

Release Notes for Cisco ICM Software Release 5.0(0)A

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Cisco ICM Software Release Notes Release 5.0
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1 Introduction

New ICM 5.0(0)A CDs

Cisco has issued a new version of the ICM 5.0 software CD to address five issues found after the ICM 5.0 FCS. These issues have been found in these products:

- ICM Enterprise Edition, release 5.0
- ICM Hosted Edition, release 5.0
- IPCC Enterprise Edition, release 5.0 (and any hosted configurations)

About the ICM 5.0(0)A CDs

The new CDs are labeled as follows:

- Cisco Intelligent Contact Management 5.0(0)A Installation Disk
- Cisco Network Administration Management 5.0(0)A Installation Disk used in Hosted configurations only)

In all cases (affected or not) you must replace your existing ICM software 5.0 CD with a new ICM Software 5.0(0)A installation CD; this will help to prevent problems when the CD is used for other ICM upgrades or modifications to your installation.

All other CDs related to the affected products do not change and can be used safely. You can request a new CD online:

<https://www.cisco.com/cgi-bin/Software/FormManager/formgenerator.pl?pid=421&fid=861>

Defects corrected in the new ICM 5.0(0)A CD

The new ICM 5.0(0)A software corrects these defects:

Defect number	Description
CSCma26489	Upgrade to ICM 5.0 may encounter a violation of UNIQUE KEY error when migrating more than 5000 configured agents
CSCma26772	Upgrade to ICM 5.0 resets agent passwords
CSCma26890	Upgrade to ICM 5.0 stalls due to SQL Server performance problems with password migration
CSCma25942	Installation of the CallManager PG stalls on newer Windows 2000 releases that do not include Microsoft JVM (Java Virtual Machine) CallManager PG
CSCma26887	Some passwords never encrypted may not allow complete migration.

Details about each of these defects follow:

Defect number: CSCma26489

Headline: Upgrade to ICM 5.0 may encounter a violation of UNIQUE KEY error when migrating more than 5000 configured agents

Symptom:

During the upgrade of the Logger, HDS, or AW database from ICM version 4.6.2 to ICM version 5.0, the Logger, HDS, or AW database is corrupted. The following errors appear in the ICM Setup log (icmsetup.log):

```
09/02/2003 16:24:23 ERROR 10007, Severity 5 in
D:\icm\upgrade\v76mods.sql (311): General SQL Server error: Check
messages from the SQL Server.
```

```
09/02/2003 16:24:23 Message 2627, Severity 14 in
D:\icm\upgrade\v76mods.sql (311): Violation of UNIQUE KEY constraint
'XAK1Agent'. Cannot insert duplicate key in object 't_Agent'.
```

```
09/02/2003 16:24:23 Message 3621 in
D:\icm\upgrade\v76mods.sql
```

```
(311): The statement has been terminated.
```

Note: This defect affects only the upgrade process. If you have already successfully upgraded to release 5.0 or have installed a new system for the first time, the defect is of no direct consequence to you.

Condition: This defect exists in when **both** of these conditions are met:

- You are performing an upgrade to release 5.0 of an existing Logger, HDS or AW, and
- The system has 5000 or more agents configured; that is, the Agent Explorer tool in Configuration Manager shows 5000 or more agents configured or the Agent table contains 5000 or more records.

If you encounter this defect:

Upgrade using the new ICM 5.0(0)A CDs.

Defect number: CSCma26772

Headline: Upgrade to ICM 5.0 resets agent passwords

Condition: This defect occurs when both of these conditions have been met:

- An existing Logger, HDS or AW is being upgraded to ICM release 5.0 and
- The system being upgraded has Agents or Persons configured.

Symptoms:

The upgrade process completes normally. After the upgrade all agents have blank passwords. Agents can log in, but are not required to provide a password.

If you encounter this defect:

If you have already done a 4.6.2 to 5.0 upgrade, then agents that have blank passwords can assign themselves a new password when they log in. The new password is recorded in the database and is valid for future log ins.

If you have not yet done a 4.6.2 to 5.0 upgrade, use the new ICM 5.0(0)A CD to avoid this problem.

Defect number: CSCma26890

Headline: SQL performance issue when migrating passwords on 4.6.2 to 5.0 upg.

Symptom: When upgrading ICM from 4.6.2 to 5.0 with large databases, the migration of agent passwords appears to cause the setup program to stall. Setup is actually still running, but due to an issue in the encryption algorithm, it could take many hours to complete the password migration.

Condition: This defect occurs when you are updating an existing 4.6.2 system to 5.0.

If you encounter this defect:

Upgrade using the new ICM 5.0(0)A CDs.

Defect number: CSCma26887

Headline: Some passwords never encrypted may not allow complete migration.

Symptom: During a 4.6.2 to 5.0 upgrade, if there are records in the Agent Table that contain agent passwords that are not encrypted, during a migration subsequent records are not migrated. Migration stops for the Agent Table. The ICM Setup Log contains the error:

Migrate Agent Password error - Manually reset agent password is needed.

At this point the upgrade has failed. This is evident only when you attempt to start the logger and the logger fails with the message: Minor Version Mismatch.

Note that the "Migrate Agent Password error - Manually reset agent password needed" is not entirely accurate. The password does need to be reset, but if you see this message, your upgrade has failed.

Condition: This defect occurs when you are updating an existing 4.6.2 system to 5.0.

If you encounter this defect:

If you have already tried to do a 4.6.2 to 5.0 upgrade and it failed due to this problem, you must do the following:

1. Backup your 4.6.2 logger and AW databases.
2. Delete the 5.0 logger and AW database.
3. Import the 4.6.2 logger and AW databases. Be sure you use overwrite when you import.
4. Do another upgrade using the ICM 5.0(0)A CD.
5. Use the setup log to determine which agents need to create new password (see procedure below).

If you have not yet done a 4.6.2 to 5.0 upgrade, use the new ICM 5.0(0)A CD to upgrade. With the new CD, passwords that are not encrypted are reassigned to a NULL password and an error is logged in the Set Up log.

The message will appear as:

Migrate agent password decryption failed, PersonID = <ID Number>, password is set to NULL for <original unencrypted password>

Use the Set Up log to determine which agents need to create new passwords. The system administrator must do the following:

1. From the Admin Workstation, start the Configuration Manager.
2. Open the Person List Tool.
3. Highlight the Agents on the Person List that have a NULL value for their password.
4. Click on the Change Password button.
5. Assign a password (must repeat to verify).
6. Save the change.

Defect number: CSCma25942

Headline: Installation of CallManager PG stalls on newer Windows 2000 releases that do not include Microsoft Java Virtual Machine (JVM)

Condition:

This defect impacts new installations of ICM Release 5.0 of a CallManager PG, on a Server that has installed a recent Windows 2000 operating system (i.e. one that does not include the Microsoft JVM).

The CallManager PG requires the Microsoft Java Virtual Machine (JVM). The Microsoft JVM is no longer included in Microsoft Windows releases as of July, 2003.

During the installation of the CallManager PG, the Setup process checks whether the Microsoft Java Virtual Machine is installed on the PG machine.

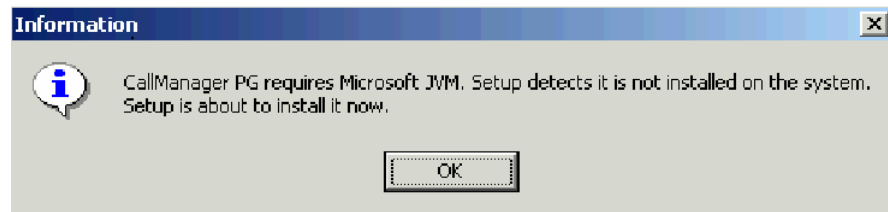
Symptom:

If Setup detects the Microsoft JVM, Setup proceeds normally. If it does not detect the Microsoft Java Virtual Machine, Setup attempts to install this program, but a defect prevents and aborts the installation.

The upgrade process aborts and displays an Information screen stating that the CallManager PG requires Microsoft JVM (see below). When you click OK, the error message "Cannot find MSJBX 86.exe" displays.

If you encounter this defect:

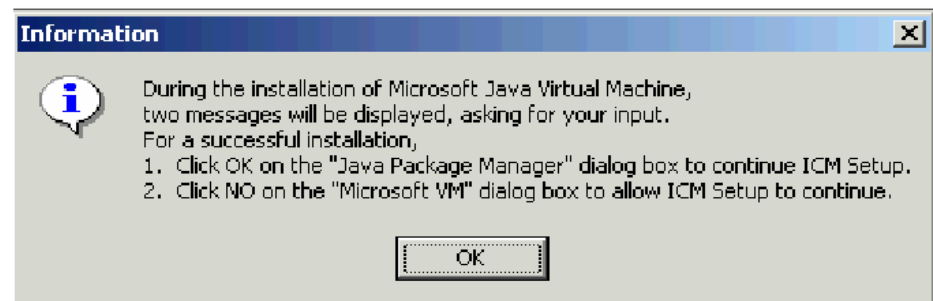
Re-install the CallManager PG with the new 5.0(0)A CD. The following message opens if Setup does not detect the Microsoft JVM:



To install the Microsoft JVM:

1. Click **OK** on the Information dialog box.

A dialog box opens, providing instructions that guide you through the installation.



2. Click **OK**.

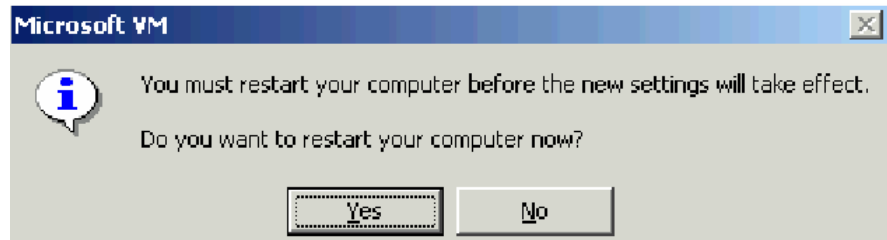
The following error message opens:



You can safely disregard this message, though it seems to indicate a problem.

3. Click OK.
4. Important: Click NO when the Microsoft VM dialog box appears. This dialog, shown below, suggests you must restart before changes take effect. You should not restart the system at this time.

When you click NO, the PG installation continues.



5. When the PG Setup is complete, restart the machine.

ICM Software Release 5.0

The rest of this document discusses the following with regard to Intelligent Contact Management (ICM) Software Release 5.0:

- New Features
- Technical Changes
- Release Planning and Install/Upgrade Details
- Caveats Resolved in This Release
- Product Limitations and Known Caveats
- Obtaining Documentation
- Obtaining Technical Assistance

This document covers the differences between ICM 4.6.2 and ICM 5.0.

Additional information on new features, and many of the product changes, is available in the relevant end-user documentation. For example, for more information on IPCC WebView report templates, see the *Cisco ICM Software IP Contact Center Administration Guide* as well as the WebView online help.

Release Notes for Cisco CTI, Cisco E-mail Manager (ICM E-Mail Manager Option), Cisco Collaboration Server (ICM Web Collaboration

Option), Cisco Media Blender, and Cisco Dynamic Content Adapter are available on the corresponding software CDs.

Note: For the most up-to-date version of these release notes, as well as all other ICM 5.0 and ICM 4.6 documentation, go to the Cisco Web page:
<http://www.cisco.com>

2 New Features

2.1 ICM 5.0 New Features

This section outlines the new features in Release 5.0 of Cisco's Intelligent Contact Management (ICM) software.

2.1.1 Multichannel Routing

The ICM 5.0 software release enables true multichannel contact center integration for voice, web callback, web collaboration, text chat, and e-mail. When used with the optional ICM E-Mail Manager Option and Web Collaboration Option, ICM 5.0 combines the routing and queuing of asynchronous channels such as e-mail with synchronous channels such as voice, chat, and collaboration. The integration of these multimedia channels offers unified configuration, queuing, routing, reporting and administration within the Cisco ICM architecture. Customers using Cisco IP Contact Center can implement Universal Queuing capabilities that allow a single agent to handle voice, e-mail, and Web collaboration tasks.

2.1.2 Common Contact Center Agents

Multichannel agents can be configured in any media-channel (e.g., voice, e-mail, or collaboration) and are automatically created in the other channels. For example, if an agent is created in the ICM E-Mail Manager Option, that agent is automatically created in ICM and the ICM Web Collaboration Option. (Note that "created" does not necessarily mean "enabled". In the example just mentioned, the ICM Web Collaboration Option would still have to enable the agent if it wanted to have that person as an agent.) Both the ICM E-Mail Manager Option and ICM Web Collaboration option update the Logger database when an administrator modifies a common agent. Administrators can allow agents working in applications such as voice, collaboration, or e-mail to switch between these applications to handle contacts from any channel. Agent definition is shared by all media-channels.

2.1.3 ACD and IPCC Compatibility

Integrated routing for ICM Web Collaboration Option and ICM E-Mail Manager Option is supported in both TDM ACD and IPCC configurations. Customers are able to migrate at their own pace from a legacy ACD to an IPCC configuration.

2.1.4 Cisco ICM Managed Multi-session Chat Agent Capability

Agents are able to handle multiple distinct independent chat interactions with customers. The number of chat interactions that can be handled by a single agent is defined on a per agent basis in the ICM Web Collaboration Option.

2.1.5 Cisco ICM-managed Interruptability for E-mail

ICM can interrupt an agent working on e-mail to handle voice or chat contacts. This allows agents working on lower priority e-mail tasks to be interrupted with higher priority tasks.

2.1.6 Cisco ICM Integration Wizard

A new wizard guides ICM Web Collaboration Option administrators through the integration process with ICM.

2.1.7 Enterprise Skill Group Management

Using ICM configuration tools, an ICM administrator can link related skill groups on multiple ICM Web Collaboration Option or ICM E-Mail Manager Option servers for routing and reporting purposes. For example, Boston Sales and Seattle Sales skill groups on separate ICM Web Collaboration Option or ICM E-Mail Manager Option servers can be combined into a Sales enterprise skill group.

2.1.8 Service Level Tracking across Media Channels

Service level tracking across media channels allows Cisco ICM administrators to ensure that agents are responding to customer contacts (voice, web or e-mail) based on established service levels.

2.1.9 Concurrent ICM Web Collaboration Option and ICM E-Mail Manager Option Administrators

Multiple ICM Web Collaboration Option or ICM E-Mail Manager Option administrators can make changes on the same item (e.g., a specific agent's settings), without overwriting each other's changes.

2.1.10 Database Synchronization and Verification

Administrator can ensure that the ICM Logger database, ICM Web Collaboration Option database and ICM E-Mail Manager Option database contain the same information regarding skill groups and common agents. The system detects and attempts to correct any inconsistencies between the databases.

2.1.11 Monitoring

In addition to monitoring skill groups, queues, and agents, ICM Web Collaboration Option and ICM E-Mail Manager Option administrators can now monitor connections to peripheral gateways (PGs). Collaboration Option also monitors connections to Admin Workstations.

2.1.12 Media Routing PIM Introduced

ICM 5.0 introduces a Media Routing PIM that allows the ICM Web Collaboration Option and ICM E-Mail Manager Option to manage route requests to and from ICM.

2.1.13 Script Editor Enhancements

Script Editor is now used to create scripts for the routing and queuing of e-mail, chat, and web collaboration requests. ICM reviews data from web or e-mail requests and evaluates agent skills and availability across all sites in order to determine the best agent for each request. The new “Queue to Agent” node allows the targeting of a task to a script-specified agent. For tasks that may be caught in a script with faulty routing logic, ICM has the ability to move tasks out of the present script execution and resubmit them as a new route request.

2.1.14 Internet Script Editor Enhancements

Internet Script Editor software provides the same functionality as the ICM Script Editor software but does not require a full Administrative Workstation (AW). Features include Full Edit and Quick Edit modes that provide different levels of script editing capabilities.

2.1.15 MicroApplications

Specialized VRU scripts called MicroApplications provide the ability to conduct VRU interactions with a caller without requiring custom VRU scripting. Available scripting nodes include a collect data node, a menu node, a play node, and VRU settings node.

Though these nodes appear in the Script Editor, they are dependent on the VRU in order to function properly. If the VRU vendor has not implemented ICM MicroApplication capability, then these nodes will always take the failure branch. Neither ISN Release 2.0 nor IP-IVR Release 3.x currently supports MicroApplications.

2.1.16 Quality of Service (QoS) Support for Convergent PG Networks

Support is introduced in Cisco ICM 5.0 for application-level QoS traffic marking between Peripheral Gateways and the ICM Central Controller, allowing PG traffic to share (QoS-enabled) convergent networks. QoS marking is provided at both layer 3 (DSCP) and layer 2 (802.1p). Further, additional new ICM network transport modifications eliminate the need for UDP traffic to the PG, improving reliability and better accommodating customer firewall deployments.

2.1.17 Reporting

WebView has replaced the Monitor ICM reporting tool. WebView offers increased scalability and improved usability. Multichannel report templates are included which allow you to report on voice, e-mail, and web collaboration. WebView can generate real-time and historical reports

and allows administrators to schedule, export, and print reports. The WebView application is installed via the ICM setup program.

2.1.18 Outbound Option (Blended Agent) for IPCC

Outbound dialing functionality is available for IPCC customers when using ICM 5.0. The IPCC Outbound Option uses a software dialer and does not require a hardware-based dialer.

2.1.19 Outbound Option Support for CTI OS

CTI OS supports the ICM Outbound Option. A sample ICM CTI OS-based application is supplied that demonstrates how to implement the ICM Outbound Option functionality on a CTI OS-based desktop application.

2.1.20 New ACD Switch Support – Aspect Contact Server

In addition to the current ACD switch support for ICM, Cisco ICM 5.0 now provides a new PIM offering for the Aspect Contact Server. This is a separately licensed PIM.

2.2 ICM Web Collaboration Option

The optional ICM Web Collaboration Option allows your contact center agents to interact with customers over the Web while conducting a voice or text chat conversation. Contact center agents and customers can share Web pages, complete online forms in a collaborative fashion, and share any Windows desktop application using nothing more than their Web browsers. The ICM Web Collaboration Option leverages the queuing, monitoring, reporting, and system administration capabilities of ICM 5.0 to improve your Web-based customer service.

The following are highlights of the new features available in the optional ICM Web Collaboration Option version 5.0 software. See the ICM Web Collaboration Option release notes for complete details.

2.2.1 Integrating ICM and Web Collaboration Option

An ICM integration wizard guides administrators through the process of selecting ICM Media Routing Domains for routing purposes, enabling peripherals, creating the ICM Distributor Administration Workstation connection, and creating ICM and ACD queues. Administrators configure the collaboration application instance, ACD queue, and ACD and Media Blender connections from the Administration desktop.

2.2.2 Message and Ad Display in the Caller Control Panel

The Caller Control Panel can display ads, messages, and Web pages while a caller is waiting to join a session or while a Web Collaboration request is waiting to be routed to the appropriate collaboration server.

2.2.3 Seamless Request Transfer

If a Web-request is submitted to one collaboration server for routing, but ultimately needs to be routed to an agent who is logged in to another server, the system can automatically redirect the request to the appropriate agent while also seamlessly redirecting the caller's browser to the correct server. This redirection occurs before the request connects into a session.

2.2.4 Agent Administration Improvements

An easy to use wizard guides ICM Web Collaboration Option administrators through the process of creating and modifying agents. Agent ACD information is included as part of the agent creation process. Administrators can also temporarily deny the login of agents who, for example, are on vacation.

2.2.5 Web Collaboration ScriptBuilder Improvements

The ICM Web Collaboration Option ScriptBuilder feature has been divided into script viewing and script authoring. Script authoring functionality has been moved to the ICM Web Collaboration Option Administration desktop, with capabilities governed by the new Script Author and Script Administrator roles. Collaboration agents can now view and share scripts from the agent desktop. A wizard guides ICM Web Collaboration Option script authors through the process of creating, assigning, uploading content to, and arranging scripts. A new script content type, URL comparison, has been added, which enables two Web pages to be uploaded and displayed side by side in the caller's browser when shared. Script administrators can also upload user-defined scripts for agent use.

2.2.6 User Roles

The ICM Web Collaboration Option now offers the ability to enable or disable specific features of the application for particular users through the creation of agent role properties. Roles enhance internal security by allowing the ICM Web Collaboration Option administrator to create various levels of privileges for different ICM Web Collaboration Option agents and administrators. Six default agent roles are available for standard types of agents and administrators that determine desktop feature availability and permission for agents and administrators. Customized agent roles can also be created, allowing for additional flexibility in user permission levels.

2.2.7 Agent Desktop Improvements

Agents can now change their passwords from the agent desktop. Multi-session agents can set their external view startup preference. A Wrap Up feature has been added to the single-session and multi-session agent desktops, allowing agents to open a page and finish work relating to a completed session. The availability and/or behavior of each of these new features is enabled through the Agent Roles feature.

2.2.8 Database Administration

An enhanced database creation wizard guides ICM Web Collaboration Option administrators through database creation and upgrade. The wizard provides easier database setup and administration, including the ability to verify entered information and purge databases as well as remove agents, skill groups, and historical information from the database.

2.2.9 Reporting Enhancements

Several enhancements have been made to the ICM Web Collaboration Option reporting capabilities. Reporting enhancements include the ability for administrators to run reports on Web callback and delayed callback requests, multiple skill groups, transferred sessions, and logically deleted skill groups and agents. Each report lists the selection material used to generate the report. These improvements allow for easier access to complete session information for each caller via reports on callers containing a link to Session reports.

2.2.10 Callback Function Enhancements

Fault tolerance has been added for delayed callback requests. ICM Web Collaboration Option administrators are able to monitor and report on these requests.

