



# Release Notes for Cisco Customer Response Applications 3.0 on the Cisco ICS 7750

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These release notes describe the features and open caveats for Cisco Customer Response Applications (CRA) Release 3.0 on the Cisco ICS 7750.



## Note

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Effective with Release 3.0, Cisco Customer Response Applications (CRA) has been renamed Cisco Customer Response Solutions (CRS). The Cisco website and packaging materials have been updated to reflect the new name, but the user interface and documentation have not been updated with the new name.

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# What's New in Cisco CRA Release 3.0

Cisco CRA Release 3.0 includes the following new features:

- **Improved Administration**—Provides a single point of administration for CRA and Cisco CallManager. The CRA 3.0 interface includes a menu bar that appears on all CRA web pages, a variety of enhancements to improve navigation, and enhanced management for prompts, scripts, and applications.
- **ICD Skills-Based Agents**—Allows an agent to be independent from a particular resource group. You can route a caller with specific needs to a resource (an agent) who has the skills needed to handle the call. With Skills-Based Routing (SBR), skill levels are based on an agent's knowledge of a particular subject. You can assign multiple skills to each resource.
- **Enhanced Reporting**—Real Time Reporting provides detailed information about contacts, applications, tasks, sessions, and database usage. Historical Reporting provides detailed information about the call activities of your CRA system. With Historical Reporting, you can access historical data; view, print, save, sort and filter reports; send scheduled reports to a file or printer; and export reports in a variety of formats, including PDF, RTF, and XLS.
- **Nuance Automated Speech Recognition (ASR)**—Allows callers to move through menus and to select menu options by speaking words or phrases instead of pressing keys on a telephone.
- **Nuance Text-to-Speech (TTS)**—Converts plain text (UNICODE) files, by using the Nuance TTS engine, to speech prompts.
- **Support for Internationalization**—Allows the CRA system to be tailored to the requirements of different languages through localization. Prompts can be played back in different languages and can be generated, based on syntax requirements, currency and date conventions, and other language-specific requirements and rules. This feature is available with Cisco CRA Release 3.02.
- **Voice eXtensible Markup Language (VXML)**—Integrated VXML makes it possible to create audio dialogs that use synthesized speech, digitized audio, recognition of spoken and dual tone multifrequency (DTMF) key input, recording of spoken input, telephony and mixed-initiative conversations.
- **Grammars**—Allows matching of input from callers (spoken words or DTMF digits) with sets of predefined rules for the different languages.
- **Improved CRA Editor scripts:**
  - **Contact Neutrality**—Generic scripts can be written to handle multiple functions so that the same scripts can be used for calls, e-mail messages, and HTTP contacts.
  - **Enhanced Steps and Prompting**—Several new and enhanced steps are available.
  - **Enhanced Variables and Expressions**—Greater support for variables and expressions.
  - **Improved Script Interruption**—A script can now be interrupted between steps. In addition, media steps can be configured to be interruptible while they are playing. Subflows can also be marked to disable interruptions, thus providing an uninterruptible sequence of operations.
- **Session Management**—Sessions track contacts and related information as the contacts move through the CRA system.
- **Improved Error Handling**—Errors in an application can be handled on various levels: error branches, exceptions, or default scripts.
- **Converting Existing Scripts to CRA 3.0**—Scripts created prior to CRA 3.0 will continue to function without the need for conversion when executed by the CRA 3.0 Engine. If you wish to enhance existing scripts, you will have the option to convert them, if required, when loading them in the CRA Editor.

## Features Enabled with Each Product Key

**Table 1** lists the Cisco CRA features that are enabled by each Cisco CRA product key. The Cisco ICS 7750 does not support Cisco Intelligent Contact Manager (ICM) or IP Queue Manager (IP-QM).

**Table 1** *CRA Features Enabled with Product Keys for the Cisco ICS 7750*

Feature	IP IVR <sup>1</sup>	IP ICD <sup>2</sup> Standard	IP ICD Enhanced	IP ICD Enhanced/ CTI <sup>3</sup> Option	Extended Services
Telephony Applications	X	X	X	X	
Integrated Contact Distribution		X	X	X	
Extension Mobility	X <sup>4</sup>			X <sup>4</sup>	X
Auto Attendant	X <sup>4</sup>			X <sup>4</sup>	X
Multiple Language Support (3.02)	X	X	X	X	
JTAPI <sup>5</sup>	X	X	X	X	X
HTTP <sup>6</sup>	X			X	
E-mail	X			X	
Database	X			X	
Cisco Media Termination	X	X	X	X	X
Automated Speech Recognition (ASR)	X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	
Text-to-Speech (TTS)	X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	
Voice Browser	X <sup>8</sup>		X <sup>8</sup>	X <sup>8</sup>	
Real-Time Reporting	X	X	X	X	X
Historical Reporting	X <sup>9</sup>	X <sup>10</sup>	X <sup>11</sup>	X <sup>11</sup>	
Editor	X <sup>12</sup>	X <sup>13</sup>	X <sup>14</sup>	X	

1. IP IVR = Cisco IP Interactive Voice Response.

2. IP ICD = Cisco IP Integrated Contact Distribution.

3. CTI = Computer Telephony Interface.

4. Sample scripts included.

5. JTAPI = Java Telephony Application Programming Interface.

6. For Extended Services, the HTTP subsystem and the ability to configure HTTP triggers are included for use with Extension Mobility.

