IPedge®

Contact Center Solutions
General Description

Publication Information

Toshiba America Information Systems, Inc.
Telecommunication Systems Division

Publication Information

IP*edge* General End User Information

FCC Requirements
Means of Connection: The IP*edge* does not connect directly to the telephone network. All direct connections are made to a gateway. Please refer to the gateway manufacturer's documentation

Radio Frequency Interference
Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the manufacturer's instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case, the user, at his/her own expense, will be required to take whatever measures may be required to correct the interference.

Underwriters Laboratory
This system is listed with Underwriters Laboratory (UL). Secondary protection is required, on any wiring from any telephone that exits the building or is subject to lightning or other electrical surges, and on DID, OPS, and Tie lines. (Additional information is provided in the IP*edge* Install Manual.)

CP01, Issue 8, Part I Section 14.1
Notice: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the Equipment will operate to the user's satisfaction.

Repairs to Certified Equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

CAUTION!   **Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.**

Important Notice — Music-On-Hold
In accordance with U.S. Copyright Law, a license may be required from the American Society of Composers, Authors and Publishers, or other similar organization, if radio or TV broadcasts are transmitted through the music-on-hold feature of this telecommunication system. Toshiba America Information Systems, Inc., strongly recommends not using radio or television broadcasts and hereby disclaims any liability arising out of the failure to obtain such a license.

Hearing Aid Compatibility Notice: The FCC has established rules that require all installed business telephones be hearing aid compatible. This rule applies to all telephones regardless of the date of manufacture or installation. There are severe financial penalties which may be levied on the end-user for non-compliance.

Patent Marking for G.729a

Products may be covered by one or more of the following US patents and their counterparts in other countries:

US5,787,391, US5,717,825, US5,708,757, US5,754,976, US5,701,392, US5,699,482, US5,444,816

MPEG-4 VISUAL PATENT PORTFOLIO LICENSE (for VCS)

"THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (i)ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD ("MPEG-4 VIDEO") AND/OR (ii)DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG-4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL, INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA,L.L.C. SEE HTTP://WWW.MPEGLA.COM"

Toshiba Telecommunication Systems Warranty and License Agreements

For information relating to the End User Limited Warranty and License Agreements, please refer to http://www.telecom.toshiba.com/Telephone_Systems_Support/warranty.cfm

WARRANTIES FOR NON-TOSHIBA BRANDED THIRD PARTY PRODUCTS

A valuable element of Toshiba's product strategy is to offer our customers a complete product portfolio. To provide this value to our customers at the most optimal prices, we offer both Toshiba-branded and third-party manufactured products that support our Toshiba IP*edge* product portfolio. Similar to other resellers of software, hardware and peripherals, these third-party manufactured products carry warranties independent of our Toshiba limited warranty provided with our Toshiba-branded products. Customers should note that third-party manufacturer warranties vary from product to product and are covered by the warranties provided through the original manufacturer and passed on intact to the purchaser by Toshiba. Customers should consult their product documentation for third-party warranty information specific to third-party products. More information may also be available in some cases from the manufacturer's public website.

While Toshiba offers a wide selection of software, hardware and peripheral products, we do not specifically test or guarantee that the third-party products we offer work under every configuration with any or all of the various models of the Toshiba IP*edge*. Toshiba does not endorse, warrant nor assume any liability in connection with such third party products or services. If you have questions about compatibility, we recommend and encourage you to contact the third-party software, hardware and peripheral product manufacturer directly.

Contents

Chapter 3 – ACD System Administration

Chapter 4 – TASKE Reporting and Monitoring

Chapter 5 – Optional Application Products

Chapter 6 – CTI / ACD Applications

Chapter 7 – Network ACD Application

Chapter 8 – Multimedia Contact Center Application

Index

This page is intentionally left blank.

Introduction

This document provides an overview of Contact Center Solutions consisting of Automatic Call Distribution (ACD), Management Information Systems (MIS), and related Computer Telephony Integration (CTI) applications for the IP*edge* system.

Organization

This document is divided into the following major topics:

- **Chapter 1 – Toshiba ACD** provides an overview of the ACD features, including basic and enhanced call handling features, system features and licensing.

- **Chapter 2 – Telephone Features** covers the ACD Agent and Supervisor telephone options.

- **Chapter 3 – ACD System Administration** covers the capabilities provided with this PC software that interfaces with the ACD system.

- **Chapter 4 – TASKE Reporting and Monitoring** covers TASKE Contact, Display Central, Desktop, TASKE Enterprise, and TASKE Workforce Management Interface.

- **Chapter 5 – Optional Application Products** describes applications available to enhance operations.

- **Chapter 6 – CTI / ACD Applications** describes the types of application solutions that the ACD package can provide.

- **Chapter 7 – Network ACD Application** – describes Network ACD and the Unifier software required to support the application.

- **Chapter 8 – Multimedia Contact Center Application** – describes the Web Callback feature, its functionality and the hardware andsoftware required to support the application.

Conventions

Conventions	Description
Note	Elaborates specific items or references other information. Within some tables, general notes apply to the entire table and numbered notes apply to specific items.
Important!	*Calls attention to important instructions or information.*
Arial Bold	Represents telephone buttons.
Courier	Shows a computer keyboard entry or screen display.
+	shows a multiple PC keyboard or phone button entry. Entries without spaces between them show a simultaneous entry. Example: **Delete**+**Enter**. Entries with spaces between them show a sequential entry. Example: **#** + **5**.
Tilde (~)	Means "through." Example: 350~640 Hz frequency range.
See Figure 10	Grey words within the printed text denote cross-references. In the electronic version of this document (FYI Internet download), cross-references appear in blue hypertext.

Related Documents/Media

Note Some documents listed here may appear in different versions on CD-ROM or in print. To find the most current version, check the version/date in the Publication Information on the back of the document's title page.

User Guides and Manuals

Located on the Call Center Solutions Application Software and Documentation Library CD-ROM:

- ACD Agent/Supervisor User Guide
- ACD System Administrator Guide
- ACD Installation Guide

Located on Internet FYI website:

- Net Server Operations Manual
- Voice Assistant Installation Guide
- Chat, System Administrator's Guide
- Call Router on CIX Operations Manual
- Call Manager System Administrator's Guide
- Call Manager User Guide

CD-ROMs

- Strata CIX Call Center Solutions Application Software and Documentation Library for ACD, Net Server and Voice Assistant

For *authorized users,* Internet site FYI (http://fyi.tsd.toshiba.com) contains all current IP*edge* and Contact Center documentation and enables you to view, print and download current publications.

This page is intentionally left blank.

Toshiba ACD   1

This chapter discusses the capabilities of the Automatic Call Distribution (ACD) application. It describes the ACD features and services provided by the Toshiba communication system and applications to support various features.

The ACD application gives call centers the ability to determine how calls are best distributed to their ACD Agents. ACD call centers can be Telemarketing, Customer Service, Technical Support, or any other group that handles large numbers of calls. With the ACD application, calls can be directed in a variety of ways to ensure that calls are handled quickly and efficiently.

ACD also interacts with applications from other vendors that help meet the overall needs of a call center. It includes OakSI (recordX application) or TASKE Contact (MIS application).

Toshiba provides the choice of platforms that run the ACD Server application, the MIS reporting application, and other CTI applications. The option to run these applications on a customer-supplied platform is also provided.

The ACD application is available with Basic and Enhanced feature functionality, along with the license for the number of ACD agents to provide cost-effective pricing levels according to the user's needs.

When the IP*edge* system receives an ACD call, it routes the call to a Pilot DN and the call enters the call center queue. From the queue, the call progresses to one of these options (see the flowchart on next page):

- Search for an Agent.

- Follow the specified call management rules.

- Follow the End of Shift operation if the shift has ended or if all Agents have logged out.

```
                        ┌─────────────────────┐
                        │  Incoming ACD Call  │
                        └─────────────────────┘
                                   │
                                   ▼
    ┌───────────────────────┐   User Chooses to    ┌──────────────────────────┐
    │ Call rings Pilot DN and │  Call Back          │ Caller Leaves Callback   │
    │ enters Call Center Queue,│───────────────────▶│ Information which is      │
    │ announcements/music plays│◀───────────────────│ Placed in the Queue.     │
    └───────────────────────┘   User Chooses to    └──────────────────────────┘
                                 Transfer           ┌──────────────────────────┐
                                                    │ Transfer to Voice        │
                                                    │ Mailbox, Attendant, or   │
                                                    │ other option             │
                                                    └──────────────────────────┘
```

Incoming ACD Call

Call rings Pilot DN and enters Call Center Queue, announcements/music plays

User Chooses to Call Back — Caller Leaves Callback Information which is Placed in the Queue.

User Chooses to Transfer — Transfer to Voice Mailbox, Attendant, or other option

Call Management Processes Call

No Answer

Ring Agent's Telephone

Overflow Operation

Looks for Agent in Another Queue

End of ACD Shift Mode or All Agents Logged Off

Overflows to Another Queue

Agent Answers

ACD Call Talk

Call Reroutes
Possible destinations: Ring another ACD Group, Distributed Hunt Group, Auto Attendant, Attendant Console, designated station(s), bell, or play an announcement and hang up.

6918

Pilot Directory Number

When the IP*edge* system receives an ACD call, it routes to a type of phantom directory number (Pilot DN). From the Pilot DN, the ACD call enters the call center queue. When a call is directed to the ACD Pilot DN, the ACD software takes over control of the call, instead of the IP*edge* system.

The Pilot DN can redirect calls to a voice mailbox or After Shift destination if the link to the ACD Agents is down. The ACD System software provides a control to turn routing on or off to the After Shift destination.

Music or Announcement Sources

Calls waiting in queue are connected either to a music source port that plays music or to pre-recorded announcements. These are defined per queue in order to provide information related to the function of that queue. System provides up to 15 music sources. The announcements are provided by the ACD server. No external digital devices are required. The call control software assigns the music source on a call-by-call basis.

Announcements

Informative announcements can be played to callers in queue at various intervals. If an Agent becomes available during an announcement, the call can be immediately routed to an agent or can wait until the announcement is completed. During the announcement, the call keeps its place in queue.

Two types of announcements can be programmed to play per queue: Initial and Periodic (repeating). For Initial announcements, if the timer is set to zero, it is always played before a call is routed to any Agent.

Once a call has been answered and the Initial announcement has been played, the call is held in a queue and the assigned announcement or music plays for the caller. The timing of the initial and periodic announcements is programmable.

The announcement can be either a fixed message or an intelligent message that provides information about the call wait time or the queue position. The announcement can also provide an option to leave a message in voice mail.

The enhanced version of ACD provides an option for callback. While the caller goes on-hook to wait for callback, the callback request retains its position in the queue until an agent becomes available.

Intelligent announcements should *not* be used in some configurations. For example, priority queuing, where higher priority calls push back existing calls in queue, thus changing the estimated wait time.

Agent Search Methods

Once a call enters the ACD queue, it searches for available Agents. The search methods are:

- **Linear** – Always starts from the top of the Agent list and finds the first available Agent.

- **Round Robin** – Next Agent on the Agent list gets the waiting call. The next call rotates to the next Agent, etc.

- **Longest Idle** – The Agent who has been idle the longest receives the next call. An Agent's "start of idle" status affects all queues – that is if the Agent just completed a call in Queue #1, that Agent is now idle for any other queue that the Agent is logged into.

- **Balanced Call Count** – The Agent who has handled the lowest number of calls receives the next call. When an Agent logs in, the Agent is set to zero calls if the Agent is the first to log into the group or the Agent can be set to the lowest call count of any Agent already logged in. This prevents Agents that logged in late from getting all of the calls.

- **Preferred Agent** – Based on integration with optional applications, the system can route the call to the Agent assigned to a specific account to handle the call. If that Agent is not available, the call routes to the next available Agent.

  In the Enhanced version, the following options are also available:

  - Timer – An ACD queue timer enables a call to wait a certain number of seconds to determine if the agent becomes available prior to going into queue.

  - Auto-Learn – (requires Call Router) Sends Preferred Agent information to Call Router. The Call Router updates its Preferred Agent field for that CallerID/ANI so that the Preferred Agent is used on all future calls from that telephone number.

  - Change Preferred Agent – (requires Call Manager) An agent can answer a call, change the Preferred Agent field, and then transfer the call back to the ACD queue. The call then tries to give the call to that preferred agent.

- **Skills-Based Routing** – Agents can log into the queues that they have the skills to support—for example, one queue for English-speaking clients, another for Spanish-speaking clients. An Agent who is bilingual can log into both queues. The ACD system can work with Interactive Voice Response (IVR) to send calls to the appropriately skilled Agents.

- **Agent Priority** – The Agent with the highest priority setting receives the next call. If multiple Agents have the same priority level, the Agent who was idle longest gets the call. This automatically expands the pool of Agents searched, based upon call traffic.

  The Agent can log into multiple groups with a different priority in each group to allow for a more flexible skills based routing configuration.

Call Handling

The ACD application is available in a basic and enhanced package. Enhanced ACD includes all basic capabilities plus multiple group login, priority queuing, time-scheduled ACD queues, agent and call priority escalation handling, balanced call count agent search and callback.

In addition to the Agent search methods described earlier, there are a number of enhanced features that provide greater flexibility and automatic call sorting.

Multiple Group Agent/Supervisor Login

System Availability: Enhanced Version

ACD agents or supervisors can be logged into multiple ACD groups, enabling agents to answer calls for multiple groups. This is very useful for backup coverage between groups. It's also the foundation for skills-based routing and agent priority routing, enabling many advanced call center applications.

Priority Queuing

System Availability: Enhanced Version

This feature enables high priority calls to be answered sooner than low priority calls. ACD calls can be tagged optionally with a priority number before they are placed into the ACD queue. The priority number assigned to the call determines where the call is placed in queue. Priority values range from 0 to 100, with 100 being the highest priority. Call priorities can be assigned through IVR or the Call Router. Identifying the caller when the call arrives is key to setting call priorities. This can be done using Call Manager (manually) or automatically using the Call Router or IVR.

Priority Escalation

The escalation parameter ensures that calls in queue will advance in answer status despite an influx of high priority calls. An escalation value can be assigned to increment the priority value to ensure that calls with a lower initial value are eventually answered. Escalation value is programmed in seconds.

Each queue can have a pre-set priority value. Calls without an assigned priority take on the queue value. Calls with higher values keep the higher value.

Escalation ensures that calls are routed to available Agents based on two factors: highest priority and oldest ringing call. Agents logged into multiple groups receive the highest priority call of all of those groups.

Call Backs (Real Time)

System Availability: Enhanced Version

At a voice assistant announcement prompt, the caller is offered the choice to be called back when his/her place in queue occurs. If the caller chooses the Call Back option, he/she is prompted for his call back number and optionally to describe the reason for his call. The ACD holds his/her place in queue, and when it's ready to be answered by an Agent, the ACD places the callback call.

If the caller does not choose the Call Back option, the call remains in the ACD queue searching for the next available agent.

This option uses the same criteria provided for queue management, and will only begin when the queue conditions deem it necessary.

Missed Call Unavailable

System Availability: Basic or Enhanced Versions

Options are provided to make an Agent automatically unavailable or logged out if they miss an offered ACD call. A call is considered missed if the call is not answered and advanced to the next Agent using the "No-Answer Advance" timer.

Abandoned Calls

System Availability: Basic or Enhanced Versions

Callers who hang up without ever being answered by an Agent are considered "abandoned." Whenever this occurs, appropriate MIS events are generated and an action can be triggered (for example, to log the call).

Overflow/Reroute

System Availability: Basic or Enhanced Versions

The amount of time that a call stays in this queue before it is routed to the overflow destination is programmable.

An overflow action can occur when calls remain in queue beyond an acceptable time period. The action to be taken is programmable, but typically the call is moved to another location.

A reroute action is triggered when the queue is disabled or no Agents are logged in to take calls. This action is also programmable, but frequently, the caller is sent to a reroute destination.

Enhanced Queue Management

System Availability: Enhanced Version

Enhanced ACD provides programmable triggers and actions to intelligently manage calls that are "unlikely to be answered in a timely fashion."

The following conditions may be checked for both the current and target queues against the programmable value:

- Number of calls waiting in a queue

- Waiting calls/agent ratio

- Agent utilization

If the conditions are met for both the current and target queues, the following actions may be taken for the call:

- Route the call to the target queue

- Available agent search is expanded to include the target group

System Capacities

The ACD software is scalable from a system of 10 Agents to 360 Agents with one agent increment.

Table 1   **IP*edge* System ACD Capacities**

ACD Max. Capacities	EP	EC	EM
Number of Pilot DNs (ACD Groups)	256	256	256
Music on hold sources	15	15	15
Voice Assistant Announcement Ports	32	32	32
Agents / Supervisors	40	360	360
Maximum Number of Extensions (PDNs)	40	200	1,000
Maximum Number of Calls waiting in queue	20	64	64

Feature Summary

Basic and Enhanced features are shown in Table 2. (X = Feature included.)

Table 2   ACD Basic and Enhanced Model Features

Queue Management Features	Basic	Enhanced
Agent Search Methods		
• Linear	X	X
• Round Robin	X	X
• Longest Idle	X	X
• Balanced Call Count		X
• Agent Priority		X
Supervisor Search Methods		
• Linear	X	X
• Round Robin	X	X
Announcement Management	X	X
• Simple Announcements	X	X
• Intelligent Announcements	X	X
Overflow Timer and Destination	X	X
No Answer Agent Advance	X	X
Enhanced Queue Management		
• Re-route to another queue		X
• Look-ahead agent routing		X
Call Backs (real time)		X
Queue Management of Music-on-hold (MOH), Announcements and Timers	X	X
Primary-level Skills Routing		X
Preferred Agent		X
Queue Start/Stop Schedules		X
Call Priority and Escalation		X
Agent Features	**Basic**	**Enhanced**
Log In	Single	Multiple
Unavailable/Available	X	X
Wrap up Timer	X	X
End Wrap up Timer	X	X
Group Call Pick Up	X	X
Agent Help (Supervisor Assistance)	X	X
Work Units	X	X
Auto Answer with Zip Tone	X	X
Agent Scripting	X	X

Table 2   ACD Basic and Enhanced Model Features *(continued)*

Supervisor Features	Basic	Enhanced
Log In	Single	Multiple
Option to Take Calls as Agent	X	X
Agent Assistance (Agent Requests Help)	X	X
Call Monitoring – Silent	X	X
Call Monitoring – Participating	X	X
Queue Alarms	X	X
System Features	Basic	Enhanced
Interfaces to other Optional Modules:	X	X
• Call Router	X	X
• Voice Assistant IVR	X	X
• Call Manager[1]	X	X
• Chat	X	X

1.ACD viewer required for enhanced ACD.

