



inContact®

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**UPTIVITY SIP SURVEY  
GUIDE, V5.6**

April 2015

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# UPTIVITY SIP SURVEY GUIDE, V5.6

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About inContact: inContact (NASDAQ: [SAAS](#)) is the cloud contact center software leader, helping organizations around the globe create high quality customer experiences with a complete workforce optimization portfolio (WFO). **Uptivity WFO** is part of the inContact portfolio and is a comprehensive WFO solution offering a powerful choice of deployment options. The portfolio also includes the WFO Suite powered by Verint®, ECHO™ Customer Feedback Survey, inView™ Performance Dashboard.

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# Introduction

## Audience

This document is written for supervisors, managers and administrators at organizations that use Uptivity Survey in VoIP/SIP environments. It also provides information for installation and support engineers at both inContact and our partner organizations who work with installing Uptivity Survey. Readers should have a basic level of familiarity with general networking, usage of a PC and its peripherals, the Windows operating system, their telephony environment, Uptivity Discover WFO, and survey theory.

## Goals

The goal of this document is to provide knowledge, reference, and procedural information necessary for you to manage and use Uptivity Survey. The information is presented in the following order:

- Overview of and requirements for Uptivity Survey
- Installation and configuration of Uptivity Survey
- Survey administration and management
- Survey reporting

## Assumptions

This document assumes that you and your Uptivity Survey team have deployed Survey (and Uptivity Discover recording if applicable) and confirmed that the software is working correctly.

## Need-to-Knows

Uptivity Survey is managed from the Discover Web Portal.

Discover WFO allows administrators to customize field names and terminology in the Web Portal to fit your unique environment. Therefore, screen examples and field names used in this manual may differ from those seen in your implementation.

Tasks described in this manual may be limited by permissions. If you need to perform a task and are unable to do so, see your supervisor or Discover WFO administrator.

## Introduction

Several Discover WFO features use menus and other windows that may be considered as “pop-ups” by some browsers. inContact recommends that you configure your browser to allow pop-ups for the Discover site.

Discover WFO supports standard Windows methods for selecting multiple items in a list: press and hold the Shift key while clicking to select consecutive items or press and hold the CTRL key while clicking to select non-consecutive items.

In some cases, Discover WFO provides more than one way to accomplish a task or access a feature. The procedures in this manual explain the primary method, but also note the **Alternative** where applicable.

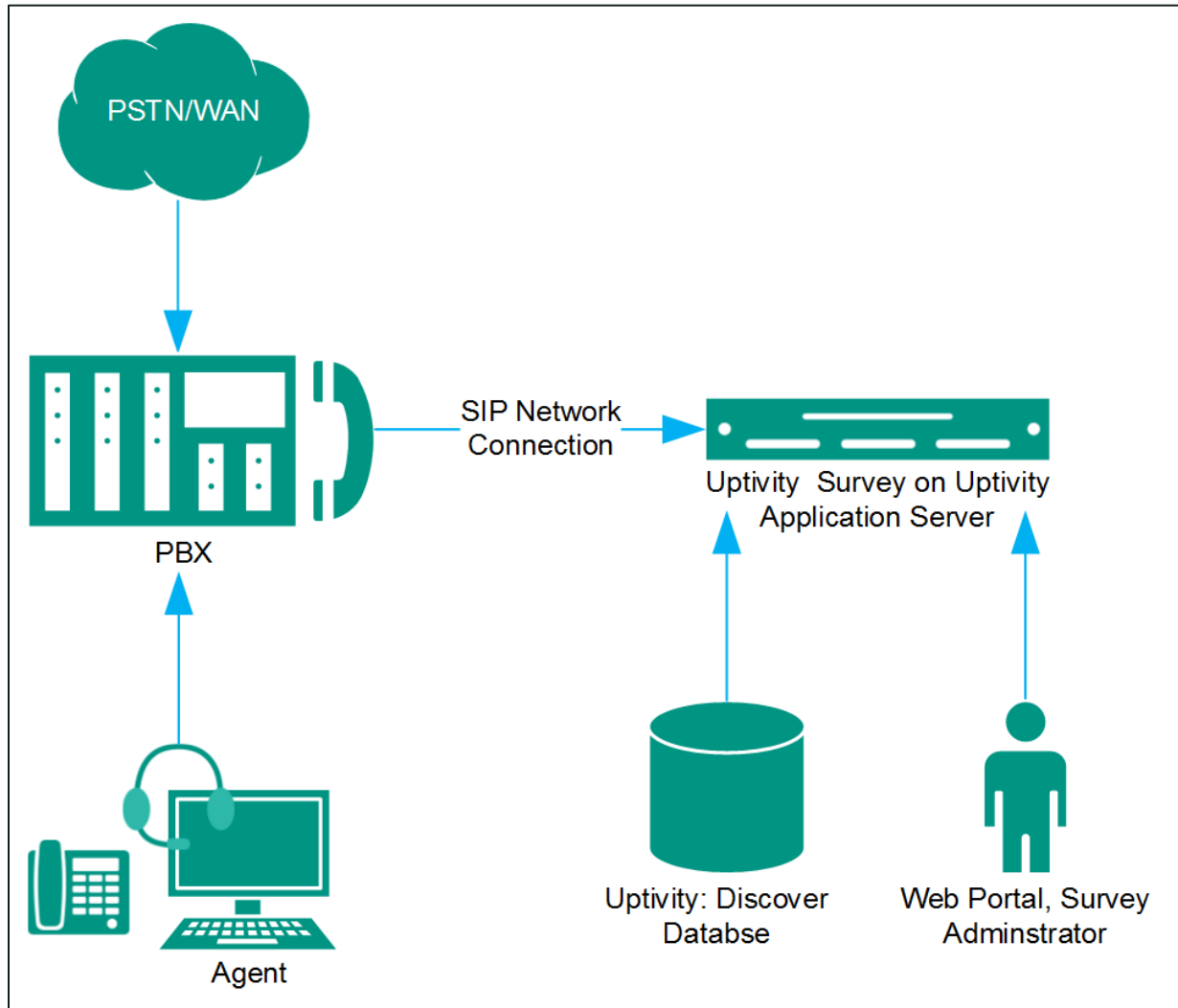
## What's New in this Version

- Avaya (Nortel) CS1000 SIP trunks using Avaya Session Manager v6.3 are now supported.



# Product Technical Overview

This diagram illustrates the Uptivity Surveys components and interactions. The accompanying table provides additional information about the components.



Component	Function
<p><b>Callers via PSTN or Agents</b></p>	<p>Survey can be configured to handle calls two ways:</p> <ul style="list-style-type: none"> <li>• A telephone number can be set up and provided to the public. Callers dial the number, and the PBX directs the call to the survey engine.</li> <li>• Agents can transfer callers to the survey engine via the PBX.</li> </ul>
<p><b>PBX</b></p>	<p>A unique DNIS is created on the PBX for each survey. The PBX transfers calls from agents or toll-free numbers to the appropriate DNIS and survey.</p> <p>For each call, the PBX can send the survey engine the:</p> <ul style="list-style-type: none"> <li>• DNIS</li> <li>• Caller number or Agent/Extension number as an ANI</li> </ul>
<p><b>Uptivity Survey Server</b></p>	<p>Survey consists of the survey engine that executes the survey forms and audio files, records respondent input and call information to the database, and records respondent voice comments to WAV files.</p> <p>The directories for the survey form, audio prompts, and verbal response files are located on this machine in most installations, although they can be located on a different machine.</p> <p>Survey and Discover can be hosted by the same machine or separate machines. Surveys can also be deployed without Discover call recording.</p>
<p><b>Discover Web Portal</b></p>	<p>Administrators, system administrators, and managers use the Web Portal to:</p> <ul style="list-style-type: none"> <li>• Create and manage survey forms.</li> <li>• Configure and manage the server and users' permissions.</li> <li>• Review survey results, reports, and respondents' audio responses.</li> </ul>
<p><b>Discover Database</b></p>	<p>Call information and respondent input and responses are recorded in this database as survey records. Reports are generated from these records.</p>

# Requirements

## PBX

### VoIP/SIP-Supported PBXs

Uptivity Survey requires that calls be directed to the application via a SIP trunk. These PBXs are supported:

- Cisco Unified Communications Manager (UCM) 9.1
- Avaya Communication Manager (CM) 5.2 - 6.x
- Asterisk 11.5
- ShoreTel ShoreWare 14.1
- Avaya Session Manager 6.x

Earlier versions of these PBX environments may be supported. Contact your Uptivity WFO Sales Engineer for more information.

### Hardware, Software, and Licensing

Hardware and software requirements vary by PBX. Some PBXs require licensing for SIP endpoints. You will need to work with your PBX vendor representative and Uptivity Sales Engineer to determine licensing needs.

## Uptivity

Uptivity Survey can be deployed with Uptivity Discover on the same server, on a separate server, or as a standalone product (i.e., no call recording). See *Customer Site Requirements for Uptivity Discover WFO* for additional information.

### Hardware

Hardware requirements vary depending on system configurations and usage requirements. Specifications are determined by the Uptivity Sales Engineering team during the sales process.

### Software

This software is required:

- Uptivity Survey, v5.6

## Requirements

- Uptivity Discover, v5.6
- Licensing

Contact your Uptivity WFO representative for licensing information.

## Performance Considerations

### Performance Guidelines

The following are general performance guidelines for this product. For more information, see [Survey Call Linking](#).

- Multiple locations or PBXs can use the same survey server, just as multiple locations can use the same recording server. A SIP link will need to be configured for each location or PBX. For details, see [Configure VoIP/SIP Endpoints](#) and/or [Appendix: PBX Configuration Examples](#).
- A dedicated survey server can safely handle 250 SIP channels.
- One survey channel should be considered the same as one concurrent recording when calculating server performance and capacity needs. The number of survey channels needed varies based on length of survey, acceptance rate, caller engagement, whether callers leave audio messages, etc.

### Beep Tone

The SIP Surveys software does not play a beep tone at the end of prompt audio files. Questions should include verbal instructions to indicate when the caller should begin speaking. For example: "...Press the pound sign to end the recording. Begin speaking now."

Uptivity Survey for TDM trunks does play a beep tone at the end of Collect Customer Information questions and before the caller starts speaking. If you are moving from TDM to SIP Surveys, you will need to review your existing surveys. Any Collect Customer Information and Collect Digits questions that mention the beep tone will require new audio files that provide verbal instructions. Replacing the audio files assures that the survey forms can continue to be used and that reporting is not affected.

### Survey Call Linking

This feature is only supported with:

- Cisco UCM and a SIP trunk (inContact recommends this option rather than TAPI for greater reliability)

- Cisco UCM with TAPI for CTI data and a SIP trunk
- Avaya CM and a SIP trunk

The Survey server and the recording server must be in the same time zone in order for call linking to work. If multiple locations or PBXs transfer calls to one Survey server, call linking:

- Will work with Avaya SIP, Cisco SIP, and Cisco TAPI SIP.
- Will NOT work if call recording is being done on two different Discover servers and Survey is running on only one of those servers.

Survey call linking typically involves matching the ANI (CallerID) of the call recording with the ANI for the completed survey. In some telephony environments and configurations, the ANI in the call recording database table can be four digits, and the ANI in the surveys database table can be one of several different values.

For example, this behavior is known to occur with some Avaya configurations. Avaya Communication Manager's Public Unknown Numbering setting can affect how the survey record ANI appears:

- If the setting is not configured, the ANI shows up as "anonymous" (see Figure 1).
- If the setting is configured without a CPN Prefix, the ANI in the recordings table shows as a four-digit extension number. This is the same way it appears in the recordings table (see Figure 2).
- If the setting is configured with a CPN Prefix, the ANI in the surveys table shows as the prefix plus the four-digit extension number.

