UPTIVITY SURVEYS TDM ADMINISTRATION GUIDE, V5.4

April 2014

Reference Guide

www.uptivity.com

Security Classification: Uptivity Confidential.

Distribution: Approved internal Uptivity staff only and licensed Uptivity customers.

Note: Applicable non-disclosure agreements must be in force for authorization.

Revision History		
Revision	**Change Description**	**Effective Date**
0	Added ini setting: `RepeatQuestionDigit=#` Controls which digit the caller can press to repeat the question. If no digit is set, the default is #.	2014-04-30

Table of Contents

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 TDM and covers:

- Equipment configuration
- Survey engine administration
- Survey form design and creation
- Reporting

Notes

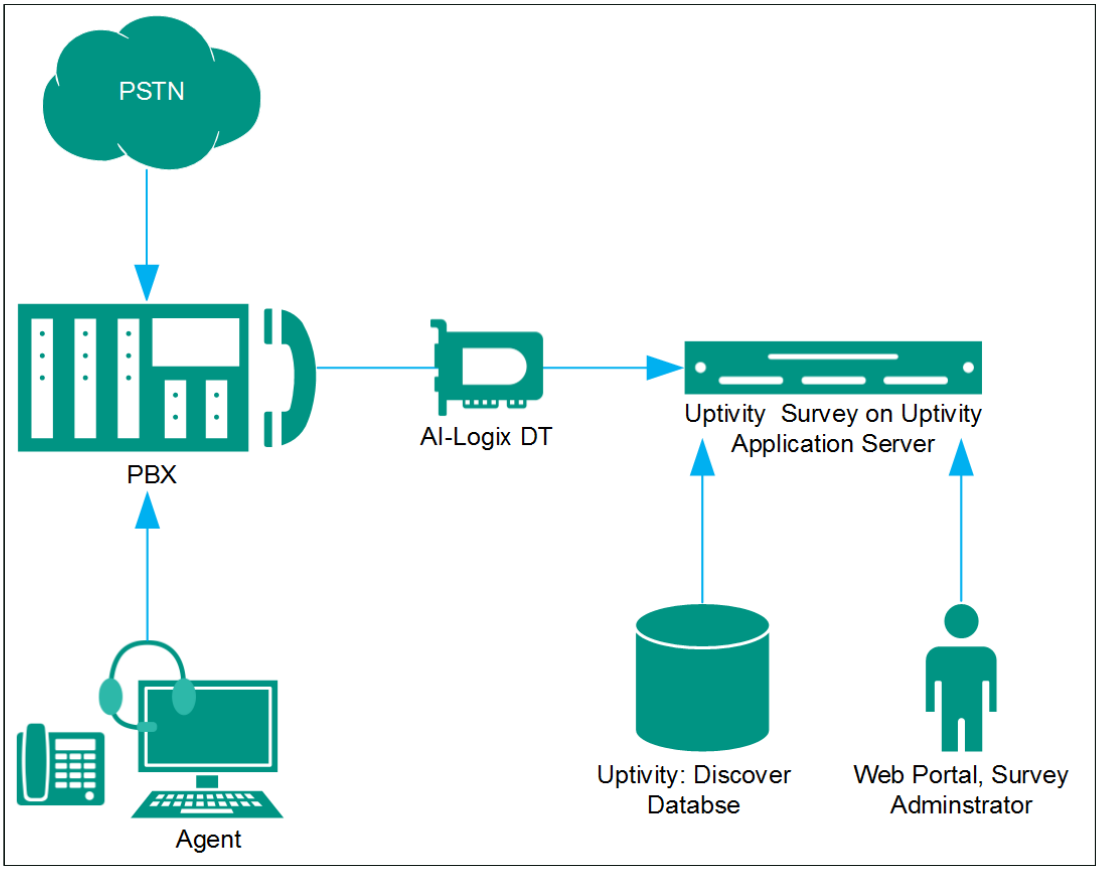
Discover allows administrators to customize field names and terminology in the Web Portal to fit your unique environment. Therefore, screen examples and field names used in this manual may differ from those seen in your implementation.

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.



<table>
<tr><th>Component</th><th>Function</th></tr>
<tr><td>Callers via PSTN or Agents</td><td>Surveys can be set up to handle calls three ways:
A telephone number can be setup and provided to the public. Callers dial the number, and the PBX directs the call to the survey engine.
Agents can transfer callers to the survey engine via the PBX.
Agents can terminate a call and caller is automatically transferred to the survey. This option is dependent on PBX capabilities and configuration.</td></tr>
<tr><td>PBX</td><td>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</td></tr>
<tr><td>AI-Logix DT</td><td>For a TDM network, Surveys connects to the PBX/ACD via a T1 trunk. This setup requires an AI-Logix DT voice board.</td></tr>
<tr><td>Uptivity Surveys</td><td>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 prompts, 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.</td></tr>
<tr><td>Discover Web Portal</td><td>Administrators, system administrators, and managers use the Web Portal to
Create and manage survey forms.
Configure and manage the server and user permissions.
Review survey results, reports, and respondent audio responses.</td></tr>
<tr><td>Discover Database</td><td>Call information and respondent input and responses are recorded in this database as survey records. Reports are generated from these records.</td></tr>
</table>

Requirements

PBX

TDM/ISDN Supported PBXs

All PBXs are supported but require an AI-Logix DT voice board. For feature restrictions, see Survey Call Linking.

Hardware, Software, and Licensing

Hardware and software requirements vary by PBX.

Uptivity

Surveys can be deployed with Discover by Uptivity on the same machine, on a separate machine, or as a stand-alone 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. For TDM/ISDN PBXs, the following items are specifically required:

- AudioCodes DT6409 (dual-span) T1 terminate board. Only one of the ports is used. This is a full-height, full-length card, so the customer-supplied server must be able to accommodate it.

Software

This guide covers:

- Discover by Uptivity, v5.4

This integration requires the following software:

- AudioCodes SmartWORKS v5.2 or higher

Licensing

Contact your Uptivity representative for licensing information.

Performance Guidelines

The following are general performance guidelines for this product.

- Only one PBX can use the Surveys server
- A dedicated Surveys 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.

Survey Call Linking

This feature is supported only for installations using Avaya TSAPI and TDM trunks.

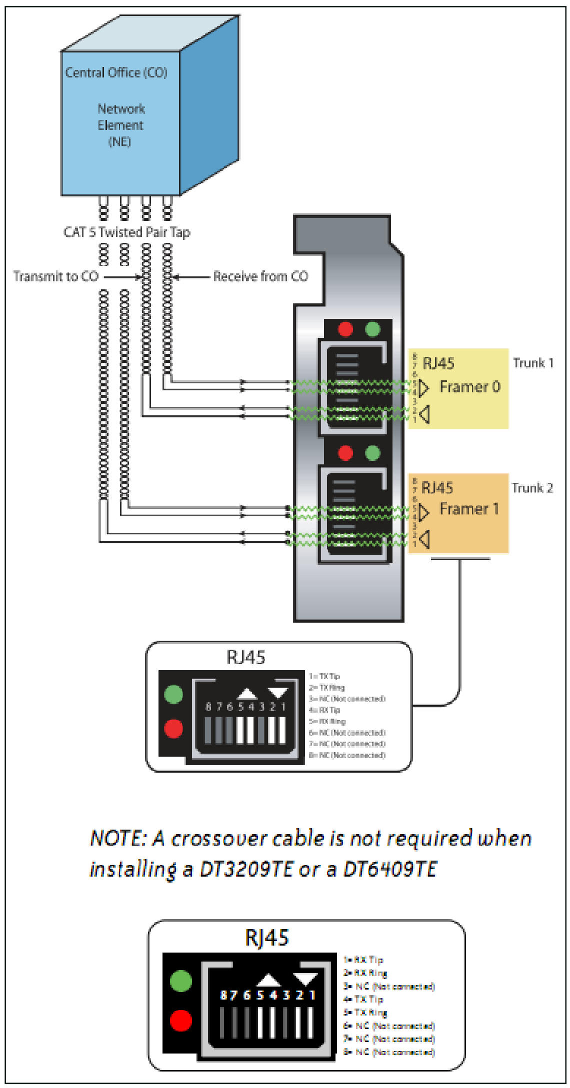
AudioCodes Configuration

Uptivity uses AudioCodes AI-Logix DT-series boards to provide terminate connections to the customer PBX.

This section assumes that AudioCodes' SmartWORKS software has been installed.

