

UPTIVITY TDM SURVEY GUIDE, V5.5.1

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leader, helping organizations around the globe create high quality customer experiences with a complete workforce optimization

portfolio (WFO). Key portfolio offerings are **inContact Discover WFO** (tightly integrated with the core platform and completely available in the cloud) and **Uptivity Discover WFO** (comprehensive, premisebased WFO that integrates with a wide variety of telephony and contact center solutions). The portfolio also includes the WFO Suite powered by Verint[®], ECHO ™ Customer Feedback Survey, inView ™

Performance Dashboard.

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Audience

This document is written for supervisors, managers and administrators at organizations that use Uptivity Survey in traditional, wired telephony (TDM) environments. It is also written 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 installation, management, and use of 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.

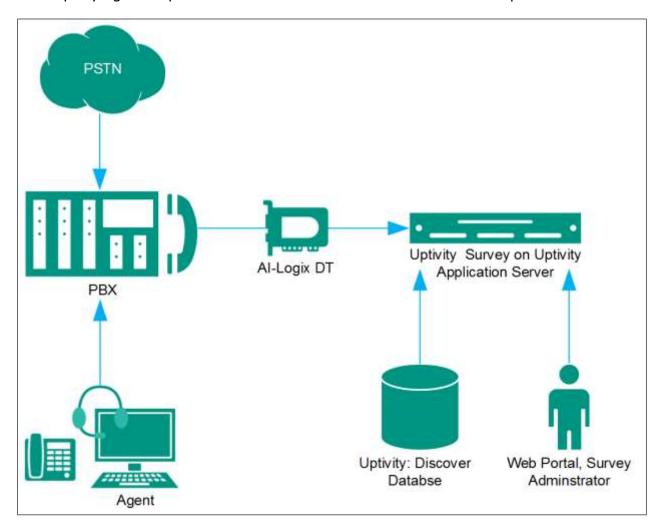
Several Discover WFO features use menus and other windows that may be considered as "pop-ups" by some browsers. inContact recommends that you configure your browser to allow pop-ups for the Discover site.

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.

Product Technical Overview

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



Component	Function		
Callers via PSTN or Agents	 Survey can be configured to handle calls three ways: 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. Agents transfer callers to the survey engine via the PBX. Agents terminate a call and caller is automatically transferred to a survey (dependent on PBX capabilities and configuration). 		
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		
Ai-Logix DT Audio Capture Card	In a TDM environment, Survey connects to the PBX/ACD via a direct cable connection between a T1 trunk and the DT card installed in the Survey server.		
Uptivity Survey Server	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. 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. Survey and Discover can be hosted by the same machine or separate machines. Survey 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 respondent input and responses are recorded in this database as survey records. Reports are generated from these records.		

Requirements

PBX

TDM/ISDN-Supported PBXs

Uptivity Survey is supported with any PBX. Some PBXs may not support certain Survey features. For related information, see <u>Survey Call Linking</u>.

Hardware, Software, and Licensing

Hardware and software requirements vary by PBX.

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. Virtual servers are not supported.

The following third-party hardware is specifically required:

 AudioCodes Ai-Logix DT audio capture card. Either DT3209 (single-span) or DT6409 (dual-span) may be used.

Software and Licensing

The following required software is provided through the Uptivity Survey installation team:

- Uptivity Survey, v5.5.1
- Uptivity Discover, v5.5.1

The following third-party software is also required:

AudioCodes SmartWORKS v5.2 or higher.

Uptivity Survey is a separately-licensed module of Uptivity Discover WFO.

Requirements

Performance Considerations

Performance Guidelines

The following are general performance guidelines for this product. For more information, see Survey Call Linking.

- Only one PBX can use the Survey server.
- A dedicated Survey server can safely handle 240 channels. The number of channels is limited by the number of voice boards supported by the server hardware.
- 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

Uptivity Survey for TDM trunks plays a beep tone at the end of Collect Customer Information questions and before the caller starts speaking.

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.

