



**Enghouse
Interactive**



Communications Center: Contact Center Connector

MODULE PAPER

The *Contact Center Connector* is the foundation of every Enghouse Interactive Communications Center (CC) solution, giving you the essential functionality for your contact center.

From this base, you can add modules and licenses as you grow and as your business evolves, purchasing additional functionality only on an as-needs basis – such as additional staff, or add-on media channels.

Out of the box, the Enghouse Interactive Communications Center *Contact Center Connector* provides:

- Intelligent routing and queuing of phone calls to improve contact center efficiencies
- Voice announcements that instantly reduce abandons and extend wait times
- Self-service options that reduce customer and agent frustration by filtering out the basic FAQs
- A database that lets you build context around your customers and improve engagement
- Administration that lets you effortlessly handle additions, moves and changes
- Reporting that gives you and your executives an understanding of contact center achievement

Included with the *Contact Center Connector*

- Intelligent, skills-based and caller recognition-based routing for voice and multi-channel¹
- Voice announcements: Queue hold, position-in-queue, estimated wait time, after-hours answer
- Auto Attendant, with graphical call flow administration interface
- Contacts database
- Administrator application with multiple concurrent user access based on secure password protection; includes comprehensive permissions configuration
- Comprehensive, predesigned reports for queuing, admin, and general communications
- Phone call delivery to 5 or 10² agents/supervisors; includes Communications Center's TouchPoint agent/supervisor interface
- Voicemail/Unified Messaging (for the 5 or 10 agents/supervisors and additional Unified Messaging)
- Rich presence capability for all TouchPoint agent or operator users

¹ The Connector includes multi-channel capability for enhanced routing; this requires advanced services to implement

² There are two Connector Options:

1. 5-Agent seat Connector; includes Unified Messaging for an additional 45 users
2. 10-Agent seat Connector; includes Unified Messaging for an additional 40 users

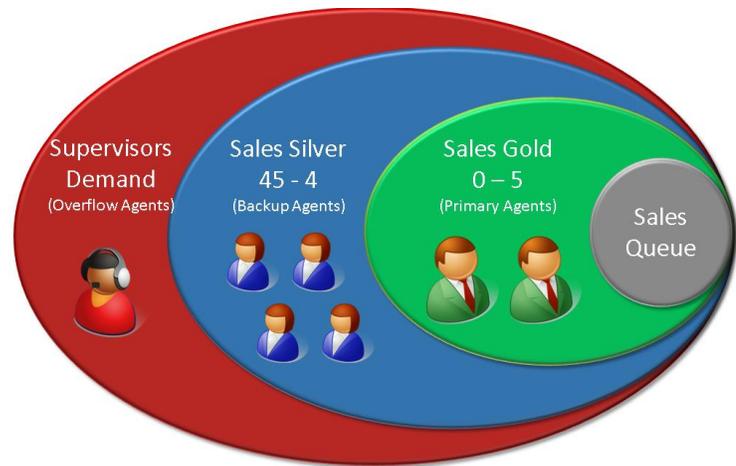
Improve Efficiencies with Intelligent Call Routing

With labor recognized as easily the single biggest cost component in any contact center, maximizing the efficiency of your agents is a top priority. The *Contact Center Connector* applies intelligence to interaction queuing and delivery, resulting in increased 'first call resolution' rates by ensuring your customers are always delivered to the right person – first time.

Skills-based and Enhanced Routing

Match agent skills and experience to queues to deliver calls to the most appropriately skilled agent available. Automate the routing of calls according to business rules and information in your database, for example:

- Send VIP customers to preferred agents or priority queues
- Route problem clients to queues such as bad debtors.



Exception Alerts

Visual and audible alerts let agents and supervisors know when a queue has reach a specified critical threshold, promoting an agile contact center that easily adapts to change as it occurs.

Queue Modes and Schedules

The *Contact Center Connector* lets you anticipate and flexibly pre-program queues to handle calls appropriately depending on the time of day, day of week or non-routine situations such as fire drills, or real emergencies. With up to 6 pre-configurable mode changes available per day for each queue, and over a dozen optional mode types, manager or supervisor intervention can be a thing of the past, leaving manual override for totally unforeseen situations.

Editing Queue 'Customer Service'										
General		Service Level	Advanced	Delivery	Progress	Modes	Schedule	Callback	Modifiers	Templates
Number	Name	Action		Action Info		Forced				
1	Day	Normal Queuing				0				
2	Night	Hang Up		Night		20				
3	Holiday	Hang Up		Holiday		20				
4	Emergency	Hang Up		Emergency		20				
5	Meeting	Force Callback		Meeting		20				

Figure 1. Pre-configure a Queue delivery mode for each potential contingency, whether scheduled or not. For each Hang Up mode above, an announcement is played to callers before terminating the call.

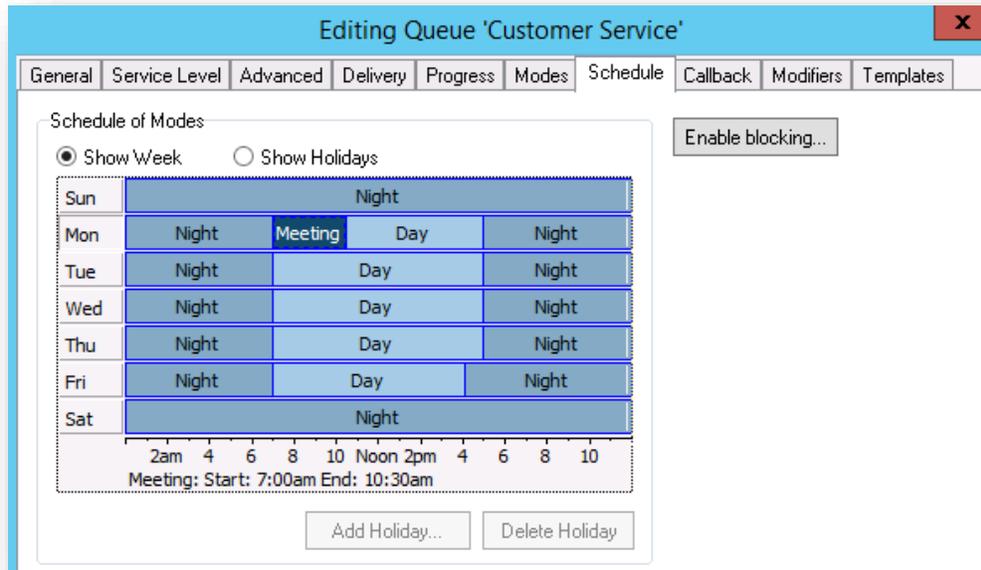


Figure 2. The Queue schedule allows different Modes to be applied at different times of the day and days of the week, including special holidays.

