



Avaya Interaction Center

Release 7.2.4 Service Pack

Release Notes

January 9, 2012



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Introduction

The Avaya Interaction Center 7.2.4 Release Notes provides information such as enhancements, defects fixed and known defects in this release.

This document provides late-breaking information to supplement Interaction Center software and documentation. For updated documentation, product support notices, and service pack information, visit the Avaya Support Center Web site at <http://support.avaya.com>.



Overview

Avaya Interaction Center (IC) software updates are distributed in service packs. The Avaya Interaction Center (IC) 7.2.4 Service Pack is the fourth service pack for the IC 7.2 release. These software updates are used to correct issues and add features not included in the original release of the IC 7.2 system.

Avaya recommends that all IC 7.2 customers update to this patch level as soon as possible to ensure they have a complete set of fixes. IC 7.2.4 does not include a redelivery of the entire IC product. However, IC 7.2.4 is a cumulative Service pack, containing files from all previous Service Packs on IC 7.2 system (that is IC 7.2.1, IC 7.2.2, IC 7.2.3 and IC 7.2.3.x Super patches). IC 7.2.4 Service Pack can be installed on any of the previous IC Service Packs (that is IC 7.2.1, IC 7.2.2 and IC 7.2.3) OR, any of the SuperPatches (IC 7.2.3.x) that were applied on top of IC 7.2.3 Service Pack.

Please follow instructions in the Release Notes when installing and configuring the IC 7.2.4 Service Pack. It contains information, such as known defects and defects fixed in this release, which may not necessarily be included in the standard IC 7.2 documentation. The existing features in IC7.2 continue to be in use, unless mentioned otherwise in the release notes.

Also, refer to the Section Product Support Information, under this releasenotes for information that were published as PSNs.

The Release Notes provides detailed installation instructions and configuration information. The Installation Tool provided with this service pack is designed to easily install all of the fixes in the IC 7.2.4 Service Pack.

For additional IC 7.2 documentation information, please refer to:

- Interaction Center (IC) 7.2 Product Documentation
- Interaction Center (IC) 7.2 Release Notes
- Avaya IC for Siebel 7 and 8 Integration Guide

Supported new features and configurations

Avaya IC includes support for the following software features and configurations:

| Feature/Configurations | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---|----------|----------|----------|----------|
| HTML Editor Replacement for Rich Client | ✓ | ✓ | ✓ | ✓ |
| Time in Email Template enhanced to support 24 or 12 hour format | ✓ | ✓ | ✓ | ✓ |
| Support for Siebel 7.8.2.13 | ✓ | ✓ | ✓ | ✓ |
| SNMP-MIB Enhancement for different OIDs in Traps based on priority. | ✓ | ✓ | ✓ | ✓ |
| Ability to enter E-Mail display name in IC Manager | ✓ | ✓ | ✓ | ✓ |
| Options to set column width, size and location of chat tasklist in IC agent | ✓ | ✓ | ✓ | ✓ |



| Feature/Configurations | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--|----------|----------|----------|----------|
| Service Class OWT data in OA reports | ✓ | ✓ | ✓ | ✓ |
| Workflow Server enhanced to handle large number of Workflow channel assignments | ✓ | ✓ | ✓ | ✓ |
| Chat Typing Status Support | ✓ | ✓ | ✓ | ✓ |
| Microsoft SQL Server 2005 SP3 | ✓ | ✓ | ✓ | ✓ |
| Workflow Server Modification for Dynamic Queue Contact Entry | ✓ | ✓ | ✓ | ✓ |
| Synchronization between Siebel toolbar and Hard phone | ✓ | ✓ | ✓ | ✓ |
| WebAdmin Page Cancel Task with Specified Status | ✓ | ✓ | ✓ | ✓ |
| TSA Server enhanced for Extended UI Data Support | ✓ | ✓ | ✓ | ✓ |
| Support for IE8 on AAWC | - | ✓ | ✓ | ✓ |
| Restrict the retries by WACD on requesting the WAA to qualify a task when no agent is logged into IC | - | ✓ | ✓ | ✓ |
| Enhanced ASIS to read IC group properties without restart | - | ✓ | ✓ | ✓ |
| Adding UUID and ALIAS of TS in EDU for IVR application | - | ✓ | ✓ | ✓ |
| HttpVOX and VOX support TS.TransferEX method | - | ✓ | ✓ | ✓ |
| Vox Server to handle extension numbers in excess of 2^31 | - | ✓ | ✓ | ✓ |
| Monitoring IVR extension using *v assignment | - | ✓ | ✓ | ✓ |
| Indication by WACD about invalid email requalification attempts | - | ✓ | ✓ | ✓ |
| Disable 'Ready/NotReady' button if agent has not logged into any channel for IC-Siebel. | - | ✓ | ✓ | ✓ |
| LDAP integration with Avaya Interaction Center | - | ✓ | ✓ | ✓ |
| SSL Enabled communication between HTTPConnector Server and Dialog Designer 5.1 | - | ✓ | ✓ | ✓ |
| Windows 7 support for Avaya Agents and Admin | - | ✓ | ✓ | ✓ |



| Feature/Configurations | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---|----------|----------|----------|----------|
| Deploying Avaya Rich Client on Citrix XenApp 6.0 on Windows 2008 R2 | - | - | ✓ | ✓ |
| Performance gains in SDK WebServices using DS Authentication-Only API over full DS Login. | - | - | ✓ | ✓ |
| Support for Microsoft Windows 2008 Server R2 (x64) (Enterprise Edition)** | - | - | ✓ | ✓ |
| Support for Microsoft SQL Server 2008 (v10.50.1600.1*)** | - | - | ✓ | ✓ |
| Support for hosting IC website using IIS 7.0 on Windows 2008 R2 | - | - | ✓ | ✓ |
| Support for hosting IC website using IBM HTTP Server 7.x on AIX 6.1 | - | - | ✓ | ✓ |
| Support for deployment of IC on VMWare 4.0 | - | - | ✓ | ✓ |
| Oracle Database 11g Client Release 11.2.0.1.0* | - | - | ✓ | ✓ |
| Added Hyperlink button in the HTML toolbar for HTML Editor (only) in Rich Client. | - | - | - | ✓ |
| Windows 7, 32-bit Support | - | ✓ | ✓ | ✓ |
| Windows 7, 64-bit Support** | - | - | - | ✓ |
| Siebel CRM 8.1.1.x support | - | - | - | ✓ |
| Support for Oracle Database Client Release 11.0.2.1.0 on Windows 2008, 64-bit. | - | - | - | ✓ |

* Product has been tested with the specified minor versions.

** There are limitations in using Advocate Admin and Workflow Designer. Please refer to IC 7.2.4 Known Issues section.

Features not supported

- **Same Time Feature**

"Same Time" feature from Webagent is no longer supported from IC 7.2 release.

Note: Web agent's tool bar shows Same Time button but it will not work as functionality is not supported.



Additional Web Browsers Supported in Service Pack IC 7.2.x

Avaya IC includes support for the following Web Browsers for **End-Customer Chat Escalations** in Service Pack IC 7.2.x.

| Web Browser |
|----------------------------|
| Chrome 2 (End Customer) |
| Safari 4 (End Customer) |
| Opera 10 (End Customer) |
| Mozilla 3.5 (End Customer) |
| Internet Explorer 8.0 |

Important: Internet Explorer 8 alone supports IV Chat and Collaboration for End Customer use.

IC 7.2.x interoperability with OA 7.2.x

| | OA 7.2 | OA 7.2.1 | OA 7.2.2 | OA 7.2.3 | OA 7.2.4 |
|----------|--------|----------|----------|----------|----------|
| IC 7.2 | ✓ | ✓ | - | - | - |
| IC 7.2.1 | - | ✓ | - | - | - |
| IC 7.2.2 | - | - | ✓ | - | - |
| IC 7.2.3 | - | - | - | ✓ | ✓ |
| IC7.2.4 | - | - | - | ✓ | ✓ |

The OA 7.2.4 and IC 7.2.4 are all considered "service pack" updates to previous releases. The content of these releases is restricted to bug fixes, patch "roll ups", and occasional enhancements. For information about the OA 7.2.4 release, see the Operational Analyst 7.2.4 Release Notes.

IC 7.2.4 interoperability with Communication Manager and AES

This section describes the compatibility of IC 7.2.4 with Communication Manager and AES versions.



Communication Manager compatibility matrix:

| Communication Manager | Telephony Server running on the operating system |
|-----------------------|--|
| 5.x | Windows 2003 R2 SP2 |
| 6.0 | Windows 2008 R2 Solaris 10 AIX 6.1 |

AES compatibility matrix:

| | |
|---|-----------|
| AES 4.2.1 with CVLAN Client 5.2.1 on windows AES 4.2.1 with CVLAN Client 3.1 on Solaris and AIX | Certified |
| AES 5.2.1 with CVLAN Client 4.2.1 or 5.2.1 on windows AES 5.2.1 with CVLAN Client 3.1 on Solaris and AIX | Supported |
| AES 6.1 with CVLAN client 6.1 on win2k8R2 AES 6.1 with CVLAN client 3.1 on Solaris and AIX | Certified |

Feature Comparisons of Avaya Agent Clients

Below table shows the feature comparisons between various Agent clients supported by AIC 7.2.x

| Channel / Feature | Functionality Supported | Avaya Rich Client | Avaya Web Client | Avaya SDK Client | Avaya Siebel Native Client | Avaya Siebel Hybrid Client |
|-------------------|---------------------------|-------------------|------------------|------------------|----------------------------|----------------------------|
| Voice | Answer | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Blind Transfer | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Consult | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Conference | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Hold/Reconnect | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Wrap | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Transfer to Virtual Queue | ✓ | ✓ | ✓ | ✓ | × |
| | Switch to caller | ✓ | ✓ | ✓ | × | × |



| Channel / Feature | Functionality Supported | Avaya Rich Client | Avaya Web Client | Avaya SDK Client | Avaya Siebel Native Client | Avaya Siebel Hybrid Client |
|-------------------|---|-------------------|------------------|------------------|----------------------------|----------------------------|
| | Transfer to Agent | ✓ | ✓ | ✓ | ✓ | ✓ |
| Email | Reply / Reply All | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Forward | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Defer | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Use local/global resource for responses | ✓ | ✓ | × | × | × |
| | Dismiss | ✓ | ✓ | ✓ | × | ✓ |
| | Transfer to Agent | ✓ | ✓ | ✓ | × | ✓ |
| | Transfer to Virtual Queue | ✓ | ✓ | ✓ | ✓* | × |
| | Wrapup Codes | ✓ | ✓ | ✓ | × | ✓ |
| | HTML Editor HyperLink toolbar button | ✓ | × | × | × | × |
| Chat | Answer | ✓ | ✓ | ✓ | × | ✓ |
| | Transfer to Agent | ✓ | ✓ | ✓ | × | × |
| | Conference | ✓ | ✓ | ✓ | × | ✓ |
| | Wrap | ✓ | ✓ | ✓ | × | ✓ |
| | Co-browse | ✓ | ✓ | × | × | ✓ |
| | Emoticons | ✓ | ✓ | ✓ | × | ✓ |
| | Chat Typing status | ✓ | ✓ | ✓ | × | ✓ |

* This feature is supported for Avaya Siebel Native Client. However, it has been tested only on IC BA (Business Advocate) setup on Windows.



| Channel / Feature | Functionality Supported | Avaya Rich Client | Avaya Web Client | Avaya SDK Client | Avaya Siebel Native Client | Avaya Siebel Hybrid Client |
|---------------------------|---------------------------|-------------------|------------------|------------------|----------------------------|----------------------------|
| | Join Us | ✓ | ✓ | ✓ | × | ✓ |
| | Transfer to Virtual Queue | ✓ | ✓ | ✓ | × | ✓ |
| Contact History | View | ✓ | ✓ | ✓ | × | × |
| | Filter | ✓ | ✓ | ✓ | × | × |
| Supervisor | Monitor/Un-Monitor | ✓ | ✓ | ✓ | × | ✓ |
| | Visible / Invisible | ✓ | ✓ | ✓ | × | ✓ |
| Multimedia Support | | ✓ | ✓ | ✓ | × | ✓ |
| Selective After Call Work | | × | × | × | ✓ | × |

Product updates and patches

For a detailed, latest list of all the product updates and patches, visit the Avaya Technical Support Web site <http://www.avaya.com/support>.

The Avaya Technical Support Web site allows you to download the latest patches and also provides you installation instructions.

IC 7.2.4 Service Pack installation and configuration guidelines

The following steps outline the procedures that need to be performed for installing and configuring the Avaya IC 7.2.4 Service Pack. Perform the installation and configuration procedures in exactly the same sequence as listed below.

Note: Skip the steps that are not applicable to your IC environment.

1. Stop Avaya Agent Web Client.
2. Stop IC servers, IC services, and Administration and Design.
3. Ensure your system conforms to the prerequisites.
4. Ensure that you have a 7.2 License Key before proceeding.
5. Check whether you have received all the installation files for the IC components included in the IC 7.2.4 Service Pack.



6. Explore the installation options for installing the IC 7.2.4 Service Pack.
7. Install IC Servers.
8. Install the Siebel Integration Component.
9. Install the Avaya Agent Web Client Connector.
10. Install the Avaya Agent Web Client.
11. Install Administration and Design.
12. Install Avaya Agent.
13. Start IC Servers, IC Services, and Administration and Design.
14. Perform the following configuration procedures in the sequence given below:
 - a. Configure all Server machines
 - b. Configure SDK Server
 - c. Configure Web Services
 - d. Configure Design and Admin
 - e. Configure Avaya Agent
 - f. Configure Avaya Agent Web Client
 - g. Configure the IC - Siebel integration
15. Start Avaya Agent Web Client.



Enhancements

This section includes the following topics:

- [Enhancements in IC7.2.4 Service Pack](#)
- [Enhancements in IC7.2.3 Service Pack](#)
- [Enhancements in IC7.2.2 Service Pack](#)
- [Enhancements in IC7.2.1 Service Pack](#)

Enhancements in IC 7.2.4 Service Pack

- GRIP 5392: Windows 7 64-bit support
- GRIP 4645: No Autoconnect after Consult cancel

Windows 7 64-bit support

IC 7.2.4 supports Windows 7 64-bit for:

- Avaya Agent (Rich Client)
- Avaya Agent Web Client (Thin Client)
- BA Admin Tool
- BA Config Tool
- IC Manager
- Config Tool
- Config Accelerator

Support has been added to configure Advocate supervisor on Windows-7, 64 bit.

Perform the following steps to configure Advocate on Windows 7, 64-bit:

1. Install IC 7.2 RTM base Design & Admin tools on Windows 64 bit machine
2. Apply IC 7.2.4 service pack on Windows 64 bit machine.
3. Run BA configuration tool to configure Business advocate supervisor. (For more information please refer "IC 7.2 Business Advocate Configuration and Administration" guide.

GRIP 4645:No Autoconnect after Consult cancel

For more information, see the section "[GRIP 4645: No Autoconnect after Consult cancel](#)" in the IC 7.2.4 Configurations section.

Enhancements in IC 7.2.3 Service Pack

- Performance gains using DS Authentication-Only API over full DS Login



- Deploying Avaya IC on Windows 2008 Server R2

Performance gains using DS Authentication-Only API over full DS Login

A new DS.Authenticate method is added to authenticate with username and password. It only performs verification of authenticity and expiration of user credentials. Therefore it is faster than the existing login process which queries and updates various tables in the database. IC SDK WebService is also changed to use Authenticate method instead of Login. This reduces the authentication time when calling a WebService.

Deploying Avaya IC on Win2008 Server R2

With Avaya IC 7.2.3, support for Windows 2008 Server R2 Operating System has been added. Refer to IC 7.2.3 Configuration section for detailed configuration guidelines.

Enhancements in IC 7.2.2 Service Pack

Below are the enhancements incorporated into IC72 release with Service pack 7.2.2:

- [Support for IE8 on AAWC.](#)
- [Restrict the retries by WACD on requesting the WAA to qualify a task when no agent is logged into IC](#)
- [Enhanced ASIS to read IC group properties without restart](#)
- [Adding UUID and ALIAS of TS in EDU for IVR application](#)
- [HttpVOX and VOX support TS.TransferEX method.](#)
- [Vox Server to handle extension numbers in excess of 2^31](#)
- [Monitoring IVR extension using *v assignment](#)
- [Indication by WACD about invalid email requalification attempts](#)
- [Disable 'Ready/NotReady' button if agent has not logged into any channel for IC Siebel.](#)
- [Avaya Interaction Center integration with LDAP](#)
- [SSL Enabled communication between HTTPConnector Server and Dialog Designer 5.1](#)
- [Windows 7 support](#)

Support for IE8 on AAWC

For more information, please refer to the [Avaya Agent Web Client](#) section in Configurations.

Restrict the retries by WACD on requesting the WAA to qualify a task when no agent is logged into IC

Introducing a new Configuration variable "**RequestResourceRetryCount**" in WACD server. This parameter controls the number of "WACD.RequestResource" re-tries (made to WAA server). For e.g. if it is set to 1, WACD will send "WACD.RequestResource", max 2 times (1st time it will try and 2nd time it will retry).



This parameter will be used only for chat contacts in Advocate mode.

In case the "**ResourceRequestRetryCount**" is not configured or negative value is provided, it is assumed to be **1000** (default).

For more information, please refer to the [IC Core Server Configuration](#) section in Configurations

Enhanced ASIS to read IC group properties without restart

Till IC 7.2.1, after changing any of the group properties, ASIS server needed to be started to have properties in effect. In IC 7.2.2 ASIS server is enhanced to read the group properties set in IC manager without restarting the server.

Note: After changing the group properties, agents need to be relogged-in to have the changed properties in effect.

Adding UUID and ALIAS of TS in EDU for IVR application

TS is enhanced to add its own UUID and alias name in the edu container voice.x.uuid and voice.x.owner respectively. This would help to identify the TS which created that particular EDUID.

HttpVOX and VOX support TS.TransferEX method

HttpVOX and VOX are now supporting TS.TransferEx method so that it can preserve the Extended UUI data while transferring the call.

HttpVOX

A new configuration "**Enable Extended Data Support**" is added in "**HttpVOX**" tab of httpVox Server Configurations. If this configuration is checked, HttpVOX extract the Extended UUI data from TS.IncomingCall event and send it while transferring the call using TS.TransferEx method. If this value is not set,HttpVOX would still call the TS.TransferEX method with "NULL" as the extended data.

By default "**Enable Extended Data Support**" configuration is **unchecked**.

VOX

A new configuration "**Enable Extended Data Support**" is added in "**VOX**" tab of Vox Server Configurations. If this configuration is checked, VOX extract the Extended UUI data from TS.IncomingCall event and send it while transferring the call using TS.TransferEx method. . If this value is not set, HttpVOX would still call the TS.TransferEX method with "NULL" as the extended data.

By default "**Enable Extended Data Support**" configuration is **unchecked**.

Vox Server to handle extension numbers in excess of 2^31

HttpVox and VOX server are now compliant with **E.164-based dial plan**.



Monitoring IVR extension using *v assignment

HttpVox is changed to assign stations with '*v' criteria by-default, earlier it was *p. This change is incorporated to support "Converse-On" step in vector.

Indication by WACD about invalid email requalification attempts

For invalid email qualification, WACD Admin page shows "**waiting for qualification**" in RED text.

Note: Invalid Qualification means, Workflow to qualify chat or email is not available or it's taking more time to do qualification and WACD time out.

Disable 'Ready/NotReady' button if Siebel agent has not logged into any channel for IC Siebel.

Ready/NotReady button is disabled if agent is not logged in to any channel. The button will be enabled once the connection resets and agent is able to log into any channel.

Avaya Interaction Center 7.2.2 integration with LDAP

LDAP is widely used in enterprises for user management. IC has been using its own proprietary user management facility through repository database to manage users. Due to this, Enterprises end up managing users on Active Directory/LDAP as well as in IC separately. This makes synchronization of users difficult e.g. when passwords are changed, user accounts are disabled etc. IC integration with LDAP will allow users to be in sync with Active Directory/LDAP hence easing the job of user management.

For more information, please refer [Installation and Configuration section for Active Directory/ LDAP](#)

SSL Enabled communication between HTTPConnector Server and Dialog Designer 5.1

The earlier HTTPConnector was accepting HTTP requests over TCP sockets. It has been enhanced to provide additional security to have a **secure communication with its SSL enabled clients**.

For configuration, please refer to [IC Core Server section](#) in Configurations.

Avaya Interaction Center supports Windows 7

Only 32 bit workstations are supported till 7.2.3. 64-bit support has been added in 7.2.4 service pack.

Refer to Windows 7 64 bit support section for the IC tools and applications supported.

Enhancements in IC 7.2.1 service pack

Below are the enhancements incorporated into IC 7.2 release with service pack 7.2.1.

- [HTML Editor Replacement for Avaya Agent Rich Client](#)
- [Time in Email Template Flexible to Allow 24 or 12 hour format](#)



- [Support for Siebel 7.8.2.13](#)
- [SNMP-MIB Enhancement](#)
- [Ability to enter E-Mail display name in IC Manager](#)
- [Options to set column width, size and location of chat task-list in IC agent](#)
- [Service Class OWT data in OA reports](#)
- [Workflow Server Modification for Dynamic Queue Contact Entry](#)
- [Workflow Server enhanced to handle large number of Workflow channel assignments](#)
- [Chat Typing Status Support](#)
- [Synchronization between Siebel toolbar and Hard phone](#)
- [WebAdmin Page Cancel Task with Specified Status](#)
- [TSA Server enhanced for Extended UII Data Support](#)

HTML Editor Replacement for Avaya Agent Rich Client

This feature provides better HTML editing capabilities for AIC agents. Separate xml files are provided for configuring each of the below enabling Agents to use a highly customized email editor.

- NewOutbound Email
- Forward/Reply for Email
- Email Preview
- Resources Configuration

Certain properties in **Application.properties** file are deprecated. Now the properties will be configured in the xml files.

The new HTML editor provides the below functionality:

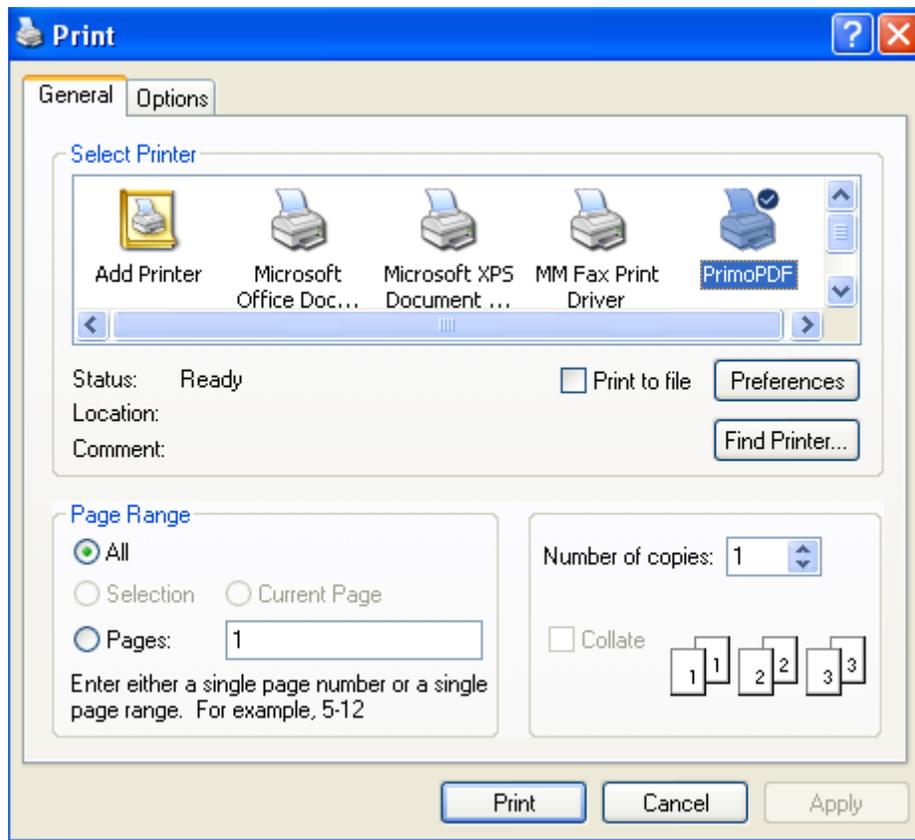
- Editing or viewing or previewing resource
- Editing or viewing or previewing email
- Hyperlink Support - Hyperlinks will work if present in the email body.
- Printing support - Editlive does not provide printing thus WebAgent will use JDIC for printing email.
- Print Screen support
- EditorUtil provides utility functions for Editor. This includes method that converts plain text to html that considers **
** as line break. This needs to be changed to use **<p>** tags.
- Html part of email - While sending out an email, the html part needs to have associated style sheet declared inline. As of today we take out data within **<body>** tag.
- Email Templates - Email Templates should insert **<p>** tag instead of **
** tag.

Note: This will impact on existing email templates on deployment site.

Pre-requisite: Fonts which are configured in the configuration files must already be installed on the machine where the Avaya Rich Client is installed before use.

Additional feature like Email Printing Option is provided using JDIC (Java Desktop Integration Component).

In IC721 SP below pop-up screen will appear while printing from WebAgent.



For more information, please refer to the [Avaya Agent Rich Client](#) section in Configurations.

Time in Email Template Flexible to Allow 24 or 12 hour format

In IC 7.2, Time format in the email templates sent from IC display a 24 hour format even though the system time is set to 12 hour format. IC7.2.1 SP provides support for 12 hour system time format display in templates for countries using languages below.

- Traditional Chinese
- Simplified Chinese
- Korean
- Japanese
- Thai
- English

For countries using 24 hour time format will continue to observe their existing behavior.

DST will not be considered for in the 12 to 24 hour conversion and vice-versa.



This feature is supported on all platforms supported by IC (Windows/Solaris/AIX). To set the locale on a AIX/Solaris Core server machine, please refer to the Configuration Section for [IC Core Server Configuration](#)

Important:

- The system time format will be used by the %TIME% macro and hence if the 12 hour time format is configured, then alone the above is applicable.
- Any change to the Time Format requires a restart of the IC Servers for the change to take effect.

Support for Siebel 7.8.2.13

IC7.2.1 supports Siebel 7.8.2.13, in addition to Siebel 8.0.0.5 and 8.1.1. The integration objects and AICD.ini files are shipped with the Service Pack IC7.2.1 that is specific to Siebel 7.8.

For more information, please refer to the [IC – Siebel 7.8 Integration Configuration](#) in configuration section.

SNMP-MIB

In IC 7.2 all alarms reported were under the same OID and the descriptions were changed by the IC. Hence, NMS could not differentiate alarms based on their priority. In IC 7.2.1 SP, the MIB includes a unique OID for alarms based on their priority.

New OIDs has been added for critical (7), major (8) and minor (9). The trap will contain one of these OID depending on alarm severity.

Below image contains the added OIDs marked in BOLD.

```
- Normal Thu 10 15 09:43:12 148.147.167.129 Received event .1.3.6.1.4.1.6889.2.4.1.1.2.1 (enterprise;.1.3.6.1.4.1.6889.2.4.1.1.2 generic:6 specific:1), no format in trapd.conf. 7 args:[1] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmTime (Ticks): 1255579816 [2] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmName (OctetString): Manager.Alarm [3] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocation (OctetString): 148.147.167.119:7000 [4] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocationIpAddress (IpAddress): IC12SV01 [5] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocationPort (Integer): 7000 [6] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmPriorityMinor (Integer): minor [7] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmDescription (OctetString): Test Low Priority Alarm

- Normal Thu 10 15 09:43:12 148.147.167.129 Received event .1.3.6.1.4.1.6889.2.4.1.1.2.1 (enterprise;.1.3.6.1.4.1.6889.2.4.1.1.2 generic:6 specific:1), no format in trapd.conf. 7 args:[1] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmTime (Ticks): 1255579817 [2] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmName (OctetString): Manager.Alarm [3] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocation (OctetString): 148.147.167.119:7000 [4] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocationIpAddress (IpAddress): IC12SV01 [5] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocationPort (Integer): 7000 [6] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmPriorityMajor (Integer): major [7] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmDescription (OctetString): Test High Priority Alarm

- Normal Thu 10 15 09:48:06 148.147.167.129 Received event .1.3.6.1.4.1.6889.2.4.1.1.2.1 (enterprise;.1.3.6.1.4.1.6889.2.4.1.1.2 generic:6 specific:1), no format in trapd.conf. 7 args:[1] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmTime (Ticks): 1255580111 [2] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmName (OctetString): Manager.Alarm [3] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocation (OctetString): 148.147.167.119:7000 [4] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocationIpAddress (IpAddress): IC12SV01 [5] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmLocationPort (Integer): 7000 [6] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmPriorityCritical (Integer): critical [7] private.enterprises.avaya.mibs.crm.ic.avICAlarmMIB.avICAlarmObjects.avICAlarmTrapObjects.avICAlarmDescription (OctetString): Test Emergency Alarm
```

For information pertaining to configuration, please refer to [Installing SNMP-MIB](#) in section Configurations.

Ability to enter E-Mail display name in IC Manager

This feature provides the ability to optionally configure a display name for each e-mail account configured in AIC. If this feature is configured, for all Outbound emails an display name will be shown to the customer instead of e-mail address.



For example, on receiving a mail from **support@testdomain.com** the customers will see **Support Test** in their e-mail client. This provides a user-friendly and logical way for customers to identify emails.

If Display Name is not configured, customers will continue to see the email address in their emails. Example **sales@testdomain.com**

Please refer to [ICManager](#) Configuration Section to enable this feature. Ensure the changes to ICManager and in ADL files using [Database Designer](#) are performed correctly.

Important:

- After performing configuration, please restart the DataServer, Directory Server and perform a Manager > Refresh on ICManager. This ensures ICManager loads the configured email accounts correctly. Otherwise, an error will be reported “Could not load Email Accounts” when trying to view configured Email accounts.

Options to set column width, size and location of chat task-list in IC agent

IC7.2.1 SP provides ability to customize the chat-list attributes like column width, size and location through cdl file. These changes will persist over successive logins of Avaya Agent Rich Client.

Most recent changes either on the running application or changed cdl file, will take precedence over the other during the next agent login.

For configuration details, refer to [Database Designer](#) and [Avaya Agent Rich Client](#) sections under Configurations.

Service Class OWT data in OA reports

In IC7.2 the OWT (Oldest Wait Time for OA reports) calculations were based on the EDU.Createtime. From IC7.2.1 SP, the definition of OWT is as below:

OWT: Waiting time of the oldest contact in a Service class Queue. The waiting time being calculated from the moment the contact enters the service class and not the time (EDU.Createtime) it entered IC system. The time the contact enters the Service class queue is also called as “QueueArrivalTime” (QAT) and synonymously called as ResourceRequestDate.

With the new definition, one can determine how long a call/contact waited in the Service class queue before getting assigned to an agent.

In vespidl.pk, below APIs for ResourceRequest used by servers TSA and WAA have a new parameter added (in BOLD), to indicate the time, the ResourceRequest was sent to ResourceManager.

```
ResourceManager_RequestRsc/ORBStatus strReqId/string strResourceId/string slQualifiers/*SeqLong  
IOriginalRequestDate/long IFlags/long ITimeoutState/long ITimeoutAction/long IResourceRequestDate/long  
out:sqRequestResult/*SeqCouple;
```

```
ResourceManager_RequestRscExcept/ORBStatus strReqId/string slQualifiers/*SeqLong  
strExceptResourceId/string strResourceId/string IOriginalRequestDate/long IFlags/long ITimeoutState/long  
ITimeoutAction/long IResourceRequestDate/long out:sqRequestResult/*SeqCouple;
```

EDU Fields

In WAA Server 2 new values (**sc.state** and **sc.qat**) will be added in the EDU of the contact when it is processed by this server. These values have no relevance outside the context of WAA server. When a



contact is sent for ResourceRequest, the **ResourceRequestDate** will be considered as a Queue Arrival time, in case the contact was **Queued** to a service class.

TSA Server however does not add any of the fields mentioned to EDU of the contact.

Important:

- Merge any previous customization changes to the new vespidl.pk file
- Do not use the fields, sc.qat and sc.state in EDU. These are only for internal server use.

Workflow Server Modification for Dynamic Queue Contact Entry

In the Postqualification block in the flows mentioned below, a new EDU parameter (a SeqCouple) has been added "arrival_time". This field by default is set to EDU.Createtime, used for contact priority calculations per service class. This field enables Customers to Customize and use the flows to modify the contact priority calculations as per their business needs.

The PostQualification and PostQualificationEx blocks of the below workflows are modified.

- advocate.qualifyemail_adv
- advocate.qualifychat_adv
- advocate.qualifyvoice_adv
- advocate.handle_exception
- advocate.transfertoagent_adv

After performing the IC7.2.1 SP installation steps, do the following steps:

1. Open Workflow Designer and open ...\\IC72\\design\\IC\\Flows\\Avaya\\Advocate\\Advocate.prj
2. If you are using customized Advocate flows but using OOTB PostQualification & PostQualificationEx blocks in those flows then replaces these blocks with new PostQualification & PostQualificationEx blocks from Advocate catalogue in Workflow Designer in all the flows.
3. If you are using customized PostQualification & PostQualificationEx blocks, then merge your customized changes into the new PostQualification & PostQualificationEx blocks.
4. Build the Advocate.prj flowset.
5. Restart all the Workflow Servers.

Note: Following changes are done in new PostQualification & PostQualificationEx blocks in Advocate catalogue: "arrival_time" SeqCouple is added into EDU with default value of EDU's createtime. TSA & WAA would use this (arrival_time) time to prioritize the contact in the Service Class queue of RM.

Workflow Server enhanced to handle large number of Workflow channel assignments

In IC7.2, channel assignment and event-flow association is done through workflow server Configuration Tab. This resulted in large vesp.imp and ds.ffd files for huge number of channel associations, which at times could result in request timeouts.



In IC7.2.1 SP, the workflow server is enhanced to provide channel assignments through scripts. The Channel associations will be loaded by the Workflow Server through "synchronous startup flow" / "startup flow" as <project_name>.<script_name>

Below methods are introduced at a script level:

1. ChannelAssign String Range, String InterfaceName, String AssignCriteria
For example, ChannelAssign "1", "TS", "*r50001"
2. ChannelAssociate String Range, String EventName, String FlowName
For example, ChannelAssociate "1", "TS.IncomingCall", "ts.incomingcall"

These script extensions will now be used in a custom flow (configured as synchronous startup flow/startup flow) and the channel assignment and event-flow association information will go into this flow. The number of channel assignments for a workflow server is configured using the couple name "assigncount" under the server configuration tab. The Maximum recommended value for "assigncount" is 2047.

Note: Configuring Channel assignments and event-flow associations through script is an additional option. Using Configuration Tab for this purpose is Still Supported.

While configuring Channel & Association through scripts, validating the uniqueness of Range (Channel Assign Number) is the responsibility of script writer. The Range of Channel Association should match with ChannelAssign. If unique Ranges are not provided in flow script the Workflow server will log this condition and will not start.

Chat Typing Status Support

IC7.2.1 SP supports the typing status in a live chat in interaction center. This feature provides the typing status indication on customer side as well as the agent side with information on who (Agent preferred name / customer display name) is typing.

This feature is supported for below Avaya Agent Clients

1. Avaya Agent Rich Client
2. Avaya Agent Web Client
3. Avaya Agent SDK Client

Below are features supported in Chat Typing Status support in IC 7.2.1 SP

1. When agent starts typing, a message is being displayed at customer side that [agent preferred name] is typing.
2. When customer starts typing, a message being shown to agent that [customer display name] is typing
3. On enter key or say button or push url button, typing status message will be removed
4. In a multiple-party conference when any one of the party starts typing, a typing status message will be displayed to other parties in call.
5. In a multiple-party conference, when one or more parties are starts typing , a message “ [customer_display_name1, customer_display_name 2] , [Agent_preferred_name1, Agent_preferred_name2] typing..” will be displayed to other respective parties in call.
6. While typing, if a party doesn't press the enter/say/push-url button, after specific configurable time-interval, the message will be removed from other parties side.
7. After disconnecting and wrapping up a chat call , typing status message will get removed .



8. After joining multiple customers in chat call using join-us, all customers' typing status will be displayed to each other and other parties in call.
9. Typing status message indication to agent is configurable in website. It is configurable on admin web site. Please refer to [Website ICM Configuration](#) section and [Avaya Agent Rich Client](#) and [ICManager Configuration](#) to enable Typing Status Support for Avaya Agent Web Client and SDK Clients.

Synchronization between Siebel toolbar and hard phone

In IC7.2.1 Siebel client is enhanced to allow the agents to login back through Siebel browser even if they are already logged-into the hard phone. The agent client toolbar and hard phone will be synchronized on agent login. Below scenarios are handled in this enhancement.

Scenario 1

Enabling an agent to remain logged in to the hard phone on Siebel browser normal/abnormal exit.

Please refer to [Configuration Section](#) to enable this feature. Do NOT perform these steps if you want this feature Disabled.

Scenario 1 Limitation

- The feature is intended only for ACD/CM based routing. In Advocate based routing, if agent exits from Siebel browser, the agent will remain logged-in into the hard-phone but may not receive any queue calls, when this feature is enabled.
- Agents have to logout of hard-phone manually, when this feature is enabled.
- Once Agents exits from Siebel, IC side reporting will not be effective and call related information will not be available.
- Once Agents exits from Siebel, Email channel will not work and agents will remain logged into hard phone.

Scenario 2

Agents can login through Siebel browser even if they are already logged-into hard phone and have the toolbar in synchronization with hard-phone.

Please refer to [Configuration Section](#) to enable this feature. Do NOT perform these steps if you want this feature Disabled.

Mentioned below are system limitations in the above mentioned Scenarios.

Scenario 2 Limitation

When feature for Scenario 2 is enabled and if hard phone is busy or agent is working on a call using hard phone then he should not try to login to Siebel. Note, CM does not allow to login to hard phone if phone is busy. Hence login will fail. AICD would continue to monitor the extension.

Note: This enhancement is specific for Avaya CM/Definity Switches.



WebAdmin Page Cancel Task with Specified Status

IC7.2.1 Web Admin pages allow you to cancel task with a specified status, rather than only being able to cancel them without any type of reason. The specified status could be any of the resolve statuses configured using RLManager.

The Administrator will have a drop-down-list on the Web Admin Page containing all the resolve statuses configured in the system. The Administrator can select any task and cancel it using the appropriate resolve status as per business application.

For information regarding configurations, please refer to section [Design and Admin Configuration](#).

TSA Server enhanced for Extended UI Data Support

In IC7.2.1, the TSA server is enhanced to handle Extended UII data. A new Server configuration parameter "Enable Extended Data Support" is added that should be used to enable/disable handling extended data by TSA Server.

Case 1

If 'Enable Extended Data Support' configuration parameter is enabled, TSA will first try to get extended UII data from TS events and if unsuccessful then try to get it from EDU. The newer TS APIs will be called along with this fetched extended UII data.

Case 2

If 'Enable Extended Data Support' configuration parameter is disabled, TSA will not try to get extended UII data either from TS event or from EDU. The newer TS APIs will be called with NULL / empty extended UII data.



Installation

This section describes the Service Pack Installer that updates existing Avaya IC 7.2 systems with the Avaya IC 7.2.4 Service Pack to provide fixes and enhancements for Avaya IC 7.2

The Installation Tool performs the following steps:

1. Creates a backup of each file that is replaced by the installer with new files.
2. Copies the new IC 7.2.4 files into the appropriate directories on your system.
3. Creates the Uninstaller program.
4. Displays a screen that confirms a successful installation with the following text:

```
Installation was successful.  
No errors or warnings were generated.  
Complete log messages are available at:  
.../IC72/ICServicePacks/7.2.4/<FolderNameOfComponent>/Log/install.log
```

Where <FolderNameOfComponent> is the folder name of each component where the respective component files reside.

The Installation Tool provides a separate installation program for each IC component to enable you to upgrade your machines based on the component they run. The following table lists the name of the component and its respective folder name:

| Component/machine | Folder Name |
|--|--------------|
| Administration and Design | DesignAdmin |
| Avaya Agent client | AvayaAgent |
| Avaya Agent Web Client | WebClient |
| Avaya Agent Web Client Connector | WebConnector |
| IC Servers | Server |
| Siebel Integration component (IC side) | ICSideSiebel |
| Siebel Integration component (Siebel side) | SiebelSideIC |

For Windows installations, the Installation Tool also:

- Un-registers the necessary files on your system.
- Registers the new files on your system.



Before you install

You must have separate machines for each of the IC components because Avaya does not support multiple IC components installed on the same machine.

- IC Servers
- Avaya Agent
- Avaya Agent Web Client Connector
- Administration and Design
- Siebel Integration component [IC side]
- Siebel Integration component [Siebel side]
- SDK

Note: Expected pop up during 7.2.4 during installation.

In case an IC installation is being done on a fresh system using the RTM installer, then some error messages can pop up during the installation of the Service pack. These error messages state that the file being copied during the Service pack installation are older than the file which already exists on the system. This is a valid scenario, and the customer should replace the existing files with the files being copied by the Service Pack installer.

When installing IC using the RTM installer, the installer adds data regarding the installation location of IC to some of the files being installed by the installer. Due to this, the modification time of the file changes to the current time. If the IC system was installed during the development phase or after the release of the Service pack, then it may happen that some of the files in the service pack have a modification time which is earlier than those of the same files installed on the system (due to the RTM installer modifying them, as stated above).

In these cases, it is perfectly valid for the message as described above to pop up during the Service Pack installation, and one should go ahead with the installation by choosing the Replace option on the dialog box which pops up.

Stop Avaya Agent Web Client

Before you run the IC 7.2.4 installation, you must stop the Avaya Agent Web Client. Ensure that all IC Avaya Agent Web Clients are logged off prior to stopping the Avaya Agent Web Client.

On the Avaya IC 7.2 release, you can start and stop the Avaya Agent Web Client component by handling the javaw process.

To start or stop the javaw process

1. For Windows Operating System, click **Start > Run** to open command prompt.
2. Change the directory to: IC_INSTALL_DIR\IC72\bin.
3. Execute the following command:

Operating System Procedure



| Operating System | Procedure |
|------------------|---|
| Windows | To stop: <code>aawcclient.bat stop</code> |
| Solaris and AIX | To stop: <code>./aawcclient.sh stop</code> |

Stop IC services

Before you run the IC 7.2.4 Server installation, you must stop all the IC services and ensure those services are stopped. This may take several minutes because it allows the servers to complete their current tasks before shutting down.

Windows

To stop the IC Services:

1. Bring up the Windows Services application.
2. Stop the following services (some may not exist on every IC server):
 - Avaya IC CIRS Service 7.2
 - Avaya IC Email Template Management Service 7.2
 - Avaya ICM Service 7.2
 - Avaya IC ORB Service 7.2
 - Avaya IC Test Service 7.2
 - Avaya IC Web Management Service 7.2
 - Avaya IC WebLM Service 7.2
 - Avaya Voice Media Manager
 - Avaya SDK Services

Solaris and AIX

To stop the IC Services, login with root privileges and navigate to the `.../IC72/bin` directory:

1. For ICM
 - a. At the command prompt, type: `./icm.sh stop -force`.
 - b. Press **Enter**.
2. For CIRS
 - a. At the command prompt, type: `./cirs.sh stop -force`.
 - b. Press **Enter**.
3. To stop multiple Tomcat instances



- a. At the command prompt, type: `./ictomcat.sh stop all -force`.
- b. Press **Enter**.
4. To stop a single Web Application
 - a. At the command prompt, type: `./ictomcat.sh stop <servicename> -force`.
 - b. Press **Enter**.
5. For Sun ONE Server
 - a. At the command prompt, type: `:<SunONE_install_dir>/servers/<my_ONE_server>/stop`.
 - b. Press **Enter**.
6. For IBM http Web Server
 - a. At the command prompt, type: `./httpserver.sh stop`.
 - b. Press **Enter**.

Stop the VMM service (Solaris only)

If you host your Avaya IC servers on Solaris and have VMM service configured, you must stop the VMM setup service to configure the Voice Media Manager (VMM) for Voice Chat. The VMM setup service configures the VMM to start automatically.

You must only perform this step if you host your Avaya IC servers on Solaris. Do not perform this step if you host your servers on Windows machines.

To stop VMM on Solaris:

1. Navigate to the following directory: `IC_INSTALL_DIR/IC72/bin`
2. Type the following at the command line:
`./vmm_setup stop`
3. Press **Enter**.

Stop IC servers

Before you run the IC 7.2.4 Server installation, you must stop all the IC servers and ensure all processes are stopped. Ensure that all IC Avaya Agents and IC Avaya Agent Web Clients are logged off prior to stopping all IC servers. This may take several minutes because the servers need to complete their current tasks before shutting down.

You can stop IC servers on any of the supported platforms using either IC Manager or the Avaya IC Admin Utility.

Windows

IC Manager

To stop all the IC servers in the proper order using IC Manager:

1. Start IC Manager, if it is not already running.
2. Click the **Server** tab.



3. Select **Server > Shutdown**.
4. Select the IP address or the name of the machine on which you want to stop servers.
5. Click **OK**.

Avaya IC Admin Utility

To stop all IC servers using the Avaya IC Admin Utility on the IC server machine:

1. In a command window, navigate to the ...\\IC72\\bin directory.
2. Stop all IC servers by performing the steps outlined in the following scenarios:
 - To stop IC servers on all/multiple machines (multi-box setup):
 - i. At the command prompt, enter the command: `icadmin tva <username> <password>`.
 - ii. Press **Enter**.
 - To stop IC servers on one machine:
 - i. At the command prompt, enter the command: `icadmin tv <username> <password>`.
 - ii. Press **Enter**.

Note: Ensure that the login credentials used in the IC Admin Utility command have IC administrative privileges.

Advocate Servers and Administration

Perform the following steps on each Advocate Administration and Server machine:

1. Close Advocate Administration.
2. Click **Start > All Programs > Administrative Tools > Component Services**.
3. In Component Services, click **Computers > My Computer > COM+ applications > Avaya Business Advocate**.
4. Right-click the package and select **Shutdown**.

Solaris and AIX

IC Manager

To stop all the IC servers in the proper order using IC Manager:

1. Start IC Manager, if it is not already running.
2. Click the **Server** tab.
3. Click **Server > Shutdown**.
4. Select the IP address or the name of the machine on which you want to stop servers.
5. Click **OK**.

Avaya IC Admin Utility

To stop all IC servers, including the ORB server, using the Avaya IC Admin Utility on the IC server machine:

1. In a command window, navigate to the ...\\IC72\\bin directory.



2. Stop all IC servers by performing the steps outlined in the following scenarios:
 - To stop IC servers on all/multiple machines (multi-box setup):
 - i. On the command line, enter the command: `./icadmin tva <username> <password>`.
 - ii. Press **Enter**.
 - To stop IC servers on one machine:
 - i. On the command line, enter the command: `./icadmin tv <username> <password>`.
 - ii. Press **Enter**.

Note: Ensure that the login credentials used in the IC Admin Utility command have IC administrative privileges.

Ensure all IC servers and services are stopped

Windows

1. Go to the **Task Manager** dialog box.
2. Click the **Process** tab to view a list of the processes on your machine.
3. Check to make sure the IC servers are not running.

Solaris and AIX

1. At the command line, type the following command:

```
ps -ef | grep <AVAYA_IC72_HOME>/bin | grep -v grep
```
2. Press **Enter**.

This command displays a list of processes related to IC servers.
3. Check to ensure the IC servers are not running.

If any processes related to IC servers are still running, you need to kill all the processes related to IC servers.
4. To kill multiple processes in one command, type the following command:

```
kill -9 <PID>
```

Where PID is the Process ID of each individual process that is related to IC servers.

Note: Alternatively, you can type "`kill -9 <PID1> <PID2> . . . <PIDn>`" to kill all the processes in a single command.
5. Press **Enter**.

Prerequisites

This section describes the prerequisites for installing the IC 7.2.4 Service Pack.



Prerequisites for installing IC 7.2.4

1. Before you install IC 7.2.4, you must have IC 7.2 installed on your system.
2. Microsoft Security Patch released on 20th Jan, 2010, (Cumulative Security Update for Internet Explorer 8 (KB978207)) - specific to Operating System. Install it, if is not already installed on machines from which AAWC will be launched.

Getting Started

Avaya IC 7.2.4 is available on the Avaya Support Web site at: <http://support.avaya.com/download/>

To receive the IC 7.2.4 release on a CD, send an email requesting the media (CD) to icoakeyrequest@avaya.com with:

- Customer Name
- Avaya Sold-to Number
- Contact Name
- Contact Address
- Contact Phone Number
- What CDs you are requesting

Obtaining a License Key

Avaya Interaction Center (IC) and Avaya Operational Analyst (OA) are enabled for run-time operation with a license key that provides features and capacity based on your specific order. The information below is supplied to assist you in requesting your license keys.

If you have a valid license key and move to a newer IC and OA release from an earlier release, your license key continues to be valid. It contains IC and OA features and capacity you are entitled to with your software licensed from Avaya. Unless you have made changes that modify your HostID on the server where the license manager is operating you will not need a new license. (For Windows deployments (of WebLM) the license is keyed on the server's MAC address, not the HostID)

License Request

1. License Key Request (New)

Send to: icoakeyrequest@avaya.com

Include:

- Customer Name
- Customer Location (city, state, country)
- Avaya SAP Order Number
- MAC Address (HostID for Solaris) of all Servers running WebLM Service
- System Purpose (for example, Production, Test, Lab)
- Return Email address
- Implementer of system (Avaya PSO, Avaya Business Partner or SI, self)



2. License Key Request (Addition/change)

Send to: icoakeyrequest@avaya.com

Include:

- COPY OF CURRENT LICENSE FILE (IMPORTANT)
- Customer Name
- Customer Location (city, state, country)
- If adding - Avaya SAP Order Number
- Avaya Customer Number
- If changing - MAC Address (HostID for Solaris) of all Servers running WebLM Service
- System Purpose (for example, Production, Test, Lab)
- Return Email address
- Implementer of system (Avaya PSO, Avaya Business Partner or SI, self)

Downloading the IC 7.2.4 Service Pack

You can download the IC 7.2.4 Service Pack files from the Avaya Support site:
<https://support.avaya.com/download/>.

To download IC 7.2.4:

1. Click the **Download My Software** link.
2. At the Login screen, enter your login id and password, and click **Login**.
If you do not have an Avaya SSO Login username and password, select Register Now to create them. Your username and password must each be at least 6 characters long, the password must also contain at least one number. Your username and password cannot be the same.
3. Click **Interaction Center (IC)**.
4. Select a release.
5. Click the appropriate IC 7.2.4 file(s) to download the file(s).
6. Move the IC 7.2.4 files to an installation directory on the machine on your system where you want to store them.

Important: The name of the installation directory can contain only acceptable characters, such as A-Z, a-z, 0-9, -, and _, for the installation to run successfully. The Installation wizard does not copy files from a directory that contains special characters in its name.

Installation files

The following table indicates the machine type, operating system, and the filename for each of the IC 7.2.4 components:

Note: The mapped network drive installation option is not available for the Solaris and AIX platforms.

| Component/machine | Platform | Filename |
|-------------------|----------|----------|
|-------------------|----------|----------|



| Component/machine | Platform | Filename |
|--|-----------------------|---|
| Administration and Design | Windows | IC724WinAdmin.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| Avaya Agent client | Windows | IC724WinAgentClient.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| Avaya Agent Web Client | Windows | IC724WinWebClient.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| Avaya Agent Web Client Connector | Windows | IC724WinWebConnector.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| | Solaris | IC724SolWebConnector.tar Extract the files into the install directory on the local machine. |
| | AIX | IC724AixWebConnector.tar Extract the files into the install directory on the local machine. |
| IC Servers | Windows | IC724WinServer.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| | Solaris | IC724SolServer.tar Extract the files into the install directory on the local machine. |
| | AIX | IC724AixServer.tar Extract the files into the install directory on the local machine. |
| SDK Servers and Design | Windows, Solaris, AIX | The SDK component files are installed with the IC Servers component. |
| Siebel Integration component (IC side) | Windows | ICSide724win.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| | Solaris | ICSide724sol.tar Extract the files into the install directory on the local machine. |



| Component/machine | Platform | Filename |
|--|----------|---|
| | AIX | ICSide724aix.tar Extract the files into the install directory on the local machine. |
| Siebel Integration component (Siebel side) | Windows | SiebelSide724win.zip Extract the files into the install directory on the local machine or on the mapped network drive, depending on the installation option you want to follow. |
| | Solaris | SiebelSide724sol.tar Extract the files into the install directory on the local machine. |
| | AIX | SiebelSide724aix.tar Extract the files into the install directory on the local machine. |

Installation options

Avaya IC 7.2.4 provides the following installation options:

- [Network installation with mapped drive](#)
- [Local installation](#)
- [Silent installation](#)
- [Console installation](#)

The IC Server components, Siebel Integration component [Siebel side], Siebel Integration component [IC side], and Avaya Agent Web Client Connector components are installed on the Windows, Solaris, and AIX platforms. All other components are installed on the Windows platform only.

For version information on all of the supported platforms, see IC 7.2 Installation Planning and Prerequisites.

Network installation with mapped drive

You can install IC 7.2.4 from a network (shared) computer to upgrade other machines without having to copy the IC 7.2.4 files from the central computer to those machines.

To enable your local machine to access the network computer, you must map a drive from the local machine to the network computer by selecting the Tools > Map Network Drive option in Windows Explorer.

Note: If Universal Naming Convention (UNC) is not supported, you need to map the drive to be accessed from the installation machine. UNC specifies a common syntax for accessing network resources, such as shared folders and printers.

For example, the syntax for Windows systems is as follows: `\\computername\sharedfolder\resource`

Local installation

To install on local machines, copy the component directory (for example, Server, Avaya Agent, or Avaya Web Agent Client) from the central machine to the machine where you want to install the component.



Silent installation

When you run installation in silent mode, the user interface is not available. To run the installer in silent mode, run record mode followed by silent mode.

Record mode

In record mode, the installer runs the installation normally but records all of your inputs in a text file.

To run the installer in record mode:

1. Go to the package directory where the contents of the Service Pack installer are extracted.
2. At the command prompt, type:

```
<setupfile> -options-record <AbsolutePathOfFile.ext>
```

For example,

| Operating System | Command |
|------------------|--|
| Windows | setupwin32.exe -options-record "D:\temp\SP724Silent.opt" |
| Solaris | ./setupsolarisSparc.bin -options-record "/tmp/SP724Silent.opt" |
| AIX | ./setupaix.bin -options-record "/tmp/SP724Silent.opt" |

Note: The <setupfile> is the platform-specific name of the setup executable and <AbsolutePathOfFile.ext> is the qualified file name, where "AbsolutePathOfFile" is the name of the file and "ext" is the file extension.

3. Press **Enter**.

The installer creates the <AbsolutePathOfFile.ext> file containing all of your inputs.

Silent mode

In a silent mode, rerun the same installation on another system using the inputs from the text file.

To rerun the installer in silent mode:

1. Copy the <AbsolutePathOfFile.ext> file to the machine where you want to install.
2. Go to the package directory where the contents of the Service Pack installer are extracted.

At the command line, type:

```
<setupfile> -options <AbsolutePathOfFile.ext> -silent
```

For example,

| Operating System | Command |
|------------------|---|
| Windows | setupwin32.exe -options "D:\temp\SP724Silent.opt" -silent |
| Solaris | ./setupsolarisSparc.bin -options "/tmp/SP724Silent.opt" -silent |



| Operating System | Command |
|------------------|---|
| AIX | <code>./setupaix.bin -options "/tmp/SP724Silent.opt" -silent</code> |

The <setupfile> is the platform-specific name of the setup executable and <AbsolutePathOfFile.ext> is the qualified file name, where "AbsolutePathOfFile" is the name of the file and "ext" is the file extension.

3. Press **Enter**.

The installer creates the <AbsolutePathOfFile.ext> file containing all of your inputs.

Console installation

When you run installation in console mode, the user interface is not available.

To run the installer in console mode:

1. Enter the following command at the command prompt:

```
<setupfile> -console
```

For example,

| Operating System | Command |
|------------------|---|
| Windows | <code>setupwin32console.exe -console</code> |
| Solaris | <code>./setupsolarisSparc.bin -console</code> |
| AIX | <code>./setupaix.bin -console</code> |

Note: The console option can be used for installation and uninstallation of all components.

Order of installation

After you complete the instructions for a network installation or a local installation, install the IC 7.2.4 components in the following order:

1. [Server installation](#)
2. [Siebel Integration Component installation](#)
3. [Avaya Agent Web Client Connector installation](#)
4. [Avaya Agent Web Client installation](#)
5. [Administration and Design installation](#)
6. [Avaya Agent installation](#)

Server installation

This section describes the installation procedures for the IC 7.2.4 Server component. The Server component can be installed on the Windows, Solaris, and AIX platforms.



This section includes the following topics:

- [Windows installation procedures](#)
- [Solaris installation procedures](#)
- [AIX installation procedures](#)

Note: The files for SDK components are currently bundled with the IC Servers installation package for the Windows, Solaris, and AIX platforms. If you have IC setup as a multi-box setup (primary machine, secondary machine, and so on), you need to install the IC Servers setup on all these machines.

Windows installation procedures

Note: Server installation instructions in this section pertain to existing IC setup on Windows 2003s server. For installation of IC on Windows 2008 R2 server, please refer the relevant chapter in this document.

Perform the following steps on the Windows machines running IC servers.

1. Before you begin the Service Pack Installation, ensure that all IC components are stopped as explained in the sections, Stop IC servers and Stop IC services.
2. Go to the directory where you extracted the contents of the IC724WinServer.zip file.
3. Copy the IC724WinServer folder to the machine where you want to install the Server component. If you are accessing a network computer through a mapped drive, you do not need to copy the folder. Perform the following steps from your server machine.
4. Open the IC724WinServer folder and double-click setupwin32.exe to start the installation program.
5. At the Welcome screen, select Next to continue.
6. At the next screen which displays the location of the Uninstall program, select Next.
7. In the pop-up window that prompts Please stop all Avaya IC servers and services, click Continue.
8. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server files to the proper directories.
 - c. Registers the new .ocx and .dll files.
 - d. Installs the Uninstall program.
 - e. Displays the results of the installation.

| | |
|---|---|
| <p>If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\Server\\Log\\install.log</p> | <p>If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\Server\\Log\\install.log LIST OF ERRORS AND WARNINGS</p> |
|---|---|

9. Click **Finish**.
10. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.



11. If a Telephony Server is configured, take the backup of the tssrv.exe and tssrv.pdb files, and delete the files from their current location. Make a copy of the files for your switch and rename the copies to tssrv.exe and tssrv.pdb.

For example: For Avaya DEFINITY/CM, create a copy of cvlansrv.exe and rename it as tssrv.exe in the AVAYA_IC72_HOME\bin directory. Similarly, create a copy of cvlansrv.pdb and rename it as tssrv.pdb in the AVAYA_IC72_HOME\bin directory.

| Switch | Copy... | Rename to... |
|-------------------|--------------------------------------|----------------------|
| Avaya DEFINITY/CM | cvlansrv.exe, cvlansrv.pdb | tssrv.exe, tssrv.pdb |
| Nortel Meridian | ctsrv.exe, ctsrv.pdb | tssrv.exe, tssrv.pdb |
| Aspect CallCenter | tsv5aspectcmi.exe, tsv5aspectcmi.pdb | tssrv.exe, tssrv.pdb |
| Cisco ICM | tsv5cisco.exe, tsv5cisco.pdb | tssrv.exe, tssrv.pdb |

12. If a TSQS Server is configured, take the backup of the tsqssrv.exe and tsqssrv.pdb files, and delete the files from their current location. Make a copy of the files for your switch and rename the copies to tsqssrv.exe and tsqssrv.pdb.

For example: For Avaya DEFINITY/CM, create a copy of tsqssrv_asai.exe and rename it as tsqssrv.exe in the AVAYA_IC72_HOME\bin directory. Similarly, create a copy of tsqssrv_asai.pdb and rename it as tsqssrv.pdb in the AVAYA_IC72_HOME\bin directory.

| Switch | Copy... | Rename to... |
|-------------------|--|--------------------------|
| Avaya DEFINITY/CM | tsqssrv_asai.exe, tsqssrv_asai.pdb | tsqssrv.exe, tsqssrv.pdb |
| Nortel Meridian | tsqssrv_rti.exe, tsqssrv_rti.pdb | tsqssrv.exe, tsqssrv.pdb |
| Aspect CallCenter | tsqssrv_aspctportal.exe (no .pdb file) | tsqssrv.exe |
| Cisco ICM | tsqssrv_cisco.exe, tsqssrv_cisco.pdb | tsqssrv.exe, tsqssrv.pdb |

13. On the Web Management Services IC machine, delete the folder "localhost" from the following location:

```
../IC72/tomcat/work/Catalina/.
```

Execute this step only on the Web Management Services IC machine.

14. If the installation is successful, reboot the machine before you restart the servers.

Solaris installation procedures

To have the permissions to run the Solaris installer, you must login with root privileges. Perform the following steps on the Solaris machines running IC servers.

1. Before you begin the Service Pack Installation, ensure that all IC components are stopped as explained in the sections, Stop IC servers and Stop IC services.
2. Go to the directory where you uncompressed the contents of the IC723SolServer.tar file.



3. At the command line, type: \$AVAYA_IC72_HOME/bin/icenv ./setupsolarisSparc.bin (where \$AVAYA_IC72_HOME/bin/icenv sets the IC environment variables and ./setupsolarisSparc.bin starts the Server installation).
4. On the Welcome screen, click **Next**.
5. On the next screen, which displays the location of the Uninstall program, click **Next**.
6. In the pop-up window that prompts Please stop all Avaya IC servers and services, click OK.
7. On the next screen, this displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server files to the proper directories.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|--|--|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: .../IC72/ICServicePacks/7.2.4/Server/Log/install.log | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and rerun the installer. The following errors or warnings were generated. Complete log messages are available at: .../IC72/ICServicePacks/7.2.4/Server/Log/install.log LIST OF ERRORS AND WARNINGS |
|--|--|

8. Click **Finish**.
9. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.
10. If the tssrv file exists on the system, check to see if this file is a symbolic link to the Telephony Server executable.
 - a. At the command prompt, type ls -l tssrv.
 - b. If the tssrv is a symbolic link to the Telephony Server, the system displays: lrwxrwxrwx filenameA -> filenameB (where filenameA is a variable for tssrv and filenameB is the absolute server name).
11. If the tssrv file is a symbolic link to the Telephony Server, use the existing file without renaming it.

| Switch | Use... |
|-------------------|----------|
| Avaya DEFINITY/CM | cvlansrv |
| Nortel Meridian | ctsrv |

12. If the tssrv file is not a symbolic link to the Telephony Server, take a backup of the tssrv file, and delete the file from its current location. Make a copy of the file for your switch and rename the copy to tssrv.
 For example: For Avaya DEFINITY/CM, create a copy of cvlansrv and rename it as tssrv in the AVAYA_IC72_HOME/bin directory.

| Switch | Copy... | Rename to... |
|--------|---------|--------------|
| | | |

| Switch | Copy... | Rename to... |
|-------------------|----------|--------------|
| Avaya DEFINITY/CM | cvlansrv | tssrv |
| Nortel Meridian | ctsrv | tssrv |

13. If a TSQS Server is configured, take the backup of the tsqssrv file, and delete the file from its current location. Make a copy of the file for your switch and rename the copy to tsqssrv.

For example: For Avaya DEFINITY/CM, create a copy of tsqssrv_asai and rename it as tsqssrv in the AVAYA_IC72_HOME\bin directory.

| Switch | Copy... | Rename to... |
|-------------------|--------------|--------------|
| Avaya DEFINITY/CM | tsqssrv_asai | tsqssrv |

14. Back up the qorasrv file from the ..\IC72\bin folder.

Note:

- If you are using an Oracle 10 DB Client, rename qora10srv as qorasrv in the ..\IC72\bin folder.
- If you are using an Oracle 11 DB Client, rename qora11srv as qorasrv in the ..\IC72\bin folder.
- On the Web Management Services IC machine, delete the folder "localhost" from the location ".../IC72/tomcat/work/Catalina/". This step is to be executed on only the Web Management Services IC system.

AIX installation procedures

Before running the Service Pack installer on the AIX platform, you need to kill the processes that use the Rogue Wave binary files installed on the system.

AIX installation prerequisites

Perform the following steps before carrying out the installation on the AIX platform:

1. Ensure that all IC components are stopped as explained in the sections, Stop IC servers and Stop IC services.
2. Change directory to \$AVAYA_IC72_HOME/lib.
3. At the command prompt, type: `slibclean`
4. At the command prompt, type: `fuser -k lib*12d*.a`

Note: After running the `fuser -k lib*12d*.a` command, type the following at the command prompt:

`fuser lib*12d*.a`

5. At the command line, type the command: `fuser -k lib*.so`

Note: After running the `fuser -k lib*.so` command, type the following at the command line:

`fuser lib*.so`

No process IDs should be displayed in the results after running this command. However, even if one process ID is displayed in the results, then you need to restart the AIX machine.



6. After carrying out the above steps, proceed with the installation on the AIX platform.

AIX installation

Perform the following steps on the AIX machines running IC servers.

Note: To have the permissions to run the AIX installer, you must login with root privileges.

1. Before you begin the Service Pack Installation, ensure that all IC components are stopped as explained in the sections, Stop IC servers and Stop IC services.
2. Go to the directory where you uncompressed the contents of the IC724AixServer.tar file.
3. At the command prompt, type:
`export AVAYA_IC72_HOME=<Avaya IC Servers installation path>`
For example, `export AVAYA_IC72_HOME=/opt/Avaya/IC72`
4. Press **Enter**.
5. At the command prompt, type: `$./setupaix.bin.`
6. On the Welcome screen, click **Next**.
7. On the next screen, which displays the location of the Uninstall program, click **Next**.
8. In the pop-up window that prompts Please stop all Avaya IC servers and services, click **OK**.
9. On the next screen, this displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server files to the proper directories.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|---|---|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: .../IC72/ICServicePacks/7.2.4/Server/Log/install.log | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: .../IC72/ICServicePacks/7.2.4/Server/Log/install.log LIST OF ERRORS AND WARNINGS |
|---|---|

10. Click **Finish**.
11. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.
12. If the tssrv file exists on the system, check to see if this file is a symbolic link to the Telephony Server executable.
 - a. At the command prompt, type `ls -l tssrv.`
 - b. If the tssrv is a symbolic link to the Telephony Server, the system displays: `lrwxrwxrwx filenameA > filenameB` (where filenameA is a variable for tssrv and filenameB is the absolute server name).
13. If the tssrv file is a symbolic link to the TS, use the existing file without renaming it.

| Switch | Use... |
|-------------------|----------|
| Avaya DEFINITY/CM | cvlansrv |

14. If the tssrv file is not a symbolic link to the Telephony Server, take a backup of the tssrv file, and delete the file from its current location. Make a copy of the file for your switch and rename the copy to tssrv.

For example, For Avaya DEFINITY/CM, create a copy of cvlansrv and rename it as tssrv in the AVAYA_IC72_HOME/bin directory.

| Switch | Copy... | Rename to... |
|-------------------|----------|--------------|
| Avaya DEFINITY/CM | cvlansrv | tssrv |

15. If a TSQS Server is configured, take the backup of the tsqssrv file, and delete the file from its current location. Make a copy of the file for your switch and rename the copy to tsqssrv.

For example: For Avaya DEFINITY/CM, create a copy of tsqssrv_asai and rename it as tsqssrv in the AVAYA_IC72_HOME\bin directory.

| Switch | Copy... | Rename to... |
|-------------------|--------------|--------------|
| Avaya DEFINITY/CM | tsqssrv_asai | tsqssrv |

16. On the Web Management Services IC machine, delete the folder "localhost" from the following location:

.../IC72/tomcat/work/Catalina/.

This step is to be executed on only the Web Management Services IC system.

Siebel Integration Component installation

This section describes the installation procedures for the Siebel Integration Component of the Avaya IC 7.2.4 release. The Siebel Integration component is installed on the Windows, Solaris, and AIX machines running Siebel Services and Avaya IC servers. The Siebel Integration component is to be installed only when your IC system is integrated with Siebel.

The Siebel section includes the following topics:

- [Windows installation procedures](#)
- [Solaris installation procedures](#)
- [AIX installation procedures](#)
- [Import the AICD.def file](#)

Windows installation procedures

The Siebel Integration component must be installed on the machine running Siebel Services and the machine running IC servers.

Siebel Integration component on Siebel server

Perform the following steps on the Windows machines that are running Siebel Services.



1. Go to the directory where you extracted the contents of the SiebelSide724win.zip file.
2. Open the SiebelSide724win folder and double-click on setupwin32.exe to start the installation program.
3. At the Welcome screen, click **Next** to continue.
4. At the next screen, enter the path location for the Siebel Servers installation, click **Next**.
For example, C:\seaxx\siebsrvr.
5. On the next screen, which displays the location of the Uninstall program, click **Next**.
6. On the next screen which prompts Please stop all Siebel Services before applying the patch, ensure that the Siebel Service is not running and click **OK**.
7. On the next screen, this displays the installation summary, click **Next** to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server file to the proper directory.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|---|--|
| <p>If installation is successful, displays:</p> <p>Installation was successful. No errors or warnings were generated. Complete log messages are available at:</p> <p>C:\Seaxxx\siebsrv\ICServicePack\7.2.4\SiebelSide\Log\install.log</p> | <p>If installation is unsuccessful, displays:</p> <p>ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at:</p> <p>C:\Seaxxx\siebsrv\ICServicePack\7.2.4\SiebelSide\Log\install.log</p> <p>LIST OF ERRORS AND WARNINGS</p> |
|---|--|

8. Click **Finish**.
9. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Siebel Integration component on IC servers

Perform the following steps on the Windows machines that are running IC servers.

1. Go to the directory where you extracted the contents of the ICSide724win.zip file.
2. Open the ICSide724win folder and double-click on setupwin32.exe to start the installation program.
3. At the Welcome screen, click **Next** to continue.
4. At the next screen which displays the location of the Uninstall program, click **Next**.
5. At the next screen which prompts Please stop all IC Services before applying the patch, ensure that all IC Services are stopped and click **OK**.
6. At the next screen which displays the installation summary, click **Next** to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server file to the proper directory.



- c. Installs the Uninstall program.
- d. Displays the results of the installation.

| | |
|---|--|
| <p>If installation is successful, displays:</p> <p>Installation was successful. No errors or warnings were generated. Complete log messages are available at:</p> <p>...\IC72\ICServicePacks\7.2.4\ICSideSiebel\Log\install.log</p> | <p>If installation is unsuccessful, displays:</p> <p>ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at:</p> <p>...\IC72\ICServicePacks\7.2.4\ICSideSiebel\Log\install.log</p> <p>LIST OF ERRORS AND WARNINGS</p> |
|---|--|

- 7. Click **Finish**.
- 8. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Solaris installation procedures

The Siebel Integration component must be installed on the machine running Siebel Services and the machine running IC servers. To have the permissions to run the Solaris installer, you must login with root privileges.

Siebel Integration component on Siebel server

Perform the following steps on the Solaris machines that are running Siebel Services.

- 1. At the command line, navigate to the directory where you uncompressed the contents of the SiebelSide724sol.tar file. If the file is compressed, untar the file using the tar -xvpf command.
- 2. At the command line, type the following command:
`./setupsolarisSparc.bin`
- 3. Press **Enter**.
- 4. At the Welcome screen, click **Next**.
- 5. At the next screen, enter the path location for the Siebel Servers installation, click **Next**. (Example, root/seaxx/siebsrvr)
- 6. The next screen displays the location of the Uninstall program, click **Next**.
- 7. At the next screen which prompts Please stop all Siebel Services before applying the patch, confirm the Siebel Service is not running and click **OK**.
- 8. At the next screen which displays the installation summary, click **Next** to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server file to the proper directory.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.



| | |
|---|--|
| <p>If installation is successful, displays:</p> <p>Installation was successful. No errors or warnings were generated. Complete log messages are available at:</p> <p>root/Seaxxx/siebsrv/ICServicePack/7.2.4/SiebelSide/Log/install.log</p> | <p>If installation is unsuccessful, displays:</p> <p>ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at:</p> <p>root/Seaxxx/siebsrv/ICServicePack/7.2.4/SiebelSide/Log/install.log</p> <p>LIST OF ERRORS AND WARNINGS</p> |
|---|--|

9. Click **Finish**.
10. If the installation was unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Siebel Integration component on IC servers

Perform the following steps on the Solaris machines that are running IC servers.

