PureConnect®

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See Change Log for summary of changes.

PureConnect Integration to Oracle Service Cloud

Installation and Configuration Guide

Abstract

This document shows how to install and configure the PureConnect integration to Oracle Service Cloud.

For the latest version of this document, see the PureConnect Documentation Library at: http://help.genesys.com/pureconnect.

Table of Contents

About the PureConnect Integration to Oracle Service Cloud

The PureConnect and Oracle Service Cloud (formerly Oracle RightNow) integration helps mid-size to large enterprises increase productivity and improve customer service by combining Oracle's agent and web-facing features with CIC's IVR and multichannel queuing and routing capabilities. Features include:

- Universal queuing of calls with all Oracle Service Cloud interaction types (chats, incidents, social media, Web forms, emails, etc.) for enhanced agent responsiveness
- Single-agent desktop application that eliminates the need to move between systems and increases agent productivity
- Customizable screen pop with the ability to transfer the pop from agent to agent (available for calls, Oracle Service Cloud incidents and chats)
- Media bar presentation for "quick access" to call controls, company directory, presence management
- Context-rich click-to-dial within Oracle Service Cloud client (contact, opportunity, incident)
- Integration available in PureConnect Cloud and on-premises
- Unified activity reporting from interaction details stored within the Oracle Service Cloud data repository

The PureConnect Integration to Oracle Service Cloud has the following parts:

- The incident and chat Integration Service
- The handlers
- The Media Bar and EmailConfig.Views Add-Ins
- The Interaction ScriptAssist utility
- The report definition file and custom objects
- Queues and queue rules

Special Notices

Oracle Service Cloud / RightNow Integration may fail to connect starting November 30, 2016

(last updated 2-Sep-2016)

Current versions of the CIC Oracle Service Cloud / RightNow Integration will begin to fail connections starting November 30, 2016. This statement applies to the integrations in CIC 2015 R3 through CIC 2016 R4, or earlier. Oracle Service Cloud servers will require network connections using TLS 1.1 or 1.2, but the current integration is based on Microsoft .NET 4.0, which supports only TLS 1.0. The new TLS requirements go into effect starting November 30th, 2016 for PCI zone customers, and March 31st, 2017 for non-PCI zone customers. For more information and for solutions to work around this issue, see KB Q147283662000060.

Installation overview and requirements

Review the following information before you install the Oracle Service Cloud Integration.

Installation files

Both CIC and Oracle Service Cloud publish releases multiple times a year. **The CIC release version and Oracle Service Cloud Integration release version must match.** For example, if you use CIC 2018 R1, you must use the Oracle Service Cloud Integration on the Integrations 2018 R1 `.iso` file.

Starting with CIC 2015 R2, the installs and related files for IC Integration with Oracle Service Cloud (formerly Oracle RightNow) are:

- Released separately from CIC 2015 R2 or later, but on the same release schedule.
- The installs and related files for the integration are included in the Integrations_YYYY_R#.iso file for the particular release (for example, `Integrations_2015_R2.iso`).
- Check the <u>Downloads</u> page for the latest Integrations (Oracle Service Cloud) release.

Important:

- IC Integration with Oracle Service Cloud 2015 R1 or later can be applied to any IC Integration with Oracle Service Cloud 4.0 SU.
- IC Integration with Oracle Service Cloud 2015 R1 or later supports Oracle Service Cloud's SOAP API instead of the Connect Data API.

  > **Note**: Beginning April 1, 2015, basic functionality testing for integrations will be performed only against the most current version of third party products under manufacturer support and the latest version of CIC software.

- See the <u>CRM Software Integrations page</u> in the Testlab site to identify which versions of CIC were tested with different versions of Oracle Service Cloud.

Release Documents and Feature Information

PureConnect/CIC Integration with Oracle Service Cloud is available in CIC 4.0 SU 3 to SU 6 and CIC 2015 R1 and later. Starting with the 2015 R2 release, IC Integration with Oracle Service Cloud is released separately from CIC, but on the same release schedule.

- For specific feature questions, see <u>Appendix A: Oracle Service Cloud Integration FAQs</u>.
- <u>PureConnect Release Notes</u>
- <u>PureConnect Integration to Oracle Service Cloud Data Dictionary</u>
- <u>Interaction ScriptAssist for Oracle Service Cloud Technical Reference</u>

Validation

We test the Oracle Service Cloud integration against the current Oracle Service Cloud release. For example, we validated the Oracle Service Cloud integration for CIC 2015 R3 against the Feb 2015 version of Oracle Service Cloud.

For more information about testing and validation, see <u>Appendix A: Oracle Service Cloud Integration FAQs</u>.

> **Note:**
> Oracle Service Cloud/RightNow has two different console modes. The Enhanced Console has been the default for several years now, as Oracle phases out the use of the Legacy Console, which customers can still choose to use instead. Although the Legacy Console is not fully deprecated by Oracle, Genesys recommends that you use only the Enhanced Console, as Genesys does not support the Legacy Console. Use of the Legacy Console is at the customer's own risk. If issues arise for a customer who is attempting to use the Legacy Console, they will need to retest with the Enhanced Console to see if the issue persists.

Integration Service

The Integration Service is only needed if you are routing incidents or chats. When choosing where to install the Integration Service, consider these points:

- It cannot be installed on the CIC server.
- It could be installed on a database server or other non-IC server.

- It does not require excessive CPU or memory resources.

Verify that the required software is installed:
- .NET Framework 4.5.2 or later
- Windows Server 2012 R2, 2016 or 2019
- External Web Access (port 80)
- Socket communication accessibility to/from the CIC server (TCP/IP, port assigned in the install)

Handlers

The integration relies on handlers present on the server.

PureConnect Media Bar and EmailConfig.Views Add-Ins

When installing the PureConnect Media Bar and EmailConfig.Views Add-Ins, consider these points:
- They require installation of the Oracle Service Cloud client.
- They require an Oracle Service Cloud administrative user.
- They require the .NET Framework 4.5.2 or later.
- They require installation of Interaction Desktop on the client machine.

> **Note:**
> Agents should use the PureConnect Media Bar for call controls, not the embedded Interaction Desktop client. The PureConnect Media Bar, not the embedded Interaction Desktop client, drives interactions.

Interaction ScriptAssist utility

Interaction ScriptAssist utility is optional.

When choosing where to install the ScriptAssist utility, consider these points:
- It cannot be installed on the CIC server.
- It should be installed on a CIC administrator's client machine.
- It can be installed on an operating system that Genesys has validated and supports.
- It requires .NET Framework 4.5.2 or later.
- It requires socket communication accessibility to/from CIC server (uses IceLib- TCP/IP Port 3952).

Oracle Service Cloud Communication Types and Ports

When referring to the Oracle Service Cloud component, the communication details are from the perspective of the PureConnect Media Bar which is embedded in the Oracle Service Cloud desktop.

The ININ Incident Polling and Chat services run under the same physical Windows service, but are separate in their approach to communicating with Oracle Service Cloud. Incident Polling routes Oracle Service Cloud Incidents as PureConnect Emails, Callbacks, or Generic Objects.Chat Service routes Oracle Service Cloud Chats as PureConnect Chats.Line 3 describes the Incident Polling while Line 4 describes the Chat communication.

Line 1	The PureConnect Media Bar communicates with the CIC server using the IceLib API.Communication is identical to that of Interaction Desktop and CIC.Communication to the CIC server is through the SessionManager component.	
	Type	TCP/IP
	Port	3952 The PureConnect Media Bar connects to session manager on this port.Session Manager can be run on or off CIC server.
	Purpose	The PureConnect Media Bar uses Icelib to perform Softphone Client services with the CIC server, logging in/out, call controls, presence management, embedding Interaction Desktop within an Oracle Service Cloud workspace.

Line 2	The PureConnect Media Bar communicates with Oracle Service Cloud in two ways.		
	Oracle Service Cloud Connector Data API Usage		
		Type	.NET API (SOAP under the covers)
		Port	Standard HTTP/HTTPS ports in the RightNow cloud
		Purpose	For Screen pops, it uses the Oracle Service Cloud Connect Data API to execute queries for loading the correct Oracle Service Cloud workspace.
	Oracle Service Cloud Web Services API Usage		
		Type	SOAP
		Port	Standard HTTP/HTTPS ports in the Oracle Service Cloud
		Purpose	The PureConnect Media Bar also writes call detail reporting information into an Oracle Service Cloud Custom Object.This can be used to write reports within Oracle Service Cloud correlating Oracle Service Cloud entities like Contact and Incidents to the activities that have occurred.
Line 3	The ININ Incident Polling service queries an Oracle Service Cloud Incident Queue using a Oracle Service Cloud Report.This report returns the Oracle Service Cloud entities to be routed (typically Incidents). The data returned in the report can be used to drive PureConnect interaction type, workgroup, skills, and routing strategies.The PureConnect interaction is a fictitious routing object that wraps the RightNow object.Once connected to an agent, it opens the Oracle Service Entity in the CX Agent Desktop.		
	Type		RightNow Connect Data .NET API (SOAP under the covers).
	Port		Unknown (it reaches out to the Oracle Service Cloud in the internet)
	Special Considerations		In PureConnect Cloud deployments, a key requirement is communication with the IC Server via the IceLibAPI and access to the Oracle Service Cloud web service endpoint. This can be accomplished by hosting the integration server (incident and chat polling) within PureConnect Cloud. If the customer needs access to this server to complete configuration, PSO can install a copy of the Oracle Service Cloud CX client on this integration server as part of the implementation process. Note: You can also accomplish access to both the IC Server and the Oracle Service Cloud web endpoint by running this integration's components on the customer network.
Line 4	ININ Chat service uses an Oracle Service Cloud Chat Service API to register our integration as a 3rd party Chat Routing engine. We communicate with the cloud by calling a blocking API to get Chat items to process.They return if there are chats to process or hang the call until a configurable timeout.This allows for outbound communication to the cloud instead of having to open port on the customer side allowing inbound communication from Oracle Service Cloud. The ININ Chat Service creates fictitious PureConnect Chats just like the Incident Service does with other media types.We also have information supporting the Oracle Service Cloud Chat which can be used to make routing decisions.Once the PureConnect Chat is connected to an agent, the ININ Chat Service communicates through the Chat API to connect the customer chat with the Oracle Service Cloud Agent within the CX desktop.		
	Type		SOAP
	Port		Standard HTTP/HTTPS ports in the RightNow cloud
	Special Considerations		See the Special Considerations for Line 3.

Line 5	The ININ Incident Polling and Chat service communicates with the CIC server using the IceLib API.There are also stock system handlers which perform the Media creation logic. (Yes, this is permitted for PureConnect Cloud).	
	Type	TCP/IP
	Port	3952
	Purpose	The ININ Incident Polling and Chat service connects to Session Manager on this port.Session Manager can be run on or off CIC server.
Line 6	The PureConnect Media Bar and ININ Chat service communicate with each to support routing of the Oracle Service Cloud Chats. When an agent logs into the PureConnect Media Bar, it registers with the Oracle Service Cloud Chat Add-in.The Chat Add-in returns a unique Chat Agent Id.The ININ Chat Service uses this information when communicating through Oracle Service Cloud's Chat API which agent isassigned what chat through our routing processes. The communication between these two components is not direct. Both use IceLib for communication with each other. Note: The administrator's Universal Queue Configuration Utilty (a secondary add-in with the client operation) does require direct access to the integration server.	
	Type	TCP/IP (Through Icelib/SessionManager connection)
	Special Considerations	As stated, this is not a direct connection.They communicate via IceLib/Session Manager connection.

Install the PureConnect Integration to Oracle Service Cloud Integration

If you have not done so already, download and copy the Integrations 2016 R2 `.iso` file to a file server on the CIC network. You will have to mount or extract the `.iso` file before you can use it.

To install Oracle Service Cloud Integration Handlers

1. Update the CIC server and workstations to the latest CIC release and patch before applying the PureConnect Integration with Oracle Service Cloud components. For special notes and release documentation, see the <u>Latest CIC Release</u> page.
2. Make sure that your Oracle Service Cloud (formerly Oracle RightNow) version is still under support by Oracle (i.e. installed version is less than 2 years old).

> **Note**: The May 2014 release uses an updated user interface (UI). If deploying a new Oracle Service Cloud dated May 2014 or later, see important information regarding CIC requirements in <u>Installation overview and requirements.</u>

3. If you have not done so already, download and copy the Integrations 2015 R2 or later .iso file to a file server, mount, and create a share.
4. On a CIC server, run `Install.exe` from the Installs directory where the `.iso` file was downloaded.
5. On the **Integrations** tab, select **Oracle Service Cloud Integration Handlers 2016 R2**. Click **Install** .
6. A pop-up window confirms the products you selected for installation. Click **OK**.
7. A Setup Wizard walks you through the install steps.
   a. Click **Next**.
   b. Verify the destination folder. Click **Next**.
   c. If this is the first install of an PureConnect product, choose a path for the logging files. Click **Next**. (If this is not your first install, this window will not appear.)
   d. Installation is ready to begin. Click **Install**.
   e. After the install is done, click **Finish**.
   A pop-up window confirms the successful completion of the install.

To install Oracle Service Cloud Integration Service:

1. On a non-IC server, run `Install.exe` from the Installs directory where the `.iso` file was downloaded.
2. On the **Integrations** tab, select **PureConnect Oracle Service Cloud Integration Service 2018 R1**. Click **Install**.
3. A pop-up window confirms the products you selected for installation. Click **OK**.
4. A Setup Wizard walks you through the install steps.
   a. Click **Next**.
   b. Verify the destination of the installation. If this is the first install of an PureConnect product, you can click **Change** to choose the destination folder for the integration. Click **Next**.
   c. If this is the first install of an PureConnect product, choose a path for the logging files. Click **Next**. (If this is not your first install, this window will not appear.)
   d. Installation is ready to begin. Click **Install**.
   e. After the install is done, click **Finish**.
   f. A pop-up window will appear asking you to reboot. Click **Yes**.

To install Interaction ScriptAssist:

1. On a non-IC server, run `Install.exe` from the Installs directory where the `.iso` file was downloaded.
2. On the **Integrations** tab, select **Interaction ScriptAssist 2016 R2**. Click **Install**.
3. A pop-up window confirms the products you selected for installation. Click **OK**.
4. A Setup Wizard walks you through the install steps.
   a. Click **Next**.
   b. Verify the destination of the installation. If this is the first install of an PureConnect product, you can click **Change** to choose the destination folder for the integration. Click **Next**.
   c. If this is the first install of an PureConnect product, choose a path for the logging files. Click **Next**. (If this is not your first install, this window will not appear.)
   d. Installation is ready to begin. Click **Install**.

e. After the install is done, click **Finish**.

A pop-up window confirms the successful completion of the install.

> **Note:**
> If you try to install an integration on the wrong type of server (CIC or non-IC), an error message appears. The message indicates what type of server you must install the integration on. Run through the installation steps again on the correct server.

Install the PureConnect Media Bar and EmailConfig.View Add-Ins

After installing the PureConnect Integration to Oracle Service Cloud, upload the Media Bar Add-In and set permissions for it.

> **Note:**
> Oracle Service Cloud sometimes displays the error message "the <PureConnect> assembly could not be loaded". This results from a known but harmless problem in the way Oracle Service Cloud loads Add-Ins when they are first uploaded to the Oracle Service Cloud servers. If Oracle Service Cloud displays the error message, ignore the message and continue. The files then load correctly.

Complete the following:
- Use the Oracle Service Cloud Media Bar for chats
- Upload the PureConnect Media Bar Add-In
- Set access permissions for the PureConnect Media Bar
- Upload the EmailConfig.Views Add-In
- Set access permissions for the EmailConfig.Views Add-In

Use the Oracle Service Cloud Media Bar for chats

By default, installing the PureConnect Media Bar hides the Oracle Service Cloud Media Bar.

To use the Oracle Service Cloud Media Bar for chats instead of using the PureConnect Media Bar:

1. Before you upload the PureConnect Media Bar, copy the `ININ.Integrations.OSC.MediaBar.zip` file to a local drive.
2. Without unzipping the file, open the zip file and delete the following files from the archive:
   - `ININ.Integrations.OSC.Chat-w32r-MAJORVERSION-MINORVERSION.dll`
   - `ININ.Integrations.OSC.Chat-w32r-MAJORVERSION-MINORVERSION.pdb`

The zip file is now ready to upload to Oracle Service Cloud.

> **Note:**
> Some Oracle chat reports require the user to be logged in to a RightNow chat session to run. The Oracle Service Cloud integration checks to see if the user has the ACD Access Media 2/3 licenses on login which is the license needed to use chats. As such, if the user is not licensed for chats, then the integration will not log the user in to a RightNow chat session resulting in the inability to run chat reports which require a chat session.
>
> The Oracle Service Cloud (RightNow) integration does not currently support the use of station licences. Licenses must be assigned to agents.

Upload the PureConnect Media Bar Add-In

The PureConnect Media Bar for Oracle Service Cloud is contained in an Add-In in the Oracle Service Cloud client. Before you can use the PureConnect Media Bar, an administrator must upload the PureConnect Media Bar Add-In to the Oracle Service Cloud server.

Access the PureConnect Media Bar Add-In from the `\Installs\OracleServiceCloud` directory on the share. The file is also available on the Product Information site at: https://my.inin.com/products/Integrations/Pages/Oracle-Service-Cloud.aspx.

> **Note:**
> If you receive an updated version of the PureConnect Media Bar, replace the zip files in the Add-In Manager. If you are upgrading to CIC 2015 R2 or later, delete the `ININ.Integrations.RightNow.ThinMediaBar.zip` file. Save this change before updating.

To upload the PureConnect Media Bar Add-In on initial setup:

1. Unless you have already done so, save the `ININ.Integrations.OSC.MediaBar.zip` file to your local drive.

   > **Note:**
   > Oracle Service Cloud cannot install the zip file over a network. The file must be on your local drive.

2. Start the **Oracle Service Cloud client** if it is not already open.
3. Log on with administrator rights.
4. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
5. Expand the **Site Configuration** folder and double-click **Add-In Manager**. Click **New** in the ribbon.
6. Click the **File Type** arrow and choose **Compressed Add-In Files**. Browse to the `ININ.Integrations.OSC.MediaBar.zip` file on your local drive and click **Open**.

   > **Warning:**
   > Do not unzip the file. If you unzip the file, you cannot upload it.