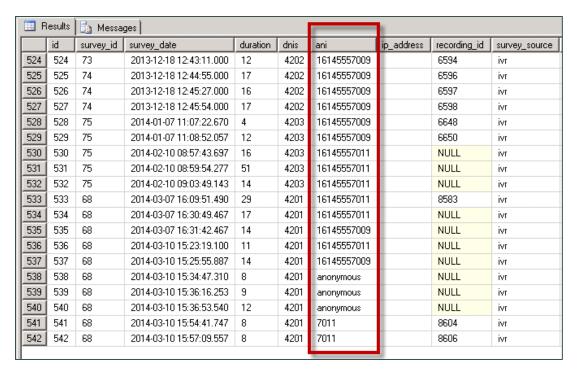


Figure 1

Requirements

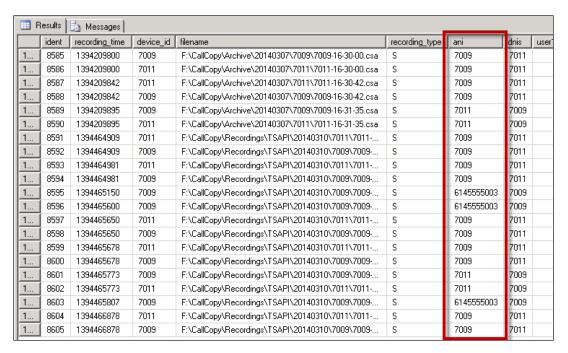


Figure 2

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

AudioCodes Configuration

Wiring Example

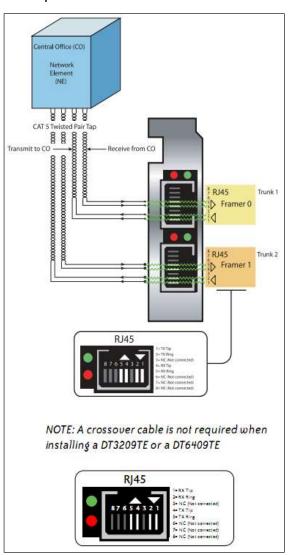
In TDM environments, Uptivity Survey uses one or more Ai-Logix cards installed in the Survey server to deliver surveys and record responses.

The customer is responsible for installing the card(s) in the server, and for performing any necessary cabling to connect the card(s) to the telephony network. The Uptivity Survey installation team will configure the card(s) using the AudioCodes SmartWORKS software.

A wiring diagram example is shown here. The T1 might need to be connected via a cross-over cable if connecting to a PBX or ACD.

For more information, refer to AudioCodes documentation, available from the AudioCodes website or through Uptivity Support.

Note: A T1 deployed with a PRI layer is preferred for speed of connectivity.



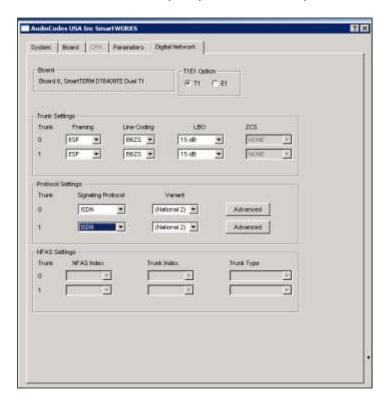
AudioCodes Configuration

Configure the Ai-Logix Card

SmartWORKS software from AudioCodes is used to configure the Ai-Logix cards. This procedure is performed by the Uptivity Survey Installation team and assumes SmartWORKS has already been installed on the Uptivity Survey server. The Ai-Logix card settings must match those on your PBX. For details, see Appendix: PBX Configuration Examples.

To configure the Ai-Logix card(s) in SmartWORKS:

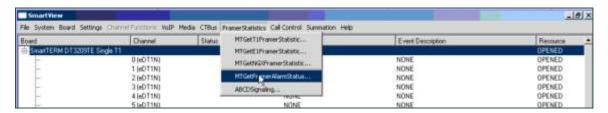
- 1. Open the SmartControl Panel Applet located in the Control Panel.
- 2. On the **Board** tab of the window, verify the desired board number is selected and confirm the TDM Encoding setting is μ -Law.
- 3. Click the **Digital Network** tab.
- 4. Under **Framing**, select **ESF** from the drop-down list.
- 5. Under **Line Coding**, select **B8ZS** from the drop-down list
- 6. Under **Signaling Protocol**, select **ISDN** from the drop-down list.
- 7. Under **Variant**, select **National 2** (NI2) from the drop-down list.



This image shows configuration of a dual-port card serving two T1s. Most Survey systems will have only a single span (port) available.

Verify Ai-Logix Card Operation

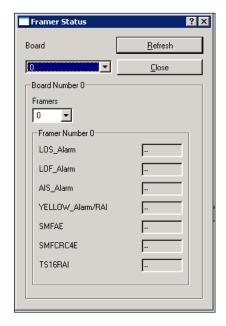
The Uptivity Survey Installation team can verify proper operation of the Ai-Logix card(s) using AudioCodes SmartView software, part of the SmartWORKS package, to view alarm states. These states let you verify that the T1 layer is configured and connected cleanly to the CPE.



