



Cisco–Concerto Technical Integration Brief

Overview

To enable contact centers to provide world-class customer service, manage multiple point solutions, and effectively utilize agents, Concerto Software™ has integrated its Ensemble™ 3.1 solution with Cisco ICM and Cisco IPCC.

Ensemble's industry leading blending process increases the productivity of the contact center by providing the tools needed to balance outbound interactions and inbound interactions while meeting service levels and improving agent productivity.

This integration allows Concerto Software to offer outbound and blend functionality to customers who utilize Cisco ICM, connected to a PBX/ACD, including the Cisco IPCC, for their inbound call processing. In this instance, Ensemble is used for outbound dialing, campaign management, outbound agent management, and reporting. Concerto Software's award winning blending functionality blends outbound agents over to inbound when the inbound traffic becomes high.

Cisco Overview

The Cisco IPCC Enterprise Edition is a strategic platform that enables customers to move into the next phase of customer contact—beyond today's Contact Center to a Customer Interaction Network. The Customer Interaction Network is a distributed, IP-based customer service infrastructure that comprises a continuously evolving suite of innovative, multi-channel services and customer relationship management applications. These services and applications provide enhanced responsiveness and streamlined customer exchanges to help your organization deliver superior customer service. A Customer Interaction Network extends customer service capabilities across the entire organization, giving your business a more integrated and collaborative approach to customer satisfaction.

An integral part of Cisco AVVID (Architecture for Voice, Video and Integrated Data), Cisco IP Contact Center (IPCC) Enterprise Edition delivers intelligent contact routing, call treatment, network-to-desktop computer telephony integration (CTI), and multi-channel contact management over an IP infrastructure. By combining multi-channel automatic call distributor (ACD) functionality with IP telephony in a unified solution, Cisco IPCC Enterprise (formerly Cisco IP Contact Center) enables companies to rapidly deploy a distributed contact center infrastructure.

Cisco IPCC Enterprise Edition segments customers, monitors resource availability, and delivers each contact to the most appropriate resource anywhere in the enterprise. The software profiles each customer using contact-related data such as dialed number and calling line ID, caller-entered digits, data submitted on a Web form, and information obtained from a customer profile database lookup. At the same time, the system knows which resources are available to meet the customer's needs based on real-time conditions (agent skills and availability, interactive voice response [IVR] status, queue lengths, and so on) continuously gathered from various contact center components.

Cisco IPCC Enterprise provides a state of the art VoIP contact center solution that allows customers to seamlessly integrate inbound and outbound voice applications with Internet applications including real-time chat, Web collaboration and e-mail. This integration allows for unified capabilities, enabling a single agent to support multiple interactions simultaneously.



regardless of the communications channel the customer has chosen. Since each interaction is unique and may require individualized service, Cisco provides contact center solutions to manage each interaction based on virtually any contact attribute.

Furthermore, Cisco can bridge the gap between TDM and IP infrastructures, providing a seamless integration of voice, chat, e-mail, and Web collaboration applications over both of these technology platforms. This allows customers to preserve the value of their existing investments in call center products such as ACDs, IVRs, PBXs, etc. while leveraging Cisco's wide range of solutions to support the same contact center requirements in a converged network environment—continuing the evolution towards a true Customer Interaction Network.

Concerto Software™ Overview

Concerto Software, Inc. (NASDAQ: CRTO) is a proven and reliable provider of contact center solutions that help companies better manage customer interactions via voice, email, the Web and fax. With multiple strengths—including financial stability, talented people, innovative technology, more than 20 years of industry expertise and a singular focus on the contact center—Concerto Software is a trusted partner to more than 1,200 companies across the globe. Concerto Software is headquartered in Westford, Massachusetts, with operations across North America, Europe and Asia. The company's Ensemble customer interaction management suite seamlessly integrates inbound and outbound calling. Ensemble is a modular platform, allowing companies to deploy the product in stages and increase its functionality as their needs expand. The solution is designed to leverage a company's existing investment in telephony and systems infrastructure while enabling rapid deployment.