7. Click **Save** on the ribbon.

> Media bar not uploading?
>
> This Addin can fail to install or upload if Oracle has not set MAXFILEATTACHSIZE to 100 or higher. If the media bar does not permit you to upload changes, check to make sure that ATTACHMAXSIZE is at the max value. If this does not resolve the issue, use Fiddler to capture traffic. Look for the following request:POST /cgi-bin/{site-id}.cfg/php/xml_api/soap_api.php.
>
> Look for any errors in that message. If you find that a fiddler capture returns the error 'msg>Invalid input: problem with end tag '</exec>', expecting '</exec></soap:Body></soap:Envelope>" then you will have to open a ticket with Oracle requesting that they increase your sites storage limit to 100MB

To update the PureConnect Media Bar Add-In:

1. Unless you have already done so, save the `ININ.Integrations.OSC.MediaBar.zip` file to your local drive.

   > **Note:**
   > Oracle Service Cloud cannot install the zip file over a network. The file must be on your local drive.

2. Start the **Oracle Service Cloud client** if it is not already open.
3. Log on with administrator rights.
4. Open the Configuration menu by clicking **Configuration icon** on the menu pane.
5. Expand the **Site Configuration** folder and double-click **Add-In Manager**.
6. Click `ININ.Integrations.OSC.MediaBar.zip`.
7. Click the folder icon beside the **Name** box.
8. Click the **File Type** arrow and choose **Compressed Add-In Files**. Browse to the `ININ.Integrations.OSC.MediaBar.zip` file on your local drive and click **Open**.

   > **Warning:**
   > Do not unzip the file. If you unzip the file, you cannot upload it.

9. Click **Save** on the ribbon.
10. Go to Set access permissions for the PureConnect Media Bar.

Set access permissions for the PureConnect Media Bar

Oracle Service Cloud assigns access permissions to user groups (roughly equivalent to PureConnect queues) that it calls profiles. For example, one profile can apply to all members of the sales team, while another can apply to technical support representatives.

Any user in a profile has all the access permissions assigned to that profile. Only users who are members of profiles with access can use the PureConnect Media Bar.

> **Note:**
> Your Oracle Service Cloud administrator must create all relevant profiles before you can set access permissions for the PureConnect Media Bar and the EmailConfig.Views Add-In.

To set access permissions:

1. In the **Add-In Manager** tab, click the Add-In you want to set permissions for.
2. Click **Profile Access** on the ribbon.
3. Under **Allowed interfaces for <profile name>**, select the check box for each profile you want to have access to the highlighted add-in.
4. Click **Save** on the ribbon.

The installation can take a few minutes.

> **Note:**
> If buttons do not appear or appear as unavailable, set user permissions in Interaction Administrator that control access to the PureConnect Media Bar features.

Upload the EmailConfig.Views Add-In

Access the PureConnect EmailConfig.Views Add-In from the `\Installs\OracleServiceCloud` directory on the share. The file is also available on the Product Information site at: https://my.inin.com/products/Integrations/Pages/Oracle-Service-Cloud.aspx.

> **Note:**
> If you receive an updated version of the EmailConfig.Views Add-In, replace the zip files in the Add-In Manager. Do not follow the steps below to create a new Add-In. When browsing for the new zip files, change the file type to Compressed Add-In Files. If you are upgrading to CIC 2015 R2 or later, delete the `ININ.Integrations.RightNow.EmailConfig.Views.zip` file. Save this change before uploading.

To upload the EmailConfig.Views Add-In on initial setup:

1. Save the `ININ.Integrations.OSC.EmailConfig.Views.zip` file to your local drive, if you have not done so already.

   > **Note:**
   > Oracle Service Cloud cannot install the zip file over a network. The file must be on your local drive.

2. Start the **Oracle Service Cloud client** if it is not already open.
3. Log on with administrator rights.
4. Open the Configuration menu by clicking the Configuration icon on the menu pane.
5. Expand the **Site Configuration** folder and double-click **Add-In Manager**.
6. Click **New** on the ribbon.
7. Click the **File Type** arrow and choose **Compressed Add-In Files**. Browse to the `ININ.Integrations.OSC.EmailConfig.Views.zip` file on your local drive and click **Open**.

   > **Warning:**
   > Do not unzip the file. If you unzip the file, you cannot upload it.

8. Click **Save** on the ribbon.

The installation can take a few minutes.

To update the EmailConfig.Views Add-In:

> **Note:**
> If you receive an updated version of the EmailConfig.Views Add-In, replace the zip files in the Add-In Manager. If you are upgrading to CIC 2015 R2 or later, delete the `ININ.Integrations.RightNow.EmailConfig.Views.zip` file. Save this change before updating.

1. Unless you have already done so, save the `ININ.Integrations.OSC.EmailConfig.Views.zip` file to your local drive.

   > **Note:**
   > Oracle Service Cloud cannot install the zip file over a network. The file must be on your local drive.

2. Start the **Oracle Service Cloud client** if it is not already open.
3. Log on with administrator rights.
4. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
5. Expand the **Site Configuration** folder and double-click **Add-In Manager**.
6. Click `ININ.Integrations.OSC.EmailConfig.Views.zip`.
7. Click the folder icon beside the **Name** box.
8. Click the **File Type** arrow and choose **Compressed Add-In Files**. Browse to the `ININ.Integrations.OSC.EmailConfig.Views.zip` file on your local drive and click **Open**.

   > **Warning:**
   > Do not unzip the file. If you unzip the file, you cannot upload it.

9. Click **Save** on the ribbon.
10. Go to Set access permissions for the EmailConfig.Views Add-In.

Set access permissions for the EmailConfig.Views Add-In

Oracle Service Cloud assigns access permissions to user groups (roughly equivalent to PureConnect queues) that it calls profiles. For example, one profile can apply to all members of the sales team, while another can apply to technical support representatives.

Any user in a profile has all the access permissions assigned to that profile. Only users who are members of profiles with access can use the PureConnect EmailConfig.Views Add-In.

> **Note:**
> Your Oracle Service Cloud administrator must create all relevant profiles before you can set access permissions for the PureConnect Media Bar and the EmailConfig.Views Add-In.

To set access permissions:

1. In the **Add-In Manager** tab, click the add-in you want to set permissions for.
2. Click **Profile Access** in the ribbon.
3. Under **Allowed interfaces for <profile name>**, select the check box for each profile you want to have access to the highlighted add-in.
4. Click **Save** on the ribbon.

Import the definition files and custom objects

After installing the PureConnect Media Bar and EmailConfig.View Add-Ins, import the EmailReport definition file, the Custom Chat Field Report definition file, and custom objects to the Oracle Service Cloud server.

Note:
If you are upgrading, skip the import and proceed to Configure the Integration Service for incidents and chats.

Before starting, complete the steps in the previous sections.

The Integration Service runs a report on the Oracle Service Cloud server to determine which incidents CIC routes. An XML file included with the integration defines the report. Additionally, the integration uses the Oracle Service Cloud custom object to write historical data about the incident/interaction relationship to the Oracle Service Cloud server for historical reporting.

See the following:
- EmailReport definition file
- Custom Chat Field Report definition file
- Import the integration custom objects
- Configure access to the custom objects

EmailReport definition file

In August 2009, Oracle Service Cloud (previously RightNow) changed its software to require a different version of the report definition file depending on which version of Oracle Service Cloud you are using.

The version-dependent report definition file as of February 2011:
- `ININ_EmailReport_11_2.xml`: Use this file if you have the Feb 2011 version of the Oracle Service Cloud client or a later version.

PureConnect names new versions of the report definition file as follows:
- `ININ_EmailReport_<year>_<month>.xml.`

Be sure to use the correct version of the email report for your site.

Custom Chat Field Report definition file

The Custom Chat Field Report definition file is: `ININ_Custom_Chat_Field_Report.xml.`

Import the report definition files

Access an PureConnect definition file from the `\Installs\OracleServiceCloud` directory on the share. Definition files are also available on the Product Information site at: https://my.inin.com/products/Integrations/Pages/Oracle-Service-Cloud.aspx.

To import the report to your Oracle Service Cloud server:
1. Start the **Oracle Service Cloud client** if it is not already open.
2. Log on with administrator rights.

3. In the menu pane, click the **Analytics icon** .
4. Double-click **Reports Explorer**.
5. Click **New Report** in the ribbon.
6. The **New Report** dialog box appears.
7. In the **New Report** dialog, click **Import Existing Report Definition**.

New Report

Getting Started

Choose one of the following options for your new report.

Group	Date	Count	Currency
Group1	09/21/2009	1	$1.00
Group1	06/13/2009	2	$2.00
Group2	09/21/2009	1	$1.00
Group2	06/13/2009	2	$2.00
Total		**6**	

Grid Report

Choose this option for operational reports. This layout only displays tabular data. The column headers are fixed and there is no horizontal scroll bar. All columns are sized to fit within the containing window. Get started by dragging fields from the Data Dictionary on to the Data Area of the Design Surface.

Standard Report

Choose this option for presentation reports. The layout contains a report header, tabular data area and report footer. By default the report surface expands to best fit the data and is both vertically and horizontally scrollable. Get started by dragging fields from the Data Dictionary on to the Data Area of the Design Surface. You can change the Title and Sub Title by double clicking on the fields on the Design Surface.

Standard Report with Chart

Choose this option if you wish to add graphical output to your tabular display. Once you've added columns to the tabular data area you can double click the chart to edit the definition.

Import Existing Report Definition

Choose this option to import a report from an Exported Report File.

Cancel

---

8. Browse to and select the report definition, `ININ_EmailReport_11_2.xml`.
9. Verify that the settings are correct for the report:
   a. With the report open, go to **Home** on the ribbon > **Properties** pod > **Options** > **More Options**.
   b. Make sure only the following settings are selected:
      - Return to previous level when current level no longer has data
      - Set report to deferred execution
      - Operational Database
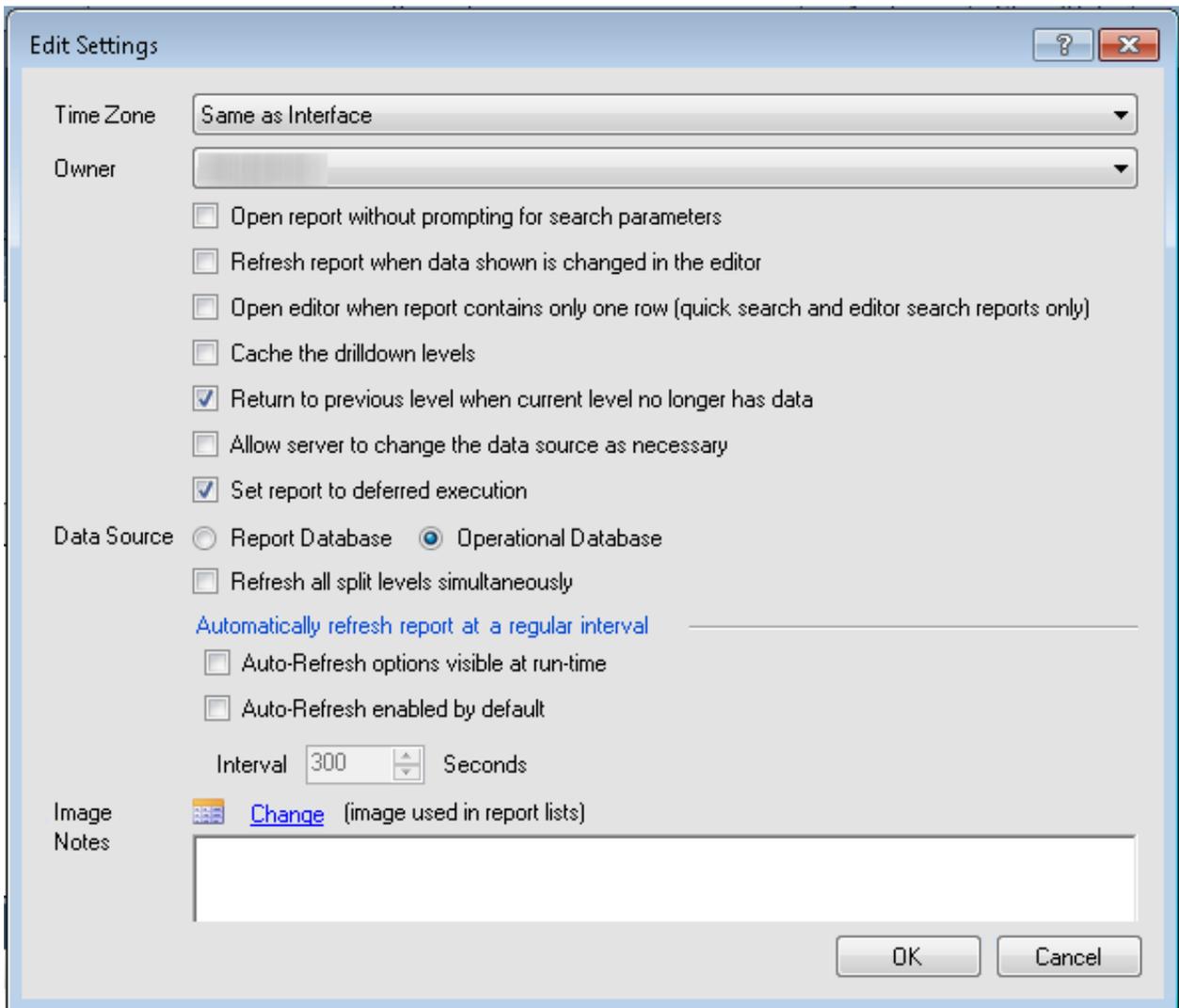
c. Click **OK**.

10. In the Quick Access Toolbar, click the arrow beside the disk icon. Select **Save As**.
11. In the pop-up window, right-click **Public Reports**, then click **New Folder**.
12. Name the new folder **Custom**.
13. In the **Name** box, type **PureConnect Email Integration Report**.
14. Click **OK**.

Import the integration custom objects

The PureConnect Integration to Oracle Service Cloud integration uses custom objects to store historical interaction data on the Oracle Service Cloud server. Before you can use the historical data, an administrator must upload the custom object package to the Oracle Service Cloud server.

Access the inin_custom_objects folder from the `\Installs\OracleServiceCloud` directory on the share. The custom objects folder is also available on the Product Information site at: https://my.inin.com/products/Integrations/Pages/Oracle-Service-Cloud.aspx.

> **Note:**
> If you use a version of Oracle Service Cloud that was released before November 2010, skip this section on mporting the integration custom objects.

To import the integration custom objects to your Oracle Service Cloud server:

1. Start the **Oracle Service Cloud client** if it is not already open.
2. Log on with administrator rights.
3. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
4. Expand the **Database** folder and double-click **Object Designer**.
5. With the Object Designer tab selected:
    a. Click **Import** in the ribbon and browse to the `ININ_custom_objects.zip` file.
    b. Click **Open**.
    c. Click **Next**.
6. The **Import Custom Objects** window appears. Select which objects you want to import. Click **Next**.
7. The custom objects you imported appear on the **Object Designer** tab under **Custom Objects** > **ININ**.
8. Click **Save** in the ribbon to save the custom object package to the Oracle Service Cloud server.
9. Click **Deploy** in the ribbon to enable the custom objects for use on the Oracle Service Cloud server.
10. Select **Deploy Immediately**.
11. In the **Email Addresses** box, type the email addresses to receive an automatically generated email whenever custom objects are deployed.
12. Click **Deploy**.

Configure access to the custom objects

> **Note:**
> If you use a version of Oracle Service Cloud from before November 2010, skip this section on configuring access to the custom objects.

The integration uses the Oracle Service Cloud Web Services for SOAP API to write data to the custom objects on the Oracle Service Cloud server. To specify an Oracle Service Cloud user account for the web requests, use the Integration Configuration Utility. To verify access to custom objects, use the same utility.

To configure permissions for custom objects, see Configure permissions for custom objects.

Configure queues and queue rules

Note:
If you are upgrading, skip this information and proceed to <u>Configure the Integration Service for incidents and chats</u>.

Queuing concepts

The PureConnect Integration to Oracle Service Cloud Integration is designed to route incidents to the appropriate agent in order to drive the best customer experience. The routing uses customer data that is already captured in Oracle Service Cloud. The Oracle Service Cloud Integration uses a universal queue to determine which incidents to route.

Incidents can include:
- Phone calls
- Emails and chats
- Any object or process

Note:
The Integration Service can route any object—not just incidents. For example, you could use this service to route RMAs.

Incidents can be generated by:
- Email receipt
- Web form completion
- Social media tracking

To take full advantage of the PureConnect Integration to Oracle Service Cloud, it is important to understand what to configure and how incident routing works. Configure the Oracle Service Cloud Integration for each type of object that you want to route.

Complete the following to create incident queues, configure them, and configure rules to govern their behavior.
- <u>Route based on Oracle Service Cloud interfaces</u>
- <u>Create incident queues</u>
- <u>Assign a profile to the incident queue</u>
- <u>Create incident rules</u>
- <u>Configure chat queues</u>
- <u>Create a universal queue chat queue</u>
- <u>Designate the universal queue chat queue as a universal queue (Oracle Service Cloud versions before</u>
- <u>Designate the universal queue chat queue as a universal queue (Oracle Service Cloud versions after</u>
- <u>Assign a profile to the chat queue (all versions)</u>
- <u>Create a rule to assign chats to the universal queue chat queue</u>

Route based on Oracle Service Cloud interfaces

By default, the Integration Service screen pops an interaction based on the interface set by Oracle Service Cloud. If you want the default behavior, skip this section.

Set this handler to clear the interface name from the interaction if any of the following applies:
- Your company is running multiple instances of Oracle Service Cloud.
- Your agents have access to multiple interfaces.
- You don't want the screen pop restricted to a particular interface.

To override the default behavior:

1. In Interaction Designer, open `RNOW_CustomIntitiateObject.ihd` found in *<installation path of IC Server>*`\Handlers\Custom\RightNow` directory.
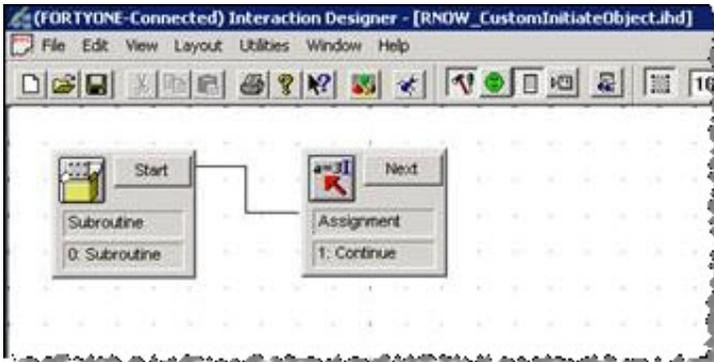
    By default, the handler does nothing. It starts and exits.