To view alarms in SmartView:

- 1. On the Uptivity Survey server, shut down any Discover WFO applications.
- 2. From the Start menu, navigate to **Programs > AI-Logix > SmartWORKS** and launch **SmartView.**
- 3. Click **System** and select **MTGetFramerAlarmStatus**.

The following alarm screen is initiated. An alarm value greater than 0 (e.g. a value other than "—") on the Framer Status screen may indicate a wiring or configuration issue. Refer to AudioCodes documentation, available from the AudioCodes website or through Uptivity Support, for troubleshooting.



PBX Configuration

Tasks in this section are performed by the customer. See your PBX documentation for specific steps to perform the tasks mentioned in this section.

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., toll-free 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 UCID for Survey Call Linking

Note: This section applies only in Avaya TSAPI environments where both Uptivity Survey and Uptivity Discover Call Recording are used.

For survey call linking to work properly, the Avaya CM must be configured to send UCID to the Uptivity Discover recording core on every call.

To configure UCID:

- 1. Log in to the Avaya CM.
- 2. Run the following command: change system-parameters features
- 3. Browse to **Create Universal Call ID (UCID)?** and set the parameter to **Y** (see Figure 1).
- 4. Browse to **Send UCID to ASAI?** and set the parameter to **Y**.
- 5. Save the changes.

```
Page 5 of 19
change system-parameters features
                            FEATURE-RELATED SYSTEM PARAMETERS
SYSTEM PRINTER PARAMETERS
  Endpoint: _
                              Lines Per Page: 68
SYSTEM-WIDE PARAMETERS
                                           Switch Hame: CallCopy
Energency Extension Forwarding (min): <u>10</u>
Enable Inter-Gatevay Alternate Routing? <u>y</u> IGAR Over IP Trunks: <u>skip</u>
Enable Dial Plan Transparency in Survivable Mode? <u>n</u>
                                  COR to Use for DPT: station
HALICIOUS CALL TRACE PARAMETERS
                 Apply HCT Varning Tone? n MCT Voice Recorder Trunk Group:
       Delay Sending RELease (seconds): 🛭
SEND ALL CALLS OPTIONS
      Send All Calls Applies to: station
                                                 Auto Inspect on Send All Calls? n
                Preserve previous AUX Work button states after deactivation? n
UNIVERSAL CALL ID
     Create Universal Call ID (UCID)? 🕡
                                                  UCID Network Node ID: 4
```

Figure 1

```
Page 13 of 19
change system-parameters features
                        FEATURE-RELATED SYSTEM PARAMETERS
 CALL CENTER MISCELLANEOUS
           Callr-info Display Timer (sec): 10
                         Clear Callr-info: <u>next-call</u>
        Allow Ringer-off with Auto-Answer? n
    Reporting For PC Non-Predictive Calls? n
            Agent/Caller Disconnect Tones? n
          Interruptible Aux Notification Timer (sec): 3
             Zip Tone Burst for Callmaster Endpoints: double
  ASAI
            Copy ASAI UUI During Conference/Transfer? n
        Call Classification After Answer Supervision? u
                                   Send UCID to ASAI? u
          For ASAI Send DTMF Tone to call uriginator? U
```

Figure 2

Install and Configure Uptivity Survey

This section explains the tasks for the Uptivity team installing Survey. Survey **must** be deployed on the server where the Ai-Logix card and AudioCodes SmartWORKS software were installed. This can be:

- 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 directory and run the following command:

```
cc SurveyControllerIVR.exe -install
```

If successful, a dialog box will appear and display the message "Service installed successfully."

Configure the Settings.INI File

Uptivity Survey settings are stored in the Settings.ini file used by the Discover database. These settings must be configured for proper operation of the server. The file is located in the base folder where the Discover software was installed.

Survey 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.

[surveys]	
NumberOfAudiocodesChannels=	Number of voice board channels. This is a required setting.
MaximumDigitLengthForAPrompt=1	Maximum number of digits the survey will expect to collect, used when you want to be able to have answers that are more than one digit. This is an optional setting.
PutANIInDigitString=	Used when the PBX isn't sending an ANI*DNIS string, it is only sending a DNIS string. Possible values: Y or N. This is an optional setting.
SurveyEngineType=CCSURVEYENGINE	All non-legacy Survey servers should be CCSURVEYENGINE. Possible values: CCSURVEYENGINE or SOAP. This is an optional setting for current versions.
RepeatQuestionAfterInvalid=N	Set to Y if you want to repeat the question when an invalid digit is pressed. An Invalid_Response file must also be set up. Possible values: Y or N. This is an optional setting,
DigitTimeOut=3000	Specifies the length of time (in milliseconds) Survey waits if the respondent has to enter digits. This is an optional setting.
SoapURL=	This setting has been deprecated; only required for legacy SOAP engine.
SoapWSDL=	This setting has been deprecated; only required for legacy SOAP engine.

