Cisco® IP Communications is a comprehensive system of powerful, enterprise-class solutions—including IP telephony, unified communications, IP video and audio conferencing, and contact center—that is enabled by Cisco AVVID (Architecture for Voice, Video and Integrated Data). Cisco IP Communications can increase your organization’s competitive advantage and deliver measurable return on investment (ROI) by improving efficiency, boosting productivity, and enhancing customer loyalty. Cisco IP Contact Center (IPCC) Express Edition—an integral component of the Cisco IP Communications system—offers an integrated, full-featured solution for managing customer contacts with all the benefits of the converged Cisco IP Telephony architecture.

Cisco IPCC Express Edition helps customers 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, multichannel services and customer-relationship-management (CRM) 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—leading to a better customer experience.

**CISCO IPCC EXPRESS EDITION OVERVIEW**

Cisco IPCC Express Edition meets the needs of departmental, enterprise branch, or small to medium-sized companies that need easy-to-deploy, easy-to-use, highly available, and sophisticated customer interaction management for 1 to 300 agents. It is designed to enhance the efficiency, availability, and security of customer contact interaction management by supporting a highly available virtual contact center with integrated self-service applications across multiple sites secured with Cisco Security Agent. Its support for powerful agent-based assisted service as well as fully integrated self-service applications results in reduced business costs and improved customer response by providing sophisticated and distributed automatic call distributor (ACD), interactive voice response (IVR), computer telephony integration (CTI), and agent and desktop services in a single-server, contact-center-in-a-box deployment.

Cisco IPCC Express Edition is provided in three versions, Standard, Enhanced, and Premium, to better match product functions with your customer contact interaction management requirements. All Cisco IPCC Express Edition solutions are tightly integrated with Cisco AVVID and Cisco CallManager.

**FEATURES AND BENEFITS OF CISCO IPCC EXPRESS EDITION ENHANCED**

Cisco IPCC Express Edition Enhanced is ideal for full-featured formal call centers requiring skills-based routing and a CTI-based agent screen pop; it can handle as few as a single agent or as many as 300 agents and 300 full-featured IVR ports*. Additional features and benefits include:

**Cisco IPCC Express Edition High Availability Option**

High availability with automatic failover provides redundancy for critical contact center functions, including active and standby services for ACD, IVR, CTI, desktop, monitoring, recording, and database services.
ACD Call Routing and Priority Queuing
Matching the caller with the right agent the first time, creating call handling tailored to different classes of customers and even for individual customers, and providing flexible contact center operational profiles based on varying business needs are all critical requirements in providing high levels of customer satisfaction while maintaining cost-effective, efficient operations.

Skill groups can be defined to require agents with specific skills and competency levels within that skill. Every agent can be assigned up to 100 different skills differentiated by their competency (up to 10 levels of competency) in that skill. Every agent can be a member in multiple skill groups.

Sophisticated routing and rerouting algorithms include the following: data-driven routing based on customer data in enterprise databases; conditional routing, including time-of-day, day-of-week, holidays, automatic number identification (ANI), dialed number identification service (DNIS), customer-entered data, and custom-defined variables; wait time; calls in queue or other custom-defined variables; and overflow, intra-flow, and inter-flow routing.

The ability to move calls up or down in a call queue at any time under workflow control is provided by the Cisco IPCC Express Edition Enhanced call priority queuing feature. This feature adds significant capability to optimize customer contact management for specific classes of customers or even to target special handling for specific customers.

VoiceMenus and Queued Calls
Cisco IPCC Express Edition Enhanced provides advanced, programmable arbitrary depth voice menus and custom caller treatments in queue, including playing the number of calls in queue, expected wait time in queue, custom messaging, and options to prompt and collect customer-entered information, as well as provision for callers to transfer to any other number or service, including voicemail.

