-one, scalable, integrated voice processing solution that works in conjunction with Contact Center Management, replacing the previous IVR solution Intelligent Queue. IVR Routing can also be integrated with Contact Center Solutions applications such as soft phone and Contact Center Screen Pop. IVR Routing enables you to rapidly and intuitively

- Build call flows in a drag-and-drop graphical interface using Visual Workflow Manager
- Create and relay static and custom recorded announcements to callers in queue
- Provide callers with expected wait time or position in queue messaging
- Guide callers to the information, extension, or ACD queue that best meets their needs
- Allow customers to request a queue callback by leaving a voice message or using the Web
- Route calls based on the number they are calling from (ANI/CLI), time or day, or current queue conditions
- Report on IVR activity

IVR Routing's intelligent messaging enables you to create and automatically serve recorded announcements that provide callers with the following information:

- Estimated time that they will wait in the queue
- Number of callers in the queue
- Time-of-day messaging
- Day-of-week messaging
- Exception-based messaging (based on what is happening in the queue)

Call flows

Call flows are the pathways callers use to reach all areas and individuals in your organization and dictate the prompts callers hear, the inputs requested by the system, and the available routing options. Call flow functionality can identify customers and determine their service needs by phone number, toll-free numbers dialed, and the digits callers enter to reach specific areas of your organization. Proper call flow configuration is necessary to direct callers to the agents, departments, and employees best qualified to handle their requests.

Call flow types

Call flows are categorized into three types

- Recorded Announcement Device (RAD)-plays RAD messages to all callers in their associated queues
- Voice-directs incoming calls to the agents, departments, and employees best qualified to handle their requests
- Management-enables managers to make changes to the incoming caller options in the event of an emergency or unforeseen circumstances

RAD messages

RAD messages are associated to queues and broadcast to up to 50 callers in the queue. After a call is received and has traveled through a call flow to a queue, RAD messages can be configured to play at programmed intervals for all callers in that queue. Up to four RAD messages can be associated to each queue. A typical RAD message may thank the caller for holding and inform them of their position in queue and expected wait time.

Call flow examples

Example 1 - Advanced ANI routing

The advanced ANI routing example shows a basic call flow that routes calls based on the phone number dialed by the customer when trying to contact your company. Incoming calls are answered and, based on configured telephone routing rules, routed to the sales department in the incoming call's country of origin.

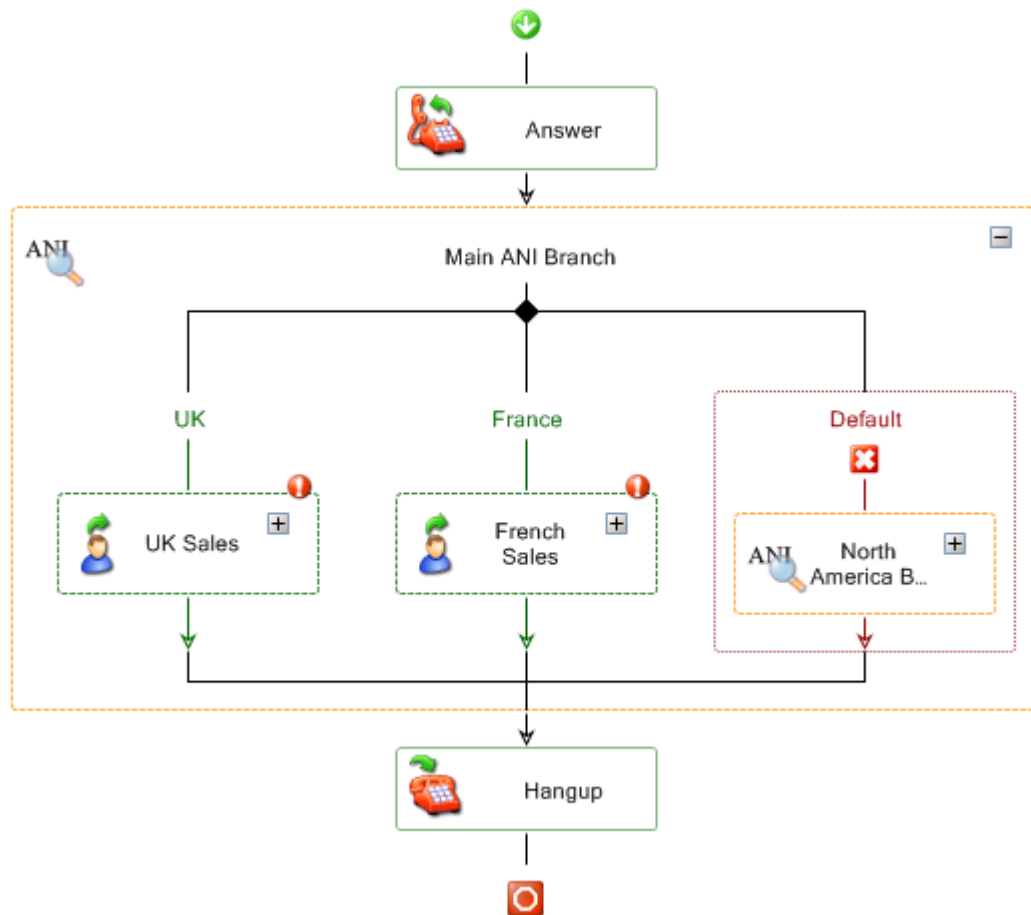


Figure 34 Advanced ANI routing call flow example

Example 2 - Advanced DNIS routing

The advanced DNIS routing example shows a call flow that routes calls to separate product lines based on the toll-free line dialed by the customer. Incoming calls are answered and, based on the toll-free number dialed, routed to the queue responsible for handling call requests for that product line.

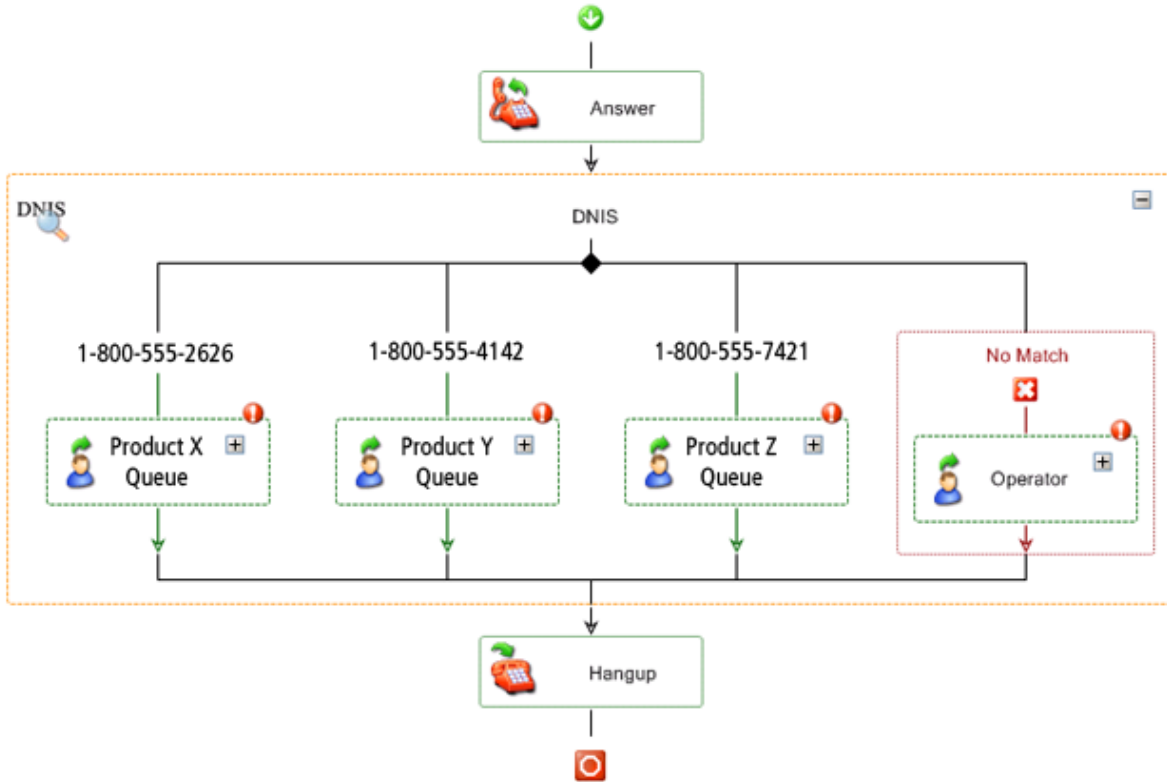


Figure 35 Advanced DNIS routing call flow example

Example 3 - Schedules and Menus

The schedules and menus routing example shows a call flow that first routes calls through a schedule to determine the action to perform based on the date and time of the call. If within business hours, the call flow provides a user menu to the caller.

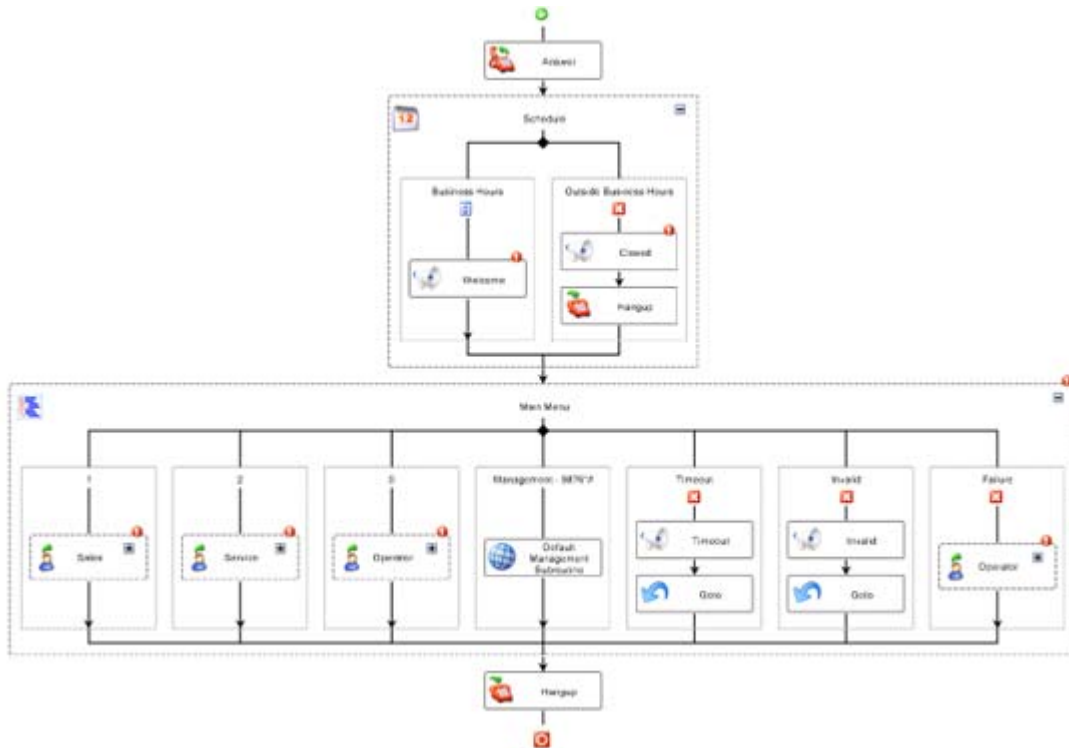


Figure 36 Schedules and menu call flow example

Example 4 - Premium Collected Digits

The premium collected digits call flow example shows a call flow that routes calls based on the extension number inputted by the caller. The call is answered and the caller is prompted to enter the extension number of the party they want to reach. A call routing decision is then made based on the collected digits.