Wiring Example

A wiring diagram example appears below. Note that the T1 might need to be connected via a cross-over cable if connecting to a PBX or ACD. For more information on wiring concerns, please reference AudioCodes documentation, available from the AudioCodes website or through Uptivity Support.



Configure the AI-Logix Board

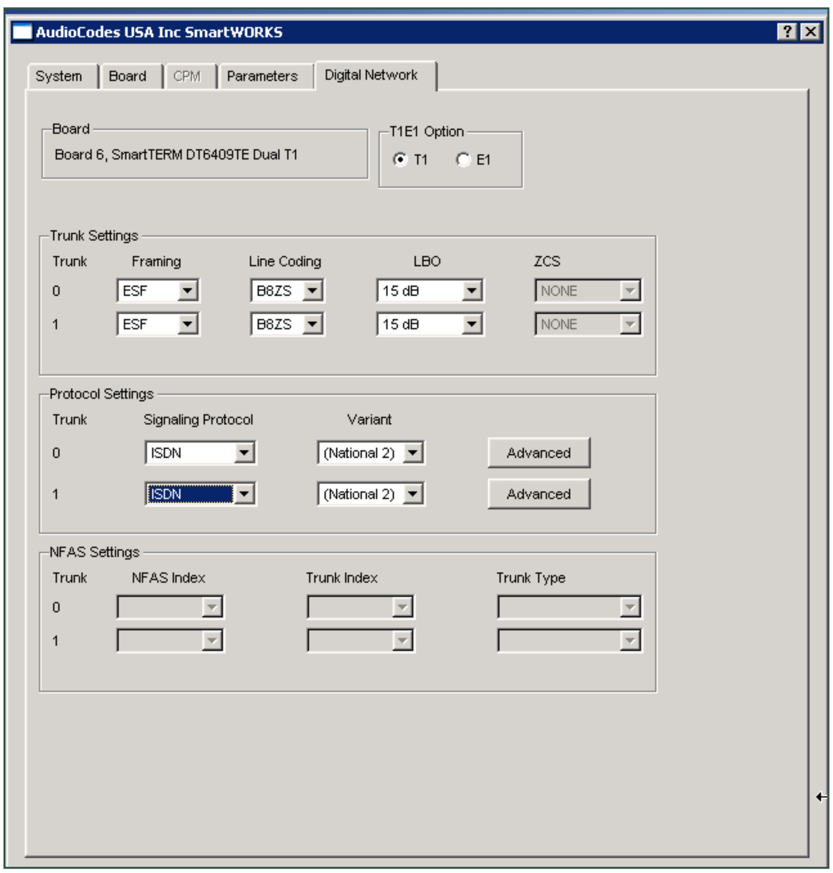
The board settings must match those on your PBX. For details, see PBX Configuration Examples.

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

To configure the SmartWORKS board:

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 screenshot shows the configuration of a T1 on a dual-port board serving two T1s. Most Surveys systems will have only a single span (port) available.



Verify Board Service

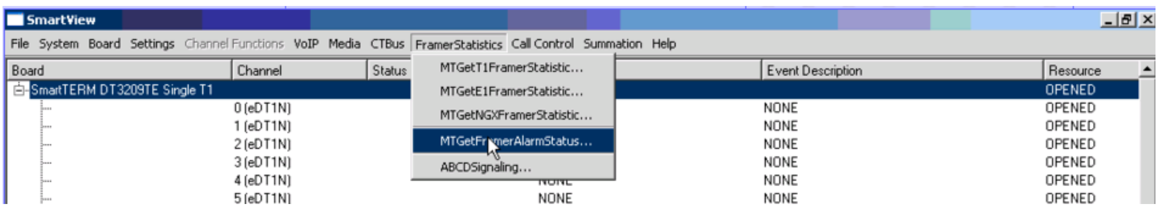
Proper operation of the board can be verified using the AudioCodes SmartView software that was installed with the SmartWORKS package. To open SmartView from the Start menu select **Programs** > **AI-Logix** > **SmartWORKS** > **SmartView.**

From the menu bar, select **System** > **MTSysStartup**. This loads the driver, opens the board, and displays all channels.

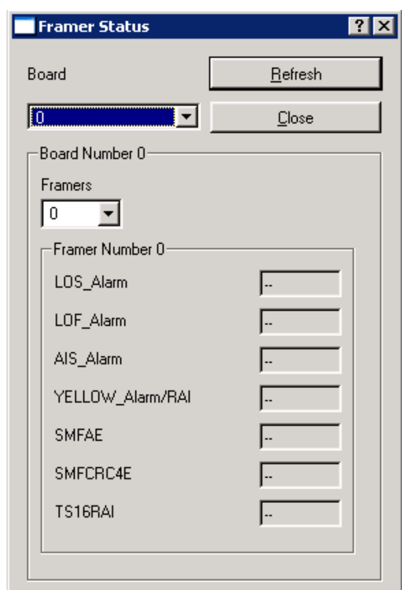
At this point the system is set up to operate and capture events. To verify the board is in service, alarm states should be checked. You can use these states to verify that the T1 layer is configured and connected cleanly to the CPE.

To view alarm states:

Click **Framer Statistics** and select **MTGetFramerAlarmStatus**.



The following alarm screen is initiated. Any alarm value of greater than 0 (or --) is indicative of a wiring or configuration issue. Refer to AudioCodes documentation, available from the AudioCodes website or through Uptivity Support, for troubleshooting.



PBX Configuration

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., 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.

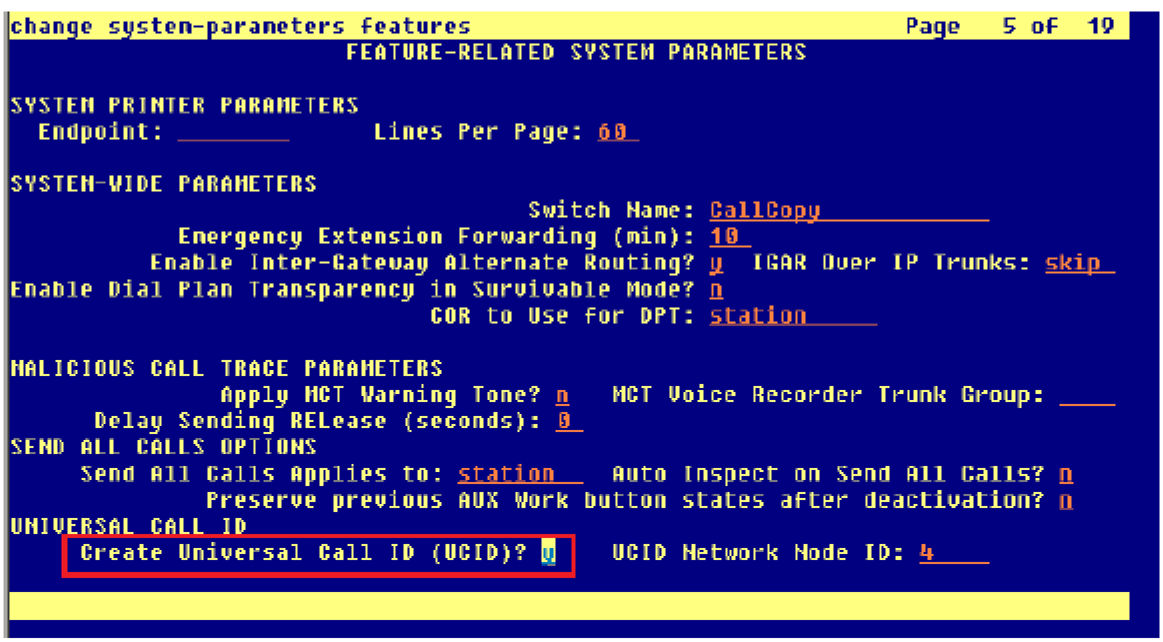
Configure UCID for Survey Call Linking

Note This section applies only in Avaya TSAPI environments.