## Requirements

	id	survey_id	survey_date	duration	dnis	ani	ip_address	recording_id	survey_source
524	524	73	2013-12-18 12:43:11.000	12	4202	16145557009		6594	ivr
525	525	74	2013-12-18 12:44:55.000	17	4202	16145557009		6596	ivr
526	526	74	2013-12-18 12:45:27.000	16	4202	16145557009		6597	ivr
527	527	74	2013-12-18 12:45:54.000	17	4202	16145557009		6598	ivr
528	528	75	2014-01-07 11:07:22.670	4	4203	16145557009		6648	ivr
529	529	75	2014-01-07 11:08:52.057	12	4203	16145557009		6650	ivr
530	530	75	2014-02-10 08:57:43.697	16	4203	16145557011		NULL	ivr
531	531	75	2014-02-10 08:59:54.277	51	4203	16145557011		NULL	ivr
532	532	75	2014-02-10 09:03:49.143	14	4203	16145557011		NULL	ivr
533	533	68	2014-03-07 16:09:51.490	29	4201	16145557011		8583	ivr
534	534	68	2014-03-07 16:30:49.467	17	4201	16145557011		NULL	ivr
535	535	68	2014-03-07 16:31:42.467	14	4201	16145557009		NULL	ivr
536	536	68	2014-03-10 15:23:19.100	11	4201	16145557011		NULL	ivr
537	537	68	2014-03-10 15:25:55.887	14	4201	16145557009		NULL	ivr
538	538	68	2014-03-10 15:34:47.310	8	4201	anonymous		NULL	ivr
539	539	68	2014-03-10 15:36:16.253	9	4201	anonymous		NULL	ivr
540	540	68	2014-03-10 15:36:53.540	12	4201	anonymous		NULL	ivr
541	541	68	2014-03-10 15:54:41.747	8	4201	7011		8604	ivr
542	542	68	2014-03-10 15:57:09.557	8	4201	7011		8606	ivr

Figure 1

	ident	recording_time	device_id	filename	recording_type	ani	dnis	user
1...	8585	1394209800	7009	F:\CallCopy\Archive\20140307\7009\7009-16-30-00.csa	S	7009	7011	
1...	8586	1394209800	7011	F:\CallCopy\Archive\20140307\7011\7011-16-30-00.csa	S	7009	7011	
1...	8587	1394209842	7011	F:\CallCopy\Archive\20140307\7011\7011-16-30-42.csa	S	7009	7011	
1...	8588	1394209842	7009	F:\CallCopy\Archive\20140307\7009\7009-16-30-42.csa	S	7009	7011	
1...	8589	1394209895	7009	F:\CallCopy\Archive\20140307\7009\7009-16-31-35.csa	S	7011	7009	
1...	8590	1394209895	7011	F:\CallCopy\Archive\20140307\7011\7011-16-31-35.csa	S	7011	7009	
1...	8591	1394464909	7011	F:\CallCopy\Recordings\TSAPI\20140310\7011\7011-...	S	7009	7011	
1...	8592	1394464909	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	7009	7011	
1...	8593	1394464981	7011	F:\CallCopy\Recordings\TSAPI\20140310\7011\7011-...	S	7009	7011	
1...	8594	1394464981	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	7009	7011	
1...	8595	1394465150	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	6145555003	7009	
1...	8596	1394465600	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	6145555003	7009	
1...	8597	1394465650	7011	F:\CallCopy\Recordings\TSAPI\20140310\7011\7011-...	S	7009	7011	
1...	8598	1394465650	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	7009	7011	
1...	8599	1394465678	7011	F:\CallCopy\Recordings\TSAPI\20140310\7011\7011-...	S	7009	7011	
1...	8600	1394465678	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	7009	7011	
1...	8601	1394465773	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	7011	7009	
1...	8602	1394465773	7011	F:\CallCopy\Recordings\TSAPI\20140310\7011\7011-...	S	7011	7009	
1...	8603	1394465807	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	6145555003	7009	
1...	8604	1394466878	7011	F:\CallCopy\Recordings\TSAPI\20140310\7011\7011-...	S	7009	7011	
1...	8605	1394466878	7009	F:\CallCopy\Recordings\TSAPI\20140310\7009\7009-...	S	7009	7011	

Figure 2

Differences in ANI formatting can affect both standard call-survey linking and the post-survey call-survey linking.

# PBX Configuration

See your PBX documentation for specific steps to perform the tasks mentioned in this section.

## Configure VoIP/SIP Endpoints

This section is only for customers who are using VoIP networks and SIP to communicate with the Surveys server.

SIP trunk endpoints must be configured on the PBX to direct calls to the Surveys server.

Below are sample SIP station configurations from an Asterisk PBX:

- type = peer
- host = (server IP address)
- username = (extension)
- secret = (password)
- dtmfmode = rfc2833
- insecure = very
- context = from-sip

[Some of the Customer Guides to Uptivity Discover call recording integrations may contain useful information on SIP trunk configuration.](#)

## Configure DNIS and ANI

The following PBX configurations must be set:

- A unique DNIS for each survey.
- Call routing to direct both direct calls (i.e., 1-800 calls from customers) and forwarded calls to the Survey engine.
- A dial plan to pass the DNIS and the ANI (i.e., the originating caller or the transferring agent's PBX number, either the Agent or the Extension) to the Survey engine.

## Configure Vectors

For most PBX types, vectors are used to direct calls. Vector programming requirements for Uptivity Survey will differ depending on whether the agent transfers the caller to the survey or the caller is automatically transferred when the agent disconnects the call.

If callers are automatically transferred to the survey when the agent disconnects, the vector programming should include a variable to count transfers and cause the call to disconnect after the survey ends. Otherwise, a looping scenario can occur in which the call is redirected to the ACD, which then redirects it to the survey, causing a new survey to begin.

For an example of vector programming in an Avaya environment, see



# Install and Configure Uptivity Survey

This section explains the tasks for the Uptivity team installing Survey. Survey can be deployed:

- On the same machine as Discover – Only the instructions in this section are needed.
- On a separate machine from Discover –
  - Complete the instructions in this section.
  - Install the Discover Logger service (Logger.exe) and CometDaemon.
  - On the Discover Web Portal machine, create a new server node and CometDaemon entry for the Survey machine.
  - Add the Survey machine and both Logger and Survey to the Service Manager in the Web Portal.
- Without call recording – Complete the Discover installation, skipping tasks for call recording.

For related information, see the *Uptivity Discover Installation Guide* and *Uptivity Discover Administration Manual*.

## Windows Server Tasks

Perform these tasks on the Windows server hosting Uptivity Survey.

### Install the Survey Server Software

Uptivity Survey is included with the base Discover installation package. Run the installer and select Base Installation. For more information, see the appropriate *Uptivity Discover Installation Guide*.

### Register Survey as a Windows Service

To ensure normal survey operations, the Survey engine should be registered as a service on the Windows server. Open a Command Prompt window on the Windows server, change to the Recorder\SurveyIvrFx directory and run the following command:

```
cc_SurveyIvrFx.exe -svcinst -autostart
```

If successful, the Command Prompt will display the message "Service Installed."

## Install and Configure Uptivity Survey

### Configure the Survey INI File

The Survey INI file (cc\_SurveyIvrFx.ini) should reside in the same folder as the executable, which is typically located in the Recorder directory. If the file is not present after installation, you will need to create it. The INI filename should always match the name of the executable it configures.

Survey INI settings and their default values (if applicable) are shown on the left in this table, with additional explanation of the settings detailed on the right.

[settings]	
ipaddress=127.0.0.1	IP address of the server running the SurveyIvrFX process.
audiopromptdirectory=	Path to audio prompt recordings. For details, see <a href="#">Specify Survey Audio Directory Settings</a> .
audiorecordingdirectory=	Path to audio response recordings. For details, see <a href="#">Specify Survey Audio Directory Settings</a> .
modules=	Comma-separated list of modules the IVR will load. This is used with survey linking. For Cisco TAPI, enter CiscoTapi. For Avaya or Cisco SIP trunk, this value should be blank. To configure a module, add the corresponding section seen below.

The following settings are required for **any** configuration.

[ivr]	
trunktype=SIP	cc_SurveyIvrFx currently only accepts SIP for the trunk type.
maximumdigitlengthforaprompt=1	Maximum number of digits the survey will expect to collect. Optional setting, used when you want to be able to have answers that are more than one digit.
repeatquestionafterinvalid=N	Used to repeat the question when an invalid digit is pressed. Requires an Invalid_Response file. Possible values: Y or N.

## Install and Configure Uptivity Survey

digittimeout=3000	Length of time Surveys waits if the respondent has to enter digits. Possible values: an integer representing milliseconds (i.e., 3000 is 3 seconds). Optional setting, used when you want to increase the time the survey waits to collect digits on the collect digit survey type.
maxpromptbeforetimeout=3	Number of times the prompt will repeat before timing out. Default setting is 3. Values of 0 or 1 both result in the prompt being played once.
temprecordinglocation=c:\temp_recordings	Temporary storage location while recordings wait to be transcoded.
invalidresponseprompt=	File location for the recorded prompt to be played when caller enters an invalid response, for example C:\Prompts\invalidresponse.wav.
seriouserrorprompt=	File location for the recorded prompt to be played when a serious error occurs, for example C:\Prompts\error.wav. The respondent hears the message but administrators are not informed of this error. Serious errors can occur for the following reasons: <ul style="list-style-type: none"> <li>• Survey does not have a valid next question</li> <li>• Survey can't determine what the last question played was</li> <li>• Survey is trying to play a TTS (text to speech) message and can't get the TTS audio to play</li> <li>• Survey encounters an error trying to record a customer response to a file or</li> <li>• There is an error determining which survey to use (e.g. the DNIS used to call the survey is not associated to any surveys).</li> </ul>
repeatquestiondigit=	Digit or key that should be pressed by the customer to repeat a question.

## Install and Configure Uptivity Survey

[trunk]	
channels=0	Number of SIP channels.
localPort=5060	Local SIP port. Note: the Discover Core module also uses port 5060. If Survey and Core are on the same server, Survey must be configured to use a different port.
remotePort=5060	PBX port for SIP. Note: the Discover Core module also uses port 5060 for some integrations, such as Cisco TAPI. Check the SIP trunks on the PBX for port usage.
basertpport=36000	Initial RTP port for audio.
localaddr=	Resolving IP address for the server running Surveys (cannot be 127.0.0.1).
remoteaddr=	IP address(es) of the PBX(s) from which SIP traffic is coming. For multiple PBXs, enter each address separated by a comma. For Avaya Session Manager, enter the IP address of the Session Manager followed by the IP of the PBX (separated by a comma).
transporttype=UDP	Required setting. <ul style="list-style-type: none"> <li>• Cisco can use either UDP or TCP</li> <li>• Avaya SIP requires TCP</li> <li>• ShoreTel and Asterisk use UDP</li> <li>• Avaya Session Manager requires TcpSharedPort</li> </ul>
ttscodec=0	Text-to-Speech setting. Leave at default value.
ttschunksize=160	Text-to-Speech setting. Leave at default value.
ttschunkduration=20	Text-to-Speech setting. Leave at default value.
filecodec=0	Setting for audio prompt playback. Leave at default value.
filechunksize=160	Setting for audio prompt playback. Leave at default value.
filechunkduration=20	Setting for audio prompt playback. Leave at default value.

## Web Portal Tasks

### Add the Application to the Discover Service Manager

To add the service to the Service Manager:

1. Click the **Administration** tab in the Discover Web Portal and expand **Tools** in the left navigation menu.
2. Click **Service Manager**.
3. Expand the Server Node and click **Add Application**.
4. Under **Application**, enter the name of the service: **cc\_SurveyIvrFx.exe**.
5. Select **Yes** from the drop-down list under **Auto-Restart** and then click **Save**.

### Enable Survey Score Column in Call Lists

This task can be performed as part of the Survey installation or by each user according to their preferences.

1. Click the **Web Player** tab in the Discover Web Portal and then click the **Call List** sub-tab.
2. Click **Settings** in the upper-right corner.
3. Under **Other Columns**, select the box for **Survey Score**.
4. Click **Save**.

## Configure Survey Linking (Optional)

This functionality is available only in specific environments. For details, see [Survey Call Linking](#).

You will need to obtain the correct script for the customer's environment from Uptivity Survey Development prior to configuring this feature.

### Install the Survey Linking Script

1. Browse to the directory containing cc\_SurveyIvrFx.exe, typically C:\Program Files (x86)\CallCopy\Recorder\SurveyIvrFx.
2. Create a **Scripts** folder in that directory.
3. Copy the script provided by Uptivity Survey Development into the folder.

## Install and Configure Uptivity Survey

### Configure the Survey INI File for Survey Linking

These settings are required for all environments that use survey linking. Browse to "\\Program Files (x86)\CallCopy\Recorder\SurveyIvrFx" and open cc\_surveyIvrFx.ini. For more information on this file, see [Configure the Survey INI File](#).

Survey INI settings for survey linking and their default values (if applicable) are shown on the left in this table, with additional explanation of the settings detailed on the right.