2.2.11 Client-side Application Programming Interface

The ICM Web Collaboration Option introduces a published Client-side Application Interface (API) that allows Cisco partners or Cisco Advanced service to build Web collaboration features on agent desktops. The client-side API provides JavaScript functions and Java applets in order to perform the following functions:

- Connect and engage in single-session Chat and Blended Collaboration sessions
- Log in and log out
- Wrap Up
- View session participants
- Page Share
- Form Share
- Follow Me browsing
- Send Chat
- Remote Control
- Disconnect sessions
- Use Collaboration skill group-based routing in push mode
- Start and stop event polling
- Share agent properties, such as first and last name and password, with all applications

- Run ICM routing scripts
- Run real-time and historical multichannel reports

2.3 ICM E-Mail Manager Option

The optional ICM E-Mail Manager Option is a comprehensive, enterprise-class solution for managing high volumes of customer inquiries submitted to your company mailboxes or Web site. Based on customizable business rules, ICM E-Mail Manager Option accelerates the response process by automatically directing messages to the right agent or support team, categorizing and prioritizing messages, suggesting relevant response templates, and, if desired, sending automated replies.

The following are highlights of the new features available in the optional ICM E-Mail Manager Option version 5.0 software. See the ICM E-Mail Manager Option release notes for complete details.

2.3.1 Push Agents

Push routing has been enhanced in ICM E-Mail Manager Option allowing agents to be in one of three modes:

- *Push*: When e-mail arrives, ICM checks to see if an agent is available. If an agent is available, the e-mail is sent to the agent. If an agent is not available, ICM queues the task and sends it when an agent becomes available.
- *Working*: Agents can use personal queue and other features permitted by their role.
- *Not Ready*: Agent is logged on but not available to receive e-mail.

Agents can control whether they are in push mode, enabling the agent to leave push mode in order to go on break or work on other items.

Previously viewed messages in the personal queue are no longer pushed, unless that agent has never viewed them. The Roles function determines the use of this feature.

2.3.2 New UI Architecture

A new Web-based architecture improves ICM E-Mail Manager Option scalability in high load installations. Multiple UI servers can be installed, distributing the load.

2.3.3 New Agent Desktop

In the ICM E-Mail Manager Option, the desktop functions for both administrators and agents have been separated. The new Agent Desktop, which agents use to read and respond to messages, as well as work with templates, is built on a new framework that allows for greater performance

and scalability and is the basis for the ICM E-Mail Manager Option API. Agent Screens include:

- Incoming E-mail Processing UI Pages - *List, Status, Read, Response, Wrap Screens, Search*
- Template UI Pages - *List, Create, Search*
- Mailing Sending Screen UI Pages - *Contact Admin, Outbound Message, Broadcast, Inbound Message*
- Personal Administration UI Pages - *Personal Mailing List, Profile*
- Real-time and Historical Reports UI Pages - *Agent State, Agent Queue, Group Queue*

Administrator Screens include:

- Mailing List UI Pages - *Public, All Lists, Personal, Opt-Out List*
- Agent Management UI Pages - *Personal Profile, Manage Agents, Manage Skill Groups, Manage Roles, Create Multiple Agents, Edit Multiple Agents, Logged into Admin UI*
- Rules maintenance UI Pages - *System Rules, Overdue Rules, Overload Rules*
- System Configuration UI Pages - *Attachments, Libraries, Keys, Categories, Incoming Mail, Outgoing Mail, Service Levels, Message Utilities, Advanced Settings*
- Diagnostics UI Pages - *Logged Items, Plug-ins, Error Events Systems Info, Send Logs*

2.3.4 User Interface API

A new client-side API allows Cisco partners and Cisco Advanced Services to develop custom user interfaces for responding to, and processing, customer e-mail. The ICM E-Mail Manager Option UI API supports the new UI architecture and allows customers to design their own UI front-end to the e-mail application. The API is implemented as an XML interface over HTTP or socket connections.

2.3.5 Private Branding Support

The ICM E-Mail Manager Option includes support for application service providers and other companies to re-brand the ICM E-Mail Manager Option to their name and logo. The following areas of the ICM E-Mail Manager Option can be customized to support re-branding:

- Title of application throughout
- Cisco logo in upper left corner
- Copyright statement
- About box
- A "Powered by Cisco" logo is also included

2.3.6 UI Customization

A special Agent UI customization feature based on JavaScript allows Cisco partners and Cisco Advanced Services to add JavaScript to the Status, List Mail, Read, Response, and Wrap screens of the Agent UI. The Agent UI customization feature supports interfaces to get the page data and the ability to add menu items to the command (top) menu. The Roles function determines the use of this feature. A sample script is included with the ICM E-Mail Manager application.

2.3.7 Spell-checking Enhancements

Enhancements to the spell-checking module in ICM E-Mail Manager Option allow the spell-checker feature to be automatically run when sending e-mail or saving a template to the template libraries. The Roles function determines the use of this feature.

2.3.8 Agent Real-time Statistics Display

Agents are now able to view their individual metrics from the Mail Processing Screens (Status, List Mail, Read, Response, Wrap). Statistics available for viewing are number of active messages in their queue, number of messages answered, longest waiting time of messages they are responsible for, and total time they have been logged into the system. The Roles function determines the use of this feature.

2.3.9 Database Performance Optimization

A new automated utility has been added to remove old, archived e-mail to a separate database, allowing ICM E-Mail Manager Option to run at peak performance levels. The process of archiving data is based on DB and application usage thresholds, ensuring that the archive process does not impede performance of e-mail handling and processing.

2.3.10 Attachment Handling

Administrators are now able to add and register attachments to ICM E-Mail Manager Option by browsing their desktop and network directories and selecting the attachment.

2.3.11 New Reporting Architecture and Tools

ICM E-Mail Manager Option utilizes the Cisco Independent Reporting database as its reporting architecture. A simplified database schema enables customers to easily create and customize reports. The WebView reporting tool is packaged as part of the ICM E-Mail Manager Option and is used as the standard report creation environment. A new standard set of reports, based on customer requirements, is delivered out-of-the-box. Customers can also use third party reporting tools to create custom reports and report templates if the standard reports do not meet their requirements.

2.3.12 Supportability Enhancements

The ICM E-Mail Manager Option now offers component health monitoring performed periodically by a separate component. This monitoring tool includes a round trip total system integrity monitor (diagnostic mail loop), polling the POP3 Mailbox for health, polling the SMTP Mail gateway for health, agent UI server testing, database health monitoring, and application polling via a loginless HTTP session.

2.3.13 Multi-byte Character Support

The ICM E-Mail Manager Option is now able to support multi-byte languages and character sets. New capabilities include properly handling encodings in e-mail headers and generating proper outgoing e-mail encodings in e-mail headers, modifying the spell check protocol to enable support of non-ideographic languages, and Unicode support. Languages written from right to left, such as Hebrew and Arabic, are not supported.

3 Summary of Technical Changes

This section describes technical changes are deemed to be of particular importance to the user.

3.1 ICM 5.0 Requires Windows 2000

As of ICM 5.0, Cisco ICM software requires Windows 2000 and no longer supports Windows NT.

3.2 Internet Script Editor Requires Windows 2000

Internet Script Editor (ISE) is supported only on Windows 2000.

3.3 ICM Schema Changes

The most significant changes to the ICM Schema for 5.0 were made to support multimedia reporting and support for SQL 2000.

3.3.1 Changed Schema Tables

Between 4.6 and 5.0, the following ICM Database tables have changed, either by add/removing elements or adding/deleting/renaming the table. Tables with changes in their default data are not listed.

- Cfg_Mngr_App_Snapshot_State
- Cfg_Mngr_Globals
- Cfg_Mngr_User_Desktop_Snap
- Cfg_Mngr_User_Desktop_Snapshot
- Cfg_Mngr_User_Menu
- Cfg_Mngr_User_Settings
- Cfg_Mngr_View
- Feature_Control_Set
- ICR_Globals
- Logger_Admin (formerly called Admin)
- t_Admin_Script_Schedule_Map
- t_Agent
- t_Agent_Half_Hour

t_Agent_Logout
t_Agent_Real_Time
t_Agent_Skill_Group_Half_Hour
t_Agent_Skill_Group_Real_Time
t_Agent_State_Trace
t_Application_Instance
t_Application_Path
t_Application_Path_Member
t_Application_Path_Real_Time
t_Call_Type_Half_Hour
t_Call_Type_Real_Time
t_Campaign
t_Campaign_Query_Rule_Real_Tim
t_Campaign_Target_Sequence
t_Cti_Application
t_Cti_Application_Real_Time
t_Customer_Definition
t_Customer_Options
t_Dialed_Number
t_Dialer
t_Enterprise_Route
t_Enterprise_Route_Member
t_Expanded_Call_Variable
t_ICR_Node
t_Import_Log
t_Import_Rule
t_Logical_Interface_Controller
t_Media_Class
t_Media_Routing_Domain
t_Message_Category
t_Message_Destination
t_Network_Event_Detail
t_Peripheral
t_Peripheral_Default_Route
t_Peripheral_Half_Hour
t_Peripheral_Real_Time
t_Person
t_Recovery

t_Recurring_Schedule_Map
t_Response_Template
t_Route_Call_Detail
t_Route_Call_Variable
t_Route_Real_Time
t_Routing_Client
t_Schedule_Source
t_Script_Data
t_Script_Queue_Real_Time
t_Script_Real_Time
t_Service
t_Service_Half_Hour
t_Service_Level_Threshold
t_Service_Real_Time
t_Skill_Group
t_Skill_Group_Half_Hour
t_Skill_Group_Real_Time
t_Termination_Call_Detail
t_Termination_Call_Variable
User_Group
User_Supervisor_Map
Vru_Currency
Vru_Defaults
Vru_Locale

3.3.2 SQL Server 2000 Support

SQL Server 2000 support has been added in ICM 5.0. All new ICM software installations must use SQL Server 2000 SP2.

The major ICM code changes that were made to support SQL Server 2000 include:

- ODBC connect string
- Database option in the ICMDBA database tool
- Database version checks
- Sort order checks

The ICM schema changes made to support SQL Server 2000 include:

- Reserve words removed from ICM Schema:

In the logger_admin table, the Function column was changed to FunctionName column.

The Admin table was changed to logger_admin table.

- Other Reserve words that were changed include:
 Admin
 Array
 At
 Data
 Day
 Domain
 Month
 Operation
 Path
 Rows
 Value
- These Reserve word changes affect these tables:
 Admin
 Admin_Script_Schedule_Map
 Agent_State_Trace
 Customer_Options
 Expanded_Call_Variable
 Network_Event_Detail
 Recovery
 Recurring_Schedule_Map
 Route_Call_Detail
 Schedule_Source
 Script_Data
 Script_Real_Time
 Termination_Call_Detail

3.3.3 Other ICM Database Changes

There are various changes on ICM 5.0 SQL Server settings. If these changes are not properly made, SQL Server performance could be adversely affected. These changes are made by ICMDBA or dbupgrade.dll during setup.

Unless specified, these settings apply to both SQL 7 and SQL 2000, and to the following ICM nodes: Logger, HDS, AW.

memory	max server memory = min server memory = 1/2 physical memory This is the setting ICMDBA recommends. By SQL Server default, memory is dynamically allocated. Dynamic allocation of memory was already included in ICM 4.6.2.
user connections	0 - dynamic
locks	0 - dynamic
open objects	0 - dynamic

recovery interval	AW: 10 Otherwise: 1
max async IO	SQL Server 7.0: 255 SQL Server 2000: does not exist
auto grow	Apply to: Logger, HDS data file; AW data and log file Settings: SQL Server auto grow 10% of the ICM database data/log file each time max auto grow limit = $\{90\% \text{ of free disk space}\} / \{\text{number of ICM db (and aw log) files on this disk}\} + \{\text{db file current size}\}$

Auto grow and max limit will be turned on and adjusted during database delete, create, expand, recreate and ICM upgrade during setup.

For example, a customer creates two ICM logger DBs (2GB each) on the C drive (which has 12GB of space at the beginning) in a new ICM installation. The second database creation happens a month after the first database has been created. So:

- At the beginning:
free disk space: 12GB
- Create 1st Logger DB (1.5GB data, 0.5GB log):
free space left: 10GB = (12-2)GB
max auto grow limit for 1st Logger DB file set to: 10.5GB = (10x90% + 1.5)GB
- A month later:
first Logger DB uses 1GB extra for auto grow (now this database data file size increases to 2.5GB), other program uses 1GB
free space left: 8GB=(10-2)GB
- Create 2nd Logger DB (1.5GB data, 0.5GB log):
free space left: 6GB=(8-2)GB
max auto grow limit for 2nd Logger DB file set to: 4.2GB = ((6 x 90% / 2) + 1.5)GB
for the 1st Logger DB file, adjust to: 5.2GB = ((6 x 90% / 2) + 1.5GB(original size) + 1GB (auto grow within this month))

Data File vs. Database Device

For all the ICM databases, when created or expanded, ICM uses database files instead of database devices. However, if a database has the old database device, ICM will continue to create device. TEMPDB uses devices since it is in the sysdevices table.

Recommended Tempdb Size

log: 20MB, data 50MB

3.4 IPCC Changes

3.4.1 IPCC PG Now Called CallManager PG

What was formerly named IPCC PG is now named CallManager PG.

3.4.2 Reduction in Number of IPCC WebView Report Templates

With the introduction of the 75 Cisco IPCC templates in Cisco ICM 4.6.2, the template population grew to over 200 templates. In Cisco ICM 5.0, 27 redundant report templates have been removed. Every reporting template that has been removed has an equal or better replacement template (except for three workforce management templates, which were not replaced because workforce management is no longer a standard ICM offering). See the template list below.

Some customers may have saved reports using templates that are no longer supplied. In cases where the replacement template is in the same template category as a deleted template, an automatic migration to the replacement template is provided as part of the upgrade process. See the *Cisco ICM 4.6.2 to 5.0 Upgrade Migration Guide* for details.

Deleted Template	Replacement Template
agteam01	agteam20
agtper01	agtper20
agtper02	agtskg20
agtskg01	agtskg20
agtskg02	agtskg20
caltyp03	caltyp20
caltyp06	caltyp21
caltyp07	caltyp20
entskg02	entskg20
entskg06	entskg21, entskg23
entskg07	entskg22, entskg24
entskg13	entskg21
entsvc10	caltyp20
entsvc19	caltyp21
entsvc20	caltyp21
entsvc21	caltyp22
peragt01	peragt20
peragt02	agtskg20
perskg02	perskg20
perskg06	perskg21, perskg23

Deleted Template	Replacement Template
perskg07	perskg22, perskg24
perskg10	---
perskg13	perskg21
persvc09	---
persvc11	persvc21, persvc23, persvc25
persvc12	persvc20, persvc22, persvc24
schimp01	---

3.4.3 IPCC Usage of Call Disposition UABORT (26)

IPCC now uses Call Disposition 26 (UABORT) to indicate that Call Manager has terminated a call for some abnormal reason. Such reasons could be: Network Congestion, Network Not Obtainable, Resources Not Available.

3.4.4 Change in Reported IPCC Call Dispositions for Redirected

Formerly, when a call was post-routed to the IVR from the CallManager PG (e.g., from a CTI route point), the call disposition was reported as Abandoned Delay (4).

Similarly, when a call was forwarded to the IVR as a part of the IPCC "no answer" treatment (e.g., an agent transfers a call to another skillgroup, but there is no agent available, so the call is sent to the IVR), the call disposition was reported as Abandoned Delay (4).

In neither case did this call disposition accurately reflect the call status.

Both of the above conditions now result in Redirected (15) being sent as the call disposition.

3.4.5 Changes in Call Type Reporting

Reporting elements for abandoned delay time and short call abandon counts have been added in this release. For details, see the *Cisco ICM Software IP Contact Center Administration Guide*.

Calls Abandoned fields in the Call Type now include calls abandoned before being queued.

Calls Abandoned are no longer counted as errors in the Call Type reports. These can be characterized as Route Call Detail records with a RouterErrorCode of 448.

3.4.6 Change in Default Behavior of Skill Group Creation for IPCC

For all new IPCC installations, or where new IPCC peripherals are added, the default method for creating a skill group is with subskill groups disabled. You can override this default if you wish using advanced tabs. The recommendation for IPCC is to use base skill groups only: see the *Cisco ICM Software IP Contact Center Administration Guide*.

3.4.7 New System Assigned Agent Reason Codes

These new reason codes are discussed in the *Cisco ICM Software IP Contact Center Administration Guide*.

3.4.8 New Default Skill Group in ICM 5.0 Used by IPCC

IPCC uses the new default skill group added for support of media routing. All voice calls not routed by an ICM script are reported in this new default skill group.

3.5 ICM Networking Enhancements

3.5.1 PG Quality of Service (QoS) for Shared Networks

Enhancements were made in ICM 5.0 to provide QoS traffic marking between Peripheral Gateways and Central Controller, allowing PG traffic to share (QoS-enabled) convergent WAN networks. This feature removes the longstanding requirement for PG private leased lines, and moves the ICM toward improved compliance with the Cisco AVVID architecture.

With both the CallRouter and PG node(s) running ICM 5.0, the respective ICM endpoints will mark both layer 2 (802.1p Class of Service (COS)) and layer 3 (DiffServ Codepoint (DSCP)) traffic headers appropriately, based on specific ICM flow. Additionally, the use of parallel UDP traffic for the PG heartbeat has been removed in this release, relying instead on TCP Keepalives for the heartbeat function. This change in the use of UDP increases PG connectivity reliability by eliminating false connection loss detection and, where relevant, simplifies firewall deployment in the PG public network. The ICM 5.0 QoS feature does not support the RSVP reservation protocol.

Full backward compatibility is retained with the QoS feature, both for pre-5.0 back-level PG version support as well as for customers not yet ready to deploy QoS in their networks. Back-level support for pre-QoS PGs is accommodated through a negotiation handshake at PG connection time to revert back to the non-QoS ICM 4.x behavior (including UDP heartbeats). For customer networks not deploying QoS, the use of distinct local IP addresses for normal (“public”) and priority (“public high”) flows is retained in ICM 5.0 to continue to facilitate IP router priority queuing policies for ICM high priority traffic.

ICM 5.0 QoS was developed and tested in combination with the Microsoft Windows 2000 Packet Scheduler component. The Packet Scheduler provides desirable traffic smoothing and shaping characteristics, and is

required to facilitate 802.1p datalink layer marking. Details on configuration of the Packet Scheduler can be found in *Cisco ICM Software Pre-Installation Planning: Network and Site Requirements*. While the ICM will perform basic DSCP (but not COS) marking *without* configuration of the Packet Scheduler, Cisco strongly recommends use of the Packet Scheduler for customers deploying ICM QoS in their PG networks.

NOTE: Use of the Packet Scheduler reduces the granularity of ICM flow marking from three to two, such that both ICM medium and high priority traffic is marked at the designated high priority DSCP and COS value. This characteristic does not diminish the feature usefulness and, in fact, is analogous to ICM release 4.x pre-QoS flow classification.

Prerequisites

The successful deployment of ICM QoS requires careful advance planning. Foremost, the WAN between PGs and the ICM central controller site must be QoS-enabled, using IP routers configured to properly interpret DSCP marking. If deploying 802.1p, local network switches must be capable of supporting markings supplied by the ICM, and deployed NIC cards must likewise support 802.1p.

Specific DSCP markings must be chosen for compatibility with complementary traffic in your network. For non-AVVID networks, you should work closely with your network administrator to ensure the configured values (as defined in ICM setup) are appropriate.

Bandwidth Sizing

In order to optimally tune the ICM system for effective traffic shaping, bandwidth requirements across the several distinct PG traffic flows must be carefully assessed. To aid in this process, Cisco has developed sizing calculator tools available to ICM deployment, SE, and Partners worldwide. *It is mandatory that customers deploying QoS in their PG networks work with their appropriate ICM planning services to adequately determine bandwidth allocations in advance of ICM 5.0 deployment.*

Tools Support

In order to provide customers and Cisco support personnel with adequate troubleshooting tool support, the Microsoft System Monitor (formerly Performance Monitor, or PerfMon) utility has been extended to include ICM QoS counter support. Additional information regarding the use of System Monitor for ICM QoS can be found in the *Cisco ICM Software Administration Guide*.

Additionally, Cisco TAC and Partners have access to enhanced network application level troubleshooting tools compatible with the ICM QoS feature.

Additional information on the PG QoS feature, installation and setup, and associated tools may be found in *Cisco ICM Software Pre-Installation Planning: Network and Site Requirements*.

Mandatory Microsoft Hotfixes Required

Customers deploying ICM QoS and the Microsoft Packet Scheduler are required to install the following Microsoft updates to rectify problems found during pre-release qualification testing of ICM 5.0 QoS. These updates are available directly from Microsoft, as indicated in the associated Microsoft Knowledge Base articles. The fixes are required to be applied to Windows 2000 Service Pack 3; preliminary information from Microsoft is that the underlying fixes will first appear integrated in Windows 2000 Service Pack 5.

- **Q329259** describes an access violation problem in RSVSP.DLL, associated with use of the Microsoft Packet Scheduler. The corresponding Hotfix addresses a problem manifested in ICM 5.0 as central controller CCAgent process access violations while running one or more QoS-enabled PGs. Short of removing the Packet Scheduler, there is no known workaround.
- **Q811657** describes two separate defects related to QoS and the Packet Scheduler. One problem is around additional flow allocation failure associated with multi-homed systems (multiple IP addresses bound to the public interface NIC adapter), and the other involves a failure condition not properly conveyed to the application layer upon flow re-allocation (internal API `WSAIoctl(SIO_SET_QOS)`). The first of these is not an issue for customers configured with a single IP address (those who are running QoS and have no need for per-flow IP router queuing policies based on destination address). The risk of encountering this second problem can be minimized by ensuring bandwidth is carefully allocated to not exceed 80% of true available physical link capacity. Ultimately, however, there is no known complete workaround short of removing the Packet Scheduler.

As noted in Section 4.1 below, Service Pack 3 of Windows 2000 is required for ICM 5.0 installation / upgrade.

3.5.2 ICM Infrastructure Transport Optimization

The ICM transport API interface used by a variety of ICM components for intranode ICM communication has been enhanced in ICM 5.0 to allow for improved error detection. Specifically, ICM applications that time connection attempts for failover (for example, the AW's connection to the primary Real Time Distributor prior to secondary RTD selection) now do so more accurately. This results in more efficient error recovery under many circumstances. Refer to defect number CSCgt06221 for more information.