License Policy

The set of features provided are controlled through the license that defines these capabilities:

- Basic or Enhanced mode of operation
- Number of configured Agents
- Number of MIS Supervisors and options

Other options such as Call Router, Call Manager, etc., are available by the proper license.

System Configuration

ACD has two major configuration options, one for traditional Time Division Multiplex (TDM)-based system and the other for Voice Over IP (VoIP)-based system.

ACD for IP*edge*

The chart below shows the ACD system for IP*edge*. ACD application must run on Media Application Server (MAS) or Micro MAS-H system to take advantage of VoIP capability for the announcement port.
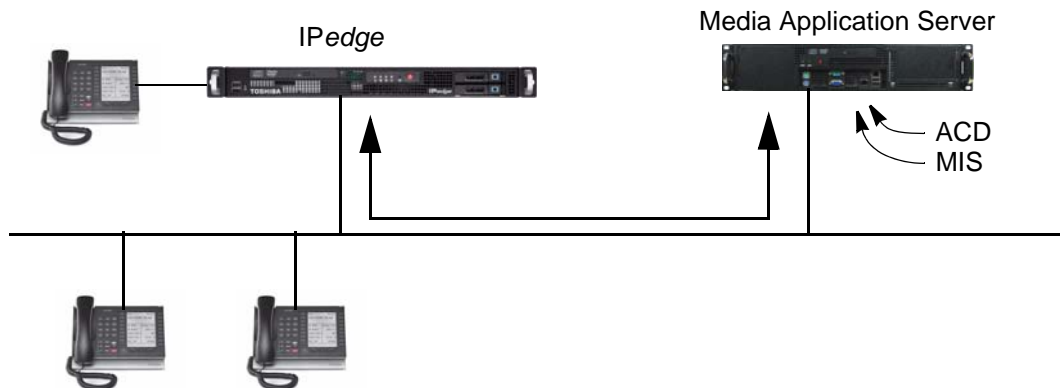
Communication Services

ACD and MIS are provided by CTI applications running on an external ACD server module connected to IP*edge* via the Computer Supported Telephone Applications (CSTA) Open Architecture Interface (OAI) port. The CTI server runs both the ACD call processing application and the separate MIS application, such as Taske Contact, as well as other CTI applications.

IP*edge* provides a number of services to support ACD beyond the CSTA link. These services allow features and functions to occur in an orderly manner within the IP*edge* system. All calls are handled by the PBX at the instruction of the external software. See Chapter 6 – CTI / ACD Applications for more information.

This page is intentionally left blank.
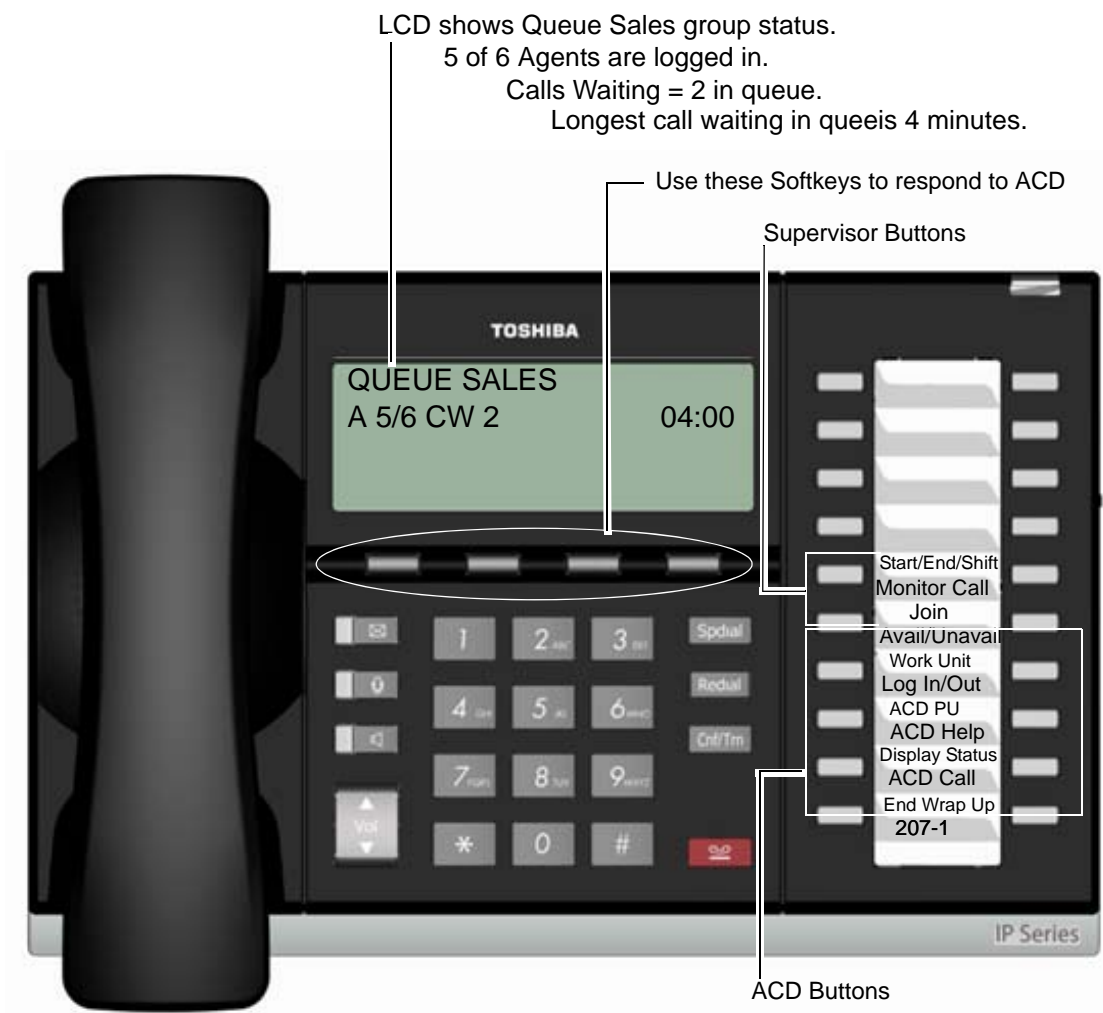
Telephone Features

2

This chapter covers the telephone features for ACD Agents and Supervisors.

ACD Agents can use a Toshiba IP5000-series telephone to log into an ACD Group, provided that the telephone has a unique, single-appearing extension. Toshiba recommends using a IP5000-series Liquid Crystal Display (LCD) telephone for all Agents requiring display functions. The 5000-series LCD IP telephone has improved data handling capabilities for instantaneous display updates.

Tones are provided for most features to indicate "entry accepted," "entry rejected," etc., for those Agents and Supervisors who do not have an LCD telephone.

A IP5000-series model telephone with typical ACD feature buttons is shown below.

LCD shows Queue Sales group status.
5 of 6 Agents are logged in.
Calls Waiting = 2 in queue.
Longest call waiting in queeis 4 minutes.

Use these Softkeys to respond to ACD

Supervisor Buttons

TOSHIBA

QUEUE SALES
A 5/6 CW 2   04:00

Start/End/Shift
Monitor Call
Join
Avail/Unavail
Work Unit
Log In/Out
ACD PU
ACD Help
Display Status
ACD Call
End Wrap Up
207-1

IP Series

ACD Buttons

Agent Telephone Features

The following features are available from IPT5000-series telephones or from the Call Manager, an on-screen PC telephone.

Log In/Log Out

After entering a valid Agent ID, password (optional), and queue number, the telephone becomes available for receiving ACD calls and the ACD feature codes are activated. The extension that is used to log into an ACD Group becomes the telephone's **ACD Call** button.

After logging out, the ACD features are deactivated on the telephone and the telephone is logged out of the ACD Group. Non-ACD calls are not registered as PBX calls for MIS reporting purposes.

After all Agents have logged out, new ACD calls are redirected to the reroute destination. Calls currently in queue go to the overflow destination.

Agents are identified by name and an Agent ID code. A pass code can be assigned to each Agent for log in purposes. Agents log in or out using a DKT telephone or Call Manager. Each Agent is assigned a priority to allow calls to be routed to an available Agent with the highest priority for the enhanced version.

The Agent may have the following states:

- Logged Out – Not logged into the queue.

- Available – Logged in and available to handle the next call.

- Unavailable – Logged in, but not available to handle calls.

- Wrap Up Work – Not open to ACD calls, completing paperwork or other post ACD-call information before handling the next call. Also known as "After Call Work."

- PBX Call – Logged in, but busy on the **ACD Call** button with a non-ACD Call.

Available/Unavailable

This feature enables temporary unavailability for ACD calls without logging out. Unavailable status can be used for lunch and coffee breaks, or extended times away from the telephone during the shift.

While in the Unavailable status, calls are not delivered to that Agent. Agents can change their status by pressing the **Avail/Unavail** button.

An option is provided within each group to automatically place an Agent in the Unavailable status if the Agent does not answer an ACD call within the Ring Timing Interval. This avoids delivering calls to an Agent that does not answer calls because he/she failed to change status.

Calls stack up in queue if all Agents are Unavailable. An alarm can be set to trigger when too many calls are in queue. New calls go to the reroute destination only if all Agents log out. Calls in queue follow the overflow destination.

When using Call Manager to place an Agent in an Unavailable status, there are 10 codes that can be used to identify the reason for the unavailability. These codes are reported in the MIS reports and appear on the monitor screen.

Wrap Up Time

This mode (also known as "After Call Work" mode) is a pre-defined mode with a time limit that enables an Agent to process information related to the last ACD call without interruption. When the wrap up time limit expires, ACD calls are routed to the Agent. The Agent can also have an **End Wrap Up** telephone button. When the Agent presses **End Wrap Up**, wrap up time ends in one second. An Agent can make/receive PBX calls during the wrap up time period.

Work Unit

This feature enters an Account Code. The code is sent to the MIS reporting system for inclusion in its reports.

ACD Help

Agents using digital telephones may have an **ACD Help** button on their telephone as a hot-line to the Supervisor for assistance. Pressing this feature button, alerts the ACD software to find the Supervisor, if logged in, and create a call to that location placing the current call on hold. Once the call is completed, the user may use PBX features to conference the caller into the call as a three-way call or hang up and return to the original caller.

Multiple Supervisors are allowed for each queue, so the ACD system can be set to use either a linear or round-robin method to find an available Supervisor.

ACD Call Pickup

This feature provides an easy method for an Agent to quickly pick up a ringing ACD call on another Agent's telephone. By pressing the **ACD PU** button, the Agent redirects the longest ringing call within the Agent's group(s) to his/her telephone.

This feature follows these guidelines for picking up ACD calls:

- Both stations must be in the same ACD Group.
- The incoming call must be an ACD call for that group.
- Your **ACD Call** button must be idle.
- You must be in an available state.

Auto Answer with Zip Tone

This option determines whether ACD auto-answers a call and then sends an audible tone to the connection. This feature is enabled on an Agent-by-Agent basis.

Supervisor Telephone Features

ACD Group Supervisors must use a Toshiba IP5000-series telephone with an LCD. The LCD provides important information about the ACD Group or an individual Agent's activities.

The ACD Group Supervisor's log in enables access to features that are exclusive to Supervisors. Each Supervisor is identified by an ID code and a name. Each Supervisor can have a unique log in code. Supervisors can log in or out using a telephone or Call Manager.

- **Start/End Shift** is used to start or end an ACD shift. End Shift prevents calls from entering the ACD queue.

- Another ACD button is **Monitor Call**, which enables Supervisors to monitor Agent's conversations on ACD calls. Supervisors can also participate in the call by pressing **Join Call**.

- Both Agents and Supervisors can display the queue status, but Supervisors can display the call status of individual Agents.

- Agents can call the ACD Group Supervisor for help with an ACD call. The Supervisor can talk to the Agent with the ACD call on hold, or talk exclusively to the caller while the Agent drops out, or participate in a three-way conversation with the Agent and the ACD caller. When an Agent presses **ACD Help**, the call is routed to an available Supervisor using linear or round robin search. If the Supervisor is busy on the **ACD Call** button, the call is delivered to that button with the camp-on option, not overridden.

- Supervisors can opt to log in as an Agent in order to alleviate heavy call loads. They receive calls only when no agent is available for the next call.

Log In/Log Out

The log in/log out procedure for the Supervisor is the same as for an Agent with one additional input. The Supervisor is asked to indicate if he/she wants to receive calls as an Agent. If yes, then the Supervisor is an Agent of last resort for that group.

In the Basic models, a Supervisor may only log into one group. In the Enhanced models, a Supervisor may log into multiple groups at the same time.

Agent Assistance

Agents can call the ACD Group Supervisor(s) for assistance by pressing **ACD Help** on their telephones. **ACD Help** rings the Supervisor telephone if the Supervisor's **ACD Call** button is available. This feature enables the Agent to:

- Talk to a Supervisor with the ACD call on hold

- Talk to an ACD caller with the Supervisor dropping out of the call by hanging up

- Participate in a three-way conversation with the Supervisor and the ACD caller

Call Monitoring/Join Call

Call Monitoring or Join Call enables the Supervisor to monitor conversations between an ACD Agent and caller. When the Supervisor presses **Monitor Call**, a one-way, listen-only path is established for the Supervisor. The monitoring feature does not apply to non-ACD calls. The Supervisor may participate in the conversation by pressing **Join Call**. This provides a three-way conference with the Agent and the caller.

Only one Supervisor can monitor an Agent at a time and that Agent must be a member of the group the Supervisor logged into. Monitoring continues until it is cancelled or the Agent logs out. The point of entry may be done with or without a warning tone to the existing parties of the call.

Important!   *This feature is only intended for ACD Supervisors, so the Supervisor log in ID code should be kept confidential to prevent unauthorized use of this and other Supervisor features.*

Notes

- Monitor only works when your telephone is idle.
- This feature is limited by the availability of conference channels. If there are no conference channels available, a reorder tone is heard.

ACD Call Pickup

This feature works the same way as it does for Agents (see page 13).

Queue Alarm Indication

Alarms may be created for indicating conditions within the queue that may need the attention of Agents and Supervisors. These indications can be made through ringing DKT telephones and through the LCD, or via pagers, or PC displays. LCD telephones provide the **CLR** (Clear) Soft Key to turn Alarms off.

Start/End Shifts

An ACD Group Supervisor can have a **Start/End Shift** button on the telephone to start or end the shift for an ACD Group. When this button is used to enable or disable the queue, the ACD queue starts or stops receiving new calls. Calls already in queue remain there until handled by the remaining Agents.

This capability can be used at the end of the work day or shift, or used during the normal shift to deflect calls during meetings when calls need to be handled in an After Shift manner.

There are two ways to start and end shifts: one way is from the telephone using the **Start/End Shift** button, the second is by using the administrative software, ACD System Administrator. From the ACD System Administrator, there are three different modes for enabling the queue: Always Enabled, Disabled or Scheduled. A scheduled Start/End Shift can be temporarily disabled.

This page is intentionally left blank.

ACD System Administration 3

The ACD System Administrator application enables Administrators to assign and organize Agents and Supervisors into ACD groups, as well as provide capabilities and actions needed for the call center.

ACD Administrators can easily change assignments for the categories represented by tabs (shown below).

Assignment Tabs
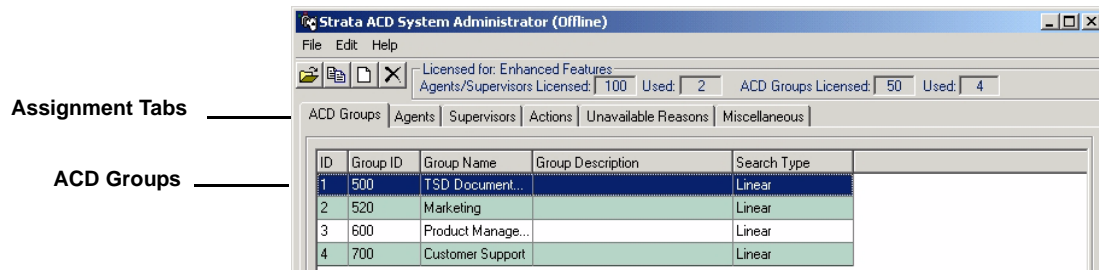
ACD Groups

ACD Groups

Administrators can easily create or edit ACD Groups by selecting File > Create ACD Groups or by double-clicking on an existing group. This is described further in the following section, "Edit ACD Group Window."

Edit ACD Group Window

This window (shown right) enables the Administrator to assign the following:

General Tab

*   Enable/Disable or schedule the queue (scheduling requires the Enhanced package)

Call Management Tab

*   Time initial and periodic announcements
*   Set overflow call time
*   Reroute calls when disabled
*   Reroute calls based on trigger actions (available in Enhanced package only)
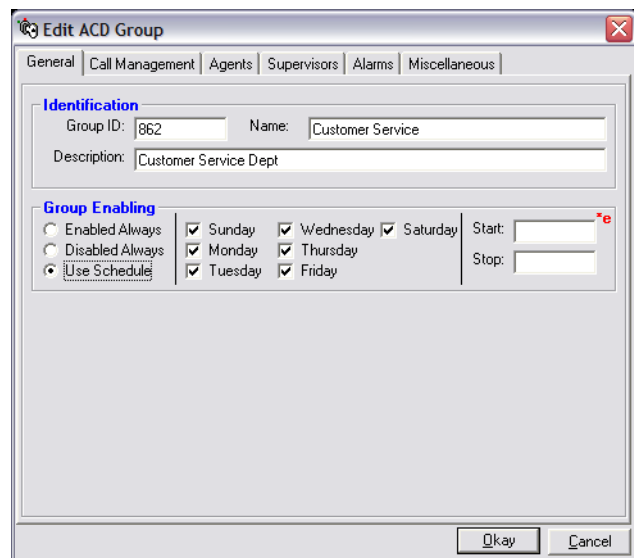
Agent and/or Supervisor Tab

- Set the Agent or Supervisor hunt method:
  - Basic ACD: linear, round robin or longest idle
  - Enhanced ACD: linear, round robin, longest idle, balanced call, and agent priority

Note Used only when more than one agent logs into the same group.

- Add or delete Agents to the group
- Timers:
  - No-Answer Advance – Set the time before a call advances to next Agent, if not answered.
  - Wrap-Up – Set length of Wrap Up time, no answer advance.