1. At the command line, navigate to the directory where you uncompressed the contents of the IC724sol.tar file.
2. At the command line, type the following command: `./setupsolarisSparc.bin`.
3. Press **Enter**.
4. On the Welcome screen, click **Next**.
5. On the next screen, enter the path location for the IC Servers installation and click Next.
For example, root/IC72
6. The next screen displays the location of the Uninstall program, click **Next**.
7. On the next screen which prompts Please stop all IC Services before applying the patch, ensure that the IC Services are not running and click OK.
8. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server file to the proper directory.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|---|--|
| <p>If installation is successful, displays:</p> <p>Installation was successful. No errors or warnings were generated. Complete log messages are available at:</p> <p>.../IC72/ICServicePacks/7.2.4/ICSideSiebel/Log/install.log</p> | <p>If installation is unsuccessful, displays:</p> <p>ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at:</p> <p>.../IC72/ICServicePacks/7.2.4/ICSideSiebel/Log/install.log</p> <p>LIST OF ERRORS AND WARNINGS</p> |
|---|--|



9. Click **Finish**.
10. If the installation was unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

AIX installation procedures

The Siebel Integration component must be installed on the machine running Siebel Services and the machine running IC servers.

Note: To have the permissions to run the AIX installer, you must login with root privileges.

Siebel Integration component on Siebel server

Perform the following steps on the AIX machines that are running Siebel Services.

1. At the command line, navigate to the directory where you uncompressed the contents of the SiebelSide724aix.tar file.
2. At the command prompt, type: `./setupaix.bin`
3. Press **Enter**.
4. On the Welcome screen, click **Next**.
5. On the next screen, enter the path location for the Siebel Servers installation, click Next.
For example, root/seaxx/siebsrvr
6. The next screen displays the location of the Uninstall program, click Next.
7. On the next screen, which prompts Please stop all Siebel Services before applying the patch, confirm the Siebel Service is not running and click **OK**.
8. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server file to the proper directory.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|--|---|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: root/Seaxxx/siebsrv/ICServicePack/7.2.4/SiebelSide/Log/install.log | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: root/Seaxxx/siebsrv/ICServicePack/7.2.4/SiebelSide/Log/install.log LIST OF ERRORS AND WARNINGS |
|--|---|

9. Click **Finish**.
10. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.



Siebel Integration component on IC servers

Perform the following steps on the Solaris machines that are running IC servers.

1. At the command line, navigate to the directory where you uncompressed the contents of the ICSide724aix.tar file. If the file is compressed, untar the file using the tar -xvpf command.
2. At the command line, type: `./setupaix.bin`.
3. Press **Enter**.
4. At the Welcome screen, click **Next**.
5. At the next screen, enter the path location for the IC Services installation and click Next.
For example, root/IC72.
6. The next screen displays the location of the Uninstall program, click **Next**.
7. At the next screen which prompts Please stop all IC Services before applying the patch, ensure that the IC Services are not running and click **OK**.
8. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing server files to that directory.
 - b. Copies the new server file to the proper directory.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|---|---|
| <p>If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: .../IC72/ICServicePacks/7.2.4/ICSideSiebel/Log/install.log</p> | <p>If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: .../IC72/ICServicePacks/7.2.4/ICSideSiebel/Log/install.log LIST OF ERRORS AND WARNINGS</p> |
|---|---|

9. Click **Finish**.
10. If the installation was unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Import the AICD.def file

To import the AICD.def file:

1. Start the Siebel Servers/Services.
2. Login to Siebel Thin Client call center application from the web browser as Siebel Administrator.
3. Navigate to the AICD profile for Siebel, click **Site Map > Administration - Communications > All configurations**.
4. Select the existing configuration for AICD.



5. Click **Import Configuration**, located on the right side of the window under the Configurations tab.

Result - A new browser window opens with following text message:

Caution: Importing communications configuration parameters, commands, events, or drivers and profiles will overwrite all existing definitions of those types in the selected configuration. Click Next to proceed.

6. Click **Next**.
7. Select the **Commands** check box.
8. Browse to the AICD.def file.
9. Click **OK**.

Avaya Agent Web Client Connector installation

This section describes the installation procedures for the Avaya Agent Web Client Connector component of the Avaya IC 7.2.4 release. You need to install the Avaya Agent Web Client Connector on the machine that hosts Tomcat Server.

- [Installation path procedures](#)
- [Windows installation procedures](#)
- [Solaris installation procedures](#)
- [AIX installation procedures](#)

Installation path procedures

The IC 7.2.4 installer checks for the installation path through an environment variable or the registry. The Avaya Agent Web Client Connector installation path is not stored in an environment variable or in the registry. Before starting the Avaya Agent Web Client Connector setup, you must declare the environment variable for the installer to use.

Windows

To declare the Avaya Agent Web Client Connector installation environment variable on Windows:

1. Right-click My Computer and select Properties.
2. Click the Advanced tab.
3. Click **Environment Variables**.
4. In the System variables section, click **New**.
5. At the New System Variable dialog box, enter the installation path name and value.

| Field Name | Enter... |
|----------------|---|
| Variable Name | AVAYA_IC72_HOME |
| Variable Value | The actual installation path, for example,C:\AvayaWebClientConnector\IC72 |

6. Click **OK** to save the new variable.
7. On the Environment Variables dialog, click **OK**.



8. On the Advanced tab, click **OK**.
9. Run the Avaya Agent Web Client Connector installation procedures described in Windows installation procedures.

Solaris and AIX

To declare the Avaya Agent Web Client Connector installation environment variable on Solaris or AIX:

1. At the console, type:

```
export AVAYA_IC72_HOME=<Avaya Agent Web Client Connector installation path>
```

For example,

```
export AVAYA_IC72_HOME=/opt/AvayaWebClientConnector/IC72
```
2. Press **Enter**.
3. Run the Avaya Agent Web Client Connector installation procedures described in the following section for your operating system:

Windows installation procedures

Perform the following steps on the Windows machines that are running the Avaya Agent Web Client.

1. Before you begin the Service Pack Installation, ensure that all IC components are stopped as explained in Stop Avaya Agent Web Client.
2. Go to the directory where you extracted the contents of the IC724WinWebConnector.zip file.
3. Open the IC724WinWebConnector folder and double-click on setupwin32.exe to start the installation program.
4. On the Welcome screen, click **Next** to continue.
5. On the next screen, which displays the location of the Uninstall program, click **Next**.
6. On the next screen, this displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing web client connector files to that directory.
 - b. Copies the web client connector files to the proper directories.
 - c. Copies the files from the Java folder to the proper directories.
 - d. Installs the Uninstall program.
 - e. Displays the results of the installation.

| | |
|---|---|
| <p>If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\WebConnector\\Log\\install.log</p> | <p>If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\WebConnector\\Log\\install.log LIST OF ERRORS AND WARNINGS</p> |
|---|---|

7. Click **Finish**.



8. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Solaris installation procedures

To have the permissions to run the Solaris installer, you must login with root privileges.

Perform the following steps on the Solaris machines that are running the Avaya Agent Web Client.

1. Before you begin the Service Pack Installation, ensure that all IC components are stopped as explained in Stop Avaya Agent Web Client.
2. Go to the directory where you uncompressed the contents of the IC724SolWebConnector.tar file.
3. At the command prompt, type: `./setupsolarisSparc.bin`.
4. Press **Enter**.
5. At the Welcome screen, click **Next**.
6. At the next screen which displays the location of the Uninstall program, click **Next**.
7. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing web client connector files to that directory.
 - b. Copies the new web client connector files to the proper directories.
 - c. Copies the files from the Java folder to the proper directories.
 - a. Installs the Uninstall program.
 - b. Displays the results of the installation.

| | |
|---|--|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: <code>.../IC72/ICServicePacks/7.2.4/WebConnector/Log/install.log</code> | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: <code>.../IC72/ICServicePacks/7.2.4/WebConnector/Log/install.log</code> LIST OF ERRORS AND WARNINGS |
|---|--|

8. Click **Finish**.
9. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

AIX installation procedures

Proceed from the Installing Avaya Agent Web Client Connector on AIX section.

AIX installation prerequisites

Perform the following steps before carrying out the installation on the AIX platform:

1. Ensure that all IC components are stopped as explained in Stop Avaya Agent Web Client.
2. Change directory to `$AVAYA_IC72_HOME/lib`.



3. At the command line, type the command: `slibclean`.
4. At the command line, type the command: `fuser -k lib*12d*.a`.
Note: After running the `fuser -k lib*12d*.a` command, type the following at the command line:
`fuser lib*12d*.a`

5. At the command line, type the command: `fuser -k lib*.so`.
Note: After running the `fuser -k lib*.so` command, type the following at the command line:
`fuser lib*.so`
No process IDs should be displayed in the results after running this command. However, even if one process ID is displayed in the results, then you need to restart the AIX machine.
6. After carrying out the above steps, proceed with the installation on the AIX platform.

AIX installation

Perform the following steps on the AIX machines that are running the Avaya Agent Web Client.

Note: To have the permissions to run the AIX installer, you must login with root privileges.

1. Before you begin the Service Pack Installation, ensure that all IC components are stopped as explained in Stop Avaya Agent Web Client.
2. At the command line, navigate to the directory where you uncompressed the contents of the IC724AixWebConnector.tar file.
3. At the command line, type: `./setupaix.bin`
4. Press **Enter**.
5. At the Welcome screen, click **Next**.
6. The next screen displays the location of the Uninstall program, click **Next**.
7. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
8. Creates a backup directory and moves the existing web client connector files to that directory.
 - a. Copies the new web client connector files to the proper directories.
 - b. Copies the files from the jre folder to the proper directories.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|--|---|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: <code>.../IC72/ICServicePacks/7.2.4/WebConnector/Log/install.log</code> | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: <code>.../IC72/ICServicePacks/7.2.4/WebConnector/Log/install.log</code> LIST OF ERRORS AND WARNINGS |
|--|---|

9. Click **Finish**.



10. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Avaya Agent Web Client installation

This section describes the installation procedures for the Avaya Agent Web Client component of the Avaya IC 7.2.4 release.

This component must be installed on the machine where the Avaya Agent Web Client package is installed, not the deployment machine.

This section includes the following topics:

- [Installation path procedures](#)
- [Windows installation procedures](#)

Installation path procedures

The IC 7.2.4 installer checks for the installation path through an environment variable or the registry. The Avaya Agent Web Client installation path is not stored in an environment variable or in the registry. Before starting the Avaya Agent Web Client setup, you must declare the environment variable for the installer to use.

Windows

To declare the Avaya Agent Web Client installation environment variable on the Windows platform:

1. Right-click My Computer and select **Properties**.
2. Click the **Advanced** tab.
3. Click **Environment Variables**.
4. In the **System variables** section, click **New**.
5. On the New System Variable dialog, enter the installation path name and value.

| Field Name | Enter... |
|----------------|---|
| Variable Name | AVAYA_WEBCLIENT72_HOME |
| Variable Value | The actual installation path, for example, C:\AvayaWebClient\IC72 |

6. Click **OK** to save the new variable.
7. At the Environment Variables dialog, click **OK**.
8. At the Advanced tab, click **OK**.
9. Run the Avaya Agent Web Client installation procedures described in Windows installation procedures.

Windows installation procedures

Perform the following steps on the Windows machines that are running the Avaya Agent Web Client.

1. Go to the directory where you extracted the contents of the IC724WinWebClient.zip file.
2. Open the IC724WinWebClient folder and double-click on setupwin32.exe to start the installation program.



3. At the Welcome screen, click Next to continue.
4. At the next screen which displays the location of the Uninstall program, click Next.
5. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing web client files to that directory.
 - b. Copies the web client files to the proper directories.
 - c. Installs the Uninstall program.
 - d. Displays the results of the installation.

| | |
|---|--|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\WebClient\\Log\\install.log | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\WebClient\\Log\\install.log LIST OF ERRORS AND WARNINGS |
|---|--|

6. Click **Finish**.
7. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.
8. Once the installation is successful, manually merge the customization files if any, and generate the war file and deploy on to the webconnector machines.

Note: To generate webclient.war file and deploy on Windows/AIX/Solaris Webconnector machines, please refer to "IC7.2 Installation and Configuration guide" in Avaya Support Site <http://support.avaya.com>

Administration and Design installation

This section describes the installation procedures for the IC 7.2.4 Administration and Design component. This component is supported only on the Windows platform.

Windows installation procedures

Perform the following steps on each machine where administration tools are installed.

1. Stop the IC Manager, Avaya Database Designer, and Workflow Designer applications if they are already running.
2. Go to the directory on the central server where you extracted the contents of the IC724WinAdmin.zip file.
3. Copy the IC724WinAdmin folder to the machine where you want to install the Admin component. If you are accessing a network computer through a mapped drive, you do not need to copy the folder. Perform the following steps from your administration machine.
4. Open the IC724WinAdmin folder on the machine from which you want to install.
5. Double-click the setupwin32.exe to start the installation.
6. At the Welcome screen, click Next.
7. At the next screen which displays the location of the Uninstall program, click Next.



8. In the pop-up window that prompts "Please log out from IC Manager", click Continue.
9. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing admin files to that directory.
 - b. Copies the new admin files to the proper directories.
 - c. Registers the new .ocx and .dll files.
 - d. Installs the Uninstall program.
 - e. Displays the results of the installation.

| | |
|--|---|
| <p>If installation is successful, displays:</p> <p>Installation was successful. No errors or warnings were generated. Complete log messages are available at:</p> <p>...\\IC72\\ICServicePacks\\7.2.4\\DesignAdmin\\Log\\install.log</p> | <p>If installation is unsuccessful, displays:</p> <p>ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at:</p> <p>...\\IC72\\ICServicePacks\\7.2.4\\DesignAdmin\\Log\\install.all.log</p> <p>LIST OF ERRORS AND WARNINGS</p> |
|--|---|

10. Click **Finish**.
11. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.

Importing the sc.xml file

You must import the sc.xml file to fix configuration related issues in IC Manager. The sc.xml file is located in the folder where you unzipped the contents of IC724WinAdmin.zip file.

To import the sc.xml file:

1. Rename the existing file <AVAYA_IC72_HOME>\\etc\\sc.xml to <AVAYA_IC72_HOME>\\etc\\sc.xml.bak
2. Copy the new sc.xml file to <AVAYA_IC72_HOME>\\etc.

Note: In case, if you have performed any customization in the existing "sc.xml" file, merge that changes from "sc.xml.bak" to the new "sc.xml" file you copied in step 2 above.
3. Log on to IC Manager as Admin.
4. From the IC Manager, click **Manager > Options > Environment** tab.
5. Click the **Import Configuration** button.
6. From the **Open** dialog box, select the sc.xml file that you copied in step 2 above, and click the Open button.
7. If the file is successfully validated, Validate sc.xml dialog box displays a Successfully Validated message. If the validation is unsuccessful you will get an xml parsing error.

Note: If you have merged any previous customization changes in the new sc.xml file, check the xml syntax for well-formedness and import the sc.xml file again.



Avaya Agent installation

This section describes the installation procedures for the IC 7.2.4 Avaya Agent (rich client) component. The Avaya Agent installation is supported only on the Windows platform.

Note: You can install the IC 7.2.4 Avaya Agent (rich client) component after all the other IC 7.2.4 Service Pack components are installed and configured. You do not require stopping the IC Servers before installing the IC 7.2.4 Avaya Agent (rich client) component.

Installation procedures

Perform the following steps on each agent workstation.

1. Stop the Avaya Agent application if it is running.
2. Go to the directory on the machine where you extracted the contents of the IC724WinAgentClient.zip file.
3. Copy the IC724WinAgentClient folder to the machine where you want to install the Agent component. If you are accessing a network computer through a mapped drive, you do not need to copy the folder. Perform the following steps from your agent desktop machine.
4. Open the IC724WinAgentClient folder and double-click on setupwin32.exe to start the installation program.
5. At the Welcome window, click **Next**.
6. The installation runs the Preinstall options which unregister the .ocx and .dll files that are patched in this installation.
7. At the next screen which displays the location of the Uninstall program, click **Next**.
8. In the pop-up window that prompts Please logout Avaya Agent, click **Continue**.
9. At the next screen which displays the installation summary, click Next to run the installation. The Installation Tool:
 - a. Creates a backup directory and moves the existing agent files to that directory.
 - b. Copies the new agent files to the proper directories.
 - c. Registers the new .ocx and .dll files.
 - d. Installs the Uninstall program.
 - e. Displays the results of the installation.

| | |
|---|--|
| If installation is successful, displays: Installation was successful. No errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\AvayaAgent\\Log\\install.log | If installation is unsuccessful, displays: ALERT! Installation failed. Please fix these errors and re-run the installer. The following errors or warnings were generated. Complete log messages are available at: ...\\IC72\\ICServicePacks\\7.2.4\\AvayaAgent\\Log\\install.log LIST OF ERRORS AND WARNINGS |
|---|--|

10. Click **Finish**.
11. If the installation is unsuccessful, run the Uninstall program. Correct the errors and re-run the Installation program.



12. If the installation is successful, reboot the agent machine.

Avaya Agent installation in silent mode

On the Windows platform, you can also run the IC 7.2.4 Avaya Agent installation in silent mode. The silent mode option is for Avaya Agent installations on multiple machines.

To run the installer in silent mode, run record mode followed by silent mode.

- In record mode, the installer runs the installation normally but records all of your inputs in a text file.
- In silent mode, re-run the same installation in silent mode on another machine using the inputs from this text file.

Record mode

To run the installer in record mode:

1. Click **Start > Programs > Accessories > Command Prompt**.
2. Go to the package directory where the contents of the Service Pack installer are extracted.
3. At the command prompt, type: `setupwin32.exe -options-record <AbsolutePathOfFile.ext>`.

Note: The <AbsolutePathOfFile.ext> is a placeholder for the qualified complete file name, where "AbsolutePathOfFile" is the name of the file and "ext" is the file extension.

4. Press **Enter**.
5. Complete the installation using the information in Avaya Agent installation. The installer creates the <AbsolutePathOfFile.ext> file containing all of your inputs.

Silent mode

To re-run the installer in silent mode:

1. Copy the <AbsolutePathOfFile.ext> file to the machine where you want to install.
2. Click **Start > Programs > Accessories > Command Prompt**.
3. Go to the package directory where the contents of the Service Pack installer are extracted.
4. At the command prompt, type:

```
setupwin32.exe -options <AbsolutePathOfFile.ext> -silent
```

For example, `setupwin32.exe -options "D:\temp\SP724Silent.opt" -silent`

5. Press **Enter**.

The installation runs (without a GUI) using the <AbsolutePathOfFile.ext> file for your inputs.

Start IC servers

After you complete the Avaya IC 7.2.4 Server installation program, delete all the files under the tomcat cache path `AVAYA_IC72_HOME\tomcat\work\Catalina\localhost\rlmanager\org\apache\jsp`. Now restart the IC servers by running both of these tools in the following order:

Avaya IC Admin Utility

To restart the ORB server using the Avaya IC Admin Utility on the server machine:



6. At the command prompt, navigate to the following directory:

- Windows: ...IC72\bin
- Solaris and AIX: ../IC72/bin

7. Type the following command:

- Windows: icadmin so
- Solaris and AIX: ./icadmin so

8. Press **Enter**.

IC Manager

In IC Manager, you must restart the IC servers individually and in the proper order. Before you begin, run the procedures described in [Avaya IC Admin Utility](#) restart the ORB server.

To restart IC servers in IC Manager:

1. Click the Server tab and select the server to be restarted. The following table lists the order in which to start the servers.
2. Click the **Start Server** button.

| Server Category | Server Name |
|---------------------------|---|
| Core Engine servers | Alarm server, Data server, Directory server, License server |
| Reporting Services | Event Collector server, Report server |
| DU (Data Unit) servers | ADU server, DUStore server, EDU server |
| Web Management servers | WebACD server, Web Admin Adapter (WAA) server, Attribute server, ComHub server, Paging server, Web Schedule Callback |
| Email Management servers | IC Email server (requires the WebACD server), CAServer server, CAAdmin server |
| Telephony servers | Telephony and TSQS servers (all switches), Telephony Server, Adapter (TSA) server, Predictive Dialing Kernel (Outbound Contact) server, SoftDialer server, VOX server |
| Business Logic servers | Workflow server, Blender server, Notification server |
| Web and Support servers | HTTP Connector server, WebQ server, WebQ Router server |
| Siebel Native Integration | ASIS Server |

Start IC services

On the Windows platform, after you complete the Avaya IC 7.2.4 Server installation program, all the IC Services need to be started if they are not already started.



Windows

The steps given below are for the Windows platform.

To start the IC Services:

1. Bring up the Windows Services application.
2. Start any of the following services that are not already started (some may not exist on every server).
 - Avaya IC CIRS Service 7.2
 - Avaya IC Email Template Management Service 7.2
 - Avaya ICM Service 7.2
 - Avaya IC ORB Service 7.2
 - Avaya IC Test Service 7.2
 - Avaya IC Web Management Service 7.2
 - Avaya IC WebLM Service 7.2
 - Avaya Voice Media Manager
 - Avaya SDK Services

Solaris and AIX

The steps given below are for the Solaris and AIX platforms.

To start the IC Services:

1. Move to the `.../IC72/bin` directory.
2. For ICM
 - At the command prompt, type: `./icm.sh start`.
 - Press **Enter**.
3. For CIRS
 - At the command prompt, type: `./cirs.sh start`
 - Press **Enter**.
4. To start multiple Tomcat instances:
 - At the command line, type: `./ictomcat.sh start all`
 - Press **Enter**.
5. To start single Web application:
 - At the command line, type: `./ictomcat.sh start <servicename>`
 - Press **Enter**.
6. For Sun ONE Server
 - At the command line, type: `<SunONE_install_dir>/servers/<my_ONE_server>/start`
 - Press **Enter**.



7. For IBM http Web Server
 - At the command line, type: `./httpserver.sh start`
 - Press **Enter**.

Start the VMM service (Solaris only)

If you host your Avaya IC servers on Solaris and have the VMM service configured, you must restart the VMM setup service for Voice Chat. The VMM setup service configures the VMM to start automatically.

You only must perform this step if you host your Avaya IC servers on Solaris. Do not perform this step if you host your servers on Windows machines.

To run the VMM setup script and start the VMM on Solaris:

1. Navigate to the following directory: `IC_INSTALL_DIR/IC72/bin`.
2. At the command line, type: `./vmm_setup start`.
3. Press **Enter**.

Start Avaya Agent Web Client

After you run the IC 7.2.4 installation, you can start the Avaya Agent Web Client component by handling the javaw process.

To start the javaw process

1. Click **Start > Run** to open the command prompt.
2. Change the directory to: `IC_INSTALL_DIR\IC72\bin`.
3. Execute the following command:

| Operating System | Procedure |
|------------------|---|
| Windows | To start: <code>aawcclient.bat start</code> |
| Solaris and AIX | To start: <code>./aawcclient.sh start</code> |



Configurations

Note:

1. Configuring IC 7.2.4 on top of IC 7.2.

Please follow steps mentioned under [IC 7.2.1 Service Pack Configuration](#), follow steps mentioned in [IC 7.2.2 Service Pack Configuration](#), follow steps mentioned in [IC 7.2.3 Service Pack Configuration](#) and then follow steps mentioned in [IC 7.2.4 Service Pack Configuration](#).

2. Configuring IC 7.2.4 on top of IC 7.2.1.

Skip IC 7.2.1 Service Pack Configuration if you already configured IC 7.2.1 and follow steps mentioned in [IC 7.2.2 Service Pack Configuration](#), [IC 7.2.3 Service Pack Configuration](#) and then follow steps mentioned in [IC 7.2.4 Service Pack Configuration](#).

3. Configuring IC 7.2.4 on top of IC 7.2.2.

Skip IC 7.2.1 Service Pack Configuration and IC 7.2.2 Service Pack Configuration and follow steps mentioned in [IC 7.2.3 Service Pack Configuration](#) and then follow steps mentioned in Section [IC 7.2.4 Service Pack Configuration](#)

4. Configuring IC 7.2.4 on top of IC 7.2.3.

Skip IC 7.2.1 Service Pack Configuration, IC 7.2.2 Service Pack Configuration and IC 7.2.3 Service Pack Configuration if you already configured IC 7.2.1, IC 7.2.2 and IC 7.2.3 directly follow steps in Section [IC 7.2.4 Service Pack Configuration](#).

Note: Configuration instructions for Windows server and Citrix virtualization for Rich Client under IC 7.2.1 and 7.2.2 configuration sections are for existing deployments on Windows 2003 Server. For Windows 2008 R2 server deployment, refer relevant chapter in this document.

IC 7.2.1 Service Pack Configuration

Below Section provides the component-wise configurations. Please note the sub-sections mentions configurations for specific features.

- [Deploying Avaya Rich Client on Citrix presentation Server v4.5](#)
- [ICManager](#)
- [Database Designer](#)
- [Avaya Agent Rich Client](#)
- [IC – Siebel 7.8 Integration Configuration](#)
- [Siebel configuration for Hard phone-browser synchronization](#)
- [ASIS Server env.properties file parameters](#)
- [Installing SNMP-MIB file](#)
- [Website and ICM](#)
- [Workflow](#)
- [Design and Admin Configuration](#)

- [IC Core Server Configuration](#)
- [SDK Server Configuration](#)
- [Configuring Web Services](#)

Deploying Avaya Rich Client on Citrix presentation Server version 4.5

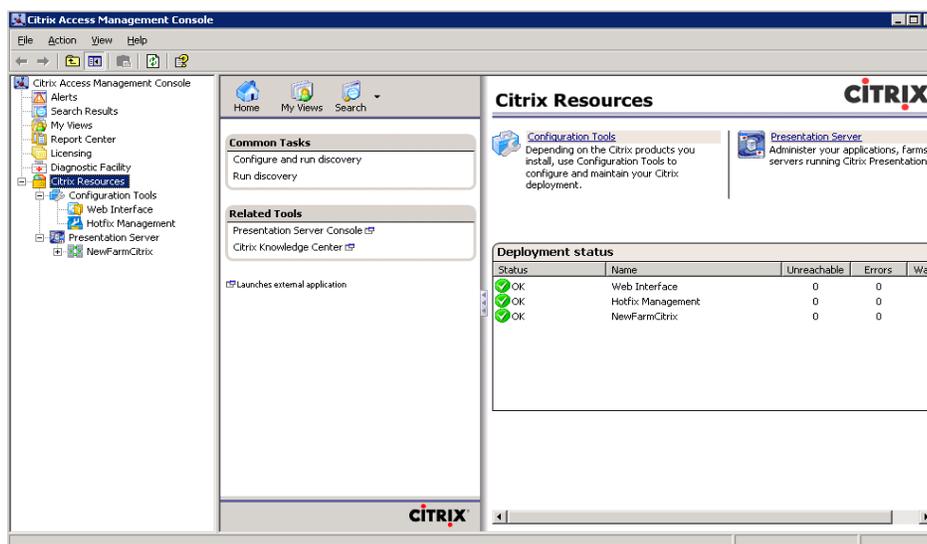
This section provides detailed information on how to deploy Avaya Rich client on Citrix presentation server version 4.5.

Install Avaya Rich client on Citrix server

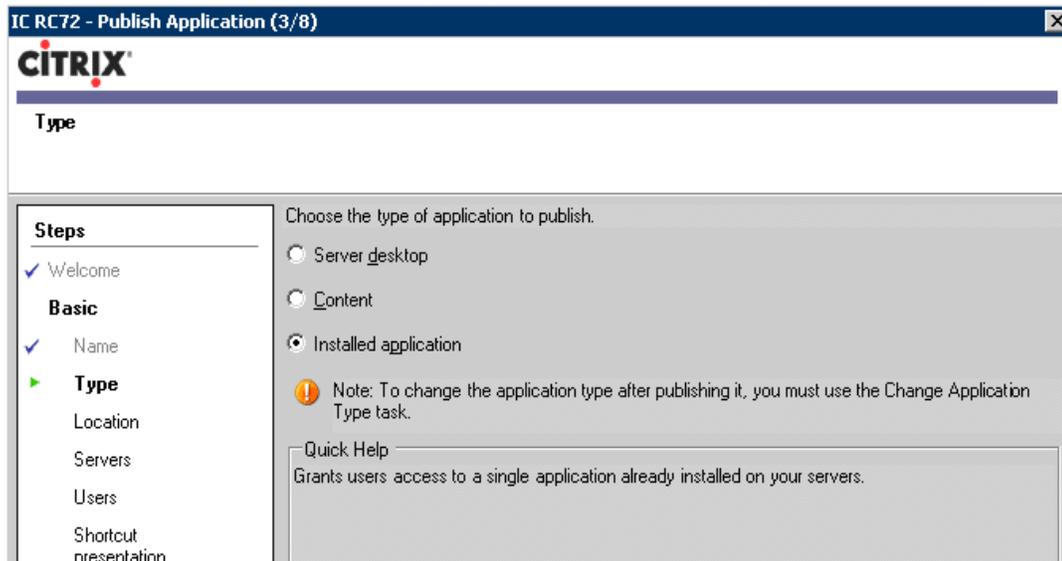
To install Avaya Rich client, refer IC72install.pdf.

Deploying Avaya Rich client on Citrix server

1. Launch Citrix Access Management Console.
2. Right-click the Presentation Server option under the Citrix Resources node and select Create a new Citrix Farm.

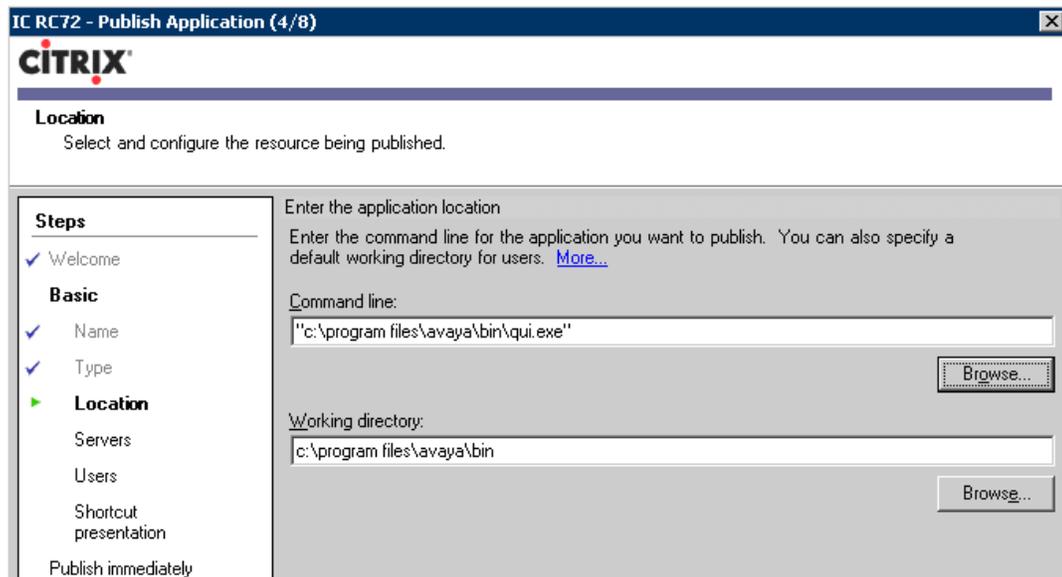


3. Right click **NewFarmCitrix > Applications** and select **New > Publish application**.
4. Click the **Next** button on the welcome screen.
5. Enter the application display name and description and Click **Next**.
6. On the **Publish Application** screen, select the **Installed application** option and click **Next**.



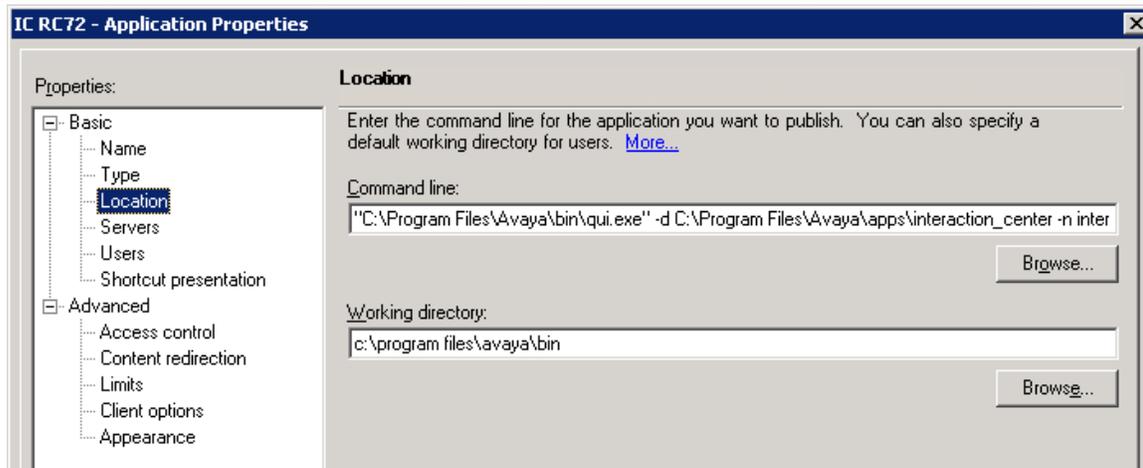
7. Browse and select "qui.exe" path in command line.

Note: Working directory path is automatically reflected.

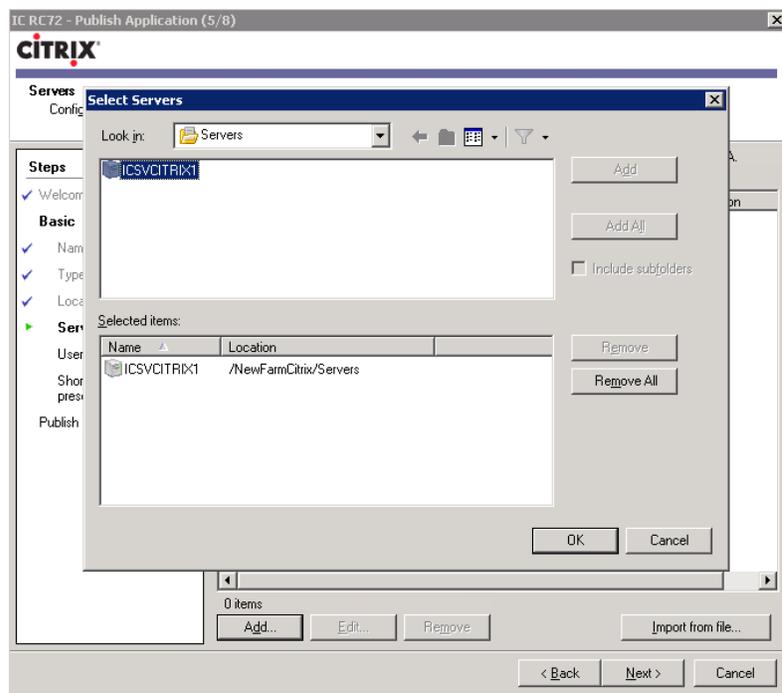


8. Modify command line path "C:\Program Files\Avaya\bin\qui.exe" to below text

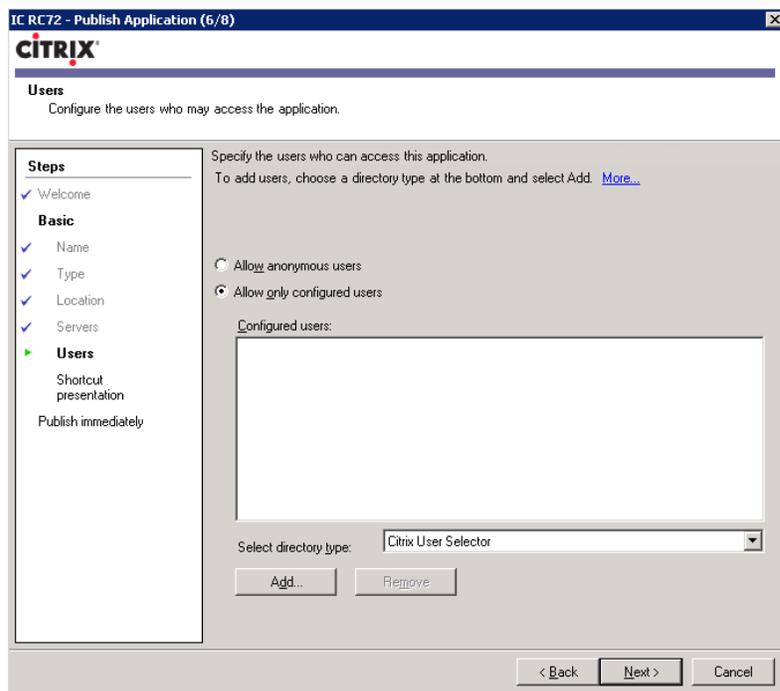
"C:\Program Files\Avaya\bin\qui.exe" -d C:\Program Files\Avaya\apps\interaction_center -n interaction_center, if AVAYA_IC72_HOME resides on C drive. Else, select the appropriate drive and path.



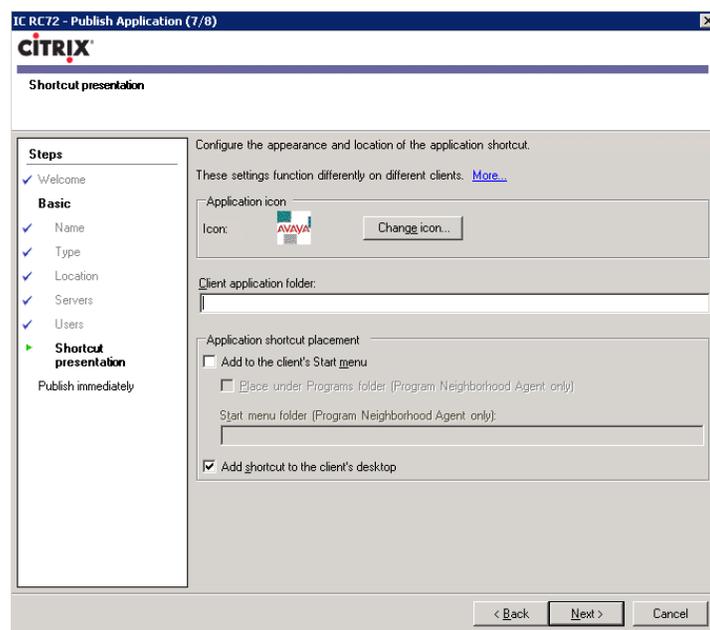
9. Click the **Add** button at the bottom of the screen.
10. Select Citrix server name and click **OK** button.
11. Click **Next**.



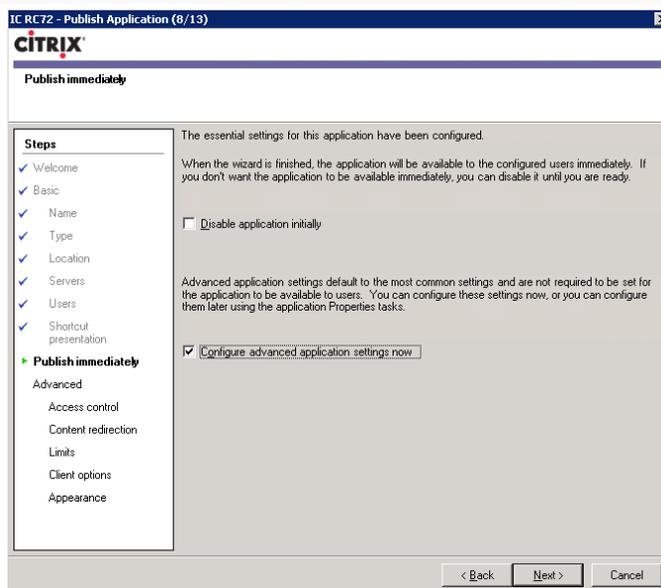
12. Select allow only configured users option (You can select Allow anonymous users option)
13. Click the **Add** button.



14. Add users, click **OK** button
15. On adding Users successfully, Click **Next**.
16. Click **Next** on the screen below.

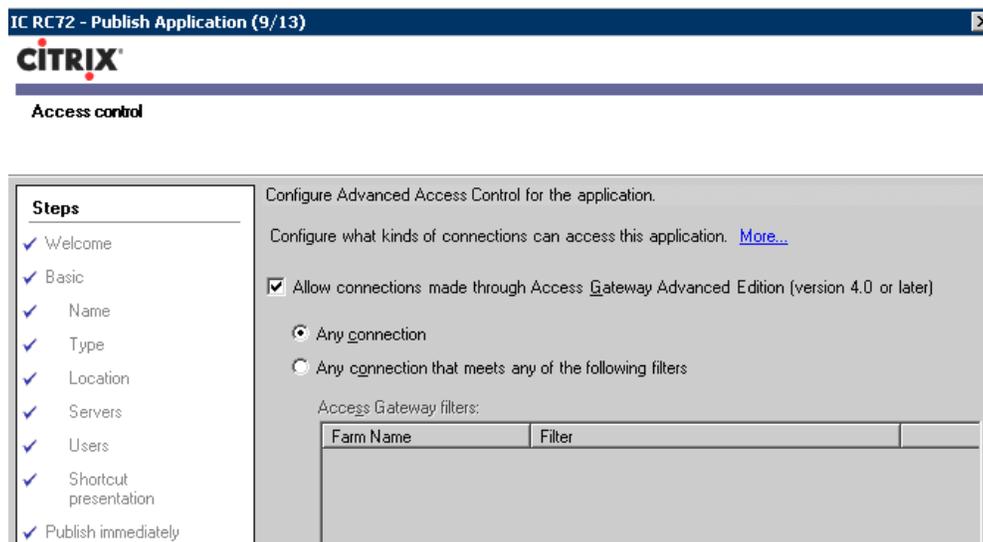


17. Select Configure advanced application settings now and click **Next**.



18. Access control should be any connection (You can set appropriate filter also), click **Next**.

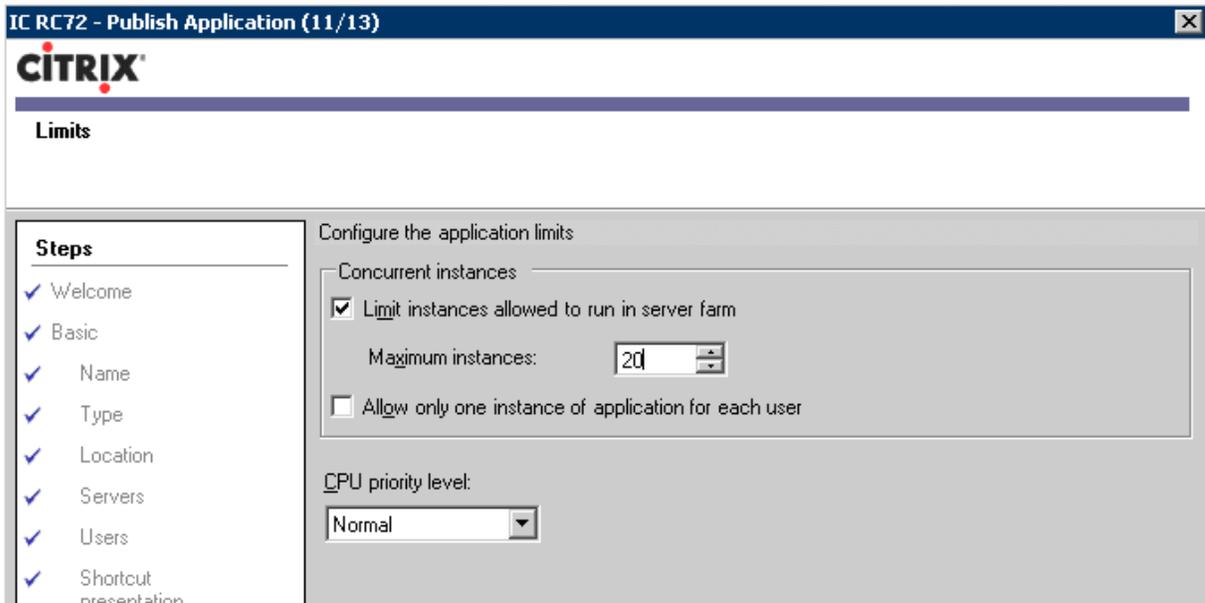
19. Leave redirection option click **Next**.



20. Select maximum number of instance that are allowed to run in server farm

21. If you want only one instance of application for each user then select "Allow only one instance of application for each user" option and Click on Next button

22. Click **Next** on the Client options screen.



23. Select appropriate Session window size and Colors and Click **Finish**.

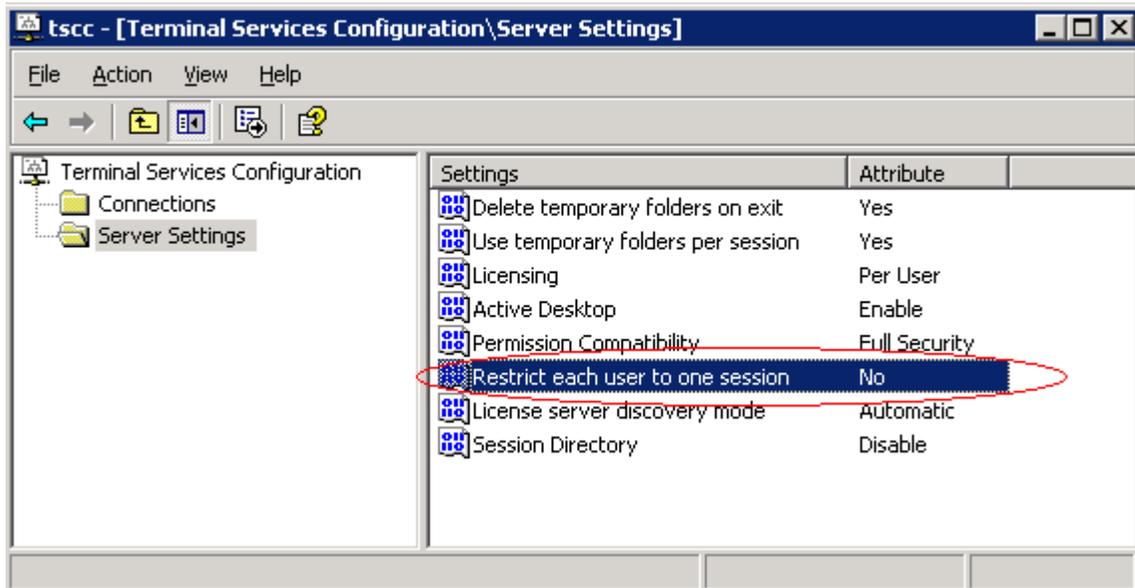
24. Verify that rich client application is added under Citrix applications. The published application setting can be changed from Citrix access management console

Modifying the Avaya Agent INI file

1. Update the Citrix server's qui.ini file with the following two lines
[QConsole]
ResizeDesktop=FALSE
2. Save the qui.ini file

Using same system user for logging multiple Citrix ICA clients

To use same system user for logging more than two session of Avaya rich client, set "Restrict each user to one session" to No under terminal services configuration.



Creating ICA (Citrix Client) connection with Citrix server

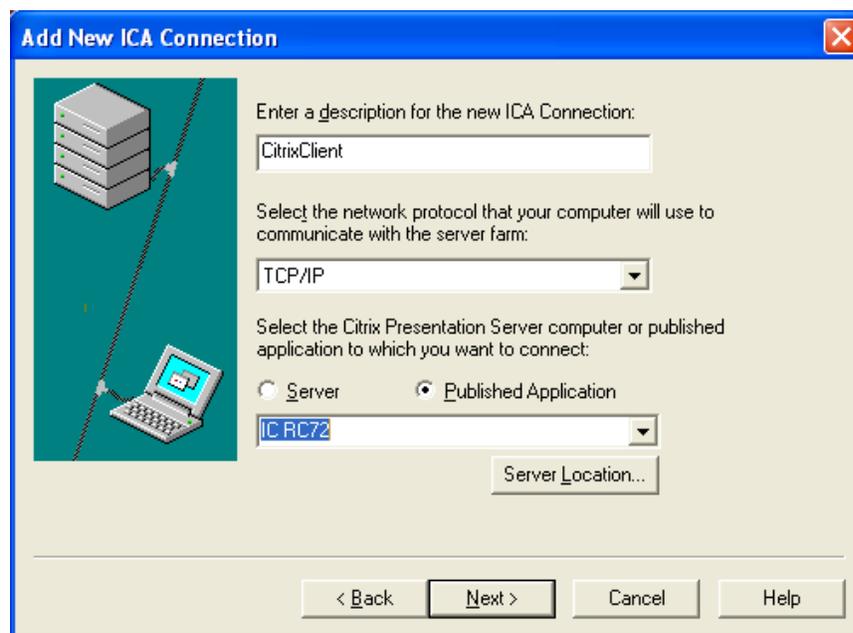
1. Install Citrix Program Neighborhood on Windows XP / 2003 machine
2. Open Citrix Program Neighborhood from Citrix client machine
3. Add new ICA connection
4. Select Local Area Network and Click on next button
5. Enter a Description for the new ICA connection
6. Select network protocol
7. Select the Published Application you want to connect.

Note: Selecting server option it will do direct RDC to Citrix server

8. Click on Server Location button and add Citrix server name



9. Click **OK**
10. Select published application name and click on next button



11. Select published view option. And click on next. Select appropriate option
12. Select encryption level and click on next (Use default)
13. Enter login credential of Citrix server

Note: User should have access permission of published application from Citrix presentation server.

14. Select the display options and click on Next.

15. Click **Finish**
16. Observe that connection is added under Citrix Program Neighborhood.
17. Double-click the added connection. It will open start session from server side, after you can access published applications.

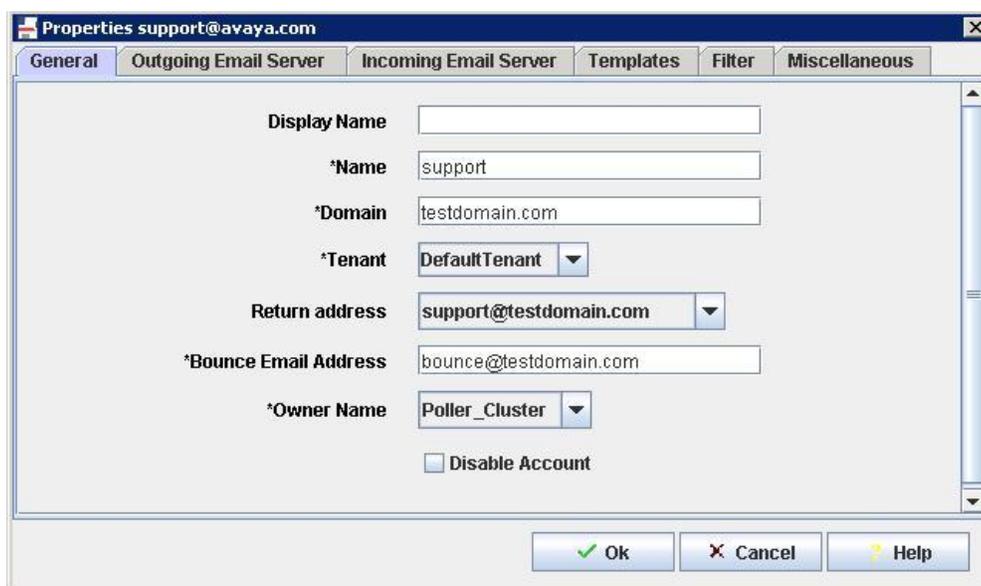
ICManager

This section describes configuration requirements for IC7.2.1 ICManager

- [Enabling Email Display Name in ICManager](#)
- [Enabling Chat Typing Status for Avaya WebClient and Avaya SDK Clients](#)

Configuring ICManager to enable Email Display name

In ICManager > Services > Email Accounts tab, open an existing email account. Please note the addition of a new field **Display Name** as in the sample snapshot below in the Email Accounts tab.



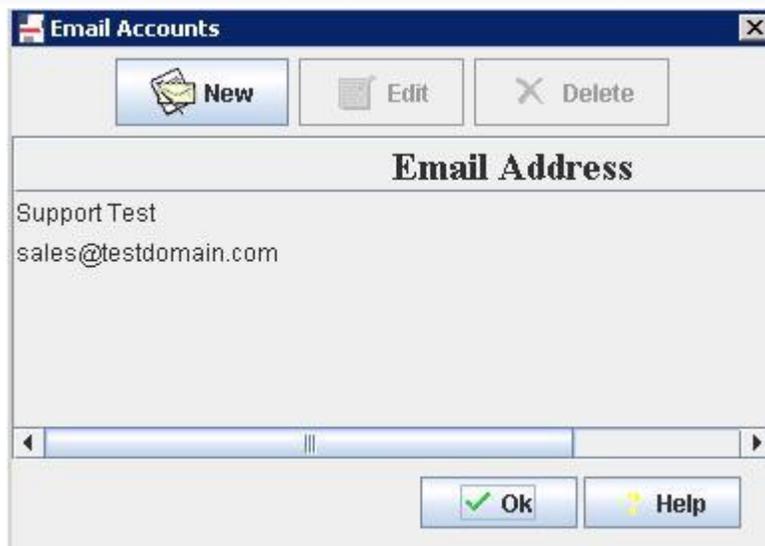
The screenshot shows a dialog box titled "Properties support@avaya.com" with several tabs: "General", "Outgoing Email Server", "Incoming Email Server", "Templates", "Filter", and "Miscellaneous". The "General" tab is active and contains the following fields:

- Display Name**: An empty text input field.
- *Name**: A text input field containing "support".
- *Domain**: A text input field containing "testdomain.com".
- *Tenant**: A dropdown menu showing "DefaultTenant".
- Return address**: A dropdown menu showing "support@testdomain.com".
- *Bounce Email Address**: A text input field containing "bounce@testdomain.com".
- *Owner Name**: A dropdown menu showing "Poller_Cluster".
- Disable Account**: An unchecked checkbox.

At the bottom of the dialog box are three buttons: "Ok", "Cancel", and "Help".

Note: Display Name by default will be empty. IC administrator needs to add a 'Display Name' to use this feature.

On Adding a Display Name value, for example "Support Test", this name will appear in the Email Accounts Tab as below:



Consider the example above, the Customers will see “From” address in their email clients as “Support Test” for replies to emails sent to support@testdomain.com. And while mails received as reply to emails sent to sales@testdomain.com will contain “From” address as sales@testdomain.com.

ICManager will save the Display name in database in UTF-8 charset with 64-bit encoding. Hence, all the languages supported by AIC 7.2.1 supports this feature.

Enabling Chat Typing Status for Avaya WebClient and Avaya SDK Clients

To Enable Chat Typing Status for Avaya Agent WebClient and SDK Clients, modify following properties in IC Manager in section **Agent/Desktop/Chat/Application**.

- ShowTypingStatus = true
- TypingStatusThreshold=12

Database Designer

This section describes configuration requirements for IC7.2.1 Database Designer.

- [Display Name](#)
- [ChatList](#)

Adding Display Name field to database table

IMPORTANT: It is mandatory to perform changes to both `ccq.adl` and `repository.adl` as per below instructions. Use of the ‘Display Name’ feature is optional; however the configurations are mandatory, as the changes are made to the IC core schema tables.

On Design and Admin machine, modify the `ccq.adl` and `repository.adl` using the Database Designer application and Re-Configure the database.

Please follow the steps below:

1. On the Design machine, launch the Database Designer application.



2. Select **Open** from the **File** menu.
3. Select the "...\- 4. Navigate to "Components->Tables->qem_mailaccount" table.
- 5. Right Click and select "New Field..." option. A dialog will pop up.
- 6. Enter field name as "displayname" and description. Click Next.
- 7. Enter the database field name as "displayname".
- 8. Select Type as "Variable Char". Read-only: NO.

Enter the length of the field as:

| | |
|---------|------|
| Windows | 1024 |
| Solaris | 342 |
| AIX | 192 |

Field Required: No

9. Click **Next**.
10. Leave the default value blank. Click **Finish**.
11. Click **File > Save**.
12. Now, reconfigure the Database and Generate Windows Application using the normal reconfiguration procedure. (Please refer Admin guide --admin1.pdf--for detailed steps)
13. After reconfiguration is completed, click "close" on the "File" Menu to close the adl file.
14. Repeat the steps 1 through 12 for "...\- 15. Click **File > Close** to close the adl file.

NOTE: After performing above configuration, please restart the DataServer, Directory Server and perform a Manager->Refresh on ICManager. This ensures ICManager loads the configured email accounts correctly. Otherwise, an error will be reported "Could not load Email Accounts" when trying to view configured Email accounts.

ChatList – Changes to Scripts files and localized CDL files

You need to perform the below steps on the Design and Admin machine to enable the ChatList feature

Below section is added in the localized .cdl files which enable you customize Chat-List width, size, location etc.

This section can be used to customize the chat-list.

```
<QSection Name="ChatList"  
Columns="{0,16,'',''}',{0,16,'',''}',{1,16,'Name',''}',{2,54,'Duration',''}',{3,54,'Waiting',''}"/>
```

Note: The above section will be localized for each of the .cdl files.

Perform the following steps on the Design and Admin machine using localized .cdl files.



1. Exit the Avaya Agent if it is running.
2. Backup the following files:
 - ...\IC72\design\QConsole\QConsole_InitializeComponents.qsc
 - ...\IC72\design\QConsole\avaya_agent_en.cdl
3. Replace the files you backed up with the files of the same name from IC7.2.1 SP.
4. Copy ChatList_Initialize.qsc to ...\\IC72\design\QConsole folder.
5. Start the Avaya Database Designer.
6. Load the CCQ.ADL file in the ...\\IC72\design\CallCenterQ directory.
7. Incorporate any previous in-house customizations done in these replaced script files.
8. Generate Windows Application.

Avaya Agent Rich Client

This section describes configuration requirements for IC7.2.1 Avaya Agent Rich Client for following features.

- [HTML Editor Replacement for Rich Client](#)
- [Enabling Options to set column width, size and location of chat task list](#)
- [Chat Typing Status](#)

HTML Editor Replacement for Rich Client

When you install IC721 Rich Client, a new folder “.\IC72\WebAgent\editlive” will be created. This folder will contain the following xml configuration files:

- NewOutboundEmail.xml
- PreviewEmailConfig.xml
- ReplyForwardEmailConfig.xml
- ResourcesConfig.xml

The above files contain the configuration parameters to configure the text plain/Html properties for specific functions as the name of the xml suggests.

Application.properties file: This file contains a property to Enable/Disable the editor logging using the property **email.editor.log.level**. By default this property is disabled. Default value is **email.editor.log.level=false**

This property can be used to debug the editor.

Important: If the Shared Path “HomeDir” for WebAgent is configured in ICManger, using the property “Agent/Desktop/WAC”, then copy the folders lexicons, images and editlive under this path.

Below properties of Application.properties file are deprecated:

- email.edit.defaultNewFont
- email.edit.defaultNewFontSize
- email.edit.defaultReplyFont
- email.edit.defaultReplyFontSize

- email.HtmlNewMessage.r
- email.HtmlNewMessage.g
- email.HtmlNewMessage.b
- email.HtmlReplyMessage.r
- email.HtmlReplyMessage.g
- email.HtmlReplyMessage.b

Default style-sheet can be configured for email reply/replyall, forward, new outbound etc. by configuring the following HTML p-tag in the appropriate xml configuration file.

For example:

```
<style type="text/css">
  p{
    font-family: Arial;
    font-size: 12pt;
    color:rgb(0,0,0)
  }
body{
  font-family: Arial;
  }
  p{
    margin: 0 1
  }
</style>
```

Default fonts can be configured for Email Reply/Forward, New Outbound Email and Email Resources.

The configuration xml file contains options to add/remove a toolbar button and shortcut menus. Inserting text can be performed using **
** or **<p>** which can be configured using the property "brOnEnter" set to true.

Font family (size, font - face) can be updated under toolbar format section. Few attributes are disabled under section **<wysiwygEditor>**, like the element **showTableGridlines**. The property **showTableGridlines** for example is used to display GRID when text, table, paragraph is inserted in HTML Editor.

Sample configuration file for Email Reply/Forward is as below:

```
<?xml version="1.0" encoding="US-ASCII"?>
<editlive>
  <document>
    <html>
      <head>
        <style type="text/css">
```

```
        p{
            font-family: Arial;
            font-size: 12pt;
            color:rgb(0,0,0)
        }
    body{
        font-family: Arial;
    }
    p{
        margin: 0 1
    }
</style>
</head>
<body>
</body>
</html>
</document>
<htmlFilter allowUnknownTags="true" commentStyles="true"
    encloseText="true" indentContent="false" logicalEmphasis="true"
    outputXHTML="true" outputXML="false" quoteMarks="false"
    uppercaseAttributes="false" uppercaseTags="false" wrapLength="0"/>
<wysiwygEditor brOnEnter="false" disableInlineImageResizing="false"
    disableInlineTableResizing="false" enableTrackChanges="false"
    showDocumentNavigator="false" showGridlines="false"
    showSectionGridlines="false" showTableGridlines="false"
    tabPlacement="off" >
<plugins>
    <plugin name="autolink" />
    <plugin name="insertHTML" />
    <plugin name="imageEditor" />
    <plugin name="BrokenHyperlinkReport" />
</plugins>
<sourceEditor enabled="true" showBodyOnly="true"/>
<wordImport styleOption="merge_inline_styles"/>
<htmlImport styleOption="merge_inline_styles"/>
```

```
<menubar showAboutMenu="false"/>
<toolbars>
  <toolbar name="Format">
    <toolbarComboBox name="face">
      <comboBoxItem name="Arial" text="Arial"/>
      <comboBoxItem name="Arial Black" text="Arial Black"/>
      <comboBoxItem name="Arial Narrow" text="Arial Narrow"/>
      <comboBoxItem name="Comic Sans MS" text="Comic Sans MS"/>
      <comboBoxItem name="Courier New" text="Courier New"/>
      <comboBoxItem name="Georgia" text="Georgia"/>
      <comboBoxItem name="Impact" text="Impact"/>
      <comboBoxItem name="Times New Roman" text="Times New Roman"/>
      <comboBoxItem name="Trebuchet MS" text="Trebuchet MS"/>
      <comboBoxItem name="Gautami" text="Gautami"/>
      <comboBoxItem name="latha" text="latha"/>
      <comboBoxItem name="mangal" text="mangal"/>
      <comboBoxItem name="shruti" text="shruti"/>
    </toolbarComboBox>
    <toolbarComboBox name="size">
      <comboBoxItem name="1" text="8"/>
      <comboBoxItem name="2" text="10"/>
      <comboBoxItem name="3" text="12"/>
      <comboBoxItem name="4" text="14"/>
      <comboBoxItem name="5" text="18"/>
      <comboBoxItem name="6" text="24"/>
      <comboBoxItem name="7" text="36"/>
    </toolbarComboBox>
    <toolbarSeparator/>
    <toolbarButton name="bold"/>
    <toolbarButton name="italic"/>
    <toolbarButton name="underline"/>
    <toolbarSeparator/>
    <toolbarButtonGroup name="align"/>
    <toolbarSeparator/>
    <toolbarButtonGroup name="list"/>
  </toolbar>
</toolbars>
```

```
<toolbarSeparator/>
  <toolbarButton name="highlightcolor"/>
  <toolbarButton name="color"/>
  <toolbarButton name="imageserver"/>
</toolbar>
</toolbars>
<shortcutMenu>
  <shrtMenu>
    <!-- <shrtMenuItem name="undo"/> -->
    <shrtMenuItem name="redo"/>
    <shrtMenuSeparator/>
    <shrtMenuItem name="cut"/>
    <shrtMenuItem name="copy"/>
    <shrtMenuItem name="paste"/>
    <shrtMenuSeparator/>
    <!-- <shrtMenuItem name="select"/> -->
    <shrtMenuSeparator/>
    <shrtMenuItem name="acceptchange"/>
    <shrtMenuItem name="rejectchange"/>
    <shrtMenuItem name="nextchange"/>
    <shrtMenuItem name="previouschange"/>
    <shrtMenuSeparator/>
    <shrtMenuItem name="hyperlink"/>
    <shrtMenuItem name="removehyperlink"/>
    <customMenuItem
      name="customItem2"
      text="Select All"
      action="raiseevent" value="selectall" />
    <customMenuItem
      name="customItem3"
      text="Clear"
      action="raiseevent" value="clear" />
  </shrtMenu>
</shortcutMenu>
</editlive>
```



Enabling Options to set column width, size and location of chat task list

Perform the below steps on each machine where Avaya Agent Rich Client is installed.

1. Shut down Avaya Agent, if it is running.
2. In Command Prompt, go to the ...\\IC72\\bin directory and use the following commands to un-register the existing file:

```
regsvr32 /u ChatList.ocx
```

3. Back up the following files in the ...\\IC72\\bin directory:
 - ChatList.ocx
 - ChatList.pdb
4. Replace the files you just backed up with the files of the same name from IC 7.2.1 SP.
5. In the ...\\IC72\\bin directory, use the following command to register the new file:

```
regsvr32 ChatList.ocx
```

6. Restart Avaya Agent.

Chat Typing Status

Modify the <AARC install_dir>\\Webagent\\Application.properties file with the following properties.

- chat.typingstatus.enable=true
- chat.typingstatus.messagestimeout=12

The property **chat.typingstatus.statusmessage** is set in the localized file **ClientMessages_<lang>.properties**.

Note: The value of property chat.typingstatus.messagestimeout should be in seconds

IC – Siebel 7.8 Integration Configuration

Follow the procedure below for IC 7.2.1 integration with Siebel 7.8. If you are trying to integrate IC 7.2.1 with Siebel 8.0.0.5 or Siebel 8.1.1, skip the below steps.

1. Extract the AICD.ini file from Integration.zip provided as part of IC 7.2.1 SP

Note: Integration.zip will not be installed with any of the SP installer. Download the integration.zip from <http://support.avaya.com>

2. Copy this new AICD.ini file and paste it to the existing location of AICD.ini e.g. (C:\\sea78\\siebsrvr\\BIN)
3. To integrate IC 7.2.1 with Siebel 7.8 the integration objects are provided separately in a folder named integrations/sea78. These integration objects should to be used while performing IC 7.2.1 integration with Siebel 7.8.

Refer to “Avaya IC Siebel Integration Guide” for Integration procedure. Integration Steps mentioned for IC-Siebel 8.0.0.5 Integration SHOULD be followed for IC-Siebel 7.8 Integration.

Important:



- For Solaris and AIX with Siebel 7.8, the expected driver location for AICD is "//siebsrvr/bin". The AICD driver needs to be copied to this location after Service Pack installation.
- For Solaris and AIX with Siebel versions 8.0.0.5/8.1.1, the expected driver location for is "//siebsrvr/lib"

Siebel configuration for Hard phone-browser synchronization

To enable an agent to remain logged in to the hard phone on Siebel browser exit ([Scenario 1](#)), perform steps below:

Siebel side

1. Login to Siebel as Siebel Administrator
2. Go to Site map > Administration - Communications > Communications Drivers and Profiles > Driver Parameter.
3. Select Appropriate Profile from Communication Driver Window.
4. In Driver Parameter window set following parameter:
Driver:TSLogout = false

IC side

1. Start IC Manager.
2. Select configured TS server -> Right Click -> Edit.
3. Go to Configuration tab.
4. Add following parameter in configuration tab as a Couple, logout_on_deassign = false
5. Restart TS.

For [Scenario 2](#)

1. Start IC Manager.
2. Right-click the configured TS server and select **Edit**.
3. Click the **Configuration** tab.
4. Add following parameter in configuration tab as a Couple -
logout_on_deassign = false
5. Add following parameter in configuration tab as a Couple -
force_logout_for_login = true
6. Restart TS.

ASIS Server env.properties file parameters

Below table provides information pertaining to properties in env.properties file and their usage. There are 3 layers in thin-client-VESP, Basic Services, UOM and Application below:

| Property Name | Default Value | Description |
|---------------|---------------|-------------|
|---------------|---------------|-------------|

| Property Name | Default Value | Description |
|-------------------------------------|---------------|--|
| AICDTIMEOUT | 30 | This time will be used for all worker tasks to be completed. Useful to wait for dust to settle after activate, deactivate. |
| application.asyncwork.poolsize | 50 | Specifies number of threads that will handle the Asynchronous tasks at the application layer. |
| application.asyncwork.queue.maxsize | 2048 | Specifies the size of queue for en-queuing Asynchronous task, applicable at application layer |
| basicservices.cachereadytimeout | 60000 | Specifies time (in millisecond) to wait for requests against a basic service to be ready, before returning potentially stale data |
| basicservices.initialwaittimeout | 2000 | On application startup, this is time (in millisecond) to wait between retries for the cache to be ready. |
| basicservices.initialwaittries | 10 | Specifies number of retry attempts for a request to basic services on application startup. |
| queuesizellogger.enabled | FALSE | Specifies whether queues/work items will be monitored |
| queuesizellogger.polltimeout | 5000 | Specifies how often a polling thread will write the current queue sizes to the log. 0 means don't write to the log. Time is in Milliseconds. |
| queuesizellogger.queuesizethreshold | 1 | Specifies the size that must be met before a queue size will be written to the log. |
| queuesizellogger.trackperuser | FALSE | Specifies whether "per-user" queues will be logged |
| uom.asyncwork.poolsize | 50 | Specifies Minimum size of thread for handling Asynchronous tasks in the UOM layer. Maximum thread poolsize is twice this value. |

| Property Name | Default Value | Description |
|--|---------------|---|
| uom.asyncwork.queue.maxsize | 2048 | Specifies the size of queue for en-queuing Asynchronous task at UOM layer. |
| uom.event.queue.poolsize | 50 | Specifies the size of thread pool for handling UOM events, applicable at UOM layer only. |
| uom.executor.pollinterval | 250 | Specifies the time when the thread will pick next available task from queue for processing. Time specified in Milliseconds. |
| uom.scheduler.queue.poolsize | 50 | Specifies the Minimum thread pool size for handling scheduled task in queue, applicable at UOM layer only. For ex. Rona Timeout. Maximum thread poolsize is twice this value. |
| vesp.alarm.unrecoverable.reportthreshold | 3600 | Minimum number of seconds to wait before repeating an unrecoverable alarm for an IC interfaces. Time in Seconds |
| vesp.event.queue.poolsize | 20 | Specifies the size of thread pool for handling VESP events in queue. |
| vesp.event.queue.size | 1024 | Specifies the size of queue for en-queuing VESP events. |
| vesp.event.waittime | 60000 | How long to wait before retrying to enqueue an event. An event is attempted to be re-queued once. There is no indication of failure if en-queuing fails. Time in milliseconds |
| vesp.taskpool.maxsize | 70 | Maximum number of threads to create to handle Assigns and De-assigns (for VespConnection) request. |
| vesp.taskpool.minsize | 20 | Minimum number of threads to create for handling Assigns and De-assigns (for VespConnection) request. |

Important:

- Please note that changing any of the above parameters will have some impact on CPU and memory utilization of the system. It is recommended to test with changed parameters (if they are changed), before deploying with new values.
- It mandatory to restart ASIS server if any of the above parameters are changed.

Installing SNMP-MIB file

Perform the following steps on the machine where NMS (for example, HP-OpenView) is installed.

1. Unload the existing AVAYAGEN-MIB.mib and AV-IC-ALARM-MIB.mib from NMS.
2. Download the latest AVAYAGEN-MIB.mib and AV-IC-ALARM-MIB.mib files from the Avaya Support Site: <http://support.avaya.com>
3. Load the downloaded MIB files in NMS. First load AVAYAGEN-MIB.mib and then load AV-IC-ALARM-MIB.mib.

Perform the following steps on the machine on which the Alarm server is running.

1. Stop Alarm Server.
2. Backup the following files for your operating system:

| Operating System | Command |
|------------------|--|
| Windows | <code>.../IC72/bin/armsrv.exe</code> <code>.../IC72/bin/armsrv.pdb</code> |
| Solaris | <code>.../IC72/bin/armsrv</code> |
| AIX | <code>.../IC72/bin/armsrv</code> |

3. Replace the files backed up with the files of the same name and type from the IC 7.21 SP
4. On Windows, if the armsrv.pdb does not exist on your system, copy the file from this patch request to the `.../IC72/bin` directory.
5. Ensure the newly copied files have the same read/execute permissions as the backed-up ones.
6. Start Alarm Server.

Website and ICM

Below are the steps to be performed for Website and ICM to enable the “Chat Typing Status Feature”.

1. Launch the web browser and navigate to the IC Website Administration Pages.
2. Login and navigate to `http://<server_name>/website/admin/tenancy/addmd.jsp`
3. Add the following metadata properties:
 - Metadata name = `chat.htmlclient.typingstatusmsg`
Default value = `typing`
Tenant Property (Check this field)
4. Click **Add Metadata**.
 - Metadata name = `chat.htmlclient.typingstatusenable`



Default value = true

Tenant Property (Check this field)

5. Click **Add Metadata**.

- Metadata name = chat.htmlclient.typingmsgtimeout

Default value in secs= 12

Tenant Property (Check this field)

6. Close the Browser.

Note:

- Above mentioned properties are default values.
- The website admin page property "chat.htmlclient.timestamps.showdate" used till IC7.2 is no longer used.