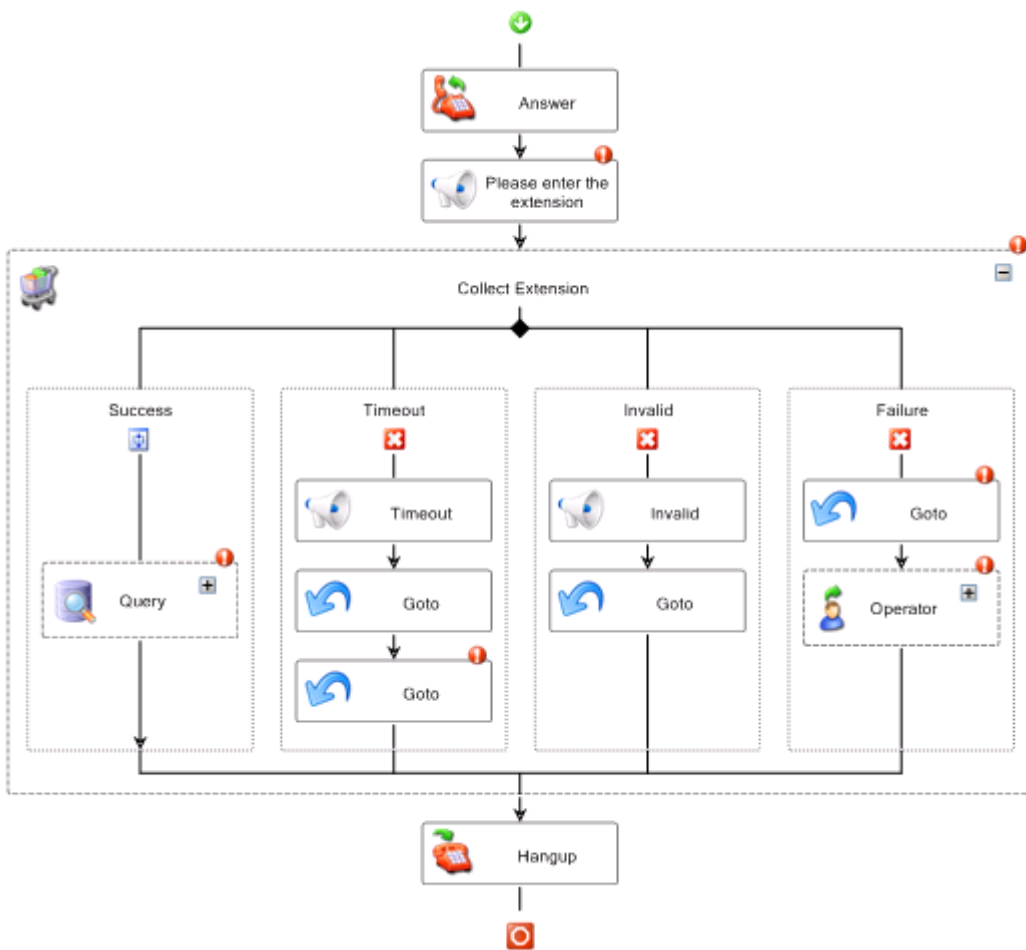


Figure 37 Premium collected digits call flow example

Benefits

IVR Routing provides the following benefits:

- Easily manages complicated call flows
- Keeps callers informed
- Manages caller expectations for a more positive experience
- Matches callers with the most appropriate agent based on a range of factors
- Provides callers with flexible contact alternatives to waiting in queue
- Helps you meet service level commitments
- Understands call flow from the customer's perspective
- Enables you to easily monitor IVR activity

Core Features

IVR Routing includes the following core features:

- Visual diagramming
- Hunt group configuration
- Prompt and playlist editor
- Network Enhancements
- Single point of administration
- Scalability and Resiliency
- RAD Messages
- Callbacks
- Music on hold
- Time in Queue
- Updated Position in Queue
- Port Status Monitor
- Port Sizing Tool
- IVR Management

Visual diagramming

Visual diagramming enables you to build call flows in a diagramming interface. You drag all activities to a pallet to build call flows, including transfers, database read/write, interactive menus, verified collected digits, and routing conditions.

Hunt group configuration

Hunt groups are available and are configured in YourSite Explorer. Hunt groups are a series of ports that act as routing points. When a call is received, the telephone system searches the ports assigned to hunt groups for the first available port and switches the call onto that port. Calls are routed to the first available port in the hunt group, at which point the caller will be connected.

Prompt and playlist editor

Prompts (playlist editor) are configured in YourSite Explorer. You are able to view the list of system, queue, voice readback, and custom prompts and assemble them to create playlist. Additionally, you can import, preview, and record prompts.

Network Monitor enhancements

Network Monitor enables you to set alarms on critical IVR and call flow functionality, such as SQL Server Down, Bad Audio File, and Invalid Agent Destination for Callback.

Single point of administration

IVR Routing's Visual Workflow Manager application uses a single point of administration in YourSite Explorer for easy administration of your IVR solution.

Scalability and Resiliency

IVR Routing provides scalability by distributing call loads across multiple instances of IVR Routing from a single interface. This enables the number of IVR Routing instances to scale up as the business grows, supporting geographically distributed instances of IVR Routing. This also reduces the number of ports required for common IVR tasks.

IVR Routing also provides resiliency, with multiple live systems and redundant ports that compensate when one system goes down. In a multi-Virtual Workflow Manager server configuration, self-sufficient remote instances continue to function even if they lose access to the primary database or site.

RAD Messages

RAD messages, such as a messaging thanking the caller for holding and informing them of their position in queue and expected wait time, are associated to queues and broadcast to up to 50 callers in the queue. After a call is received and has traveled through a call flow to a queue, RAD messages can be configured to play at programmed intervals for all callers in that queue. Up to four RAD messages can be associated to each queue.

Callbacks

A callback identifies a caller from the information provided in the caller's message, left by phone or email, and makes a return telephone call. Voice callbacks provide callers in queue with the option of entering their phone number on a voice message requesting a queued callback. Web callbacks enable customers to submit requests for contact using a form on the Web. Callbacks provide customers with a flexible alternatives to waiting in queue or initiating contact with an agent, reducing frustration. Callbacks also reduce trunk costs.

Music on hold

Visual Workflow Manager enables you to configure, manage, and assign Music on Hold playlists to queues to be played to callers during a call flow. Playlists can contain music or prerecorded information messages, and maybe associated with more than one queue, enabling managers to play specific types of Music on Hold to the various customer types that call their business.

Time in Queue

You can configure Time in Queue messages to be played to callers while they are in queue. Time in Queue messages are based on real-time ACD statistics and inform callers of the expected wait time before the call is answered, helping to reduce caller frustration with wait times in queue.

Updated Position in Queue

You can configure Updated Position in Queue messages to be played to calls while in queue. These messages inform customers of their initial queue position and keep them informed of their position as it changes at preset intervals.

Port Status Monitor

The Port Status Monitor enables managers and supervisors to monitor all of their contact center functions from one central location in Contact Center Client, using Contact Center Client's functionality, such as alarming, device control (port reset, set in/out of emergency mode), and sorting and filtering data. Users can view all ports, their states, and usage statistics, as well as reset port states for problematic ports directly from the Contact Center Client monitor.

Port Sizing Tool

The Port Sizing Tool is a web-based wizard that guides you through the process of determining how many ports you require for your contact center. The Port Sizing Tool takes messaging, RAD, Updated Position in Queue, and callback requirements into consideration to accurately forecast a contact center's port requirements.

IVR Management

Visual Workflow Manager enables you to configure management plans for your interactive trees that enable supervisors to call in and interact with the IVR over the phone. After you configure a management, administrators can call in and put messaging ports into Emergency Mode or back into Normal Mode, and can optionally record and manage messages over the phone from remote locations.

Configuration

IVR Routing and Visual Workflow Manager are configured in YourSite Explorer. The primary devices used with IVR Routing are media servers, extensions (ports), hunt groups, queues, and call flows.

Extension configuration in YourSite has been expanded so extensions can be configured as IVR Routing ports. From the Extension type field, extensions can now be classified as the following port types: App Server, Attendant Console, Auto-attendant, Callback Port 5020 IP, IQ Smart Choice Port, Messaging Port 5020 IP, RAD Port 5020 IP, UPiQ 5020 IP, Voice, Voice Mail, and Voice Softphone. Each extension / port has a specific extension number. A caller to your contact center is presented with options to dial various answering points. The caller can dial an individual agent at an extension through a queue number.

Chapter 18
Multimedia Contact Center

Introduction

This section provides an overview of Mitel Multimedia Contact Center and how it works. For more information, refer to the following topics:

- Overview
- Features
- Configuration
- Software Interfaces

Overview

Multimedia Contact Center, available with Contact Center Enterprise or Business Edition, works in conjunction with Contact Center Management, Microsoft Exchange, and Outlook to distribute contacts (voice, emails, SMS, Web chats, and faxes) and track agent handling across media types. Multimedia Contact Center integrates all media types in Contact Center Management for multimedia reporting and real-time monitoring.

Multimedia Contact Center sends auto-acknowledgement messages to customers who send emails, SMS messages, and Web chats, based on the time of day. Incoming contacts are automatically routed to the next available agent. Agents log on to Multimedia Contact Center using Outlook, and receive one or more contacts. Agents can readily change their availability, and can forward contacts to the next available agent when required.

Multimedia Contact Center leverages Microsoft Exchange Server and SQL Server (except for Express Edition) with Microsoft Outlook on the agent desktop, and relies on the Contact Center Management reports engine for multimedia contact center reporting.