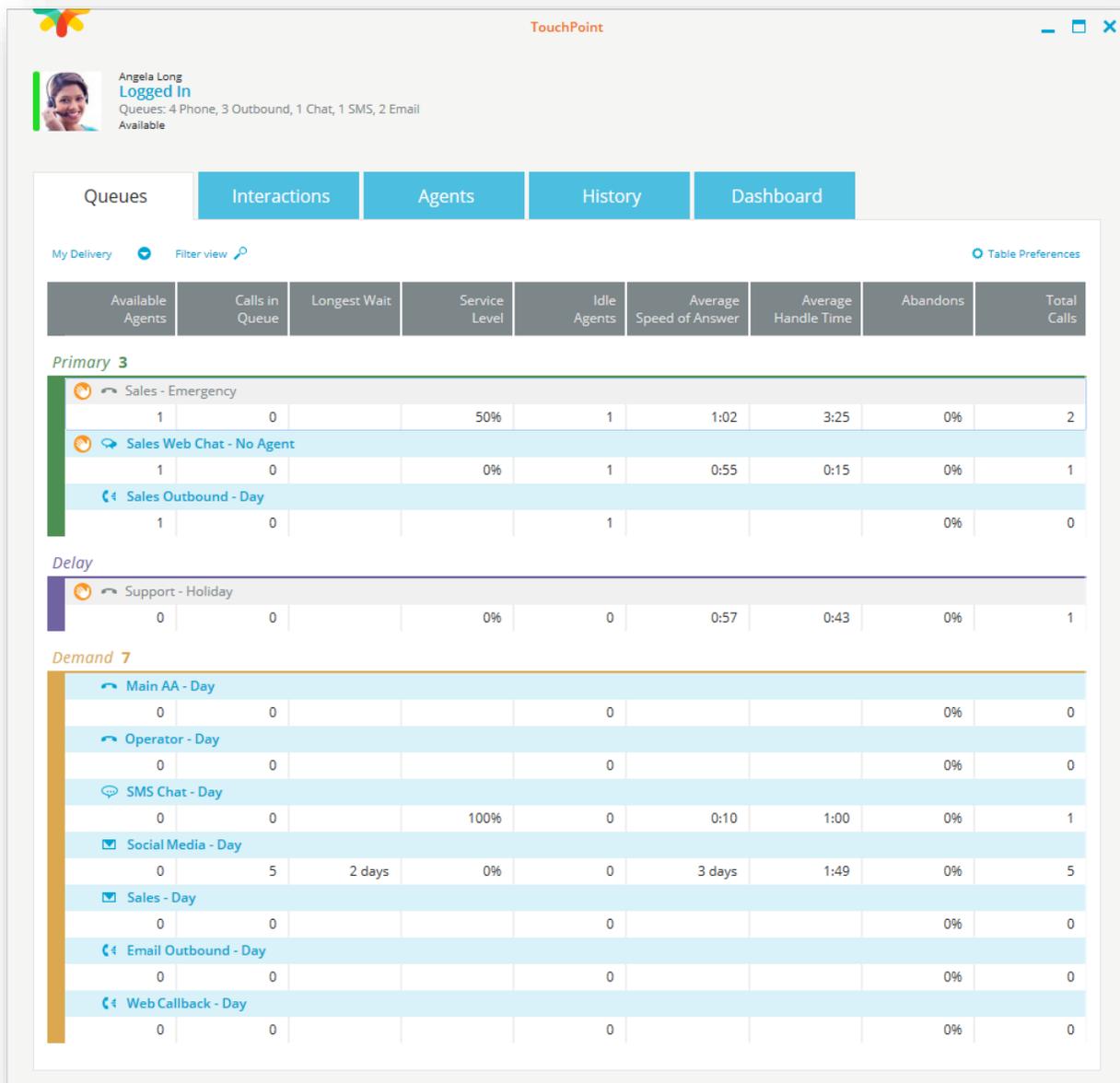


Figure 3. CC apps display the active modes for all queues ...

Queue modes can be scheduled to automatically activate, but can also be changed manually as required, on a per-queue basis. Administrators also have the option to remotely action a mode change for the whole system, for example for an emergency, or “snow” day.

Implement Fail-Safe Practices

You can reduce unnecessary abandons by ensuring the customer’s experience isn’t adversely affected by unexpected circumstances. No matter how disciplined your agents, or how vigilant your supervisors, it is always critical to cover risk areas, for those situations that may arise.

For example...

An agent takes a break without realizing they have left the queue unattended

While the TouchPoint desktop app can be configured to notify supervisors (and agents, if required) when there are no agents logged in, the system also provides an extra safety mechanism: The *Contact Center Connector* can automatically activate its 'Mode Change on Zero Agents' feature. This applies the mode that your administrator has pre-designated for this situation so that calls in unmanned queues are still carefully handled. Callers can be invited to request a Callback, be automatically transferred to a different queue – or even be redirected to an external answer point.

An agent walks away from their desk without going on a break or logging out

Because the agent is still logged in, the *Contact Center Connector* is not immediately aware that they are not there, therefore the next call is delivered to them as usual. However, a fail-safe practice implemented by the administrator allows the call to be recalled back to the queue within a pre-configured duration, so that it can be delivered to the next available agent. Meanwhile the *Contact Center Connector* will automatically log out the agent or (if preferred) put them on a break. This event will be included in the contact center agent performance reports.

The last agent walks away early without logging out

There are two aspects to this scenario. First, a call delivery must be attempted to any agents still logged in, as above, before the system recognizes there are no agents available.

