

# Interactive Session Recorder

## User Guide



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# Contents

## About This Guide

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### 1

## Overview

---

About the ISR	1-1
Session Recording Client Support	1-2
Selective Call Recording SIPREC	1-2
SIPREC for Active Recording	1-3
Preserve SIPREC with SIP REFER Header	1-4
Configuring SIPREC	1-4
ISR FACE	1-4
About the ISR Dashboard	1-5
Requirements	
Recommendations	1-5
Security Features	1-6

### 2

## Getting Started

---

Logging In/Out of the ISR Dashboard	2-1
User Access Levels	2-4
Help Link	2-5
Editing My Settings	2-6
Recordings List Settings	2-8
Dashboard Tools	2-9
Functional Icons	2-9
Paging Tool	2-10
Search Tools	2-11
Basic Search for Recordings	2-11
Advanced Search for Recordings	2-12
More Recording Search Options	2-14
Recording Search by Custom Data	2-15
Recording Search by Session	2-16
Basic Search for Routes	2-17

Column Sorting Tool	2-18
Download Tool	2-18
Downloading a Single Recording File	2-18
Downloading a Recording List to a CSV File	2-19
Import Link	2-21

### 3 Managing Recordings

---

Manage Recordings	3-1
Playing a Recording	3-2
Viewing and Editing Details of a Recording	3-3
Recording Details	3-4
Viewing Recording Details	3-5
Archiving Recordings Permanently	3-6
Recording Session Metadata	3-7
Segment Session Metadata	3-7
Segment Session Participant Metadata	3-7
Displaying DTMF Data in Segment Details: Routes	3-8
Displaying DTMF Data in Segment Details: Accounts	3-9
Displaying DTMF Data in Segment Details	3-10
Deleting a Recording	3-10

### 4 Managing Reports

---

Manage Reports	4-1
Usage Reports	4-2
Generating a Usage Report	4-2
Generating a report by month	4-2
Generating a report by range	4-2
Selecting a route	4-3
Usage Report Bar Graph Descriptions	4-3
Billing Reports	4-5
Generating a Billing Report	4-6
Generating a Report by Month	4-6
Generating a Report by Range	4-6
Selecting a Route	4-6
Billing Report Bar Graph Descriptions	4-7

# About This Guide

The Interactive Session Recorder User Guide provides information about accessing and using the Interactive Session Recorder (ISR) Dashboard to view, play, and delete recordings, save recording searches, create recording categories, download recordings to CSV files, generate reports, and edit user profiles (available to Super User, Account Administrator, and Tenant Administrator only).

## Oracle Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

## Related Documentation

The following table describes the documentation set for this release.

Document Name	Document Description
ISR Release Notes	Contains information about new ISR features, fixes, and known issues.
ISR Installation Guide	Provides an overview of the ISR, hardware/software requirements and recommendations, storage considerations, pre-installation information, installation procedures, post-install verification procedures, making the first call, and additional advanced topics about the ISR.
ISR User Guide	Contains information about using the ISR Dashboard for all levels of users. Provides information about viewing, playing, deleting recordings, running reports, and managing user profiles.
ISR Administrator Guide	Contains information about using the ISR Dashboard for the Administrator level user (Super User, Account Administrator, Tenant Administrator). Provides information about creating and managing accounts, routes, and users. Also provides information about configuring the ISR, running reports, viewing active calls, and securing the ISR deployment.
ISR API Reference Guide	Contains information about ISR FACE, Recording File Types/Formats Supported, Return Codes, and Troubleshooting.
ISR Monitoring Guide	Provides provisioning, configuration and test instructions for the NET-SNMP implementation to monitor all ISR component hosts.
ISR Security Guide	Contains information about security considerations and best practices from a network and application security perspective for the ISR product.

## Revision History

Date	Description
September 2018	<ul style="list-style-type: none"><li>Initial release of ISR 6.2 software.</li></ul>

# 1

## Overview

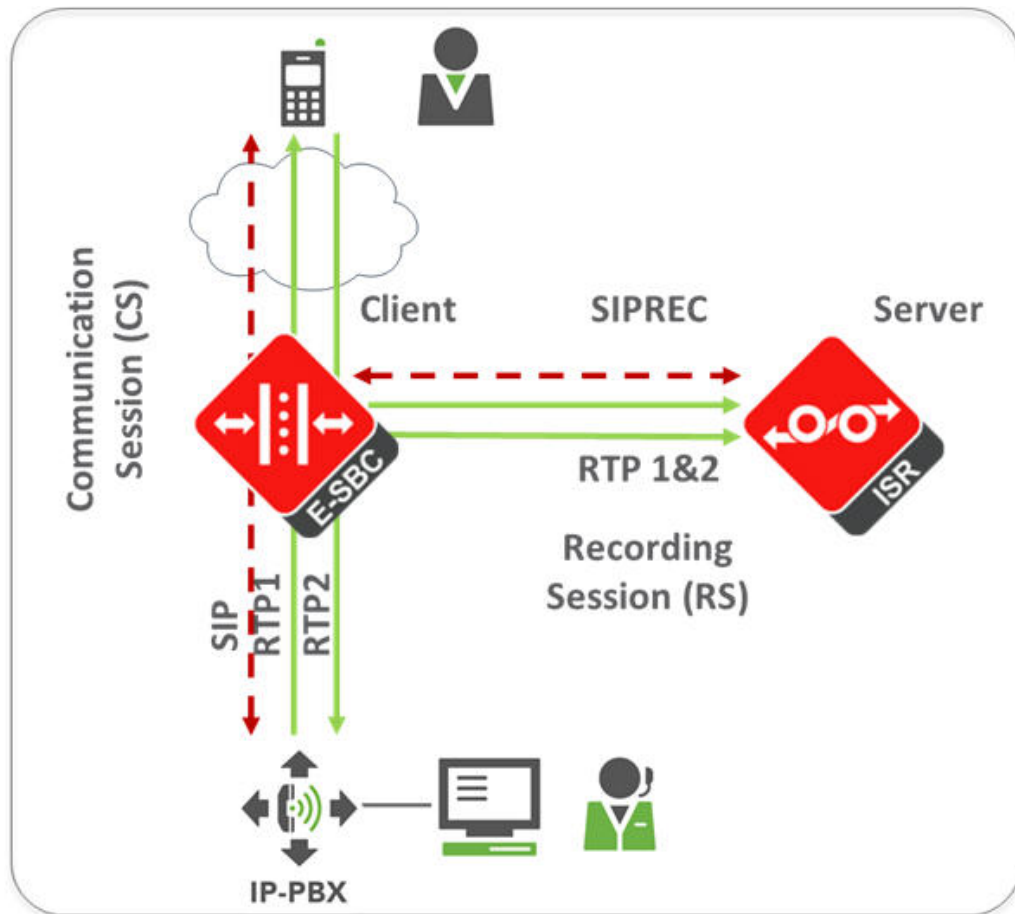
This chapter provides an overview of the ISR. It also provides information about using the ISR Dashboard to access and configure the ISR, and includes requirements and recommendations.

### About the ISR

Driven by a profusion of government and industry regulations, enterprises are required to record and store an increasing quantity of communications sessions in order to maintain compliance. Conventional call recording solutions, designed for capturing contact center agent exchanges for training or quality assurance purposes, are not well suited to compliance recording applications. They are difficult to integrate with business applications, offer limited scalability, and can be costly to deploy.

The Oracle Communications Interactive Session Recorder (ISR) is specifically designed to eliminate enterprise compliance recording cost and complexity. The solution features an open, standards-based architecture that dramatically simplifies the capture and storage of real-time IP communications sessions throughout the enterprise. Ideal for a wide range of compliance applications, ISR leverages a modular design for superior scalability and economics, offers an extensive API set for ultimate extensibility and flexibility, and includes integrated support for screen recording using an industry leading user monitoring solution.

The ISR leverages SIPREC and a modular architecture for ease of deployment and scale. SIPREC uses a client/server architecture, where the SIPREC client (the Oracle Enterprise Session Border Controller in the image below) initiates SIPREC sessions with the SIPREC server (the Oracle ISR).



For an introduction to SIPREC and its configuration on the Oracle Session Border Controller, see the "Selective Call Recording/SIPREC" appendix in this guide or .

## Session Recording Client Support

The ISR has been tested with the following SIPREC Session Recording Platforms:

- Oracle communications Session Border Controller
- Oracle Enterprise Session Border Controller
- Broadworks Application Server R21

## Selective Call Recording SIPREC

The SIPREC protocol is used to interact between a Session Recording Client (SRC) (the role performed by the ISR) and a Session Recording Server (SRS) (a third-party call recorder or Oracle Communications Interactive Session Recorder's Record and Store Server (RSS)). Selective Call Recording controls the recording of media transmitted in the context of a communications session (CS) between multiple user agents.

SIPREC provides a selective-based call recording solution that increases media and signaling performance on a recording server, more robust switchovers, and the ability to selectively record. SIPREC also isolates the RSS from the communication session.

The SRC starts a recording session for every call within a configured realm. All call filtering, if needed, must be accomplished by the recording server. The recording server performs the filtering and the selection of which sessions it should record.

SIPREC supports sending transcoded and SRTP calls.

## SIPREC for Active Recording

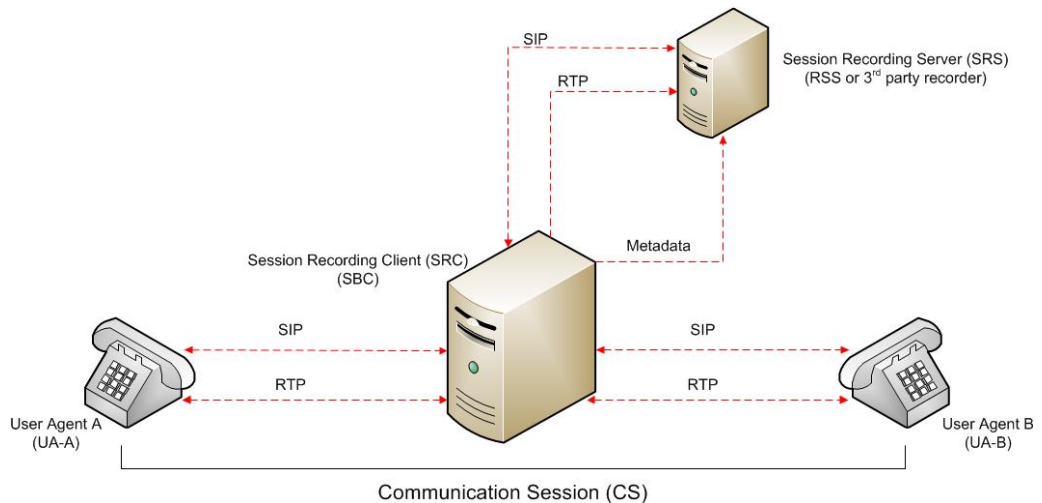
SIPREC supports active recording, where the ISR (E-SBC) acting as the Session Recording Client (SRC), purposefully streams media to the Oracle Communications Interactive Session Recorder's RSS (or 3rd party call recorder) acting as the SRS. The SRC and SRS act as SIP User Agents (UA). The SRC provides additional information to the SRS to describe the communication sessions, participants and media streams for the recording session to facilitate archival and retrieval of the recorded information.

