

# UPTIVITY SURVEYS SIP ADMINISTRATION GUIDE, V<sub>5.4</sub>

April 2014

Reference Guide

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0	Rebranded all content.  Added section for Post-Survey Linker.	2014-04-30

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## Introduction

This document is for Uptivity Surveys system administrators, supervisors, and managers, and assumes a basic level of familiarity with Discover, the PBX integration in use, the Windows OS, and the network in place at the customer site. It explains the customer-premise based version of Uptivity Surveys with SIP and covers:

- Surveys engine administration
- Surveys form design and creation
- Reporting

#### Notes

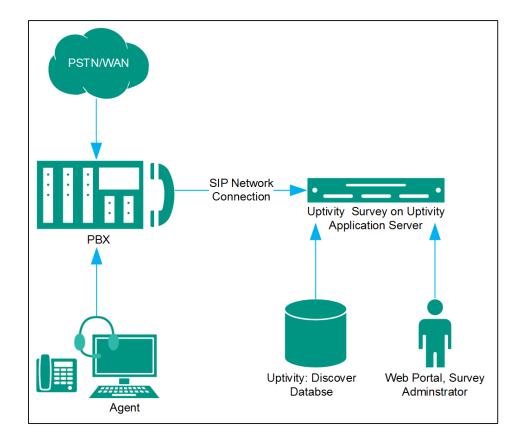
Discover allows administrators to customize field names and terminology in the Web Portal to fit your unique environment. Therefore, screen examples and field names used in this manual may differ from those seen in your implementation.

Prior to v5.4 of the Discover Software Suite, Uptivity Surveys was known as cc: Survey.

For information on Uptivity's Surveys service, contact your Uptivity representative. That service provides all the functionality of the customer-premise based version, but Uptivity hosts and manages the equipment and data. Users are provided access to the surveys and reporting.

# **Product Technical Overview**

This diagram illustrates the Uptivity Surveys components and interactions.



Component	Function
Callers via PSTN or Agents	<ul> <li>Surveys can be set up to handle calls two ways:</li> <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>
PBX	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.  For each call, the PBX can send the survey engine the:  DNIS  Caller number or Agent/Extension number as an ANI
Uptivity Surveys	Surveys 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.  The directories for the survey form, audio prompt, and verbal response files are located on this machine in most installations, although they can be located on a different machine.  Surveys and Discover can be hosted by the same machine or separate machines. Surveys can also be deployed without Discover call recording.
Discover Web Portal	Administrators, system administrators, and managers use the Web Portal to:  Create and manage survey forms.  Configure and manage the server and users' permissions.  Review survey results, reports, and respondents' audio responses.
Discover Database	Call information and respondents' input and responses are recorded in this database as survey records. Reports are generated from these records.

# Requirements

#### **PBX**

#### VoIP/SIP-Supported PBXs

Uptivity Surveys 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 6.1
- Asterisk 11.5
- ShoreTel ShoreWare 14.1

If the SIP trunk is routed through an intermediary system (e.g. Avaya Session Manager), not directly from the PBX, that system must be on the list above to be supported.

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

#### Hardware, Software, and Licensing

Hardware and software requirements vary by PBX. Some PBXs do 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 Surveys can be deployed with Discover by Uptivity on the same machine, on a separate machine, or as a standalone product (i.e., no call recording). See the *Discover by Uptivity Requirements* for additional requirements 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:

Discover by Uptivity, v5.4

## Licensing

Contact your Uptivity representative for licensing information.

### **Performance Considerations**

#### Performance Guidelines

The following are general performance guidelines for this product. For more information, see <u>Survey Call</u> 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 <u>Configure</u>
  <u>VoIP/SIP Endpoints</u> and/or <u>PBX Configuration Examples</u>.
- 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.

#### Survey Call Linking

This feature is only supported with:

- Cisco UCM and a SIP trunk (Uptivity 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 Surveys is running on only one of those servers.

#### 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."

**Note** Uptivity Surveys 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 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.

# **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

**Note** Some of the Uptivity integration documents may contain useful information on SIP trunk configuration.

## **Configure DNIS and ANI**

The following PBX configurations must be set:

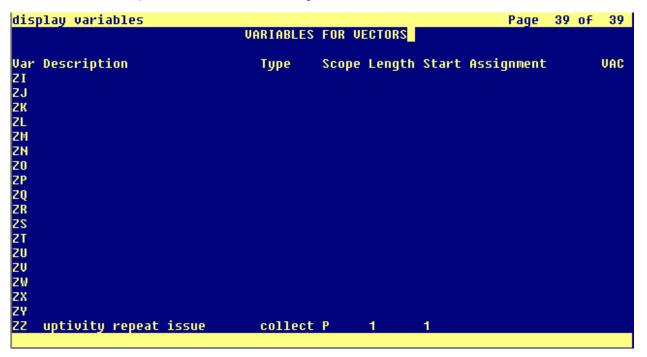
- A unique DNIS for each survey.
- Call routing to direct both direct calls (i.e., 1-800 calls from customers) and forwarded calls to the Surveys engine.
- A dial plan to pass the DNIS and the ANI (i.e., the originating caller or the transferring agent's PBX number, either the Agent or the Extension)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

## Vector Programming/Automatic Transfer

Vectors are needed to direct calls to agents and to the survey engine. Vector programming depends on if the agent transfers the caller to the survey by dialing a number or if the caller is automatically transferred when the agent disconnects the call. This example is one possible way to program vectors for automatic transfers.