7. Add-on Feature.

8. Available only if ASR option is purchased.

9. Only IVR Reports.

10. ICD Standard Historical Reporting Client can be purchased.

11. ICD Enhanced Historical Reporting Client can be purchased.

12. ICD steps not included.

13. E-mail, Http, DB, and Java steps not included; also, the Set Priority step is not included.

14. E-mail, Http, DB, and Java steps not included.

# Unsupported Features and Requirements

Cisco CRA 3.0 on the Cisco ICS 7750 does not support the IP Queue Manager (IP-QM) that interfaces with the IP Customer Contact (IPCC) system.

Cisco CRA 3.0 on the Cisco ICS 7750 has the following requirements:

- The system processing engine (SPE) running Cisco CRA 3.0:
  - Supports Microsoft Data Exchange (MSDE) on a dedicated configuration.
  - Supports Microsoft SQL on a co-located configuration.
  - Must have 1 GB of RAM for running all CRA applications. The SPE for Nuance TTS and ASR must have 1 GB of RAM, also.
- VLANs are needed to support the complete CRA monitoring and recording features on the Cisco ICS 7750. In order to configure VLANs, the Cisco ICS 7750 must run System Software Release 2.5.0. In addition, the Cisco ICS 7750 must have an MRP300 installed or have another VLAN-capable router available.



**Note**

For the latest information about supported features and configurations, refer to the online version of the release note at this URL:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/ics/icsapps/icscra/cra30/index.htm>

## Product Configurations

The Cisco ICS 7750 supports two configuration options for the Cisco CRA 3.0 server:

- Cisco CRA 3.0 can be installed on a dedicated SPE.
- Cisco CRA 3.0 can be co-located on an SPE running Cisco CallManager 3.2 or higher.
- If you are using the Nuance TTS and ASR applications, it is recommended that you install these applications on a separate, dedicated SPE.

Table 2 lists the two configuration options and the supported ICD agents or IVR ports capacities.

**Table 2**      *Capacities for Cisco CRA 3.0 Product Configurations for the Cisco ICS 7750*

Cisco CRA Application	Co-Located with Cisco CallManager on an SPE	Dedicated SPE
IP Integrated Contact Distribution (ICD)	10 ICD Agents 1 ICD Supervisor	ICD Agent and Supervisor capacity is configurable <sup>1</sup> .
IP Interactive Voice Response (IVR)	10 IVR ports	IVR port capacity is configurable*

1. Specific capacities for a dedicated IP-IVR configuration or a dedicated IP-ICD configuration depend on the number and type of CRA features in the system. The sales engineer (SE) uses the CRA Performance Tool to calculate maximum capacities for your system.



**Note**

You can have up to 500 users in Cisco CallManager when you are running Cisco CRA on the Cisco ICS 7750.

# Qualified Combinations of Product Releases

Cisco CRA 3.0 has been qualified for the following product combinations only. [Table 3](#) lists the qualified product combinations for Cisco CRA 3.0, Cisco CallManager, and ICS System Manager.

**Table 3** *Qualified Combinations of Product Releases*

Cisco CRA Release	Cisco CallManager Release	ICS System Manager Core Software Release
3.0	3.2(1), 3.2(2)	2.5.0 or later



## Note

For the latest information about supported product releases, refer to the online version of this document at this URL:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/ics/icsapps/icscra/cra30/30crsrn.htm>

## Upgrading from Cisco CRA 2.2.(x)



## Caution

You cannot upgrade Cisco CRA 2.2(4) to Cisco CRA 3.0(1). If you are running Cisco CRA 2.2(4), you must wait for release 3.0(2) before you can upgrade your system.

To upgrade from Cisco CRA Release 2.2(2) or 2.2(3) to CRA Release 3.0(1), follow these steps:

- Step 1** Install any hotfixes for the operating system on your SPE running CRA. For instructions, go to this URL: [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/3\\_2/install/upgrade/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/3_2/install/upgrade/index.htm)
- Step 2** Upgrade your Cisco ICS 7750 System Manager software to Release 2.5.  
For instructions, refer to [Installing System Software Release 2.5.0 on the Cisco ICS 7750](#).
- Step 3** Upgrade your Cisco CallManager software to Cisco CallManager Release 3.2.  
For instructions, refer to [Upgrading Cisco CallManager](#).
- Step 4** Install Cisco CRA Release 3.0 on your SPE running CRA.  
For instructions, refer to the “[Installing Cisco CRA 3.0](#)” chapter in *Getting Started with Cisco Customer Response Applications*.
- Step 5** If you want to maintain existing profile information, use the LDAP conversion tool to convert configuration and Repository profiles. For instructions, refer to Appendix C, “[Cisco CRA 2.x to 3.0 Profile Conversion](#),” in *Getting Started with Cisco Customer Response Applications*.