With Multimedia Contact Center, you can:

- Efficiently deliver service to customers in the media of their choice
- Maintain service levels across all contacts, ensuring all customer inquiries are addressed in a timely manner
- Capture more detailed customer information than is possible during voice communications
- Assist customers in completing online transactions, information queries, or other browser-based experiences with chat
- Protect against liability and customer claims with accurate tracking and reporting on all contact types
- With third-party social media monitoring applications, you can protect and promote your brand across social media

Features

Multimedia Contact Center includes the following features:

- Advanced routing
- Agent productivity tools
- Supervisor management
- Multimedia Contact Center Social Media Integration

Advanced routing

- **Multimedia paths**—Create unlimited email, SMS, chat, and fax paths, such as Support@yourcompany.com, to distribute contacts to the longest idle agent in the group.
- **Flexible routing**—Provide overflow, interflow, and re-queue email, SMS, chat, and fax sessions, similar to the ACD. This feature optimizes the use of path and agent resources to ensure that service levels are met.
- **Agent groups**—Route multimedia contacts to one primary agent group and up to three overflow groups. This feature optimizes the use of pooled resources, resulting in more cost-effective workflow.
- **Auto-acknowledgement messages**—Create unique auto-acknowledgement messages for each email, SMS, and chat path, based on business hours. During business hours, the message notifies customers that the agent has received the inquiry and is handling the request. Outside of business hours, customers will hear a message that the business is closed. Auto-acknowledgement messages help to eliminate multiple inquiries.
- **Agent “No Answer” handling**—Set a timer for each media type which specifies the maximum duration contacts can wait before agents answer them. Unanswered contacts are re-queued at a higher priority. When the original agent does not respond to the contact, the system puts the agent in “Make Busy with Reason” for the current media type only, and flags the agent with a re-queued event. The longest-waiting contacts always have the highest priority.
- **“Original agent not available” re-queue time**—When a customer emails, sends a SMS message, chats, or faxes your company a second time, the system attempts to route the correspondence back to the original agent. If the agent is not available within a set time frame, the system offers the contact to a different agent in that agent group. Routing the customer back to the original agent reduces customer wait time and frustration because the original agent does not have to view the correspondence history prior to responding.
- **Customer tracking**—Assign unique ticket numbers to each incoming email, SMS, chat, and fax session, linking the customer’s entire history together. Supervisors and agents can view detailed correspondence history based on individual case numbers, and customers can reference specific contacts.

Agent productivity tools

- **Agent availability across media types**—Enables agents to have a unified login/availability screen across all media types (e.g., login/logout, set Make Busy with Reason, and remove Make Busy with Reason), eliminating the need to log in to multiple applications.
- **Customer history**—Enables you to view the customer history of previous email, SMS, or fax sessions. For example, Display Current Case allows you to view all correspondence associated with the current case, while Display Client History allows you to view all previous correspondence associated with the contact and the entire history of contact between you and the customer. Agents can provide more efficient service when they can review their customers' contact history.
- **Media request transfers**—Enable an agent who does not have the required information to transfer an email, SMS, chat, or fax request to an alternate agent, path, or email address. This ensures that the customer receives the correct answer as quickly as possible.
- **Automatic agent identification**—Allows for agent mobility by enabling agents to transfer an email, SMS, chat, or fax request using just the receiving agent's name and not the agent's email address.
- **"No Reply Needed" or "Junk Mail" settings**—If an agent receives an email, SMS, or fax from a customer and no response is required, the agent can tag the contact with "no reply needed". If an agent receives an email, SMS, or fax from an unsolicited sales organization or other party, the agent can tag the contact with "junk mail". This enables accurate reporting on all contacts, showing the email, SMS, or fax as having been received and not requiring a response.
- **FAQ response templates**—Create a folder to store standard company responses to FAQs. Multimedia Contact Center automatically adds the appropriate FAQ template information, as identified by the agent, to the reply. Templates optimize productivity and reduce response times, while maintaining quality with uniform responses.
- **Account codes**—Enable agents to enter account codes based on topic. You define account codes in the YourSite database to generate reports on the number, origin, and handling of calls for each department, service, or company. This enables you to consistently track the level of service provided to customers across all media.
- **Threshold alerting**—Provides a visual warning to supervisors and agents when the longest-waiting email, SMS, chat or fax's wait time exceeds the threshold. This alerts supervisors and agents so they can proactively respond to changes in service level.

Supervisor management

Multimedia Contact Center integrates all media types in Contact Center Management for multimedia reporting and real-time monitoring.

- **Multimedia reporting**—You can view, generate, schedule, and share reports across all contact center elements over any date and time horizon. Presentation-quality tables and charts are delivered in Microsoft Excel. You can readily measure and demonstrate contact center performance against service level objectives to optimize contact center operations.

- Multimedia real-time monitoring**—You can view real-time displays of agent and path activity, with customizable monitors and alarm thresholds. You can display each agent's current state, how long they've been in that state, when they logged on and off, and more. Queue monitors display real-time queue statistics. You can proactively manage your contact center based on current conditions, and track and provide feedback on the performance and shift adherence of individual agents. You can also respond immediately to changing traffic volumes and path conditions to ensure that service goals are maintained.

Multimedia Contact Center Social Media Integration

Multimedia Contact Center Version 6.0 offers integration with third-party social media monitoring applications in order to provide uniform, knowledgeable, and responsive messaging to social media sites, industry blogs and wikis, knowledge bases, and forums. With this third-party social media monitoring application, businesses can use advanced text analytics to detect relevant key words and phrases on social media sites and send notifications to skilled Multimedia Contact Center agents who can respond accordingly. Businesses can protect and promote their brand as well as measure and manage agent performance, using the advanced real time and reporting capabilities of Multimedia Contact Center. For example, you could designate a specific agent (acting as representative of your company) to handle social media responses, set a service level objective for such responses, and then monitor and report on the agent's handling of social media responses using Multimedia Contact Center. Figure 38 provides an overview of Social Media Integration with Yupiq.

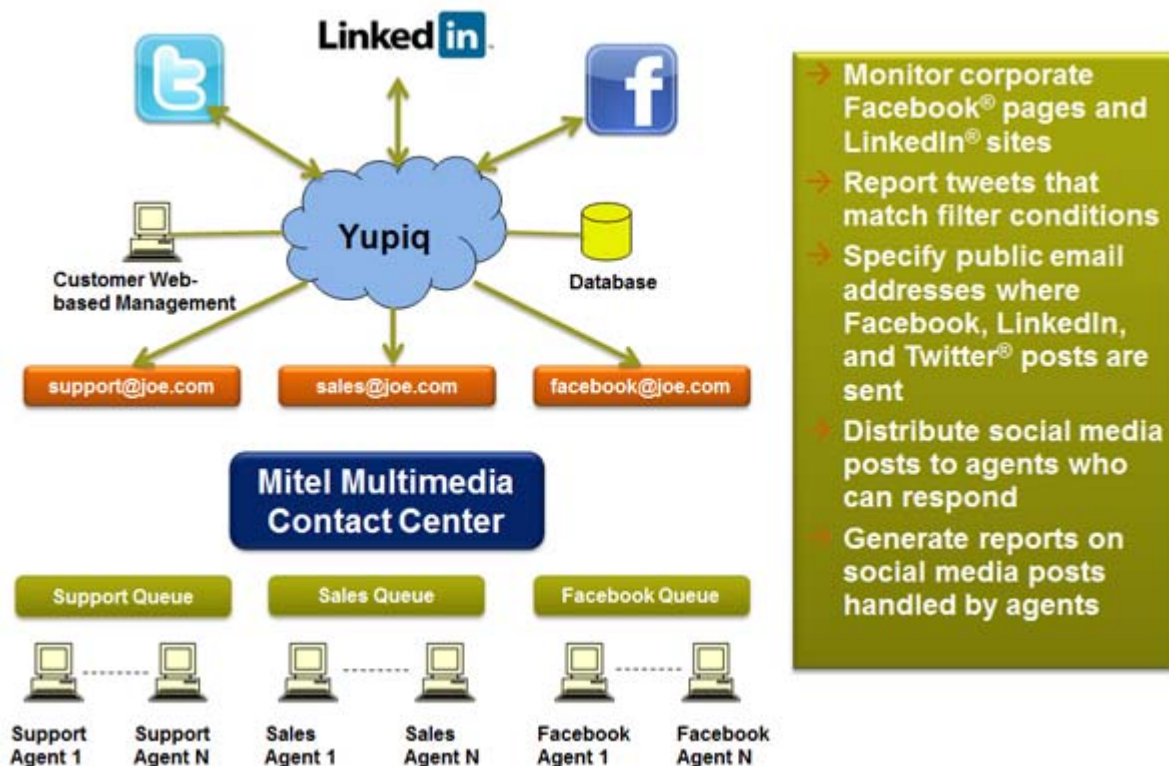


Figure 38 Multimedia Contact Center integrated with Yupiq

The Multimedia Contact Center Social Media integration leverages existing infrastructure to minimize start-up costs. Customers only need an account with a third-party social media application in order to integrate with Multimedia Contact Center. Currently, the social media integration has been validated using Yupiq, a social media aggregator. More social media partners will be validated in future releases of Contact Center Solutions.

See the *Contact Center Solutions and Call Accounting System Engineering Guide* for more information.

Configuration

Multimedia Contact Center basic configuration

Figure 39 illustrates a basic configuration for Multimedia Contact Center.

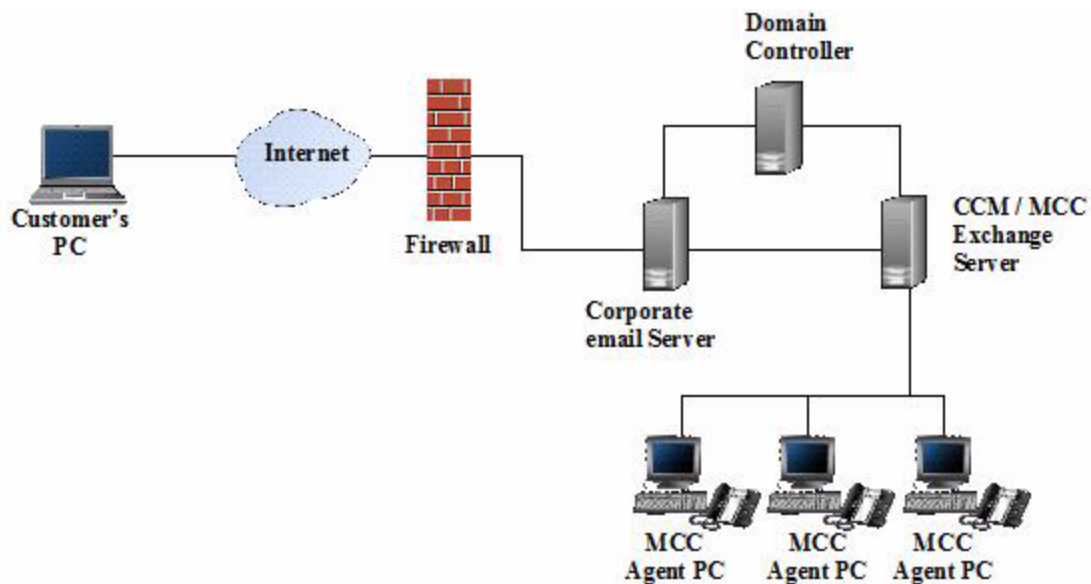


Figure 39 Multimedia Contact Center Configuration

Multimedia Contact Center email routing

Figure 40 illustrates how Multimedia Contact Center email traffic is routed.