If callers are automatically transferred to the survey engine when the agent disconnects, a looping scenario can occur. When the survey ends, the call is redirected to the ACD, which then redirects it back to the survey engine, causing a new survey to begin. A variable can be used to count the transfers and cause a disconnect after the survey ends.

The screen shown here provides the values for creating the variable.



The vector shown here is used to transfer the incoming call to the agent. Note that Variables must be enabled. The variable created earlier is set to 1. The VDN Return Destination is set to the vector or number that forwards the caller to the survey engine (not shown in this screen capture).

```
display vector 984
                                                                  Page
                                                                          1 of
                                   CALL VECTOR
    Number: 984
                              Name: Test CC Queue
                    Attendant Vectoring? n
                                              Meet-me Conf? n
Multimedia? n
                                                                          Lock? n
     Basic? y
                EAS? U
                          G3V4 Enhanced? y
                                              ANI/II-Digits? y
                                                                 ASAI Routing? y
 Prompting? y
                LAI? y
                         G3V4 Adv Route? y
                                              CINFO? y
                                                         BSR? y
                                                                   Holidays? y
 Variables? y
                3.0 Enhanced? y
        Test Call Copy and Survey
01 #
02 set
                                 ADD
                ZZ
                        = none
                            pri 1
03 queue-to
                skill 12
04 wait-time
                60 secs hearing music
05 announcement 01221
06 wait-time
                90 secs hearing music
07 goto step
                               if unconditionally
                4
08 stop
89
10
11
12
```