2. At the end of the handler, add a **SetAt** tool.
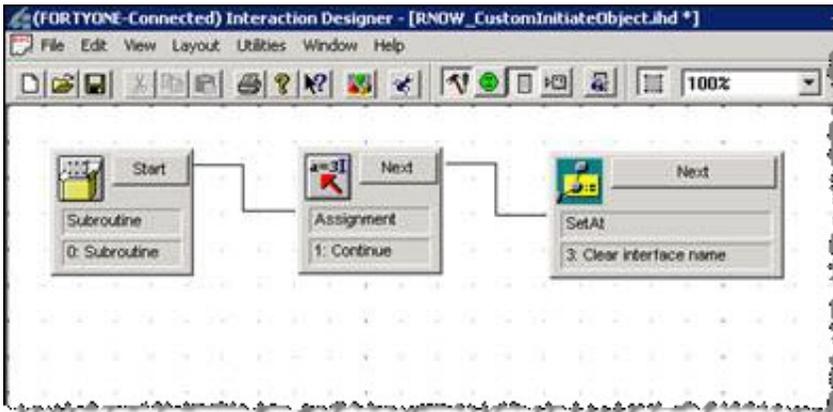
3. Double-click the **SetAt** tool and set its values to:
    - **p_IsCommonAttributeValues**
    - **Value**: "" (an empty string).
    - **Index**: `Find(p_lsCommonAttributeNames, "`*InterfaceName*`", 0)` where *InterfaceName* is the name of the Oracle Service Cloud interface to route.

4. Save your changes and close the handler.

Create incident queues

Your CIC server handles all incident processing. Create two "worker" queues to enable this functionality. The first queue is the staging queue. This queue holds all the incidents for the server to route. The second queue is the processing queue and holds all the email messages currently being routed (but not yet assigned).

> **Note:**
> You can create any number of staging and processing queues, but there must be a one-to-one ratio of staging queues to processing queues. For example, five staging queues require five processing queues. This one-to-one match is important for reprocessing emails on a switchover or due to CIC connection changes.
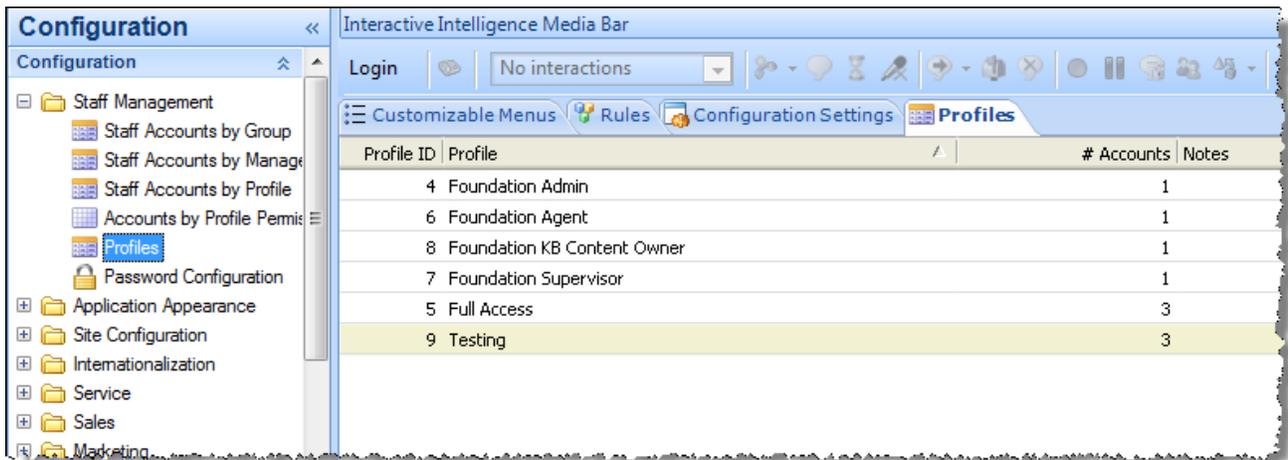
To create incident queues:

1. If the Oracle Service Cloud client hasn't been restarted, restart it and log on to **Oracle Service Cloud client** using an account with administrator permissions.

2. Open the Configuration menu by clicking the **Configuration icon** on the menu pane, expand the **Application Appearance** folder, and double-click **Customizable Menus**.
3. Expand the **System Menus** folder and double-click **Incident Queues**.
4. Click **New** on the ribbon.
5. In the **Interface Visibility Label** box, type `Incident Staging`.
6. In the **Queue Type** list, select **Standard**.
7. Repeat steps 4-6 to create an Incident Processing queue.
8. Click **Save & Close** on the ribbon.

Assign a profile to the incident queue

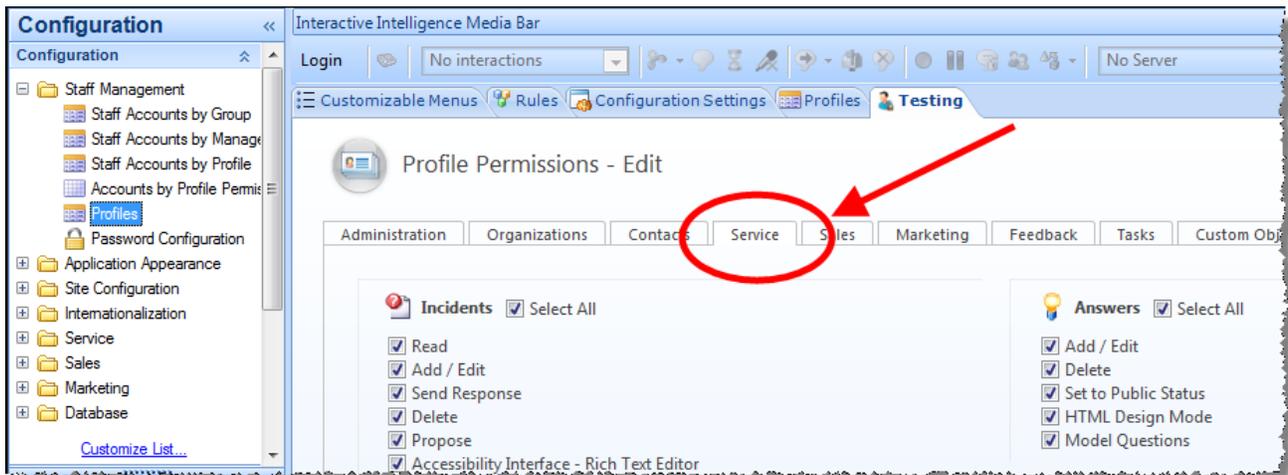To assign a profile to the incident queue:

1. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
2. Expand the **Staff Management** folder, then double-click **Profiles**.

3. Double-click the profile you want to open.
4. On the ribbon, click **Permissions**.
5. The **Profile Permissions** page appears.
6. Click the **Service** tab.

7. Next to **Incidents**, select the **Select All** check box.

8. In the **Incident Queues** list, select the **Incident Staging** queue and click [+] .

9. In the **Incidents Queues** list, click the **Incident Processing** queue and click [+] .

10. From the **Pull Policy** list, select **First Due**.

11. From the **Pull Quantity** list, select **1**.

12. From the **Inbox Limit** list, select **1**.
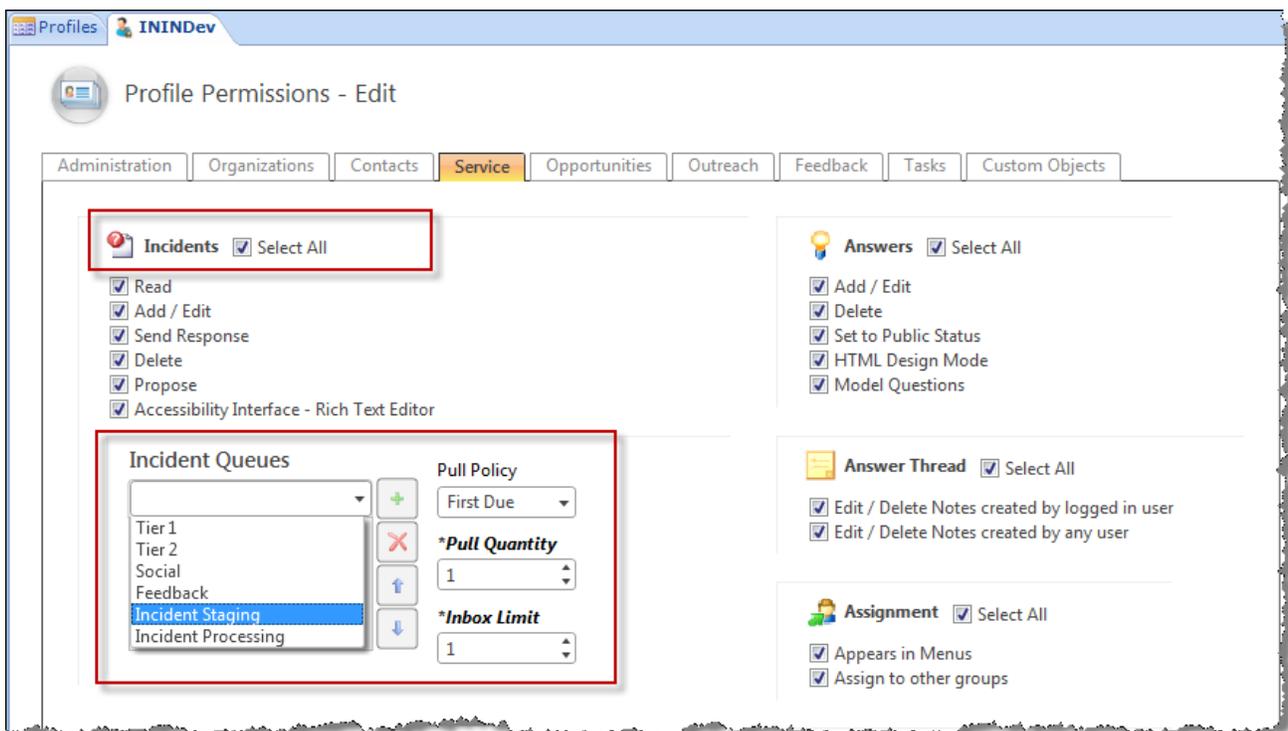
13. On the ribbon, click **Save & Close**.

Create incident rules

Oracle Service Cloud has Business Rules for simplifying and automating common business tasks. Incident rules determine how Oracle Service Cloud routes new incidents. Create three rules that direct Oracle Service Cloud to send email messages to the CIC server.

When you define the rules, define all of them to be in the Initial state; create all of them under the **Initial** branch in the **States** tree.

To create incident rules:

1. Start the **Oracle Service Cloud client** if it is not already open.
2. Log on with administrator rights.
3. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
4. Expand the **Site Configuration** folder and then double-click **Rules**.
5. Click **Edit** on the ribbon.
6. Create a rule to determine when an incident is assigned:
   a. In the **States** tree, expand the **Initial** branch, then right-click and choose **New Rule**.
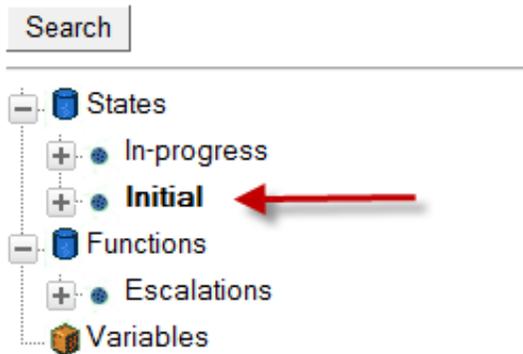
   b. In the **Edit Incident Rule** pane, in the **Rule Name** box, type `IncidentAssigned_StopRules`.
   c. Under **Add Options**, in the **Add IF Condition Based On** list, point to **Incident**, then select **Queue ID**.
   d. In the **Incident.Queue ID** section, from the **Select Operator** list, select **equals**.
   e. From the corresponding list, select **Incident Processing**.
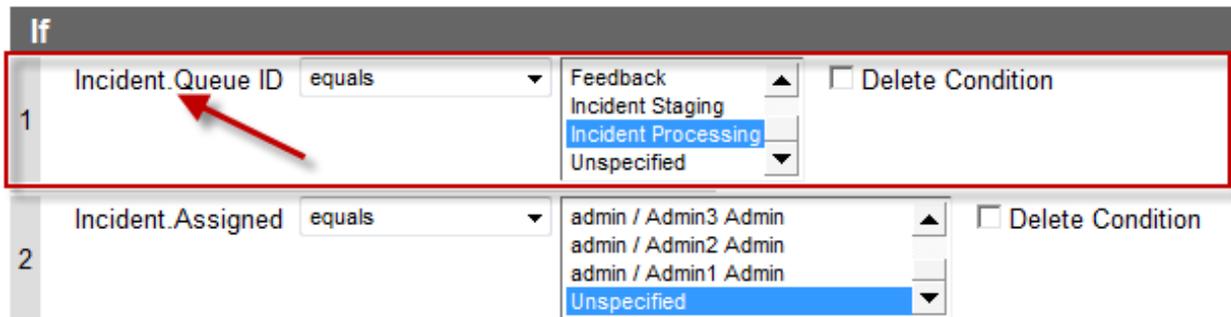
   f. Under **Add Options**, in the **Add IF Condition Based On** list, point to **Incident**, then select **Assigned**.
   g. In the **Incident.Assigned** section, from the **Select Operator** list, select **equals**.
   h. From the corresponding list, select **Unspecified**.

i. In the **Logical Expression** box, verify that **1 & 2** appear. If they do not appear, type `1 & 2`.

j. Under **Add Options**, in the **Add Action - Then** list, select **Stop Processing Rules**.
k. Click **Save**.
7. Create a rule to determine when an incident is saved:
   a. In the **States** tree, expand the Initial branch, then right-click and choose **New Rule**.

   b. In the **Edit Incident Rule** pane, in the **Rule Name** box, type **IncidentAssigned_ProcessingQueue**.
   c. Under **Add Options**, in the **Add IF Condition Based On** list, point to **Incident**, then select **Assigned**.
   d. In the **Incident.Assigned** section, from the **Select Operator** list, select **not equal**.
   e. From the corresponding list, select **Unspecified**.
   f. Under **Add Options**, in the **Add IF Condition Based On** list, point to **Incident**, then select **Queue ID**.
   g. In the **Incident.Queue ID** section, from the **Select Operator** list, select **equals**.
   h. Select **Incident Processing**.
   i. In the **Logical Expression** box, verify that **1 & 2** appear. If they do not appear, type `1 & 2`.
   j. Under **Add Options**, in the **Add Action - Then** list, point to **Set Field**, then select **Queue ID**.

k. From the **Assign Queue** list, select --.

> **Note:**
> The dash-dash indicates no queue. It is equivalent to clearing the queue field.

l. Under **Add Options**, in the **Add Action - Then** list, select **Stop Processing Rules**.

> **Warning:**
> It is crucial to specify this `then action`. Failing to do so can cause incidents to be rerouted in an endless loop.

m. Click **Save**.

8. Create a rule to move incidents to the staging queue:

a. In the **States** tree, expand the **Initial** branch, then right-click and choose **New Rule**.
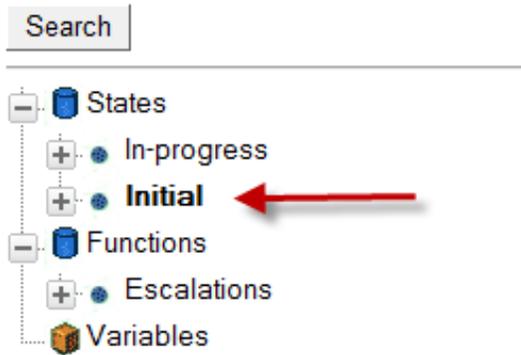
b. In the **Edit Incident Rule** pane, in the **Rule Name** box, type **IncidentAssigned_StagingQueue**.

c. Under **Add Options**, in the **Add IF Condition Based On** list, point to **Incident**, then select **Source**.

d. In the **Incident.Source** section, from the **Select Operator** list, select **equals**.

e. From the corresponding list, select the following check boxes:

- End-User pages
- WAP
- Utilities
- Public API

> **Note:**
> This IF block indicates the source of the email messages. The rule indicates that if an email message comes from the source specified, then the CIC server routes the message. The specific sources depend on your organization's environment.

f. Under **Add Options**, in the **Add Action - Then** list, point to **Set Field**, then select **Queue ID**.

g. From the **Assign Queue** list, select **Incident Staging**.

h. Click **Save**.

9. After creating all three rules:

a. Click **Compile**.

b. Click **Activate**.

The rules are now in effect.

Configure chat queues

To use chat queues with the universal queue, configure the Oracle Service Cloud client by completing the following procedures, which are detailed in the subsequent sections.

1. Enable the universal queue base variable.
2. Create a universal queue chat queue.
3. Designate the universal queue chat queue as a universal queue.
4. Assign a profile to the chat queue.
5. Create a rule to assign chats to the universal queue chat queue.

> **Note:**
> To enable the universal queue base variable, work with the Oracle Service Cloud Site Management team to enable the
> `CHAT_UQ_WS_API_ENABLED` configuration base variable for the Oracle site.

Create a universal queue chat queue

To create a universal queue chat queue:

1. Start the **Oracle Service Cloud client** if it is not already open.
2. Log on with administrator rights.

3. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
4. Expand the **Application Appearance** folder and double-click **Customizable Menus**.
5. On the **Customizable Menus** tab, under **System Menus**, click **Chat Session Queues** or **Chat Queues**, depending on your version.
6. Click **New** on the ribbon.
7. Delete the default name and type a name for the new chat queue.
8. Click **Save**.

