ORACLE CONTACT CENTER ANYWHERE: NETWORK-BASED ARCHITECTURE

KEY FEATURES

- Mirrored hot backup
- Carrier-grade scalability
- Web-based user interfaces
- Integrated by design
- Carrier-grade network security
- Manageability at scale
- Operating system interoperability
- Survivability across servers, data centers
- Survivability even in the event of database failure
- Carrier-grade reliability
- SIP or H.323, PBX phone, or PSTN end points

Oracle's Contact Center Anywhere is a carrier-class multimedia contact center solution designed to operate at scale on a mission-critical basis. The architecture scales to carrier levels across an unlimited number of locations.

Distributed Network-Based Architecture

In the pre-internet days, telecommunications system architecture was described in terms of CPUs, operating systems, time slots, redundant data storage, and communication protocols. But, the growth of the internet and the availability of bandwidth have changed those standards. Today, the system architecture can be the bottleneck—and companies are challenged to unify voice and data in a single queue with servers and telephones sharing system resources.

Oracle's Contact Center Anywhere supports both circuit-switched and packet-switched IP telephony. Its unique distributed network-based architecture enables it to support centralized or geographically dispersed contact center operations with virtually limitless growth capacity and rapid provisioning—without security risks.

Secure, Web-Based User Interfaces

Contact Center Anywhere's client applications are Web-based and take full advantage of the flexibility of Web communications infrastructure. The user applications require no special PC configurations or custom programming. Wherever users are, they simply log in to open or secure socket layer (SSL) sessions and enjoy a seamless extension of all contact center capabilities.

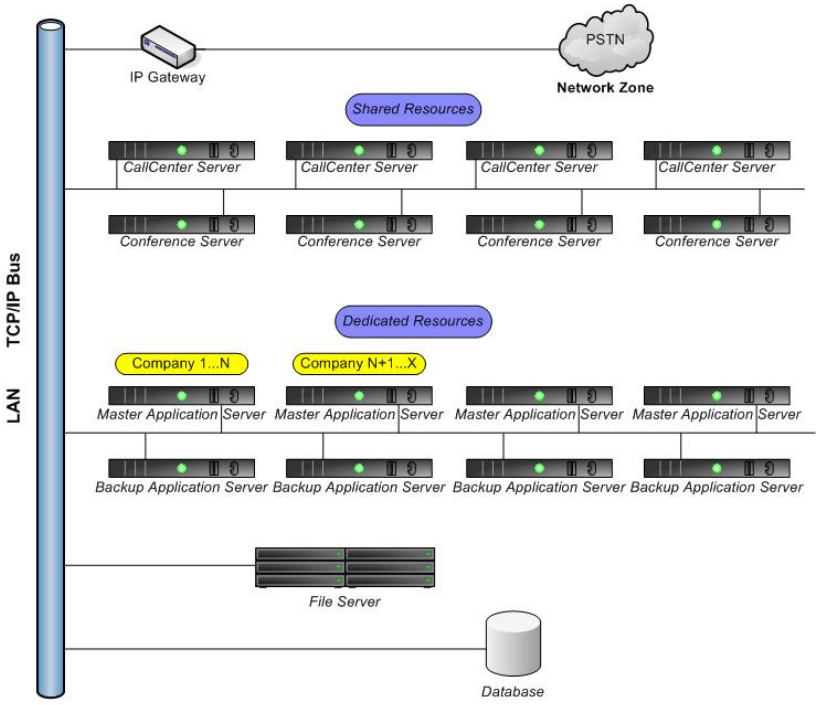
The pure Web-based interface simplifies firewall security. Requests from client interfaces are handled via Hypertext Transfer Protocol or HTTP (port 80) or secure HTTP or HTTPS (port 443). Web servers are located in a demilitarized zone (DMZ), outside the corporate firewall. Web servers pass messages between the users and the back-end application resources and servers. The Web servers are responsible for handling requests from all users and customers. These Web servers, or session servers, allow for redundancy when using multiple servers with domain name service (DNS). Prebuilt user interfaces are supplemented with world-class Web services to ensure maximum efficiency and return on investment.

Now the Network Really Is the Computer

The core advantage of a network-based architecture is that scalability can be achieved simply by adding additional servers to the distributed network. Processes are distributed across the network work together to form the application. The

switching layer is just one of a set of distributed processes that communicate with each other over a software-based transmission control protocol/internet protocol (TCP/IP) bus—enabling an unlimited number of servers to be aggregated into one system. These processes comprise the application software for media handling, data collection, and communication. Server processes include the application servers that run the business applications such as automated call distributor (ACD), e-mail, chat, and scheduling; the database servers that hold the application configuration files and historical data; and the media servers that manage the real-time protocol (RTP) streams with an integrated softswitch and media gateways.

Processes are provisioned with hot-mirrored backups and can be provisioned with N+M redundancy to run in parallel on multiple servers. It also provides the option of multisite redundancy with mirroring of software processes and hardware across locations. Contact Center Anywhere is designed to be bullet-proof, providing uninterrupted service, regardless of circumstances. Processes can be located anywhere on the network. For example, in a multisite contact center topology, primary server processes may be located at one location and hot backup servers at another. This ensures continuity of service in the event of an outage on a primary server and provides disaster recovery protection in the event of the loss of a site. The applications "stay alive," even if individual servers or data centers fail.