After that, this situation is handled by automatically activating the 'Mode Change on Zero Agents' feature as described in the first point above.

The first agent arrives late

Again, the system recognizes there are no agents available and automatically activates the 'Mode Change on Zero Agents' feature as described above.

Reduce Customer Frustration with Flexible Announcements

Creating a streamlined and informative greeting process, using some of the variety of options offered by the *CC Connector*, can measurably reduce customer frustration, and will in turn lower abandon rates.

Reduce abandon rates through strategic announcements

Research shows that caller abandonment rates reduce dramatically if customers are played greetings and music while waiting, rather than hearing ringing. The *Contact Center Connector* allows administrators to vary announcements almost infinitely, to ensure callers aren't getting bored OR, just as important, feeling that they are stuck in some kind of technological dead-end, and not advancing in the queue. Giving their approximate position in queue and/or an estimated wait time is shown to further extend the time a caller is willing to hold, showing them that they are at least moving. Callers can be played their position in queue, offered menu options from an auto attendant, played critical information or even – if required – asked to enter an account number or ID (that is validated by a *Contact Center Connector* database match).

Announcements are not only provided for voice calls; the *CC Connector* also provides text “announcements” for add-on channel modules.

All queue announcements³, as well as auto attendants, come as standard with the *CC Connector* but voice announcements may need provisioning with additional software or hardware, depending on PBX.

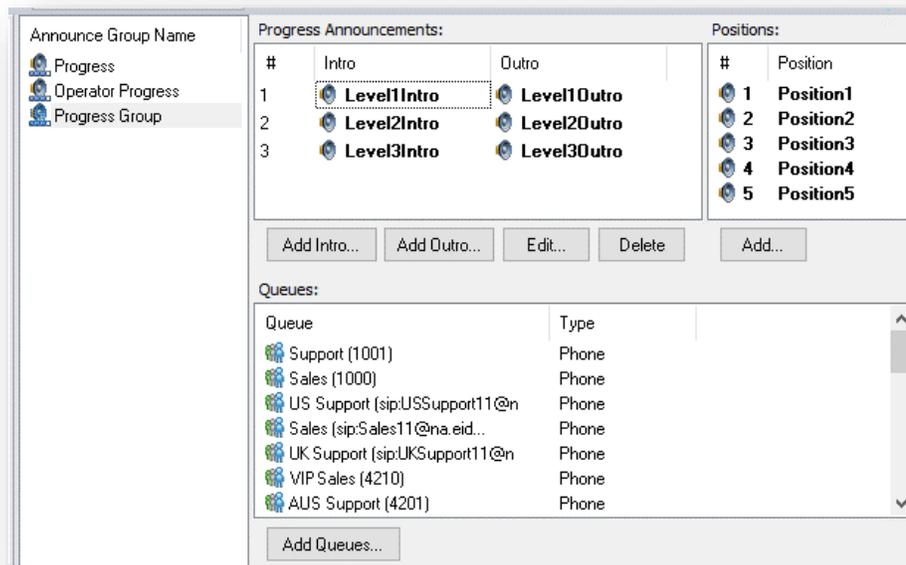


Figure 4. Queues can be grouped so that announcements can be shared. The Administrator application provides a clear graphical representation of the announcement structure.

³ Please note that IVR Queuing and Callback Queuing are separate add-on modules

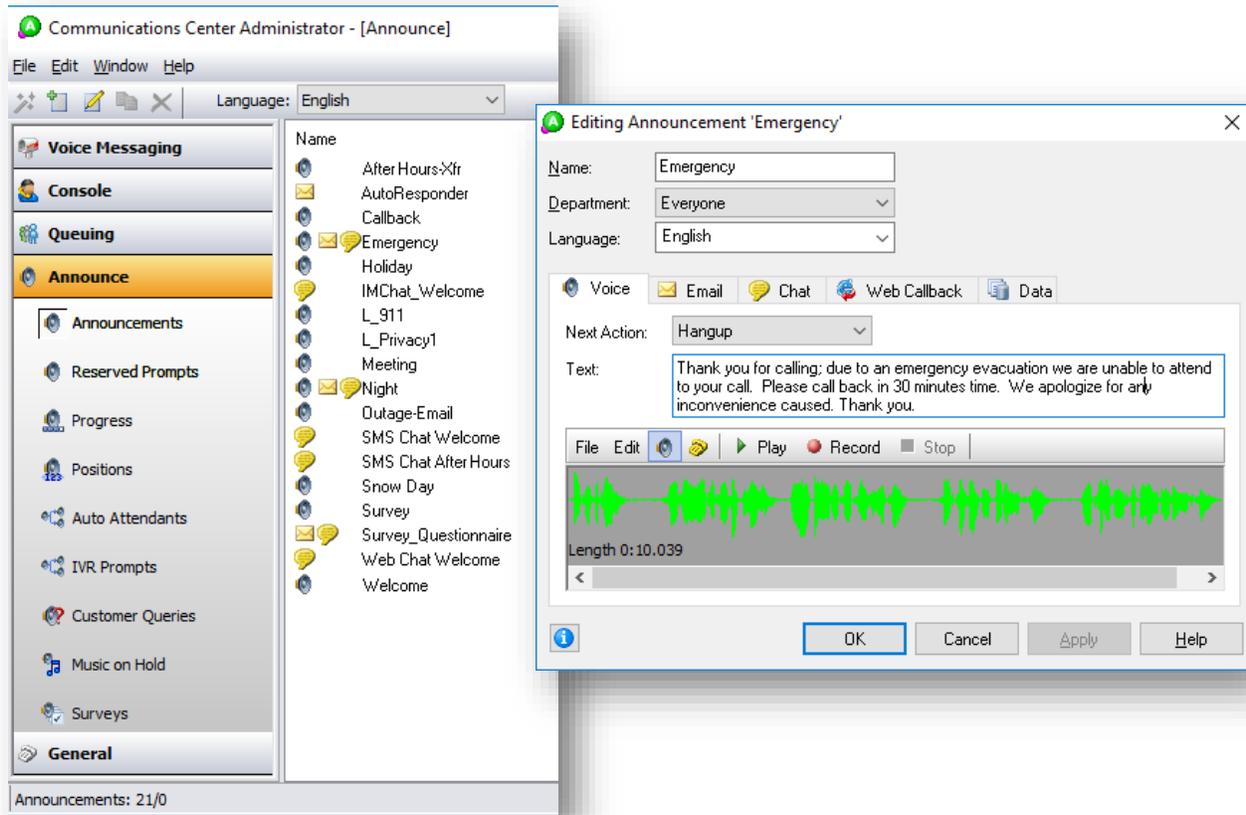


Figure 5. Editing a Queue Announcement, for any Channel⁴

⁴ Some of the items shown in the Announce menu are related to add-on modules not included in the Connector