The E-SBC acting as the SRC, is the source for the recorded media. The E-SBC consumes configuration information describing the ecosystem within which it operates. The interface, realm and session agent configuration objects specify the SIPREC configuration. A SIP UA can elect to allow or disallow any network element from recording its media.

During the establishment of a SIP Session, the E-SBC determines if SIPREC is configured for recording the call. If so, it then duplicates the media prior to initiating the session with the SRS. (Media replication is set up prior to the recording session). The SRS may choose to record, not record, or cancel the recording session, and then communicates by way of SIP signaling to the E-SBC. If the call is not to be recorded, the SRS signals termination of the recording session.

The E-SBC maintains SIPREC metadata information associated with recording sessions. The recording session metadata describes the current state of the recording session and its communication session(s). It is updated when a change of state in the communication session(s) is observed by the E-SBC. The SRS is responsible for maintaining call history, etc. The E-SBC creates and logs call detail records (CDRs) in the current manner, the 3rd party SRS vendor may collate this information if desired. (For more information about the contents of metadata, see [Metadata Contents](#)).

The following illustration shows two endpoints, User Agent A (UA-A) and User Agent B (UA-B). Their session is being recorded by an SRC (the E-SBC) and an SRS.





## Preserve SIPREC with SIP REFER Header

When the ISR (E-SBC) generates a new INVITE as part of terminating a SIP REFER, the E-SBC evaluates the SIPREC configuration of the realms and session agents involved in the new call leg and responds accordingly. The REFER and Transfer mechanism automatically preserves the UCID, XUCID, GUID, GUCID, and UUI in the metadata, and can forward this information to the Session Recording Server. The E-SBC can Start, Stop, Pause, and Resume SIPREC sessions in response to any re-INVITE, UPDATE, new INVITE, REFER, or specified SIP Response Message.

The E-SBC can establish a new session or update the existing session with the SIPREC server in the following ways.

- When the A-B call leg SA-realm-sipinterface is configured for SIPREC, and the B-C call leg SA-realm-sipinterface is not configured for SIPREC, the E-SBC sends metadata to the Session Recording Server to stop the recording on the sessionID associated with the original call.
- When both the A-B call leg and the B-C call leg have the same SIPREC configuration on their SA-realm-sipinterface, the E-SBC sends metadata to the Session Recording Server to stop Party A participation and start Party C participation within the same sessionID.
- When the A-B and B-C call legs have a different SIPREC configurations on their SA-realm-sipinterface, the E-SBC sends metadata to the A-B call leg Session Recording Server to stop the current recording session and sends metadata to the B-C call leg Session Recording Server to start a new recording session with a new sessionID.

## Configuring SIPREC

For more information on configuring SIPREC on an SBC, see the *Oracle Communications Session Border Controller Call Monitoring Guide*.

## ISR FACE

The ISR supports FACE. FACE is a feature for the aggregation and control of events. It is a centralized component used to control both ISR and integrated third-party services. It can also retrieve audio, video, and detailed metadata for recordings stored in the ISR. The initial third-party integration is with the ObserveIT Visual Session Recording solution. This provides the key activities necessary for desktop screen capture and for associating the captured screens to related audio recordings.

The controls currently available include full recording control (start, stop, pause, and resume, where pause and resume can aid in the omission of sensitive information from the recording), retrieval of recorded files and metadata, as well as starting and stopping screen capture on an ObserveIT agent host. FACE also supports a policy system allowing incoming events to trigger actions, with the current set of actions dedicated to screen capture control.

The ISR FACE contains the following components:

- FACE Policy System—Handles automatic actions for specific ISR events.
- External Event Notification Listener—Receives events from ISR components and passes them to Policy System.
- FACE REST API—API for communication and control of ISR components.

## About the ISR Dashboard

The ISR Dashboard allows you to access, configure, manage, and monitor the ISR in your network, including:

- **Manage Recordings**
- **Manage Reports**
- **Manage Settings**
- **Manage Administrator Functions**
  - Manage Realms
  - Manage Accounts
  - Manage Routes
  - Manage Users
  - Manager Sites
  - Manage Authorization Services
  - View Live Sessions

## Requirements Recommendations

To use the ISR Administrator Dashboard, the following must be met.

### Browser Requirements

The ISR Dashboard has been tested on the following browsers:

- Google Chrome™ 60.0.3112.113
- Firefox 52.3.0
- Microsoft Internet Explorer 11.0.9600.18762CO

ISR recording playback errors have been reported for the following web browsers:

- Firefox—For the (historically) most popular transmission codec, g711, Firefox is not supporting playback of the 8-bit/8 kHz audio format set in the **"Default" Recording Format Profile**. The playback controls may appear only briefly before becoming unavailable. To address this issue, changes any routes configured to use the **"Default" Recording Format Profile** to the **"Firefox Supported" Recording Format Profile**, where the g711 transmission codec is converted to the PCM 16-bit/16 kHz recording format.
- Internet Explorer— To play recorded waves files on Internet Explorer (IE), you must use the Windows Media Player plugin or you will receive an "Invalid Source" error. This issue impacts ObserveIT Screen Recording integrations with ISR, and Chrome or Firefox browsers must be used for playback instead of IE.
- Playback failures may also occur with the Quicktime plugin version 7.7.7. To resolve this issue, downgrade to Quicktime version 7.7.4.

 **Note:**

In some cases, developers may not include the audio file extension (.wav) on the file name when programmatically naming the file through one of the ISR APIs. Windows Media Player 11 plays the file regardless of whether or not the file extension is present.

## Security Features

The following security features have been implemented in the ISR:

- Optional configuration to force cookies through an encrypted (SSL/TLS) session. For a procedure to enable serving pages with SSL, see Appendix C, Enable Serving Pages with SSL.
- Cache-control set to 'no-cache' to avoid possible storage of sensitive data in local browser
- Enforced stronger password controls
- Ability to configure password expiration, user lockout duration, and maximum failed login attempts.
- Removed "hidden" URLs

# 2

## Getting Started

This chapter provides information about logging into the ISR Dashboard, editing the Dashboard settings, and using the Dashboard tools while navigating the Dashboard. Dashboard tools include search tools, a download tool, and an import tool for managing information in the ISR database. It is recommended that you review this section before using the ISR Dashboard.

### Logging In/Out of the ISR Dashboard

Prior to logging into the ISR Dashboard for the first time, you must enter a valid email and password. However, if your email and password are not available, you may use the following default email and password, then change the email address and password after logging in.

**Email:** isradmin@acmepacket.com

**Password:** admin123

#### Note:

When you login to the ISR Dashboard, depending on your assigned access level, you have access to only your associated ISR Dashboard information. Performance restrictions depend on your login level status. For more information about user login levels, see *User Access Levels* and *Managing Users*.

To login to the ISR Dashboard:

- Password must be at least 8 characters long.
- Password must contain at least one number (0-9) and one letter (A-Z and/or a-z).
- Password must contain at least one letter and one special character (for example, @, #, \$).

#### Note:

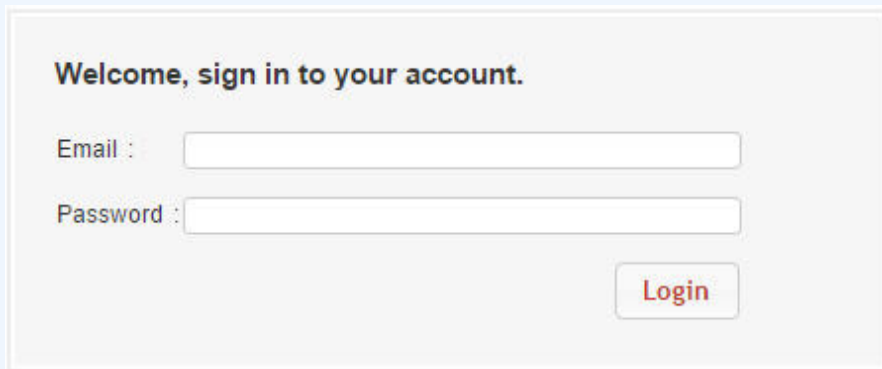
Your password must meet the following requirements:

1. Open your Internet Web browser (see compatible browser requirements in the Requirements/Recommendations section.).
2. Enter the following URL in the URL field:

`http://<host name or IP>/`

 **Note:**

The host name or IP address you enter here is the name or address assigned to the dashboard VM during installation.  
The Login page displays.

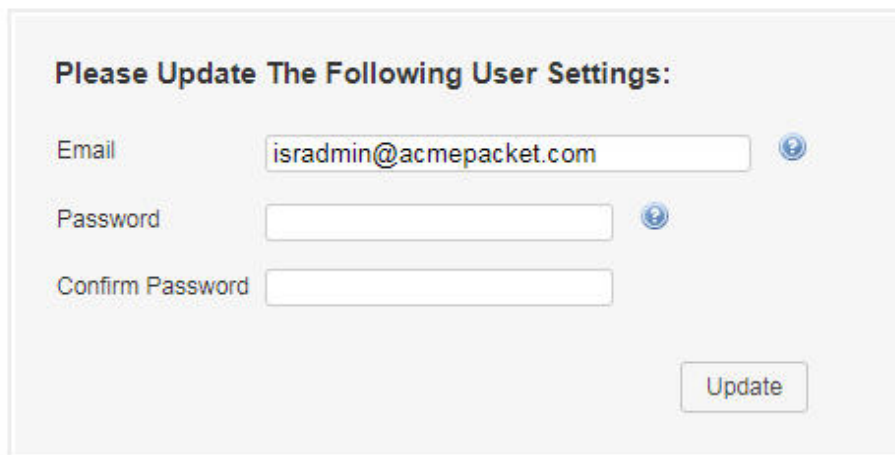


A screenshot of a login form with a light gray background. At the top, it says "Welcome, sign in to your account." Below this are two input fields: "Email :" and "Password :". To the right of the "Password :" field is a "Login" button with red text.

3. **Email**—Enter your email (username).
4. **Password**—Enter the password provided by your Administrator at the time of the ISR installation. If this is the first time you are logging in, enter the following and press **Enter**.

Email: isradmin@acmepacket.com  
Password: admin123

On first-time login with default user and password, the system prompts you to reset the email address and password.



A screenshot of a form titled "Please Update The Following User Settings:". It contains three input fields: "Email" with the value "isradmin@acmepacket.com", "Password", and "Confirm Password". Each field has a blue question mark icon to its right. At the bottom right is an "Update" button.

For security purposes, you should change your password every 45 days.

 **Note:**

The number of failed attempts before a user is locked out of the ISR can be configured under the **Admin, Manage Security Settings** link. For more information, see *Chapter 6, Managing Users*. A message displays with the length of time the User has to wait before attempting to log in again. Contact your Administrator if you forgot your password.

After changing your password, the ISR Dashboard Home page (default) displays.



The home page provides all of the options available to a user based on their user type.

This page allows you to perform the following:

Icon	Description
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Find Recordings (or Recordings in the main menu) — Allows you to view, play, delete and search recordings currently in the ISR database. Also allows you to download the recording metadata to a comma-separated value (CSV) file. For added convenience, after completing a recording search, you can save the search by assigning it a name. You can also create categories and add recordings to the category as applicable.