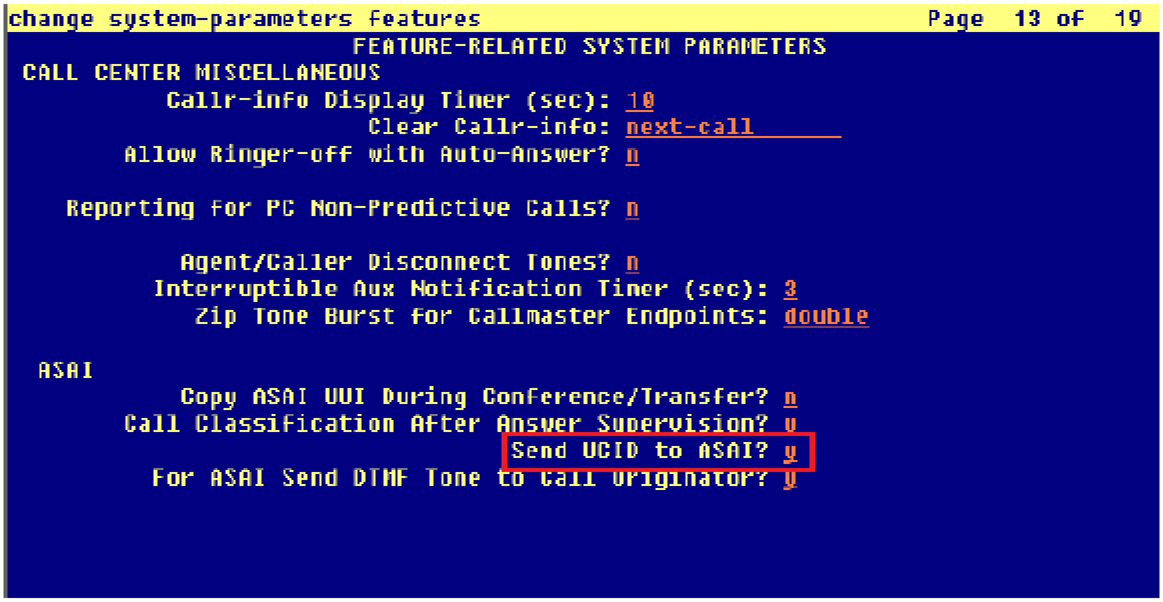
In order for survey call linking to work properly, the Avaya CM must be configured to send UCID to the Uptivity core so that it is captured on every call. This can be set up from the CM console. To configure this:

1. Log into the CM.
2. Run the following command: **change system-parameters features**
3. Browse to and set the following settings to **Y**:

    - Create Universal Call ID (UCID)?



- Send UCID to ASAI?



4. Save the changes.

Install and Configure Uptivity Surveys

This section explains the tasks for installing Surveys. Surveys **must** be deployed on the server where the AI-Logix board 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 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 directory and run the following command:

```
cc_SurveyControllerIVR.exe -install
```

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

Check INI Configuration

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

These are the configuration settings:

[surveys]	Description
NumberOfAudiocodesChannels=	Number of voice board channels. Required for TDM.
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.
PutANIInDigitString=	Optional setting, used when the PBX isn't sending an ANI*DNIS string, it is only sending a DNIS string. Possible values: Y or N.
SurveyEngineType=	All non-legacy Surveys servers should be CCSURVEYENGINE. Possible values: CCSURVEYENGINE or SOAP. Optional for current versions, it defaults to CCSURVEYENGINE if not set.
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.
RepeatQuestionDigit=#	Controls which digit the caller can press to repeat the question. If no digit is set, the default is #.
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.
SoapURL=	This setting has been deprecated; only required for legacy SOAP engine.
SoapWSDL=	This setting has been deprecated; only required for legacy SOAP engine.

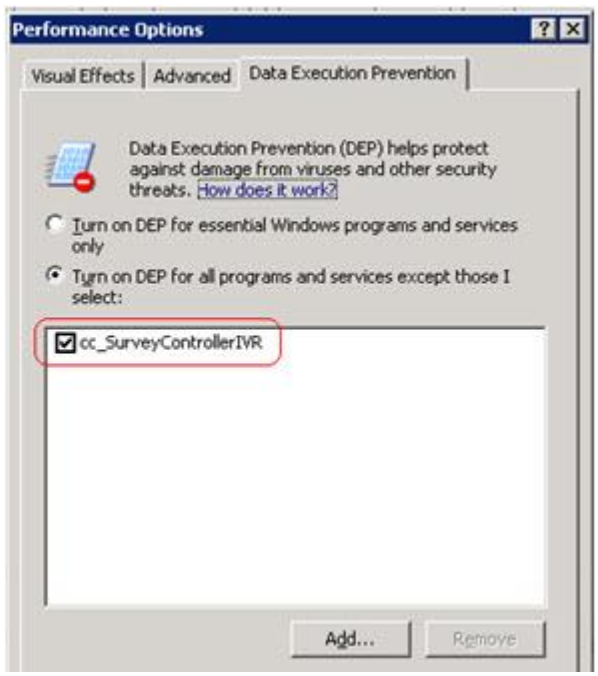
Add Survey Controller as an Allowed Application

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 setting is NOT set, 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 configure this setting:

1. Go to Control Panel > System > Advanced > Performance – Settings > Data Execution Prevention.
2. Click **Add**.
3. Navigate to the folder where the survey software was installed and select cc_SurveyControllerIVR.exe. Click **OK**. If you are prompted to insert a disk, click **Cancel** and continue with this step.



Install Default Files

Default files are available from the Uptivity 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

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: CallCopySurveyControllerService.
5. Select **Yes** from the drop-down list under **Auto-Restart**.
6. Click **Save**.

> **Note** Discover 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.

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 check box for **Survey Score.**
5. Click **Save**.

Survey Call Linking (Optional)

> **Note** This feature currently works only with TDM Surveys installations in Avaya TSAPI environments that have been configured to send UCID to the Discover Core for every call.

Install the Surveys TSAPI Script

1. Browse to the directory containing **cc_SurveyControllerIVR.exe**, typically **C:\Program Files (x86)\CallCopy\Recordings**.
2. Create a **Scripts** folder in that directory.
3. Obtain the correct script file from Development and copy it to the **Scripts** folder.

Update the Settings.ini File

1. Locate a transfer to Surveys in the Avaya TSAPI channel events log. You should see the trunk identifier (trunkGroup_#=#) in the message. Refer to the example below.

*2012-06-05 07:35:05.990 Info 0 Channel 0[1155] Type: CTI_EVENT_AVAYA_TSAPI 8216(67) CSTA_TRANSFERRED IP: 2012-06-05 07:35:05.990 Info 0 Channel 0[1155] Msg==>timeReceived=07:35:05.943|eventType=67|eventClass=4|monitorCrossRefId=8|primaryOldCallID=14730|secondaryOldCallID=14705|transferringDevice=8305|transferredDevice=8305|primaryOldDeviceID=8305|secondaryOldDeviceID=8305|numberOfTrunks=1|trunkInfoCallId_0=14705|trunkInfoDeviceId_0=T14705#1|**trunkGroup_0=5**|trunkMember_0=17|oci_ucid=00000000000000000000|oci_trunkGroup=|oci_trunkMember=|oci_calledDevice=|oci_callingDevice=|ucid=00001147051338899665|attEventType=132<==*

2. Add the following entries to the settings.ini file (in C:\Program Files (x86)\CallCopy). The "AvayaTsapi" settings must be the same as those set on the Avaya TSAPI CTI module of the Discover Core that is recording the calls being transferred.

[settings]	
modules=	Value should be **AvayaTsapi**.
[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=	Set to match the column being used to store 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=`	Should be set to Y.
`Channel0BoardTrunk=` `Channel1BoardTrunk=`	Defined in the first step 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 Call 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. You can use Post-Survey Linker 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 not yet 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.

The Linker should be used as a supplemental, not primary, means of linking. The Surveys service uses CTI data that assures most surveys/calls will be linked accurately. That CTI data is not available to the Linker service. In addition, 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 Surveys engine but should for ease of administration.

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, 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 setup:

- 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.
- Surveys 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 install 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 icon to save.

Values can be edited by clicking the icon 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

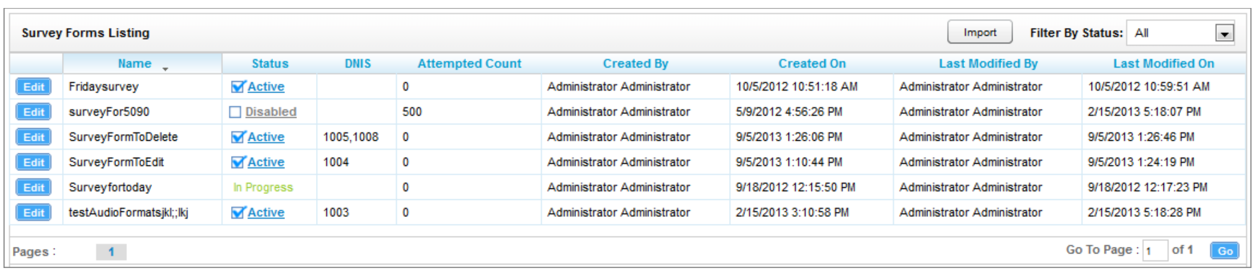
Surveys requires these two directories, and the application must have Create/Write permission for both:

- 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 T1.
6. Click **Save**.