## Note

For information about known problems with upgrades, refer to the “Cisco CRA Upgrade Known Problems” section in the [Release Note for Cisco Customer Response Applications 3.0](#).

## Related Documentation

For a list of related documentation, refer to the *Cisco Customer Response Applications 3.0 for Cisco ICS 7750 Documentation Locator*, which is included with this product. To view the most recent version of this document, go to the following location:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/ics/icsapps/icscra/cra30/index.htm>



### Note

The Cisco ICS 7750 has special requirements for setting up agent recording and monitoring that uses the Switched Port Analyzer (SPAN) feature of IOS. For information and set-up instructions, refer to *Setting Up the Switched Port Analyzer (SPAN) for Monitoring and Recording IP-ICD Agents on the Cisco ICS 7750* at this URL:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/ics/icsapps/icscra/cra30/icsspan.htm>

For information about the Cisco ICS 7750 system, refer to the *Cisco ICS 7750 Documentation Roadmap*. This document provides a high-level overview of the key tasks involved in installing, configuring, and maintaining the ICS 7750. Each task has one or more hyperlink references to the documentation that tell how to complete that task.

<http://www.cisco.com/univercd/cc/td/doc/product/voice/ics/icsmap.htm>

## Additional Information Online

You can access information about Cisco CRA and related voice products online:

- Cisco voice product documentation is available in online help and on the web at the following URL:  
<http://www.cisco.com/univercd/cc/td/doc/product/voice/index.htm>
- Cisco CRA Release 3.0 information is available at the following URL:  
[http://www.cisco.com/univercd/cc/td/doc/product/voice/sw\\_ap\\_to/apps\\_3\\_0/english/admn\\_app/rel\\_note/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/sw_ap_to/apps_3_0/english/admn_app/rel_note/index.htm)
- Online help is available from the Cisco CRA Administration web pages, the Cisco CRA Editor, the Cisco Supervisor Desktop, the Cisco Agent Desktop, the Cisco Desktop Administrator, and the Cisco CRA Historical Reports.

## Known Problems

Known problems are unexpected behavior or defects in Cisco software releases. They are graded according to severity level. Release notes for Cisco CRA contain information for severity levels 1, 2, and 3 only.

To see a list of known problems for Cisco Customer Response Applications, refer to the “Known Problems” section of the *Release Notes for Cisco Customer Response Applications 3.0*.

In addition, you can search for known problems on the Cisco bug tracking system tool, which is called Bug Toolkit.

To access Bug Toolkit, perform one of the following actions:

- Enter the following URL in your web browser:  
[http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl)

- Log in to CCO, and choose **Service & Support > Technical Assistance Center > Tool Index > Software Bug Toolkit**.

Table 4 lists the known caveats for Cisco CRA 3.0 running on the Cisco ICS 7750.

**Table 4**     *Caveats for Cisco CRA 3.0 on the Cisco ICS 7750*

Caveat Number	Description
CSCdy24491	<p>The CRA installation program might not set the maximum size of the MSDE database to 256 MB, which is the required setting. In this situation, the CRA databases can grow large enough to affect system performance. For example, there might be an increase in the abandoned call rate, and agents can be logged off while running a report.</p> <p><b>Workaround:</b></p> <p>A correction for “MSDE max server memory not capped to 256 MB” problem is included in the Support Patch B. You can download this service pack at this URL:</p> <p><a href="http://www.cisco.com/cgi-bin/tablebuild.pl/crs30">http://www.cisco.com/cgi-bin/tablebuild.pl/crs30</a>.</p> <p>You can use the following commands to see whether MSDE max server memory is set to 256:</p> <ol style="list-style-type: none"> <li>1. Open a Command window, and enter the following commands, where <i>sa_password</i> is the database password. <pre> osql -Usa -Psa_password sp_configure 'show advanced option', 1 go reconfigure go sp_configure go </pre> </li> <li>2. Check that the value in the config_value column for max server memory is 256. If it is not, type the following commands: <pre> sp_configure 'show advanced option', 1 go reconfigure go sp_configure 'max server memory', 256 go reconfigure go quit </pre> </li> </ol>

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These sections explain how to obtain documentation from Cisco Systems.

## World Wide Web

You can access the most current Cisco documentation on the World Wide Web at this URL:

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[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## Documentation CD-ROM

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Cisco TAC inquiries are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

The Cisco TAC resource that you choose is based on the priority of the problem and the conditions of service contracts, when applicable.



## Cisco TAC Web Site

You can use the Cisco TAC Web Site to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to this URL:

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All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

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

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC Web Site, you can open a case online by using the TAC Case Open tool at this URL:

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

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

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

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

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