Note: Displayed recordings are dependent on the level of logged in user. For more information about user levels, see User Access Levels.

For more information about Recordings, see Manage Recordings.



Build a Report (or Reports in the main menu) — Allows you to generate Usage and Billing reports for routes configured on the ISR. These reports display the information in a Bar Graph as well as in a Data Graph.

Note: For more information about Reports, see Manage Reports.

Icon	Description
	<p>Edit My Settings (or Settings in the main menu) — Allows you to view and edit the ISR Dashboard settings such as:</p> <ul style="list-style-type: none"> <li>Preferred Time Zone Locale</li> <li>List refresh rate (seconds)</li> <li>Displayed number of recording entries per page</li> <li>Specify the fields (columns) to display in a Recording search</li> <li>Change your user login password</li> </ul> <p>Note: For more information about Dashboard settings, see Editing My Settings.</p>
	<p>Edit System Configurations (or Admin in the main menu) (displays for a Super User, Account Administrator, and Tenant Administrator only) — Allows you to perform the following Administrator tasks, including:</p> <ul style="list-style-type: none"> <li>• Accounts</li> <li>• Realms</li> <li>• Routes</li> <li>• Users</li> <li>• Authorization Services</li> <li>• Custom Data Fields</li> <li>• External Event Destinations</li> <li>• Locales</li> <li>• Recording Format Profiles</li> <li>• Security Settings</li> <li>• Template Definitions</li> <li>• Thirdparty Services</li> <li>• Live Sessions</li> <li>• Sites (includes Recorders, Locations, Archival)</li> </ul> <p>Note: Display of this feature is dependent on the level of logged in user. For more information about user levels, see User Access Levels.</p> <p>For more information about Administrator features, see Managing Realms/Accounts, Managing Routes, Managing Users, Managing Sites, Managing Authorization Services, and Viewing Live Sessions.</p>

To logout of the ISR Dashboard:

Click the Logout icon in the upper-right corner of the page. The ISR Dashboard immediately logs you out.

## User Access Levels

All users can access the ISR Dashboard. However, the functions available to the logged in user are dependent on the level of access assigned. The following table identifies the functions available at each user level.

 **Note:**

The Edit System Configuration (Admin) menu in the ISR Dashboard displays ONLY for users logged in as Super User.

User Type	Find Recordings (Recordings)	Build Reports (Reports)	Edit My Settings (Settings)	Edit System Configurations (Admin)
Super User	Yes	Yes	Yes	Yes (Can manage all)
Account Administrator	View only.	Yes	Yes	Yes (Can manage all EXCEPT Super User and sites)
Tenant Administrator	View and delete own recordings only. (Permissions to edit must be assigned.)	Yes (Reports include info from own accounts only)	Yes	Yes (Can manage own Accounts, Routes, Tenant Admin, Tenant User only)
Tenant User	View and delete own recordings only. (Permissions to edit must be assigned.)	Yes (Reports include info from own accounts only)	Yes	No
API User	N/A	N/A	N/A	N/A

API users are currently specific to the ISR FACE REST API only and cannot log into the ISR Dashboard.

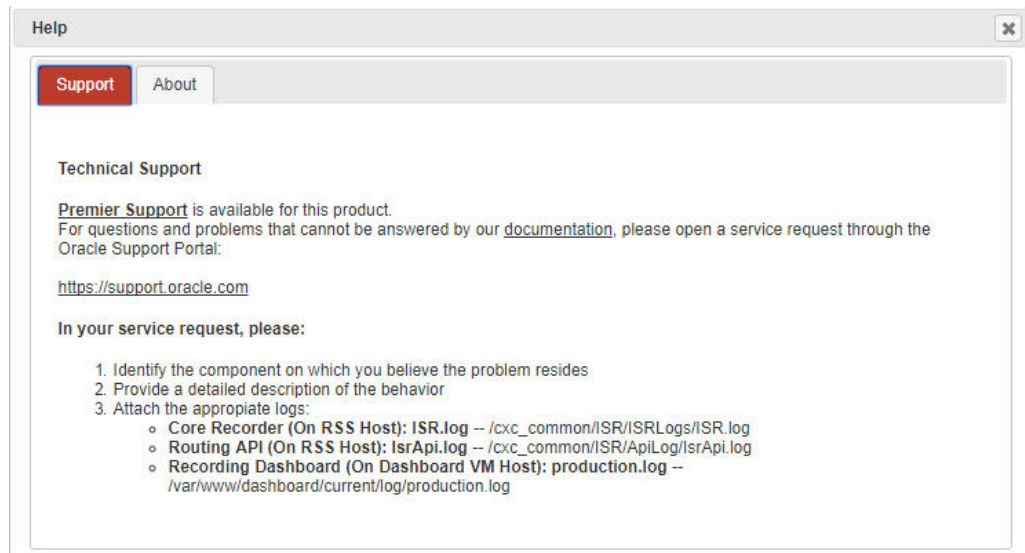
For more information about user login levels, see *Chapter 6, Managing Users*.

## Help Link

Online support is available for the ISR Dashboard by clicking on the Help link (the question mark symbol '?') in the upper right corner of any page in the Dashboard.

The Help window has two tabs, Support, which provides the Oracle Support Portal's website, as well as all of the information to include in a service request. The About tab provides the ISR software version and build numbers you are running.





 **Note:**

Help Text is customizable for each account. For more information on Dashboard branding, see Account Branding in Chapter 3.

## Editing My Settings

The **Edit My Settings** page (**Settings** in the Main Menu) in the ISR allow you to customize specific elements of the Dashboard for your environment. These settings apply to the current logged in user only. You can configure:

- Dashboard Settings
- Recordings List Settings
- RSS View Settings
- Change Password
- After logging into the ISR Dashboard, click **Edit My Settings** (**Settings** in the Main Menu). The following Dashboard Settings page displays.



Using the Dashboard Settings, you can:

- Set your preferred language

- Set your preferred time zone locale
- Set the number of seconds that the pages in the dashboard are refreshed
- Set the number of entries you want displayed per page

To configure the Dashboard settings:

1. **Preferred Language**—Select the language you prefer.
2. **Preferred Time Zone Locale**—Select the time zone locale associated with your location or location of the user. The following table provides the valid values for this field.

Abu Dhabi	Copenhagen	London	Sapporo
Adelaide	Darwin	Madrid	Sarajevo
Alaska	Dhaka	Magadan	Saskatchewan
Almaty	Dublin	Marshall Is.	Seoul
American Samoa	Eastern Time (US & Canada)	Mazatlan	Singapore
Amsterdam	Edinburgh	Melbourne	Skopje
Arizona	Ekaterinburg	Mexico City	Sofia
Astana	Fiji	Mid-Atlantic	Solomon Is.
Athens	Georgetown	Midway Island	Srednekolymsk
Atlantic Time (Canada)	Greenland	Minsk	Sri Jayawardenepura
Auckland	Guadalajara	Monrovia	St. Petersburg
Azores	Guan Hanoi	Monterrey	Stockholm
Baghdad	Harare	Montevideo	Sydney
Baku	Hawaii	Moscow	Taipei
Bangkok	Helsinki	Mountain Time (US & Canada)	Tallinn
Beijing	Hobart	Mumbai	Tashkent
Belgrade	Hong Kong	Muscat	Tbilisi
Berlin	Indiana (East)	Nairobi	Tehran
Bern	International Date Line West	New Caledonia	Tijuana
Bogota	Irkutsk	New Delhi	Tokelau Is.
Brasilia	Islamabad	Newfoundland	Tokyo
Bratislava	Istanbul	Novosibirsk	UTC
Brisbane	Jakarta	Nuku'alofa	Ulaanbaatar
Brussels	Jerusalem	Osaka	Urumqi
Bucharest	Kabul	Pacific Time (US & Canada)	Vienna
Budapest	Kaliningrad	Paris	Vilnius
Buenos Aires	Kamchatka	Perth	Vladivostok
Cairo	Karachi	Port Moresby	Volgograd
Canberra	Kathmandu	Prague	Warsaw
Cape Verde Is.	Kolkata	Pretoria	Wellington
Caracas	Krasnoyarsk	Quito	West Central Africa
Casablanca	Kuala Lumpur	Rangoon	Yakutsk
Central America	Kuwait	Riga	Yerevan
Central Time (US & Canada)	Kyiv	Rihadh	Zagreb

Chatham Is.	La Paz	Rome	Zurich
Chennai	Lima	Samara	
Chihuahua	Lisbon	Samoa	
Chongqing	Ljubljana	Santiago	

- List Refresh Rate Seconds**—Select the number of seconds that the dashboard waits before refreshing the recordings list. Valid values are:
  - None (default)
  - 30 seconds
  - 1 minute
  - 2 minutes
  - 5 minutes
- List Display Entries Per Page**—Enter the number of entries per page to display on the Recordings page. For example, entering a value of 7 in this field displays 7 recording entries per page in the Recordings List. Valid values are 1 to 100. Default is 20.

## Recordings List Settings

Using the Recordings List Settings, you can customize the columns that display on the Recordings List page.

You can select the column heading(s) from the “Not Displayed” column and drag it to the “Displaying” column. After clicking **Update**, the headings in the Displaying column display on the Recordings List page.

To configure the Recordings List settings:

- To add a heading to the display list, in the “Not Displayed” column (red boxes), click on a heading and drag the selection to the Displaying column. The red box you placed in the Displaying column turns green.

To remove a heading from the display list, in the “Displaying” column (green boxes), click on a heading and drag the selection to the Not Displayed column. The green box you placed in the Not Displayed column turns red.

You can place a maximum of 5 headings in the Displaying column.

The following table describes the headings you can select to display in the Recordings list.

Heading	Description
Time (default)	Displays the date and time the recording started. This column is based on the user’s GMT offset and is in the format MM/DD/YY HH:MM:SS (AM or PM).
From (default)	The number that the caller dialed from (i.e., Caller ID).
To (default)	Displays the number that the caller dialed.
Duration (default)	Displays the length of the recording (in seconds)
Session ID	Displays the Session ID derived from the X-ISR-UCID.
RSS Egress Call ID	Displays the unique egress call ID derived from the call-id used in the egress call leg for the recording (only used in pass-thru mode).
RSS Ingress Call ID (default)	Displays the unique ingress call ID derived from the call-id received in the initial SIP INVITE.

Heading	Description
Custom Data Fields	Displays a Custom Data field name as a Recordings list heading, and a valid Custom Data field value displays in that column for each recording.

2. Click **Update** to save the recordings list settings.

The headings listed in the Displaying column (green boxes) display as column headings on the Recordings List page.




## Dashboard Tools







The ISR Dashboard provides various tools that allow you to perform specific functions on each page.

- Functional Icons
- Paging Tool
- Search Tools
- Column Sorting Tool
- Download Tool
- Import Link

## Functional Icons

The ISR Dashboard has various icons that perform specific functions. The following table describes each functional icon.