Workflow

This section describes the changes to the Workflow scripts and server.

Exception Requeue option for Preferred Agent

In Scenario where the Preferred Agent is not available, the contact will either be requeued, re-qualified depending on the configuration of **Preferred Agent Setup** block in workflows. On requeue-timeout, the contact

To enable the exception requeue option for preferred agent, set the certain properties in the "Preferred Agent" block in the flows (advocate.qualifyemail_adv, advocate.qualifychat_adv and advocate.qualifyvoice_adv) as mentioned below.

Three properties of the preferred agent block are as below

| | |
|-----------------------|--|
| requeue_agentid | Agent Id for the contact to be requeued |
| requeue_exclusionflag | Flag indicating the Agent mentioned should/not be excluded on contact requeue If value is '0', the contact will be assigned to preferred agent alone. If value is '1', on agent un-availability, the contact will be assigned to an appropriate Service Class. |
| requeue_lrmid | LRM Id |

These properties can control the behavior contacts to get re-queued to service class or wait for preferred agent to login back.

Following are the sample values which need to be set to requeue the contact to the service class in case preferred agent is not available.

Example:

- requeue_agentid = \$PreferredAgent



- `requeue_exclusionflag = 1`
- `requeue_lrmid = $LRMId`

By setting these values, after timeout the contact will be requeued to the service class than waiting for the preferred agent to log in.

Design and Admin Configuration

For Web Admin Page cancel task with resolve status, follow steps below:

Perform the following steps on Windows machine (Where Design and Admin is installed):

1. Login into ICManager
2. Open Tools menu and click **IC Data Sources**.
3. On the **IC Data Sources**, expand the **interaction_center** node.
4. Click **ccqDBConnection**.
5. Note down Database Name and Database Server Values.

Execute sql queries on Database that you noted down in the above step.

```
insert into w_log_event_master (event_type,event_name)values (700,'Resolve Status');
```

```
insert into w_log_event_detail values (700,'pkey','qem_resolvestatus','pkey',0);
```

```
insert into w_log_event_detail values (700,'name','qem_resolvestatus','name',1);
```

IC Core Server Configuration

This section describes configuration requirements for IC7.2.1 Core Servers.

Time in Email Template Flexible to Allow 24 or 12 hour format

Perform the steps below (For Solaris and AIX Only) to set the desired locale.

1. Stop AIC servers on the current machine.
2. `export LC_TIME=<desired_locale_name>`
3. Verify the format of time using "date +%X"
4. Start AIC servers from the same terminal where step b. was performed

Note: Above steps MUST be performed on all servers (Solaris/AIX), where ICEmail Server is configured to run.

SDK Server Configuration

You need to manually replace the IC SDK Server files installed on the Windows, Solaris, and AIX platforms if IC SDK Server is installed and configured.

Perform the following configuration steps to replace the files:

1. Stop the IC SDK Service, if running, on the applicable platforms using following:

Windows:



- a. Start the Windows Services application.
- b. Stop the IC SDK Service.

Solaris/AIX:

- a. At the command line, type:
`./ictomcat.sh stop SDK -force`
- b. Press **Enter**.

2. Backup the following files from the specified folder location:

Windows:

```
..\IC72\sdk\server\icsdk\WEB-INF\lib\avaya-ic-services.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\avaya-ic-webui.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\avaya-ic-sdk-common.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\avaya-ic-sdk-server.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\avaya-common.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\avayaiccommon.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\icm.jar
..\IC72\sdk\server\icsdk\WEB-INF\lib\WebAgent.jar
```

AIX and Solaris:

```
../IC72/sdk/server/icsdk/WEB-INF/lib/avaya-ic-services.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/avaya-ic-webui.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/avaya-ic-sdk-common.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/avaya-ic-sdk-server.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/avaya-common.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/avayaiccommon.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/icm.jar
../IC72/sdk/server/icsdk/WEB-INF/lib/WebAgent.jar
```

3. Manually copy the following files from the IC 7.2.1 Service Pack to the ..\IC72\sdk\server\icsdk\WEB-INF\lib folder:

- avaya-ic-services.jar
- avaya-ic-webui.jar
- avaya-ic-sdk-common.jar
- avaya-ic-sdk-server.jar
- avaya-common.jar
- avayaiccommon.jar

4. Backup following files from ..\IC72\sdk\design\dotnet\lib folder and manually copy the following files from sdk folder of IC 7.2.1 Service Pack to the ..\IC72\sdk\design\dotnet\lib folder:

- AvayaICSDKClient.dll



- AvayaCSDKClient.pdb
 - AvayaCSDKClient.xml
 - Com.Avaya.Util.dll
 - Com.Avaya.Util.Messaging.dll
 - Com.Avaya.Util.Messaging.pdb
 - Com.Avaya.Util.pdb
 - CSharptester.pdb
5. Backup following files from sdk\design\dotnet\sample\bin folder and manually copy the following files from sdk folder of IC 7.2.1 Service Pack to the ..\IC72\sdk\design\dotnet\sample\bin folder:
- AvayaCSDKClient.dll
 - AvayaCSDKClient.pdb
 - AvayaCSDKClient.xml
 - Com.Avaya.Util.dll
 - Com.Avaya.Util.Messaging.dll
 - Com.Avaya.Util.Messaging.pdb
 - Com.Avaya.Util.pdb
 - CSharptester.exe
 - CSharptester.pdb
6. Backup the following folders from the specified folder location:
- The Controller and UI folders from sdk\design\dotnet\sample\src\Com.Avaya.Ic.Sdk.Sampleclient.
 - The MSDN folder from sdk\design\dotnet\doc.
 - The Doc folder from sdk\design\java\doc.
 - The src folder folder from sdk\design\java\sample.
7. Manually copy the following from the IC 7.2.1 Service Pack to the specified folder location:
- The Controller and UI folders to sdk\design\dotnet\sample\src\Com.Avaya.Ic.Sdk.Sampleclient.
 - The contents of the sdk\doc\MSDN folder to sdk\design\dotnet\doc.
 - The contents of the Doc folder to sdk\design\java\doc.
 - The src folder to sdk\design\java\sample.
8. Ensure that the newly copied files have the same read/execute permissions as the backed-up files.
9. Start IC SDK Service on the applicable platforms:
- Windows:**
- a. Start the Windows Services application.
 - b. Start Avaya SDK Services
- Solaris/AIX:**
- a. At the command line, type: `./ictomcat.sh start SDK.`



- b. Press **Enter**.

Configuring Web Services

Perform the following steps, if IC Webservice is installed and configured:

1. Stop the IC Webservice, if running on:

Windows:

- a. Start the Windows Services application.
- b. Stop the Avaya IC 7.2 Web Services.

Solaris/AIX:

- a. At the command line, type: `./ictomcat.sh stop webservices -force`.
- b. Press **Enter**.

2. Backup the following file from the specified folder location:

Windows:

...\IC72\sdk\webservices\webservices\WEB-INF\lib\avaya-ic-webservices.jar

AIX/Solaris:

...\IC72/sdk/webservices/webservices/WEB-INF/lib/avaya-ic-webservices.jar

3. Replace the file you just backed up with the file of the same name from this service pack.
4. Ensure that the newly copied file has the same read/execute permissions as the backed-up file.
5. Start IC Webservice on:

Windows:

- a. Start the Windows Services application.
- b. Start Avaya IC 7.2 Web Services.

Solaris/AIX:

- a. At the command line, type: `./ictomcat.sh start webservices`.
- b. Press **Enter**.

IC 7.2.2 Service Pack Configuration

Below Section provides the component-wise configurations. Please note the sub-sections mentions configurations for specific features.

- [Avaya Agent Web Client](#)
- [Design and Admin Configuration](#)
- [Update Fulcrum indexes](#)
- [Installation and Configuration section for Active Directory/ LDAP](#)



Avaya Agent Web Client

Internet Explorer 8

This section describes configuration requirements for **Internet Explorer 8** for Avaya Agent Web Client.

1. Microsoft has released Security Patch on 20th Jan, 2010, (Cumulative Security Update for Internet Explorer 8 (KB978207)) - specific to Operating System. Install it, if is not already installed on agents machine.
2. Uninstall Avaya WindowManager Control from Agent machine if it is already installed, follow below steps
 - a. Open IE Browser.
 - b. Select **Tools > Internet Options**.menu item.
 - c. On **General** tab, click Settings command button under Browsing History.
 - d. Click **View Objects command** button, to view already installed Avaya WindowManager Control.
 - e. Right click **Avaya WindowManager Control** and select Remove menu item. (This will uninstall Avaya WindowManager Control).
3. Change following Internet Options (Select **Tools > Internet Options** menu item) of Internet Explorer 8 for proper functioning of Avaya Agent Web Client.
 - a. Advanced Tab - Browsing section
 - ◆ Uncheck - Enable automatic crash recovery
 - ◆ Uncheck - Enable third-party browser extensions.
 - b. General Tab
 - ◆ Click Settings button of Tabs section, this will open new dialog window. Uncheck - Enable Tabbed Browsing
 - OR
 - ◆ Click Settings button of Tabs section, this will open new dialog window. Check - Enable Tabbed Browsing and ensure "**Always open pop-ups in a new window**" option is selected under "When pop-up is encountered" section.
4. Restart Internet Explorer.
5. Access Avaya Agent Web Client, select install if prompted for installing avayaicagent.cab.
6. On completion of avayaicagent.cab installation, close Internet Explorer.
7. Step 1 to 6 is one time activity.

Note: Don't access another website in new tab of same Internet Explorer instance from which Avaya Agent Web Client login page is launched.

Design and Admin Configuration

Perform the following steps on Windows machine (Where Design and Admin is installed):

WACD infinitely keeps on requesting the WAA to qualify a task when no agent is logged into IC, which is impacting the WkCancelledCnt in OA reporting.

Perform following steps in IC Manager



1. Select the server tab.
2. Select the **WACD** server under Web domain.
3. Select the configuration tab.
4. Select "new"
Under the couple
 - .Name = **RequestResourceRetryCount**
 - .value = **3** (WACD will send WACD.RequestResource for 3 times: 1 try and 2 re-try)
5. Select ok and update the WACD server.

Virtual Queue Transfer selects the wrong Wait Treatment

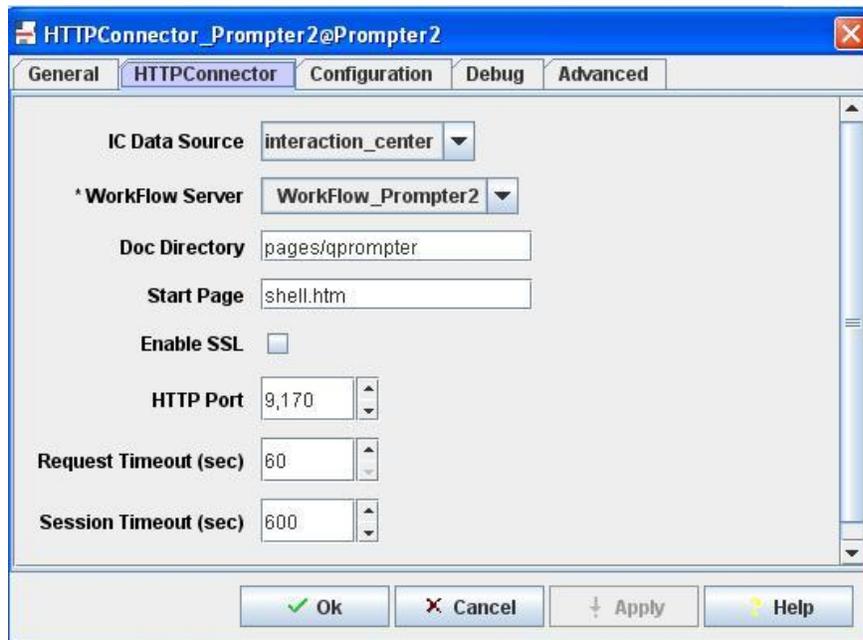
1. In IC Manager, stop the following servers (in the following order):
 - Blender Server
 - All Workflow Servers
2. Make sure following files are from IC 7.2.2 SP.
 - transfertovq.qfd
 - update_vq_cache.qfd
3. Compile the project sys_transfer.prj using WorkFlow designer.
4. Restart the following servers (in the following order):
 - All the Work Flow Servers
 - Blender Server.

SSL Enable HTTP Connector Server

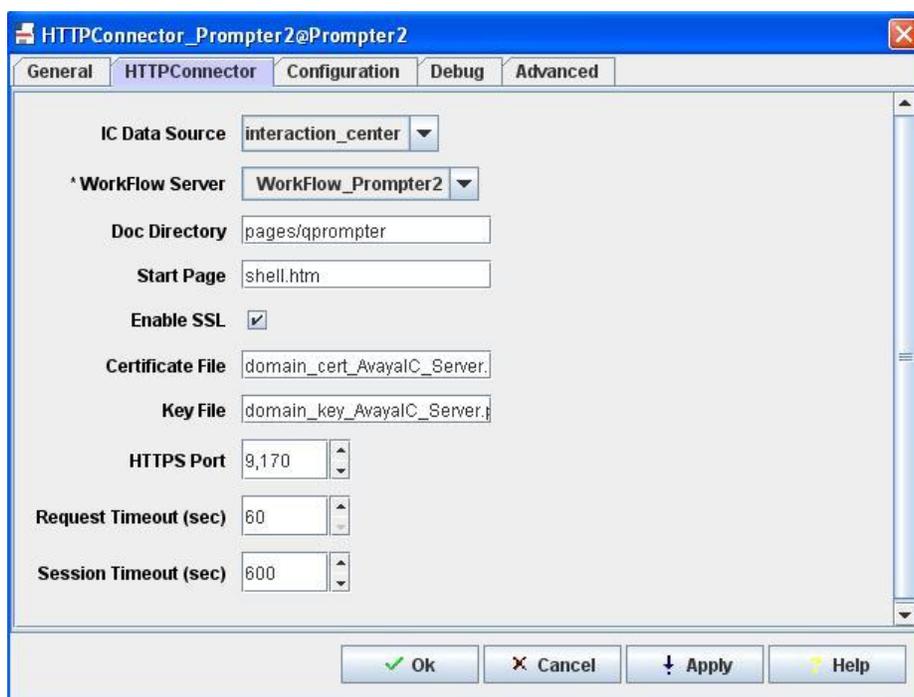
Configuration Steps:

In **ICManager > HTTPConnector_Server > HTTPConnector** tab below are the new fields added.

1. Enable SSL (Check box): By Default, this check-box is not ticked and the server will work in the conventional TCP mode.



If this check-box is selected, it shows the default configuration for the server to work in SSL mode. Users do not have to change any of these parameters.



2. Certificate file: This is the server certificate file used by the HTTPConnector server.
The instructions to generate Server certificate are provided in the section [Generate Certificate](#).
3. Key File: This is the key file used by the HTTPConnector server. Default keyfile.
The instructions to generate Server keyfile are provided in the section [Generate Certificate](#).

Important: Please rename these files ones they are created. There are certificates already shipped in IC7.2.2 SP with these names.

If the Key file used is encrypted with a Passphrase, remember to enter a new entry and enter the passphrase in the **ICManager > Configuration Tab > Private Key PassPhrase > HTTPConnector Server > Password Phrase**.

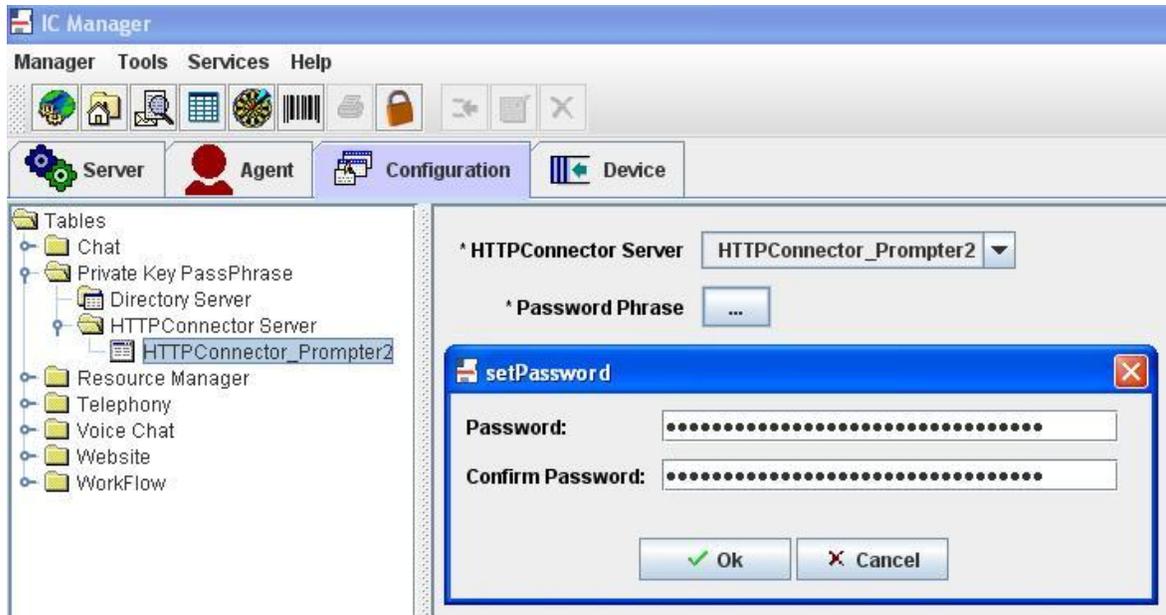
Note:

1. The Server Certificate and Server Keyfile MUST be placed in the path **%AVAYA_IC72_HOME%/etc**.
2. If the Keyfile is not passphrase protected, then please **DO NOT** creates entry the "**ICManager > Configuration Tab > Private Key PassPhrase > HTTPConnector Server > Password Phrase**" for the said keyfile.
3. The server will work either in the **TCP/TLS** mode based on the property "**Enable SSL**" in the **HTTPConnector Server > Configuration tab**.
4. The root/CA certificate MUST be deployed in the DD5.1.

For more information about installing and configuring the same, please refer the **IC** section (Point 33) on page 14 in the DD Release Letter 5.1.0.14.01 (<http://support.avaya.com/css/P8/documents/100111377>).

Important: Please use FQDN (Fully Qualified Domain Name) of server hosting HTTPConnector as CN (Common Name) while generating Server Certificate.

Remember to add this FQDN, IP mapping in the host file of Server hosting the Dialog Designer 5.1 application. Please use the same FQDN in the "Address:" (Address of HTTP Server) in the **Dialog Designer Admin page > IC VRUSM/HTTPVOX**.



5. The Mode of operation from **TCP > SSL** or **SSL > TCP** cannot be achieved at runtime. This needs the user to stop and start the server.



Update Fulcrum indexes

1. If your IC deployment has WACD server and Admin and Client website hosted on separate machine then follow below steps to synchronize Fulcrum indexes.
 - a. Copy "**IC72/logs/fulcrum_updateout.fte**" file from Admin website machine.
 - b. Place the copied file to WACD server and Client website machine under "**IC72/etc/wru_sql**" folder.
 - c. Shutdown IC services and servers on WACD and Client website machine.
 - d. Execute "**IC72/etc/wru_sql/fulcrum_updateout**" script as follows:
 - On Windows:**
 - i. Open command prompt and navigate to "**IC72\etc\wru_sql**" folder.
Execute command "**fulcrum_updateout.cmd**" without double quotes.
 - On Solaris and AIX:**
 - i. Using shell, navigate to "**IC72/etc/wru_sql**" directory.
 - ii. Execute command "**sh fulcrum_updateout.sh**" without double quotes.
 - e. Execute "**IC72/etc/wru_sql/fulcrum_updatendx**" script as follows:
 - On Windows:**
 - i. Open command prompt and navigate to "**IC72\etc\wru_sql**" folder.
 - ii. Execute command "**fulcrum_updatendx.cmd**" without double quotes.
 - On Solaris and AIX:**
 - i. Using shell, navigate to "**IC72/etc/wru_sql**" directory.
 - ii. Execute command "**sh fulcrum_updatendx.sh**" without double quotes.
- NOTE:** Not performing these steps will not enable WACD and Client website to search updated WRU documents.
2. On Admin website machine, if you observe file "**IC72/logs/fulcrum_updateerr.fte**" then follow below steps on Admin website machine to update Fulcrum indexes.
 - a. Copy "**IC72/logs/fulcrum_updateerr.fte**" file.
 - b. Place the copied file at "**IC72/etc/wru_sql**" directory.
 - c. Shutdown IC services and servers and website on Admin website machine.
 - d. Execute "**IC72/etc/wru_sql/fulcrum_updateerr**" script as follows:
 - On Windows:**
 - i. Open command prompt and navigate to "**IC72\etc\wru_sql**" folder.
 - ii. Execute command "**fulcrum_updateerr.cmd**" without double quotes.
 - On Solaris and AIX:**
 - i. Using shell, navigate to "**IC72/etc/wru_sql**" directory.
 - ii. Execute command "**sh fulcrum_updateerr.sh**" without double quotes.
 - e. Execute "**IC72/etc/wru_sql/fulcrum_updatendx**" script as follows:
 - On Windows:**



- i. Open command prompt and navigate to "**IC72\etc\wru_sql**" folder.
- ii. Execute command "**fulcrum_updatendx.cmd**" without double quotes.

On Solaris and AIX:

- i. Using shell, navigate to "**IC72/etc/wru_sql**" directory.
- ii. Execute command "**sh fulcrum_updatendx.sh**" without double quotes.

NOTE: Not performing these steps will not enable Admin website WRU search feature to fetch updated WRU documents.

Installation and Configuration section for Active Directory/ LDAP

In order to successfully enable LDAP integration support with Interaction Center, it needs to be configured as the steps outlined below. Otherwise skip these steps and goto [Next Section](#).

The order of installation and configuration and the steps for the same are outlined below:

1. [Install and configure IC Server component](#)
2. [Install and configure IC Design & Admin component](#)
3. [Install and configure IC Client component](#)
4. [Install and configure IC Website component](#)
5. [Install and configure Siebel Integration component \[IC Side\]](#)
6. [Install and configure Siebel Integration component \[Siebel Side\]](#)
7. [Replace default certificate for Directory Server and Client](#)

IC Server component

1. [Install the Service Pack to the secondary servers of IC.](#)
2. Make sure that the following certificates are installed in the **<AVAYA_IC72_HOME>\etc** folder.
 - **domain_cert_AvayaIC_Server.pem**
 - **domain_key_AvayaIC_Server.pem**
 - **root_cert_AvayaIC_Client.pem**
3. [Install Active Directory/LDAP server certificate](#) if the SSL communication is used between them.
4. Restart IC servers on this machine.
5. If Directory Server is configured for that secondary server then check following things:

Check if Directory Server is up and running.

 - Go through the Directory Server logs and ensure that there are no certificate/SSL related errors or warnings.
 - Confirm that Directory Server is listening on port 14433 for SSL requests.
6. Follow steps 1 to 4 for all the secondary servers.



7. Once all the secondary servers are updated with the Service Pack, and respective Directory Server servers are running, follow steps 1 to 4 for the primary server machine.
8. In case of any error or warnings reported in the logs, ensure that the required certificates mentioned in step 2 are available on the machine and copied to the correct folder i.e. <AVAYA_IC72_HOME>etc, and that the port 14433 is not being used by any other process.

Note: In case of Directory Server not being able to listen for SSL requests, older clients can still login. However, clients where the Service Pack has been applied may face issues while logging in to IC. The certificate names and ports can be changed through IC Manager, once the Service Pack is installed on Design & Admin machine.

Installing Active Directory/LDAP certificate for Directory Server

Directory Server can communicate with Active Directory/LDAP over non-SSL and SSL both modes. The Directory Server Active Directory/LDAP communication is required for [authenticating login credentials](#) of Active Directory/LDAP users. Directory Server will work as a client for Active Directory/LDAP server and it should be ensured that it trusts Active Directory/LDAP server's certificate if it is connecting to it over SSL. For SSL communication between Directory Server and Active Directory/LDAP Server, Active Directory/LDAP Server's certificate (or its CA's certificate) must be installed in to Directory Server machine. This will allow Directory Server to trust the certificate coming from Active Directory/LDAP server during SSL handshake. Installing the signing authority (CA) credentials, which has signed the certificate of Active Directory/LDAP server, in to Directory Server is described below for different supported platforms ([Windows](#), [Solaris/AIX](#)).

Directory Server running on Windows

In case of Directory Server configured to run on a windows machine, the Active Directory/LDAP CA certificate needs to be installed in the windows certificate store, on the machine on which Directory Server is running. In case there are multiple Directory Servers, then the certificate needs to be installed in the certificate store of every machine where Directory Server is configured. To import CA certificates into the Windows Certificate Store, it is easiest if they are PEM-encoded and have a .cer extension.

When creating a secure connection to the Active Directory/LDAP server, the SSL libraries are automatically going to use the correct CA certificate used to sign the certificate presented by the Active Directory/LDAP server. In this case the certificate field specified in the Active Directory/LDAP configuration can be left blank.

Directory Server running on UNIX

In case the Directory Server is configured to run on IC supported UNIX platform (Solaris or AIX), then the CA certificate needs to be saved on the file system, encoded in a PEM format. The filename containing the certificate is to be specified in the **Certificate Name** field during the [Active Directory/LDAP server configuration](#). The certificate is required to be copied to the <AVAYA_IC72_HOME>etc folder on the machine where Directory Server is running.

Note: Ensure that value of **LDAP Server Name** field specified in the [Active Directory/LDAP server configuration](#) matches the hostname specified in the Active Directory/LDAP certificate's **commonName** field. If these values are different, then the SSL handshake between Directory Server and the Active Directory/LDAP server will not succeed, and [Active Directory/LDAP authentication](#) for users will not going to work.

IC Design & Admin component

[Install the Service Pack on the Design & Admin machine.](#) Following configurations steps are required to integrate IC with Active Directory/LDAP:



- [Importing Active Directory/LDAP server certificate to IC Manager](#)
- [Importing sc.xml to IC Manager](#)
- [Reconfiguring database and generating Windows application](#)
- [Enabling LDAP integration support](#)
- [Configuring Active Directory/LDAP server properties](#)
- [Importing users from Active Directory/LDAP](#)
- [Synchronizing users with Active Directory/LDAP](#)
- [Configuring Directory server](#)
- [Configuring password management options for Active Directory/LDAP users](#)

Importing Active Directory/LDAP server certificate to IC Manager

IC Manager can communicate with Active Directory/LDAP over non-SSL and SSL both modes. The IC Manager Active Directory/LDAP communication is required for importing and synchronizing Active Directory/LDAP users in to IC system. IC Manager will work as a client for Active Directory/LDAP server and it should be ensured that it trusts Active Directory/LDAP server's certificate if it is connecting to it over SSL. For SSL communication between IC Manager and Active Directory/LDAP Server, Active Directory/LDAP Server's certificate (or its CA's certificate) must be installed in to IC Manager used JRE's database of trusted certificates. This will allow IC Manager to trust the certificate coming from Active Directory/LDAP server during SSL handshake. Following steps will install the signing authority (CA) credentials, which has signed the certificate of Active Directory/LDAP server, in to IC Manager used JRE's database of trusted certificates.

1. Copy Active Directory/LDAP Server's certificate (or its CA's certificate) from Active Directory/LDAP server machine to IC Design & Admin machine's `<AVAYA_IC72_HOME>\IC72\Java\lib\security` folder and rename it to `root_cert_LDAP_server.pem`.
2. Open command prompt and run following commands to import above certificate:
 - `cd <AVAYA_IC72_HOME>\IC72\Java\lib\security`
 - `<AVAYA_IC72_HOME>\IC72\Java\bin\keytool.exe -import -file root_cert_LDAP_server.pem -alias <Certificate Unique Alias Name> -keystore jssecacerts -storepass changeit`
3. Verify that `jssecacerts` keystore is present in `<AVAYA_IC72_HOME>\IC72\Java\lib\security` folder in the form of a file and check if `root_cert_LDAP_server.pem` is successfully imported in to `jssecacerts` keystore by checking the output of following command:
 - `<AVAYA_IC72_HOME>\IC72\Java\bin\keytool.exe -list -v -alias <Certificate Alias Name> -keystore jssecacerts -storepass changeit`

Note:

- The default password for `jssecacerts` keystore is `changeit`. Use the appropriate password if it is changed.
- All keystore entries (key and trusted certificate entries) are stored and accessed via unique, case-insensitive aliases through the keystore. If certificate alias name is not provided then default alias name `mykey` will be used by `keytool`.

Importing sc.xml to IC Manager

Directory Server will now listen on a separate port over SSL for Login requests only. There are new configurations added for Directory Server to make it SSL enabled. Following steps will allow IC Manager to import new configurations added for IC Active Directory/LDAP integration.

Start IC Manager. Import the sc.xml file into the system through following steps:

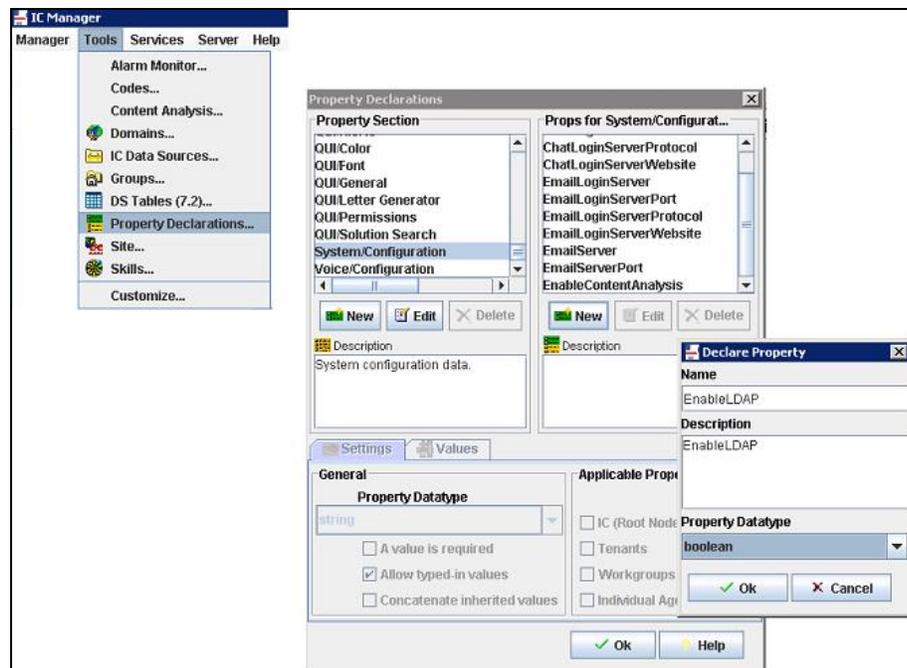
1. In IC Manager, go to **Manager > Options > Environment (tab) > Import Configuration**.
2. Browse through <AVAYA_IC72_HOME>\etc directory and select sc.xml.
3. Verify if validation of sc.xml is successful and then press Ok to import it.
4. Exit IC Manager and restart it.
5. Ensure that Admin user is able to login into IC Manager.

Enabling Active Directory/LDAP integration support

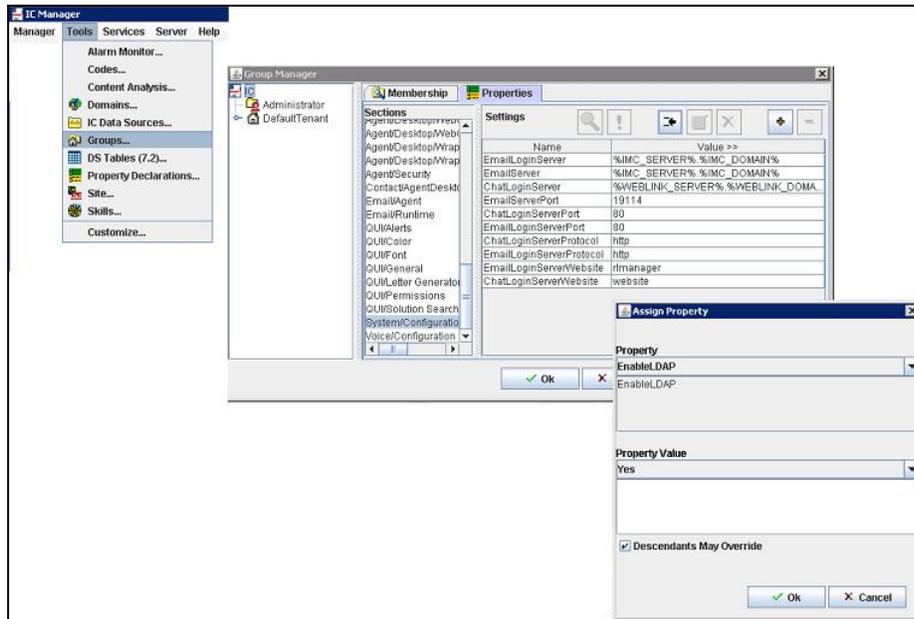
Enablement of IC Active Directory/LDAP integration can be controlled by EnableLDAP IC property. IC system will communicate to Active Directory/LDAP only if this property is set to true. Following steps will add this new property to IC system.

1. Open IC Manager and select **Tools > Property Declaration**.
2. In **Property Declarations** dialog box select **System/Configuration** from **Property Section**, add a property with following values selecting **New** from **Props for System/Configuration** section:

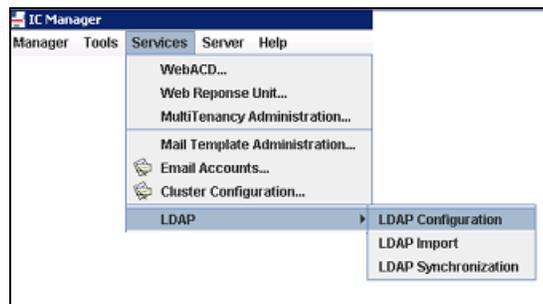
Name: EnableLDAP
Description: EnableLDAP
Property Data Type: boolean



3. Select **Tools > Groups** through IC Manager. Select **IC** from the left pane in **Group Manager** dialog box.
4. Select **System/Configuration** under **Properties** tab in the left pane in **Group Manager** dialog box and assign a new property **EnableLDAP** with the property value **Yes**.



5. Exit from IC Manager and restart it.
6. Login to IC Manager using administrative privileges (Admin user).
7. The **LDAP** menu will be available under **Services** menu in IC Manager.



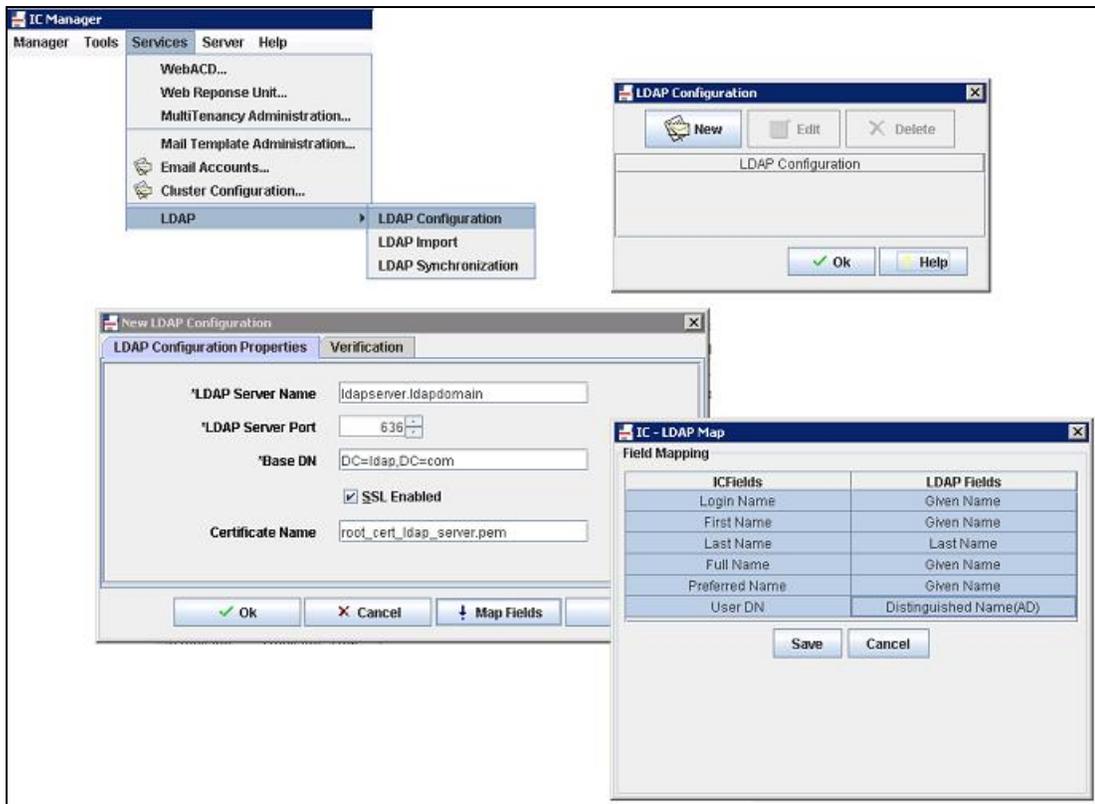
Configuring Active Directory/LDAP server properties

IC Manager communicates to Active Directory/LDAP for [importing](#) and [synchronizing](#) Active Directory/LDAP users in to IC system. Similarly Directory Server communicates to Active Directory/LDAP server for user authentication. Following steps will allow IC system to store Active Directory/LDAP configuration details that can be used by IC Manager or Directory Server for the above mentioned purposes.

1. Select **Services → LDAP → LDAP Configuration** through IC Manager
2. For creating a new Active Directory/LDAP configuration click on the **New** button. For editing the existing configuration use **Edit** button in Active Directory/LDAP **Configuration** dialog box.
 - **New LDAP Configuration** dialog box has following fields:

- ◆ **LDAP Server Name:** Host name or IP address of Active Directory/LDAP server machine.
- ◆ **LDAP Server Port:** Active Directory/LDAP port number over which IC Manager/ Directory Server will communicate with Active Directory/LDAP. The default value of non-SSL port is 389 and default value of SSL port is **686**.
- ◆ **Base DN:** Active Directory/LDAP base DN name. e.g. dc=ldap,dc=com
- ◆ **SSL Enabled:** Check box to set if the communication between IC system and Active Directory/LDAP is over SSL.
- ◆ **Certificate Name:** Active Directory/LDAP server's CA certificate name. This [configuration](#) will be used by Directory Server only for UNIX platform. For Windows, this field can contain any value.
- **New LDAP Configuration** dialog box also has following buttons:
 - ◆ **OK button:** Clicking this button will save the Active Directory/LDAP configuration to the ldapconfig table in repository database.
 - ◆ **Cancel button:** Clicking this button will exit the form without saving the Active Directory/LDAP configuration changes.
 - ◆ **Map Fields button:** This button provides option to map IC Fields to Active Directory/LDAP fields. Refer [IC-LDAP Field Mapping](#) for more details.

Note: Only one Active Directory/LDAP configuration creation is supported with 7.2.2 Service Pack. Thus after saving first Active Directory/LDAP Configuration, the **New** button will be disabled in **LDAP Configuration** dialog box.





IC-LDAP field mapping

IC-LDAP field mapping is required to map Active Directory/LDAP user attributes with columns of employee table in IC repository database. This mapping is used in [importing](#) or [synchronizing](#) Active Directory/LDAP users in to IC system. Active Directory/LDAP user's mapped attribute's values will be populated into the corresponding column of employee table at the time of [import](#) or [synchronize](#).

It is required to map the Active Directory/LDAP fields to IC fields before performing [Import](#) or [Synchronization](#) activity. Mapping fields is a one time activity and the IC-LDAP field map gets saved in *ldapconfig* table along with other configuration details provided through [New LDAP Configuration dialog box](#).

IC Manager reads the Active Directory/LDAP fields and IC fields from **agentAttributes.xml** file placed in **<AVAYA_IC72_HOME>IC72\etc** folder to populate options/values for **Field Mapping** in **IC-LDAP Map** dialog box. This file has two sections:

1. LDAP fields

In this section Active Directory/LDAP attributes can be specified as XML tags. The tag name represent actual Active Directory/LDAP attribute name and value represents display name for that attribute. e.g.

```
<Snippet>
.
.
.
    <LdapFields>
        <sAMAccountName>sAMAccountName</sAMAccountName>
        <givenName>Given Name</givenName>
        <sn>Last Name</sn>
        <distinguishedName>Distinguished Name (AD)</distinguishedName>
        <!-- This must be used for Active Directory systems. -->
        <entryDN>Entry DN (OpenLDAP)</entryDN>
        <!-- This must be used for OpenLDAP systems. -->
    </LdapFields>
.
.
.
</Snippet>
```

Here **givenName** is the attribute name of Active Directory/LDAP user and **Given Name** is the display name.

Important: There should be at least one Active Directory/LDAP user attribute which has unique value associated with it across the Active Directory/LDAP server users. This attribute should always be mapped to IC's loginname attribute. The other required attribute is DN which needs to be mapped to userDN field of IC. The attribute name for DN could vary depending upon LDAP server type e.g. for Active directory the attribute's name is distinguishedName and for OpenLDAP it is entrydn.

2. IC fields

In this section IC attributes can be specified as XML tags. The tag name represent actual IC attribute name from IC repository database's employee table and value represents display name for that attribute. e.g.

```
<Snippet>
.
.
.
    <ICFields>
        <loginname>Login Name</loginname>
        <firstname>First Name</firstname>
        <lastname>Last Name</lastname>
        <fullname>Full Name</fullname>
        <preferredname>Preferred Name</preferredname>
        <userDN>User DN</userDN>
    </ICFields>
.
.
.
</snippet>
```

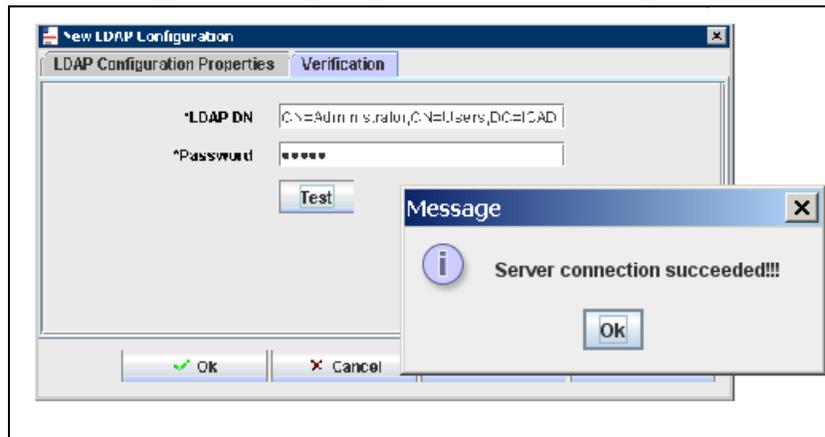
Here **loginname** is the actual IC attribute name and **Login Name** is the display name.

Note: It is recommended to review the **agentAttributes.xml** file, installed with this Service Pack, to verify that the Active Directory/LDAP schema has the all the attributes present as defined in **LDAPFields** section, before mapping fields. This file can be modified to add more mapping fields in IC/LDAP section. However this should be done carefully so that LDAP user attributes should match with the desired IC user attribute.

Active Directory/LDAP configuration verification:

Active Directory/LDAP configuration details provided through [New LDAP Configuration dialog box](#) can validate the configuration data provided:

1. Fill up the details in **LDAP Configuration Properties** tab of **New LDAP Configuration** dialog box.
2. Go to **Verification** tab of **New LDAP Configuration** dialog box.
3. Provide LDAP **DN** and **Password** information.
4. Select **Test** button. Test result will be displayed in the **Message** box.



Importing users from Active Directory/LDAP server

IC Manager has the capability to import Active Directory/LDAP users to IC system as per the rules set through [IC-LDAP Field Mapping](#). Following steps will allow importing Active Directory/LDAP user information in to the IC system.

1. Select **Services > LDAP > LDAP Import** through IC Manager.
2. Input Active Directory/LDAP login credentials in to the [Login Screen](#) and select **Login** button.
3. Select all the users to be imported from [Import Screen](#) and select **Import** button.
4. Verify if all the users selected are imported successfully in [Import Summary Screen](#) and select **Finish**.

Login screen

Login screen has following input fields:

- **LDAP DN:** Active Directory/LDAP user name (DN), who has permission to search users in Active Directory/LDAP server.
- **Password:** Password of the above user.

Login screen has following buttons:

- **Login:** Selecting this button will take to the **Import Screen** on successful login.
- **Cancel:** To exit the **Import LDAP users** dialog box.

Import screen

Import screen lists users to be selected to import in to IC system. The list of users will be populated based on the Filter/Search criteria.

This screen has following components:

Filter/Search Criteria: Active Directory/LDAP query string for additional filtering on the list of users to be fetched from Active Directory/LDAP. This search criterion must follow the Active Directory/LDAP query creation rules.

For example:

- Query string for the list of users belonging to division 'rnd': **(division=rnd)**



- Query string for the list of users who do not belong to 'rnd' and have Email ID: **(&! (division=rnd))(mail=*)**
- Query string for the list of users whose name begins with agent: **(name=agent*)**
- etc.

Search Button: Selecting this button will search Active Directory/LDAP users on Active Directory/LDAP server based on the filter criteria set. It will use Active Directory/LDAP server details set through [Configuring Active Directory/LDAP server properties](#).

Select all checkbox: To select all users listed.

List of Users with selection checkbox: The checkboxes will provide option to select users those are to be imported in to IC system. Following user attributes will be shown:

- Serial No
- sAMAccountName
- Given Name
- Last Name
- Distinguished Name(AD) / Entry DN(OpenLDAP)

Note:

These fields are populated with the help of entries present in [LDAPFields](#) section of **<AVAYA_IC72_HOME>IC72\etc\agentAttributes.xml** file. The values could be different based on the changes made in agentAttributes.xml file. Refer [IC-LDAP Field Mapping](#) for details.

Import screen has following buttons:

- **Import:** To import selected Active Directory/LDAP users into IC system. Only users who do not exist already in IC system are imported.
- **Cancel:** To exit the Import LDAP users dialog box.

Import Summary screen

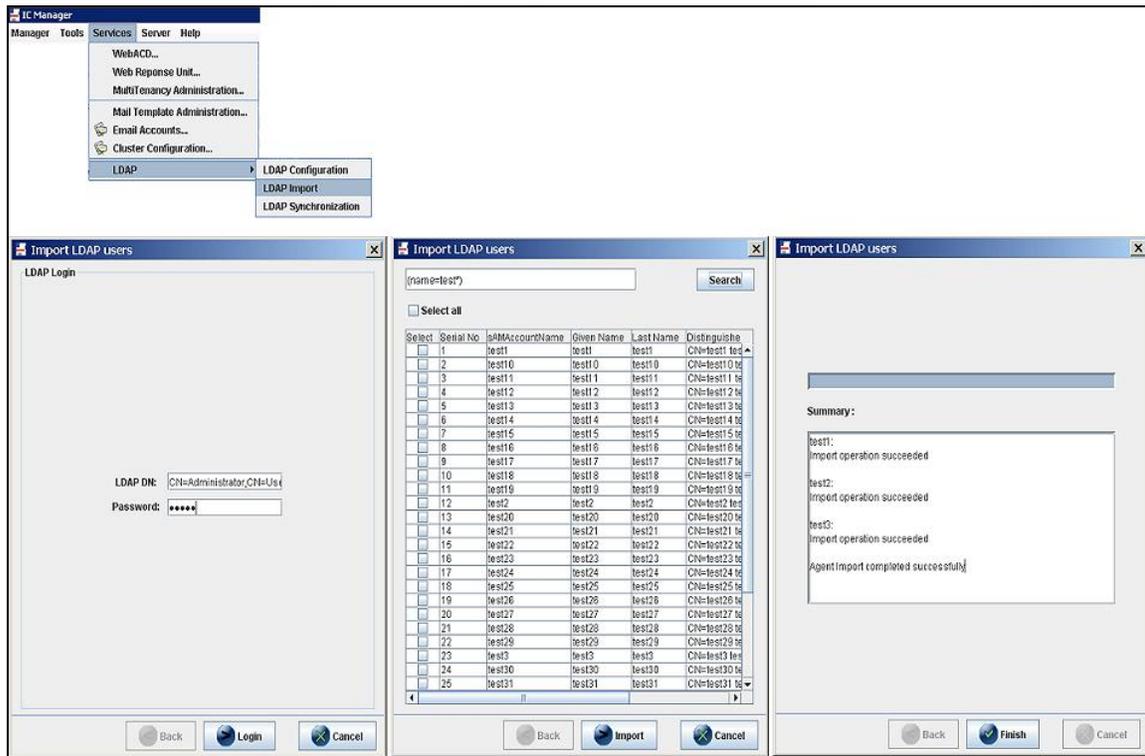
Import Summary Screen displays the progress of import operation and the import status for each user. This screen has following components:

Progress Bar: Displays import operation progress.

Summary Text Area: Displays import status for each user.

Import Summary Screen has following buttons:

Finish: To exit from Import Wizard after completion of import operation. This button is enabled only after the completion of import activity.



Synchronizing users with Active Directory/LDAP server

If the attribute(s) of any Active Directory/LDAP user, who were already imported to IC system, is changed on any Active Directory/LDAP server, they need to be synchronized in IC system too. Following steps will allow synchronizing Active Directory/LDAP user attributes with the IC system.

1. Select **Services** → **LDAP** → **LDAP Synchronization** through IC Manager.
2. Input Active Directory/LDAP login credentials in to the [Login Screen](#) and select **Login** button.
3. Select **Start Synchronization** button on [Sync Summary Screen](#) to start the synchronization.
4. Verify if all the users imported are synchronized successfully in [Sync Summary Screen](#) and select **Finish**.

Login screen

- Login screen has following input fields:
 - **LDAP DN:** Active Directory/LDAP user name (DN), who has permission to search users in Active Directory/LDAP server.
 - **Password:** Password of the above user.
- Login screen has following buttons:
 - **Login:** Selecting this button will take to [the Sync Summary Screen](#) on successful login.
 - **Cancel:** To exit the Synchronize LDAP users dialog box.

Sync Summary screen

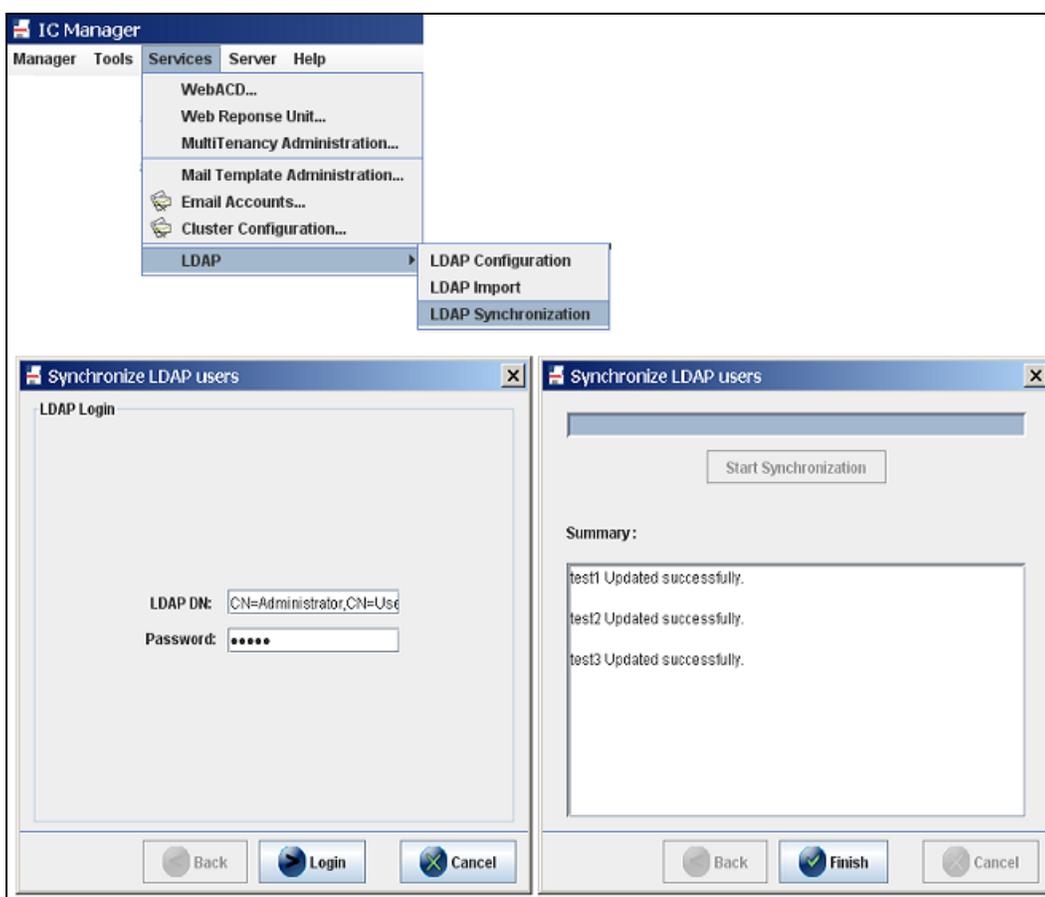
Sync Summary Screen displays the progress of synchronization operation and the sync status for each user.

This screen has following components:

- **Start Synchronization Button:** To start synchronization operation of Active Directory/LDAP enabled IC users. This button is disabled once synchronization is started.
- **Progress Bar:** Displays synchronization operation progress.
- **Summary Text Area:** Displays synchronization status for each user.

Sync Summary Screen has following buttons:

- **Cancel:** To exit from Sync Wizard without completing the user synchronization operation. This button is disabled once synchronization is started.
- **Finish:** To exit from Sync Wizard after completion of synchronization operation. This button is enabled only after the completion of synchronization activity.



Directory Server SSL configuration

The IC client authentication mechanism is undergoing a change with the installation of this Service Pack. Going forward IC Clients will be using a secure channel to login into the VESP framework. The Directory Server will now listen for SSL login requests on a different port apart from the VESP port. Only login requests are going to be serviced by this port, all other requests are still going to be routed to the normal VESP port.

New configuration properties are added in to Directory Server to make it SSL enabled. These properties need to be configured through IC Manager if default values are not being used. Following new properties are added in to Directory Server's **Directory tab** for IC-LDAP integration:

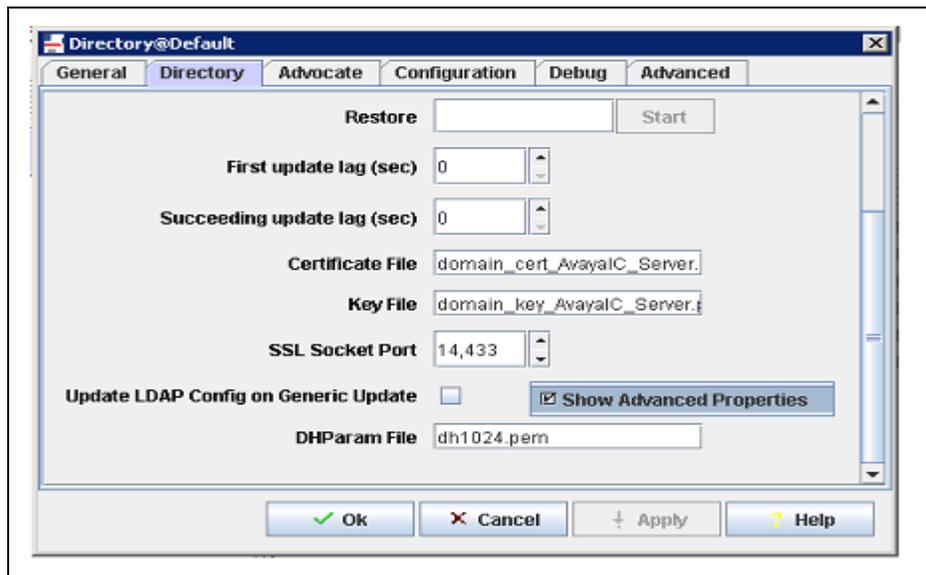
General properties

- **Certificate File:** Directory Server SSL Certificate (PEM format) file name. Default value is **domain_cert_AvayaIC_Server.pem**.
- **Key File:** Directory Server SSL Certificate Private Key file name. Default value is **domain_key_AvayaIC_Server.pem**.
- **SSL Socket Port:** Port to be used for SSL communication for accepting Login request. Default value is **14433**.

Advanced properties

Update LDAP Config on Generic Update: To update IC-LDAP integration related Directory Server properties at run time through Generic Update.

DHParam File: This parameter is not used currently though a warning log message will be logged in to Directory Server log about the missing dh1024.pem file. This option is kept for future implementation and should not be altered.

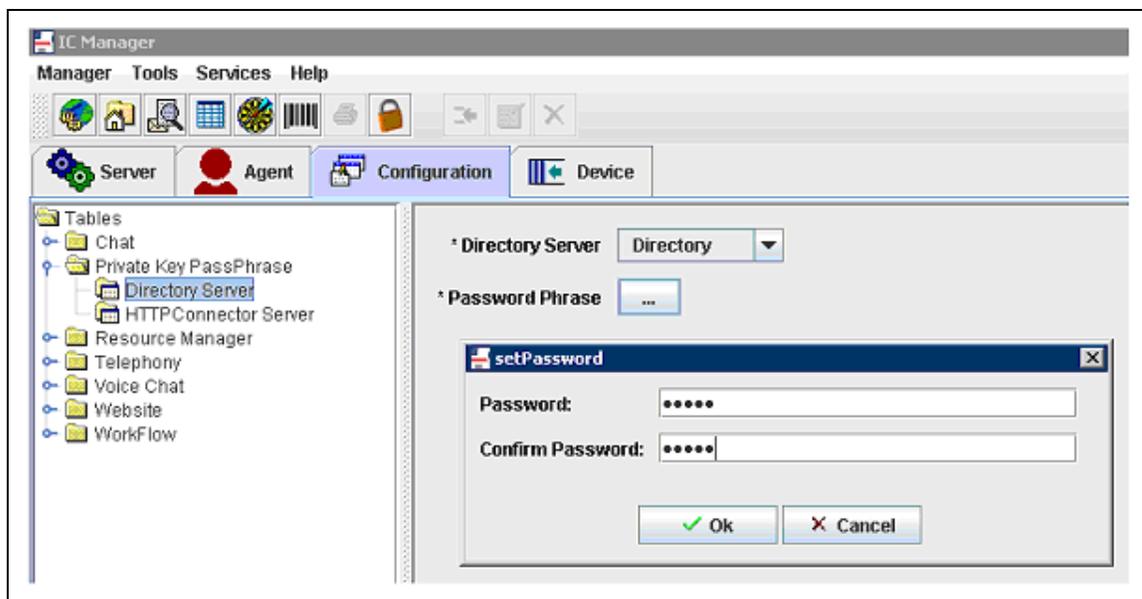


The Directory Server SSL Certificate Private Key file can be pass phrase protected. This passphrase information should be configured through Configuration tab in IC Manager.

1. Go to **Configuration** tab in IC Manager and expand **Private Key PassPhrase** tree node in the left panel.
2. Select **New** and choose the Directory Server alias from **Directory Server** drop down list.
3. Select **Password Phrase** and enter the password in **setPassword** dialog box.
4. Save this information by selecting **Ok** button.

Note: The default Directory Server SSL Certificate Private Key installed with this Service Pack is not passphrase protected and this configuration is not required for that key.

The Directory Server SSL Certificate Private Key file passphrase information (if configured) will be stored in an encrypted format in ds.ffd file only.



Reconfiguring database & generating Windows application

There are changes to the Database Schema for IC-LDAP integration, which is available through ADL files in the <AVAYA_IC72_HOME>\design folder. Following steps will allow IC system to update its database with new entries related to IC-LDAP integration.

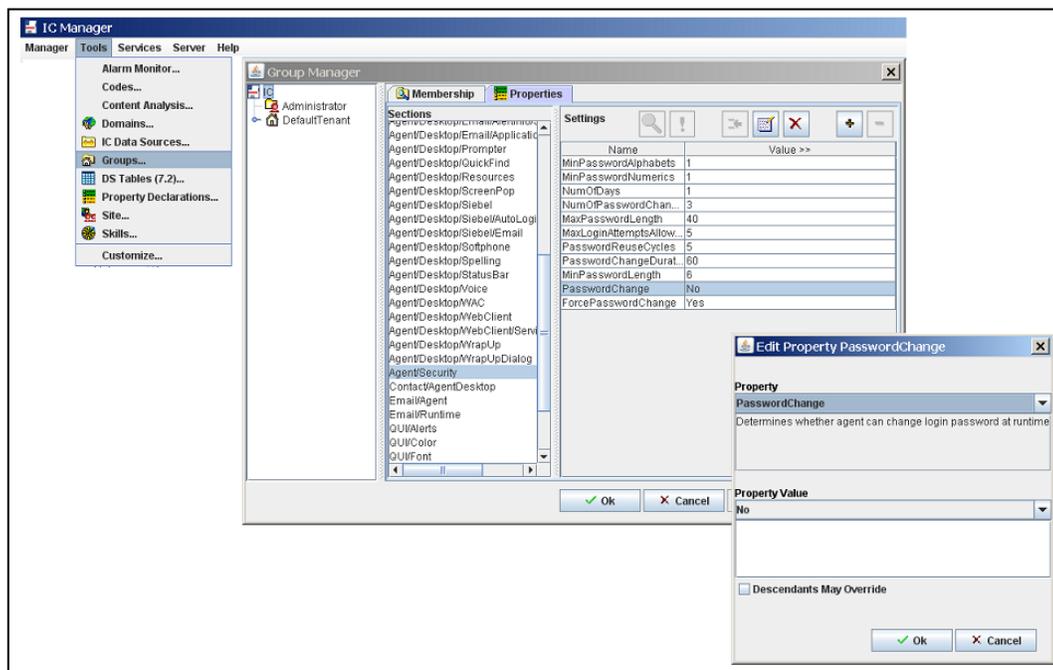
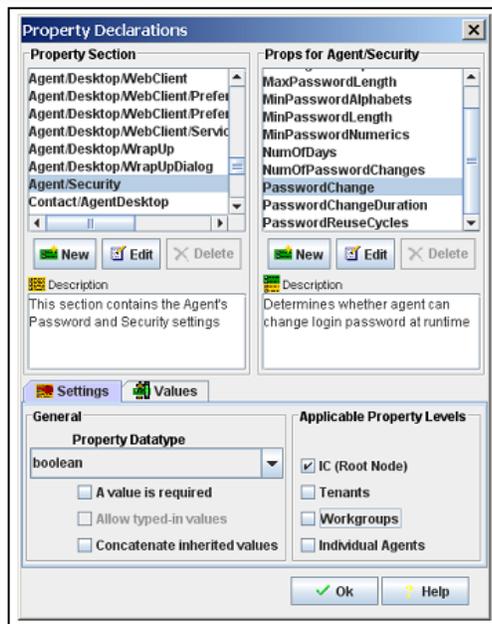
1. Open DB Designer. Open the repository.adl file. Reconfigure the database, and regenerate the windows application again.
2. Repeat the above step with ccq.adl.
3. In case there are errors, check the logs to find and resolve the cause.

Configuring password management options

IC system would not manage the passwords for Active Directory/LDAP users in IC-LDAP integration. For authentication of Active Directory/LDAP user, the user-password and a unique identifier (usually the Distinguished Name of the user) will be sent by IC system to the Active Directory/LDAP server. The authentication result received from Active Directory/LDAP server is passed back to the respective clients.

To avoid confusion among Active Directory/LDAP users, IC system's password management related configurations should be turned off as described below:

1. **Agent/Security > PasswordChange** option, which allows agent to change their password, should be set to **No** through IC Manager for Active Directory/LDAP users. This option can be set at **IC (Root Node), Tenants, Workgroup** or **Individual Agents** level as per the configuration and requirement of contact center.



Note: If **Agent/Security** → **PasswordChange** option is set to **Yes** for Active Directory/LDAP users, the respective agents will get an option to change the password through IC Client, but using this option will not have any effect on Active Directory/LDAP password maintained at Active Directory/LDAP server. This may create confusion among agents when they will try to use the new password changed through IC Client.

2. Values of following password management options will not be used for Active Directory/LDAP users:
 - Agent/Security → ForcePasswordChange
 - Agent/Security → MaxPasswordLength

- Agent/Security → MinPasswordAlphabets
- Agent/Security → MinPasswordLength
- Agent/Security → MinPasswordNumerics
- Agent/Security → NumOfDays
- Agent/Security → NumOfPasswordChanges
- Agent/Security → PasswordChangeDuration
- Agent/Security → PasswordReuseCycles

Note: Following fields will be disabled for all agents [imported](#) from Active Director/LDAP server:

- ◆ Password
- ◆ Confirm
- ◆ Force password change on login

The screenshot shows a configuration window titled 'ldapagent1@User1' with a 'Security' tab selected. The 'Password' and 'Confirm' fields are disabled. The 'Force password change on login' and 'Disable login' checkboxes are also disabled. The 'Roles' section includes a list of roles: Administrator, Postmaster, Agent (checked), Support, Supervisor, Operator, Clerk, and Editor.

3. **Agent/Security > MaxLoginAttemptsAllowed** option value will be used for Active Directory/LDAP users in the same manner as for regular users to control the login attempts in to IC system. It will not affect the similar rule set at Active Directory/LDAP server.

Example:

- **MaxLoginAttemptsAllowed** is set to 3 in IC system and 5 in Active Directory/LDAP server. After 3 unsuccessful attempts of login through IC system, IC will disable the login for that agent and will not consult Active Directory/LDAP server for login authentication for subsequent attempts even though there are 2 more attempts available for that agent on Active Directory/LDAP server.
- **MaxLoginAttemptsAllowed** is set to 5 in IC system and 3 in Active Directory/LDAP server. After 3 unsuccessful attempts of login through IC system, Active Directory/LDAP server will disable the login for that agent but IC system will consult Active Directory/LDAP server for login authentication for next 2 subsequent attempts as agent's login will be disabled only after 5 unsuccessful attempts in IC system.

Note: LDAP Users created with Empty password will not be allowed to login into AIC.



IC Client component

[Run the Service Pack client installer on each of the client machines.](#) Machines running SDK client or accessing AAWC using IE do not require this Service Pack to be installed.

Note: The Directory Server's SSL Certificate's signing authority's (CA's) certificate should be installed (in PEM format) on each Client machine's <AVAYA_IC72_HOME>\etc folder with the name `root_cert_AvayaIC_Client.pem`.

IC Website component

- If the website resides on the same machine where WACD has been configured to execute, then the Service Pack is already installed, and no additional steps are necessary.
- If the website is on a machine different from which hosts the WACD server, then the Service Pack needs to be installed on the website machines as well. Restart the website after installing the Service Pack.

Siebel Integration component [IC Side]

[Install the Service Pack on IC server machine.](#)

Siebel Integration component [Siebel Side]

[Install the Service Pack on Siebel server machine.](#)

Note: If IC-Siebel Native integration is configured using the 'AgentPassword' parameter where AICD will use a common Avaya IC password for all agents, do not configure LDAP for IC. In this case, if LDAP is desired for agents, it needs to be configured for the Siebel Agents on the Siebel side.

Replacing default certificate for Directory Server and Client

In order to enable SSL between IC Clients and Directory Server for Login request, certificates are exchanged between Directory Server and the client requesting login. The client then verifies the certificate to ensure that it is communicating with a valid Directory Server, and an encrypted channel is created between them. The login information is then exchanged between the client and Directory Server, and Directory Server authenticates the client against the credentials passed. The Service Pack bundles Out-of-Box self signed certificates for this purpose of creating the encrypted channel between the client and Directory Server. However, customers are free to create and use their own certificates for the same. The certificates for this kind of usage falls broadly under 2 categories:

We will look at each of these categories, and when and how to use them for different scenarios

Certificates signed by Certificate Authority (CA)

These certificates are either signed by a well known CA e.g. VeriSign etc. or signed by a self-created CA. The signing authority verifies the existence of the business and the ownership of the fully qualified domain name (FQDN) to provide additional security. When using this option, the customers need to ensure that the FQDN on the certificate needs to match the FQDN of the Directory Server on which it is installed. As IC operates on IP addresses rather than host names, a proper reverse IP lookup mechanism needs to be setup so that the IP is resolved to the correct hostname. This can be achieved through either of the well know mechanisms like DNS, NIS, local hosts file, etc. The signed certificate should be installed on the machine running the Directory



Server, in <AVAYA_IC72_HOME>\etc folder. The certificate name can be [entered](#) in the respective server's configuration tab using IC Manager. The CA's (signing authority's) certificate, who has signed the Directory Server SSL certificate, is to be [distributed](#) to all the client machines, and needs to be copied in to <AVAYA_IC72_HOME>\etc folder with the name **root_cert_AvayaIC_Client.pem**. The name of the CA certificate cannot be changed, and has to be the one mentioned above. It also needs to be ensured that all the certificates are in **PEM** format. During the initial handshake, the client receives the server certificate and validates its credentials using the CA certificate which it has. If the certificate is validated successfully, then the client tries to match the FQDN of the host it is connecting to with the FQDN name in the certificate's **commonName** field or certificate's **dNSName** field of the **subjectAltName**. If the DNS names match, then the handshake is successful, and encrypted data is exchanged between the two nodes. If the DNS names do not match, the client rejects the connection.

IC clients support the use of wildcard characters in FQDN name in CA signed server certificate's **commonName** field or certificate's **dNSName** field of the **subjectAltName**. The accepted wildcard characters are described at <http://support.microsoft.com/kb/258858>.

Accepted wildcard examples

- [www.example.com](#) matches [www.example.com](#)
- *.example.com matches [www.example.com](#)
- w*.example.com matches [www.example.com](#)
- ww*.example.com matches [www.example.com](#)
- [Www.Example.com](#) matches [www.examPle.cOm](#)

Non-accepted wildcard examples

- *www.example.com
- *w.example.com
- w*w.example.com
- *ww.example.com does not match [www.example.com](#)
- [www.e*ample.com](#) does not match [www.example.com](#)
- [www.*ample.com](#) does not match [www.example.com](#)
- [www.ex*.com](#) does not match [www.example.com](#)
- [www.*.com](#) does not match [www.example.com](#)
- example.com does not match *.com does not match [www.example.com](#)
- [www.example.abc.com](#) does not match *.abc.com
- example.com does not match *.*
- example does not match *
- abc.def.example.com does not match a*.d*.example.com
- [www.example.com.au](#) does not match *.*.com.au
- [www.example.com.au](#) does not match [www*.com.au](#)

Note:



- The Directory Server fully qualified domain name (FQDN) must be present in the respective certificate's `commonName` field or certificate's `dNSName` field of the `subjectAltName` or both for the successful SSL handshake in case of CA signed certificate.
- IC Client supports multiple `commonName` fields in the server certificate as well as multiple FQDN configured in certificate's `dNSName` field of the `subjectAltName`. This means, multiple FQDN can be used in one certificate either by using multiple `commonName` fields in certificate or having multiple `dNSName` field entry in the certificate's `subjectAltName` field.

Important:

1. If Directory Server is using CA signed certificate on different Directory Server machines (Primary and Secondary), then it is recommended that only single certificate containing multiple FQDNs of different Directory Server machines (Primary and Secondary) should be used by entering different FQDNs in the certificate with the help of:
 - a. Multiple **commonName** field of the certificate, or
 - b. Multiple **dNSName** field of the **subjectAltName** of the certificate, or
 - c. Both (above), or
 - d. Using accepted wildcard characters for FQDN in the certificate.

In this case the single CA's certificate should be [distributed](#) to all the client machines, and needs to be copied in to `<AVAYA_IC72_HOME>\etc` folder with the name **root_cert_AvayaIC_Client.pem**.

2. Multiple CAs can be used to sign certificate(s) under following circumstances:
 - a. Different CAs signing a single certificate at different hierarchy level and creating a certificate chain inside that certificate, *or*
 - b. Different certificates (containing different FQDN information) used for different Directory Server machines (Primary and Secondary) signed by different CAs, *or*
 - c. Both (above)

In this case certificates of **ALL** of the CAs involved in signing server certificate(s) needs to be appended one after another (not necessary in any particular order) in to **root_cert_AvayaIC_Client.pem** file. This file should be [distributed](#) to all the client machines and should be copied in to `<AVAYA_IC72_HOME>\etc` folder with the same name. For example,

```
-----BEGIN CERTIFICATE-----  
<CA 1 Certificate>  
-----END CERTIFICATE-----  
-----BEGIN CERTIFICATE-----  
<CA 2 Certificate>  
-----END CERTIFICATE-----  
-----BEGIN CERTIFICATE-----  
<CA 3 Certificate>  
-----END CERTIFICATE-----  
.....  
.....
```



Multiple CA certificates can be appended in to **root_cert_AvayaC_Client.pem** file using notepad or any other text editing tools.