The vector shown here routes the caller to the survey engine and increments the variable. If the variable is greater than 1 (i.e, 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
                                              ANI/II-Digits? y
                EAS? y
                          G3V4 Enhanced? y
                                                                  ASAI Routing? u
     Basic? y
                         G3V4 Adv Route? y
 Prompting? y
                LAI? y
                                              CINFO? y
                                                         BSR? y
                                                                   Holidays? y
                3.0 Enhanced? y
 Variables? y
               Destination For Appointment Center Survey
01 #
        Return
02 wait-time
                1
                     secs hearing silence
03 goto step
                6
                               if ZZ
                                                            1
04 set
                                 ADD
                ZZ
                        = ZZ
                                          with cov n if unconditionally
05 route-to
                number 09650
06 disconnect
                after announcement none
07 stop
98
89
10
11
12
```

# **Install and Configure Uptivity Surveys**

This section explains the tasks for installing Surveys. Surveys 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 Surveys machine.
  - Add the Surveys machine and both the Logger and Surveys to the Service Manager in the Web Portal.
- Without call recording Complete the Discover installation, skipping tasks for call recording.

Check the *Discover by Uptivity Installation Guide* and *Discover by Uptivity Administration Manual* for instructions on the above tasks.

#### **Windows Server Tasks**

Perform these tasks on the Windows server hosting Surveys.

#### Install the Server

The Surveys server is included with the base Discover install package. Run the installer and select Base Installation. For more information, see the *Discover by Uptivity Installation Guide*.

#### Register 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."

## Configure INI

These settings are used to configure cc\_SurveylvrFx.exe. Browse to "\Program Files (x86)\CallCopy\Recorder\SurveylvrFx" and if cc\_surveylvrFx.ini is not present, create it. The INI filename should always match the name of the executable it configures. Supply the following information using default values (shown in the left column) unless otherwise specified.

[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 Surveys Audio">Specify Surveys Audio</a> <a href="Directory Settings">Directory Settings</a> .
audiorecordingdirectory=	Path to audio response recordings. For details, see <u>Specify Surveys</u> <u>Audio Directory Settings</u> .
	Comma-separated list of modules the IVR will load. This is used with survey linking.
modules=	<ul> <li>For Cisco TAPI, enter CiscoTapi.</li> <li>For Avaya or Cisco SIP trunk, this value should be blank.</li> <li>To configure a module, add the corresponding section seen below.</li> </ul>

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 if there is an Invalid_Response file setup and the question must be repeated. Possible values: Y or N. Optional setting, used when you want to repeat the question when an invalid digit is pressed.

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=0	Number of times the listener will be prompted before timing out.
<pre>temprecordinglocation=c:\temp_reco rdings</pre>	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:  • Survey does not have a valid next question • Survey can't determine the last question played was • Survey is trying to play a TTS (text to speech) message and can't get the TTS audio to play • Survey encounters an error trying to record a customer response to a file or  There is an error determining which survey to use (e.g. the DNIS used to call the survey is not associated to any surveys).
repeatquestiondigit=	Digit or key that should be pressed by the customer to repeat a question.
[trunk]	
channels=0	Number of SIP channels.