If your Oracle Service Cloud version is before May 2014:

1. Hover the mouse pointer over the new chat queue name.
2. Oracle Service Cloud displays the chat queue ID. Make a note of this ID because you need it to configure the universal queue chat queue.
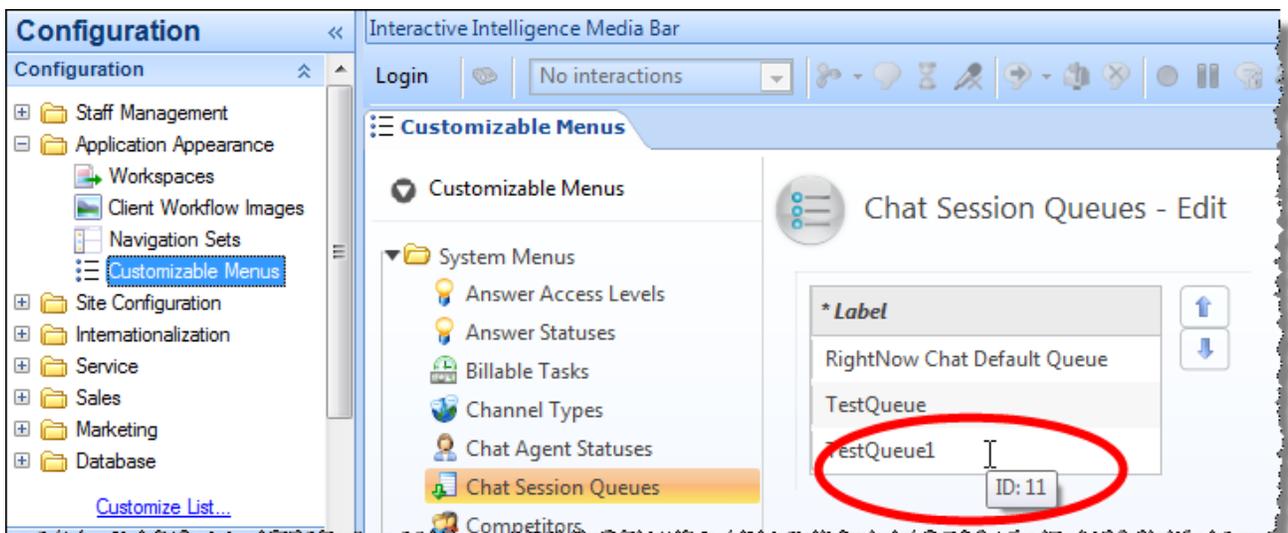
If your Oracle Service Cloud version is May 2014 or later:

1. Click the **External** check box.

This designates the universal queue chat queue as a universal queue. Skip the next to two sections about designating the universal queue chat queue.

Designate the universal queue chat queue as a universal queue (Oracle Service Cloud versions before May 2013)

This section describes how to mark the universal queue chat queue as a universal queue. This section is for Oracle Service Cloud versions that were released before May 2013.

To designate the universal queue chat queue as a universal queue:

1. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
2. Expand the **Site Configuration** folder and double-click **Configuration Settings**.
3. Under the **General Configuration** menu, click **RightNow Chat**.
4. In the **General** section, under **Server**, click `CHAT_UQ_EXTERNAL_QUEUES`.
5. Oracle Service Cloud displays the **Universal Queue External Queues** list. The **Value** text box contains the list of queue identifiers.
6. In the **Values** section, enter the chat queue ID in the **Value** box. If there are multiple chat queues, use commas to separate the chat queue IDs.
7. Click **Update**.
8. Wait a few moments for the update to complete.
9. Click **Commit and Exit**.

Designate the universal queue chat queue as a universal queue (Oracle Service Cloud versions after February 2013 and before May 2014)

This section describes how to mark the universal queue chat queue as a universal queue. This section is for Oracle Service Cloud versions that were after February 2013.

To designate the universal queue chat queue as a universal queue:

1. Expand the **Site Configuration** folder and double-click **Configuration Settings** to display the **Configuration Settings** tab.
2. A **Search** dialog box appears.
3. Click **Search**.
4. In the **Slice: Folder Hierarchy**, select the **Chat** folder.
5. Double-click **CHAT_UQ_EXTERNAL_QUEUES**.
6. Oracle Service Cloud displays the **Universal Queue External Queues** tab.
7. In the **Values** section, enter the chat queue ID in the **Value** box. If there are multiple chat queues, use commas to separate the chat queue IDs.

8. Click **Save & Close**.

Assign a profile to the chat queue (all versions)

To assign a profile to the chat queue:

1. Open the Configuration menu by clicking the **Configuration icon** on the menu pane.
2. Expand the **Staff Management** folder and double-click **Profiles**.
3. Double-click the profile you want to open.
4. Click **Permissions** on the ribbon.
5. Oracle Service Cloud displays the **Profile Permissions** page.
6. Click the **Service** tab.
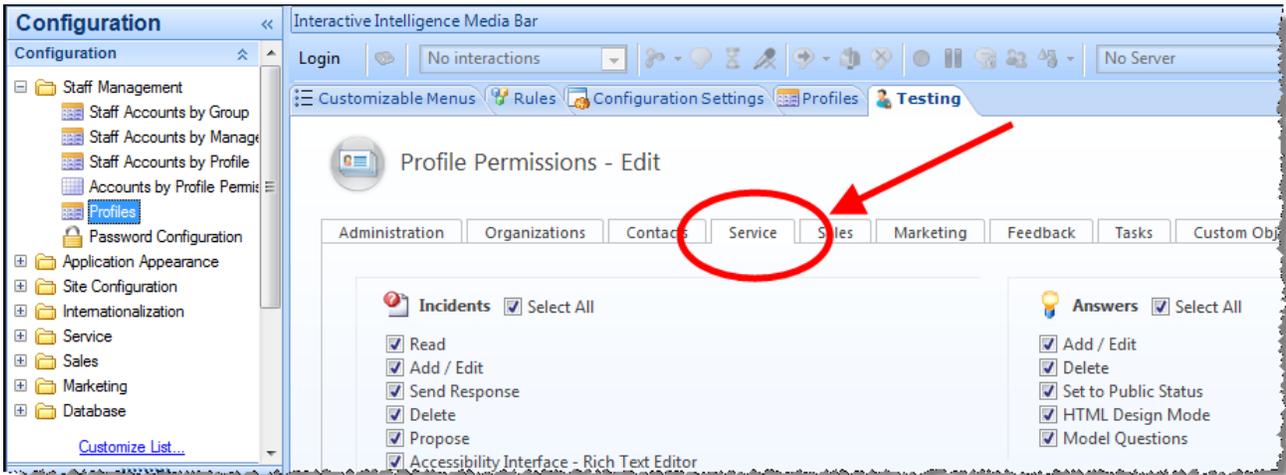
7. Scroll down to the **Chat** section.
8. Next to **Chat Agent Permissions**, select the **Select All** check box.
9. In the **Chat Queues** list, select the new chat queue.
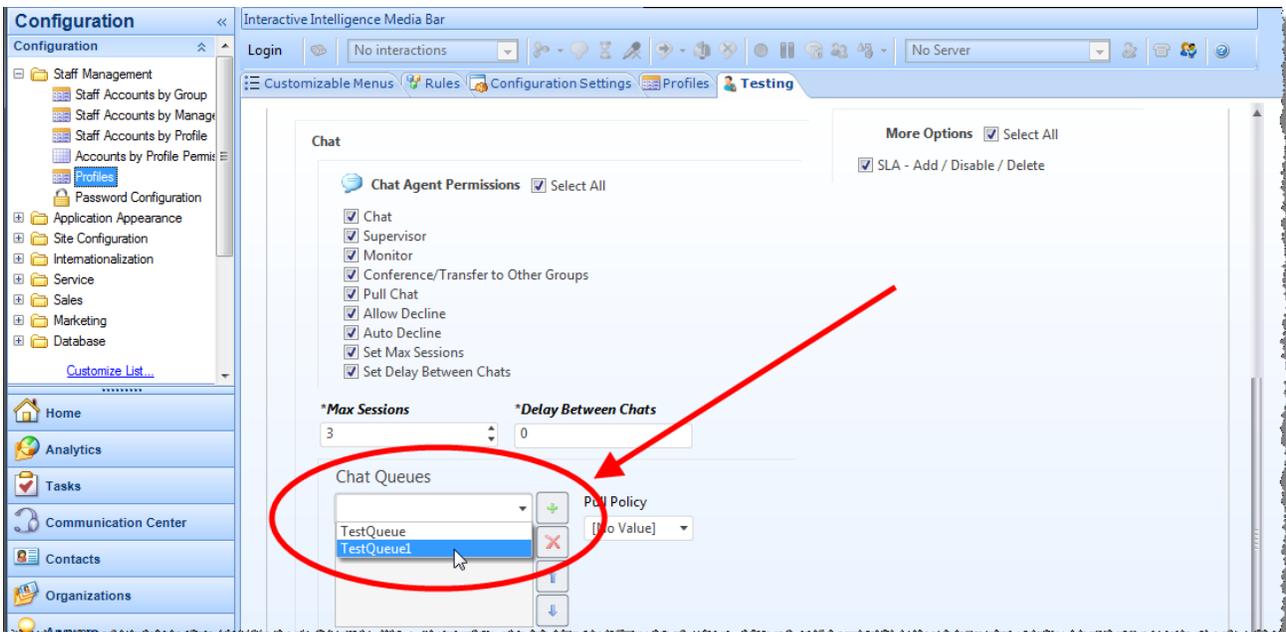
10. Click [+] to assign the queue to the profile.
11. From the **Pull Policy** list, select **First Due**.
12. Scroll down to the **Chat Agent Statuses** section, select **Available-Unrestricted**.
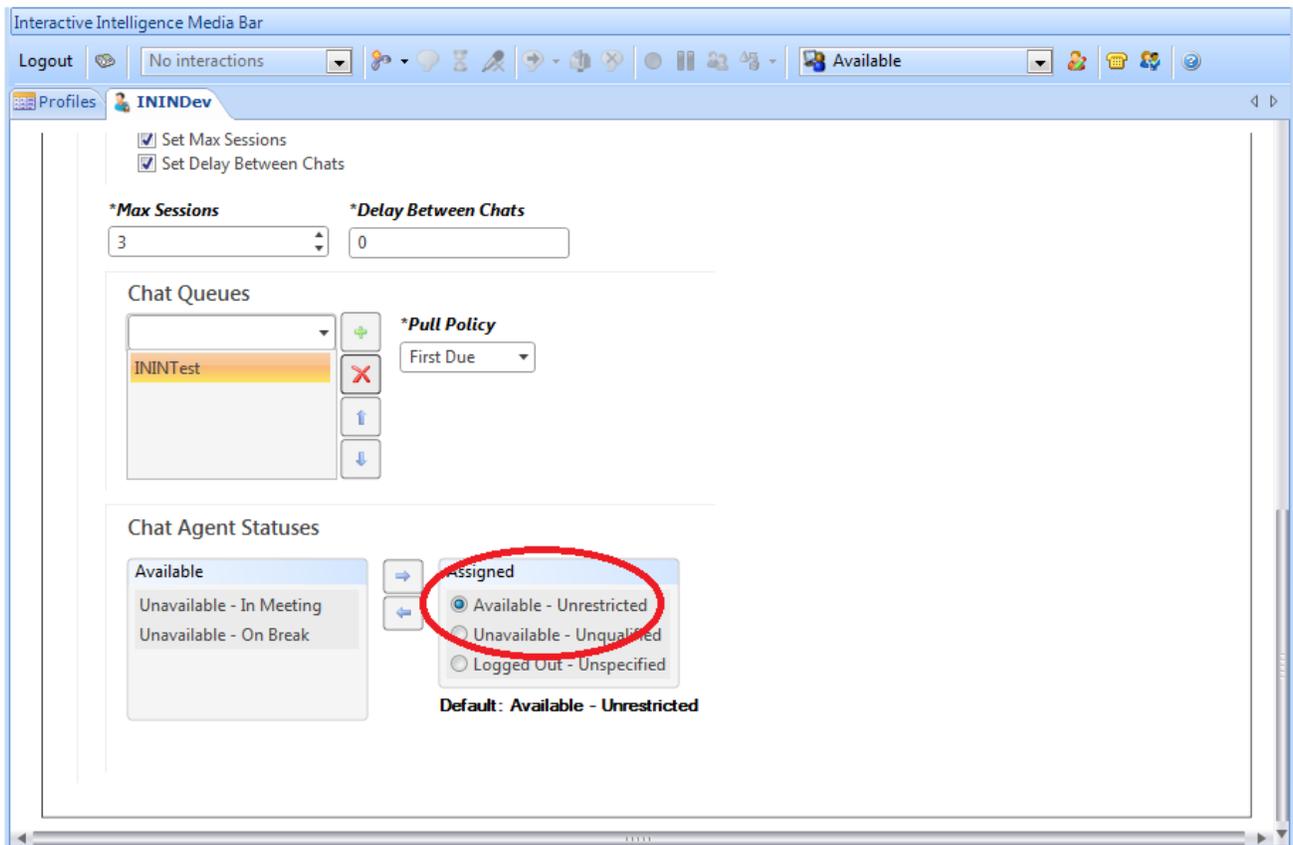
13. On the ribbon, click **Save & Close**.

Create a rule to assign chats to the universal queue chat queue

Now create a rule to route the appropriate chats into the universal queue that you created.

To create the rule:

1. In the Configuration menu, expand the **Site Configuration** folder and double-click **Rules** .
2. Click **Chat** on the ribbon.
3. Click **Edit** on the ribbon.
4. Create the new rule:
   a. In the hierarchy, expand the **States** branch.
   b. Expand the **Initial** branch.
   c. Right-click **Initial** and select **New Rule**.
   d. In the **Rule Name** box, enter a name for the rule.
5. Select rule options:
   a. Under **Add Options**, in the **Add IF Condition Based On** list, point to **Incident**, then select **Interface**.
   b. In the **Incident.Interface** section, from the **Select Operator** list, select **equals**.
   c. From the corresponding list, select **<the current interface name>**.
   d. Under **Add Options**, in the **Add Action - Then** list, select **Chat Queue ID**.
   e. In the **Assign Chat Queue** list, select the **<universal chat queue>**.
6. Click **Save**.
7. Click **Compile**.
8. Click **Activate**.

Configure the Integration Service for incidents and chats

Prerequisites

Set up the following items on the CIC server:
- Workgroups
- Skills

Best practices for handling multiple sites and interfaces

Oracle Service Cloud chat queues are compatible with all interfaces and the CHAT_UQ_EXTERNAL_QUEUES setting is a site-wide configuration setting. Therefore, all chat queues that you designate for the CHAT_UQ_EXTERNAL_QUEUES setting receive chat-routed messages for all interfaces that you have.

Use only one chat queue for your site. In the Universal Queue Configuration Utility, use the routing modifiers in the queue sets to route the chats to the correct destination.

Complete or read the following:
- Configure SOAP for the Oracle Service Cloud Integration
- Configure the Integration Service
- Configure the integration for incidents
- How incidents are routed
- Overview of configuring the integration service for routing incidents (new Oracle Service Cloud
- Overview of configuring the integration service for routing incidents (existing Oracle Service
- Configure incident queue sets (all installs)
- Define custom filters
- Add media type details
- Add media type details for email
- Add media type details for callbacks
- Add media type details for generic objects
- Create modifier rules
- Configure the integration for chat routing
- How chats are routed
- Transfer and conference
- Overview of configuring the chat routing (new Oracle Service Cloud customers)
- Overview of configuring the chat routing (existing Oracle Service Cloud customers)
- Configure chat queue sets

Configure SOAP for the Oracle Service Cloud Integration

To configure SOAP settings for the integration:

1. Start the **Oracle Service Cloud client** if it is not already open.
2. Log on with administrator rights.
3. Open the Configuration menu by clicking **Configuration icon** on the menu pane.
4. Expand the **Staff Management** folder and double-click **Profiles**.
5. On the **Profile** tab, double-click the profile to edit.
6. Click **Permissions** on the ribbon.
7. On the **Administration** tab in the **Public SOAP API** section, check **Select All**.
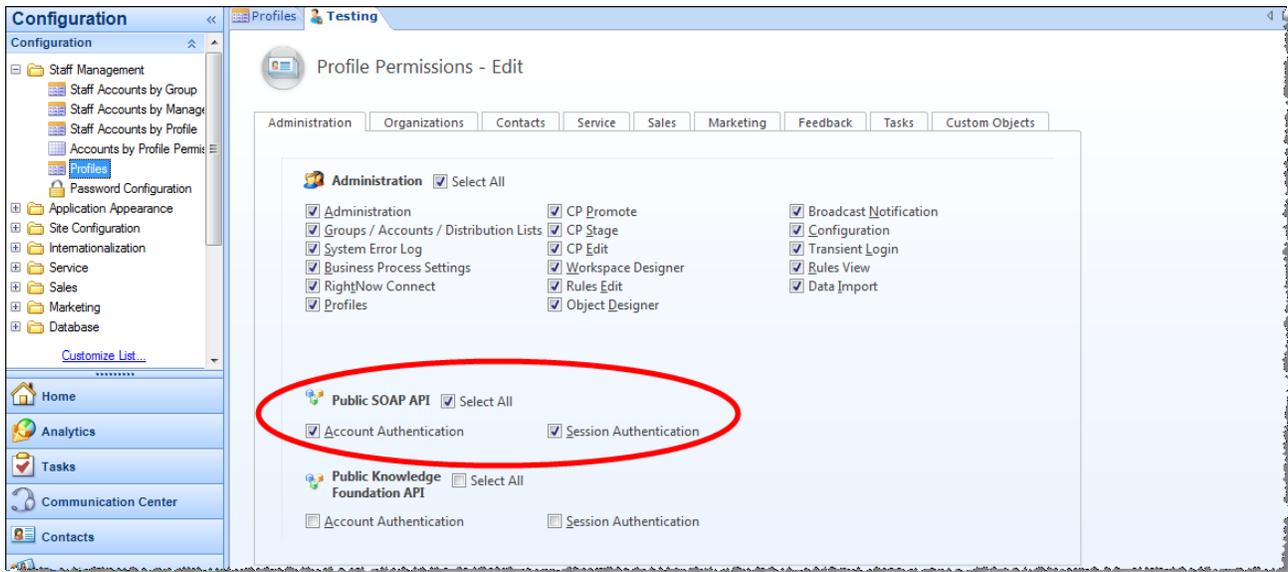
8. Click **Save** on the ribbon.

Configure the Integration Service

> **Note:**
> Restart the Oracle Service Cloud client before proceeding with this section.

To configure the Integration Service:

1. Click the **File** tab, point to **PureConnect** , and then click **Universal Queue Configuration Utility** .
2. In the **Service URL** box, type the web address of the Universal Queue Service that you installed as part of the integration and the appropriate port number.

   The format of the address is:

   ```
   http://<server name or IP>:<port>/ComponentConfiguratorService
   ```

   If you previously configured the Universal Queue service, then Oracle Service Cloud fills in the server path. You may have to click the drop-down to see it.
3. Click the **Load Service Configuration** button.

   If you previously configured the Universal Queue service, then your credentials are remembered. Otherwise, the boxes are blank.
4. Add an Interaction Center Server connection:

   a. On the **Server Connections** tab, click the **Add** arrow and select **Interaction Center Server**.

b. In the **User ID** and **Password** boxes, enter the appropriate login credentials.