Note: IC Active Directory/LDAP integration feature supports certificate chain depth (signing hierarchy) up to **9** levels.

Following openssl commands can be used to create a CA and then create a server certificate signed by that CA.

Generate Certificate

REM 1. Generate pass-phrase protected Private Key for CA:

```
openssl genrsa -des3 -out root_key_AvayaC_CA.pem 1024
```

REM 2. Create the CA Certificate:

```
openssl req -new -x509 -extensions v3_ca -key root_key_AvayaC_CA.pem -out root_cert_AvayaC_CA.pem -days 5475
```

REM 3. Generate pass-phrase protected Private Key for Server:

```
openssl genrsa -des3 -out domain_key_AvayaC_Server.pem 1024
```

REM 4. Create the Server Certificate Request:

```
openssl req -new -key domain_key_AvayaC_Server.pem -out domain_req_AvayaC_Server.pem -days 1825
```

REM 5. Sign the request with the Root CA and make a Server certificate containing Server public key:

```
openssl x509 -req -days 1095 -in domain_req_AvayaC_Server.pem -extensions v3_usr -CA root_cert_AvayaC_CA.pem -CAkey root_key_AvayaC_CA.pem -CAcreateserial -CAserial ca.srl -out domain_cert_AvayaC_Server.pem
```

REM 6. Make a copy of CA Certificate to be used as Client's trusted CA:

```
copy root_cert_AvayaC_CA.pem root_cert_AvayaC_Client.pem
```

Self signed certificates

Using CA signed certificates could mean a complicated setup in terms of host name validation, as we have seen above. Some customers may not be in a position for such an arrangement, or may not have need for such a complicated setup. To help such situations, IC also supports self-signed certificates to be used to establish a secure SSL connection between the clients and Directory Server. In this case, the CA certificate to be used on the client side is essentially the same self-signed server certificate. When the client attempts a secure connection to the Directory Server, it tries to validate the certificate the server sends it. If the certificate is self-signed, it tries to match the certificate received from the server with the certificate which exists on the client side. If they match, then the handshake is successful, else the connection is rejected by the client.



Note: In case of self-signed certificate, successful certificate's FQDN validation by the client is optional during SSL handshake and Directory Server certificate may contain any information in certificate's **commonName** field or certificate's **dnsName** field of the **subjectAltName**.

Important: If Directory Server is using self-signed certificate then only single certificate should be deployed and configured on different Directory Server machines (Primary and Secondary). The same self-signed certificate should be distributed to all the client machines, and needs to be copied in to **<AVAYA_IC72_HOME>\etc** folder with the name **root_cert_AvayaIC_Client.pem**.

Following openssl commands can be used to create a self-signed server certificate.

REM 1. Generate pass-phrase protected Private Key for Server:

```
openssl genrsa -des3 -out domain_key_AvayaIC_Server.pem 1024
```

REM 2. Create the Self-Signed Server Certificate:

```
openssl req -new -x509 -extensions v3_usr -key  
domain_key_AvayaIC_Server.pem -out domain_cert_AvayaIC_Server.pem  
-days 1095
```

REM 3. Make a copy of Self-Signed Server Certificate to be used as Client's trusted Certificate:

The same process is applicable for windows as well UNIX based clients/servers.

Pass-Phrase protected server private key

Every server side certificate contains the public key along with other information e.g. FQDN etc. and has a corresponding private key which is used for asymmetric encrypt-decryption of SSL communication. The private key could be a part of the certificate file itself or resided in a different file. The default key file Directory Server will read at startup is **domain_key_AvayaIC_Server.pem**. The key file name can be changed using [Directory Server configuration properties](#) using IC Manager. In case the key file is a part of the certificate itself, give the certificate file name in the properties.

The private key could be saved on the file system as is, or in an encrypted form protected by passphrase. If the key is encrypted, then a passphrase is required by Directory Server for decoding the private key. The passphrase can be [configured through IC Manager's Configuration tab](#) for respective Directory Server.

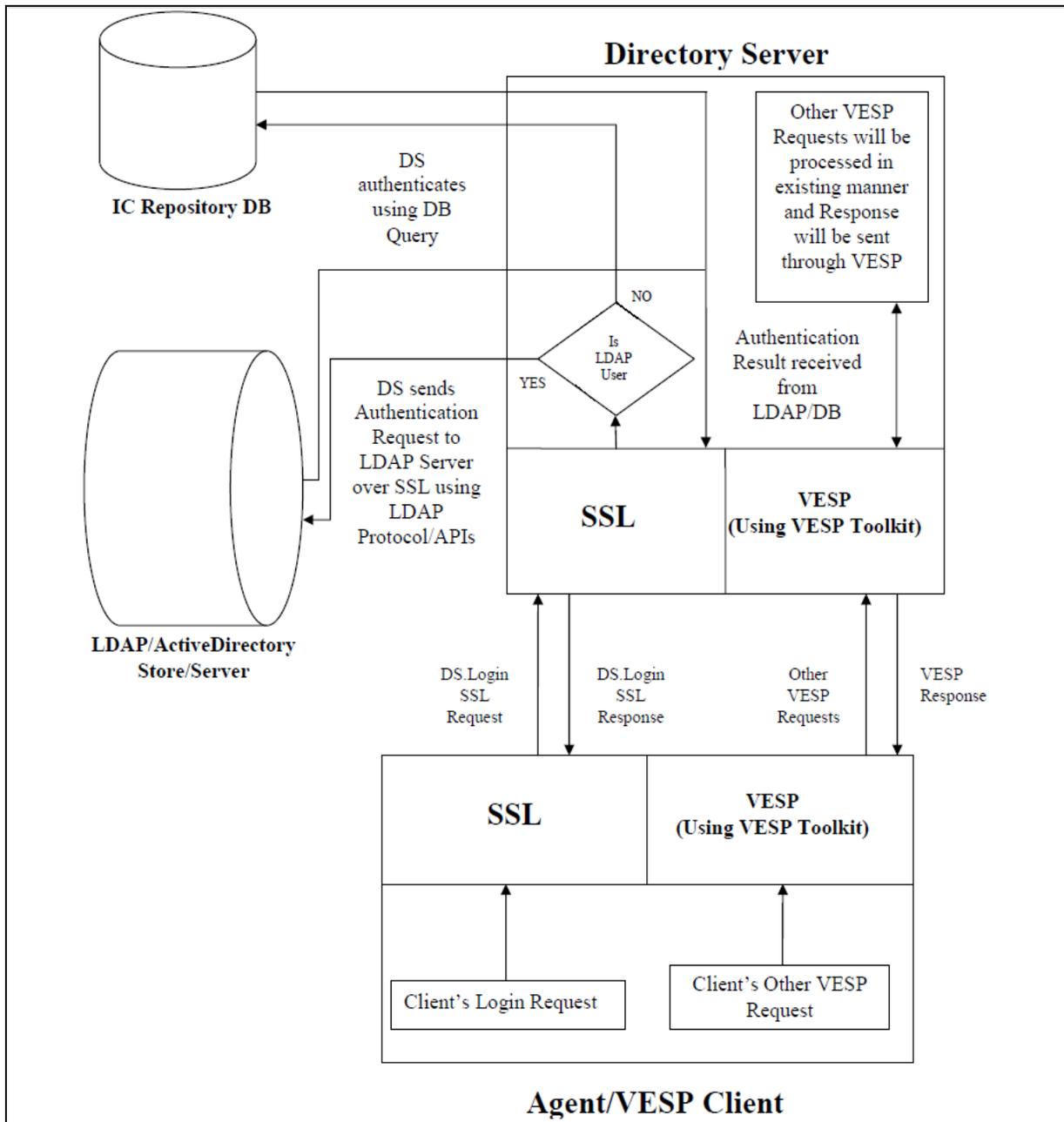
Note: The default certificates installed with this Service Pack will not provide a true SSL security due to the fact that the default server private key is shared to all the customers using this Service Pack. In order to keep the Active Directory/LDAP password secure, it is highly recommended that customers create either a new [self-signed certificate](#) or create/get a [CA signed certificate](#). CA signed certificate is more recommended as it prevents Man in the Middle attack through certificate's FQDN validation which is absent in self-signed certificate.

Directory Server login process

Once the SSL handshake and verification is successful, the login request is sent in a secure manner to the Directory Server by the IC client. There are 2 options which Directory Server could use to authenticate the agent. The first is the usual method of authentication of IC agents, wherein the data received in the login requested is compared with the employee table data in the repository database. With this Service Pack,

support is added for authenticating agents against an Active Directory/LDAP server. This requires creating agents by [importing](#) relevant data from an Active Directory/LDAP server.

Every login request that Directory Server receives could either be for an agent which needs to be authenticated against the IC system, or which needs to be authenticated against an Active Directory/LDAP server. In case of authentication against an Active Directory/LDAP server, the user-password and a unique identifier (usually the Distinguished Name) need to be sent to the Active Directory/LDAP server for authentication. The authentication result received from Active Directory/LDAP server is passed back to the respective IC clients.



Note: IC does not support SASL authentication with Active Directory/LDAP server at present.



IC 7.2.3 Service Pack Configuration

Deploying IC 7.2.3 on Windows 2008 Server R2

IC 7.2.3 has added support for Windows 2008 R2 Server operating system. However, IC 7.2 RTM installer was changed for the same. In case you have downloaded the IC 7.2 RTM installer prior to 7.2.3 Service Pack GA, then it needs to be downloaded again. (For downloading the updated IC 7.2 RTM installer, visit the Avaya Support Center Web site: <http://support.avaya.com>)

Therefore, any deployment on Windows 2008 R2 Server shall require IC 7.2 RTM installation followed by IC 7.2.3 SP installation followed by configuration as described in the steps below.

The installation of IC 7.2.3 requires the following steps to be performed:

1. Install IC 7.2 RTM on the machine where Win2008 R2 has been installed. No configurations should be performed at this point of time. Any configuration related screens which pop up during installation should be cancelled. Configuration tool should also not be run to configure the server as Primary/Secondary/Client.
2. Install IC 7.2 SP3 on the machine on which 7.2 RTM was installed in the previous step. Steps to install the service pack provided in this document should be followed.
3. Run the configuration tool to configure the server as a Primary/Secondary IC server or as a client for Design/Admin machine.

Perform configuration steps as appropriate for the role designated for the newly installed IC.

The following IC features can be deployed on a Windows 2008 Server R2 machine:

- Servers (Primary/Secondary)
- Design/Admin
- AAWC Connector
- Avaya Business Advocate
- Website (using IIS7)
- Siebel Integration
- XenApp Application server (citrix)

Configuration and prerequisites for Windows 2008 Server R2.

Windows 2008 Server introduces a new concept of Roles/Feature to make management of Servers easier and more efficient. This section lists the Roles and Features required to successfully install/configure IC on Windows 2008 Server R2.

Roles

- Web Server (IIS), for servers hosting website. Following Role Services are required for this role:
 - Common HTTP Features
 - Application Development
 - (ISAPI Filters)



- (ISAPI Extensions)
- Health and Diagnostics (Optional)
- Management Tools
- IIS Management Console
- IIS Management Scripts and Tools

Note: Only the essential roles/services required for successfully configuring the website are listed above. Additional Roles/services are required for maintaining and running a website using IIS.

Features

- Message queuing (for servers hosting Advocate)
- .Net Framework 3.51 Features
- Role Administration – Webserver (IIS) Tools
- Windows PowerShell Integrated Scripting Environment
- Windows Process Activation Service

Please note, only the essential Features/services required for successfully configuring and running IC are listed above. Additional Features/services may be required for a fully functional server running other software besides IC.

Servers

Prerequisites

There are no prerequisites in addition to those mentioned in the pre requisite guide to deploy IC servers which are to be deployed on a Windows 2008 Server R2 OS machine. Some of the prerequisites may need to be installed in a different manner as specified in the beginning of this section.

Configuration

As already mentioned, no configuration should be done for the machine hosting Avaya IC on a Windows 2008 Server machine before the IC Service Pack 7.2.3 is installed. Once the IC Service Pack 7.2.3 is installed, normal process of configuring the servers to be deployed on a Windows OS are to be followed – follow the relevant sections in the install guide for the same.

Design/Admin

Prerequisites

There are no prerequisites in addition to those mentioned in the pre requisite guide to deploy IC Design/Admin tools which are to be run on a Windows 2008 Server R2 OS machine. Some of the prerequisites may need to be installed in a different manner as specified in the beginning of this section.

Configuration

As already mentioned, no configuration should be done for the machine hosting Avaya IC on a Windows 2008 Server machine before the IC Service Pack 7.2.3 is installed. Once the IC Service Pack 7.2.3 is installed,



normal process of configuring the Design/Admin tools to be run on a Windows OS are to be followed – follow the relevant sections in the install guide for the same.

AAWC Connector

Prerequisites

There are no prerequisites in addition to those mentioned in the pre requisite guide to deploy AAWC Connector on a Windows 2008 Server R2 OS machine.

Configuration

As already mentioned, no configuration should be done for the machine hosting Avaya IC on a Windows 2008 Server machine before the IC Service Pack 7.2.3 is installed. Once the IC Service Pack 7.2.3 is installed, normal process of configuring the AAWC Connector to be run on a Windows OS are to be followed – follow the relevant sections in the install guide for the same.

Avaya Business Advocate

Prerequisites

There are no prerequisites in addition to those mentioned in the pre requisite guide to deploy Avaya Business Advocate on a Windows 2008 Server R2 OS machine. Some of the prerequisites may need to be installed in a different manner as specified in the beginning of this section.

Configuration

As already mentioned, no configuration should be done for the machine hosting Avaya IC on a Windows 2008 Server machine before the IC Service Pack 7.2.3 is installed. Once the IC Service Pack 7.2.3 is installed, normal process of configuring Avaya Business Advocate are to be followed – follow the relevant sections in the install guide for the same.

Website

Prerequisites

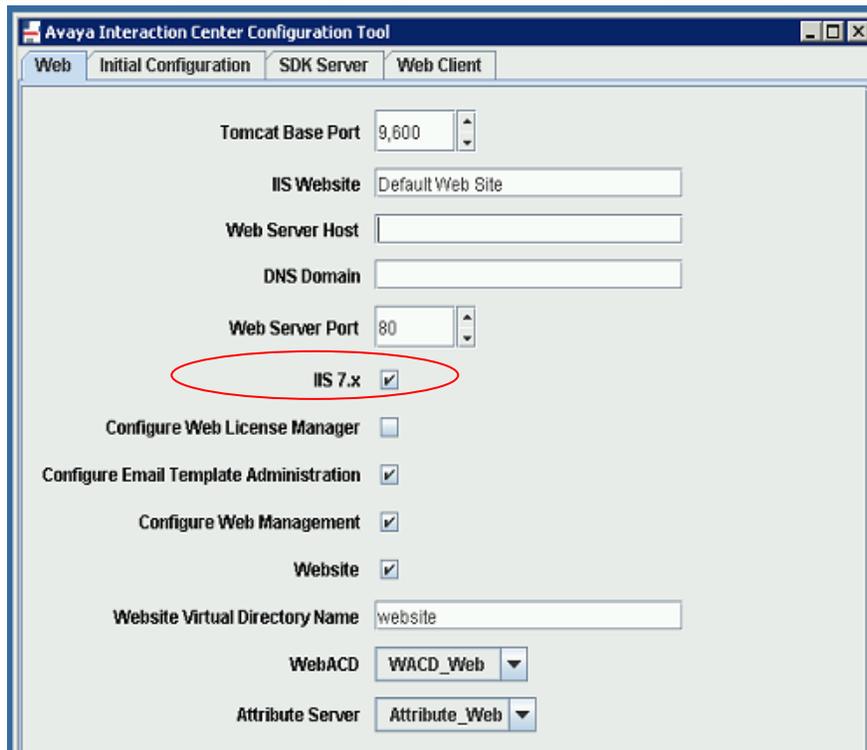
Prerequisites for successfully deploying a website on Windows 2008 Server R2 machine are listed earlier in this section. Please be sure to have the necessary Roles and features required for the same.

Configuration

Windows 2008 Server R2 supports only IIS7.x web server. There are architectural changes between the previous versions of IIS and IIS7.x. Due to this, new scripts have been packaged along with the service pack which will configure an IIS7.x web server for successfully hosting an Avaya IC website.

Before the website configuration is performed, please be sure to apply the service pack on a Design/Admin machine and follow the steps to be performed after applying the service pack on the Design/Admin machine. A new sc.xml file has been packaged along with this service pack. Be sure that the new sc.xml file has been imported into ICManger before configuring the website on a machine hosting Avaya IC on a Windows 2008 Server machine.

When the configtool is run after the necessary steps as mentioned above are performed, a new checkbox – IIS7.x will be visible in the “Web” tab of the configtool, as shown below:



This checkbox is to be enabled when configuring a website which is to be hosted on an IIS7.x web server. Enabling the checkbox ensures that the correct scripts are used to configure the web server. As previously mentioned, there are some architectural changes in IIS7.x, and the fact that it is a 64-bit application, some changes done by the configtool/ IIS configuration scripts are mentioned below:

All websites/applications are run using an application pool. During configuration, the default application pool for the website is used as the application pool for the application created during the web server configuration. The application pool associated with these applications has a property "Enable 32 bit applications to run", which is required to be enabled to allow the 32 bit ISAPI filters/extensions which are used by Avaya IC. The scripts change this property to true.



This property can be found in the Advanced Settings for an application pool.

Every Application Pool is associated with an Identity (user) under which it is run. The process has all the rights allotted to that Identity (user). As any filters/extensions on the website are run under this identity, this identity needs access to be able to write logs to the required directories. Hence, write permissions are granted to the identity associated with Application pool under which the website is running under for the following folders:

```
<AVAYA_IC_HOME>\tomcat\logs
```

```
<AVAYA_IC_HOME>\logs
```

Read permissions are also granted for the above mentioned user Identity for the folders under which the ISAPI filters are installed:

```
WebAdmin - <AVAYA_IC_HOME>\comp\icws
```

```
Tomcat Redirector - <AVAYA_IC_HOME>\tomcat\modules
```

```
ICM - <AVAYA_IC_HOME>\comp\icm\mdir
```

```
Email template management - <AVAYA_IC_HOME>\email\jsp
```

```
Public/Admin pages - <AVAYA_IC_HOME>\comp\website
```

Siebel Integration

Refer to Siebel Installation Guide available with Siebel 8.1.1.3 product for installation on Windows 2008 Operating System.

Avaya Agent Web Connector (AAWC)

Perform the following steps on machine where Avaya Agent Web Connector is installed.

1. Stop AAWC server <AVAYA_IC72_HOME>\bin\aaawcclient.bat stop.
2. Edit <AVAYA_IC72_HOME>\bin\aaawcclient.bat in text editor.
3. Find line starting with SET JAVA_OPTS

4. Add Parameter "-Xss128k" to Java Options

Example: SET JAVA_OPTS=-server -XX:+UseParallelGC -XX:+UseParallelOldGC -Xms1124m -Xmx1124m -Xss128k -Xbootclasspath/a:"%CATALINA_HOME%\common\lib\mail.jar"

5. Save and close.

6. Start AAWC Server - <AVAYA_IC72_HOME>\bin\awcclient.bat start

Deploying Avaya Rich Client on Citrix XenApp 6.0

This section provides detailed information on how to deploy Avaya Rich client on Citrix XenApp version 6.0 on Windows 2008 Server R2.

Install Avaya Rich client on Citrix server

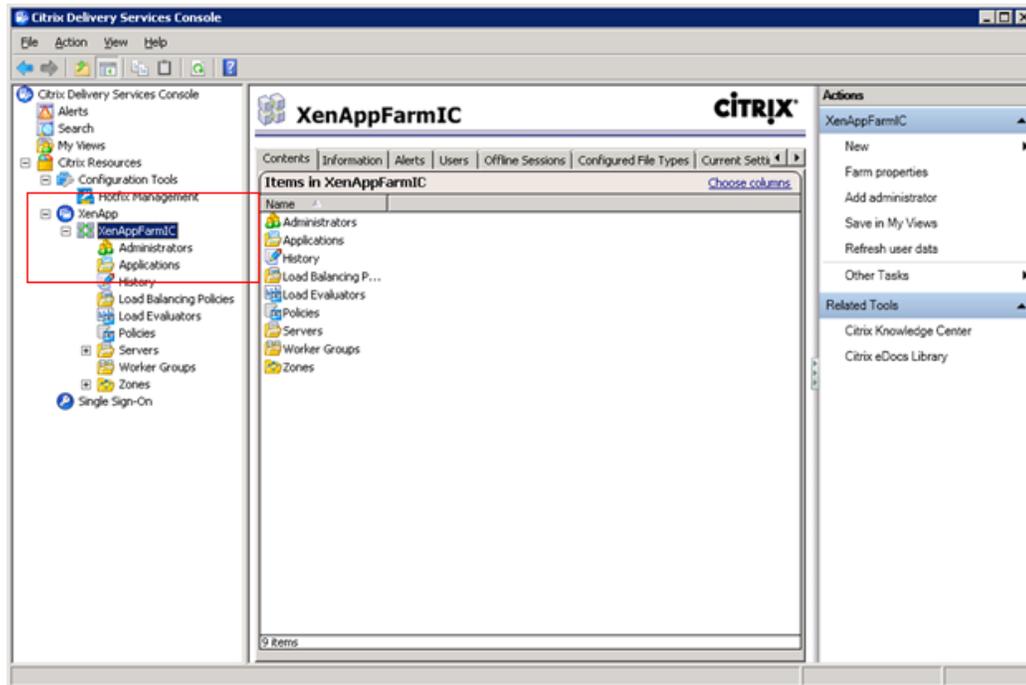
To install Avaya Rich client, refer IC72install.pdf

Deploying Avaya Rich client on Citrix server

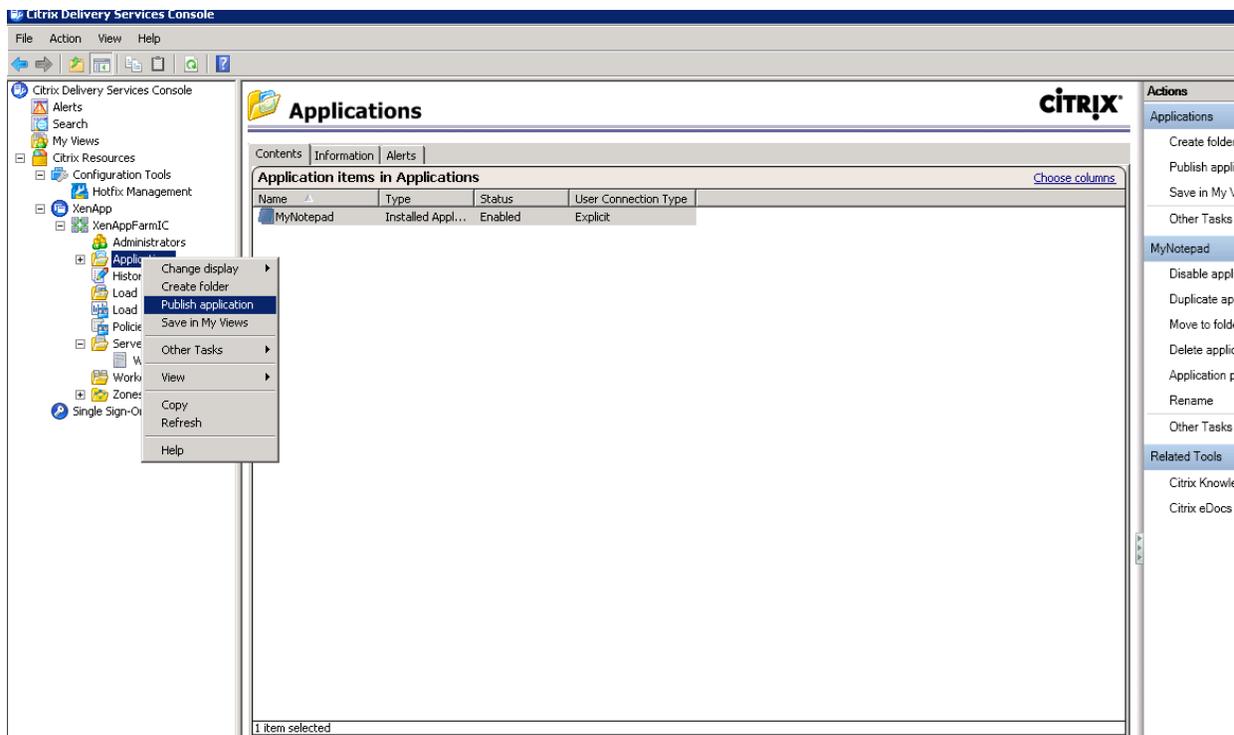
1. Launch Citrix Delivery Services Console.



2. Farm has been already created while configuring XenApp for servers. For eg. XenAppFarmIC



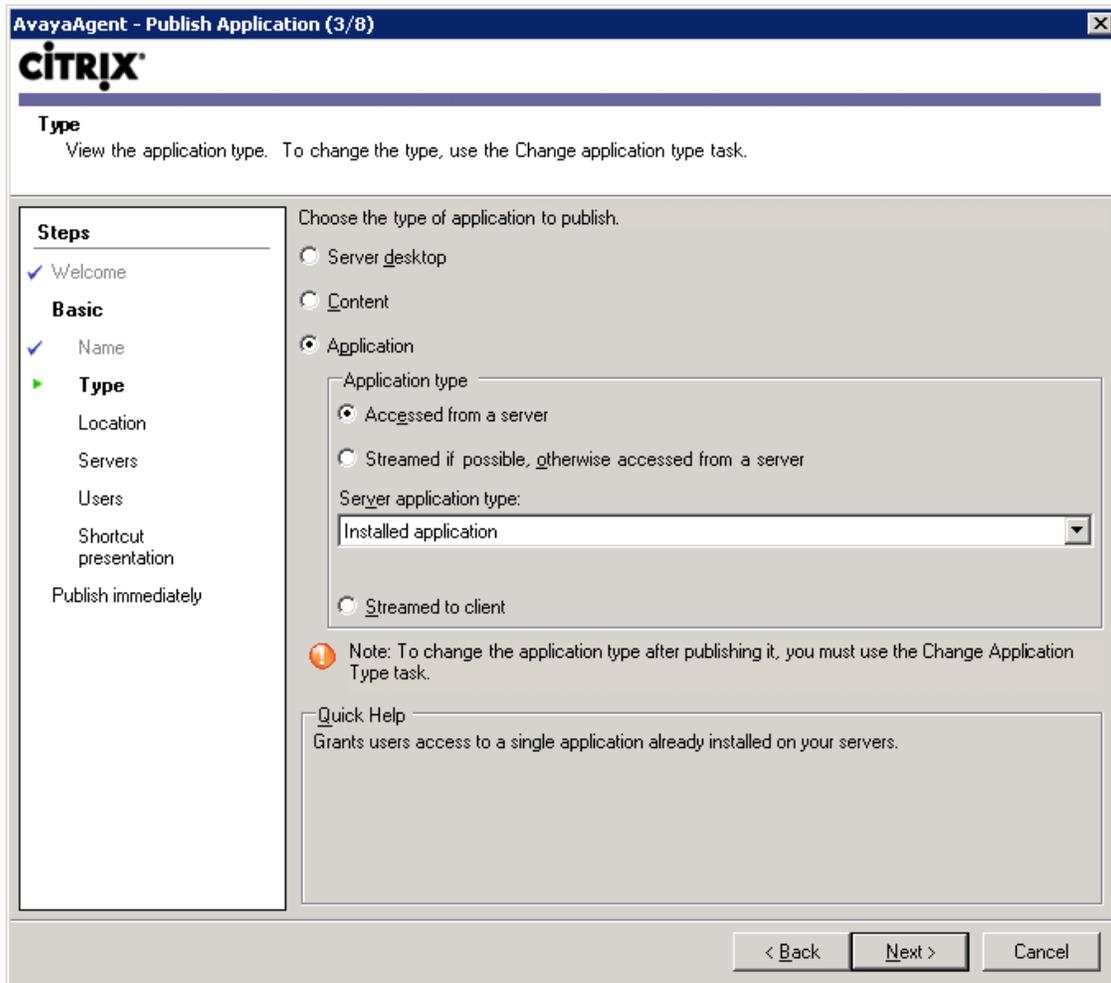
- Expand XenAppFarmIC. Select Application and Right click > **Applications** and select > **Publish application**.



- Click the **Next** button on the welcome screen.
- Enter the application display name and description and Click **Next**.

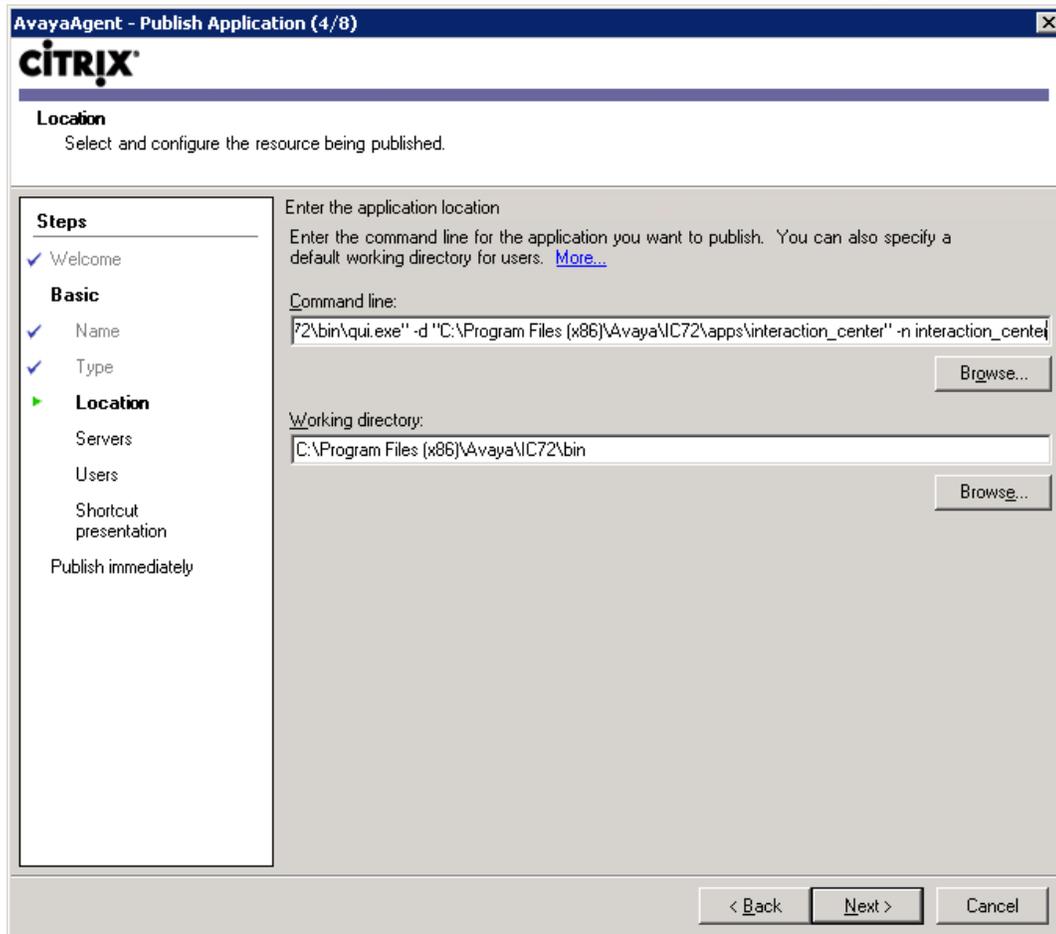
The screenshot shows a Citrix 'AvayaAgent - Publish Application' dialog box. The title bar includes the Citrix logo. The main area is titled 'Name' and contains the instruction: 'Enter the name and description that you want to be displayed to clients for this application.' On the left, a 'Steps' pane lists: 'Welcome' (checked), 'Basic', 'Name' (selected with a green arrow), 'Type', 'Location', 'Servers', 'Users', 'Shortcut presentation', and 'Publish immediately'. The main area has two text input fields: 'Display name:' with the value 'AvayaAgent' and 'Application description:' with the value 'AvayaAgent'. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

6. On the **Publish Application** screen, select the **Installed application** option and click **Next**.

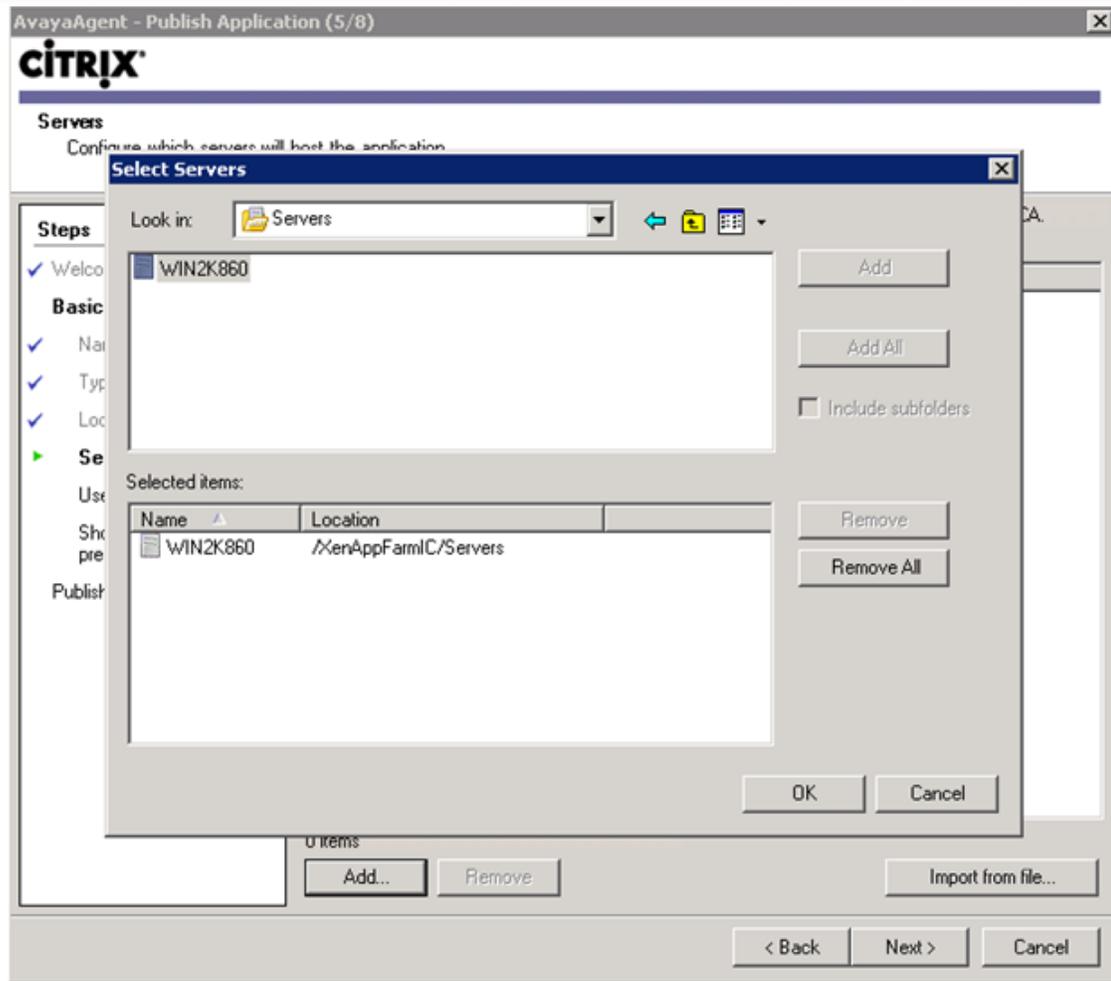


7. Browse and select "qui.exe" path in command line.

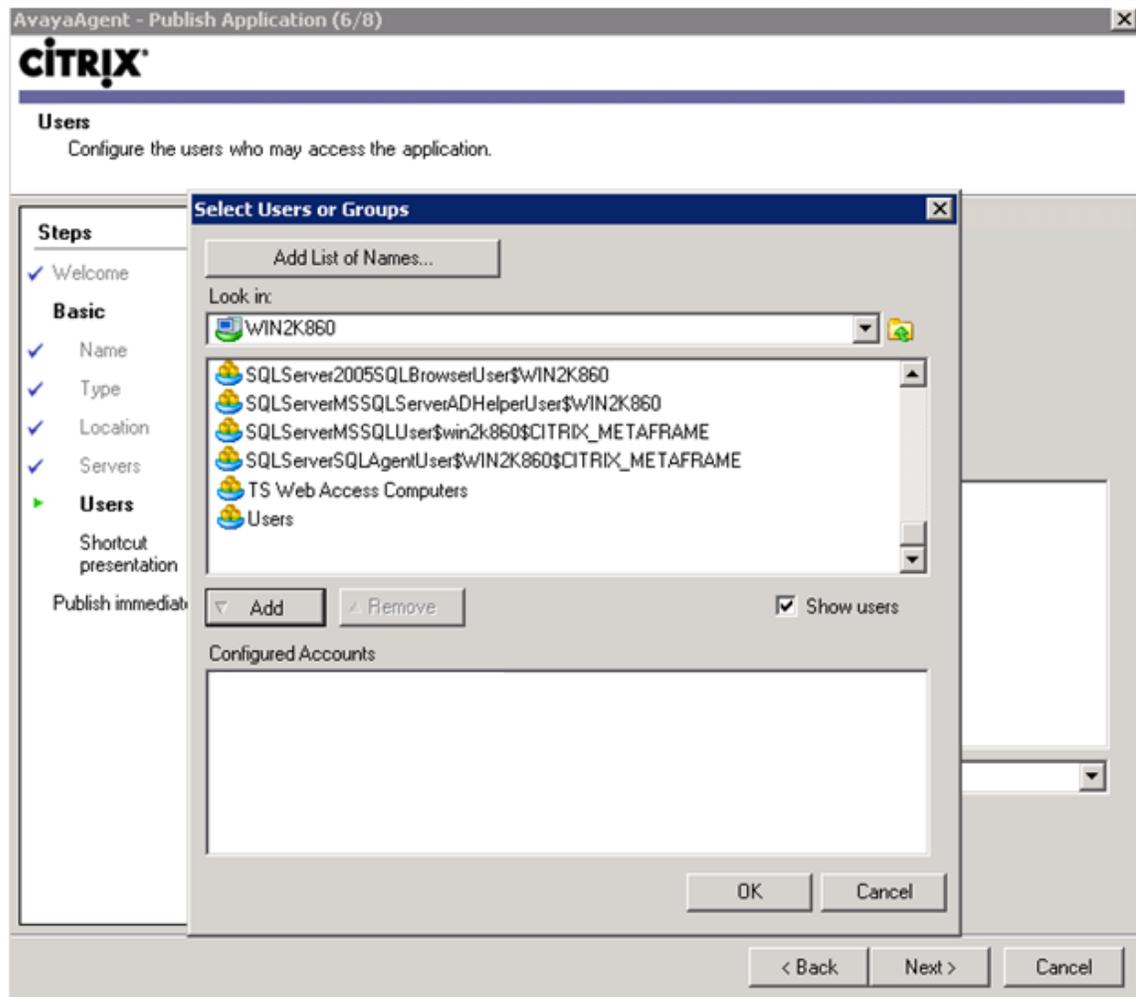
Note: Working directory path is automatically reflected.



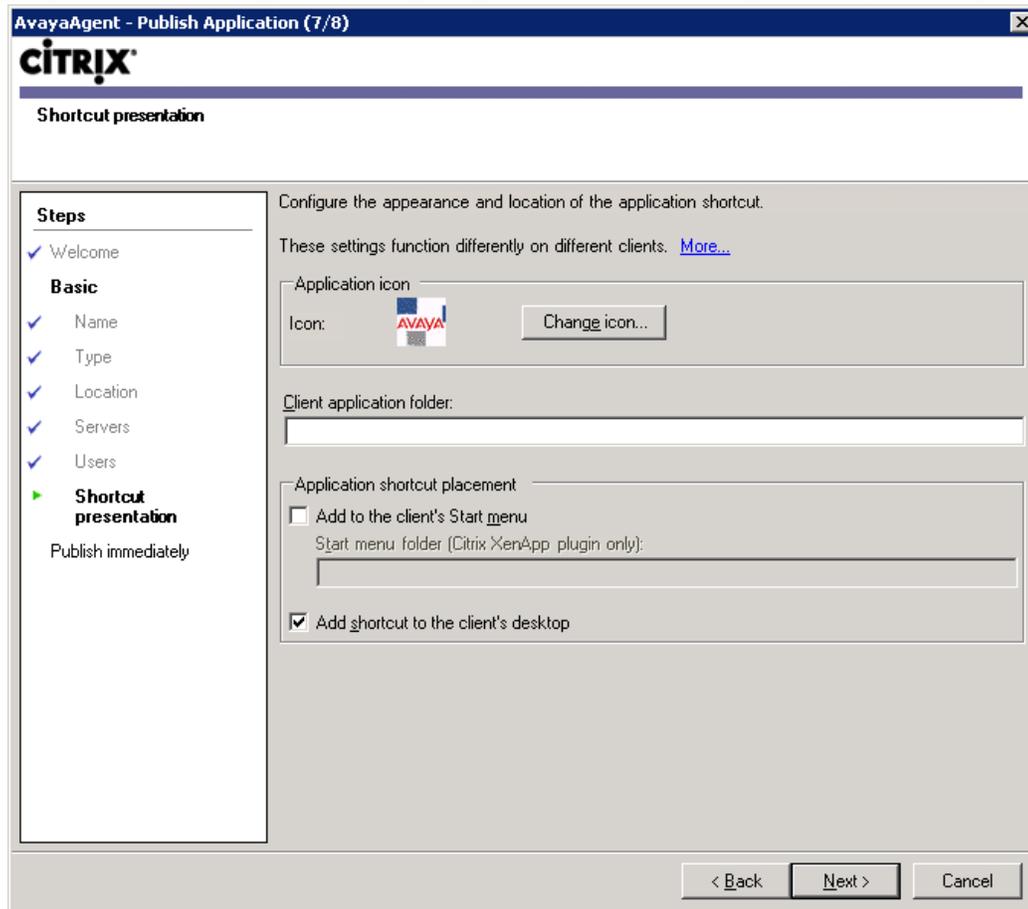
8. Modify command line path "C:\Program Files\Avaya\bin\qui.exe" to below text
"C:\Program Files\Avaya\bin\qui.exe" -d C:\Program Files\Avaya\apps\interaction_center -n interaction_center, if AVAYA_IC72_HOME resides on C drive. Else, select the appropriate drive and path.
Click Next.
9. Click the **Add** button at the bottom of the screen.
10. Select Citrix server name and click **OK** button.
11. Click **Next**.



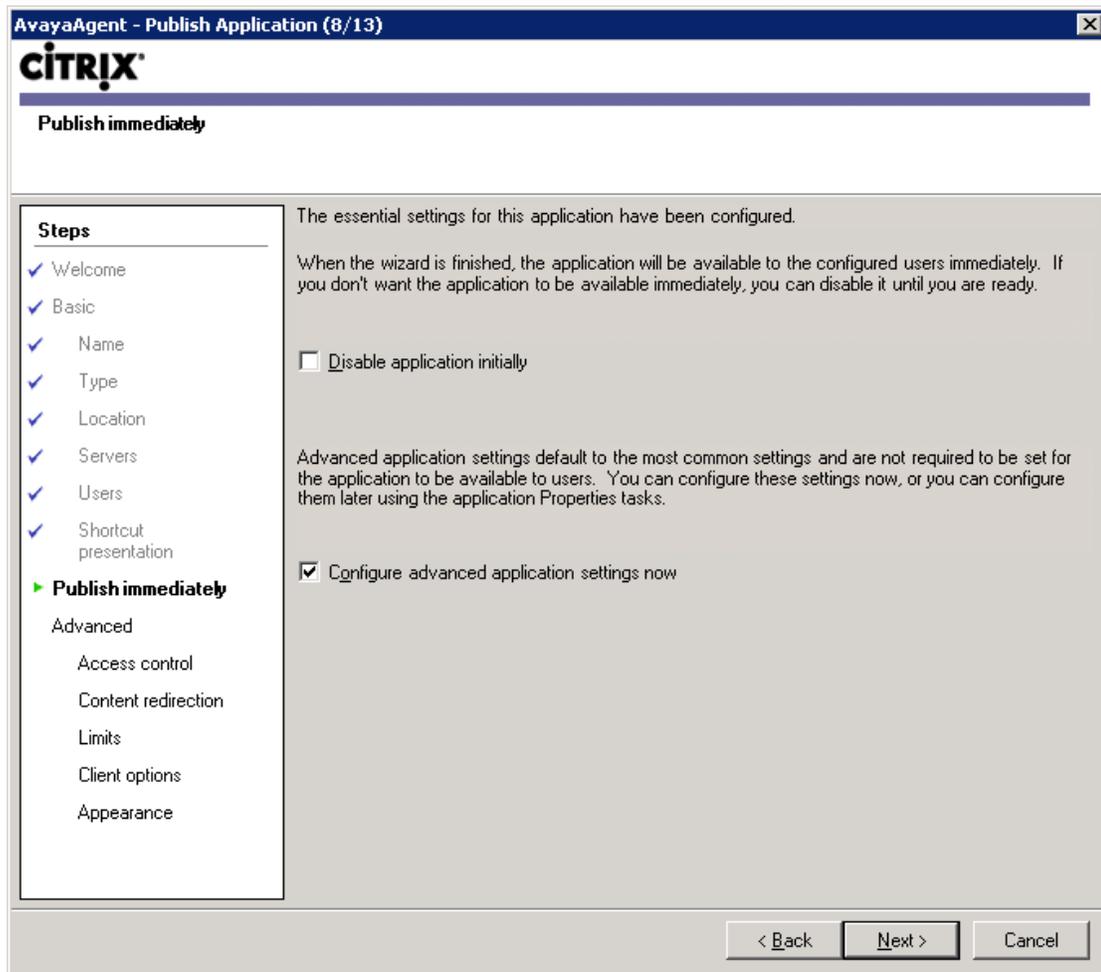
12. Select allow only configured users option (You can select Allow anonymous users option)
13. Click the **Add** button.



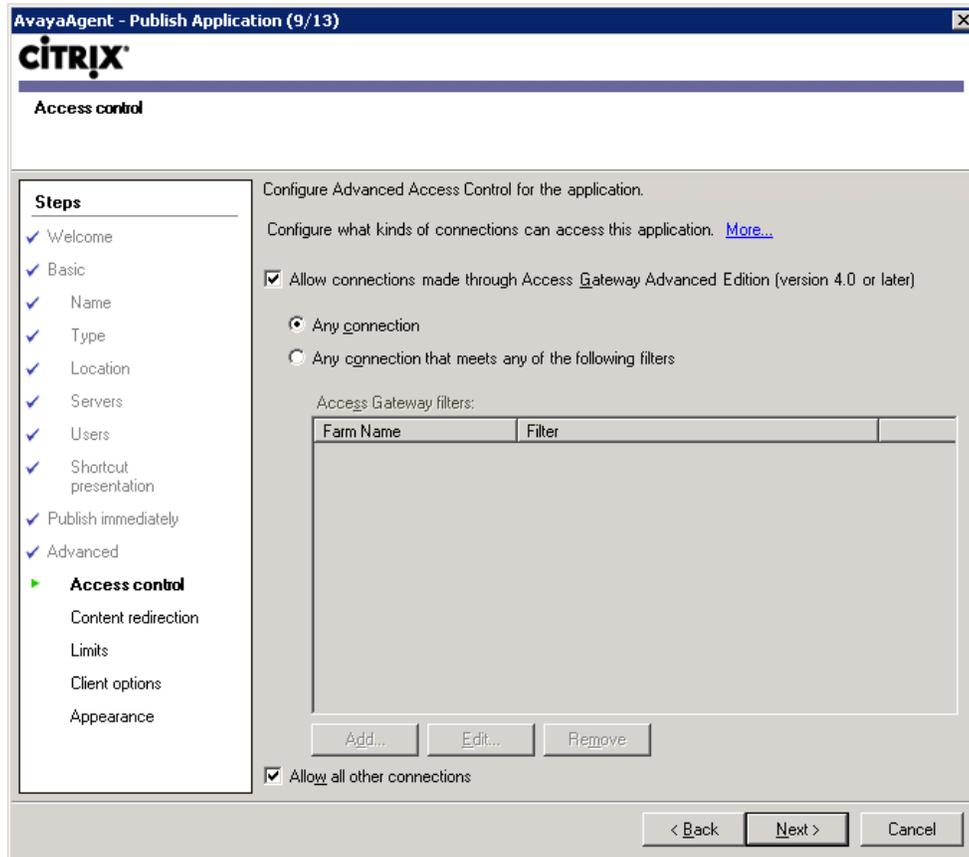
14. Add users, click **OK** button
15. On adding Users successfully, click **Next**.
16. Click **Next** on the screen below.



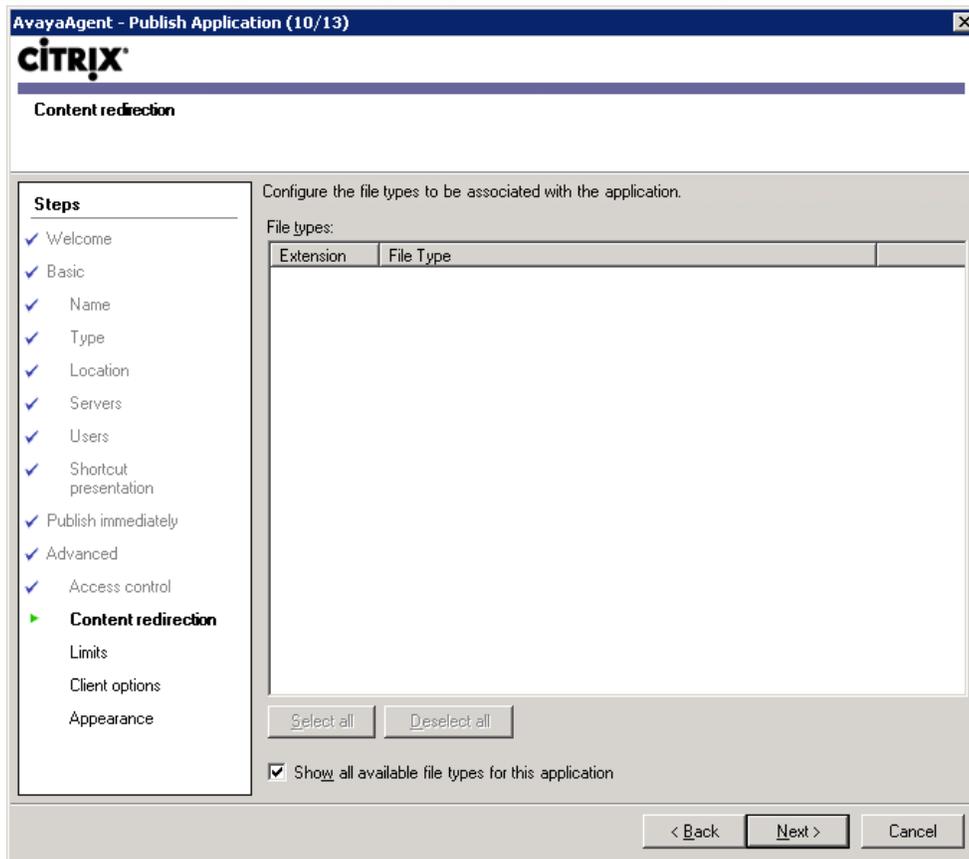
17. Select Configure advanced application settings now and click **Next**.



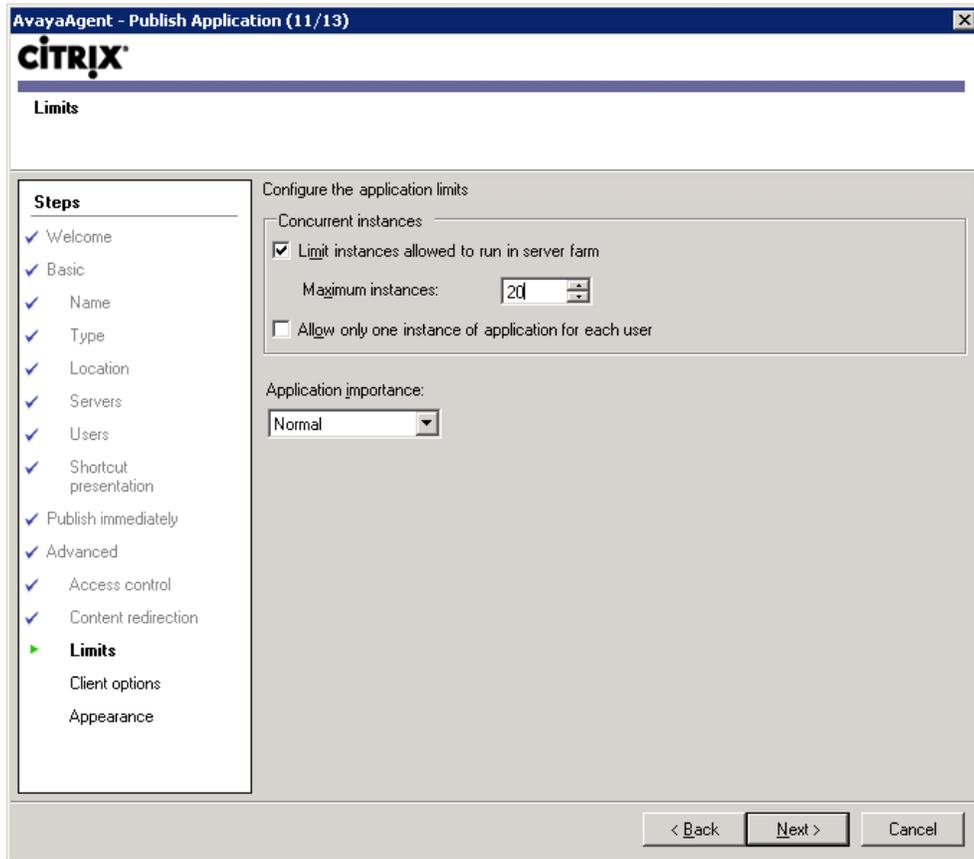
18. Access control should be any connection (You can set appropriate filter also), click **Next**.



19. Click **Next** for content redirection.



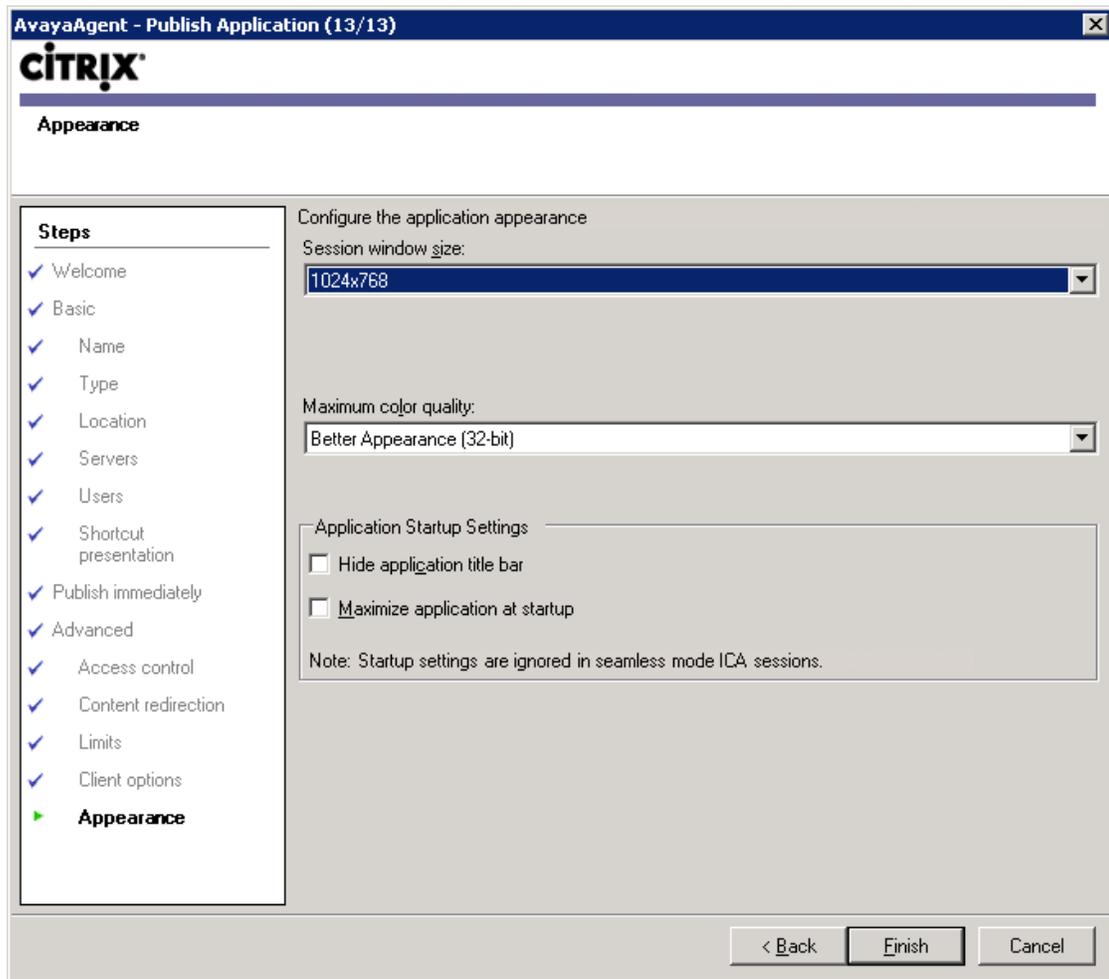
20. Select maximum number of instance that are allowed to run in server farm
21. If you want only one instance of application for each user then select “Allow only one instance of application for each user” option and Click on Next button



22. Click **Next** on the Client options screen.

The screenshot shows the 'Client options' configuration window in Citrix AvayaAgent. The window title is 'AvayaAgent - Publish Application (12/13)'. The Citrix logo is at the top left. The main heading is 'Client options'. Below it, there is a 'Steps' sidebar with a list of configuration steps: Welcome, Basic, Name, Type, Location, Servers, Users, Shortcut presentation, Publish immediately, Advanced, Access control, Content redirection, Limits, Client options (highlighted with a green arrow), and Appearance. The main area contains instructions: 'Configure the client options for the application. Specify the default settings for the application when users connect. [More...](#)'. There are three sections: 'Client audio' with 'Enable legacy audio' checked and 'Minimum requirement' unchecked; 'Connection encryption' with 'Enable SSL and TLS protocols' unchecked and an important note: 'Important: There is no minimum requirement for this option. The settings on the client device can override this option.' Below this is an 'Encryption:' dropdown menu set to 'Basic' and 'Minimum requirement' unchecked; and 'Printing' with 'Start this application without waiting for printers to be created' checked. At the bottom are '< Back', 'Next >', and 'Cancel' buttons.

23. Select appropriate Session window size and Colors and Click **Finish**.



24. Verify that Avaya Agent Rich Client application is added under Citrix applications. The published application settings can be changed from Citrix Delivery Services Console.

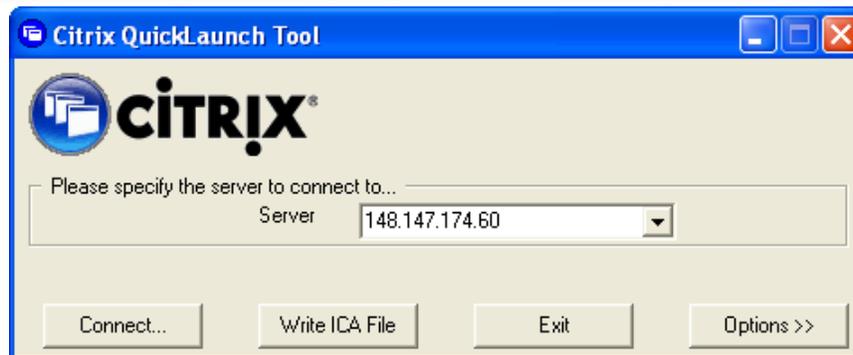
Modifying the Avaya Agent INI file

1. Update the Citrix server's qui.ini file with the following two lines
[QConsole]
ResizeDesktop=FALSE
2. Save the qui.ini file.

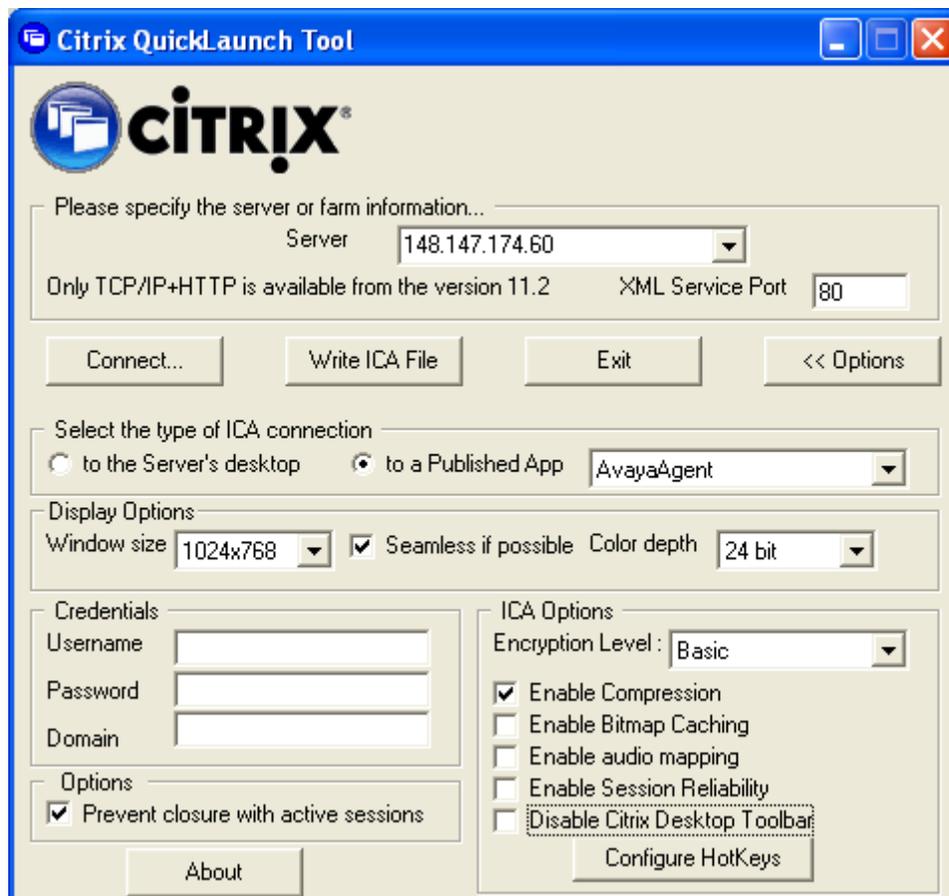
Note: Make sure that all the qui.ini files (files under agent account) are also updated with the above code.

Creating ICA (Citrix Client) connection with Citrix server

1. Install Citrix ICA Client, CitrixOnlinePlugin for Web and Citrix QuickLaunchTool(Download from Citrix) on Windows XP / 2003 machine
2. Open Citrix Citrix QuickLaunch Tool from Citrix client machine.



3. Click **Options**.



4. Add XenApp Server address and XML port (Specified while configuring PNAgent)
5. Select published application name from Dropdown.
6. Select Display options.
7. Select encryption level for ICA Options.
8. Enter login credential of Citrix XenApp Server.

Note: User should have access permission of published application from Citrix presentation server.

9. Click on "Write ICA File" and give a location to save ICA file.

Double click on saved ICA file or use Connect button of Citrix QuickLaunch Tool to start Avaya agent.

Support for Authentication-Only against full DS Login

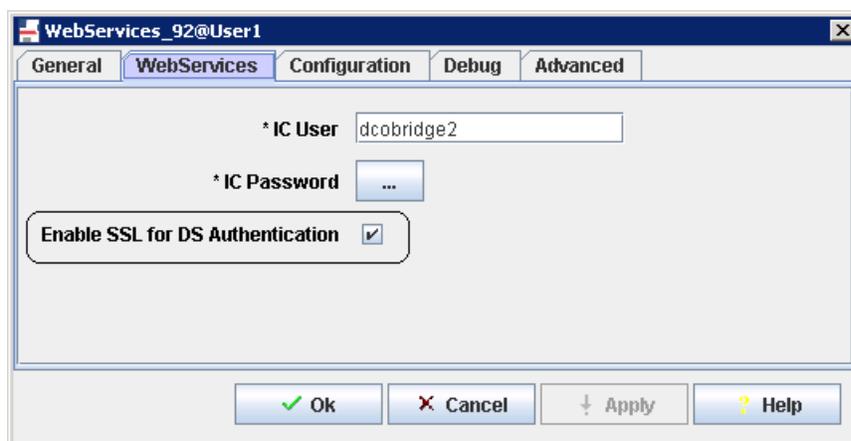
Design & Admin Configuration:

1. Exit all IC Design & Admin applications.
2. Install IC 7.2.3 Design & Admin Service Pack on the respective machines.
3. Start IC Manager and import the sc.xml file (if not already imported) into IC Manager
4. Open WebServices Server through IC Manager and go to WebServices tab.
5. A new Configuration 'Enable SSL for DS Authentication' should be visible and checked by default.

IC Webservice Configuration for applicable platform(s):

1. Stop the IC Webservice, if running on the applicable platform(s).
2. Remove the already deployed IC WebServices.
3. Run IC 7.2.3 Service Pack installer on the applicable platform(s).
4. Re-deploy IC WebServices. Make sure that the latest jars from service pack are present in <AVAYA_IC72_HOME>/sdk/webservices/webservices/WEB-INF/lib folder after re-deployment.
5. Start IC Webservice on the applicable platform(s).

'Enable SSL for DS Authentication' Configuration for WebServices:



1. If 'Enable SSL for DS Authentication' configuration parameter is checked, DS.Authenticate request will be sent over SSL by WebServices to DS in SSL encrypted format. It will support authentication for both LDAP and non-LDAP users.
2. If 'Enable SSL for DS Authentication' configuration parameter is unchecked, DS.Authenticate request will be sent over VESP by WebServices to DS. The password will be in MD5 encrypted format and rest of the request parameter will be in plain text format in this case. It will support authentication for ONLY non-LDAP users and authentication for LDAP users will fail.



Important Note:

- Response time for DS.Authenticate over SSL will be slower compared to the response time of DS.Authenticate over VESP because of SSL overhead of handshake, encryption/decryption etc.
- If 'Enable SSL for DS Authentication' configuration parameter is unchecked, DS.Authenticate request for LDAP enabled users will fail. To authenticate LDAP enabled users, DS.Authenticate MUST be sent over SSL by checking 'Enable SSL for DS Authentication' configuration parameter.

RFC 5321 Compliance (Address Comparisons):

1. A new property "EnableRFC5321LocalPart" (without double quotes) is introduced in this FIX. This property can be manually added in the ICMManager->Poller_Server->Configuration Tab. A value '1' ALONE will enable usage of this property for the purpose specified below. (Any other value will disable this property)

To configure the enablement of this feature perform the following steps:

- a. Click the Server tab.
 - b. Double-click the Poller server.
 - c. Click the Configuration tab.
 - d. Add a new "Couple" with name: "EnableRFC5321LocalPart"
 - e. Value:
 - ◆ 1 - Turn ON this fix
 - ◆ 0 - Turn OFF this fix[Any other value is treated as OFF]
 - f. Click **OK**.
2. This property will decide if the address comparisons will compare email local-parts as per RFC5321. (As per RFC5321 "The local-part of a mailbox MUST BE treated as case sensitive.")
 3. Enabling (setting value to '1') will enable case-sensitive comparisons of local-parts of Mailboxes with email polling/logon accounts. (By default, this property is turned off)
 4. This property should be used and configured in ICMManager ONLY if the external Email Server (for ex. Exchange) at your installation can differentiate the local-part cases. i.e. external Email Server treats Support@xyz.com and support@xyz.com as two different mailboxes.

Usage of Reply-To Address when From Address is invalid or missing

1. A new property "UseReplyToIfNoFrom" (without double quotes) is introduced. This property can be manually added in the ICMManager->Poller_Server->Configuration Tab. A value '1' ALONE will enable usage of this property for the purpose specified below. (Any other value will disable this property)
2. To configure the enablement of this feature perform the following steps:
 - a. Click the Server tab.
 - b. Double-click the Poller server.
 - c. Click the Configuration tab.



d. Add a new "Couple" with name: "UseReplyToIfNoFrom"

e. Value:

- ◆ 1 - Turn ON this fix
- ◆ 0 - Turn OFF this fix

[Any other value is treated as OFF]

f. Click **OK**.

3. Enabling (setting value to '1') will enable usage of "Reply-to" address in case "From" address is invalid or missing. (By default, this property is turned off)

NOTE: An email having ALL invalid or missing "From" address, "Reply-To" address and "Sender" address, will be skipped by Poller on every poll cycle as per the existing design, so that there is no data loss and the email can be handled by the IC Administrator.

Usage of Return Address while populating "From" header of outbound email

1. A new configurable parameter "UseReplyToForReturnAddress" is added to the icemail server configuration. This flag decides how the return address is sent. This property can be set in ICManager->ICEmail Server->Configuration tab Key value pair. (UseReplyToForReturnAddress, value).
2. Value can be "1"(meaning Property Enabled) / "0"(meaning Property Disabled).
 - a. "From:" header in this case is consistent with as in IC7.1 which is return address configured for the email account. By default this property is disabled (not configured or configured to value <>1) and end-customer will see the Return address in the "From:" header of the mail received from agent. So, replies to this email will arrive at Return address.

This property need not be configured, unless behavior in b) is desired.
 - b. "From:" header in this case contains the Polling-address and "Reply-To" header consists the Return-address. When this property is enabled (set to 1), the Return-address will be populated in the "Reply-To:" header of the mail received from agent, while "From:" header continues to contain polling address. So, replies to the email sent from end-customer to agent will use "Reply-To:" header and the email will arrive at Return address.

The respective configured DisplayNames will appear alongside the mail-address in the email.

Configuring stations with leading zeros to be used as VP stations in HTTPVox

Perform the following steps on the Windows Design and Admin machine:

1. Start IC Manager and import the sc.xml file (if not already imported) into IC Manager.

Note: The configured extensions with leading zeros will be preserved only if all line numbers in the range have the same number of digits.

Example:

- Range 08132-09132 has same number of digits so the leading zeros will be preserved
- Range 008123-09132 does not have same number of digits so the leading zeros will not be preserved



AAWC/UOM configuration (to fix Agent AutoIn and INIT_AUX issues as a result of TS.Ready being issued on Workitem Completion)

Perform the following steps on the windows machine where AAWC is installed:

1. Create the new webclient.war file using wargenerator.bat on WebClient machine.
2. Redeploy the newly created webclient.war file on WebClient Connector machine. For more information, refer IC 7.2 Installation and Configuration.pdf.

Note: To generate webclient.war file and deploy on Windows/AIX/Solaris Webconnector machines, please refer to "IC7.2 Installation and Configuration guide" in Avaya Support Site <http://support.avaya.com>

Handling OTHER_PARTY_CONFERENCE event from IC Scripts (customizations)

With this Service Pack, VTel will send a new event "OTHER_PARTY_CONFERENCE" when a party is conferenced to the call monitored by the agent. In order to handle this event in the scripts, following steps need to be taken:

1. Login to datatbase.
2. Open the apporpriate ccq.adl file
3. On the menu navigate to Edit > IC Scripts. This will open the 'IC Script Editor'
4. In 'Scripts' section, navigate to a script named "Softphone_Login". Click on the script name to edit the script in the panel below.
5. Add the following line where Telephony Event ID Constants are defined
Const evCallOtherPartyConference= 308
6. Inside the function SetupEvents(), add the following line to register to listen for this event
bSuccess = iPhoneEngine.AddEventToListenFor(evCallOtherPartyConference)
7. Now one can modify the script 'PhoneEngine_OnTelephonyStateChanged' to handle the event "evCallOtherPartyConference".

Configuring IBM HTTP server 7.x on AIX-6.1

1. Run configtool (Web tab), and fill in the value of "Web Server Home" with the folder in which IHS7.x is installed.
2. Edit <AVAYA_IC72_HOME>/etc/ictomcat.cfg and search for the LoadModule directives. Replace the names of the modules (last parameter) in these directives as follows:
 - a. Replace libapachedatasensor.so with libapachedatasensor_ihs7.so.
 - b. Replace libapachedatasensor.so with libapachedatasensor_ihs7.so.
 - c. Replace mod_jk.so with mod_jk_ihs7.so.
3. Edit <AVAYA_IC72_HOME>/lib/httpserver.sh and ensure that the variable WEBSERVER_HOME has been assigned the correct IHS7.x installation path.