Add Survey Controller as an Allowed Application

Windows Data Execution Prevention (DEP) setting helps protect against viruses and other security threats. The Survey Controller (cc_SurveyControllerIVR.exe) must be added to the DEP setting in order to perform remote data execution.

If this procedure is not performed, the IVR will respond with an "Access Violation" message on the respondent's phone, and the violation will also be logged in the CCSurvey-*.log files where * is the channel number.

To add the Survey Controller as an allowed application:

- Navigate to Control Panel > System > Advanced > Performance Settings > Data Execution Prevention.
- 2. Click Add.
- Navigate to the folder where Uptivity Survey was installed and select cc_SurveyControllerIVR.exe. Click Open. If you are prompted to insert a disk, click Cancel.
- 4. Click OK.



Install Default Files

Default files are available from the Uptivity Survey Installation team. Manually create the Prompts folder in the Recorder directory and copy the default files into it.

Web Portal Tasks

Add the Application to the Discover Service Manager

Note: Discover WFO normally requires that the Application Name be entered as an exact match for the corresponding EXE file. This service is an exception to that rule.

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: **CallCopySurveyControllerService**.
- 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 feature currently works only with Uptivity Survey installations in TDM environments where Avaya TSAPI has been configured to send UCID to the Discover Core for every call. For related information, see <u>Survey Call Linking</u> and <u>Configure UCID for Survey Call Linking</u>. 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 TSAPI Script

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

Configure the Settings. INI File for Survey Linking

You will need to add entries to the Settings.ini file to enable survey linking. For more information on this file, see <u>Configure the Settings.INI File</u>.

These settings let Survey process the information provided by Avaya TSAPI and relate it to the information from Discover Call Recording. Therefore, the settings for the Avaya Tsapi section in this INI file must match the settings in the Avaya TSAPI CTI module of the Discover Core recording the calls used with Survey.

Before modifying the INI file, you will need to obtain the trunk identifier used with Survey by Avaya TSAPI. To do this, locate a transfer to Survey in the Avaya TSAPI channel events log. You should see the trunk identifier (trunkGroup_#=#) in the message. In the example shown below, the value is shown as "trunkGroup_0=5".

```
2012-06-05 07:35:05.990
                                  Info
                                             0
Channel 0[1155] Type: CTI_EVENT AVAYA TSAPI 8216(67) CSTA TRANSFERRED
06-05 07:35:05.990
                                        0
                             Info
                                                     Channel
0[1155]
Msg==>timeReceived=07:35:05.943|eventType=67|eventClass=4|monitorCrossR
efId=8|primaryOldCallID=14730|secondaryOldCallID=14705|transferringDevi
ce=8305|transferredDevice=8305|primaryOldDeviceID=8305|secondaryOldDevi
ceID=8305|numberOfTrunks=1|trunkInfoCallId 0=14705|trunkInfoDeviceId 0=
oci trunkGroup=|oci trunkMember=|oci calledDevice=|oci callingDevice=|u
cid=00001147051338899665|attEventType=132<==
```

Settings for survey linking are shown on the left in this table, with additional explanation of the settings detailed on the right. If a setting has the same value for every customer, that value is shown on the left as a "default".

[settings]		
modules=AvayaTsapi	Specifies the module being added to the Settings.ini file.	
[AvayaTsapi]		
Servername=	Refer to customer's TSAPI CTI module settings.	
serverusername=	Refer to customer's TSAPI CTI module settings.	
serverpassword=	Refer to customer's TSAPI CTI module settings.	
tsversion=	Refer to customer's TSAPI CTI module settings.	
privatedatatype=	Refer to customer's TSAPI CTI module settings.	
vdns=	VDN(s) used to transfer calls to the IVR; if more than one, separate them with a comma.	
groups=	Add any hunt groups in order to get agent logins; if more than one, separate them with a comma	
[scripting]		
recordingmatchcolumn=user8	Specifies the column being used to store the UCID, which is required to link surveys. The default column for TSAPI is user8.	
[Surveys]		
Settings for the IVR, the channel settings alter what number the board is treated as. This way we can match TSAPI info to the board and channel from IVR		
NumberOfAudiocodesChannels=	Customer should provide the number of audio channels they are using.	
PutANIInDigitString=Y	Instructs Survey to include the ANI in the digit string. Should be set to Y.	
Channel0BoardTrunk= Channel1BoardTrunk=	Defined earlier in this section. Enter the corresponding value for each channel. If there are multiple trunks, you will need to find the identifier for that trunk and repeat this sequence for the channels that relate to that trunk.	