localPort=5060	Local SIP port. Note: the Discover Core module also uses port 5060. If Surveys and Core are on the same server, Surveys 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.
transporttype=UDP	Required setting.
	<ul> <li>Cisco can use either UDP or TCP</li> <li>Avaya SIP requires TCP</li> <li>ShoreTel and Asterisk use UDP</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 Discover **Administration** tab 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**.
- 6. Click Save.

## Enable Survey Score Column in Call Lists

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

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

## **Configure Survey Linking (Optional)**

This functionality is available only in specific environments. For details, see <u>Survey Call Linking</u>.

#### Install the Surveys Script

- Browse to the directory containing cc\_SurveylvrFx.exe, typically C:\Program Files (x86)\CallCopy\Recorder\SurveylvrFx.
- 2. Create a **Scripts** folder in that directory.
- 3. Check with Development to determine which script file should be copied to the Scripts folder.

#### Configure INI

These settings are required for all scripting environments. Browse to "\Program Files (x86)\CallCopy\Recorder\SurveylvrFx" and open cc\_surveylvrFx.ini. The INI filename should always match the name of the executable it configures.

[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. <li><li><!--ist--> := <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:  eventfilter=1,2-8</reason></type></reason></type></type></item></item></item></item></li></li>
maxprocesslength=60000	The maximum amount of time the event process thread is allowed to hang before it is terminated.

recordingmatchcolumn=	This value must be the matching 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., user8) or Agent ID (e.g., agent_number).
	For <b>Avaya SIP</b> , to use the ANI (i.e. the agent's number, not the caller's ANI) to link surveys to calls, <b>device_id</b> is the preferred value.

Only use the following settings in a Cisco TAPI environment.

[CiscoTapi]	
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. O 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).

## **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 Uptivity database when the survey was completed. The Surveys engine has to link the agent to the survey. Surveys always adds the agent to the survey record. If the recording is yet not written to the database the Surveys 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 Linker service is slower than the Surveys 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 machine as the Survey engine but should for ease of administration.

The Avaya PBX allows users to configure Public Unknown Numbering for calls where the ANI (CallerID) is blocked or private. The recordings database in Discover always shows the ANI as either extension 7009 or 7011 for these calls, but the Surveys database shows different ANI results depending on how the customer has configured the PBX. If Public Unknown Numbering:

- Is not configured, Surveys will display "Anonymous" for the ANI.
- Is configured without a CPN prefix, Surveys will display the same extension (7009 or 7011) that is seen in Discover.
- Is configured with a CPN prefix, Surveys will display this prefix plus the extension (7009 or 7011).

## Check INI Configuration

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.

These are the configuration settings:

[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 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 -svcinst -autostart

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

### Add the Application to the Discover Service Manager

To add the service to the Service Manager:

- 1. Click the Discover **Administration** tab 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.
- 6. Click Save.

## **Security**

#### **Permissions**

Users must be granted permissions to work with surveys. See the "Permissions Definitions" section of the *Discover by Uptivity Administration Manual* for further information.

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

These components need these permissions set up:

- IIS account running Discover Web Portal Read/Write permissions to the Audio Prompt Upload Directory and the Audio Recording Directory. If Surveys is installed on a **separate machine** from Web Portal, the IIS account must be a service account with explicit read/write access to the prompts and recordings directories on the Surveys 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 installation program set permissions needed for the database and other Uptivity modules.

#### Auditing

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

## 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 Surveys are not archived.

# **Surveys Administration**

## **Manage DNIS Values**

A DNIS is a unique identifier that the phone system (PBX) sends to Surveys. 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.

#### Add/Edit/Delete Values

To add DNIS values:

- 1. Log into the Discover Web Portal.
- 2. Click the **Administration** tab and then click the **Add-Ons** sub-tab.
- 3. Expand **Surveys** in the left navigation menu and click **DNIS List**.
- 4. Click Add.
- 5. 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.
- 6. Click the licon to save.

Values can be edited by clicking the vicon or deleted by clicking the icon.

#### Import Multiple 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 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 can be created in an Excel spreadsheet. Some telephony equipment will export DNIS data as a file.

After creating the CSV file, follow these steps to import the DNIS values:

- 1. Log into the Discover Web Portal.
- 2. Click the **Administration** tab and then click the **Add-Ons** sub-tab.
- 3. Expand **Surveys** in the left navigation menu and click **DNIS List**.
- 4. Click Import.
- 5. Browse to the location of the CSV file, select it and click **OK**.
- 6. 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.
- 7. Click **Upload File**. Review the records that are ready for importing. If any of the records are not correct, click **Cancel**. Edit the file and repeat the import. Otherwise, go to the next step.
- 8. If the records are correct, click Import. The DNIS values appear as records in the list.

## **Specify Surveys Audio Directory Settings**

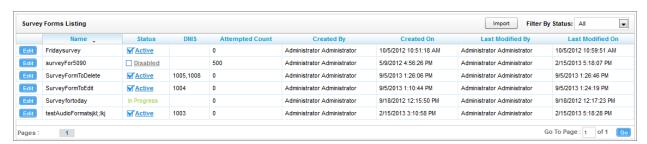
Surveys requires these two directories, and the application must have Create/Write permission for both:

- Audio Prompt Upload Directory This is where messages and prompts are stored on the server's hard drive.
- Audio Recording Directory This is the location on the server's hard drive array where customer feedback recordings are stored.

To specify these directories:

- 1. Create the directories in the file system (for example, C:\SurveyPrompts). Discover does not require specific names for these directories.
- 2. Log into the Discover Web Portal and click the **Administration** tab, 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**.
- 6. Click Save.

## **Manage Surveys**



Click the **Surveys** tab in the Discover Web Portal. This tab will only be available if you have been assigned at least one of the survey-related permissions. For more information about permissions, see the "Permissions Definitions" section in the *Discover Administration Manual*.

If you have permission to edit surveys, **Manage Surveys** will be available. Clicking this selection will display 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.
- To edit the survey delivery information or survey form content, click the Edit button to the left of the survey
  name. This will launch the Survey Editor. For details, see <u>Create Survey</u>.
- To quickly change the status of a survey from Disabled to Active (or vice versa), click 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 Form Editor. Custom forms are not supported.

## **Create Survey**

Click the **Surveys** tab in the Discover Web Portal. This tab will only be available if you have been assigned at least one of the survey-related permissions. For more information on permissions, see the "Permissions Definitions" section in the *Discover by Uptivity Administration Manual*.

**Create Survey** will be available if you have permission to edit surveys. Uptivity recommends creating survey questions, responses, and actions on paper before trying to create the form. To build your survey in Uptivity Surveys:

- 1. Click the **Surveys** tab.