IC 7.2.4 Service Pack Configuration

IC 7.2.3.1 Configuration

Note: If customer is on 7.2.3 update1 and already applied this configuration, this IC 7.2.3.1 Configuration should be skipped.

Disabling auto generation of a new TrackingID for incoming emails:

The behavior of the Poller server in IC 7.2.3 for an email with a TrackingID in the subject that doesn't match any existing record in the IC database due to purging of database is that the email will remain on the email server and the Poller server will alarm every polling interval about this email until the email is cleared from the email mailbox. This issue has been address by this update, by generating new TrackingID for such emails and treating them as new email contacts. The default behavior of this fix is to generate a new TrackingID for emails having purged parent entry from the IC database. For more information please refer to wi00840365

In case it is desired not to treat such emails as new contacts (email will remain on external email server and alarms will be generated), this fix can be disabled by performing the below steps (set value to 1):

1. Login to ICManager using admin account.
2. Click the **Server** tab.
3. Double-click the Poller server.
4. Click the **Configuration** tab.
5. Add a new "Couple" with name: "NoNewTrackingIDForPurgedParent"
(Without double quotes)
6. Value:
 - 1 - Disable this fix (email will not be polled by poller server)
 - 0 - Enable this fix (email will be polled by poller server)(NOT ADDING THIS VALUE OR ADDING ANY VALUE APART FROM 1 WILL ENABLE THIS FIX. i.e. The default behavior is that a new tracking id is generated for emails for which the parent contact entry has been deleted from the database.)
7. Click **OK**.
8. Restart the Poller server.

Allowing non-RFC-compliant emails to be processed by AIC

From IC72 onwards poller server checks email headers (From/Sender/ReplyTo) for RFC compliance. By default if none of these headers are compliant to RFC then such email will remain on the email server and the Poller server will alarm every polling interval about this email until it is cleared from the mailbox. To disable or enable RFC compliance a new configuration value for the poller server has been provided. For more information please refer to wi00845454.

1. Allowing Poller Server to download NON-RFC compliant emails to into the system:
(NON-RFC compliance is based on invalid from/sender/reply-to addresses)

- a. Login to ICMManager using admin account.
 - b. Click the **Server** tab.
 - c. Double-click the Poller server.
 - d. Click the **Configuration** tab.
 - e. Add a new "Couple" with name: "DisableEmailAddressRFCCheck"
(without double quotes)
 - f. Value:
 - ◆ 1 - Turn OFF RFC compliant checking.
 - ◆ 0 - Turn ON RFC compliant checking.

(NOT ADDING THIS VALUE OR ADDING ANY VALUE APART FROM 1 WILL ENABLE THIS FEATURE. i.e. the default behavior is that RFC compliant checking will take effect.)

Note: Such emails with invalid from/sender/reply-to addresses will be bounced by the poller server's SPAM plugin (through email server) to the bounce address of the respective Mail Account from which the email was polled. (Unless the flag "DisableRFCCheckInSpamPlugin", mentioned in following point (2) is used)
 - g. Click **OK**.
 - h. Restart the poller server.
2. To configure Poller Server to allow NON-RFC compliant emails to be delivered to agent:
(NON-RFC compliance is based on invalid from/sender/reply-to addresses)
- a. Click the **Server** tab.
 - b. Double-click the Poller server.
 - c. Click the **Configuration** tab.
 - d. Add a new "Couple" with name: "DisableRFCCheckInSpamPlugin"
(Without double quotes)
 - e. Value:
 - ◆ 1 - Turn OFF SPAM RFC checking.
 - ◆ 0 - Turn ON SPAM RFC checking.

(NOT ADDING THIS VALUE OR ADDING ANY VALUE APART FROM 1 WILL ENABLE THIS FEATURE. i.e. The default behavior is that RFC compliant checking will take effect.)
 - f. Click **OK**.
 - g. Restart the Poller Server.
- Note:** If steps in "2" are performed while the steps in "3" are not performed, then the respective bounce address for mail account will be used as a substitute email address.

3. Configuring a substitute email address which will be shown to the agent:

Substitute email address will be used in place of FROM address of the incoming email in case the email MIME does not contain FROM address or contains an invalid one.

- a. Click the **Server** tab.



- b. Double-click the Poller server.
- c. Click the **Configuration** tab.
- d. Add a new "Couple" with name: "SubstitueFromAddress"
(Without double quotes)
- e. Value: Any valid email address.
Note: If email address is not provided or an invalid email address is provided in "d", the respective polling account's bounce email address will be used as a substitute address.
- f. Click **OK**.
- g. Restart the Poller Server.

ADL changes to enable loop-detection type "BOTH"

In IC manager, for an email account, loop detect type can be set to either "sender", "from", "replyto" or "both" (Miscellaneous tab). Before applying this fix ICManger was allowing to select value as "both" but that value was not getting reflected into database. After reopening the email account window, it shows the value for loop detects which was set prior to being changed to "both". To overcome this problem below configuration steps are needed.

Note: Perform the steps mentioned in the section below, only if the functionality fixed in the items wi00830582 and wi00895056 are desired.

The ccq.adl and repository.adl files (files are not part of the IC 7.2.3 update1. Use the current adl from the design and admin machine) need to be modified to ensure that the loop-detection type BOTH works correctly.

The following steps have to be performed after the IC 7.2.3.1 is applied.

1. On the Design and Admin system, run the Database Designer application.
2. Select **Open** from the **File** menu.
3. Select the "...\\<AVAYA_IC72_HOME>\\design\\CallCenterQ\\ccq.adl" file.
4. Navigate to "Components->Tables->qem_mailaccount" table.
5. Click on the table fieldname "loopdetectiontype".
6. Select the "FROM_REPLYTO" from Enumerated_value (value tab) list box and click the **Edit** button.
7. Replace "FROM_REPLY" with "BOTH".
8. Click **File > Save**.
9. Click on File > Generate Windows Application menu. This will popup "Generate Windows Application" dialog box. Uncheck all the check boxes(Messages, IC Scripts, Help File, Avaya Agent Layout and EDU Layout) from the save tab. Click on Ok button. After reconfiguration is completed, click "close" on the "File" Menu to close the adl file.
10. Repeat the steps 1 through 9 for "...\\<AVAYA_IC72_HOME>\\design\\repository\\repository.adl" file.
11. Execute the query "UPDATE qw_fieldinfo SET enum_label = 'BOTH' WHERE table_name = 'qem_mailaccount' AND column_name = 'loopdetectiontype' AND enum_value = '3'" on both **ccq** and **repository** databases if MSSQL is used as database.

If oracle database is used, execute above query by logging in ccq and repository user. If db2 database is used, execute above query on ccq and repository schemas.



Note: After performing above configuration, please restart the DataServer, Directory Server and Poller Servers. Perform a Manager->Refresh on ICManger. This ensures ICManger loads the configured email accounts correctly to reflect the modified value "BOTH".

IC 7.2.3.2 Configuration

Note: If customer is on 7.2.3 update2 and already applied this configuration, this IC 7.2.3.2 Configuration should be skipped.

CDL file changes to prevent Rich Client (AARC) from crashing while exiting the application

The loading and unloading of various components in Rich Client depends on sequence mentioned in the .cdl file. The sequence mentioned in the current .cdl file unloads EDUViewer before unloading components dependent on it causing Rich Client to crash. Perform the following steps on the machine where Design and Admin tool is installed to correct the sequence in the CDL file:

1. Open the appropriate .cdl file from "<AVAYA_IC72_HOME>\design\QConsole" directory. (Open the language specific file)

Example: For 'english' language open avaya_agent_en.cdl file

2. In the 'Contact Pane' section move the EDUViewer control which is currently placed after ACViewer control, above the CHBrowser control. The difference lies in the order within the CDL file. The actual physical layout and layout within the panes will and should remain unchanged.

Example:

Snippet from current file:

- <QControl Name="ACViewer" ProgID="AvayaACViewer.ACViewerCtrl72" Left="454" Top="32" Width="20" Height="20" Visible="TRUE"/>
- <QControl Name="EDUViewer" ProgID="AvayaEduViewer.EduViewerCtrl.72" Left="490" Top="0" Width="300" Height="141" Visible="TRUE"/>

After moving EDUViewer above CHBrowser:

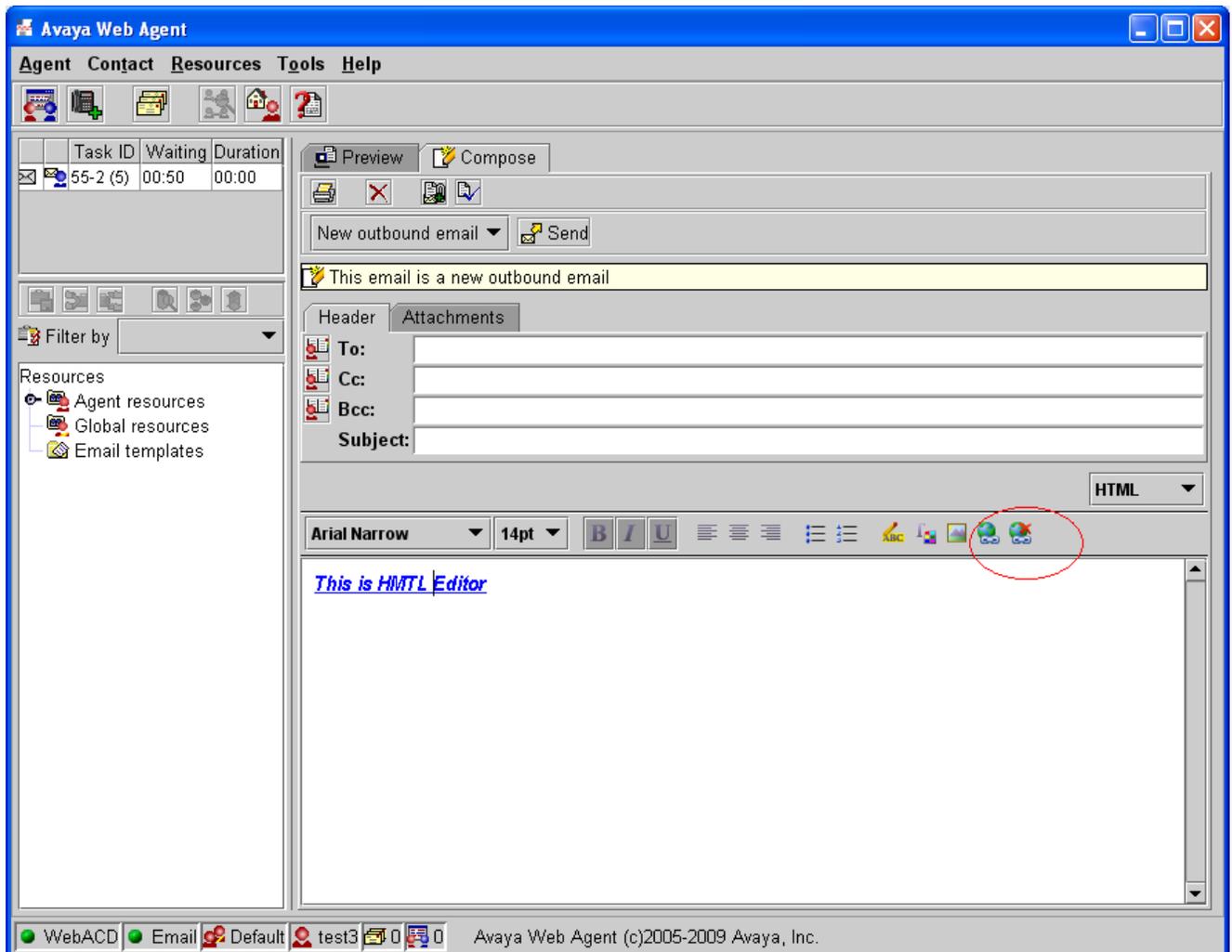
- <QControl Name="EDUViewer" ProgID="AvayaEduViewer.EduViewerCtrl.72" Left="490" Top="0" Width="300" Height="141" Visible="TRUE"/>
- <QControl Name="CHBrowser" ProgID="AvayaCHBrowser.CHBrowserCtrl.72" Left="5" Top="25" Width="441" Height="111" Visible="TRUE"/>

3. Save the .cdl file.
4. Start the Avaya Database Designer.
5. Load the ccq.adl file in the "<AVAYA_IC72_HOME>\design \CallCenterQ" directory.
6. Generate windows application by selecting appropriate .cdl file. (Check only Avaya Agent Layout option.)

Configuration file changes for WebAgent(AARC) Hyperlink feature

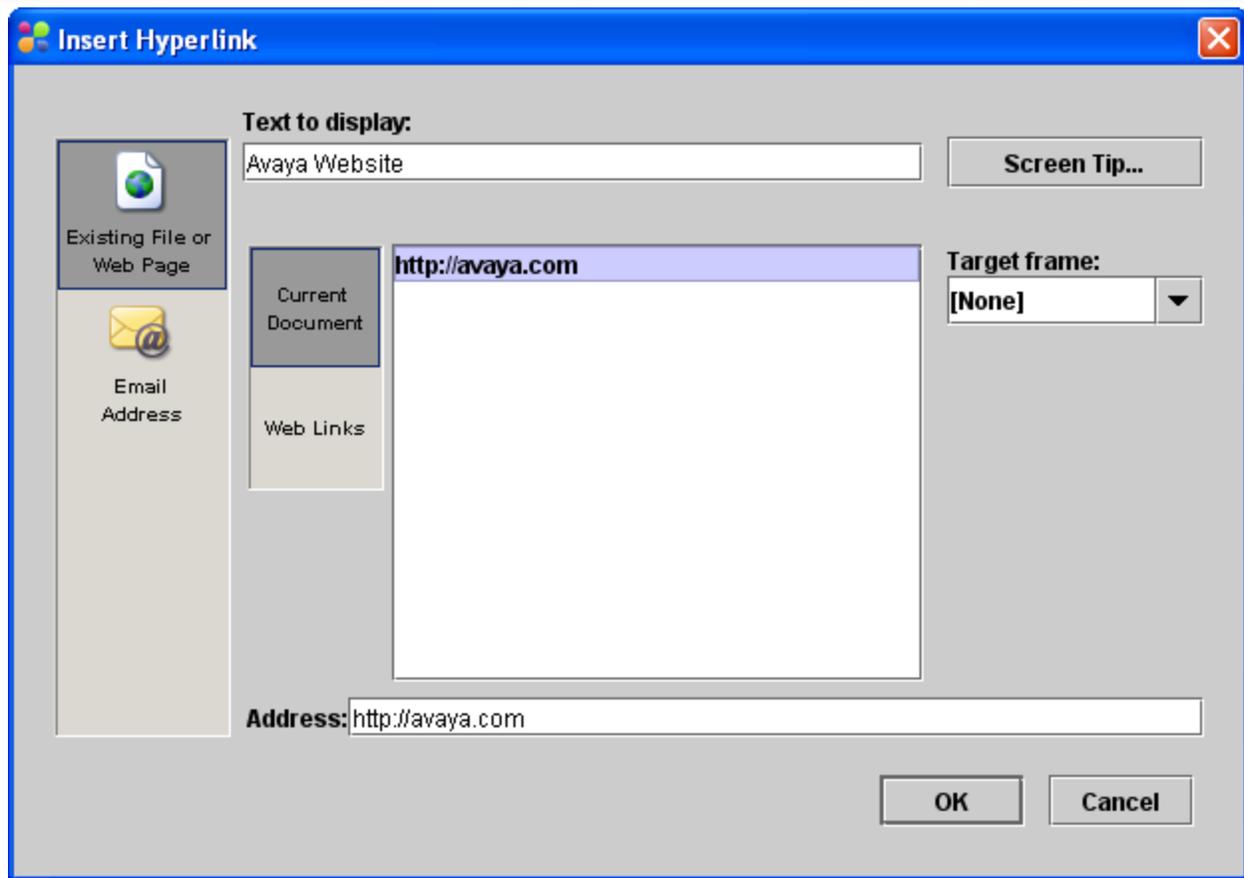
A new feature has been introduced in WebAgent to support text hyper linking in HTML mode. Two new buttons have been added in the HTML toolbar of Email and Resource editor, namely:

1. Insert Hyperlink: To hyperlink selected text.
2. Remove Hyperlink: To remove the hyperlink from selected text.



The **Hyperlink Dialog Box** would pop up with click on the 'Insert Hyperlink' button. It contains following options for hyper linking:

1. Existing File or Web Page: Hyperlink to existing file or Web Page.
2. Email Address: Hyperlink to email address.



Displaying default values for Web-Links and Email Addresses

The Hyperlink dialog box can be configured to display default Web Links and Email Address which can be used for hyper linking any text inside the WebAgent HTML Editor.

To enable default Web-Links and Email addresses, the Editlive! Configuration files can be modified as below:

1. Go to <AVAYA_IC72_HOME>\IC72\WebAgent\editlive directory on the machine where AARC is installed.
2. Edit the file NewOutboundEmail.xml.
3. Go to “<hyperlinks>” tag.
4. Uncomment <hyperlinkList> and <mailtoList> tags as shown in below snippet.
5. To customize the hyperlinks and email ids, provide appropriate values for “href” and “description” attributes in <hyperlink> and <mailtoLink> tags.
6. Follow the steps #1 to #5 for following files
 - a. <AVAYA_IC72_HOME>\IC72\WebAgent\editlive\ReplyForwardEmailConfig.xml
 - b. <AVAYA_IC72_HOME>\IC72\WebAgent\editlive\ResourcesConfig.xml

Snippet from <AVAYA_IC72_HOME>\IC72\WebAgent\editlive\NewOutboundEmail.xml:

```
<hyperlinks>
  <!-- Provide default hyperlink and email ids -->
```



```
<hyperlinkList>
    <hyperlink href="http://www.avaya.com" description="Avaya Web site"
/>
    <hyperlink href="http://support.avaya.com" description="Avaya
Support Web site" />
</hyperlinkList>
<mailtoList>
    <mailto href="mailto:test@xyz.com" description="Test ID" />
</mailtoList>
<!-- Disable the "Places in Document" option -->
<placesInDocumentList enabled="false" />
</hyperlinks>
```

Note: Copy the changed configuration files to the respective 'WAC/HomeDir' if it is other than the default Home Directory defined in ICManger.

CCFieldPopulation (How to bypass changes to TO and CC headers in MIME of incoming emails)

By default, the Poller Server(s) changes the TO and CC headers in MIME of all incoming emails so that the TO header contains the IC polling address and all other address are moved to CC header. This allows the agent to display only 1 email address in the TO field when the agent views the email. Also, additional advantage of this approach is when the agent uses the "Reply All" functionality, all the non-polling address (which were moved to CC) are retained in the CC field of reply from the agent. However, with this approach, the agent cannot understand the original intention of the sender of incoming contact, whether the polling address was specified in TO or the CC header. Thus causing misinterpretation when the polling address was originally added to CC header, but the Poller Server moved it to the TO header.

To bypass this default behavior, use the below mentioned configuration steps:

1. In, ICManger Click the Server tab.
2. Double-click Poller server.
3. Navigate to Configuration tab and add the following property and click OK.

| Property Name | Acceptable Values |
|-------------------|---|
| CCFieldPopulation | 0 ("Cc" list will be changed if required) |
| CCFieldPopulation | 1 ("Cc" list will not be changed) |

Note:

- ◆ This property will take effect only on server restart.
- ◆ In case of absence of this property, default "0" value will be used.
- ◆ Configuring this property with value 1 will cause the agent to receive the email MIME as is, the way it was polled from the Exchange Server.



- ◆ This configuration needs to be applied to ALL Poller Servers in the system so that consistent behavior is maintained.

Populating original TO and CC headers of incoming emails in new EDU fields:

Poller Server, by default changes the TO and CC headers of incoming emails so as to address loss-of-email-addresses issue at the agent side while using the "Reply All" feature. However, this means that the original values of TO and CC headers will not be written to the EDU. The changed values of TO and CC headers will be present in the EDU (since it always contains values of headers from the MIME of email).

In order to create a copy of original TO and CC headers (the values before the Poller Server changes it) in 2 new EDU fields, use the following configuration steps:

1. In, ICManager Click the **Server** tab.
2. Double-click ICEmail server.
3. Navigate to Configuration tab and add the following property and click OK.

"OrigToCclnEDU" is a new configuration parameter added to the ICEmail Server. Following are the acceptable values for the configuration parameter:

| OrigToCclnEDU Property Value | Behavior |
|------------------------------|--|
| 0 | No change in functionality. This is the default setting. |
| 1 | Poller server will add new custom headers with the original header values if the "To" or "Cc" headers are modified. The new custom headers are "XWF_OH_To" and "XWF_OH_Cc" (this is a new Poller Server behavior, and not dependent on the value of this flag). ICEmail Server will populate new EDU fields using values from these custom headers. The corresponding EDU field names would be "currentemail.header.XWF_OH_To" and "currentemail.header.XWF_OH_Cc". If any of the "To" or "Cc" headers have not been modified, then the corresponding custom header will not be present, and therefore the corresponding EDU field will not be present in the EDU. |
| 2 | Same behavior as '1', except that the new EDU fields will be added to the EDU regardless of whether the "To" and "Cc" headers are modified. In case the original headers are not changed, the new EDU fields will contain values from the actual "To" and "Cc" headers. |

Note:

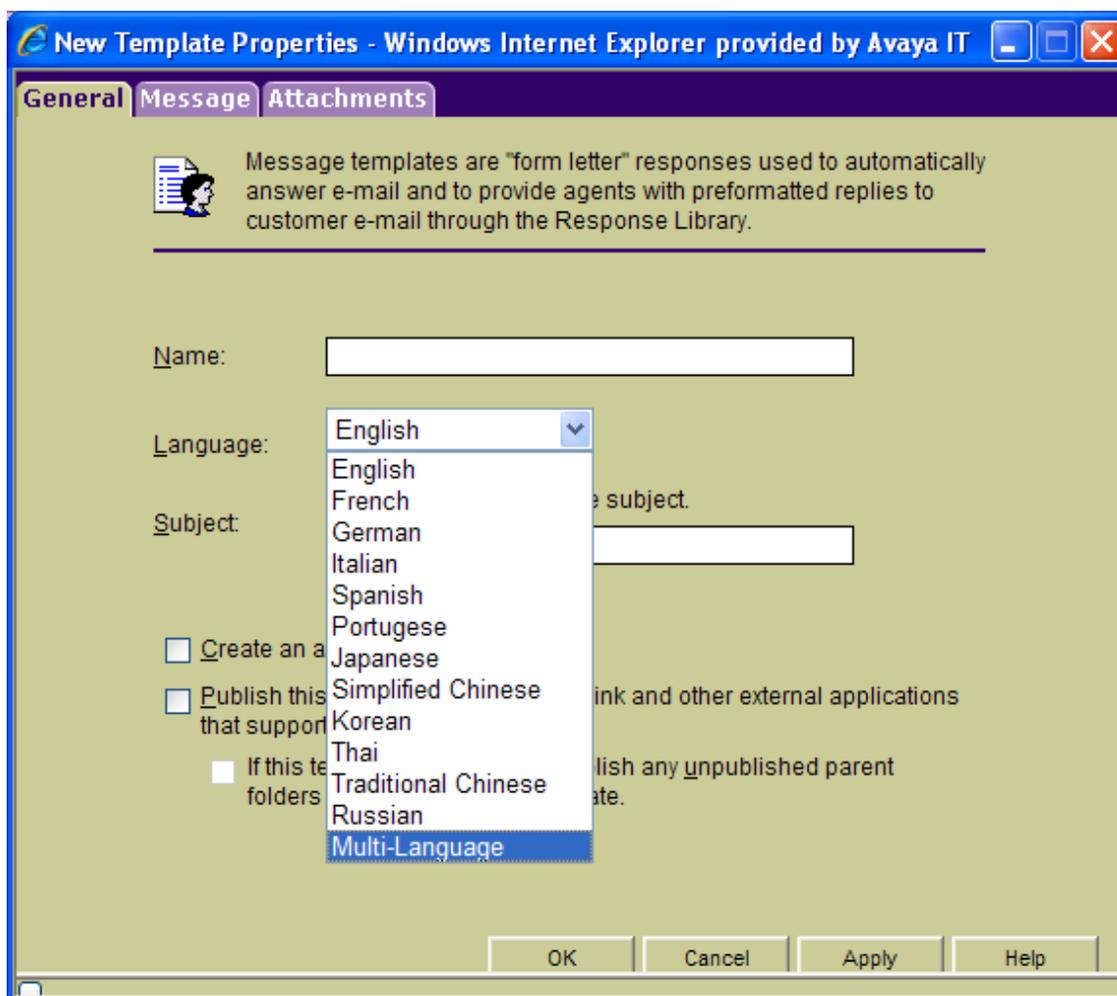
- ◆ This property will take effect only on server vesp update.
- ◆ In case of absence of these properties, default "0" value will be used.
- ◆ This configuration needs to be applied to ALL ICEmail Servers in the system so that consistent behavior is maintained.

IC 7.2.3.3 Configuration

Note: If customer is on 7.2.3 update3 and already applied this configuration, this IC 7.2.3.3 Configuration should be skipped.

Multi Language support for email templates:

RLManager now supports creation of Multi-Language templates for use in acknowledgements. Usually, the language used in the template is to be specified when creating or editing the template. This limits the template to a single language, and if the language contains characters from another language (other than English), then corruption of those characters can occur. The corrupted characters are seen either as boxes or arrows when it is received by the customer. To allow creating templates consisting of more than one language, a new “Multi-Language” option has been added to the “Language” selection list when creating or editing a template.



Notes:

- The time format when using the Multi-Language option will be set as 24 hour time format.
- Multi-Language templates are currently not supported for use as Header/Footer templates.



Telephony Server ‘Wait Time Before Merge Call’

Configuration mentioned below need to be applied to avail fixes done for the wi00858281 and wi00904616. Before applying fix, the functionality of ‘Wait Time Before Merge Call’ configuration available in IC Manager on the TS tab, was not effective. After applying the fixes value set for ‘Wait Time Before Merge Call/merge_call_wait_time’ will take into the effect.

TS ‘Wait Time Before Merge Call/merge_call_wait_time’ should now be set in multiple of 200 milliseconds. The default and the minimum values are 200 milliseconds, and the maximum value is 5 seconds. Any intermediate value that is not a multiple of 200ms will be rounded off to the lower side (e.g. configuring 2500 will have effect of 2400ms). If the configured value is exceeded, then the appropriate boundary value will be set. If value for “Wait Time Before Merge Call/ merge_call_wait_time” is set less than 200 ms or greater than 5 seconds, below low alarm will be generated.

- If value for “Wait Time Before Merge Call/ merge_call_wait_time” < 200 milli seconds
 - “merge_call_wait_time value is out of operating range (200 milliseconds). Using default value of 200 milliseconds”
- If value for “Wait Time Before Merge Call/ merge_call_wait_time” > 5000 milli seconds
 - merge_call_wait_time value is out of range. Resetting it to maximum 5000 milliseconds.

Please note that the delay before merge will be upto the maximum configured value (and not necessarily the absolute configured value). If CM sends events for the outbound call leg (except origination), then the merge will happen immediately and will not wait further. Example, the maximum value is configured for 5 seconds. However, in the call scenario, if Alerting was received after 1 second for the outbound call leg, the merge will happen immediately and not wait for another 4 seconds.

Note: Default value for ‘Wait Time Before Merge Call/merge_call_wait_time’ is 50 milli seconds. So you may observe low priority alarm whenever telephony server is restarted.

Perform the below steps to change the value of “Wait Time Before Merge Call” value to 200 milli seconds:

- Login to IC Manager and select TS Server
- Select edit option and in the TS tab, right click and select “Advanced properties”
- Change the value of “Wait Time Before Merge Call” to 200
- Apply and restart TS
- Perform this change for every TS that is configured in the system

Note: If the value is not changed to 200, TS will raise Alarm and set the value to 200 internally.

The emailcount field update in EDU

For more details on emailcount, please refer following

- IC Administration Volume 1: Servers & Domains 7.2, Section: Avoiding an email auto response loop, Page 93.
- Media Workflow Reference 7.2, Section: Detecting email loops, Page 212.

Limitations:

- Since primary server and secondary server do not have loopdetect cache in sync, they will not work seamlessly in failover scenario.



- ICEmail now has a capability of detecting if the customer email has reached loopdetect count after Workflow Analyze, Hence it will stop sending any template to customer after Workflow Analyze if the loopdetect count is reached. So if any customization done for emailcount to block the acknowledgement will be preceded by the loopdetection count value specified in the mail account configuration.

IC 7.2.4 Configuration

The ResetScriptIteration setting for WACD

With this feature when the WACD server is restarted, WACD will maintain the same priority and same workgroup for email contacts that it had prior to the restart, rather than resetting the priority of tasks.

However, enabling of this new behavior depends on the parameter 'ResetScriptIteration' and pushing the new script to the database.

Note: The parameter "ResetScriptIteration" is applicable only for the email contacts. If email channel is not being used, then the following configurations can be skipped.

The following steps need to be performed, only if the new behavior is required. Otherwise, the below steps (1 to 6) can be skipped

- If the parameter is set to 1, WACD will behave as it used to, before the fix i.e. queue scripts will start from iteration zero (priorities of tasks will be reset)
- If the parameter is set to 0, WACD will recreate tasks at the same priority and workgroup that it had prior to the restart provided the new script is uploaded by following steps 1 to 6 (priorities will be maintained as prior to restart)

By default (i.e if not configured) WACD server considers the value of 'ResetScriptIteration' parameter to be 0 unless the value is explicitly set to 1 in the WACD configuration in IC Manager.

Configuration steps to be performed after installing IC 7.2.4 SP:

1. If the new behavior of WACD server is desired, perform the following steps for all WACD servers:
 - a. Login to ICManager
 - b. Go to the 'Server' tab and double click on a WACD server to edit its configuration.
 - c. Go to the configuration tab and add a new configuration parameter
 - ◆ Name: ResetScriptIteration
 - ◆ Value: 0
 - d. Click **OK** to save the WACD configuration
2. Gathering database information.
 - a. Log in to ICManager.
 - b. Open Tools menu and click on "IC Data Sources...".
 - c. Once "IC Data Sources..." dialog opens expand "interaction_center".
 - d. Click on ccqDBConnection.
 - e. Note down Database Name and Database Server Values.
3. Update the w_script_details table
 - a. If the CCQ DB is of type SQL Server or DB2, execute the SQLDB2 Script given below

- b. If the CCQ DB is of type Oracle execute the ORACLEDB script given below
4. After executing the query, from ICManger restart the WACD server.

SQLDB2 Script

```
update w_scripts_detail set script_text ='' This is the default script
''
'' It looks for the following key-values
''
'' Expectedqueueetime
'' - If present, it will disply the expected
'' hold time
''
'' Workgroup
'' - The value should be a Workgroup to enqueue
'' to
''
'' Agent
'' - The value should be an agent name to
'' enqueue to
''
'' Priority
'' - The priority of an enqueue (team or
'' agent)
''
'' Say
'' - A string message to say to the customer
''
'' PushURL
'' - A URL to push to the customer
''
'' Wait
'' - A value (in secs) to wait before
'' processing the next set of keys
''
'' If Expectedqueueetime is defined, get
```

```
' ' the expected hold time
if acd.GetValue("Expectedqueuetime") <> "0" then
acd.sv("time", ACD.ExpectedQueueTime(10))
if acd.gv("time") = 0 then
say("An agent will be with you shortly.")
endif
if acd.gv("time") <> -1 then
say("Your approximate wait time is " & acd.gv("time") & " minutes.")
endif
endif
' ' First check if pacAgentName is provided. If so, this will be
' ' used first, and the main loop only entered if the requested
' ' agent does not become available within 30 seconds
if acd.GetValue("pacAgentName") <> "0" then
acd.GetAgent(acd.GetValue("pacAgentName")).Enqueue()
Say("Agent " & acd.GetValue("pacAgentName") & " will be with you shortly.")
Sleep(30)
endif
acd.sv("exit", 0)
' '
' ' Start the loop
' '
while (acd.gv("exit") = 0)
acd.sv("exit", 1)
' '
' ' Check to see if a team is defined
' ' and if so, check for a priority
' '
if acd.GetValue("Workgroup" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) = "low" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(low)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "normal" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(normal)
```

```
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "high" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(high)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "urgent" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(urgent)
endif
else
ACD.GetTeam(Cstr(acd.getvalue("Workgroup" & acd.gv("cnt")))).Enqueue()
endif
acd.sv("exit",0)
endif
''
'' Check to see if an agent is defined
'' and if so, check for a priority
''
if acd.GetValue("Agent" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) = "low" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(low)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "normal" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(normal)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "high" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(high)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "urgent" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(urgent)
endif
else
ACD.GetAgent(Cstr(acd.getvalue("Agent" & acd.gv("cnt")))).Enqueue()
endif
acd.sv("exit",0)
endif
```

```
''  
'' check for a say value  
''  
if acd.GetValue("Say" & acd.gv("cnt")) <> "0" then  
say(acd.getvalue("Say" & acd.gv("cnt")))  
acd.sv("exit",0)  
endif  
''  
'' check for a push url value  
''  
if acd.GetValue("PushURL" & acd.gv("cnt")) <> "0" then  
pushurl(acd.getvalue("PushURL" & acd.gv("cnt")))  
acd.sv("exit",0)  
endif  
''  
'' check for a wait value  
''  
if acd.GetValue("Wait" & acd.gv("cnt")) <> "0" then  
acd.setvalue("sleep", acd.getvalue("Wait" & acd.gv("cnt")))  
sleep(Int(CDbl(acd.getvalue("sleep"))))  
acd.sv("exit",0)  
endif  
''  
'' If this was the 1st time through and  
'' no values were set, then we need to do  
'' a normal routing.  
''  
''  
if acd.gv("exit") = 1 AND acd.gv("cnt") = 0 then  
say("Please wait for the next available eContact agent.")  
while(true)  
'ACD.GetTeam("Default").Enqueue()  
Sleep(30)  
Say("Please continue to wait...")  
wend
```

```
endif
''
''
'' If any values were set for this count
'' then up the counter and continue,
'' otherwise, set the counter back to zero
'' and start over.
''
if acd.gv("exit") = 0 then
acd.sv("cnt", acd.gv("cnt") + 1 )
else
acd.sv("cnt", 0)
endif
acd.sv("exit", 0)
wend'
where script_name='DefaultQueueScript';
```

ORACLEDB Script

```
set scan off;
declare sScriptVar varchar2(32767) := '' This is the default script
''
'' It looks for the following key-values
''
'' Expectedqueuetime
'' - If present, it will display the expected
'' hold time
''
'' Workgroup
'' - The value should be a Workgroup to enqueue
'' to
''
'' Agent
'' - The value should be an agent name to
'' enqueue to
''
```

```
' ' Priority
' ' - The priority of an enqueue (team or
' ' agent)
' '
' ' Say
' ' - A string message to say to the customer
' '
' ' PushURL
' ' - A URL to push to the customer
' '
' ' Wait
' ' - A value (in secs) to wait before
' ' processing the next set of keys
' '
' ' If Expectedqueuetime is defined, get
' ' the expected hold time
if acd.GetValue("Expectedqueuetime") <> "0" then
acd.sv("time", ACD.ExpectedQueueTime(10))
if acd.gv("time") = 0 then
say("An agent will be with you shortly.")
endif
if acd.gv("time") <> -1 then
say("Your approximate wait time is " & acd.gv("time") & " minutes.")
endif
endif
' ' First check if pacAgentName is provided. If so, this will be
' ' used first, and the main loop only entered if the requested
' ' agent does not become available within 30 seconds
if acd.GetValue("pacAgentName") <> "0" then
acd.GetAgent(acd.GetValue("pacAgentName")).Enqueue()
Say("Agent " & acd.GetValue("pacAgentName") & " will be with you shortly.")
Sleep(30)
endif
acd.sv("exit", 0)
' '
```

```
' ' Start the loop
''
while (acd.gv("exit") = 0)
acd.sv("exit", 1)
''
' ' Check to see if a team is defined
' ' and if so, check for a priority
''
if acd.GetValue("Workgroup" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) = "low" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(low)
endif
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "normal" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(normal)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "high" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(high)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "urgent" then
ACD.GetTeam(acd.GetValue("Workgroup" & acd.gv("cnt"))).Enqueue(urgent)
endif
else
ACD.GetTeam(Cstr(acd.getvalue("Workgroup" & acd.gv("cnt")))).Enqueue()
endif
acd.sv("exit",0)
endif
''
' ' Check to see if an agent is defined
' ' and if so, check for a priority
''
if acd.GetValue("Agent" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) <> "0" then
if acd.GetValue("Priority" & acd.gv("cnt")) = "low" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(low)
```

```
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "normal" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(normal)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "high" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(high)
endif
if acd.GetValue("Priority" & acd.gv("cnt")) = "urgent" then
ACD.GetAgent(acd.GetValue("Agent" & acd.gv("cnt"))).Enqueue(urgent)
endif
else
ACD.GetAgent(Cstr(acd.getvalue("Agent" & acd.gv("cnt")))).Enqueue()
endif
acd.sv("exit",0)
endif
''
'' check for a say value
''
if acd.GetValue("Say" & acd.gv("cnt")) <> "0" then
say(acd.getvalue("Say" & acd.gv("cnt")))
acd.sv("exit",0)
endif
''
'' check for a push url value
''
if acd.GetValue("PushURL" & acd.gv("cnt")) <> "0" then
pushurl(acd.getvalue("PushURL" & acd.gv("cnt")))
acd.sv("exit",0)
endif
''
'' check for a wait value
''
if acd.GetValue("Wait" & acd.gv("cnt")) <> "0" then
acd.setvalue("sleep", acd.getvalue("Wait" & acd.gv("cnt")))
sleep(Int(CDbl(acd.getvalue("sleep"))))
```

```
acd.sv("exit",0)
endif
''
'' If this was the 1st time through and
'' no values were set, then we need to do
'' a normal routing.
''
''
if acd.gv("exit") = 1 AND acd.gv("cnt") = 0 then
say("Please wait for the next available eContact agent.")
while(true)
''ACD.GetTeam("Default").Enqueue()
Sleep(30)
Say("Please continue to wait...")
wend
endif
''
''
'' If any values were set for this count
'' then up the counter and continue,
'' otherwise, set the counter back to zero
'' and start over.
''
if acd.gv("exit") = 0 then
acd.sv("cnt", acd.gv("cnt") + 1 )
else
acd.sv("cnt", 0)
endif
acd.sv("exit", 0)
wend';
begin
update qw_text set text=sScriptVar where qwkey=1;
end;
```



Allow emails with blank body having attachment

To allow emails having attachment and blank body to enter to IC system a new configurable property "**BlankWithAttachment**" is added to the Poller Server.

Setting this property value to 1 will enable Poller Server to treat emails with attachment having blank body as "**Valid**" emails.

Setting this property value to 0 will enable Poller Server to treat emails with attachment having blank body as "**Blank**" emails.

Perform the following configuration steps for Poller Server in ICManger after installing IC 7.2.4 SP

1. In ICManger double-click Poller server.
2. Click the **Configuration** tab.
3. To turn on this feature, add the property 'BlankWithAttachment' with value '1' and click **OK**.
 - **Property:** BlankWithAttachment
 - **Value:** 1
4. Update the poller server.

Note: This property is not defined in the Poller server with OOTB configuration. The default value (in absense of this property on configuration tab) is '0'.

Forwarding Emails with inline images on WebAgent

Inline images in an incoming email are also added as attachments when the email is presented to the Agent in WebAgent. If such email is forwarded, these inline image attachments will get forwarded as well. If the original incoming email had any attachments, the inline images will be displayed along with the original attachments.

It may be confusing for an Agent to differentiate between an original email attachment and an inline image added as attachment. Also when there are more inline images (typically images in signature that can grow in number with every reply) the attachment list grows unnecessarily due to the addition of inline images as an attachment.

A new parameter "email.preview.InlineAsAttachment" is introduced in SP IC7.2.4 SP. By setting this parameter to "false", webagent behaves as following:

1. Webagent will not include inline images in the attachment list while rendering the email having inline images in its body. The inline images will be displayed as inline images only and the Attachment list will include only the original attachment (if any) associated with the email.
2. If agent does a "Forward Copy", only the original attachments (if any) will be sent out.
3. If agent does a "customer history search" and selects an email having inline images, attachment list will not include the inline images.
4. If agent changes the preference to view the email (email having inline images) in "Plain" mode, webagent will pop a warning message for formatting loss and render the email with plain text. Attachment list will include the inline images as an attachment along with the original attachments (If any).
5. If the agent changes the email preference to view the email in "Plain" mode, then all the inline images will be attached in the attachment list. If the agent changes back the email view preference to "html" mode, then the inline images will not be rendered by the wegabent's email editor and the attachment list will contain only the original attachment (if any).



Note: If the agent does a “Forward copy” with email view preference set to “plain” mode then the inline images will be sent as a part of the email body and not as an attachment.

Configuration steps to get the new behavior after installing IC 7.2.4 SP:

1. Goto to the system where Avaya Agent is installed.
2. Open the "Application.properties" file to set the configuration parameter value:

Location: <Avaya_IC_Agent>/webagent

3. Add this parameter and set its value to "false"

email.preview.InlineAsAttachment = false

If this parameter is not present in the file or it is set to ‘true’, the same behavior prior to applying SP 7.2.4 i.e. "webagent includes the inline images in the attachment list" will be seen.

“Default Email Cluster (Mandatory for Email Channel)” setting for WACD

The “Default Email Cluster (Mandatory for Email Channel)” attribute is present under ‘WACD’ tab of WACD server. This is a required attribute for Email Channel to work properly.

This attribute needs to be set for all the configured WACD servers for Email Channel. It is not marked as mandatory in ICManager as it is not required for Chat channel.

Channel Throttling for Agent Clients

Channel Throttling has been made functional for Avaya Agent Web Client, Siebel Native and SDK client as part of IC7.2.4 Service Pack.

When an agent goes from Auxwork state to Available state, the channels are made available based on ADU Events. The voice channel is made available first followed by the Email and Chat channels. However, this process is asynchronous. Hence, the sequence in which the channels become available may change depending on the time required for processing to make each channel available.

This could cause email/chat channel going available before voice channel. Hence, the agent may get email/chat contact prior to voice contact.

Channel throttle is introduced to give enough time for processing to make each channel available so that the channels become available in a desired sequence viz. voice, email and chat.

ChannelThrottleTime is the delay introduced between one channel going available and prior to next channel in the sequence. Although the process continues to be asynchronous, setting sufficient Throttle Time would ensure voice channel becomes available first.

To set this property in IC Manager, configure the property **Agent/Desktop->ChannelThrottleTime**

The value is configured in seconds. The Default value is ‘0’. It is suggested that incremental values are tested to identify sufficient throttle time for the environment.

PhonePresetACD parameter in Vtel.ini

For Avaya Agent Rich Client, in Vtel.ini, the PhonePresetACD parameter should be set in accordance with the AutoIn parameter. Namely, if AutoIn is set to ‘y’, then PhonePresetACD should be set to ‘y’. And if AutoIn is set to ‘n’, then PhonePresetACD should also be set to ‘n’.



Adding devices or voice queues at runtime

When new devices or voice queues are added in the IC Manager, the ADUID for the new devices are not created. Therefore reporting does not happen for the calls added in the new queues. Whenever a new device or a voice queue is added to the system, the TSQS Server needs to be updated. This ensures that the ADUID is created for a newly added device or voice

ServerFailed Loop Control for AARC

If two agents happen to login into AARC configured with the same IP, then a ServerFailed-Assign loop is initiated between the agents and the IC servers (note that, different agents with the same IP is not a supported configuration in AIC, but may happen under some circumstances e.g. APIPA etc.). This activity detects the loop by monitoring the intensity/rate of ServerFailed events. When such a loop is detected, the agent is prompted to log out of AARC, and web channels are disabled.

The following configurations (through environment variables) were introduced to control the threshold rate of the LoopDetect event.

- **CDK_LOOPCOUNT** = Threshold count of ADU.ServerFailed events detected by MTT thread of CDKToolkit. Default value is 10.
- **CDK_LOOPINTERVAL** = Maximum interval (in seconds) between two consecutive above ADU.ServerFailed events to increment the loop-detect count. Default value is 3.
- **SERVER_LOOPCOUNT** = Threshold count of ICServer.ServerFailed events detected by event-processing thread of CDKToolkit. Default value is 5.
- **SERVER_LOOPINTERVAL**= Maximum interval (in seconds) between two consecutive above ICServer.ServerFailed events to increment the loop-detect count. Default value is 5.

Note: The rate of ServerFailed-Assign loop between MTT and ADU server is far more as compared to other servers. As such, different parameters are being used to set the threshold rate.

GRIP#4645, No Auto-reconnect after consult-cancel

Before IC7.2.4, when an consultation call is cancelled, the agent is automatically reconnected to the customer. The GRIP#4645, requires the Customer should not be automatically reconnected instead should allow the agent to initiate another consult.

For example,

1. Customer calls Agent1.
2. Agent1 answers the call.
3. Agent1 initiates a consultation call to Agent2.
4. Agent2 is busy/no-answer/answer the call.
5. Agent1 cancels the consultation call.

Till IC7.2.3, when Agent1 cancels the consultation call, Agent1 would be automatically reconnected to the customer.

In IC7.2.4 based on the below settings, the Agent1 would not be automatically reconnected to the customer and his current call will be placed on-hold. Agent1 will also be able to initiate another consult.

Two new properties are added under Agent\Desktop\Voice section as:

- **AllowTransferOnHold:** By default set the value as “No”



If this is set to “Yes”, the call which is on Hold will be allowed to transfer/conference/consult.

If this is set to “No”, the call which is on “Hold” will be not allowed to transfer/conference/consult.

- **ReconnectOnTransferCancel:** By default set the value as “Yes”

If this is set to “Yes”, the call will be reconnected on cancel of conference/consult

If this is set to “No”, the call will be put on “Hold” on cancel of conference/consult

Perform the following steps on the Design and Admin machine:

This section describes configuration requirements for IC7.2.4 ICMManager.

Property declaration In IC manager:

1. Log in to IC manager.
2. Go to **Tools > Property Declarations**.
3. From Property Section select **Agent/Desktop/Voice**.
4. Add the following properties under Agent/Desktop/Voice. Both these properties should have “Property Datatype” as “boolean”
 - AllowTransferOnHold
 - ReconnectOnTransferCancel
5. Click **OK** on Property Declarations dialog box after performing above steps.
6. Go to **Tools > Groups** and set values for the above properties under **Agent/Desktop/Voice**.

For default behavior:

- Set AllowTransferOnHold as No.
- Set ReconnectOnTransferCancel as Yes.

ChatList – Changes to Scripts files and localized CDL files Siebel (Hybrid agents)

Perform the following on the Design and Admin machine to enable the ChatList customization

1. The highlighted new section “ChatList” needs to be added as below to customize the chat-list for the localized .cdl file (for example, avaya_agent_sbl_en.cdl) to enable customization of Chat-List width, size, location etc.

```
<QSection Name="TaskList"
..
..
/>
<QSection Name="ChatList"
Columns="{0,16,'',''},{0,16,'',''},{1,16,'Name',''},{2,54,'Duration',''},{3,
54,'Waiting',''}"/>
```

Note: The above section will be localized for each of the .cdl files.



2. Start the Avaya Database Designer.
3. Load the CCQ.ADL file in the ...\\IC72\\design\\CallCenterQ directory.
4. Incorporate any previous in-house customizations done in these replaced script files.
5. Generate Windows Application.

Enabling XSS filters for Public Website

Perform the following steps on the machine where IC Website is installed to enable the XSS filter to prevent the XSS attacks in case there are no customizations to website.

1. Stop the website
2. Take a backup of the following file in a separate directory.
For example, C:\\Backup\\AYA_IC72_HOME>/comp/website/WEB-INF/web.xml
3. Delete folder "<AVAYA_IC72_HOME>/tomcat/work/Catalina/localhost/website" for cleaning tomcat cache.
4. Run the config tool and apply the Web settings. This will create/update the web.xml file in the path <AVAYA_IC72_HOME>/comp/website/WEB-INF/
For more information, see *Configuring Web Management services on Windows* section in the *IC Installation and Configuration Guide*.
5. Start the Web site.

Perform the following steps on the machine where IC Website is installed to enable the XSS filter to prevent the XSS attacks in case there are customizations made to the website.

1. Stop the website
2. Take a backup of the following file in a separate directory.
For example, C:\\Backup <AVAYA_IC72_HOME>/comp/website/WEB-INF/web.xml.
3. Delete the <AVAYA_IC72_HOME>/tomcat/work/Catalina/localhost/website directory for cleaning tomcat cache.
4. Copy the following in the filter section of the existing web.xml file

```
<web-app>
<display-name>Website for Avaya Web Management </display-name>
<description>Website runs the customer-facing web site for Avaya Web
Management.</description>
<filter>
<description>This filter is used to clean input paramaters.Since no validation
is done in the respecitve JSP's they are susceptible to XSS and Clickjacking
attacks. This filter avoids the same.
</description>
<display-name>cssFilter</display-name>
<filter-name>cssFilter</filter-name>
<filter-class>com.quintus.security.cssFilter</filter-class>
```

```
</filter>
<filter-mapping>
<filter-name>cssFilter</filter-name>
<url-pattern>/*</url-pattern>
</filter-mapping>
<servlet>
<servlet-name>
InitServlet
</servlet-name>
```

5. Start the website service.

Updation of DCO Money fields

Consider the following points that specify the Currency formats in the “Regional and Language Options” when updating the Money fields, if custom applications use dcoMoney fields.

1. The Money fields will not accept input strings with space in between the digits (eg: 123 456 789)
2. The default settings for ‘Decimal symbol’ and ‘Digit grouping symbol’ of any locale used needs to be same as these default setting on the machine where DataServer runs.
3. The ‘Digit grouping’ format should not be customized. Use the default formats for all the locales.

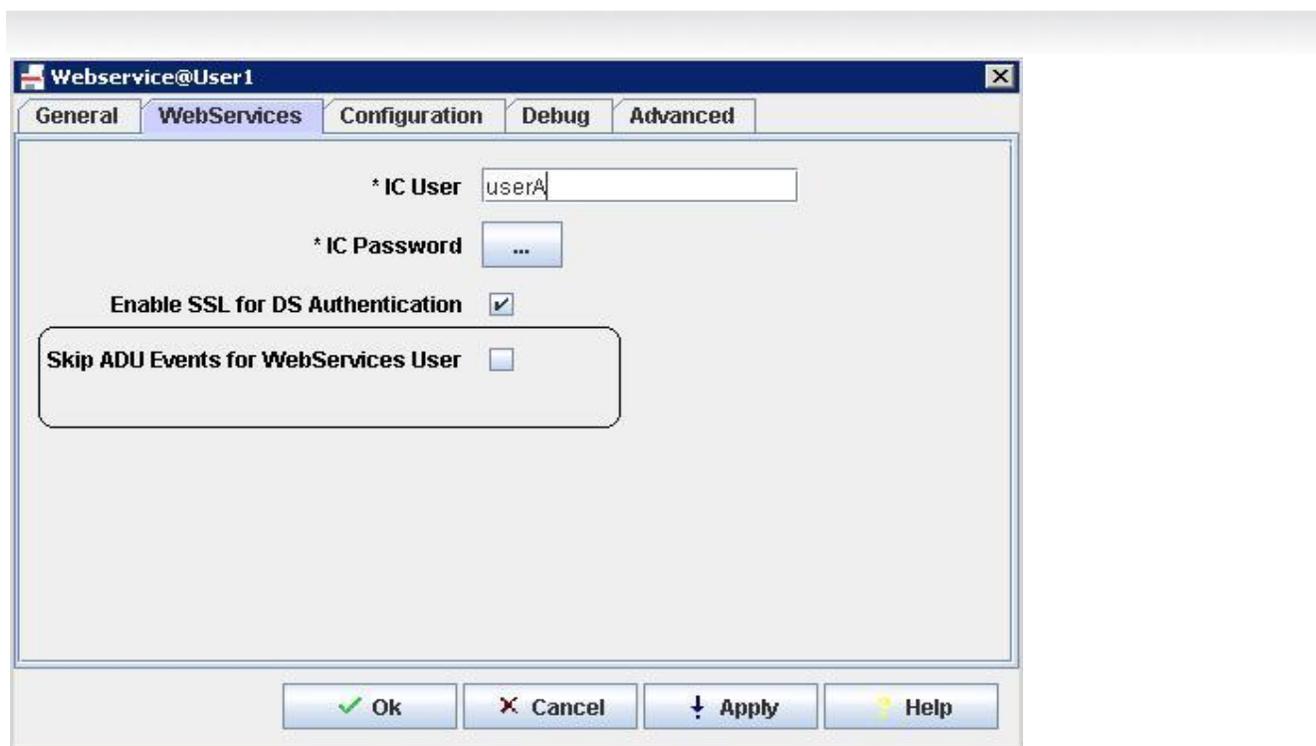
To Skip ADU Events for WebServices User

WebService Server can now skip receiving ADU events using a new configuration parameter in the WebServices tab of Webservices Server.

Perform the following steps on the Design and Admin machine to import the sc.xml into ICManager.

1. Login to ICManager.
2. Select the "Manager" tab and navigate to Options -> Environment -> Import Configuration
3. In the file chooser dialog box, select "<AVAYA_IC72_HOME>/etc/sc.xml"
4. Click "Open" button on the dialog box.
5. Click on "Ok" button in the Validate sc.xml dialog box to import the configuration.
6. Click on "Ok" button on the Options dialog box.
7. Restart IC Manager.

The below is the snapshot of the New Property added:



Note: Checking the Tick Box "Skip ADU Events for WebServices User", will prevent the Webservice Server from receiving the ADU events. By Default, this Tick Box is not checked and the server will receive ADU events.

Restart the WebService on Avaya Webservices Machine after you change the above property.

Disabling Authentication for IC WebServices

Perform the following steps on the on Avaya Webservices Machine to Turn-Off the Authentication in IC Web-Services for Workflow Service:

1. Open the <AVAYA_IC72_HOME>\sdk\webservices\webservices\WEB-INF\server-config.wsdd file in notepad and go to <service name="AicWorkflow" section.
2. Comment out (using XML Style Comment i.e. <!-- -->) or delete following lines under that section.

```
<requestFlow>
<handler type="Authenticate"/>
</requestFlow>
```

For example:

```
<!--
<requestFlow>
  <handler type="Authenticate"/>
</requestFlow>
-->
```

3. Save the file and restart the webservices.



4. Repeat the above steps for **<service name="AicAgentAdmin"** section if you want to disable Authentication for Agent Admin Service.

Upgrade Steps for WebLM Server from version 4.5.x.x to version 4.7.1

Perform the below steps to determine the current version of WebLM Server installed in your system.

1. Paste the url `https://<WebLM Server IP>:<WebLM Server Port>/WebLM/LicenseServer` in a browser.
2. From the login page, note down the WebLM version.

Perform the instructions mentioned in the section below, only if the installed version of WebLM server is earlier than 4.7.1. Skip this section, if the installed version of WebLM server on your system is 4.7.1 or later.

Retain the following files of the WebLM server version 4.5.x.x installed on your system.

| File/Folder | File Location | Required | Description |
|--------------------------------|---|---|---|
| Users.xml – File | AVAYA_IC72_HOME/tomcat/webapps/WebLM/admin | Yes, if any users are added that are to be retained. | This file contains the list of users. |
| Product_folder – Folder | AVAYA_IC72_HOME/tomcat/webapps/WebLM/data/ | Yes | The product folder that contains the configuration files. E.g aic |
| License file (.xml) – File | AVAYA_IC72_HOME/tomcat/webapps/WebLM/licenses | Yes | The installed license file |
| usagehistory.properties – File | AVAYA_IC72_HOME/tomcat/webapps/WebLM/data | Yes | The Usage History Information |
| weblmserver.properties – File | AVAYA_IC72_HOME/tomcat/webapps/WebLM/data | Yes, if WebLM configuration properties have been modified | The server properties file. |

Perform the following steps on the machine where WebLM server is installed.

1. Stop Tomcat server (Stop the WebLM service)
2. Before upgrading the WebLM server, back up the set of files as described in the table above.
3. Delete the AVAYA_IC72_HOME/tomcat/webapps/WebLM folder recursively.



4. Start the tomcat server.

This will extract the new WebLM.war file from the IC724 server installer of respective platforms (AIX, Solaris, Windows)

5. Stop the tomcat server.
6. Restore/Overwrite the above set of files in the respective file/folder location.
7. Start Tomcat/WebLM service and access WebLM.

Adding attachments and email addresses for additional recipients to outbound email through Workflow server

For more information on Adding email attachments through Workflow, see the *Email components* topic in the *Media Workflow Reference Guide*.

The below information will override the information provided for Step 9, under Description for Block Name "Add Email Component", page 230 of the Media Workflow Reference 7.2.

Specifies attachments and additional recipients for the outbound email contact.

If you want to add more than one email address to a field, separate the entries with comma.

If you want to add more than one attachment, separate the entries with semicolon.

To use this block, set the following properties in the Basic tab

- BCCEmailAddresses – Adds email addresses to the BCC field
- ToEmailAddresses – Adds email addresses to the To field
- CCEmailAddresses – Adds email addresses to the CC field
- FileAttachments – Adds these attachments to the outbound email.

To include an attachment:

1. Store the file on the machine that hosts the ICEmail Server
2. Create directory "<%AVAYA_IC72_HOME%>/email/Attachments"
3. Add attachment files to the above mentioned directory.

Note: Once the workflow changes are done, save and rebuild the flow. Also reload the flow from the workflow server.

Limitations:

1. Primary and Secondary ICEmail should have the Attachments directories in sync, so that this feature works in failover scenario.
2. Display name will not be supported in the BCCEmailAddresses, ToEmailAddresses and CCEmailAddresses.
3. Filename with spaces will not be supported
4. In SME/REQ and QA email address and attachments might be added multiple times if email goes through outbound workflow again and again.



Uninstall program

The Avaya IC 7.2.4 Installation Tool installs an Uninstall Program that uninstalls the files from the IC 7.2.4 installation and returns your system to its previous state. If your installation fails, you must run the Uninstall program before attempting to rerun the Installation Tool. Running the Uninstall program returns the system to its previous state and preserves the files.

When the Service Pack installer fails to complete the installation, any one of the following events may happen based on the progress achieved during installation:

- The uninstaller is created
You need to run the uninstaller to remove the Service Pack to restore the system to its original state. After running the uninstaller, the system is restored to its previous state.
- The uninstaller is not created
When the uninstaller is not created, it implies that the Service Pack installer has already rolled back all the changes made to the system during installation. In this case, no action is required from the user.

Before running the Uninstall program

- For uninstalling servers, stop all of the servers using the procedures described in [Stop IC services](#) and [Stop IC servers](#).
- Exit the Agent and IC Manager applications on the system.
Note: On the AIX platform, you need to kill the processes that use the Rogue Wave binary files installed on the system.

Perform the following steps before carrying out the uninstallation on the AIX platform:

- a. Change directory to \$AVAYA_IC72_HOME/lib.
- b. At the command line, type the following command: *slibclean*
- c. At the command line, type the following command:
 - ◆ `fuser -k lib*12d*.a`
 - ◆ `fuser -k lib*.so`
- d. After running the `fuser -k lib*12d*.a` and `fuser -k lib*.so` commands, type the following at the command line:
 - ◆ `fuser lib*12d*.a`
 - ◆ `fuser lib*.so`

No process IDs should be displayed in the results after running this command. However, even if one process ID is displayed in the results, then you need to restart the AIX machine.

Uninstall

Perform the following steps on a system from where you want to uninstall IC 7.2.4 files:

1. Navigate to the following directory:



- a. Windows: ...\\IC72\\ICServicePacks\\7.2.4\\<FolderNameOfComponent>\\Record\\
 - b. Solaris and AIX: .../IC72/ICServicePacks/7.2.4/<FolderNameOfComponent>/Record/
2. Start the Uninstall program:

Windows

- Double-click the uninstall7.2.4.bat file.
Note: In cases where “<AVAYA_IC72_HOME>/SPBackup” folder is not deleted automatically by Uninstall program, we need to manually delete this folder.

Solaris and AIX (server only)

1. At the command prompt, type: `./uninstall7.2.4.sh`.
2. Press **Enter**.
3. At the Welcome screen, click **Next**.
4. The next screen indicates the directory from which the files are uninstalled.
5. Click **Next** to start the Uninstall program which:
 - a. Restores the component to its previous state.
 - b. Displays confirmation of a successful uninstallation with a list of uninstallation warnings and errors that were encountered.
6. Click Finish if the uninstallation is successful.
7. On the Windows platform, restart the machine for the system to be restored to its previous state. Solaris and AIX systems do not require restarting the machine.

Un-Installation using the Silent command line option

IC 7.2.4 Service Pack components can be uninstalled using the Silent command line option. IC 7.2.4 Service Pack supports only the Silent option. When you run un-installation in silent mode, the user interface is not available.

Silent mode

In a silent mode, rerun the same uninstallation in silent mode on another machine using the inputs from this text file.

To re-run the uninstaller in silent mode:

1. From the command prompt (command line, in case of Solaris and AIX), go to the following directory:

Windows:

...\\IC72\\ICServicePacks\\7.2.4\\<FolderNameOfComponent>\\Record where <FolderNameOfComponent> is the folder name of each component where the respective component files reside.

Solaris and AIX:

.../IC72/ICServicePacks/7.2.4/<FolderNameOfComponent>/Record where <FolderNameOfComponent> is the folder name of each component where the respective component files reside.



2. At the command prompt (command line, in case of Solaris and AIX), type the following command:

`<uninstallscriptname> -silent`

Note: The <uninstallscriptname> is the uninstaller script. For example,

For example:

| Operating System | Command |
|------------------|--|
| Windows | <code>uninstall7.2.4.bat -silent</code> |
| Solaris and AIX | <code>./uninstall7.2.4.sh -silent</code> |

3. Press **Enter**.

Note: After the un-installation is complete, sometimes the uninstaller does not delete the 7.2.4 subfolder. In such a case, you need to manually delete the 7.2.4 subfolder from the .../IC72/ICServicePacks folder.