[scripting]	
folder=scripts	The folder local to the executable in which the script(s) are located.
eventfilter=	Comma separated list of events to filter out. <list> := <item>, <item>, <item>, ..., <item> <item> := <type>   <type>-<reason> <type> := numeric type code <reason> := numeric reason code specific to integrations The below example would filter out all events of type 1, and events that have type 2 with a reason of 8: <b>eventfilter=1,2-8</b>
maxprocesslength=60000	The maximum amount of time the event process thread is allowed to run before it is terminated.
recordingmatchcolumn=	This value must be match the value from the script. When scripts match completed surveys to a recording via a match column, this is how the match column is configured. Possible values could include UCID (e.g., <b>user8</b> ) or Agent ID (e.g., <b>agent_number</b> ). For <b>Avaya SIP</b> , to use the the agent's number and not the caller's ANI to link surveys to calls, <b>device_id</b> is the preferred value.

Only use the following settings when you are configuring survey linking in a **Cisco TAPI** environment.

<b>[CiscoTapi]</b>	
initialLineMessageDelay=15	Amount of time (in seconds) to delay before processing line messages from TAPI.
lineMonitorFrequency=0	How frequently (in seconds) to run the line monitor job.
lineTimeout=900	Amount of time that passes (in seconds) before Surveys considers a line to have timed out.
probelinefrequency=0	How frequently (in seconds) Surveys probes the line caps to see if lines are valid.
tapieventtimeout=0	Determines whether or not Surveys hard fails on timeout rather than just resetting TAPI. 0 to disable, 1 to enable.
dumpLinestates=F	Determines whether or not to retain the line states during a line monitor call. T to remove, F to retain.
closedLineCheck=30	How often Surveys checks for closed lines (in seconds).
reopenattempt=0	How often Surveys allows between line re-open attempts (in seconds).
alertonlineopenfailure=F	Alerts when there is a failure to open a line. T to alert, F to ignore.
lineopendelay=0	Delay after opening a line (in seconds).

## Install and Configure Uptivity Survey

### Post-Survey Linker (Optional)

Post-Survey Linker is an additional means of linking call records and surveys. Linking is done after the call is recorded and the survey is completed. It can be used if:

- Linking was not performed when the Survey service was first used.
- The Survey service could not complete the linking because the process was interrupted while the survey was being done.
- The call recording record was not written to the Discover database when the survey was completed. The Survey engine has to link the agent to the survey. Survey always adds the agent to the survey record. If the recording is not yet written to the database, the Survey engine cannot link the records.

Post-Survey Linker will attempt to link all surveys in the database that have the required data values. The time for this initial processing depends on the number of surveys in the database. The performance impact is minimal and can be controlled by INI file settings. Once the Linker has checked a survey, it will not check the survey again.

Linker should be used as a supplemental, not primary, means of linking. The Survey service uses CTI data that assures most surveys/calls will be linked accurately. That CTI data is not available to the Linker service. The Linker service is also slower than the Survey service. Actual performance is system dependent.

No conflicts will occur if both survey linking and Post-Survey Linker are run on the same machine. Linker does not try to link surveys that are already linked to a recording.

For Post-Survey Linker to work:

- Customers must understand the CTI data their ACD/PBX provides for the call and survey records. Not all CTI integrations provide the necessary data.
- The call recording script must be updated to remove all hyphens from the ANI values.

Post-Survey Linker does not have to run on the same server as the Survey engine but should for ease of administration.



## Configure the Post-Survey Linker INI File

Post-Survey Linker initialization settings are stored in the PostSurveyLinker.ini file. These settings **must** be configured for the proper operation of the service. The file is located in C:\Program Files (x86)\CallCopy\Recorder\PostSurveyLinker.

You must configure at least one linking method. You can use all methods, and you can use multiple instances of a method. The Linker uses the first method that matches a survey/call records' data. Therefore, methods should be entered in the INI file from most preferred to least preferred.

These methods can be used:

- **SurveyStartTimeAndMatchColumnToSurveyANI:** Matches survey start time/call record end time and a configured Match column from the Recordings table. It must match both settings to link. For example, if the survey starts five seconds after the call end and the threshold is set to 10, but the matchColumn value doesn't produce a match, the survey and call are not linked. The opposite is also true: if the column matches but the time threshold is not valid, no linking will occur. The settings required for this method are:
  - recordingTimeTolerance=10
  - matchColumn=
- **SurveyStartTimeAndAgentID:** Matches survey start time/call record end time and Agent ID. The setting required for this method is:
  - recordingTimeTolerance=10

The suggested time tolerance is 10 seconds. Post-Survey Linker will search plus-or-minus by this value. For example, if the tolerance is set to 10 seconds, Linker will search for surveys to link that have start times within ten seconds before or ten seconds after the end of the call. The wider the range, the less accurate the results may be. Also, if the server running the Surveys module is not time-synched to the server running Discover, or is in another time zone entirely, linking will be difficult if not impossible. The match column can be any column from the call recordings table. The suggested column is Device ID or ANI.

## Install and Configure Uptivity Survey

Post-Survey Linker INI settings and their default values (if applicable) are shown on the left in this table, with additional explanation of the settings detailed on the right.

[postSurveyLinker]	
maxSurveysReturned=	Limits the number of records queried from the database. Looks for oldest records first and tracks the last record checked. This check persists through any shutdowns. Value is stored in a local file which can be deleted if you want to re-run Post-Survey Linker.
Period=	Frequency (in minutes) that Linker checks for survey records.
linkMethods=	Number of link method entries in the ini file. If this value is less than the number of configured methods, some methods will not be used. For example, if this value is two and three methods are configured, only the first two will be used.
[linkMethod_0]	
type=	Possible value: one of the linking methods
	Method settings.
[linkMethod_X]	
type=	Possible value: one of the linking methods
	Method settings.

### Register Post-Survey Linker as a Windows Service

To ensure normal operations, the Post-Survey Linker should be registered as a service on the Windows server:

Open a Command Prompt window on the Windows server. Change to the CallCopy Recorder\PostSurveyLinker directory and run the following command:

```
postSurveyLinker.exe -svcinstant -autostart
```

If successful, the Command Prompt window will display the message "Service Installed."

## Add the Application to the Discover Service Manager

To add the Post-Survey Linker to the Service Manager:

1. Click the **Administration** tab in the Discover Web Portal and expand **Tools** in the left navigation menu.
2. Click **Service Manager**.
3. Expand the Server Node and click **Add Application**.
4. Under **Application**, enter the name of the service: **postSurveyLinker.exe**.
5. Select **Yes** from the drop-down list under **Auto-Restart** and then click **Save**.

## Security

### Permissions

You must be granted permissions to work with surveys. If you need to work with Survey and are unable to do so, consult your Discover application administrator.

Group permissions are not enforced by Survey. A user who has access to Survey reports can see survey results for any agent.

The following components need Windows-level permissions:

- **IIS account running Discover Web Portal:** Read/Write permissions to the Audio Prompt Upload Directory and the Audio Recording Directory. If Survey is installed on a **separate server** from Web Portal, the IIS account must be a service account with explicit read/write access to the prompts and recordings directories on the Survey server.
- **Survey Module:** Read permission to the Audio Prompt Upload Directory. Write permission to the Audio Recording Directory.
- **Reporting Server:** Read permission to the Audio Recording Directory if respondents are allowed to leave audio responses to questions.

The Uptivity Survey installation wizard establishes the needed permissions for the database and other Uptivity Discover modules.

### Auditing

Uptivity Survey relies on Discover's auditing function. No specific Survey-related actions or data are tracked.

## Install and Configure Uptivity Survey

### **Encryption**

The audio prompt and audio response recordings are not encrypted. Typically, surveys should not provide respondents with sensitive information or ask them to provide sensitive information.

### **Archiving**

Audio files used and created by Uptivity Survey are not archived.


# Uptivity Survey Administration



## Manage DNIS Values

A DNIS is a unique identifier that the PBX sends to Uptivity Survey. The DNIS allows specific surveys to be associated with specific dialed numbers (DNIS). Using this methodology, one Survey engine can support an infinite number of unique surveys, each playing their own messages and asking for their own responses.

### Configure DNIS Values

To add DNIS values:

1. Click the **Administration** tab in the Discover Web Portal and then click the **Add-Ons** sub-tab.
2. Expand **Surveys** in the left navigation menu and click **DNIS List**.
3. Click **Add**.
4. On the new line, enter values under **DNIS** and **Comment**. The comment can be a client name or some explanation of how the DNIS will be used in the survey work.
5. Click the Save  icon.

To edit or delete DNIS values, follow the same procedure but click the Edit  icon or the Delete  icon at step 3.

### Import Multiple DNIS Values

Multiple DNIS values can be added at one time using a CSV file. For example, all the DNIS values used by your phones can be entered. This action avoids the repetitive work of entering values each time one or more DNIS is needed for a survey. Surveys are not applied to calls received through a DNIS until that DNIS is assigned to a survey form.

Entries in the CSV file must fit this format: DNIS, Comment. Each entry should be on a separate line. A CSV file can be created in Microsoft Excel. Some telephony equipment will export DNIS data as a file.

## Uptivity Survey Administration

To import a CSV file of DNIS values:

1. Click the **Administration** tab in the Discover Web Portal and then click the **Add-Ons** sub-tab.
2. Expand **Surveys** in the left navigation menu and click DNIS **List**.
3. Click **Import**.
4. Browse to the location of the CSV file, select it, and click **OK**.
5. If the first row in the CSV file is NOT a header (i.e., it is a DNIS/Comment value), clear the **File contains a header row** check box.
6. Click **Upload File**. Review the records that are ready for importing. If any of the records are not correct, click **Cancel**, then edit the file and repeat the import. Otherwise, go to step 7.
7. If the records are correct, click **Import**.

## Specify Survey Audio Directory Settings

Survey requires these two directories, and the application must have Create/Write permission for both:

- **Audio Prompt Upload Directory:** This is the location where messages and prompts are stored.
- **Audio Recording Directory:** This is the location where customer feedback recordings are stored.

To specify these directories:

1. Create the directories in the file system (for example, C:\SurveyPrompts). Uptivity Survey does not require specific names for these directories.
2. Click the **Administration** tab in the Discover Web Portal and then click the **Add-Ons** sub-tab.
3. Expand **Surveys** in the left navigation menu and click **Survey Settings**.
4. Enter full path names for both directories.
5. Set the **Survey Audio Format** to SIP and then click **Save**.

## Manage Surveys


Survey Forms Listing									
Import Filter By Status: All									
	Name	Status	DNIS	Attempted Count	Created By	Created On	Last Modified By	Last Modified On	
<a href="#">Edit</a>	FridaySurvey	<input checked="" type="checkbox"/> Active		0	Administrator Administrator	10/5/2012 10:51:18 AM	Administrator Administrator	10/5/2012 10:59:51 AM	
<a href="#">Edit</a>	surveyFor5090	<input type="checkbox"/> Disabled		500	Administrator Administrator	5/9/2012 4:58:28 PM	Administrator Administrator	2/15/2013 5:18:07 PM	
<a href="#">Edit</a>	SurveyFormToDelete	<input checked="" type="checkbox"/> Active	1005,1008	0	Administrator Administrator	9/5/2013 1:26:06 PM	Administrator Administrator	9/5/2013 1:26:46 PM	
<a href="#">Edit</a>	SurveyFormToEdit	<input checked="" type="checkbox"/> Active	1004	0	Administrator Administrator	9/5/2013 1:10:44 PM	Administrator Administrator	9/5/2013 1:24:19 PM	
<a href="#">Edit</a>	Surveyfortoday	In Progress		0	Administrator Administrator	9/18/2012 12:15:50 PM	Administrator Administrator	9/18/2012 12:17:23 PM	
<a href="#">Edit</a>	testAudioFormatsjkt;lkj	<input checked="" type="checkbox"/> Active	1003	0	Administrator Administrator	2/15/2013 3:10:58 PM	Administrator Administrator	2/15/2013 5:18:28 PM	

Pages : 1 of 1 Go

The **Manage Surveys** screen displays a list of surveys in your system, as shown above, and enables you to do the following tasks.

- The default view shows all active surveys in the system. You can alter this view by using the **Filter by Status** drop-down. The choices available are All, Active, Disabled, and In Progress.
- Clicking the **Edit** button to the left of the survey name will launch the **Survey Editor**. For details, see [Create Survey](#).
- To quickly change the status of a survey from Disabled to Active (or vice versa), select/clear the check box in the **Status** column. Survey status can also be changed in the Survey Editor.
- The **Attempted Count** value indicates the number of respondents who have started the survey form.
- The **Import** button can be used to load XML files and use them as Survey Forms. The files must be formatted exactly as those created using the Survey Editor. Custom forms are not supported.

## Create Survey

 Survey auto-saves forms while you are working on them. The **Save Draft** and **Save** options identify any missing required field data.

inContact recommends creating survey questions, responses, and actions on paper before trying to create the survey in Uptivity Survey. Each survey you create should have a unique, descriptive name; inContact recommends that the name also incorporate a version number.