3.5.3 INCRP Path Local CIC Port Selection Option

In a NAM or ICM-ICM Gateway environment, the NetworkCIC process is included as part of the ICM Router installation. By default, the IP port used in the NetworkCIC process for the public network communication to the CICM (INCRP NIC) is selected dynamically at runtime. This dynamic

port allocation presents a security concern for some limited number of ICM customers.

To resolve this issue, the NetworkCIC has been enhanced to optionally use an explicit port number when so configured in the Registry. For further detail and conventions used to avoid conflict with ICM-allocated UDP ports, see the *Cisco ICM Software ICM-to-ICM Gateway User Guide*.

3.6 Internationalization and Localization Considerations

ICM with Web Collaboration and/or E-Mail Manager options offer internationalization/localization support for the following languages:

Chinese (Simplified)
French
German
Spanish
Korean

Support for Japanese is limited to internationalized data in standalone ICM with no localized user interface.

3.6.1 Localization

Web Collaboration offers the following localized features:

- User Interfaces: Caller, Agent, Admin, Media Blender Admin.
- Online Help: Media Blender alerts.
- Server Platform: May optionally be installed on localized OS and database.

E-Mail Manager offers the following localized features:

- User Interfaces: Agent, Admin, WebView, Report Templates.
- Online Help: Agent, Admin, WebView (French and German only).
- Server Platform: May optionally be installed on localized OS and database.

ICM offers the following localized features:

- User Interfaces: All, including ICM Reporting, are in English only.
- Report Template Descriptions are available in French.
- InfoMaker can be used to make custom, localized report templates.
- Online Help: English only.
- Server Platform: Language support depends on being installed on a localized OS and database (see below).

No documents have been translated.

3.6.2 International Character Data

ICM

- ICM stores data in the Native Character Set specified in the SQL Server database, not Unicode. Web Collaboration and E-Mail Manager do store data as Unicode in their databases.
- Agent First Name, Agent Last Name, and Description fields are the only data fields in ICM to support characters in the SQL database native character set. ICM components such as Configuration Manager and Reports will permit entry and display.
 - The Configuration Management System will convert these data between the internal native character set of ICM and the API character set of Unicode.
 - The VRU interface and CTI Server interface do no character conversions, and will transport textual data as simple byte strings.
- Only ASCII characters are accepted for Enterprise names, Call Variables, ECCs, and other fields. If characters other than ASCII are entered, ICM displays an error message. Interface APIs assume ASCII for these data.

Web Collaboration and E-Mail Manager conform to the above data restrictions.

- ICM Routing scripts can only be saved using English file names even on localized platforms.

Web Collaboration

- Conforms to the ICM data restrictions.

E-Mail Manager

- Conforms to the ICM data restrictions.
- Handles encodings specified in incoming e-mail headers.
- Generates the proper encoding in outgoing e-mail headers.
- Supports spell-checking for non-ideographic languages

3.6.3 ICM Operating Platforms for Localized Installations

In these configurations English ICM is installed on a localized operating system platform. The configurations support the native character data of localized, integrated applications to the extent that ICM data has been internationalized (see above).

(This sub-section does not pertain to Web Collaboration or E-Mail Manager.)

Localized OS: Windows 2000	Database *	SQL Native Character Set	SQL Collation Sequence	SQL Sort Order **
Chinese	English SQL 7 Chinese SQL 2000	GB-2312	Default	Binary
Japanese	Japanese SQL 7 Japanese SQL 2000	ShiftJIS	Default	Binary
French	French SQL 7 French SQL 2000	Latin1	Latin1	Binary
German	German SQL 2000	Latin1	Latin1	Binary
Spanish	Spanish SQL 2000	Latin1	Latin1	Binary
Korean	Korean SQL 2000	EUC-KR	Default	Binary

* SQL7 is supported only for existing ICM installations, not new installations.

** If ICM Setup detects that the Sort Order has been improperly configured, the following message displays: “SQL sort order is wrong” and exit.

3.7 ICM User Documentation Updates

3.7.1 Documentation Changes

Cisco ICM 5.0 Multichannel Software Overview—a new document that provides an overview of the various multichannel components of ICM 5.0.

Cisco ICM 5.0 Multichannel Software Implementation Map—a new document that provides a high-level picture of the elements involved in installing and configuring the various multichannel components of ICM 5.0.

Cisco ICM 4.6.2 to 5.0 Upgrade Migration Guide—a new document that describes the methods involved in upgrading from ICM 4.6.2 to ICM 5.0.

Cisco ICM Software Scripting and Media Routing Guide replaces the *Cisco ICM Software Script Editor Guide*—it includes sample scripts, as well as information on scripting in a multichannel environment.

Cisco ICM Software IP Contact Center Installation and Configuration Guide replaces the *Cisco ICM Software IP Contact Center Installation*

Guide—providing more information in a single location than its predecessor.

Cisco ICM Software IP Contact Center Administration Guide has been expanded and refocused—in particular, the information from the *Cisco ICM Software IPCC Reporting Guide* is now included in the *Cisco ICM Software IP Contact Center Administration Guide*.

Cisco ICM Software CTI OS Agent Desktop User Guide—simply a re-titling of the *Cisco ICM Software IPCC CTI OS Agent Desktop User Guide* to clarify that it applies more widely than to just IPCC.

Cisco ICM Software Blended Agent User Guide—a new document that describes how to use the ICM Blended Agent (BA) application. It also provides a sample call center scenario using a credit card offer campaign and explains how BA can be configured to support this type of campaign. Some of the information from the *Cisco ICM Software Blended Agent Setup and Configuration Guide* has been moved to this new guide, so the Setup Guide now concentrates solely on setting up BA in the Cisco IP Contact Center and the Avaya DEFINITY ECS ACD environment.

3.7.2 Blended Agent: Dynamic Imports (CSCma23181)

The online help for the Blended Agent Import Rule configuration tool does not mention dynamic imports. You can activate dynamic imports in this tool by going to the Schedule tab and clicking on the "Start import when file is present" radio button.

Dynamic import is a new feature available in ICM Blended Agent 5.0. It permits importing a file as soon as it is copied into the specified location. The import process polls every second to see if the import file has become available. Once it has, the import begins immediately. After the import is completed, the import file will either be renamed, by appending ".bak" to the file name, or deleted.

3.7.3 Blended Agent: Update Dialing List (CSCma23358)

The online help for the Blended Agent Query Rule explorer does not contain documentation for the "Update Dialing List" button, which was added in ICM 5.0.

This button allows an administrator to immediately update the Dialing List with the changes which were made to a Query Rule, rather than waiting for the next import. All campaigns which have the selected query rule will be updated.

3.7.4 Blended Agent: Enable CallManager Call Waiting Option on Outbound Agent Phones (CSCma23855)

The *Cisco ICM Software Blended Agent Setup and Configuration Guide* and the *Cisco ICM Software IP Contact Center Installation and Configuration Guide* do not contain information about enabling the CallManager Call Waiting Option, which must be enabled on each outbound agent phone to ensure that every customer call successfully transfers to an available agent.

Enable the Call Waiting option by doing the following:

1. From the CallManager Phone Configuration window, select **Line 1**.
2. In the Directory Number Settings submenu, select the **On** option in the Call Waiting pull-down selection box.
3. Click **Update** to save the changes.

3.7.5 SkillGroup.Avail May Compute Differently from Previous Releases

The Script Editor documentation does not include the following information.

In earlier releases, SkillGroup.Avail was defined as the number of agents in the available state, meaning that the agents were available to accept calls. In ICM 5.0, with the introduction of new Media Routing Domains (that is, other than voice), this becomes more complicated.

Note: This discussion only applies once non-voice Media Routing Domains are actually used, and there are agents who log into multiple domains. In a voice-only system (such as a simple upgrade from an earlier release), there is no change to SkillGroup.Avail.

ICM 5.0 introduces a new variable, SkillGroup.ICMAvailable. The following table outlines the differences between SkillGroup.Avail and SkillGroup.ICMAvailable:

Case	SkillGroup.Avail	SkillGroup.ICMAvailable
Only voice domain is being used	Number of agents in the available state (same as older releases)	Same
Multiple domains are being used	Number of agents in the available state, regardless of what they may be doing in this or other domains	Number of agents who can actually handle an additional task or call in the domain

SkillGroup.ICMAvailable is the actual number of agents in the group who are available for new calls or tasks. More precisely, it is the count of agents logged into the group who are "ICMAvailable" in the group's domain. This means the agents meet all the following criteria:

1. They are routable in the domain.
2. The agent's state in the domain is something other than "Not-Ready".
3. The agent is below the maximum task limit.

Note: For most domains (that is, if the agent is not a Collaboration Server Multi-session agent), the maximum task limit is 1, and

an agent is below the maximum only when they are not working on any call or task.

4. The agent is not working on another task in a non-interruptible domain.

SkillGroup.Avail is the number of agents in the group who are not doing anything in the domain. An agent who is logged into two domains can be counted as Avail in one domain even though that agent is handling a task in another non-interruptible domain. An agent in a domain that handles multiple tasks (such as multi-session chat) is not counted as Avail if that agent is handling a task, even though the agent has additional capacity for more tasks.

The table below shows some possible values for these variables. Assume three agents are logged into a voice skill group, and the same three agents also logged into another non-interruptible domain, such as Collaboration Server Single-session Chat. This table shows the voice skill group states.

Case	SkillGroup.Avail	SkillGroup.ICMAvailable
Initial state	3	3
First agent handles a voice call	2	2
Second agent handles a Collaboration chat session	2 (because there are two agents doing nothing in the domain.)	1 (because there is really only one agent left to handle voice)
Voice call ends	3	2
Collaboration ends	3	3

If a routing script needs to check the number of available agents, the correct variable to use is SkillGroup.ICMAvailable. SkillGroup.Avail>0 does not guarantee that there are really available agents, as those apparently available agents may be handling tasks in another domain.

Below is another example showing agents handling multi-session chat. Assume three agents logged into a multi-session chat skill group, each capable of handling two chats. This table shows states for the multi-session chat group.

Case	SkillGroup.Avail	SkillGroup.TalkingIn	SkillGroup.ICMAavailable
Initial state	3	0	3
First agent handles a chat	2 (because the agent is now in the talking state)	1	3 (because all 3 agents can still handle additional chats)
Second agent handles a chat	1	2	3
Third agent handles a chat	0	3	3
First agent handles a 2 nd chat	0	3 (even though a total of 4 chats are in progress, only 3 agents are doing the work)	2 (because only the 2 nd and 3 rd agents can handle an additional chat)

By default, Script Editor does now show ICMAavailable instead of Avail when displaying skill group real-time data.

3.7.6 Configuring the Listener Server as a RAS Device for Windows 2000 (CSCma18739)

The Remote Monitoring Suite documentation does not include the following information. The section applies to customers running RMS under Windows 2000.

You need to configure Remote Access Service on the Listener, and perform a default RAS installation on the client (Logger).

Windows 2000 does not require a configuration of inbound/outbound protocols to be made on the client side for RAS. Only a default installation of RAS is necessary on the client. RAS on Windows 2000 is pre-configured to use the following three protocols:

- IP
- NetBEUI
- IPX

The ICM software Listener option is configured to accept only NetBEUI connections. The DTP client then negotiates the supported protocol.

Note: These instructions apply only to customers using the ICM Listener option.

Note: *You should first consult with your IT department before setting up your Listener server as a RAS device on your network.*

To configure the Listener server:

1. From the Listener machine Start menu, select Start > Programs > Administrative Tools > Routing and Remote Access:
2. The Routing and Remote Access window displays. Right click on the server you want to configure and select **Configure and Enable Routing and Remote Access**.
3. Making this selection launches the Routing and Remote Access Server Setup Wizard. Select Remote access server (RAS) and click **Next**. Accept all remaining defaults in the wizard.
4. When the wizard is finished, right-click on the server entry again and select **Properties**.
5. The Properties window displays. Select the **General** tab. Check only the Remote access server checkbox.
6. Select the IP tab. Disable both the IP Routing and Allow IP-based remote access and demand-dial connections.
7. Select the NetBEUI tab. Use the checkbox to enable Allow NetBEUI based remote access clients to access, and select the **This computer only** option.
8. Select the **AppleTalk** tab. Make sure the Enable AppleTalk remote access checkbox is unchecked.
9. Accept the defaults for the remaining tabs and close the window. When the configuration is complete, the RAS services will restart.

Note: It is highly recommended that you **not** enable RAS Server capability on the Logger, as this might create a conflict with the ICM DTP process using the modem.

3.7.7 Listener and AALSTN Customer (CSCma20910)

The Remote Monitoring Suite documentation does not include the following information.

With Remote Monitoring Suite 2.0, if the AALSTN customer does not exist on the Listener, the Listener software sends all Listener Notifications to the (alphabetically) first customer node in the list. The first customer node will receive all Listener Notifications that pertain to the Listener, for all customers.

That is, the Listener attempts to report events to a special customer instance known as AALSTN. If no such customer instance exists, then the Listener deposits the events in the first customer instance available. This is to ensure that Listener events are not lost if a configuration does not have the special AALSTN instance configured.

Therefore, users are strongly advised to configure customer AALSTN in RMS 2.0.

3.8 Component Changes and End of Life

3.8.1 Monitor ICM

In ICM 5.0 the WebView reporting feature replaces the Monitor ICM reporting tool.

3.8.2 VRU Polled Data Feed Interface

Support for the VRU PG “polled data feed” interface is being phased out concurrent with the ICM 5.0 release.

3.8.3 DOS-based NICs

With the pending obsolescence of the ICM DOS-based NICs and associated ISA SS7 line cards, Cisco plans to retire support for these older SS7 NICs in deployed ICM systems 24 months from the date of ICM 5.0 initial availability.

Further, customers are required to upgrade their DOS-based NICs at the point they upgrade the ICM software itself, regardless of version.

Cisco has suitable, current-generation replacement offerings for all DOS NIC types. Contact Cisco ICM Sales for full details.

3.8.4 WebView Script Editor

Internet Script Editor, which was introduced in release 4.6, has now fully replaced the 'Quick Edit' capability in the web-based script editor in WebView. The WebView script editor has been retired in release 5.0—it is no longer available.

3.9 Miscellaneous Changes

This section contains various technical changes that do not fit under the more general categories that have been used above.

3.9.1 GeoTel and ICR Removed from Registries and Directories

With ICM 5.0, what had been standard registry and directory names have been replaced.

"GeoTel" has been replaced by "Cisco Systems, Inc."

"ICR" has been replaced by "ICM".

This change is of particular interest to users who have custom tools that may be looking in renamed locations for information.

3.9.2 Change in Database Size Defaults

The default value for the size of an Admin Workstation database has been increased to 1000 MB (the previous value was 73 MB).

The default value for the size of a Logger database has been increased to 500 MB (the previous value was 23 MB).

3.9.3 Important Considerations Regarding ICM User Accounts

ICM user accounts are automatically associated with Windows 2000 domain accounts and the following user groups in those domain accounts:

- <ICM_instance_name>SQLUser group
- ·<ICM_instance_name>WVScript group if the WebView Script only option is selected for the ICM user
- DomainOperators group if the Can create other user account option is selected for the ICM user

Therefore you should be aware of the following when creating or deleting ICM user accounts:

When creating an ICM user (account):

- You can add a new ICM user who has no existing Windows 2000 domain account.

This creates the ICM user account in the ICM instance database and automatically creates a Windows 2000 domain account in the domain since an ICM user must also be associated with a Windows 2000 domain account.

- You can add a new ICM user who already has an existing Windows 2000 domain account.

This adds the ICM user account to the ICM database and adds the existing Windows 2000 domain account to the appropriate groups as described above.

- You can add the same ICM user (one ICM username and password) to more than one ICM instance in a domain.

This adds the ICM user account to the ICM database in each ICM instance where it is created and adds the existing Windows 2000 domain account to the appropriate ICM instance groups as described above.

- You can give an ICM user the option of creating new ICM users.

This adds that option to the ICM user account in the ICM instance database and adds that user's Windows 2000 account to the DomainOperators group. All ICM user accounts associated with that Windows 2000 account (ICM user accounts on different ICM instances in the domain but having the same username and password) will have that option, even though it was implemented in only one ICM instance.

- You can mark an ICM user as having the WebView script only option.

This adds that option to the ICM user account in the ICM instance database and adds that user's Windows 2000 account to the <ICM_instance_name>WVScript group. If the ICM user has an account (with the same username and password) on other ICM instances in the same domain, those other accounts do not

automatically have this option unless it is enabled separately in each ICM instance.

When deleting an ICM user (account):

- You can delete both the ICM user account and the associated Windows 2000 domain accounts.

This removes the ICM user account from the ICM instance database and also removes that user's Windows 2000 account. This also removes the Windows 2000 domain account from the following groups:

<ICMinstanceName>SQLUser group

<ICMinstanceName>WVScript group if the ICM User is WebView script only

DomainOperators group if the ICM User could create other ICM users.

If any ICM user accounts on other ICM instances are associated with that Windows 2000 domain account (that is, have the same ICM username and password), they still exist in the other ICM instance databases, but no longer function. They must be deleted and recreated in each ICM instance if they are still wanted.

You can delete only the ICM user account, leaving the associated Windows 2000 domain account undeleted.

This removes the ICM user account from the ICM instance database and leaves that user's Windows 2000 account.

- If any ICM user accounts on other ICM instances are associated with that Windows 2000 domain account (that is, have the same ICM username and password), they still exist in the other ICM instance databases and will still function.
- If the deleted ICM account had the option of creating other ICM users, then any ICM user accounts on other ICM instances associated with the Windows 2000 domain account (that is, accounts on other ICM instances with the same ICM username and password), will no longer have the right to create other ICM users.

When an ICM user is deleted with the option to leave the account undeleted, the account is no longer in the DomainOperators group even though the account is still there.

3.9.4 Supervisor Team WebView Login (CSCma19062)

A user ID and password can be defined for each supervisor from the ICM configuration. When the Supervisor/Agent checkbox is selected in the Supervisor tab of the Agent Explorer List Tool, then a Supervisor ID and password can be defined. A supervisor using that ID and password to log into WebView can access only SkillGroup and Agent information for the Supervisor's team.

3.9.5 ICM Setup Log File Placement

In previous releases, ICM Setup created the icmsetup.log file in the %Temp% directory. (%Temp% is an environment variable). However, since different users may have different Temp directories on the same machine, this has occasionally caused confusion when people were trying to find the log file.

Setup has been changed to create the log file in the C:\temp directory if a C drive exists. If a C drive does not exist, setup creates the log file in the %SystemDrive%\temp directory. The %SystemDrive% is an environment variable and it is the disk drive that contains the Windows system directory.

3.9.6 Extension (agentID/Instrument) with Leading Zeros

Up to and including ICM 4.1.5, ICM did not differentiate between an agentID/extension/instrument with leading zeros and without leading zeros. Leading zero numbers were treated as an integer, e.g., 0002 = 2.

Starting with ICM 4.5, ICM (OPC and CTI Server) does differentiate between an agentID/extension/instrument with leading zeros and without leading zeros, e.g., 0002 = 0002. This change was made since some switches (e.g., DEFINITY ECS) now support leading zeros.

In the past, if a client provided leading zero extensions for a switch that did not support leading zeros, this was not a problem because the leading zeros were stripped. With the ICM enhancement to support leading zeros, some client applications may experience problems if the client provides leading zero extensions for switches that do not support leading zeros.

3.9.7 Aspect Contact Server PIM

The ICM 5.0 Aspect Event Link PIM is supported only when used with the Aspect Contact Server CMI (Computer Media Integration) Server interface. The CMI Server replaces the Application Bridge and Event Bridge interfaces. In order to implement an ICM Aspect PG, the CMI Server software must first be installed on a separate server. The Aspect PIM is then configured to interface with the CMI Server.

The new ICM Aspect Contact Server ACD Supplement provides guidelines on CMI Server installation and configuration. This is not intended to replace the documentation provided with the CMI Server software in the Aspect Customer Relationship Portal. It is intended as a supplement to that documentation. The ACD Supplement is available on Cisco.com.

The ICM Aspect Installation, Configuration and Troubleshooting Guide provides even greater detail for system administrators. Customers and partners are encouraged to make use of this document as well.

3.9.8 Media Routing, Configuration Screens, and Voice-only Users

The existence of Media Routing has resulted in the addition of a new field, “Media routing domain”, to many configuration screens. In a voice-only environment, most of these default to NONE, and also by default they have only “Cisco Voice” in the dropdown list. Voice-only users must, nevertheless, select Cisco Voice from the dropdown list. The field must not be left containing NONE.

3.9.9 Termination Call Detail (TCD) Record - Called Party Disconnected

A new call termination Cause code has been added to the ICM/VRU Interface, resulting in a new CallDA new call termination Cause code has been added to the ICM/VRU Interface, resulting in the introduction of a new CallDisposition value in the Termination Call Detail (TCD) record. The value is: Called Party Disconnected (52).

A Cause code of Called Party Disconnected describes the termination condition where the agent hung up before the caller did. Support requires a VRU routing client acting as a network switch, such as the Cisco ISN solution. The routing client must detect this reason for terminating the call and provide the code to the VRU PG.

For more information refer to the current *ICM / VRU Interface Specification* (revision 3.0c or later) regarding use of the DBCD_CALLED_PARTY_DISCONNECTED Cause code.

3.9.10 Network Event Reporting

Network Event Reporting is a newly introduced feature in ICM 5.0, providing a new ICM schema table that is populated with (pre-routed) call detail from selected NIC routing client(s). This feature is meant to serve as an adjunct to existing per-call reporting detail, providing call event and duration information across call legs (referenced by RouterCallKey) on a more granular basis than Route Call and Termination Call Detail allow. Data is populated into a new schema table, Network_Event_Detail.

Network Event Reporting is offered in ICM 5.0 as a configurable option available only to a limited number of SS7 ICM NIC interfaces. Contact your Cisco representative for further detail.