Ensemble offers outbound, call blending, desktop automation and reporting capabilities. The primary benefits of Ensemble include the following:

- **Maximizes agent productivity** by improving the quantity and quality of both inbound and outbound customer interactions.
- **Improves flexibility** with a modular design that allows you to tailor solutions to meet specific business needs and build upon existing technology investments.
- **Increases ROI** through rapid deployment of call management capabilities that can help increase revenue opportunities.

Ensemble features include:

Outbound—The outbound module facilitates proactive customer contact. It includes predictive and preview dialing, campaign and call list management, automated messaging and scheduled recalls. It also intelligently matches outbound calls to the appropriate agent based on skills and availability. Automating these tasks maximizes agent productivity and enhances the value of outbound customer contact campaigns.

Campaign Development Tools—Ensemble provides the flexibility to develop, implement and modify specific call campaign strategies quickly and efficiently. To maximize effectiveness, Ensemble allows changes to be made in real time and provides campaign performance metrics.

Call Blending—Ensemble's call blending feature is designed to automate tasks associated with managing inbound and outbound calling patterns. The software monitors telephone traffic and automatically shifts representatives between outbound activities and inbound call handling based on the business rules defined by each contact center. This level of efficiency allows flexibility over how agents are used, while maximizing their productivity.



LYRICall Desktop Automation—This single-view desktop application allows agents to quickly and seamlessly access the information they need to conduct successful calls—including order status, account balances, shipping information, previous purchase information, and product descriptions—from all data sources, enabling them to respond quickly and accurately to each customer inquiry. This powerful browser-based scripting tool, allows developers to easily build and deploy scripts to guide agents through calls and call flows. These capabilities increase agent productivity and effectiveness, leading to increased customer satisfaction.

Web Callback—Ensemble’s Web callback feature allows visitors to request a priority telephone callback from an agent via the Web. Web site visitors can browse at their leisure and request real-time follow-up as needed, putting them in control of these interactions and giving them an escalation path to a live representative.

Decision Support Tools—Real-time and historical reporting capabilities allow managers to assess conditions and allocate resources appropriately to maximize results. In addition, managers can receive early notification of sub-optimal performance and productivity levels through an automatic alert system.

Open, Scalable Architecture—Ensemble is designed to integrate with existing voice and data systems and most back-end databases, as well as to grow and evolve along with user needs.

Solution Benefits

The following are the benefits of the integration.

- Increases the efficiency of a contact center by monitoring inbound traffic and subsequently making blend agents available to inbound.
- Enables a contact center to maintain their required service levels by moving outbound agents to inbound call handling as required.
- Ensures the movement of agents between outbound and inbound is seamless, thereby improving agent productivity.
- Improves the operational efficiencies of a contact center.
- Increases the consistency and cross-pollination of agent skill sets through the standardization of the agent desktop for all solutions, via the Concerto Software LYRICall desktop or API integration to a 3rd party solution.

Solution Features

The following are the features of the integration.

- Utilizes inbound configurations/thresholds within Ensemble to switch agents from outbound interactions to inbound interactions.

Blending makes outbound agents available for inbound calls by constantly monitoring inbound traffic and customer settings (configurations) and deciding how to deploy agents. The movement of agents between outbound and inbound tasks is seamless in that there is no agent action for each transition from outbound to inbound.

- Moves agents from inbound back to outbound when inbound thresholds are being met.
- Provides for a consolidated agent desktop via the Concerto Software LYRICall solution or a 3rd party desktop.
- Allows a contact center to utilize one centralized reporting application for both inbound and outbound interactions via Ensemble ComposeIT.



Integration Overview

Cisco Components	Partner Components	3 rd Party Components
Intelligent Contact Manager (ICM) 5.0	Ensemble 3.1	None
Call Manager 3.2 (2C)		
Peripheral Gateway		
CTI Server		
IP-IVR v 2.2 (5)		
VoIP Gateway		
IP Phones		

Integration Architecture

Cisco Intelligent Contact Manager (ICM)—This component distributes voice and data from multiple inbound channels to enterprise resources such as ACD and IVR. The Cisco Site ICM functions as an interface between Ensemble and the telephony devices such as PBXs and ACDs.