Agent Tab Only

- Log out an Agent that doesn't answer within the Ring-No Answer time
- Make an Agent Unavailable if the agent doesn't answer within the Ring-No Answer time
- Allow the last agent to log out or go Unavailable only if there are no calls in queue

Alarms Tab

Alarms can be generated when certain conditions occur in the queue. These alarms can be delivered to the Agents and Supervisor(s) for that group, or delivered to other devices to alert that a condition has occurred which needs attention.

Set the types of conditions that trigger alarms, and specifying actions made by the system (default or custom actions can be selected). The following alarms are preprogrammed into the system:

- Agent Utilization, Busy Ratio/percentage.
- Active Agents + Supers, Available Agents + Supers/number of agents.
- Call Abandoned
- Calls Waiting/number of calls.
- Longest Call Waiting/number of seconds.

Miscellaneous Tab

- Route calls to the Preferred Agent set in this screen. Choices are: Never, Always, If preferred agent is missing on entry. Also sets a preferred-agent time out in seconds.
- Define initial priority level and set an escalation value to increment the call to the next priority value.
- Set the Music-on-hold (MOH) source to be used by the ACD group when calls are placed back into the queue.
- Attach a "scripting" reference (URL) to the call so that when a call arrives on an agent's telephone, the agent sees the "scripting" information to lead the agent through specific statements and questions.
- Set a calculated wait time based on number of seconds entered in this screen (available in Enhanced package only).

Agents and Supervisors

The Agents and Supervisors tabs from the top level (shown on page 17) enables setting the following:

- Add or delete Agents or Supervisors to the group

- Assign Agents or Supervisor IDs and priorities

Actions

From the Actions tab, users can view or change actions.

- Add, edit or delete actions. Although a number of predefined actions are provided with the software, new actions can be defined. New or existing Voice Assistant scripts and parameters can be used with the actions.

- Actions are programmable and used for many different purposes like: Announcement, Abandoned Calls, Overflow, Alarms, Notifications, etc.). Actions can encompass a number of types such as the following:

  - Transfer Call to VA/Announcement

  - Run VA Script

  - Transfer Call

  - Send Dynamic Data Exchange (DDE) Message

  - Log to File

  - Send LCD Message

  - Send Email

  - Announce with Callback (Enhanced version)

  - Interflow (Enhanced version)

  - Share Agents (Enhanced version)

Unavailable Reasons

The DKT telephone has two fixed unavailable codes—Forced and General Unavailable. Forced is used when the ACD forces an agent unavailable due to a call not being answered in the allocated time frame. General is used when the manual button on the phone is used.

The 10 additional codes (Unavailable, On Break, Away from Desk, Wrapping Up, Making Calls, Sales Demo, In a Meeting, In Conference, Scheduling, Conference Call) are not available from the telephone, but can be entered using Call Manager. By clicking Change, these reasons can be changed to meet the customer's needs by replacing the text with your own customized text.

Miscellaneous

From the Miscellaneous tab, users can view or change the following:

- Trunk Access Code – used to dial out (e.g., 8 or 9) when callbacks are used.

- Pilot DN – defines the Pilot DN where the ACD calls for the group will be delivered.

- Route Destination – Pilot DN destination for the routing point of an Intermediate Pilot DN.

This page is intentionally left blank.

# TASKE Reporting and Monitoring   **4**

TASKE Contact

TASKE Contact provides a suite of easy-to-use management tools that enable a contact center supervisor to manage their agents, set and meet service levels and provide vital management information on call activity. TASKE Contact is a robust management application that's easy to use and includes Real-time display and reports on the web browser. TASKE Contact has several add-on modules to further enhance the application and includes Contact Desktop, Display Central, TASKE Enterprise Client and TASKE Work Force Management Interface.

Real Time Display

For a quick and comprehensive overview of contact center activity, the Real Time display provides the supervision with real-time and historical information on overall company performance, agent or group activity and queue status through the web interface. The monitor also tracks a variety of important contact center indicators, including agents available, longest call waiting, calls answered and average talk time.

TASKE Replay plays back historical agent or queue activity. The Replay's trigger feature makes it easy to pinpoint the source of inefficiencies in contact center performance by automatically halting playback at pre-selected thresholds. For example, the progressive display can be set to stop at the first abandoned call of the day to verify queue volume and agent actions at that time.
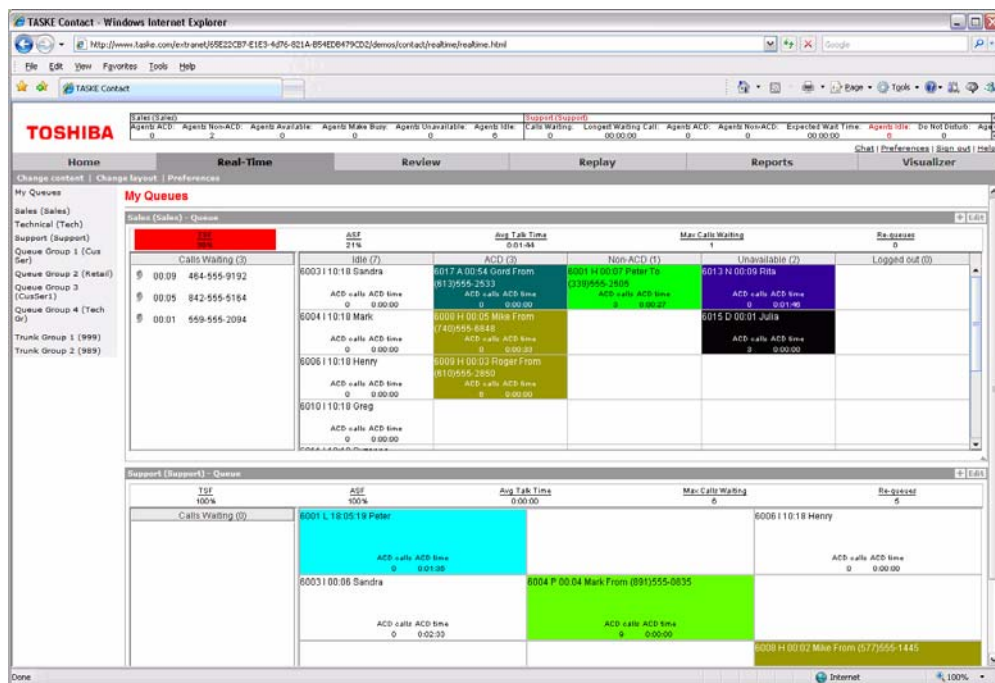
Reports

Through simple, intuitive menus, managers can generate more than 150 standard reports on call details, abandoned calls, individual agent activity, agent groups, extensions, trunks, queue groups, activity codes and more. With straightforward report templates that can be saved and conveniently used again, managers can quickly compile detailed call activity data.

TASKE Reports (shown below) cover daily, weekly, monthly and yearly timeframes, and reports can be customized to highlight key information. Automatic report printing can be scheduled for any time of the day, or exported to spreadsheet, database or text files, even HTML for the World Wide Web. With an Internet connection and Web browser, users can view reports posted on the company intranet or Internet site while on the road.
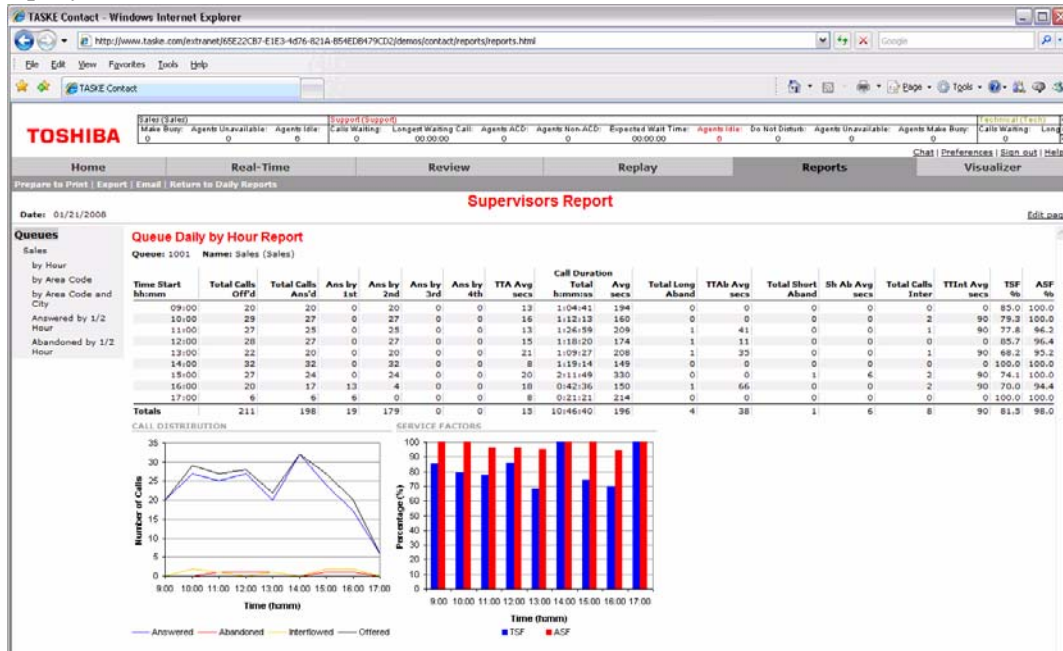
Display Central

Taske Display Central is a tool for sharing critical call center information among agents and supervisors. By taking advantage of large screen technologies such as LCD and/or plasma displays, Display Central integrates real-time statistics as well as dynamic data from a wide range of business applications. Taske DisplayCentral Designer allows the administrator to configure and customize the DisplayCentral screen to satisfy the specific needs of the customer.

TASKE Desktop (Optional Agent Desktop Application)

With Agent Desktop, agents can view and react to current contact center conditions in situations where wall-mounted reader boards are impractical. Agent Desktop displays user-specified, real-time contact center data on an agent's computer monitor.

Optional Desktop Advanced provides agents with the rule to execute the action triggered by an event.

TASKE Enterprise (Option)

TASKE Enterprise, an add-on module to TASKE Contact, provides managers with the convenience of viewing business data from multiple telephone system locations in real-time using a single network connection. With Enterprise, managers don't have to connect to each separate server in order to view reports and monitor statistics with a familiar user interface.

TASKE Workforce Management Interface (Option)

The TASKE Workforce Management option provides integration to popular workforce management systems including IEX and Left Bank. The option provides automatic historical data imports, and with some systems real-time agent adherence.

This page is intentionally left blank.

Optional Application Products $\quad$ **5**

Toshiba ACD system has optional products from various vendors to enhance its capabilities and to meet customers' needs. These products are integrated with the ACD system to provide customers with contact center and other CTI solutions.

Call Router

The Right Person At The Right Time

In today's interactive business environment, getting your callers to the appropriate person or group quickly is extremely important. Routing calls based on the identity of the caller improves service and focuses business efforts. The Call Router is an intelligent call routing system that uses caller information and schedules to automatically route calls to a particular person, call group or automated application. Whether your business has dedicated territories, a customer service or technical support group, help desks or functional departments, routing calls makes good business sense. As a business grows, it takes more than an experienced receptionist to handle the increasing call volume and number of employees. With Call Router you can provide your top customers with priority service while directing non-paying callers to your collections department.

Intelligent Routing

Call Router utilizes Caller ID or database information to identify each call and quickly route it to the person or group best suited to service it. Callers can also be prompted to input identifying information, such as an account, serial or phone number to assist in routing the call. The caller's information is entered into the Call Router database, which stores the information for each caller. The database is capable of storing more than 1,500,000 entries, easily managing virtually any routing application. Call Router can be used with Call Manager for screen pop applications by attaching the collected information and database information into Call Manager's Call Notes so anyone who handles the call can see the customer-related information.

24/7

Most businesses do not operate around the clock and have customers who cannot contact them during normal business hours. The Call Router gets after-hours, weekend and holiday calls to the appropriate destination, forwards calls to an on-call person and transfers calls to alternate phone numbers. The Auto Learn feature allows the Call Router to recognize multiple telephone numbers from the same company and changes the Caller ID information to the main company number or an account number in the Call Router database. Call Router also changes or adds additional information about the incoming caller. A name can be associated with Caller ID information for easy identification by the answering party. Call Router prompts the incoming caller or Call Manager users for additional information and presents that new information each time a call is received from the original telephone number.

Call Router (shown in diagram below) ensures your customers reach the correct destination in a timely and efficient method.
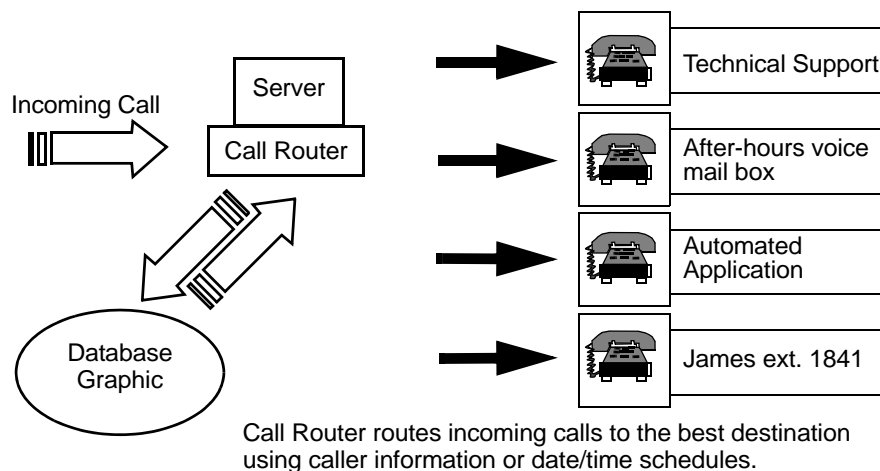
Call Router routes incoming calls to the best destination using caller information or date/time schedules.

Call Router routes incoming calls to the best destination using caller information or date/time schedules.

Voice Assistant IVR with ODBC Access

Virtual Employee

Voice Assistant is a flexible Interactive Voice Response (IVR) system that acts as a virtual employee. It can, by automatically collecting data from callers, provide information back to them, or route the caller to another location, if needed. By combining a "voice" with your company's customer database, Voice Assistant becomes an integral employee, providing customized service all day, every day, to your callers. Voice Assistant goes far beyond the capabilities of voice mail to deliver high-level voice processing applications.

Actions Speak Louder than Words

Voice Assistant is the engine behind all voice processing capabilities in the Computer Telephony Solutions suite. Working in conjunction with other modules, Voice Assistant provides even more capabilities to each application, such as making announcements to callers, prompting callers for information, validating customer information, and playing a menu of options. For example, Voice Assistant enhances other applications, such as Call Router and Call Manager, by routing calls and performing screen pops based on information collected from each caller. The available IVR Option connects Voice Assistant with most industry-standard ODBC-compliant databases, enabling applications to provide customers with automated information including order entry, job status, site locations and customer surveys.

Voice Assistant's Text-to-Speech (TTS) engine "speaks" the database information to the caller with its TTS capabilities instead of using recorded prompts. This is beneficial for applications with extensive information, such as requesting addresses or product information. The integrated design of the suite allows all the applications to work together, reducing the amount of hardware and software required for managing multiple voice processing functions.

Voice Assistant saves company resources and time by automating routine telephone processes, including collecting customer information and providing callers with routine and relevant information.

Description:

Caller enters identifying data through keypad.	Voice Assistant requests & retrieves customer information from company database.	Voice Assistant "speaks" information back to caller using recorded prompts or TTS engine.

The IVR Option for Voice Assistant that provides real-time access to a company's Open Database Connectivity (ODBC) compliant database. With the IVR option, Voice Assistant can allow callers to access pertinent information such as account status and schedules.

Call Manager

Call Manager (CM) is a powerful unified communications tool, a PC soft phone designed to enhance productivity for mobile and office users.

The Call Manager application runs on a PC with Microsoft® Windows XP, Windows Vista, the Terminal server on Windows Server 2003 ~ Windows Server 2008 R2, Windows 7 or Windows 10 operating systems.

There are two levels of IP*edge* Call Manager:

- Call Manager Standard version is free to all users of the IP*edge* system. The license (I-CM-STD1) for Call Manager Standard is included in the user license bundle at no additional charge.

- Call Manager Advanced version provides enhanced functionality, including full Unified Communications (UC). Purchase Call Manager Advanced license (I-CM-1) when full UC capabilities are required.

  ACD customers and/or Network Call Manager customers must purchase the full featured Call Manager Advanced as the Call Manager Standard is not supported under this environment.

Call Manager clients connect to the Net Server running on the IP*edge* system with the appropriate license (I-CM-1/I-CM-V1) on IP*edge*. When Call Manager is used with ACD or Unifier, it must connect to the external server with ACD or Unifier with the appropriate license (LICMAS-NETSEAT) for the server.

Call Manager Standard

Call Manager Standard provides the following major functions:

- Call control support (dial, answer, transfer, with drag and drop operation)

- 9 configurable buttons for any of the following features:

  - DSS/BLF (status display)

  - Feature access code

  - Run Program

  - Speed Dial

  - System/PBX Command

  - Web URL

- LCD View

- Dialing from Microsoft Outlook Contacts
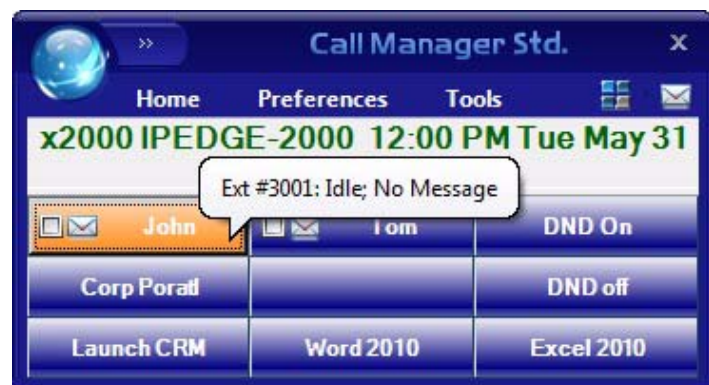
Call Manager Advanced

Call Manager Advanced provides the following major functions:

- Desktop call control from your PC

- Customized call handling – CM allows you to place, answer, handle, view, and manage telephone calls using your computer screen, keyboard, and mouse.

- Outbound dialing from any application

- CRM integration with screen pops – CM can easily interface with many popular programs (like Microsoft Outlook, Salesforce CRM, ACT, etc.). This allows you to dial from and "screen-pop" into these programs or the Internet / Intranet.

- Presence Viewer to display the status of other users

- Instant Messaging / Chat

- Using the VoIP Audio capabilities can provide a complete soft phone speech path when using a PC with the proper speech component support.