Functional Icon	Description
	Logout - Allows you to logout of the ISR Dashboard.
	Help - Displays information about contacting Technical Support for help with the ISR Dashboard.
	Add - Adds a new item to a list

Functional Icon	Description
	Delete - Removes an item from the list.
	Play - Immediately opens and plays a .wav file recording stored in the ISR. Note: When you click the “Play” icon, the Dashboard offers the file to the applicable browser you currently have open. The browser determines the file type of the file and opens the media player according to the player plugin settings in the browser. The Dashboard ensures the play element is recognizable by all supported browsers (Chrome, Internet Explorer, Firefox).
	Download - Downloads a recording from the recording list to your PC. You can choose to immediately play the recording or save the recording file to your PC.
	Details - Displays additional details about the item in the list. Some items allow for additional editing after clicking this tool.
	View User Audit Trail (managing User feature) - Displays details about the actions of the User in the ISR Dashboard. Information includes: <ul style="list-style-type: none"> <li>• Time - Time of the action.</li> <li>• Action - Description of the action.</li> <li>• Object - The object that the action was performed on.</li> <li>• IP Address - IP address of the user who initiated the action.</li> </ul>
	Events (managing Session Agent feature) - Displays specific events that occurred on a Session Agent within a Site.

## Paging Tool

The ISR Dashboard provides a paging tool to help you navigate through pages if the data that displays is greater than the number set for the **Settings, List Display Entries per Page** parameter.

 **Note:**

This paging tool displays ONLY if the elements in the list require more than one page for display. For more information about setting the display entries per page, see [Editing My Settings](#).

You can click on "**Next**" to move to the next page, or Previous to move to the previous page. If more than one page exists, the number for each page displays with the navigation tools. You can click on any page number to display the data on that page.

## Search Tools

The ISR Dashboard provides a search tool you can use to search for specific information in the ISR database. The search feature is applicable to:

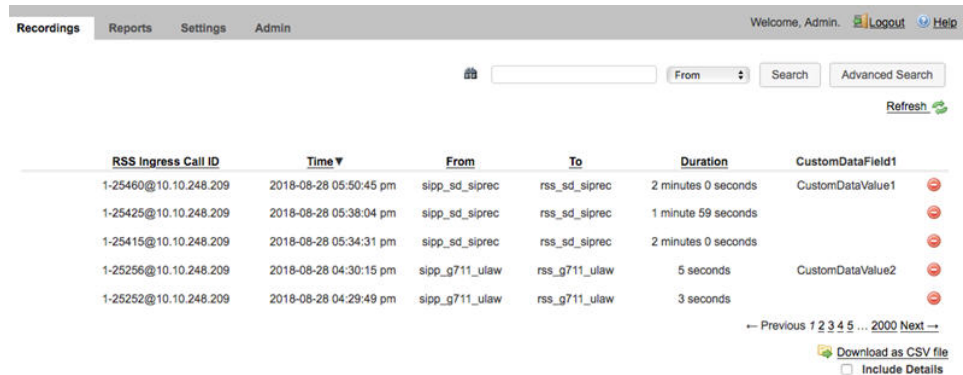
- Recordings
- Routes

## Basic Search for Recordings

You can perform a basic search for a specific recording. A basic search uses an exact match on a single common search field.

To perform a basic search for a recording:

1. Click **Recordings** in the main menu (or **Find Recordings** on the Home page). A list of recordings stored in the ISR database display.



The screenshot shows the 'Recordings' page in the ISR Dashboard. At the top, there are navigation tabs: 'Recordings', 'Reports', 'Settings', and 'Admin'. On the right, there is a user greeting 'Welcome, Admin.' and links for 'Logout' and 'Help'. Below the navigation is a search bar with a 'From' dropdown menu, a 'Search' button, and an 'Advanced Search' button. A 'Refresh' button is also present. The main content area displays a table of recordings with the following columns: 'RSS Ingress Call ID', 'Time', 'From', 'To', 'Duration', and 'CustomDataField1'. The table contains five rows of data. At the bottom right of the table, there are pagination controls: 'Previous', '1', '2', '3', '4', '5', '...', '2000', 'Next', and a 'Download as CSV file' button. There is also an 'Include Details' checkbox.

RSS Ingress Call ID	Time	From	To	Duration	CustomDataField1
1-25460@10.10.248.209	2018-08-28 05:50:45 pm	sipp_sd_siprec	rss_sd_siprec	2 minutes 0 seconds	CustomDataValue1
1-25425@10.10.248.209	2018-08-28 05:38:04 pm	sipp_sd_siprec	rss_sd_siprec	1 minute 59 seconds	
1-25415@10.10.248.209	2018-08-28 05:34:31 pm	sipp_sd_siprec	rss_sd_siprec	2 minutes 0 seconds	
1-25256@10.10.248.209	2018-08-28 04:30:15 pm	sipp_g711_ulaw	rss_g711_ulaw	5 seconds	CustomDataValue2
1-25252@10.10.248.209	2018-08-28 04:29:49 pm	sipp_g711_ulaw	rss_g711_ulaw	3 seconds	

2. In the drop-down box (at the top-right of the Recordings page), select the information about the recording(s) that you want to search. Valid values are:
  - From - ID of the caller for this call.
  - To - ID of the recipient for the call.
  - Session ID - Session ID derived from the X-ISR-UCID
3. In the text box, enter the information required dependent on the selection you made in Step 2.

For example, if you selected From in the drop-down box, enter the ID of the caller associated with a recording for which you want to search. All the recordings associated with that caller ID display in a list.

 **Note:**

You can select a recording and click on the Details icon to reference the “Session ID”, “From”, and To information for the recording if required.

4. Click **Search** to find all recordings based on the search criteria. All matching recordings display in the recordings list.

 **Note:**

The result is an exact match. This feature does not support wildcard matching.

## Advanced Search for Recordings

You can perform more advanced searches for recordings. Advanced searches allow more search options, including multiple search fields and partial matching.

To perform an advanced search for a recording:

1. On the Recordings page, click **advanced search**.

The following dialog box displays.

**Advanced Search** ✕

**Search Mode** And ▾

**Partial Match**

**Session ID**

**From**

**To**

**Label**

**Search Date**  
 **By Relative** Today ▾  
 **By Range**

▸ *More Recording Search Options*

▸ *By Segment Search Options*

▸ *By Custom Data Search Options*

▸ *By Session Search Options*

Search

2. **Search Mode**—Select whether to perform the search using **AND** or **OR**.
  - **AND**—Returns results where recordings match **ALL** fields you specify. For example, if you specify From as "123", File Name as "Recording1", and "Search Date as "Today", then the results of the search show all recordings with a start date matching the current date, **AND** a value of "123" in the From field, **AND** file name of "Recording1".
  - **OR**—Returns results where recordings match **ANY** of the fields you specify. For example, if you specify From as "123", File Name as "Recording1", and Search Date as "Last 7 Days", then the results of the search show any recordings with a value of "123" in the From field, **OR** a file name of "Recording1", a start date within the last seven days (**OR** a a result that includes all of these).
3. **Partial Match**—When enabled, the ISR finds recordings that partially match the values entered in the search fields.
4. **Session ID**—The unique Session ID derived from the X-ISR-UCID on which to perform the search.
5. **From**—The From SIP URI to perform the search on.
6. **To**—The To SIP URI to perform the search on.
7. **Label**—The route label to perform a search on.



8. **Search Date**—Select whether you want to search for recordings **By Relative** or **By Range**:

**By Relative**—Allows you to perform a search for recordings that happened "**Today**" (default), within the **Last 7 Days**, or within the **Last 30 Days**.

**By Range**—Allows you to perform a recording search, based on the date range you specify.

 **Note:**

Search Date is always included in the advanced search terms. Therefore, when using Search Mode "OR" with a large date range, many recordings may be returned.

9. If you select a **Search Date By Range**, enter the **From Date** and **To Date** in the format MM/DD/YYYY, or click on the calendar icon next to the text box to select the dates for which you want to search for recordings.

In the "**From Date** and **To Date** boxes, select the time in the format HH:MM for which you want to search for recordings.

 **Note:**

For convenience, clicking in the text box displays a pop-up calendar for which you can select the month, day, and year.

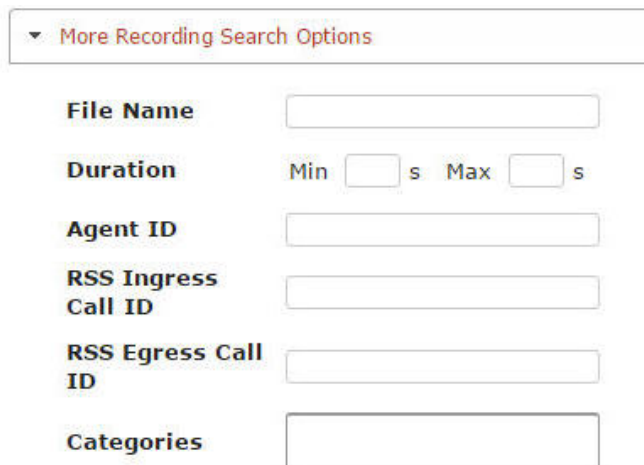
10. Click **Search** to find all recordings based on the search criteria. All matching recordings display in the recordings list.

## More Recording Search Options

You can perform recording searches based on additional search criteria as follows.

To perform a more advanced search for recordings:

1. In the Advanced Search dialog box, click **More Recording Search Options** to expand the dialog box.



▼ More Recording Search Options

**File Name**

**Duration** Min  s Max  s

**Agent ID**

**RSS Ingress Call ID**

**RSS Egress Call ID**

**Categories**

2. **Duration Min**—The minimum duration, in seconds, of a recording. Valid values are numeric characters. For example, 15.
3. **Duration Max**—The maximum duration, in seconds, of a recording. Valid values are numeric characters. For example 24.

Using the examples in Steps 3 and 4, the results would include all recordings that had a recording duration between and including 15 and 24 seconds.

4. **Agent ID**—The ID of the agent that answered the call. This is the value set in the Dashboard or API.
5. **RSS Ingress Call ID**—The ingress call ID derived from the call-id received in the initial SIP INVITE.
6. **RSS Egress Call ID**—The egress call ID derived from the call-id used in the egress call leg for the recording, if using pass-thru mode.
7. **Categories**—The name of the category for which you want to search for recordings. The category you enter in this field must already exist in the database. For more information about creating and searching categories, see Recording Details.
8. Click **Search** to find all recordings based on the search criteria. All matching recordings display in the recordings list.

## Recording Search by Custom Data

You can search for recordings by custom data values.

To search for recordings based on custom data values:

1. In the Advanced Search dialog box, click **By Custom Data Search Options** to expand the

The screenshot shows a portion of the Advanced Search dialog box. At the top, there are two expandable sections: 'More Recording Search Options' (expanded) and 'By Custom Data Search Options' (expanded). Below the 'By Custom Data Search Options' section, there are two input fields labeled 'CustomDataFieldName1' and 'CustomDataFieldName2'. Below these fields is a horizontal scrollbar. At the bottom of the dialog box, there is a 'Search' button.

dialog box.

2. The currently configured Custom Data Field names are listed. Enter the value(s) for which you want to search next to the corresponding Custom Data Field name(s).
3. Click **Search** to find all recordings based on the specified custom data. All matching recordings display in the recordings list.

### Note:

Custom Data search parameters are applied in addition to any other search options defined, including date ranges.

