

# Technical Integration Brief

## Overview

Verint's s ULTRA™ Intelligent Recording™ integrates with Cisco IP Contact Center (IPCC) to provide Voice over IP (VoIP) call recording. Centrally monitoring the VoIP media streams, ULTRA records VoIP and manages it with all of the industry leading tools it applies to traditional voice recording, including agent evaluation and contact center quality improvement, customer experience management and analysis, and enterprise business intelligence and analytics. Users are able to use Rules-Based Recording™ to define which calls are recorded and when.

Verint also offers an ULTRA enterprise recording solution for Cisco ICM-enabled contact centers. This recording solution allows you to control how you record your customer interactions and what information you capture through the integration of ULTRA with Cisco's ICM CTI server. This integration enables ULTRA to receive real-time login/logout events and call events from across the enterprise. Based on these events and user-defined rules, calls can be selectively recorded, tagged with customer and telephony data, and (using the router ID) tracked cradle to grave throughout the enterprise to capture the complete customer experience.

## 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.

### **Partner Overview**

Verint's ULTRA Intelligent Recording is a unified platform for contact center recording and analytics. ULTRA captures and mines your contact center interactions for critical business insights delivered directly to desktops company wide. Built on open, non-proprietary industry standards, ULTRA integrates seamlessly with your IT infrastructure and enterprise technologies and scales to accommodate spikes in demand and long-term growth.

- **ULTRA Contact Center Quality** provides quality monitoring and evaluation applications and automates delivery of recordings for evaluation, for workforce performance optimization.
- **ULTRA Enterprise Transaction Management** records transactions in their entirety and makes recordings directly accessible enterprise wide to facilitate dispute resolution, enhance compliance, and minimize liability and loss.
- **ULTRA Customer Xperience Management** flags and forwards contacts that do not meet call handling standards or that otherwise lessen customer satisfaction to help you preserve valuable customer relationships.
- **ULTRA Customer Intelligence Analytics** automatically unearth customer preferences, patterns, and perceptions from recording content to help you build more effective customer strategies and identify new revenue opportunities.

ULTRA's actionable intelligence equips your staff to enhance every process and program that touches your customers. It empowers your contact center to deliver a high quality, *branded* customer experience that generates revenue opportunities and makes your customers want to come back for more.

### **Solution Benefits**

- Allows users of Cisco VoIP telephone systems to record their customer interactions using Verint's ULTRA solution
- Allows user to define which calls will be recorded and when, using Rules-Based Recording from Verint
- Provides network simplification, allowing more standardization and reduction of total equipment needs through an integrated voice and data network
- Provides support for future VoIP multimedia and multiservice applications
- Supports recording in a hybrid environment with VoIP and traditional digital/analog



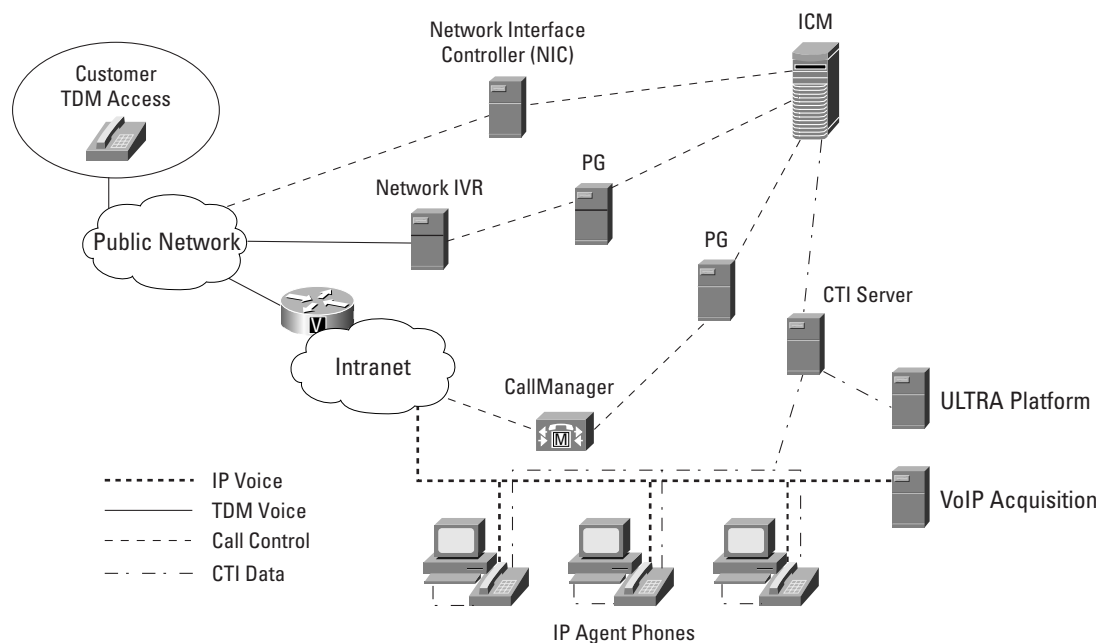
## Solution Features and Capabilities

### Verint/Cisco Integration: Full Capabilities

- Enterprise-wide recording solution for ICM-Enabled Contact Centers
- Scalable solutions for your growing business
- Enterprise-wide command and control
- Multimedia recording
- Migrate your solution to record and monitor Voice over IP, e-mail and Web chat
- Control, monitor and capture information from your Cisco Customer Interaction Suite
- Rules-Based Recording using ICM Customer-Profile Routing
- Using ICM Router ID, track calls cradle to grave to capture the complete customer experience
- Software-only recording solution