Eliminate Basic, Repetitive Enquiries with Simple Self-Service

The *CC Connector's* Auto Attendant functionality lets organizations automate a certain amount of call handling, reducing the volume of calls waiting and improving service levels.

Consider routing frequently-asked or else seasonally anticipated questions to automatic announcements, so that only the interactions that really need human handling are using your agent resources. This creates a win-win situation where your customers' needs are much more efficiently met, while at the same time, agents are saved some of the more tedious tasks.

These can also be used as after-hours options, possibly reducing the need to employ agents for longer hours.

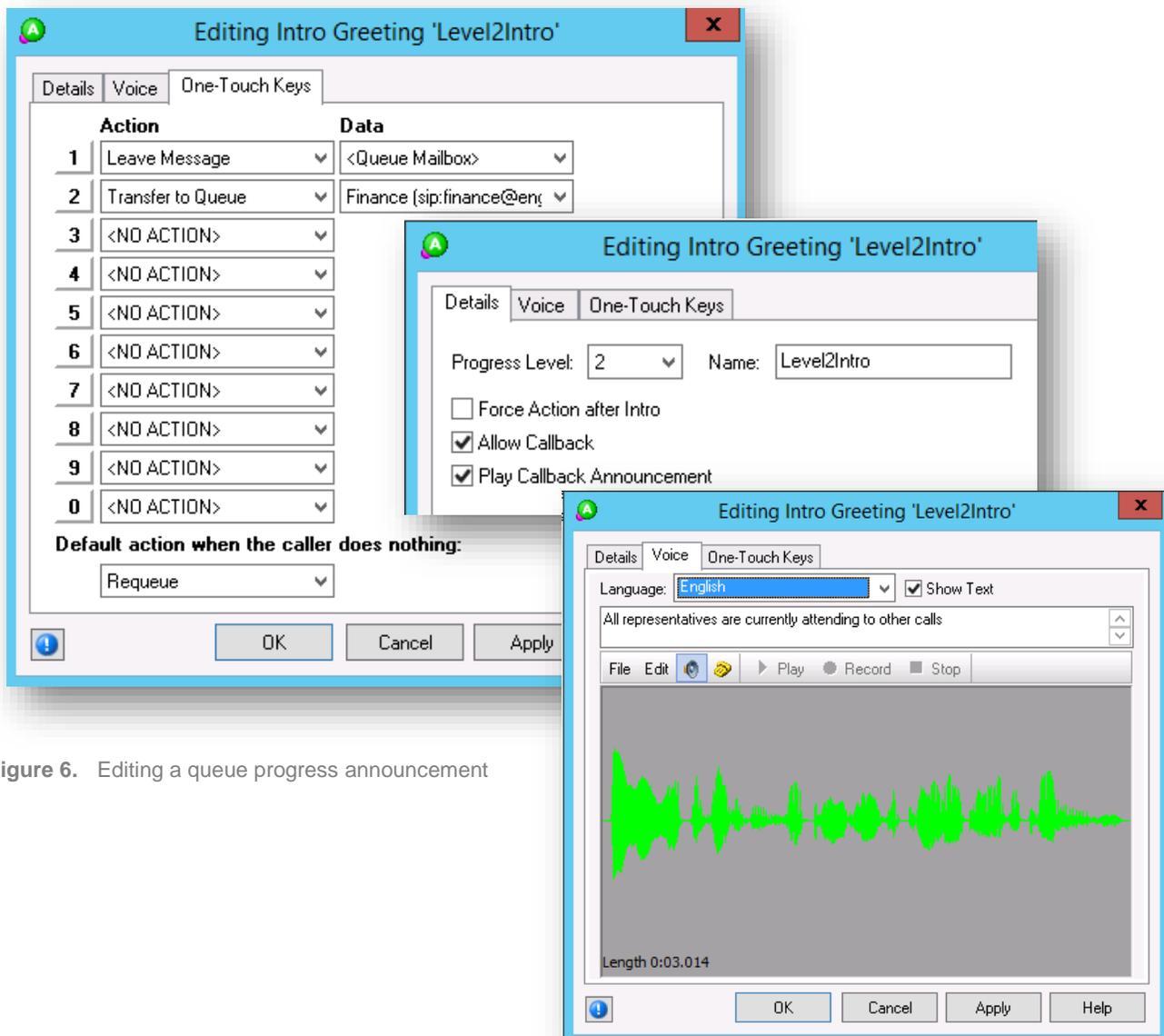


Figure 6. Editing a queue progress announcement

Increase Customer Engagement with Context for Agents

Streamlining agent processes and helping them work smarter will promote first call resolution as well as reducing customer frustration *and* improving agent engagement and retention.

Arm agents with information

Useful information can be stored in the *Contact Center Connector* database, such as the caller's name, title and company, so it can be automatically displayed in the TouchPoint Agent screen on the delivery of any interaction, immediately empowering the agent for better handling.

Other important details that can be displayed are:

- A customer's interaction history – who they dealt with, and when
- Callers can be required to enter a verification or identification code via the keypad that the *CC Connector* can authenticate against the database – or else can just use as an association code.