> **Note:**
> Do not use the login credentials for the `icadmin` account. Use of the `icadmin` credentials for this task creates security risks.

c. In the **Server Name** box, type the identifier of the CIC server on your network.

d. Click **Add**.

5. Add an Oracle Service Cloud Server connection:

a. On the **Server Connections** tab, click the **Add** arrow and **select OSC Server.**

b. Oracle Service Cloud displays the Connection Details panel.

c. In the **User ID** and **Password** boxes, enter the appropriate login credentials.

d. In the **Site Name** box, type the site name including the domain name of your Oracle Service Cloud Server.

e. In the **Interface Name** box, type the name of the Oracle Service Cloud interface. The interface name is usually the first part of the site name.

f. Next to **Monitored Queues**, select the boxes for the queue types to monitor (**Chat Queue** or **Incident Queue**).

g. Click **Add**.

6. Test connections and correct any errors.

Do one of the following:

○ To test all connections, click **Test All Connections** .

○ To test a single connection, click **Test Connection** .

If any connection fails, Oracle Service Cloud displays an error message.
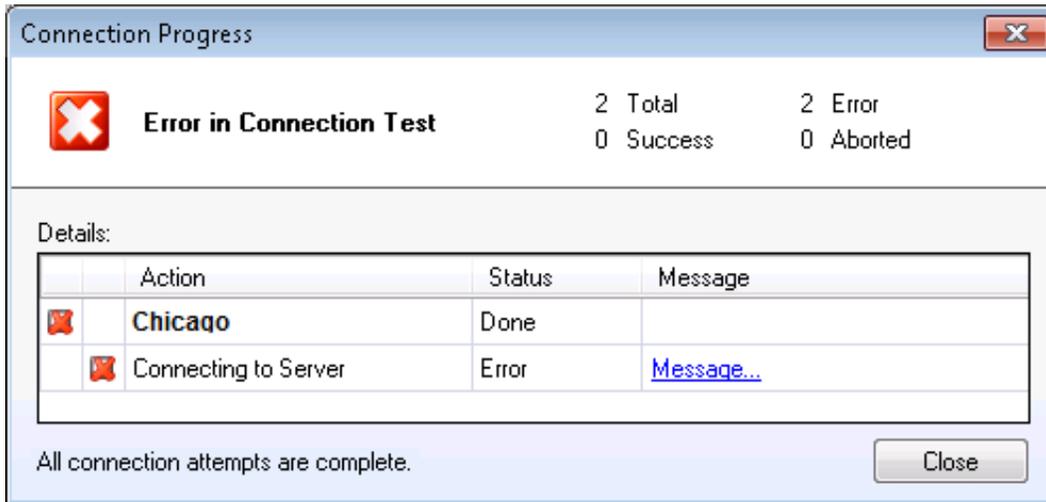
Click **Message** to display a correction dialog box.

Correct any errors and click **Reattempt Connection**.

If test still fails, click **Leave As Is** and review the PureConnect log file.

Configure the integration for incidents

The Integration Service allows you to queue incidents, run analysis on incident data, and then route an Oracle Service Cloud incident as a generic object, callback, or email through the CIC server to the agent who is best able to handle it. Chats are unique and handled in a separate section later in this chapter.

To take full advantage of the Integration Service incident functionality, it is important to understand how the Integration Service routes incidents.

How incidents are routed

1. The Integration Service reads the configuration to determine which report to run and which Oracle Service Cloud incident queue to run it against.
2. The service executes the report and analyzes the results.
3. The service applies the queue set.
4. The service applies the modifier rules against the result set to determine how to route the specific incidents in the queue.
5. You can have multiple modifier rules. The service applies the correct one based on the result set.
6. The service creates the interaction and moves the incident from the staging queue to the processing queue for the following reasons:

   For fault tolerance reasons: If the CIC server goes down, upon restarting, the service automatically reprocesses all incidents in the processing queue. To avoid reprocessing the incident, move them out of the processing queue.
7. The CIC server delivers the incident to the agent who addresses the incident. Once the incident gets to the agent, it is no longer in the processing queue. The agent is responsible for the incident as soon as it appears on their monitor.
8. The **EmailSaved** rule is applied. When an agent receives the incident and saves it, then the **EmailSaved** rule automatically removes the incident from the processing queue.

Overview of configuring the integration service for routing incidents (new Oracle Service Cloud customers)

This section provides a high-level overview of the steps to configure the Integration Service for email incidents. Detailed instructions are provided later in this chapter.

Customers with a new Oracle Service Cloud implementation must complete all of these steps. If you already have Oracle Service Cloud implemented at your company, see the next section for the steps that you must complete.

To configure email routing (new Oracle Service Cloud customers only):

1. Evaluate the data that you already capture with Oracle Service Cloud and determine how you want to use it to route incidents.
2. Define your incident queues.
3. Modify the stock report that analyzes email incident data. PureConnect provides a stock report that is designed to satisfy the essential routing requirements for most email incidents. If you want to surface more data to drive routing behavior that is specific to your company, you can optionally modify the stock report.

   The report definition specifies the incident queue, which identifies the source of the message. You can also create a custom report. For example, suppose you want to route an email message to the agent who owns it, but the Oracle Service Cloud user name is not the same as the CIC user name. Create a custom database field to track this data.

   > **Tip:**
   > Start by modifying the stock report to surface the necessary data for the Integration Service to drive routing behavior.

4. Configure the Integration Service to run the report.
5. If you want to refine how email incidents are routed, define the modifier rules for the report. The following are some examples of modifier rules:
   - Example 1: Emails from our "gold" customers have a higher priority than other emails in the queue so they are addressed first.
   - Example 2: Spanish-language emails are routed to the agent who speaks Spanish. In this case, create a skill.
   - Example 3: If a customer has already worked with an agent, then all emails from that customer are sent to that agent.

   > **Note:**
   > Modifier rules are optional. Start with an easy rule to become familiar with the process of building and executing them. Then build more complex modifier rules.

6. Finally, identify which Oracle Service Cloud queues you want to use for email incident routing and identify how messages that arrive in that queue are routed.

   Example: Suppose that you have an incident queue called "Support". Any messages that are received for Support are routed to the Support workgroup.

Overview of configuring the integration service for routing incidents (existing Oracle Service Cloud customers)

This section provides a high-level overview of the steps to configure the Integration Service for email incidents for existing Oracle Service Cloud implementations. Detailed instructions are provided later in this chapter.

> **Note:**
> If you already have email incident queues set up, you do not need to modify them.

To configure email routing (existing Oracle Service Cloud customers only):

1. Set up the processing queue.
2. Modify the stock report that analyzes email incident data.

   PureConnect provides a stock report to satisfy the essential routing requirements of most email incidents. You can modify the stock report. The report definition specifies the incident queue, which identifies the source of the message. You can also create a custom report.

   For example, suppose you want to route this email to the same agent who already owns it. The Oracle Service Cloud user name is not the same as the CIC user name. Therefore, create a custom field in the database to track this data.

   > **Tip:**
   > Start by modifying the stock report to surface the necessary data for the Integration Service to drive routing behavior.

3. Configure the Integration Service to run the report.
4. If you want to refine how email incidents are routed, define the modifier rules for the report.

   > **Note:**
   > If you already have Oracle Service Cloud implemented at your company, recreate your Oracle Service Cloud rules as modifier rules for the Integration Service.

5. Finally, identify which Oracle Service Cloud queues you want to use for email incident routing and identify how messages that arrive in that queue are routed.

   Example: Create an incident queue called Support. Any messages that are received for Support are routed to the Support workgroup.

Configure incident queue sets (all installs)

This section is specific to incident (email) queue sets. See Configure chat queue sets for information specific to chat queue sets.

To configure an incident queue set:

1. Click the **File** tab, point to **PureConnect,** and then click **Universal Queue Configuration Utility**.
2. Click the **Queue Sets** tab. (You may have to click **Load Service Configuration** to activate the **Queue Sets** tab.)
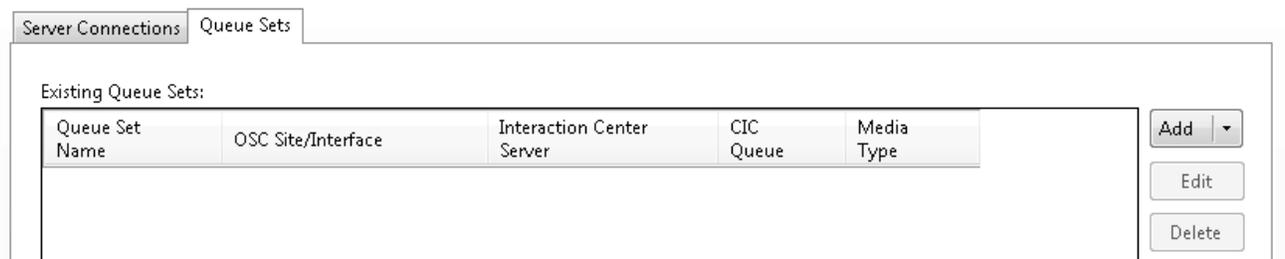
3. Click the **Add** arrow and select **Incident Queue Set**.
4. In the **Queue Set Details** dialog box, add information about the incident queue:
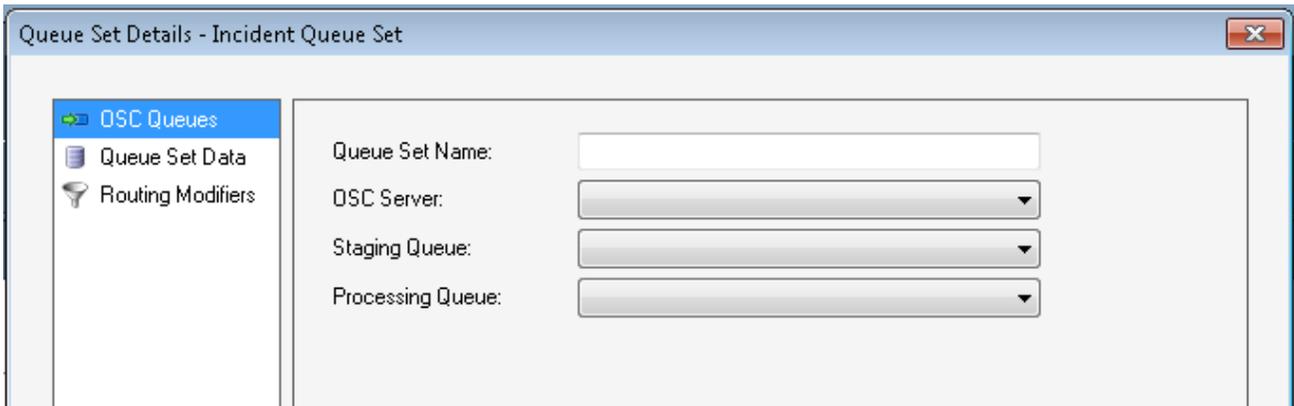
a. In the **Queue Set Name** box, type a name for the queue set.

b. In the **OSC Server** list, select the Oracle Service Cloud server.

c. In the **Staging Queue** list, select a staging queue.

d. In the **Processing Queue** list, select a processing queue.

e. In the left pane, click **Queue Set Data**.

5. In the **Queue Set Details** dialog box, click **Queue Set Data**:
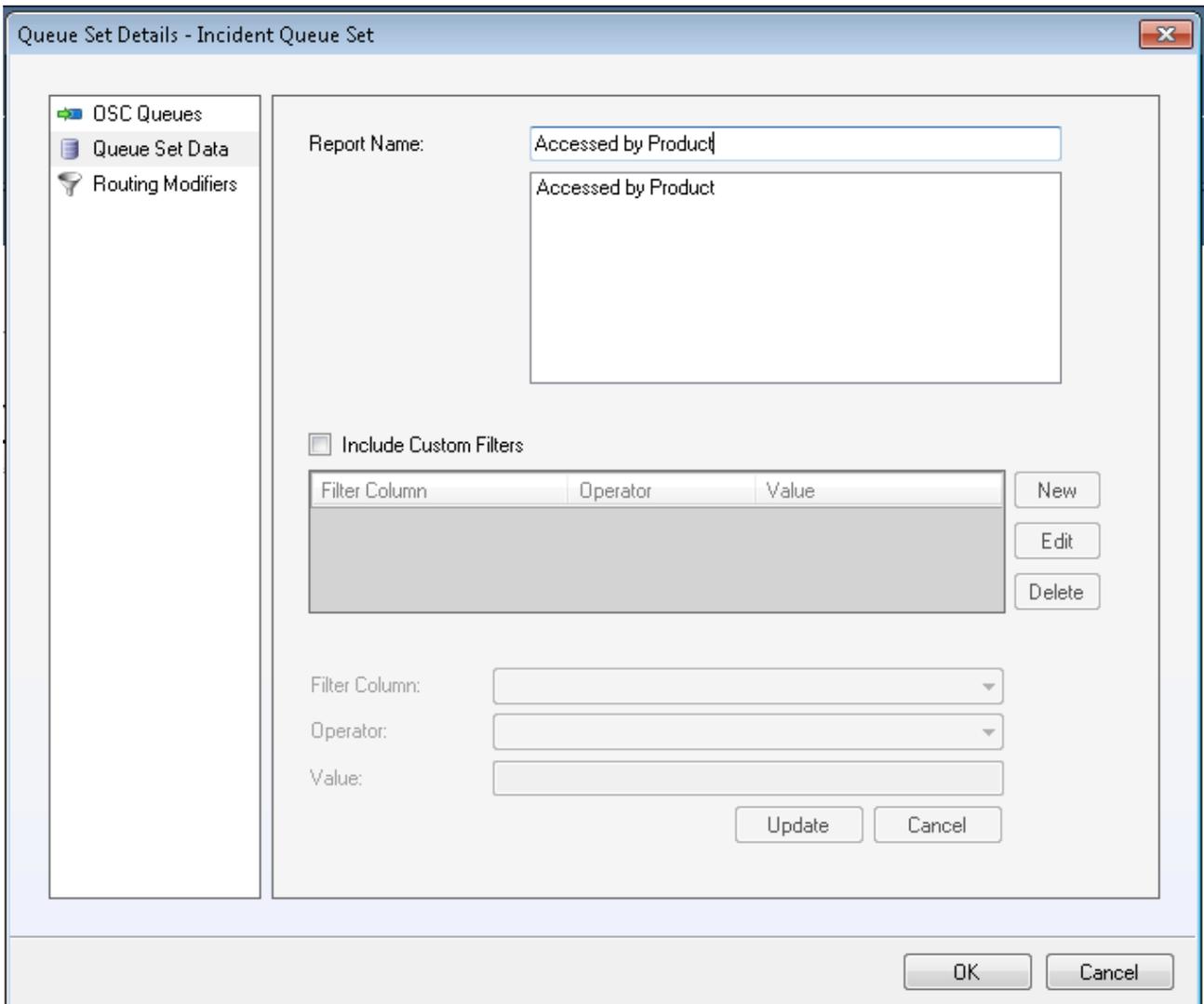
a. In the **Report Name** box, select the report that you imported earlier (the name you gave to:
   `ININ_EmailReport_<year>_<month>.xml`).

b. (Optional) To define custom report filters, select the **Include Custom Filters** check box. For more information, see the
   Define custom filters section.

c. In the left pane, click **Routing Modifiers**.

6. In the **Queue** Set Details dialog box, select **Routing Modifiers**:

a. In the Interaction Center Server list, select the CIC server to use.
b. In the **Destination Workgroup** list, select the destination workgroup of the item.
c. In the **Media Type** list, select **Callback**, **Email**, or **Generic Object**.
d. Oracle Service Cloud displays the **Media Type Details** section. The data fields in the section depend on the media type you selected.

7. In the **Media Type Details** section, fill in the information for the media type you selected. For more information, see the Add media type details section.

> **Note:**
> Without step 7, Oracle Service Cloud will not display media details correctly to the agent.

8. If needed, add modifier rules. For more information, see the Create modifier rules section.
9. Click **OK**.

Define custom filters

Custom filters give you a way to return the report based on any filters you provide. An example would be to set a filter to only show emails with subjects that begin with the letter "a".

To define custom filters:
1. In the **Queue Set Data** section of the **Queue Set Details** dialog box, select the **Include Custom Filters** check box.
2. In the **Filter Column** list, select the column by which to filter the report.
3. In the **Operator** list, select the operator (Equals, Greater_Than, and so on).
4. In the **Value** box, type the value to match.
5. Click **Add**.
6. Do the following, as necessary:
   - To add more filters, click **New**.
   - To edit a filter, click the filter in the list, then click **Edit**.
   - To delete a filter, click the filter in the list, then click **Delete**.

Add media type details

Each media type (email, callback, and generic object) requires different configuration information. Therefore, Oracle Service Cloud displays different data boxes in the **Media Type Details** section depending on the media type you selected. This section explains the information needed for each media type.

The media type is useful in routing the incident through the CIC server. It is also used when reporting the incident details in Oracle Service Cloud as well as the CIC server. You also have the ability to determine how the interaction will be displayed to the agent based on the media type.

> **Note:**
> The values that you can select for the media type details come from the `ININ_EmailReport_11_2.xml` that you uploaded earlier.

Add media type details for email

To add media type details for emails:
1. In the **Media Type Details** section, in the **Remote Name** list, select the name that should appear in the **Name** box on the telephone page of the Interaction Client.
   This field is required.
2. In the **Remote Address** list, select the email address for the interaction.
   This field is required.
3. In the **Local Name** list, select the name associated with the User ID of the Interaction Client user participating in the call.
4. In the **Local Address** list, select the address of the sender.

Add media type details for callbacks

To add media type details for callbacks:
1. In the **Callback Phone Number** list, select the phone number of the remote party.
   This field is required.
2. In the **Callback Remote Party Name** list, select the name of the sender of the callback request.
   This field is required.
3. In the **Callback Username** list, select the name of the user responding to the callback request.
4. In the **Callback Session Subject** list, select the callback request subject.

Add media type details for generic objects

To add media type details for generic objects:

1. In the **Generic Object Interaction Direction** list, select incoming or outgoing.
2. In the **Generic Object Remote Party Type** list, select internal or external.
3. In the **Generic Object Local Party Type** list, select internal or external.
4. In the **Generic Object Remote Name** list, select the name that is used to populate the **Name** box on the **Telephone** page of the Interaction Client.

   This field is required.
5. In the **Generic Object Remote ID** list, select the name that is used to populate the **Number** box on the telephone page of Interaction Client.
6. In the **Generic Object Line** list, select the value that is used to populate the **Line** box on various pages of Interaction Client.

Create modifier rules

Modifier rules change how the Integration Service routes items (incidents or chats). Regardless of the incident type, you create modifier rules in the same way. The specific criteria and actions differ depending on the item type and situation.