## Recording Search by Session

You can search for recordings by session criteria if required.

To search for recordings based on session criteria:

1. In the Advanced Search dialog box, click **By Session Search Options** to expand the dialog box.

Advanced Search

By Session Search Options

SIPREC Session ID

Participant AOR

apkt:ucid

extTrackingID

serviceProviderID

userID

groupID

callID

callingPartyNumber

calledPartyNumber

newExtTrackingID

apkt:realm

apkt:P-Asserted-Identity

apkt:Diversion

apkt:request-uri

Search

2. **SIPREC Session ID**—The SIP recording session ID number for which you want to search.

### Note:

You can select a recording and click on the Details icon to reference the SIPREC Session ID information for the recording if required.

3. **Participant AOR**—The participant's address of record (AOR) associated with the call that was recorded.
4. **apkt:ucid**—The Universal Call ID (UCID) of the incoming caller.
5. **extTrackingID**—The external tracking ID that was used when an incoming call was transferred to another recipient.

6. **ServiceProviderID**—The Service Provider ID that was used on the incoming call.
7. **userID**—The user ID on the incoming call.
8. **groupID**—The group ID on the incoming call.
9. **callID**—The call ID of the incoming call.
10. **callingPartyNumber**—The source number of the incoming call.
11. **calledPartyNumber**—The destination number of the incoming call.
12. **newExtTrackingID**—The new external tracking ID that was used when an incoming call was transferred a second time to another recipient.

 **Note:**

The extTrackingID, ServiceProviderID, userID, groupID, callID, callingPartyNumber, calledPartyNumber, and newExtTrackingID parameters are specific to a SIPREC integration with Broadsoft's Broadworks platform and may not be shown in all installations.

13. **apkt:in-realm**—The name of the ISR realm that received the SIPREC session (in-realm).
14. **apkt:P-Asserted-Identity**—The remote party's ID in the SIPREC session. The ISR uses the P-Asserted-Identity header field to convey the proven identity of the originator of a request within a trusted network.
15. **apkt:Diversion**—The call forwarding phone number from the SIPREC session, to which the incoming call was diverted. Diversion is a call forwarding feature that lets an incoming call to a called party be redirected to a third party.
16. **apkt:request-uri**—The Uniform Resource Identifier (URI) in the header of the request message of the SIPREC session. The URI in the request message contains sufficient information to initiate and maintain the SIPREC communication session.
17. Click **Search** to perform the search based on the recording session parameters you specified. All matching recordings display in the recordings list.

 **Note:**

Session search parameters are applied in addition to any other search options defined, including date ranges.

## Basic Search for Routes

You can perform a basic search for Routes configured in the ISR database based on the route pattern.

To perform a basic search for a route:

1. Click **Admin** in the main menu (or **Edit System Configurations** on the Home page).
2. Click **Routes**. A list of routes display in the routes list.

Account	Type	Pattern	Virtual Pattern	Record	Percent to Record
System	To	%	%DNIS%	100	100
System	To	test	test	25	25

- In the drop-down box (on the upper-left of the page), select the account for which you want to search for a route(s).

### Note:

The values in the drop-down box include any accounts you've added to the ISR database.

- In the text box (on the upper-right of the page), enter the route pattern for which to search. This field does not support partial matches.
- Click **Search** to perform the search based on the criteria you specified. All matching routes display in the routes list.

## Column Sorting Tool

In the ISR Dashboard, you can sort the list of recordings in ascending or descending order by clicking the column heading.

To sort the recording data in the recording list:

- Click any of the column headings to sort that column in ascending or descending order. The Up Arrow icon indicates the column is currently in ascending order. The Down Arrow icon indicates the column is in descending order.

## Download Tool

You can download a single specific recording file for playing immediately, or save the recording (.wav file) to a storage location on your PC to listen to later. You can also download the metadata for all recordings in the recording list to a CSV file on your PC.

### Downloading a Single Recording File

You can download a single recording file to play immediately, or save the recording to your PC to play later.

To download a single recording file:

- Click **Recordings** (or **Find Recordings** on the Home page). The recordings list displays.

2. Select a recording and click the Download icon (the downward facing green arrow) for that recording.

The ISR stores the file in a temporary folder on your computer.

3. Click **Open with** and select the application for which to play the .wav recording file or click **Save File** to save the .wav recording file to a location on your PC for listening to later.

 **Note:**

If you click the Download icon more than once for the same recording, additional copies of the same file are saved, appending a numerical digit to the file name. For example:

rss\_g711-24-1841@172.30.58.237 (1).wav,

rss\_g711-24-1841@172.30.58.237 (2).wav,

rss\_g711-24-1841@172.30.58.237 (3).wav, etc.

 **Note:**

The names of these options may vary between browsers.

4. Click **OK**. Your browser immediately opens and plays the .wav file, or downloads it to your PC for listening later.

## Downloading a Recording List to a CSV File

You can download the metadata for up to 10,000 recordings from the local ISR database, to a comma separated value (CSV) file (<filename>.csv), and then open the file for viewing using an application that recognizes the CSV format (i.e., Notepad®, Microsoft® Excel, etc.). The resulting file contains the details of each recording (not the actual recorded files).

 **Note:**

This feature limits the download to 10,000 recordings. Therefore, if the Recordings List exceeds 10,000 recordings, you must perform a search to create a list of results containing less than 10,000 recordings before downloading to a CSV file.

To download a recording list's metadata to a CSV file:

1. On the Recordings page, click **Download as CSV file** to download the current list of recordings to a CSV file.
2. **Include Details**—Place a checkmark in the check box to include all details about the recording in the CSV file.

 **Note:**

If you click Download as CSV file without checking the Include Details box, the ISR Dashboard only downloads the information in the columns that currently display in the recordings list. If you place a checkmark in the Include Details box, the ISR Dashboard includes all column attribute information, including those columns, not listed in the current recording list.

The ISR automatically provides a filename of recordingResults.csv and stores the file in a temporary folder on your computer.

3. Click **Open with** and select the application for which to open the resulting CSV file.  
or  
Click **Save File** to save the CSV file to your PC.

 **Note:**

If you choose Save File, and you click Download as CSV file more than once, each time the ISR generates a CSV file, it appends a numerical digit to the file name.  
For example:  
recordingResults (1).csv  
recordingResults (2).csv  
recordingResults (3).csv

 **Note:**

The names of these options may vary between browsers.

4. Click **OK**. The CSV file is opened with the application you specified, or is saved to your PC for viewing later.

Example CSV file with recordings and no detail specified

	A	B	C	D	E
1	RSS Ingress Call ID	Time	From	To	Duration
2	24-1841@172.30.58.237	11/17/2016 12:27	sipp_g711	rss_g711	10
3	23-1841@172.30.58.237	11/17/2016 12:27	sipp_g711	rss_g711	10
4	22-1841@172.30.58.237	11/17/2016 12:27	sipp_g711	rss_g711	10
5	21-1841@172.30.58.237	11/17/2016 12:26	sipp_g711	rss_g711	10
6	20-1841@172.30.58.237	11/17/2016 12:26	sipp_g711	rss_g711	10
7	19-1841@172.30.58.237	11/17/2016 12:26	sipp_g711	rss_g711	10
8	18-1841@172.30.58.237	11/17/2016 12:26	sipp_g711	rss_g711	10
9	17-1841@172.30.58.237	11/17/2016 12:26	sipp_g711	rss_g711	10
10	16-1841@172.30.58.237	11/17/2016 12:26	sipp_g711	rss_g711	10
11	15-1841@172.30.58.237	11/17/2016 12:25	sipp_g711	rss_g711	10
12	14-1841@172.30.58.237	11/17/2016 12:25	sipp_g711	rss_g711	10
13	13-1841@172.30.58.237	11/17/2016 12:25	sipp_g711	rss_g711	10
14	12-1841@172.30.58.237	11/17/2016 12:25	sipp_g711	rss_g711	10
15	11-1841@172.30.58.237	11/17/2016 12:25	sipp_g711	rss_g711	10

Example CSV file with recordings and detail specified

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Transact To	Time	Session ID	Rating	RSS Ingress Call ID	RSS Egress Call ID	Notes	Hours	From	File Name	Duration	DTMF Events	Custom Data	Session Extension Data
2	rs_g711	11/17/2016 12:27	x-isr-ucid-34-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161227	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
3	rs_g711	11/17/2016 12:27	x-isr-ucid-23-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161227	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
4	rs_g711	11/17/2016 12:27	x-isr-ucid-22-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161227	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
5	rs_g711	11/17/2016 12:26	x-isr-ucid-21-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161226	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
6	rs_g711	11/17/2016 12:26	x-isr-ucid-20-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161226	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
7	rs_g711	11/17/2016 12:26	x-isr-ucid-19-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161226	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
8	rs_g711	11/17/2016 12:26	x-isr-ucid-18-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161226	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
9	rs_g711	11/17/2016 12:26	x-isr-ucid-17-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161226	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
10	rs_g711	11/17/2016 12:26	x-isr-ucid-16-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161226	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
11	rs_g711	11/17/2016 12:25	x-isr-ucid-15-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161225	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
12	rs_g711	11/17/2016 12:25	x-isr-ucid-14-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161225	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
13	rs_g711	11/17/2016 12:25	x-isr-ucid-13-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161225	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
14	rs_g711	11/17/2016 12:25	x-isr-ucid-12-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161225	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	
15	rs_g711	11/17/2016 12:25	x-isr-ucid-11-1841@172.30.58.237	0	15-1841@172.30.58.237	0		0	rs_g711	rs_g711_111720161225	10.207	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	[[{"event": "orig", "source": "0", "dest": "1", "type": "orig"}, {"event": "dest", "source": "1", "dest": "0", "type": "dest"}]]	

The following table identifies some of the columns that can display in the CSV file.

Column Heading	Description
To	Specifies the To SIP URI. This is the URI for where the call is going.
Time	Specifies the starting GMT time and date of the recording in the format YYYY-MM-DD HH:MM:SS, respectively. Note: In the date format, M = month, D = day, and Y = year. In the time format, H = hours, M = minutes, S = seconds.
Session ID	Specifies the Session ID assigned to the incoming call. Format may be specified as x-isr-ucid-<session id>@<local host>.
Rating	Specifies the score assigned to a recording by a reviewer and can be assigned as needed by your organization. Scoring is based on 1 to 5 stars.
RSS Ingress Call ID	Specifies the call ID assigned by the RSS to the incoming call.
RSS Egress Call ID	Specifies the call ID assigned by the RSS to the outgoing leg of the call (pass-thru mode only).
Notes	Specific notes, if any, entered by users through the dashboard.
Hours	Specifies the length of time, in hours, a user spent reviewing, transcribing, and commenting on the recording.
From	Specifies the From SIP URI. This is the URI from where the call session was coming.
File Name	Specifies the name of the recording file.
Duration	Specifies the length of the recording (in seconds).
Custom Fields	Specifies a unique set of meta-data associated with the recording (i.e., Transaction ID, Account Number, Unique Call ID). For more information on Custom Fields, see "FACE Custom Data" in the <i>Oracle Communications Interactive Session Recorder API Guide</i> .
Completed	Specifies whether or not this recording resulted in a complete transaction, added by the dashboard user.
Agent ID	Specifies the ID of the Agent answering the call.