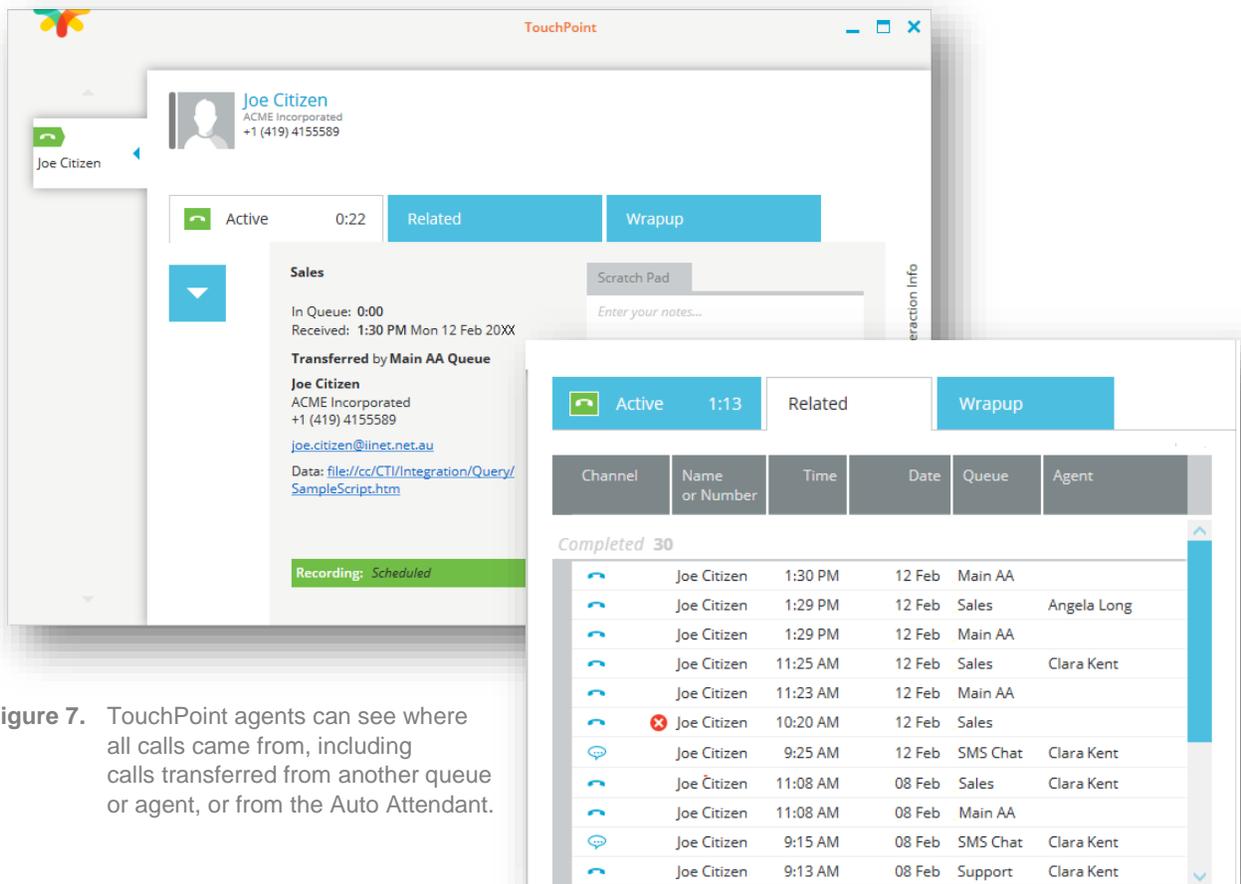


Figure 7. TouchPoint agents can see where all calls came from, including calls transferred from another queue or agent, or from the Auto Attendant.

Effortlessly Anticipate and Action Necessary Updates

Avoid the need for extra highly paid technical staff or third-party organizations when changes are required – or worse still, the temptation to do without valuable improvements. The *Contact Center Connector* incorporates a graphical administration interface, wizards, default settings, help files and a variety of other tools that make administration both quick and easy while minimizing the total cost of ownership.

Help Files

Illustrated online help and tutorials support end-users and administrators so that they continue learning about the applications as they use them.

Intuitive Administrative Interface

Accurate configuration is achievable without IT specialists! Managers and Supervisors can easily add an agent, create a new queue mode or alter an announcement via simple, intuitive tools.

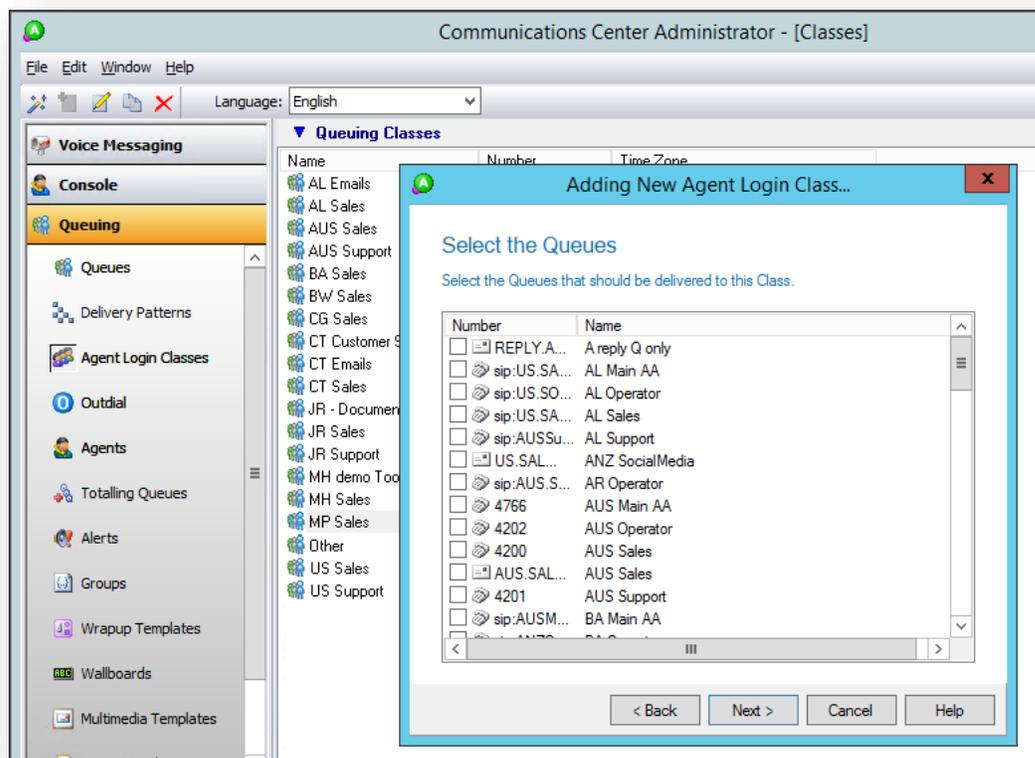


Figure 8. Administrators can easily configure new skills groups, agents, queues or announcements

Unified administration across all channels

When configuring queues, the administrator selects which channel the queue will handle (i.e., phone, email, fax, web callback or web chat) and the administration interface displays the applicable fields for the chosen channel. CC's ability to manage multi-channel interactions within a single contact center environment ensures optimal utilization of agents while providing consistency of interaction handling – and administration.