For examples of modifier rules, see the Overview of configuring the integration service for routing incidents (new Oracle Service Cloud customers) section.

To create a modifier rule:

1. In the **Queue Set Details** dialog box, complete the following steps:
2. Fill in the **OSC Queues** and **Queue Set Data** sections.
3. Click **Routing Modifiers** and configure the required modifiers.
4. In the Modifier Rules section, click **Add** and select **Incident Queue Set** or **Chat Queue Set**.

5. Add basic information about the modifier:
   a. In the **Modifier Name** box, type a name for the modifier.
   b. In the **Notes** box, type any explanatory notes.
6. Define the rule:
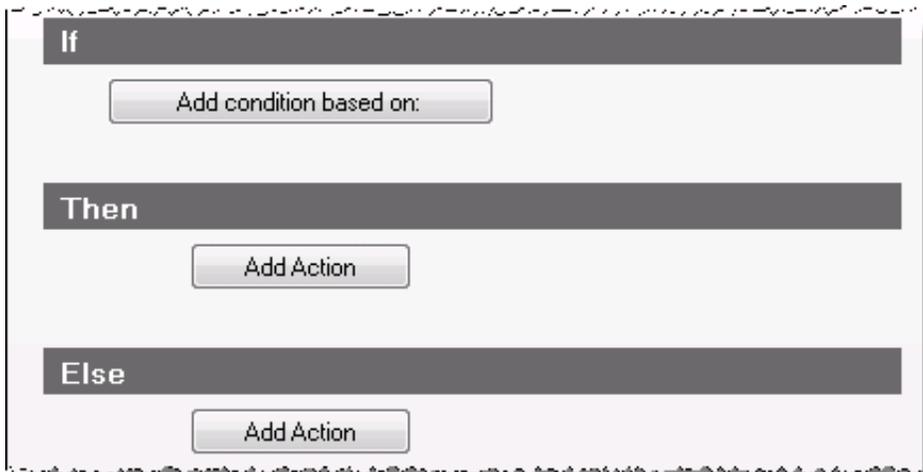
7. Click **Save**.
   The integration saves the rule and adds it to the **Modifiers** list.

Configure the integration for chat routing

The Integration Service enhances the Oracle Service Cloud chat functionality. It allows you to queue chat incidents, run analysis over chat data, and then route a chat request to the agent who is best able to handle it. The Integration Service takes advantage of the existing Oracle Service Cloud chat media functionality. Therefore, an agent sees a chat in an Oracle Service Cloud window.

To take full advantage of the Integration Service chat functionality, it is important to understand how chat routing works.

How chats are routed

1. The PureConnect Integration to Oracle Service Cloud uses the Chat API to ask Oracle Service Cloud whether there are any new chats to route. By default, chats are polled every 5 seconds.
2. The service applies the queue set and then applies the modifier rules.
3. The service creates an interaction as a placeholder for the chat.
4. The CIC server routes the interaction to the correct agent.
5. The Integration Service tells Oracle Service Cloud where the chat has been routed.
6. The agent receives the chat in an Oracle Service Cloud pop-up window.

Transfer and conference

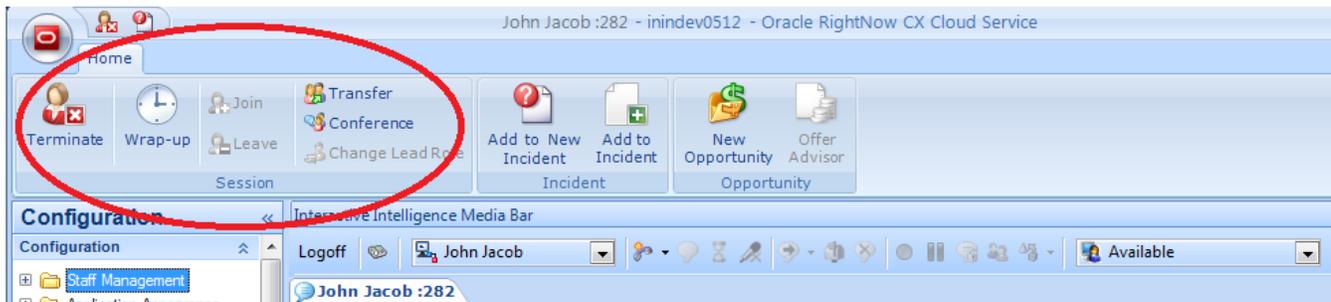Oracle Service Cloud transfers, conferences, and disconnects chats. You can view the buttons that correspond to these functions on the Oracle Service Cloud ribbon.

Overview of configuring the chat routing (new Oracle Service Cloud customers)

This section provides a high-level overview of the steps to configure the Integration Service for chat. Detailed instructions are provided later in this chapter.

It is important to set up your workgroups and skills in the CIC configuration before starting to configure the chat routing.

Customers with a new Oracle Service Cloud implementation must complete all of these steps. If you already have Oracle Service Cloud implemented at your company, see the next section for the steps that you must complete.

To configure chat routing (new Oracle Service Cloud customers only):

1. Define your chat queues. The Integration Service monitors different queue sets for chat queues than for email queues.
2. Designate one of your chat queues as a universal queue. The Integration Service monitors only the universal queue.
3. To refine how chats are routed, set up modifier rules the same way you did for the other types of incidents. Modifier rules are optional.
4. Define your custom chat fields. When a user wants to start a chat, the user has to complete a form that includes data such as their name and email address. As an Oracle Service Cloud implementer, you can add custom fields to gather more data. These fields can be sent to the Integration Service to cause routing behavior changes. Any chat field in the incident that has been tagged as a chat custom field is available in the modifier rule to drive incident routing.
5. Assign a profile to each chat queue. A profile is a collection of agents. To enable a profile of agents to receive chats, assign that profile to a chat queue.

> **Note:**
> An agent cannot be a member of an Oracle Service Cloud profile that is part of a universal queue chat queue and a non-universal queue.

6. Assign an initial state for the queue.
7. Create a rule to assign chats to the existing queue.

Overview of configuring the chat routing (existing Oracle Service Cloud customers)

This section provides a high-level overview of the steps to configure the Integration Service for chat. Detailed instructions are provided later in this chapter.

To configure chat routing (existing Oracle Service Cloud customers only):

> **Note:**
> Your implementation may have already been configured to perform this work. You may or may not need to create a rule to assign chats to the universal queue. Check your current configuration.

1. Designate one of your chat queues as a universal queue. The Integration Service monitors only the universal queue.
2. If you want to refine how chats are routed, set up modifier rules in the same way you did for the other types of incidents.
3. Define your custom chat fields. When a user wants to start a chat, the user has to complete a form that includes data such as their name and email address. As an Oracle Service Cloud implementer, you can add custom fields to gather more data. These fields can be sent to the Integration Service to cause routing behavior changes. Any chat field in the incident that has been tagged as a chat custom field is available in the modifier rule to drive incident routing.
4. Assign a profile to each chat queue. A profile is a collection of agents. To enable a profile of agents to receive chats, assign that profile to a chat queue.

> **Note:**
> An agent cannot be a member of an Oracle Service Cloud profile that is part of a universal queue chat queue and a non-universal queue.

5. Assign an initial state for the queue.

Configure chat queue sets

To configure a chat queue set:

1. Display the **Queue Sets** tab.
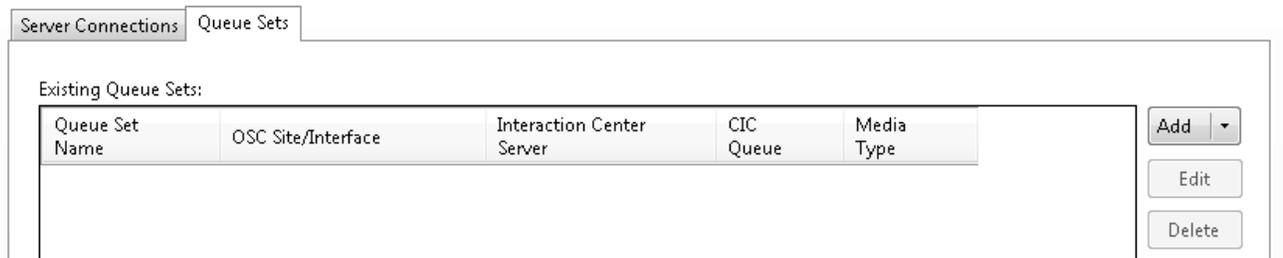
2. Click the **Add** arrow and select **Chat Queue Set**.
3. In the **Queue Set Details** dialog box, complete the following steps to add information about the chat queue:
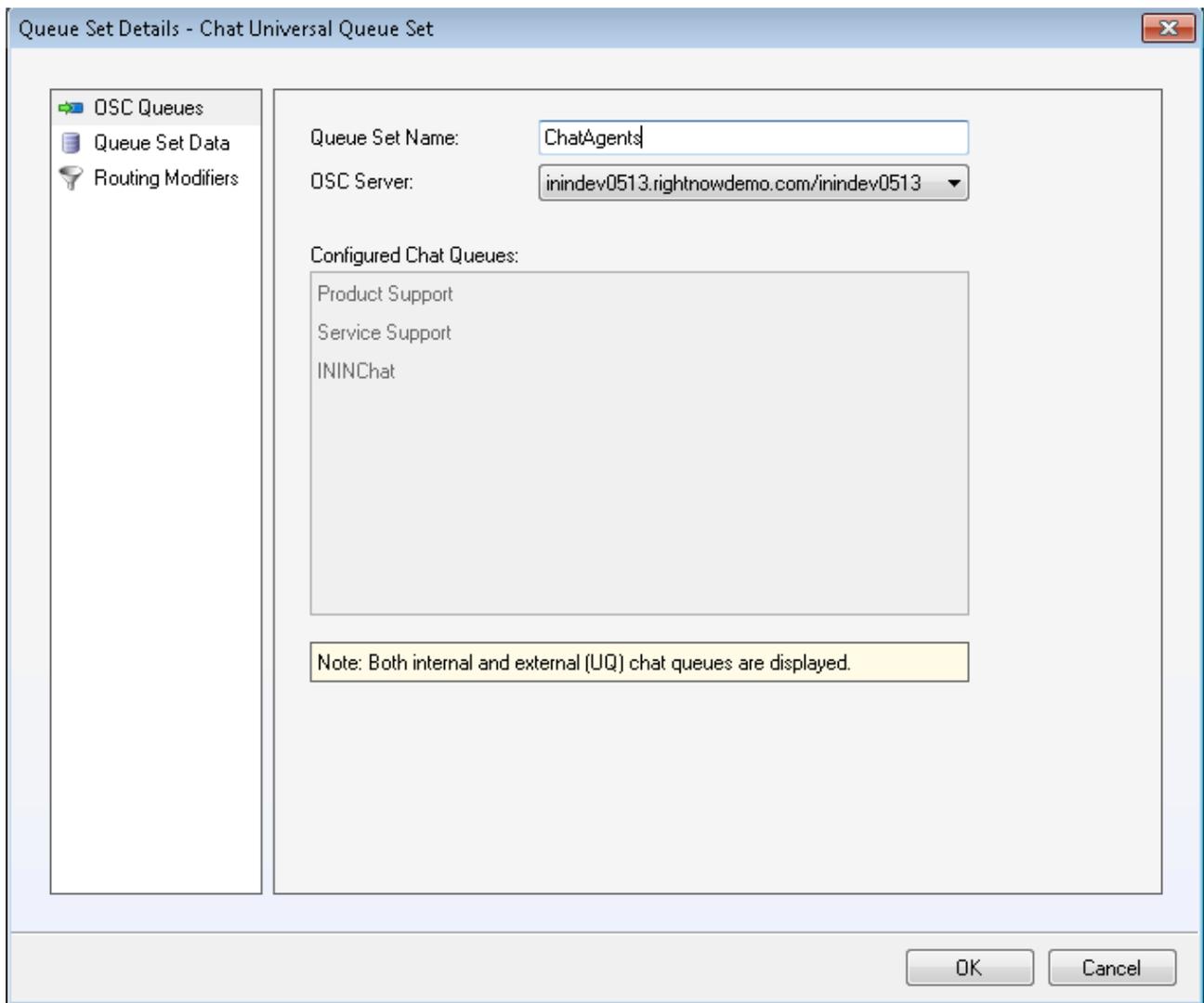
In the **Queue Set Name** box, type a name for the queue set.

  a. In the **OSC Server** list, select the Oracle Service Cloud server.

  b. In the left pane, click **Queue Set Data**.

4. In the **Queue Set Details** dialog box, select the chat queue that you set up as the universal queue. If the chat you want is not shown, set up the chat queue according to the instructions in Configure queues and queue rules.

  a. All the queues are listed in the **Included Chat Queues** list. Click **Remove All**. And then from the **Available Chat Queues** list , select the universal queue you created and click **Add**.
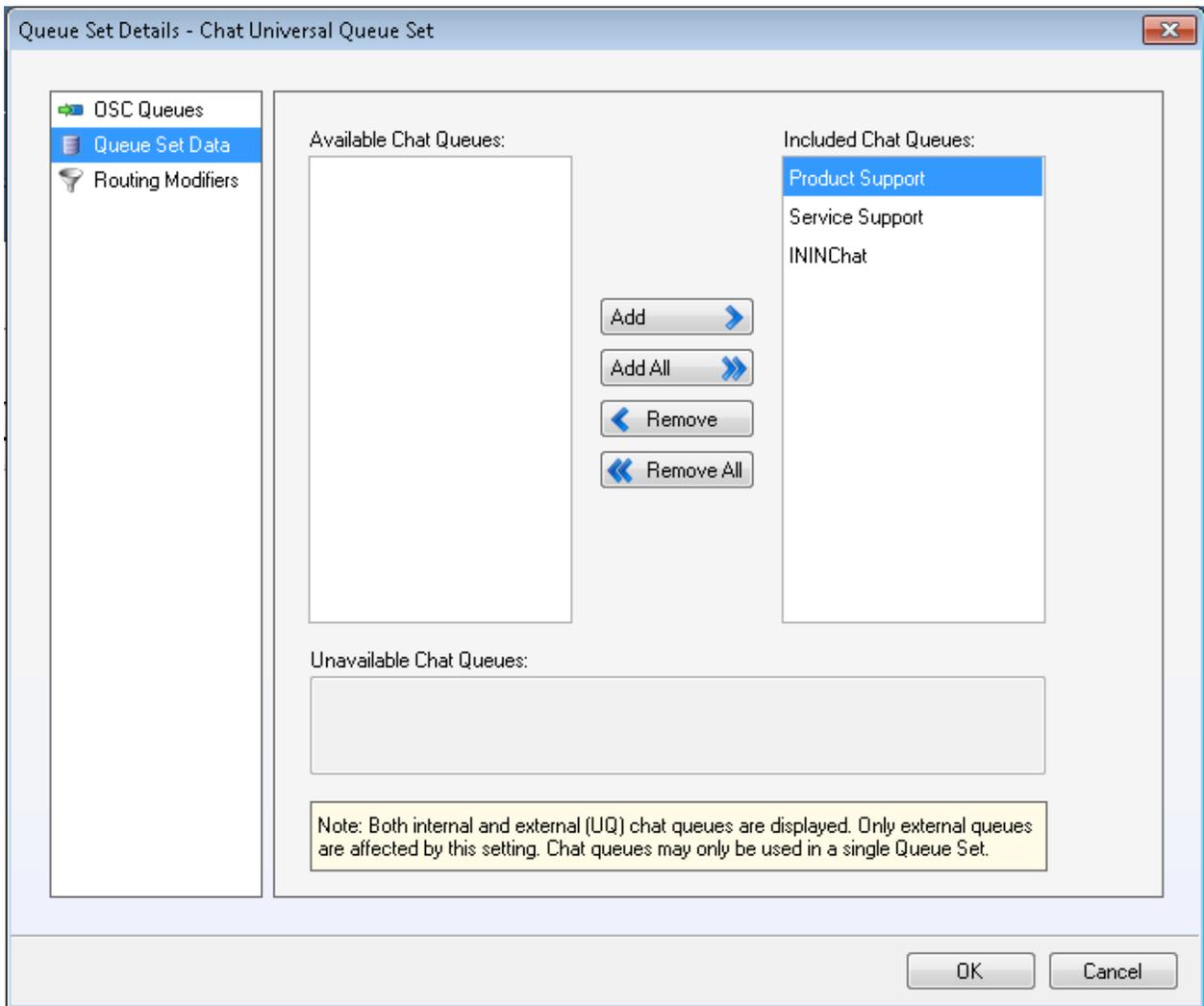
5. In the left pane, click **Routing Modifiers**.

6. In the **Queue Set Details** dialog box, complete the following steps to select required modifiers:

   a. In the Interaction Center Server list, select the CIC server to use.

   b. In the **Destination Workgroup** list, select the destination workgroup of the item.

   c. In the **Media Type** list, select **Chat**.

   d. In the **Report** box, select the report that you imported earlier (the name you gave to: `ININ_EmailReport_<year>_<month>.xml`).

   e. Oracle Service Cloud displays the **Media Type Details** section.

      i. In the **Remote Name** box, select the field or fields you want as the top line in the PureConnect Media Bar when the chat comes in. To select more than one field, select a field, add a space, and then select another field. Use the format `[First Name] [Last Name]`.

      ii. In the **Remote Address** box, select the field or fields you want as the bottom line in the PureConnect Media Bar when the chat comes in. To select more than one field, select a field, add a space, and then select another field. Use the format `[EMailAddress]`.

7. If needed, add modifier rules. For more information, see the Create modifier rules section.

8. Save the queue set details and service configuration:

9. Click **OK**.

10. After the chat queue set has been configured, click **Save Service Configuration**.

Configure permissions for custom objects

Custom objects are used to send data from the CIC server to Oracle Service Cloud for reporting information. An administrator could then run a report and to receive all of the information for the interaction that the CIC server sent to Oracle Service Cloud. Custom objects define what is sent to Oracle Service Could. This is an out of the box feature that cannot be changed.