Manage Surveys



Survey Forms Listing — Import — Filter By Status: All

	Name	Status	DNIS	Attempted Count	Created By	Created On	Last Modified By	Last Modified On
Edit	Fridaysurvey	Active		0	Administrator Administrator	10/5/2012 10:51:18 AM	Administrator Administrator	10/5/2012 10:59:51 AM
Edit	surveyFor5090	Disabled		500	Administrator Administrator	5/9/2012 4:56:26 PM	Administrator Administrator	2/15/2013 5:18:07 PM
Edit	SurveyFormToDelete	Active	1005,1008	0	Administrator Administrator	9/5/2013 1:26:06 PM	Administrator Administrator	9/5/2013 1:26:46 PM
Edit	SurveyFormToEdit	Active	1004	0	Administrator Administrator	9/5/2013 1:10:44 PM	Administrator Administrator	9/5/2013 1:24:19 PM
Edit	Surveyfortoday	In Progress		0	Administrator Administrator	9/18/2012 12:15:50 PM	Administrator Administrator	9/18/2012 12:17:23 PM
Edit	testAudioFormatsjkl;;lkj	Active	1003	0	Administrator Administrator	2/15/2013 3:10:58 PM	Administrator Administrator	2/15/2013 5:18:28 PM

Pages : 1 — Go To Page : 1 of 1 Go

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 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 Create Survey.
- 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

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. Be sure 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 Surveys 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 Check INI Configuration.
- **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 the application:

1. Click the **Surveys** tab.
2. Click **Create Survey** in the left navigation menu. The **Survey Editor** will appear.
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**. The Surveys module 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 Specify Surveys Audio Directory Settings. 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.

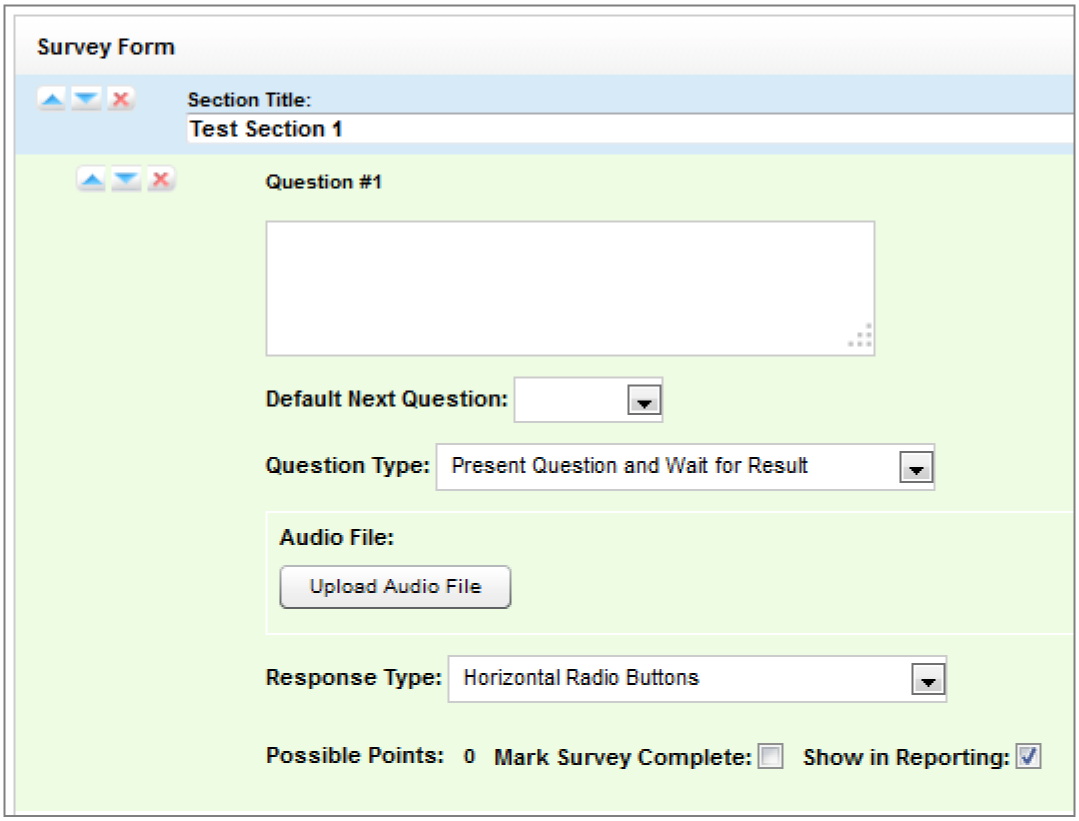
Survey content is organized by section, question and response. A survey must have at least one section, and all questions can be placed in that section. Using multiple sections can help you organize longer surveys.

Add a Section

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

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

To add a question in the **Survey Editor**:

1. Click **Add New Question**.
2. Enter the text of the question in the text box. Your entry should be the text within the question's recorded audio file for consistency and future troubleshooting.
3. **Default Next Question** allows you to specify the next question that will be presented in the survey.
4. Select a **Question Type**. For additional information about question types and corresponding response options, see Question Types.

5. Click **Upload Audio File** and navigate to the file with the question. This is the location of the recording audio file stored on the survey application survey's hard drive structure. 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	T1-Based
Bit rate	128kbps
Audio sample size	16-bit (Linear)
Channels	1 (mono)
Audio sample rate	8kHz
Audio format	PCM

6. **Response Type** is not used by audio-based surveys. This is reserved for future use within web browser-based surveys.
7. (Optional) Check 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. Question 5 would be scored as 0 out of the possible points for Question 5, in this example. Any survey not reaching Question 4 would be marked as "incomplete."
8. (Optional) Clear the **Show-in-Reporting** check box 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.
   - **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**.

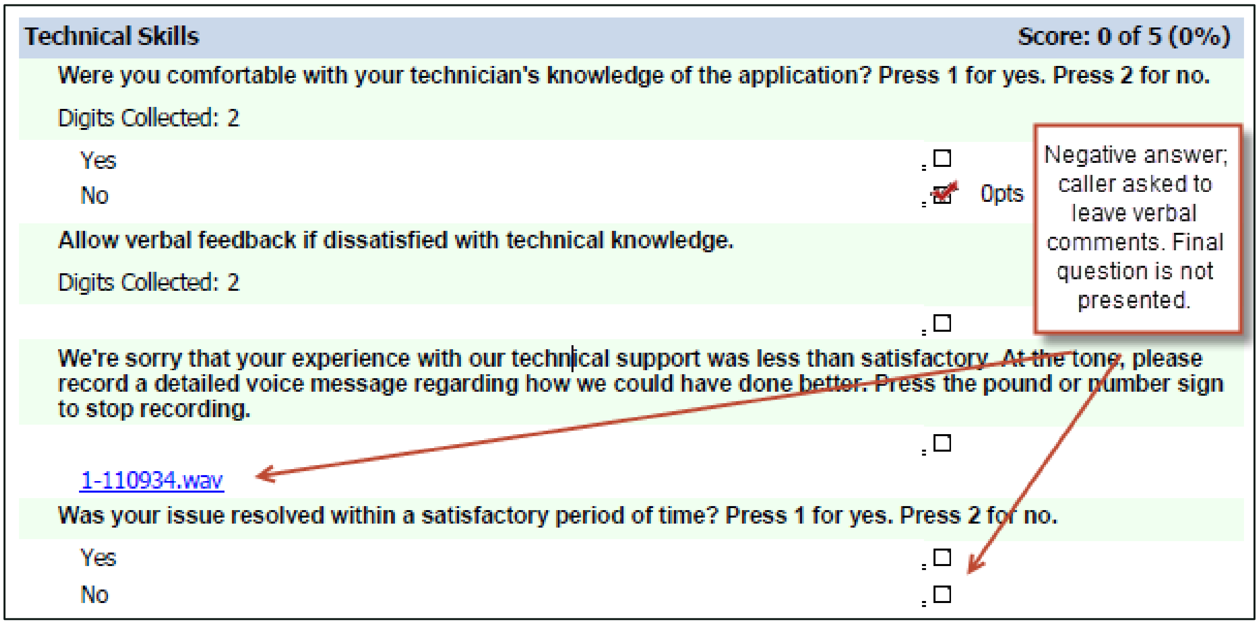
   Note Surveys auto-saves the form while you work with it. The **Save Draft** and **Save** options identify any missing required field data.