The *CC Connector* easily caters for multilingual operations, with unique phone numbers for each language all handled by the one queue. Announcement and port usage reports keep administrators and managers informed on how the system's announcement ports are being used, both historically and in real-time.

Manage Up, Down and Across with Comprehensive Analytics

Enghouse Interactive Communications Center's on-board database collects 'cradle-to-grave' statistics on every facet of every interaction, regardless of channel, and including both inbound and outbound. In contrast to many other reporting packages, Enghouse Interactive's standard reporting gives you vital information about all types of communication within your enterprise from the one platform, with your choice of more than 200 predesigned reports and graphs that have been created and added to over many years. Many of our customers say it is the first time they have been able to produce meaningful reports for their managers, their teams and their colleagues.

Keep it simple and intuitive

Wizard-driven reports along with detailed Help descriptions enable quick analysis of meaningful contact center data.

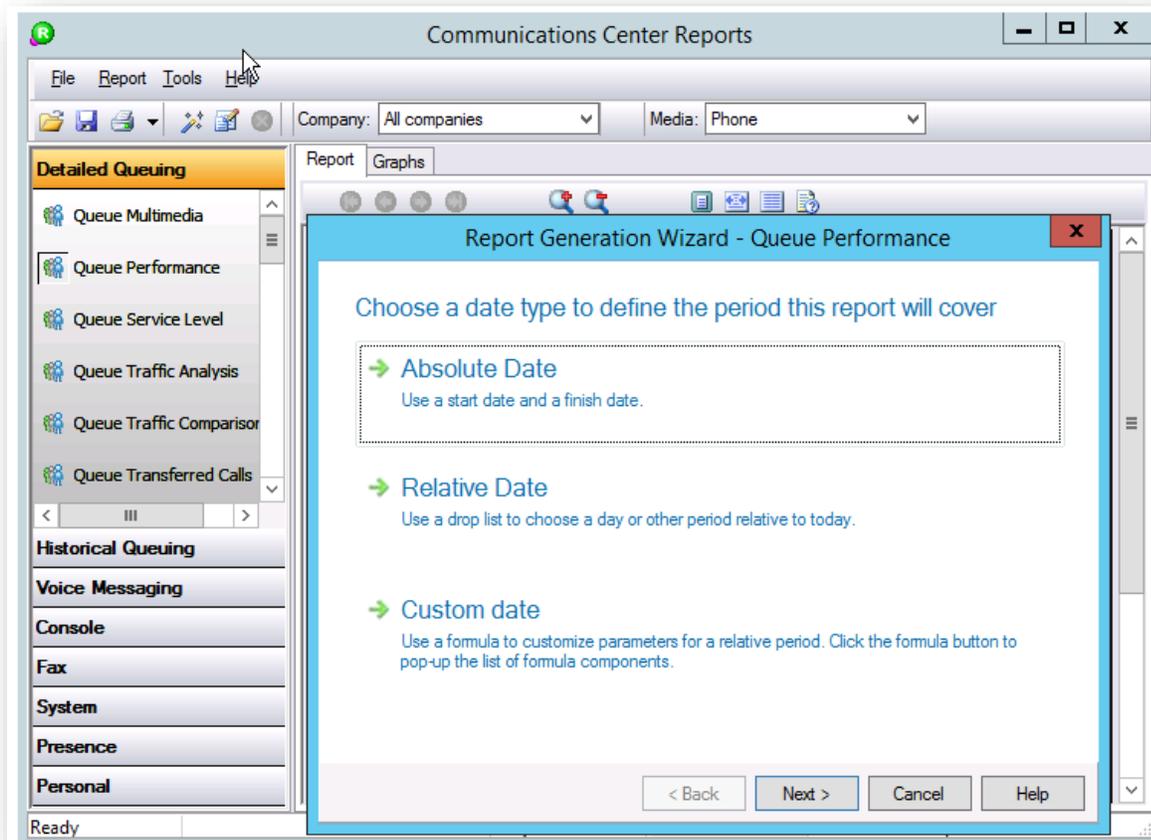


Figure 9. Out-of-box reports, designed for contact centers in all sectors, meet fundamental reporting needs

Understand your contact center environment

Having the information to make the right management decisions at the right time can have an immediate positive impact on your contact center's bottom line. Statistical outputs assist managers

to appropriately configure and staff the contact center to handle fluctuations in volumes, resulting in lower abandonment rates, improved service levels and increased customer engagement.

Choose your reporting angle

Analyze your contact center from different angles such as agent performance versus queue performance within the core reporting tool. Or, empower agents and supervisors and keep them informed via TouchPoint, the desktop client which displays contact center status to all, improving operational management and noticeably raising the bar for all agents.

Encourage consistently high service levels

Inspire your contact center to achieve goals by providing agents and supervisors with their own views of queue and agent activity. Wider visibility of progress can help a team achieve its collective goals.

Save time through automation

Free up your managers by allowing them to save commonly used report definitions as personal or system reports that they can then schedule to run every day, week or month, to be delivered to their email inbox, or to print automatically.