Figure 1   Call Manager Main Page

- Rules and actions can be set up to automatically activate when calls arrive even while you are away.

The Call Manager is based on the Microsoft Fluent User Interface which is easy to use and manage.

Microsoft's fluent user interface breaks the ribbon GUI down into multiple tabs. The tabs are broken down into groups. The ribbon groups all the common features and functionality together. Each tab has a specific function and all the buttons in that tab support that specific function. For example, the Home tab encompasses all the basic telephony functions including: Hold, Transfer, Hang up, and Make Call.

Centralized Communication Tool

Look at any desktop in a call center or progressive company and you're guaranteed to find a computer and a telephone. These critical communication tools are used constantly; yet they are seldom integrated. Instead, users become the "technology-integrator," going back and forth for information and communication while reducing the level of customer service provided to callers. Call Manager leverages the power of the computer and telephone to bring one superior tool to the desktop. Call Manager manages incoming and outgoing call functions and synchronizes with a company's operations, CRM or contact software. The versatility of Call Manager allows you to control calls, capture important customer data and provide customers with superior service.

Advanced Call Management

Call Manager provides users with telephone features and call-handling functions directly from the computer. Dialing, answering, transferring, placing a call on hold and ending calls are all executable from the compact or expanded Call Manager Home view. Caller ID and status of each call display, enabling users to efficiently manage multiple calls. Call Manager also allows you to dial a telephone number from any program including contact, CRM, word processing, spreadsheet and presentation applications. The Call Notes feature allows users to attach important customer information to a call, which then follows the caller if they are transferred to another department or extension. This eliminates the need to ask a caller for the same information multiple times. Call notes can also display information collected from the IVR system.

Ribbon GUI

The Call Manager GUI is based on the Microsoft Fluent User Interface to make the GUI easy to use and manage. Microsoft's fluent user interface breaks the ribbon GUI down into multiple tabs. The tabs are broken down into groups. The ribbon groups all the common features and functionality together. Each tab has a specific function and all the buttons in that tab support that specific function. For example, the Home tab encompasses all the basic telephony functions including: Hold, Transfer, Hang up, and Make Call (as shown below).

Center Console

The center console holds the LCD and Call Information as well as the very familiar central programmable feature buttons to keep the user's most frequently called people or application buttons within reach. The Calls window displays the status and associated information for each active telephone call (shown below). Thus viewing and managing multiple telephone calls is easy.

Buttons

All buttons in the Call Manager are created equal so that any button can be programmed as any other button. Call Manager can use any of the buttons including other buttons from the More Buttons companion application for ACD functionality. Each button companion application can hold eight banks of 64 buttons per bank. One can have eight instances of the More Buttons companion applications in Call Manager. All buttons can be programmed by the user for feature codes, speed dial, System/PBS commands, user defined actions, ACD keys, DSS extension keys, web key, and to run programs. If optional softphone license is applied, any fixed key, soft key, or feature key of the IP telephone can be assigned to Call Manager button.

Screen Pops

Call Manager integrates with many of the leading contact manager and CRM programs with its flexible, multi-protocol software interface. When a telephone call comes in, Call Manager triggers the software's database and automatically launches (pops-up) the caller's corresponding contact information.

Among the applications with which Call Manager integrates for screen pops are shown below:

Note   Please check the Toshiba FYI site for the latest information.

- Microsoft® Outlook®
- Microsoft CRM (requires Call Router and IVR Option)
- Tigerpaw CRM
- FrontRange™ Goldmine ®
- SalesLogix® for Sales
- Microsoft Access®
- Salesforce.com®
- Microsoft Internet Explorer
- ACT!®

Personal Call Handler

The Personal Call Handler saves time by automatically performing routine call-handling events. Using a combination of triggering events, conditions and actions, Call Manager addresses each call or function based on the user or supervisor preferences. Call Manager can announce VIP calls with a particular tone from the PC, forward incoming calls from a specific number directly to voice mail, launch e-mail or contact programs, and log into an ACD group on start up.

Companion Applications

Call Manager provides a powerful open architecture that allows companion applications to add features and functions. These companion applications are provided as tabs on the Main Screen.

Call Manager ships with several companion applications, including ACD Viewer, Buttons, History, Contacts, Chat, Dialer, and Web Browser.

The companion applications are docked in the lower panel of the Call Manager screen and are accessed using the tabs. Users may also undock the companion applications and place them anywhere on the desktop.
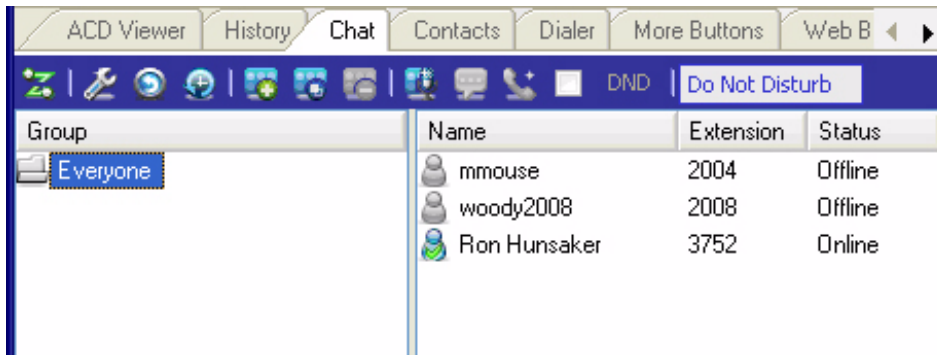
Contacts (Directory, Presence Viewer and Speed Dial)

The Contacts companion application performs three features: Directory, Presence and Speed Dial. The Contacts application provides a powerful set of directory features that enables users to look up and dial extensions with a click of the mouse.

The directory functionality in Contacts is generated by the system so it is always up to date with every extension. The directory can be easily be searched and sorted by name and number. In addition to sorting by column name, the Contacts application has a grouping feature where a column name can be dragged into the grouping section and the resulting list will be grouped by that column name.

The Contacts application also has a Presence status column (shown below) to quickly view the current status of the user's telephone. Right-clicking on any user brings up a window that enables you to either call, chat, send broadcast, edit or delete.
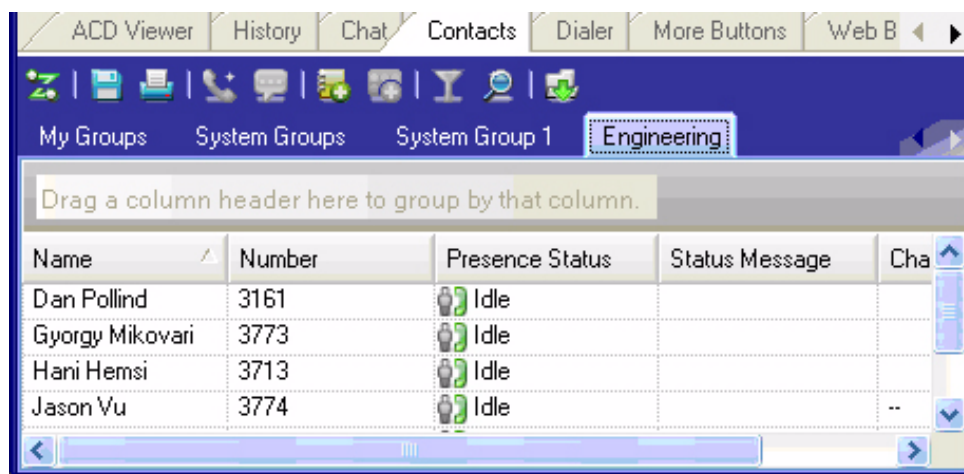
History

The History companion application tab (shown below) automatically creates a log of calls dialed, received and missed on the local telephone extension. The call history can be searched for specific calls by date, telephone number, name or account code. Calls can be automatically dialed by double clicking the call in the Call History window.

The entire Call History or a search result can easily be printed or exported to a file. In addition to sorting by column name, the History application also has the grouping feature where a column name can be dragged into the grouping section and the resulting list will be grouped by the column name.
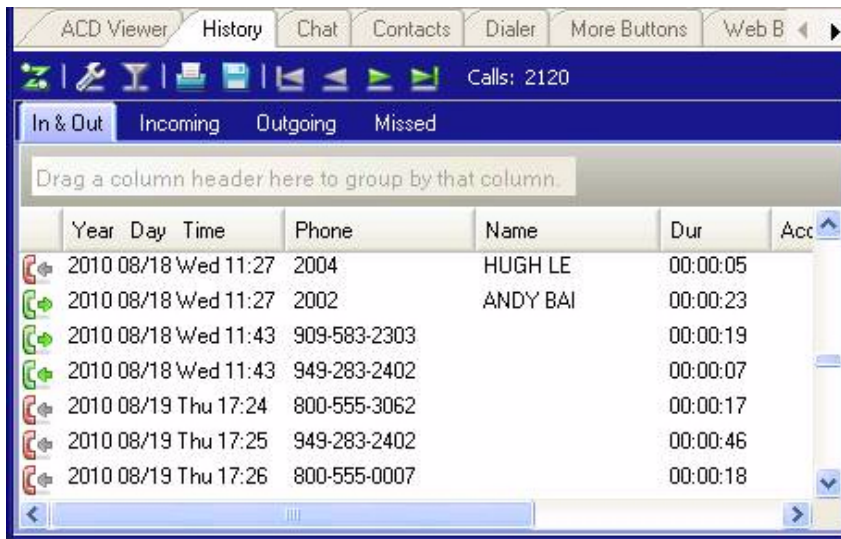
ACD Viewer

Call Manager is tightly integrated with the ACD. The Call Manager ACD Viewer enables users connected to the ACD server to view the status of all ACD groups in which they belong. This additional functionality does not require MIS software to be installed. The Call Manager shows the operating status of each group. Each group view can be expanded to see the number of calls and the status of each of the agents and supervisors in the group. Each group contains a "My Status" icon showing ones own status in the group (logged in, logged out, busy, in wrap-up, etc), and the status can be changed by right-clicking on the icon.
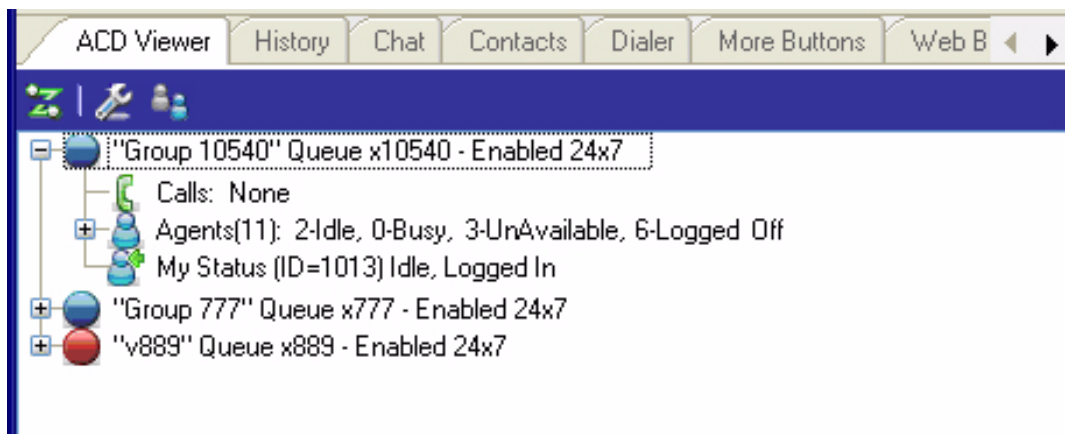
Chat

The Call Manager Chat program (shown below) allows Call Manager users connected to the Net Server to interactively have chat conversations. Chat also supports whiteboard and canned messages. This program works as a companion program with the Call Manager to enable employees in the enterprise to communicate using real time text-based communications.

Using Chat you can have individual conversations with anyone else on the server with the same feature installed. Chat can also be used to send a broadcast message to an individual or to an entire group. A broadcast message is a one-time message that will appear on the recipient's Chat window.
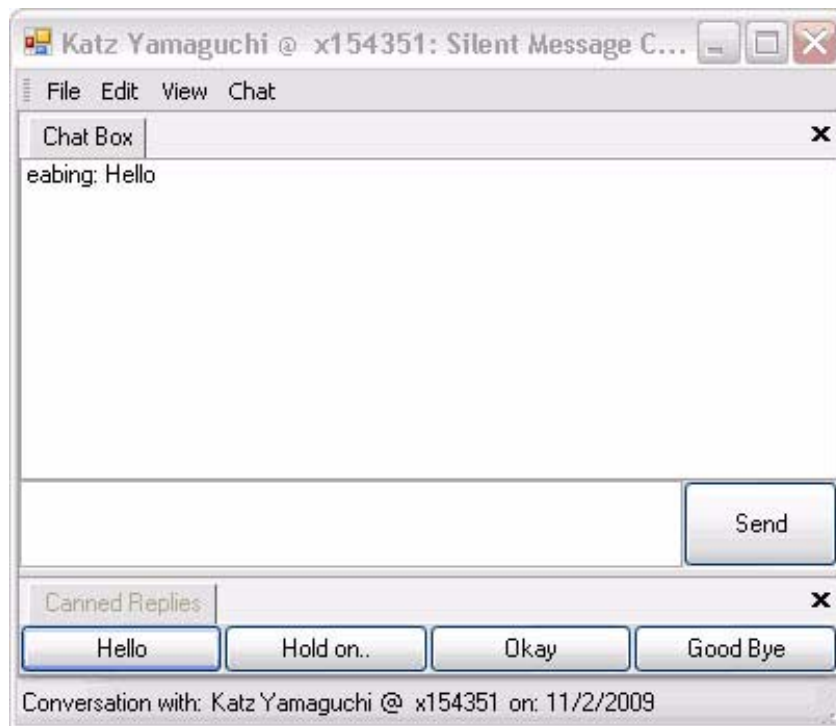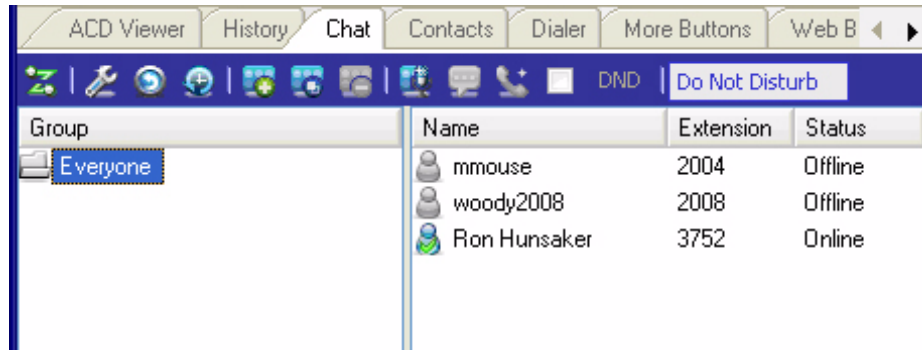
Chat Message Window

Dialer

The Call Manager Dialer enables users to easily schedule telephone calls to be placed later. For example, when a sales representative arrives in the morning he may know he needs to make calls to 15 of his customers. So using Microsoft® Outlook® he can drag and drop the contact information of all 15 of the customers into Dialer. When the designated time arrives for each call to be placed the user will be presented with a pop-up screen alerting him that it is time to place the call. Once the call is finished, the user will be presented with another pop-up screen requesting information about whether the call was successful and if not whether it should call again later (for example if the party was busy). Dialer displays all calls yet to be placed as well as calls that have recently been completed, and the status of the dialers and the telephone.
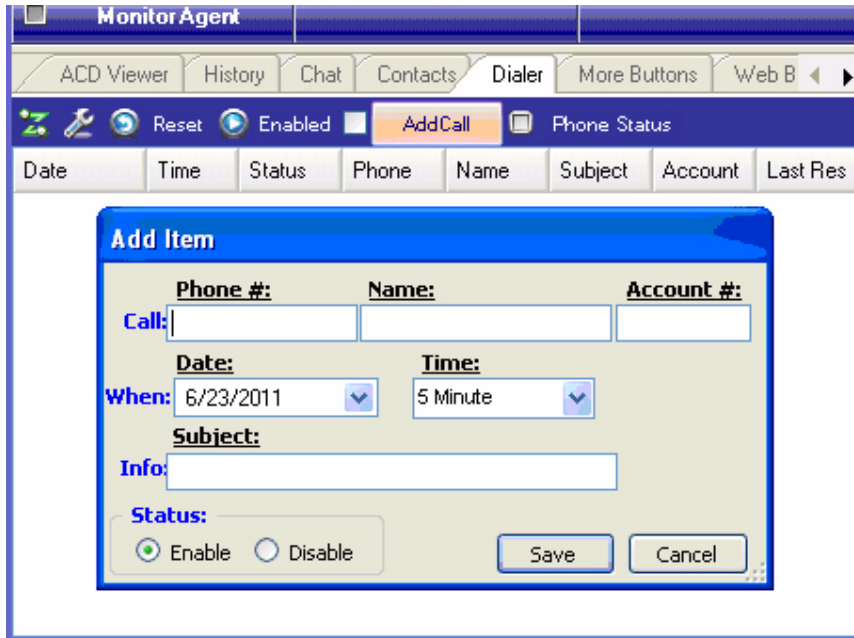
Dialer Companion Application Tab

More Buttons

Call Manager has many different User Programmable buttons on the main screen and Side Window. These buttons can be easily configured by the user as DSS buttons, Feature buttons, Speed Dial buttons, User Action buttons, ACD buttons, etc. This provides the user with one-touch access to features, applications, files, telephone numbers, employees and more.

Directory Numbers (DNs) controlled by Call Manager or used for DSS should not have CO/GCO/ Pool Line key or any other shared line or DN.

To change any of these buttons right-click over the button and use the Setup keys window to configure the settings.

To swap the configuration of two programmable buttons, you can drag-and-drop one to the other. To do this, hold the Control (Ctrl) key down while using the left mouse button to drag a key to another location.

Note Some key types will not swap with other keys. Extra Buttons will swap with Extra Buttons, but not with Main Screen buttons, etc.