## Import Link

The ISR allows administrators to specify account and/or route parameters in a comma separated value (CSV) file, save the file, and then import the information into the ISR database using the ISR Dashboard's Import link (located in the top right corner of both the Accounts and Routes pages). An administrator can use any application that can save to a CSV file (i.e., Microsoft® Excel, Notepad®, etc.) when inputting the account and/or route information into the file.

### Note:

The import link is for Super User and Account Administrators only.



# 3

## Managing Recordings

This chapter provides information about managing account recordings on the ISR. You can play, view, edit, download, and delete recordings as required.

### Manage Recordings

All user levels can be configured to view, edit, delete, download, and/or play recordings stored on the ISR (or other configured storage facility). However, a Tenant Administrator and Tenant User, if granted the appropriate permissions, can edit, play, download, and delete their own recordings only.

 **Note:**

Recordings that display are dependent on the level of user currently logged into the ISR Dashboard.

In addition to viewing, editing, playing, downloading, and deleting recordings, a user with Notes and Scoring permission can also specify notes for a recording, and specify a rate or score for a recording. A recording can be rated or scored from 1 star to 5 stars, with 5 stars being the best. For more information about assigning a score to a recording see Recording Details.

You can access the Recordings from the Home page by clicking **Find Recordings** (or by clicking Recordings on the top menu bar).







Each recording displays on the Recordings page with information about that recording.

#### Recordings Page

RSS Ingress Call ID	Time	From	To	Duration	CustomDataField1
1-25460@10.10.248.209	2018-08-28 05:50:45 pm	sipp_sd_siprec	rss_sd_siprec	2 minutes 0 seconds	CustomDataValue1
1-25425@10.10.248.209	2018-08-28 05:38:04 pm	sipp_sd_siprec	rss_sd_siprec	1 minute 59 seconds	
1-25415@10.10.248.209	2018-08-28 05:34:31 pm	sipp_sd_siprec	rss_sd_siprec	2 minutes 0 seconds	
1-25256@10.10.248.209	2018-08-28 04:30:15 pm	sipp_g711_ulaw	rss_g711_ulaw	5 seconds	CustomDataValue2
1-25252@10.10.248.209	2018-08-28 04:29:49 pm	sipp_g711_ulaw	rss_g711_ulaw	3 seconds	

The following table describes each possible column on the Recordings page.

Column Heading	Description
Time	Specifies the start date and time of the recording. This column is based on the User's preferred time zone locale.
From	Specifies the calling party.
To	Specifies the called party.
RSS Ingress Call ID	Specifies the call-id from the SIP headers of the initial INVITE.
RSS Egress Call ID	Specifies the call-id from the SIP header of a secondary call leg. Only applicable for pass-through or Record & Save routes.
Duration	Specifies the length of time, in seconds, of the recording.
Session ID	Specifies the unique X-ISR-UCID for this recording.
	Downloads the selected recording to a file on your PC.
	Deletes the Recording from the ISR system.
	Screen recording playback is available.
	Video playback is available.

## Playing a Recording

After a recording occurs on the ISR, it is saved as an audio, and optionally video, file so a user can review the details of the recording and playback the audio and video. Play a recording by first choosing it in search results or the default listing to bring up the Recording Details page, then clicking the Segment tab and the play button for that recorded Segment file.



### Note:

The recording's metadata is saved in the ISR database.

The Recordings page displays all up-to-date recordings that meet the search parameters and access level restrictions of the user. Depending on the size of your storage device (Network Attached Storage (NAS), Storage Area Network (SAN)), older recordings may not be stored

locally. However, this is transparent to the user viewing the recordings. Regardless of where the recordings are stored, all recordings display on the Recordings page.

Before playing recordings, make sure you have a media application that plays audio files with a .wav format. For more information about the software requirements and recommendations for playing recordings, see Requirements/Recommendations.

To play a recording:

1. After logging into the ISR Dashboard, click **Find Recordings** on the Home Page (or **Recordings** on the main menu bar). The Recordings page displays.
2. Click on the row of a recording to show the details, then click the **Segment 1** tab. If you have the appropriate permissions, you may play the recording using the play button at the top of the screen.



#### Note:

To find a specific recording, perform a search using the Advanced Search link in the upper-right corner of the page. For more information, see Search Tools. The Recordings page refreshes depending on the value set in **Settings, Refresh Rate (seconds)**. Default is every 30 seconds. For more information about setting the Refresh rate, see Dashboard Settings.

When the recording is retrieved, the file(s) automatically opens using the applicable media application installed on your computer. For media applications you can use, see Requirements/Recommendations.

## Viewing and Editing Details of a Recording

The ISR Dashboard allows you to view and edit specific details and metadata of a recording if required. From a Recording's Details page, you can:

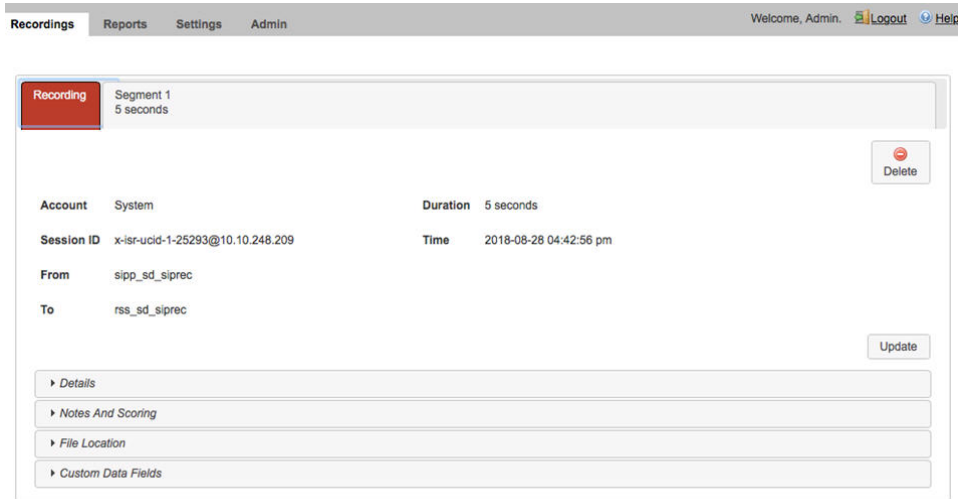
- Play a recording.
- Assign custom data fields to a recording.
- Specify whether or not the recording is completed.
- Assign a length of time, in hours/minutes that the reviewer spent reviewing/transcribing the recording.
- Specify notes pertaining to the recording.
- Assign a rating to the recording.
- Create a category for which to place the recording.
- Transcribe the conversation that took place on the recording.

To play a recording from the details page:

1. After logging into the ISR Dashboard, click **Find Recordings** on the Home Page (or **Recordings** on the main menu bar).

The Recordings page displays.

2. Choose a recording and click the Details icon. The following Recording Details page displays.



The following table describes information displayed on the Recording Details page.

Column Heading	Description
Account	Specifies the Account name associated with the recording.
Session ID	The unique session identifier for the session that contains the recording segment(s).
From	Specifies the calling party.
To	Specifies the called party.
Duration	Specifies the length of time, in seconds, of the recording.
Start Time	Specifies the date and time when the active session began. This is displayed in the user's preferred time zone locale.

To play the recording, click the appropriate segment tab. For example, Segment 1 and the play button at the top of the segment details.

When the recording is retrieved, the file(s) automatically opens using the applicable media application installed on your computer. For media applications you can use, see Requirements/Recommendations.

You can display additional recording details, session metadata, and session participant metadata if required. Refer to the following paragraphs for more information.

## Recording Details

The ISR allows you to assign specific information to each recording that can be used to identify and analyze calls. You can save this information to be reviewed at a later time. You can display the additional details and add specific information about a recording by clicking **Details** on the Recording Details page.

For each recording stored in the Recording list, you can perform the following:

- Apply a score to the call session (a rating on a scale from 1 to 5 stars, with 1 being the worst and 5 being the best). The score is at the discretion of the Administrator or User that is scoring the recording.
- Specify whether or not the call session represents a complete transaction.
- Specify the number of hours spent on the call session (for example, transcribing or reviewing).
- Write notes about the call session.
- Transcribe the conversation that took place in the call session.

After specifying and saving this information, the data is attached to the applicable recording and stays with the recording even when the recording is archived. Administrators and users can create reports against the call scoring information in the database.

### Note:

To add or change detailed information about a recording, the user must have permission privileges for the Account's route associated with the recording. To provide permission to set "Complete Transaction", "Notes/Transcription", and Rating, see Recording, Editing Permissions.

## Viewing Recording Details

To display details:

1. On the Recordings page, choose a recording and click the Details icon. The Recording Details page displays.

The screenshot shows a web application interface for viewing recording details. At the top, there is a navigation bar with tabs for Recordings, Reports, Settings, and Admin. The user is logged in as Admin. The main content area displays the following information:

- Recording:** Segment 1, 2 minutes 0 seconds
- Account:** System
- Duration:** 2 minutes 0 seconds
- Session ID:** x-tsr-ucid-1-28605@10.10.248.209
- Time:** 2018-08-29 03:00:54 pm
- From:** sipp\_sd\_slprec
- To:** rss\_sd\_slprec

Below the metadata, there are four expandable sections:

- Details
- Notes And Scoring
- File Location
- Custom Data Fields

Buttons for 'Delete' and 'Update' are also visible.






The **RSS** field indicates the RSS that received the call session for the recording.

The **RSS Ingress Call ID** field indicates the call-id received in the header of the initial SIP INVITE.

## Recording Details Custom Data

Specifies custom data values to associate with this recording. This information is specific to this recording.

Create custom data fields via the Admin page's **Custom Data Fields** link. For more information on configuring Custom Data, see "Custom Data".

Custom Data Fields			
	Name	Value	
	sampleField1	sample value 1	 
	sampleField2	sample value 2	 

### Note:

To add or change detailed information about a recording, the user must have permission privileges for the Account's route associated with the recording. To provide permission to add Custom Data Fields, see "Custom Data".

## Recording Details File Location

The File Location section on the Recording Details page provides information about storing a recording indefinitely.

▼ File Location

Store Indefinitely

## Archiving Recordings Permanently

You can view archival status of a recording by clicking **File Location** on the Recordings Details page.

You can also flag a recording to remain archived permanently.

To flag a recording to never expire:

1. After logging into the ISR Dashboard, click **Find Recordings** or click **Recordings** in the top menu bar, select the recording you want to flag, and click File Location on the Recording's detail page.

▼ File Location

Store Indefinitely

2. **Store Indefinitely**—Check the box to ensure this recording is never deleted due to expiration.
3. Click **Save Changes**.

## Recording Session Metadata

You can view specific metadata, including extension metadata, about a recording by clicking **Session Metadata** on the Recording Details page.

## Segment Session Metadata

To view Segment Session Metadata:

1. On the Recordings page, choose a recording and click the Details icon. The Recording Details page displays.
2. Click **Session Metadata**. The following information displays.



▼ Session Metadata	
SIPREC Session ID	Hbp8WXmmRVZPI4FSEU1mlg==
Start Time	2017-09-05 01:57:58 pm

The **SIPREC Session ID** field displays the SIP Recording Session ID assigned to the call recording session at the time the call was received by the RSS.