- 2. Click Create Survey in the left navigation menu.
- 3. Enter a **Survey Name**. This name appears in reports. Best practice is to create form names that are unique and descriptive of the survey. You may also wish to include a version number.
- 4. Enter a **Description** if desired.
- 5. 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.
- 6. Select a **Recording Format**. Surveys supports questions that allow the customer to record a verbal answer. This item allows you to select the file format for these recordings. The only supported format is GSM, which is a highly compressed WAV format.

**Note** For more information on the storage location for these recordings, see <u>Specify Surveys Audio</u> <u>Directory Settings</u>. A new folder is automatically created for each survey. Folders are numbered according to the number of survey forms created (i.e., the tenth survey is placed in a folder numbered '10').

7. In the Available DNIS field, select the number(s) from which calls will be directed to this survey. You can select multiple consecutive numbers by shift-clicking, or multiple non-consecutive numbers by CTRL-clicking. Click to move the number to the Attached DNIS field. Similarly, you can click to remove numbers from the Attached DNIS field.

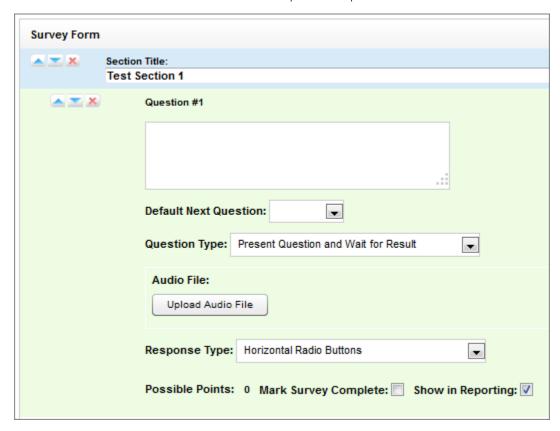
Survey content is organized by section, question and response. A survey must have at least one section, and all questions can be placed in that section. Using multiple sections can help you organize longer surveys.

#### Add a Section

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

- Click Add New Section.
- 2. 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**:

- 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.

**Note** If you want to give callers the option of having the question repeated, instruct them to enter a digit that is not included in your list of valid responses. You will need to ensure that the INI setting repeatquestionafterinvalid is set to **Yes**. Contact Uptivity for additional assistance.

- 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 <u>Question Types</u>.

- 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, they will be converted to one of the following formats:

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 within web browser-based surveys.
- 7. (Optional) Select the Mark Survey Complete check box. You can require certain questions to be responded to in order 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 uncheck this box for these items. Otherwise, this question will display with no data responses.

**Note 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.
  - 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.

**Note** Surveys auto-saves the form while you work with it. The **Save Draft** and **Save** options identify any missing required field data.

# Question Types

Question Type	Used To:	Response Values		
Present Question and Wait for Result	<ol> <li>Convey greeting, closing, instructions or other information, and automatically advance after a wait period (defined at the time of installation in the cc_surveylvrFX.ini file)</li> <li>Present a question and wait for touch-tone input</li> </ol>	<ol> <li>Response Text: enter the text of the response</li> <li>Point Value (optional)</li> <li>DTMF: touch-tone input value for response (e.g. 1 for Yes, 2 for No, etc.); each response must have a unique DTMF value</li> <li>Next Question: allows you to direct the survey based on response (e.g. Yes leads to Question 3, No to Question 4)</li> </ol>		
Collect Customer Information	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">Beep Tone</a> .			
Collect Digits	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_surveylvrFX.ini file)			
End Survey	Convey closing message. Call automatically disconnects after execution of this audio file.			
Threshold Branch	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.	<ol> <li>Negative Percentage Threshold: surveys with current percentage below this value are negative (current accumulated points/current total possible points)</li> <li>Positive Percentage Threshold: surveys with current percentage above this value are positive (current accumulated points/current total possible points)</li> <li>Negative Next Question: next question for surveys at negative threshold</li> <li>Neutral Next Question: next question for surveys between thresholds</li> <li>Positive Next Question: next question for surveys at positive threshold</li> </ol>		