To configure permissions for custom objects:

1. Start the **Oracle Service Cloud client**, if it is not already open (If it is open, close and restart it.)
2. Log on with administrator rights.
3. Open the Configuration menu by clicking **Configuration icon** on the menu pane.
4. Expand the **Staff Management** folder and double-click **Profiles**.
5. On the **Profile** tab, double-click the profile to configure.
6. Click **Permissions**.
7. In the **Profile Permissions** page, click the **Custom Objects** tab.
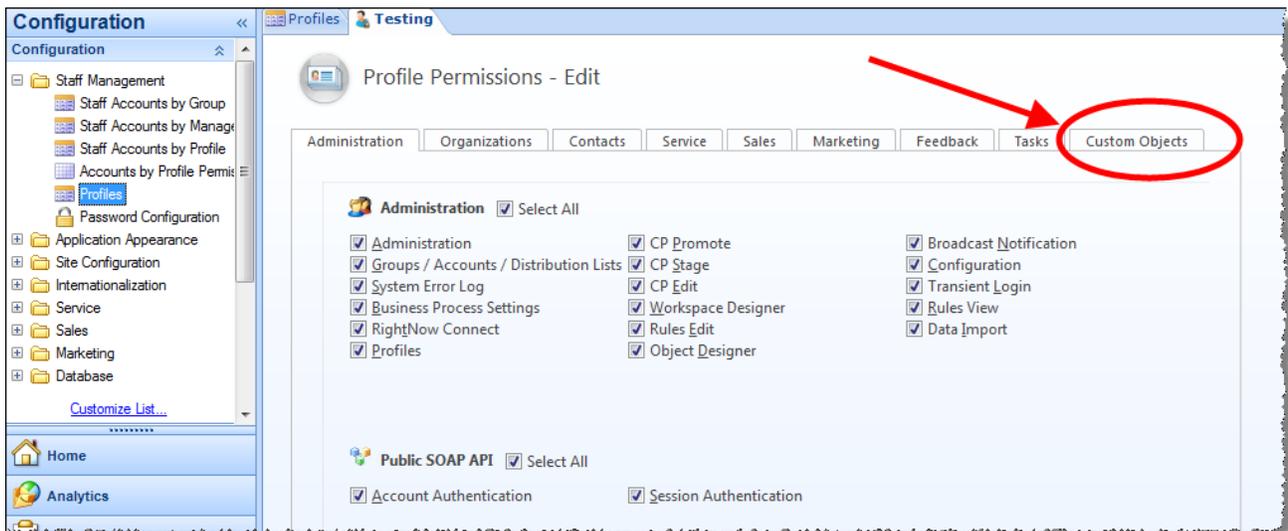
8. On the **Custom Objects** tab, check **Select All**.
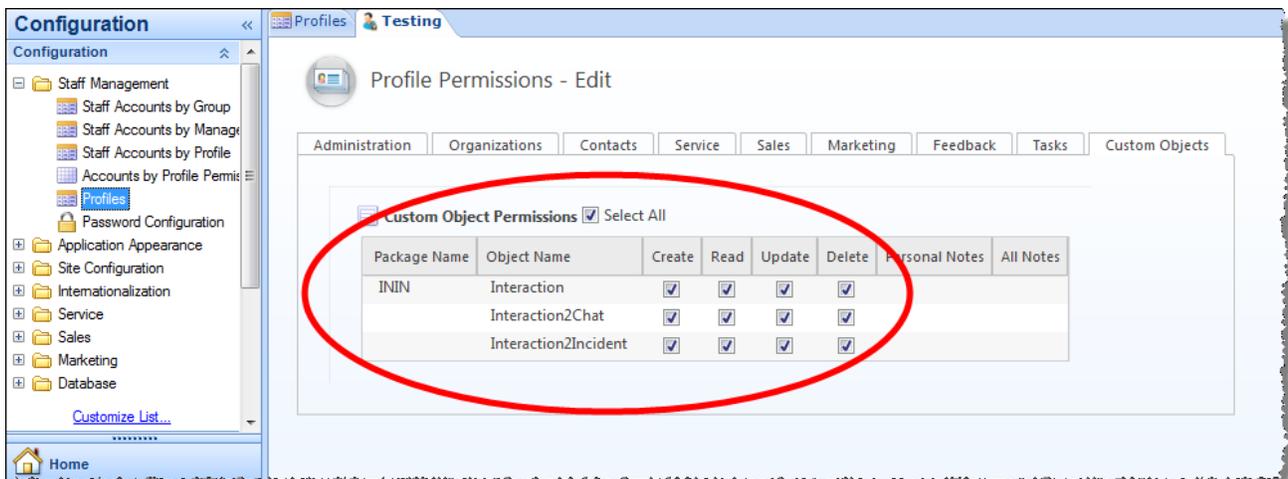
9. Click **Save** on the ribbon.

Configure the PureConnect Media Bar

Your next step is to configure options for the PureConnect Media Bar. You can select profiles that can access the embedded Interaction Desktop workspace. You can also set options for screen pops, interaction transfers, and more.

Overview of the Integration Configuration Utility

Use the Integration Configuration Utility to configure your options.

The utility has two sections:

- **CIC Connection:** In this section, enter your user name, password, and CIC server name, and then load the configuration for that server.
- **Integration Configuration:** In this section, set configuration options, including which user profiles can open the Interaction Client workspace with the PureConnect Media Bar.

The Integration Configuration section

The **Integration Configuration** section has two tabs:
- **Workspace Client**: On this tab, select which Oracle Service Cloud profiles can open the Interaction Desktop workspace with the PureConnect Media Bar.
- **Other**: On this tab, set the behavior of transfers and pop-ups. Enter a username and password for the SOAP API connection that is used for screen pops and the custom objects.

Configure the integration

To configure the integration:
1. Click the **File** tab, point to **PureConnect**, and then click **Integration Configuration Utility**.
2. In the IC Connection section of the tab, enter your user name, password, and server name for your CIC server. Then click **Load Integration Configuration**.
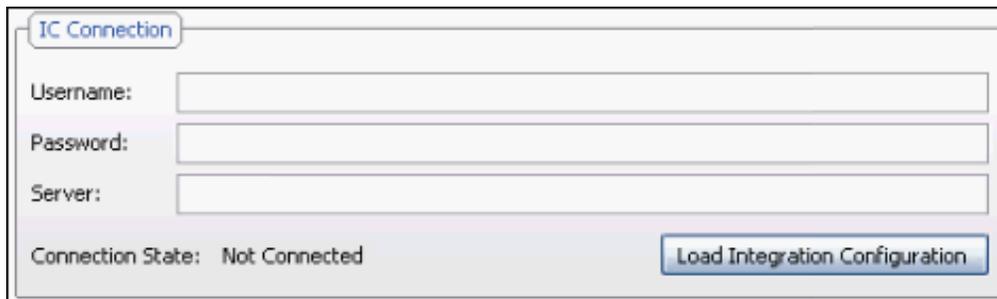
> **Note:**
> If you have previously logged on from this tab, the Oracle Service Cloud server automatically fills in your user name, password, and server name.

The Integration Configuration Utility connects to your CIC server. When it establishes the connection, the Integration Configuration Utility updates the displayed connection state to "Connected to Server."

In the **Integration Configuration** area, the Integration Configuration Utility lets you configure which profiles are eligible to see the Interaction Desktop workspace by a button on the PureConnect Media Bar.

3. On the **Workspace Client** tab of the **Integration Connection** group, complete the following steps:

a. In the **Available Profiles** list, click a profile whose members require access to the Interaction Desktop workspace with the PureConnect Media Bar.

b. Click **Add**.

c. Oracle Service Cloud adds the profile to the **Selected Profiles** list.

d. Repeat these steps to grant access for any other profiles that require it.

e. Click **Save Service Configuration**.

4. On the **Other** tab of the **Integration Configuration** section:

a. In the **Transfer Behavior** section, select the check box to allow users to transfer interactions with associated workspace records without first saving the records.

   Best practice: Leave the check box unselected to ensure that a transfer retains the most recent information that the initial agent entered. After an agent saves the workspace, once the interaction is transferred, the receiving agent is presented with the saved workspace. If the initial agent does not save the workspace, then the receiving agent sees only the initial screen pop of the interaction; the receiving agent does not see the most recent workspace screen in which the initial agent was working.

b. In the **Screenpop Behavior** section, use the list to select one of the following:

   ▪ **Entrance**: Whenever an interaction enters the user queue, the screen pop occurs.

   ▪ **Connected**: The screen pop does not occur until the interaction is connected.

   Note:
   Enter the Service Username and Password, even if custom objects aren't used elsewhere.

c. In the **Check Custom Object** section, specify any Oracle Service Cloud staff account. Specify the user credentials:

   i. **Service Username**: The username of the staff account

   ii. **Service Password**: The password for the staff account

iii. After specifying a staff account, click **Check Now** to verify that the custom objects are implemented and that the staff account has access to those custom objects. The configuration section indicates success or failure:

5. Click **Save Service Configuration**.
6. For users who belong to profiles with access to the workspace client, the PureConnect Media Bar displays the **Show Workspace Client** button.
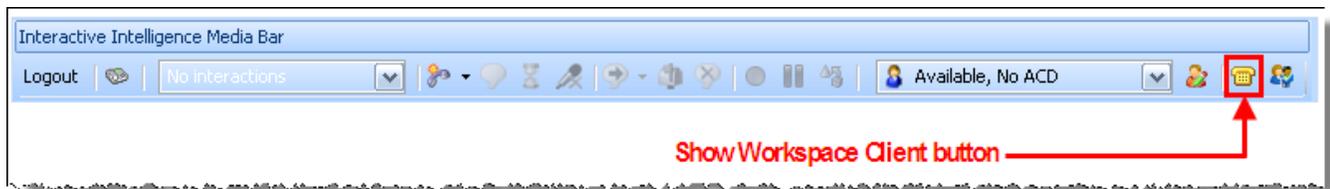
> **Note:**
> If a user is logged on to a profile with access to the workspace client and an administrator removes rights for that profile, then the button immediately disappears. If the user had the **Client** tab open, the tab is not closed, but the button is removed. Once the tab is closed, there is no way for the user to reopen it unless the administrator restores access rights for that profile.

Use the PureConnect Integration to Oracle Service Cloud

The PureConnect Integration to Oracle Service Cloud contains a Help system, which you can reach by clicking the Help button in the PureConnect Media Bar. Direct your users to this valuable resource.

For more information, see the following:
- [Using the PureConnect Media Bar](#)
- [Associate an Interction with a Workspace](#)

Using the PureConnect Media Bar

The PureConnect Media Bar is a fully functioning CIC client located on a toolbar in the Oracle Service Cloud Console. This toolbar controls CIC client functions within Oracle Service Cloud and is integrated into the Oracle Service Cloud interface. It contains buttons for logging on or logging out, making calls, setting your status, as well as other basic CIC client functions.

Tip: The most reliable method for call control is to use the buttons available in the PureConnect Media Bar.

Note: Any of these buttons can be unavailable if the currently selected interaction is not in a state in which the action associated with the button can be performed. For example, "Pickup" is not available if you do not have a currently selected interaction.
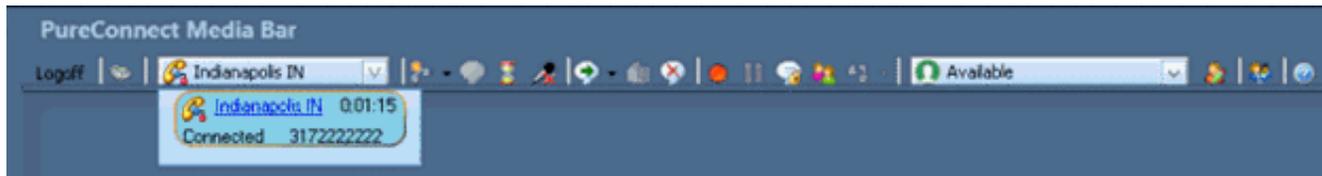
These buttons appear on the PureConnect Media Bar:

Icon or Label	Function
Logon / Logoff	The label on the **Logon / Logoff** button changes, depending on whether you are currently logged on to the CIC client.
(telephone icon)	Click **Change Station** to switch your current station between your desktop workstation and a configured remote station, if necessary.
Indianapolis IN / Connected 3172222222	The **Interactions drop-down list** displays the interactions currently in your queue. Use this list to select an interaction, then use the buttons on the media bar to handle the interaction. **Tip**: The currently selected interaction in this drop down list does not correspond to any interaction you may have selected in the embedded CIC client. The selected interaction and the available controls in the PureConnect Media Bar and the embedded CIC client are independent. **Note**: This control "flashes" when an interaction is in the dialing or alerting state; i.e., the background color flashes to get your attention. Additionally, new interactions (alerting or dialing state) are automatically selected. Pre-selecting interactions makes call control actions like picking up a call faster and easier.

	The **Make Call / Click to Dial** button enables you to either make a call or dial the phone number for a contact. • Click the icon to enter a phone number and make a call. • Click the arrow to dial a phone number for the contact associated with the selected workspace record. If no workspace record is selected, or if no contact is associated with the selected workspace record, then the drop-down list is unavailable.
	Click **Pickup** to answer the current interaction, or to take the current interaction off hold.
	Click **Hold** to place the selected interaction on hold. Click **Hold again** to pick up a held interaction. • If the selected interaction is on hold, then this button appears to be pressed down. • When you click this button, the icon for the selected call changes to a Hold icon. **Tip:** Your CIC administrator can configure a maximum hold time for calls. By default, calls on hold for longer than fifteen minutes are disconnected. Your administrator can change the amount of time a call can remain on hold and/or the behavior that occurs once the hold time is exceeded. For example, your administrator may choose to transfer calls on hold longer than twenty minutes to another queue. For more information, see your CIC administrator.
	Click **Mute** to disable the microphone on your telephone so that the other party or parties cannot hear what you are saying. Click **Mute** again to reactivate the microphone. If the selected interaction is muted, then this button appears to be pressed down. **Tip**: If you are in a conference call hosted by a different CIC server and you put the call on hold, you should first click Mute to avoid playing on-hold music to the other parties in a conference call.
	Click **Transfer** to open the Transfer dialog box, where you can enter a transfer recipient and select the type of transfer operation you want to perform. To send the interaction directly to the recipient, enter the recipient's extension (internal number) or a phone number (external number), select the recipient from the drop-down list and click **Transfer**.
	Click **Voicemail** to transfer a selected call to your voice mail account. Use this button if you want to send an incoming call to your voice mail instead of speaking with the caller.
	Click **Disconnect** to disconnect the current call. When you click Disconnect, the icon for that call changes to a Disconnect icon.
	Click **Record** to record the currently selected call. This recording is saved as a. wav file. Clicking Record the first time starts the recording session for a call. Clicking Record again stops the recording session for a call.
	Click **Pause** to control a recording session. Click this button to **pause** the recording session. Click it again to **resume** the recording session.
	Click **Secure Pause** to avoid recording sensitive information, such as a Social Security number or credit card number, when you are connected to a call interaction.
	Click **Conference Manager** to create a conference call for two or more currently active calls.
	Click **Associate Interaction with Workspace** to associate a selected interaction with a Oracle Service Cloud Incident workspace record.

Available	The **Status** drop-down list both displays your current status and enables you to change it easily by selecting a different status from the drop-down list.
	Depending on your current status, you can click **Set Status Details** to add status notes, provide a forwarding phone number, and indicate the date and time you will become available. The date and time information you enter is played for all your incoming calls while in this status.
	Click **Configuration** to adjust your CIC client logon settings or client configuration. You can also create personal call rules or display the PureConnect Media Bar Integration About dialog box.
	If you have the appropriate license and user rights, you can click **Show Interaction Client** to run the full CIC client in a workspace.
	Click this icon to view the CIC client Help.

Associate an Interaction with a Workspace

Requirements: Only agents with the appropriate licenses and rights can use the PureConnect Integration to Oracle Service Cloud.

Outbound calls and emails are automatically associated with incidents when you make them while the incident is currently open. However, **incoming** interactions are not automatically associated with incidents. You must manually associate incoming interactions with incidents.

You can associate a selected interaction with an Oracle Service Cloud Incident workspace record. This association is written to the Oracle Service Cloud database and is available for reporting purposes. Examples of the types of interactions that can be associated with workspace records include an email request for assistance and follow-up calls made to resolve the problem.

A single interaction can be associated with multiple Oracle Service Cloud workplace records and a single workplace record can be associated with multiple interactions.

Note: If the PureConnect Integration to Oracle Service Cloud screen pops the appropriate Oracle Service Cloud workplace record when you receive an interaction, the currently selected interaction is automatically associated with that Oracle Service Cloud workplace record.

To associate an Interaction with a Workspace record:

1. Pick up an alerting interaction or put an interaction on hold.

    Note: Connect to an interaction before making an association. You cannot associate a disconnected interaction with a workspace record.

    Result: The Associate Interaction with Workspace button becomes available.
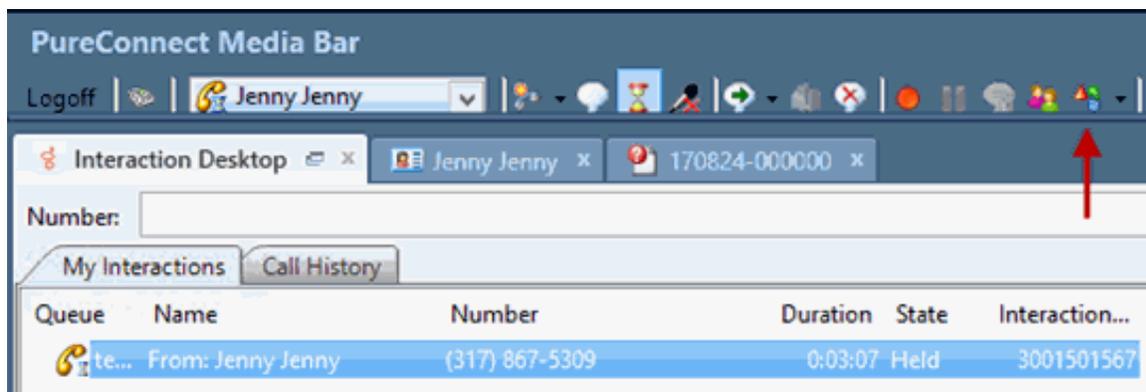
2. Locate and open the appropriate Oracle Service Cloud workspace record and select the tab for this record.

Result: If you have not previously associated this interaction with this workspace record, the Associate Interaction with Workspace button remains available.
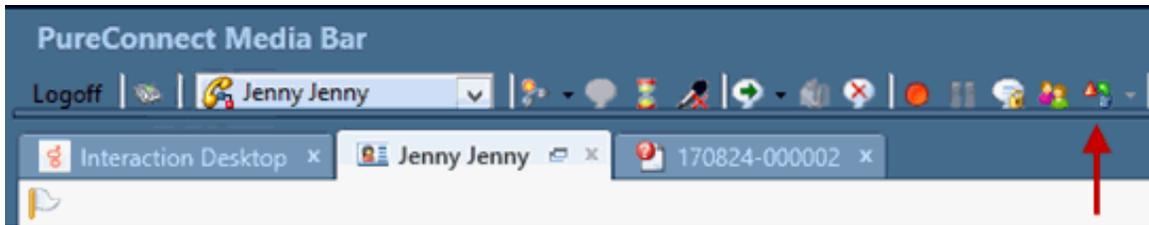
3. With the tab for the workspace record selected, click the Associate Interaction with Workspace button.