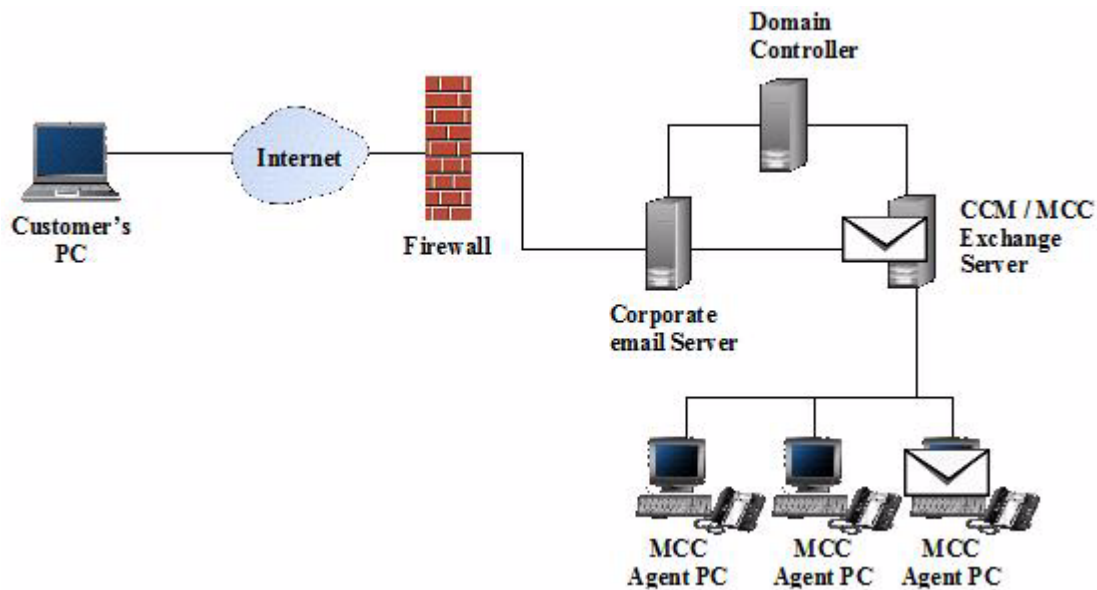


Figure 40 Email Routing with Multimedia Contact Center

When email is routed

1. The corporate email server uses Active Directory to determine that the destination is a mail-enabled public folder located on the exchange server (found on the Contact Center Solutions Server). It then automatically forwards the customer's email to the Exchange Server based on the public folder's email alias. Note that the exchange server and the corporate email server belong to the same Windows domain. This allows both servers to use the same Active Directory on the primary domain controller. The Contact Center Solutions Server houses Contact Center Management, Multimedia Contact Center, and Exchange.
2. The Multimedia Contact Center email router automatically sends the customer a customizable email, which acknowledges that your company has received their email.
3. The Multimedia Contact Center email router uses an ACD algorithm to queue the email and distribute it to the longest idle Multimedia Contact Center email agent.
4. The Multimedia Contact Center email agent opens the email, responds, and then sends a reply. The Multimedia Contact Center email agent answers emails using Outlook with an add-in that allows agents to log in to Multimedia Contact Center to make themselves available to answer the emails. Each agent is assigned a public folder, which is used as an agent inbox for Multimedia Contact Center emails. All Multimedia Contact Center emails that are routed to an agent appear in the agent's inbox. When offered a Multimedia Contact Center email, the agent is notified either visibly or audibly that there is an email in their inbox.

Multimedia Contact Center chat routing

Figure 41 illustrates how Multimedia Contact Center chat traffic is routed.

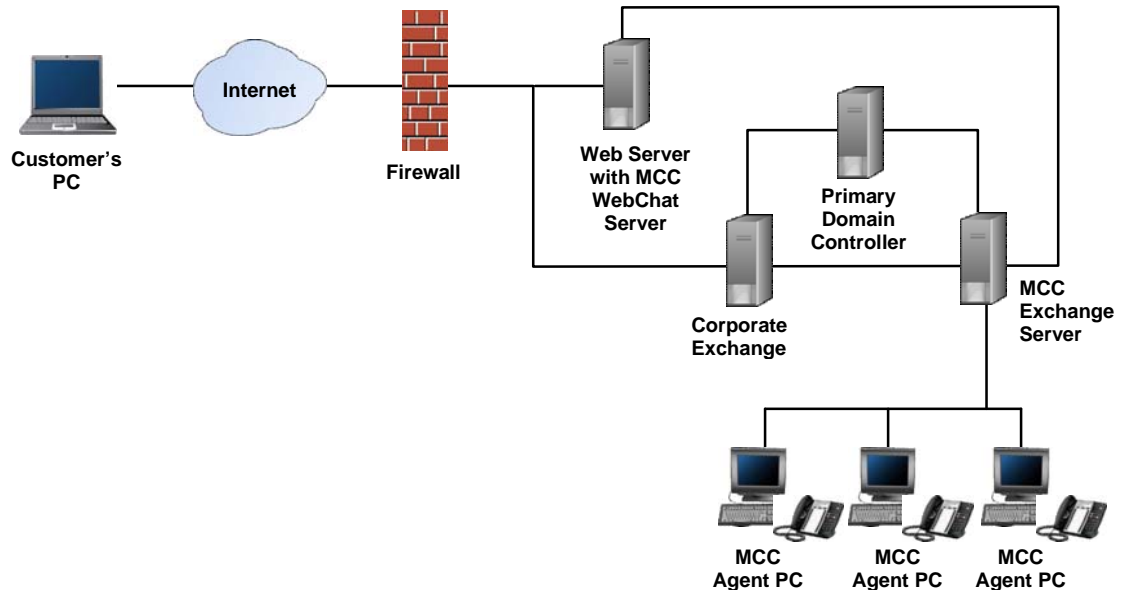


Figure 41 Multimedia Contact Center Chat Traffic Routing

When chat traffic is routed

1. A customer visits your website and clicks the "Chat Now" graphic on your Web page.
2. A form is displayed where the customer enters their name, email address, and the subject of the chat session. The customer then submits the chat request.
3. The Web server receives the chat request and initiates a chat session.
4. The customer's browser loads the Multimedia Contact Center Web chat Java applet into their browser.
5. The Multimedia Contact Center Web chat router (found on the Contact Center Solutions Server) is notified of the new chat session, the chat session request is saved, and the ACD algorithm begins.
6. The Multimedia Contact Center Web chat router uses the ACD algorithm to queue the chat session and distribute it to the longest idle Multimedia Contact Center chat agent.
7. The Multimedia Contact Center Web chat agent answers the chat request using Outlook with a Multimedia Contact Center Outlook add-in. Each agent is assigned a public folder, which is used as an inbox for Multimedia Contact Center Web chat requests. All Multimedia Contact Center Web chat requests routed to an agent appear in the agent's inbox. The agent can be notified either visually or audibly that there is a chat request in their inbox.
8. The agent opens the chat request and a custom chat form is used to chat with the customer. Note that behind the firewall, chat messages travel over port 5024 between the agent's PC and the Contact Center Solutions Server, and over port 5022 between the Contact Center Solutions Server and the Web server. Outside the firewall, the customer sends and receives chat messages over port 80 (or port 443 if SSL is used).

9. Either the agent or the customer can end the chat session. If the customer ends it, the Web server notifies the Multimedia Contact Center Web chat router that the session is finished and the chat agent is available to answer another chat request. If the agent ends it, the router notifies the Web server that the session is finished and the Web server then notifies the customer.
10. The customer is sent an email containing a transcript of the finished chat session.

Multimedia Contact Center fax routing

Figure 42 illustrates how Multimedia Contact Center fax traffic is routed.

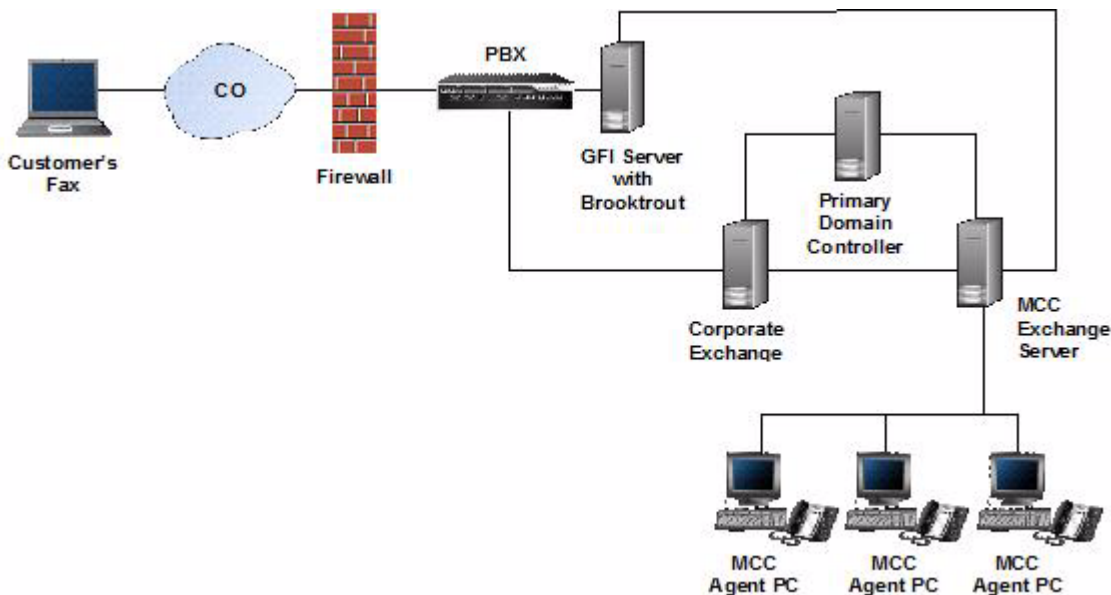


Figure 42 Multimedia Contact Center Fax Traffic Routing

When fax traffic is routed

1. The customer's fax is received by your GFI server. The GFI server accepts the fax and converts it to an electronic format (.TIF) and attaches the .TIF to an email.
2. The Multimedia Contact Center fax router automatically sends the customer a customizable email, which acknowledges that your company has received their email (optional).
3. The GFI Server forwards the electronic fax to the Multimedia Contact Center fax router as a .TIF file.
4. The Multimedia Contact Center fax router receives the new fax and creates a fax request. The fax request is saved and the ACD algorithm begins.
5. The Multimedia Contact Center fax router uses an ACD algorithm to queue the fax and distribute it to the longest idle Multimedia Contact Center fax agent.
6. The Multimedia Contact Center fax agent replies to the customer's fax, either by fax or by email from the Multimedia Contact Center Outlook plug-in. The Multimedia Contact Center

fax agent answers fax requests using Outlook with a Multimedia Contact Center Outlook add-in, which allows agents to log in to Multimedia Contact Center to make themselves available to answer the fax requests. Each agent is assigned a public folder, which is used as an agent inbox for Multimedia Contact Center fax requests. All the Multimedia Contact Center fax requests, routed to an agent, appear in the agent's inbox. The agent is notified either visibly or audibly that there is a fax request in their agent inbox.

Software interfaces

Figure 43 illustrates the Multimedia Contact Center Agent Desktop.