3.9.11 Maximum Task Limits for Agents

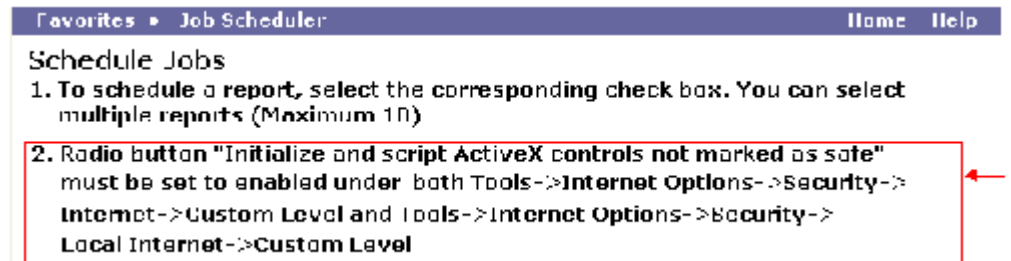
The concept of maximum task limits for agents is new in ICM 5.0. However, for ICM 5.0, the only case in which this limit can be set is for multi-session agents using Collaboration Server. In all other cases the maximum task limit is one.

3.9.12 Alternative Option to Configure Microsoft IE Security for the WebView Job Scheduler

This section details an alternative option to configure Microsoft Internet Explorer (IE) security when you run the WebView Job Scheduler in an Intelligent Contact Management (ICM) Enterprise environment.

You can use the Job Scheduler in WebView to schedule reports that you can generate and print at a later time.

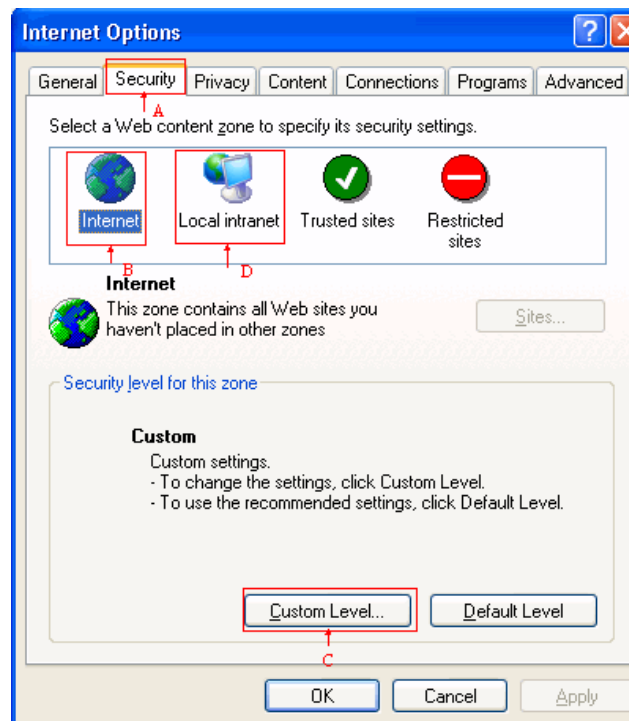
When you add a new job from the Job Scheduler page in WebView, a recommendation for IE configuration appears.



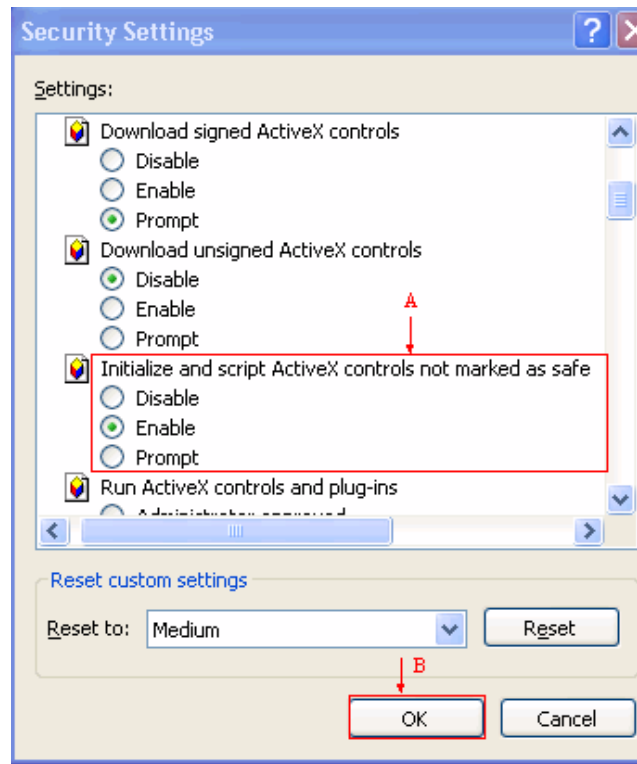
Configure Security for Microsoft IE

Complete these steps in order to configure security settings for Microsoft IE:

1. Start IE.
2. Select **Tools > Internet Options**. The Internet Options dialog box appears:



3. On the Internet Options dialog box:
 - Select the Security tab (see arrow A)
 - Click Internet (see arrow B)
 - Click the Custom Level button (see arrow C)The Security Settings dialog box appears.



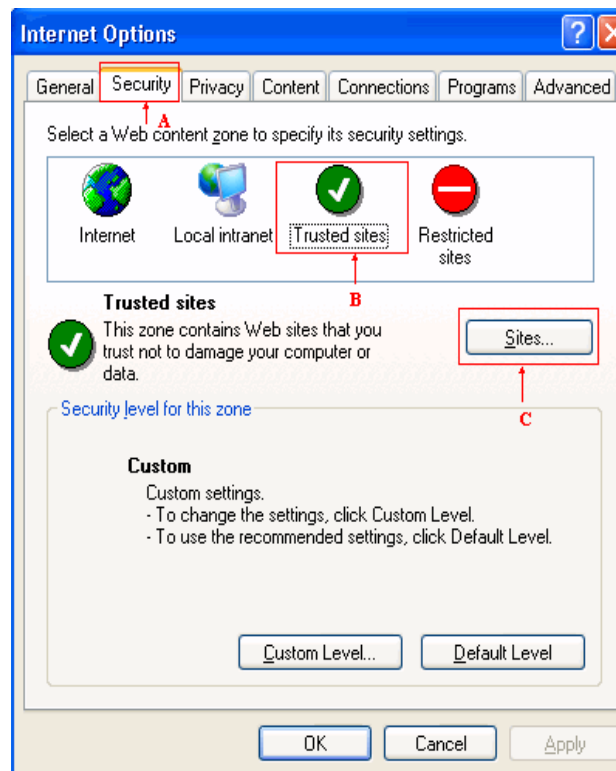
4. On the Security Settings dialog box:
 - Scroll to locate Initialize and script ActiveX controls not marked as safe, and select the Enable option (see arrow A)
 - Click OK (see arrow B)The Internet Dialog Options dialog box appears again (see Step 2).
5. On the Internet Options Dialog Box:
 - Click Local Intranet (see arrow D)
 - Click the Custom Level button
 - Scroll to locate Initialize and script ActiveX controls not marked as safe, and select the Enable option
 - Click OK twice

Add WebView Server to the List of Trusted Sites

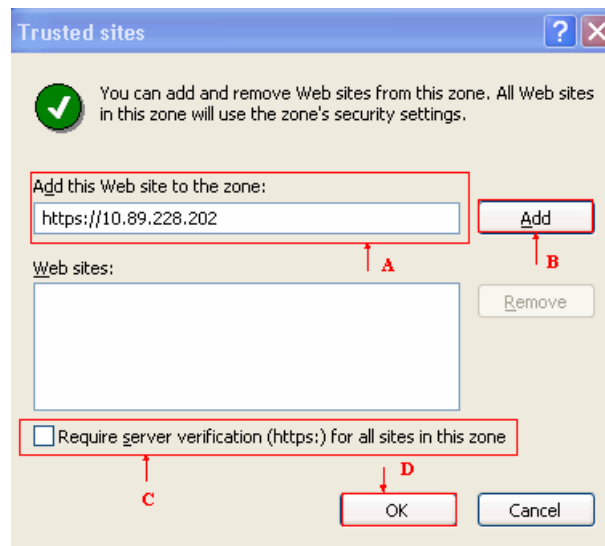
Complete these steps in order to add WebView Server to the list of Trusted Sites in IE:

1. Start IE.

2. Select **Tools > Internet Options**. The Internet Options dialog box appears.



3. On the Internet Options dialog box:
 - Click the Security tab (see arrow A)
 - Click Trusted Sites (see arrow B)
 - Click the Sites button (see arrow C)The Trusted Sites dialog box appears.



4. On the Trusted Sites dialog box:
 - Type the URL for the WebView server (see arrow A)
 - Click Add (see arrow B)
 - Repeat to add all the other WebView servers.
 - Uncheck the Required server verification(https:0) for all sites in this zone check box (see arrow C)
 - Click OK (see arrow D)

4 Release Planning and Installation / Upgrade Details

For detailed installation and upgrade instructions, see the appropriate manuals, such as the *Cisco ICM Software Installation Guide*, *Cisco ICM Software IP Contact Center Installation and Configuration Guide*, and *Cisco ICM 4.6.2 to 5.0 Upgrade Migration Guide*.

4.1 Platform O/S Requirements

You can upgrade to ICM 5.0 from the ICM 4.6.2 baseline configuration only. If your current ICM software release is not the ICM 4.6.2 baseline, you must first upgrade to the 4.6.2 baseline before upgrading to ICM 5.0. Upgrading to ICM 5.0 from any other release is neither qualified nor supported.

The baseline requirements are: ICM 4.6.2, Windows 2000 SP3, SQL Server 7.0 SP3.

If you are using CTI OS, you must at some point upgrade to / be at CTI OS 4.6.2, 4.7, or 5.0. ICM 5.0 does not support earlier versions of CTI OS.

Note: New installations are required to have Windows 2000 SP3 and SQL 2000 SP2.

4.1.1 SQL Upgrade Support

Cisco will only provide support for SQL Server 7 on the ICM 5.0 base platform until December 31, 2005. After this date, The Cisco Customer Contact Business Unit (CCBU) will no longer create any Engineering Specials and/or Service Releases for ICM 5.0 running SQL Server 7. The ICM 5.0 base platform with SQL Server 2000 will be the only supported combination after that date.

Customers upgrading from ICM 4.6.2 to 5.0 after 12/31/05 will be allowed to use SQL Server 7.0 as a migration step. However, for continued product support, all ICM database components must be upgraded to SQL Server 2000 upon the completion of the ICM software upgrade, with the exception of the PGs. The ICM software upgrade includes the data migration period of all ICM database components. The SQL upgrade should be completed on all ICM components in no more than 14 days from the start of the SQL upgrade.

All new ICM 5.0 installations will continue to require SQL Server 2000.

4.2 Upgrade Methods

There are two upgrade methods provided for upgrading to ICM 5.0. For a description of both of these methods, see the *Cisco ICM 4.6.2 to 5.0 Upgrade Migration Guide*.

4.2.1 Common Ground Upgrade Method

The common ground upgrade method is the usual "in-service" upgrade process.

You must first bring your system to the baseline describe above.

4.2.2 Forklift Upgrade Method

The forklift upgrade method allows customers to redeploy their system on new machines with new ICM domains, and then cut over production from the old system to the new.

You must first bring your old system to the baseline describe above.

4.3 Release Planning Considerations and Miscellaneous Notes

4.3.1 Internet Script Editor in Partitioned Systems

Any new configuration item created in ICM Configuration Manager, such as a Skill Group or Service, is not updated in open versions of Internet Script Editor (ISE) in a partitioned system.

For example:

A user creates a new Skill Group in ICM Configuration Manager while ISE is open. This newly created Skill Group does not appear in ISE.

The ISE user must click the Reload button to be able to see and use the newly created Skill Group.

As indicated, this occurs for any Script Editor configurable item (Skill Group, Master Script, Call Type Schedule, User Formula, ...). In all of these cases, the ISE user—in a partitioned system—must click Reload to see the changes made while ISE has been running.

4.3.2 Cisco Discovery Protocol (CDP) Implications

As was the case in ICM version 4.6, due to a problem with compatibility ICM 5.0 does not provide the Cisco Discovery Protocol (CDP) driver as part of the ICM installation. The lack of inclusion of the driver means that the ICM node will not be automatically identified to the CiscoWorks family of network management tools.

As part of the ICM 5.0 upgrade process, customers having the CDP driver installed on their legacy ICM systems are advised to remove it prior to the upgrade. The following steps may be used to manually remove the driver:

- 1) From a command prompt change to your CD drive, which contains the ICM 5.0 software distribution CD disk.
- 2) Change your directory to Drivers\W2K directory.
- 3) Run the following command from command line to remove the driver:

```
cdpinstaller -v -u CISCO_CDP
```
- 4) Reboot the system.

The ICM development team is aware of this restriction and is working to alleviate it in a future release of the ICM software.

4.3.3 Logger Database Upgrade Requirement

Before upgrading to 5.0, the logger database requires a minimum of 400 MB of log space. It is not recommended that the transaction log be larger than 500 MB. Use ICMDBA or SQL Server Enterprise Manager to verify that this amount of space is available.

4.3.4 Blended Agent Dialer Throttle Settings (IPCC only)

For IPCC deployments, you must configure Dialer throttling on each Dialer in the system. This is controlled by a pair of registry keys at the Dialer level (*/icm/<custname>/Dialer*), *PortThrottleCount* and *PortThrottleTime*. *PortThrottleCount* indicates the number of ports to throttle and *PortThrottleTime* indicates the amount of time (in seconds) to throttle them. For example, a setting of count=40 and time=2 indicates that only 40 ports can be dialed at any one time and no additional ports can be dialed for 2 seconds.

IMPORTANT:

Depending upon the type of CallManager server being used, these numbers need to be tailored. Use the following settings for the models in the following table.

Caution: It is important to not leave the Dialer with the default values for these throttle settings under IPCC!

Dialer Throttling Values

CallManager Server Type	PortThrottleCount	PortThrottleTime
800 MHz 7835 server	24	2
1.2 GHz 7835 server	40	2

CallManager Queue Throttling (CallManager versions 3.1/3.2)

You must increase the *LowPriorityQueueThrottlingMaxCount* to 50 on the CallManager that the Dialer ports are registering to. To set this value, go to the CallManager Service Parameters menu (Service->Service Parameters).

With CallManager version 3.3, this Boolean is disabled and does not need to be adjusted.

4.3.5 Implications of Windows 2000 Media Sense

As with ICM 4.6, proper ICM network interface function requires the disabling of Microsoft's "Media Sense" feature for Windows 2000. The ICM setup program will do this for you.

Further technical detail on Media Sense and the implications of disabling the feature can be found in Microsoft Knowledge Base article Q239924.

4.4 Microsoft SQL Implications

4.4.1 SQL Client and Server Network Utilities

- In Client Network Utility, under the General tab "Enabled protocols by order", Named Pipe should appear **before** TCP/IP. Adjust their appearance order if necessary.
- In Client Network Utility, under the Alias tab "Server alias configurations", there should be **no** entry for ".", for TCP/IP, for Named Pipe, or for any other protocols.

Both the Client Network Utility and the Server Network Utility are located in the Microsoft SQL Server folder.

4.4.2 SQL 2000 Auto Shrink Option (CSCma20420)

Make sure that the Auto Shrink option for SQL Server 2000 is turned off during installation/upgrade.

4.5 Limitations and Workarounds (Specific to Upgrade)

4.5.1 Script Editor Compatibility with Microsoft Registry

When you upgrade from 4.6.2 to 5.0, Script Editor preferences for window positions, most recently opened scripts, and other customizations will be lost for all but the current logged in user.

After upgrading, each user should re-enter his or her preferences. At that point, the preferences will be maintained for subsequent Script Editor sessions. Please see the DDTS entry for CSCma22360 for further details.

4.5.2 WebView and Forklift Upgrades

Special attention is required in order to preserve custom templates and saved reports. These must be copied manually to the new hardware. See the *Cisco ICM 4.6.2 to 5.0 Upgrade Migration Guide* for details.

4.5.3 Domain Conversion Tool Limitations

The Domain Conversion Tool is used as part of the forklift upgrade method. The following should be noted:

- At the end of the domain conversion, the Domain Conversion Tool indicates the conversion has been successfully completed, but you may get the message:
"Windows NT user or group 'xxx' not found. Check the name again."
Ignore this message.
- Currently the Domain Conversion Tool does not support domain conversion for user names longer than 20 characters. The tool simply skips conversion for such users. Therefore, manually change user names in domains and/or ICM databases as needed to conform to this restriction.
- When an ICM user has been deleted using the Microsoft domain management tool rather than the ICM user management tools, the user will be kept in the ICM database with the old domain information. If the users are not deleted via the ICM user management tools prior to running the Domain Conversion Tool, they must be deleted from the ICM database using the ICM user management tool after running the Domain Conversion Tool. Otherwise these users will have access to ICM data.
- When migrating users from an NT domain to an Active Directory domain, the Domain Conversion Tool will migrate users, but will NOT migrate any security or property settings. You are responsible for setting proper security parameters for any migrated users. In particular, if the password option is not used when importing users with the Domain Conversion Tool, there will be no password protection for any users.

4.5.4 Script Limits Affecting Upgrade

For ICM 5.0, new meters have been added to several script nodes. This may cause a problem after upgrading. If you are at the script limit, you will receive a warning message when you attempt to save the script, and you will not be able to save the script. You must split the script into multiple scripts, with each script containing fewer metered nodes.

5 Caveats Resolved in This Release

This section contains a list of significant defects that were resolved in ICM version 5.0. Defects are listed by severity and then by component.

For more information on defects, use the Bug Toolkit found at

www.cisco.com/support/bugtools/Bug_root.html

Defect Number: CSCma21107

Severity: 1

Component: cg.ctiserver

Headline: CTI Server failed after 4.6.2 upgrade

CTI Server failed after an upgrade to ICM Release 4.6.2. Hotfix #54 for ICM release 4.6.2 fixes this problem.

Defect Number: CSCma20974

Severity: 1

Component: cg.ctiserver

Headline: CTI Server fails to answer outbound calls to an ISDN Trunk

CTI Server was unable to answer an outbound call that was made over an ISDN trunk through an Avaya Definity switch and then transferred to an on-switch device (agent phone).

Defect Number: CSCma19746

Severity: 1

Component: db.logger

Headline: Configuration updates may fail during very large half-hour data transfers from router to logger.

With very large configurations, particularly those with many routes, the historical half-hour data transfer would take a very long time. Sometimes, configuration updates were blocked from going through.

Defect Number: CSCma17741

Severity: 1

Component: db.logger.migration

Headline: Upgrade from 4.1.3 to 4.6.2 Recovery running out of locks.

During upgrade from 4.1.3 to 4.6.2, the Nightly Purge began; then the Nightly Update Statistics routine would begin before the Purge routine was complete. The Recovery process would then run out of locks and asserts. A DRWTSN32.LOG file was generated and data migration did not complete on the logger

Defect Number: CSCma18528

Severity: 1

Component: nic.sprint.comm

Headline: Sprint NIC not going active. Cust running 4.6.2 on Win2k.

The Sprint NIC failed to properly initialize and go active on a newly upgraded ICM 4.6.2 system.

Defect Number: CSCma16804

Severity: 1

Component: pg.eapim

Headline: On CTI Manager fail under load, router no longer finds a Device Target.

After the CTI Manager (CallManager process) fails under load, once the IPCC Peripheral Gateway comes back on-line, the router cannot find device targets for telephones on those CallManagers serviced by the CTI Manager that failed.

Defect Number: CSCma19210

Severity: 1

Component: pg.eapim.jtapigw

Headline: IPCC PIM did not recognize deadlock condition and did not fail over.

The CallManager PG dead locked and no calls were routed. This condition continued until PG services were restarted. This occurred only if there were no agents on this PG, and all DNs were configured with related CTI Route Points.

Defect Number: CSCma17921

Severity: 1

Component: pg.opc

Headline: OPC has access violation when sideB of PG comes up.

The OPC process on the state-transferring side recycled when its partner was in service. This was due to an error in building the state records.

Defect Number: CSCma16735

Severity: 1

Component: router

Headline: Router Terminated in NAM Environment

In a NAM environment, the Router terminated unexpectedly about every three minutes.

Defect Number: CSCma20664

Severity: 1

Component: router

Headline: Router Terminated when Handling CallEventReport of Abandon

The Router restarted when handling a CallEventReport of Abandon after sending a Requery connect message for a Translation Route target.

Defect Number: CSCma18288

Severity: 2

Component: aw-bulk.config

Headline: Vru_Port_Map table interface reports error dialogs

The Vru_Port_Map table displayed two error dialogs. The first had no context. The second incorrectly reported an error about selecting peripherals from the wrong interface controllers. This interface did not allow the user to make inserts into this table.

Defect Number: CSCma18178

Severity: 2

Component: aw.config

Headline: Unable to associate Labels to Dialed Numbers after upgrading to ICM 4.6.2

Unable to associate a newly created Label to a Dialed Number that existed prior to upgrading to ICM 4.6.2.

Defect Number: CSCma18474

Severity: 2

Component: aw.config

Headline: List tools performance issue with large numbers of records

After an upgrade to ICM 4.6.2, adding labels to the system took an unacceptable amount of time. With ICM 4.6.2, it could take from 5 to 20 minutes, or more, to add a single label to the system due to an un-timely response from the ICM List tools with a large configuration.

Defect Number: CSCma20637

Severity: 2

Component: aw.config

Headline: Deleted Objects tool - poor performance during select and delete.

In the Deleted Objects tool, when the Select All button was used, it took several minutes to select only 1000 objects. In addition, memory usage grew quickly and without limit (i.e., after selecting all with 1000 objects, over 100 MB is taken).

Defect Number: CSCma17584

Severity: 2

Component: aw.config.explorer

Headline: Unable to add a routing client as INCRP.

When trying to create a new routing client, it was impossible to select the INCRP client type. The system populated the client type with a blank field. Configuration Manager worked properly for all client types except the INCRP & ICRP types (in these cases the field was populated with an empty string).

Defect Number: CSCma15057

Severity: 2

Component: AW.config.list

Headline: Autorecord on Emergency call N or Y instead of 0 or 1.