You may also wish to allow for these special circumstances:

- **Invalid Responses:** You can record a WAV file called Invalid\_Response and place it in the Prompts folder in the same directory as the Survey executable. When Surveys is configured with the **Repeat Question After Invalid** setting as **Yes**, this file will play and the question will repeat whenever the caller enters a digit that is not in your list of valid responses. For related information, see [Configure the Survey INI File](#).
- **Question Repeats:** Sometimes callers may simply want to have a question repeated. You can accomplish this by instructing them to enter a digit that is not on your list of valid responses, which will force them into the Invalid Response protocol. Be sure that your recorded Invalid\_Response message takes both scenarios into account so that callers are not confused.

To build your survey in Uptivity Survey:

1. Click the **Surveys** tab in the Discover Web Portal and then click **Create Survey** in the left navigation menu.
2. Enter a **Survey Name** and a **Description** if desired.
3. Enter the **Min Percentage Threshold** and **Max Percentage Threshold**. Any survey whose score is below the minimum percentage is defined as "Negative." Any survey whose score is above the maximum percentage is defined as "Positive." Any score between the minimum and maximum thresholds is reported as "Neutral." These values appear on the Survey Summary and Survey Overview Reports.
4. For **Recording Format**, select **GSM** from the drop-down list. This specifies the format of files produced when the customer records a verbal answer. GSM (a highly-compressed WAV format) is the only supported format is GSM.



For more information on where these recordings are stored, see [Specify Survey Audio Directory Settings](#). A new folder is automatically created for each survey and numbered according to the number of survey forms created (i.e., the tenth survey is placed in a folder numbered '10').

- In the **Available DNIS** field, select the number(s) from which calls will be directed to this survey. Click the right-facing arrow → to move the number to the Attached **DNIS** field or the left-facing arrow ← to remove numbers from the **Attached DNIS** field.

Survey content is organized by section, question and response. A survey must have at least one section, and all questions can be placed in that section. Using multiple sections can help you organize longer surveys. This image shows the section, question, and response portion of the Survey Editor.

The screenshot shows the 'Survey Form' editor interface. At the top, there are navigation buttons (up, down, delete) and a 'Section Title' field containing 'Test Section 1'. Below this is a 'Question #1' section with its own navigation buttons and a large empty text area. Underneath the question area are several configuration options: 'Default Next Question' (a dropdown menu), 'Question Type' (set to 'Present Question and Wait for Result'), 'Audio File' (with an 'Upload Audio File' button), 'Response Type' (set to 'Horizontal Radio Buttons'), and 'Possible Points' (set to 0). At the bottom, there are checkboxes for 'Mark Survey Complete' (unchecked) and 'Show in Reporting' (checked).

## Add a Section

To create or add a section in the **Survey Editor**:

- Click **Add New Section**.
- Enter a **Section Title**.

Use the buttons to move sections and questions up or down or to delete them.

## Add a Question

Follow these steps to add a question in the **Survey Editor**:


1. Click **Add New Question**.
2. Enter the text of the question in the text box. Your entry should be the text within the question's recorded audio file for consistency and future troubleshooting.
3. **Default Next Question** allows you to specify the next question that will be presented in the survey.
4. Select a **Question Type**. For additional information about question types and corresponding response options, see [Question Types](#).
5. Click **Upload Audio File** and navigate to the file with the question. This is the location of the recording audio file that will be stored in the Audio Prompt Upload Directory. These files can be copied to the server location manually if you have access to the server's drive array. The supported formats are:
  - WAV container encoded in GSM, u-Law or PCM16
  - VOX 8k/6k
  - AU container encoded in u-Law
  - CSA mono/stereo

During upload to the site, your files will be converted as follows:

Survey Type	SIP-Based
Bit rate	64kbps
Audio sample size	8-bit
Channels	1 (mono)
Audio sample rate	8kHz (G.711)
Audio format	CCITT u-Law

6. **Response Type** is not used by audio-based surveys. This is reserved for future use with web browser-based surveys.

7. (Optional) Select the **Mark Survey Complete** check box. You can require responses for certain questions for the data to be presented within reporting. For example, if you have a 5 question survey, and completing Question 4 marks the survey as "complete," the customer could hang up and not complete Question 5, yet the survey would still display the data within reporting. In this scenario, question 5 would be scored as 0 out of the possible points for Question 5. Any survey not reaching Question 4 would be marked as "incomplete."
8. (Optional) Clear the **Show in Reporting** check box. Use this option if you do not want this question included within the reporting values. Since the system considers greetings, closings, or transitions without responses to be "questions", it might be appropriate to clear this check box for these items. Otherwise, this question will display with no data responses.

 **Possible Points** is auto-calculated based on the highest response defined on the list of responses to questions of the type **Present Question and Wait for Result**.

9. Select from the buttons at the top of the **Survey Editor**:
  - **Export:** Exports the survey form as an XML file.
  - **Delete:** Removes in-progress forms while you're working on them. Do *not* delete forms that have been used; disable them using the **Form Manager** instead. For related information, see [Manage Surveys](#).
  - **Save Draft:** saves your form and lists it as "In-Progress" in the **Form Manager**.
  - **Save:** saves and closes the form, after which it will appear in the **Form Manager**.

**Question Types**

Question Type	Used To:	Response Values
Present Question and Wait for Result	<ol style="list-style-type: none"> <li>1. Convey greeting, closing, instructions or other information, and automatically advance after a wait period (defined at the time of installation in the cc_surveyivrFX.ini file)</li> <li>2. Present a question and wait for touch-tone input</li> </ol>	<p><b>Response Text:</b> enter the text of the response</p> <p><b>Point Value</b> (optional)</p> <p><b>DTMF:</b> touch-tone input value for response (e.g. 1 for Yes, 2 for No, etc.); each response must have a unique DTMF value</p> <p><b>Next Question:</b> allows you to direct the survey based on response (e.g. Yes leads to Question 3, No to Question 4)</p>
Collect Customer Information	<p>Allow the customer to leave detailed feedback in the form of a recording. Recording length is bound only by available disk space. Recording continues until customer disconnects or presses "#" as instructed in your question audio file. Voice recordings are playable from within reports, and/or can be accessed from the Audio Recording Directory. For related information, see <a href="#">Beep Tone</a>.</p>	
Collect Digits	<p>Allow the customer to leave a string of numeric values (e.g. transaction number, customer ID) using his/her touch-tone keypad. Survey advances when the caller presses "#" as instructed in your question audio file, or after the wait period (defined at time of installation in the cc_surveyivrFX.ini file)</p>	
End Survey	<p>Convey closing message. Call automatically disconnects after execution of this audio file.</p>	

<p>Threshold Branch</p>	<p>Direct respondents to specific questions based on cumulative score of earlier responses. Requires no audio file. Transparent to caller. Typically not appropriate for the Mark Survey Complete option. An example of this type of question and the associated logic is shown below.</p>	<p>Negative Percentage Threshold: surveys with current percentage below this value are negative (current accumulated points/current total possible points)</p> <p>Positive Percentage Threshold: surveys with current percentage above this value are positive (current accumulated points/current total possible points)</p> <p>Negative Next Question: next question for surveys at negative threshold</p> <p>Neutral Next Question: next question for surveys between thresholds</p> <p>Positive Next Question: next question for surveys at positive threshold</p>
-------------------------	--	--

**Threshold Branch Example**

In this example, the survey is designed so that, if the technician's technical skills were not satisfactory, the caller is asked to leave verbal feedback and the survey ends immediately thereafter (see Figure 1). If the technician's technical skills were satisfactory, the caller is presented with another question prior to the survey's conclusion (see Figure 2).

# Uptivity Survey Administration

Technical Skills		Score: 0 of 5 (0%)
Were you comfortable with your technician's knowledge of the application? Press 1 for yes. Press 2 for no.		
Digits Collected: 2		
Yes	<input type="checkbox"/>	Opts
No	<input checked="" type="checkbox"/>	
Allow verbal feedback if dissatisfied with technical knowledge.		
Digits Collected: 2		
<input type="checkbox"/>		
We're sorry that your experience with our technical support was less than satisfactory. At the tone, please record a detailed voice message regarding how we could have done better. Press the pound or number sign to stop recording.		
<input type="checkbox"/>		
<a href="#">1-110934.wav</a>		
Was your issue resolved within a satisfactory period of time? Press 1 for yes. Press 2 for no.		
Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	

Negative answer, caller asked to leave verbal comments. Final question is not presented.

Figure 1

Technical Skills		Score: 10 of 10 (100%)
Were you comfortable with your technician's knowledge of the application? Press 1 for yes. Press 2 for no.		
Digits Collected: 1		
Yes	<input checked="" type="checkbox"/>	5pts
No	<input type="checkbox"/>	
Allow verbal feedback if dissatisfied with technical knowledge.		
Digits Collected: 1		
<input type="checkbox"/>		
We're sorry that your experience with our technical support was less than satisfactory. At the tone, please record a detailed voice message regarding how we could have done better. Press the pound or number sign to stop recording.		
<input type="checkbox"/>		
Was your issue resolved within a satisfactory period of time? Press 1 for yes. Press 2 for no.		
Digits Collected: 1		
Yes	<input checked="" type="checkbox"/>	5pts
No	<input type="checkbox"/>	
Conclusion		Score: 0 of 0 (N/A)
Thank you for participating in our Post-Support Survey. We appreciate your feedback.		
<input type="checkbox"/>		

Positive Answer leads to presentation of additional question

Figure 2

## Search Attempted Surveys (Form Search)

Search Attempted Surveys
Search

Survey: All

Record ID:

IP Address:

Start Date: 11/25/2013

DNIS:

Agent Name:

End Date: 11/25/2013

ANI:

**No Surveys Found Matching Criteria**

Pages:

Go To Page:  of 1

If you have permission to view surveys, you will also be able to search for surveys which have been offered and wholly or partially completed. You can refine your search based on one or more of the following:

- **Survey:** This is the name of the survey.
- **Start Date:** Click the calendar icon to set the start date for your search period.
- **End Date:** Click the calendar icon to set the end date for your search period.
- **Record ID:** Each attempted survey is assigned a unique identification number by the system. If you know this number, you can search for a specific survey by entering that ID number here.
- **DNIS:** In the **DNIS** field, enter the number(s) attached to the survey.
- **ANI:** To limit your search to surveys delivered to a specific caller, enter the ANI (CallerID) information here. Availability of ANI information is dependent on your telephony system. If the caller is manually transferred to the survey by an agent, the ANI may not reflect the original CallerID.
- **IP Address:** This field is reserved for future functionality.
- **Agent Name:** To limit your search to surveys associated with a specific agent, enter the agent's name here.

To search for surveys:

1. Click the **Surveys** tab in the Discover Web Portal and then click **Form Search**.
2. Enter your desired search criteria.
3. Click **Search**.

# Survey Reports

## Survey Reports Overview

Survey includes a number of pre-built reports, called Printable Reports. You can also use Discover WFO's ad hoc reporting functionality to build reports using Survey data. You must have appropriate permissions for reporting. For more information on permissions, talk to your Discover WFO application administrator or see the "Permissions Definitions" section in the *Uptivity Discover Administration Manual*.

Report	Description	Date Created
Survey Detail	Detailed breakdown of survey responses.	10/22/2013
Survey Detail Summary	Detail Summary of Survey Activity	10/22/2013
Survey Overview	Summary of all survey activity during a date range.	10/22/2013
Survey Summary	Summary of Survey Activity	10/22/2013
Survey Summary by Agent	Survey Summary By Agent	10/22/2013
Survey Summary by Question	Provides a count of each given response to each of the questions in a survey form.	10/22/2013
Survey Summary by Response	Provides a count of each given response to each of the questions in a survey form given that one question has been provided with a particular response. This allows you to see how different segments of the surveyed population have answered questions.	10/22/2013

The **Survey Reporting** screen lists the available Printable Reports. The **Date Created** column shows the date that the template for the report type was created in the system.

## Reporting Criteria Reference

You can use these criteria to specify the data included in a Printable Report. Not all criteria may be applicable to or available for some reports.

- **Start Date:** Click the calendar icon to set the start date for your search period.
- **End Date:** Click the calendar icon to set the end date for your search period.
- **Agent:** One or all agents can be selected from the drop-down list.
- **Record ID:** Each attempted survey is assigned a unique identification number by the system. If you know this number, you can search for a specific survey by entering that ID number here.
- **Surveys/Forms/Form ID:** One, multiple, or all survey forms can be selected from the list provided.
- **Survey Complete:** Surveys are either Complete or Incomplete based on whether the respondent reached a question that had the Mark Survey Complete option selected. You can limit your search to Complete, Incomplete, or Any using the drop-down list.