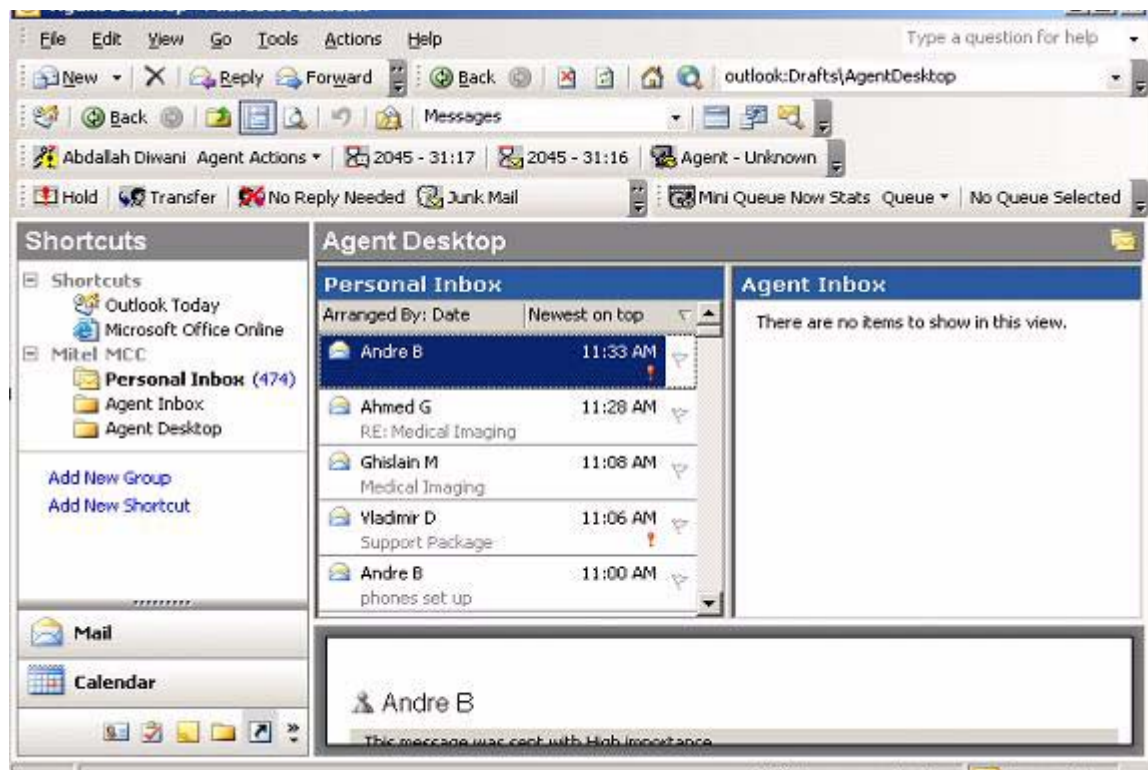


Figure 43 Multimedia Contact Center Agent Desktop

Figure 44 illustrates a Multimedia Contact Center email.



Figure 44 Multimedia Contact Center Email

Figure 45 illustrates a Multimedia Contact Center Web chat session.

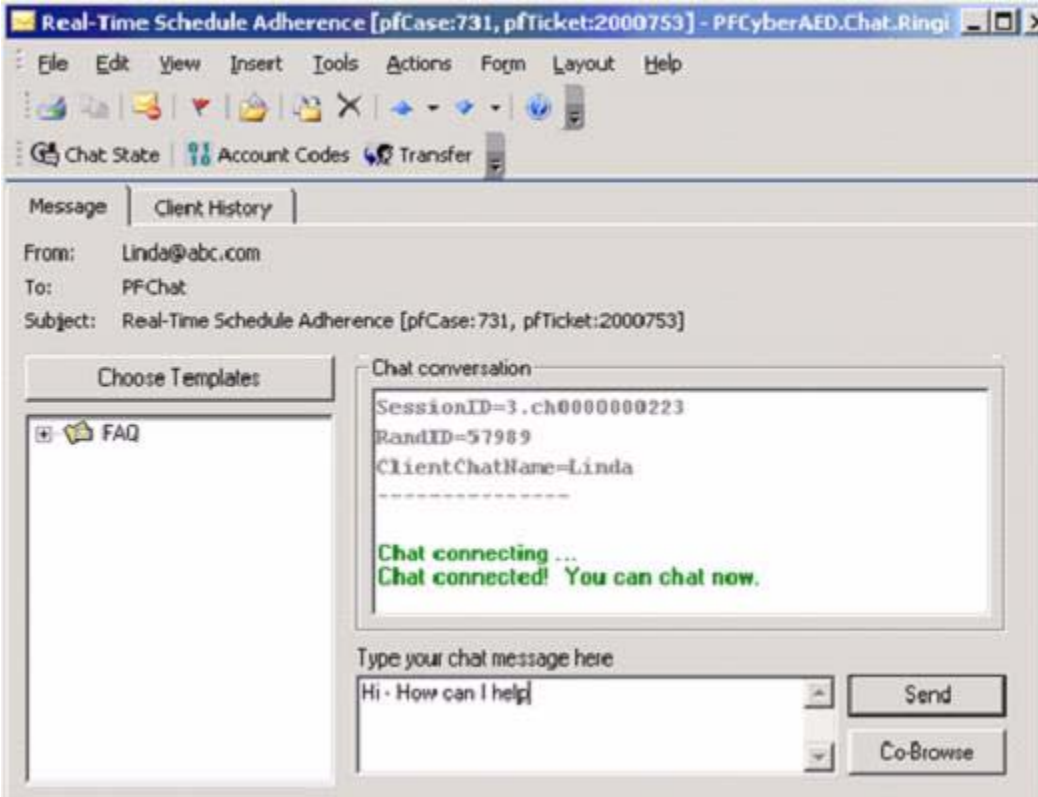


Figure 45 Multimedia Contact Center Web Chat Session

Chapter 19

Professional Services Custom Development

Introduction

This section provides an overview of Mitel Professional Services - Custom Development. For more information, refer to the following topics:

- Overview
- OutBound Dialer
- Workforce Management Integration
- Customer Relationship Management Integration
- Other Integrations

Overview

Professional Services provides customized, cost-effective solutions that improve customer interaction and streamline business processes.

OutBound Dialer

OutBound Dialer assigns outbound calls to agents based on agent groups, queues, and idle times, creating a blended contact center, where agents can process both inbound and outbound calls.

Agents are notified of outbound call assignments with pop-up windows. They can choose to accept, decline, or requeue these calls.

OutBound Dialer can create outbound dialing campaigns and report on agent activity and call success in these campaigns.

Benefits

- Contact center productivity and efficiency increases when idle agents are prompted to make outbound calls during slow periods.
- Managers can define a wide variety of call outcomes, such as closed sales, requests for callbacks, and messages left by agents, that can be readily tracked and analyzed.
- Outbound calls are automated which saves time and allows agents to focus on serving customers.
- Customer information is displayed in pop-ups, enabling agents to provide efficient, informed customer service

Workforce Management Integration

Contact Center Solutions integration for third-party Workforce Management software is an optional, server-side application that works in conjunction with Mitel Contact Center Management. It provides Workforce Management systems with the data required for forecasting, monitoring adherence and compliance to schedules, agent productivity metrics, and automated agent scheduling.

Professional Services Workforce Management connectors enable Contact Center Solutions integration with the following applications:

- Witness Impact 360 Integration
- IEX TotalView Integration
- Q-Max Integration

Benefits

- Effective, accurate schedules can be created by using historical data to predict future service level requirements.
- Automated scheduling saves time in comparison to manual scheduling.
- Skill-based scheduling improves customer satisfaction by ensuring access to informed agents.
- Agent performance of scheduled tasks is tracked in real time. Managers are alerted to non-adherence and can intervene to improve agent productivity.

Customer Relationship Management Integration

Contact Center Solutions integration for third-party Customer Relationship Management (CRM) software is an optional, server-side application that works in conjunction with Mitel Contact Center Management.

This section describes the following third-party CRM integrations:

- Contact Center Screen Pop Connector for Microsoft Dynamics CRM
- Salesforce.com Integration

Contact Center Screen Pop Connector for Microsoft Dynamics CRM

Contact Center Screen Pop Connector for Microsoft Dynamics CRM is an optional application that works in conjunction with Mitel Contact Center Management and Contact Center PhoneSet Manager.

Contact Center Screen Pop Connector for Microsoft Dynamics CRM manages interactions between the Microsoft CRM server and agent desktops, providing click-to-dial, call logging, and screen pop capabilities.

Click-to-dial from agent desktops enables agents to dial customer phone numbers with a single mouse click.

Call logging of customer interactions is ensured because Microsoft CRM Phone Call or other activity pages, in conjunction with customer sales, service, marketing, or other CRM pages, are automatically delivered to the agent desktop.

Based on the caller's phone number, the toll free number the caller dialed, or customer entered digits, Contact Center Screen Pop launches CRM database pages containing pertinent customer records, providing agents with immediate access to customer information.

Benefits

- Click-to-dial saves time and reduces misdialed calls.
- Call logging encourages compliance to business processes, improves reporting, and enables agents to readily access case histories and provide consistent service.
- With critical customer information at hand, agents can reduce call response and duration times which increases efficiency and boosts customer satisfaction.

Salesforce.com Integration

Salesforce.com Integration is an optional client application that works in conjunction with Contact Center Management and/or Call Accounting and requires an account with Salesforce.com (Enterprise edition), and, optionally IVR Routing (for Collect Caller Entered Digits only). Salesforce.com Integration includes support for both ACD hot desking agents and non-ACD General Business hot desking extensions.

Salesforce.com Integration enhances the functionality of Salesforce by embedding your Mitel phone directly into the Salesforce user interface. This improves productivity by providing fast and easy access to accounts, contacts, cases, and other Salesforce objects directly related to incoming calls. Using Salesforce.com Integration enables your contact center agents to perform their job functions through a single user interface.

Salesforce.com Integration is compatible with the Salesforce.com Microsoft Outlook connector. Users can synchronize their Salesforce.com contacts, tasks, and calendar events, associate Outlook email messages, and map custom fields in Salesforce.com to fields in Outlook.

Benefits

- Automatic delivery of Salesforce CRM database pages to contact center agents upon call arrival ensures agents log all customer interactions and requests in the Salesforce CRM database. This encourages compliance to business processes, improves reporting, and enables agents to readily access case histories and provide consistent service.
- Customer satisfaction is improved. Agents can provide prompt, informed service by quickly identifying callers and the services they are requesting.
- Desktop screen pops reduce call handling time and increase the accuracy of business transactions.
- Easily create new Leads while on active calls

- Click-to-dial saves time and reduces misdialed calls.
- Call logging encourages compliance to business processes, improves reporting, and enables agents to readily access case histories and provide consistent service.

Other Integrations

Integration is also available with most major CRM applications and ODBC compliant databases. For more information, contact Professional Services at sales@prairiefyre.com.

Chapter 20
Third Party Integration

Introduction

This section provides an overview of third-party solutions that can be optionally integrated with Mitel Contact Center Solutions. For more information, refer to the following topics:

- Overview
- Software connectors
- Global Partners
- North America Partners
- Europe, Middle East, Africa (EMEA) Partners

Overview

Contact Center Solutions integrates with a variety of third-party applications to enhance contact center functionality.



Note: It is the responsibility of the customer to ensure that any third-party application meets the requirements provided by the third-party vendor. Installation, configuration, support, and maintenance is to be provided by the third-party vendors only and is not the responsibility of Mitel or prairieFyre Software Inc.