The **Start Time** field displays the date and time the call recording session began. The date and time are based on the time zone configured for the User.

The **Session Extension Metadata** displays additional extension metadata associated with the session. The metadata types that may be present here include:

- apkt:ucid
- calledPartyNumber
- callID
- callingPartyNumber
- extTrackingID
- groupID
- newExtTrackingID
- serviceProviderID
- userID

## Segment Session Participant Metadata


You can view specific participant metadata, including extension metadata, about a recording by clicking Session Participant Metadata on the Recording Details page.

To view Session Participant Metadata:

1. On the Recordings page, choose a recording and click the Details icon. The Recording Details page displays.
2. Click **Session Participant Metadata**. The following information displays.

Session Participant Metadata				
SIPREC Participant ID	Name	Participant AOR	Start Time	End Time
swWEGj0SSbBs39Y53GllKw==	leo	sip:leo@10.138.239.179	2017-09-05 01:57:58 pm	
LMbgTxCjRw5PXmO3+FjwCQ==	raf	sip:raf@10.138.237.213	2017-09-05 01:57:58 pm	

The following table describes each field on the Session Participant Metadata page.

Column Heading	Description
SIPREC Participant ID	Specifies the ID of the SIPREC participant on the recording.
Name	Specifies the SIP URI name of the SIPREC participant.
AOR	Specifies the address of record (AOR) associated with the participant.
Start Time	Specifies the date and time when the active session recording began.
End Time	Specifies the date and time when the active session recording ended.
	Displays extension metadata information about the participant if it exists.

- Choose a SIPREC Participant ID and click the Details icon to display extension metadata information about the participant.

Information in this box can include metadata for:

- apkt:-realm
- apkt:P-Asserted-Identity
- apkt:Diversion
- apkt:request-uri

For more information about these parameters, see Recording Search by Session.

## Displaying DTMF Data in Segment Details: Routes

You can configure the ISR to display DTMF data within a call's recording details for digits transmitted via RFC 2833 and SIP INFO. The **Record DTMF** parameter has been created which allows you to specify whether or not to display DTMF details on either a per-route or per-account basis.

To enable the ISR to display DTMF details for a particular route:

- After logging into the ISR Dashboard, click **Edit System Configurations** or click **Admin** in the top menu bar.
- Click **Routes**.  
A list of all routes configured on the ISR displays.
- Click the route on which you want to enable the recording of DTMF data.
- Click **Route Advanced Configurations**.



▼ Advanced Configurations

<b>Recording</b>		<b>Video</b>	
Route Mode	<input type="text" value="Standard (SIPREC)"/>	Video Recording is	<input type="text" value="Disabled"/>
Recording is	<input type="text" value="Enabled"/>	Video Access Permission	<input type="text" value="Enabled"/>
Percent To Record	<input type="text" value="100"/>	<b>Record and Save Mode</b>	
Always Record As Raw RTP	<input type="text" value="No"/>	Record and Save on DTMF	<input type="text" value="dtmf-pound #"/>
Recording Format Profile	<input type="text" value="Default"/>	<b>Archiving</b>	
Record DTMF	<input type="text" value="No"/>	Keep Recordings for	<input type="text" value="365"/> Days
<b>Recording Editing Permissions</b>		<b>Sessions Capacity</b>	
Allow Editing of Agent ID	<input type="text" value="Yes"/>	Session Capacity	<input type="text" value="24"/>
Allow Editing of Rating	<input type="text" value="Yes"/>	Additional Burst Session Capacity	<input type="text" value="6"/>
Allow Editing of Completed Transaction	<input type="text" value="Yes"/>		
Allow Editing of Notes	<input type="text" value="Yes"/>		

5. **Record DTMF**—Select whether or not to display DTMF data. Valid values are:
  - Use Account's Setting—This route defaults to its account's behavior.
  - No—No DTMF data appear in the recording details.
  - Yes—data details appear in the recording details.
6. Click **Update**.

## Displaying DTMF Data in Segment Details: Accounts

To enable the ISR to display DTMF data for a particular account:

1. After logging into the ISR Dashboard, click **Edit System Configurations** or click **Admin** in the top menu bar.
2. Click **Accounts**.  
A list of all accounts configured on the ISR displays.
3. Click the account on which you are want to enable the recording of DTMF data.
4. Click **Route Defaults**.

▼ Route Defaults

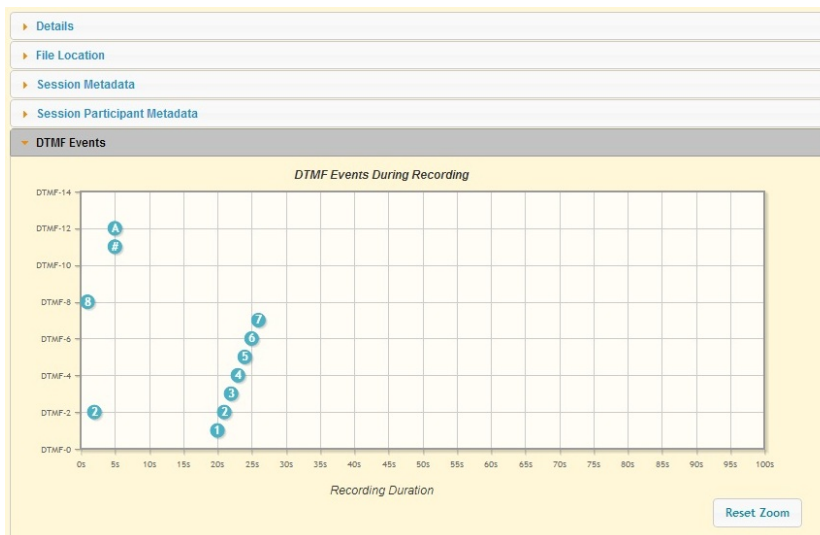
<b>Recording Defaults</b>		<b>Record and Save Mode Defaults</b>	
Route Mode	<input type="text" value="Standard (SIPREC)"/>	Record and Save on DTMF	<input type="text" value="dtmf-pound #"/>
Recording is	<input type="text" value="Enabled"/>	<b>Sessions Capacity Defaults</b>	
Percent To Record	<input type="text" value="100"/>	Session Capacity	<input type="text" value="24"/>
Always Record As Raw RTP	<input type="text" value="No"/>	Additional Burst Session Capacity	<input type="text" value="6"/>
Recording Format Profile	<input type="text" value="Default"/>		
Record DTMF	<input type="text" value="No"/>		
<b>Recording Editing Permissions</b>			
Allow Editing of Agent ID	<input type="text" value="No"/>		
Allow Editing of Rating	<input type="text" value="No"/>		
Allow Editing of Completed Transaction	<input type="text" value="No"/>		
Allow Editing of Notes	<input type="text" value="No"/>		

5. **Record DTMF**—Select whether or not to display DTMF details. Valid values are:
  - No—No DTMF data appear in the recording details.
  - Yes—DTMF data appear in the recording details.
  - Use System Account's Setting—This account defaults to the System account's behavior. This is the default value.
6. Click **Update**.

## Displaying DTMF Data in Segment Details

To view DTMF data in recording details:

1. After logging into the ISR Dashboard, click **Find Recordings** or click **Recordings** in the top menu bar.
2. Choose the recording you want to view and click the Details icon.  
The Recording's detail page displays.
3. Click **DTMF Events**. The DTMF data appears.



You can zoom in on a particular area of the DTMF Events graph by highlighting the section you want to view. To get back to the original graphical view, click **Reset zoom**.

## Deleting a Recording

You can delete a recording from the ISR Dashboard as required.

To delete a Recording:

1. After logging into the ISR Dashboard, click **Find Recordings** on the Home Page (or **Recordings** on the main menu bar). The Recordings page displays.
2. Choose a Recording from the Recordings page and click the Delete icon. The following prompt displays:  
Are you sure you want to delete this recording?
3. Click **OK** to delete the Recording from the ISR database or click **Cancel** to cancel the delete function.

 **Note:**

Once a recording is deleted, it cannot be recovered. The file is deleted from disk and the metadata is removed from the database.

# 4

## Managing Reports

The ISR allows you to generate call usage and billing statistical reports using date and route filters. This chapter describes the types of reports you can generate and filters you can use to generate the reports.

### Manage Reports

The ISR provides the following types of reports you can generate:

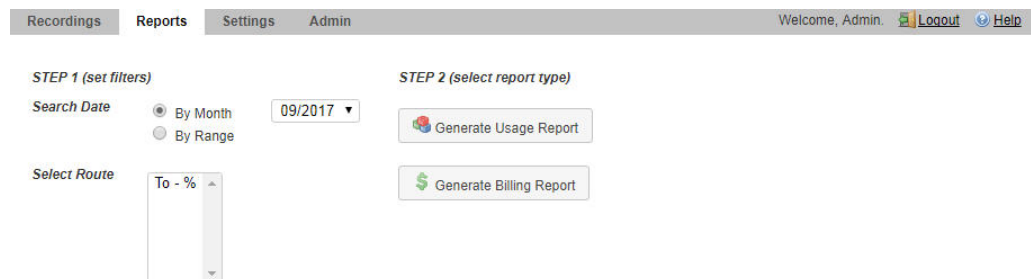
- **Usage Reports**- Generates a report that includes call recorder usage information by date range and/or by route.
- **Billing Reports** - Generates a report that includes billing information by date range and/or by route.

You can run these reports for the current month or the previous month, or specify a date range.

You can access the Reports from the Home page by clicking **Build A Report** (or by clicking **Reports** on the top menu bar).



### Reports Page



The Reports page allows you to build Usage and/or Billing Reports based on the filters you set in the **Search Date** and **Select Route** fields.

The following paragraphs provide information about building Usage and Billing reports.

## Usage Reports

Usage Reports show information about calls that use routes configured on your ISR. Usage Reports include:

- Route used for calls
- Number of sessions provisioned on the route
- Number of provisioned burst sessions on the route
- Total number of calls initiated using the route
- Number of calls made during peak time on the route
- Number of calls that used burst sessions on the route
- Number of calls rejected on the route

You can filter the call data by month or by date range, and select a single or multiple routes to display in the report.

## Generating a Usage Report

To generate a Usage Report:

1. After logging into the ISR Dashboard, click **Build a Report** on the Home Page (or **Reports** on the main menu bar). The Reports page displays.

2. **Search Date**—Select whether you want to generate a report by the month or by date range.

## Generating a report by month

To generate a report by month:

1. Select **By Month**.
2. In the drop-down box, select the month for which you want to generate the report. Valid values are dependent on the dates for calls stored in the ISR database.

## Generating a report by range

To generate a report by range:

1. Select **By Range**. The **From Date** and **To Date** fields display.
2. **From Date**—Click the cursor in the text box or click the Calendar icon to display the calendar.

3. Click the date from where you want to begin to include the report data. Use the arrow keys in the calendar to change months.
4. **To Date**—Click the cursor in the text box or click the Calendar icon to display the calendar.
5. Click the date from where you want to end the inclusion of the report data. Use the arrow keys in the calendar to change months.