- **ANI:** To limit your report to surveys delivered to a specific caller, enter the ANI (CallerID) information here.

🔗 If the respondent was manually redirected to the survey by an agent, the ANI may not accurately reflect the respondent's number, depending on your telephony equipment.

- **DNIS:** Surveys can be configured so that customers receive different surveys based on the number they call to reach you (DNIS). To limit your report to surveys delivered via a specific DNIS, enter that information here.
- **Question ID:** To limit your report to a specific question, select from the list provided. This list is populated only after you have selected a survey for the report.

You can use saved criteria sets for reports that you run regularly. You can also use many of these criteria items when generating ad hoc reports. For more information about saved criteria sets and about building and generating ad hoc reports, see the *Uptivity Discover Reporting Manual*.

## Generate a Survey Report

To generate a Printable Report for Survey data:

1. Click **Reporting** in the Discover Web Portal and expand **Printable Reports** in the left navigation menu.
2. Click **Survey Reporting**.
3. In the **Report** column, click the name of the report you wish to generate.
4. Enter the desired criteria and click **Generate Report**.


## Printable Reports for Survey Data

This section provides you with explanations and images for each of the Survey-related Printable Reports. For related information, see [Reporting Criteria](#) and [Generate a Survey Report](#).

## Survey Reports

### Survey Detail Report

The **Survey Detail** report shows complete responses for one or more survey respondent(s) and also provides information about the respondent, such as DNIS and ANI.

 IP Address is not used at this time.


Form: CallCopy Customer Survey		Record: 53190
DNIS: 7533	ANI: 5010	Survey Date: 4/1/2011 9:38 AM
Survey Complete:	Yes	IP Address:
Satisfaction		Score: 10 of 10 (100%)
On a scale of one to five, five being the highest, how satisfied are you with the CallCopy software solution overall?		
Digits Collected: 5		
5		<input checked="" type="checkbox"/> 5pts
4		<input type="checkbox"/>
3		<input type="checkbox"/>
2		<input type="checkbox"/>
1		<input type="checkbox"/>

If respondents left a voice message for a question, a link to the message file appears in the report.

Close	Score: 0 of 0 (N/A)
Finally, one last question. If you could have one product enhancement, what would it be?	
	<input type="checkbox"/>
<a href="#">2-101411.wav</a>	


### Survey Detail Summary Report

The **Survey Detail Summary** lists all survey responses that match the search criteria. Click a survey to open the Survey Detail report for that survey. The Recordings column shows the number, if any, of respondent voice recordings.

 <b>Survey Detail Summary</b> For period beginning Tuesday, May 08, 2012 and ending Friday, June 08, 2012							
Selected Surveys: surveyFor5090							
Survey Complete: Complete							
Name	Date	DNIS	ANI	Score	RecordID	Recordings	Agent Name
surveyFor5090	5/9/2012	1001	1234	46.67%	5	0	agent9_first58 agent9_last58
surveyFor5090	5/9/2012	1001	1234	46.67%	6	0	Clifton Guiran
surveyFor5090	5/9/2012	1001	1234	60.00%	7	0	agent10_first58 agent10_last58
surveyFor5090	5/9/2012	1001	1234	53.33%	8	0	Alan Crow
surveyFor5090	5/9/2012	1001	1234	80.00%	9	0	Myron Galliano
surveyFor5090	5/9/2012	1001	1234	0.00%	10	0	Connie Francis
surveyFor5090	5/9/2012	1001	1234	40.00%	11	0	Connie Francis
surveyFor5090	5/9/2012	1001	1234	60.00%	12	0	agent10_first58 agent10_last58

### Survey Overview Report

The **Survey Overview** report calculates the shown categories for each survey form in a time period. Positive, Negative, and Neutral ranges are defined on the Survey Form specific information. If a survey form does not have any responses, it does not appear on the report.

 <b>Survey Overview</b> For period beginning Thursday, January 27, 2011 and ending Tuesday, September 27, 2011						
Name	Count	Complete	Incomplete	Positive	Negative	Neutral
CallCopy Customer Survey	12	11 (91.7%)	1 (8.3%)	4 (33.3%)	2 (16.7%)	4 (33.3%)


Survey Overview - 9/27/2011      CallCopy Recorder Reporting Service      Page 1 of 1

## Survey Reports

### Survey Summary Report

The **Survey Summary** report calculates the shown categories for all surveys in a time period, and displays them on a per-survey basis. If a survey form does not have any responses, it does not appear on the report.

- **Score:** Total score of the survey responses and the total maximum possible score of a survey. The maximum possible score on a survey can vary based on the questions that a respondent is asked to answer. For example, one respondent may be asked to answer five questions with a total of 50 points. Another respondent, based on his/her answers, will be directed through seven questions with a total of 70 points. This fact must be considered when designing surveys.
- **Average Percentage (%):** (Sum of each response's score)/((Sum of the possible score for each form)/Number of responses)

 <b>Survey Summary</b>								
For period beginning Thursday, January 27, 2011 and ending Tuesday, September 27, 2011								
Name	Count	Complete	Incomplete	Positive	Negative	Neutral	Score	Avg %
CallCopy Customer Survey	12	11 (91.7%)	1 (8.3%)	4 (33.3%)	2 (16.7%)	4 (33.3%)	76 of 90	80.8%

Survey Summary - 9/27/2011      CallCopy Recorder Reporting Service      Page 1 of 1

**Survey Summary by Agent Report**

**Survey Summary by Agent** allows you to select a set of agents over a specific date range, and displays the number of surveys completed for each agent, given survey score, total possible points, percentage overall score, and totals for each column.

The Report Type option determines how results are broken down and displayed:

- **Agent:** Lists total scores for all forms by agent as shown below.
- **Form:** For each agent, shows scores by form and the total scores for all forms.
- **Section:** Shows scores for each section on the form.
- **Question:** Shows scores for each question in each section on each form.



## Survey Reports

### Survey Summary by Question Report

The **Survey Summary by Question** report provides a count of each given response to each of the questions in a survey form. You can select a date range, the survey form to evaluate, DNIS/ANI numbers, and survey completion status. For each form evaluated, the generated report displays the number of surveys completed and average score, followed by counts and score percentages for each question in the form. The Survey field is required.

Start Date: 1/1/2009 End Date: 8/8/2012 Survey: surveyFor5090  
DNIS: ANI: Survey Complete: Complete

1 of 1 Find | Next

### Survey Summary by Question

For period beginning Thursday, January 01, 2009 and ending Wednesday, August 08, 2012

Selected Form: surveyFor5090

Survey	Number of Surveys	Average Score
surveyFor5090	0	0 of 0 (N/A)

Question	Response	Count	Percentage
Q1 On a scale of 1 to 5 - 5 is the best	1	0	0.0%
	2	0	0.0%
	3	0	0.0%
	4	0	0.0%
	5	0	0.0%
Q2 On a scale of 1 to 5 - 5 is the best	1	0	0.0%
	2	0	0.0%
	3	0	0.0%
	4	0	0.0%
	5	0	0.0%
Q3 On a scale of 1 to 5 - 5 is the best	1	0	0.0%
	2	0	0.0%
	3	0	0.0%
	4	0	0.0%
	5	0	0.0%

Thank you for your time

Survey Summary by Question - 8/8/2012 CallCopy Recorder Reporting Service Page 1 of 1

## Survey Summary by Response

**Survey Summary by Response** helps you identify the relationship between a response to one question and the responses to other questions. This allows you to see how different segments of the surveyed population have answered questions. This report works well with surveys where one question addresses a respondent's overall opinion of a product or service, and follow-up questions elicit the reasons or factors for that overall opinion.

For example, a Car Satisfaction Survey may be designed where customers who purchased any new car within the last year are surveyed. One question asks them to rate their overall satisfaction with their car on a scale of 1 to 5, with 5 being the highest satisfaction. Additional questions ask how many times they have taken the car for repairs, the price of the car, the size of the car, the car's miles-per-gallon rate, and whether the car was the customer's first choice. Assume that these are the results:

Report 1: Question 1: Satisfaction rating: 1

- Question 2 -- Number of times cars repaired: 1
- Question 3 – Was this car your first choice?: No

Report 1: Question 1: Satisfaction rating: 5

- Question 2 -- Number of times cars repaired: 1
- Question 3 – Was this car your first choice?: Yes

Given these results, it appears that satisfaction with a car purchase is determined by whether or not the customer was able to purchase their first choice. A customer may have wanted a \$35,000 car but had to settle for a \$20,000 car, which affected the satisfaction rating.

Multiple versions of this report may need to be created in order to identify the relationships between a question's responses and the responses on the other questions. In other words, if Question 1 has four possible responses, and that question is used as the overall or control question, then a report should be run for each response.

Survey, Question ID, and Response are required fields. The result fields are:

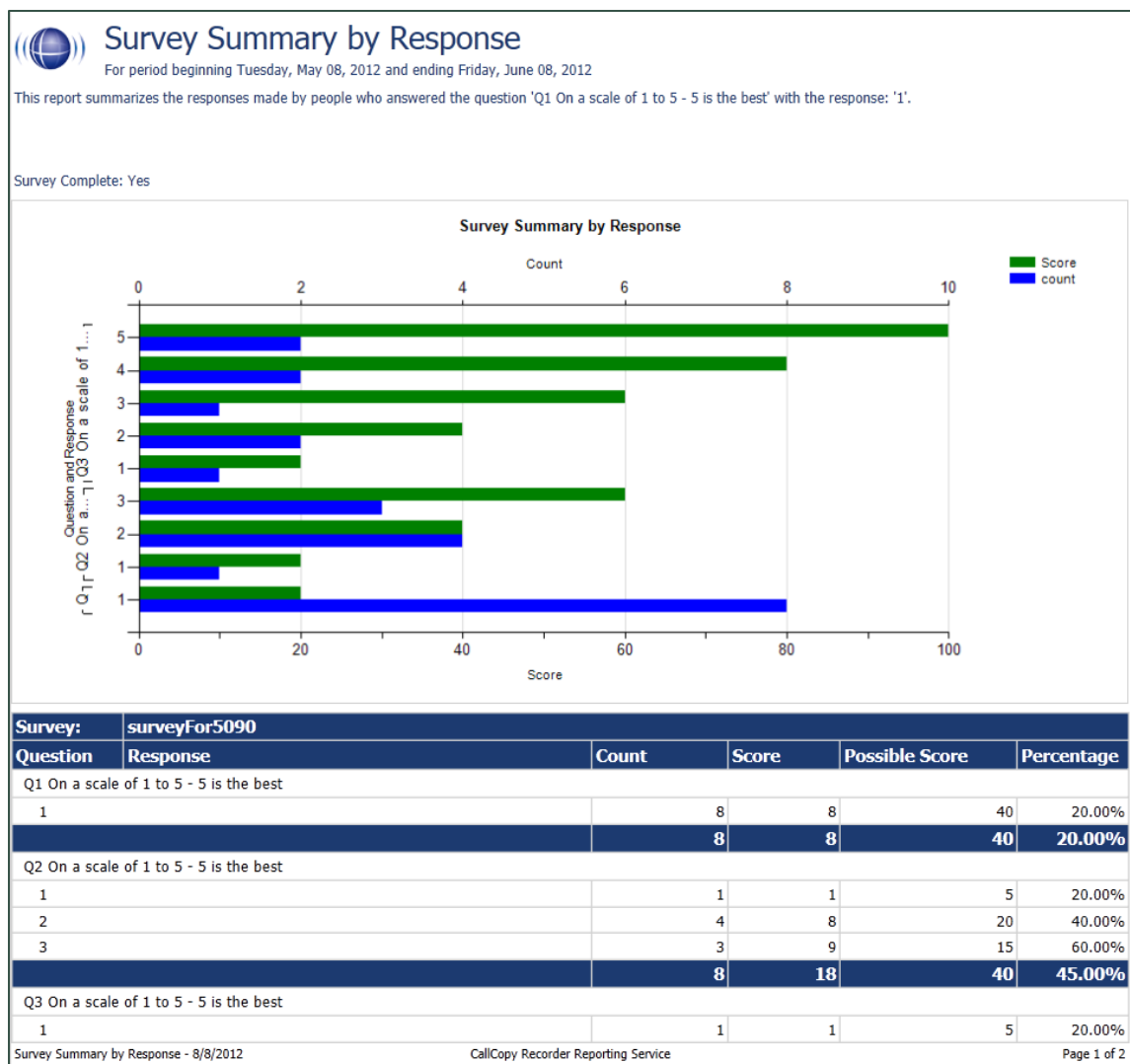
- **Count:** Number of respondents who selected a response.
- **Score:** Actual total points for a response. If a response was worth two points and three respondents selected it, the Score would be six.

