

Proven, Mature ACD for Call Centers:

What to look for when selecting an ACD for mission critical operations.

Executive Summary

Since its inception more than thirty years ago, Automatic Call Distribution (ACD) has revolutionized the contact center industry by delivering the ability to manage, route and handle customer interactions systematically and efficiently. Since then, the contact center industry has matured and ACD systems have made leaps and bounds in delivering robust, stable and proven call-handling capabilities to many mission critical businesses. Key functionality most notable of quality ACD includes call routing, automated customer interaction, queuing with prioritization and balancing, as well as skills based routing.

Many of the new generation ACD features provide flexibility to the call taking and handling processes of customer interactions, whether they are meant for high call volumes requiring call handling efficiency or low call volume, critical interactions requiring agility and unique processes. Enhanced functionality, such as skills based routing and voice recognition, has made new generation ACD systems a must have for contact centers seeking to maintain their competitive edge. Technology has advanced in the underlying telecommunications connectivity, providing for unity of disparate protocols like TDM (PRI E1/T1) or VoIP (SIP/H323/IAX). Such advances allow ACD to seamlessly integrate VoIP and TDM, as well as handle all the PBX functionality. The resulting architecture provides the opportunity to create distributed contact centers with a centralized ACD and enables geographically distributed agent clusters to be easily deployed in order to achieve greater overall efficiency.

New generation ACD also delivers unprecedented ease of integration to contact centers utilizing proprietary business applications. The open architecture of such systems allows IT Managers and System Integrators to utilize an advanced set of APIs to fully embed call center features into evolved business applications. Full database integration then enables unified reporting between the contact center technology platform and the business application. These evolutions in ACD highlight the emerging trends to maximize flexibility, agility and functionality within the contact center. This white paper will continue to discuss the functionality, architecture and improved capabilities of a proven, mature ACD. We will identify key considerations when selecting an ACD and we will closely examine how Indosoft Q-Suite ACD software is capable of providing the differentiation you demand.

What is ACD?

Automatic Call Distribution (ACD) describes the ability of the contact center to manage, route and handle interactions. ACD is the part of the Call Center Software working the underlying telephony switch. It provides the ability to define call handling models based on business logic specific to your domain. In other words, ACD controls the capabilities of the underlying telephone switching to process, handle and distribute calls. For example, calls may be subjected to logic based on time of the day schedules, automated call processing, agent skills and queue prioritization, in which case the ACD makes decisions on the distribution of the incoming calls based upon predefined logic. With multiple Queues requiring different skill sets and multiple agents available, the ACD can be programmed to provide the call to the highest skilled agent available or to the least busy Agent, which is commonly used in a balanced setup. As you can see, the flexibility of the ACD is a key factor in the contact center's ability to accommodate the various call models required by different industries dependent upon contact centers to play a leading role in managing their customer interactions.

Q-Suite Call Center ACD Software

Indosoft provides Q-Suite, a very high-end call center ACD software that is feature-rich, scalable and fault tolerant. Q-Suite offers comprehensive ACD capabilities with full control over call routing, queuing, skills based routing and call handling.

Call Models

Q-Suite ACD offers support for different types of call models based on specific business requirements. It is ideally suited for both high volume call centers requiring up-front automation efficiency in handling calls, like Customer Service and Sales, as well as lower volume specialized call centers, which may require agility and unique responses depending on the call situation, like help-lines and hot-desks. Depending on the call model required, the call routing, queuing, agent notification and status information can vary greatly to fine-tune the overall handling of the customer interaction. Once a call is answered, Q-Suite ACD supports transfers (Blind, Conference and Consultative) as well as Call park, Call retrieve and the ability to take the caller into a conference rooms. With highly efficient channel monitors, all participants within the ACD have a very good view of live status to make quick decisions.