## Integration Overview

**Figure 1: Cisco—Verint reference architecture.**



ULTRA integrates with Cisco's Internet Protocol Contact Center (IPCC) to provide Voice over IP (VoIP) recording. Centrally monitoring the standard (H.323) VoIP media stream in a central location, ULTRA addresses and records VoIP in the same way as traditional voice. ULTRA can receive real-time login/logout events and call events from across the enterprise. Based on these events and user-defined rules, calls can be selectively recorded, tagged with customer and telephony data, and (using the router ID) tracked cradle to grave throughout the enterprise to capture the complete customer experience.



ULTRA interfaces with the ICM CTI Server to provide information, including:

- Date
- Time
- Dialed number (DNIS)
- Customer phone number (ANI/CLID)
- Agent ID
- Duration of call
- Agent wrap-up code
- Any other information provided via CTI from the contact center's data or telephone systems

This information is tagged to recorded calls, stored in the session database, and used in search operations for retrieval and analysis. In addition, a unique call ID is attached to each call, which enables the system to track a call as it is transferred through the contact center.

For greater integration capabilities, ULTRA VoIP also supports the ability to connect via TAPI (Telephony Application Program Interface). Also included in the Cisco feature set is the ability to provide greater fault tolerance by means of N+1 and the ability to provide VOX fail-over.

Alternatively, agents can control recording directly from their desktops. Particular types of calls or high profile customers can be recorded, as determined individually by the agents using applications developed by Verint, such as Record-On-Demand. This type of recording is often used to record those portions of the customer-agent conversation in which a transaction or other significant event takes place. Other ULTRA applications enable agents to manually enter information to be tagged to the session currently recorded. ULTRA functionality can be integrated with the customer's CRM application environment. Users can automatically trigger ULTRA recording and data tagging or play back recorded calls from within the CRM application.

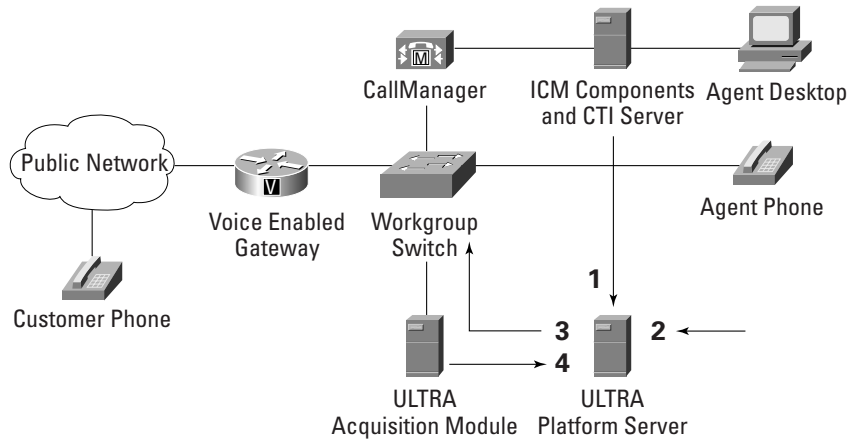
## **Call Flow**

Following is a description of the call flow of a VoIP transaction in an integrated ULTRA-Cisco environment.

1. When a Voice over IP (VoIP) call is connected between the agent and customer (via the CallManager), the CTI Server provides a call event to the ULTRA Platform Server.
2. Based on fulfillment rules, a decision is made to record the call.
3. The ULTRA Platform Server instructs the Acquisition Module to begin collecting the IP packets relevant to this call.
4. At the end of the call, a .WAV file is created and stored on the ULTRA Platform Server, and the call-related information is updated in the database.

If the call is transferred to another agent, the CTI server updates ULTRA with the new data, including the unique call ID that enables the system to identify all segments of the call (that is, each of the interactions between the customer and the agents).

**Figure 2: A single-site deployment of Cisco IPCC with Verint ULTRA. The Cisco CallManager, Voice Gateway, and CTI Peripheral Gateway (PG) are shown.**



## Implementation

The Cisco/Verint IP-based contact center solutions require Cisco CallManager 3.x and Cisco ICM 4.1 or later. All of these components are currently available and licensed through Cisco Systems.

## Resources

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

To learn more about Verint's ULTRA Intelligent Recording, please visit <http://www.verintsystems.com>.



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(0303R) SPS 06/2003