## Survey Reports

- **Possible Score:** Number of response options multiplied by the point value for a response.
- **Percentage:** Score / Possible Score

This report can be run for all questions except Collect Customer Information questions. Because this question type allows customers to leave a recorded voice message as a response, Survey cannot include the response in any type of calculation. If you inadvertently include a question of this type as you build this report, Survey will not populate the Response field. Attempting to run the report anyway generates the error message, "Response value must be selected."

If no respondents selected a response to a question, the response option does not appear on the report. For example, if no respondents selected response 2 to a question, the report shows numbers for responses 1, 3, 4, and 5.





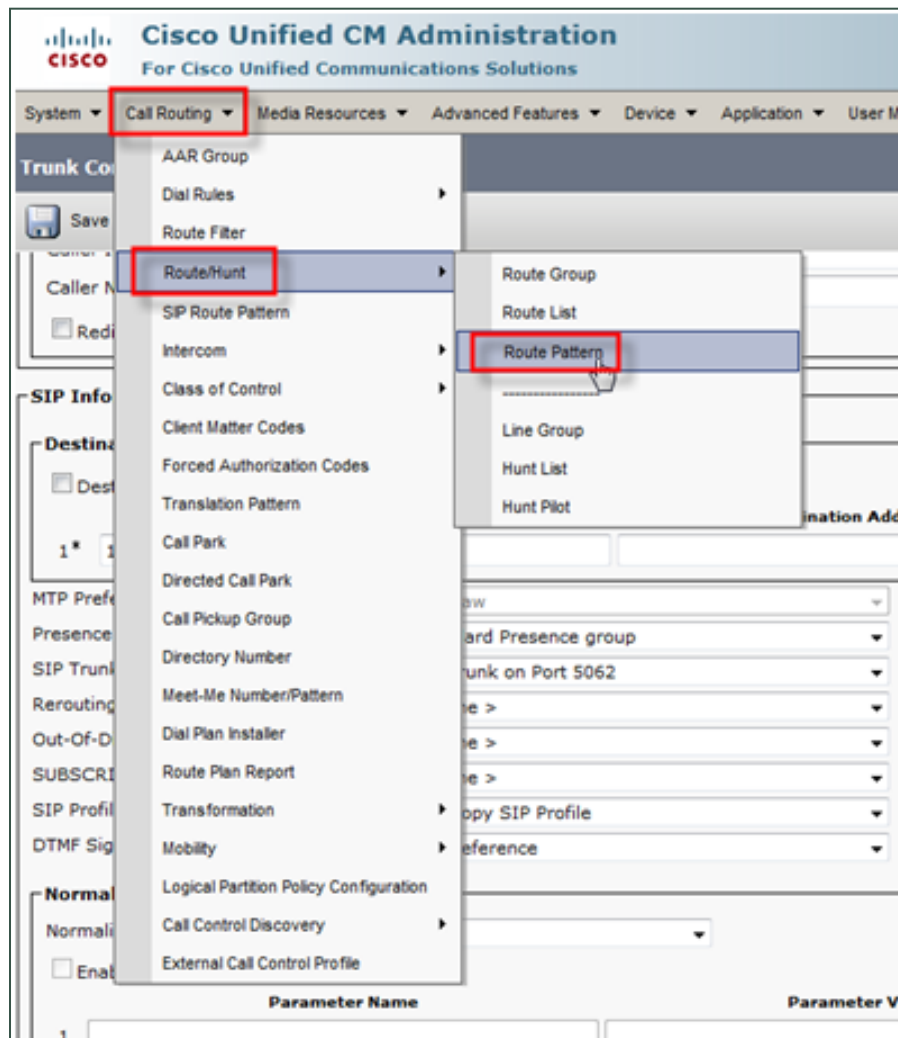
# Appendix: PBX Configuration Examples

This section provides screen images of PBX configuration examples for SIP trunks used with Uptivity Survey. This is **not** an inclusive list and Uptivity makes no guarantees that these configurations will work in your scenario. You should always use documentation from your PBX manufacturer to configure PBX settings. Consult your PBX support or vendor for specific questions regarding your installation.

## Cisco


The following images identify which fields need to be configured for Survey to function properly. Specific values will vary from one environment to another.

### Set Route Pattern



## Appendix: PBX Configuration Examples

**Status**

 Status: Ready

---

**Pattern Definition**

Route Pattern*	93XXXX
Route Partition	< None >
Description	
Numbering Plan	-- Not Selected --
Route Filter	< None >
MLPP Precedence*	Default
Resource Priority Namespace Network Domain	< None >
Route Class*	Default
Gateway/Route List*	CCSurveyTest
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern
Call Classification*	OffNet

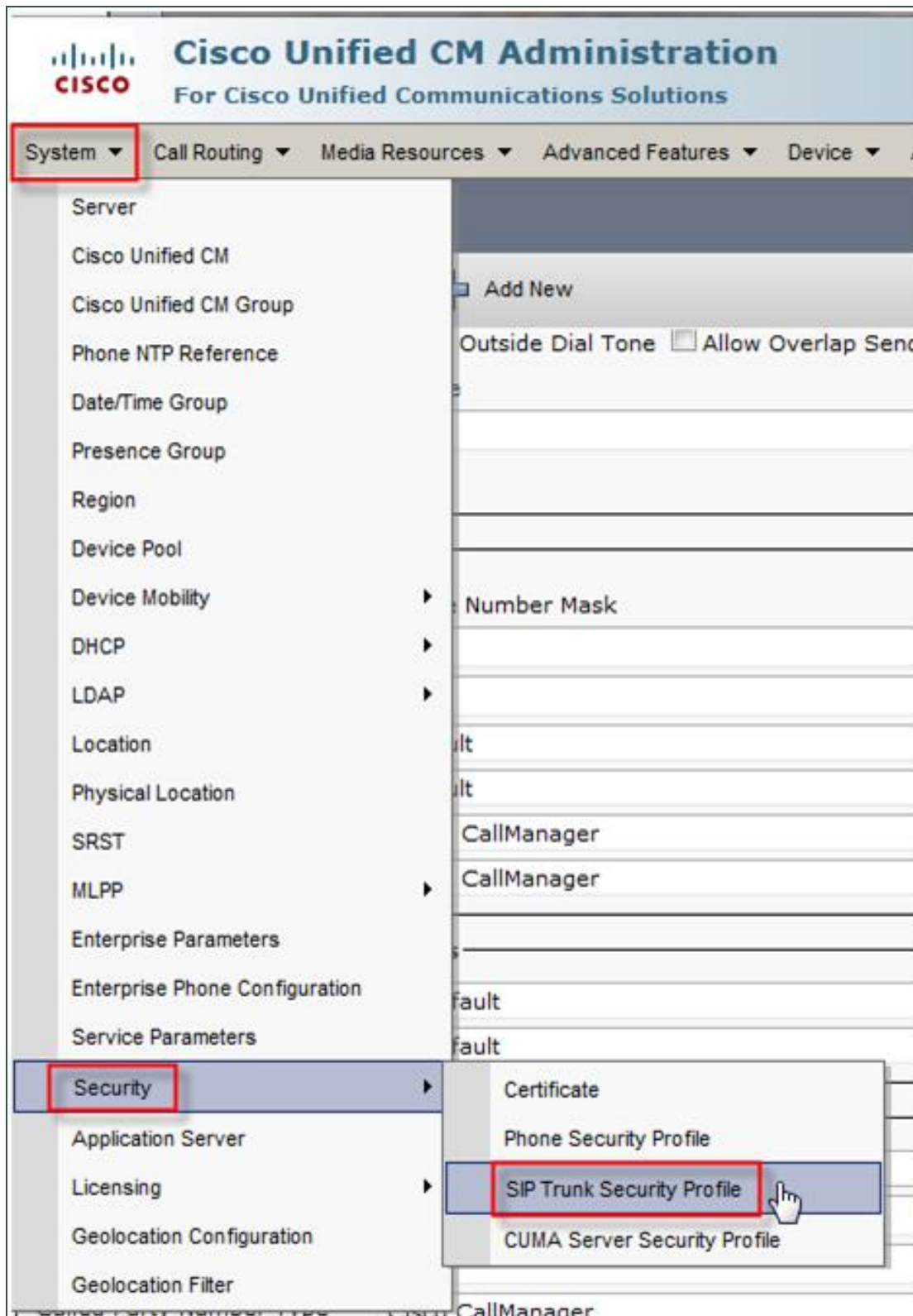
Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority

[\(Edit\)](#)

**Called Party Transformations**

Discard Digits	< None >
Called Party Transform Mask	XXXX
Prefix Digits (Outgoing Calls)	93
Called Party Number Type*	Cisco CallManager
Called Party Numbering Plan*	Cisco CallManager


Set SIP Trunk Security Profile



## Appendix: PBX Configuration Examples

In the following image, an alternate TCP port (5062) is used as described in [Configure the Survey INI](#).

