uptivity

cc: Survey TDM Administration Guide, v5.3

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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 Performance Guidelines section. Added Manage Surveys and Search Attempted Surveys sections.	2013-12-06

Table of Contents

Introduction

This document explains the customer-premise based version of CallCopy's cc: Survey module. The document is for system administrators, survey administrators, and report users. It covers

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

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

Product Technical Overview

This diagram illustrates the cc: Survey components and interactions.

Component	Function
Callers via PSTN or Agents	cc: Survey 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. • Agent terminates the call and caller is automatically transferred to the survey. This option is 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	For a TDM network, cc: Survey connects to the PBX/ACD via a T1 trunk. This setup requires an AI-Logix DT voice board.
cc: Survey	cc: Survey consists of the survey engine that executes the survey forms and audio files, records respondent's input and call information to the database, and records respondents' voice comments to WAV files. The directories for the survey form, audio prompt, and verbal response files are located on this machine in most installations, although they can be located on a different machine. Survey and cc: Discover can be hosted by the same machine or separate machines. Survey can also be deployed without cc: Discover.
cc: 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.
cc: Discover Database	Call information and respondents' input and responses are recorded in this database as survey records. Reports are generated from these records.

Requirements

PBX

TDM/ISDN Supported PBXs

All PBXs are supported but require an AI-Logix DT voice board.

Hardware, Software, and Licensing

Hardware and software requirements vary by PBX.

CallCopy

cc: Survey can be deployed with CallCopy's cc: Discover on the same machine, on a separate machine, or as a stand-alone product (i.e., no call recording). See the *cc: Discover Requirements* for additional requirements information.

Hardware

Hardware requirements vary depending on system configurations and usage requirements. Specifications are determined by the CallCopy Sales Engineering team during the sales process. For TDM/ISDN PBXs, the following items are specifically required:

- AudioCodes DT3209 (single span) T1 terminate board.

Software

This software is required:

- CallCopy cc: Discover Web Portal and database, v4.3 and higher
- AudioCodes SmartWORKS v5.2 or higher

Licensing

Contact your CallCopy representative for licensing information.

Performance Guidelines

The following are general performance guidelines for this product.

- 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, if callers leave audio messages, etc.)

Survey Call Linking

This feature currently works only with TDM Survey installations in Avaya TSAPI environments.

AudioCodes Configuration

This chapter is only for users who will connect to the cc: Survey server via a TDM/ISDN PRI T-1 trunk. CallCopy uses AudioCodes AI-Logix DT-series boards to provide terminate connections to the customer PBX.

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

Example Wiring

An example wiring diagram 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 the *AudioCodes SmartWORKS DT Quick Install* document.
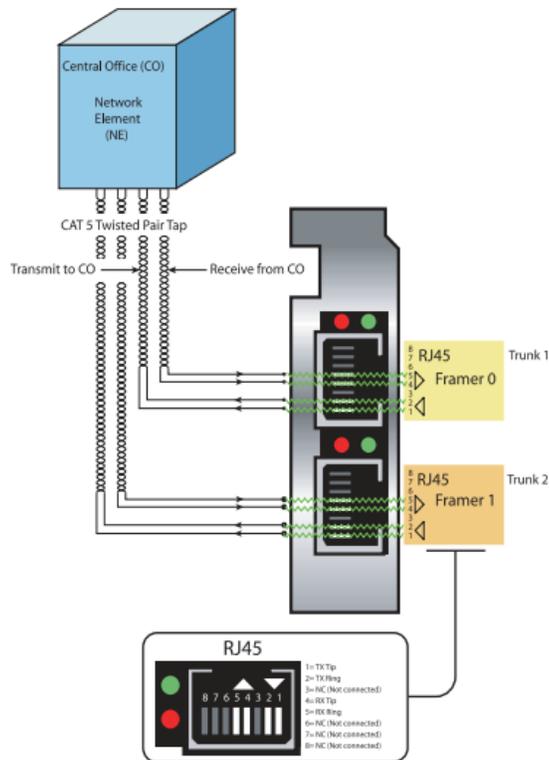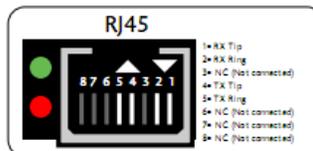
Board Configuration

The board settings have to match those on the customers' PBX. For details, see Example PBX Configurations.