Software connectors

Contact Center Management integrates with Verint Audiolog and OAISYS Tracer, to enable call recording, and Microsoft Live Communications Server 2005, to provide Enterprise Presence and Chat Integration.

OAISYS Tracer

Contact Center Management integrates with OAISYS Tracer call recording software to enable 24/7 call recording. Using OAISYS Tracer, calls can be recorded based on pre-defined schedules. When a call recording is complete, a hyperlink to the recording is appended to call-specific Lifecycle reports. See "Generating Lifecycle reports" on page 40.

OAISYS Tracer can optionally be used in conjunction with the Mitel Secure Recording Connector. See "Secure Recording Connector" on page 185.

Microsoft Lync Server 2010

Contact Center Solutions integrates with Microsoft Lync Server 2010 to provide enhanced presence.

Agents and supervisors use Microsoft Lync as their default instant messaging client. The presence of all company employees is natively delivered in Contact Center Client.

Contact Center Chat provides the online chat presence of contact center employees, including Online, Offline, and Away. Agents can view the availability and presence of other contact center employees before they transfer calls or send online chat messages.

Enterprise Presence / Chat Integration integrates with Microsoft Lync Server 2010 to enable contact center employees to view the presence of both internal and external contacts to determine if they are available to communicate. In addition to Online, Offline, and Away, employees see In a Meeting, Busy, On a Call, Do Not Disturb, Out of Office, and other presence indicators.

Lync extends the capabilities of Contact Center Chat enabling agents to communicate with people who are

- In the same company, but are not using Contact Center Client
- In the same company, but are not on the same intranet
- External to the company, where the companies in which they work have a Federated Live Communication Server environment and use Lync
- External to the company, communicate over the public internet, and use popular instant message services (MSN, AIM, Yahoo!)

In a Lync environment, you can take advantage of other forms of communication: computer voice calls, video conferencing, white boarding, and desktop sharing capabilities. Communication with MSN, AIM and Yahoo! is typically limited to instant messaging only.

Global Partners

Call Recording

Integration is available for the following call recording applications:

- Cybertech: SMB Recording Solution Myracle Platform
- Cybertech: Enterprise Recording Solution Pro Platform
- Voice Print International (VPI): Activ!Voice Recording Solution

Cybertech: SMB Recording Solution Myracle Platform

Features include

- Support for 3300 ICP and 5000 CP
- Support for 4 to 64 channels in one server and archiving to NAS, SAN, DVD, or Iomega REV
- Quality monitoring

Cybertech: Enterprise Recording Solution Pro Platform

Features include

- Support for 3300 ICP and 5000 CP

- Support for 4 to 1000s of channels in one system
- Remote alarming and monitoring
- Multi-site deployment with centralized archiving
- High resiliency

Voice Print International (VPI): Activ!Voice Recording Solution

Features include

- Support for 3300 ICP and 5000 CP
- Voice and screen recording, quality management, and coaching
- Browser-based, profile-driven interface for call recordings and modules
- Real-time dashboards and reporting of Key Performance Indicators from external data sources
- Scalability
- Ability to encrypt calls using the Mitel Secure Recording Connector (3300 ICP only)

Interactive Voice Response (IVR)

Integration is available for the following IVR application:

- Syntellect: Syntellect Voice Platform

Syntellect: Syntellect Voice Platform

Features include

- Support for 3300 ICP and 5000 CP
- Automation of self-service transactions using Advanced Speech Recognition or touch-tone
- Speech Recognition with natural language and large vocabulary speech applications
- Text-to-speech capability, so textual information can be delivered in spoken format to callers

North America Partners

Call Recording

Integration is available for the following call recording applications:

- OASYS: SMB Recording Solution Talkument
- OASYS: Enterprise Recording Solution Tracer
- Telrex: CallRex Call Recording

OAISYS: SMB Recording Solution Talkument

Features include

- Support for 3300 ICP and 5000 CP
- Support for 8 to 48 ports and 20 000 recording hours
- View of each call from beginning to end
- Outlook-like user interface
- Ability to highlight areas of conversations and add call notes to share with employees
- Secure sharing of calls and call segments
- Ability to encrypt calls using the Mitel Secure Recording Connector (3300 ICP only)

OAISYS: Enterprise Recording Solution Tracer

Features include

- Support for 3300 ICP and 5000 CP
- Support for 4 to 192 ports and 75 000 recording hours
- View of each call from beginning to end
- Coaching, using quality control reports and evaluations and a live call monitor
- Desktop video recording option (screen recording)
- Selective and on-demand recording
- Ability to encrypt calls using the Mitel Secure Recording Connector (3300 ICP only)

Telrex: CallRex Call Recording

Features include

- Support for 3300 ICP and 5000 CP
- CallRex Express for single sites with 5 to 15 users
- CallRex Professional for multiple sites with thousands of users
- Optional agent evaluation module
- Multimedia add-on
- Ability to encrypt calls using the Mitel Secure Recording Connector (3300 ICP only)

Speech Analytics

Integration is available for the following speech analytics application:

- Tellrex: CallRex Speech Analytics

Telrex: CallRex Speech Analytics

Features include

- Support for 3300 ICP
- Ability to identify and flag keywords, conduct root cause analysis, monitor for compliance, and select recorded calls based on content

Interactive Voice Response (IVR)

Integration is available for the following IVR application:

- Voice 4 Net: ePBX Custom IVR

Voice 4 Net: ePBX Custom IVR

Features include:

- Support for 5000 CP
- Custom IVR development

Multi-Channel Routing

Integration is available for the following multi-channel routing application:

- Revation: Link Live Secure Chat and Email Routing

Revation: Link Live Secure Chat and Email Routing

Features include

- Support for 3300 ICP and 5000 CP
- Simplification of call handling over the Web (useful for contact centers with stringent security requirements, for example financial and health care services)
- Encrypted chat, email, FTP, and Web presence services (128-bit SSL, SRTP, and multi-factor authentication)

Campaign Management

Integration is available for the following campaign management application:

- Teledirect: Liberation and Liberation Express Campaign Platform

Teledirect: Liberation and Liberation Express Campaign Platform

Features include

- Support for 3300 ICP and 5000 CP
- Liberation Express for smaller contact centers of up to 25 agents
- Powerful list builder which pulls from multiple databases in real time and defines execution strategies and follow-up actions for non-contacts

Europe, Middle East, Africa (EMEA) Partners

Call Recording

Integration is available for the following call recording applications:

- ASC: Marathon Evolution Call Recording
- RedBox: RedBox Call Recorder
- Xarios: Xarios Call Recorder (UK only)

ASC: Marathon Evolution Call Recording

Features include

- Support for 3300 ICP
- On-demand, selective, or bulk recording
- Web playback
- Support for ACD hot desking
- Voice or screen capture
- Keyword spotting
- Centralized storage

RedBox: RedBox Call Recorder

Features include

- Support for 3300 ICP and 5000 CP
- Support for 192 analog/digital channels, 480 E1 channels, and 480 IP channels
- Multi-server (up to 250 000 channels)
- On-demand recording
- Web playback
- Local or remote access
- Call authentication

- Secure recording format
- Ability to evaluate agent performance
- Centralized administration

Xarios: Xarios Call Recorder (UK only)

Features include

- Support for 5000 CP
- Up to 20 000 hours of recording
- Express package: search and playback abilities
- Professional package: timelines, user profiles, archiving
- Enterprise package: scalability, in-progress call status, agent scoring
- Web-based administration
- Call notes

Multi-Channel Routing

Integration is available for the following multi-channel routing applications:

- New Media: Adaptive Messaging (UK only)
- New Media: Adaptive Web Assist (UK only)

New Media: Adaptive Messaging (UK only)

Features include

- Support for 5000 CP
- Routing for email, SMS, and fax for Mitel Customer Service Manager
- Extensive message rules systems
- Automatic read and reply
- Support for skills-based routing and multi-channel work blending
- Management console and real-time and historical reports

New Media: Adaptive Web Assist (UK only)

Features include

- Support for 5000CP
- Web chat and Web callback for Mitel Customer Service Manager
- Routing of Web callback and chat requests to the next available employee
- HTML-based

Campaign Management

Integration is available for the following campaign management application:

- New Media: Adaptive Campaign Editor (UK only)

New Media: Adaptive Campaign Editor (UK only)

Features include

- Support for 5000 CP
- Simplified setup of outbound calling campaigns
- Ability to customize dialing settings, and specify result codes and rescheduling options for each campaign
- Access to comprehensive management information

Outbound Dialer

Integration is available for the following outbound dialer applications:

- New Media: Adaptive Progressive and Predictive Dialer (UK only)
- Xarios: Xarios Outbound Dialing (UK only)

New Media: Adaptive Progressive and Predictive Dialer (UK only)

Features include

- Support for 5000 CP
- Manual data importing from CSV files or automatic data importing from ODBC and SQL compliant databases
- Support for multi-number dialing
- Support for multiple simultaneous campaigns and queues
- Blending of inbound and outbound calls
- Comprehensive management reporting ability

Xarios: Xarios Outbound Dialing (UK only)

Features include

- Support for 5000 CP
- Progressive dialer
- Automatic dialing using the campaign database. The customer's name is shown on the telephone display
- Automatic callback handling
- Do Not Call list management and campaign list cleaning

Chapter 21

Traffic Analysis

Introduction

This section provides an overview of Traffic Analysis and how it works. For more information, refer to the following topics:

- Overview
- Features

Overview

Traffic Analysis, available with Contact Center Enterprise Edition, Business Edition, and stand-alone Call Accounting, provides an overall view of trunk traffic and enables you to analyze the traffic to maximize service and decrease costs. Traffic Analysis reports provide call statistics on attendant and attendant groups, DTMF receivers, route lists, route plans, routes, and trunks. You can create on-demand or scheduled Traffic Analysis reports. Traffic Analysis reports are not available in real time.

Features

Traffic Analysis includes the following report types:

- Traffic Attendant reports
- Traffic DTMF Receiver Group reports
- Traffic Route reports
- Traffic Trunk reports

Traffic Attendant reports

The following reports enable you to view and analyze attendant call activity by period:

- **Attendant Console Traffic by Period reports**—show the attendant console call activity for the shift duration and day(s) you specify. The activity is on a per-console basis, regardless of the number of attendants who may have manned it during the activity period.
- **Attendant and Attendant Group Traffic by Period reports**—show the attendant and attendant group call activity for the shift duration and day(s) you specify.

Figure 46 is an example of an Attendant Console Traffic by Period report.