**Status**

 Status: Ready

---

**SIP Trunk Security Profile Information**

Name\*

Description

Device Security Mode

Incoming Transport Type\*

Outgoing Transport Type

Enable Digest Authentication

Nonce Validity Time (mins)\*

X.509 Subject Name

Incoming Port\*

Enable Application Level Authorization

Accept Presence Subscription


Accept Out-of-Dialog REFER\*\*


Accept Unsolicited Notification

Accept Replaces Header

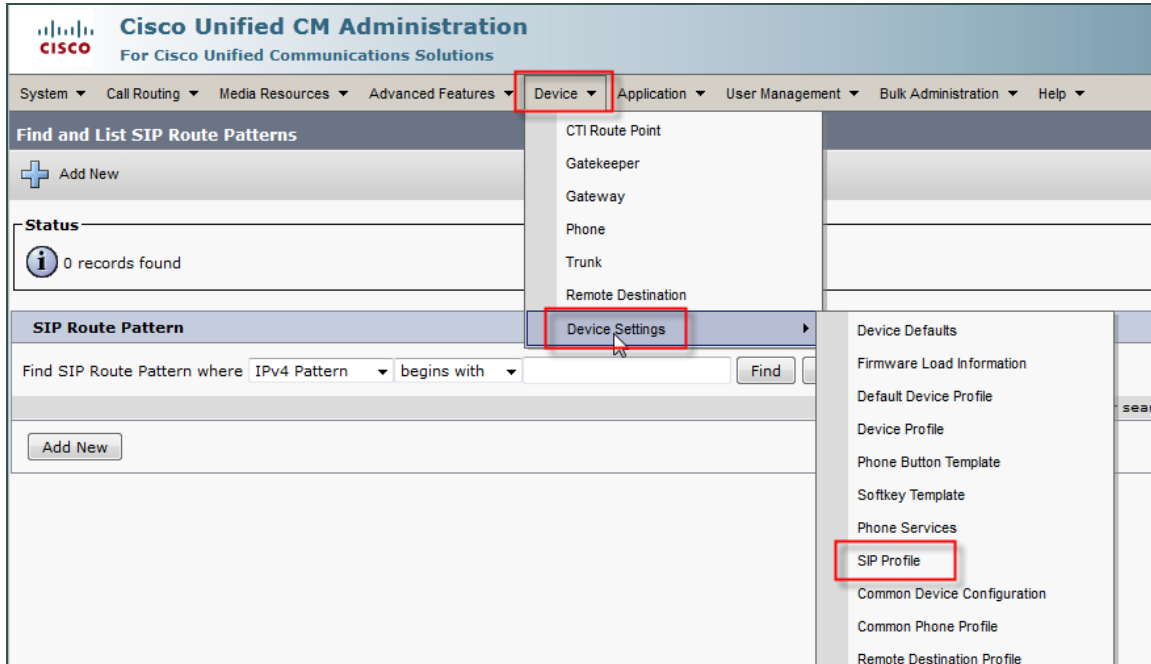
Transmit Security Status

---

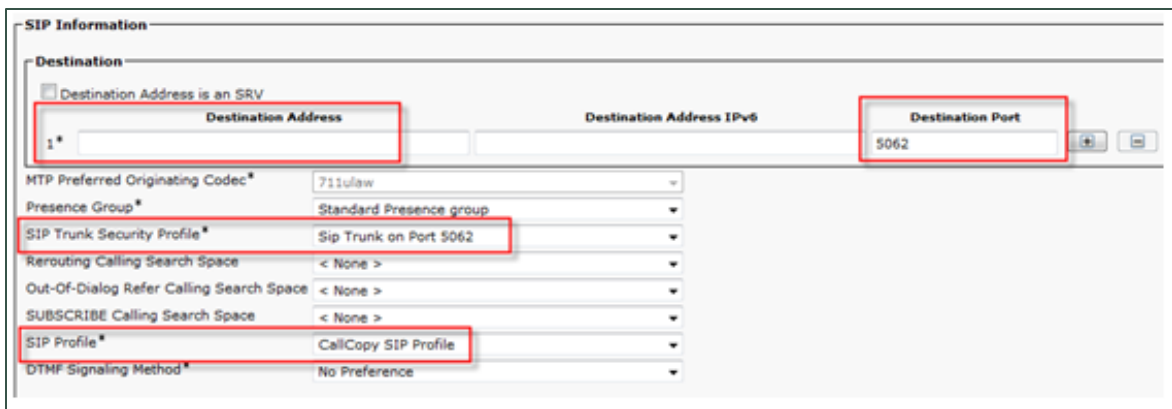
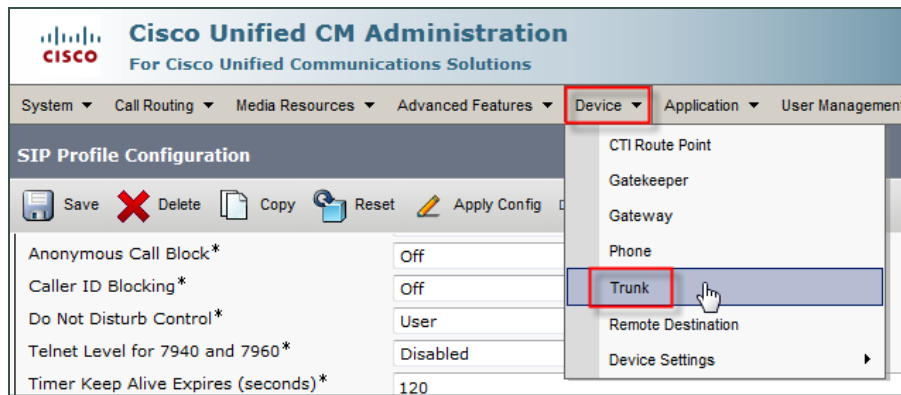
 \*- indicates required item.

 \*\*If this profile is associated with an EMCC SIP trunk, Accept Out-of-Dialog REFER is enabled regardless of the

### Configure SIP Profile



### Configure Trunk



## Avaya SIP

### Create Node

Create a node with a unique name and the IP of the system running Uptivity Survey.

The screenshot shows a terminal window titled "change node-names ip" with "Page 2 of 2" in the top right corner. The main content is a table with two columns: "Name" and "IP Address". The first row contains the text "qavm" under the "Name" column. Below the table, there is a message: "( 16 of 19 administered node-names were displayed )". At the bottom of the terminal, there are two lines of instructions: "Use 'list node-names' command to see all the administered node-names" and "Use 'change node-names ip xxx' to change a node-name 'xxx' or add a node-name". At the very bottom, there is a row of function key buttons: F1 Cancel, F2 Refresh, F3 Enter, F4 Clear, F5 Help, F6 Edit, F7 Next, and F8 Prev.

Name	IP Address
qavm	

( 16 of 19 administered node-names were displayed )

Use 'list node-names' command to see all the administered node-names  
Use 'change node-names ip xxx' to change a node-name 'xxx' or add a node-name

F1 Cancel F2 Refresh F3 Enter F4 Clear F5 Help F6 Edit F7 Next F8 Prev

**Create Signaling Group****Transport Method:** TCP**Near-end Node Name:** procr**Far-end Node Name:** The name of the node created in the previous step.

Near-end and Far-end Listen Ports should be 5060 by default when the Transport Method is set to TCP. Port 5061 is reserved for encryption, which is not supported by Uptivity Survey.

```

change signaling-group 70                                     Page 1 of 1
                                SIGNALING GROUP

Group Number: 70                Group Type: sip
                                Transport Method: tcp
IMS Enabled? n

Near-end Node Name: procr                Far-end Node Name: qavm
Near-end Listen Port: 5060                Far-end Listen Port: 5060
                                Far-end Network Region: 1
Far-end Domain: _____

Incoming Dialog Loopbacks: eliminate        Bypass If IP Threshold Exceeded? n
                                RFC 3389 Comfort Noise? n
DTMF over IP: rtp-payload                Direct IP-IP Audio Connections? y
Session Establishment Timer (min): 3        IP Audio Hairpinning? n
                                Enable Layer 3 Test? n                Direct IP-IP Early Media? n
H.323 Station Outgoing Direct Media? n    Alternate Route Timer(sec): 6

```

F1 Cancel F2 Refresh F3 Enter F4 Clear F5 Help F6 Edit F7 Next F8 Prev

### Create Trunk Group

**Group Type:** SIP

**TAC:** Select a unique value not already in use.

**Service Type:** Tie

**Number of Members:** Number of individual trunks. This will be determined by your configuration.

The screenshot shows a terminal window with a blue background and white text. At the top, a yellow bar contains the text 'add trunk-group 70' on the left and 'Page 1 of 21' on the right. Below this, the title 'TRUNK GROUP' is centered. The main configuration details are as follows:

- Group Number: 70
- Group Type: sip (highlighted with a red box)
- CDR Reports: y
- Group Name: \* SIP to qavm
- COR: 1
- TN: 1
- TAC: 270 (highlighted with a red box)
- Direction: two-way
- Outgoing Display? n
- Dial Access? n
- Night Service: \_\_\_\_\_
- Queue Length: 0
- Service Type: tie (highlighted with a red box)
- Auth Code? n
- Signaling Group: 70
- Number of Members: 10 (highlighted with a red box)

At the bottom of the terminal window, there is a yellow bar and a row of function key buttons: F1 Cancel, F2 Refresh, F3 Enter, F4 Clear, F5 Help, F6 Edit, F7 Next, and F8 Prev.



**Create Route Pattern**

**Group Number:** Trunk group number (see top-left of previous screenshot)

**FRL:** 0

**NPA:** Local area code

change route-pattern 70 Page 1 of 3

Pattern Number: 70 Pattern Name: \* Survey qavm  
 SCCAN? n Secure SIP? n

Grp No	FRL	NPA	Pfx Mrk	Hop Lmt	Toll List	No. Del	Inserted Dgts	DCS/ QSIG Intw	IXC
1: 70	0	614	-	-	-	-	-	n	user
2:	-	-	-	-	-	-	-	n	user
3:	-	-	-	-	-	-	-	n	user
4:	-	-	-	-	-	-	-	n	user
5:	-	-	-	-	-	-	-	n	user
6:	-	-	-	-	-	-	-	n	user

BCC VALUE	TSC	CA-TSC	ITC	BCIE	Service/Feature	PARM	No. Dgts	Numbering Format	LAR
0 1 2 M 4 W		Request					Subaddress		
1: <u>y y y y y n</u>	<u>n</u>	<u>n</u>	<u>rest</u>						<u>none</u>
2: <u>y y y y y n</u>	<u>n</u>	<u>n</u>	<u>rest</u>						<u>none</u>
3: <u>y y y y y n</u>	<u>n</u>	<u>n</u>	<u>rest</u>						<u>none</u>
4: <u>y y y y y n</u>	<u>n</u>	<u>n</u>	<u>rest</u>						<u>none</u>
5: <u>y y y y y n</u>	<u>n</u>	<u>n</u>	<u>rest</u>						<u>none</u>
6: <u>y y y y y n</u>	<u>n</u>	<u>n</u>	<u>rest</u>						<u>none</u>

F1 Cancel F2 Refresh F3 Enter F4 Clear F5 Help F6 Edit F7 Next F8 Prev

**Set ARS Digits**

**Dialed String:** DNIS numbers associated with surveys. You can represent a range (42xx means 4200 through 4299) or list individual DNIS numbers on this page.

**Total Min/Max:** Number of accepted digits for dialed string.

**Route Pattern:** Same as Pattern Number from previous screenshot.

**Call Type:** locl (allows dialing just an extension to forward to survey rather than a full 11-digit number)

**ANI Reqd:** Yes

The screenshot displays a terminal window titled "change ars analysis 0" with "Page 2 of 2" in the top right. The main content is an "ARS DIGIT ANALYSIS TABLE" for "Location: all" and "Percent Full: 0". The table has the following columns: "Dialed String", "Total Min", "Total Max", "Route Pattern", "Call Type", "Node Num", and "ANI Reqd". The first row is highlighted with red boxes around the "Dialed String" (42xx), "Total Min" (4), "Total Max" (4), "Route Pattern" (70), "Call Type" (locl), and "ANI Reqd" (y) fields. The "ANI Reqd" column contains a vertical stack of 'n' characters. At the bottom, there is a row of function key buttons: F1 Cancel, F2 Refresh, F3 Enter, F4 Clear, F5 Help, F6 Edit, F7 Next, and F8 Prev.

Dialed String	Total Min	Total Max	Route Pattern	Call Type	Node Num	ANI Reqd
42xx	4	4	70	locl		y
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n
						n

**Disable Mask CPN/Name**

Under the Class of Restriction that applies to agents directing callers to surveys, set "Mask CPN/NAME for Internal Calls?" to **N**.

change cor 1 Page 2 of 23

CLASS OF RESTRICTION

MF Incoming Call Trace? n  
 Brazil Collect Call Blocking? n  
 Block Transfer Display? n  
 Block Enhanced Conference/Transfer Displays? y  
 Remote Logout of Agent? n

Station Lock COR: 1      TODSL Release Interval (hours):

Station-Button Display of UI IE Data? n  
 Service Observing by Recording Device? n  
 ERASE 24XX USER DATA UPON  
 Dissociate or unmerge this phone: none  
 EMU login or logoff at this phone: none  
 Mask CPN/NAME for Internal Calls? n

F1 Cancel   F2 Refresh   F3 Enter   F4 Clear   F5 Help   F6 Edit   F7 Next   F8 Prev

## Appendix: PBX Configuration Examples

### Program Vectors for Automatic Transfer

This screen provides values for creating a vector variable to ensure the caller is disconnected when the survey ends (instead of redirected to the ACD).

```
display variables Page 39 of 39
VARIABLES FOR VECTORS
Uar Description Type Scope Length Start Assignment UAC
ZI
ZJ
ZK
ZL
ZM
ZN
ZO
ZP
ZQ
ZR
ZS
ZT
ZU
ZV
ZW
ZX
ZY
ZZ uptivity repeat issue collect P 1 1
```

This example shows a vector used to transfer an incoming call to an agent. When the caller is to be transferred to the survey automatically upon agent disconnection, the **Variables** field must be set to **y** and the **VDN Return Destination** must be set to the vector or number that forwards the caller to the survey (not shown in this screen capture).

```
display vector 984 Page 1 of 6
CALL VECTOR
Number: 984 Name: Test CC Queue
Multimedia? n Attendant Vectoring? n Meet-me Conf? n Lock? n
Basic? y EAS? y G3U4 Enhanced? y ANI/II-Digits? y ASAI Routing? y
Prompting? y LAI? y G3U4 Adv Route? y CINFO? y BSR? y Holidays? y
Variables? y 3.0 Enhanced? y
01 # Test Call Copy and Survey
02 set ZZ = none ADD 1
03 queue-to skill 12 pri 1
04 wait-time 60 secs hearing music
05 announcement 01221
06 wait-time 90 secs hearing music
07 goto step 4 if unconditionally
08 stop
09
10
11
12
```

## Appendix: PBX Configuration Examples

This example shows a vector that routes the caller to the survey and increments the variable. If the variable is greater than one (in other words, the user has been directed to the survey before), the caller is disconnected.