Softphone

When the optional built-in softphone is used, it can be assigned to one of the companion application windows, and the entire IP telephone features can be accessible. Please note that the softphone companion application is not a requirement to use the built-in softphone feature.
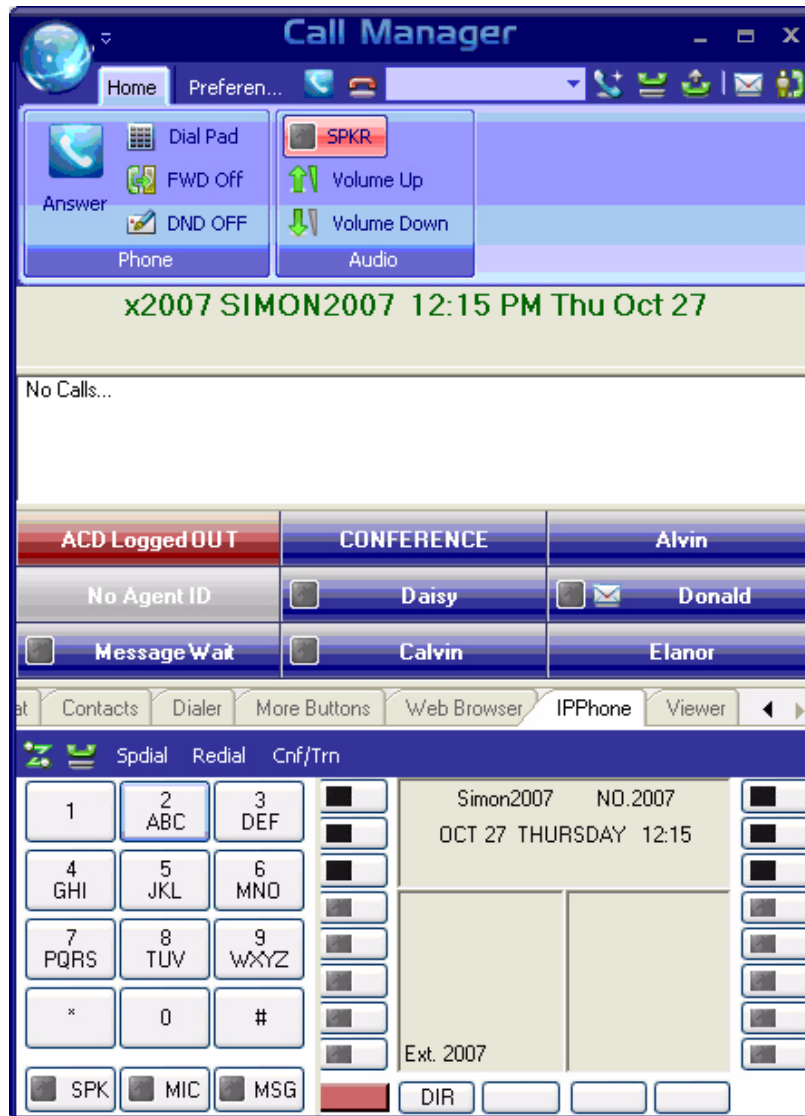
Web Browser

The Call Manager provides an integrated web browser window for access to Internet or Intranet locations, or direct access to local HTML files. In addition to basic browsing, you can create custom web applications to extend the functionality of Call manager for your business. For example, your call center could have incoming calls automatically open the Call Manager browser window to a "Caller Survey" page. The Call Survey page could display information about the caller and display an answering script the agent could use to guide the conversation. The web page might also allow the agent to enter answers from the caller into HTML forms and submit the results to a company web server.
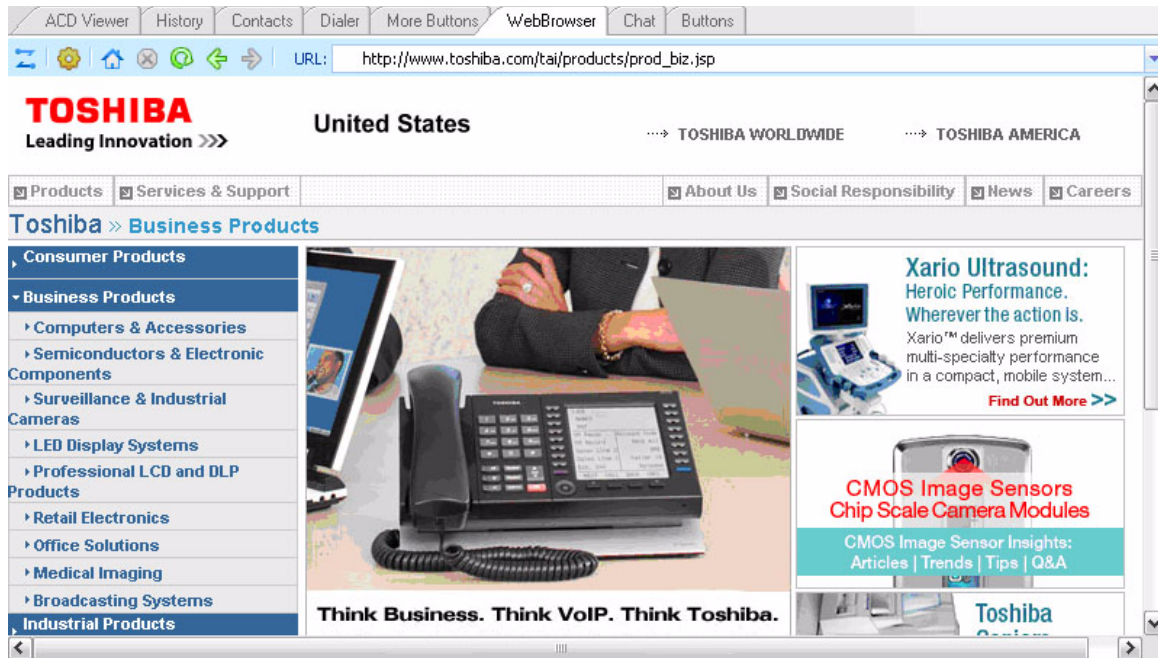
Web Browser Companion Application Tab

Oak Call Recording Solution

Calls Recording and Evaluation

The Oak call recording solution includes powerful call recording applications from Oak System International (OakSI). The Oak call recording solution is advanced, yet easy-to-use, with innovative features that let users securely record, archive, search, play and share telephone calls. It can help Contact Centers and any business to resolve disputes, monitor quality and improve performance. It is HIPAA and PCI compliant. It is fully tested and tightly integrated with the latest versions of the IPedge business communications systems. It can also run on a virtual machine in a VMware environment.

It can be integrated with SIP trunks. Stored recordings can be searched using the caller ID, time or extension number. Please refer to OakSI web site (http://www.oaksi.com) for their features and configuration when integrating with SIP trunks.

It can be used to retrieve and play back recordings. Replay streams the audio from wherever the recoding is stored and allows searching by any collected information criteria.

The Oak Call Recording Solution includes two applications, Clarify and recordX. Clarify integrates with the IPedge and Strata CIX with the Applications Server through CTI. recordX integrates with the systems using SMDR.

The Oak Call Recording Solution can be used for contact centers and offices with its robust features, which include:

- Trunk side recording – SIP trunk recording is supported. In addition, Strata CIX supports PRI, T1, and Analog trunks.

- Station side recording – Extension recording is supported when only a few users need to be recorded. Clarify supports IP telephones and recordX supports SIP extensions. Both applications support digital and analog telephones for the Strata CIX.

- Recording rules – All calls recording and selective call recording is supported. In addition, on demand recording from the phone and/or optional client is supported. UCedge and Call Manager will support on-demand recording control in the future release.

- Live monitor – With the proper permission, the user can view the current calls in progress. Listening in a SIP trunk call will be supported in the subsequent releases.

- Search capabilities – The user can search the specific recording with various criteria including the data range, TOD, direction and/or duration of the call, extension number, Agent ID, and ACD groups.

- Playback and sharing – The user can playback the whole or a part of the recording with speed control and forward/rewind control. Searchable notes can be added to the recording. The user can extract all or a part of the call and send via the email.

- Recording management – Recording can be archived to external location for longer storage. A schedule can be setup to automatically archive the recordings.

- Evaluation – The administrator/supervisor can create a template and score the recording based on the template. The evaluation report can be generated for each agent and exported to a file.

- Screen recording – Optional screen recording feature is available to record the PC screen together with the recording.

- Report – Traffic report and chart is available for recorded calls.

Advanced Recording Technology

Record and Archive

Oak Call Recording Solution taps the business phone system's trunk lines (analog, T1 or PRI) or uses port mirroring (SIP) to capture and record the audio stream. In addition, Clarify uses CTI and recordX uses SMDR to match the recordings to call details such as an extension number or Caller ID. The administrator can configure the capability to record all calls, or set to record on-demand by dialing an access code from the phone. Recorded calls are stored on a the recording server or can be archived to an alternate storage location.

Encrypt/Mask Sensitive Data

Encrypted recordings along with tight security measures ensure compliance with industry regulatory requirements, including the Health Insurance Portability and Accountability Act (HIPAA) and Payment Card Industry Data Security Standards (PCI DSS). The recordX solution uses AES 256bit encryption, making call recordings secure and tamperproof, and encrypted recordings can only be played back using the proprietary call player. To help meet PCI security requirements, a pause/resume feature can be invoked to pause the recording during a call so that sensitive credit card information is suppressed and replaced by silence. The replay will show a time stamp of when the pause and resume feature was triggered.

Filter and Search

A variety of filters can be combined to narrow down and search for a particular call recording, including by date, time or call duration, by extension or department, Caller ID or any combination of these and other criteria. For example, a manager may want to listen only to calls with duration less than one minute in length or listen to all calls made from a particular agent's extension. In the contact center, a Supervisor can listen to a particular agent or all agents in the group easily. The search results will match only the criteria selected, making it easy to find, listen to, annotate and share the desired call(s).

Play, Review and Share

Users access call recordings through a simple-to-use browser-based interface and can review calls visually. With intuitive playback features, users can listen and make notes for later reviews, convert recordings to MP3 files to share directly via email or share recordings via iTunes or Window Media Player. A masking tool can suppress private information prior to sharing, and an Audit tab shows who has listened to or annotated a call recording.

Evaluate

Managers can assess staff performance using the simple Web-based Agent Evaluation tool, creating filters to capture a particular sample of calls such as from a new employee or calls from a specific customer. Calls are scored via a customized questionnaire and then compiled to generate graphical, evaluation reports and statistics which help managers track trends and performance and identify areas that require additional staff training or focus. Reports can be emailed as PDF files or saved to a hard drive.

Integrate External Systems

With the SDK (Software Development Kit), systems integrators can tie in external systems such as a database or CRM program for development of customized applications to meet a variety of business needs. Some examples include popping customer details upon receiving a call, automatically adding notes to recordings directly from a third party application, or initiating start/stop commands to control which part of a phone call to record. recordX and Clarify integrate with popular CRM applications such as Microsoft, Salesforce, ACT! And Lotus Notes.

Features and Specifications

Store and Backup Calls

- Automated Secure Archive

Trunks

- Analog (Strata CIX)

- T1/PRI (Strata CIX)

- SIP (Strata CIX, IPedge)

Extensions

- Analog (Strata CIX)

- Digital (Strata CIX)

- SIP (Strata CIX, IPedge)[1]

- Toshiba IP telephones[2] (Strata CIX and IPedge)

Search for Calls

- Notes

- Date, Time, Duration

- Caller ID, DID

- Dialed Number

- Add & Search Flags

- Extension

- Department

- ACD Group[2]

- ACD Agent[2]

- CRM Customer Fields (option)

Play Calls

- Review multiple calls simultaneously

- Review all or part of a call

- Speed up, slow down playback

- Extract all or part of a call to WAV

- Email call extract to client

- Place markers in call, add labels

- Add searchable notes to call

- Mask out section when exporting

- View audit trails

- View and listen to calls live

- Evaluate calls (option)

Security

- Call encryption (AES)

- User-defined security policies

- Listen to own/department calls only

- PCI/DSS, HIPPA compliant

Optional Features

- Agent evaluation

- Screen recording

- PCI compliance

- SDK

- Virtual machine support

Integration

- D Channel (Caller ID/DID)

- SMDR[1]

- CTI[2]

System Requirements

- Toshiba Strata CIX R5.2 or higher

- Toshiba IPedge 1.6.2 or higher

Recording Server

- 16GB RAM

- Quad Core Processor

- 500GB Hard Drive

- .NET Framework updates to 4.0

- Two Network Cards

- Static IP Address

- Sound card (if played back on server)

- Windows 7, 10, 2012 64bit versions

1. Oak recordX only
2. Oak Clarify only.

This page is intentionally left blank.

CTI / ACD Applications 6

The ACD products provide a series of applications for meeting a customer's CTI and call center needs. This chapter provides application examples to assist in identifying a customer's needs. Each application example provides a description of the application, how the call flow works and a set of components needed to provide the solution.

Remember, these are just examples to assist in putting together solutions for making your CTI or call center application function. You may need to apply several of these examples to build the application your customer desires.

CTI Applications

Call Manager may be deployed with or without the ACD module. The two most common applications are providing screen-pops for users and using the Chat application for a silent, text-based messaging system.

Screen Pop Applications

Screen-pops provide information about the caller before an Agent answers the call. This enables call screening and provides more personalized service for callers.

This system OAI application is very cost effective when only 7~10 desktops need this capability as compared to the Desktop OAI link. In addition, an Installation Wizard makes connections with popular applications quite simple and the Call Manager (PC telephone) interface offers many more choices for personalizing and screening calls.

Chat

This is a instant text messaging system that enables Agents to get quick answers while talking on the telephone. It also enables Agents to send messages to someone who is using the telephone. Chat can be applied throughout the organization, thus the communication is only limited by those who have the service and currently make themselves available.

This application requires the Net Server on the user's desktop PC.

Basic ACD Applications

Typical ACD Queuing

Call centers are designed to handle the largest volume of calls using the fewest number of Agents, thus calls are expected to wait in queue for an available Agent. Music or intelligent announcements can be played to inform the caller of the status of the call. Announcements include an "Initial Announcement" and a "Periodic Announcement."

Agents log into a queue to receive calls. Reroute and overflow destination routing is offered to handle calls during alternate time periods or certain conditions.

Basic ACD call queuing provides a method to distribute calls to a group of Agents that have registered their availability. One of the most common distribution methods is called "Most Idle Agent." This method finds the Agent who has been idle the longest to handle the next call. Other methods include "round-robin search," which finds the next Agent by rotating the call in a circular fashion or "linear search," which always starts with the same person and progresses down a list of available Agents.

Example

The figure below shows three different groups for this organization, Inside Sales, Customer Service, and Technical Support. Each group has its own set of Agents and a Supervisor for handling calls.

• Calls arrive into the queue based upon system programming. CO lines or DNIS numbers may route calls directly to the Pilot DN for the group or calls may be transferred into the queue via an operator or auto-attendant operation.

• Each group has its own "Initial" and "Periodic" announcements and music while waiting for an available Agent.

• Each group may choose the call distribution method from "Most Idle," "Round Robin," or "Linear."

• The overflow destination and a reroute destination for the calls are programmed for each group. This overflow could be to another group, any other destination within the system including a Voice Mailbox or even an off-premises number.

Customer Service   Inside Sales   Technical Support
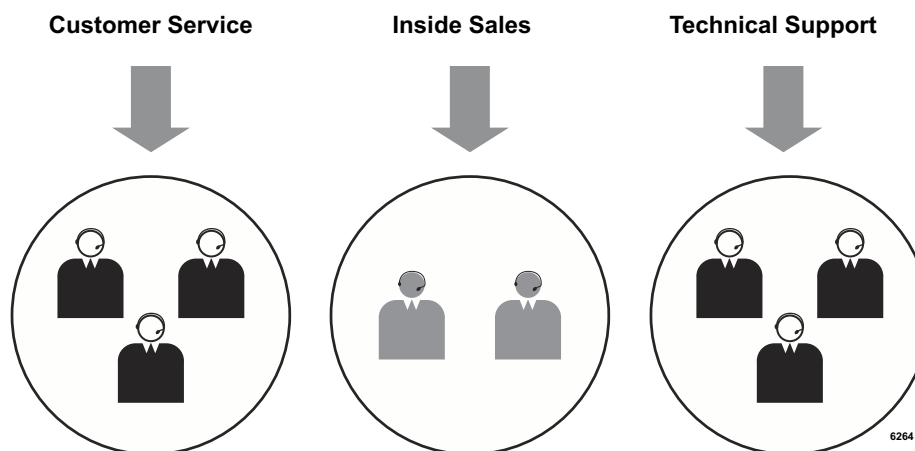
Call Routing Based on Geographic Territory

A very common application need is call routing based upon the territory of the originating call. This enables Agents to consistently handle customers from a specific territory and possibly to adjust work schedules for different time zones.

Routing calls based on the geographic territory requires identifying the location of the originating call. A customer could assign different numbers for each territory, thus using either DNIS or CO line routing to send the calls to the appropriate group. But many customers would like to use a common pool of lines and a single telephone number to reach their business.

Example

In this example, Caller ID is used to route the calls (see figure below). The customer needs an 800 number since Caller ID blocking does not affect 800 calls as it does general numbers. This ensures a greater chance of getting the identification from the public network to enable routing without the need to query the caller.

This application requires the optional Call Router module to create a database of known telephone numbers. This database has time of day scheduling to allow for different routing based upon time, day of the week, etc.

New Calls

Call Router (database)

Territory A   **Territory B**   **Territory C**

6265
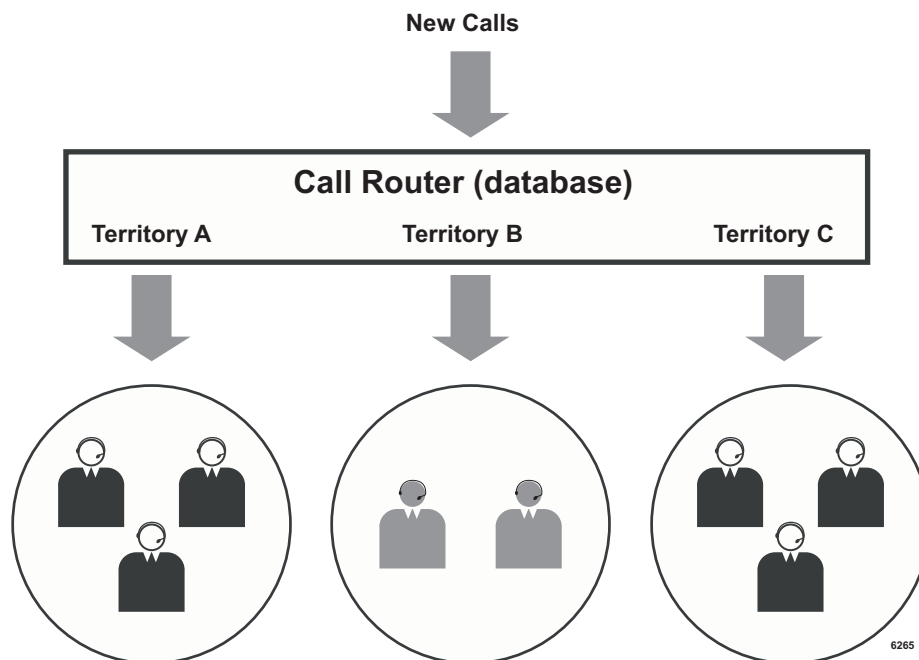
Contact Center with Screen Pops

Contact center Agents that have PCs with the Call Manager application can view pop-up screens that contain information about the caller. Call Manager can work with a variety of popular applications, such as Contact Managers, databases developed as part of the business operation, Customer Relationship Management (CRM) applications, Help Desk applications, etc.