## 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 first screenshot). If the technician's technical skills were satisfactory, the caller is presented with another question prior to the survey's conclusion (see second screenshot).

Technical Skills	9	Score: 0 of 5 (0%)
Were you comfortable with your technician's knowledge of the application? Pro	ess 1 for ye	s. Press 2 for no.
Digits Collected: 2		
Yes No	.□ .ao Opts	Negative answer; caller asked to leave verbal
Allow verbal feedback if dissatisfied with technical knowledge.		comments. Final
Digits Collected: 2		question is not presented.
	. 🗆	presented.
We're sorry that your experience with our technical support was less than satis record a detailed voice message regarding how we could have done better. Pre to stop recording.		
1-110934.wav	. 🗆	
Was your issue resolved within a satisfactory period of time? Press 1 for yes. I	Press 2 for	no.
Yes	. 🗆 📈	
No	. 🗆	

Technical Skills	s	core: 1	10 of 10 (100%)
Were you comfortable with your technician's knowledge of the application	n? Press 1 f	or yes.	Press 2 for no.
Digits Collected: 1			
Yes	. <del>W</del>	5pts	Positive Answer
No	. 🗆		leads to
Allow verbal feedback if dissatisfied with technical knowledge.			presentation of additional
Digits Collected: 1			question
	. 🗆		
We're sorry that your experience with our technical support was less than record a detailed voice message regarding how we could have done bette to stop recording.			
	. 🗆		
Was your issue resolved within a satisfactory period of time? Press 1 for	yes. Press 2	for no	<b>)</b>
Digits Collected: 1		V	
Yes	. <del>W</del>	5pts	
No	. 🗆		
Conclusion		Sco	ore: 0 of 0 (N/A)
Thank you for participating in our Post-Support Survey. We appreciate yo	ur feedback		
	. 🗆		

## **Search Attempted Surveys (Form Search)**



Click the **Surveys** tab in the Discover Web Portal. This tab will only be available if you have been assigned at least one of the survey-related permissions. For more information about permissions, see the "Permissions Definitions" section in the *Discover by Uptivity Administration Manual*.

If you have permission to view surveys, **Form Search** will be available. Clicking this selection will allow you 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.

# **Reports**

Surveys reports can be accessed, and ad hoc reports created, through the Discover Web Portal. You must have appropriate permissions for reporting. For more information on permissions, see the "Permissions Definitions" section in the *Discover by Uptivity Administration Manual*. For more information on ad hoc reports, see the *Discover by Uptivity Reporting Manual*.

To access reports for Surveys:

 Click the Reporting tab, expand Printable Reports in the left navigation menu, and then click Survey Reporting.



The **Survey Reporting** page lists the types of reports that can be created. The **Date Created** column shows the date that the template for the report type was created in the system.

## **Reporting Criteria**

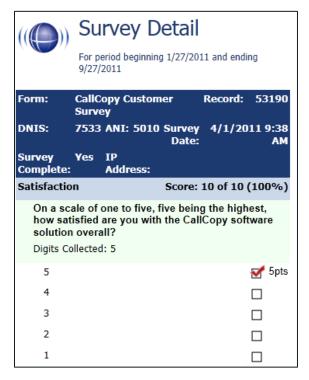
You can use these criteria to specify the data included in a report. The criteria available vary by report.

- 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.
  - **Note** 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.

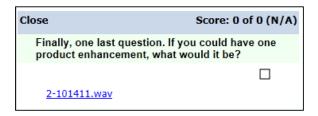
## **Survey Detail**

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

Note IP Address is not used at this time.

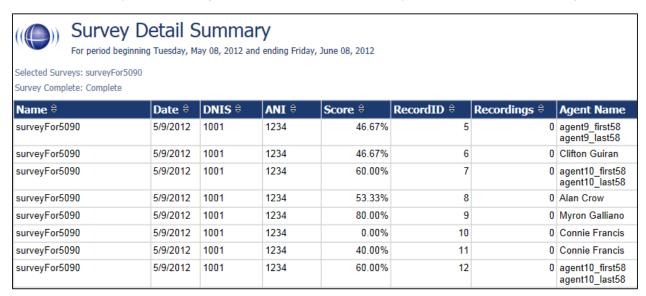


If respondents left a voice message for a question, a link to the message file appears in the report.



## **Survey Detail Summary**

This report 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.



## **Survey Overview**

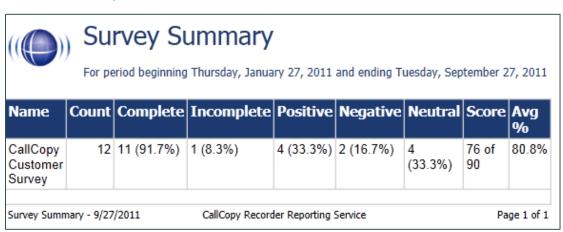
For each survey form in a time period, the report calculates the shown categories. Positive, Negative, and Neutral ranges are defined on the Survey Form specific information. If a survey form does not have any responses, it does not appear on the report.