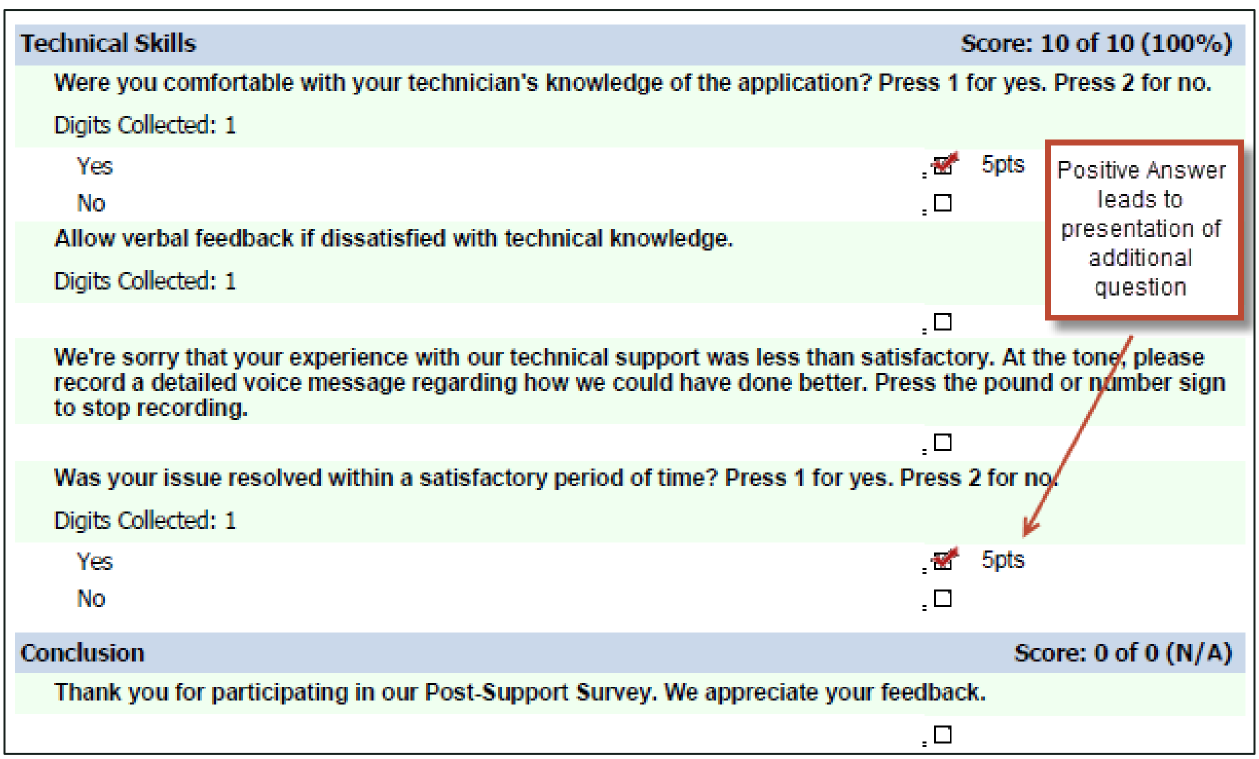
Question Types

Question Type	Used To:	Response Values
Present Question and Wait for Result	1. 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) 2. Present a question and wait for touch-tone input	1. **Response Text:** enter the text of the response 2. **Point Value** (optional) 3. **DTMF:** touch-tone input value for response (e.g. 1 for Yes, 2 for No, etc.); each response must have a unique DTMF value 4. **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	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.	
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.	1. **Negative Percentage Threshold**: surveys with current percentage below this value are negative (current accumulated points/current total possible points) 2. **Positive Percentage Threshold**: surveys with current percentage above this value are positive (current accumulated points/current total possible points) 3. **Negative Next Question**: next question for surveys at negative threshold 4. **Neutral Next Question**: next question for surveys between thresholds 5. **Positive Next Question**: next question for surveys at positive threshold

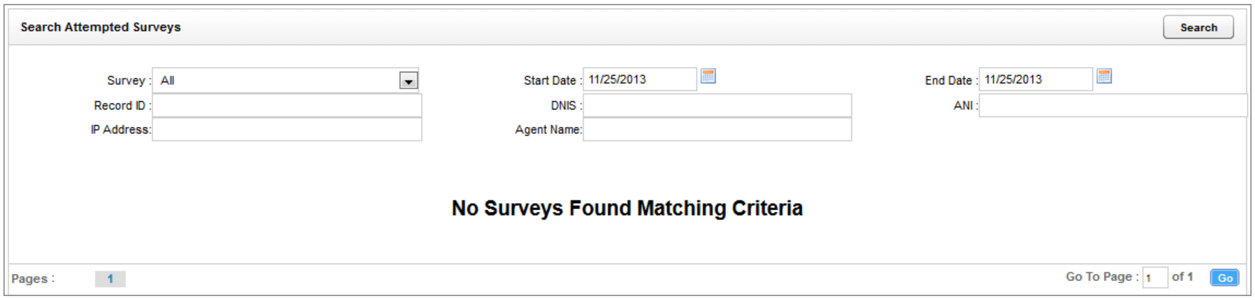
Threshold Branch Example

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 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).





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:

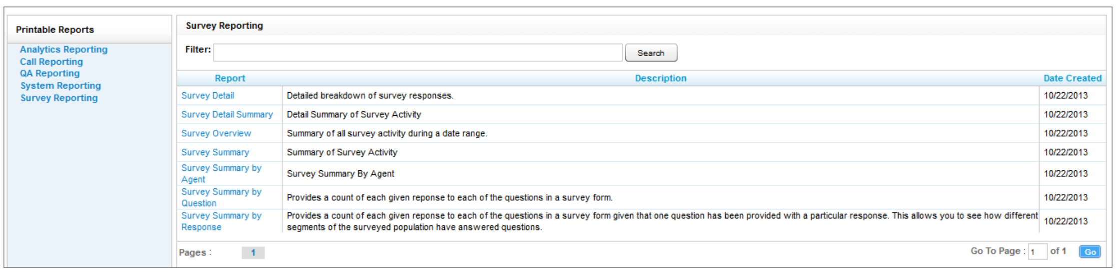
- **Survey**: This is the name of the survey.
- **Start Date**: Click on the calendar icon to set the start date for your search period.
- **End Date**: Click on the calendar icon to set the end date for your search period.
- **Record ID**: Each attempted survey is assigned a unique identification number 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 on the calendar icon to set the start date for your search period.
- **End Date**: Click on 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.

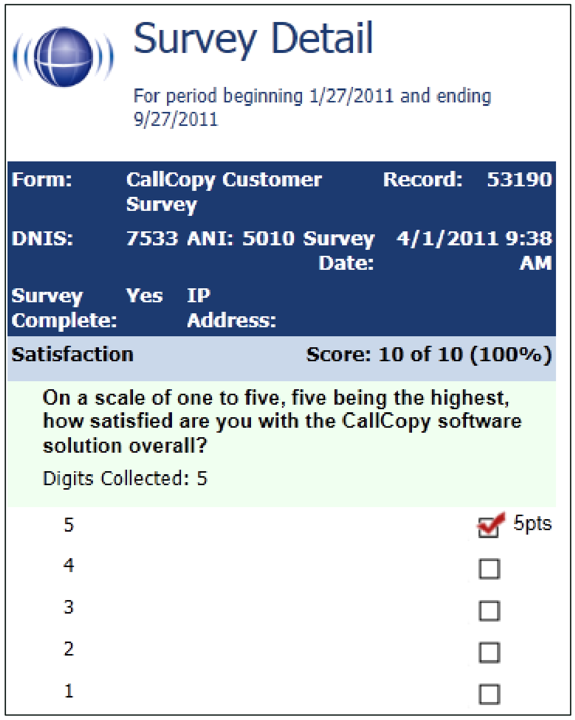
  Note If the respondent was manually redirected to the survey by an agent, the ANI may not accurately reflect the respondent's number, depending on your telephony equipment.

- **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.


Survey Detail

For period beginning 1/27/2011 and ending 9/27/2011

Form:	CallCopy Customer Survey	Record:	53190
DNIS:	7533 ANI: 5010	Survey Date:	4/1/2011 9:38 AM
Survey Complete:	Yes	IP Address:	

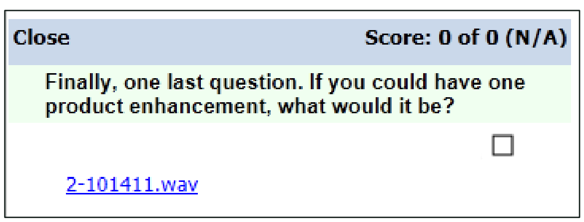
Satisfaction	Score: 10 of 10 (100%)

On a scale of one to five, five being the highest, how satisfied are you with the CallCopy software solution overall?