Fixed MRs / WIs in Service Packs

Fixed MRs / WIs in IC 7.2.4 Service Pack

The following table lists the MRs/WIs that is fixed in Avaya IC 7.2.4 Service Pack.

| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------------|------------|------------|---|
| IC:Admin:AdvocateConfig Tool | wi00889312 | wi00896305 | Advocate uninstaller script "cleanupadvocate.vbs" does not cleanup advocate on 64 bit operating system. |
| IC:Admin:ConfigTool | wi00226044 | wi00935830 | ictomcat.sh not installed if SDK is configured without the Website configuration, hence can not start the SDK service |
| IC:Admin:DB Designer | wi00727212 | wi00830582 | It is not possible to select or save a loop detection type of "both" in IC Manager for an email account. ADL qem_mailaccount.loopdetectiontype enum values do not match IC Manager. "FROM_REPLYTO" should be changed to "BOTH". |
| IC:Admin:ICManager | wi00376569 | wi00385555 | Mutli edit allows Administrator to change passwords of LDAP imported agents. |
| IC:Admin:ICManager | wi00308172 | wi00691636 | ICManager does not fetch the "Default Email Cluster" information and does not show the Templates |
| IC:Admin:ICManager | wi00835970 | wi00848908 | Any change to a set of agent records using the Multi Agent Editor in IC Manager forces each agent to change his/her password on next login. |
| IC:Admin:ICManager | wi00277554 | wi00886596 | Cannot delete Voice Devices having the same Queue ID using IC Manager. |
| IC:Admin:ICManager | wi00410019 | wi00886630 | ICManager hangs when an user with role as "Clerk" tries to add advocated enabled agent. |
| IC:Admin:ICManager | wi00886640 | wi00886646 | For Clerk user, Email Account and cluster configuration menus should not be displayed. |



| Component | Parent WI | Child WI | Summary of reported defect |
|---------------------------------------|------------|------------|--|
| IC:Advocate:Advocate Resource Manager | wi00850963 | wi00881831 | Advocate Resource Manager does not create MxRscMgr_service.log in IC7.2.x |
| IC:Advocate:Advocate Resource Manager | wi00873166 | wi00884396 | RM server goes down when component manager is shutdown |
| IC:Advocate:TSA | wi00907622 | wi00921265 | TSA fails to call the Workflow for Qualification,incase of a TS.ServerFailed event |
| IC:Advocate:TSA | wi00857818 | wi00935836 | TSA crashes when voice contact with large no. of qualifiers comes in. |
| IC:Advocate:WAA | wi00349124 | wi00373004 | WAA server is crashing on Primary Resource Manager bounce with no standby |
| IC:Advocate:WAA | wi00843137 | wi00847120 | On Solaris, the Qualification flow (qualifyemail) does not return and contacts do not get qualified. |
| IC:Advocate:WAA | wi00882162 | wi00895901 | WAA needs to change the logic of processRetry in the same manner as it is done for TSA (wi00226152). |
| IC:Advocate:WAA | wi00859227 | wi00921291 | Potential Buffer over runs, if qualifier string length > 255 chars can lead to server crash. |
| IC:Client:AAWC | wi00774720 | wi00817331 | When contact comes in and connection between Application server and AAWC is broken, task remains in agent tasklist upon RONA. |
| IC:Client:AAWC | wi00844319 | wi00898144 | Request to update German dictionary used by Webagent's spellchecker. |
| IC:Client:AAWC | wi00890976 | wi00903821 | In AAWC, chat transcript Print option is disabled for supervisor. |
| IC:Client:AAWC | wi00906056 | wi00921269 | When Auto-sync for Chat is turned on and agent pushes an invalid url from agent's transcript area, urls are pushed in a loop and finally gives error pop-up:lost connection to application server. |



| Component | Parent WI | Child WI | Summary of reported defect |
|--------------------------|------------|------------|--|
| IC:Client:AAWC | wi00904184 | wi00921279 | The thinclient's datacontroller cannot handle periods (".") in virtual queue names when building nodes. This causes problems in the Address Book |
| IC:Client:AAWC | wi00940104 | wi00943618 | Agent UI doesn't have the option to hangup the call (Thin Client and Java SDK Client) |
| IC:Client:AAWC:Other | wi00866666 | wi00872760 | AddressBook fails to add all added emails in TO field while replying/creating an email. |
| IC:Client:AAWC:Other | wi00873661 | wi00873791 | The AAWC 7.2.3 agent freezes in IE8 while printing an email and chat contact. |
| IC:Client:AAWC:RefApp | wi00894459 | wi00898095 | AAWC Client freeze while chatting with customer in production environment. |
| IC:Client:AAWC:RefApp | wi00898000 | wi00898099 | AAWC Client hangs while doing spell checking in chat/email. |
| IC:Client:AAWC:RefApp | wi00899025 | wi00949859 | In AAWC agent is not able to perform any operation after accepting the chat from customer. |
| IC:Client:AAWC:UOM:Voice | wi00844699 | wi00844720 | GRIP (4645)-IC SDK Client API has lost a simple but critical feature that was previously available with IC VTEL API. |
| IC:Client:AAWC:UOM:Voice | wi00872334 | wi00881857 | Conference initiating call-leg is dropped when a party leaves the conference. |
| IC:Client:AAWC:UOM:Voice | wi00340864 | wi00956326 | Agent1 not able to complete the conference, when agent1->Conf->Agent2 and Agent2-> Conf same call->agent3 and agent2 completes the conference. |
| IC:Client:RichClient | wi00832928 | wi00848561 | qui.exe.dmp getting created in Avaya Ic Logs Folder on Rich Client machine after the agent exits |
| IC:Client:RichClient | wi00308705 | wi00853144 | Agent is not able to create resources specific to tenant when only chat channel is set |
| IC:Client:RichClient | wi00869629 | wi00886257 | DB Record methods erroneously removed from 7.2 |



| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------------------|------------|------------|---|
| IC:Client:RichClient | wi00898620 | wi00898632 | qui.exe.dmp getting created in Avaya Ic Logs Folder on Rich Client machine after the agent exits |
| IC:Client:RichClient | wi00893135 | wi00899561 | Intermittently dialog pops up with msg "QUI stopped working" at Rich Client. |
| IC:Client:RichClient | wi00893201 | wi00899564 | Intermittently Web agent fails to appear/not visible when an agent enabled for email, chat and voice is logged in as Rich client. |
| IC:Client:RichClient | wi00903255 | wi00905957 | There is no way to hyperlink text in webagent |
| IC:Client:RichClient | wi00906406 | wi00907389 | The cancel button when doing Blind transfer is not doing any action |
| IC:Client:RichClient | wi00931252 | wi00933297 | "Switch to caller" message box disappears, when recorders are involved in the Consult Transfer. |
| IC:Client:RichClient | wi00943469 | wi00943726 | With IC-PC integration Agents are going in to wrong state in inbound and outbound mode and during Inbound-Outbound mode change. |
| IC:Client:RichClient | wi00937420 | wi00946825 | Assign cycle is initiated if two agents assigns to WACD with the same IP and port in the Assign's session ID. |
| IC:Client:RichClient | wi00948248 | wi00948956 | QUI.exe is not coming up when the user installs IC 7.2.3.2 on windows XP with USER permissions intermittently. |
| IC:Client:RichClient:BlenderClient | wi00835405 | wi00837619 | When TS server fails voice.device_address is set to "" twice by the client, this needs to happen only once. |
| IC:Client:RichClient:BlenderClient | wi00835415 | wi00837664 | IC Agent uses the previously selected aux reason code under a particular scenario. |
| IC:Client:RichClient:BlenderClient | wi00870943 | wi00881782 | QUI is crashing intermittently on graceful exit. |



| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------------------|------------|------------|---|
| IC:Client:RichClient:BlenderClient | wi00869564 | wi00895305 | Rich Client sending a TS.Ready request even after preset of Busy. |
| IC:Client:RichClient:BlenderClient | wi00890305 | wi00898628 | While moving from Aux to available agent is sending extra busy request along with Ready to TS. |
| IC:Client:RichClient:BlenderClient | wi00936630 | wi00941369 | IC Agent (AARC) infinitely sends ADU.SetOneValue requests if connection to blender server breaks and restores while the agent is in init-aux state. |
| IC:Client:RichClient:BlenderClient | wi00942847 | wi00943591 | Customer call can not be put on hold after the below mentioned scenario is performed.Agent logout and relogin is required. |
| IC:Client:RichClient:BlenderClient | wi00225514 | wi00949361 | There should be a way in OOTB IC to disallow agents using IC Agent Thick Client to change their agent blending |
| IC:Client:RichClient:ChatList | wi00869127 | wi00876323 | Qui.exe crashing intermittently when agents are working multiple chats (2) |
| IC:Client:RichClient:Qconsole | wi00841463 | wi00853121 | IC 7.2 RichClient is not coming up if it is coexisting with IC 7.1 RichClient on the same machine as per IC 7.2 Migration Document |
| IC:Client:RichClient:Qconsole | wi00946811 | wi00951364 | Unable to get the windows handle for Bottom_frame and Right_frame |
| IC:Client:RichClient:Softphone | wi00904374 | wi00907750 | Disconnecting a call while in AUX(on login) intermittently causes agent to go to available |
| IC:Client:RichClient:StausDialog | wi00832188 | wi00832468 | Siebel Hybrid qui.exe crashes when exiting with AUX window open |
| IC:Client:RichClient:UAD | wi00867726 | wi00889856 | Avaya Agent Rich Client UAD does not allow addressing an email to a queue. This contradicts the Avaya Agent User Guide. |
| IC:Client:RichClient:UAD | wi00925965 | wi00926472 | OK' button gets disabled on the UAD window, when agent clicks on View-->Refresh |



| Component | Parent WI | Child WI | Summary of reported defect |
|-------------------------------|------------|------------|--|
| IC:Client:RichClient:Vtel | wi00734076 | wi00817333 | Agent cannot switch to AUX mode if he has previously set ACW from hardphone |
| IC:Client:RichClient:Vtel | wi00844699 | wi00852859 | GRIP (4645)-IC SDK Client API has lost a simple but critical feature that was previously available with IC VTEL API. |
| IC:Client:RichClient:Vtel | wi00842382 | wi00863702 | With TimedACW, if Aux is pressed immediately on entering ACW both phones remain in ACW and not AUX. |
| IC:Client:RichClient:Vtel | wi00892136 | wi00899552 | Voice.device_address is getting set twice by vtel when EDU server is restarted |
| IC:Client:RichClient:WebAgent | wi00357750 | wi00373005 | Line spaces in an email composed in HTML mode are getting removed when received at customer side. |
| IC:Client:RichClient:WebAgent | wi00820154 | wi00826306 | Webagent should show warning message, when email addresses starting and ending with single quotes are being sent. |
| IC:Client:RichClient:WebAgent | wi00733066 | wi00829560 | web agent fails to hyperlink the first character in the URL. |
| IC:Client:RichClient:WebAgent | wi00830011 | wi00830647 | WebAgent fails to parse attachments in an inbound email if the attachments are not all tagged with the same Content-Type boundary. |
| IC:Client:RichClient:WebAgent | wi00825506 | wi00830649 | WebAgent attempts to spellcheck base64 encoding of inline image and throws java exception |
| IC:Client:RichClient:WebAgent | wi00835195 | wi00837661 | During the chat session the right click "paste" option remain disabled |
| IC:Client:RichClient:WebAgent | wi00844955 | wi00846346 | WebAgent's Search Email/History tool does not display all attachments associated with the selected email. |
| IC:Client:RichClient:WebAgent | wi00844319 | wi00847126 | Request to update German dictionary used by Webagent's spellchecker. |



| Component | Parent WI | Child WI | Summary of reported defect |
|-------------------------------|------------|------------|--|
| IC:Client:RichClient:WebAgent | wi00845445 | wi00853072 | Login into rich client and web agent to appear for an email enabled agent takes around 1 min 52 sec and sometime more than 2 min when RL manager is loaded with around 2500 templates. |
| IC:Client:RichClient:WebAgent | wi00887567 | wi00889844 | Email with a multi-line subject and TAB character causes java exception in WebAgent when performing a Customer History search |
| IC:Client:RichClient:WebAgent | wi00857248 | wi00898206 | WebAgent hangs up when Email address with " (double quotes) is used when replying/composing a new outbound email. |
| IC:Client:RichClient:WebAgent | wi00225878 | wi00898212 | Proper Error check window doesn't pops up when an Email is sent without having proper "To", "Cc" and "Bcc" fields |
| IC:Client:RichClient:WebAgent | wi00224326 | wi00899083 | Rich Client: HTML Resources text gets inserted with extra line break when used in a chat. |
| IC:Client:RichClient:WebAgent | wi00867800 | wi00899085 | The webagent (Ephox editor) doesnt preserve the line spaces for the copy & pasted HTML text. |
| IC:Client:RichClient:WebAgent | wi00893340 | wi00899135 | Email data copied from Microsoft word does not retain the formatting while displayed on the end email client |
| IC:Client:RichClient:WebAgent | wi00900395 | wi00900409 | Slow performance in fetching emails after failover as observed in the WebAgent. |
| IC:Client:RichClient:WebAgent | wi00899511 | wi00904203 | Webagent doesnt display's the inline images for an email send from the Lotus notes client |
| IC:Client:RichClient:WebAgent | wi00733064 | wi00905949 | Web Agent is not highlighting URLs embedded in outgoing email when TAB is pressed |
| IC:Client:RichClient:WebAgent | wi00927366 | wi00927438 | Webagent renders email sent from the Lotus notes having inline images as an attachment named as "untitled". |

| Component | Parent WI | Child WI | Summary of reported defect |
|--------------------------------|------------|------------|--|
| IC:Client:RichClient:WebAgent | wi00931292 | wi00931631 | There is no way to remove hyperlink in webagent |
| IC:Client:RichClient:WebAgent | wi00936284 | wi00937072 | Header(plain/HTML) sent from webagent (RC) in HTML mode is not getting displayed on customer side in html mode |
| IC:Client:RichClient:WebAgent | wi00356514 | wi00953873 | All the formating is lost on using bullets and numbering |
| IC:Client:RichClient:WebAgent | wi00931299 | wi00955135 | Tab is identified as a character in url instead of as a trigger character for url. |
| IC:Client:RichClient:WebAgent | wi00932995 | wi00955137 | Compose a new email using any font type, size,colour which has been bolded,italic and underlined followed with some another font type and size without pressing enter key and send it, at customer end after bolded,italic and underlined font,followed font t |
| IC:Client:RichClient:WebEngine | wi00867805 | wi00881848 | Qui.exe crashing intermittently when agents are working multiple chats (2) |
| IC:Client:SDK:WebServices | wi00895155 | wi00898566 | IC WebServices assigns to ADU with "(type=per){loginid,state}" creteria and receives all Agent ADU events |
| IC:Client:UOM | wi00863601 | wi00863685 | UOM collects property from the incorrect TS server if there are multiple TS are configured and one of the TS server is down |
| IC:Common | wi00884284 | wi00886605 | IC SSL Client should consider a scenario where socket selects function times out. |
| IC:Common | wi00932072 | wi00932078 | Log archiving does not happen in Solaris for similar spelt servers. |
| IC:Common:MTT | wi00841809 | wi00843358 | MTT is not able to handle subjectAltName->DNS entry or case insensitive DNS comparision in the certificate while doing post connection DNS match. |
| IC:Common:MTT | wi00868279 | wi00868170 | MTT should validate multiple common names and blank common name from server certificate |



| Component | Parent WI | Child WI | Summary of reported defect |
|---|------------|------------|---|
| IC:Common:MTT | wi00906874 | wi00921263 | Servers crash intermittently when rollover happens due to daycount set. |
| IC:Common:MTT | wi00937420 | wi00937427 | Assign cycle is initiated if two agents assigns to WACD with the same IP and port in the Assign™s session ID. |
| IC:Common:Qscripts(IC Scripts) | wi00873199 | wi00886270 | OOB IC 7.23 script StatusDialog_ButtonClicked.qsc does not confirm the iControl object variable is set before attempting to modify the object |
| IC:Common:STT | wi00826343 | wi00832464 | STT server aborts, reporting multi-threading as cause. |
| IC:Common:STT | wi00867916 | wi00896850 | TS crashes on Update if fopen fails for vesp.imp |
| IC:Common:STT | wi00871885 | wi00903868 | Log level is reset after Vesp_Login command of STT |
| IC:Common:STT | wi00937420 | wi00937429 | Assign cycle is initiated if two agents assigns to WACD with the same IP and port in the Assign's session ID. |
| IC:Installer:SP Installer | wi00948428 | wi00952951 | The system throws an error while trying to configure Administrative Client on windows7 64-bit machine |
| IC:Installer:Win Install | wi00887911 | wi00903854 | 7.2 RTM installer(modified for win2k8 R2 support) is not copying required jar in \$AVAYA_IC72_HOME\sdk\design\java\lib |
| IC:Integration:IVR:VOX | wi00935820 | wi00935825 | HTTPVOx server crashes if start/end extension range which is not configured in CM, is used in HTTPVox configuration. |
| IC:Integration:Siebel | wi00907647 | wi00921282 | IC Native Siebel client requires wrap-up even after RONA of a call. |
| IC:Integration:Siebel:Agent Integration | wi00888868 | wi00957949 | In hybrid Siebel,chat is not displayed in the tasklist even upon accepting the contact. |
| IC:Other:Migration:Chat/Email Migration | wi00884452 | wi00894291 | Email Migration tool take Very long time to migrate data. |



| Component | Parent WI | Child WI | Summary of reported defect |
|---|------------|------------|--|
| IC:Other:Migration:Chat/Email Migration | wi00894293 | wi00894301 | IC 7.1.5 to IC 7.2.3 Email Data Migration tool does not consider the DST time offset |
| IC:Other:Documentation | wi00307651 | wi00691641 | Wrong file extension mentioned for required files in web-inf folder in icconnector directory of Dialog Designer Machine. |
| IC:Other:Documentation:ReleaseNotes | wi00844979 | wi00847144 | Configuration to Enable Channel Throttling for AAWC |
| IC:Other:Documentation:ReleaseNotes | wi00845906 | wi00847148 | The chat contacts are not getting routed to the agent when the 'ResetScriptIteration' set to value '0'(default value) |
| IC:Other:Documentation:ReleaseNotes | wi00844951 | wi00853125 | In IC 7.2 Siebel 8 Integration.pdf, adding AICD responsibility for profile should be applicable for Siebel 8.0.0.0 as well. |
| IC:Other:Documentation | wi00884707 | wi00889847 | Documentation detailing expected AAWC/SDK client behavior when primary ICEmail in cluster fails and secondary server becomes active |
| IC:Other:Documentation | wi00871965 | wi00889851 | Documentation on providing JVM options for ASIS |
| IC:Other:Documentation | wi00880592 | wi00892795 | Documentation needed for the maximum load handling for WSCallback server. |
| IC:Other:Documentation:ReleaseNotes | wi00891589 | wi00903843 | When a new voice queue is added in device tab, we need to update the TSQS server to get ADU entity in EC active pool. |
| IC:Other:Documentation | wi00905107 | wi00921271 | IC72 Installation and Configuration guide doesn't have the steps to configure Component Manager on separate machine |
| IC:Other:Documentation | wi00905086 | wi00921273 | IC72 Installation and configuration document needs to be corrected for the information under "Building the database schema for an additional Logical Resource" |



| Component | Parent WI | Child WI | Summary of reported defect |
|---|------------|------------|--|
| IC:Other:Documentation | wi00927777 | wi00941367 | Large number of templates takes time to load in the resources window of AAWC |
| IC:Other:Documentation:Releas eNotes | wi00956837 | wi00957955 | Poller Server Configuration Parameter "BlankWithAttachment" to allow emails with attachment, but no body. |
| IC:Other:Tools | wi00732436 | wi00817337 | When the Report Wizard application is customized to include a money field, the DCO throws errors when searching and updating the field/column. |
| IC:Other:Tools | wi00964847 | wi00964852 | Report Wizard Application does not get launched in Windows 7 64 bit agent machine. |
| IC:Other:Tools:LogCollector | wi00864923 | wi00889854 | LogCollectorSrv.exe crashes when user repeatedly clicks the Run button in the LogCollectorClient.exe. |
| IC:Other:WebLM | wi00951148 | wi00951377 | ICWebLM certificate expiration |
| IC:Server:Attribute | wi00885648 | wi00896289 | Attribute Server crashes when an exception is raised by the Network Layer |
| IC:Server:Directory | wi00871678 | wi00871684 | DS allowing Login to LDAP user with correct as well as empty password, even though non-empty password is configured for the user at LDAP Server |
| IC:Server:Directory | wi00897752 | wi00900017 | DS is processing DS.Login request coming over VESP port as well as SSL port. |
| IC:Server:Email | wi00836320 | wi00837622 | ForwardTo feature of ICEmail workflow handling is broken in 7.2.2 |
| IC:Server:Email | wi00841481 | wi00850317 | Email Template Administration slows down under 1000+ templates load |
| IC:Server:Email | wi00845445 | wi00862865 | Login into rich client and web agent to appear for an email enabled agent takes around 1 min 52 sec and sometime more than 2 min when RL manager is loaded with around 2500 templates. |



| Component | Parent WI | Child WI | Summary of reported defect |
|-----------------|------------|------------|--|
| IC:Server:Email | wi00872833 | wi00884231 | Counter mismanagement within ICEmail server causes server to stop sending ICEmail.analyze events because it believes no workflow servers are available. |
| IC:Server:Email | wi00887567 | wi00891554 | Email with a multi-line subject and TAB character causes java exception in WebAgent when performing a Customer History search |
| IC:Server:Email | wi00860965 | wi00898201 | currentstatus of the emails with invalid email address stuck at 60027 in DB and causing the smtp to send such emails again when the icemail server restarts. |
| IC:Server:Email | wi00905664 | wi00905675 | CCField Population flag added in wi00332483 causes loss of original toaddress in email MIME. |
| IC:Server:Email | wi00907680 | wi00924647 | When HTML footer template is added to outgoing HTML email, the footer to not automatically line wrap when received by the Customer. |
| IC:Server:Email | wi00927569 | wi00931569 | EDU should contain original TO and CC fields for incoming emails even if Poller changes it as per CCFieldPopulation logic. |
| IC:Server:Email | wi00286167 | wi00935818 | The emailcount field in EDU is not being updated when an email account is configured loop detect |
| IC:Server:Email | wi00939671 | wi00941378 | Japanese characters get replaced by arrows when AIC client sends Auto reply mail to a Customer mail account. |
| IC:Server:Email | wi00937615 | wi00943595 | Accurate messagestatus values are not getting inserted for "forward a copy", "SME", "REQ" & specialstatus for outbound email. |
| IC:Server:Email | wi00240785 | wi00945455 | Email Server does not attach a file as instructed by WorkFlow Server. |
| IC:Server:Email | wi00945424 | wi00946349 | Memory leak in cluster server when buddy is configured but not running |



| Component | Parent WI | Child WI | Summary of reported defect |
|---------------------------|------------|------------|--|
| IC:Server:Email | wi00967671 | wi00967676 | ICEmail is not deleting the email objects created in its memory when unable to send an email to the customer due to SMTP failure. |
| IC:Server:Email | wi00965320 | wi00965744 | In IC 7.2, Email resolved with status code without template are not recorded in qem_messagestatlog table |
| IC:Server:Email:poller | wi00839481 | wi00840365 | Emails with old or unknown tracking number not polled by poller server |
| IC:Server:Email:poller | wi00845448 | wi00845454 | IC Poller won't poll messages with an unknown MIME-Type (Non RFC emails) |
| IC:Server:Email:poller | wi00861318 | wi00861325 | Poller Loopdetect functionality does not work as designed for FROM and BOTH detection-types. |
| IC:Server:Email:poller | wi00877448 | wi00895056 | If loop detect type is set to BOTH, a loop is detected if the Loop_Detection_Count number of emails with invalid from but valid reply to are sent to IC, with same from address each time. The loop should not have been detected. |
| IC:Server:Email:poller | wi00937096 | wi00944112 | Miscalculation of string length in qwtranscoder library causes Poller Server to hang while converting UTF8 string to Japanese locale. |
| IC:Server:Email:poller | wi00949433 | wi00949926 | If we select loop detection & blank mail together then after specified loopcount blank email doesn't work. |
| IC:Server:Email:poller | wi00956357 | wi00956454 | Poller server goes down when the email filterlist is updated from the ICManager. |
| IC:Server:Email:RLManager | wi00936780 | wi00937304 | We can not associate a Template with Status in RL Manager and cannot be used at agent's end to Resolve any mail. |
| IC:Server:HttpConnector | wi00883817 | wi00883825 | Webchannel consumes 100% CPU on receiving requests from Loadbalancer. |
| IC:Server:HttpConnector | wi00877663 | wi00892496 | HttpVox.Transfer is failing if the call is attached to a SingleStepConference. |



| Component | Parent WI | Child WI | Summary of reported defect |
|--|------------|------------|--|
| IC:Server:HttpConnector | wi00323828 | wi00921292 | The memory leak has observed for HTTPConnector(webchannel process) server during longevity testing |
| IC:Server:HttpConnector | wi00925307 | wi00930035 | When sending https requests from IVR application to httpconnector server, if the packet size of the request is more than 500 bytes, then the IVR application receives a timeout. |
| IC:Server:HttpConnector | | wi00958015 | HTTPConnector (webchannel) server is crashing on update |
| IC:Server:ICM | wi00362600 | wi00853074 | Properties chat.transcript.email.footer and chat.transcript.email.header do not effect transcript email sent to customer |
| IC:Server:ICM:Website:Web Management IC:Website - Server Pages | wi00222946 | wi00857407 | Old Quintus HTML pages and images should not be installed |
| IC:Server:ICM:Website:Web Management IC:Website - Server Pages | wi00884630 | wi00889862 | When agent send a large size text resource to customer while chatting, chat transcript is not rendered/repaint properly on customer website in IE6/7/8. |
| IC:Server:ICM:Website:Web Management IC:Website - Server Pages | wi00942676 | wi00943585 | The public website pages are vulnerable to XSS attacks. |
| IC:Server:License Server | wi00898592 | wi00899029 | WebLM client libraries needs to be upgraded to 4.7.1 for Win2k8 support |
| IC:Server:ORB Server | wi00909802 | wi00921330 | Avaya Interaction Center ORB Service Buffer Overflow Vulnerability |
| IC:Server:ORB Server | | wi00948558 | On windows2k8R2 64-bit ORB Server doesn't starts |
| IC:Server:TSV5 | wi00732335 | wi00817286 | "Agent_key" is getting wrongly updated incase another IC Agent unknowingly uses the same station number to login in a free seating environment. |
| IC:Server:TSV5 | wi00844699 | wi00844721 | GRIP (4645)-IC SDK Client API has lost a simple but critical feature that was previously available with IC VTEL API. |



| Component | Parent WI | Child WI | Summary of reported defect |
|---------------------|------------|------------|--|
| IC:Server:TSV5 | wi00852672 | wi00853558 | TS needs to increase the size of qualifiers it gets from TSA, this impacts OA contacts delivered count |
| IC:Server:TSV5:ASAI | wi00828456 | wi00830580 | TS crash due to simultaneous access to VESP by the main and worker threads. |
| IC:Server:TSV5:ASAI | wi00828458 | wi00830645 | TS crashes while attempting to establish connection to LS which is down. |
| IC:Server:TSV5:ASAI | wi00852395 | wi00853554 | TS asai lower layer does not delete the call object, during a cut through scenario |
| IC:Server:TSV5:ASAI | wi00834765 | wi00858281 | TS Transfer waits for 500ms for the call merge to happen. |
| IC:Server:TSV5:ASAI | wi00866214 | wi00872757 | 7TS sends a TS.abandon event when Service Observers are involved. |
| IC:Server:TSV5:ASAI | wi00885338 | wi00889859 | Contact count is incremented to 2, when an agent makes an outbound call and the customer rejects the call. |
| IC:Server:TSV5:ASAI | wi00904616 | wi00907387 | TS continues to wait for value set in "wait time before merge call" even for calls which are blind transferred to Hunt group |
| IC:Server:TSV5:ASAI | wi00931252 | wi00934789 | "Switch to caller" message box disappears when recorders are involved in the Consult Transfer. |
| IC:Server:TSV5:ASAI | wi00937073 | wi00937878 | Agents gets a TS.Drop & TS.abandon, when multiple parties are involved and the recording happens using Singlestep Conference |
| IC:Server:TSV5:ASAI | wi00942737 | wi00942743 | CVLAN Client libraries used by TS needs to be upgraded to AES 6.1 on windows |
| IC:Server:WACD | wi00316400 | wi00856381 | With using Advocate, ADU is not updated when chat RONAs, which is causing problems in OA reporting |
| IC:Server:WACD | wi00872325 | wi00876333 | WACD Crashes and Emails do not get qualified and stays in "Waiting for Qualification" State and BA Agents do not receive Emails. |



| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------|------------|------------|---|
| IC:Server:WACD | wi00876424 | wi00880852 | Email queuetime is not getting updated in the EDU after RONA in case of advocate routing. |
| IC:Server:WACD | wi00867820 | wi00881853 | The old legacy logo "Quintus eContact" page is displayed on the WACD web page when an agent with a supervisor role tries to browse it from the agent machine. |
| IC:Server:WACD | wi00879968 | wi00884386 | WACD's plaid script "DefaultQueueScript" is not processing all PushURL's created in the "Set Chat Wait Treatment" workflow blocks of the wacd.qualifychat workflow. |
| IC:Server:WebConnector | wi00831267 | wi00844027 | Potential memory leak when the socket read operation throws an exception. |
| IC:Server:WF Server | wi00909782 | wi00925948 | Workflow exception causes counter mismanagement within ICEmail server which causes server to stop sending ICEmail.analyze events because it believes no workflow servers are available. |
| IC:Server:WF Server | wi00949734 | wi00951360 | DBNow function called thru WF returns an invalid date. |
| IC:Server:WSCB | wi00863146 | wi00864888 | WSCallback server stops (goes in sleep mode), if contact shedule time is of previous day. |
| IC:Server:WSCB | wi00863150 | wi00864961 | In WSCallback server changing value of "call queue size" at run time does not works as per expected |

Fixed MRs / WIs in IC 7.2.3 Service Pack

The following table lists the MRs/WIs that is fixed in Avaya IC 7.2.3 Service Pack.

| Component | Parent WI | Child WI | Summary of reported defect |
|-----------|------------|------------|---|
| IC:Admin | wi00385506 | wi00385787 | In IC Manager, the Workgroup Right-click menu on Agent tab stops displaying after IC Manager refresh is performed |



| Component | Parent WI | Child WI | Summary of reported defect |
|----------------------------|------------|------------|--|
| IC:Admin:ICManager | wi00407962 | wi00408203 | Email: Intermingling of Loop-Detection and Blank-email parameters skewing IC Manager settings. |
| IC:Admin:ICManager | wi00385509 | wi00385783 | IC Manager's "Multi Agent Edit" does not allow the Admin to set "Disable Login" to true on the Security tab if the ccq.w_offline_task table has more than zero records in it. |
| IC:Admin:ICManager | wi00462146 | wi00462255 | In the Group manager dialog window (Under IC Manager), the "cancel" and "closing" the dialog window functions not working as designed, behave same as the OK or APPLY buttons. |
| IC:Admin:ICManager | wi00462946 | wi00704290 | The HTTPVOX server require changes in the SC.xml, to allow the configuration for the extensions having leading zeros |
| IC:Advocate | wi00664760 | wi00689286 | Advocate Events are not reaching ECB Servers. |
| IC:Advocate:Advocate Admin | wi00386280 | wi00386835 | IC BA Admin tool user login gets an error if login is re-created with change in role. |
| IC:Advocate:Advocate Admin | wi00429552 | wi00429554 | Advocate Supervisor is sending incorrect data to ECB when profile is assigned to agent |
| IC:Advocate:WAA | wi00368746 | wi00369906 | In BA, Emails stuck in queue while transferring to another agent with message in logs 'contact detail object not found in the map' |
| IC:Client:AAWC | wi00330469 | wi00599408 | The voice.contactcount is getting incremented to 2 instead of 1 on the first incoming call as a result of which the agent is not able to go AutoIn in a particular scenario. |
| IC:Client:AAWC:UOM:Email | wi00384487 | wi00385769 | Attachments cannot be viewed using Find Email feature in IC 7.2.1 Web Client. |
| IC:Client:AAWC:UOM:Voice | wi00461447 | wi00462259 | SDK client is unable to complete/cancel a consult call if the agent/party you are transferring to, consults/blind transfer to another agent/extension. |



| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------------------|------------|------------|--|
| IC:Client:RichClient | wi00330469 | wi00599407 | The voice.contactcount is getting incremented to 2 instead of 1 on the first incoming call as a result of which the agent is not able to go AutoIn in a particular scenario. |
| IC:Client:RichClient | wi00376207 | wi00376360 | From ICAgentClient to the TS, there are two requests of TS.BusywithReason after the agent logs-in |
| IC:Client:RichClient:BlenderClient | wi00827463 | wi00827491 | After RONA voice channel does not become available for Rich Client though Agent state is available in automatic blending mode. |
| IC:Client:RichClient:BlenderClient | wi00823828 | wi00825257 | Avaya Agent Blender client continually updates ADU state when agent attempts to enter AUXWORK with email that is not deferred |
| IC:Client:RichClient:EDUViewer | wi00388513 | wi00409016 | An email with "%n" in its Message-ID header crashes the EDU Viewer which results in the IC agent thick client crash. |
| IC:Client:RichClient:Softphone | wi00223560 | wi00362096 | If client network connectivity is broken briefly then re-establish, invalid EDU object is established by blender client when vdu server assign is performed. |
| IC:Client:RichClient:Softphone | wi00411215 | wi00462262 | Reconnect button doesn't change back to Hold in Avaya Agent client in a specific scenario. |
| IC:Client:RichClient:Softphone | wi00411211 | wi00411335 | Reconnect button is not getting enabled in the scenario where the consult transfer to a VDN fails. |
| IC:Client:RichClient:UAD | wi00301960 | wi00408202 | UAD window does not display OK/Cancel button after agent selects Show Directory option from Media tab |
| IC:Client:RichClient:Vtel | wi00461447 | wi00774904 | VTel does not check initiator before forwarding conference event to Rich client. |
| IC:Client:RichClient:WCAgentClient | wi00296900 | wi00331116 | Web Agent is not properly forming HTML tags for URLs embedded in outgoing email. |



| Component | Parent WI | Child WI | Summary of reported defect |
|-------------------------------------|------------|------------|---|
| IC:Client:RichClient:WCAgent Client | wi00406919 | wi00410823 | During a WebAgent chat, if the agent double clicks anywhere in the Resource tree view pane, a highlighted resource is sent to the customer again and again. |
| IC:Client:RichClient:WCAgent Client | wi00384252 | wi00385793 | If an inbound email parsed by Webagent contains a blank "Content-type:" header the webagent throws a ParseException and places the body of the email in an attachment. The agent sees a blank email body in the Webagent's HTML Editor. |
| IC:Client:RichClient:WCAgent Client | wi00409991 | wi00410265 | WebAgent does not sends a broadcast message to remove typing status message from the customer side of chat when agent selects (but does not send) agent/global resource. |
| IC:Client:RichClient:WCAgent Client | wi00429170 | wi00462261 | Webagent fails to properly terminate HTML img tag's src attribute with a double quote when changing the image source from cid to file |
| IC:Client:RichClient:WrapupDialog | wi00379792 | wi00380365 | Multiple clicks of the "OK" button on Avaya Agent's WrapUpDialog causes 11023 error, results in agent hang. |
| IC:Client:SDK:WebServices | wi00554506 | wi00554520 | [GRIP#1645] SDK WebServices should use newly created lightweight DS.Authenticate API for authentication instead of DB-heavy DS.Login |
| IC:Client:SDK:WebServices | wi00817367 | wi00817375 | WebServices LookupSites() returns an array of Sites that includes deleted sites. |
| IC:Client:SDK:WebServices | wi00729833 | wi00732671 | WebServices LookupWorkgroups() returns an array of workgroups that includes deleted workgroups. |
| IC:Client:UOM | wi00382937 | wi00599414 | Workitem complete issuing a TS.Ready request even when agent is in INIT_AUX. |
| IC:Common:MTT | wi00554506 | wi00599602 | [GRIP#1645] MTT & STT changes for sending DS.Authenticate request over SSLas we need to authenticate both LDAP and non-LDAP users |
| IC:Common:MTT | wi00704222 | wi00704232 | MTT leaks memory with DS.Login over SSL |



| Component | Parent WI | Child WI | Summary of reported defect |
|-------------------------------------|------------|------------|---|
| IC:Common:STT | wi00700897 | wi00703974 | 'Bad magic value: Memory Corruption' error seen after a TS.GenericUpdate operation. |
| IC:Integration:IVR:VOX | wi00462946 | wi00554522 | Stations with leading zeros cannot be used as VP stations in HTTPVox. |
| IC:Integration:Siebel:AICD | wi00498443 | wi00554518 | Agent cannot complete conference/consultative transfer using the AICD toolbar when recorder is involved |
| IC:Integration:Siebel:AICD | wi00330469 | wi00599409 | The voice.contactcount is getting incremented to 2 instead of 1 on the first incoming call as a result of which the agent is not able to go AutoIn in a particular scenario. |
| IC:Other:Documentation:ReleaseNotes | | wi00369742 | Information related to "Display Name" feature needs to be updated |
| IC:Server:Directory | wi00480881 | wi00480897 | In IC7.2.2 Directory server not able to restart successfully, when DS is autostarted or IC is rebooted |
| IC:Server:Directory | wi00554506 | wi00599417 | [GRIP#1645] Directory Server to expose a new API (DS.Authenticate) which does not do all the DB queries done by DS.Login today |
| IC:Server:Email | wi00408066 | wi00408197 | IC 7.2.1 does not bounce emails to the configured bounce email address |
| IC:Server:Email | wi00461829 | wi00554529 | <p>The original inbound email to the AAWC cannot be fetched by "Find Email" using "From address" option, after a 'forward' operation.</p> <p>Note: After applying this fix, the inbound email will be visible using 'Find Email' after an interval that has been configured in the 'No User Interval' field of the email EDU server. (This behavior is as per the design of the product.)</p> |
| IC:Server:Email | wi00700909 | wi00704231 | ICEmail SMTP manager is not using the IC email account's "Return Address" while populating the outbound email's "From" header field. |



| Component | Parent WI | Child WI | Summary of reported defect |
|--|------------|------------|---|
| IC:Server:Email:poller | wi00379074 | wi00379266 | Poller server considers inbound email's entire "TO" address as case sensitive, result in copying "To" address into CC field (violates RFC 5321) |
| IC:Server:Email:poller | wi00382925 | wi00410822 | Poller server exit/crash for an email, containing "Reply-to" header with no value (email address). |
| IC:Server:Email:poller | wi00385016 | wi00385773 | Poller Server is not using "Reply-To" header when "From" address is invalid, results the email travel through IC without a "From" address. It restricts the Thick Client from wrapping the email contact. |
| IC:Server:Email:RLManager | wi00410012 | wi00410267 | Unable to save/modify email templates in IC (RL manager) with user account having roles of the "supervisor" and "editor" |
| IC:Server:ICM:Website:PDM | wi00380495 | wi00381559 | Website/ICM do not pick the correct default language for a tenant when the default language of that tenant is changed multiple times. |
| IC:Server:ICM:Website:WCSHaredBrowsing | wi00215963 | wi00462263 | In Autosync session, if the caller pushes a page to the agent, the agent pushes the same page back to the caller |
| IC:Server:ICM:Website:Web Management IC:Website - Server Pages | wi00697250 | wi00703968 | Extra space present in the chat typing status message. |
| IC:Server:License Server | wi00400224 | wi00407266 | Need to upgrade WebLM client library as the one currently used (4.5.4) by License Server (IC 7.2.1) crashes when multiple requests are sent to it simultaneously. |
| IC:Server:TSV5 | wi00461447 | wi00689352 | SDK client is unable to complete/cancel a consult call if the agent/party you are transferring to, consults/blind transfer to another agent/extension. |
| IC:Server:TSV5 | wi00330469 | wi00367706 | The voice.contactcount is getting incremented to 2 instead of 1 on the first incoming call as a result of which the agent is not able to go AutoIn in a particular scenario. |



| Component | Parent WI | Child WI | Summary of reported defect |
|--------------------------|------------|------------|---|
| IC:Server:TSV5:ASAI | wi00380802 | wi00385470 | Call not cleared if agent disconnects using hardphone when inside converse-on step in vector. |
| IC:Server:TSV5:ASAI | wi00350227 | wi00372793 | On Link down TS is still adding events to device queue. |
| IC:Server:WACD | wi00373724 | wi00374772 | WACD does not retry request a resource for Tasks which got stuck |
| IC:Server:WACD:AdminSite | wi00359484 | wi00822313 | Support IBM HTTP server 7.x in AIX-6.1 with IC-7.2 release |

Fixed MRs / WIs in IC 7.2.2 Service Pack

The following table lists the MRs/WIs that is fixed in Avaya IC 7.2.2 Service Pack.

| Component | Parent WI | Child WI | Summary of reported defect |
|-----------|------------|------------|--|
| AAWC | wi00313072 | wi00356783 | Emails are not delivered, when an agent is associated with a TS Link Group and if the voice channel is down |
| AAWC | wi00356203 | wi00362627 | In BA RM using ThinClient (ASIS), email contact is delivered to agent before voice contact, when agent |
| AAWC | wi00305089 | wi00362834 | If wacd is down and agent logs out, WACDRedundancy thread is not getting terminated |
| AAWC | wi00339742 | wi00362890 | IE 8.0 support issue. When a supervisor logs in and clicks 'Begin supervisor session', the agents under supervisor are not visible. |
| AAWC | wi00340287 | wi00362891 | IE 8.0 support issue - Spelling checker hangs on invoking. |
| AAWC | wi00340363 | wi00362892 | IE 8.0 support issue - When agent click 'Exit' button or close (X) button for exiting the thin agent application, the 'exit' window will not close on clicking 'yes' button on it. |
| AAWC | wi00366250 | wi00366405 | chat transfer/conference is not working in AAWC |
| AAWC | wi00333388 | wi00333390 | Need to add support for IE8 on AAWC |

| Component | Parent WI | Child WI | Summary of reported defect |
|----------------------------|------------|------------|--|
| AAWC:UOM:Chat | wi00294362 | wi00362893 | Message Mismatch "Can not Resolve text You Entered." |
| AAWC:UOM:Voice | wi00371696 | wi00372059 | Agents are unable to complete conference/consult-transfer a call having recorder using single step conference. |
| Admin:ICManager | wi00289524 | wi00363235 | VOX server with extension numbers in excess of 2^31 thawing error. |
| Admin:WF Designer | wi00225125 | wi00361981 | Workflow Designer toolbar displaying invalid entry and missing tooltip for valid one. |
| Advocate Admin | wi00352626 | wi00364200 | MxDBFx consumes lot of memory while associating profiles to agents or vise-versa |
| Advocate Resource Manager | wi00313072 | wi00355267 | Emails are not delivered, when an agent is associated with a TS Link Group and if the voice channel is down. |
| Advocate:Advocate Admin | wi00322179 | wi00364201 | When using Advocate Administrator to view or edit agents with a profile with large capability set errors are encountered on the desktop and seen in the dllhost log. |
| Client:RichClient | wi00356651 | wi00360854 | TransferComplete event conversion to OtherPartyTransfer causing dependent scripts to fail. |
| Client:RichClient:Qconsole | wi00370978 | wi00372215 | IC_Agent hangs in IC-siebel hybrid integration while doing repeatedly call transfers and switching between the Agent states (Ready/Aux). |
| Integration:IVR | wi00367691 | wi00367692 | IC should be able to monitor IVR extension using *v assignment |
| Integration:IVR:VOX | wi00356590 | wi00362334 | HttpVOX and VOX should support TS.TransferEX method |
| Integration:Siebel | wi00315272 | wi00356184 | The 'Ready/Not Ready' button gets disabled under a particular scenario (includes multiple AICDs) |
| Integration:Siebel | wi00305709 | wi00375044 | Disable 'Ready/NotReady' button if agent has not logged into any channel. |



| Component | Parent WI | Child WI | Summary of reported defect |
|--------------------------|------------|------------|--|
| Integration:Siebel:AICD | wi00297729 | wi00361036 | Call state is shown as wrapup in WIDL, when Aux is pressed before Switch Time ACW expires. |
| Integration:Siebel:ASIS | wi00333444 | wi00363740 | AICD does not deassign from TS in hard-phone logout scenario. |
| Integration:Siebel:ASIS | wi00226297 | wi00356144 | Needs to restart ASIS server after changing IC group properties |
| RichClient | wi00312607 | wi00356774 | For Chat and Callback functionality, if we wrap chat, call still remained at agent desktop. |
| RichClient | wi00361631 | wi00362376 | For ADU.SetOneValue (), both key-value is being set to "" (no value), Fixed in 7.1.4 but removed from mainline (7.2). |
| RichClient | wi00361631 | wi00366697 | For ADU.SetOneValue (), both key-value is being set to "" (no value), Fixed in 7.1.4 but removed from mainline (7.2). |
| RichClient:BlenderClient | wi00313072 | wi00356578 | Emails are not delivered,when an agent is associated with a TS Link Group and if the voice channel is down |
| RichClient:BlenderClient | wi00296914 | wi00361880 | Aux reason codes are not propagating correctly to switch in Manual blending mode. |
| RichClient:BlenderClient | wi00355315 | wi00362091 | From ICAgentClient to the TS, there are multiple requests of TS.BusywithReason while making the agent from ready to aux |
| RichClient:Qconsole | wi00370978 | wi00371008 | IC_Agent hangs in IC-siebel hybrid integration while doing repeatedly call transfers and switching between the Agent states (Ready/Aux). |
| RichClient:UAD | wi00312961 | wi00362090 | After modifying a UAD qscript, the contact list tab in the UAD does not display the media icons |
| RichClient:WCAgentClient | wi00225774 | wi00362852 | Switching between to reply windows of two different customers does not change the edu viewer window. |

| Component | Parent WI | Child WI | Summary of reported defect |
|---|------------|------------|--|
| RichClient:WCAgentClient | wi00340957 | wi00362888 | Every time supervisor clicks on customer name to monitor chat, website starts from blank & supervisor cannot see the web page on which agent & customer is. |
| Server:Email | wi00310282 | wi00361879 | %recipientname% used in header/footer shows agent's name |
| Server:Email | wi00339440 | wi00362855 | ICEmail server should raise High Alarm and retry ICMail.Analysis when it does not receive disposition in Analyzed call |
| Server:HttpConnector | wi00376008 | wi00376015 | SSL Enable HTTP Connector Server. |
| Server:ICM | wi00343271 | wi00368815 | While agent is typing, customer also starts typing simultaneously and at this time when agent press enter/Send button, the status message that 'Agent1 is typing' is not getting removed on customer side. |
| Server:ICM | wi00352657 | wi00352657 | Chat typing status is not displayed on the agent side if original customer in joinus disconnects the chat |
| Server:ICM:Website:Web Management IC:Website - Server Pages | wi00214344 | wi00369880 | WebACD should give some indication about invalid email requalification attempts, maybe throw an alarm |
| Server:Notification | wi00301554 | wi00362092 | Version of QuikSoft's emsmtp.dll shipped with IC reports error in Windows Application Event |
| Server:TSV5 | wi00362178 | wi00362180 | UUID & Alias of the TS creating the container should be added in EDU so that it is available for IVR application |
| Server:TSV5:ASAI | wi00352972 | wi00360835 | Oubound call with Cut-Through does not updates UCID on EDU. |
| Server:TSV5:ASAI | wi00352354 | wi00360857 | A two step blind transfer to a VDN introduces a delay of 4 to 5 seconds. |
| Server:TSV5:ASAI | wi00350236 | wi00362160 | Miss-spelt parameter for call_record_time_to_live causing the value to be not read on TS initialization. |
| Server:TSV5:ASAI | wi00368222 | wi00368606 | Outbound cut-through call with single-step-conference (recorder) disconnects when put on hold. |



| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------|------------|------------|--|
| Server:TSV5:ASAI | wi00373713 | wi00374124 | A phantom call is delivered to agent after completing a blind/consult transfer. |
| Server:TSV5:Aspect | wi00359387 | wi00359463 | Aspect Calls are getting dropped during the second log on |
| Server:WACD | wi00224930 | wi00366262 | When the WebACD is restarted the queue scripts for recreated tasks restart from iteration |
| Server:WACD | wi00338367 | wi00349530 | WACD infinitely keeps on requesting the WAA to qualify a task when no agent is logged into IC which is impacting the WkCancelledCnt in OA reporting. |
| Server:WACD | wi00338372 | wi00349521 | Chat Transfer to queue that fails due to no agent logged-in is increasing wktransferredcnt because of code 102 terminate. |
| Server:WACD:FTSE | wi00355918 | wi00355920 | Avaya FTSE is not re-indexing existing FAQ documents that are updated via WRU |
| Tools:CommandScripter | wi00355216 | wi00358915 | 7.2 Avaya Agent Script Debugger does not work |
| Workflows:Prompter | wi00351961 | wi00362329 | The prompter block when clicked on page space is not opening the DHTML editor window. |
| Workflows:VoiceRouting | wi00225286 | wi00362157 | Virtual Queue Transfer selects the wrong Wait Treatment |

Fixed MRs / WIs in IC 7.2.1 Service Pack

The following table lists the MRs/WIs that is fixed in Avaya IC 7.2.1 Service Pack.

| Component | Key | Summary of reported defect |
|-----------|------------|--|
| AAWC | wi00331598 | Pure HTML Email is not displayed in HTML, when Agents Read incoming emails |
| AAWC | wi00331601 | Only Display Name is displayed and email address is not displayed in Email Composition Body when Reply/ReplyAll/Forward is done in Thinclient. |

| Component | Key | Summary of reported defect |
|---------------------------|------------|--|
| AAWC | wi00331596 | Need to remove getTrackingHistory API from EmailMediaInteraction class since it is not used anywhere but still consumes loads of memory |
| AAWC | wi00332400 | Problem in calling an agent using UAD in thinclient when agent's first name ends with a space |
| AAWC | wi00333105 | TS.GetPhoneInfo is not always successful and fails the login process for the agent. |
| AAWC | wi00331635 | Need to add support for chat typing status in WebClient |
| AAWC | wi00333394 | Localization issue - Dynamically re-adjust sizes of the Collaboration Dialog so longer strings would not be truncated |
| Advocate Resource Manager | wi00329572 | OA reports for Advocate Service Class shows incorrect OWT (Oldest Wait Time) value. |
| Advocate Resource Manager | wi00332586 | Advocate routes the calls to parking device even though the agent is not logged-in into voice channel. |
| Alarm Server | wi00340632 | Grip request - For SNMP traps set priority of alarms so we will have 3 OID i.e. critical, Major, Minor. |
| Cisco TS | wi00313573 | Cisco TS does not ask for feature license from license server. This issue is been fixed in Cisco TS. Note that now Cisco TS will consume Ericsson TS licenses. |
| Config Accelerator | wi00354341 | Wrong domain failover order set for Site2_Voice2_helper domain in vesp.imp file for Scenario 8. |
| ConfigAccelerator | wi00281558 | Database panel for Oracle database should not show plain password. |
| ConfigAccelerator | wi00284781 | For oracle server there must be two password options for ccq & repository databases |



| Component | Key | Summary of reported defect |
|-------------------|------------|---|
| ConfigAccelerator | wi00310594 | Email Cluster name changes from CA tool don't get reflected in "Default Email Cluster" field under WACD server. |
| ConfigAccelerator | wi00330696 | Localization support for Russian language is not available in CA |
| ConfigAccelerator | wi00330722 | In Email Account panel, on selecting/de-selecting "Use TLS" checkBox, the "Incoming port" value should be changed accordingly. |
| ConfigAccelerator | wi00330732 | Banner information is scrolled down initially on 'IC Configuration' panel. |
| ConfigAccelerator | wi00330745 | Do not show 'Email Account Creation' panel for voice only scenarios |
| ConfigAccelerator | wi00332460 | User must be allowed to select multiple domains at a single shot under Failover order field in Domains option. |
| HttpVox | wi00345463 | HttpVOX and IC Manager supports extension Range till 10 digits, needs to be increased in 7.2. |
| ICEmail Server | wi00332483 | CC address is populated erroneously when the Email Account configuration in IC Manager is such that the General tab's name and domain differs from the Server tab's logon account and POP3 fields |
| ICEmail Server | wi00332596 | On Email reply customer name is not being sent. |
| ICEmail Server | wi00332601 | Resolving email by status does not wrap email on solaris |
| ICEmail Server | wi00332602 | Email Server:Over the load 1200 emails per hour,the Email server was generating alarm as Unable to Force Terminate EDU id. |
| ICEmail Server | wi00336880 | GRIP #717 - Ability to enter E-Mail display name in IC Manager |
| ICEmail Server | wi00337837 | Time in templates is in 24 hour format even though system time is set to 12 hour format |

| Component | Key | Summary of reported defect |
|----------------|------------|--|
| ICEmail Server | wi00344595 | Web Admin pages should allow you to cancel task with a specified status, rather than only being able to cancel them without any type of reason1 |
| ICM | wi00330413 | Need to add support for chat typing status in HTML Chat Client and WebAgent |
| ICM | wi00332080 | Chat typing status message is displayed both in Customer and Agent's chat windows, if any of the key (all keys present in the keyboard) is being pressed on the chat text area of either side. |
| ICM | wi00332101 | If customer sends the chat texts by clicking the Send Message button, the chat typing status message should get removed on the agent's chat window. |
| ICM | wi00332402 | Customer wishes that chat timestamp format should be configurable |
| ICM | wi00342914 | The chat type status is not removed when the customer disconnects the chat either by logging off or by closing the public web page. |
| ICM | wi00342923 | During a chat between a customer and a thin agent, when agent is inserting a resource, the chat type status is not displaying on the customer side. |
| ICM | wi00342928 | When 'SpellCheckOnSend' property is set 'yes' and agent types something in the chat type area and click 'Send' button , the spell checking window opens up. Without waiting for the TypingStatusThreshold time to expire, the status message is removed. |
| ICM | wi00343275 | While agent1 is typing some text in chat area, agent1 transfers the chat contact to another agent, agent2, the chat type status message 'agent is typing' is not getting removed from agent2 and customer even after agent1 wraps the contact |



| Component | Key | Summary of reported defect |
|---|------------|--|
| ICM | wi00343749 | When the chat type status is disabled from agent side, the chat status message is not displaying on both customer side and agent side. |
| ICM:Website:WCSHaredBrowsing | wi00333392 | Pages are pushed in display frame in a certain chat conference scenario despite java plugin being enabled in browser |
| ICM:Website:Web Management IC:Website - Server Pages | wi00341211 | HTML Chat Client's TextArea remains disabled in Chrome and Safari browsers |
| ICM:Website:Web Management IC:Website - Server Pages | wi00332415 | Remove the limitation of JoinUS Handle cannot be more than 25 chars |
| ICManager | wi00331113 | The agent state is not reflected in ICMManager when the agent selects to go to Aux while on active call/email/chat. |
| ICManager | wi00336894 | Unable to add extensions range in VRU tab of VOX server |
| License Server | wi00337230 | License Server raises an Alarm "License File Expired" for the obvious license file with permanent expiry Date |
| Localization | wi00332432 | Grip Request #939 - Enhancement request to change the columns width, size and location on the chat tasklist. |
| Localization | wi00334128 | Localization wi in reference with wi00305400 - Correction needed in the parameter name in OOTB def file for SendDTMF command. |
| Localization | wi00346373 | Need translated strings for the chat typing feature |
| Patch Installer | wi00344937 | Siebel side Installer currently does not support integration with Siebel 7.8 |
| Poller Server | wi00352030 | Same emails are re-pollled and requeued when there are connectivity issues with Exchange server. |



| Component | Key | Summary of reported defect |
|--------------------------------|------------|---|
| Poller Server | wi00343315 | Emails with attachment and no body should not be treated as blank email Note: Requires configuration parameter 'BlankWithAttachment' |
| Poller Server | wi00313222 | Poller Stops polling mail account if there is connectivity issues with Exchange server. |
| Report Server | wi00332489 | ReportServer creates .bad files which contain no error when original edu for hudedu is no longer in dustore. No such Vdu error is in log |
| RichClient | wi00332454 | BusyReason not correct when going to Aux in manual mode |
| RichClient | wi00332593 | If agent logs out of softphone but does not exit IC and then logs back in to Softphone, agent is placed in auto in rather than AUX. |
| RichClient | wi00332594 | Thick client doesnt update Agent's status control for channel state ,while declining an email/chat in manual blending mode |
| RichClient | wi00332452 | Grip Request #939 - Enhancement request to change the columns width, size and location on the chat tasklist. |
| RichClient | wi00331639 | CreateObject for "AvayaAgent.Application" is not returning current instance of running Rich Client Application class. |
| RichClient | wi00330780 | WebAgent replaces Leading/Trailing spaces found on agent supplied "to email address" Field with a tilda (0x7e '~') while using "Forward Original" option. |
| RichClient | wi00332493 | WebAgent is unable to view attachments having same file name individually |
| RichClient | wi00330776 | WebAgent crashes when image with very long URL is embedded in an email. |
| RichClient:ActiveContactViewer | wi00347017 | IC 7.2 Thick client - Active Contact Viewer does not work for Email channel. |



| Component | Key | Summary of reported defect |
|--------------------------|------------|---|
| RichClient:Qconsole | wi00332529 | On Avaya Web Agent, "Error 61704. Internal Application Error(QWApp.StartApp)" message is displayed when the system date is changed. |
| RichClient:Qconsole | wi00342615 | Citrix client users get error "client already running" while running IC Agent client application |
| RichClient:WCAgentClient | wi00331107 | WebAgent is displaying only 2nd set of HTML tag, for Emails having multiple <HTML>, <HEAD>, and <BODY> tags |
| RichClient:WCAgentClient | wi00331115 | HTML forms data embedded within an HTML email is not displayed properly in WebAgent |
| RichClient:WCAgentClient | wi00331116 | Web Agent is not properly forming HTML tags for URLs embedded in outgoing email. |
| RichClient:WCAgentClient | wi00331118 | In WebAgent, when switching from plain text to HTML, the editor does not use the new 7.1.5 default font properties from the application.properties file when determining font, size, and color. |
| RichClient:WCAgentClient | wi00331119 | Webagent client should be able to pick up the default font set in the application.properties file for its plain text resources instead of using the system default font(Times New Roman). |
| RichClient:WCAgentClient | wi00332494 | Chats get stuck when supervisor keeps switching between agents |
| RichClient:WCAgentClient | wi00332613 | Erasing text while composing email resets the font to system default font and not the default font mentioned in the application.properties file |
| RichClient:WCAgentClient | wi00336058 | Double clicking an email's task in the Thick Client's TaskList control will cause existing email draft to be erased from GUI |
| RichClient:WCAgentClient | wi00336065 | HTML Editor Replacement in WebAgent |
| RichClient:WCAgentClient | wi00336881 | GRIP #717 - Ability to enter E-Mail display name in IC Manager |

| Component | Key | Summary of reported defect |
|--------------------------|------------|--|
| RichClient:WCAgentClient | wi00346739 | When sending an outbound email using a WebAgent with a shared HomeDir, screenshots pasted from the clipboard are not encoded and sent with the email. |
| RichClient:WCAgentClient | wi00347010 | IC 7.2 Webagent – Status resolution window with Status takes too long or freezes when either "Resolve or Cancel" is clicked. |
| SDK | wi00332399 | UOM throws exceptions while attempting to change the channel state for agent login and logout |
| SDK:WebServices | wi00338342 | LookUpAgentIds returns agent list that includes deleted agent. |
| Siebel | wi00332576 | Agent cannot defer existing email after attending an inbound/outbound call. |
| Siebel | wi00332580 | After PR1495, agent have to logout of hardphone manually every time. Enhancement request to allow the agents to login back through Siebel browser even if they are already logged-into the hard phone and have the toolbar in synch with the hard |
| Siebel | wi00332582 | Agents are logged out of their phones if Siebel is shutdown either on purpose or due to a system error. |
| Siebel | wi00341873 | IC 7.2.1 Support for Siebel 7.8.2.13 |
| Siebel:AICD | wi00332578 | Correction needed in the parameter name in OOTB def file for SendDTMF command. |
| Siebel:ASIS | wi00334240 | Switch time ACW functionality is not working with IC-Siebel |
| SIP TS | wi00225943 | Failed to register route point if using sips protocol for outbound proxy in SIP TS configuration. This issue is been fixed in SIP TS which will support TLS now. |
| TSA | wi00329570 | TSA to employ TS.RouteEx and TS.UnparkEx methods to handle the extradata. |

| Component | Key | Summary of reported defect |
|------------|------------|---|
| TSQS | wi00355165 | When a call is placed in queue for 15 or lesser seconds, offered to the agent, and then is abandoned, 'Abandonmiss' has a negative value. |
| TSV5 | wi00332536 | Need a automatic recovery mechanism of failed MSHS connection when ping times out or receipt of ServerFailed Connection |
| TSV5 | wi00332581 | TS is unable to suppress the drop event caused by a recorder in case of single/multiple transfer/conference scenarios |
| TSV5 | wi00333020 | TS should always move the data from the 34th byte to the extdata field in the EDU and also in the TS.IncomingCall event Note: Refer to Section UI Container Information |
| TSV5:Cisco | wi00355167 | When a conference to a route point is made in a Rich agent, the "Complete" button is enabled when the call rings in the other agent |
| UOM | wi00332444 | In Advocate environment, RONA occurs on direct call causing impact on call-center operation and incorrect reports |
| WAA | wi00332464 | Exception requeue option for preferred agent is not working Refer to Section Workflows |
| WAA | wi00332475 | contactcount and specificcount are not being decremented as expected when contacts go through the preferred agent block in the qualification flow and then are routed to the exception flow |
| WACD | wi00332478 | With using Advocate, ADU is not updated when chat RONAs, which is causing problems in OA reporting |
| WACD | wi00332480 | Talk Time, Wrap Time, and Deferred Time columns in the WACD Page under Active Task list are always 00:00:00. |

| Component | Key | Summary of reported defect |
|--------------------|------------|---|
| WACD | wi00332603 | Web Admin pages should allow you to cancel task with a specified status, rather than only being able to cancel them without any type of reason. |
| WACD | wi00332604 | WACD should query the DS for "default Email cluster" value, during generic update |
| WF Server | wi00329010 | Enhance the workflow server to enable large number of workflow channel assignments. |
| Workflows:Advocate | wi00347999 | Advocate workflows are not delivering the transferred contact in correct order to the agent for modified contact arrival time. |



Known Issues and Resolutions

This section provides the known issues or limitations that pertain to the IC 7.2.4 release, in addition to the IC 7.2 release.

The following section describes these issues and their workaround, wherever possible.

Known issues in Avaya IC 7.2.4

The following table lists the known issues in the Service Pack IC 7.2.4.

| Component | Parent WI | Key | Summary |
|----------------------------|------------|-----|---|
| IC:Advocate:Advocate Admin | wi00952710 | | In Windows 7 64 bit machine, if Advocate Admin client is installed, Advocate Supervisor cannot be logged in if the user is logged into the machine as a domain user with administrative privileges. |

| Component | Parent WI | Key | Summary |
|----------------------|------------|------------|--|
| IC:Admin:Config Tool | wi00948314 | wi00954479 | <p>Config tool does not reflect changes on "magnus.conf",when IC web management deployed on solaris WorkAround:</p> <ol style="list-style-type: none"> 1. Stop the webserver. 2. Go to the Webserver's home directory. 3. Navigate to the "config" directory for the current server instance name. For example, /opt/SUNWwbsvr/https-<servername>/config. 4. Open the file named "magnus.conf" in editor e.g. Vi editor. 5. Goto the "Configure Datawake Sensor plugin" section. 6. Comment the lines in the snippet as below: <pre><Snippet> # # Configure Datawake Sensor plugin (only turn this on if you want DW functionality) #Init fn="load-modules" shlib="/opt/Avaya/IC72/lib/libipla netdatasensor.so" funcs="DWSensorInit,DWSensorNameTr ans" #Init fn="DWSensorInit" logFile="/opt/Avaya/IC72/logs/dw.l og" datawakeServer= "<Datawake_Server_IP>" datawakePort="2300" datawakeLoginID="AS" datawakePassword="AS" filterName="main" domain="<domain_name>" serverName="<Server_Name>" </Snippet></pre> |
| IC:Admin:ICManager | wi00934894 | wi00939616 | <p>IC Manager deletes wrong email account Note: Currently do not perform sorting on account list in IC Manager before selecting an account for deletion</p> |

| Component | Parent WI | Key | Summary |
|-------------------------------|------------|------------|---|
| IC:Admin:ICManager | wi00964376 | | Users with Supervisor + operator role when logged into Ic Manager do not have Services Menu displayed. |
| IC:Admin:WF Designer | | wi00950192 | The prompter block when clicked on page space is not opening the DHTML editor window on Windows7. |
| IC:Client:RichClient:WebAgent | wi00941899 | | Inline image and attachment which is part of HTML Header & HTML Footer sent from webagent (RC) in HTML mode is not getting displayed at customer side in html mode. |
| IC:Server:ICM | wi00954382 | | When customer profile contains more number of attributes chat not able to escalate from Customer Website |
| RichClient:WCAgentClient | wi00954456 | wi00956350 | <p>When an agent copies and pastes text containing quotes (") from a word document to webagent and sends the email and when the customer receives the same, the quotes are displayed as "?"</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. The agent should select the encoding as "UTF-8" before sending the email for the above copy/paste scenario. 2. Alternately Set the property email.charsetdetection.converttoutf8 = "true" in Application.property file. Note: Setting this would convert all the outbound emails to UTF-8. |
| IC:Server:ICM | wi00903247 | wi00970020 | <p>OK is enabled as emoticon shortcut in chat channel. Whenever the customer/agent types OK in chat it is converted as a "shake hand emoticon icon".</p> <p>Workaround:</p> <p>In the <AVAYA-IC72-HOME>/comp/icm/emoticons.properties file, change the following line :</p> <p>OK=thankyou.gif to \:U=thankyou.gif</p> |



| Component | Parent WI | Key | Summary |
|----------------|------------|------------|---|
| IC:Client:AAWC | wi00906409 | wi00969507 | <p>W8 shortcut invokes Spellcheck instead of emoticon in AAWC initially.</p> <p>Workaround: In the <AVAYA-IC72-HOME>/comp/icm/emoticons.properties file, change the following line :</p> <p>\\:W8=holdon.gif to \\:8=holdon.gif</p> |

Known issues in Avaya IC 7.2.3

The following table lists the known issues in the Service Pack IC 7.2.3.

| Component | Parent WI | Key | Summary |
|----------------------------|------------|------------|--|
| Admin:ICManager | wi00728546 | wi00817330 | <p>In ICmanager, for any email account the Blank email template browse button is active when the window is opened for the first time even when Blank Template Detection parameter is set to FALSE.</p> <p>On switching the Blank Template Detection check box value the browse button appears to work correctly.</p> |
| IC:Admin:ICManager | NA | wi00351565 | Text box in Routing Hints allow invalid queue id's to be added. |
| IC:Admin:ICManager | wi00227045 | wi00411057 | In IC-Manager, loading of devices should be deferred until the Device tab is accessed. ICManager might become slow or unresponsive during the loading of this information at startup. |
| IC:Advocate:Advocate Admin | wi00251767 | wi00817456 | If multiple sessions for IC Advocate administrator client are opened on the same machine the application freezes or crashes. |
| IC:Advocate:TSA | NA | wi00225787 | With Advocate, contacts which are qualified, but not answered (abandoned), fail to create a routingevent record for routingattempt |

| Component | Parent WI | Key | Summary |
|------------------------------------|------------|------------|---|
| IC:Client:AAWC | wi00734269 | wi00817280 | In AAWC- Supervisor is not able to see inline images for monitored agent. |
| IC:Client:AAWC | NA | wi00410466 | During active chat with customer on customer website & IC agent on thin client if javaappbridge server experiences any failure/outage, IC agent goes in hang state. Agents can't logout neither they can release active task. Agents can't take any action on thin client. Workaround: To exit it is required to kill the processes from task manager. |
| IC:Client:RichClient:BlenderClient | NA | wi00836495 | AuxWorkonLogin Property not working as expected for Rich Client. i.e. AuxWorkon Login property is set to "Yes" in IC Manager.Now Login an agent enabled with only Voice channel as Rich client.It is observed that the agent head is in aux state while the Voice channel is in available state.Here the Voice channel should be in aux state. It works fine for Email and Chat channel individually or all the three channels together.This issue is seen with Voice channel. Now set AuxWork on Login property to "No" in IC Manager.Login an agent enabled with only Voice channel as Rich client.It is observed that agent head is in aux and Voice channel is in available state ,which ideally should not happen.If we login an agent which is enabled for all the three channels,all the channels along with agent head are in aux state ,which again is not expected.If an agent enabled with email or chat channel solely is logged in,the particular channel is seen in aux state along with the agent head too. |
| IC:Client:RichClient:WCAgentClient | NA | wi00351443 | "Switch to Chat Mode" & "Switch to Chat & Phone Mode" buttons on WebAgent are enabled & on Clicking on them it switches to chat & phone mode though voice & chat channels are not configured for this agent. |
| IC:Client:RichClient:WCAgentClient | NA | wi00313479 | Webagent is unable to display Gautami font for HTML email3 |

| Component | Parent WI | Key | Summary |
|------------------------------------|------------|------------|---|
| IC:Client:RichClient:WCAgentClient | NA | wi00697408 | Agent logs into the rich client and accepts a chat session escalated by the customer. Agent selects a resource, right clicks and selects 'say'. Quickly after that the agent clicks in the white space in the resource tree viewpane. The same resource is sent twice to the customer at the other end. |
| IC:Client:RichClient:WCAgentClient | wi00225558 | wi00332490 | The "Contact -> Print" menu option in AVAYA Web Agent is disabled for newly composed emails. |
| IC:Other:Documentation | NA | wi00300244 | The property "chat.attributes.cookiesEnabled" should not be shown in the Tenant Chat properties as applet chat is not supported in IC 7.1 |
| IC:Other:Tools:LogCollector | NA | wi00824860 | The Log Collector Assigns one time when Run button is hit for zipping the log files and de-assigns when the client exits. Also all the logs are zipped on the server side, even when the request from client is sent only for zipping logs for a specific server. Moreover they are not deleted as deassign is not recieved from client side. not even on exiting the client when the deassign is eventually sent. |
| IC:Other:Tools:LogCollector | NA | wi00824880 | Log Collector reads vesp and tries to pick logs from all the existing servers even if Logcollectorsrv.exe is not present on the server side For example, If the Web connector server is configured and vesp has its entry, Logcollector populates Webconnectors IP in the list of servers, from where you can pick up the logs. Although as the server does not have log collector server running on it there are no logs sent back. |
| IC:Server | NA | wi00836371 | Selecting Enable SIP for TSA causes memory leak in TSA server under normal load |



| Component | Parent WI | Key | Summary |
|---------------------|------------|------------|---|
| IC:Server:ICM | NA | wi00231599 | In Multi-tenant administration, a property value change in a non-Roman language such as Chinese or Korean requires a restart of ICM service to show the new value properly in that language. Note: This WI Will Not be Fixed due to restriction at the architecture level. |
| IC:Server:TSV5:ASAI | wi00734638 | wi00830593 | When Link between TS and AES goes down TS also goes down irrespective of the value of AbortOnLinkDown flag. Ideally when AbortOnLinkDown is set to TRUE TS should go down as soon as the Link goes down and should remain UP when AbortOnLinkDown is set to FALSE and Link goes down, but TS is going down in both the cases. |

Known issues in Avaya IC 7.2.2

The following table lists the known issues in the Service Pack IC 7.2.2.

| Component | Parent WI | Key | Summary |
|--------------------------|------------|------------|--|
| AAWC | wi00320591 | wi00320589 | Avaya thin client – SIP: conference, transfer, consult button gets disabled when we delay to answer the call from hard phone. |
| Server:TSV5:SIPTS | wi00357127 | wi00373009 | AUX Agent is made available, if the agent is consulted and the consultation is cancelled. Note: This Issue is Not Reproducible |
| Server:TSV5:SIPTS | wi00361354 | wi00373011 | AUX Agent is made available, if the customer call is transferred to an AUX agent and the agent answers the call |
| Client:AAWC | wi00353962 | wi00373065 | Consult button is never enabled for chat & callback request. |
| RichClient:Email | wi00355558 | wi00368821 | Contents of the html control like list box are not displayed in preview mode |
| RichClient:WCAgentClient | wi00356216 | wi00368816 | Customer email address which is seen as a tag in Reply mode, is not visible when customer views the Agent reply |



| Component | Parent WI | Key | Summary |
|---------------------------|------------|------------|--|
| Server:WACD:AdminSite | wi00312895 | wi00362840 | Customer name of customer created through MultiTenancy Administration is not getting displayed as display name before email address if email is sent from the customer to IC. |
| Client:AAWC | wi00357130 | wi00372091 | Dialpad does not work. |
| Installer:Patch Installer | | wi00343405 | During uninstallation of 7.2.1 uninstaller on Solaris shows the error executing postinstall script. |
| ICEmail Server | | wi00308611 | Emails with inline image and no body should not be treated as blank email. |
| TSV5 | | wi00226519 | Events Lock timer is not being checked for expiration until new switch event is received on the locked monitor. Workaround: Main route point should not be part of the device list and VDN should be monitored. |
| Server:TSV5:SIPTS | wi00225943 | wi00361925 | Failed to register route point if using sips protocol for outbound proxy in SIP TS configuration. |
| RichClient:WCAgentClient | wi00352390 | wi00363723 | Fonttype, fontsize, and formatting, such as Bold, Italic, Underline, Color changes to default, on deleting text in the email composition. |
| ICEmail Server | wi00295328 | wi00332600 | From Address is not displayed at agent side when an email is send with a from address formatted like: scotiabankmexico@scotiabank.com.mx <scotiabankmexico@scotiabank.com.mx> |
| RLManager | | wi00339695 | Help is not working in RL manager. |
| Client:AAWC | wi00360903 | wi00372090 | Hold button is disabled when the agent performs consult operation. |
| Client:AAWC | wi00353965 | wi00372018 | IC agent can send voice contact but can not send chat to another agent in Chat & callback request. |
| RichClient | | wi00340961 | IC chat crashes after enabling default visibility during monitoring chat sessions. |



| Component | Parent WI | Key | Summary |
|----------------------|------------|------------|---|
| Server:TSV5:ASAI | wi00361352 | wi00372089 | IC TTS agent cannot transfer a call to IC SIP agent. Workaround: Make sure Traditional agent use SigleStepTransfer and not TwoSteptransfer. |
| IC Common STT | | wi00224353 | If agent pc goes out of network, it does not recover unless voice calls are completed manually. Workaround: As soon as the network between the Agent desktop application and IC servers goes down, there will be a message box popping up on the agent desktop saying the connection to the core service failed. When this happens, the agent should manually logout of the hard phone, making the agent unavailable for any calls. This will make the TS to logout the agent internally and update the routing engine accordingly. When the network comes back up, the agent can restart the agent application which will log the agent into the switch and the system will work without any problem. |
| RichClient:Softphone | wi00320606 | wi00320603 | If an agent drops from the conference via Hard phone, the call is still active on Rich Client GUI. |
| Advocate:WAA | wi00368746 | wi00369906 | In BA, Emails stuck in queue while transferring to another agent with message in logs 'contact detail object not found in the map' Workaround: 1. Open the workflow project "Advocate.prj". 2. Open the flow "transfertoagent_adv". 3) Add a Delay block of 50ms before the block "Post Qualification". 4) Compile the workflow. 5) Restart the workflow servers. |
| ICM | | wi00231599 | In Multi-tenant administration, a property value change in a non-Roman language such as Chinese or Korean requires a restart of ICM service to show the new value properly in that language. |

| Component | Parent WI | Key | Summary |
|---------------------------|------------|------------|--|
| RichClient:WCAgentClient | NA | wi00385503 | In the webagent when the agent composes a new email, either by copy & past a text template or by typing the text manually,for the following scenarios the text of the email is not displayed properly: |
| RichClient:WCAgentClient | wi00357750 | wi00373005 | Line spaces in an email composed in HTML mode are getting removed when received at customer side. |
| WACD Server | | wi00225285 | Network or DB problems can cause WACD and Email server to get out-of-sync with DB. This can lead to old emails coming back into system. |
| RichClient:WCAgentClient | wi00355650 | wi00373063 | Non English email templates when used in a HTML email composition on WebAgent, the characters are displayed as? |
| Installer:Patch Installer | | wi00343706 | On AIX sp installer is not removing all folders after uninstalling service pack |
| Server:TSV5:ASAI | wi00350227 | wi00372793 | On Link down TS is still adding events to device queue. |
| ICEmail Server | | wi00280061 | On mapping new poller cluster to an email cluster, email server does not fetch email from that poller server. Workaround: Email servers part of the mapped email cluster need to be restarted. |
| Admin:ICManager | wi00308361 | wi00362849 | On the workflow server, while selecting service on the "Channel editor" it does not select the server name if you press particular alphabet. Workaround: Type/paste/scroll to the complete server alias into the combo box. |
| RichClient:WCAgentClient | wi00355251 | wi00363748 | On Webagent, non english characters are not printing |
| ICM | | wi00226338 | Selecting pre-typed/existing value in text control of collaborated browser window using mouse is not getting reflected at another end. Workaround: Change some value in pre-typed text to make it visible. |



| Component | Parent WI | Key | Summary |
|-----------------------------|------------|------------|--|
| SIPTS | | wi00226087 | SIPTS: MSHS feature stops working if one of the TS loses network connectivity and then reconnects. Workaround: Restart one of the SIPTS servers. |
| AAWC | | wi00310283 | Supervisor doesn't show an transferred contact of the supervised agent |
| Server:TSV5:SIPTS | wi00226434 | wi00356476 | 'Switch to Caller' and 'Complete' buttons are enabled before second agent answer a consult call: Consult transfer from Traditional-TS agent to SIP-TS agent |
| WorkFlow Designer | | wi00305673 | Sys_transfer.update_vq_cache crashes when used with regions where decimal separator is other than ".". Workaround: Use val instead of CDbI function in this flow. |
| RichClient | wi00225558 | wi00332490 | The "Contact > Print" menu option in AVAYA Web Agent is disabled for newly composed emails. |
| WACD Server | | wi00225091 | The non functional WACD Server fails to stop completely. Workaround: Kill the WACD Server process, if it is running. |
| ConfigAccelerator | | wi00340391 | There is no feature rollback the configurations made in CA tool |
| RichClient:WCAgentClient | wi00350167 | wi00362894 | Tracking history shows Agent name "null", when Administrator will Resolve Contact with status from WACD Admin Page before Agent accepts the contact. |
| Client:SDK:JavaSampleClient | NA | wi00388552 | UI related issues on the SDK Java sample client. Like email preview content is not shown. |
| Installer:Patch Installer | NA | wi00343706 | Uninstaller is not removing ICServicePacks/7.2.1/Server/Record/_jvm/jre/bin folder after uninstalling service pack. |

| Component | Parent WI | Key | Summary |
|--------------------------|------------|------------|--|
| WACD Server | | wi00280567 | WACD Admin page shows ACD down (For Non-Functional Server) when the server goes off network for 6-8 seconds & comes back on network. Workaround: Restart the non functional WACD server. |
| Tools:ConfigAccelerator | wi00347494 | wi00374667 | When a scenario is saved the password provided is not getting saved in encrypted form. |
| Server:ICM | wi00343269 | wi00373059 | when system generated handle for 'join us ' feature is used for inviting the second customer, then the display name of second customer during chatting is not correct.(if the first customer uses an existing account to chat) Workaround: Agent should make sure that , there should be no space in joinus-handle , before passing joinus-handle to customer. |
| RichClient:WCAgentClient | wi00312634 | wi00361877 | When WACD/Pagging server is made down,after transfer attempt (which is unsuccessful) , transfer button is still enabled |
| RichClient:WCAgentClient | | wi00355864 | While moving between the original text in the Reply composition of a HTML Email, extra line breaks are seen |
| RichClient:WCAgentClient | wi00355864 | wi00368825 | While moving between the original text in the Reply composition of a HTML Email, extra line breaks are seen |



Avaya Product Support Information

This section contains information on the information that has been published as PSNs, yet relevant to IC 7.2.4 Service Pack.

- [Workflow Server throws an “Out of String” error when an email comes with a huge CC list](#)
- [IC 7.2 AARC Uninstaller removes certain binaries from the system32 directory that may be commonly used by other applications](#)
- [Interaction Center License Server uses extra TotalAgents license when agent is configured for all media channels in multi-domain, multi-LS environment](#)
- [Silent Installation mode](#)
- [Interaction Center \(IC\) & Operational Analyst \(OA\) impact by Russia abandoning Winter time/DST](#)
- [Limitation of the existing Interaction Center \(IC\) 7.1 to IC 7.2 migration process that the incomplete contacts when migrated to IC 7.2 are not recovered by Poller and IEmail Servers](#)

WorkFlow Server throws an “Out of String” error when an email comes with a huge CC list

Problem description:

The VBA used by WorkFlows restricts string to a maximum of 32KB. When an Email comes up with a huge CC list, the email server would copy the cc list to the VDU container, if the debug is turned on, the flows would copy the VDU data to the debug variable used in the scripts. In the OOTB flows, some of the blocks have debug turned on, In this case, when the flows tries to copy string length more than 32KB, VBA raises an exception “Out of String space.”