The Agent Desk Settings List tool saved the AutoRecordOnEmergency as a 'Y' or an 'N' instead of a 1 or a 0. Agent Desk Settings records saved using the ICM 4.6.0 or the ICM 4.6.1 Agent Desk Settings List tool already have a 'Y' or 'N' saved. Versions of the Agent Desk Settings List tool that used 1 or 0 do not change the database.

Defect Number: CSCma20961

Severity: 2

Component: AW.config.list

Headline: Dialed Number name / descriptions lost.

This problem occurred after an upgrade to ICM 4.6.2,. The user added descriptive text at the end of the Dialed Number names. The descriptive

names disappeared from their dialed number names when the user tried to view the configuration information for each dialed number.

Defect Number: CSCma20658

Severity: 2

Component: ba.campaignmgr

Headline: Campaign Manager exited when a dialer with 90+ ports connected.

The BA Campaign Manager exited unexpectedly when it connected with a Dialer configured with more than 90 ports.

Defect Number: CSCma17412

Severity: 2

Component: ba.campaignmgr

Headline: Records with an Account Number longer than 30 characters were not dialed.

An import rule with an account number that consisted of 30 or more characters automatically used this value as the AccountNumber field length in the Dialing List. When this value was copied to the customer record, it overwrote the end of the Account Number string and part of the GMT value. This created an incorrect value for the customer GMT, resulting in records that were rejected based on time values.

Defect Number: CSCma17685

Severity: 2

Component: ba.dialer

Headline: Dialer ended call because of no answer too early in predictive mode (T1 only).

Outbound customer calls configured in predictive mode would sometimes only ring a couple of times before the Dialer declared it as a “no-answer” call, even if the configured ring number was high. For example, if the configured ring number was 5, the Dialer would sometimes only ring the customer once or twice before declaring the call as a no-answer and end the call. (This only occurred on the T1 interface.)

Defect Number: CSCma23366

Severity: 2

Component: cg.ctiserver

Headline: CTI Server fails with error in AddSocketToDescriptor.

CTI Server exited with the following string in the trace message:
Fail:TransportProtocol::AddSocketToDescriptor: Duplicate add of socket to select descriptor .

Defect Number: CSCma17422

Severity: 2

Component: db.distributor.rtf.client

Headline: AW DB Error. Message Line 1: Incorrect syntax near :, Id 170

The Real Time Client (RTC) process repeated an “Incorrect syntax, ID 170” message sequence 3 or 4 times per day. When this message sequence occurred, the RTC process became unstable and ICM configuration became unavailable.

Defect Number: CSCma20716

Severity: 2

Component: db.HDS.migration

Headline: DB Migration uses wrong RecoveryKey

Database migration on an HDS used the wrong RecoveryKey and attempted to delete all the remaining rows in the v51_Termination_Call_Detail table.

Defect Number: CSCma16271

Severity: 2

Component: db.logger

Headline: Update Statistics preventing the LGR from updating its DB (upgrade).

After an upgrade from ICM 4.1.5 to 4.6.2, the Update Statistics routine prevented the logger from updating its database. The logger did not initialize because database was out of date. The Update Statistics process then restarted.

Defect Number: CSCma17984

Severity: 2

Component: db.logger

Headline: Unable restrict data insertion into Termination_Call_Variable.

It was not possible to restrict data insertion into the Termination_Call_Variable table.

Defect Number: CSCma18016

Severity: 2

Component: db.logger

Headline: Need ability to turn up tracing on ECC variable DB insertions.

When the ECC Variables buffer was exhausted while information was being written to the database, the Logger trace logs did not reflect the problem.

Defect Number: CSCma17983

Severity: 2

Component: db.logger

Headline: Logger crash using ECC variables.

When ECC variables were being written to the Termination_Call_Variable table, the Logger would crash.

Defect Number: CSCma21997

Severity: 2

Component: db.logger

Headline: Logger process exited unexpectedly.

The Logger process exited unexpectedly with the following error message: "111447 la-nm Process lgr on ICR\irs\LoggerA went down for unknown reason. Exit code 0x80000003."

Defect Number: CSCma21505

Severity: 2

Component: db.logger

Headline: Logger crashes with reserved DB-LIB connections are exhausted error.

The Logger crashed with the following error message: "13:06:51 la-lgr Fail: The reserved DB-LIB connections are exhausted. at File: x:\icm\logger\loggerlib\sqltable.cpp. Line 1682."

Defect Number: CSCma21915

Severity: 2

Component: db.logger

Headline: Unable to make changes to Routing Scripts, without error.

Saving of changes to Script Editor scripts was slow because of communication problems between the AW, Router, and Logger.

Defect Number: CSCma21086

Severity: 2

Component: db.logger.migration

Headline: Script data missing after upgrade; router keeps requesting scripts.

After an upgrade to 4.6.x , user could open only some of the scripts. After every configuration change, the router become so busy that the user had to wait several minutes before another configuration change could be made.

In addition, some of the Script_Data table contents were missing from the database.

Defect Number: CSCma20746

Severity: 2

Component: db.logger.synch

Headline: After upgrade to 4.6.2, Initializing Local DB is Very Slow

After upgrade to 4.6.2, initializing the local DB takes 5 to 7 hrs to complete.

Defect Number: CSCma16525

Severity: 2

Component: inetscripted

Headline: Exporting/Importing scripts without edit rights.

If a user exported a script to which he did not have edit rights, though feature control, then imported the script and mapped it to a different object, the user could save the script with changes.

Defect Number: CSCma17835

Severity: 2

Component: inetscripted

Headline: Internet Script Editor not receiving configuration changes.

If a user made changes through the Configuration Manager, those changes were not automatically reflected in an active Internet Script Editor session.

Defect Number: CSCma22323

Severity: 2

Component: inetscripted

Headline: Internet Script Editor Unexpectedly Closes

If another user modified a large script, other active sessions of Internet Script Editor closed unexpectedly.

Defect Number: CSCma19726

Severity: 2

Component: nic.crsp

Headline: CRSPNIC process fails if disconnect received prior to answer message.

When routing calls from a Network VRU using CRSP NIC, the NIC process aborted and restarted if a disconnect message was received before the corresponding answer message.

Defect Number: CSCma18448

Severity: 2

Component: nic.incrp

Headline: Calls w/ max ECC variables negative impact NAM/CICM load performance.

Using the maximum configurable ECC variable data volume (2000 bytes) in a NAM/CICM environment, calls occasionally failed under significant CPS load. Calls timed out (at the NAM) before they could be routed to the proper CICM.

Defect Number: CSCma19022

Severity: 2

Component: pg.alcatel

Headline: Making a call via CTI results in odd behavior

If a third-party Make Call was done, two calls appeared in the CTI Server interface.

Defect Number: CSCma17450

Severity: 2

Component: pg.aspect

Headline: Unable to send DTMF message on Aspect.

The agent received an incoming call and sent a DTMF signal. The result was a Peripheral error.

Defect Number: CSCma18163

Severity: 2

Component: pg.definity

Headline: No screen pops appeared when agents use a 3-digit agent ID softphone login.

The agent used a 3-digit agent ID when logging into the softphone. No screen pop occurred. This was because the agent state was unknown when a 3-digit agent ID was used.

Defect Number: CSCma20380

Severity: 2

Component: pg.definity

Headline: Incorrect call details presented to agents.

The agent was in the NOT_READY state, entered a READY command in the CTI Desktop, and received a queued call. The call was delivered to the agent but the agent never went to the RESERVED state.

Defect Number: CSCma22387

Severity: 2

Component: pg.definity

Headline: G3 CTI Agent with Voicemail experiences problem CallFlow.

Station A called station B. Station B had the coverage feature ON. The call was forwarded to station C. After the call was forwarded to station C, the call left station B. Although the call had left station B, events were received on the CTI Desktop.

Defect Number: CSCma05398

Severity: 2

Component: pg.eapim

Headline: PG recovery, call was retained, no way out of call.

This problems existed with IPCC Softphone on CTI release 4.1 & 4.5 in the following scenario: Agent was talking on an inside call. Agent 1 had Agent 2 on hold. The PG went down and then came back up. The call was still live on the softphones, retained their previous states, but neither Retrieve or Release buttons were enabled. The agent closed the phone and reopened/logged in, but the phones returned to the same state, still with no way to release the call from either end.

Defect Number: CSCma20864

Severity: 2

Component: pg.eapim

Headline: Simultaneous agent disconnect and phone restart problem.

Agents could not log out or log in. All agent requests for agent and call control time out. Failed the active side PG to let the inactive side take over. This problem could occur when an agent resets his/her phone and closes his/her agent desk top application at the same time.

Defect Number: CSCma17552

Severity: 2

Component: pg.eapim

Headline: IPCC PIM exited when transfer to agents phone after log out
Call Manager PIM process exited. All agents were temporarily logged out.

Defect Number: CSCma22330

Severity: 2

Component: pg.eapim.jtapigw

Headline: JTAPI GW deadlock on agent disconnect plus call held

Agents cannot do call control from the agent desktop application, including log in or log out. Post routed calls to CTI Route Points are treated as busy. This problem occurred when the agent closed the agent desktop application and put a call on hold at the same time.

Defect Number: CSCma17288

Severity: 2

Component: pg.eapim.jtapigw

Headline: JTAPI G/W process hung which led to PG failover

While load testing IPCC, the A side JTAPI Gateway failed. The A side JGW was reporting active but not updating events. Eventually JGW failed over to the B side.

Defect Number: CSCma17735

Severity: 2

Component: pg.eapim.jtapigw

Headline: All call events were ignored after adding a multi-line phone.

Calls to CTI Route Points returned fast busy. Agents could not log in.

Defect Number: CSCma21303

Severity: 2

Component: pg.eapim.jtapigw

Headline: Race condition caused agents stuck in alerting state.

Agents were getting stuck in alerting state. This occurred when an agent (Agent A) received and answered an inbound call, then performed a consultative transfer to another agent (Agent B). Agent B answered the call at approximately the same time Agent A completed the transfer.

Defect Number: CSCma21362

Severity: 2

Component: pg.eapim.jtapigw

Headline: Agent on PIM2 left in talking state after transfer call was dropped.

This problem occurred when an agent (Agent A) called a second agent (Agent B), who completed a consultative transfer to a third agent (Agent

C). When Agent C dropped the call, Agent A agent was left in the talking state.

Defect Number: CSCma21395

Severity: 2

Component: pg.eapim.jtapigw

Headline: IPCC agent cannot answer consult call w/ agents on multiple CMs.

An agent was not able to answer call from an agent application on an agent-to-agent consult call because the call did not appear in the destination agent's desktop.

Defect Number: CSCma09500

Severity: 2

Component: pg.mer

Headline: Calls stuck in OPC state of Connected and None.

Skill group statistics did not match the Default Service Statistics. The agent received a call on the IDN line and the call was not answered. It was subsequently forwarded to a VRU, which is an unmonitored device.

Defect Number: CSCma18011

Severity: 2

Component: pg.mer

Headline: CTI Unable to Login Agts using Agt IDs that Use a Leading Zero.

The customer was unable to log into a CTI softphone using an agent ID that started with a leading zero. When the agent tried to log in, the softphone login window was populated with extension and agent ID. However, when the agent clicked OK, the screen was grayed out and softphone functionality was locked up.

Defect Number: CSCma01822

Severity: 2

Component: pg.opc

Headline: Duplicate RouterCallKeySequence Number on take back transfers.

Router Call Key Sequence Number is not incrementing for all call legs, due to the call's bouncing among several ACDs.

Defect Number: CSCma23221

Severity: 2

Component: pg.opc

Headline: DeliveredEventResetASACalculation behaving opposite of normal.

The AnswerWaitTimeToHalf in Service_Half_Hour calculation is incorrect.

Defect Number: CSCma17945

Severity: 2

Component: pg.opc

Headline: OPC asserts with a DrWatson error

The PIM sent a -1 in the call ID of the first party of a conferenced call. This caused a failure in the Symposium ACD.

Defect Number: CSCma01822

Severity: 2

Component: pg.opc

Headline: Duplicate RouterCallKeySequence Number on take back transfers.

Router Call Key Sequence Number was not incrementing for all call legs. This made it more difficult to determine the sequence of call legs when doing customized cradle to grave reporting.

Defect Number: CSCma23096

Severity: 2

Component: pg.opc

Headline: OPC logs out 5 agents per second during PG failover/

If the network cable attached to the active CTI Manager was pulled while 500 agents were logged in, the system took 4 minutes to fail over from PG Side A to PG Side B.

Defect Number: CSCma23221

Severity: 2

Component: pg.opc

Headline: DeliveredEventResetASACalculation behaving opposite of normal.

The AnswerWaitTimeToHalf in Service_Half_Hour calculation was incorrect if the specified registry setting DeliveredEventResetASACalculation was enabled.

Defect Number: CSCma16968

Severity: 2

Component: pg.opc

Headline: OPC - ForcedClosedCalls inaccuracy.

When OPC reported the ServiceHalfHour data, the ForcedClosedCalls field was not always correct. (ForcedClosedCalls are defined as "Failed Software" with a CallDisposition value of 27 in the Termination Call Detail record.) For example, OPC half hour data could indicate that there was a forced closed call, but there was no TCD record with a CallDisposition value of 27.

Defect Number: CSCma17001

Severity: 2

Component: pg.opc

Headline: Supervisor Assist time not captured in DB or on templates.

After a supervisor assist call, the skill group table did not show the supervisor assist time, though it showed the supervisor assist call count.

Defect Number: CSCma17328

Severity: 2

Component: pg.opc

Headline: OPC has the wrong value for LongestRouterCallQNow with no calls in Q.

LongestRouterCallsInQ field in the Skill Group Real Time table displayed an invalid value.

Defect Number: CSCma17535

Severity: 2

Component: pg.opc

Headline: OPC assertion on state transfer.

OPC recycled when its partner came in service.

Defect Number: CSCma21176

Severity: 2

Component: pg.opc

Headline: OPC asserts on ClearConferencedCallList.

PG-OPC occasionally cycled upon processing two duplicate conferenced events. (Two conferenced events with different primary and secondary

connection IDs for the same calls were seen.) This might have corrupted the conference list that OPC maintains during a conference.

Defect Number: CSCma16569

Severity: 2

Component: pg.symp.noseipim

Headline: Late RTD Msg Causes Agt to be assigned to default skill group.

When an agent logged in and answered an ACD call immediately, sometimes the agent was put in the unconfigured skill group and the PG needed to be restarted before the agent could be assigned to the correct skillgroup

Defect Number: CSCma13551

Severity: 2

Component: pg.spectrumpim

Headline: Transaction Link Alarms after failover to redundant PG/Transaction L.

If the TCP connection was lost and then restored, the PIM failed over to the stand-by PG and Transaction Link. When this happened, there was a continuous Transaction Link Alarm in the ACD for the original Transaction Link.

Defect Number: CSCma17986

Severity: 2

Component: pg.vru

Headline: Call not transferred to second agent after RONA timeout expiration

When RONA timeout expired before ISN RNA timeout, ISN did not transfer the call to the next agent.

Defect Number: CSCma22459

Severity: 2

Component: phonehome

Headline: DTP (Listener phone home) not working properly with Win2K OS.

DTP failed to phone home on the primary or secondary number because the modem was not responding. Since DTP was not able to communicate with the central TAC, the Listener reported the following: "SideA(B) Logger has not phoned home to Listener in over 12 hours".

Defect Number: CSCma18739

Severity: 2

Component: phonehome

Headline: Unable to configure RAS for DTP phone home w/ Windows 2000.

The Remote Monitoring Suite documentation did not include information on configuring the Listener Server as a RAS Device for Windows 2000.

Defect Number: CSCma20865

Severity: 2

Component: reporting.thirdparty

Headline: Jaguar rejecting connections

In ICM 4.6.2, Jaguar rejected user connections when there was a lot of activity on the system. In ICM 5.0, this problem was fixed by adding the following properties to the Jaguar Server configuration:

com.sybase.jaguar.server.maxconnections 1000

com.sybase.jaguar.server.maxthreads 1000

Defect Number: CSCma15115

Severity: 2

Component: reporting.webview.ICM

Headline: Following upgrade, Jaguar server using 99% CPU on the AW.

In ICM software version 4.6(2), the Jaguar server process, jagsvc.exe, used up to 99% of the CPU on the Admin Workstation/WebView server after upgrade because the Merant ODBC driver was not included in the Sybase root directory. This issue is resolved in ICM software version 5.0.

Defect Number: CSCma08018

Severity: 2

Component: reporting.webview.ICM

Headline: Setup doesn't copy the WebView installation files correctly.

When a user uninstalls the Jaguar or New Atlant Servlet, some WebView files are also removed because they were installed in the Jaguar and the New Atlanta Servlet directories. So if a user reinstalls Jaguar or the New Atlanta Servlet, he/she should also rerun ICM Setup in UpgradeAll mode to make sure any deleted WebView files get reinstalled correctly. In ICM 5.0, this is documented in the "Uninstalling the Third Party Software" section of the "*Cisco ICM Software WebView Installation Guide*."

Defect Number: CSCma12795

Severity: 2

Component: router

Headline: Router Memory Usage Constantly Increased

The Router unexpectedly restarted because its memory usage was constantly increasing.

Defect Number: CSCma13784

Severity: 2

Component: router

Headline: ipcc_callty20 S/L was Always Zero

The CallType IPCC reports did not contain valid data because these Call Type column in the Logger database tables (Call Type Half Hour and Call Type Real Time) did not contain valid data: ServiceLevelTo5, ServiceLevelHalf, and ServiceLevelToday .

Defect Number: CSCma14640

Severity: 2

Component: router

Headline: RunVRUScript Failed on Failure Path of Label Node with Requery

The RunVRUScript message failed on the failure path of the Label node with Router Requery enabled because the Router mistakenly cleared the context for the call.

Defect Number: CSCma16902

Severity: 2

Component: router

Headline: High Call Loads Caused High NAM Router Utilization and CICM Timeouts

NAM customers running large configured routing label pools (e.g. on the order of 10,000 labels or more) experienced significant high latency in returning PSTN route responses. This excessive delay resulted in timed out calls, leading to network default routing.

Defect Number: CSCma17022

Severity: 2

Component: router

Headline: Trans Rte to VRU to Queue to SG w/ Rtr-Rqry Enabled Didn't Work

When you used a Translation RoutetoVRU node connected to a Queue to Skill Group node with Router Requery enabled, when the Router Requery executed, the call disconnected from the VRU.

Defect Number: CSCma17280

Severity: 2

Component: router

Headline: RouterCallKey in Records did not Match for a VRU Originated Call

In a NAM/CICM environment, when a VRU PG routing client sent a newcall message, both a RouterCallDetail and TerminationCallDetail record were generated, but the RouterCallKey in both records did not match.

Defect Number: CSCma17400

Severity: 2

Component: router

Headline: Router Exited Following Network Transfer to a Type3 VRU

Following a Network Transfer from an ACD Agent to a Type3 VRU, where the VRUSCRIPTTIMEOUT setting in the NAM router is less than the VRU Script Timeout setting in Configuration Manager at the CICM, both sides of the NAM Router exited and restarted when the end of the VRU Announcement is reached.

Defect Number: CSCma17426

Severity: 2

Component: router

Headline: CICM Router Crash on Side A with DrWatson Entry

The Router restarted unexpectedly.

Defect Number: CSCma17563

Severity: 2

Component: router

Headline: Route Select Failed if Selecting Max or Min Value of Negative Numbers

If the Router attempted to select the maximum or minimum value of multiple choices, and they are all negative numbers, it failed.

Defect Number: CSCma17797

Severity: 2

Component: router

Headline: NetXfer Call to Type 3 VRU NBQ Failed to DeQueue

A call network transferred to NBQ on the CICR remained at the VRU after MaxTimeInQueue timeout was reached, and stayed at the VRU until the VRU script was finished. This resulted in the customer being billed for the duration of the call at the VRU.

Defect Number: CSCma18139

Severity: 2

Component: router

Headline: Router Crashed with an Error in the MeterLabel Function

The Router failed with a Dr. Watson error when the script was edited while Active; it also failed to receive the state transfer.

Defect Number: CSCma18283

Severity: 2

Component: router

Headline: Router Did Not Send a Release Message to type 7 VRU

The Router did not send the Release message to the VRU, so the call stayed in the VRU platform.

Defect Number: CSCma18794

Severity: 2

Component: router

Headline: Unconfigured Label in NAM Caused Router to Terminate

In a NAM environment, if you used a scripted with a Select node (LAA) with router requery enabled and attached to a skill group target, when the skill group has 1 associated label and the label was not configured at the NAM, the NAM router crashed when CICM timed out waiting for a requery response.

Defect Number: CSCma18891

Severity: 2

Component: router

Headline: Requery Did Not Work with Translation Routes and Answer Supervision

When router requery was enabled in a Route Select or Label node, a label for a target that is known to be available was not returned. When router requery was disabled, the correct label was returned.

Defect Number: CSCma19031

Severity: 2

Component: router

Headline: VRUPim Logs Error: SkillTargetID Did Not Match a Configured Service

With Service Array in a Translation Route to VRU node, the VRUpim logged errors similar to the following string: "SkillTargetID 9088 (0x2380) does not match a configured Service."

Defect Number: CSCma19549

Severity: 2

Component: router

Headline: Router Stat Sync Times Out After 4.0.3 to 4.6.2 Upgrade

After upgrading from 4.0.3 to 4.6.2, the Router state synchronization failed. Side B is operating in simplex, and aborted when Side A attempted to be brought online.

Defect Number: CSCma19764

Severity: 2

Component: router

Headline: NAM Times Out Calls Prematurely

The NAM CallRouter was prematurely issuing a timeout shortly after sending the request to the CICM. The CICM responded "in time" but the NAM already timed out the call.

Defect Number: CSCma20013

Severity: 2

Component: router

Headline: Router Unexpectedly Exited with Requery Call with Call Tracer

The Router unexpectedly exited when you sent a requery call with Call Tracer.