Q-Suite ACD features

- Routing based on Time, Day, Week, Month etc.
- IVR and Automation to interface to data sources
- Multiple DID/DNIS with Text identification per inbound service
- Screen-pop for every call
- Music on Hold, Announcements and Branching
- Queue prioritization, Music On Hold, Service Level, Branching
- Skills based routing (Agent skill assignment, Queue Skill assignment)
- Adapting to different Call Models
- Notify Select or ALL
- Call Park, Retrieve and Conference
- Continuous Status update for Calls/Channels
- Detailed CDR
- Transfers (Live, Assisted and Consultative)
- Detailed Cradle to Grave Reporting
- Detailed Live Wall Board

Queues

Calls are routed into Queues to be generally handled by a pool of agents. From an ACD perspective, Queues are abstractions that hold call information while ACD connects the caller from a particular queue to the most appropriate agent based on skills or other business rules.

Skills Based Routing

Skills based routing is an efficient way for ACD to increase the overall performance of a contact center. Agent skill levels determine which agent is most suitable to receive a call from a queue. If specified in the call model, an incoming call will be delivered to an available agent with the highest skill level. When multiple agents are available to take a call, the longest waiting agent will get the call. When there are calls waiting in multiple queues, the agent will get the call from the queue in which the agent has the highest skill level. When agent skill levels are equal, the longest waiting agent will receive the call. If all agents are assigned the same priority on all queues, it will result in a balanced queue system, meaning the longest waiting call will be delivered to the first available agent. If multiple agents are waiting for a call, the longest waiting agent will receive the call. With “Notify ALL”, routing decisions can be controlled by the agent instead of the ACD.

Queues and Skills

- Music on Hold
- Queue Priority
- Queue Skills
- Queue Overflow
- Service Level
- inbound service
- Call and Status Notifications
- Notify ALL

Agents

Forward-thinking, innovative organizations are deploying new generation technologies, such as Q-Suite ACD, as primary drivers of healthy ROI. Finding ways of getting more value requires taking advantage of new architectures and emerging VoIP technology. Q-Suite ACD brings tremendous flexibility in controlling large cost elements of the contact center. Distributed operations, or operations where the call center infrastructure is consolidated in an easy to manage location and the agents are capable of working from altogether different geographic locations, enable significant cost reductions for the contact center. For example, organizations can safely consolidate their software and supporting hardware in a data center in one location while employing agents in different locations to use the software when servicing calls.

This ability to utilize distributed agents has revolutionized the contact center industry.

Key Agent Features:

- Free seating
- Hot Desking
- Remote & Distributed Agents
- On-hook and Off-Hook Agents
- Web and Native Client Agent Interface
- Status Notifications for calls
- Transfers and Conferencing
- CRM and Custom Application Integration
- IP phones or Softphones
- VoIP and TDM Trunks
- Integrated PBX
- Built-in Quality Assurance and Recording
- API for Computer Telephony Integration

In terms of agent features, Q-Suite ACD delivers the maximum amount of flexibility to contact centers, whether or not they utilize a distributed architecture. The popular feature of Free Seating allows agents to sit in any available agent seat and use the computer and phone in the desk to login. Empowering your agents with tools like Hot Desking allows free seated agents to give out specific DIDs or extensions so that callers can reach them directly. Options for various types of agent notifications include Alert before Call Hand-off, On-hook and Off-hook agents. Alert before Call Hand-off is primarily used by organizations utilizing at-home or remote agents, as it requires the agent to acknowledge within a set time, usually 2-3 seconds, before handing out the call to the agent. This ensures that agents are alert before the call is connected to the agent. On-hook refers to the agent phone being on-hook while waiting for call, which means that for every incoming call the phone will ring for the agent to pickup. This is suitable for low volume call centers where the agent is multi-tasking between answering calls. However, since each ring is 8 seconds, this method may not be the most efficient way for distributing high volumes of calls. Off-hook refers to agents that stay connected to the phone system and allows calls to be handed to agents with an audible tone. Typically, high volume call centers have off-hook agents. The important thing to remember is that with more flexibility in utilizing agent resources comes a greater ability to fine tune operations for different business requirements. For example, some specialized clients require agents to have the ability to pick and choose calls. The ability to send notifications for all calls and channels allows the agents to pick the calls they will be most successful at handling. The ACD allows the agent station to do all the transfers and conferencing required for sophisticated operations.