The distributed design of Contact Center Anywhere.

Carrier-Grade TCP/IP Bus Key to Scalability and Resiliency

One of the key determinants of scalability for such a network-based solution is the ability of the solution's TCP/IP bus to handle interprocess communication. Most vendors rely solely on the bus supplied by the operating system, and as a result their solutions will not ultimately scale to carrier levels. Contact Center Anywhere has its

own carrier-grade TCP/IP bus that enables Contact Center Anywhere to scale easily and dynamically to support virtually unlimited growth.

Another key driver of resiliency lies in the fact that the software processes distributed across the network pull all database-driven configuration data into the bus memory on startup—ensuring operations are not disrupted even if databases fail. Administrative changes to business logic are stored in the bus until the database reappears on the network—and the network-based application is also smart enough to disregard queued messages that have been rendered irrelevant by subsequent administrative changes.

Distributed Design Improves Multitenant Operations

In a multitenant context, this distributed design lets every tenant run its own software processes on shared servers, ensuring no tenant can disrupt the business of any other, while simultaneously delivering maximum economies of scale through shared licenses, hardware, and phone lines. These processes are managed on a global network via a user-friendly network manager interface or by leveraging the solution's simple network management protocol management information base (SNMP MIB) and an external management utility such as HP OpenView.

Integration By Design

Contact Center Anywhere was designed from the ground up as a full-featured, multimedia, virtual contact center solution. It is provisioned using a menu-driven configuration tool that encompasses the very same needs analysis options integrators rely on to deliver custom applications. This menu-driven approach empowers dynamic, real-time business optimization without stability risks. For service providers offering applications to customers, or enterprises that want to leverage next-generation technology investments across lines of business, Contact Center Anywhere is a proven contact center solution that will assist companies in improving profitability in the short term and provide unprecedented flexibility to adapt technology business processes on an ongoing basis.

Softswitch Architecture Built In

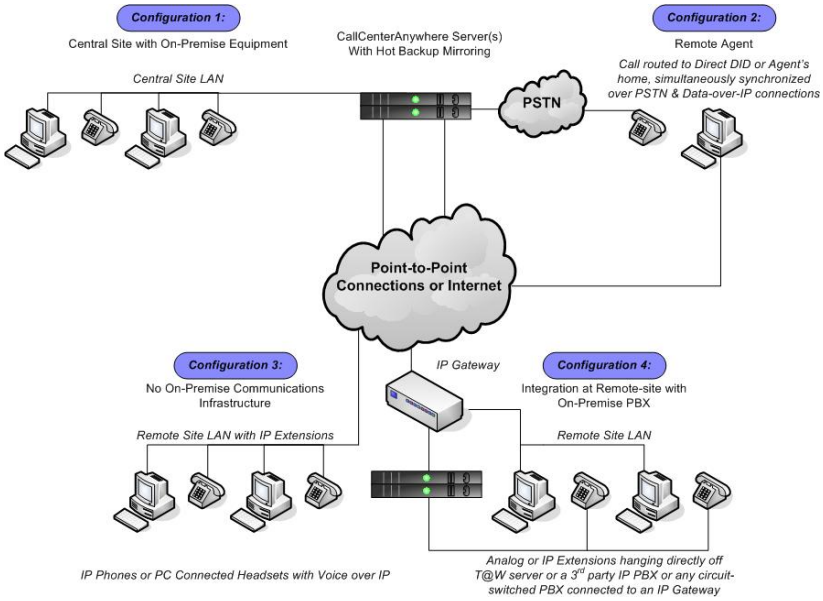
Contact Center Anywhere offers a built in softswitch architecture for session initiation (SIP) and H.323 protocols. Contact Center Anywhere's voice over IP (VoIP) functionality incorporates the product's unequalled standards of redundancy and flexibility. Flexible call routing allows a single contact center to have agents receive calls on a variety of phone types, including H.323, SIP, analog, and PBX extensions. In fact, Contact Center Anywhere's softswitch is able to bridge H.323 calls to SIP calls and vice versa. The softswitch is also interoperable with various third-party SIP- or H.323-enabled IP phones. The system is compatible with most commercially available gateways, including Cisco, AudioCodes, and Quintum.

Flexible Topology Options

Many companies today find themselves challenged with the management of multiple sites, each employing its own contact center infrastructure. While connecting the sites into a single system would be advantageous, system scalability issues are

usually a restriction. Contact Center Anywhere's carrier-class architectural design eliminates traditional limitations in a multitenant architecture that redefines scalability as a flexible barrier limited only by the processing resources on the network.

New processes are provisioned across a standard set of servers to achieve hot-backup mirroring, whether servers are located in one location or spread out in a multisite configuration. Oracle's Contact Center Anywhere's distributed, network-based software keeps track of all the transactions in a virtual topology supporting heterogeneous platforms—time division multiplexing (TDM) and/or IP. There are no limitations to the number of servers that may be placed in the network, nor does it matter where the nodes (servers) are located.



Contact Center Anywhere configuration options.

Contact Us

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