Defect Number: CSCma21296

Severity: 2

Component: router

Headline: Router B crashes after Sate Transfer

The Router restarted unexpectedly when calls were running for a certain call type, and the call type was deleted before the CallTypeServiceLevelTimer timed out, or when calls were running through a script which had a Divert Label node and a script that was running the calls was deleted.

Defect Number: CSCma21947

Severity: 2

Component: router

Headline: CICR Router Failure with DrWatson and No Tracing On.

In a NAM environment, the Router restarted by node manager while running schedule target calls. The schedule target was deleted while the call was active.

Defect Number: CSCma21967

Severity: 2

Component: router

Headline: Network Transfer Failed when Requery was Enabled

In a NAM/ICM/IPCC environment, using ISN as the routing client a Q/prompting platform (Type 5 IVR), network transfer failed when router requery was enabled.

Defect Number: CSCma22538

Severity: 2

Component: router

Headline: Router Sent a DialogFailure Message to VRU

The Router sent a DIALOGUE_FAILURE_EVENT to the VRU while it is processing a Connect request and after it has sent a RUN_SCRIPT_RESULT message. This resulted in erroneously dropped calls.

Defect Number: CSCma21489

Severity: 2

Component: router

Headline: Call Type SLCalls and SLAbandonCalls Not Incremented for SL Calls

The Call Type service level (SL) data was not pegging properly. In the Call_Type_Half_Hour and Call_Type_Real_Time tables, the ServiceLevelCallsHalf(To5/Today) and ServiceLevelAbandHalf(To5/Today) values remained 0, while the ServiceLevelCallsOfferedHalf(To5/Today) values were incrementing with each call.

Defect Number: CSCma16060

Severity: 2

Component: scripteditor

Headline: Script Editor generates bad logger transaction

If you edited then saved a script, an extra transaction was generated, causing multiple errors in the Router Logger logs.

Defect Number: CSCma17239

Severity: 2

Component: scripteditor

Headline: Importing Scripts with unmapped skills/service.

If you imported scripts with unmapped skill groups and services, Script Editor unexpectedly terminated.

Defect Number: CSCma17789

Severity: 2

Component: scripteditor

Headline: Mouse pointer not aligned with nodes and objects in script editor

In larger-sized scripts, the mouse pointer was not aligned with nodes and objects in Script Editor.

Defect No.	Component	Sev.	Headline
CSCma17063	agent-reporting	3	CMS-less PIM; opctest only reporting LoggedOn and NotReady states.
CSCma18131	aw	3	Dumpcfg.exe doesnt work with NT Integrated Security.
CSCma18546	aw	3	Large Transaction Log Required to Complete Initialize Local DB.
CSCma18725	aw	3	DBLib error in Distributor rtclient process after upgrading to 4.6.2.
CSCma21656	aw	3	ipcc_perskg24 template, customer getting high utilization percentage.
CSCma17937	aw.config	3	Region Editor crashes in rare config. Operation.
CSCma18402	aw.config	3	Explorer tools slow in handling 10^3 level records.
CSCma18683	aw.config	3	4.6.2 - PG Explorer - Symposium Peripheral Monitors unusable.
CSCma19826	aw.config	3	Peripheral Target list too long and unsorted in Label List.
CSCma15552	aw.config.ba	3	Unable to modify Blended Agent Dialer port map extension.
CSCma20743	aw.config.ba	3	Portmap config should enforce a 96 port limit and a 10 char station.
CSCma18896	aw.config.ba	3	Large Query Rule Clauses (> 255 chars) may cause import errors.

CSCma16608	aw.config.explorer	3	Agent Explorer allows mapping Supervisor. to domain administrator.
CSCma16672	aw.config.explorer	3	Responsiveness to typing in Explorer tools edit field is slow.
CSCma16705	aw.config.explorer	3	Trunk Group Explorer sets default enterprise name incorrectly.
CSCma16729	aw.config.explorer	3	Announcement Explorer: Error appears upon Retrieve.
CSCma17110	aw.config.explorer	3	NIC Explorer doesn't allow edit of Default Call Type.
CSCma17189	aw.config.explorer	3	Unable to recreate NIC even after removing from Deleted Objects.
CSCma17209	aw.config.explorer	3	Region explorer displays region without proper order
CSCma17331	aw.config.explorer	3	Sub skill groups descriptions dont update
CSCma17424	aw.config.explorer	3	Configuration Manager : Mouse click event not consistent
CSCma18397	aw.config.explorer	3	Service Array does not display N\new route built in wizard.
CSCma20719	aw.config.explorer	3	Explorers unable to select multiple records at once for deletion.
CSCma16301	aw.config.list	3	Security authentication fails when PDC isnt present.
CSCma20736	aw.config.list	3	Member tab sorted by ID, not EnterpriseName in Several List tools.
.CSCma21973	aw.config.regions	3	Region Editor prefix business rule restrictions need to relax.
CSCma21509	aw.synchronize	3	Init AW can cause contention problems on the logger.
CSCma04799	aw.trans.route.wiz	3	TRWiz - cannot change value.
CSCma16822	aw-bulk.config	3	Bulk Dialed Number Tool - Sort does not sort on specified column.
CSCma16949	aw-bulk.config	3	Issues with saving Imported data in Bulk Configuration Tool.
CSCma14194	ba.dialer	3	Dialer ports became stuck with DialogicHangupFlag entry set to false.
CSCma17276	ba.dialer	3	Predictive Algorithm rounded up fractional lines to dial.
CSCma17413	ba.dialer	3	Dialer would not set AccountNumber ECC variable when >30 characters.
CSCma17688	ba.dialer	3	Canceled calls could not be stored as abandoned in database.

CSCma18936	ba.dialer	3	CTI Server did not fail over if co-located with BA Dialer.
CSCma20319	ba.dialer	3	1 customer record reserved all available agents in multidialer scenario.
CSCma21426	ba.dialer	3	Dialer port real-time report did not contain query rule name.
CSCma17622	ba.dialer.g3	3	BA Dialer was not compatible with newer rev of dialogic software.
CSCma18813	ba.dialer.g3	3	ToneSet utility needed to handle single tone dial-tones.
CSCma21142	ba.dialer.g3	3	BA did not detect fax machines when using analog Dialogic boards.
CSCma22017	ba.dialer.g3	3	Dialer would not start when more than 1 E1 board is installed.
CSCma18974	db.create	3	Views for Historical Tables not built properly.
CSCma15381	db.distributor.replication	3	Persistent variable duplicate error in replication after upgrade.
CSCma17612	db.icmdba	3	ICMDBA generates obscure error message .
CSCma17737	db.icmdba	3	Cannot obtain instances for <machinename> when running Setup.
CSCma18817	db.icmdba	3	ICMDBA does not calculate database usage correctly.
CSCma22584	db.icmdba	3	ICMDBA reports allocated memory as 1.
CSCma17272	db.icmdba.import.export	3	SQL upgrade with ICMDBA fails if start prior to migration completion.
CSCma20133	db.icmdba.import.export	3	Customer unable to import data in 4.6.2 after exporting from 4.6.1.
CSCma21507	db.icmdba.import.export	3	ICMDBA should be able to import a CC configuration to a distributor.
CSCma21504	db.logger	3	Logger can deadlock with itself when computing the checksum.
CSCma21743	db.logger	3	Registry key to enable/disable storing ECC variables.
CSCma14479	db.logger	3	Router does not write requeryStatus variable into RouteCallDetail
CSCma20632	db.logger.migration	3	Logger error trying to update security tables with SQL 7.0.
CSCma14895	db.logger.synch	3	Logger asserts when NM shutdown occurs during state transfer.

CSCma07834	db.logger.validation	3	Cannot delete a service array after one is configured.
CSCma13806	db.logger.validation	3	Changing or adding disabled ECC variable triggers size validation.
CSCma15130	db.logger.validation	3	User can activate a script that has been deleted.
CSCma15215	db.logger.validation	3	Various error messages need to be reworded for clarity.
CSCma16467	db.slqserver	3	Tables still exist after replication on Logger, AW and HDS complete.
CSCma17960	documentation	3	Need to state in documentation if Leading 0 Accepted for CTI Login.
CSCma07205	documentation	3	CTI OS Server requires no password for the ODBC to work.
CSCma16270	documentation	3	Key config param options not called out for device target.
CSCma17574	documentation	3	Label list tool forgets field values.
CSCma18466	documentation	3	Requery help topic does not exist.
CSCma20601	documentation	3	Help text content for some rprts on Monitor ICM and WebView is wrong.
CSCma15640	inetscripted	3	User Not Affected By Feature Control Changes While App Is Open
CSCma16256	inetscripted	3	IScriptEditor upgrade pops a message about read-only files
CSCma16372	inetscripted	3	Palette in ISE Script Editor should not appear for read-only user
CSCma16831	inetscripted	3	Call Type Manager Causes Unexpected Exit Of Script Editor
CSCma16912	inetscripted	3	Show Page Boundaries is not functional in Internet Script Editor
CSCma17361	inetscripted	3	Edit Mode Enabled Even Though AW is Slave NAM
CSCma17950	inetscripted	3	ICM Configuration Updates Cause a Full Reload
CSCma18146	inetscripted	3	Internet Script Editor Pauses Indefinitely After Clicking Reload
CSCma16452	international	3	Japanese Script Editor - English hardcoded in Call Type Manager
CSCma18383	international	3	Japanese version of Script Editor terminated. On the Japanese version of ICM, Script Editor closed unexpectedly when certain nodes contained errors.

CSCma20662	nic.btv2	3	BTV2 NIC fails with NetwrkXferEnabled Requery Connect.
CSCma17269	nic.gk	3	Gatekeeper NIC does not report out of range port number as invalid.
CSCma22044	nic.sprint.comm	3	Sprint NIC fails to validate label length before sending to SCP.
CSCma17055	pg.alcatel	3	Alcatel 4400 - CSTA link overload.
CSCma17360	pg.aspevt	3	Aspevpim crash on error.
CSCma18134	pg.definity	3	During outside Consult call, lost of call. control on engaged/busy to.
CSCma20064	pg.definity	3	Outbound Call over ISDN Trunks gets terminated and recreated.
CSCma13145	pg.definity	3	ECSPIM asserting randomly.
CSCma20083	pg.definity	3	(FO) After client failover agent cannot answer call.
CSCma21016	pg.definity	3	RealTime TrunkData information not being passed by G3 PIM.
CSCma21155	pg.definity	3	ICM Peripheral Configuration Parameter for Monitor Agent not working.
CSCma21907	pg.definity	3	ECSPIM populates CallingDevice field incorrectly.
CSCma22097	pg.definity	3	ECSPIM doesn't populate CallingDevice as per configuration settings.
CSCma22485	pg.definity	3	AgentSmartStateTimer sends reversed messages to OPC.
CSCma17231	pg.dms100	3	DMS-100 PIM sending incorrect CID and CS to OPC on conf. Event.
CSCma19121	pg.eapim	3	Incorrect/confusing call disposition in TCD records.
CSCma15630	pg.eapim	3	CallType does not change after release call w/Sup conf call to agent.
CSCma16999	pg.eapim	3	Conference-IP IVR: Agent cannot retrieve held call.
CSCma17035	pg.eapim	3	Call disappears when 2-step transfer to VRU if agent is available.
CSCma17059	pg.eapim	3	Calls Offered incremented for incorrect service during transfer.
CSCma17062	pg.eapim	3	Transfer out vs transfer in. Service stats are incorrect.
CSCma17108	pg.eapim	3	Calltype is wrong during consult conference after emergency.

CSCma17252	pg.eapim	3	Cannot intercept call after SST call from Supervisor to Agent.
CSCma17253	pg.eapim	3	SS transfer and then Consult Conference cannot hang up caller.
CSCma17624	pg.eapim	3	Need to provide easier recovery for agent stuck on hold.
CSCma17994	pg.eapim	3	Blind conference supervisor call should not cause BARGE_IN.
CSCma18189	pg.eapim	3	Intercept not incremented in ipcc_peragt21 report.
CSCma18670	pg.eapim	3	ICM Reports wrong reason code for agent state change.
CSCma18760	pg.eapim	3	Two calls in que in VRU, cycle PG PIM1 agent goes into reserved mode.
CSCma18819	pg.eapim	3	Sometimes IPCC agent cannot answer call from Unity Voice Mail.
CSCma19406	pg.eapim	3	Clear call request fails in JTAPIGW but does not return from EAPIM.
CSCma19733	pg.eapim	3	Failed post routed call not properly cleaned up.
CSCma20374	pg.eapim	3	Agent set not ready, PIM Log: Unable to find configured linePtr.
CSCma17587	pg.eapim.jtapigw	3	Abandon not pegged at CT if RONA to IVR first instead of LAA.
CSCdy60268	pg.eapim.jtapigw	3	JTAPI 1.4(x.x) require manual configuration of version field.
CSCma17179	pg.eapim.jtapigw	3	JGW java.lang.NullPointerException and CALL_ALREADY_EXISTS.
CSCma17806	pg.eapim.jtapigw	3	Scalability: Logging 1000+ agents thru CTITest causes JGW to hang.
CSCma18916	pg.eapim.jtapigw	3	JGW hangs when adding multiple devices or Device w/ multiple lines.
CSCma19289	pg.eapim.jtapigw	3	Agent gets stuck on hold - race condition.
CSCma19519	pg.eapim.jtapigw	3	Agent gets stuck on hold - failed conference call.
CSCma16671	pg.mer	3	Agent could not logout from softphone.
CSCma19217	pg.mis	3	MIS asserts when EMS tracemask set to 0xffff (or higher).
CSCma21951	pg.opc	3	CTISVR Assertion failed due to peripheralType mismatch.
CSCma06212	pg.opc	3	Service Level not counted right when established precedes precall.

CSCma16819	pg.opc	3	Direction shows NOT APPLICABLE for calls on hold.
CSCma16967	pg.opc	3	Conference Out not incrementing in DB tables or applicable templates.
CSCma17004	pg.opc	3	Agent_Skill_Group_Half_Hour is missing data.
CSCma17079	pg.opc	3	Agent hang when drop call after ctisvr failure during emerg. call.
CSCma17081	pg.opc	3	Calltype is wrong when making a blind emergency call.
CSCma17091	pg.opc	3	Cant conference again after failover Ctios (simplex&duplex).
CSCma17112	pg.opc	3	CallType is wrong after Intercept call.
CSCma17259	pg.opc	3	CTI Switchover Logic During NoClientConnect not correct.
CSCma17346	pg.opc	3	TCD records time stats wrong for some Meridian and IPCC Peripherals.
CSCma17423	pg.opc	3	PG trunk status stays resident even when the PG sees the IVR offline
CSCma17490	pg.opc	3	SupAssist column not increased after SupervisorAssist consult-xfer
CSCma17534	pg.opc	3	Opctest is failing to work on the disabled side
CSCma17602	pg.opc	3	OPC is resetting ANI previously set by Blended Agent Dialer
CSCma18190	pg.opc	3	Consultation not incremented when agent consults via local extension
CSCma18321	pg.opc	3	InternalCallsRcvd and InternalCallsRcvdTime not inc. w/ Assist calls
CSCma18697	pg.opc	3	OPC_MIS feature should block VRU events from reaching CTI Server
CSCma18973	pg.opc	3	Realtime Trunk Data inconsistencies
CSCma20387	pg.opc	3	CallsQueuedNow metric does not get decremented in the Skill Group
CSCma21652	pg.opc	3	Call ID reclassification disrupts the conference logic for some ACDs
CSCma18709	pg.symp	3	agents showing extremely long available times
CSCma19345	pg.symp	3	Symposium PIM: agent state changes unreliable
CSCma03162	pg.symp.noseipim	3	False Design in Determining LocalConnectionState When Call Dequeued

CSCma11696	pg.symp.noseipim	3	PIM tests failing
CSCma17125	pg.symp.noseipim	3	Agent Line State Changes Reported Twice to OPC
CSCma17356	pg.vru	3	ICM Blind Transfer: Route End with Status Code Unspecified Failure
CSCma15434	pg.vru	3	Simultaneous inbound/outbound VRU callIDs produce unexpected result
CSCma16842	pg.vru	3	VRUPim not handling DialogueFailureConf for some timing conditions
CSCma17919	pg.vru	3	VRU PIM does not handle BlindTransferConf message
CSCma21333	pg.vru	3	VRU unable to convey invalid label status back to VRU PG
CSCma16537	reporting	3	Wrong From and To date formats for UK browser on historical reports.
CSCma16920	reporting	3	Too many summary rows in Campqrrule11
CSCma16922	reporting	3	Available column should be put into campqrrule01.
CSCma08886	reporting.monitoricm	3	InfoMaker: access to DB.
CSCma17310	reporting.templates.ipcc	3	Refresh doesn't work in WebView for Historical reports.
CSCma17321	reporting.thirdparty	3	Use of thresholds in WebView reports leads to high CPU utilization.
CSCma19470	reporting.webview.ICM	3	Get java.lang.NullPointerException in both WebView panes.
CSCma21156	reporting.webview.ICM	3	Real Time report cannot be updated automatically.
CSCma21659	reporting.webview.ICM	3	Jaguar Scalability issue when there are too many (5000) items.
CSCgt09649	router	3	After the TranslationRouteToVRU operation, the router applies the wrong client ID.
CSCma10839	router	3	Adjunct routing requests fail on pre-routing.
CSCma11143	router	3	Missing values in the Route_Call_Detail for dynamic labels.
CSCma13113	router	3	Call abandon should be noted when a call is abandoned before being queued.
CSCma14301	router	3	Enterprise Service Level calculations from the router are incorrect.
CSCma16905	router	3	If CICR returns a dialog fail, the router continues without setting status.

CSCma17060	router	3	A router fails on large numbers of ApplicationGatewayTransaction timeouts.
CSCma17180	router	3	Registry settings improperly return ECC variables from CICM.
CSCma17182	router	3	ICM delivers calls to the VRU when the Max Time in the queue is set to zero.
CSCma18347	router	3	RunScript from both NAM and CICM causes type 5 NIVR dialog to fail.
CSCma18392	router	3	Router should send a release to type7 VRU when it sends a dialog fail.
CSCma19538	router	3	Abandon label written to Call_Termination_Detail records.
CSCma20090	router	3	RunVRUScript after requery fails with Type7 VRU in NAM/CICM config.
CSCma20495	router	3	Large amounts of invalid data in the configuration database can break the router.
CSCma20549	router	3	Transfer to VRU fails after NetworkTransferEnabled requery.
CSCma21431	router	3	If a call in a queue disconnects during the running of a script, it may get routed.
CSCma21478	router	3	Call variables returned from RunScriptResult are not updated in the RCD record.
CSCma21677	router	3	If CallTypeServiceLevel is not set, return the system level.
CSCma22494	router	3	Calls abandoned in a queue should not be counted as an error.
CSCma18271	router.tools	3	Router Log Viewer problems with refresh and event listing.
CSCma18341	router.tools	3	Router Log Viewer refresh problems.
CSCma19976	router.tools	3	Router Log Viewer does not report data.shown in the RCD table.
CSCma16605	scripteditor	3	Read-only status is not updated while the user has Script Editor open.
CSCma17156	scripteditor	3	Script Editor printing may overwrite page number and header text.
CSCma17157	scripteditor	3	Page margins do not set to 0 correctly when in inches
CSCma17479	scripteditor	3	Connections seem to disappear when using the Save As option in edit mode
CSCma17480	scripteditor	3	An unexpected exit occurs when using the Save As option to save a script
CSCma17493	scripteditor	3	The time node does not validate time periods properly

CSCma17757	scripteditor	3	DN field length in Call Type Manager creates a viewing issue
CSCma18297	scripteditor	3	The custom function dialog does not sort functions
CSCma18880	scripteditor	3	Unexpected exit occurs when dragging the node and pressing the shift key
CSCma19696	scripteditor	3	Cannot edit scripts because Script Editor cannot get script locks
CSCma19878	scripteditor	3	Not all Enterprise Services are available in the route select node
CSCma20391	scripteditor	3	An error message incorrectly states that another user owns the script lock
CSCma21019	scripteditor	3	There is a Script Editor call volume mismatch in monitor mode
CSCma21921	scripteditor	3	Selected Enterprise Skill Group in queue node does not display
CSCma16810	setup.3rdparty	3	WebView errors when trying to view templates.
CSCma15015	setup.aw	3	Tempdb logfile expansion error even though sufficient space exists
CSCma19511	setup.aw	3	Setup checks wrong registry key for JRE and JDK installation
CSCma14994	setup.centralized.UI.mgr	3	Instance tab showing duplicate tree entries
CSCma14995	setup.centralized.UI.mgr	3	Tree view / List View integration
CSCma17064	setup.centralized.UI.mgr	3	Manager does not refresh view, when opening a new database
CSCma14877	setup.logger	3	Service Control fails if it is closed while service is starting
CSCma19553	setup.logger	3	DTP configuration for the backup Listener is not configurable.
CSCma19139	setup.pg	3	JTAPI GW install not writing icrjavalib.zip entry to registry classp
CSCma16085	setup.webview.ICM	3	Disabling Web Reporting during setup does not disable WebView
CSCma16086	setup.webview.ICM	3	WebView cannot be disabled from Local setup
CSCma20910	sysmgmt	3	All Listener events assigned to wrong customer
CSCma17214	tools	3	Testsync creates too many threads.
CSCma19825	agent-reporting	4	Entsvc04_calls_trend_analysis - some summary data missing.

CSCma18983	aw.config.list	4	ICM Node List doesnt provide default Enterprise Name
CSCma09833	aw.script	4	Schedule in Call Type Manager always displays the first Call Type.
CSCma21814	documentation	4	CallType field in TCD is always -1.
CSCdz45901	documentation	4	Service realtime reporting not accurate for calls queued for IPCC.
CSCma18790	pg.md110	4	MD110 PIM looks for non-existent CCMMaxSeconds registry entry.
CSCma07444	on-line-help	4	Case Sensitive help for Agent to Agent node is missing.
CSCma21163	reporting.webview.ICM	4	Duplicate historical templates.
CSCma21885	scripteditor	4	The script is saved in the Central Controller, but is not shown as saved in the distributor
CSCma18605	pg.opc	5	Define Further RcdInErrorTo5 Field in Routing_Client_Five_Minute.