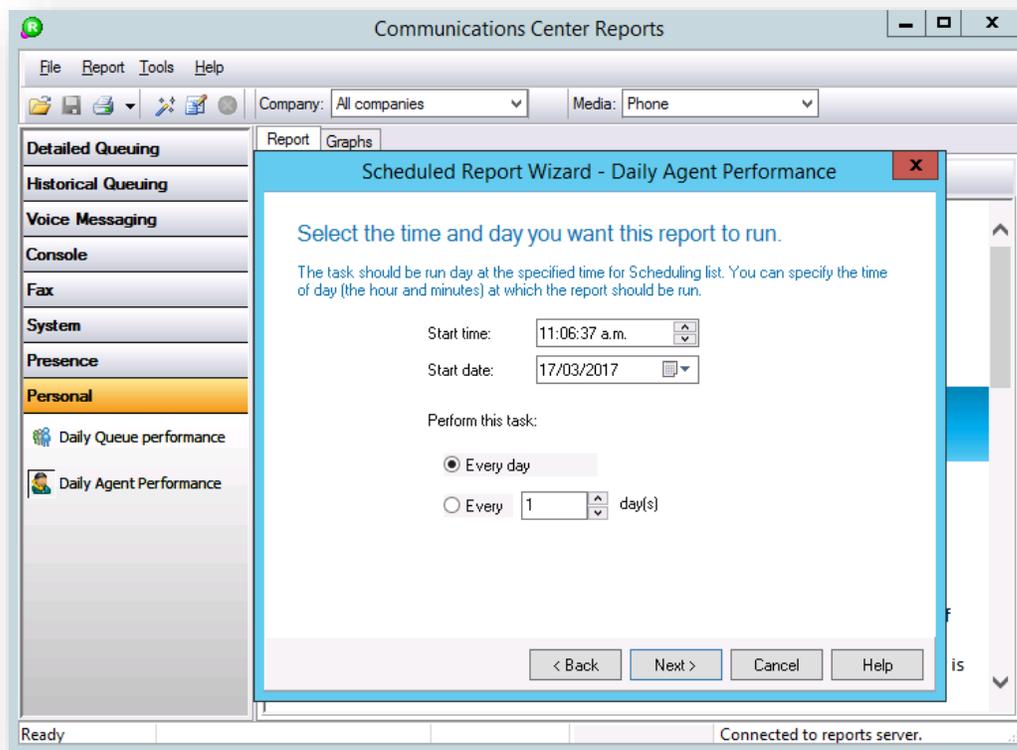


Figure 10. Reports can be scheduled and automatically delivered to the people who need to review and understand your contact center's performance

Feature / Function Matrix

Features	Usage
Multi-channel Queuing	Supports automatic delivery, queuing and reporting of all interactions regardless of channel ⁵ .
Skills-based Routing	Interactions are delivered to the most appropriately skilled agent. Allows delayed delivery to backup agents only when the call is considered to be urgent enough. As the call gets older, more agents become available to take the call. Delivery of calls to agents is based on wait time, agent skills and/or call priority.
Schedules	Time-of-day and day-of-week routing can be applied to queue modes to offer flexibility when requirements change; not just from day to after-hours service, but based on expected or unexpected events, such as meetings, shift changes or emergencies.
Modes	A maximum of 98 configured modes is available, each activating one of 10 possible mode actions, with a maximum of 6 scheduled automatic mode changes within a 24-hour period. Can be manually changed as a supervisor function or automated via schedules.
Priority/VIP Routing	Give high value customers priority call handling by selecting certain agents to answer calls, changing the priority of the call, or moving it to different queue – depending on who is calling
CLID/ANI Routing	Prioritize calls based on who the interaction is from. <i>Contact Center Connector</i> can recognize and adapt routing based on sender/chat email address, caller ID and dialed number.
DNIS Routing	Prioritize calls based on the number dialed when it is directed to a queue.
Query/Prompted Digit Routing	Query a caller to identify themselves using their telephone keypad and then deliver the call based on this information. Subsequent query actions include: priority adjust, redirection, preferred agent, data display, text display such as 'VIP customer', force auto attendant, play announcement, re-query, prompt Callback, transfer to new queue
Last Called Agent Routing	Display information for the agent on delivery of an interaction, that shows who the last agent was that handled this person, based on their caller ID. Optionally, subsequent interactions can also be routed to the same agent, if available.
Holiday Routing	Holidays can be pre-programmed and have different rules for how interactions are handled in that period.
Agent Worktime	Two worktime options can be tracked and reported on:

⁵ Multi-channel functionality is provided with an add-on module per channel

	<ul style="list-style-type: none"> • Automatic after call Worktime • Manual 'Worktime', where agents choose from a list of pre-defined allocations such as 'Training', 'Meeting', 'Paperwork'.
Auto Logout	Automatically log agents out if they do not answer a queue call. The ability to automatically log an agent out means that queue calls will not go unanswered on an agent's extension but instead will be delivered to another agent. The Logout action is configurable; the call is returned to the queue it came from, but the agent can optionally be removed from the pool of available agents: the administrator specifies for this eventuality if the agent will be logged out, put on a break or placed into worktime – or left available for subsequent calls.
Queue Alert	<ul style="list-style-type: none"> • Alerts can be automatically activated based on predefined volume maximums or staffing minimums, to ensure service-affecting situations can be dealt with immediately. • Agent-raised alerts are visible and audible from TouchPoint, notifying a supervisor so they can listen-in on or assist with a tricky conversation
Queue Blocking	Block queues to restrict the number of calls waiting and activate alternatives such as a busy message, the ability to request a Callback (requires Callback module) or transfer callers elsewhere.
Wrap-Up Templates	Apply wrap-up codes to categorize interactions in relevant way, including capturing the result of an interaction; view this information in reports.
Internal and Personal Queues	Configure personal queues for staff who receive regular interactions from customers or suppliers and require these people to be able to queue for them.
Security Classes	Assign a class to each user or user group based on their role within the organization. Allow entities to co-exist in multi-company or multi-department environments without sharing access to their individual applications, functionality, configurations and reporting.
Wizards	Wizard-driven, intuitive administration for ease of use.
Health Check Warnings	Tools to verify system configuration and identify incomplete tasks.
Supervisory Monitoring	Monitor agent calls, including 'barge in' or intrude ⁶ feature on voice calls.
Zero Agent mode change	The system can automatically change the queue mode when there are no agents logged in to take delivery. Historical mode change reporting is available.