## Selecting a route

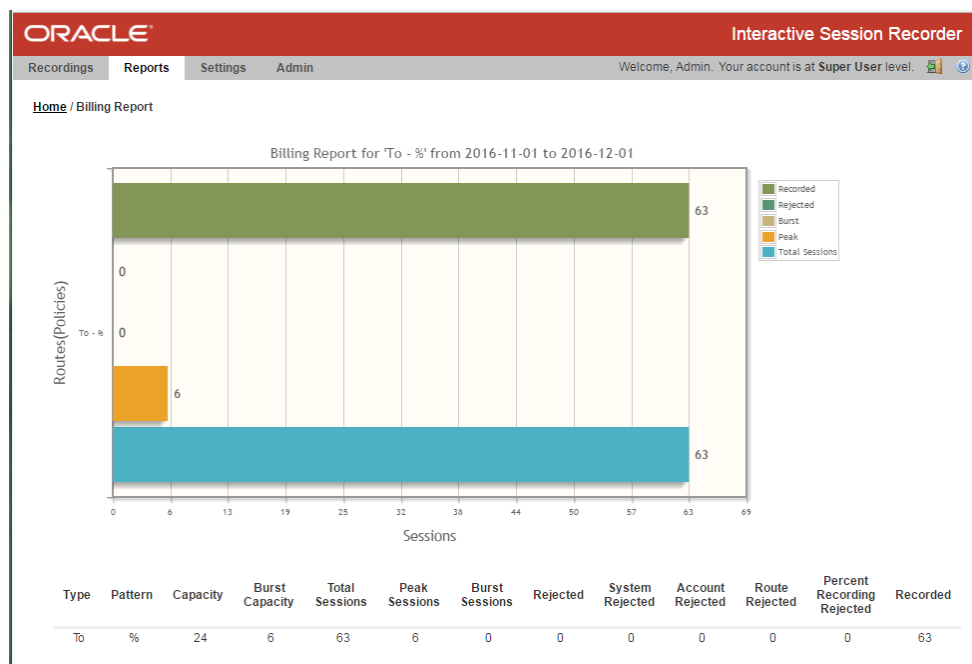
To select a route:

1. **Select Route**—Select a route or routes to include in the report. Valid values are dependent on the routes currently configured in the ISR database.

### Note:

To select multiple routes, click on a route in the selection box, press and hold the <Ctrl> key, and select additional routes.

2. Click **Usage Reports**. The **Generate Report** button displays.
3. Click **Generate Report** to generate the Usage Report. The following report displays.



The Usage Report displays the information in bar graph format at the top of the page, and in data format at the bottom of the page.

## Usage Report Bar Graph Descriptions

The following table identifies the information in the bar graph section of the report.

### Usage Report Bar Graph Descriptions

Graph Information	Description
Routes (Policies)	Indicates the route(s) selected for this report.
Sessions	Indicates the number of sessions handled by the route.
Recorded	Indicates total number of recorded sessions on the route during the reported period.
Rejected	Indicates total number of rejected sessions on the route during the reporting period.
Burst	Indicates total number of burst sessions on the route during the reporting period. Burst sessions are sessions handled by the Burst Ports.
Peak	Indicates maximum number of simultaneous sessions on the route during the reporting period.
Total Sessions	Indicates total number of sessions on the route during the reporting period.

The following table describes each column in the data format section of the report.

### Usage Report Data Format Descriptions

Column	Description
Type	The type of route policy (for example, To, From, or To/From).
Pattern	The route pattern that the RSS looks for when searching for a route policy.
Capacity	Total concurrent sessions allocated to the route.
Burst Capacity	Number of concurrent sessions available for call recording when the provisioned capacity has been depleted.
Total Sessions	The total number of sessions for this reporting period.
Peak Sessions	The maximum number of concurrent sessions that occurred during this reporting period.
Burst Sessions	The total number of sessions that occurred after the provisioned capacity had been depleted.
Rejected	Total number of rejected sessions on this route during this reporting period.
System Rejected	The total number of rejected sessions by the ISR during this reporting period.

 **Note:**

This data is only available in a day by day breakdown.

Account Rejected	The total number of rejected sessions by this account during this reporting period.
------------------	---

 **Note:**

This data is only available in a day by day breakdown.

Column	Description
Route Rejected	The total number of rejected sessions by this route during this reporting period.
Recorded	Total number of recorded sessions on this route during this reporting period.
Percent Recording Rejected	Total number of sessions rejected during this reporting period because of the route's percent to record setting.

 **Note:**

This data is only available in a day by day breakdown.

 **Note:**

This data is only available in a day by day breakdown.

After you have generated a usage report, you can click on the details icon for a specific route within the report to view a day by day breakdown of the statistics.

Detailed Stats for Route '%'									
Date	Total Sessions	Peak Sessions	Burst Sessions	Rejected	System Rejected	Account Rejected	Route Rejected	Percent Recording Rejected	Recorded
2016-11-30	55	5	0	0	0	0	0	0	55
To	%	24	6	55	5	0	0	55	

## Billing Reports

Billing Reports show information about calls that use the routes configured on your ISR. Billing Reports include:

- Route used for calls
- Number of sessions provisioned on the route
- Number of provisioned burst sessions on the route
- Total number of calls initiated using the route
- Number of calls made during peak time on the route
- Number of calls that used burst sessions on the route
- Number of calls rejected on the route



You can filter the call data by month or by date range, and select a single or multiple routes to display in the report. You can use this information for billing purposes as required.

## Generating a Billing Report

To generate a Billing Report:

1. After logging into the ISR Dashboard, click **Build a Report** on the Home Page (or **Reports** on the main menu bar). The Reports page displays.

The screenshot shows the 'Reports' page in the ISR Dashboard. The navigation bar includes 'Recordings', 'Reports', 'Settings', and 'Admin'. The 'Reports' section is active. Below the navigation bar, there are two steps: 'STEP 1 (set filters)' and 'STEP 2 (select report type)'. In STEP 1, there is a 'Search Date' section with radio buttons for 'By Month' (selected) and 'By Range'. A dropdown menu shows '09/2017'. Below this is a 'Select Route' section with a dropdown menu showing 'To - %'. In STEP 2, there are two buttons: 'Generate Usage Report' and 'Generate Billing Report'.

2. **Search Date**—Select whether you want to generate a report by the month or by date range.

## Generating a Report by Month

To generate a report by month:

1. Select **By Month**.
2. In the drop-down box, select the month for which you want to generate the report. Valid values are dependent on the dates for calls stored in the ISR database.

## Generating a Report by Range

To generate a report by range:

1. Select **By Range**. The **From Date** and **To Date** fields display.
2. **From Date**—Click the cursor in the text box or click the Calendar icon to display the calendar.
3. Click the date from where you want to begin to include the report data. Use the arrow keys in the calendar to change months.
4. **To Date**—Click the cursor in the text box or click the Calendar icon to display the calendar.
5. Click the date from where you want to end the inclusion of the report data. Use the arrow keys in the calendar to change months.

## Selecting a Route

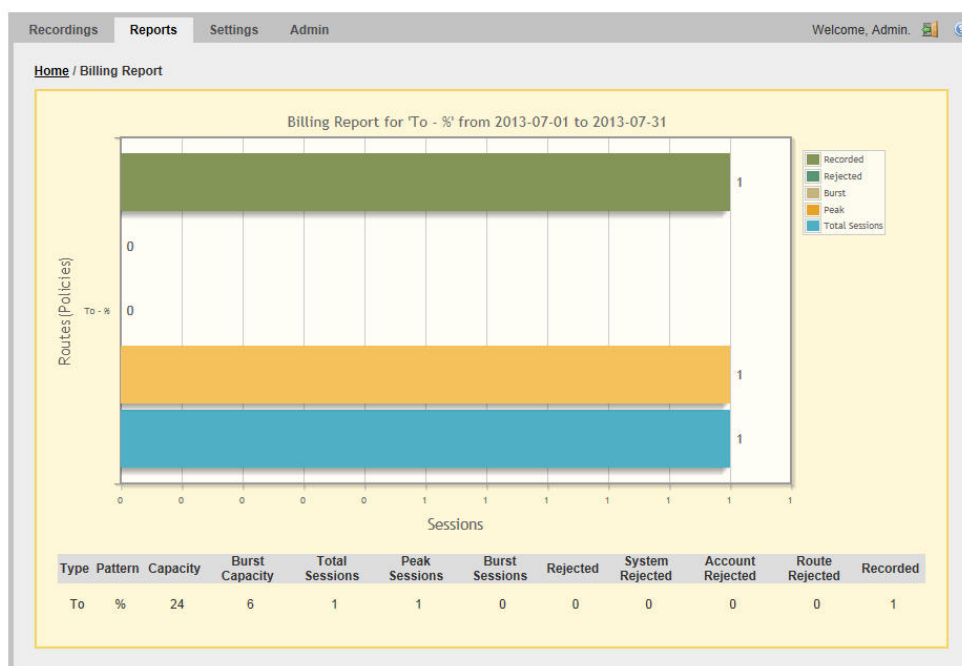
To select a route:

1. **Select Route**—Select a route or routes to include in the report. Valid values are dependent on the routes currently configured in the ISR database.

**Note:**

To select multiple routes, click on a route in the selection box, press and hold the <Ctrl> key, and select additional routes.

2. Click **Billing Reports**. The **Generate Report** button displays.
3. Click **Generate Report** to generate the Billing Report. The following report displays.



The Billing Report displays the information in bar graph format at the top of the page, and in data format at the bottom of the page.

## Billing Report Bar Graph Descriptions

The following table identifies the information in the bar graph section of the report.

### Billing Report Bar Graph Descriptions

Graph Information	Description
Routes (Policies)	Indicates the route(s) selected for this report.
Sessions	Indicates the number of sessions handled by the route.
Recorded	Indicates total number of recorded sessions on the route during the reported period.
Rejected	Indicates total number of rejected sessions on the route during the reporting period.
Burst	Indicates total number of burst sessions on the route during the reporting period. Burst sessions are sessions handled by the Burst Ports.
Peak	Indicates maximum number of simultaneous sessions on the route during the reporting period.

Graph Information	Description
Total Calls	Indicates total number of sessions on the route during the reporting period.

The following table describes each column in the data format section of the report.

#### Billing Report Data Format Descriptions

Column	Description
Type	The type of route policy (i.e., To, From, or To/From).
Pattern	The route pattern that the RSS looks for when searching for a route policy.
Capacity	Total concurrent sessions allocated to the route.
Burst Capacity	Number of concurrent sessions available for call recording when the provisioned capacity has been depleted.
Total Sessions	The total number of sessions for this reporting period.
Peak Sessions	The maximum number of concurrent sessions that occurred during this reporting period.
Burst Sessions	The total number of sessions that occurred after the provisioned capacity had been depleted.
Rejected	Total number of rejected sessions on this route during this reporting period.
System Rejected	The total number of rejected sessions by the ISR during this reporting period.
Account Rejected	The total number of rejected sessions by this account during this reporting period.
Route Rejected	The total number of rejected sessions by this route during this reporting period.
Recorded	Total number of recorded sessions on this route during this reporting period.
Percent Recording Rejected	Total number of sessions rejected during this reporting period because of the route's percent to record setting.

 **Note:**

This data is only available in a day by day breakdown.