Resolution:

The Workflows used by IC Email servers and WACD has to be modified to check for the string length condition in the following blocks:

- **Block name:** FetchEDU block

Line number: 70

Current code:

```
debugOut = debugOut & {_#vduData}(i).name & ":" & _  
String$(numSpaces, " ") & {_#vduData}(i).value & ebCrLf  
'This block could have a lot of output when in debug mode.  
'Limit it to {_#maxDebugLength}, or 32k, whichever is smaller.  
If len(debugOut) >= {_#maxDebugLength} Then  
debugOut = debugOut & "Debug output exceeded max of " _  
& {_#maxDebugLength} & " bytes! Aborting printout..."  
Exit For
```

```
ElseIf len(debugOut) >= 32000 Then
debugOut = debugOut & _
"Debug output approaching 32k! Aborting printout..."
Exit For
End If
```

This needs to be modified as:

```
If (len(debugout) + len({_#vduData}(i).name) + _
numSpaces + len({_#vduData}(i).value) + 3) < {_#maxDebugLength} then
debugOut = debugOut & {_#vduData}(i).name & ":" & _
String$(numSpaces," ") & {_#vduData}(i).value & ebCrLf
Else
'This block could have a lot of output when in debug mode.
'Limit it to {_#maxDebugLength}, or 32k, whichever is smaller.
debugOut = debugOut & "Debug output exceeded max of " _
& {_#maxDebugLength} & " bytes! Aborting printout..."
Exit For
End if
```

- **Block name:** ICEmail Analysed

Line number: 113

Current code

```
debugOut = debugOut & vduSeqCpl(i).name & ":" & _
String$(numSpaces," ") & vduSeqCpl(i).value & ebCrLf
'This block could have a lot of output when in debug mode.
'Limit it to 32k
If len(debugOut) >= 32000 Then
debugOut = debugOut & "Debug output approaching 32k! Aborting printout..."
Exit For
End If
```

This needs to be modified as:

```
If (len(debugout) + len(vduSeqCpl(i).name) + numSpaces +
len(vduSeqCpl(i).value) + 3) < 32000 then
debugOut = debugOut & vduSeqCpl(i).name & ":" & _
String$(numSpaces," ") & vduSeqCpl(i).value & ebCrLf
```

```
Else
'This block could have a lot of output when in debug mode.
'Limit it to 32k
debugOut = debugOut & "Debug ouput approaching 32K! Aborting printout"
Exit For
End if
```

- **Block name:** ICEmail Outbound Response

Line number : 114

Current code

```
debugOut = debugOut & vduSeqCpl(i).name & ":" & _
String$(numSpaces," ") & vduSeqCpl(i).value & ebCrLf
'This block could have a lot of output when in debug mode.
'Limit it to 32k
If len(debugOut) >= 32000 Then
debugOut = debugOut & _
"Debug output approaching 32k! Aborting printout..."
Exit For
```

This needs to be modified as:

```
If (len(debugout) + len(vduSeqCpl(i).name) + numSpaces +
len(vduSeqCpl(i).value) + 3) < 32000 then
debugOut = debugOut & vduSeqCpl(i).name & ":" & _
String$(numSpaces," ") & vduSeqCpl(i).value & ebCrLf
Else
'This block could have a lot of output when in debug mode.
'Limit it to 32k
debugOut = debugOut & "Debug ouput approaching 32K! Aborting printout"
Exit For
End if
```

The following flows needs to be modified with the above change.

- Flow Name : icemail.analyzeca
- Block name : fetchEDU and ICEmail Analyzed
- Flow Name : icemail.analyzenoca
- Block name : fetchEDU and ICEmail Analyzed



- Flow Name : icemail.outboundca
- Block name : fetchEDU and ICEmail Outbound response
- Flow Name : icemail.outboundnoca
- Block name : fetchEDU and ICEmail Outbound response
- Flow Name : WACD.qualifyemail
- Block name : fetchEDU

Note: The above listed blocks are some of blocks identified which need the code changes. However, there may be other blocks where the string copy is done without checking the string length.

Workaround or alternative remediation

The debug which is turned on by default in the OOTB flows can be turned off in all the blocks and flows mentioned above. Once this is turned off, the Workflows need to be compiled and uploaded to the database. All the Workflow servers need to be restarted or the

Workflows needs to be reloaded in all the Workflow server by selecting reload flows -> Include file based flows -> Force immediate reload.

IC 7.2 AARC Uninstaller removes certain binaries from the system32 directory that may be commonly used by other applications

Problem description:

After running the Avaya Agent Rich Client (AARC) uninstaller of IC 7.2, certain binaries from system32 folder are also removed.

These binaries, primarily from Microsoft Corporation, are installed during AARC installation. However they may be commonly used by other applications installed on the same machine. Hence removal of these binaries during un-installation of AARC may affect other applications installed on the same machine.

Here is the list of binaries that may be uninstalled by the AARC uninstaller:

| Binary | Description |
|--------------|---|
| vbar332.dll | Visual Basic for ApplicationsRuntime - Expression Service |
| dbgrid32.ocx | Microsoft Data Bound Grid Control |
| dblist32.ocx | Microsoft DBList Object Library |
| mci32.ocx | Media Control Interface |
| msflxgrd.ocx | Microsoft FlexGrid Control |
| msinet.ocx | Microsoft Internet Transfer Control |

| Binary | Description |
|---------------|--|
| msjet35.dll | Microsoft Jet Engine 3.5 |
| msjint35.dll | Microsoft Jet Engine 3.5 |
| msjter35.dll | Microsoft Jet Engine 3.5 |
| msmapi32.ocx | MSMAPI Controls Library |
| msmask32.ocx | Masked Edit Control |
| msrdc20.ocx | RemoteData Control |
| mswinsck.ocx | WinSock Control |
| odbctl32.dll | ODBC Helper Function DLL |
| tabctl32.ocx | SSTab Control |
| vb6stkit.dll | DLL de la biblioteca de Visual Basic Setup Toolkit |
| regtlib.exe | Visual Studio RegTLib |
| msvcr71.dll | Microsoft C Runtime Library |
| comctl332.ocx | Microsoft Common Controls 3 Object Library |
| comctl32.ocx | Windows Common Controls ActiveX Control DLL |
| comdlg32.ocx | CMDialog ActiveX Control DLL |
| mscomctl2.ocx | Microsoft Common Controls 2 ActiveX Control DLL |
| mscomctl.ocx | Windows Common Controls ActiveX Control DLL |
| richtx32.ocx | RichTextBox Control |
| mscomm32.ocx | Communications Control |
| msadodc.ocx | ADO Data Control |

Resolution:

The wi00380519 has been created to resolve this issue

Workaround or alternative remediation:



The AARC uninstaller reads the list of files to be uninstalled from “<AARC_HOME>\Uninstall_Avaya Agent Rich Client\.com.zerog.registry.xml”. This file is created during AARC installation and contains entries of the above listed binaries that were installed by the AARC installer. Hence as a workaround, we need to delete the entries of these binaries from the file or just change the value of ‘uninstall’ property for each of the entries to “false”, AARC Uninstaller will not remove them.

For example, delete the following entry from .com.zerog.registry.xml file

```
<resource keyfile="false" name="vbar332.dll" location="C:\Windows\system32\vbar332.dll" type="file"
uninstall="true"/>
```

Or just change the value of ‘uninstall’ property to “false” as shown bellow

```
<resource keyfile="false" name="vbar332.dll" location="C:\Windows\system32\vbar332.dll" type="file"
uninstall="false"/>
```

Interaction Center License Server uses extra TotalAgents license when agent is configured for all media channels in multi-domain, multi-LS environment

Problem description:

Issue: License Server procures extra “TotalAgents” license when the Telephone Server (voice) and WebACD (email+chat) requests different License Servers for the same agent having all channels enabled in multi-domain, multi-LS environment.

Detail:

The issue seems to occur when the request for licenses for a single agent is going to two different License Servers (LS) viz. first from TS (for voice channel), and the second from WACD (for email and chat).

TS could be requesting from the primary LS, whereas WACD is requesting from the secondary LS or vice versa.

Essentially, for a particular agent, license request for all media channels should go to the same LS i.e. TS and WACD should request from the same LS.

License Server procures a “TotalAgents” license for the first time if it has not already been done for that agent, irrespective of the channel requesting it. For subsequent request from remaining channels for the same agent, License Server does not request for “TotalAgents” license.

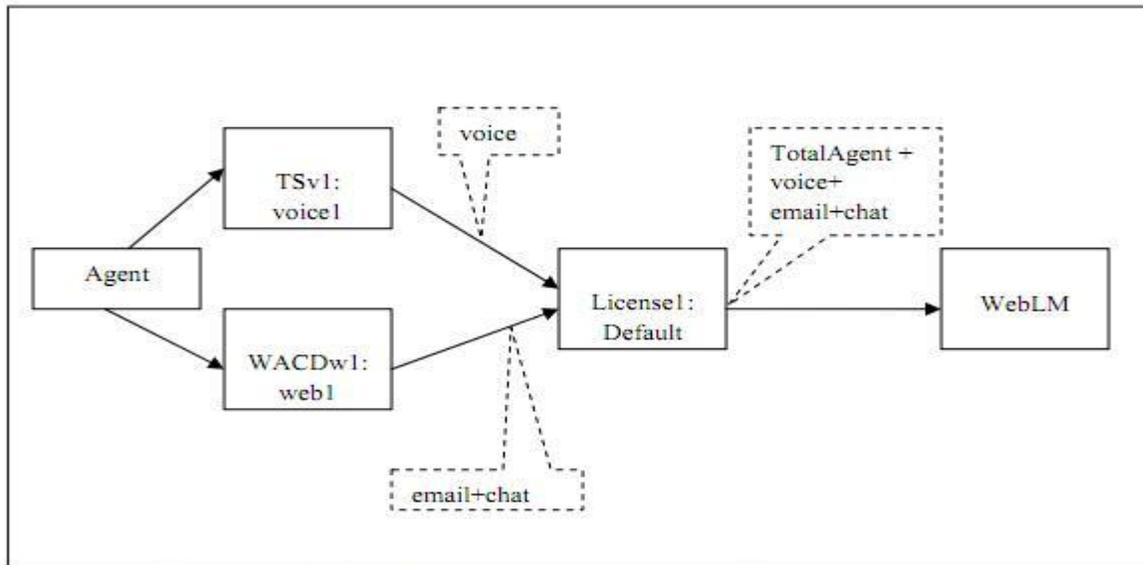


Figure 1: No Issue - TS and WACD communicates with the same License Server

'TotalAgents' parameter is a local resident value per LS and not across multiple LSs. So if the multiple license requests of different channels for the same agent go to same LS, there is no issue (Figure 1).

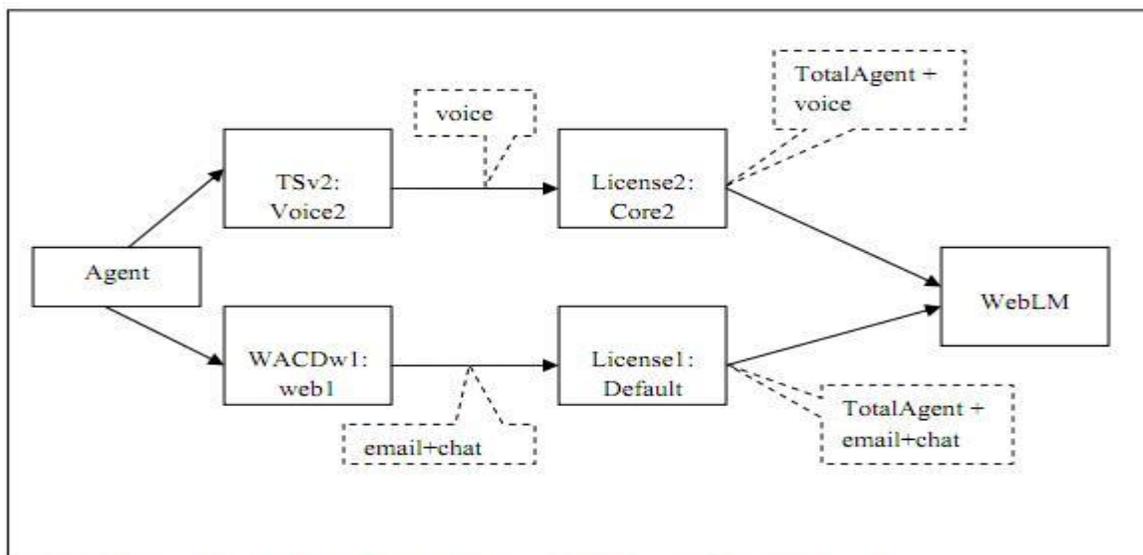


Figure 2: Issue - TS and WACD communicates with different License Servers

However if the different license requests (from TS and WACD) goes to different LSs, then each LS procures a "TotalAgents" license in addition to the license for the channel. This is so, because either of the LS is not aware of the other LS procuring "TotalAgents" license for the same agent (Figure 2).

Another factor is that only one WACD can be active at a given time.

An e.g. of occurrence of this issue is when active WACDs domain failover for LS might not match with TSv2 in domain Voice2, and both the active WACD and TSv2 send requests to different LSs.

Resolution:

MR 138400: marked as Will Not Fix



Silent Installation mode

Problem description:

Providing the detailed steps for silent installation.

Resolution:

Installation mode

All Avaya IC installers can run Silent mode.

This section is intended to provide instructions to perform silent installation for Avaya Interaction Center 7.2 products which uses Install Anywhere platform for its RTM installers. Silent installation can be done in two ways.

1. Run installer in silent mode that simply accepts default values (Refer Option 1)
2. Create a response file and change the default values as per the requirement

Option 1: Run the install with the default values (no response file)

- a. Open command/shell prompt on Windows or Unix
- b. Go to the installer directory (directory where installer is copied)
- c. At the command/shell prompt execute command as per the OS (refer below table).

Table 1

| Operating System | Command |
|------------------|-------------------------|
| Windows | install.exe -i silent |
| Solaris | ./install.bin -i silent |
| AIX | ./install.bin -i silent |

Note: There are multiple install sets within some installers (for ex. icwinserversuite contains Server, Design/Admin and AAWC); only 'default' install set will be installed when the installer is run without using a response file. Table 2 lists the default Install set for multi-set installer in IC.

Use this option only in case default installs set needs to be installed.

Table 2

| IC7.2 Installers | Install Sets | Default Install set |
|------------------|--|---------------------|
| icwinserversuite | Server, Design and Admin and Web Connector | Server |
| icclientsuite | AARC and AAWC | AARC |
| SiebelNT | ASServer and ASDesign | ASServer |
| icsolserversuite | Server, Web Connector | Server |
| icaixserversuite | Server, Web Connector | Server |

Option 2: Using a response file to supply values for installer variables

1. Create the response file
 - a. Open command/shell prompt on Windows or Unix

- b. Go to the installer directory (directory where installer is copied)
 - c. At the command prompt, execute the below commands
- This will create default installer. properties response file in installer directory itself

Table 3:

| Operating system | Command |
|------------------|------------------|
| Windows | install.exe -r |
| Solaris | ./install.bin -r |
| AIX | ./install.bin -r |

This will create response file at the specified location file.

Table 4

| Operating system | Command |
|------------------|---|
| Windows | install.exe -i silent -f <absolutepathoffile.txt> |
| Solaris | ./install.bin -i silent -f <absolutepathoffile.txt> |
| AIX | ./install.bin -i silent -f <absolutepathoffile.txt> |

- d. Installer will be launched after executing the above command. Change the default values as per your need and these values will be reflected in response file.
2. Modify the response file(This step is required for installers mentioned in Table 2)
- a. Once the installation is done, a response file will be created in the same directory where the installer is located, or at the absolute path location if specified.
 - b. Open the response file in any text editor like Notepad/WordPad
 - c. Add the lines mentioned in Data column from the below table in response file for the respective installations. This step is must for all IC7.2 installers having multiple install sets (refer Table 2). Values related to install set do not get written to the response file, this is known issue of IA 2009.
 - d. Save and close the file

Table 5

| Installer | Data |
|-----------------------------------|--|
| Windows Server | #Choose Install Set #----- CHOSEN_FEATURE_LIST=Servers CHOSEN_INSTALL_FEATURE_LIST=Servers CHOSEN_INSTALL_SET=Custom |
| Windows design and Admin | #Choose Install Set #----- CHOSEN_FEATURE_LIST=DesignA CHOSEN_INSTALL_FEATURE_LIST=DesignA CHOSEN_INSTALL_SET=Custom |
| Windows WebConnector | #Choose Install Set #----- CHOSEN_FEATURE_LIST=WebConn CHOSEN_INSTALL_FEATURE_LIST=WebConn CHOSEN_INSTALL_SET=Custom |
| Solaris Server ¹ | #Choose Install Set #----- CHOSEN_FEATURE_LIST=servers CHOSEN_INSTALL_FEATURE_LIST=servers CHOSEN_INSTALL_SET=Custom |
| Solaris WebConnector ¹ | #Choose Install Set #----- CHOSEN_FEATURE_LIST=WebConn CHOSEN_INSTALL_FEATURE_LIST=WebConn CHOSEN_INSTALL_SET=Custom |

| | |
|--------------------------------------|--|
| Aix Server ¹ | #Choose Install Set #----- CHOSEN_FEATURE_LIST=servers CHOSEN_INSTALL_FEATURE_LIST=servers CHOSEN_INSTALL_SET=Custom |
| Aix WebConnector ¹ | #Choose Install Set #----- CHOSEN_FEATURE_LIST=WebConn CHOSEN_INSTALL_FEATURE_LIST=WebConn CHOSEN_INSTALL_SET=Custom |
| AIC Siebel Windows (AICSiebelINT) | Server: #Select Installer options #----- CHOSEN_FEATURE_LIST=ASServer CHOSEN_INSTALL_FEATURE_LIST=ASServer CHOSEN_INSTALL_SET=Custom Design: #Select Installer options #----- CHOSEN_FEATURE_LIST=ASDesign CHOSEN_INSTALL_FEATURE_LIST=ASDesign CHOSEN_INSTALL_SET=Custom |
| Windows WebClient | #Select Installer options #----- CHOSEN_FEATURE_LIST=AAWC CHOSEN_INSTALL_FEATURE_LIST=AAWC CHOSEN_INSTALL_SET=Custom |
| AICSiebel Solaris | N/A |
| AICSiebel AIX | N/A |
| Windows AgentClient | N/A |
| Siebel Windows | N/A |
| Siebel Solaris | N/A |
| Siebel AIX | N/A |

Note:

- ◆ [1] This is specific to Solaris/AIX platform, open response file to edit and remove the trailing Avaya/IC72 path from USER_INSTALL_DIR path variable value as Avaya/IC72 directory structure gets appended to the path during installation.
- ◆ N/A – Not Applicable (No install sets)
- ◆ Rows starting with '#' are treated as comments

3. Now run the silent install on different system (where silent installation is desired)



- a. Go to the installer directory
- b. Open command/shell prompt and execute the below command

Table 6

| Operating system | Command |
|------------------|--|
| Windows | <code>install.exe -i silent -f <absolute_path\offile.txt></code> |
| Solaris | <code>./install.bin -i silent -f <absolute_path\offile.txt></code> |
| AIX | <code>./install.bin -i silent -f <absolute_path\offile.txt></code> |

Interaction Center (IC) and Operational Analyst (OA) impact by Russia abandoning Winter time/DST

Problem description:

2011 - Russia Abolishes Winter Time

The new legislation eliminates the yearly switch between standard time and daylight saving time. The country will turn its clocks one hour forward for the last time on March 27 2011, making daylight saving time as Russia's new standard time.

If corrective action is not implemented before 30th October 2011, then IC and OA will revert back to Winter time on October 30th, which would affect reporting. The error in reporting would be of one hour.

Resolution:

IC & OA

IC and OA use the resident operating system's timezone utility. Therefore applying the appropriate timezone patch for the resident OS (viz, Windows, Solaris, AIX) should alleviate the problem.

This applies for both IC 7.1 and IC 7.2.

Also, the Java SE platform's timezone data is not read from the local or host operating system (OS), so OS timezone patches will not update the JRE software's timezone data. To resolve this, it might be necessary to run the TZUpdater tool (more details in the Remarks section).

Remarks:

The following lists some helpful links to avail of patches /write-ups/ tools.

----- OS -----

Windows:

<http://support.microsoft.com/kb/2570791>

AIX:

https://www-304.ibm.com/support/docview.wss?q1=tz&dc=DB520&rs=111&uid=isg3T1000252&context=SWG10&cs=utf-8&lang=en&loc=en_US#5

----- Java TZUpdater -----



Refer to <http://www.oracle.com/technetwork/java/javase/timezones-137583.html>

Perform the following steps:

1. Check which version of the Olson timezone data is included in your JRE version. See Timezone Data Versions in the JRE Software.
2. If the latest timezone data for your region is still not correct, then you should download and run the TZUpdater tool.

For Windows/Solaris:

<http://www.oracle.com/technetwork/java/javase/tzupdater-readme-136440.html>

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

For AIX: IBM Time Zone Update Utility for Java (JTZU), that applies Daylight Saving Time (DST) changes directly to Java SDKs and JREs.

The tool can be downloaded from: <http://www.ibm.com/developerworks/java/jdk/dst/jtzu.html>

<http://www-01.ibm.com/support/docview.wss?uid=swg21515564>

More information on the tool releases and the respective TZ changes it supports.

http://www.ibm.com/developerworks/java/jdk/dst/olson_table.html

Limitation of the existing Interaction Center (IC) 7.1 to IC 7.2 migration process that the incomplete contacts when migrated to IC 7.2 are not recovered by Poller and IEmail Servers

Problem description:

The current documented email migration process from IC 7.1 to IC 7.2 does not properly migrate the older IC 7.1.x emails to the current IC 7.2.3 structure. The migration process migrates the data but all emails need to be completed in IC 7.1.x prior to the migration and this is clearly stated in the IC documentation. However once emails are completed they cannot be recycled once migrated as the database structures between IC 7.1 and IC 7.2.x are different. What this means is that if you have a copy on the exchange server of the original email you can send it as a new email and it will be processed again but no history for that case will be found.

This document explains the steps required to be performed so that the IC 7.2 system (Poller and IEmail Servers) pick up the migrated contacts in non-completed state for further processing.

Within the IC documentation it states that all emails in the IC system must be in the completed state in order to migrate to IC 7.2.x.

Resolution:

To facilitate the smooth recovery of all migrated email contacts, a multiple step approach is required. It can be broken down into following major operations:

1. Migrate ALL email contacts.
2. Run SQL scripts for Poller and IEmail Servers.
3. Restart IC Servers.



Each step is described in detail in this document.

1. Migration of ALL email contacts

Run the existing IC 7.1 to IC 7.2 Email Migration Tools as per the existing the IC Documentation. Once the migration tool is run successfully on ALL contacts, the IC 7.2 database will have email contacts in the following possible states:

- Complete/Dismissed – Completed migrated contacts
- Incomplete – Contacts that were not completed prior to the migration. These contacts need to be recovered by the Poller and IEmail Servers of the IC 7.2 system. However, with the introduction of Redundancy of Servers in IC 7.2, each contact requires “ownership” information, which depicts which server (cluster, to be precise) will recover and process the email contact further. This ownership information needs to be populated correctly in the new IC 7.2 database. This task is explained in detail in the next section.

2. Running the SQL Scripts

This step of the migration process details the steps required to populate ownership information for all incomplete contacts.

Using the following 2 SQL cursors for Poller and IEmail Servers will automate the populations of the ownership information:

- Poller Server Cursor - This cursor works only on email contacts which will be recovered by Poller Server. Working:
 - ◆ Find queue_key for contact from qem_message table.
 - ◆ Find mailaccount record for the queue_key found in #1.
 - ◆ Find PollerClusterName from the qem_mailaccount table and use it to populate contact row, found in #1.
 - ◆ Repeat the process for all incomplete emails which Poller Server must recover.

```
DECLARE @pkey INT
DECLARE db_cursor CURSOR FOR
    SELECT pkey
    FROM qem_message
    WHERE currentstatus IN (65000)
    AND owner IS NULL
OPEN db_cursor
FETCH NEXT FROM db_cursor INTO @pkey
WHILE @@FETCH_STATUS = 0
BEGIN
    DECLARE @pollercluster VARCHAR(40)
    SET @pollercluster = ''
    SELECT @pollercluster = owner
    FROM qem_mailaccount
    WHERE defaultqueue_key =
        (SELECT queue_key FROM qem_message
        WHERE pkey = @pkey)
    if @pollercluster <> ''
    begin
        UPDATE qem_message
        SET
            owner = @pollercluster,
            pollerstate = 0, /* TOPLUGIN */
            responsestate = 0 /* NORMAL */
        WHERE
            pkey = @pkey
    end
    FETCH NEXT FROM db_cursor INTO @pkey
END
CLOSE db_cursor
DEALLOCATE db_cursor
```

- ICEmail Server Cursor - This cursor works only on email contacts which will be recovered by ICEmail Server.
 - ◆ Find queue_key for contact from qem_message table.
 - ◆ Find mailaccount record for the queue_key found in #1.
 - ◆ Find PollerClusterName from the qem_mailaccount table.
 - ◆ Find ClusterMap record from clustermap table and use the first ICEmail Cluster mapped to Poller Cluster and populate the ClusterName in the record found in #1.
 - ◆ Repeat the process for all incomplete emails which ICEmail Server must recover.

```
DECLARE @pkey INT
DECLARE db_cursor CURSOR FOR
    SELECT pkey FROM qem_message
    WHERE currentstatus NOT IN (65000, 65028)
    AND owner IS NULL
OPEN db_cursor
FETCH NEXT FROM db_cursor INTO @pkey
WHILE @@FETCH_STATUS = 0
BEGIN
    DECLARE @icemailcluster VARCHAR(40)
    SET @icemailcluster = ''
    SELECT TOP 1 @icemailcluster = icemailcluster
    FROM clustermap
    WHERE pollercluster =
        (SELECT owner
        FROM qem_mailaccount
        WHERE defaultqueue_key =
            (SELECT queue_key
            FROM qem_message
            WHERE pkey = @pkey))
    if @icemailcluster <> ''
    begin
        UPDATE
            qem_message SET owner = @icemailcluster,
            pollerstate = 2, /* SENTTOICEMAIL */
            responsestate = 0 /* NORMAL */
        WHERE
            pkey = @pkey
    end
    FETCH NEXT FROM db_cursor INTO @pkey
END
CLOSE db_cursor
DEALLOCATE db_cursor
```

3. Re-Starting the IC Servers

Restart Poller, ICEmail and WACD servers in IC 7.2 if already running, else start them. This will cause the recovery routines of all these servers to be run. Now, each server will pick up tasks in their respective recovery routines and process them further. (Poller and ICEmail Servers will pick up contacts based on ownership information which is populated in the previous step, using SQL scripts).

Remarks:

The above steps to migrate email contacts have been tested by Avaya. Some items to highlight

- EDU's created in IC 7.1 cannot be recreated in the IC 7.2 system – see the workaround section below to address this



| State Name | State Value | Tested in R&D lab? | Remarks | Deletion of EDUID from DB required? |
|----------------------|-------------|--------------------|---|---------------------------------------|
| msDismissed | 1 | N | Not applicable in this context (equivalent to closed state) | N |
| msReceived | 65000 | Y | Poller will handle this email correctly. | Y |
| msResponded | 65001 | N | Initial state for replies. | Y |
| msAcknowledged | 65002 | N | NO EDU CREATED, SO SAFE | N |
| msBounced | 65003 | N | NO EDU CREATED, SO SAFE | N |
| msSentToAgent | 65004 | N | WACD initially reports error "VUID not reachable" and ICEmailsrv creates new EDU in this case automatically. Should work similar to msContactReady. | N |
| msTransferredToAgent | 65005 | N | Previous agent handling and routing info was present in old EDU. So that info will be lost. | Y |
| msForwardToPool | 65006 | - | - | UNUSED by AgentClient nor ICEMail |
| msReceivedReply | 65007 | - | - | (Y) UNUSED by AgentClient nor ICEMail |
| msExpiredToPool | 65008 | - | - | UNUSED by AgentClient nor ICEMail |
| msForwardToEmail | 65009 | N | NO EDU CREATED, SO SAFE | N |
| msParked | 65010 | Y | Email Server will recover this email. | Y |
| msAnalyzed | 65011 | Y | Email Server will recover this email. | Y |
| msSentSME | 65012 | N | HUB EDU creation/updation will be attempted by design. | Y |

| | | | | |
|---------------------------------|-------|---|--|---|
| msReceivedSME | 65013 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msSentApproval | 65014 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msRejected | 65015 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msApproved | 65016 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msReceivedAdditionalInformation | 65017 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msReplyOutbound | 65018 | - | - | (Y) UNUSED by AgentClient nor ICEMail |
| msReplyForwarded | 65019 | - | - | (Y) UNUSED by AgentClient nor ICEMail |
| msOutbound | 65020 | Y | WorkFlow will be run again and email will be sent. | Y |
| msReceivedReplyToAck | 65021 | - | - | (Y) UNUSED by AgentClient nor ICEMail |
| msReceivedReplyToAutoResponse | 65022 | - | - | (Y) UNUSED by AgentClient nor ICEMail |
| msSystem | 65023 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msAutoReplied | 65024 | N | NO EDU CREATED, SO SAFE | N |
| msRequestAdditionalInformation | 65025 | N | HUB EDU creation/updation will be attempted by design. | Y |
| msContactReady | 65026 | Y | WACD initially reports error "VDUID not reachable" and ICEmailsrv creates new EDU in this case | N |

| | | | | |
|---------------|-------|---|--|---|
| | | | automatically. | |
| msRunOutbound | 65027 | N | Email Server will recover this email. WorkFlow will try to update the EDU and will fail, so require to delete EDU. | Y |
| msClosed | 65028 | N | Not applicable in this context | N |

Workaround or alternative remediation:

As highlighted above, EDU's created in IC 7.1 cannot be recreated in an IC 7.2 system. The impact of this is that any operations that require EDU updates or related will be impacted.

To workaround this, the following needs to occur:

- In order to allow the contacts to be processed further, the EDUID information MUST be DELETED from the contact records so that new EDUs will be created.
- This will impact reporting (and functionalities at times) which are based on EDU existence and their values.
 - Contact Creation time will change.
 - OA live reporting will be impacted.
- Flows will require proper error handling and recovery (i.e. corrective action) in case of such EDU access failures.



Avaya IC 7.2 Documentation Errata

The below section contains additional information and modifications to some existing information in IC7.2 documentation.

UII Container Information for Telephony Server in IC7.2.1

Following section describes the format of the UII field that the 'Telephony Server' (TS) of IC7.2.1 expects for it to preserve the UII data set by third party applications.

TS is responsible for decoding the UII field that comes in the event data from the switch. TS expects the value of the uudata to be specified in the following format to separate out EDU-ID and extended data from the ui field

- EDU-ID 32 bytes (Index - 0 – 31)
- Field separator 1 byte (Index - 32)
- Extended data 63 bytes (Index - 33 – 95)

The "field separator" between the EDU-ID and the "extended data" is ";" by default. It can be adjusted by changing TS configuration parameter "extdata_separator". The parameter can be added in the "Configuration" tab of TS Server in "IC Manager". The value of this parameter should not be more than a character.

Example: 4a700d1400000009493a94923340002; cust=4567213/ivr=1, 3, 9

Here EDU-ID will be considered as "4a700d1400000009493a94923340002" and the extended data as "cust=4567213/ivr=1,3,9". Note that TS will always verify if the EDU-ID is valid.

TS, irrespective of any data in the first 32 bytes (Valid EDU\Non EDU\Invalid EDU) would always move the data from the 34th byte to a field "extdata" in the EDU as well as in TS.IncomingCall event. The 33rd byte should be a separator.

Following table provides the log file container examples for different UII scenarios with or without extended data and with various couples being populated.

| UII | Extended Data | Couple(s) populated | uudata and Log file container example |
|-----|---------------|---------------------|--|
| EDU | None | EDU | uudata: 4a700d1400000009493a94923340002 Event: [TS.IncomingCall.event({0,"TS.IncomingCall",{0,13,{"vdu_id","4a700d1400000009493a94923340002"},"call_ref_id","556"},"monitor","4992"},"orig","4993"},"dest","4992"},"ani","4993"},"dnis","4992"},"called","4992"},"calltype","direct"},"ctype","direct"},"eventQual","new asai call"},"ucid","09999005561116683500"},"queue","")}]]) |

| UUI | Extended Data | Couple(s) populated | uudata and Log file container example |
|-------------|---------------|---------------------|---|
| EDU | extra data | EDU, extdata | <p>uudata:</p> <p>4a700d1400000009493a94923340002; cust=4567213/ivr=1,3,9</p> <p>Event:</p> <pre>[TS.IncomingCall.event({0,"TS.IncomingCall",{0,14,{"vdu_id","4a700d1400000009493a94923340002"},"call_ref_id","567"},{"monitor","4992"},{"orig","4993"},{"dest","4992"},{"ani","4993"},{"dnis","4992"},{"called","4992"},{"calltype","direct"},{"ctype","direct"},{"eventQual","new asaicall"},{"extdata","cust=4567213/ivr=1,3,9"},{"ucid","09999005671116684033"},{"queue",""}]]]</pre> |
| Invalid EDU | None | uui | <p>uudata:</p> <p>428f3e4b00000000ac2aad06232f0002</p> <p>Event:</p> <pre>[TS.IncomingCall.event({0,"TS.IncomingCall",{0,14,{"vdu_id","4a700d1400000009493a94923340002"},"call_ref_id","570"},{"monitor","4992"},{"orig","4993"},{"dest","4992"},{"ani","4993"},{"dnis","4992"},{"called","4992"},{"calltype","direct"},{"ctype","direct"},{"eventQual","new asaicall"},{"ucid","09999005701116684193"},{"queue",""},{"uui","428f3e4b00000000ac2aad06232f0002"}]]]</pre> |
| Invalid EDU | extra data | uui, extdata | <p>uudata:</p> <p>428f3e4b00000000ac2aad06232f0002; cust=4567213/ivr=1,3,9</p> <p>Event:</p> <pre>[TS.IncomingCall.event({0,"TS.IncomingCall",{0,15,{"vdu_id","4a700d1400000009493a94923340002"},"call_ref_id","570"},{"monitor","4992"},{"orig","4993"},{"dest","4992"},{"ani","4993"},{"dnis","4992"},{"called","4992"},{"calltype","direct"},{"ctype","direct"},{"eventQual","new asaicall"},{"extdata","cust=4567213/ivr=1,3,9"},{"ucid","09999005701116684193"},{"queue",""},{"uui","428f3e4b00000000ac2aad06232f0002"}]]]</pre> |



| UII | Extended Data | Couple(s) populated | uudata and Log file container example |
|---------|---------------|---|--|
| Non EDU | None | uui | uudata: 123456 Event: <pre>[TS.IncomingCall.event({0,"TS.IncomingCall",{0,14,{"vdu_id","4a700d1400000009493a94923340002"},"call_ref_id","576"},"monitor","4992"},"orig","4993"},"dest","4992"},"ani","4993"},"dnis","4992"},"called","4992"},"calltype","direct"},"ctype","direct"},"eventQual","newasaicall"},"uui","123456"},"ucid","09999005761116684499"},"queue","")}]</pre> |
| Non EDU | extra data | uui (UII and Extended Data with field separator), extdata | uudata: 12345678901234567890123456789012;cust=4567213/ivr=1,3,9 Event: <pre>[TS.IncomingCall.event({0,"TS.IncomingCall",{0,15,{"vdu_id","4a700d1400000009493a94923340002"},"call_ref_id","570"},"monitor","4992"},"orig","4993"},"dest","4992"},"ani","4993"},"dnis","4992"},"called","4992"},"calltype","direct"},"ctype","direct"},"eventQual","newasaicall"},"extdata","cust=4567213/ivr=1,3,9"},"ucid","09999005701116684193"},"queue",""},"uui","12345678901234567890123456789012;cust=4567213/ivr=1,3,9"}]})]</pre> |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|--|----------------------|--|
| Avaya Interaction Center Release 7.2 Siebel 8 Integration Guide / IC72sbl8int.pdf | Page 266, Section : Diagnosing and clearing AICD loading problems-> For Solaris and AIX platforms | Missing Information. | The configured user for Siebel MUST have Write permissions for directories and files under \$AVAYA_ICXX_HOME. Best practice is to have both Siebel and IC installed by same user account. |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|--|---|---|
| Avaya Interaction Center Release 7.2 Telephony Connectors Programmer Guide /IC7.2 Voice.pdf | Page 86, Section: Table under point "8. Complete the following fields on form 3:" | Missing Information. | Additional Information. Field: UUI Treatment Description: Enter value service-provider. If the value is shared, SIP TS cannot route the call to agent. |
| IC Administration Volume 1: Servers & Domains. /IC72admin1.pdf | Page 99, Section : Incoming Email Server: Email Account Type | In Avaya IC 7.2, you can also use IMAP4 protocol for receiving the emails. In IMAP4, all the emails remain on the email server. | In Avaya IC 7.2, you can also use IMAP4 protocol for receiving the emails. In IMAP4, emails will be deleted from Exchange server, once they are processed by ICEmail server, like POP3. |
| Avaya IC Installation and Configuration. | Page 146 Section: Installing the license file | Missing information. | Installing License file by non-root user for Unix variants. When webIm is running as non-root user, additional privilege must be given to this non-root user to be able to install license file. Perform the steps below for Solaris/AIX: Login to solaris box with root login. Execute the command <code>usermod -K defaultpriv=basic,net_rawaccess <non-root user></code> Re-login the non-root user and start the webIm and then install the license file. |
| Client SDK Programming Guide / IC72sdkProg.pdf | Page 149 Section: Voice Call Scenario | Missing information. | Section added, that illustrates normal call scenario (outbound and inbound calls) for SDK, list of events generated and objects generating them. Refer to http://support.avaya.com |

| Document Name | Location | Current Information | Corrected /Added Information |
|--|---|---------------------|--|
| Avaya Agent User Guide / IC72agent.pdf | Page 71 Section: Managing Email Contacts | Missing Information | <p>Added Note:</p> <p>Agent Should Not Explicitly add tracking id or tracking id like string/text to email subject, while doing reply or sending new outbound email.</p> <p>The format of tracking id is as below:</p> <p>Format 1: [T<4 digits for year><2 digits for Month><2 digits for date><4 digit for base 32 string>S<2 digits for special status><1 digit for agent preference for routing>Z<Messageid of outgoing email>]</p> <p>Format 2: [T<4 digits for year><2 digits for Month><2 digits for date><4 digit for base 32 string>S<2 digits for special status><1 digit for agent preference for routing>]</p> |
| Avaya Agent User Guide / IC72agent.pdf | Page 116 Section: Using Collaborative Form Filling | Missing Information | <p>Note:</p> <p>If customer has installed the JDK/JRE on the machine from where a chat has been escalated to an agent and website has the property "chat.htmlclient.collaboration.enabled = true" then a page pushed by the agent is displayed on a new window.</p> <p>But if customer does not have JDK/JRE installed on machine from where a chat has been escalated and website has the property "chat.htmlclient.collaboration.enabled = true" the pushed page is displayed at the right frame (In docked mode).This behavior for all versions of IC from IC 7.1.5</p> |



| Document Name | Location | Current Information | Corrected /Added Information |
|--|--|--|---|
| Avaya Interaction Center Release 7.2 Telephony Connectors Programmer Guide / IC7.2 Voice.pdf | Page: 92 Section: Table under the section "Pattern for a contact in a media server address map" | 5061: The port number of the TCP. | 5061: The Port number of TLS. |
| Avaya Agent User Guide / IC72agent.pdf | Page: 114 Section: Using Auto Sync | Tip for Point 2. | If you are handling two or more chat contacts simultaneously & you want to send URL of website to other customers, there is an Internet Explorer icon for each customer. |
| Avaya Agent User Guide / IC72agent.pdf | Page: 115 Section: Using Auto Sync | Tip for Point 8. | If you begin a chat session with another customer before you complete the chat session you are currently handling, another browser will open for the second customer if you want to send URL of website to another customer. |
| Avaya Agent User Guide / IC72agent.pdf | Page: 116 Section: Collaborative Form Filling | To help your customer fill a form. 1. Verify that your chat customer wants you to help fill out a form. | To help your customer fill a form: 1. Type the URL in the Text Entry area. Click Push URL. 2. Verify that your chat customer wants you to help fill out a form. |
| Avaya Interaction Center Release 7.2 IC Installation Planning and Prerequisites / IC Installation Planning and Prerequisites.pdf | Page : 54 Section: Required agent desktop software | IC 7.2 Pre-req guide mentions JRE 1.6 as required software on agent desktop (to be installed by customer). | Since IC ships JRE, it is not needed that customers install JRE on agent desktop for Avaya Agent Rich Client. However JRE is required by Avaya Agent Web Client. Hence JRE need to be installed on every machine from where AAWC will be launched. |



| Document Name | Location | Current Information | Corrected /Added Information |
|--|---|--|---|
| Avaya Interaction Center Release 7.2 Business Advocate Configuration and Administration / IC72Advocate.pdf | Page : 53 Section : Component Manager | Document does not contain the complete information. | The Primary RM, Secondary RM and the Advocate Supervisor depend on the MxDBFx.dll loaded by Component Manger to talk to the advocate database. The role of Component Manager is not limited till defining the primary and secondary RM during installation only. If the machine hosting component manager goes down, none of the BA components would be able to talk to the advocate database. |
| Avaya Agent User Guide / IC 7.2 Avaya Agent User Guide.pdf | Page : 64 Section: Handling Contacts Without Auto Answer | The steps mentioned are insufficient to answer the call. | Double clicking on the contact in the phone task list does not provide the answer functionality. The agent has to explicitly use the "Answer" button to receive the call. |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|---|---------------------|--|
| IC Administration Volume 2: Agents, Customers, & Queues.pdf | Page : 157 Section: Using a shared directory for agent files | Missing Information | <p>The globalpreferences.xml file is intended to be used on a shared network drive as a way to globally set preferences for all agents without having to make changes on each individual agent machine. However, agents are free to override these settings by setting their own preferences via WebAgent. Changes made to the agent's preferences in WebAgent are stored in the agentpreferences.xml file. So, the globalpreferences.xml file can be considered as the agent's initial default settings. If there is an agentpreferences.xml file with different settings, the agentpreferences.xml will override the settings from the globalpreferences.xml file.</p> <p>Additionally, the globalpreferences.xml file is used to create the agentpreferences.xml file when new agents first login.</p> <p>Configuration for globalpreferences.xml</p> <p>Put globalpreferences.xml file on a shared network drive.</p> <p>Login to ICManager.</p> <p>Modify following IC property Agent\Desktop\WAC and set shared network path for HomeDir property.</p> <p>Click on "Apply" button.</p> |



| Document Name | Location | Current Information | Corrected /Added Information |
|--|--|--|--|
| Avaya Interaction Center Release 7.2 Business Advocate Configuration and Administration / IC72Advocate.pdf | Page : 20 Section: How Business Advocate works with Avaya IC standard routing | The steps mentioned are insufficient to configure. | In a single system of IC, both the routing combinations(IC Standard routing and BA routing) can exist. But supported combinations are Email and chat channel with either standard or BA but not both at the same time. Both channels must use the same type of routing at a given time. Voice can have both types of routing. If an agent is enabled for BA it is expected that the agent receives contacts only through BA with an exception for voice contacts which he might receive from BA or directly through switch based routing. |
| Avaya Interaction Center Release 7.2 IC Administration Volume 1: Servers & Domains / IC 7.2 IC Administration Volume 1 Servers and Domains.pdf | Page: 56 Section: Server overview for IC Email Server | Missing Information | Poller Server doesn't poll the emails, which doesn't have the FROM or REPLY-TO header. Such emails will be skipped by Poller Server and exchange admin needs to clean up such emails. |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|---|----------------------------|---|
| <p>Avaya Agent User Guide / IC 7.2 Avaya Agent User Guide.pdf</p> | <p>Page : 71 Section: Managing Email Contacts</p> | <p>Missing Information</p> | <p>Monitoring an Email Session (Supervisors Only)</p> <p>To monitor agents' e-mail sessions one of the most important way is start agent in Supervisory mode.</p> <p>Supervisor can only view the e-mails but cannot perform any other operations.</p> <p>Note: Before Supervisor can monitor an agent, he must be designated as the supervisor of at least one of the agent's workgroups.</p> <p>To monitor an e-mail session:</p> <p>Before monitoring an e-mail session, Supervisor can set his availability for voice, chat, and e-mail to 0 in Avaya Agent Web Client.</p> <p>Select the Supervisor Tools > Begin supervisor session option on the main toolbar of the Avaya Agent Web Client.</p> <p>This displays a Supervisor pane besides the interaction list panel. In this Supervisor pane, he can view the workgroup and agents currently logged-in to the chat or e-mail session.</p> <p>To end monitoring session without switching to another session, select the Supervisor Tools > End supervisor session option.</p> <p>This ends supervisory mode for monitoring and he can start in an agent mode.</p> |

| Document Name | Location | Current Information | Corrected /Added Information |
|-----------------------|---|---------------------|---|
| IC721ReleaseNotes.pdf | Page : 69 Section: Configurations / ICManger / Enabling Chat Typing Status for Avaya WebClient and Avaya SDK Clients | Missing Information | <p>To Enable Chat Typing Status for Avaya Agent WebClient and SDK Clients</p> <p>Login to ICManger.</p> <p>Selects Tools->Property Declaration.</p> <p>This will open the Property Declaration dialog box.</p> <p>Add below properties under Agent/Desktop/Chat/Application.</p> <p>Add property ShowTypingStatus having dataype as boolean.</p> <p>Add property TypingStatusThreshold having datatype as integer.</p> <p>Click on Ok button of the Property Declaration dialog box.</p> <p>Modify following properties in IC Manager in section Agent/Desktop/Chat/Application.</p> <p>ShowTypingStatus = Yes</p> <p>TypingStatusThreshold=12</p> |

| Document Name | Location | Current Information | Corrected /Added Information |
|--|--|------------------------------------|--|
| IC 7.2 Using Config Accelerator.pdf | Page : 42 Section: Sites Configuration / WebACD (Web Automatic Call Distributor) server | Missing Information | Note: If CA tool is used to configure IC, user may have to change the "WACD WebServer" in WACD server parameter, depending upon the deployment of website. The steps to change the parameter are as follows: Open ICManager and edit WACD server. Go to WACD tab. In the 'WACD Webserver' field, enter the the name and domain of the computer that hosts the Web Administration pages. Click on "Apply" button and restart WACD server. |
| Avaya Agent User Guide / IC 7.2 Avaya Agent User Guide.pdf | Page : 114 Section: Using Auto Sync | It doesn't mention correct button. | If a customer wants to send you a page, such as information they entered on a form, they must click a Send Message button. Point no. 6: If your customer wants to lead you to a different page, tell them to go to that page and click the Send Message button in their chat client. They can also paste the URL into the chat client and Send Message Page. |
| Avaya Agent User Guide / IC 7.2 Avaya Agent User Guide.pdf | Page : 116,117 Section: Using Collaborative Form Filling | It doesn't mention correct button. | If the customer is viewing the form, ask them to click the Send Message button. Tip: When your customer clicks the button, the page you are viewing may be different from your customer's page. In this case, ask your customer to click the Send Message button again |



| Document Name | Location | Current Information | Corrected /Added Information |
|---|---|--|--|
| Avaya Agent User Guide / IC 7.2 Avaya Agent User Guide.pdf | Page: 132 Section: Handling a JoinUs Conference | It doesn't mention correct button. | Tip: You may want to tell your customer and friend how to lead the others to a Web page. They can go to the page or paste the URL in the URL box of their chat client, and then click the Send Message button. |
| Avaya Interaction Center Release 7.2 Avaya IC integration with VP / IR document | Page: 84 Alarm "Failed to create all of the ADUs" | Duplicate Information (This information is present on Page : 85 correctly) | Ignore this content. |
| Avaya Interaction Center Release 7.2 Avaya IC integration with VP / IR document | Page: 85 Alarm "Unable to load server configuration" | Duplicate Information (This information is present on Page : 90 correctly) | Ignore this content. |

| Document Name | Location | Current Information | Corrected /Added Information | | | | | | | | |
|---|---|-----------------------|--|-------|-------------|-------|--------------------|-------------|---|------|---|
| Avaya Interaction Center Release 7.2 Telephony Connectors Programmer Guide | Page No: 257 Section: TS.SingleStepConferenceV DU | Incorrect Information | <p>Read the parameters table as below:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>vduid</td> <td>EDUID of the call.</td> </tr> <tr> <td>destination</td> <td> <p>The destination of the conference, which can be any of the following:</p> <p>Agent ID Number - The call is transferred to the agent's teleset.</p> <p>Name - The name is looked up in the Avaya IC Directory. If the telephone number field associated with the name contains an extension number, the call is conferenced to that extension.</p> <p>Sequence of digits to dial.</p> </td> </tr> <tr> <td>Mode</td> <td> <p>VISIBILITY_ON: The newly added party with full visibility Option will have listen and talking paths.</p> <p>VISIBILITY_OFF: Only listening paths will be provided for the newly added party.</p> </td> </tr> </tbody> </table> | Value | Description | vduid | EDUID of the call. | destination | <p>The destination of the conference, which can be any of the following:</p> <p>Agent ID Number - The call is transferred to the agent's teleset.</p> <p>Name - The name is looked up in the Avaya IC Directory. If the telephone number field associated with the name contains an extension number, the call is conferenced to that extension.</p> <p>Sequence of digits to dial.</p> | Mode | <p>VISIBILITY_ON: The newly added party with full visibility Option will have listen and talking paths.</p> <p>VISIBILITY_OFF: Only listening paths will be provided for the newly added party.</p> |
| Value | Description | | | | | | | | | | |
| vduid | EDUID of the call. | | | | | | | | | | |
| destination | <p>The destination of the conference, which can be any of the following:</p> <p>Agent ID Number - The call is transferred to the agent's teleset.</p> <p>Name - The name is looked up in the Avaya IC Directory. If the telephone number field associated with the name contains an extension number, the call is conferenced to that extension.</p> <p>Sequence of digits to dial.</p> | | | | | | | | | | |
| Mode | <p>VISIBILITY_ON: The newly added party with full visibility Option will have listen and talking paths.</p> <p>VISIBILITY_OFF: Only listening paths will be provided for the newly added party.</p> | | | | | | | | | | |
| Avaya Interaction Center Release 7.2 Installation and Configuration | Page No: 315 Section: Required permissions for agents | Incorrect information | For IC_INSTALL_DIR\etc and IC_INSTALL_DIR\logs Delete should also be in the list of Required permissions and not in Allowable restrictions in the table. | | | | | | | | |

| Document Name | Location | Current Information | Corrected /Added Information |
|--|---|----------------------------|---|
| <p>Avaya Interaction Center Release 7.2 Installation and Configuration</p> | <p>Page No. 431 Section: Troubleshooting the Data server (Consider this as a new point in this section)</p> | <p>Missing Information</p> | <p>Issue: SQL1220 when issuing db2start, SQL1084 when trying to connect to a database when running 32-bit DB2 version 8.2 on AIX 6.1 with the Olson timezone format</p> <p>Solution: Running a 32-bit DB2 Version 8.2 server on AIX 6.1 will encounter errors when using an Olson timezone format (TZ=US/pacific). In this configuration, AIX's ICU (International Unicode) component memory maps files which conflict with DB2's use of shared memory. Prior to 32-bit DB2 Version 8.2 FP16, SQL1220 will be received on db2start. On 32-bit DB2 version 8.2 FP16 or higher, due to unrelated changes, an error will occur later when attempting the first connection to or activation of a database, at which point SQL1084 will be received. The workaround is to switch to a POSIX timezone format, for example TZ=EST5. An alternative workaround on FP16 or higher is to enable AIX's Extended Shared Memory setting (EXTSHM).</p> <p>Recommendation: In view of the above, it is recommended to set the system timezone format (TZ) of the server running the DB2 server is set using the POSIX format as described above.</p> |

| Document Name | Location | Current Information | Corrected /Added Information |
|--|---|---|--|
| IC 7.2 Avaya Agent User Guide | Pages 82-83 Section: Addressing Emails with the UAD | This section documents steps to address an email using UAD, and mentions using queue in addition to agents. | Email address is not associated with any queue. As such, the ability to select queue using UAD for Email has been disabled in AARC. The relevant section for 'Addressing Emails with the UAD', should now be read without reference to queue/queue tab. |
| IC 7.2 Avaya IC for Siebel 8 Integration Guide | Page No. 212 Section: Creating a Profile | In step 6, adding the AICD Responsibility section is mentioned only for Siebel 8.1.1.0. | AICD Responsibility is applicable for Siebel 8.0.0.0 as well. |
| Avaya Interaction Center Release 7.2 Avaya IC integration with VP / IR | Page No. 26 Section: Configure Dialog Designer Step 6. | Incorrect filename | Under "Ensure that the following files and folders are seen in the WEB-INF directory." "ibm-web-bnd.xml" file is incorrectly mentioned as "ibm-web-bnd.xml" file |
| Avaya Interaction Center Release 7.2 Installation and Configuration | Page No. 47 Section : Building the database schema for an additional Logical Resources Manager Sub-Section: Building the Business Advocate database schema for SQL Server | Missing Information | Note: Create a new database for Additional Logical Resource Manager configuration, by following the same steps used to create database for Primary Logical Resource Manager. |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|--|----------------------------|--|
| <p>Avaya Interaction Center Release 7.2 Avaya IC for Siebel 8 Integration Guide</p> | <p>Page No. 162 Section: ASIS parameters</p> | <p>Missing Information</p> | <p>JVM Options for ASIS Server</p> <p>To improve the performance of ASIS certain JVM options can be passed to the jloader which accordingly loads the JVM for running the ASIS inside it.</p> <p>Below are the steps to apply these parameters:</p> <ol style="list-style-type: none"> 1. In IC Manager, edit the ASIS server and go to the Configuration tab 2. Click new (Name value pair) 3. Go to the ASIS server configuration tab. 4. Add the parameter e.g. "jvm:-Xrs" into the Name field and leave the Value field blank. <p>Perform steps 1 to 4 for all the desired JVM parameters listed. See examples below.</p> <p>Apply the settings and press OK</p> <p>Restart the ASIS server, update the directory server and refresh the IC Manager.</p> <p>Examples of the parameters:</p> <pre>jvm:-Xrs jvm:-Xms128m jvm:-Xmx256m jvm:-Xgcpolicy:subpool</pre> |



| Document Name | Location | Current Information | Corrected /Added Information |
|---|--|------------------------|--|
| Avaya Interaction Center Release 7.2 IC Administration Volume 2: Agents, Customers, & Queues | Page No. 162 Section: About contact acceptance RONA | Additional Information | <p>Note: In Automatic blending mode, when only one agent is available and that agent rejects the contact (Email/Chat) by selecting “No” on the contact acceptance dialog box, the email/chat channel becomes busy and the pop up disappears. The entire agent does not go into aux, but only the Email/Chat channel goes into aux.</p> <p>To enable Email/Chat channel, put the entire agent in aux by clicking the agent head and then make the agent available by clicking agent head again so that agent becomes available on all the channels.</p> |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|--|----------------------------|---|
| <p>Avaya Interaction Center Release 7.2 IC Administration Volume 1: Servers & Domains / IC 7.2 IC Administration Volume 1 Servers and Domains.pdf</p> | <p>Page No. 79 Section: Email services</p> | <p>Missing Information</p> | <p>Whenever the Primary ICEmail server in cluster fails and Secondary ICEmail server become active/functional, for the agents logged in via AAWC/SDK server, the email channel status changes to "Impaired" state</p> <p>During this time agent would not receive any new incoming emails and can not send any outbound emails. However agent can compose new emails or replies and can read already accepted emails.</p> <p>After 2-3 minutes email channel status is changed to "OK" state automatically (cross sign disappears and email channel is available). Agent can continue working normally thereafter and the agents are NOT required to logoff and re-login again.</p> <p>Note: In AAWC, a cross sign appears on agent's email channel when the email channel is "Impaired" and the cross sign disappears when the email channel becomes available.</p> <p>In SDK, this UI representation may vary depending on the implementation to represent the channel availability information.</p> |

| Document Name | Location | Current Information | Corrected /Added Information |
|--|---|---------------------|---|
| IC 7.2 Avaya Agent Web Client online help.pdf | Page No. 35 Section: Email application | Missing Information | <p>In AAWC, the list of fonts displayed in the 'Fonts' drop-down shown during email composition/reply/forward is fetched from the 'C:\WINDOWS\Fonts' folder in the agent's machine.</p> <p>Hence, the fonts that are displayed do not represent specific set of fonts supported by AAWC. The displayed list of font depends on the set of fonts present on the agent windows machine.</p> <p>Any fonts that the customer wishes to use in AAWC can be added to this font's directory and it will be displayed in the 'Fonts' drop-down.</p> |
| Avaya Interaction Center Release 7.2 IC Administration Volume 1: Servers & Domains / IC 7.2 IC Administration Volume 1 Servers and Domains.pdf | Page No. 79 Section: Email services | Missing Information | <p>The time required to complete the "Refresh Email Templates" operation performed from JavaAppBridge server in IC Manager varies according to number of templates configured in the system. For large number of email templates (more than 1000), it may take 5 to 10 minutes depending on the size of the templates.</p> <p>During the time this operation is underway, the templates will not be available for agents. So if an agent logs in to AAWC before this operation is complete, the templates will not be visible to the agent. Agent needs to close the resource window and reopen again to view the templates once the caching operation is completed.</p> <p>It is recommended to perform the "Refresh Email Templates" operation during the Non-Peak hours.</p> |

| Document Name | Location | Current Information | Corrected /Added Information |
|--|--|---|--|
| Avaya Interaction Center Release 7.2 IC Administration Volume 2: Agents, Customers, & Queues | Page No. 95 Section: Phone Type | Missing Information | Note: For Definity CM, the Phone Type "Direct" is not supported with IC:Client:AAWC (WebClient) |
| Avaya Interaction Center Release 7.2 Avaya Agent User Guide Release 7.2 | Page No. 74 Section: Icons in the Email Task List | Missing Information | Note: When an agent is handling an email contact (Active email) and if a voice call comes, the email tasklist changes the email contact's status from Active to InActive/Pause state,the Webagent tool Bar gets greyed-out and the options under the Contact menu gets disabled. The email status (Inactive/Pause) and webagent toolbar will remain in this state, till the agent clicks the email task again (While in the voice call or after the call gets completed) to make the email contact Active. |
| Avaya Interaction Center Release 7.2 IC Administration Volume 1: Servers & Domains | Page No. 343 Section: Web Scheduled Callback server: WSCallback tab: Advanced Properties | Incorrect Information & Missing Information | Field: Call queue size Default is 50 & Minimum is 10 Maximum is 200 |

| Document Name | Location | Current Information | Corrected /Added Information |
|---|--|---|---|
| Avaya Interaction Center and Operational Analyst Release 7.2 Software Upgrade and Data Migration | Page No. 60 Section: Migrate email data from Email server | Incorrect Information & Missing Information | Prerequisites for migrating Email data: Email contacts in the database can be in any state before the migrateemail tool is run. It is Mandatory to set the time and zone information of the machine where the migration tool is run to the same values as that of the server where IC Database (ccq and repository) resides. This is needed for correct DST and Standard offset calculations, which will be generated using the timezone information during migration of datetime fields. |



Known issues in Avaya IC 7.2 documentation

Following are the known issues in IC documentation.

| Key | Parent WI | Summary |
|------------|-----------|--|
| wi00226552 | | Document that it is necessary to use a locale that supports use of the period for decimal representation for Advocate flows to work properly. |
| wi00222300 | | Advocate documentation incorrectly states that Backup work gets only serviced if there is not reserved work that agent is activated for. |
| wi00302242 | | Security checklist is not provided in IC documentation |
| wi00307668 | | IC 7.2 - IR 4.0 - DD 5.0: Documentation: Integration is not successful by following "Avaya Interaction Center Release 7.2 – Avaya IC Integration with VP/IR" document. |
| wi00225655 | | Need to mention in the product document that "AUXRONARReasonCode" works only when IC is integrated with BA for Voice Channel |
| wi00223011 | | Prerequisite and installation documentation should explicitly address requirements for PDM with respect to database connectivity |
| wi00226328 | | Need to update documentation for AIX, to change locale from "EN_US" to "en_US" |
| wi00226228 | | Description provided for Generic.GenericUpdate method for TS server should be changed in the core.pdf (page 31) |
| wi00224666 | | Remove Documentation Ordering information from all documentation -- after market printed documentation/doc CDs no longer supported per Product Management |
| wi00224022 | | User document referencing Voice Chat does not match the Rich client GUI |
| wi00287792 | | Log related configuration parameters must be documented for RLManager. |
| wi00297674 | | Customer wants a setting that would stop the dataserver from trying to reconnect to the database, when the database is down for 30 minutes or more. In this case it is recommended to shut down IC. Need to document this. |
| wi00307172 | | WACD WebServer name must be changed depending upon the website deployment. |
| wi00231779 | | IC pre-req document for TS needs to be change as AIC ASAI Core and Plus are not required as pre-requisites for Agent events/States to work. |



| Key | Parent WI | Summary |
|------------|-----------|--|
| wi00225504 | | WAA.RetryAfterTimeOut for requalifying contacts is not documented |
| wi00226505 | | Suggested Responses should be document properly mentioning all the detailed steps |
| wi00302239 | | IC7.2 Customization Guide is not available in the Server Machines. |
| wi00303172 | | Need to document Rich and Thin Client behavior when default email cluster goes down. |
| wi00225638 | | The IC system doesn't create the required subfolders for "Default WebSite" under IIS in French environment after running the configuration Tool. |
| wi00297643 | | 286378 issue needs to be documented. |
| wi00299484 | | In Solaris IC server installation, a library path does not set correctly. |
| wi00222836 | | VOX documentation dealing with "pings" initiated from an IVR that connects to the VOX needs to reference VOX.ping instead. |
| wi00307651 | | IC 7.2 Documentation: Wrong file extension mentioned for required files in web-inf folder in icconnector directory of Dialog Designer Machine. |
| wi00223700 | | AAWC OnLine help refers to prompt to install WindowsManager.ocx. Prompt has changed (we now install avayaaicagent.cab) |
| wi00224417 | | Documentation needs to be updated to reflect no support for VoIP Chat and Collaborative Form Filling |
| wi00224976 | | The WSC help file contents needs to be corrected |
| wi00297801 | | MS Exchange Server 2007 is changing invalid char set of the Email to valid character |
| wi00300052 | | Documentation doesn't specify the limitations of "co-browsing/auto-syncing" for the websites that require authentication. |
| wi00205351 | | SEC_DOC_AVAY_060 - A general section to address secure deployment and operation of AIC is needed in the documentation |
| wi00224845 | | Documentation - NLS_LANG value for Oracle needs to be changed for all languages |
| wi00225142 | | At the bottom of Page 144 of the install.pdf guide, there is missing text starting with "You can", but with nothing else |
| wi00224967 | | FRA-OLH Footer in Contents is in English – this appears in the PDF |



| Key | Parent WI | Summary |
|------------|------------|--|
| wi00225181 | | Installation docs should state location of nethome directory created by installer |
| wi00221846 | | The Database Designer User Guide is referenced in the 7.0 manuals and that manual title no longer exists |
| wi00225060 | | THA: incorrect spelling in Help Topic (about Translation) |
| wi00371577 | wi00350167 | Tracking history shows Agent name "null", when Administrator will Resolve Contact with status from WACD Admin Page before Agent accepts the contact. |
| wi00362089 | wi00300052 | Documentation doesn't specify the limitations of "co-browsing/auto-syncing" for the websites that require authentication. Workaround: For security reasons, certain fields like the password field and hidden field in a form are not synchronized across between clients. |
| wi00364148 | wi00340944 | Transcript window of chat does not show any chat session after enabling default Visibility during monitoring chat sessions. Workaround: After making default mode visible of a supervisor from Tools > Preferences > Other & enable "Default mode visible when monitoring a chat session", to view chat interaction transcript, click on agents name. Chat transcript interaction will be visible. |
| wi00363744 | wi00284682 | Full support of Microsoft Exchange Server 2007 as a Mail Server with IC. IC Email server is complaint with RFC standards and in case of issues with MS Exchange 2007; those will be taken up appropriately. |
| wi00366018 | wi00362506 | Email Channel is NOT Available on WebAgent login when there is NO Primary Email server configured, but Secondary is configured AND Secondary is FUNCTIONAL. Workaround: Always Configure Primary Email server in a Cluster. The primary email server field in Cluster Configuration "MUST NOT" be empty. |
| wi00376378 | wi00359484 | IBM no longer supports IBM HTTP Server release 1.3.28 (since September 2008), this is shipped with WebSphere Application Server V5.1. Workaround (AIX only): Make changes to the deployment configuration as follows: Install core servers on AIX and deploy the website on a Windows 2003 machine. |
| wi00387290 | wi00309879 | [PR for 7.2.3] On AIX machine, TimeZone format should be set to posix |
| | | |



Cisco TS known issues

The following are Cisco TS known issues:

| Key | Summary |
|------------|--|
| wi00314919 | A generic error is obtained in the TS log for call related scenarios |
| wi00314348 | For a conference using the hard phone, when the agent does 'move conversation' twice, completes the conference and when one of the agent hangs up the call, the call disappears from agent's hard phone but still remains in the Soft phone. |
| wi00314338 | When a call gets RONA, there is a TS.Abandoned event instead of TS.Rona event in the TS log. |

Cisco TSQS known issues

The following are Cisco TSQS known issues:

| Key | Summary |
|------------|---|
| wi00314771 | Cisco TSQS - The value for 'averagedelay' is incorrectly updated in the Cisco AWDB database and TSQS log. |

Troubleshooting

Email

| Problem | Solution |
|--|--|
| <p>After configuration, opening email account shows no email account/ error message "Could not load Email Accounts" pops up.</p> | <p>Check if "displayname" field was added to qem_mailaccount table in both ccq.adl and repository.adl and DB reconfigure was performed.</p> <p>After performing above configuration, please restart the DataServer, Directory Server and perform a Manager > Refresh on ICManger.</p> <p>This ensures ICManger loads the configured email accounts correctly.</p> |
| <p>SME/REQ email alert functionality is not configurable as described in the documentation "admin2.pdf", pages 242-243.</p> | <p>PSN (PSN2719) has been published to address this issue.</p> <p>Link to PSN: http://support.avaya.com/css/P8/documents/100073907</p> |
| <p>ICEmail server reports an alarm on SMTP failure for message delivery. The SMTP-server specified in alarm did not accept the message for delivery.</p> | <p>Check the Alarm text as below:</p> <p>"Failed to send email through SMTP mail server [%s] at port [%u] for msgid <[%lu]>. Check ICMail server logs for more details."</p> <p>where:</p> <ul style="list-style-type: none"> • <%s> is the location of the SMTP server. • <%u> is the port of the SMTP server. • <%lu> is the messageid of the email contact. <p>If you see this alarm:</p> <p>Check whether the email address in the to/cc/bcc field of the failed email is a valid email address or not.</p> |



| Problem | Solution |
|--|--|
| ICEmail server reports alarm on SMTP failure. When the SMTP-server specified in the alarm is unreachable, the IEmail server will retry 15 times to send the email contact. | <p>Check the Alarm text as below:</p> <p>“Failed to send email through SMTP <[%s]> at port <[%u]> for msgid <[%lu]>, Tried for <[%d]> times.”</p> <p>where:</p> <p><%s> is the location of the SMTP server.</p> <p><%u> is the port of the SMTP server.</p> <p><%lu> is the messageid of the email contact.</p> <p><%d> is the retry count for that particular email contact.</p> <p>If you see this alarm:</p> <p>Check if the SMTP server specified in logs is reachable from the IEmail server machine.</p> |

SDK

| Problem | Solution |
|--|---|
| Chat typing status doesn't work for SDK Clients using SDK API's. | <p>Check Chat Typing Status feature in SDK Client is implemented as mentioned below. Please refer SDK API Docs from http://support.avaya.com for newly provided API's for Chat Typing Status.</p> <p>For displaying received Chat Typing Status from other participants of Chat room in SDK Client User Interface.</p> <p>SDK clients need to add and register listener for ChatMediaInteractionTypingStatusChanged event, retrieve typingstatusmessage from the event and display it in appropriate user interface.</p> <p>For Broadcasting chat typing status of agent to other participants in Chat room:</p> <p>SDK client need to invoke sendTypingStatus API exposed on ChatMediaInteraction object.</p> |

Chat

| Problem | Solution |
|---------|----------|
|---------|----------|

| Problem | Solution |
|--|--|
| Chat typing status doesn't work for website | <p>Perform the following steps:</p> <p>Launch the web browser and navigate to the IC Website Administration Pages.</p> <p>Login and navigate to http://website/admin/tenancy/addmd.jsp</p> <p>Confirm below property marked as true.</p> <p>Metadata name = chat.htmlclient.typingstatusenable</p> <p>Default value = true</p> <p>Tenant Property (Check this field)</p> <p>Restart website</p> |
| Updated Chat typing status message is not reflecting in status window of html chat | Restart Web site. |
| Chat typing status doesn't work for webagent | <p>Confirm that the <AARC install_dir>\Webagent\Application.properties file with the following properties marked as true.</p> <p>chat.typingstatus.enable=true</p> <p>Restart webagent</p> |
| Updated Chat typing status message is not reflecting in status window of webagent. | Restart Web agent. |

WebAgent

| Problem | Solution |
|--|---|
| After upgrading to 721, Webagent doesn't launch over network home path. | <p>If the Shared Path "HomeDir" for WebAgent is configured in ICManager using the property "Agent/Desktop/WAC", then copy the folders lexicons, images and editlive under this path.</p> <p>Verify that the directory has required read, write and execute permissions.</p> |
| Change in Agent's 'Preferred Name' is not reflecting at WebAgent, WebAgent displays the old preferred name only. | After changing Agent's 'Preferred Name', Restart comhub server. |



TS

| Problem | Solution |
|--|--|
| TServer puts default-ANI in data although configured as empty. | Add a single space (" ") instead of blank ("") in the Default ANI configuration. |
| TS generate a TS.Abandon event on receipt of an extraneous C_Drop event from CM. | <p>The issue i.e. extra C_DROP occurred was caused due to a CM Patch # 17374.</p> <p>The new CM patch superseding 17374 does not cause extra C_DROP from CM, resolves the issue.</p> |

RL Manager

| Problem | Solution |
|---|---|
| After clicking on 'Apply' button once, 'Apply' button is not disabled until next change | Though there is no change in button state, the Apply functionality works as expected. |

Siebel

| Problem | Solution |
|--|---|
| IC 7.2 sif file have a compatibility issues with Siebel SIA 7.8.2.6 and above. | <p>Before import of sif files shipped with IC 7.2 into Siebel SIA 7.8.2.6, do following modification in sif file.</p> <p>Steps to modify sif file -</p> <p>Open the file in some editor.</p> <p>Add following attribute for PROJECT tag of the file UI_FREEZE="N"</p> <p>Save the file and close it.</p> <p>Go ahead with importing this modified file.</p> |
| Agent is Not able to Reply/Reply All/Forward an email. | <ol style="list-style-type: none">1. Agent accepts the email sent by a customer.2. Select "Communications-->Communications List"3. Select All Communications from the drop down, that appears below "My Communications".4. Select the email from the list.5. Continue with normal Reply/Reply All/Forward operation. |

Website

| Problem | Solution |
|---|--|
| Website fails to launch when configured using IBM HTTP server 7.x on AIX-6.1. | <p>Reason: If the config tool is re-launched due to any reason after performing all the steps mentioned under Configuring IBM HTTP server 7.x on AIX-6.1 then this problem would occur.</p> <p>Solution: Follow the Steps #2 & #3 again mentioned under the section: Configuring IBM HTTP server 7.x on AIX-6.1.</p> |

Rich Client

| Problem | Solution |
|--|--|
| <p>While starting the Rich Client through the citrix client if the following error pops-up:</p>  <p>Error text: "Avaya Agent Error 11008: Cannot register appbar Termination application."</p> | <p>Click the Ok button.</p> <p>On citrix server search for the qui.ini.</p> <p>Make sure that you update all the qui.ini files with the following two lines</p> <pre>[QConsole] ResizeDesktop=FALSE.</pre> <p>Restart Rich Client.</p> |

Installer

| Problem | Solution |
|--|------------------------------------|
| The Service Pack installer may display popup messages for confirmation to overwrite files. | It is safe to overwrite all files. |



ICManager

| Problem | Solution |
|---|--|
| <p>The template data is not displayed in “Email Account” panel.</p> | <p>Edit the WACD server and go to “WACD” tab.</p> <p>Verify that correct value has been provided for “Default Email Cluster”. If not, provide correct value and apply changes.</p> <p>Make sure that atleast one ICEmail server in the “Default Email Cluster” is up and running.</p> <p>Restart the WACD server.</p> <p>Perform steps #1 to #4 for both WACD instances if you have WACD cluster configured.</p> |



Product Limitations

The items mentioned in the table below are Product Limitations of the Avaya Interaction Center due to underlying architecture.

| Component | Parent WI | Child WI | Summary of reported defect |
|-------------------------------|------------|------------|---|
| IC:Client:AAWC | wi00357129 | wi00938347 | One Reason code with multiple outcomes can be entered in wrapup codes. |
| IC:Client:RichClient:WebAgent | wi00225558 | wi00332490 | The "Contact -> Print" menu option in AVAYA Web Agent is disabled for newly composed emails. |
| RichClient:WCAgentClient | wi00825503 | wi00829554 | Ephox EditLive! editor in IC WebAgent does not render HTML comment & select tags as expected in IC 7.2.2. Note: This issue resides with 3rd party component Ephox, and not integral to RichClient. Workaround: For interactive elements (containing data), double clicking it will display the relevant information. |

The items mentioned in the table below were reported, but subsequently did not occur again on any test or production systems, hence are marked as Non-Reproducible.

| Component | Parent WI | Child WI | Summary of reported defect |
|--------------------------|------------|------------|---|
| IC:Advocate:WAA | wi00879167 | wi00898626 | WAA Server hangs on receiving SimDeassign. |
| IC:Client:AAWC:UOM:Email | wi00909680 | wi00927293 | AAWC agent is unable to reply to an inbound email, if the email contains an inline image whose source is a URL |
| IC:Server:Email | wi00844332 | wi00857234 | Email sent for Quality Assurance that is rejected by the approver is never completed with a status of 65028 |
| IC:Server:Email | wi00844093 | wi00853058 | ICEmail server is failing to properly parse the Reply-To header which causes the email to arrive at the agent with a from address of '>'. |