Cisco Call Manager—Provides traditional PBX functions.

Call Manager Peripheral Gateway (PG)—This provides a connection from CallManager to ICM. The PG informs ICM of events at the CallManager and provides a means for controlling the CallManager.

Cisco CTI Server—Provides the connection between Ensemble and Cisco ICM. This application allows Ensemble, on behalf of agents, to perform ACD functions such as log in, answer, hold, and transfer. It also enables Ensemble to gather telephony information pertaining to contacts, queues, and agents.

Cisco IP IVR—Provides announcements, prompting, gathering of caller entered digits, and a queue point for the ICM to provide call treatment to callers.

Cisco VoIP Gateway—The appropriate Cisco voice gateway that meets the customer needs.

Cisco IP Phones—The Cisco IP Phone.

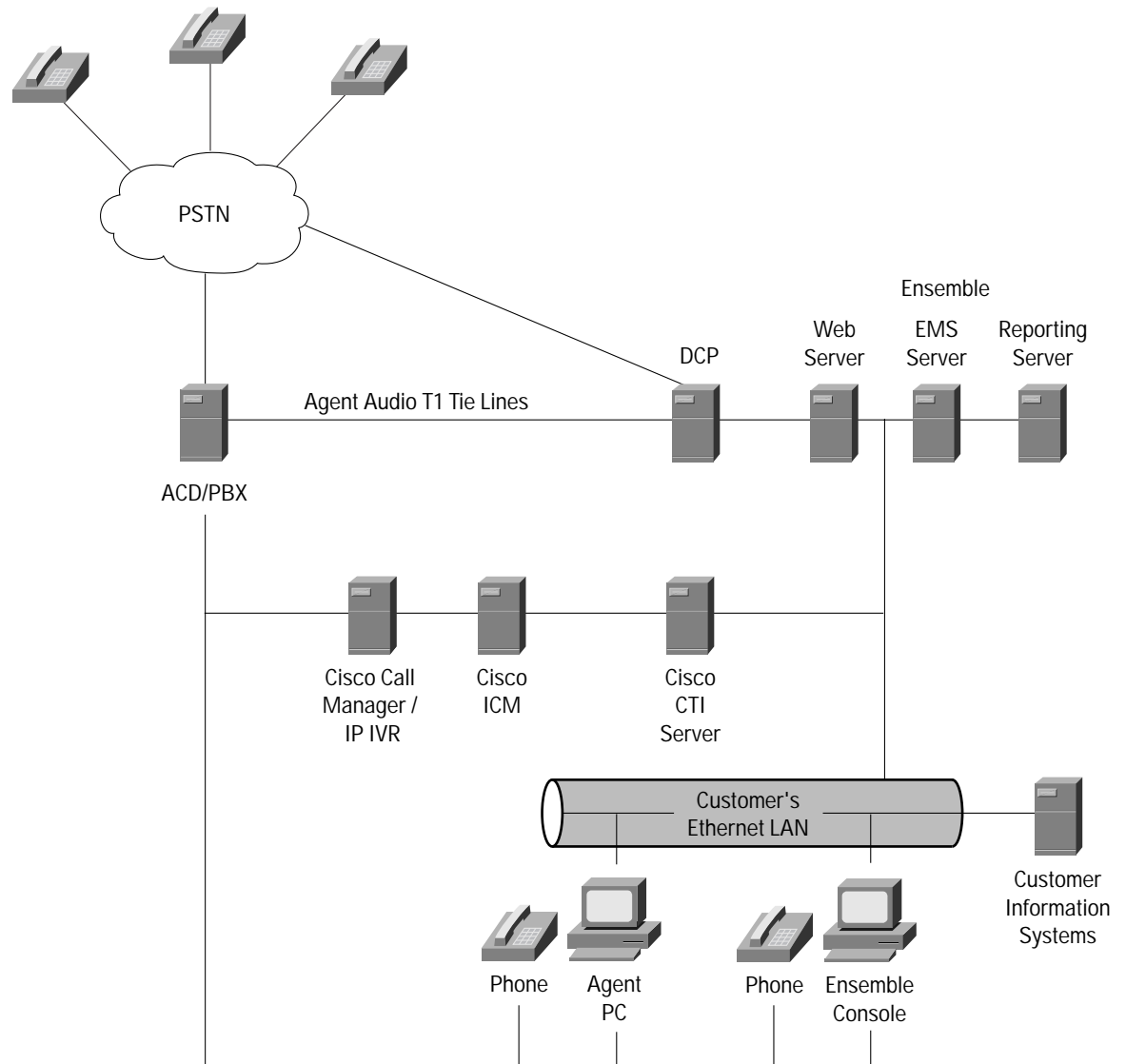
Concerto Software Ensemble

The Ensemble solution communicates to Cisco ICM via the Cisco CTI Server. Ensemble, through the link to Cisco ICM, gathers telephony information pertaining to contacts, queues, and agents. Ensemble also communicates to Cisco ICM for purposes of sending commands to control calls at agent telephones. For example:

- Answer
- Set Agent State
- Transfer/Conference
- Hold
- Clear Connection



Figure 1: Cisco ICM/IPCC/ Collaboration integration details.



Integration Limitations

Each platform has its own agent profile. The inbound agents are defined in ICM and the outbound agents are defined in Ensemble. The blended agents must be defined in both places.

Call Flow

The integration call flow between Ensemble and Cisco IPCC is as follows:

1. The Ensemble system continually monitors all calls routed to the Cisco IPCC queues and decides, based on the thresholds set, whether the service levels are being met.



2. If the services levels are not being met, Ensemble slows down the outbound pacing and makes a blended agent who is working outbound “available” to Cisco.
3. The communication to Cisco is done via the CTI connection to ICM via the Cisco CTI Server.
4. Cisco indicates to Ensemble, via the CTI connection, which agent will be taking the call.
5. The delivery of the voice to the agent is done via the Cisco IPCC. The delivery of the data can be through Ensemble or through the Cisco desktop.
6. Once the service levels are back to the configured ratio, then the blended agents are moved back over to support outbound dialing on Ensemble.