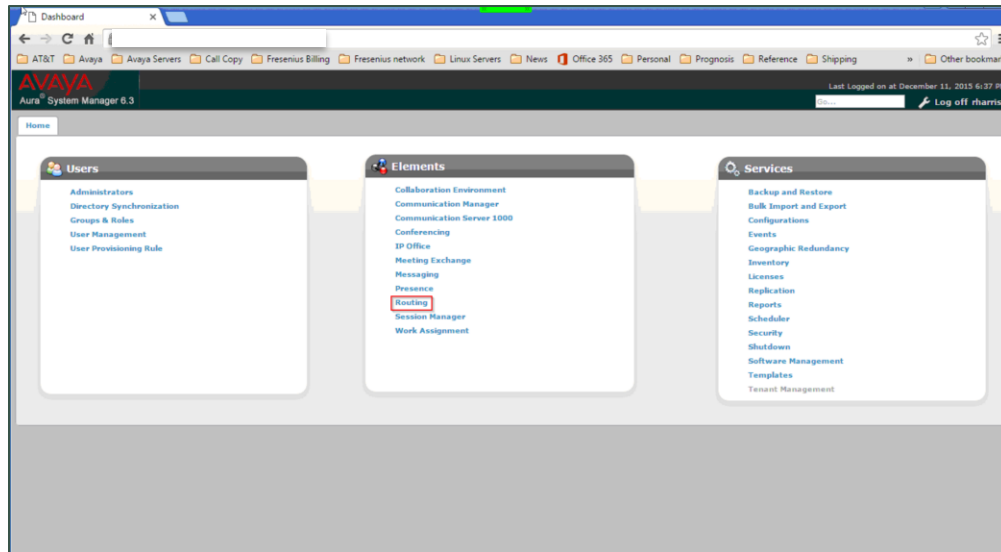
```
display vector 99                                     Page 1 of 6
                                     CALL VECTOR
Number: 99                                           Name: Survey Return
Multimedia? n      Attendant Vectoring? n      Meet-me Conf? n      Lock? n
Basic? y           EAS? y      G3U4 Enhanced? y      ANI/II-Digits? y      ASAI Routing? y
Prompting? y       LAI? y      G3U4 Adv Route? y      CINFO? y      BSR? y      Holidays? y
Variables? y       3.0 Enhanced? y
01 #      Return Destination For Appointment Center Survey
02 wait-time 1 secs hearing silence
03 goto step 6      if ZZ      >      1
04 set      ZZ      = ZZ      ADD      1
05 route-to number 09650      with cov n if unconditionally
06 disconnect after announcement none
07 stop
08
09
10
11
12
```

## Appendix: PBX Configuration Examples

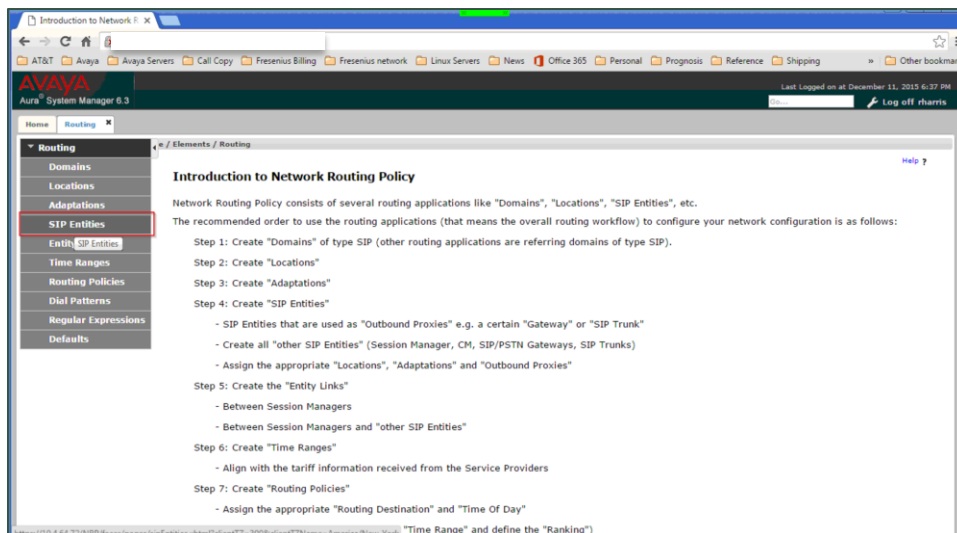
### Avaya Session Manager

Screenshots in this section are taken from the web interface for Session Manager v6.3 on an Avaya Aura PBX. Uptivity Survey must be v5.6 or later. The integration has been tested with Session Manager and Communication Manager v6.3.

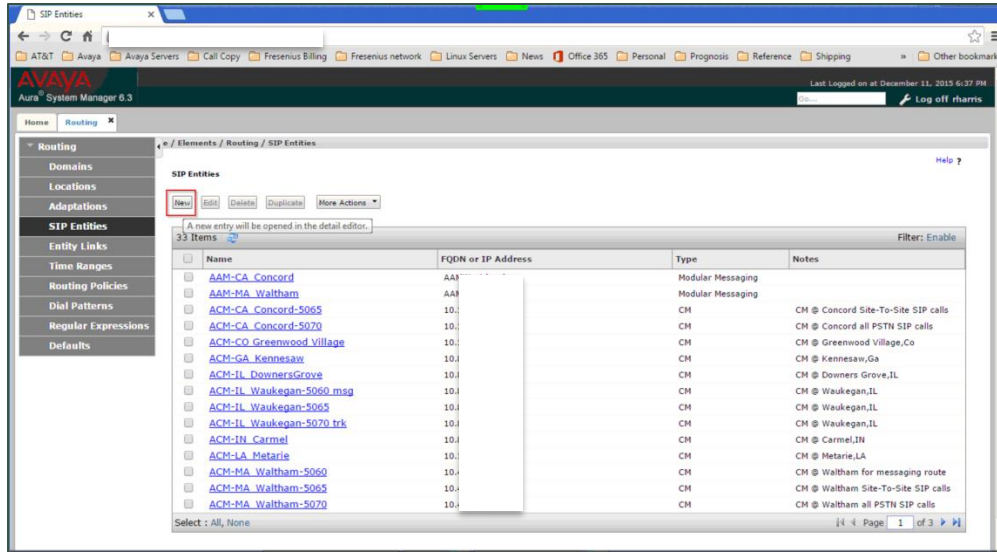
1. Log into Session Manager with an appropriately-permissioned account.
2. In the Elements section, click **Routing**.



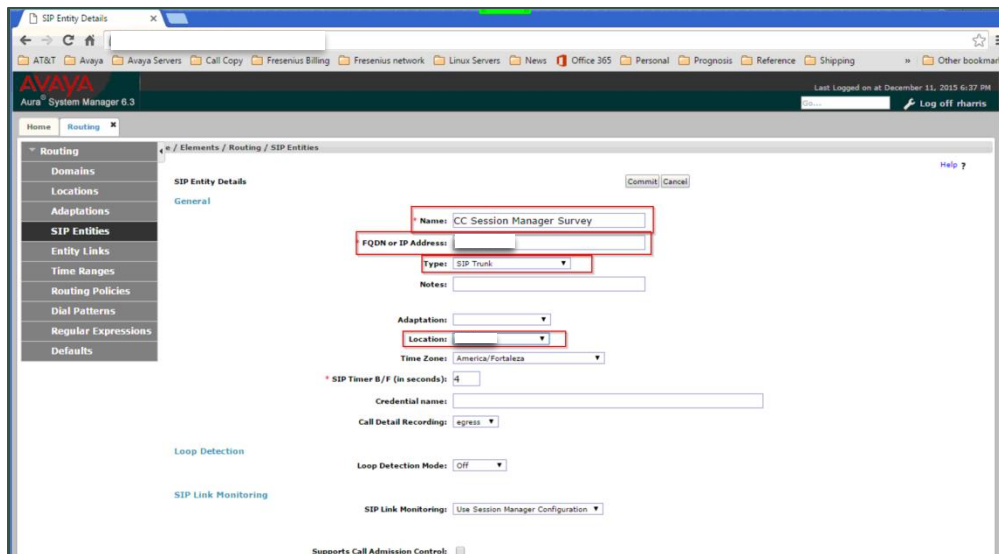
3. Click **SIP Entities**.



4. Click **New**.



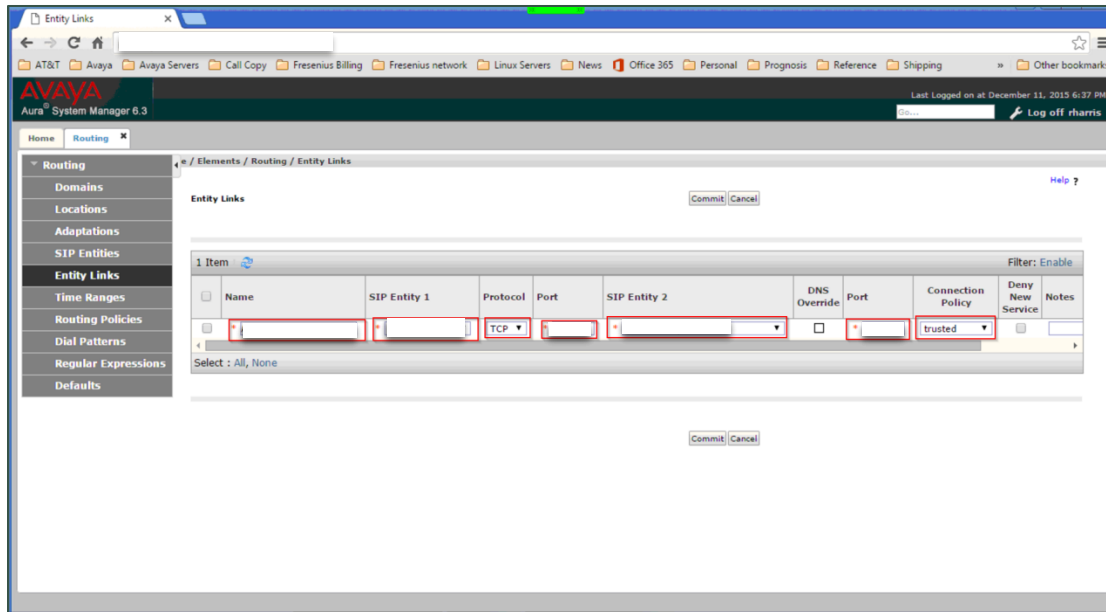
5. Complete the fields as indicated in this image. The fields framed in red will vary for each customer.



6. Click **Commit**.

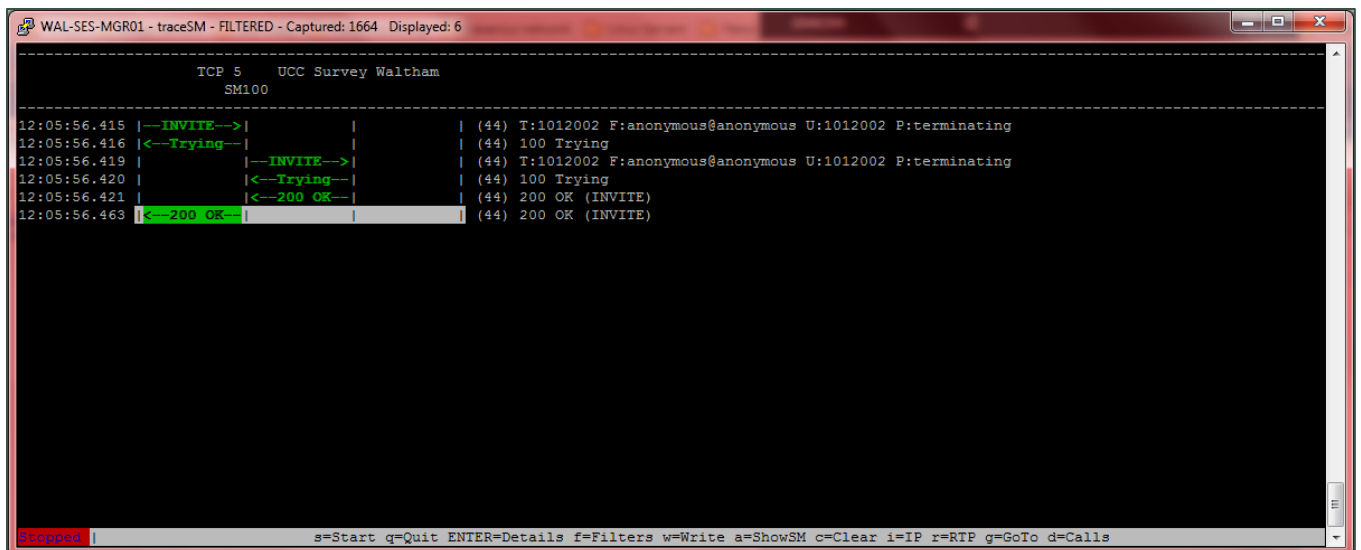
## Appendix: PBX Configuration Examples

- Click **Entity Links** and complete the fields as indicated in this image. The fields framed in red will vary for each customer.



- Click **Commit**.
- Expand **System Status** and click **SIP Entity Monitoring** to verify that the link between Session Manager and the Survey server is present.

You can confirm that Session Manager has been configured correctly by running a trace and viewing the traffic between Session Manager and the Survey server. The following image shows an example of successful communication.





## Document Revision History

Revision	Change Description	Effective Date
0	Initial release for this version	2015-04-30
1	Added examples for Avaya Session Manager to the Appendix.	2016-01-18