Report: Attendant Console Traffic by Period Site: ABC Company Device: SC1000 - Attendant Console				Date Range: Create Date: Created By:								
Activity period	Calls answered	Occupancy (hh:mm:ss)	Avg service time (hh:mm:ss)									
8:00	14	0:13:30	0:00:05	<table border="1"> <thead> <tr> <th colspan="2">Peak Hour</th> </tr> </thead> <tbody> <tr> <td>Peak time</td> <td>Feb 22 2005 14:15</td> </tr> <tr> <td>Peak peg</td> <td>25</td> </tr> </tbody> </table>	Peak Hour		Peak time	Feb 22 2005 14:15	Peak peg	25		
Peak Hour												
Peak time	Feb 22 2005 14:15											
Peak peg	25											
8:15	5	0:10:20	0:00:02									
8:30	2	0:03:02	0:00:01									
8:45	1	0:02:33	0:00:00									
9:00	4	0:02:43	0:00:02	<table border="1"> <thead> <tr> <th colspan="2">Total</th> </tr> </thead> <tbody> <tr> <td>Total calls answered</td> <td>534</td> </tr> <tr> <td>Total occupancy (hh:mm:ss)</td> <td>0:05:24</td> </tr> <tr> <td>Avg service time (hh:mm:ss)</td> <td>0:00:03</td> </tr> </tbody> </table>	Total		Total calls answered	534	Total occupancy (hh:mm:ss)	0:05:24	Avg service time (hh:mm:ss)	0:00:03
Total												
Total calls answered	534											
Total occupancy (hh:mm:ss)	0:05:24											
Avg service time (hh:mm:ss)	0:00:03											
9:15	5	0:06:21	0:00:02									
9:30	3	0:04:32	0:00:01									
9:45	4	0:04:32	0:00:03									
10:00	3	0:03:27	0:00:00									
10:15	10	0:14:23	0:00:06									
10:30	2	0:02:42	0:00:01									
10:45	2	0:02:45	0:00:00									

Figure 46 Attendant Console Traffic by Period Report

Traffic DTMF Receiver Group reports

The following report enables you to see if your telephone switch has sufficient DTMF receivers available to service your outbound callers.

- **DTMF Receiver Group Traffic by Period reports** —report on the accessibility of DTMF receivers for the shift duration and day(s) you specify.

Figure 47 is an example of a DTMF Receiver Group Traffic by Period report.

Report: DTMF Receiver Group Traffic by Period Site: ABC Company Device: [InHouse] 1 - DTMF Group					
Activity period	Peg	Usage (hh:mm:ss)	Busy peg	Max in use	Max in use/available
19:45	6	0:00:00	0	1	1/48
20:00	5	0:00:00	0	1	1/48
20:15	4	0:00:00	0	1	1/48
20:30	5	0:00:00	0	1	1/48
20:45	9	0:00:00	0	1	1/48
21:00	36	0:03:36	0	1	1/48
21:15	64	0:07:12	0	1	1/48
21:30	30	0:03:00	0	1	1/48
21:45	0	0:00:00	0	0	0/48
22:00	0	0:00:00	0	0	0/48
22:15	0	0:00:00	0	0	0/48
22:30	5	0:01:12	0	1	1/48
22:45	11	0:00:36	0	1	1/48
23:00	3	0:00:36	0	1	1/48
23:15	0	0:00:00	0	0	0/48
23:30	0	0:00:00	0	0	0/48
23:45	0	0:00:00	0	0	0/48
Total	950	1:03:53	0	1	1/48

Figure 47 DTMF Receiver Group Traffic by Period Report

Traffic Route reports

The following reports enable you to identify the period of busiest route traffic:

- **Route List Traffic by Period reports**—show route list activity for the shift duration and day(s) you specify. A route list determines where call traffic is directed, based on a prioritized list of routes
- **Route Plan Traffic by Period reports**—show route plan activity for the shift duration and day(s) you specify. A route plan determines where call traffic is directed, based on the time of day and day of week.
- **Route Traffic by Period reports**—show route activity for the shift duration and day(s) you specify.

Figure 48 is an example of a Route List Traffic by Period report.

Report: <i>Route List Traffic by Period</i> Site: ABC Company Device: [SX-2000 ACD] 1 - Route list				Date Range: Create Date: Created By:								
Activity period	Outbound peg	Outbound usage (hh:mm:ss)	Busy peg									
9:00	4	0:16:12	0	<table border="1"> <thead> <tr> <th colspan="2">Peak Hour</th> </tr> </thead> <tbody> <tr> <td>Peak outbound time</td> <td>Feb 3 2005 07:00</td> </tr> <tr> <td>Peak outbound peg</td> <td>4088</td> </tr> </tbody> </table>	Peak Hour		Peak outbound time	Feb 3 2005 07:00	Peak outbound peg	4088		
Peak Hour												
Peak outbound time	Feb 3 2005 07:00											
Peak outbound peg	4088											
9:15	4	0:19:48	0									
9:30	3	0:19:12	0									
9:45	3	0:15:00	0									
10:00	2	0:18:36	0	<table border="1"> <thead> <tr> <th colspan="2">Total</th> </tr> </thead> <tbody> <tr> <td>Total outbound peg</td> <td>36302</td> </tr> <tr> <td>Total outbound usage (hh:mm:ss)</td> <td>10:57:00</td> </tr> <tr> <td>Total busy peg</td> <td>0</td> </tr> </tbody> </table>	Total		Total outbound peg	36302	Total outbound usage (hh:mm:ss)	10:57:00	Total busy peg	0
Total												
Total outbound peg	36302											
Total outbound usage (hh:mm:ss)	10:57:00											
Total busy peg	0											
10:15	4	0:15:00	0									
10:30	4	0:15:00	0									
10:45	5	0:11:24	0									
11:00	4	0:07:12	0									
11:15	5	0:08:24	0									
11:30	0	0:00:00	0									
11:45	0	0:00:00	0									

Figure 48 Route List Traffic by Period Report

Traffic Trunk reports

The following reports enable you to identify the period of busiest trunk traffic. You can use the information in these reports to configure trunks effectively and schedule the required staff.

- **Trunk Traffic by Period reports**—show trunk activity for the shift duration and day(s) you specify.
- **Trunk Busy Hour Traffic by Day of the Week reports**—show the trunk’s busiest hour for each day of the week.
- **Trunk and Trunk Group Traffic Usage by Day of the Week reports**—show the use of trunks or trunk groups across 15-, 30-, or 60-minute intervals for each day of the week.
- **Trunk Group Outgoing Traffic by Period reports**—show the outgoing trunk activity for the shift duration and day(s) you specify.
- **Trunk Group Outgoing Traffic Usage by Day of the Week reports**—show the outgoing trunk usage across each day of the week.
- **Trunk Group Outgoing Busy Hour Traffic by Day of the Week reports**—show the outgoing trunk’s busiest hour for each day of the week.

Figure 49 is an example of a Trunk Traffic by Period report.

Report: <i>Trunk Traffic by Period</i> Date Range: 2/3/2005 - 2/3, Site: ABC Company Create Date: 2/25/2005 Device: [SX-2000 ACD] 101 Created By: _admin						
Activity period	Inbound peg	Inbound usage (hh:mm:ss)	Outbound peg	Outbound usage (hh:mm:ss)	Low peg high usage	High peg low usage
14:30	0	0:00:00	0	0:00:00	No	Yes
14:45	0	0:00:00	0	0:00:00	No	No
15:00	0	0:00:00	0	0:00:00	No	No
15:15	0	0:00:00	0	0:00:00	No	No
15:30	0	0:00:00	0	0:00:00	No	No
15:45	0	0:00:00	0	0:00:00	No	No
16:00	0	0:00:00	2	0:00:00	No	No
16:15	0	0:00:00	0	0:00:00	No	No
16:30	0	0:00:00	0	0:00:00	No	No
16:45	0	0:00:00	0	0:00:00	No	No
17:00	0	0:00:00	0	0:00:00	No	No
17:15	0	0:00:00	0	0:00:00	No	No
17:30	0	0:00:00	0	0:00:00	No	No
17:45	0	0:00:00	0	0:00:00	No	No
Total	1	0:00:00	18883	0:05:01	No	Yes

Figure 49 Trunk Traffic by Period Report

Chapter 22
Mitel Border Gateway Connector

Introduction

This section provides an overview of Mitel Border Gateway Connector and how it works. For more information, refer to the following topics:

- Overview
- Features
- Benefits
- Configuration

Overview

Mitel Border Gateway Connector is a secure IP-based solution for remote and home-based employees that replaces Teleworker Solution. Using Mitel Border Gateway Version 7 or greater, remote agents, employees, and supervisors can connect to the Enterprise Server using a Virtual Private Network-like connection and use all Contact Center Solutions and Call Accounting functions as if they were in the office.



Note: Users of Mitel Border Gateway Version 6 may benefit from remote agent support through Mitel Border Gateway Connector, but only Contact Center Client real time, soft phone, and Contact Center Management / Call Accounting webbiest functionality is supported.

Features

Mitel Border Gateway Connector enables remote employees at remote locations to

- Use the full suite of Contact Center Solutions and Call Accounting applications
- Handle calls using PhoneSet Manager and Contact Center Softphone
- View real-time monitors and enable real-time alarming
- View historical events in simulated real-time in Auditor
- View Network Monitor to verify if alarms are enabled for the media servers and if the media servers are reporting any alarms

Benefits

Increased productivity

- Agents tend to work longer hours with fewer disruptions.

Reduced real-estate and overhead costs

- Remote employees require little or no access to corporate facilities. Office space can be easily shared or even eliminated.

Increased agent morale

- Agents can avoid long commutes and work more flexible hours in the comfort of their own home. Improved agent satisfaction saves money by decreasing absenteeism and turnover.

Configuration

Employees using Mitel Border Gateway Connector require a phone or USB headset (for soft phone), a computer, a router, and a high-speed Internet connection. Phones must be registered with Mitel Border Gateway and the remote employee's client computer must have the Mitel Border Gateway Connector connection configured to Mitel Border Gateway by an administrator.

When employees connect to the system using the Mitel Border Gateway Connector, they can specify which Mitel Border Gateway they will connect to. After remote employees attempt to connect to the system for the first time, a Mitel Border Gateway system administrator must approve the Mitel Border Gateway certificate from the Mitel Border Gateway web application. Once approved, remote users are connected and have access to all of the Contact Center Solutions and Call Accounting applications for which they are licensed and have the required security permissions.

While active, the Mitel Border Gateway Connector is visible in the Windows system tray and displays the name of the active connection. Only one connection can be made at a time. The name of the Mitel Border Gateway connection will become the address in all application login windows and users sign in with their normal username and password.

Chapter 23

Secure Recording Connector

Introduction

This section provides an overview of Mitel Secure Recording Connector and how it works. For more information, refer to the following topics:

- Overview
- Features
- Configuration

Overview

Secure Recording Connector (SRC) is a software solution that enables the recording of Mitel encrypted voice streams by third-party call recording equipment (CRE). SRC is also supported for use with Contact Center PhoneSet Manager and Contact Center Softphone.

SRC uses the Mitel Standard Linux (MSL) system as its base and is positioned on the LAN between the ICP and the recording-enabled phone sets. It accepts requests from an authorized CRE to establish taps in the voice stream. These taps are separate (mirrored) streams from the SRC to the CRE. (See Figure 50.)