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

To configure the SmartWORKS board, follow these steps:

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. Confirm that the TDM Encoding setting is µ–Law.
3. Click the **Digital Network** tab. On this tab, the following Trunk Settings must be configured:

   - Framing: ESF
   - Line Coding: B8ZS

4. Configure these Protocol Settings:

   - Signaling Protocol: ISDN
   - Variant: National 2 (NI2)

This screenshot shows the configuration of a T1. The screenshot is for a board serving two T1s. Most cc: Survey systems will have only a single span available.
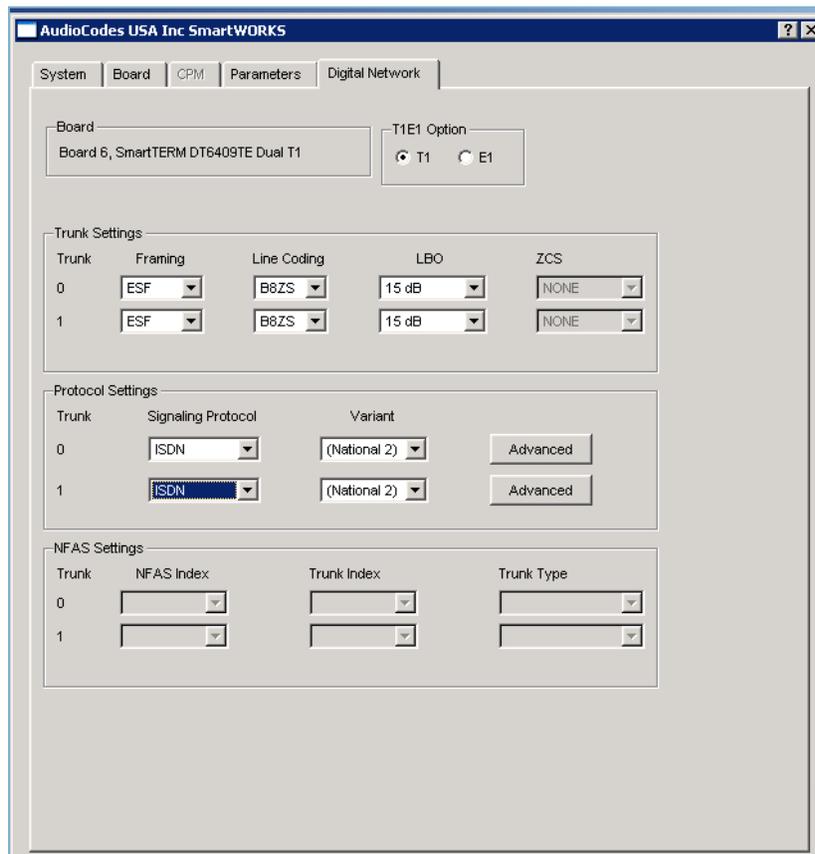
Verify Board Service

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 all channels.

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

From the menu bar, select **FramerStatistics > MTGetT1/E1FramerStatistic.**

The following alarm screen is initiated:
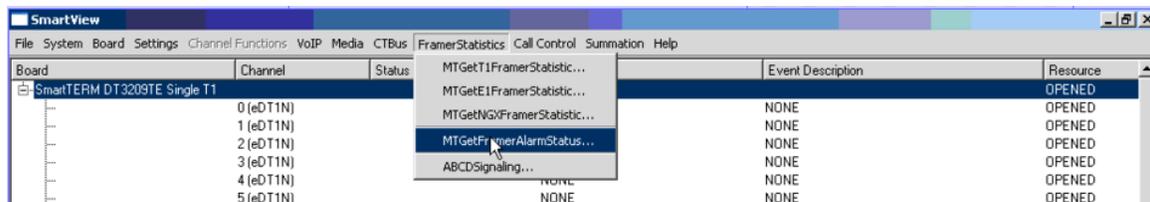
The following alarm screen is initiated. Any alarm value of greater than is indicative of wiring or configuration issue. Any alarm value of greater than 0 (or --) is indicative of wiring or configuration issue. Reference the *AudioCodes SmartWORKS DT Quick Install* document for troubleshooting.
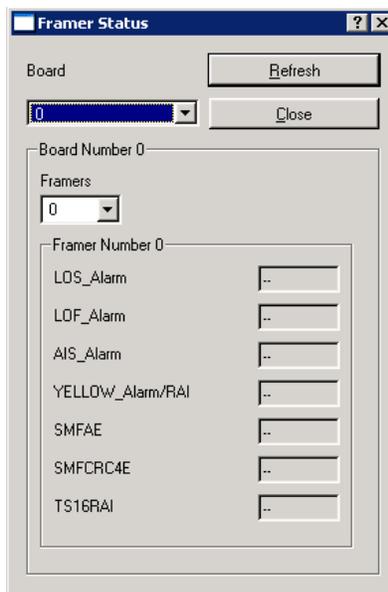
PBX Configuration