The Call Manager Installation Wizard makes it easy to integrate with outside applications. Once the Call Manager software is loaded, information about the call is collected by the Net Server. Call Manager offers a number of enabling methods for linking the standard database applications.

Example

Sometimes the information needed, such as the customer's account number, cannot be delivered by the system, thus the IVR can be used to query the caller for the information (see figure below). The collected information is delivered to the Call Manager. As calls arrive on an Agent's telephone, the information about the caller is passed via the LAN to Call Manager running on each Agent's desktop PC to create the screen pop.

6266_a
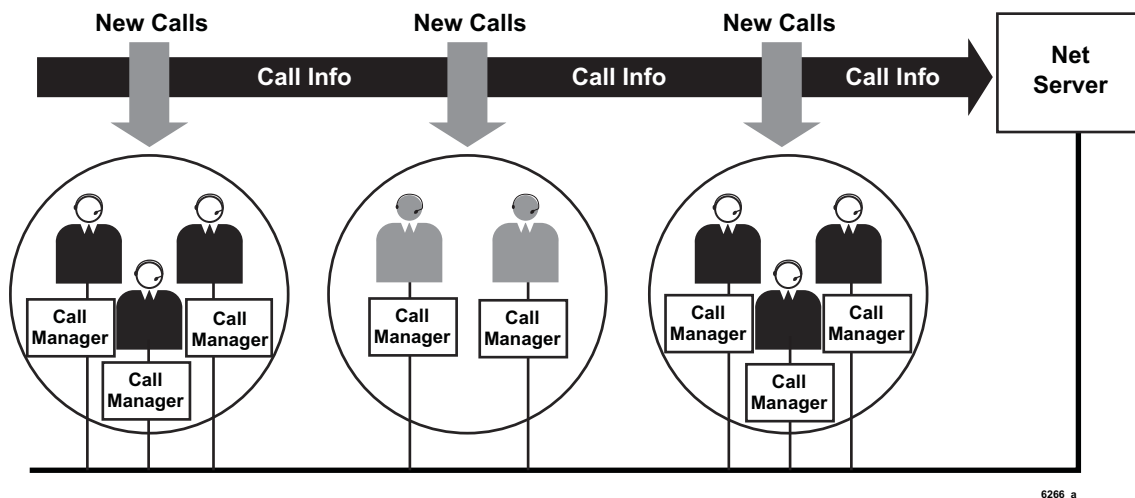
Account Number Routing

Some businesses prefer to assign Agents to handle selected groups of accounts. In this type of application, the callers are assigned account numbers which are used to determine where the call should be routed.

Since the public network does not provide account numbers, the ACD application must be set up to query a caller for an account number and then route the call to the Agent who is best suited to handle this account.

Example

This application could be accomplished a couple of different ways, but in this example, the Call Router is used to build a database of account numbers and to determine the routing action where the call is to be handled (see figure below).

The Call Router uses a predefined script and the Voice Assistant to answer the call. The Voice Assistant requests the caller to enter an account number. This number is then passed to the Call Router which then does a "lookup" and issues a command to move the call to the appropriate call center group for that account.
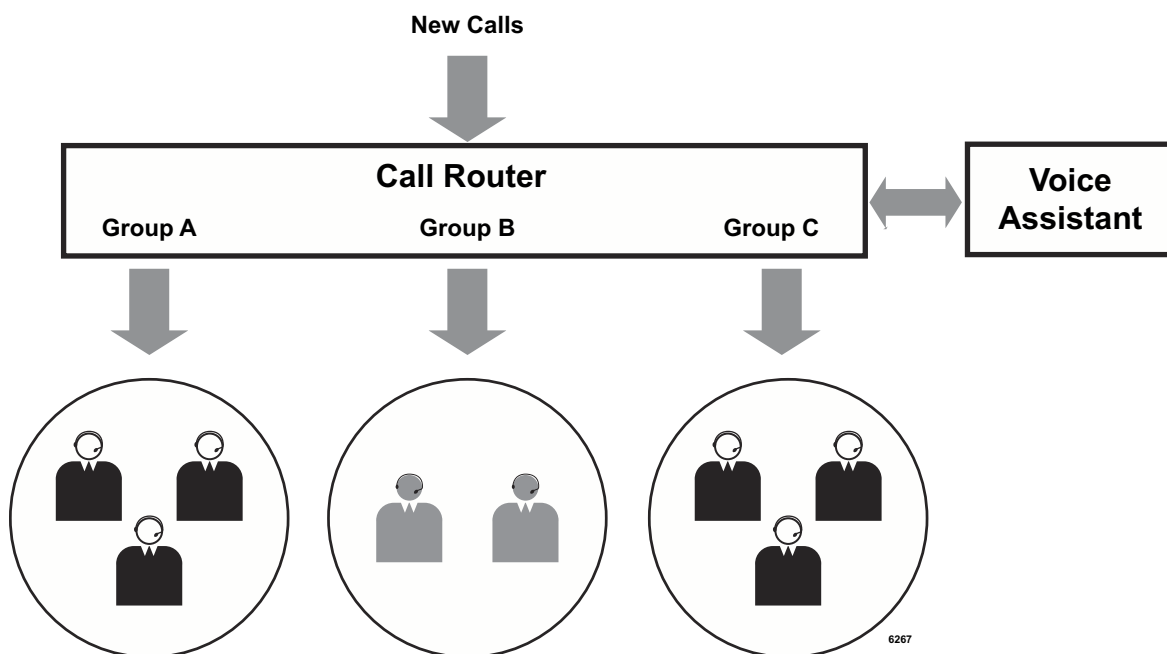
Enhanced ACD Applications

Group Overflow with Look-back Routing

Many call centers need the ability to overflow calls to another group, expanding the pool of available Agents for handling a call in a timely manner. "Look-back" is the term commonly used to describe the ability to overflow to another group while continuing to look in the original group for an available Agent.

Some applications need groups to overflow to each other with this capability. This is often used where an equivalent group is capable of handling the call, but the groups are assigned a smaller area of expertise. With the ACD, a different technique is employed to simulate the "Look-back" function.

Example

Typically all Agents need to be treated with the same priority for handling calls. A group should be created for each of the original groups, as well as an overflow call group (see figure below). If the call is not handled by the original group, then the call is re-directed to the overflow group per the overflow criteria. Each of the Agents log into a primary group and also log into the overflow group. Thus, in the following example, the number of Agents in the overflow group is the sum of all Agents in each of the primary groups.

New Calls   New Calls

Primary Group A   Primary Group B
(Queue Priority = 20)   (Queue Priority = 5)

Overflow
Group

**Agents from Groups A & B
also log into Overflow Group.**

**If Queue Priority is used:
Calls in the Overflow group will
keep their original priority.**

6268
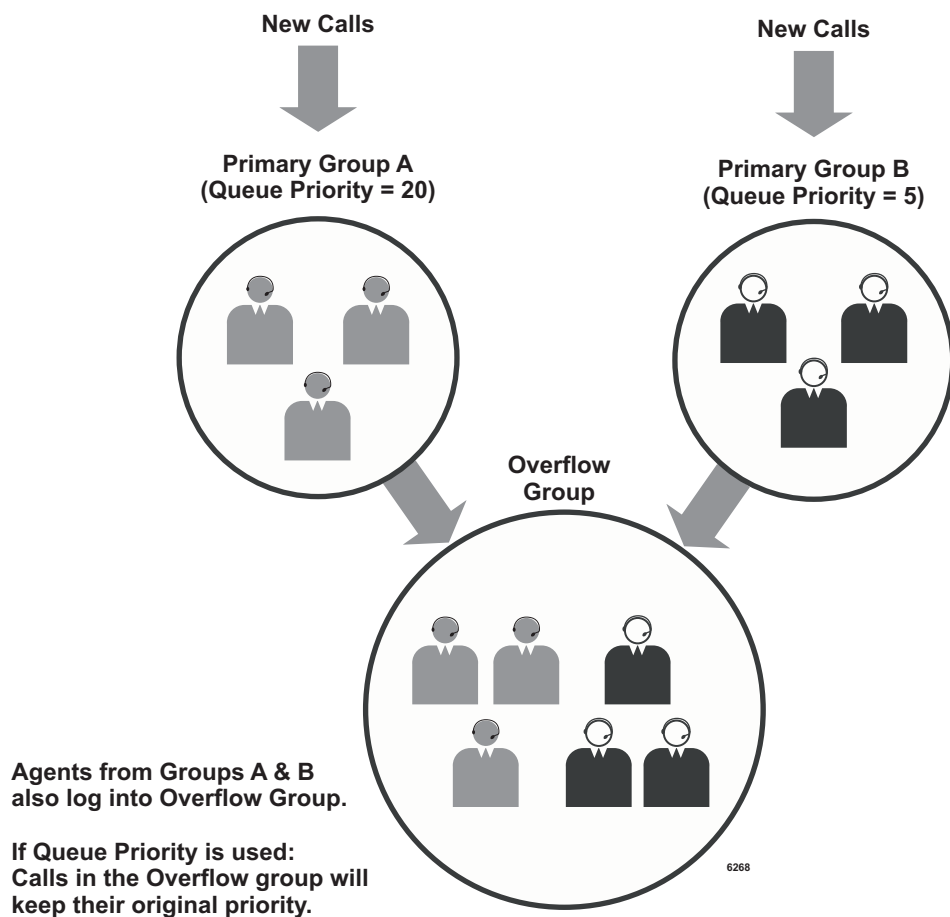
Agent Priority Routing

When traffic is heavy, the Agent pool can be expanded based upon Agent priority levels. When all Agents are busy at one level, calls are automatically distributed to Agents at the next level.

Example

One solution is to assign a high priority level to the primary answering Agents, and a lower priority level to other Agents (see figure below). Then, select Agent Priority as the routing method. Calls are delivered to Agents with the highest priority first using the longest idle method.

If all Agents of that level are busy or unavailable, the ACD searches for the next highest Agent priority level. This provides the ability to keep expanding the Agent pool based upon traffic conditions.

New Calls

Level 1 Agents

Level 2 Agents

Level 3 Agents

6269
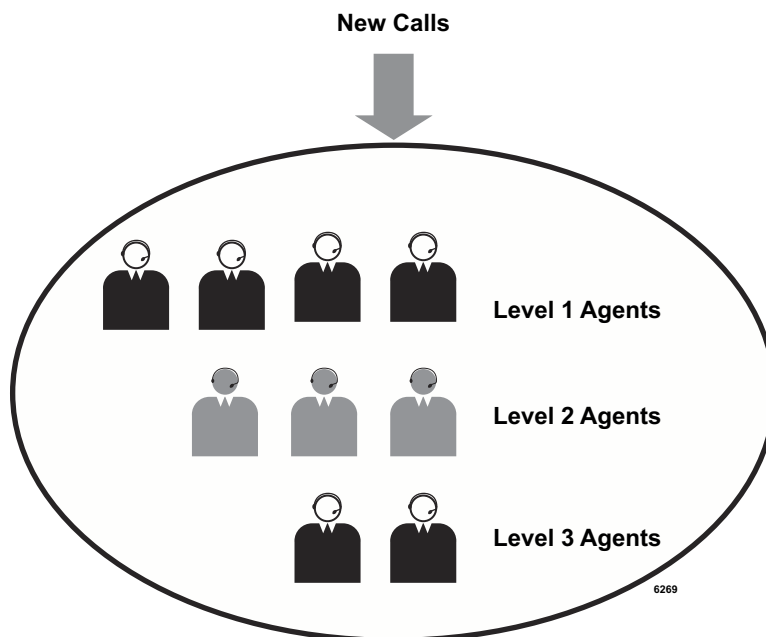
Preferred Agent Priority

This capability can be very useful for applications where Agents are assigned specific accounts or cases and the caller knows this information. Typically, an IVR script is needed to collect the information about the preferred Agent. This could be as simple as using a database lookup based on an account or case number.

A Preferred Agent Priority allows a selected Agent to be the preference. If that Agent is busy or unavailable to take the call, the call enters the queue and is handled by the next available Agent (see figure below).

Example

One example is a technical support line where on the original call the caller is given a call back number to use if any additional problems are encountered. If that caller needs to call back, the caller enters the number and the database lookup rings the same Agent that previously talked to that caller. If that Agent is not available, the call enters the queue. This provides priority treatment with a preference to connect the caller with someone who is familiar with the problem.

New Calls

Voice Assistant (IVR)

6270
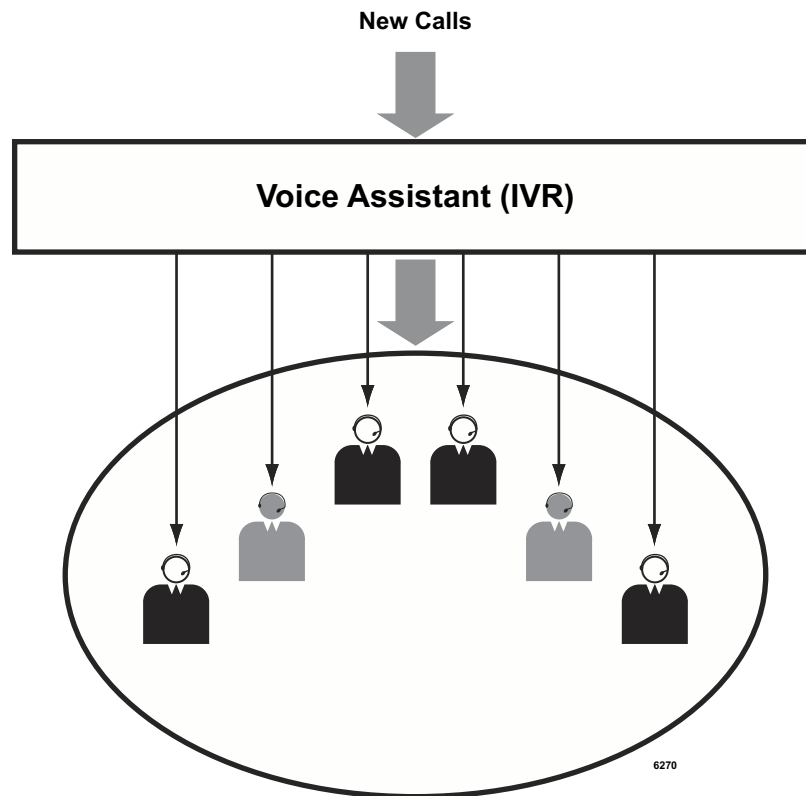
Priority Call Handling

This feature enables some calls to receive priority handling in a seamless manner. It requires identifying the caller prior to placing the call into queue. Typically this is done using an IVR prompting script, or Caller ID, or by giving specific telephone numbers to certain callers.

Caller ID is not always reliable since callers do not always call from the same telephone. The exclusive telephone number technique can lose effectiveness if people other than the intended user obtain the number.

One solution is to use the Call Router and Voice Assistant (IVR) to identify the caller. All calls are directed to the Pilot DN for the Call Router. The Call Router requests the Voice Assistant play an IVR script and direct the call to it. The Voice Assistant returns the account number entered, which is used by the Call Router to send the call to the appropriate queue. It then passes the initial priority value for that caller to ACD, thus placing the call in the queue at a designated point rather than at the end of the queue.

Example – Priority of Call Type

This method uses multiple ACD queues and routes the calls to the appropriate queue using direct ringing or DNIS routing (see the figure below).

Setting a different initial priority value to each queue and a common escalation value ensures that no caller is left in queue indefinitely. Callers to Priority A are treated with more favor than callers to Priority B. Likewise, callers to Priority B are treated more favorably than callers to Priority C. In this example, Agents need to log into Priority queues A, B, and C. Calls with the highest queue priority are delivered first.

New Calls

**An Attendant can sort calls or
different phone numbers can be used for each group.**

Priority A   **Priority B**   **Priority C**
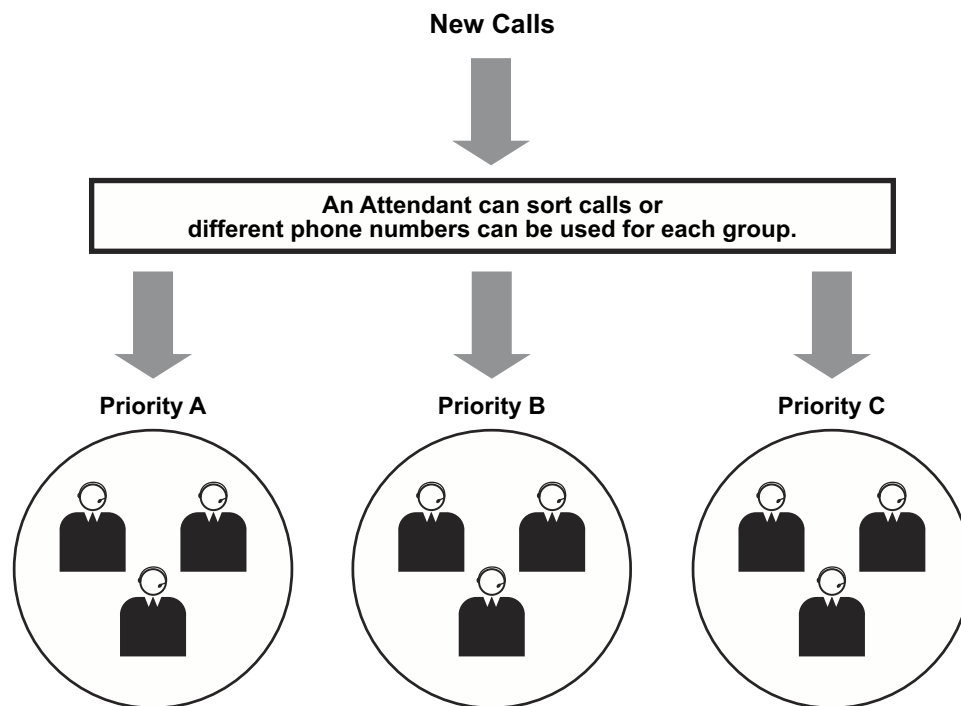
6271

Example – Tiered Routing with Call Identity

The second method for providing a Tiered or Queue Priority uses the Call Router or the Voice Assistant to identify callers and assign a call priority (see figure below).