6 Known Limitations in This Release

This section contains information about the known limitations of ICM 5.0. Many of these limitations have been entered as defects. Cisco has evaluated these defects on a case-by-case basis and has closed them. For each defect, we have determined that either of the following is true:

- The software functions as designed.
- The issue cannot be resolved.

Defects are listed by severity and then by component.

For more information on defects, use the Bug Toolkit found at www.cisco.com/support/bugtools/Bug_root.html

Defect Number: CSCma20525

Severity: 2

Component: ba.dialer.ipcc

Headline: IP Dialer exits on TFTP Error

After startup, the IP Dialer attempts to retrieve the configuration file for each dialer port from Cisco CallManager. If this fails, the Dialer attempts to obtain the XMLDefault configuration file, which should always exist. If the Dialer is unable to obtain any port configuration, it must exit.

Defect Number: CSCma17853

Severity: 2

Component: db.HDS.replication

Headline: Replication process (RPL) is not dumping transaction log successfully

The RPL does not dump the HDS database transaction log properly. The RPL process restarts when the transaction log is full.

Defect Number: CSCma21187

Severity: 2

Component: db.HDS.replication

Headline: Distributor replication asserts, SQL stops, Logger Distribution replication fails .

When the temporary database log file is full, the logger and distributor can become out-of-sync as the Distributor replication stops SQL on the AW and attempts to restart.

Defect Number: CSCma22950

Severity: 2

Component: db.logger

Headline: Logger cannot handle load with many configured ECC variables

When processing more than 100 ECC variables, the logger might stop responding and attempt to restart. The logger continues to attempt to restart until it exceeds the recovery key setting. Then, the router attempts to restart the logger, however, the logger acts as if the start recovery key is greater than the largest recovery key. The logger continues to cycle until it believes the keys are valid to initialize.

Defect Number: CSCma17028

Severity: 2

Component: mds.process

Headline: SQL 7.0 constrains machine and impacts MDS fault tolerance

You should dedicate half the amount of the system memory to SQL Server. Limited memory ultimately causes processes to keep requesting more memory. This results in constant paging and CPU utilization increase. When there is no call, 300MB paging memory and 30% CPU usage was observed. For ICM, the symptom negatively impacts the MDS process.

Defect Number: CSCma19641

Severity: 2

Component: pg.definity

Headline: ecspim.exe asserting function:
ATTAgent::FindTempActiveAgent

PIM asserts, then recovers. If duplexed, the PIM will fail over. The PIM configuration is EAS-PHD. Agent reports are generated by CMS. The problem seems to be related to agents that have two agent IDs and alternatively log on and off on the same instrument.

Defect Number: CSCma19729

Severity: 2

Component: pg.definity

Headline PIM allows CMS to connect to both sides of the PG at the same time

Both sides of a duplexed PG allow a TCP connection to be established from CMS simultaneously. Furthermore, both sides of the PG allow the connection to be maintained, even after one side of the PG goes active. This results in CMS attempting to send records simultaneously to both sides of the PG, even though one of the two sides is idle.

Defect Number: CSCma14807

Severity: 2

Component: pg.definity

Headline AsaiErrno=C_BADPMATCH Errno=0 in the PIM log

Interm PIM receives information over the ASAI link which it cannot understand. This causes the PIM to fail.

Defect Number: CSCma15918

Severity: 2

Component: pg.definity

Headline: PIM service bounces

If the DEFINITY PIM to OPC heartbeat interval time is larger than OPC's expected heartbeat timeout value, or if the DEFINITY PIM has a large number of interactions with the switch at startup due to the large amount of ICM configuration data (such as VDN monitoring and agent state queries), no heartbeat message is sent to OPC. OPC then sets the PIM to go idle.

Defect Number: CSCma16324

Severity: 2

Component: pg.definity

Headline After warm transfer agent state goes to work ready - should be available.

The agent receives an inbound ICM routed call and then performs a test warm transfer. The CTI Server shows the agent state as being not_ready. This causes the softphone to get out of synch with both the hardphone and the switch. The softphone believes that the current state is not_ready, but the hardphone and switch show the agent as available.

Defect Number: CSCma16763

Severity: 2

Component: pg.definity

Headline: The TCD shows call attributed to a wrong service

The TCD shows the first segment of a call attributed to a wrong service. The call initially hits one number, which immediately dials another number. Depending on the timing, if the PIM sees the second number last, the call is attributed correctly. If the PIM sees the first number last, the call is attributed incorrectly.

Defect Number: CSCma22999

Severity: 2

Component: pg.eapim

Headline: Agents stuck talking during SDL Link failure

Call not cleared for an agent. CallManager SDL link failure is detected. Refer to CallManager defect CSCdz26087.

Defect Number: CSCma21964

Severity: 2

Component: pg.eapim.jtapiCnt

Headline: Failed conferences - java.lang.NullPointerException

Third party consult request is successful, but it is reported as an error in the JTAPI interface. This error is propagated back the agent desktop. JTAPI GW log indicates "com.cisco.jtapi.PlatformExceptionImpl: Could not meet post conditions of call.consult()."

The agent receives a pop up indicating an error with the consult. The conference or transfer can be completed in this condition, and no call control is lost. Refer to CallManager defect CSCdz26353.

Defect Number: CSCma17229

Severity: 2

Component: pg.eapim.jtapiCnt

Headline: CTIMgr failure under call load. Instrument, cti routepoint monitors lost

A CTI Route Point stops working . CTI Route Points are lost due to a CallManager problem. Refer to CallManager defect CSCdx83662.

Defect Number: CSCma17027

Severity: 2

Component: pg.eapim.jtapiGW

Headline: Connectivity issues with simplex PG against CM cluster.

In a simplex PG/CM cluster redundancy design, if the JGW comes up and finds a good connection to the publisher CTIMgr, the JGW and PIM will go active. If the publisher CTIMgr fail, the JGW successfully switches over to the subscriber. However, if the JGW comes up and cannot find a

connection to the publisher CTIMgr, it does not try to connect to the secondary CM. It continues reporting "connection refused.". Refer to CallManager defect CSCdw37161.

Defect Number: CSCma17289

Severity: 2

Component: pg.eapim.jtapigw

Headline: JTapi gateway leaks memory for conference calls scenario

Memory usage of JTAPI gateway process grows over time when conference calls are made through the JTAPI Gateway interface. Refer to CallManager defect CSCdy72386.

Defect Number: CSCma18602

Severity: 2

Component: pg.eapim.jtapigw

Headline: IPCC agents not able to log in ****Intermittent Problem****

Intermittently, agents are unable to log into a device using the Softphone. Refer to CallManager defect CSCdy37103.

Defect Number: CSCma12941

Severity: 2

Component: pg.eapim.jtapigw

Headline: JTAPI GW appending classpath to registry instead of overwriting

When installing a new IPCC PG and JGW, the registry classpath for the JTAPI gateway appends to the path instead of overwriting it, resulting in recycling of JTAPI gateway.

The Registry path is

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Java VM\Classpath.

This is observed only when installing IPCC Version 4.6.2 on a machine that was previously loaded with IPCC Version 5.0.

Defect Number: CSCma19889

Severity: 2

Component: pg.eapim.jtapigw

Headline: Phones do not fail over because secondary CM is not seen in configuration

Phones do not fail over. Network settings on the phone show the primary CallManager correctly. The second CallManager indicates SRST.

This problem occurs because the DNS server in the domain does not resolve the host names for the CallManager Servers.

Defect Number: CSCma23136

Severity: 2

Component: pg.vru

Headline: Using 15000 or above port VRU PIM causes MDS to disconnect.

The user tries to add a 15th trunk group to their VRU PIM, bringing the trunk total to 15,000 trunks. When this limit is reached, MDS disconnects from the VRU PIM due to an MDS buffer error.

Defect Number: CSCma20755

Severity: 2

Component: reporting.thirdparty

Headline: InstallShield silent installs fail when path is too long

If the user runs the WebView Third-Party installer or E-Mail Manager shell installer over a network, instead of from the CD, the silent install of JDK 1.3.1 can fail. The setup.exe for JDK 1.3.1 is a 16-bit application, and can handle only file paths that are approximately 70 characters or less. The JDK 1.3.1 silent install fails if the path to JDK 1.3.1 setup.exe in WebView Third-Party installer or E-Mail Manager shell installer exceeds approximately 70 characters. To resolve this issue, move the WebView Third-Party installer or E-Mail Manager shell installer to a directory with a shorter path and run the installer.

Defect Number: CSCma22899

Severity: 2

Component: setup

Headline: Reg edits are required: set up does not change values

The RouterX\GENNIC\CurrentVersion\NetComm\LocalEMTNode Value, and the PIM registry entry for CallCenterBackupHostName must be edited to complete conversion from ICM 4.6.2 to ICM 5.0.

Defect Number: CSCma17439

Severity: 2

Component: setup.pg

Headline: Setup for Ericsson MD110 PIM has a blank field

A MD110 Peripheral Gateway is installed on a server using the ICM CD. Once setup is complete, services are started and all PG services start normally. The PG instance is included in Service Control and all Registry information is present for the PIM configuration. When setup is run from the ICR/bin directory on the PG to edit the PIM data, setup shows the chosen interface type as MD110, but the next screen in setup shows a

blank PIM field. PIM1 is not shown here, but is configured on the system and in the registry.

Defect Number: CSCma19984

Severity: 3

Component: ba.dialer.ipcc

Headline: Enabling the Auto Answer option in BA and in IPCC Agent Desk Settings drops BA calls

Calls are dropped when BA is configured with the Auto Answer Reservation Call option enabled and the agent phone is set to auto-answer (either on the ACD, the phone, or through the agent desk settings in Cisco IPCC). (The Auto Answer Reservation Call option is set in the Campaign Skill Group Selection tab in the BA Campaign configuration component, which resides in the ICM Configuration Manager.)

Defect Number: CSCma05862

Severity: 3

Component: cg.ctiserver

Headline: New call variable values revert to former values during transfer
ECC Variable are overwritten during transfer event.

Defect Number: CSCma16338

Severity: 3

Component: cg.ctiserver

Headline: Login attempt receives Inconsistent_Agent_Data response.
CTIClient's Open_REQ/Login attempt receives an Inconsistent_Agent_Data response. The Softphone client is not usable. The CTI connection cannot be maintained.

Defect Number: CSCma00364

Severity: 3

Component: pg.definity

Headline: ECSPIM Screen FREEZES EMT ERROR 519897068

In a dual PG system, both PGs may appear to be active. However, one side is active, and the other side is inactive but in a locked-up condition.

Defect Number: CSCma13311

Severity: 3

Component: pg.definity

Headline After restarting CMS, PIM would not reconnect

This problem occurs when CMS was stopped for backup, and then restarted. In this case, the PIM did not reconnect.

Defect Number: CSCma15709

Severity: 3

Component: pg.eapim

Headline: Login duration does not match between Agent Logout and agent HH tables

PerAgt03 and PerAgt04 report fields yield different results for agent logged in time for the same agent. This occurs with IPCC on ICM 4.6 Reports viewed while agent is logged in.

Defect Number: CSCma19739

Severity: 3

Component: pg.eapim

Headline: CallWaiting-cleared line hung after picked third party call

If an agent (who is required to go into Work mode) is already handling two calls (for example, oneACD_IN call and one INSIDE call), and one of the calls is dropped, the dropped call enters WRAPUP state and is cleared after the wrap up time specified in Agent Desk Settings . However, if another call is delivered to the agent and then answered, before the call that is in WRAPUP state is cleared, the call that is in WRAPUP state is cleared only when all calls that the agent is handling are dropped. This occurs with ICM 5.0 IPCC when the "Call Waiting" property is enabled at the Cisco CallManager for the agent's device.

Defect Number: CSCma17992

Severity: 3

Component: pg.eapim

Headline: ICM router requery for IPCC Ring-No-Answer

An agent is not set to unavailable when the router requery option is invoked. This occurs with IPCC 4.6.2 and an ISN routing client. The call is routed to the agent, but the agent fails to receive and/or answer the call. ISN requeries for another agent, and redirects the call to second agent successfully. The first agent is then set back to available.

Defect Number: CSCdy67912

Severity: 3

Component: pg.eapim.jtapigw

Headline: IP IVR reports online before all DN's in service causing TR timeouts.

When the IP IVR starts up, it reports that it is online, but provides only partial service before all of the CTI Route Points are in service. When translation routing to the IP IVR, the router does not have any means to track which CTI Route Points are or are not in service. Therefore, the Router may send calls to CTI Route Points that are out of service until they all come on line. This results in translation route time outs until all CTI Route Points come in service.

Defect Number: CSCma22091

Severity: 3

Component: pg.opc

Headline Service real time reporting doesn't show accurate IPCC calls queued

The call-in-queue information is missing in the Service real time and half hour fields.

Defect No.	Component	Sev.	Headline
CSCma13206	agent-reporting	3	Base skill group records missing in Agent_Skill_Group_Half_Hour
CSCma17982	agent-reporting	3	Unsuccessful outbound calls are recorded as internal calls
CSCma20534	aw.config.explorer	3	IPCC - Agents are automatically configured by the router from Agent Explorer
CSCma14152	ba.dialer	3	Dialer Real Time report does not display all call results
CSCma22855	ba.dialer	3	Campaign Query Rule Report displays a negative value in Available
CSCma17680	ba.dialer.ipcc	3	Agent is not set to available state after hanging up the reservation call
CSCma15931	db.create	3	Partitioning enabled - Peripheral table does not have proper views.
CSCma15681	db.logger	3	Partitioned Update Security is slow with many users.
CSCma20586	db.logger	3	Killing DBAgent results in nrpl asserting.
CSCma22673	db.logger	3	CHS: Logger install fails with wrong SQLServer charset or sort order.
CSCma22714	db.logger	3	Logger needs more graceful exit for assertion on system time change.
CSCma20730	db.slqserver	3	Server alias name for TCP/IP could cause DB connection fail.

CSCma16556	documentation	3	Provisioning router info not available on upgrade from 4.1
CSCma16614	international	3	Translation Wizard has corrupted description fields in Japanese
CSCma19311	international	3	Timestamp is in GMT in the log
CSCma20193	international	3	Help button opens English online help on localized Media Blender
CSCma19258	international	3	Timestamp is in GMT in the log
CSCma12148	nic.gk	3	ECC Remote Zone syntax errors not handled correctly
CSCma23122	pg	3	MIS not Post Routing/Translation Routing; data is not delivered
CSCma17083	pg	3	Calls offered & Calls Abandoned stats dont match with Script Editor
CSCma17484	pg.aspect	3	Incorrect device ID association
CSCma16295	pg.aspect	3	Call control lost after PIM shuts down and restarts.
CSCma00364	pg.definity	3	ECSPIM Screen freezes with an MT error: 519897068
CSCma19134	pg.definity	3	ECS PIM crashes because of an access violation processing abort msg.
CSCma19128	pg.eapim	3	Agent cannot realease call from Desktop (CTIOS) phone
CSCma23026	pg.eapim	3	Cannot complete conf if during consult call failover JtapiGW
CSCma09402	pg.eapim	3	PIM failover causes all talking agent to go to Not Ready
CSCma09821	pg.eapim	3	During failover situations, incorrect call type sometimes returned
CSCma15537	pg.eapim	3	Agent extrapolation key leads to desktop errors on state change
CSCma15592	pg.eapim	3	Alternate followed by a SST results in ambiguous state
CSCma16076	pg.eapim	3	Agent hangs during complex conference/SST scenario
CSCma16490	pg.eapim	3	Agent hangs if release call during transfer call to supervisor
CSCma16891	pg.eapim	3	Bad error message for no conference bridge.
CSCma16988	pg.eapim	3	CTIOS Softphone stays in Hold state after xfr w/conf & xfr keys
CSCma18325	pg.eapim	3	Agent is in talking state with no calls

CSCma18713	pg.eapim	3	Snapshot device does not return ringing call on phone.
CSCma20414	pg.eapim	3	NOT READY state change request rejected with error 10104
CSCma22577	pg.eapim.jtapicli	3	Call cleared from desktop after conference then single-step transfer
CSCma16553	pg.eapim.jtapiclt	3	ICM routes call to ready agent while instrument voice channel closed
CSCma16665	pg.eapim.jtapiclt	3	JTAPI Exception, UNRECOGNIZABLE_PDU
CSCma19198	pg.eapim.jtapiclt	3	Get JTAPI Exception Conference_Already_Present when load testing
CSCdz66412	pg.eapim.jtapigw	3	SelectRoute fails with invalid destination but device is valid
CSCma21355	pg.eapim.jtapigw	3	Following CCM sp upgrade, JGW will not connect, provider not created
CSCdy57190	pg.eapim.jtapigw	3	Post routing interrupted while failed subscriber phones migrate
CSCma16644	pg.eapim.jtapigw	3	CallManager upgrade causes JTAPI gateway failure
CSCma16688	pg.eapim.jtapigw	3	JTAPI Exception - UNSPECIFIED (0)
CSCma16817	pg.eapim.jtapigw	3	Cannot redirect call to supervisor if make conference then SST
CSCma17015	pg.eapim.jtapigw	3	JTAPI missing conference events for original caller
CSCma17171	pg.eapim.jtapigw	3	Conference to VRU, agent gets the call, can not conference again
CSCma17232	pg.eapim.jtapigw	3	Cannot transfer call during conference
CSCma17666	pg.eapim.jtapigw	3	JTAPI does not get DN for device with Extension Mobility
CSCma18377	pg.eapim.jtapigw	3	Cannot do emergency call again after reconnect emergency call
CSCma19082	pg.eapim.jtapigw	3	IPCC error if hold agent1 and agent2 SST to agent3
CSCma16823	pg.eapim.musicfsp	3	Agent voice delays and signal amplification problems
CSCma14307	pg.md110	3	MD110 PIM fails to clear some conference parties on a 4 party conference call
CSCma14802	pg.definity	3	Agent/Instrument assoc. not cleared from PIM memory after logout

CSCma16833	pg.definity	3	Can we load balance between ASAI links?
CSCma19799	pg.definity	3	Agent Receive Cause=C_USER_BUSY [15] on Transfer
CSCgt04917	pg.mer	3	Meridian PIM Trans Route to IDN Can Lose CTI Data
CSCgt04918	pg.mer	3	Meridian PIM fast blind transfer through post route can lose CTI data
CSCma16669	pg.mer	3	(Meridian)Calling agent is talking w/ 0 calls after alert timeout
CSCma19741	pg.mer	3	Agent state doesnt change from talking to on-hold (Meridian)
CSCma18233	pg.opc	3	SNAPSHOT_DEVICE_REQ doesnt return call after PG failover
CSCma05652	pg.symp.noseipim	3	ICM Release 4.5 Symposium dll issue for SCCS release 3.0 and 4.0
CSCma15349	pg.symp.noseipim	3	SINGLE STEP TRANSFER - Symposium reporting issue
CSCma18081	pg.symp.noseipim	3	No CALL_HELD_EVENT received after Hold on a Transferred call
CSCma15398	pg.vru	3	Can run multiple CallIDs on single trunk
CSCma16849	scripteditor	3	You cannot close the Web script monitor from the “x” in the upper right corner of the window
CSCma19679	scripteditor	3	The Script Editor monitor option Starting Now field shows historical data
CSCma17920	scripteditor	3	A customized MED calculation causes false conditions
CSCma17579	scripteditor	3	The Day of Week node shows only three columns in WebView
CSCma02260	sendhome	3	Wrong document title in Send Home/Doc. Feedback category

7 Known Caveats in This Release

This section contains a list of significant known defects for ICM version 5.0. Defects are ordered by severity and then by severity.

For more information on defects, use the Bug Toolkit found at www.cisco.com/support/bugtools/Bug_root.html

Defect Number: CSCma23557

Severity: 2

Component: aw-bulk.config

Headline: AgentCfg tool crashes with certain data as input

When AgentCfg.exe is run with certain data as an input, it crashes.

Defect Number: CSCma21848

Severity: 2

Component: comm.emt

Headline: Reallocated traffic flow causes call processing degradation and unmarked packets .

The Quality of Service (QoS) feature that is enabled with the Microsoft Packet Scheduler application on the ICM Router or PG reallocates traffic flow to “best effort” traffic flow when available network bandwidth is over-allocated at the local node. This traffic flow reallocation causes degradation in call processing, as well as late calls and possibly delayed agent reporting data delivery to the ICM Central Controller. Missed heartbeats might occur from the PG to the ICM Central Controller, leading to call disconnection. This failure prevents packets between the PG and the ICM Central Controller from being tagged with Layer 2 [CoS] or Layer 3 [DSCP/TOS] markings. Also, High, Medium, or Low priority traffic is sent as best effort traffic. Customers deploying ICM QoS and the Microsoft Packet Scheduler are required to install the Microsoft **Q329259** and **Q811657** updates to resolve the problem.

Defect Number: CSCma23589

Severity: 2

Component: db.logger

Headline: Network Events not being written to database

Network Events are not being written to the Network_Event_Table with a logger error of "Unknown DataMsg." Network Event Reporting is enabled on the SS7 INNIC and calls are being sent to that NIC.

Defect Number: CSCma23056

Severity: 2

Component: db.logger

Headline: 20+ ISE instances on a distributor loads CPU to 98%

Symptom: The Distributor logger tasks up more tha 95% of CPU.

This problem can occur on a machine with the Internet Script Editor server (ISEMAN) installed and with 20 or greater Internet Script Editor clients with scripts open in monitor mode connected to that server.

Defect Number: CSCma22442

Severity: 2

Component: db.logger

Headline: AW DB falls behind with many simultaneous updates during call load

When using the Script Editor to save or create a new script, an error message box displays the following: "The Update succeeded at the central controller but was never propagated back to the Distributor." The update log shows the following trace message: "Admin Workstation configuration data is out-of-date with the central controller. Please, update your local ICR database. Aborting..." This is associated with many simultaneous script updates during very high call load. In this situation, the AW DB cannot be replicated in time, and falls out of sync with the logger.