The items mentioned in the list below were reported by Customers. These items work consistent with the design of the Avaya Interaction Center software, hence marked as "Works as designed".

| Component | Parent WI | Child WI | Summary of reported defect |
|------------------------------------|------------|------------|--|
| IC:Client:RichClient:BlenderClient | wi00892779 | wi00898631 | For manual blending mode Rich client sends an aux request to TS after Outbound call completed. |
| IC:Client:RichClient:WebAgent | wi00889362 | wi00892800 | The HTML part of a multipart email is not rendered on webagent while setting the "Read html mode" as false |
| IC:Client:RichClient:WebAgent | wi00893313 | wi00898640 | Webagent doesn't creates bullet point with Enter key pressed |



Service Pack Files

- [Avaya Agent component \(Windows\)](#)
- [Avaya Agent Web Client component \(Windows/Solaris/ AIX\)](#)
- [Avaya Agent Web Client Connector \(Windows\)](#)
- [Avaya Agent Web Client Connector \(Solaris\)](#)
- [Avaya Agent Web Client Connector \(AIX\)](#)
- [Administration and Design component \(Windows\)](#)
- [Server component \(Windows\)](#)
- [Server component \(Solaris\)](#)
- [Server component \(AIX\)](#)
- [Siebel Integration component \[IC Side\] \(Windows\)](#)
- [Siebel Integration component \[IC Side\] \(Solaris\)](#)
- [Siebel Integration component \[IC Side\] \(AIX\)](#)
- [Siebel Integration component \[Siebel Side\] \(Windows\)](#)
- [Siebel Integration component \[Siebel Side\] \(Solaris\)](#)
- [Siebel Integration component \[Siebel Side\] \(AIX\)](#)
- [SDK component \(Windows\)](#)
- [SDK component \(Solaris\)](#)
- [SDK component \(AIX\)](#)

Avaya Agent component (Windows)

The following table lists the files that are installed on the Avaya Agent on Windows platform:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------------|---|---------------------------------------|--|--|
| ActiveContactViewer.ocx | Date: 10/15/2009 Version: 7.2.1.16 | Date: 10/15/2009 Version: 7.2.1.16 | Date : 10/15/2009 Version : 7.2.0.0 | Date: 7/30/2011 Version: 7.2.0.0 |
| ActiveContactViewer.pdb | Date: 10/15/2009 Version: 7.2.1.16 | Date: 10/15/2009 Version: 7.2.1.16 | Date : 10/15/2009 Version : 7.2.0.0 | Date: 7/30/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------------|---------------------|------------------|---------------------|---|
| AgentProxy.exe | Date: 11/06/2009 | Date: 11/06/2009 | Date : 11/6/2009 | Date: 11/6/2009 Version: 1.0.0.0 |
| asai.ini | Date: 08/19/2009 | Date: 08/19/2009 | Date : 8/19/2009 | Date: 8/19/2009 |
| avaya_agent_en.cdl | | | Date : 8/6/2009 | Date: 7/28/2011 |
| AxInterop.BSLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| AxInterop.CDKTOOLKITOCXLib.dll | | | | Date: 11/26/2011 Version: 7.2.0.0 |
| AxInterop.QCommCtlsLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| AxInterop.QConsolefxLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 Version: 7.2.0.0 |
| AxInterop.QWdcocxLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 8/5/2011 Version: 7.2.0.0 |
| AxInterop.QwrwocxLib.dl | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| AxInterop.QWScriptsLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 Version: 7.2.0.0 |
| AxInterop.QXMLParseLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| AxInterop.VespEngineLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.0 |
| AxInterop.wrapLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------------|---|---------------------------------------|---|---|
| BlenderClient.ocx | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/21/2010 Version: 7.2.2.17 | Date : 10/22/2010 Version : 7.2.3.16 | Date: 11/26/2011 Version: 7.2.4.33 |
| BlenderClient.pdb | Date: 10/22/2009 | Date: 04/21/2010 | Date : 10/22/2010 | Date: 11/26/2011 |
| BSLib.dll | | | Date : 9/10/2010 Version : 7.2.0.0 | Date: 6/24/2011 Version: 7.2.0.0 |
| CallList.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| CallList.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |
| ccq.adl | | | Date : 4/6/2010 | Date: 6/16/2011 |
| cdk.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| cdk.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| CdkToolkitOcx.ocx | | | | Date: 12/12/2011 Version: 1.0.0.1 |
| CdkToolkitOcx.pdb | | | | Date: 12/12/2011 |
| CDKTOOLKITOCXLib.dll | | | | Date: 11/26/2011 Version: 7.2.0.0 |
| ChatList.ocx | Date: 08/13/2009 | Date: 08/13/2009 | Date : 7/31/2010 | Date: 6/10/2011 Version: 7.2.4.12 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------------|---------------------|---------------------------------------|---|---|
| ChatList.pdb | Date: 08/13/2009 | Date: 08/13/2009 | Date : 7/31/2010 | Date: 6/10/2011 |
| clogin.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 6/24/2011 Version: 7.2.4.14 |
| clogin.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| cobrowse.jar | | | Date : 8/6/2010 | Date: 8/6/2010 |
| consolefx.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| consolefx.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| ContactHistoryBrowser.ocx | - | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 6/24/2011 Version: 7.2.4.14 |
| ContactHistoryBrowser.pdb | - | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| Core.dll | | | Date : 10/15/2010 Version : 7.2.3.14 | Date: 11/15/2010 Version: 7.2.4.14 |
| Core.pdb | | | Date : 10/15/2010 | Date: 10/15/2010 |
| CtiNmi.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| CtiNmi.pdb | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/26/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------|---|---------------------------------------|--|---|
| dco.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 8/5/2011 Version: 7.2.4.20 |
| dco.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 8/5/2011 |
| editlivejava.jar | Date: 11/27/2009 | Date: 11/27/2009 | Date : 11/27/2009 | Date: 11/3/2011 |
| EduViewer.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| EduViewer.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |
| getsysdir.bat | | | | Date: 11/9/2011 |
| ibmdom.dll | | | | Date: 11/3/2011 |
| icm.jar | Date: 11/04/2009 Version: 7.2.1.18 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| ImcClient.jar | | | | Date: 8/25/2011 |
| jdic.dll | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 10/7/2009 Version: 0.9.1.0 |
| jdic.jar | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 10/7/2009 |
| jdic_stub_windows.jar | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 10/7/2009 |
| libeay32.dll | | Date: 11/10/2008 Version: 0.9.8.4 | Date : 11/10/2008 Version : 0.9.8.4 | Date: 11/10/2008 Version: 0.9.8.4 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------|---------------------|---------------------------------------|---|---|
| localeprops.jar | Date: 11/04/2009 | Date: 11/04/2009 | Date : 11/4/2009 | Date: 11/4/2009 |
| MailEngine.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 11/26/2011 Version: 7.2.4.33 |
| MailEngine.pdb | | | Date : 7/31/2010 | Date: 11/26/2011 |
| mttlogger.dll | | | | Date: 11/25/2011 Version: 7.2.4.33 |
| mttlogger.pdb | | | | Date: 11/25/2011 |
| mttoolkit.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 12/8/2011 Version: 7.2.4.33 |
| mttoolkit.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/8/2011 |
| NewOutboundEmail.xml | Date: 12/04/2009 | Date: 12/04/2009 | Date : 12/4/2009 | Date: 11/3/2011 |
| PhoneEngine.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| PhoneEngine.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |
| PreviewEmailConfig.xml | Date: 12/04/2009 | Date: 12/04/2009 | Date : 12/4/2009 | Date: 7/14/2011 |
| PrompterClient.ocx | | | | Date: 11/26/2011 Version: 7.2.4.33 |
| PrompterClient.pdb | | | | Date: 11/26/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------|---------------------|---------------------------------------|---|---|
| QCOMMCTLSLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| qconfig.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| QConsole_asai.ini | Date: 08/19/2009 | Date: 08/19/2009 | Date : 8/19/2009 | Date: 8/19/2009 |
| QCONSOLEFXLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| qimport.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qimport.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qui.exe | Date: 09/24/2009 | Date : 04/15/2010 | Date : 9/10/2010 | Date: 11/28/2011 |
| qui.pdb | Date: 09/24/2009 | Date : 04/15/2010 | Date : 9/10/2010 | Date: 11/28/2011 |
| qui.reg | | | | Date: 3/9/2011 |
| qwbsext.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/4/2011 Version: 7.2.4.32 |
| qwdco.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| qwdco.pdb | | | | Date: 11/26/2011 Version: 7.2.4.33 |
| QwdcocxLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 Version: 7.2.0.0 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------------|---------------------|--|---|--|
| qwdcprop.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 6/23/2011 Version: 7.2.4.14 |
| qwdcprop.pdb | | Date: 04/15/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| qwlog.dll | | | | Date: 11/3/2011 Version: 7.2.4.32 |
| qwlog.pdb | | | | Date: 11/3/2011 |
| QwrwocxLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 Version: 7.2.0.0 |
| QWScripts.ocx | Date: 08/13/2009 | Date : 04/15/2010 Version : 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/4/2011 Version: 7.2.4.32 |
| QWScripts.pdb | Date: 08/13/2009 | Date : 04/15/2010 Version : 7.2.2.16 | Date : 9/10/2010 | Date: 11/4/2011 |
| QWSCRIPTSLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 Version: 7.2.0.0 |
| qwtranscode.dll | | | | Date: 10/14/2011 |
| QXMLPARSELlib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| RegRichClient.bat | | | | Date: 12/2/2011 |
| ReplyForwardEmailConfig.xml | Date: 12/04/2009 | Date: 12/04/2009 | Date : 12/4/2009 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|---------------------|---------------------------------------|--|--|
| ReportWizard.exe | | | | Date: 12/8/2011 Version: 7.2.0.0 |
| ReportWizard.pdb | | | | Date: 12/8/2011 |
| ResourcesConfig.xml | Date: 12/04/2009 | Date: 12/04/2009 | Date : 12/4/2009 | Date: 11/3/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 Version: 7.2.4.14 |
| rw.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 6/24/2011 Version: 0.9.8.4 |
| rw.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| SoftPhoneGui.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| SoftPhoneGui.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |
| sscege.tlx | | | | Date: 6/22/2011 |
| sscegn2.clx | | | | Date: 6/22/2011 |
| sscego2.clx | | | | Date: 6/22/2011 |
| ssleay32.dll | | Date: 11/10/2008 Version: 0.9.8.4 | Date : 11/10/2008 Version : 0.9.8.4 | Date: 11/10/2008 |
| ssllib.dll | | | Date : 9/9/2010 | Date: 6/23/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------|---|---------------------------------------|---|---|
| ssllib.pdb | | | Date : 9/9/2010 | Date: 6/23/2011 |
| Status.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 11/4/2011 Version: 7.2.4.32 |
| Status.pdb | | | Date : 7/31/2010 | Date: 11/4/2011 |
| TaskLib.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| TaskLib.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |
| TaskList.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| TaskList.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |
| TelButton.ocx | | | Date : 8/20/2010 Version : 7.2.3.6 | Date: 10/21/2011 Version: 7.2.4.31 |
| TelButton.pdb | | | Date : 8/20/2010 | Date: 10/21/2011 |
| Telephony.dll | Date: 09/11/2009 Version: 7.2.1.11 | Date: 09/11/2009 Version: 7.2.1.11 | Date : 10/15/2010 Version : 7.2.3.14 | Date: 12/9/2011 Version: 7.2.4.33 |
| Telephony.pdb | Date: 09/11/2009 Version: 7.2.1.11 | Date: 09/11/2009 Version: 7.2.1.11 | Date : 10/15/2010 | Date: 12/9/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|---------------------|---------------------------------------|---|---|
| TreeCtrl.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 6/24/2011 Version: 7.2.4.14 |
| TreeCtrl.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| UAD.ocx | | Date: 02/18/2010 Version: 7.2.2.9 | Date : 8/27/2010 Version : 7.2.3.7 | Date: 8/5/2011 Version: 7.2.4.20 |
| UAD.pdb | | Date: 02/25/2010 | Date : 8/27/2010 | Date: 8/5/2011 |
| UnregRichClient.bat | | | | Date: 12/2/2011 |
| VespEngine.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| VespEngine.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| VESPENGINELib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.0 |
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |
| vesporb.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 10/15/2010 Version : 7.2.3.14 | Date: 11/26/2011 Version: 7.2.4.33 |
| vtel.exe | | Date: 04/14/2010 | Date : 10/15/2010 | Date: 11/4/2011 Version: 7.2.4.32 |
| vtel.pdb | | Date: 04/14/2010 | Date : 10/15/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---------------------|---------------------------------------|---|---|
| VtelDispatch.dll | | | Date : 10/15/2010 Version : 7.2.3.14 | Date: 9/23/2011 Version: 7.2.4.27 |
| VtelDispatch.pdb | | | Date : 10/15/2010 | Date: 9/23/2011 |
| WACEngine.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 11/25/2011 Version: 7.2.4.33 |
| WACEngine.pdb | | | Date : 7/31/2010 | Date: 11/25/2011 |
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |
| WebEngine.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 6/10/2011 Version: 7.2.4.12 |
| WebEngine.pdb | | | Date : 7/31/2010 | Date: 6/10/2011 |
| wrap.ocx | | Date: 02/25/2010 Version: 7.2.2.10 | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| wrap.pdb | | Date: 02/25/2010 | Date : 7/31/2010 | Date: 7/31/2010 |
| WRAPLib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| Wrapup.ocx | | | Date : 7/31/2010 Version : 7.2.3.3 | Date: 7/31/2010 Version: 7.2.3.3 |
| Wrapup.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|----------|----------|---|--|
| WrapUpEngine.ocx | | | Date : 7/31/2010 Version : 7.2.0.0 | Date: 7/31/2010 Version: 7.2.0.0 |
| WrapUpEngine.pdb | | | Date : 7/31/2010 | Date: 7/31/2010 |

Avaya Agent Web Client component (Windows)

The following table lists the files that are installed with the Avaya Agent Web Client component on Windows platform:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------|------------------|---------------------|---------------------|------------------|
| addressbook.js | | Date: 02/08/2010 | Date : 2/8/2010 | Date: 5/4/2011 |
| addressbookfooter.jsp | | | | Date: 5/4/2011 |
| addressbooklist.js | | | | Date: 5/4/2011 |
| agent.jsp | Date: 08/26/2009 | Date: 02/08/2010 | Date : 2/8/2010 | Date: 2/8/2010 |
| agent_default.jsp | | | | Date: 8/26/2009 |
| agentdefs.js.jsp | Date: 08/26/2009 | Date: 02/08/2010 | Date : 9/30/2010 | Date: 5/4/2011 |
| application.js | | | | Date: 6/24/2011 |
| application.jsp | | | | Date: 11/3/2011 |
| autocomplete.js | | | | Date: 5/4/2011 |
| avaya-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avayaicagent.cab | | Date: 04/14/2010 | Date : 4/14/2010 | Date: 4/14/2010 |
| avaya-ic-bridges.jar | | | Date : 9/10/2010 | Date: 10/21/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------------------|------------------|---------------------|----------------------|-----------------|
| avayaiccommon.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avayaicL10N.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-sample.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-server.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| avaya-ic-webclient.jar | | | | Date: 6/24/2011 |
| avaya-ic-webui.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 10/19/2010 | Date: 8/5/2011 |
| body.js | | Date: 02/02/2010 | Date : 2/2/2010 | Date: 11/3/2011 |
| chatAll.js | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 8/4/2011 |
| chatapp.jsp | Date: 08/26/2009 | Date: 08/26/2009 | Date : 8/26/2009 | Date: 8/26/2009 |
| chatPrintTemplate.jsp | | | | Date: 4/14/2011 |
| chatsendtextpane.jsp | Date: 08/26/2009 | Date: 08/26/2009 | Date : 8/26/2009 | Date: 8/26/2009 |
| cobrowse.jar | | | Date : 8/6/2010 | Date: 8/6/2010 |
| Collaborationcontrols.js | | Date: 02/08/2010 | Date : 2/8/2010 | Date: 2/8/2010 |
| collaborationdialog.jsp | Date: 08/13/2009 | Date: 08/13/2009 | Date : 8/13/2009 | Date: 8/13/2009 |
| collaborationdialog_default.jsp | Date: 08/13/2009 | Date: 08/13/2009 | Date : 8/13/2009 | Date: 8/13/2009 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------------|------------------|---------------------|---------------------|-----------------|
| cstable.js | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 8/7/2009 |
| customercontactdetails.js | | | Date : 9/30/2010 | Date: 9/30/2010 |
| datacontroller.js | | | | Date: 8/25/2011 |
| emailall.js | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 8/7/2009 |
| emailPrintTemplate.jsp | | | | Date: 4/14/2011 |
| htmlarea.js | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 8/7/2009 |
| icapplication.js | Date: 08/26/2009 | Date: 08/26/2009 | Date : 8/26/2009 | Date: 11/3/2011 |
| icm.jar | Date: 11/04/2009 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| ImcClient.jar | | | | Date: 8/25/2011 |
| interactionlist.js | | | | Date: 11/3/2011 |
| joinus.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 8/7/2009 |
| list.js | | | | Date: 8/25/2011 |
| public_api.js | Date: 08/26/2009 | Date: 08/26/2009 | Date : 8/26/2009 | Date: 8/26/2009 |
| quickfind.js | Date: 08/07/2009 | Date: 02/02/2010 | Date : 2/2/2010 | Date: 5/4/2011 |
| spelling.js | | | | Date: 6/24/2011 |
| spellingApp.js | | | | Date: 6/24/2011 |
| sscege.tlx | | | | Date: 6/30/2011 |
| sscegn2.clx | | | | Date: 6/30/2011 |
| sscego2.clx | | | | Date: 6/30/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------|------------------|---------------------|---------------------|-----------------|
| trackinghistory.js | | | Date : 9/30/2010 | Date: 9/30/2010 |
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |

Avaya Agent Web Client Connector (Windows)

The following table lists the Avaya Agent Web Client Connector files that are installed on the Windows machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|---------------------|---------------------------------------|---------------------------------------|---|
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| cdk.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.32 |
| CommandScripter.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| CtiNmi.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.32 |
| DCOBinding.dll | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| DCOBinding.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| ibmdom.dll | | | | Date: 11/3/2011 |
| icadmin.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| icm.jar | Date: 11/04/2009 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| ImcClient.jar | | | | Date: 8/25/2011 |
| jloader.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|---------------------|---------------------------------------|--|---|
| libeay32.dll | | Date: 11/10/2008 Version: 0.9.8.4 | Date : 11/10/2008 Version : 0.9.8.4 | Date: 11/10/2008 Version: 0.9.8.4 |
| mttlogger.dll | | | | Date: 11/25/2011 Version: 7.2.4.32 |
| mttoolkit.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 12/8/2011 Version: 7.2.4.32 |
| mttoolkit.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 9/9/2010 |
| qconfig.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qwbsext.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/4/2011 Version: 7.2.4.32 |
| qwdc0.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| qwdcprop.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 6/23/2011 Version: 7.2.4.14 |
| qwlog.dll | | | | Date: 11/3/2011 Version: 7.2.4.32 |
| qwtranscode.dll | | | | Date: 10/14/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |
| ssleay32.dll | | Date: 11/10/2008 Version: 0.9.8.4 | Date : 11/10/2008 Version : 0.9.8.4 | Date: 11/10/2008 Version: 0.9.8.4 |
| ssllib.dll | | | Date : 9/9/2010 | Date: 6/23/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------|---------------------|---------------------------------------|---|---|
| ssllib.pdb | | | Date : 9/9/2010 | Date: 6/23/2011 |
| tools.jar | | Date: 04/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| VespBridge.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 6/23/2011 Version: 7.2.4.14 |
| VespBridge.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |
| vesporb.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 10/15/2010 Version : 7.2.3.14 | Date: 11/26/2011 Version: 7.2.4.33 |
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |

Avaya Agent Web Client Connector (Solaris)

The following table lists the Avaya Agent Web Client Connector files that are installed on the Solaris machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---------------------|------------------|----------------------|---------------------|
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| Jloader | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libADULib.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 9/23/2011 |
| libcdk.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libclusterlib.so | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libcrypto.so | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|---------------------|------------------|----------------------|---------------------|
| libCtiNmi.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| libDCOBinding.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libmttlogger.so | | | | Date: 11/25/2011 |
| libmtttoolkit.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/12/2011 |
| libqwbsext.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libqwdc.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/26/2011 |
| libqwibmdom.so | | | | Date: 11/4/2011 |
| libqwlog.so | | | | Date: 11/4/2011 |
| libqrrw.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libRMBLib.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| libssl.so | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libssl.lib.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libstssl.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libUtilityLib.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| libVespBridge.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libvesporb.so | | Date: 04/14/2010 | Date : 10/15/2010 | Date: 11/25/2011 |
| libWFSLib.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------|---------------------|------------------|------------------|-----------------|
| tools.jar | | Date: 04/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |

Avaya Agent Web Client Connector (AIX)

The following table lists the Avaya Agent Web Client Connector files that are installed on the AIX machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|------------------|---------------------|----------------------|------------------|
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| icadmin | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| jloader | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libADULib.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 9/23/2011 |
| libcdk.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libclusterlib.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libCtiNmi.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libDCOBinding.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libmttlogger.so | | | | Date: 11/25/2011 |
| libmttoolkit.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date:12/12/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|------------------|---------------------|----------------------|------------------|
| libqwbsext.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libqwdc.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libqwibmdom.so | | | | Date: 11/3/2011 |
| libqwlog.so | | | | Date: 11/3/2011 |
| libqwrw.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libRMBLib.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libssl.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libstssl.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libUtilityLib.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libVespBridge.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libvesporb.so | | Date: 4/14/2010 | Date : 10/14/2010 | Date: 11/25/2011 |
| libWFSLib.so | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| orbsrv | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| qconfig | | Date: 4/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 2/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------|------------------|------------------|------------------|-----------------|
| tools.jar | | Date: 4/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |

Administration and Design component (Windows)

The following table lists the files that are installed on the Administration and Design machine on the Windows platform after installing the Service Pack:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|------------------|------------------|---------------------------------------|-------------------------------------|
| ADLPathFix.bat | | | Date : 4/19/2010 | Date: 4/19/2010 |
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| Advocate.scad | Date: 10/21/2009 | Date: 10/21/2009 | Date : 10/21/2009 | Date: 10/21/2009 |
| agentAttributes.xml | | Date: 04/14/2010 | Date : 4/14/2010 | Date: 4/14/2010 |
| AgentWatcher.ocx | | | Date : 2/25/2010 Version : 7.2.0.0 | Date: 2/25/2010 Version: 7.2.0.0 |
| avaya_agent_de.cdl | | | | Date: 7/28/2011 |
| avaya_agent_en.cdl | Date: 08/06/2009 | Date: 08/06/2009 | Date : 8/6/2009 | Date: 7/28/2011 |
| avaya_agent_es.cdl | | | | Date: 7/28/2011 |
| avaya_agent_fr.cdl | | | | Date: 7/28/2011 |
| avaya_agent_it.cdl | | | | Date: 7/28/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------------|----------|---|---------------------------------------|---|
| avaya_agent_ja.cdl | | | | Date: 7/28/2011 |
| avaya_agent_ko.cdl | | | | Date: 7/28/2011 |
| avaya_agent_pt.cdl | | | | Date: 7/28/2011 |
| avaya_agent_ru.cdl | | | | Date: 7/28/2011 |
| avaya_agent_sbl_en.cdl | | | | Date: 11/18/2011 |
| avaya_agent_th.cdl | | | | Date: 7/28/2011 |
| avaya_agent_zh.cdl | | | | Date: 7/28/2011 |
| avaya_agent_zt.cdl | | | | Date: 7/28/2011 |
| BAConfigurationTool.exe | | Date: 04/29/2010 | Date : 9/10/2010 | Date: 9/10/2010 Version: 7.2.0.0 |
| BAConfigurationTool.pdb | | Date: 04/29/2010 | Date : 9/10/2010 | Date: 9/10/2010 |
| cadl.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| cadl.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| ccq.adl | | Date: 04/06/2010 | Date : 4/6/2010 | Date: 6/16/2011 |
| cdk.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------------|------------------|---------------------|---|--|
| cdk.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| channel_state.qfd | Date: 09/09/2009 | Date: 09/09/2009 | Date : 9/9/2009 | Date: 10/20/2011 |
| ChatList_Initialize.qsc | Date: 08/06/2009 | Date: 08/06/2009 | Date : 8/6/2009 | Date: 8/6/2009 |
| cleanupAdvocate.vbs | | | | Date: 8/16/2011 |
| cobrowse.jar | | | Date : 8/6/2010 | Date: 8/6/2010 |
| comct332.ocx | | | Date : 4/25/2002 Version : 6.7.0.8988 | Date: 4/25/2002 Version: 6.7.0.8988 |
| comctl32.ocx | | | Date : 7/25/2002 Version : 6.0.81.5 | Date: 7/25/2002 Version: 6.0.81.5 |
| comdlg32.ocx | | | Date : 4/25/2002 Version : 6.0.84.18 | Date: 4/25/2002 Version: 6.0.84.18 |
| CommandScripter.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| Common.xml | Date: 08/25/2009 | Date: 08/25/2009 | Date : 8/25/2009 | Date: 8/25/2009 |
| configAccelerator.jar | Date: 10/04/2009 | Date: 10/04/2009 | Date : 10/4/2009 | Date: 10/4/2009 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| CoreServices_Initialize.qsc | | | | Date: 10/20/2011 |
| CoreServices_Login.qsc | | | | Date: 6/9/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------|------------------|---|---------------------------------------|---|
| CtiNmi.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| CtiNmi.pdb | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| DataUnit56.ocx | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.1 |
| DCOBinding.dll | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 Version: 1.0.0.1 |
| DCOBinding.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| DirectoryService56.ocx | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.1 |
| employee_seed.csv | | Date: 04/14/2010 | Date : 4/14/2010 | Date: 4/14/2010 |
| getsysdir.bat | | | | Date: 11/9/2011 |
| handle_exception.qfd | Date: 10/21/2009 | Date: 10/21/2009 | Date : 10/21/2009 | Date: 10/21/2009 |
| ibmdom.dll | | | | Date: 11/3/2011 |
| ibmdom.pdb | | | | Date: 11/3/2011 |
| icadmin.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------|------------------|---|--|---|
| icdoctor.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.1 |
| icm.jar | Date: 11/04/2009 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| icmanager.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 9/17/2010 | Date: 6/10/2011 |
| ImcClient.jar | | | | Date: 8/25/2011 |
| jloader.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libeay32.dll | | Date: 11/10/2008 | Date : 11/10/2008 | Date: 11/10/2008 Version: 0.9.8.4 |
| LogCollectorClient.exe | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 1.0.0.1 | Date: 8/19/2011 |
| LogCollectorClient.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 8/19/2011 |
| msadodc.ocx | | | Date : 12/24/2008 Version : 6.0.88.4 | Date: 12/24/2008 Version: 6.0.88.4 |
| mscomct2.ocx | | | Date : 4/25/2002 Version : 6.0.88.4 | Date: 4/25/2002 Version: 6.0.88.4 |
| mscomctl.ocx | | | Date : 4/25/2002 Version : 6.0.88.62 | Date: 4/25/2002 Version: 6.0.88.62 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------|----------|--|--------------------------------------|---|
| mttlogger.dll | | | | Date: 11/25/2011 Version: 7.2.4.33 |
| mttlogger.pdb | | | | Date: 11/25/2011 Version: 7.2.4.33 |
| mttoolkit.dll | | Date: 04/14/2010 Version: 2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 12/8/2011 Version: 7.2.4.33 |
| mttoolkit.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/8/2011 |
| MxCmClient.dll | | | | Date: 6/3/2011 Version: 7.2.0.0 |
| MxCmClient.pdb | | | | Date: 6/3/2011 |
| MxDBFx.dll | | Date: 04/15/2010 | Date : 7/31/2010 | Date: 7/31/2010 Version: 7.2.0.0 |
| MxDBFx.pdb | | Date: 04/15/2010 | Date : 7/31/2010 | Date: 7/31/2010 |
| MxDrctSI.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| MxDrctSI.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| MxRscMgr.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 7/1/2011 Version: 7.2.0.0 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------------------|------------------|---------------------|----------------------|---|
| MxRscMgr.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 7/1/2011 |
| PrompterClient.ocx | | | | Date: 11/26/2011 Version: 7.2.4.33 |
| property.csv | Date: 08/26/2009 | Date: 08/26/2009 | Date : 8/26/2009 | Date: 6/9/2011 |
| propinstance.csv | | | | Date: 6/9/2011 |
| propvalue.csv | Date: 08/26/2009 | Date: 08/26/2009 | Date : 8/26/2009 | Date: 12/15/2011 |
| qconfig.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| QConsole_ExitComponents.qsc | | | | Date: 11/2/2011 |
| QConsole_InitializeComponents.qsc | Date: 08/06/2009 | Date: 08/06/2009 | Date : 8/6/2009 | Date: 8/6/2009 |
| QConsole_WrapContact.qsc | | Date: 12/28/2009 | Date : 12/28/2009 | Date: 12/28/2009 |
| qdesigner.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 Version: 1.0.0.0 |
| qdesigner.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| QFlowControl56.ocx | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.0 |
| QFlowDebugUI.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 1.0.0.0 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------------|------------------|---|---------------------------------------|---|
| qimport.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qimport.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qualifychat_adv.qfd | Date: 10/21/2009 | Date: 10/21/2009 | Date : 10/21/2009 | Date: 10/21/2009 |
| qualifyemail_adv.qfd | Date: 10/21/2009 | Date: 10/21/2009 | Date : 10/21/2009 | Date: 10/21/2009 |
| qualifyvoice_adv.qfd | Date: 10/21/2009 | Date: 10/21/2009 | Date : 10/21/2009 | Date: 10/21/2009 |
| qwbsext.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/4/2011 Version: 7.2.4.32 |
| qwbsext.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qwdco.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 Version: 7.2.4.33 |
| qwdco.pdb | | | | Date: 11/26/2011 |
| qwdcprop.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 6/23/2011 Version: 7.2.4.14 |
| qwdcprop.pdb | | Date: 04/15/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| qwlog.dll | | | | Date: 11/3/2011 Version: 7.2.4.32 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------------|------------------|---------------------|--|--|
| qwlog.pdb | | | | Date: 11/3/2011 |
| qwtranscode.dll | | | | Date: 10/14/2011 |
| RegAdvocate.bat | | | | Date: 12/2/2011 |
| repository.adl | | Date: 04/06/2010 | Date : 4/6/2010 | Date: 6/16/2011 |
| richtx32.ocx | | | Date : 4/25/2002 Version : 6.0.88.4 | Date: 4/25/2002 Version: 6.0.88.4 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |
| Scenario8.xml | Date: 11/17/2009 | Date: 11/17/2009 | Date : 11/17/2009 | Date: 11/17/2009 |
| ssleay32.dll | | Date: 11/10/2008 | Date : 11/10/2008 | Date: 11/10/2008 Version: 0.9.8.4 |
| ssllib.dll | | | Date : 9/9/2010 | Date: 6/23/2011 |
| ssllib.pdb | | | Date : 9/9/2010 | Date: 6/23/2011 |
| StatusDialog_ButtonClicked.qsc | | | | Date: 11/3/2011 |
| StatusDialog_Create.qsc | | | | Date: 7/14/2011 |
| StatusDialog_Update.qsc | | | | Date: 6/9/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------------|------------------|---|--|---|
| tools.jar | | Date: 04/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| transfertoagent_adv.qfd | Date: 10/21/2009 | Date: 10/21/2009 | Date : 10/21/2009 | Date: 10/21/2009 |
| transfertovq.qfd | | Date: 01/19/2010 | Date : 1/19/2010 | Date: 1/19/2010 |
| TreeCtrl.ocx | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.4.14 |
| update_vq_cache.qfd | | Date: 01/19/2010 | Date : 1/19/2010 | Date: 1/19/2010 |
| VespBridge.dll | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 Version: 7.2.4.14 |
| VespBridge.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |
| vesporb.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 10/15/2010 Version : 7.2.3.14 | Date: 11/26/2011 Version: 7.2.4.33 |
| w_log_event_detail.csv | Date: 10/01/2009 | Date: 10/01/2009 | Date : 10/1/2009 | Date: 10/1/2009 |
| w_log_event_master.csv | Date: 10/01/2009 | Date: 10/01/2009 | Date : 10/1/2009 | Date: 10/1/2009 |
| WAC_Login.qsc | | Date: 03/17/2010 | Date : 3/17/2010 | Date: 3/17/2010 |
| WAC_SendAddressLookup.qsc | | | | Date: 6/9/2011 |
| Web_Login.qsc | | | | Date: 6/9/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------------------|------------------|---------------------|----------------------|--|
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |
| WebEngine_WebStateChanged.qsc | | Date: 12/28/2009 | Date : 12/28/2009 | Date: 12/28/2009 |
| website.jar | | | Date : 8/6/2010 | Date: 11/4/2011 |
| WorkFlowDesigner.exe | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 Version: 1.0.0.1 |
| WorkFlowDesigner.pdb | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |

Server component (Windows)

The following table lists the files that are installed on the Windows server machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------|---|---------------------|----------------------|---------------------|
| .project | | | Date : 12/21/2008 | Date: 12/21/2008 |
| acuity.gif | | | | Date: 11/3/2011 |
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| adusrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| adusrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| answers.gif | | | | Date: 11/3/2011 |
| armsrv.exe | Date: 10/04/2009 Version: 7.2.1.14 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------|---|---------------------|----------------------|---|
| armsrv.pdb | Date: 10/04/2009 Version: 7.2.1.14 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| attrsrv.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/9/2011 |
| avaya-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-bridges.jar | | | Date : 9/10/2010 | Date: 10/21/2011 |
| avayaiccommon.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-client.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-sample.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-server.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| avaya-ic-webservices.jar | Date: 09/11/2009 | Date: 09/11/2009 | Date : 10/15/2010 | Date: 10/15/2010 |
| avaya-ic-webui.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 10/19/2010 | Date: 8/5/2011 |
| BAConfigurationTool.exe | | Date: 04/29/2010 | Date : 9/10/2010 | Date: 9/10/2010 Version: 7.2.0.0 |
| BAConfigurationTool.pdb | | Date: 04/29/2010 | Date : 9/10/2010 | Date: 9/10/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|---------------------|---|---------------------------------------|---|
| blendersrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| blendersrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| casrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/24/2011 |
| casrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/24/2011 |
| cdk.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| cdk.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| chatconnection.jsp | | | | Date: 7/14/2011 |
| chatframe.js.jsp | | | | Date: 7/14/2011 |
| chatframe.jsp | | | | Date: 7/14/2011 |
| chathandler.js.jsp | Date: 10/07/2009 | Date: 03/10/2010 | Date : 3/10/2010 | Date: 7/14/2011 |
| chathandler.jsp | | | | Date: 7/14/2011 |
| chattranscript.html | | | | Date: 7/14/2011 |
| cleanupAdvocate.vbs | | | | Date: 8/16/2011 |
| clusterlib.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| clusterlib.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|---------------------|---------------------|--|---|
| cobrowse.jar | | | Date : 8/6/2010 | Date: 8/6/2010 |
| collabframe.js.jsp | | | | Date: 7/14/2011 |
| collabframe.jsp | | | | Date: 7/14/2011 |
| comhubsrv.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| comhubsrv.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| command.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 7/14/2011 |
| CommandScripter.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| constants.jsp | Date: 07/30/2009 | Date: 07/30/2009 | Date : 7/30/2009 | Date: 7/30/2009 |
| Controller | | | Date : 9/6/2010 | Date: 5/3/2011 |
| Core.dll | | | Date : 10/15/2010 Version : 7.2.3.14 | Date: 10/15/2010 Version: 7.2.3.14 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| Core.pdb | | | Date : 10/15/2010 | Date: 10/15/2010 |
| CSharpTester.csproj | | | Date : 4/21/2010 | Date: 4/21/2010 |
| ctdmstssrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| ctdmstssrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------------|---|---|---------------------------------------|---|
| CtiNmi.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| CtiNmi.pdb | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| ctsrv.exe | Date: 10/04/2009 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 9/23/2011 |
| ctsrv.pdb | Date: 10/04/2009 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 9/23/2011 |
| cvlansrv.exe | Date: 10/04/2009 Version: 7.2.1.14 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 11/4/2011 |
| cvlansrv.pdb | Date: 10/04/2009 Version: 7.2.1.14 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 11/4/2011 |
| dco.ocx | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 8/5/2011 Version: 7.2.4.20 |
| DCOBinding.dll | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 Version: 1.0.0.1 |
| DCOBinding.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| default.htm | | | | Date: 7/14/2011 |
| dmdco.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| Doc | | | Date : 9/6/2010 | Date: 5/3/2011 |
| domain_cert_AvayaIC_Server.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---|---|---------------------|----------------------|--------------------|
| domain_key_AvayaIC_Server.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| dssrv.exe | | Date: 04/29/2010 | Date : 10/21/2010 | Date: 11/3/2011 |
| dssrv.pdb | | Date: 04/29/2010 | Date : 10/21/2010 | Date: 11/3/2011 |
| dustoresrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| dustoresrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| edit_status_dialog_template_picker_ajax.jsp | | | | Date: 9/13/2011 |
| edit_status_dialog_template_picker_bottom.jsp | | | | Date: 9/13/2011 |
| entry.jsp | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 7/14/2011 |
| fulcrum_setup.cmd.template | | | Date : 9/30/2010 | Date: 9/30/2010 |
| fulcrum_updateerr.cmd | | Date: 01/05/2010 | Date : 1/5/2010 | Date: 1/5/2010 |
| fulcrum_updateout.cmd | | Date: 01/05/2010 | Date : 1/5/2010 | Date: 1/5/2010 |
| htmlarea.js | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 10/7/2009 |
| htmlchat.html | | | | Date: 7/14/2011 |
| httpvoxsrv.exe | Date: 10/08/2009 Version: 7.2.1.15 | Date: 04/14/2010 | Date : 9/23/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---------------------|------------------|---------------------|
| httpvoxsrv.pdb | Date: 10/08/2009 Version: 7.2.1.15 | Date: 04/14/2010 | Date : 9/23/2010 | Date: 11/3/2011 |
| ibmdom.dll | | | | Date: 11/3/2011 |
| ibmdom.pdb | | | | Date: 11/3/2011 |
| icadmin.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| icemailsrv.exe | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 12/21/2011 |
| icemailsrv.pdb | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 12/21/2011 |
| ICLogDevDco.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| ICLogDevFile.dll | | | | Date: 11/4/2011 |
| icm.jar | Date: 11/04/2009 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| ICMBridge.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/8/2011 |
| icmonserver.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| icmonserver.pdb | | | Date : 9/9/2010 | Date: 6/23/2011 |
| icsdk.war | | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| ImcClient.jar | | | | Date: 8/25/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|---|---------------------|----------------------|---------------------------------------|
| installisapi7.vbs | | | Date : 9/30/2010 | Date: 7/14/2011 |
| jloader.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 10/28/2010 |
| joinus.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 11/3/2011 |
| libeay32.dll | | Date: 11/10/2008 | Date : 11/10/2008 | Date: 8/7/2009 Version: 0.9.8.4 |
| libeay32.dll | | Date: 11/10/2008 | Date : 11/10/2008 | Date: 11/10/2008 |
| licensesrv.exe | Date: 09/03/2009 Version: 7.2.1.10 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| licensesrv.pdb | Date: 09/03/2009 Version: 7.2.1.10 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| listadu.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| listadu.pdb | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| listvdu.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| listvdu.pdb | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| localeprops.jar | Date: 11/04/2009 | Date: 11/04/2009 | Date : 11/4/2009 | Date: 11/4/2009 |
| LogCollectorSrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| LogCollectorSrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|----------|---|--------------------------------------|---|
| logo.jsp | | | | Date: 7/14/2011 |
| migrateemail.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| mkvd7.vbs | | | Date : 8/5/2010 | Date: 8/5/2010 |
| mttlogger.dll | | | | Date: 11/25/2011 Version: 7.2.4.33 |
| mttlogger.pdb | | | | Date: 11/25/2011 |
| mttoolkit.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 12/8/2011 Version: 7.2.4.33 |
| mttoolkit.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/8/2011 |
| MxCmClient.dll | | | | Date: 6/3/2011 |
| MxCmClient.pdb | | | | Date: 6/3/2011 |
| MxDBFx.dll | | Date: 04/15/2010 | Date : 7/31/2010 | Date: 7/31/2010 Version: 7.2.0.0 |
| MxDBFx.pdb | | Date: 04/15/2010 | Date : 7/31/2010 | Date: 7/31/2010 |
| MxDrctSI.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 Version: 7.2.0.0 |
| MxDrctSI.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------|---|---------------------|---------------------------------------|---------------------------------------|
| MxRscMgr.exe | Date: 09/11/2009 Version: 7.2.1.11 | Date: 04/15/2010 | Date : 9/10/2010 Version : 7.2.0.0 | Date: 7/1/2011 Version: 7.2.0.0 |
| MxRscMgr.pdb | Date: 09/11/2009 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 7/1/2011 |
| notifysrv.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| notifysrv.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| orbsrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| orbsrv.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| pagingsrv.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| pagingsrv.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| pdmJavaWrap.dll | | | | Date: 11/4/2011 |
| pdmsql.dll | | Date: 02/18/2010 | Date : 2/18/2010 | Date: 11/4/2011 |
| poll.js.jsp | | | | Date: 7/14/2011 |
| poll.jsp | | | | Date: 7/14/2011 |
| pollersrv.exe | Date: 11/19/2009 Version: 7.2.1.19 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/14/2011 |
| pollersrv.pdb | Date: 11/19/2009 Version: 7.2.1.19 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/14/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------------|----------|---|---------------------------------------|---|
| proactivecontact.dll | | | | Date: 11/4/2011 |
| qconfig.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qodbcsvr.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qodbcsvr.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qorasrv.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qorasrv.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qsqsvr.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qsqsvr.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| quintus.gif | | | | Date: 11/3/2011 |
| quintusmall.gif | | | | Date: 11/3/2011 |
| qwbsext.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/4/2011 Version: 7.2.4.32 |
| qwbsext.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| qwdco.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 Version: 7.2.4.33 |
| qwdco.pdb | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/10/2010 Version : 7.2.3.9 | Date: 11/26/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---|--------------------------------------|--|
| qwdcprop.dll | | Date: 04/15/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 6/23/2011 Version: 7.2.4.14 |
| qwdcprop.pdb | | Date: 04/15/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| qwesext.dll | | Date: 02/18/2010 | Date : 2/18/2010 | Date: 2/18/2010 |
| qwlog.dll | | | | Date: 11/3/2011 Version: 7.2.4.32 |
| qwlog.pdb | | | | Date: 11/3/2011 |
| qworkflowsrv.exe | Date: 09/24/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| qworkflowsrv.pdb | Date: 09/24/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| qwtranscode.dll | | | | Date: 10/14/2011 |
| qwtranscode.pdb | | | | Date: 10/14/2011 |
| RegAdvocate.bat | | | | Date: 12/2/2011 |
| reportsrv.exe | Date: 09/24/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| reportsrv.pdb | Date: 09/24/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|---|---|--|--|
| rlmanager_message.properties | | | | Date: 10/3/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |
| scripts.jar | Date: 12/09/2006 | Date: 12/09/2006 | Date : 12/9/2006 | Date: 12/9/2006 |
| sdk | | | Date : 9/6/2010 | Date: 5/3/2011 |
| sipsrv.exe | Date: 05/26/2009 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 9/23/2011 |
| sipsrv.pdb | Date: 05/26/2009 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 9/23/2011 |
| src | | | Date : 9/6/2010 | Date: 5/3/2011 |
| ssleay32.dll | | Date: 11/10/2008 | Date : 11/10/2008 | Date: 11/10/2008 Version: 0.9.8.4 |
| ssllib.dll | | | Date : 9/9/2010 | Date: 6/23/2011 |
| ssllib.pdb | | | Date : 9/9/2010 | Date: 6/23/2011 |
| tasklst.html | Date: 10/01/2009 | Date: 02/23/2010 | Date : 2/23/2010 | Date: 2/23/2010 |
| Telephony.dll | Date: 09/11/2009 Version: 7.2.1.11 | Date: 09/11/2009 Version: 7.2.1.11 | Date : 10/15/2010 Version : 7.2.3.14 | Date: 12/9/2011 Version: 7.2.4.33 |
| Telephony.pdb | Date: 09/11/2009 Version: 7.2.1.11 | Date: 09/11/2009 Version: 7.2.1.11 | Date : 10/15/2010 | Date: 12/9/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------------|---|---------------------|------------------|--------------------|
| title.gif | | | | Date: 11/3/2011 |
| tools.jar | | Date: 04/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| tsasrv.exe | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 9/23/2011 |
| tsasrv.pdb | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 9/23/2011 |
| tsqssrv_asai.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsqssrv_asai.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsqssrv_aspctportal.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| tsqssrv_aspctportal.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| tsqssrv_cisco.exe | Date: 11/04/2009 Version: 7.2.1.18 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| tsqssrv_cisco.pdb | Date: 11/04/2009 Version: 7.2.1.18 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| tsqssrv_csta.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsqssrv_csta.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsqssrv_msi.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------|---|---|--------------------------------------|--|
| tsqssrv_msi.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsqssrv_rti.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsqssrv_rti.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| tsv5aspectcmi.exe | Date: 11/04/2009 Version: 7.2.1.18 | Date: 04/15/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| tsv5aspectcmi.pdb | Date: 11/04/2009 Version: 7.2.1.18 | Date: 04/15/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| tsv5cisco.exe | Date: 11/04/2009 Version: 7.2.1.18 | Date: 04/15/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| tsv5cisco.pdb | Date: 11/04/2009 Version: 7.2.1.18 | Date: 04/15/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| Ui | | | Date : 9/6/2010 | Date: 1/1/1900 |
| util.js.jsp | | | | Date: 7/14/2011 |
| vdudasrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| vdusrv.exe | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| vdusrv.pdb | | | | Date: 6/23/2011 |
| VespBridge.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 9/9/2010 Version : 7.2.3.9 | Date: 6/23/2011 Version: 7.2.4.14 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---|--|---|
| VespBridge.pdb | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| vespdde.exe | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |
| vesporb.dll | | Date: 04/14/2010 Version: 7.2.2.16 | Date : 10/15/2010 Version : 7.2.3.14 | Date: 11/26/2011 Version: 7.2.4.33 |
| voxsrv.exe | | Date: 04/14/2010 | Date : 9/23/2010 | Date: 6/23/2011 |
| voxsrv.pdb | | Date: 04/14/2010 | Date : 9/23/2010 | Date: 6/23/2011 |
| VtelDispatch.dll | | | Date : 10/15/2010 Version : 7.2.3.14 | Date: 9/23/2011 Version: 7.2.4.27 |
| VtelDispatch.pdb | | | Date : 10/15/2010 | Date: 9/23/2011 |
| waasrv.exe | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| waasrv.pdb | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| wacdsrv.exe | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 11/4/2011 |
| wacdsrv.pdb | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---------------------|---------------------|----------------------|---------------------|
| wcservlet.dll | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| web.config | | | Date : 10/18/2010 | Date: 10/18/2010 |
| web.xml.template | | | | Date: 10/31/2011 |
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |
| webchannel.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/18/2011 |
| webchannel.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/18/2011 |
| WebLM.war | | | | Date: 6/30/2011 |
| webservices.war | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/15/2010 | Date: 10/21/2011 |
| website.jar | | | Date : 8/6/2010 | Date: 11/4/2011 |
| wscallback.jar | | | | Date: 3/30/2011 |
| xpdm.dll | | | | Date: 11/4/2011 |

Server component (Solaris)

The following table lists the files that are installed on the Solaris server machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------|----------|----------|----------------------|---------------------|
| .project | | | Date : 12/21/2008 | Date: 12/21/2008 |
| acuity.gif | | | | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------|---|---------------------|----------------------|---------------------|
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| Adusrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| answers.gif | | | | Date: 11/3/2011 |
| armsrv | Date: 10/04/2009 Version: 7.2.1.14 | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| Asaisrv | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| Aspctsrv | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| Attrsrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/9/2011 |
| avaya-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-bridges.jar | | | Date : 9/10/2010 | Date: 10/21/2011 |
| avayaiccommon.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-client.jar | | | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-sample.jar | | | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-server.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| avaya-ic-webservices.jar | Date: 09/11/2009 | Date: 09/11/2009 | Date : 10/15/2010 | Date: 10/15/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---------------------|---------------------|---------------------|----------------------|---------------------|
| avaya-ic-webui.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 10/19/2010 | Date: 8/5/2011 |
| blendersrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| casrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| chatconnection.jsp | | | | Date: 7/14/2011 |
| chatframe.js.jsp | | | | Date: 7/14/2011 |
| chatframe.jsp | | | | Date: 7/14/2011 |
| chathandler.js.jsp | Date: 10/07/2009 | Date: 03/10/2010 | Date : 3/10/2010 | Date: 7/14/2011 |
| chathandler.jsp | | | | Date: 7/14/2011 |
| chattranscript.html | | | | Date: 7/14/2011 |
| cobrowse.jar | | | Date : 8/6/2010 | Date: 8/6/2010 |
| collabframe.js.jsp | | | | Date: 7/14/2011 |
| collabframe.jsp | collabframe.js p | | | Date: 7/14/2011 |
| Comhubsrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| command.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 7/14/2011 |
| CommandScripter | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/26/2011 |
| constants.jsp | Date: 07/30/2009 | Date: 07/30/2009 | Date : 7/30/2009 | Date: 7/30/2009 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---|---|---------------------|----------------------|--------------------|
| Controller | | | Date : 8/18/2010 | Date: 8/18/2010 |
| COPYRIGHT | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| Cqsconfig | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| CSharptester.csproj | | | Date : 4/21/2010 | Date: 4/21/2010 |
| ctsrv | Date: 10/04/2009 | Date: 04/14/2010 | Date : 9/17/2010 | Date: 9/23/2011 |
| cvlansrv | Date: 10/04/2009 Version: 7.2.1.14 | Date: 04/15/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| default.htm | | | | Date: 7/14/2011 |
| Doc | | | Date : 8/18/2010 | Date: 8/18/2010 |
| domain_cert_AvayaIC_Server.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| domain_key_AvayaIC_Server.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| Dssrv | | Date: 04/24/2010 | Date : 10/22/2010 | Date: 11/4/2011 |
| Dustoresrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| edit_status_dialog_template_picker_ajax.jsp | | | | Date: 9/13/2011 |
| edit_status_dialog_template_picker_bottom.jsp | | | | Date: 9/13/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------------|---|---------------------|------------------|---------------------|
| entry.jsp | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 7/14/2011 |
| fulcrum_updateerr.sh | | Date: 01/05/2010 | Date : 1/5/2010 | Date: 1/5/2010 |
| fulcrum_updateout.sh | | Date: 01/05/2010 | Date : 1/5/2010 | Date: 1/5/2010 |
| htmlarea.js | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 10/7/2009 |
| htmlchat.html | | | | Date: 7/14/2011 |
| Httpvoxsrv | Date: 10/08/2009 Version: 7.2.1.15 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/4/2011 |
| lcaadmin | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| lcemailsrv | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 12/21/2011 |
| icm.jar | Date: 11/04/2009 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| lcomserver | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| icsdk.war | | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| lmcClient.jar | | | | Date: 8/25/2011 |
| index.htm | index.htm | | | Date: 7/14/2011 |
| Jloader | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| joinus.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 8/7/2009 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------------|----------|---------------------|------------------|---------------------|
| libADULib.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 9/23/2011 |
| libagentservlet.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libcdk.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libclusterlib.so | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libcrypto.so | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libcrypto.so.0.9.8 | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libCtiNmi.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/26/2011 |
| libDCOBinding.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libdmdco.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libiclogdevdco.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libiclogdevfile.so | | | | Date: 11/4/2011 |
| libICMBridge.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/9/2011 |
| libiplanetdatasensor.so | | | | Date: 11/4/2011 |
| libiplanetplugin.so | | | | Date: 11/4/2011 |
| liblber-2.4.so.2.5.2 | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libldap_r-2.4.so.2.5.2 | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------|---|---------------------|------------------|---------------------|
| libmttlogger.so | | | | Date: 11/25/2011 |
| libmttoolkit.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/12/2011 |
| libpdm.so | | | | Date: 11/4/2011 |
| libpdmJavaWrap.so | | | | Date: 11/4/2011 |
| libpdmsql.so | | Date: 02/18/2010 | Date : 2/18/2010 | Date: 11/4/2011 |
| libproactivecontact.so | | | | Date: 11/4/2011 |
| libqwbsext.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libqwdc.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/26/2011 |
| libqwibmdom.so | | | | Date: 11/4/2011 |
| libqwlog.so | | | | Date: 11/4/2011 |
| libqwrw.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libRMBLib.so | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| libssl.so | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libssl.so.0.9.8 | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libssl.lib.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---------------------|----------------------|---------------------|
| libstssl.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libUtilityLib.so | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| libVespBridge.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libvesporb.so | | Date: 04/14/2010 | Date : 10/15/2010 | Date: 11/25/2011 |
| libwcservlet.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| libWFSLib.so | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| LICENSE | | Date: 02/26/2010 | Date : 9/9/2010 | Date: 2/26/2010 |
| licensesrv | Date: 09/03/2009 Version: 7.2.1.10 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| Listadu | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| Listvdu | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| logCollectorsrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| logo.jsp | | | | Date: 7/14/2011 |
| Migrateemail | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| Notifysrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| nsscript.jar | Date: 12/09/2006 | Date: 12/09/2006 | Date : 12/9/2006 | Date: 12/9/2006 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------|---|---------------------|------------------|---------------------|
| Orbsrv | | Date: 04/14/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| os_fill | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| pagingsrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| poll.js.jsp | | | | Date: 7/14/2011 |
| poll.jsp | | | | Date: 7/14/2011 |
| pollersrv | Date: 11/19/2009 Version: 7.2.1.19 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 12/14/2011 |
| Qconfig | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| qdb2srv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| qora10srv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| qora11srv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| qora9srv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| quintus.gif | | | | Date: 11/3/2011 |
| qworkflowsrv | Date: 09/24/2009 Version: 7.2.1.13 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| reportsrv | Date: 09/24/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/10/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|---|---------------------|------------------|---------------------|
| rlmanager_message.properties | | | | Date: 10/3/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |
| scripts.jar | Date: 12/09/2006 | Date: 12/09/2006 | Date : 12/9/2006 | Date: 12/9/2006 |
| sdk | | | Date : 8/18/2010 | Date: 8/18/2010 |
| src | | | Date : 8/18/2010 | Date: 8/18/2010 |
| tasklst.html | Date: 10/01/2009 | Date: 02/23/2010 | Date : 2/23/2010 | Date: 2/23/2010 |
| title.gif | | | | Date: 11/3/2011 |
| tools.jar | | Date: 04/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| tsasrv | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 9/23/2011 |
| tsqssrv_asai | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| tsqssrv_aspct | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| tsqssrv_csta | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| tsqssrv_msi | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| Ui | | | Date : 8/18/2010 | Date: 8/18/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---|----------------------|---------------------|
| util.js.jsp | | | | Date: 7/14/2011 |
| vdudasrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| vdusrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 6/24/2011 |
| vespidl.pk | Date: 10/04/2009 Version: 7.2.1.14 | Date: 10/04/2009 Version: 7.2.1.14 | Date : 9/9/2010 | Date: 9/9/2010 |
| voxsrv | | Date: 04/15/2010 | Date : 9/24/2010 | Date: 6/24/2011 |
| waasrv | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| wacdsrv | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 11/4/2011 |
| web.xml.template | | | | Date: 10/31/2011 |
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |
| Webchannel | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/18/2011 |
| WebLM.war | | | | Date: 6/30/2011 |
| webservices.war | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/15/2010 | Date: 10/21/2011 |
| website.jar | | | Date : 8/6/2010 | Date: 11/4/2011 |
| wscallback.jar | | | | Date: 3/30/2011 |



Server component (AIX)

The following table lists the files that are installed on the AIX server machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-------------------------|---|---------------------|----------------------|---------------------|
| .project | | | Date : 12/21/2008 | Date: 12/21/2008 |
| acuity.gif | | | | Date: 11/3/2011 |
| admin.jar | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/18/2010 | Date: 9/30/2011 |
| Adusrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| answers.gif | | | | Date: 11/3/2011 |
| Armsrv | Date: 10/18/2009 Version: 7.2.1.15 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| Aspctsrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| Attrsrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/9/2011 |
| avaya-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-bridges.jar | | | Date : 9/10/2010 | Date: 10/21/2011 |
| avayaiccommon.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-client.jar | | | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-common.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-sdk-sample.jar | | | Date : 9/3/2009 | Date: 9/3/2009 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------|---------------------|---------------------|----------------------|---------------------|
| avaya-ic-sdk-server.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 9/3/2009 | Date: 9/3/2009 |
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| avaya-ic-webservices.jar | Date: 09/11/2009 | Date: 09/11/2009 | Date : 10/15/2010 | Date: 10/15/2010 |
| avaya-ic-webui.jar | Date: 09/03/2009 | Date: 09/03/2009 | Date : 10/19/2010 | Date: 8/5/2011 |
| Blendersrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| Casrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| chatconnection.jsp | | | | Date: 7/14/2011 |
| chatframe.js.jsp | | | | Date: 7/14/2011 |
| chatframe.jsp | | | | Date: 7/14/2011 |
| chathandler.js.jsp | Date: 10/07/2009 | Date: 03/10/2010 | Date : 3/10/2010 | Date: 7/14/2011 |
| chathandler.jsp | | | | Date: 7/14/2011 |
| chattranscript.html | | | | Date: 7/14/2011 |
| cobrowse.jar | | | Date : 8/6/2010 | Date: 8/6/2010 |
| collabframe.js.jsp | | | | Date: 7/14/2011 |
| collabframe.jsp | | | | Date: 7/14/2011 |
| Comhubsrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|--------------------------------|---|---------------------|----------------------|---------------------|
| command.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 7/14/2011 |
| CommandScripter | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| constants.jsp | Date: 07/30/2009 | Date: 07/30/2009 | Date : 7/30/2009 | Date: 7/30/2009 |
| Controller | | | Date : 8/18/2010 | Date: 8/18/2010 |
| COPYRIGHT | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| core.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 8/20/2010 | Date: 6/17/2011 |
| Cqsconfig | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| CSharpTester.csproj | | | Date : 4/21/2010 | Date: 4/21/2010 |
| Cvlansrv | Date: 10/18/2009 Version: 7.2.1.15 | Date: 04/14/2010 | Date : 9/16/2010 | Date: 11/3/2011 |
| Cvlansrv | | Date: 04/14/2010 | Date : 9/16/2010 | Date: 7/14/2011 |
| Doc | | | Date : 8/18/2010 | Date: 8/18/2010 |
| domain_cert_AvayaIC_Server.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| domain_key_AvayaIC_Server.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| Dssrv | | Date: 04/24/2010 | Date : 10/21/2010 | Date: 11/3/2011 |
| Dustoresrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|---|---|---------------------|------------------|---------------------|
| edit_status_dialog_template_picker_ajax.jsp | | | | Date: 9/13/2011 |
| edit_status_dialog_template_picker_bottom.jsp | | | | Date: 9/13/2011 |
| entry.jsp | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 7/14/2011 |
| fulcrum_updateerr.sh | | Date: 01/05/2010 | Date : 1/5/2010 | Date: 1/5/2010 |
| fulcrum_updateout.sh | | Date: 01/05/2010 | Date : 1/5/2010 | Date: 1/5/2010 |
| htmlarea.js | Date: 10/07/2009 | Date: 10/07/2009 | Date : 10/7/2009 | Date: 10/7/2009 |
| htmlchat.html | | | | Date: 7/14/2011 |
| Httpvoxsrv | Date: 10/18/2009 Version: 7.2.1.15 | Date: 04/14/2010 | Date : 9/24/2010 | Date: 11/3/2011 |
| ladmin | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| lcmailsrv | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/14/2010 | Date : 9/24/2010 | Date: 12/21/2011 |
| icm.jar | Date: 11/04/2009 Version: 7.2.1.18 | Date: 03/14/2010 | Date : 9/17/2010 | Date: 11/4/2011 |
| lcomserver | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| icsdk.war | | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------------|---------------------|---------------------|----------------------|---------------------|
| ImcClient.jar | | | | Date: 8/25/2011 |
| index.htm | | | | Date: 7/14/2011 |
| Jloader | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| joinus.jsp | Date: 08/07/2009 | Date: 08/07/2009 | Date : 8/7/2009 | Date: 8/7/2009 |
| libADULib.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 9/23/2011 |
| libagentservlet.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libapachedatasensor.so | | | | Date: 11/4/2011 |
| libapachedatasensor_ihs7.so | | | Date : 10/15/2010 | Date: 10/15/2010 |
| libapacheplugin.so | | | | Date: 11/4/2011 |
| libapacheplugin_ihs7.so | | | Date : 10/15/2010 | Date: 10/15/2010 |
| libcdk.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libclusterlib.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libCtiNmi.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libDCOBinding.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libdmdco.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libiclogdevdco.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------|----------|---------------------|------------------|---------------------|
| libiclogdevfile.so | | | | Date: 11/4/2011 |
| libICMBridge.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/9/2011 |
| liblber-2.4.a | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libldap_r-2.4.a | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| libmttlogger.so | | | | Date: 11/25/2011 |
| libmttoolkit.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/12/2011 |
| libpdm.so | | | | Date: 11/3/2011 |
| libpdmJavaWrap.so | | | | Date: 11/3/2011 |
| libpdmsql.so | | Date: 02/18/2010 | Date : 2/18/2010 | Date: 11/3/2011 |
| libproactivecontact.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libqwbsext.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| libqwdc.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/25/2011 |
| libqwibmdom.so | | | | Date: 11/3/2011 |
| libqwlog.so | | | | Date: 11/3/2011 |
| libqwrw.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---------------------|----------------------|---------------------|
| libRMBLib.so | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libssl.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libstssl.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libUtilityLib.so | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libVespBridge.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| libvesporb.so | | Date: 04/14/2010 | Date : 10/14/2010 | Date: 11/25/2011 |
| libwcservlet.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| libWFSLib.so | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| LICENSE | | Date: 02/26/2010 | Date : 9/9/2010 | Date: 2/26/2010 |
| LICENSE | | | Date : 2/26/2010 | Date: 11/3/2011 |
| Licensesrv | Date: 09/03/2009 Version: 7.2.1.10 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| Listadu | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| Listvdu | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| logCollectorsrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 7/14/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|----------------|---|---------------------|----------------------|---------------------|
| Migrateemail | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| mod_jk_ihs7.so | | | Date : 10/14/2010 | Date: 10/14/2010 |
| Notifysrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| orbsrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| os_fill | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| pagingsrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/4/2011 |
| poll.js.jsp | | | | Date: 7/14/2011 |
| poll.jsp | | | | Date: 7/14/2011 |
| pollersrv | Date: 11/19/2009 Version: 7.2.1.19 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 12/14/2011 |
| Qconfig | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| qdb2srv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| quintus.gif | | | | Date: 11/3/2011 |
| qworkflow | Date: 09/25/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| reportsrv | Date: 09/25/2009 Version: 7.2.1.13 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------------------|---|---------------------|------------------|---------------------|
| rlmanager_message.properties | | | | Date: 10/3/2011 |
| root_cert_AvayaIC_Client.pem | | Date: 02/26/2010 | Date : 2/26/2010 | Date: 2/26/2010 |
| sc.xml | Date: 08/13/2009 | Date: 04/15/2010 | Date : 9/24/2010 | Date: 11/26/2011 |
| scripts.jar | Date: 12/09/2006 | Date: 12/09/2006 | Date : 12/9/2006 | Date: 12/9/2006 |
| sdk | | | Date : 8/18/2010 | Date: 8/18/2010 |
| src | | | Date : 8/18/2010 | Date: 8/18/2010 |
| tasklst.html | Date: 10/01/2009 | Date: 02/23/2010 | Date : 2/23/2010 | Date: 2/23/2010 |
| title.gif | | | | Date: 11/3/2011 |
| tools.jar | | Date: 04/15/2010 | Date : 4/15/2010 | Date: 4/15/2010 |
| Tsasrv | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 9/23/2011 |
| tsqssrv_asai | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| Ui | | | Date : 8/18/2010 | Date: 8/18/2010 |
| util.js.jsp | | | | Date: 7/14/2011 |
| vdudasrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |
| vdusrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 6/23/2011 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------------|---|---------------------|----------------------|---------------------|
| vespidl.pk | Date: 10/04/2009 | Date: 10/04/2009 | Date : 9/9/2010 | Date: 9/9/2010 |
| voxsrv | | Date: 04/14/2010 | Date : 9/24/2010 | Date: 6/23/2011 |
| waasrv | Date: 12/03/2009 Version: 7.2.1.20 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| wacdsrv | Date: 10/22/2009 Version: 7.2.1.17 | Date: 04/14/2010 | Date : 10/18/2010 | Date: 11/4/2011 |
| web.xml.template | | | | Date: 10/31/2011 |
| WebAgent.jar | Date: 12/01/2009 | Date: 02/25/2010 | Date : 10/1/2010 | Date: 11/4/2011 |
| Webchannel | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/18/2011 |
| WebLM.war | | | | Date: 6/30/2011 |
| webservices.war | Date: 09/11/2009 | Date: 04/15/2010 | Date : 10/15/2010 | Date: 10/21/2011 |
| website.jar | | | Date : 8/6/2010 | Date: 11/4/2011 |
| wscallback.jar | | | | Date: 3/30/2011 |

Siebel Integration component [IC Side] (Windows)

The following table lists the files that are installed on the Windows machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------|------------------|------------------|------------------|-----------------|
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| asis.jar | Date: 08/25/2009 | Date: 02/19/2010 | Date : 2/19/2010 | Date: 2/19/2010 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------|----------|------------------|------------------|--------------------------------------|
| eaisrv.exe | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 Version: 7.2.4.32 |
| eaisrv.pdb | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |

Siebel Integration component [IC Side] (Solaris)

The following table lists the files that are installed on the Solaris machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------|------------------|------------------|------------------|-----------------|
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/15/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| asis.jar | Date: 08/25/2009 | Date: 02/19/2010 | Date : 2/19/2010 | Date: 2/19/2010 |
| Eaisrv | | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |

Siebel Integration component [IC Side] (AIX)

The following table lists the files that are installed on the AIX machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------------------|------------------|------------------|------------------|-----------------|
| avaya-ic-services.jar | Date: 10/04/2009 | Date: 04/14/2010 | Date : 10/8/2010 | Date: 12/8/2011 |
| asis.jar | Date: 08/25/2009 | Date: 02/19/2010 | Date : 2/19/2010 | Date: 2/19/2010 |
| Eaisrv | | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |

Siebel Integration component [Siebel Side] (AIX)

The following table lists the files that are installed on the AIX machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------|------------------|------------------|------------------|-----------------|
| libaicd.so | Date: 10/18/2009 | Date: 04/14/2010 | Date : 9/9/2010 | Date: 11/3/2011 |
| AICD.def | Date: 08/11/2009 | Date: 08/11/2009 | Date : 8/11/2009 | Date: 8/11/2009 |



Siebel Integration component [Siebel Side] (Solaris)

The following table lists the files that are installed on the Solaris machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|------------|------------------|------------------|------------------|-----------------|
| libaicd.so | Date: 10/04/2009 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| AICD.def | Date: 08/11/2009 | Date: 08/11/2009 | Date : 8/11/2009 | Date: 8/11/2009 |

Siebel Integration component [Siebel Side] (Windows)

The following table lists the files that are installed on the Windows machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC 7.2.3 | IC 7.2.4 |
|-----------|------------------|------------------|------------------|--------------------------------------|
| aicd.dll | Date: 10/04/2009 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 Version: 7.2.4.32 |
| aicd.pdb | Date: 10/04/2009 | Date: 04/15/2010 | Date : 9/10/2010 | Date: 11/4/2011 |
| AICD.def | Date: 08/11/2009 | Date: 08/11/2009 | Date : 8/11/2009 | Date: 8/11/2009 |

SDK component (Windows)

The following table lists the files that are installed on the Windows machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC7.2.4 |
|-------------------------|----------------|----------------|----------------|
| avaya-common.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avayaiccommon.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-common.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-sample.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-server.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC7.2.4 |
|------------------------------|----------------|------------------|-----------------|
| avaya-ic-sdk-client.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-services.jar | Date: 10/04/09 | Date: 04/15/2010 | Date: 12/8/2011 |
| avaya-ic-webui.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 8/5/2011 |
| icsdk.war | Date: 11/19/09 | Date: 04/15/2010 | Date: 12/8/2011 |
| lcm.jar | Date: 11/04/09 | Date: 03/14/2010 | Date: 11/4/2011 |
| AvayaICSDKClient.dll | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| AvayaICSDKClient.pdb | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| AvayaICSDKClient.xml | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| Com.Avaya.Util.dll | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| Com.Avaya.Util.Messaging.dll | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| Com.Avaya.Util.Messaging.pdb | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| Com.Avaya.Util.pdb | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| CSharptester.pdb | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| CSharptester.exe | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| WebAgent.jar | Date: 12/01/09 | Date: 02/25/2010 | Date: 11/4/2011 |
| Controller (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| Doc (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| sdk (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| src (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| Ui (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |

SDK component (Solaris)

The following table lists the files that are installed on the Solaris machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC7.2.4 |
|-----------|----------|----------|---------|
|-----------|----------|----------|---------|



| File Name | IC 7.2.1 | IC 7.2.2 | IC7.2.4 |
|-------------------------|----------------|----------------|-----------------|
| avaya-common.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avayaiccommon.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-common.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-sample.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-server.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-client.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-services.jar | Date: 10/04/09 | Date: 04/15/10 | Date: 12/8/2011 |
| avaya-ic-webui.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 8/5/2011 |
| icsdk.war | Date: 11/19/09 | Date: 04/15/10 | Date: 12/8/2011 |
| lcm.jar | Date: 11/04/09 | Date: 03/14/10 | Date: 11/4/2011 |
| WebAgent.jar | Date: 12/01/09 | Date: 02/25/10 | Date: 11/4/2011 |
| Controller (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| Doc (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| sdk (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| src (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| Ui (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |

SDK component (AIX)

The following table lists the files that are installed on the AIX machine:

| File Name | IC 7.2.1 | IC 7.2.2 | IC7.2.4 |
|-------------------------|----------------|----------------|----------------|
| avaya-common.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avayaiccommon.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-common.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-sample.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |



| File Name | IC 7.2.1 | IC 7.2.2 | IC7.2.4 |
|-------------------------|----------------|----------------|-----------------|
| avaya-ic-sdk-server.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-sdk-client.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 09/03/09 |
| avaya-ic-services.jar | Date: 10/04/09 | Date: 04/15/10 | Date: 12/8/2011 |
| avaya-ic-webui.jar | Date: 09/03/09 | Date: 09/03/09 | Date: 8/5/2011 |
| icsdk.war | Date: 11/19/09 | Date: 04/15/10 | Date: 12/8/2011 |
| lcm.jar | Date: 11/04/09 | Date: 03/14/10 | Date: 11/4/2011 |
| WebAgent.jar | Date: 12/01/09 | Date: 02/25/10 | Date: 11/4/2011 |
| Controller (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| Doc (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| sdk (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| src (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |
| Ui (folder) | Date: 11/23/09 | Date: 11/23/09 | Date: 5/3/2011 |



Technical Support

If you are having trouble with IC 7.2.4, you should:

1. Retry the action. Carefully follow the instructions in written or online documentation.
2. Check the documentation that came with your hardware for maintenance or hardware-related problems.
3. Note the sequence of events that led to the problem and the exact messages displayed. Have the Avaya documentation available.
4. If you continue to have a problem, contact Avaya Technical Support by:
5. Logging in to the Avaya Technical Support Web site <http://www.avaya.com/support>
6. Calling or faxing Avaya Technical Support at one of the telephone numbers in the [Support Directory](#) listings on the Avaya support Web site.

You may be asked to email one or more files to Technical Support for analysis of your application and its environment.

Note: If you have difficulty reaching Avaya Technical Support through the above URL or email address, please go to <http://www.avaya.com> for further information.

Avaya Global Services Escalation Management provides the means to escalate urgent service issues. For more information, see the [Escalation Contacts](#) listings on the Avaya Web site.

For information about patches and product updates, see the Avaya Technical Support Web site <http://www.avaya.com/support>.