Once the caller is identified, the call is placed into one queue and a parameter is passed to ACD to indicate the initial priority value for each call when it arrives. Thus calls begin in the queue at a designated point. Agents only need to log into one queue. The next available Agent receives the call with the highest priority value.

Note Call Manager can be used at the call's original answering point and buttons can be defined to transfer calls into a queue with specified initial priority values. This is a convenient way to place emergency calls into queue ahead of other callers.

New Calls

Call Router or Voice Assistant

Identifies the caller and assigns a call priority

Low Priority

Medium Priority

High Priority

6272
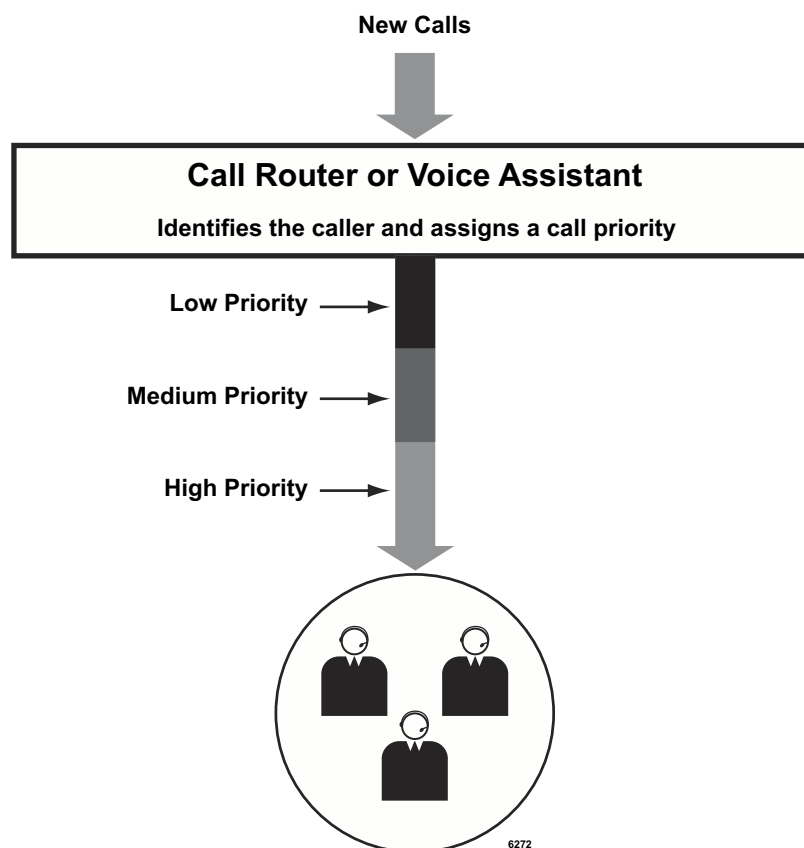
Basic Skills-based Routing

The ACD provides a skills-based routing capability using multiple queues. Typically, the skills assessment is done by IVR posing a few simple questions.

Example

In this example, a script in the Voice Assistant (IVR) asks the caller for an English, Spanish or French speaking Agent.

The IVR routes the call into the appropriate queue for the skill selected (languages or Skills A, B or C, shown in the figure below). Agents log into the queues they have the skills to support. Agents are able to see the call type that is ringing in order to answer with the appropriate language.
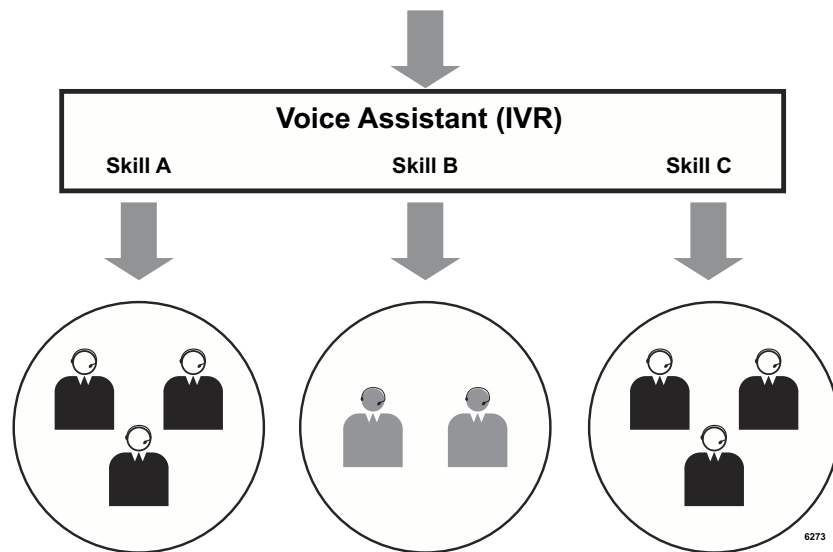
It is also possible to implement more complex operations utilizing the multi-login feature.

An agent can be assigned a different priority per queue so that the agent with the most appropriate skill set is selected while lower priority agents can be used as back-up.
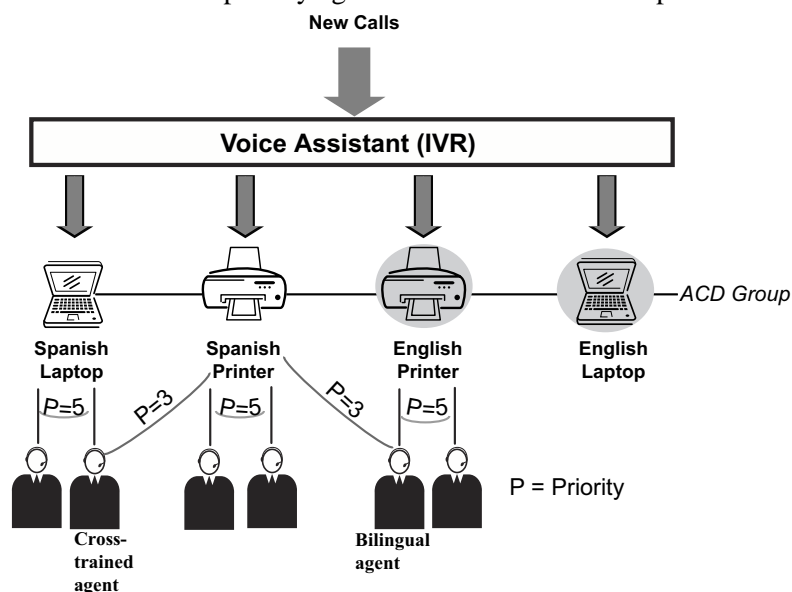
Using Customer's Database

Many businesses have developed their own customer databases that can be used to identify the caller for better call handling.

Example

The Voice Assistant IVR can query the caller for information, such as the caller's zip code. The information is sent to the Database Assistant that communicates with the customer database via an ODBC link. Specific information from the customer database can be relayed back to the Voice Assistant IVR so that the call can be routed to the appropriate group (see figure below).

The customer database information should be carefully checked to make sure there are no duplicate records and that the data entries are correct. For instance, telephone numbers should be in the appropriate fields and the entry format must be consistent so that Caller ID lookup works smoothly.

New Calls

Voice Assistant (IVR)

Group A　　　　　**Group B**　　　　　**Group C**

Database Assistant

ODBC Link

Database

6274

Network ACD Application

7
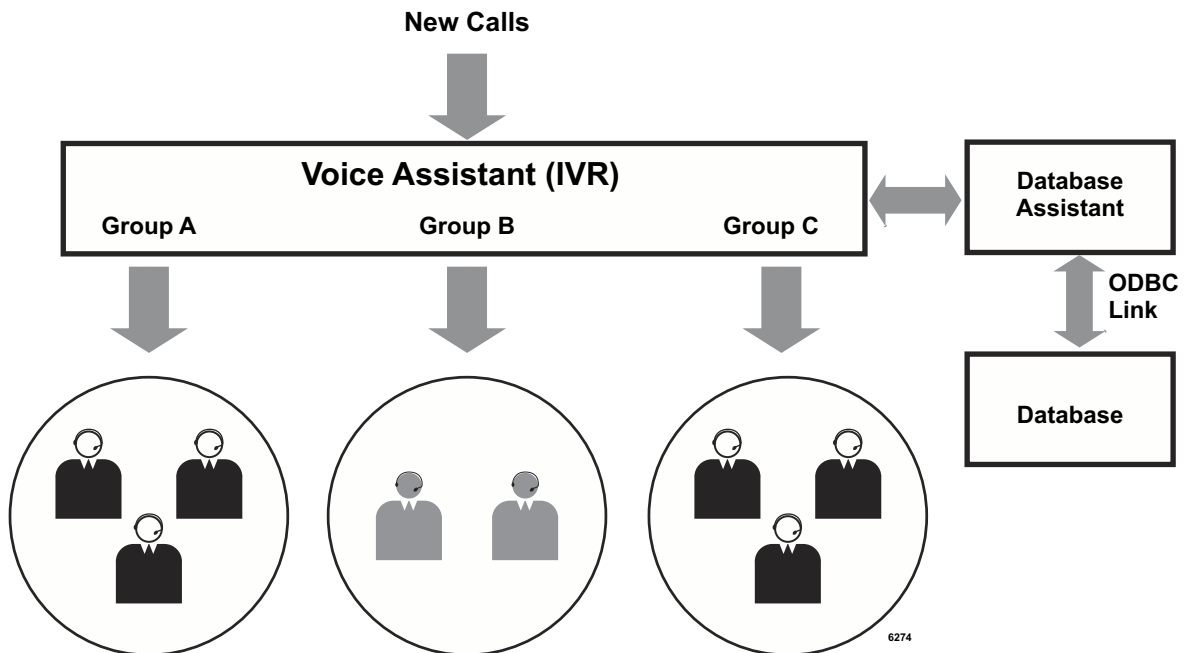
The ACD application supports multi-site contact centers operations. Network ACD enables contact centers to distribute agents over the network to route calls to available agents on any system on the network. The ACD system provides the look ahead routing where it can check the status of agents in other nodes before it routes the call to those agents. The MIS report covers agents and calls over the network.

Network ACD applications require the new software module, Unifier, which integrates CTI links of all systems in the network to provide the single ACD operation. It can also extend the functionality of Call Manager over the network so that new features such as Network DSS/BLF and/or Chat between users in multiple nodes.

Overview

Network ACD consists of major components, such as, the IP*edge* system, Strata CIX system, ACD, and Unifier. There is one ACD system on the network which controls up to 10 call centers on the network. Following figure shows the overview of Network ACD.
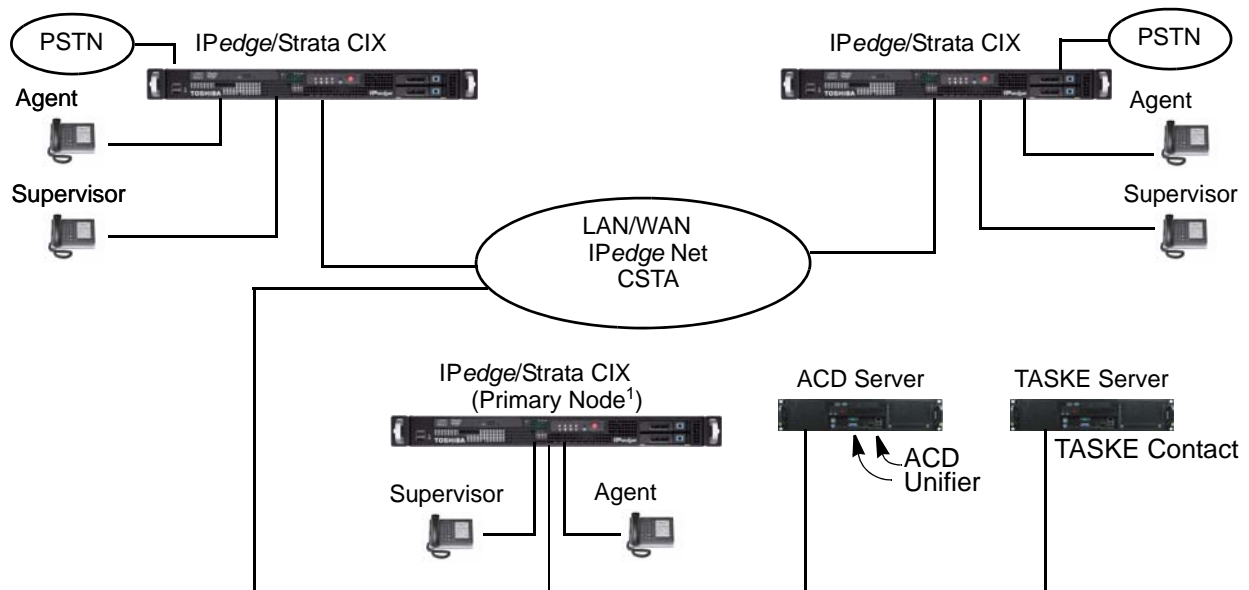
1. All the queues (ACD pilots are configured in the Primary node, and all Voice Assistant ports of the ACD are also connected to the main node. Agents, Supervisors, and incoming CO trunks can be located at remote nodes.

Unifier

Unifier software consolidates multiple CSTA streams from CIX systems from multiple locations and feed the single stream of the information to applications such as ACD. Applications do not have to be aware of the network configuration since the CSTA stream to the application is same as the single node system.

Unifier needs to run on the ACD server (MAS) and requires its own license to operate. Each IP*edge* system must have the valid CSTA license (LIC-ACD) to work as a part of the Network ACD operation, and it must be interconnected to other IP*edge* or Strata CIX through IP*edge* Net/IP.

Unifier supports up to ten the IP*edge*/Strata CIX nodes.
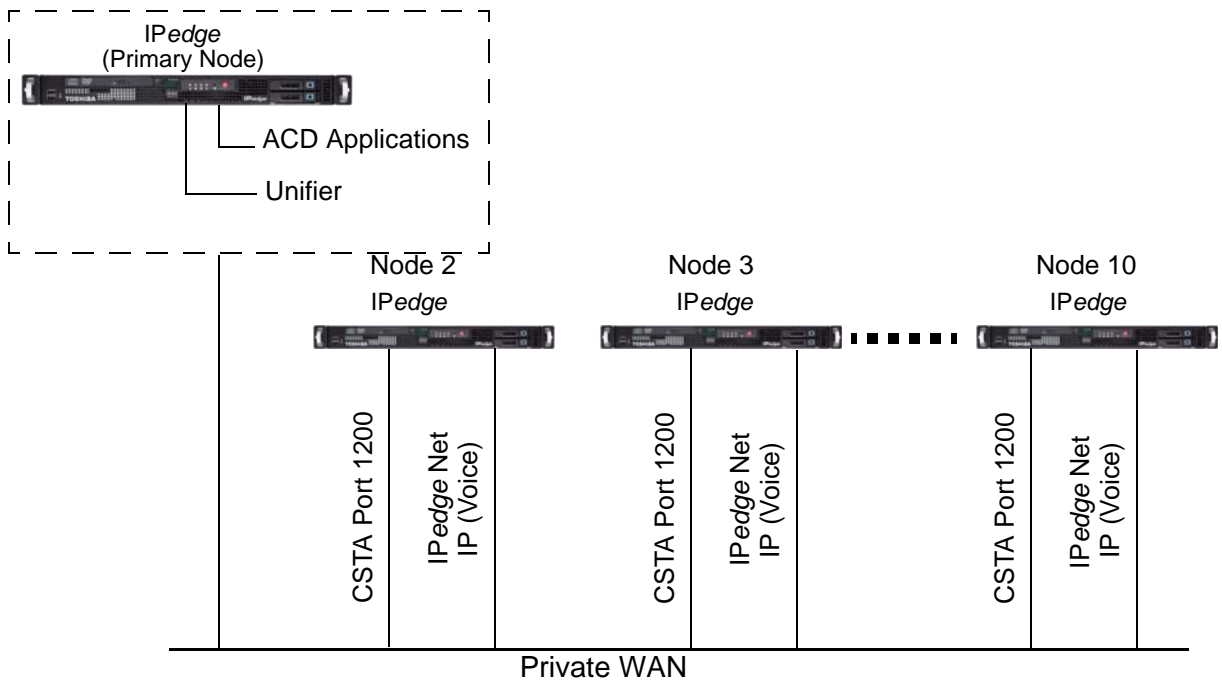
ACD

The ACD application supports multi-site Network ACD environment through the Unifier. All the ACD queues are implemented on one of the nodes. Agents or supervisors can be located on any of nodes on the network. Each node may have CO (Central Office) trunks for ACD calls.

Remote Agents

Remote agents operations can be implemented by placing agents on remote nodes and assigning them to a queue. Typically, ACD calls are coming to the main node queues and are routed to any available agents regardless of locations. It is also possible to assign a lower priority to remote agents so that agents in the main node mostly take calls to reduce the traffic between nodes.
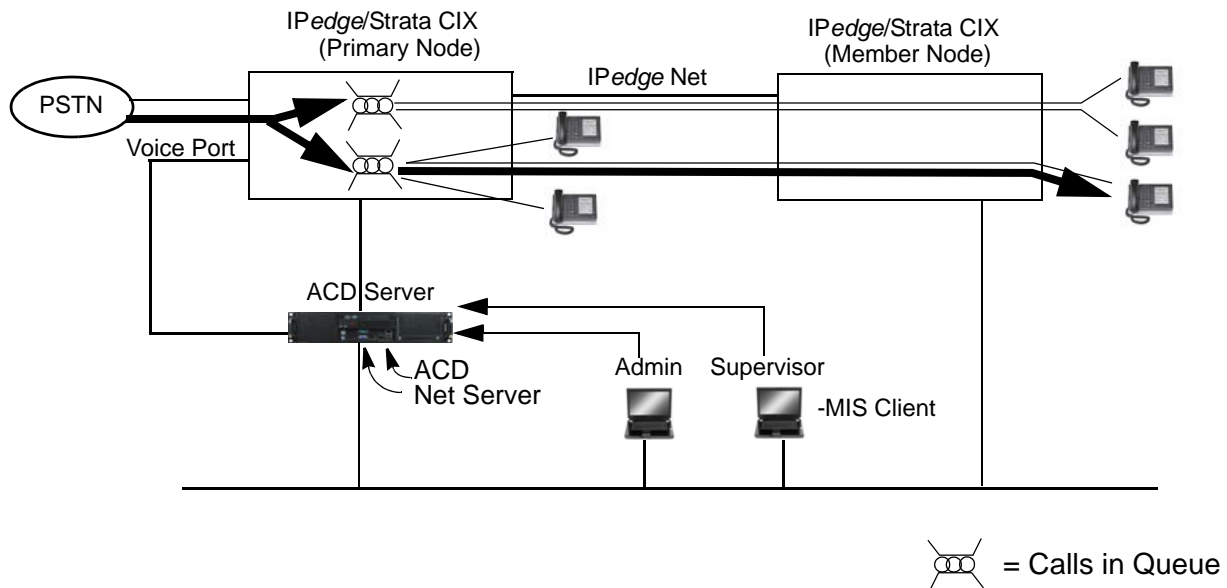
Network Routing

Mid size call centers may have relatively large remote node operations. The customer may have ACD calls coming to each node so that local agents can handle those calls while requiring the routing between nodes.