Implementation

System Requirements

Hardware and Software Requirements

Hardware and software requirements for Ensemble 3.1 and ICM 5.0 are set forth in the Ensemble Hardware and Software Requirements document and in the ICM Release Notes. The ICM requirements do not change with the integration to Ensemble 3.1.

Networking Requirements

100MB Ethernet connection to the Customer LAN

100MB isolated Ethernet connection from the DCP to the EMS/Application Server

Installation Process

The installation process for Ensemble is through Concerto Software. Customers must have the hardware components as well as the business rules for blending, campaigns, and agent setup available prior to installation.

It is assumed that the person doing the installation and configuration of both ICM and Ensemble has a basic understanding and knowledge of the contact center workflow model.

Customization

There are many components of Ensemble that can be customized. This includes the campaigns, agent configurations, reports, blending rules, and the agent desktop. The specific components of customization are outlined in the various Ensemble Users Guides.

Availability

Integrated Product Versions

Cisco Packaging

Supports Cisco ICM and IPCC, version 5.0.

Concerto Software Packaging

Ensemble 3.1 and the integration to Cisco ICM and IPCC, version 5.0 is currently available.

Resources

Training

Training for Ensemble is available through Concerto Software University. The following training courses are available:

1. Ensemble Administrator
2. Ensemble Architecture
3. Ensemble Supervisor
4. Advanced Reporting
5. LYRICall Designer
6. Scale/Call Blending

Support

The Ensemble 3.1 solution is supported through the Concerto Software Worldwide Support Center.

Documentation

To learn more about Cisco Contact Center Solutions, including Cisco ICM and Cisco IPCC Enterprise, please visit <http://www.cisco.com/en/US/products/sw/custcosw/ps1844/index.html>

To learn more about Concerto Software and its solutions, please visit <http://www.concerto.com>.

This paper is not intended to serve as a technical specification, but rather as a general description of the particular product feature described herein. Technical specifications as to this product feature may be found in the applicable End User Manual published by Concerto Software.



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