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-orminus 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 -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 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.

Note: 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.
- 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 \checkmark icon or the Delete \checkmark 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 T1 and then click **Save**.

Manage Surveys



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

Note: 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 Settings.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.

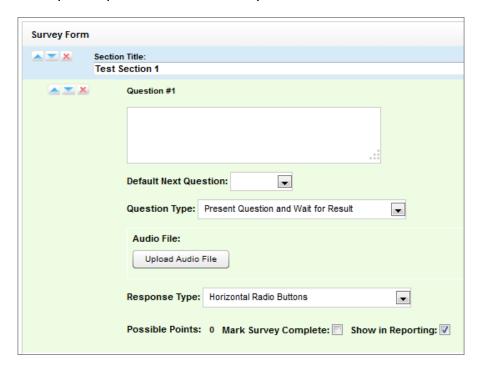
To build your survey in Uptivity Survey:

- 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.

Note: For more information on where these recordings are stored, see <u>Specify Survey Audio Directory Settings</u>. 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').

5. 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.



Add a Section

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

- 1. 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**:

- 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 <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, your files will be converted as follows:

Survey Type	T1-Based
Bit rate	128kbps
Audio sample size	16-bit (linear)
Channels	1 (mono)
Audio sample rate	8kHz (G.711)
Audio format	PCM

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.

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. 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.

Uptivity Survey Administration

Question Types

Question Type	Used To:	Response Values	
Present Question and Wait for Result	1. Convey greeting, closing, instructions or other information, and automatically advance after a wait period (defined at the time of installation in the settings.ini file) 2. Present a question and wait for touch-tone input	Response Text: enter the text of the response Point Value (optional) DTMF: touch-tone input value for response (e.g. 1 for Yes, 2 for No, etc.); each response must have a unique DTMF value Next Question: allows you to direct the survey based on response (e.g. Yes leads to Question 3, No to Question 4)	
Collect Customer Information	recording. Recording length is Recording continues until cust instructed in your question au from within reports, and/or ca	etailed feedback in the form of a bound only by available disk space. comer disconnects or presses "#" as dio file. Voice recordings are playable in be accessed from the Audio ed information, see Beep Tone .	
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 settings.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	Negative Percentage Threshold: surveys with current percentage below this value are negative (current accumulated points/current total possible points) Positive Percentage Threshold: surveys with current percentage above this value are positive (current accumulated points/current total possible points) Negative Next Question: next question for surveys at negative
	option.	threshold
	An example of this type of question and the associated logic is shown below.	Neutral Next Question: next question for surveys between thresholds
		Positive Next Question: next question for surveys at positive threshold

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).

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 No	.□ .æ* 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 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.				
1-110934.wav	. 🗆			
Was your issue resolved within a satisfactory period of time? Press 1 for yes. Press 2 for no.				
Yes No	. .			

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	. W	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 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.			
	. 🗆		
Was your issue resolved within a satisfactory period of time? Press 1 for yes. Press 2 for no.			
Digits Collected: 1		V	
Yes	. W	5pts	
No	. 🗆		
Conclusion		So	ore: 0 of 0 (N/A)
Thank you for participating in our Post-Support Survey. We appreciate your feedback.			
	. 🗆		

Figure 2

Search Attempted Surveys (Form Search)



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

About Reports

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*.



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.

About Reporting Criteria

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.

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.

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**.

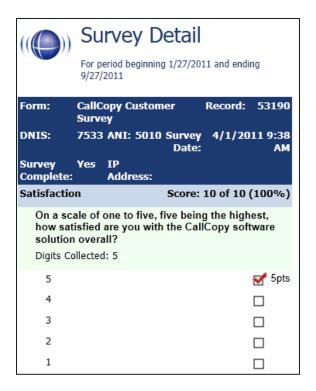
About Printable Reports for Survey Data

This section provides you with explanations and images for each of the Survey-related Printable Reports. For related information, see <u>About Reporting Criteria</u> and <u>Generate a Survey Report</u>.

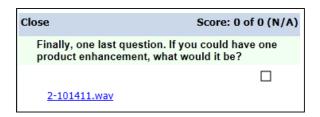
Survey Detail Report

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.

Note: IP Address is not used at this time.