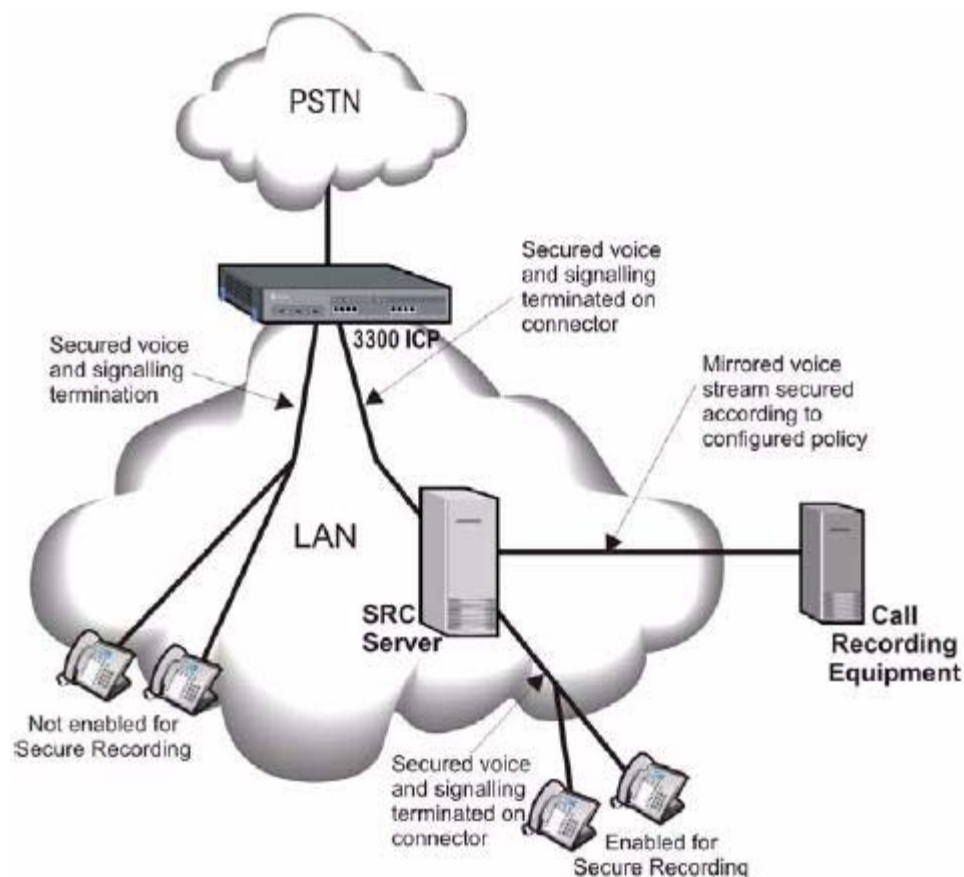


Figure 50 Secure Recording Connector - Configuration

After configuring SRC and CRE, call recording is enabled and recorded data can be accessed from hyperlinks in call-specific Lifecycle reports. For more information regarding Lifecycle reports, see the *Contact Center Solutions Enterprise Edition Reports Guide*.

Features

Resiliency

The SRC supports ACD resiliency. For more information, see "Resiliency and ACD Resiliency".

Two SRC servers must be deployed for resiliency. A secondary server can be set up to maintain service in the event of a primary server failure. Although the servers are designated as "primary" and "secondary", they are actually equal peers, both of which provide full-featured call recording service with no need to re-home when service is restored.



Note: If the failover server does not have at least as many licenses as the active server, then service to some phone sets may be denied.

Security

After the CRE has been installed and configured, it must be enrolled with the SRC to establish a trust relationship. Enrollment is a one-time task that ensures unauthorized personnel cannot use the SRC to eavesdrop on phone conversations.

Recording Beep

Agents can, optionally, hear a beep sound to notify them that the call is being recorded.

Compatibility

The SRC is compatible with a variety of telephones. See Table 8.

Table 8 SRC Compatibility

Platform	Release	Compatible Sets						
		5020	5215 5220	DM 5215/5220	5235	Navigator	5330 5340	5560 IPT2
3300 ICP	7.0	Yes	Yes	Yes	Yes	Yes	Yes	No
	7.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	8.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Configuration

The SRC must be on the LAN, preferably on the same LAN segment as the ICP(s) with which it is working.

Figure 51 is an example of a possible configuration. The phone sets on the right are on the same LAN segment as the SRC server. These phone sets use the SRC as their server and ICP and are enabled to record calls. The phone sets on the left are not on the same LAN segment as the SRC server. These phone sets use the 3300 ICP as their server and are not enabled for recording.

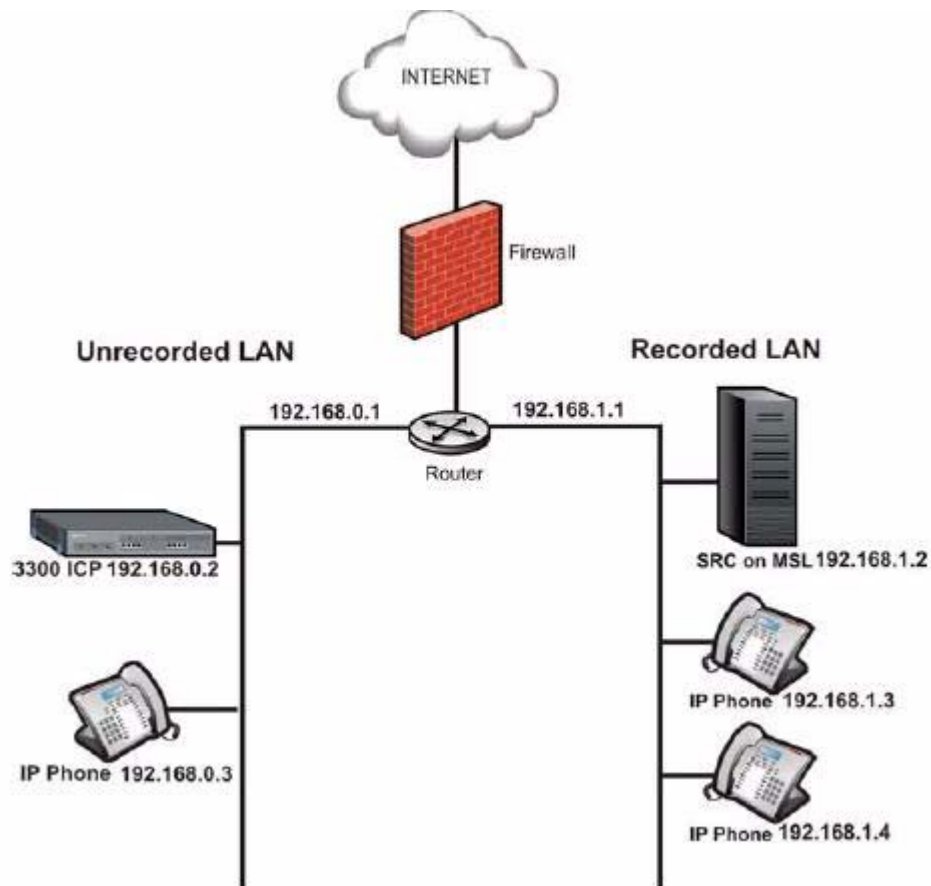


Figure 51 Sample SRC deployment

If remote or external phones are in use, they can be proxied through the Mitel Border Gateway server to enable recording. Figure 52 shows an example of a remote phone set being proxied through the Mitel Border Gateway server, which is then proxied through an SRC server, so that it can be recorded along with the sets on the Recorded LAN.

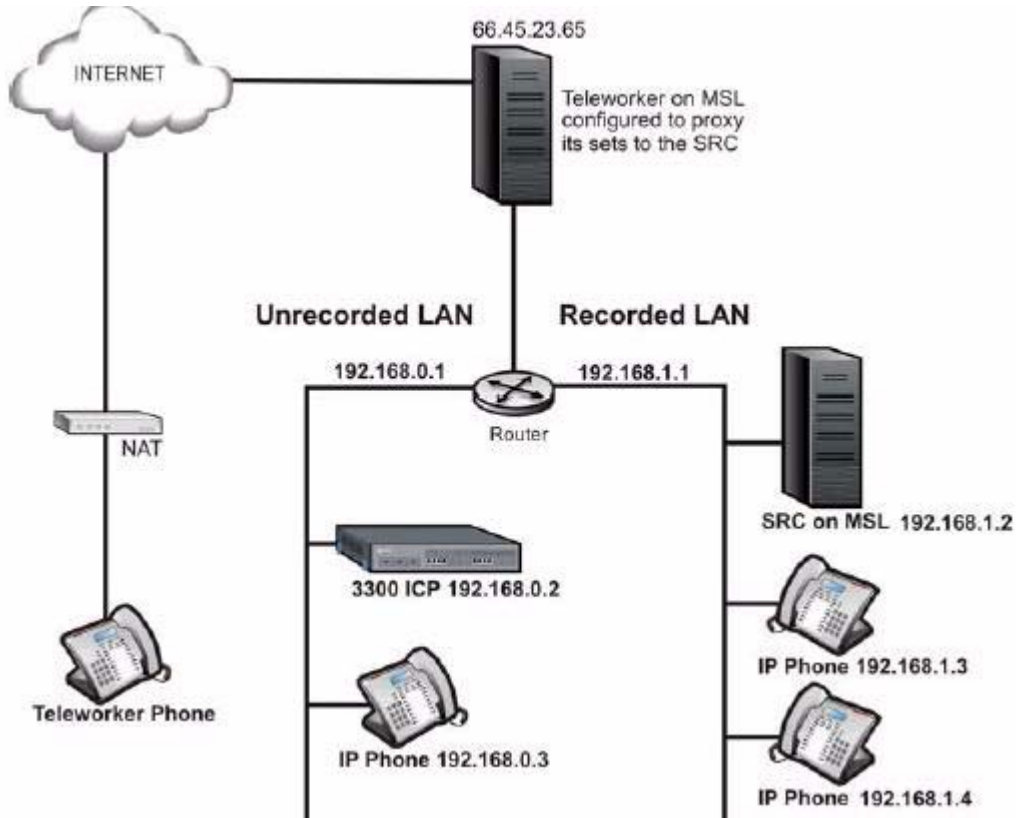


Figure 52 Using SRC in Conjunction with Mitel Border Gateway

Global Headquarters	U.S.	EMEA	CALA	Asia Pacific
Tel: +1(613) 592-2122 Fax: +1(613) 592-4784	Tel: +1(480) 961-9000 Fax: +1(480) 961-1370	Tel: +44(0)1291-430000 Fax: +44(0)1291-430400	Tel: +1(613) 592-2122 Fax: +1(613) 592-7825	Tel: +61(0) 2 9023 9500 Fax: +61(0) 2 9023 9501

For more information on our worldwide office locations, visit our website at www.mitel.com/offices

THIS DOCUMENT IS PROVIDED TO YOU FOR INFORMATIONAL PURPOSES ONLY. The information furnished in this document, believed by Mitel to be accurate as of the date of its publication, is subject to change without notice. Mitel assumes no responsibility for any errors or omissions in this document and shall have no obligation to you as a result of having made this document available to you or based upon the information it contains.

M MITEL (design) is a registered trademark of Mitel Networks Corporation. All other products and services are the registered trademarks of their respective holders.

© Copyright 2010, Mitel Networks Corporation. All Rights Reserved.

www.mitel.com