Interflow between nodes can be easily implemented by assigning all the agents in the node to a queue. Typically, agents are handling calls to their node. However, if other groups in other nodes are busy, they can be interflowed to the queue assigned for other nodes. The ACD's enhanced capabilities such as checking the status of the target group and/or Share Agents can be used for inter node routing.
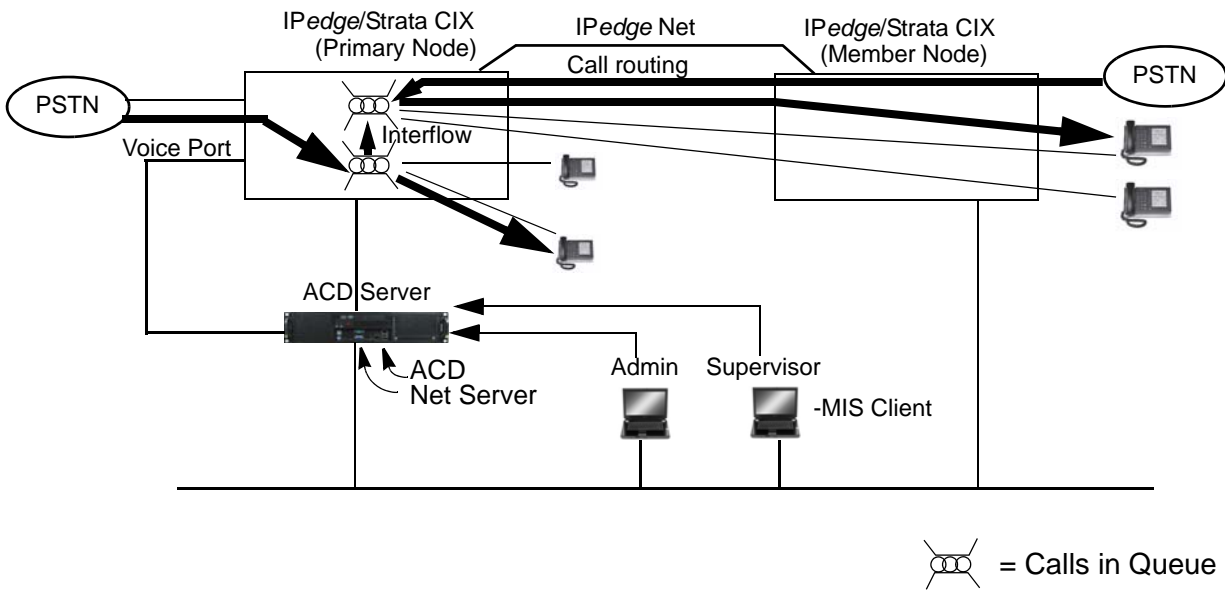
Important!   The ACD must have the license to cover all the agents/supervisors on the network.

Call Manager

Call Manager is compatible with Unifier, and as an added capability, Call Manager DSS (Direct Station Select) capability is extended over the network. Users can see the status of other phones in a different node from the Call Manager. Users can also have a chat session with users on different nodes.
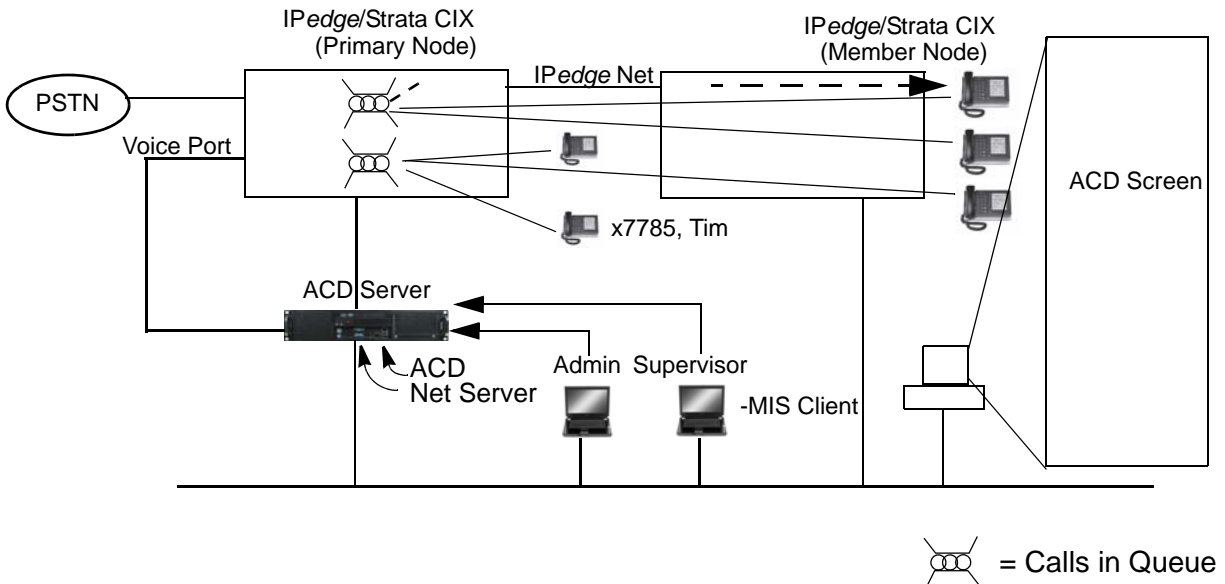
TASKE

TASKE Contact software is compatible with the Network ACD environment and provides the administrator with the centralized realtime display and reporting capability.

TASKE Contact ACD monitor provides the realtime status information on any queue and agent on the network. TASKE Contact Report can provide all the queue and agent activities on the network so that the supervisor/manager can report the entire call center activities without consolidating the report. TASKE Call Visualizer shows how each call is processed in detail wherever the call may be routed. All of these capabilities are available either through TASKE client software or web browser based access.

Licenses

Each IP*edge* or Strata CIX node that is a part of Network ACD must have the valid ACD license (LIC-ACD).

One ACD system is required on the network, and it must have the enough agent licenses for all the agents/supervisors on the network.

The license for the Unifier to support the intended number of nodes is required.

Hardware

Network ACD is supported on MAS or MicroMAS for IP*edge*.

2GB of memory is required to run Network ACD.

When using the MAS or MicroMAS to run Network ACD; the ACD and Unifier must be the only applications running on these systems. Voice Mail should not be running on the same MAS. TASKE must run on a different PC.

Note If TASKE Contact is required, TASKE Contact Server software needs to run on a separate PC. Please see the PC requirement from TASKE (http://www.taske.com/support/knowledgearticles/toshiba/kb60001.html).

Network

The network requirement to implement Network ACD are listed below. Perform the network assessment prior to Network ACD introduction.

IP*edge* network	IP*edge* Net (mesh configuration)
Max round trip delay	100ms
Max packet loss	0.5%
Bandwidth	More than 1.5Mbps both ways
IP*edge* Net channels	Enough number of IP*edge* Net channels between each node.

Capacity

Following table shows the capacity of the entire system including multiple nodes. In addition to this, each system in the network cannot exceed its capacity.

Items	Capacity
Nodes	10
Agents/supervisors	360
Pilot DNs (ACD groups)	Limited by each IP*edge* or Strata CIX system
VA ports	32
Traffic	1000 calls per hour

Interactions with other Applications

Following show Network ACD interactions with other applications:

- A node in the network may go down or lose the CSTA connection to the Unifier. In this case, calls will not be routed to agents in that node. If there are queues in those nodes, calls will not be routed to other nodes.

- If one of links is down during the call, the affected call may be reported to be terminated although the call itself may still exist. When the call still exists after the link is recovered, the call may be treated as a new call, and if the call spans across nodes, it may be treated as separate call at each node, and therefore, they may be counted as two calls.

- Network ACD supports distributed ACD resources (agents and queues) over the network. However, it does not support the generic distributed network operation. Therefore, when the call is forwarded, transferred, and/or overflowed to an extension and other devices, the ACD may report that the call goes to another node. When this call comes back to the same node, ACD may report that it is a different call from the original call, and two calls may be reported.

- When the call is diverted, forwarded, or transferred to an extension other than the ACD agent, ACD may show that the call is cleared although the call still exists in the other node. This happens when the extra link is released by the route IP*edge* Net release link feature.

- When one of the CTI links to the node from the Unifier is down, calls will not be routed or delivered to queues and/or agents in that node until the link is reconnected.

- The Unifier has the capability to accommodate some network delay. However, the delay is more than it can handle, following symptoms may be observed. In this case, it is necessary to examine the network to make sure it support the requirement listed in this document.

    - ACD admin screen and/or report shows that the call is non ACD call

    - The call across the network may considered to be two calls, and involved agents may be reported as handling a non ACD call.

    - The call may be dropped.

- IP*edge* Net has the capability to release the extra link when the connection becomes loopback. It requires a temporary additional B-ch to perform the operation. If no extra B-ch is available at that time, the link will not be released, and the call is treats as two independent segments to avoid further mi reporting. In this case, the single call becomes two, and involved agents may be considered to handle a non ACD call.

- Supervisors or agents cannot pick up or retrieve a call in a different node.

- Users cannot configure the telephone to use the flexible key to perform the one touch operation. Following sequence can transfer the existing call to pre-programmed destination by the single button press. However, this operation is not supported by Unifier.
  [Cnf/Trn][dialing digits][Spkr]

- When a Callback call is made, the system follows the access code defined in the node where Voice Announcement port is connected regardless of the agent location. Therefore, if the agent is in Node#1 and the VA port is in Node#2, the callback call may be generated to the PSTN from the node#2. Therefore, in general, it is recommended to use LCR to route the call by specifying the LCR access code in the Trunk Access Code in the Miscellaneous tab in ACD Administration screen. If all calls need to be generated from the trunk in a certain node, node ID needs to be specified in the Trunk Access Code. It is strongly recommended to have the enough number of trunks for callback calls. Otherwise, the callback call may be lost due to all trunks busy.

- When the overflow destination of the ACD queue is a UCD group, the call may not be overflowed to UCD overflow destination, and the call may come back to the ACD queue. Therefore, it is strongly recommended to use an ACD group instead.

- MCG cannot be used for ACD operation such as overflow destination. Please use an ACD group instead.

- When upgrading the IP*edge* or Strata CIX system, it is necessary to remove and reconnect the LAN cable to the IP*edge* or Strata CIX to reset the link after the system is restarted to ensure that the link is fully restored after the upgrade.

- At the time or after the conference is established and the controller is dropped, no more consultation call may be able to be established as the system prohibits the possibility of creating a conference call with multiple conference master. At this time, TRN/CNF does not work. If necessary, the call needs to be reestablished.

- OCA (Off-hook Call Announcement) is not supported in network ACD environment. If it is used for the agent, the system may recognize the agent status incorrectly and may route a call to an agent who is not available to take a call.

- SPLIT operation is not supported. If done, the call may be reported as a non ACD call.

Multimedia Contact Center Application **8**

By using web technology, the Multimedia Contact Center application provides web surfing customers with the option to contact the contact center. As an option to the ACD, the Web callback and Chat feature are available. In Web callback, the user initiates the callback request while surfing the web, and the ACD automatically calls the user's telephone number specified on the web page. Chat allows the web surfing user to request the chat with a contact center agent so that the user can obtain the necessary information in a semi-realtime manner. These applications help provide better service to customers by adding another method to access the contact center and reduce the call center operations cost by taking advantage of the web technology.

Overview

The Web Callback service enables users to place a callback request from the customer's website. This service gives users easy access to the contact center via the web. All types of browsers are supported.

By adding the web components to the existing ACD system, the Web Callback and Chat applications can be easily integrated with a customer's existing web pages. This service is set up similar to the current voice based callback and the call center has the same ability to generate reports they currently use.
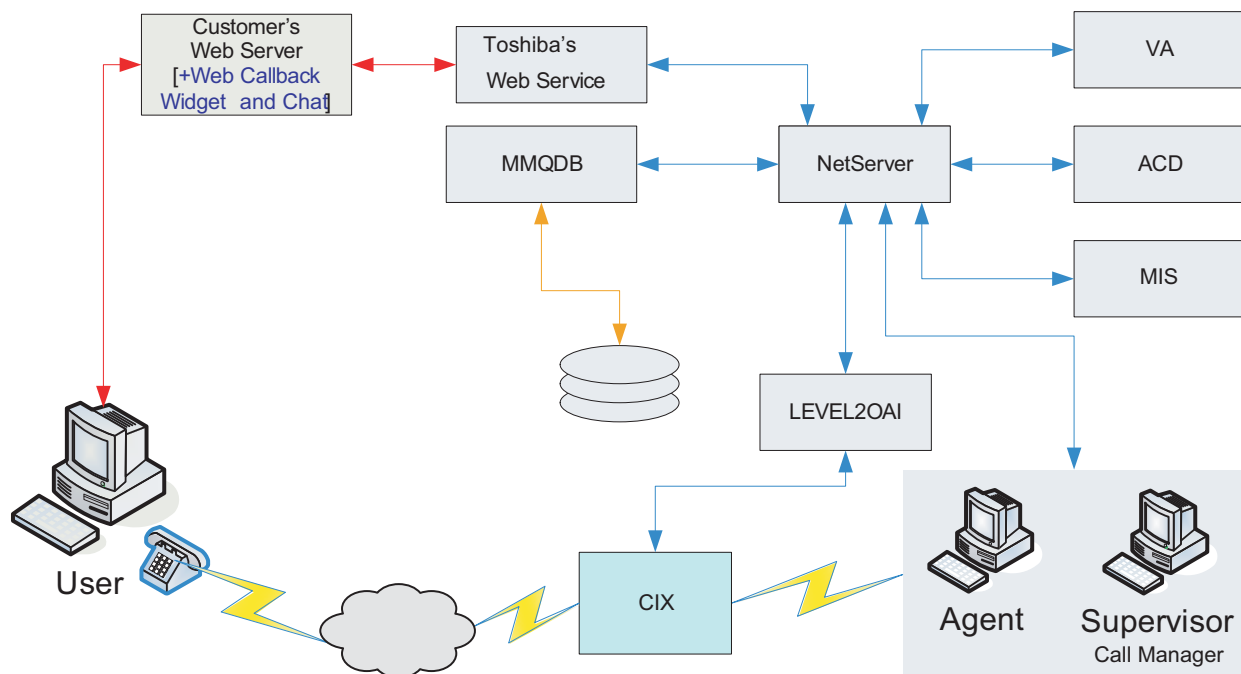
Features

Multimedia Contact Center service has the following features:

- User can request the web callback, and an available agent will call back the user

- User can request the Chat session, and and available agent will respond to the chat message to start the conversation

- Supports routing of Web callback and Chat requests to different ACD groups based on information entered by the users such as callback number, extension, name, and any additional custom information such as subject, notes, etc that is passed on the extra info field.

- Filters duplicate callback requests to the same callback number and extension

- Limits number of requests in ACD queue

- Separates initial queue priority for request

- Supports virtual ACD queue (no corresponding CIX pilot DN)

- Supports web callback counting similar to regular callback counting in TASKE

- Includes additional web callback statistics reports

- Call Manager can show the user information such as name and/or subject collected through the web page when the request is made to an agent.

- Ready made web widget provided for Web Callback (include source codes, for ASP.NET, JAVA, and PHP)

- Automatic insertion of customizable initial/ending/canned messages for Chat

Reporting

The multimedia contact center application is integrated with the TASKE reporting system. All the web callback and chat requests are recorded in the same manner as the in-queue recording ACD currently provides. It is recommended to use a dedicated separate queue for web callback and Chat requests so that a report can be generated for each service separately for easier readability.

Note In addition to the standard reporting by Taske, web callback services has built-in reports to provide the additional information such as Registration records and Delivery records. The following are examples of Web Callback Registration Records and Delivery reports.

Integration with Customer's Web Page

Web Callback and Chat requires the integration with the customer's web page. Examples of the Web Callback and Chat screen can be found on the following page. To easily create the integration, a ready made web widget, including the source codes for ASP.NET, Java, and PHP, is provided (Chat application requires PHP). The widget can be customized for the customer's web server environment.

Optional technical support to integrate the customer's web page is available from Toshiba Technical Support Services.

System Requirements

Chat user client requirement

The following browsers have been tested to work with Chat Contact Center application.

- Internet Explorer 6/7/8

- Firefox 3.6

- Safari 5.0.1

- Opera 10.6

- Chrome 7.0

License Requirements

Web Callback service or Chat requires the following licenses to be activated. There is one license part number for MAS systems and one for the standalone ACD system. By activating one of the following license parts, both Chat application and Web callback can be activated.

Part numbers for MAS and MicroMAS and standalone ACD

LICMAS-MMQBDL	Multimedia queuing – Web callback and Chat for MAS
	Provides users with the ability to request the call back on the web page and Chat. The system will distribute the request to the agent and make a callback call to the user or establish the Chat session. License for the system (LICMAS-MMQCBK) is required per system and included. Includes up to three hours of Technical Support hours which must be used within 90 days after the purchase. Requires the enhanced ACD system.

Web Callback and Chat service requires the enhanced ACD system and basic system is not supported. To upgrade to the enhanced system from the existing basic system, all the basic agents must be converted to the enhanced agents by LICMAS-UPGREN1.

Web Callback and Chat requires that the ACD system is covered by maintenance. Otherwise, the web callback software may go into the demo mode.

Index

reasons, 19

V

Voice Assistant, xi

W

Work Force Management Interface, 21
work unit, 13
wrap up, 13
Wrapping Up, 19
Wrap-Up, 18

This is the last page of the document.