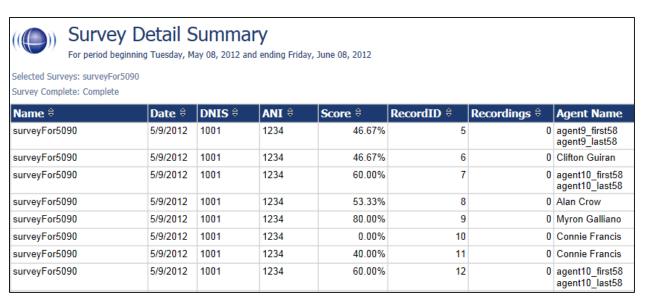


If respondents left a voice message for a question, a link to the message file appears in the report.



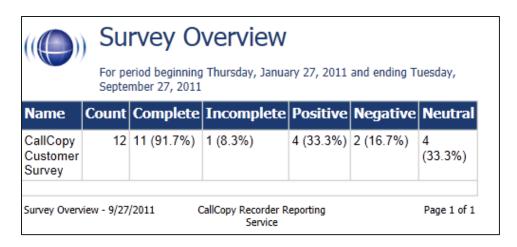
Survey Detail Summary Report

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.



Survey Overview Report

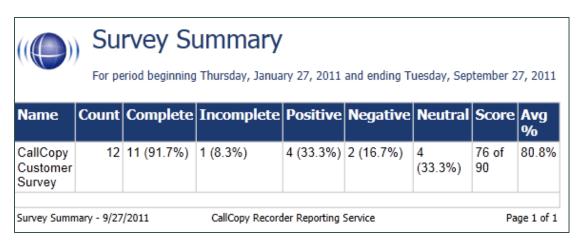
The **Survey Overview** report calculates the shown categories for each survey form in a time period. Positive, Negative, and Neutral ranges are defined on the Survey Form specific information. If a survey form does not have any responses, it does not appear on the report.



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)



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.

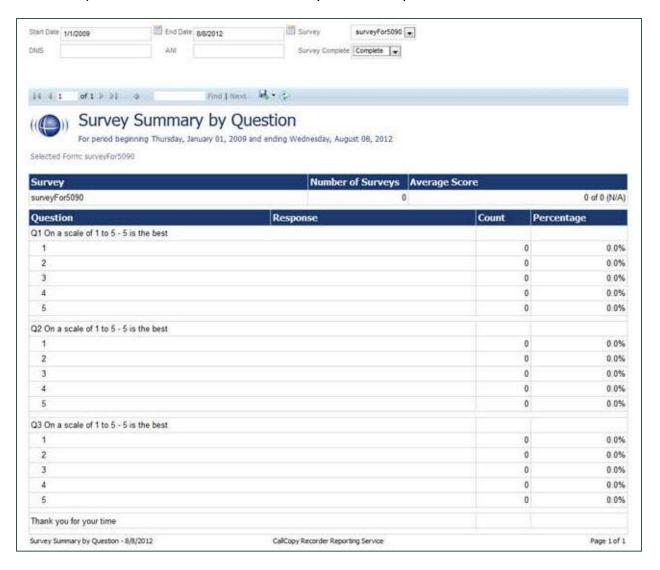
The Report Type option determines how results are broken down and displayed:

- **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 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.



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:

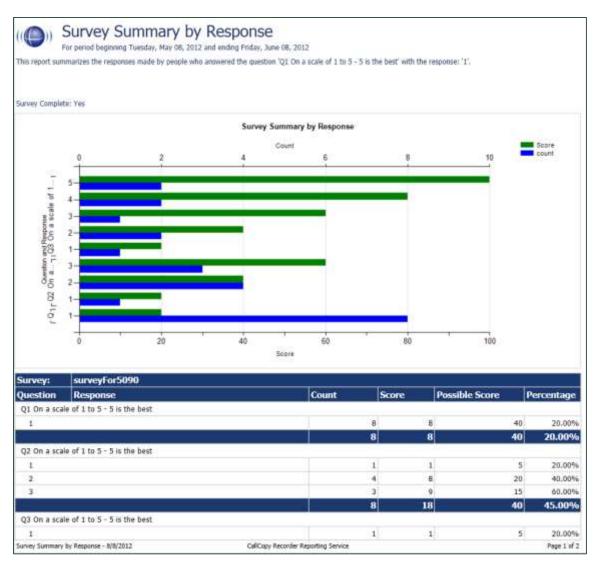
- **Count**: Number of respondents who selected a response.
- **Score**: Actual total points for a response. If a response was worth two points and three respondents selected it, the Score would be six.

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.



This section provides screen images of PBX configuration examples for T1s and trunk groups 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.