CTI for Screen Pop
The unique, cost-effective CTI integration feature of Cisco IPCC Express Edition Enhanced brings CTI integration costs within reach for all contact center operators, including using caller-entered information as a key for an enterprise database access to retrieve detailed caller information for popping extensive information about the caller to the agent using any Microsoft Windows-based CRM or other application.

In addition, Cisco IPCC Express Edition Enhanced supports a default, integrated basic screen pop capability. Also supported is the ability to access data stored on any enterprise Web server through HTTP and Extensible Markup Language (XML).

Historical Reporting
The Cisco IPCC Express Edition solution provides out of the box graphical and tabular reports that allow supervisors and call center managers to:

- Manage agents using reports that provide information such as agent call counts, agent call durations, agent activity on each call, agent login and logout activity, agent not ready reason codes, and agent duration in state information.
- Measure customer experience using reports that provide information about application call counts, application call durations, abandon rate and average speed to answer (ASA) by application, peak hour call statistics by application, and detailed reports on abandoned/rejected calls.
- Measure contact service queue (CSQ) performance using reports that provide information such as different types of service level by CSQ, queue statistics by CSQ, answer and abandon call distribution by CSQ, CSQ call counts, and CSQ call durations.
- Access detailed views on each contact made to the system through reports that provide information such as custom call variables tagged to each call and detailed call by call reports.

The Cisco IPCC Express Edition historical reporting client provides supervisors and call center managers with flexibility to display report data using features including date time range, sorting parameters, and filter parameters. Once reports are generated, the tool also provides the ability to manipulate the report output by scaling the report size and providing the ability to export the report data in file formats such as PDF, Excel, and
XML for further data manipulation or presentation options. Through the job scheduler, users also have the ability to print or save scheduled reports at user defined date and time intervals.

Cisco IPCC Express Edition customers have the option of using Crystal Reports to build custom reports that are viewable through the Cisco IPCC Express Edition historical reporting client. Detailed documentation is provided to help customers understand the data presented on the standard reports, information on detailed data stored in the historical reporting database, and how to build custom reports for Cisco IPCC Express Edition.

**Cisco Agent and Supervisor Desktop Services**

The Cisco Agent Desktop and Cisco Supervisor Desktop are the agent and supervisor interfaces for Cisco IPCC Express Edition and Cisco IPCC Enterprise Edition. With a common desktop environment across these products, contact center training and business operations decisions can be made once and reused across products.

Cisco IPCC Express Edition offers the option to employ Cisco IP Phone Agent for the Cisco IP Phone 7970G, 7960G and IP Phone 7940G. This option requires only a Cisco IP Phone 7970G, 7960G or IP Phone 7940G for an agent—no PC is required.

**CISCO AGENT DESKTOP ENHANCED FOR CISCO IPCC EXPRESS EDITION ENHANCED**

Cisco Agent Desktop allows agents to perform call-control functions directly from their desktops for a Cisco IP Phone 7905G, IP Phone 7940G, or IP Phone 7960G or IP Phone 7970G or to the Cisco IP Communicator soft phone. Call-control functions include make call, terminate call, hold call, transfer call, and conference call (Figure 1).

Additional features include:

- On-demand recording—This feature enables agents record any call on demand**.
- Workflow automation control—This feature provides a single-click method to execute predefined actions.
- Agent or supervisor chat—Agents and supervisors can exchange messages one on one or in a conference with other agents.
- Ability to predefine agent or supervisor messages
- Reason codes—Agents can optionally provide a reason code for logout and not-ready state change.
- Real-time reporting—Agents can see their real-time statistics directly on their desktop application.
- Agent state log—ACD state changes are logged with a time and date stamp to allow detailed tracking and troubleshooting of agent state transitions.
- Screen pop options
  - Enterprise data pop (Figure 2)—Displays caller data, including caller ID, ANI, DNIS, as well as queue time, talk time with thresholds, and customer-defined variables
  - Screen pop with any caller-entered information or internal workflow values to pop most Windows applications on an agent’s desktop
- Hot desking and extension mobility support—This feature provides the flexibility for agents to sit at any available agent station while maintaining their unique settings.
CISCO SUPERVISOR DESKTOP FOR CISCO IPCC EXPRESS EDITION ENHANCED

Cisco Supervisor Desktop allows supervisors to perform call-control functions directly from their desktop; call-control functions include make call, terminate call, hold call, transfer call, and conference call.