	Su	Survey Overview				
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 Over	riew - 9/27	/2011 (	CallCopy Recorder R Service	eporting		Page 1 of 1

## **Survey Summary**

This 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)

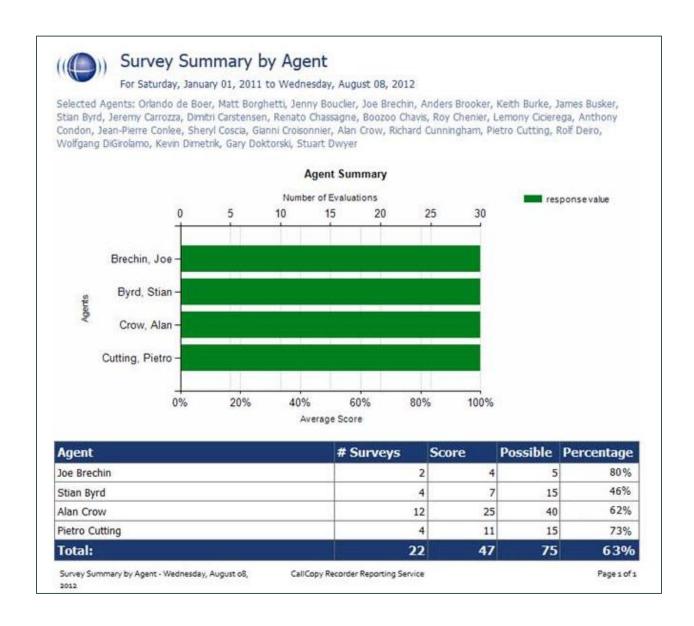


## **Survey Summary by Agent**

This report 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.

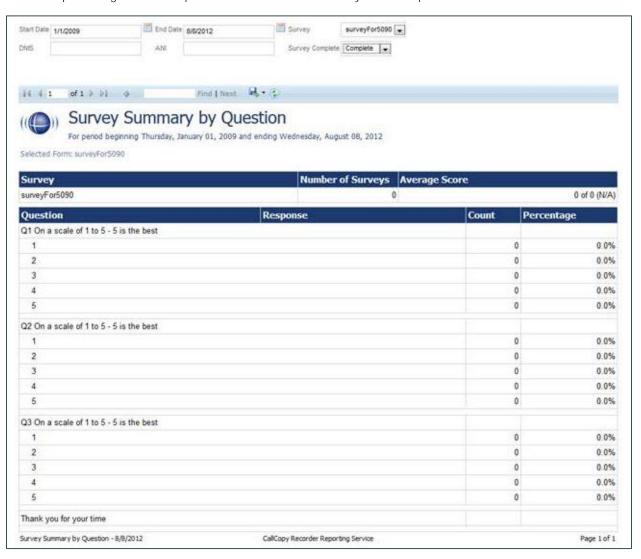
The Report Type option determines how results are broken down and displayed:

- 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 Summary by Question**

This 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.



## **Survey Summary by Response**

This report 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.

Example: Car Satisfaction Survey – 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

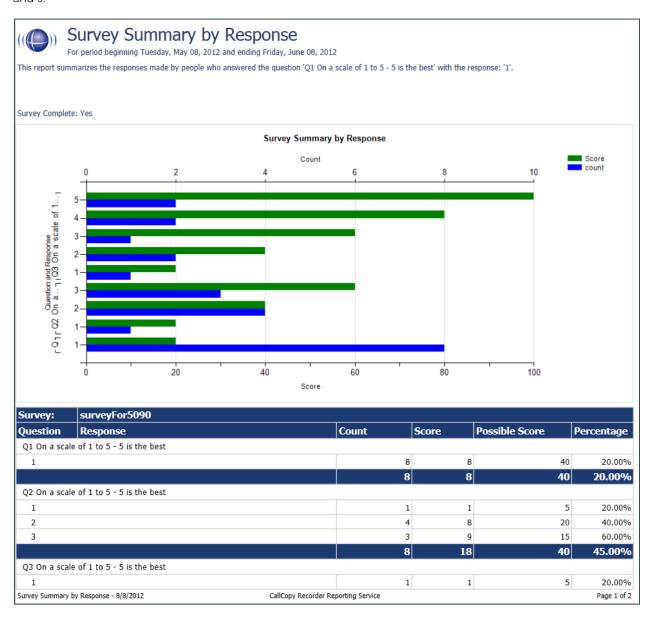
Given these results, it appears that satisfaction with a car purchase is determined by whether or not the customer was able to purchase their first choice. A customer may have wanted a \$35,000 car but had to settle for a \$20,000 car, which affected the satisfaction rating.

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

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.



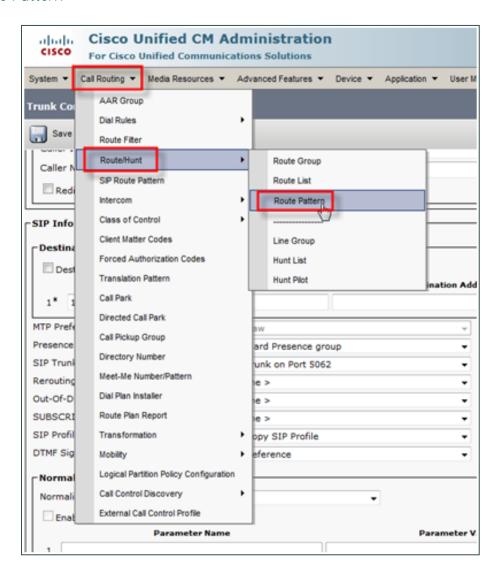
# **PBX Configuration Examples**

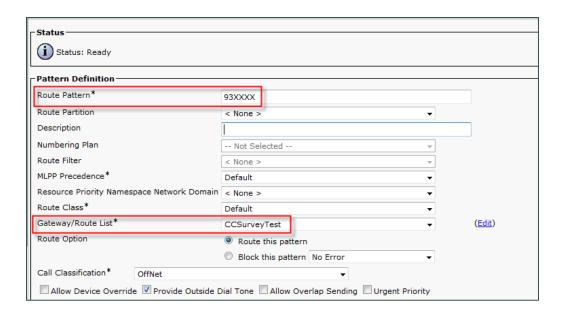
This section outlines PBX configuration examples for SIP trunks used with Uptivity Surveys. This is *not* an inclusive list and Uptivity makes no guarantees that these configurations will work in your scenario. Please consult your PBX support or vendor for specific questions regarding your installation.

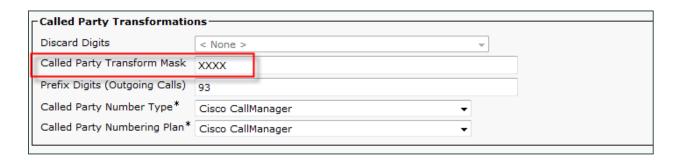
### Cisco

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

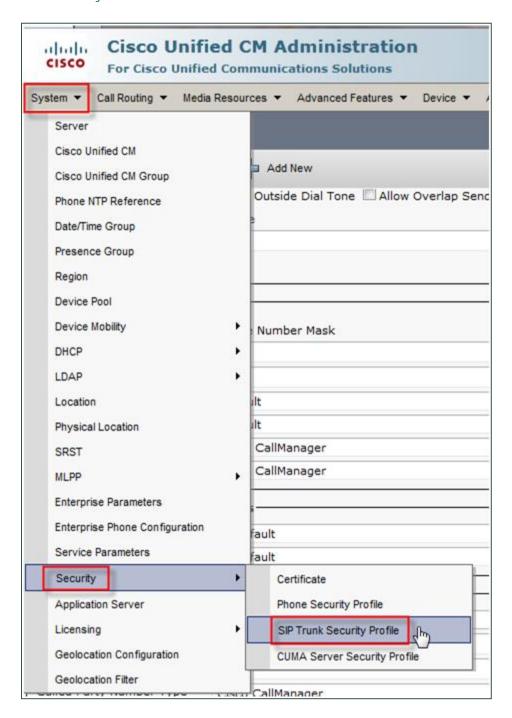
#### Set Route Pattern



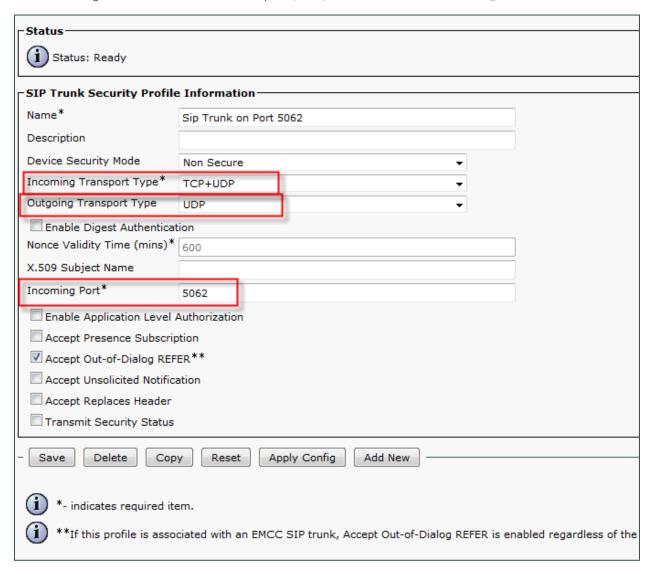




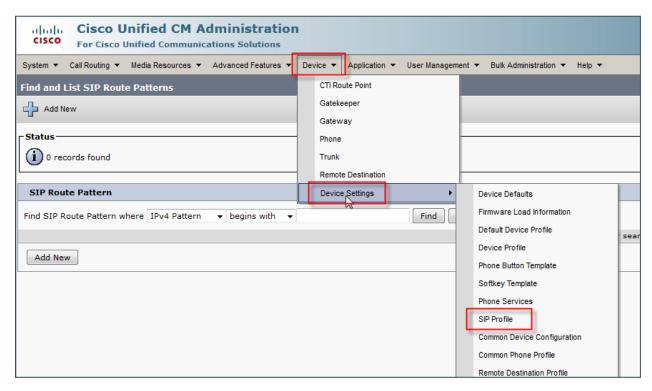
## Set SIP Trunk Security Profile



In the following screenshot, an alternate TCP port (5062) is used as described in Configure INI.



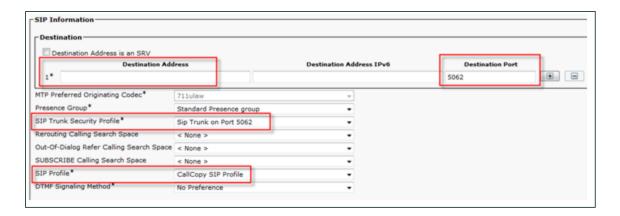
### Configure SIP Profile



Please refer to your Cisco documentation for information on configuring this section.

### Configure Trunk

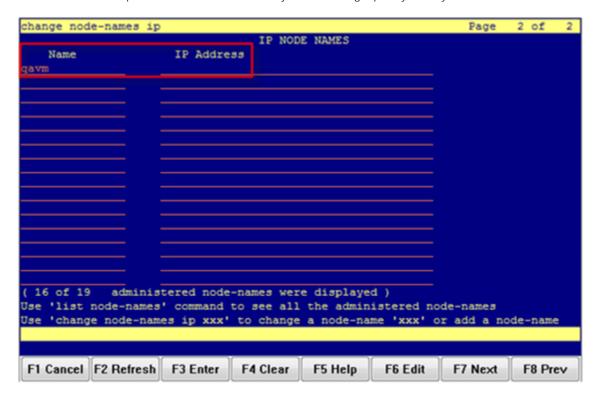




## **Avaya SIP**

### Create Node

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



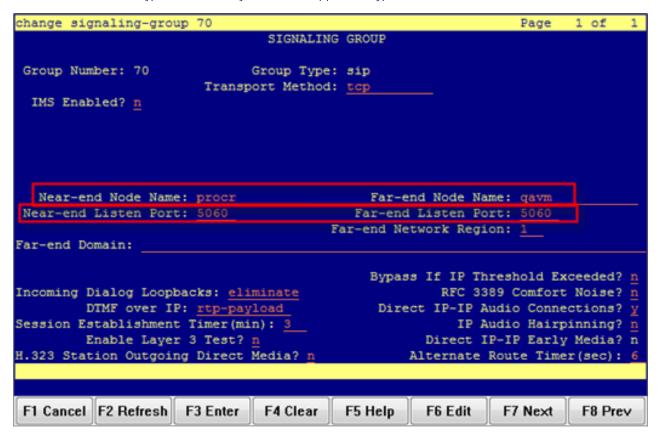
### Create Signaling Group

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, but Surveys does not support encryption.



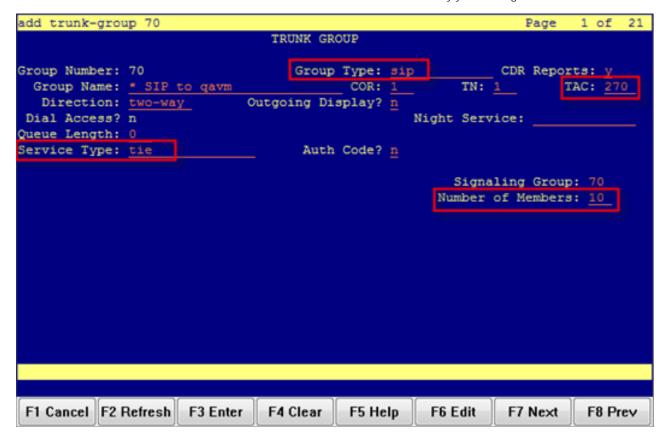
## Create Trunk Group

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.

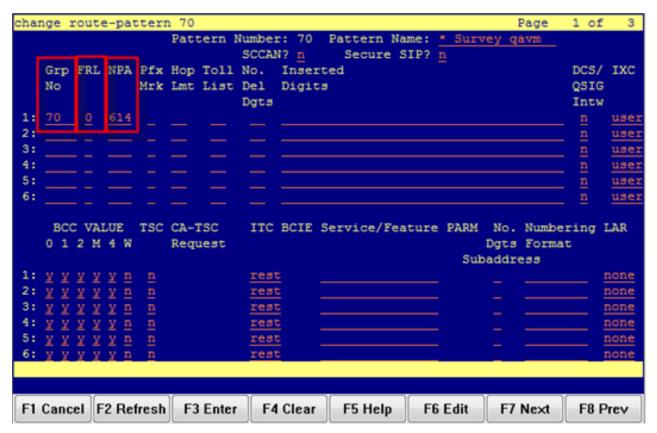


### Create Route Pattern

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

FRL: 0

NPA: Local area code



## Set ARS Digits

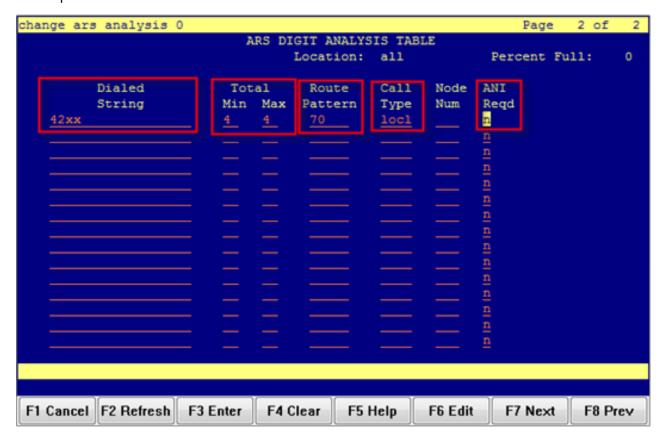
**Dialed String**: DNIS numbers associated with surveys. You can represent a range (42xx means 4200 through 4299) or list individual DNIS numbers on this page.

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

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

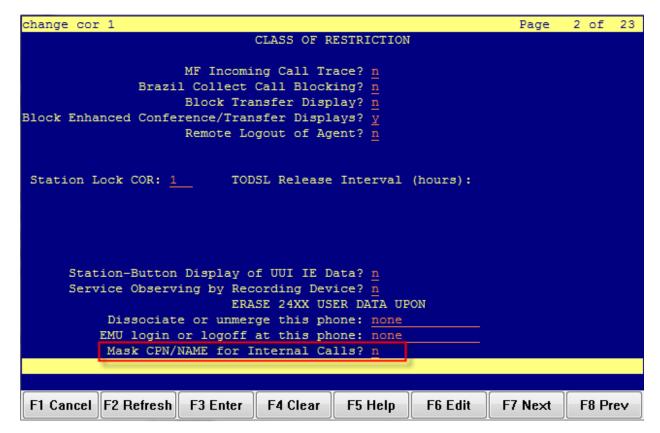
Call Type: locl (allows dialing just an extension to forward to survey rather than a full 11-digit number)

ANI Reqd: Yes



#### 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  $\mathbf{N}$ .



# **About Uptivity**

What boosts the bottom line for any company with a contact center? How about getting the best that every agent can deliver from their first day on the job and constantly optimizing contact center management and performance? Only Uptivity gives you the tools you need to continuously improve every aspect of each step of every agent's life cycle and enhance customer satisfaction. You get exactly what you need thanks to a modern, integrated, and easy-to-use suite of tools that offers a unified system for performance management, workforce management, speech analytics, and call recording. Unparalleled customer service and support from our in-house staff combine with a better bundle for a better value, and a lower total cost of ownership.

Headquartered in Columbus, Ohio, and on the Web at www.uptivity.com.