Avaya

DS1 Circuit Pack

```
CC Avaya: display ds1 01v3 (page 1) 10/27/2008 5:29:20 PM
                                DS1 CIRCUIT PACK
          Location: 001V3
Bit Rate: \frac{1.544}{2}
                                                     Name: * Survey Trunk
                                             Line Coding: b8zs
  Line Compensation: 1
                                            Framing Mode: esf
   Signaling Mode: <u>isdn-pri</u>
            Connect: pbx
                                                 Interface: network
                                 Country Protocol: 1
Protocol Version: b
  TN-C7 Long Timers? n
Interworking Message: PROGress
                                                       CRC? n
Interface Companding: mulaw
           Idle Code: 111111111
                              DCP/Analog Bearer Capability: 3.1kHz
                                           T303 Timer(sec): 4
      Slip Detection? y
                                       Near-end CSU Type: other
   Echo Cancellation? y
                               Block Progress Indicator? n
      EC Direction: inward
    EC Configuration: 4
```

```
CC Avaya: display ds1 01v3 (page 2) 10/27/2008 5:29:20 PM

DS1 CIRCUIT PACK

ESF DATA LINK OPTIONS

Network Management Protocol: tabs
Send ANSI-T1.403 One-Second Performance Reports? n
Far-end CSU Address: b
```

Trunk Group Configuration

```
CC Avaya: display trunk-group 10 (page 3) 10/27/2008 5:28:47 PM
TRUNK FEATURES
                                           Measured: \underline{\text{none}} Wideband Support? \underline{\text{n}} Maintenance Tests? \underline{\text{y}}
           ACA Assignment? n
                                   Internal Alert? n Maintenance ....

Restriction? n NCA-TSC Trunk Member:
                                  Data Restriction? n
Send Name: y
                                                             Send Calling Number: y
            Used for DCS? n
                                                            Send EMU Visitor CPN? n
  Suppress # Outpulsing? n Format: public
Outgoing Channel ID Encoding: preferred
                                                  UUI IE Treatment: service-provider
                                                      Replace Restricted Numbers? n
                                                     Replace Unavailable Numbers? n
                                                            Send Connected Number: y
Network Call Redirection: none
                                                       Hold/Unhold Notifications? n
              Send UUI IE? y
                                                   Modify Tandem Calling Number? n
                Send UCID? y
Send Codeset 6/7 LAI IE? y
                                                          Ds1 Echo Cancellation? n
                                               US NI Delayed Calling Name Update? n
                                Network (Japan) Needs Connect Before Disconnect? n
                                                               Apply Local Ringback? n
```

```
CC Avaya: display trunk-group 10 (page 2) 10/27/2008 5:28:47 PM

Group Type: isdn

TRUNK PARAMETERS

Codeset to Send Display: 6 Charge Advice: none
Supplementary Service Protocol: a Digit Handling (in/out): enbloc/enbloc

Trunk Hunt: cyclical

Trunk Hunt: cyclical

Incoming Calling Number - Delete: Insert: Format:

Bit Rate: 1200 Synchronization: async Duplex: full

Disconnect Supervision Timeout: 0
```

eOn eQueue

T1 Line Assignment

```
29 08:12:24 ONLN
                                          Rev:7.00.00-b01 equeue-a
                    eOn eQueue
              Add Change Delete Print Quit
                    Line Assignment Modification
                 Port [01.15.01 ] Name [PRI TEST 1.15.1 ]
Number [E1750101]
Line Info 1 [
Type [TRUNK] COS [1 ]
                           Group [1 ] CallZone [ ]
                                                ] VAN Grp [
Port Class [4 ] T1 Class [5 ] Password [
                                              Msg Lamp [O
     Lamp [O
              ] Aux Lamp [O ] Lamp Type [O]
                                                     ] IP [O
Port Comm. [
Skill Set for Routing
Hotline/Direct In Number
                         [D801
Ring no Answer default
                     ---- FORWARDS
       RNA [ ] Active [N ] Delay [ ]
           Busy [ ] Active [N ]
                                               Internal ? [N ]
                                ] Active [N ]
Forward Setup Allowed Internal [N ] External [N ]
Find an assignment
                                                  F1 = HELP
```

T1 Class

```
ct 29 07:14:23 ONLN eOn eQueue
Find Next Back Add Change Delete Print Quit
                            T1 Class Modification
     T1 Index
                                    [ISDN W/D NETWORK ]
     Name
     Protocol (ESF/D4/TR8)
                                    [ESF ]
     Zero Suppression (AMI/B8Z)
                                    [B8ZS ]
                                    [P ]
[Y ]
     Default CSU (P/S)
     ISDN Signaling (Y/N)
                                    [Y ]
     Clear D-Channel (Y/N)
     Maintenance Channel Format (0/1) [0]
     Network or User (N/U)
                                    [N ]
                                    [0]
     Line Build Out
                                                         F1 = HELP
Find an assignment
```