Digits Collected: 5

5	☑ 5pts
4	☐
3	☐
2	☐
1	☐

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


Close	Score: 0 of 0 (N/A)

Finally, one last question. If you could have one product enhancement, what would it be?

☐

2-101411.wav

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 Detail Summary

For period beginning Tuesday, May 08, 2012 and ending Friday, June 08, 2012

Selected Surveys: surveyFor5090

Survey Complete: Complete

Name	Date	DNIS	ANI	Score	RecordID	Recordings	Agent Name
surveyFor5090	5/9/2012	1001	1234	46.67%	5	0	agent9_first58 agent9_last58
surveyFor5090	5/9/2012	1001	1234	46.67%	6	0	Clifton Guiran
surveyFor5090	5/9/2012	1001	1234	60.00%	7	0	agent10_first58 agent10_last58
surveyFor5090	5/9/2012	1001	1234	53.33%	8	0	Alan Crow
surveyFor5090	5/9/2012	1001	1234	80.00%	9	0	Myron Galliano
surveyFor5090	5/9/2012	1001	1234	0.00%	10	0	Connie Francis
surveyFor5090	5/9/2012	1001	1234	40.00%	11	0	Connie Francis
surveyFor5090	5/9/2012	1001	1234	60.00%	12	0	agent10_first58 agent10_last58

Survey Overview

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.

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 Overview - 9/27/2011 CallCopy Recorder Reporting Service 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

For period beginning Thursday, January 27, 2011 and ending Tuesday, September 27, 2011

Name	Count	Complete	Incomplete	Positive	Negative	Neutral	Score	Avg %
CallCopy Customer Survey	12	11 (91.7%)	1 (8.3%)	4 (33.3%)	2 (16.7%)	4 (33.3%)	76 of 90	80.8%

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

Survey Summary by Agent

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 Agent

For Saturday, January 01, 2011 to Wednesday, August 08, 2012

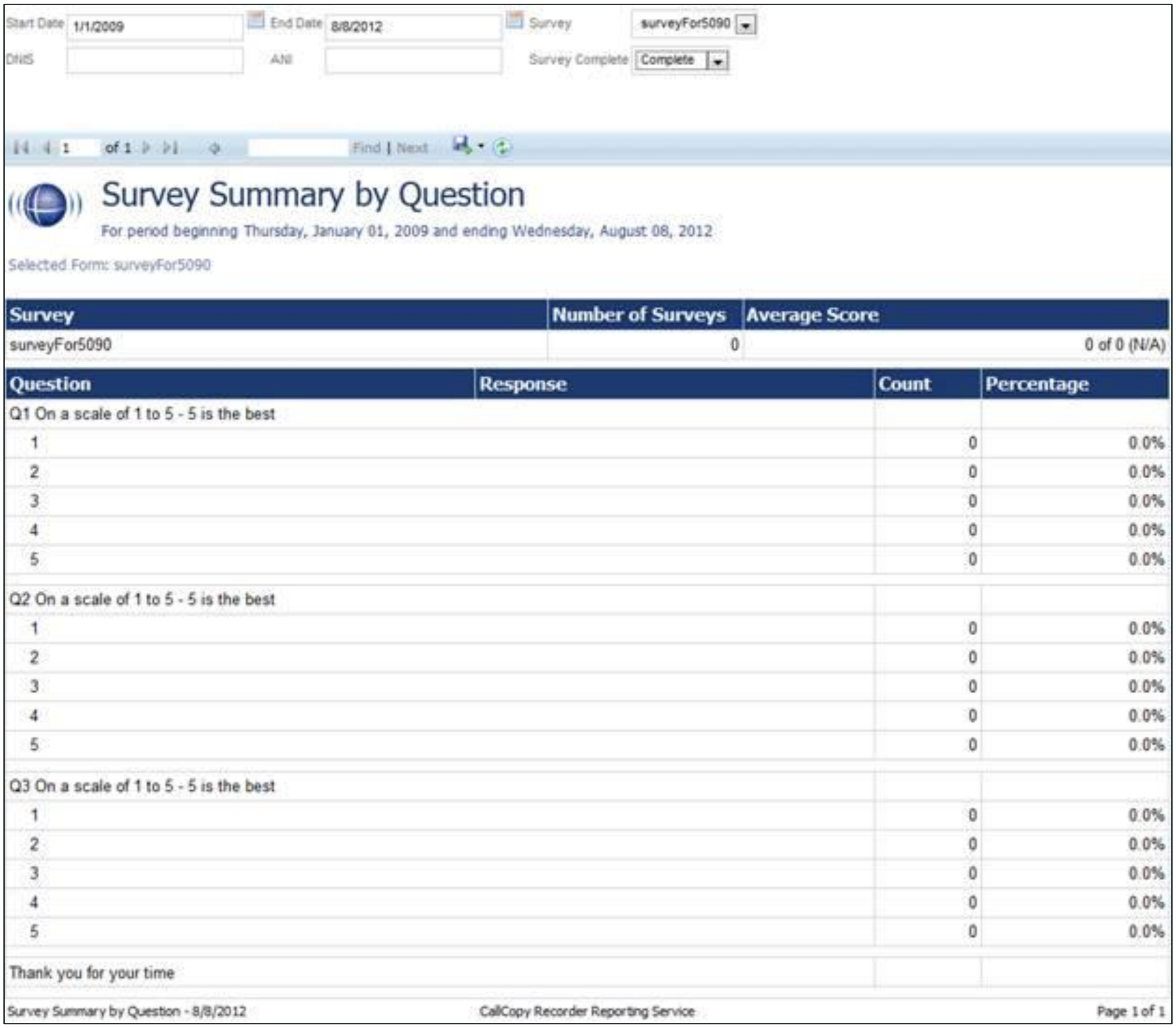
Selected Agents: Orlando de Boer, Matt Borghetti, Jenny Boucler, Joe Brechin, Anders Brooker, Keith Burke, James Busker, Stian Byrd, Jeremy Carrozza, Dimitri Carstensen, Renato Chassagne, Boozoo Chavis, Roy Chenier, Lemony Cicierega, Anthony Condon, Jean-Pierre Conlee, Sheryl Coscia, Gianni Croisonnier, Alan Crow, Richard Cunningham, Pietro Cutting, Rolf Deiro, Wolfgang DiGirolamo, Kevin Dimetrik, Gary Doktorski, Stuart Dwyer

Agent	# Surveys	Score	Possible	Percentage
Joe Brechin	2	4	5	80%
Stian Byrd	4	7	15	46%
Alan Crow	12	25	40	62%
Pietro Cutting	4	11	15	73%
Total:	**22**	**47**	**75**	**63%**

Survey Summary by Agent - Wednesday, August 08, 2012 CallCopy Recorder Reporting Service Page 1 of 1

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.



Start Date 1/1/2009 End Date 8/8/2012 Survey surveyFor5090

DNIS ANI Survey Complete Complete

1 of 1 Find | Next

Survey Summary by Question

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

Selected Form: surveyFor5090

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

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

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

Survey Summary by Response

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:

<u>Report 1: Question 1</u>: Satisfaction rating: 1

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

<u>Report 1: Question 1</u>: 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