Options with agent phones go hand in hand with agent location and notification options. Q-Suite ACD allows agent phones to be an extension within the PBX (phone system) of the call center ACD, or they can belong to an external phone system. Internal phones could be IP phones, Softphone or regular POTs phones.

Quality Monitoring

Quality assurance is a function of any high-quality contact center technology platform. New generation telephony platforms offer a distinct advantage in that they deliver built-in call recording and monitoring features. Previously, costly CTI developments were required to achieve these features, but Q-Suite has built-in features, which deliver immediate and significant cost savings. Commonly used quality monitoring tools available include Listen to Agents, Whisper, and Barge.

Reporting

Being able to see deep into your daily operations is clearly an extremely important factor of achieving operational leanness. Q-Suite offers a complete set of reports and an open database to integrate with other reporting engines. Q-Suite ACD has the ability to maintain Cradle to Grave Reporting of each with granular details. Its Agent Performance report allows for reporting on the time spent by an agent on all agent states, including custom DND states. It is compiled and presented as a time profile for every session. Call dispositions provide an indication of the conversion rate for an agent. Inbound and outbound setups have different wrap-up definitions and are compiled by the hour for all call dispositions. Supervisor Dashboards and Wallboards provide call center administrators with a view of the call center

performance broken down by agent, queue and ACD performances. Wallboards allow supervisors a bird-eye view of the floor performance. Since all these screens are Web reports, an across the board view is provided to management. Periodic and Historical Reporting can be scheduled and emailed automatically to any distribution list.

Fault Tolerance – Fail Safe Call Recovery

The enormous evolution of telephony has been led by huge advances in software development. Nearly all functions of telephony, once managed by a purely hardware system built using MIL certified hardware chips (U.S. Military standard specification), are now predominantly performed by software. With software as the core, these new systems provide enormous flexibility and feature evolution at a rate that was unimaginable with hardware systems. Although this can theoretically expose the systems to greater vulnerability due to failures, building fault tolerance into such software systems ensures that the system remains available and fully functional even in the event of a failure with little to no effect upon the normal operations of the call center.

Fail-Safe Call Recovery

- Redundant Components
- Watch Dog Monitor
- No Dropped calls due to Single Failure

Q-Suite ACD has an inbuilt design to ensure that a single failure does not result in any loss of calls or conversation. Should there be any single point of failure, including software failure within the components of the system, Q-Suite ACD's unique fail-safe call recovery does not drop ongoing calls and allows new calls to continue coming. As a result, the two end point phone devices during a conversation will be able to continue the voice conversation after the said failure, without having to re-initiate a fresh connection.

Computer Telephony Integration (API)

Q-Suite ACD can work under the hood, enabling vertical businesses to embed the ACD into its mature vertical domain. It comes with a sophisticated API to allow CTI interaction using .NET and socket interface, as well as an XML interface for database interaction. This creates an opportunity for business systems with legacy telephony to incorporate CTI and embed Q-Suite ACD into their evolved business domain.

CTI Interface

- Socket and .NET API library
- XML library for Database

A Final Word

The paradigm shift in technology with the emergence of VoIP has opened an unprecedented opportunity to enhance your call center ACD, lower your cost and provide much more functionality. In Q-Suite ACD you have proven technology that has evolved with this paradigm shift in telecommunication. Since its genesis in 2004, Q-Suite ACD has matured through its worldwide deployment to over 75 call centers and a few thousand seats operating with significant call volume. There has been never such an opportunity to compete and grow with industry leaders, and taking full advantage of technology shifts enables you to do just that.

There are a number of resources to help you learn about the incorporating Q-Suite into your contact center operation. At www.indosoft.com, you can find valuable information.

You can read more whitepapers about Q-Suite at, http://www.indosoft.com/white_papers.htm

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