Port Class

```
Rev:7.00.00-b01 equeue-a
                                            Print Quit
Find Next Back Add Change Delete
                           Port Class Modification
   Port Class No. [
                      4]
                            Name [ISDN B CHANNEL ] Type [
   Pad Value
               1000 Rx [ 0] Tx [ 0]
                                      2000 [ 0]
   Shelf Parameters :
                               0] 4 [
   1 [
                               0] 10 [
   Inbound Setup
                             Outbound Setup
                                             Release Protocol
   Rx Ring
                       [N]
                             Tx Ring [N ]
                                             Can't be Released
                             Rx Ack [N ]
Rx Ans [N ]
                       [N]
                                             Re-Seize Guard Timer [ 0]
   Tx Ack
   Tx Ans
                       [N]
   Decoder
                       [Y]
                            Tx Blck [N ]
   No Answer on CONNECT [N ]
                                                    Nailed
   Electr. Set [N ]
                        Can Sup Inbound
                                          [Y]
                                                                 [N]
   Aux Line
             [N]
                        Can Sup Outbound [Y]
                                                          F1 = HELP
Find an assignment
```

ISDN Group

```
Rev:7.00.00-b01 equeue-a
ct 29 07:14:59 ONLN
                       eOn eQueue
Find Next Back Add Change Delete Print Quit
                          ISDN Group Modification
                         2] Supergroup Number [0 ]
   ISDN Group Number
   Primary D-Channel Interface ID
                                                [0]
   Backup D-Channel Interface ID
   Interface Type (P = PCM30/T = T1/V = VoIP)
                                                [T]
   ISDN Parameter Table
                                                [4]
   Interface
              Identifier No.
                              Starting Port No. of Ports
                               [01.15.01]
                                                [23]
     4
     9
     10
                                                        F1 = HELP
Find an assignment
```

ISDN Parameter

```
Oct 30 10:05:05 ONLN eOn eQueue
Find Next Back Add Change Delete
                                               Print Quit
                               Parameter Modifi
                                [NI SERV EXPL CH ]
     Number [
                        Name
     Protocol Variant
                                      [NIS ]
     Implicit Channel Identifier
                                      [N]
     Release vs Disconnect
                                      [N]
     Trunk Release (Transfer)
                                      [N]
     Protocol Test Mode
                                      [N]
     UUI Option
            Name Delivery
     QSIG
                                      [N]
     QSIG
            Trunk Release (Forward)
                                      [N]
     QSIG
            Message Waiting
                                      [N]
     Default Values :
     DNIS Type [ 0]
                                        DNIS Plan
     ANI Type
                                        ANI Plan
     Facility
                                        Bearer
                                                             F1 = HELP
Find an assignment
```

Hotline

```
eOn eQueue
Find Next Back Add Change Delete Print (
Inbound Routing Modification
                                                Print Quit
             17] Pilot [D801 ] Name [survey pri
                                                            Copy From [
 Number [
  Comment [
                                                               ] Zone [0 ]
 Step
                Command
                                         Step
                                                          Command
  [1 ][ISDN ALERT
                                        [2 ][NULL
  [3 ][NULL
                                        [4 ][NULL
  [5][ROUTE DNIS, 80, 0
                                        [6][NULL
  [7 ][NULL
                                        [8][NULL
  [9] [TERMINATE
                                        [10][
  [11][
                                        [12][
  [13][
                                        [14][
  [15][
                                        [16][
  [17][
                                        [18][
  [19][
                                        [20][
  [21][
                                        [22][
  [23][
                                        [24][
  [25][
                                        [26][
  [27][
                                        [28] [
  [29][
                                        [30][
  [31][
                                      ] [32][
                                                              F1 = HELP CHANGE
 Enter inbound route entry name.
```

Nortel

The following sample configurations were taken from a Nortel Option 11, LD screen 22:

```
CTYP MSDL
DNUM 8
PORT 1
DES CC_SVY
USR PRI
DCHL 19
OTBF 32
PARM RS422 DTE
DRAT 64KC
CLOK EXT
IFC NI2
 ISDN MCNT 300
CLID OPT0
CO_TYPE STD
SIDE NET
CNEG 1
RLS ID 25
RCAP COLP NDS
T310 120
T200 3
T203 10
N200 3
N201 260
K 7
BSERV NO
```

Document Revision History

Revision	Change Description	Effective Date
0	Initial release for this version	2015-02-13