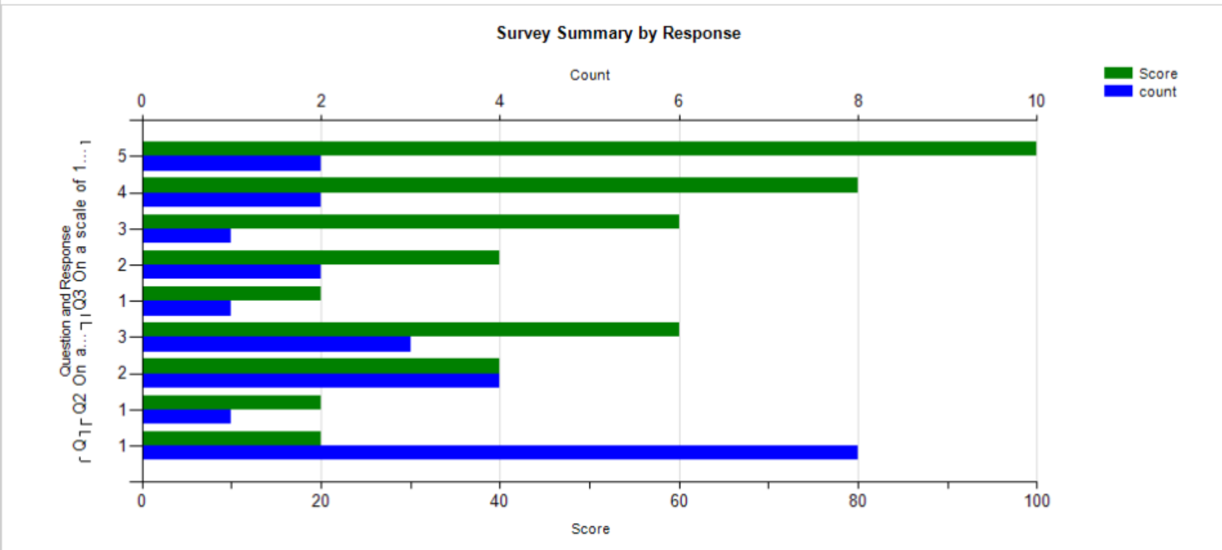
If no respondents selected a response to a question, the response option does not appear on the report. For example, if no respondents selected response 2 to a question, the report shows numbers for responses 1, 3, 4, and 5.

Survey Summary by Response

For period beginning Tuesday, May 08, 2012 and ending Friday, June 08, 2012

This report summarizes the responses made by people who answered the question 'Q1 On a scale of 1 to 5 - 5 is the best' with the response: '1'.

Survey Complete: Yes



Survey:	surveyFor5090				
Question	**Response**	**Count**	**Score**	**Possible Score**	**Percentage**
Q1 On a scale of 1 to 5 - 5 is the best					
	1	8	8	40	20.00%
		8	**8**	**40**	**20.00%**
Q2 On a scale of 1 to 5 - 5 is the best					
	1	1	1	5	20.00%
	2	4	8	20	40.00%
	3	3	9	15	60.00%
		8	**18**	**40**	**45.00%**
Q3 On a scale of 1 to 5 - 5 is the best					
	1	1	1	5	20.00%

Survey Summary by Response - 8/8/2012 CallCopy Recorder Reporting Service Page 1 of 2

PBX Configuration Examples

This section outlines PBX configuration examples for T1s and trunk groups. 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.

AVAYA

DS1 Circuit Pack

```
CC Avaya: display ds1 01v3 (page 1) 10/27/2008 5:29:20 PM

                               DS1 CIRCUIT PACK

            Location: 001V3                           Name: * Survey Trunk
            Bit Rate: 1.544                    Line Coding: b8zs
   Line Compensation: 1                       Framing Mode: esf
      Signaling Mode: isdn-pri
             Connect: pbx                        Interface: network
   TN-C7 Long Timers? n                   Country Protocol: 1
Interworking Message: PROGress            Protocol Version: b
Interface Companding: mulaw                           CRC? n
           Idle Code: 11111111
                               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 1) 10/27/2008 5:28:47 PM

                               TRUNK GROUP

Group Number: 10                   Group Type: isdn        CDR Reports: y
  Group Name: * Nortel                    COR: 1       TN: 1        TAC: *111
   Direction: two-way        Outgoing Display? y        Carrier Medium: PRI/BRI
 Dial Access? y                Busy Threshold: 255      Night Service:
Queue Length: 0
Service Type: tie                  Auth Code? n            TestCall ITC: rest
                         Far End Test Line No:
TestCall BCC: 4
```

```
CC Avaya: display trunk-group 10 (page 3) 10/27/2008 5:28:47 PM

TRUNK FEATURES
          ACA Assignment? n            Measured: none      Wideband Support? n
                                 Internal Alert? n       Maintenance Tests? y
                               Data Restriction? n     NCA-TSC Trunk Member:
                                      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     Codeset to Send National IEs: 6
        Max Message Size to Send: 260   Charge Advice: none
  Supplementary Service Protocol: a     Digit Handling (in/out): enbloc/enbloc

            Trunk Hunt: cyclical
                                                   Digital Loss Group: 13
Incoming Calling Number - Delete:     Insert:                 Format:
              Bit Rate: 1200        Synchronization: async    Duplex: full
 Disconnect Supervision - In? y  Out? n
 Answer Supervision Timeout: 0
```

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 gives the values for creating the variable.

```
display variables                                                Page  39 of  39
                              VARIABLES FOR VECTORS

Var Description                      Type     Scope Length Start Assignment       VAC
ZI
ZJ
ZK
ZL
ZM
ZN
ZO
ZP
ZQ
ZR
ZS
ZT
ZU
ZV
ZW
ZX
ZY
ZZ  uptivity repeat issue            collect P      1       1
```

The vector shown below 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   6
                                  CALL VECTOR

    Number: 984              Name: Test CC Queue
Multimedia? n       Attendant Vectoring? n    Meet-me Conf? n           Lock? n
     Basic? y   EAS? y   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
01 #     Test Call Copy and Survey
02 set          ZZ      = none    ADD    1
03 queue-to     skill 12   pri l
04 wait-time    60  secs hearing music
05 announcement 01221
06 wait-time    90  secs hearing music
07 goto step    4             if unconditionally
08 stop
09
10
11
12
```

The vector shown below 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.

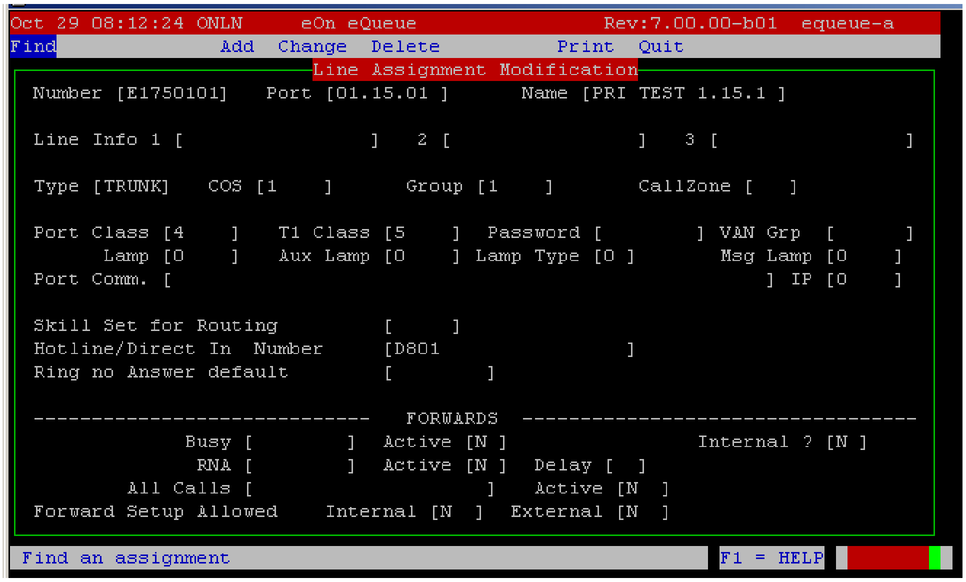
```
display vector 99                                               Page   1 of   6
                                  CALL VECTOR