   Result: The Associate Interaction with Workspace button remains selected and indicates that the association has been made and recorded.

   > **Note**: This visual indication that an interaction is associated with a workspace record remains only until the interaction is disconnected. It does not appear the next time you view the workspace record.

4. As long as the interaction remains active and selected, you can repeat steps 2 and 3 to associate the interaction with additional workspace records.

Appendix A: Oracle Service Cloud Integration FAQs

General Features

Does our integration support doing data dips from our IVR (handlers or Interaction Attendant)?

No, not out of the box. We have this on our future roadmap. This does not mean that IVR data dipping is not possible in handlers or Interaction Attendant. To interact with Oracle Service Cloud Web Services, write a proxy web service for Interaction Attendant or use the SOAP Web Service tools in handlers to interact with the data. On the roadmap, we have plans to create a package solution that will not require any programming and will be fully accessible from Interaction Attendant.

Can you playback call recordings within the Oracle Service Cloud interface?

Currently this is not available. PSO could write this functionality if a customer would like to fund the effort. It is also on the product roadmap.

Is there any combined reporting available between PureConnect's call detail and the Oracle Service Cloud Incidents/Contacts popped?

We currently write a set of data to Oracle Service Cloud. We write this data to Oracle Service Cloud Custom "objects" that are custom entity types. This allows for comprehensive blending of report on call detail all from within Oracle Service Cloud. Currently we don't have any standard reports that display this data. This would require Oracle PSO services to create new views of this data. Below describes the custom objects and data written:

Interaction Object - One row is created per handled interaction

ID - Auto incrementing field
- CallId - Call ID key of the Interaction
- InteractionId - Call ID (short version) of the interaction
- Direction - Direction of the interaction (inbound vs. outbound)
- Type - Interaction type (call, email, chat, callback, etc)
- EntranceUTC - Date/time when the call entered the system
- WorkTime - Amount of time in seconds that the agent was working this interaction. We use the current tab in front to determine which interaction is being worked if there are numerous tabs open at one time.
- CallHoldTime - Amount of time the interaction was put on hold
- AgentHandleTime - Amount of time the interaction was connected to the agent (includes hold time, but does not include after call work)
- SpeedToAnswer - Time call was alerting agent

Interaction2Incident object - For every incident that is correlated with this incident, there will be a row in this table.
- ID - Auto incrementing field
- InteractionId - ID of the related interaction object
- IncidentID - ID of the related Oracle Service Cloud incident object
- WorkTime - Amount of time in seconds the agent worked on this incident as part of the entire interaction. If the agent worked on only one incident for this interaction, the WorkTime will match the interaction object.

Interaction2Chat
- ID - Auto incrementing field
- InteractionId - ID of the related interaction object
- ChatID- ID of the related Oracle Service Cloud chat object
- WorkTime - Amount of time in seconds that the agent worked on this chat as part of the entire interaction

Oracle Service Cloud Incident/Chat Routing

I understand you can route Oracle Service Cloud incidents and chats. Can the Oracle Service Cloud Media bar handle traditional ININ-based emails and chats?

Absolutely. When those interactions are offered in the Media Bar and picked up, the interaction form from the Interaction Desktop Client opens for a response and interaction with the media type.

For the incident and chat routing, are you able to drive routing rules based on the contextual data of the interaction?

Yes. For Incident routing, we execute a report against an Oracle Service Cloud queue. The data returned from the report can be used to build conditions. With a condition, you can set which CIC workgroup queue to route to, what skills to use, and what attributes to set on the Interaction. For Oracle Service Cloud chats, Oracle provides stock information about the chat and can include custom fields collected in the Start a Chat form in the customer portal. The same conditions and actions are available for Oracle Service Cloud incidents.

Is configuration required in Oracle Service Cloud for the integration?

Yes. This includes uploading our Oracle Service Cloud addins (Media Bar and Configuration Addin), configuring our routing service, importing our stock report for incident routing, importing our Reporting Custom Object, and importing any rules for putting the incidents and chats in the right Oracle Service Cloud queues for routing through the CIC ACD engine.

What is the difference between Interaction ScriptAssist and Oracle's Desktop Workflow?

Interaction ScriptAssist is written and maintained by Interactive Intelligence. Its purpose is to help create a seamless and complete screen pop experience for the agent. We have found though in many implementations that it is better to use Oracle's Desktop Workflow and limit the complexity of the screen pop. Most implementations have very basic scripts for opening a contact or an incident, or for creating a new incident. All of the other automation work desired has been done through Oracle's Desktop Workflow rules.

Does Interaction Recorder get the details of the Oracle Service Cloud incident and chats that are routed for QA purposes?

Not currently. We have this planned for the roadmap. While Interaction Recorder can still record those interactions, it is not aware of the specific communication within the media that occurred in the Oracle Service Cloud system.

Are the incidents and chats routed as generic objects?

No. We actually route Oracle Service Cloud Incidents as CIC emails, callbacks, or generic objects and the Oracle Service Cloud Chats as CIC chats. This way you can adequately report and forecast your contact center based on the channel.

Screen Pop

What screen pops are supported out of the box? How can I customize the screen pops?

Out of the box Interaction ScriptAssist include three screen pops: Load Incident, Load Contact, and Create New Incident w/ Contact.

Screen pops can be created and customized using the visual editor in Interaction ScriptAssist.

Interaction ScriptAssist allows you to define searches, Oracle Service Cloud Workspace loading, and the pre-filling of data fields. It even allows the automation of executing actions like Save on a record.

Don't rely on Interaction ScriptAssist for automating all of your screen pop needs. Oracle supports very complex automation with their Desktop Workflow and Guided Assistance.

Is it possible to create/launch a new case, when a call arrives to the agent?

Yes. The integration can create a new case on arrival and prefill fields using attributes from the interaction. This is available for all media types (including calls, emails, chats, callbacks, and generic objects)

Are screen pops delivered on transferred calls?

All workspaces that are associated to an interaction will be transferred and popped upon the completion of the transfer.

Where are screen pops provisioned and assigned?

Interaction ScriptAssist is used to create screen pops. The screen pops are stored as "Actions" within Interaction Administrator. Using the "Actions" container, we set Oracle Service Cloud Screen Pop actions in the alerting action for a workgroup or through use of the "Set Screen Pop" tool in Interaction Attendant. The integration ships with three stock screen pops for Interaction ScriptAssist: Load Incident, Load Contact, and Create Incident w/ Contact.

Can the integration support multiple Oracle Service Cloud interfaces under one site?

Yes. We have even programmed the solution to allow you to screen pop the correct interface based on the call flow. That means the agent would have two Oracle Service Cloud clients open, one for each of the interfaces, and the integration would screen pop only one of the interfaces based on the type of call delivered.

Versioning

What versions of Oracle Service Cloud do you support?

In CIC 4.0 the integration supports Oracle Service Cloud versions currently under manufacture support by Oracle (i.e. installed version is less than 2 years old). Note - In the May 2014 release, an updated user interface (UI) framework has been implemented in Windows Presentation Foundation (WPF) for the administration interface in Oracle Service Cloud. For new customers in the May 2014 release, the new Service Console is the default and the legacy CX Console (Winforms UI architecture) cannot be used. For existing customers who upgrade to the May 2014 release, the new Service Console is optional.

The enhanced UI of the Service Cloud in May 2014 and later requires CIC 4.0 SU6, or CIC 2015 R1 or later.

Oracle Service Cloud May'15 is confirmed to be compatible with CIC 2015R2 and later

Can you explain Oracle Service Cloud versioning?

Oracle releases a new version every quarter. They have a release in February, May, August, and November. They name their releases by the by the month and year of release, for example, February '15.

Do you test every release of Oracle Service Cloud against our latest SU released?

Basic functionality testing is done with the latest released version of Oracle Service Cloud and the latest CIC release.

When was the integration originally released?

It was released within Integrations 3.0 SU5.

Deployment

Does the Oracle Service Cloud integration require opening any inbound ports in my firewall from the Oracle cloud?

No. All communication to Oracle Service Cloud is outbound-based. Even the chat integration service polls for chat events to process. The integration is architected in a way that is still real-time-based without inbound communication from the Oracle Service Cloud cloud.

I thought Oracle Service Cloud was a hosted solution. Do they really have a .NET-based client that is running on the local machine?

Yes. They do have a .NET-based client. The server-side part of their solution is completely in the cloud. Since they are using .NET, we have been able to create a tighter integration than we have done with any other solution. The Oracle Service Cloud application is also installed/deployed using a web URL (one-click install).

Is the Oracle Service Cloud integration which runs on the desktop deployed like all other Genesys software (installed via MSI)?

No. The deployment model for the Oracle Service Cloud Media Bar integration is through Oracle. We upload a zip file that contains our integration binaries to Oracle Service Cloud in the cloud. When an agent logs in who is provisioned to use the integration, Oracle downloads and extract the zip file to the local desktop. The binaries are then loaded into the Oracle Service Cloud desktop to be embedded in the Media Bar location.

Do I still need to install the Oracle Service Cloud Integration Service if I am not planning to route Oracle incidents or chats through CIC ACD?

No. The Oracle Service Cloud Integration service's purpose is to manage configuration and identify Oracle Service Cloud incidents and chats. If you are not using those media types or not using CIC's ability to handle emails and chats, you do not need to install this integration.

Is the handler install required to be run if I am not using the Oracle Service Cloud Integration Service?

Yes. The handler install is required in all Oracle Service Cloud implementations. Some handlers are used for standard call routing and screen pop behavior.

Does the Oracle Service Cloud integration require the Interaction Desktop client to be installed on each client machine? If so, why?

Yes. Originally we shipped all of the binaries in the Oracle Service Cloud Media Bar zip file. The zip file became very large since we had to include almost all the same binaries that Interaction Desktop utilizes. In an effort to keep our zip files small, we now require that Interaction Desktop is installed locally. It does not have to be running in order for the integration to work. It "bootstraps" the files installed by the Interaction Desktop, when the Oracle Service Cloud Media Bar AddIn is loaded.

Do you support full user and password synchronization?

No. Oracle Service Cloud and CIC users must be provisioned separately in each environment. The usernames between the two systems do not have to match. When a agent logs into the Oracle Service Cloud client, the ININ Media Bar is loaded and appears. To give the appearance of SSO, the user can fill out their credential, station, and server information on the first login and select 'Save Password'. Then within the "User Configuration", they can check the setting for auto login. Then when Oracle Service Cloud is started, the ININ Media Bar is starts and is logged in for the user.

Licensing/Certification

How is the integration licensed? Do we charge more per the media type that is handled?

It is licensed by CIC server, but not by users. It is the same price for the integration regardless if they just use it for calls or for all Oracle Service Cloud media types (incidents and chats).

Do I still need to license CC2 or CC3 if we are using Oracle Service Cloud for Email and Web Chat?

Yes assuming you are using our integration routing service to route Oracle Service Cloud emails and Web chats. Both emails and Web chats are routed like objects within the Interaction Center Platform which means that they have the same ACD licensing requirements as if CIC had sourced the emails and Web chats directly.

Is the integration certified by Oracle?

Our certification from Oracle has expired and needs to be renewed.

Supported Environments

Does the integration support Dialer environments?

There is currently no native Dialer support within the Oracle Service Cloud integration. You can screen pop for Dialer interactions, which are managed in a separate scripter client (Interaction Scripter .NET Edition).

Is the integration supported in CaaS?

Yes. As of CIC 3.0 SU15, no handler customizations are required for full multimedia routing of calls, Oracle Service Cloud incidents (email and Web form), and chats.

Does the integration support director environments when routing the Oracle Service Cloud Incidents and Chats?

No. Currently the integration can only route from one Oracle Service Cloud server to one CIC server by the Oracle Service Cloud queue that is monitored

CIC Testing Cadence

What is the process to ensure that CIC releases are staying compatible with Oracle Service Cloud API releases?

As part of our quarterly CIC release cycle, we regression test the latest Oracle Service Cloud API to identify any compatibility issues and prioritize their resolution.

Change log

The following table lists the changes to the *PureConnect Integration to Oracle Service Cloud Installation and Configuration Guide* since its initial release.

Date	Changes
18-May-2010	• Added note under "Creating Incident Rules" in Chapter 7. • Updated bullets under "Versions of Report Definition Files" in Chapter 5. • Added new substeps for Steps 6 and 7 under "Configuring the Email Service" in Chapter 8.
20-May-2010	Added text to site name references to make it clear that the site name must include the domain name.
24-May-2010	Added material to "Configure the Integration" in Chapter 9 for users to verify that the integration's PHP script is on the server. Also added instructions about what to do if it is not on the server.
02-June-2010	Added section on changing the location of the email service after installation.
09-June-2010	Fixed broken link in section "Customization Points for Interaction Designer."
27-August-2010	Added note in Chapter 3 that user permissions set in Interaction Administrator can control access to some features.
30-August-2010	Updated system requirements to state that the .NET Client must be installed on the client machine.
01-October-2010	Updated section on setting up a new site to emphasize that that user must stop processing rules at the end of step 4. The text already stated the fact, but it's crucial and might easily be missed so I added a note to spotlight it.
10-May-2012	Added new material about universal queue, updated configuration and custom actions information, and deleted obsolete content.
13-June-2012	Made some final formatting and other tweaks. Added notes about differences between RightNow versions.
03-July-2012	Updated information about .NET Framework. Added information about error if .NET Framework 4.0 is not installed.
11-September-2012	Added information about configuring universal queue, chat queues, and SOAP.
25-February-2013	• Updated Chapter 7 to include an overview of the routing process for incidents and chats. • Updated Chapter 6 to include instructions on configuring incident and chat queue sets. • Edited entire document.
07-March-2013	Updated copyright page, made minor edits and formatting tweaks.
21-March-2013	Added and updated material about configuring chat queue sets and other new features.
22-April-2013	Updated references to RightNow product name.
13-May-2013	• Corrected three typos in the section on "Creating Incident Rules." • Corrected product name on page 2.
28-May-2013	• Removed references to RightNow Connect and corrected a cross-reference on page 20. • Updated screenshot. • Fixed support site links and some broken cross-references. • Changed RightNow version under "Designating the Universal Queue Chat Queue as a Universal Queue." • Added sub-section on upgrading to CIC 4.0 Service Update 4 under the section "Configuring Incident Queue Sets."
23-July-2013	• Added note about support for RightNow's SOAP API instead of the Connect Data API. • Updated copyright page. • Verified removal of all references to Windows 2003.
25-October-2013	Made formatting tweaks and made some text more concise. Corrects some version issues and other issues.

06-June-2014	- Added "To Use the RightNow Media Bar for Chats to the beginning of Chapter 3. - Added "Routing based on RightNow interface" to Chapter 6. - Added information on settings of the RightNow Report Definition into Chapter 5.
18-September-2014	- Updated documentation to reflect changes required in the transition to CIC 2015 R1, such as updates to product version numbers, system requirements, installation procedures, references to Interactive Intelligence Product Information site URLs, and copyright and trademark information. - Updated product name from RightNow to Oracle Service Cloud.
29-September-2014	- Changed the title to IC Integration with Oracle Service Cloud. - Updated all references to RightNow that needed to be updated.
17-November-2014	- Made multiple organization changes to the layout of the document. - Verified the process of installing and configuring, and made appropriate changes. - Changed all of the RightNow references and screenshots as appropriate to Oracle Service Cloud or OSC.
03-February-2015	Added Support of the Oracle Service Cloud UI section.
06-February-2015	Added Installation files section, which contains information about the `.iso` file change.
16-February-2015	Added note in the Creating incident queues section about creating the same number of staging and processing queues.
05-March-2015	Added Windows Server 2012 R2 as a supported operating system in the Installation overview and requirements section.
10-April-2015	Updated for 2015 R3.
30-April-2015	- Updated information about versions and handlers. - Added information about validation.
04-August-2015	Updated for 2015 R4.
09-October-2015	- Updated for 2016 R1. - Removed references to Interaction Client .NET Edition and replaced with Interaction Desktop. - Updated screenshots as needed.
21-December-2015	Updated for 2016 R2.
02-March-2017	Updated Microsoft .NET Framework version requirement. Version 4.5.2 or later is not required instead of version 4.0.
30-May-2017	- Corrected incorrect wording in step 3 of Route based on Oracle Service Cloud interfaces. List: Add an attributer for "InterfaceName" was changed to p_IsCommonAttributeValues. - Noted in Chapter 2 under the "Use the Oracle Service Cloud Media Bar for chats" section, that: Some Oracle chat reports require the user to be logged in to a RightNow chat session to run. The Oracle Service Cloud integration checks to see if the user has the ACD Access Media 2/3 licenses on login which is the license needed to use chats. As such, if the user is not licensed for chats, then the integration will not log the user in to a RightNow chat session resulting in the inability to run chat reports which require a chat session.
09-August-2017	- Updated cover, copyright and trademark pages. - Rebranded to apply Genesys terminology.
11-October-2017	1. Previous releases improperly replaced | (OR operators) with & (AND operators) in routing modifier expressions. This defect was corrected. From this release forward, the OR operator is supported. 2. Added troubleshooting instructions to "Upload the PureConnect Media Bar Add-In". See note about the `MAXFILEATTACHSIZE` parameter. 3. Tip for customers: This Oracle Service Cloud integration does not currently support the use of station licences. Licenses must be assigned to agents.
20-November-2017	Added the Oracle Service Cloud Communication Types and Ports section to the Integration overview and requirements chapter.

13-December-2017	Added Chapter 8: Use the PureConnect Integration to Oracle Service Cloud.
31-January-2019	Added note mentioning that the Oracle Service Cloud/RightNow Legacy Console is not supported by Genesys.
5-March-2019	Created an overview topic for the Integration overview and requirements section.
27-March-2019	Changed PureCloud Integration to PureConnect Integration in several topics and the TOC.
21-June-2019	Reorganized the content only, which included combining some topics and deleting others that just had an introductory sentence such as, "In this section...".
28-January-2020	Added new topic: Appendix A: Oracle Service Cloud Integration FAQs.
16-March-2020	Completed migration of information from the Product Information site to this Installation and Configuration Guide.
17-April-2020	Updated to reflect support for Windows Server 2016 and 2019.
21-May-2020	Replaced links to inin.com with links to genesys.com