Additional features include:

- Full support for agent or supervisor interaction using chat capability—Instant messaging offers the capability to communicate with any or all agents on the supervisor’s team.
- Scrolling marquee messages—Supervisors can send these messages to broadcast important news to all agents on their team.
- Monitor agent status, Silent Monitor, Coaching, Barge-In and Intercept—improve performance and customer satisfaction through the use of advanced supervisor features:
  - Agent monitoring—Supervisors can monitor phone status and agent state with caller data.
  - Silent monitoring—Supervisors can silently monitor agent and caller interaction.
  - Coaching—While silent monitoring, supervisors can use chat to provide coaching to agent.

Figure 1. Cisco Agent Desktop Enhanced with Workflow Automation Control

Figure 2. Cisco Agent Desktop Enhanced with Enterprise Data Pop
– Barge in—Supervisors can join any call in progress.
– Call Intercept—Supervisors can move any call from any agent to themselves.
• Changing the agent state—Supervisors can change an agent from logged in to logged out or from ready to not ready.
• Real-time reporting—Supervisors can change view agent and skill group statistics.
• Hot desking and extension mobility support—This feature gives organizations flexibility by allowing supervisors to sit at any available workplace while maintaining their unique settings.

CISCO IP PHONE AGENT FOR CISCO IPCC EXPRESS EDITION ENHANCED
Cisco IP Phone Agent (Figure 3) provides ACD functions on a Cisco or IP Phone 7960G IP Phone 7960G or IP Phone 7940G. The IP phone agent does not support all features of the agent desktop, but in many cases it eliminates the need for an agent desktop to be installed on the agent’s PC.

Cisco IP Phone Agent features include:
• Call control using the Enhanced IP phone capabilities
• ACD states
  – Log in and log out
  – Ready or not ready
  – Reason codes for log out and not ready
• Hot desking (extension mobility)
• Display of real-time statistics for number of calls in queue and longest call in queue
• Support for enterprise data pop

Cisco Supervisor Desktop control of IP Phone agents includes:
• Ability to monitor agent phone status in real time
• Ability to change the agent state—Supervisors can change an agent from logged in to logged out or from not ready to ready.
• On-demand recording—This feature enables agents record any call on demand**.
• Monitor agent status, Silent Monitor, Barge-In and Intercept—improve performance and customer satisfaction through the use of advanced supervisor features:
  – Agent monitoring—Supervisors can monitor phone status and agent state with caller data.
  – Silent monitoring—Supervisors can silently monitor agent and caller interaction.
  – Barge in—Supervisors can join any call in progress.
  – Call Intercept—Supervisors can move any call from any agent to themselves.
SERVICE CREATION AND SCRIPTING ENVIRONMENT

The Cisco IPCC Express Edition Workflow Editor is the service creation and scripting environment that helps enable complete customization of call-flow behavior and call treatments. It can be run from anyplace on the enterprise WAN, and workflows can be uploaded and run on the Cisco IPCC Express Edition server. This environment is a visual editor that provides a simple, easy-to-understand interface for building powerful, custom, business-communication applications. As Figure 4 illustrates, the service creation and scripting environment allows users to simply select a predefined call-flow component and drag and drop that component onto the current call-flow document. Users simply right-click on the dropped component to fill in component parameters.

Figure 4. Service Creation and Scripting Environment
ADMINISTRATIVE SERVICES
Cisco IPCC Express Edition Enhanced provides Web-based administration fully integrated with that for Cisco CallManager. It can be administered from anywhere within an enterprise’s Cisco AVVID WAN (Figure 5).