    Number: 99               Name: Survey Return
Multimedia? n       Attendant Vectoring? n    Meet-me Conf? n           Lock? n
     Basic? y   EAS? y   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
01 #     Return Destination For Appointment Center Survey
02 wait-time    1   secs hearing silence
03 goto step    6             if ZZ               >      1
04 set          ZZ      = ZZ      ADD    1
05 route-to     number 09650           with cov n if unconditionally
06 disconnect   after announcement none
07 stop
08
09
10
11
12
```

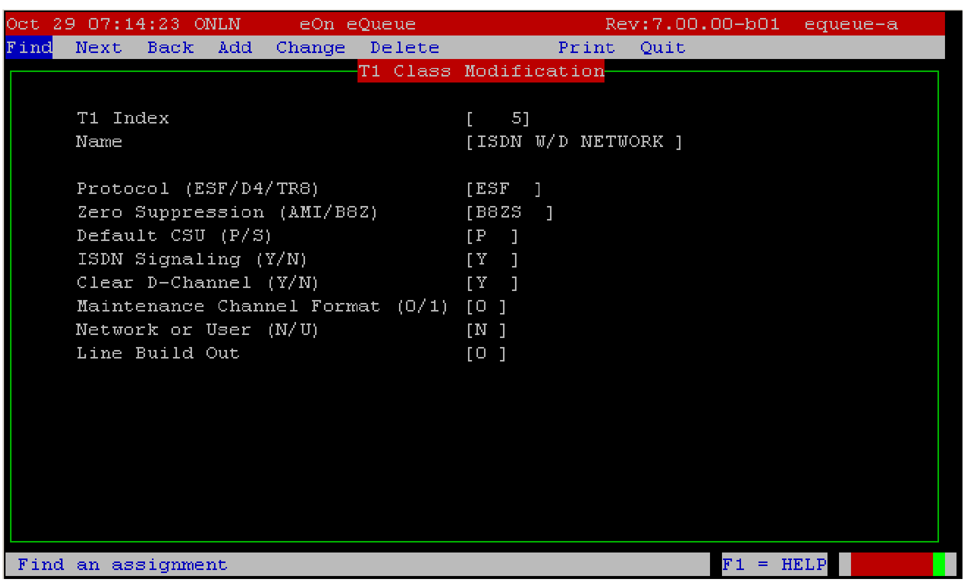
eOn eQueue

The following screenshots layout trunk configurations on an eOn eQueue.

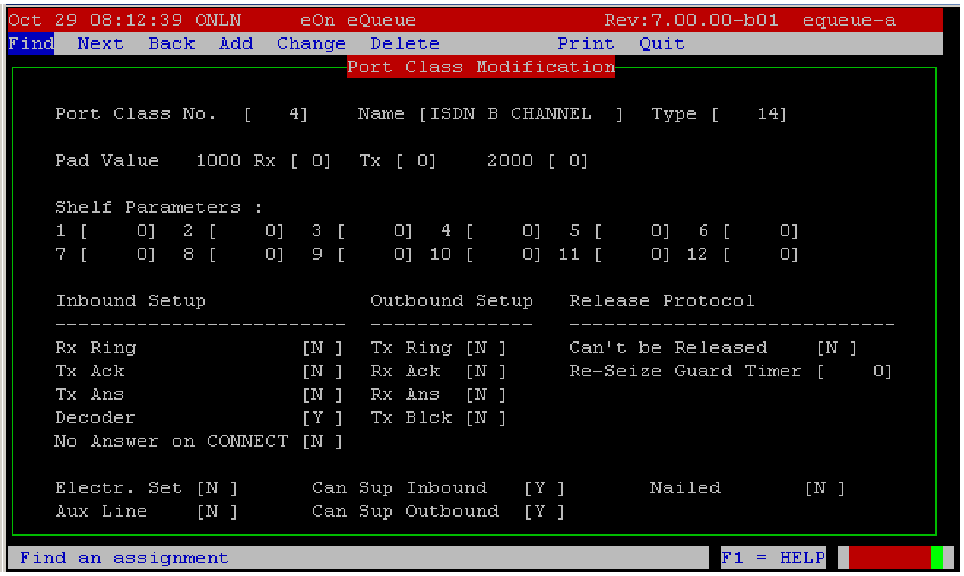
T1 Line Assignment



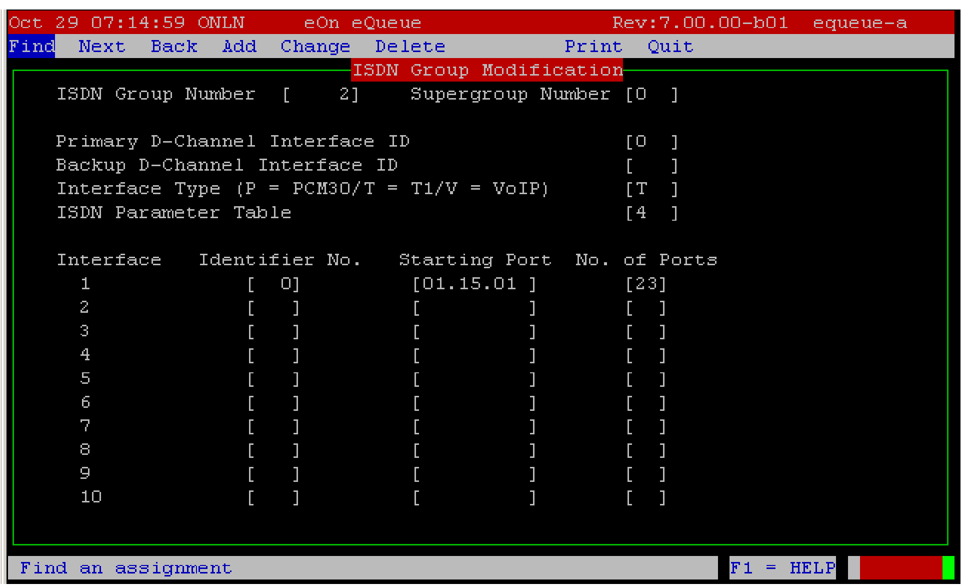
T1 Class



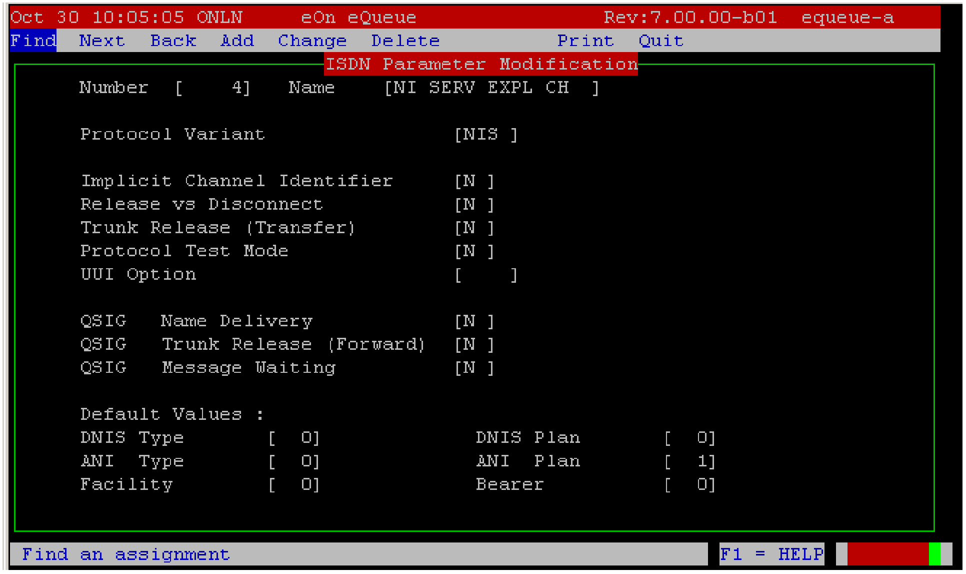
Port Class



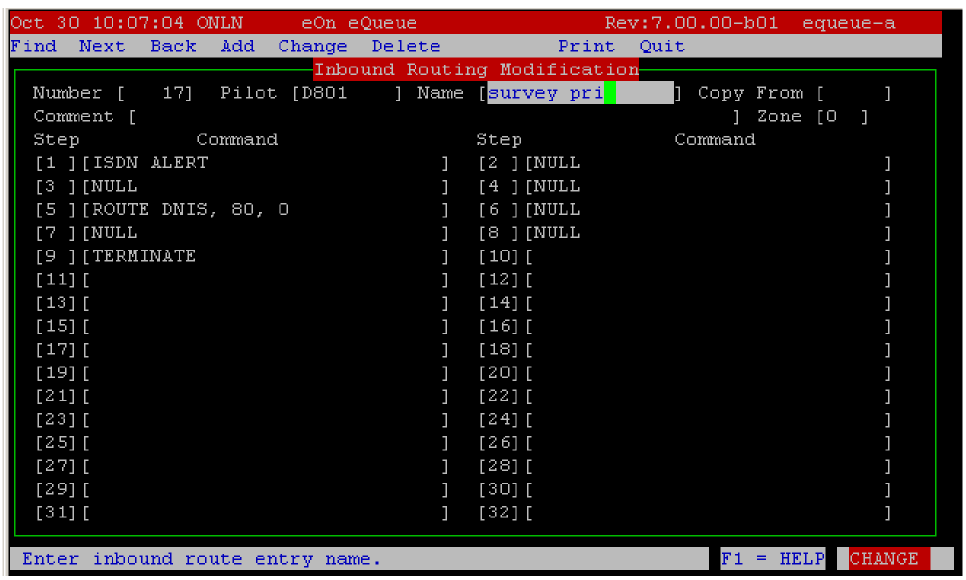
ISDN Group



ISDN Parameter



Hotline



Nortel

The following are sample configurations 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
```

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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.