Defect Number: CSCma21968

Severity: 2

Component: db.logger.failover.recovery

Headline: Recovery from a dual logger failure may not succeed

When both loggers simultaneously restart, or one logger is configured to be simplex in a duplex scenario, both loggers may generate duplicate recovery keys. This causes the recovery to fail and the logger node to restart.

Defect Number: CSCma23050

Severity: 2

Component: international

Headline: WebView does not support CHS/JPN characters

When WebView is installed on Chinese, Japanese and Korean platforms, native characters in agent names may appear corrupted in reports. The month and week names may likewise appear corrupt in the historical date/time selection page.

This problem occurs specific to ICM 5.0 only, and then only with (English) ICM installed on the aforementioned operating system platforms.

Defect Number: CSCma23440

Severity: 2

Component: pg

Headline: Dual ICM Router crash due to bad message from peripheral
Dual ICM Router fails when a bad message is received from a peripheral.

Defect Number: CSCma23430

Severity: 2

Component: pg.definity

Headline: Inaccurate reporting of services in queue

ICM inaccurately reports on services in queue. When more than one call is in queue for a service, any calls queued after that only show the statistics for the last call queued.

Defect Number: CSCma23596

Severity: 2

Component: pg.eapim.jtapigw

Headline: Supervisor Barge In incurs 2 second delay that disrupts agent/cust

A call to an agent is interrupted by call being placed on hold for 2 seconds. This occurs when a Supervisor uses the Barge-In feature to enter the established call between agent and caller. This is associated with call load.

Defect Number: CSCma23656

Severity: 2

Component: pg.opc

Headline: In agent skill reports, agent state is Busy_Other when it should be Talking.

Agent skill reports agent state incorrectly. In addition, the HandledCallsTimeTo5 & CallsHandledTo5 columns always indicate a value of 0

Defect Number: CSCma22854

Severity: 2

Component: pg.symp.noseipim

Headline: No Recovery Mechanism if SCCS HDX link drops

When the HDX link loses network connectivity, Symposium, with the latest service pack SU09, now senses a loss of connectivity and attempts to send a DXM_SERVER_SHUTDOWN message. With this new enhancement, ICM software responds that it does not recognize the message, and therefore does not cycle the PIM.

Defect Number: CSCma23527

Severity: 2

Component: reporting.webview.ICM

Headline: Can't access WebView reports with CORBA error

The user received following Webview II error when trying to access reports: "Could not retrieve the icm route org.omg.CORBA.TRANSACTION_ROLLEDBACK: minor code: 0 completed: Yes also affecting realtime data".

Defect Number: CSCma23419

Severity: 2

Component: setup.3rdparty

Headline: Webview 3rd party setup fails during EA installation.

This problem occurs when upgrading 3rd party software from 4.6.2 to 5.0 on a WebView server. During the upgrade of Jaguar 3.6.1 to EAServer 4.1.1 (ICM 4.6.2 to ICM 5.0 respectively in the WebView Third-Party Installer), errors occur saying that "An unexpected return code was received, possibly indicating failure..." Other problems may occur. If you then later run ICM setup, you receive the error: "Setup encountered an error while configuring EAServer for WebView. Error: - 1"

Defect Number: CSCma23419

Severity: 2

Component: setup.thirdparty

Headline: WebView Third Party setup fails during EA installation

If you install Jaguar 3.6.1 on one machine, and copy the hard drive over to another machine with a different machine name without changing the machine name in the appropriate Jaguar 3.6.1 configuration file, then when you upgrade Jaguar 3.6.1 to 4.1.1 on the new machine, a name conflict occurs. To solve the problem, before you upgrade Jaguar, open the file %JAGUAR%\Repository\Listener\Jaguar_iiop1.props and change the line

com.sybase.jaguar.listener.host=<hostname> so that the correct hostname is shown. For example: NADON3HDS1.

Defect Number: CSCma22649

Severity: 3

Component: aw

Headline: SQL Server User Error: 15063, State 1, Severity: 16, Message: Login

When updating the Script Editor, the AW distributor logger client repeatedly displays the following message: "SQL Server User Error: 15063, State 1, Severity: 16, Message: Login already has an account under a different user name." This occurs in ICM 4.5 (with software patches 37 39 43 62 65 66 74 80 83 93 108 120 127 139 141 145 155 158 199 94 107 and with SQL 6.5 having post 5a installed.

Defect Number: CSCma22211

Severity: 3

Component: aw

Headline: AW Setup hangs at 84% completion

If another scheduled NT Job is holding the necessary resource for which Setup is waiting, Setup can hang.

Defect Number: CSCma22900

Severity: 3

Component: aw

Headline: Distributor UpdateaAW process crashes during ICM configuration

The UpdateAW process crashes if configuration data changes are made while the process is running. To avoid this issue, do not perform configuration tasks until the updateaw process has been cycled by the node manager and is fully initialized.

Defect Number: CSCma23228

Severity: 3

Component: aw.conapi

Headline: The cached table does not update when UpdateAW is cycled.

When using any agent tool to add or edit an agent, the Person selection list may not be up to date if other issues cause the UpdateAW process to cycle.

Defect Number: CSCma16276

Severity: 3

Component: aw.config

Headline: User List tool allows creation of user with conflicting properties.

The checkbox related to the User's Account Operator status does not display properly until a few moments after the user has been created due to network latency. During this time, you can check both the "read-only" and "allow user to create other user accounts" checkboxes.

Defect Number: CSCma23301

Severity: 3

Component: aw.config.explorer

Headline: The primary skill for a service defaults to OFF.

The default value for the primary skill checkbox for a service definition is OFF. This should default to ON.

Defect Number: CSCma23023

Severity: 3

Component: ba.dialer.ipcc

Headline: Personal Callback calls count against incorrect skill groups

In BA Releases 4.6.2 and 5.0 with the Personal Callback option enabled, personal callback reservation calls count against the first skill group assigned to the agent or the base Cisco_Voice skill group. If an agent is a member of just one skill group, which is a BA skill group, then customer calls might count against the base Cisco_Voice skill group in the Skill_Group_Half_Hour table.

Defect Number: CSCma17299

Severity: 3

Component: cicr-replication

Headline: CICM Report Tool Fails

When you run the CICM Report Tool, no data is retrieved.

Defect Number: CSCma21345

Severity: 3

Component: cicr-replication

Headline: CICM Replication Fails with Long Dialed Numbers

In a NAM environment, if the number of characters in the dialed number string and the CICM routing client that corresponds to the NAM routing client exceeds 32 characters, CICM replication fails.

Defect Number: CSCma22668

Severity: 3

Component: cg.ctiserver

Headline: CallDataUpdate events not always sent on data change

When using Internal MIS, a CallDataUpdate event is sometimes missing from a CTI Server message when that message is changed by an IVR. A CTI Client that is expecting to receive events should change a piece of the call data in order to force the CallDataUpdate event to arrive.

Defect Number: CSCma15476

Severity: 3

Component: db.agent

Headline: Initialize Local DB number of rows copied for Security Control tables is not accurate

In the "Initialize Local Database" interface, the number of rows copied shown on the window is inaccurate for the "User_Security_Control" and "Group_Security_Control" tables.

Defect Number: CSCma05132

Severity: 3

Component: db.icmdba

Headline: ICMDBA application error on synchronizing logger from one side to another.

When you synchronize the ICM databases on two computers by using ICMDBA, if the process crashes for an unknown reason, to solve the problem use another machine in the same LAN segment to do the synchronization.

Defect Number: CSCma22886

Severity: 3

Component: db.icmdba.import.export

Headline: ICMDBA reports successful export when the export really failed

If your machine does not have write permission to the directory to which you are attempting to export the configuration data, then the ICMDBA tool will report that the export succeeded when in fact it failed.

Defect Number: CSCma12637

Severity: 3

Component: db.logger

Headline: Logger crashes on the bulk insert of 1000 or more labels

If you bulk insert large numbers of labels (1000 or more), the logger can periodically crash due to a local timeout in logger.

Defect Number: CSCma17169

Severity: 3

Component: international

Headline: Configuration Manager on Chinese Language Platform

When using Configuration Manager on a Chinese Windows computer, some English text is truncated and partially hidden. If the screen resolution is 1024/768, some dialog boxes are not displayed within the screen; you cannot click the Save button on those dialog boxes.

Defect Number: CSCma18442

Severity: 3

Component: pg

Headline: Do not get error msg when CG is misconfigured and PG AG crashes

The PG Application Gateway process will fail if the CTI Gateway is misconfigured in CTI Server Setup. No error message is sent.

Defect Number: CSCma21292

Severity: 3

Component: pg.eapim

Headline: Call information lost with failover of CTIManager

Call context is lost for all calls when the "active" CTI Manager in use fails. This occurs with IPCC ICM 5.0, CM 3.2(2c). Calls are recovered when the PG comes back on line and can be controlled from the agent desk top, but call variables and router call key information will be lost.

Defect Number: CSCma23528

Severity: 3

Component: pg.eapim.jtapigw

Headline: IPCC does not support conferencing with the IP IVR

An agent is unable to answer a conference call redirected from the IP IVR. This problem includes cases where the agent is unable to answer call from the desk top and the agent is not able to control the call after it is redirected back from the IP IVR to the next available agent.

Defect Number: CSCma18893

Severity: 3

Component: pg.opc

Headline: Abandon Ring incremented instead of Redirect if abandonwait>0

The Redirect No Answer fields are not incremented for calls that are forwarded on no answer if the Abandon Call Wait Timer is configured to be greater than the Forward on No Answer timer in the agent desktop settings.

Defect Number: CSCma22646

Severity: 3

Component: pg.opc

Headline: OPC asserts at startup when side B PG has version mismatch

If two sides of a duplexed system have PGs that are running different versions of the OPC executable, the process will assert during agent state transfer.

Defect Number: CSCma22671

Severity: 3

Component: pg.opc

Headline: AGSKG reports are inaccurate for BA calls when subskills configured

Blended Agent outbound dialer calls are not reflected in the agent skill group real time or half hour reports if agents have been assigned to sub-skillgroups.

Defect Number: CSCma08417

Severity: 3

Component: pg.vru

Headline: RouterCallKey Sequence number not incremented for transfer leg

The RouterCallKeySequenceNumber (RCKSN) is always set to 1 in the Termination Call Detail record of a Service Control VRU. It is not incremented for subsequent legs of the call.

Defect Number: CSCma19132

Severity: 3

Component: setup.thirdparty

Headline: The WebView Third Party Installer fails to reinstall EAServer 4.1.1

When running the WebView Third-Party Installer (ICM 5.0) or the Shell Installer (CEM 5.0) and EAServer 4.1.1 is being installed over an existing installation of EAServer 4.1.1, the bin directory of EAServer is cleared out of almost all of the necessary files. The result is that EAServer (that is the Jaguar Server) no longer works. So, if you must re-install EAServer 4.1.1, you should first uninstall EAServer 4.1.1 and then do a fresh install of EAServer 4.1.1 using the WebView Third-Party Installer (ICM 5.0) or the Shell Installer (CEM 5.0).

Defect Number: CSCma20421

Severity: 3

Component: setup.thirdparty

Headline: The WebView Third Party Installer setup fails when the C: drive is low on space

The WebView Third Party Installer fails if the C drive is low on space.

Defect Number: CSCma22254

Severity: 3

Component: documentation

Headline: Need further information on Status Field for PeripheralRealTime

The documentation provided for the Status field in the Peripheral_Real_Time database table is missing information. Each failure code should be documented, and the codes should be broken down by peripheral type if they are vendor specific.

Defect No.	Component	Sev.	Headline
CSCma23510	aw.config.ba	3	Update Dialing List button in Query Rule config tool does not work.
CSCma15390	aw.config.explorer	3	Adding two peripheral targets with the same DNIS results in a SQL error.
CSCma22120	aw.config.explorer	3	Can't add 1000 trunks using Network Trunk Group Explorer.
CSCma23433	aw.config.explorer	3	Service Explorer displays error when user both deletes and adds a member.
CSCma22604	aw.trans.route.wiz	3	In Translation Route Wizard, unable to add additional DNIS
CSCma15049	aw-bulk.config	3	User may receive unclear error message when trying to insert a VRU port.
CSCma23477	aw-bulk.config	3	Agent Bulk (Edit) does not work for Agent State Trace
CSCma22811	aw-wiz.app	3	Translation route wizard Infinite Loop
CSCma23028	ba.campaignmgr	3	After the PG stops, a large number of records are rescheduled
CSCma23124	ba.dialer	3	BA reservation call increments transfer-in
CSCma21822	ba.dialer.g3	3	First call fails when agent phone uses handsfree option
CSCma23029	ba.dialer.ipcc	3	Creating a personal callback with a blank VDN causes the dialer to fail
CSCma23383	ba.import	3	ba.import process stops working after a failed import occurs
CSCma23510	ba.import	3	Update Dialing List function is not working in Blended Agent
CSCma22154	call-tracer	3	With Enterprise skill group call tracer does not send to next sg
CSCma22435	call-tracer	3	Call Tracer - VRU Settings node is not recognized
CSCma23282	db.icmdba	3	ICM 4.6.2 ICMDBA space used summary incorrect
CSCma05132	db.icmdba	3	ICMDBA Application Error on Synchronize A to B from A
CSCma15251	db.icmdba	3	No clear message when nonprivileged user accesses ICMDBA
CSCma21788	db.icmdba	3	ICMDBA cannot increase temp DB size
CSCma22511	db.icmdba	3	ICMDBA - Unable to build BA database on Side B install
CSCma23129	db.slqserver	3	Indexes for local DBs and possibly HDSs are fragmented

CSCma23196	documentation	3	Security Dialog help button does not find any help topic
CSCma23452	documentation	3	ECC variable configuration instructions are misleading
CSCma23490	documentation	3	Calltype21,22 report online help incorrect.
CSCma22254	documentation	3	Need Further Information on Status Field for PeripheralRealTime TBL
CSCma23452	documentation	3	ECC variable configuration instructions are misleading
CSCma22952	hotfix-process	3	Hotfix process does not properly handle FRA language setting
CSCma16667	inetscripted	3	Users cannot open scripts
CSCma19083	inetscripted	3	Some newly created config objects are not dynamically updated
CSCma22156	inetscripted	3	Cannot save script - Another user has changed the object
CSCma23426	inetscripted	3	ISEMAN server constantly increases memory usage
CSCma23251	inetscripted	3	ISE unable to save new script if no other scripts already exist
CSCma23675	nic.crsp	3	ra-crspnic Trace: XmitUnknownDialogFailMsg: dialog fail to clientID
CSCma15462	nic.gk	3	Incorrect handling of invalid endpoint and remote zone address.
CSCma00181	on-line-help	3	Incorrect help topic appears when Siemens help is selected
CSCma20103	on-line-help	3	ICM Error Lookup tool allows only digits
CSCma10896	other	3	ICM-ICM Gateway (Peer to Peer) circular routing potential
CSCma22876	pg.alcatel	3	ring no answer on Alcatel results in loss of call context
CSCma23512	pg.aspect	3	aspevpim.exe assert - access violation
CSCma21380	pg.aspevt	3	PIM incorrectly reports agent state updates to OPC during conference
CSCma23149	pg.definity	3	TCD has Disposition 14 if agent logs in with calls in queue.
CSCma22068	pg.definity	3	ECSPIM asserts with DrWatson error RemoveConfigAgent
CSCma22857	pg.definity	3	CTI Agents Unable to Log In

CSCma23498	pg.definity	3	Agent Skill not picked after reskilling on G3
CSCma23575	pg.definity	3	Pim Err - (Assert)Unexpected Message Capability Received 11, Ex 34
CSCma23627	pg.definity	3	Unknown Trunk Errors present for non-existent trunk
CSCma23632	pg.definity	3	G3 PIM does not support concurrent local and network queuing.
CSCma23650	pg.definity	3	Opctest show periph off line when PIM is Active
CSCma22914	pg.eapim	3	Calls redirected on no answer treatment counted as Abandon Ring
CSCdz57164	pg.eapim	3	JTAPI call connection event failed with false calling address
CSCdz58894	pg.eapim	3	DEVICE_TARGET_ABORT_IND msgs increase as PG CPU increases
CSCma16828	pg.eapim	3	SS & duplex bridge failover recovers with wrong call type
CSCma18593	pg.eapim	3	Transfer and redirect to VRU agent cannot answer the call
CSCma19284	pg.eapim	3	Blind Transfer a conference off PIM sends new conference message
CSCma19291	pg.eapim	3	Agent left conference during EAPIM failure. Other agent cannot leave
CSCma20949	pg.eapim	3	Cannot retrieve call after hold call then make transfer to VRU
CSCma21099	pg.eapim	3	Agent not able to answer call from VRU after conf (barge-in) & xfer
CSCma21125	pg.eapim	3	Media termination phone error with single step transfer of conference
CSCma21247	pg.eapim	3	ECC variable not passed to VRU through IVR Post Route point
CSCma21289	pg.eapim	3	Disabling NIC connection during the active call causes call to fail
CSCma21418	pg.eapim	3	Agent cannot retrieve held call if received conference from VRU
CSCma21420	pg.eapim	3	Agent cannot answer conference call received from VRU
CSCma21424	pg.eapim	3	Calls are dequeued from IP IVR when shutting down CTIManager
CSCma21425	pg.eapim	3	Agent cannot hold a call which has been conferenced through VRU
CSCma21427	pg.eapim	3	Call disappears after transfer of IVR conference

CSCma21430	pg.eapim	3	IPCC Error: 13059 on second consult conference attempt
CSCma22660	pg.eapim	3	IPCC PIM does not respond to Agent SkillGroup configuration changes
CSCma22771	pg.eapim	3	Incorrect number of parties in conference event
CSCma23135	pg.eapim	3	Blind transfer to media terminated CAD fails
CSCma23551	pg.eapim	3	No Agent ID when agent receives transfer call via CTI route point
CSCma21495	pg.eapim.jtapiclnt	3	Agents recovered to not ready state after CTIManager failover
CSCma22001	pg.eapim.jtapiclnt	3	Errors doing single step transfer to VRU
CSCma22005	pg.eapim.jtapiclnt	3	Redirect failures using icm dialed number plan
CSCma23329	pg.eapim.jtapiclnt	3	Desktop reports unable to login error when inst number is invalid
CSCma23416	pg.eapim.jtapigw	3	D572162 : Jtapi Gateway restarts after a procmon command is ran
CSCma16764	pg.eapim.jtapigw	3	Losing calls following PG public network outage/recovery
CSCma17105	pg.eapim.jtapigw	3	Cannot drop call after PIM failover if making conference call
CSCma17942	pg.eapim.jtapigw	3	Cisco JTAPI Client new install does not prompt for required reboot
CSCma23132	pg.eapim.jtapigw	3	IP phone agent chained transfer problem
CSCma18873	pg.eapim.jtapigw	3	JTAPIGW and Call Park not working
CSCma22894	pg.mer	3	Termination Call Detail record not generated on some calls
CSCma16722	pg.mer	3	Meridian - Agent extension displayed on softphone is wrong
CSCma23248	pg.opc	3	Csta_call_cleared and Call_Terminated Deltas upsetting CTI client
CSCdz68508	pg.opc	3	ICM is unaware of IVR State and cannot tell if JTAPI is down
CSCma22394	pg.opc	3	Base Skill Group reporting missing sub skill group data in 5.0
CSCma22728	pg.opc	3	ECC variable got lost when transfer to VRU
CSCma23257	pg.opc	3	PG can send half hour data out of order.
CSCma23583	pg.opc	3	CallsInProgress empty for active IP IVR
CSCma23661	pg.softacd.mitel	3	Conference is cleared when agent leaves
CSCma22910	pg.symp	3	Blender Conference call does not get cleared on Symposium switch

CSCma15399	pg.vru	3	Can run single CallID on multiple trunks
CSCma15752	pg.vru	3	RunVRUScript Name is limited to 39 characters (and not 40)
CSCma23169	pg.vru	3	RingTime field in TerminationCallDetail record not populated
CSCma22786	reports	3	Database extends too small in load test.
CSCma09580	router	3	The router is always busy when you try to delete a corrupt script
CSCma16853	router	3	The CallsRouted field is not incremented when a call is sent to an agent from IVR
CSCma17127	router	3	The ICM fails to reset time in the Queue counter when re-queuing after a cancel queuing node
CSCma17306	router	3	The CICM router did not respond to the dialog fail from the NIC during Runscript
CSCma18186	router	3	CallsHandled field is not incremented at the initial call type for supervisor assistance
CSCma21669	router	3	The Route_Call_Detail record produces an error message
CSCma21753	router	3	The router never disconnects from the release node after a network transfer
CSCma22969	router	3	The PersistentVariableMsg contains an invalid -> ValueDateTime
CSCma23493	router	3	The CallTypeServiceLevel value was not re-initialized when no calls are routed
CSCma23520	router	3	Calls are not routed according to the longest call Queue Value
CSCma23522	router	3	A router incorrectly fails due to a timing issue
CSCma23559	router	3	The call router fails during routing
CSCma23369	router.library	3	For message XXX from routing client YYY could not find dialog ID ZZZ

CSCma19754	router.tools	3	The rttest indicates that a dump of .sod files is complete before it is complete.
CSCma23076	router.tools	3	CallTracer dialog truncated on Japanese system
CSCma21988	setup.pim	3	Change Symposium version from 4.0 to 4.0/4.2
CSCdz53198	scripteditor	3	The Script Editor stops working during a delete of old versions of scripts
CSCma21340	scripteditor	3	Script Editor allows a script with errors to be active
CSCma23279	scripteditor	3	The scheduled script display is based on local AW time
CSCma19132	setup.3rdparty	3	3rd party installer fails to reinstall EAServer 4.1.1 over itself
CSCma23610	setup.pim	3	Activating new VRU PIM requires shutting down existing PIM

8 Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

8.1 World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

8.2 Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

8.3 Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products Marketplace:
- http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
- <http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

8.4 Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Attn Document Resource Connection
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

9 Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

9.1 Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

9.2 Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

9.2.1 Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.cisco.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

<http://www.cisco.com/register/>

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

9.2.2 Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.