Figure 5. Web-Based Administration

MANAGEMENT SERVICES
As the capabilities and dependencies of converged voice and data networks continue to grow, effective management of an enterprise’s infrastructure is imperative. Using open Internet standards and the inherent capabilities of Cisco Systems® devices, CiscoWorks helps network managers oversee their converged networks while maintaining confidence that their IP telephony environments, including Cisco IPCC Express Edition Enhanced, are performing as expected. CiscoWorks provides real-time, detailed fault analysis designed specifically for Cisco devices in the IP telephony environment. This focus on Cisco devices helps enable monitoring of Cisco IP telephony technology-based networks for a variety of fault conditions, analysis of these conditions, and notification of network managers through intelligent traps detailing the problem that has occurred. Functions supporting Cisco IPCC Express Edition Enhanced include server discovery, health statistics, subsystem process checks, application runtime status, and other critical network management capabilities (Figure 6).
SECURITY

Maintaining security within networks is vital to Cisco, and to meet that requirement in the contact center and throughout the enterprise, Cisco IPCC Express Edition supports Cisco Security Agent as well as virus-detection software from the major antivirus software vendors. Cisco Security Agent is a host-based intrusion detection system that provides security to mission-critical enterprise servers and hosts. It goes beyond conventional endpoint security solutions such as virus scanning software and firewalls by identifying and preventing malicious behavior before it can occur, thereby removing potential known and unknown security risks that threaten enterprise networks and applications. By analyzing behavior rather than relying on signature matching, Cisco Security Agent complements the capabilities of the antivirus software and together they provide a robust solution to protect your network and reduce operational costs.

ACCELERATING THE SUCCESSFUL IMPLEMENTATION AND OPERATION OF YOUR CONTACT CENTER SOLUTION

Contact center solutions can help your company dramatically improve customer service and increase business efficiencies. It is critical that your contact center be correctly deployed and effectively operated to help provide optimal contact center performance and improve customer satisfaction.

Cisco and its partners can help you ensure the deployment of a robust, dependable contact center solution by taking a lifecycle approach that addresses all aspects of deploying a multi-faceted solution including people, processes, and technology. Whether you are transitioning your existing
contact center solution to an IP-based contact center or deploying a new IP contact center, this approach helps ensure alignment of business and technical goals at each of the six phases of the solution lifecycle: prepare, plan, design, implement, operate, and optimize.

Cisco services are available through various service programs designed to help accelerate customer success throughout the network lifecycle. For more information about Cisco services for contact center, visit http://www.cisco.com/go/ipcservices or contact your local account representative.

**SUMMARY**

Cisco IPCC Express Edition offers an integrated, full-featured solution for managing customer voice contacts while retaining all the benefits of fully converged, IP telephony Cisco AVVID deployment. Cisco IPCC Express Edition meets the need for adjunct ACD as well as both formal and informal contact centers by delivering sophisticated call routing, management, and administration features for departmental, enterprise branch, or small to medium enterprise customer-care needs.

Cisco IPCC Express Edition offers ease of installation, configuration, and application hosting, as well as reduced business application integration complexity, ease of agent administration, increased agent flexibility, and network hosting efficiencies—continuing the evolution toward a true Customer Interaction Network.

* The actual maximum number of agents that can be deployed on a given hardware server depends on the performance and capacities of that server as well as how many and what kind of other features are also deployed on that server. Your Cisco or Cisco partner account team can assist you in determining the maximum number of agents and prompt and collect ports for your deployment.

** The actual maximum number of simultaneous recording or silent monitoring sessions that can be deployed on a given hardware server depends on the performance and capacities of that server as well as how many and what kind of other features are also deployed on that server. Your Cisco or Cisco partner account team can assist you in determining the maximum number of simultaneous recording or silent monitoring sessions available for your deployment.