⁶ Availability of the Intrude feature is dependent on the underlying PBX

Multiple Call Handling⁷	Agents can be configured to receive queue calls when they are already connected to a non-queue call, only if there are no idle agents available.
Login ID	Identifies agent and related login class. There are three login types available: <ol style="list-style-type: none"> 1. Single Login - Agent logged in at extension 'A' can only log in at extension 'B' after logging off at extension 'A' first 2. Multiple Login - Agents can log in at multiple extensions simultaneously 3. Follow-me Login - If an agent is logged into a phone, doesn't log out and then attempts to login into another extension, CC will log the agent out of the first extension and allow them to log into the second extension
Reporting	Usage
Graphical User Interface (GUI)	Administrators will be able to quickly run a wizard to view a report. They also have access to a simple help menu.
Detailed Queuing Reports	Shows detailed statistics on queue activity and performance including peak periods, service levels, wrap ups, call tracking, etc.
Detailed Agent Reports	Shows detailed statistics on agent activity and performance.
Historical Reports	Visibility of month on month or year on year trends.
System Reports	Shows how system is set up, who made changes (audit trail).
Personal Reports	Allows each manager to create and customize their own favorite reports.
Export	Managers can export the data and sort in a different format or combine with data from other resource.
Scheduling	Certain reports can be emailed or printed based on time/day.
Wall Displays	Real-time agent and queue status information with support for multiple wall display units. Managers can also implement Communications Center's <i>Snapshot</i> application ⁸ to provide a real-time, fully configurable, graphical view of the contact center, for example on a large LCD monitor.
TouchPoint Agent Screen-pop	Call and queue information can be screen-popped to agents as calls are delivered to them. Providing agents with call details prepares them for the call and allows them to provide a higher level of service.
Wrap-Up Reports	Analyze subjective information regarding the call such as the subject of the call, the region of the caller, or the role of the caller to gain a deeper understanding of contact center activity.

⁷ Availability of the Multiple Call Handling feature is dependent on the underlying PBX

⁸ Snapshot is a separate add-on module

Real-time Statistics	The <i>Contact Center Connector</i> provides the data from its databases to fuel the real-time statistics viewed in the TouchPoint and Snapshot applications ⁹ .
Announce	Usage
Multiple messages per queue	Play different announcements to inform and entertain callers while waiting.
Customized messages based on queue	Advertise products and services or other relevant information.
Position in queue/Estimated wait	Inform callers so they can choose to wait or potentially select other options. Position in Queue information can be manipulated based on individual contact center needs, e.g., when a large contact center answers multiple calls a minute, each ordinal can represent a defined number of calls rather than an individual call. ETA prompts are queue-specific. If call's wait time is greater than the time specified in the initial ETA announcement, an automatic apology announcement will play, but no further ETA announcements.
Auto Attendant	An interactive voice menu can provide easy self-service, routing voice callers based on numbers keyed. Callers can be routed to informative announcements or to a different answer point, which could be an internal or external number, a queue or a new auto attendant for more options. More advanced, transactional IVR (Interactive Voice Response) functionality is available with our optional add-on IVR Queuing module.
Query	<ul style="list-style-type: none"> • Identify callers prior to live answer so they can be routed appropriately. • Supply information to trigger screen pops on TouchPoint Agent.
Multi lingual announcements	Play appropriate language based on specific incoming number or caller.
Forced announcements	Make sure callers get important information, e.g., "Please have your credit card ready" or "calls may be recorded for training purposes". All callers are played the announcement, even if agents are free to take the call.
Deliver through announce	Optionally, if an agent becomes available while a caller is listening to an announcement, the call can still get delivered rather than waiting for the announcement to finish playing.
Scheduling via Modes	Mode changes can vary based on time-of-day or day-of-week and can be automatically scheduled OR activated manually.
Audio text	Audio text functionality provides callers with answers to commonly asked questions.

⁹ Please note that Snapshot and TouchPoint are separate add-on modules

Announce Groups	Create sets of progress announcements that can be unique per queue, or else shared among multiple queues.
Announce Text Fields - Administration	Text fields are attached to each announcement, allowing on-the-spot scripting of each recording.
Usage Reporting	Reporting is available on Announce Usage, Announce Exceptions and Auto Attendant Options selected by callers.
Load Reporting	Administrators have a real-time view of the status of the system announcement ports.
Administration	Usage
Copy Manager	Save time by allowing administrators to duplicate the properties of one system setting (i.e. a queue or class) when creating a new one.
Multi Editing	Allow system administrators to access groups of entries simultaneously.
Live Updates	Changes made will take effect immediately.
Audit Trail	Track all changes to the Administrator settings. The three-tier client server architecture supports remote administration while maintaining data integrity
Online Help	Help button access from within any CC application to view Contents, Index or Search tabs
Verify System Configuration	The system automatically generates a list of “incomplete tasks” and provides information explaining each issue in more detail. Each incomplete task displays links to the interface required to complete the configuration more robustly.
Dynamic Monitoring	Communications Center can “monitor” extensions continuously OR only as required, reducing the number of line/extension cards required within the PBX and increasing the overall capacity of the system.
Backups and Redundancy	A graphical UI allows administrators to schedule backups of voicemail, configuration and report data to a local or network location. The MSI-based installer can restore data with a single click; automatic scheduling is also available.
Queue Redundancy	Defaults to telephony platform delivery. Communications Center also offers an add-on Redundancy module ¹⁰ that provides active/failover redundancy to a backup server.

¹⁰ Please note that the Redundancy module is a separate add-on module

Additional References and Resources

- Omni-channel Solution Paper: <http://www.enghouseinteractive.com/solutions/omni-channel-communications/>
- The ContactBabel Inner Circle Guide to Self-Service: http://info.enghouseinteractive.com/CB-Inner-Circle-Guide-to-Self-service-Web-page_Download-Report.html

Ask your account representative for more of our module papers:

- Communications Center Reports
- Communications Center interaction queuing: Email, SMS, Callback, IVR, Outdial
- Communications Center TouchPoint