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 cc: 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

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

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)?

```
change system-parameters features                          Page   5 of  19
                    FEATURE-RELATED SYSTEM PARAMETERS

SYSTEM PRINTER PARAMETERS
  Endpoint: _____        Lines Per Page: 60_

SYSTEM-WIDE PARAMETERS
                                    Switch Name: CallCopy_____
           Emergency Extension Forwarding (min): 10_
         Enable Inter-Gateway Alternate Routing? y  IGAR Over IP Trunks: skip_
Enable Dial Plan Transparency in Survivable Mode? n
                         COR to Use for DPT: station____

MALICIOUS CALL TRACE PARAMETERS
              Apply MCT Warning Tone? n   MCT Voice Recorder Trunk Group: ____
      Delay Sending RELease (seconds): 0_
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)? y   UCID Network Node ID: 4____
```

▪ Send UCID to ASAI?

```
change system-parameters features                    Page   13 of   19
                   FEATURE-RELATED SYSTEM PARAMETERS
 CALL CENTER MISCELLANEOUS
            Callr-info Display Timer (sec): 10
                       Clear Callr-info: next-call
        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? y
                           Send UCID to ASAI? y
        For ASAI Send DTMF Tone to Call Originator? y
```

4. Save the changes.

Install and Configure cc: Survey

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

- On the same machine as cc: Discover – Only the instructions in this section are needed.
- On a separate machine from cc: Discover –

    - Complete the instructions in this section.
    - Install the cc: Discover Logger service (Logger.exe) and CometDaemon.
    - On the cc: Discover Web Portal machine, create a new server node and Comet Daemon entry for the Survey machine.
    - Add the Survey machine and both the Logger and Survey to the Service Manager in the Web Portal.

- Without call recording – Complete the cc: Discover installation, skipping tasks for call recording.

Check the *cc: Discover Installation Guide* and *cc: Discover Administration Manual* for instructions on the above tasks.

Windows Server Tasks

Perform these tasks on the Windows server hosting cc: Survey.

Install the Server

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

Check INI Configuration

cc: Survey initialization settings are stored in the settings.ini file used by the cc: Discover database. These settings **must** be configured for the proper operation of the server. The file is located in the base folder where the cc: 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 digit.
PutANIInDigitString=	This is used if the PBX is not passing ANI/Survey ID in the digit string. Possible values: Y or N. Optional setting, used when the PBX isn't sending an ANI*DNIS string, it is only sending a DNIS string.
SurveyEngineType=	All non-legacy survey 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.
DigitTimeOut=3000	Length of time Survey 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=	Only used by the legacy SOAP engine. Deprecated, only required for legacy.
SoapWSDL=	Only used by the legacy SOAP engine. Deprecated, only required for legacy.

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 CallCopy Recorder directory. From the directory, run the following command:

```
cc_SurveyControllerIVR.exe –install
```

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

Add the Application to the cc: Discover Service Manager

To add the service to the Service Manager, follow the listed steps.

1. Click the cc: Discover Administration tab > Tools > Service Manager.
2. Locate and expand the node created earlier.
3. Click **Add Application**.
4. In the new line, enter the following information:

   - **Application Name:** Enter **CallCopySurveyControllerService**
   - **Auto-Restart:** Select Yes to have the service restarted automatically if it is stopped.

5. Click **Save**.

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.

Perform these steps on the Windows server:

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.)

Default Files

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

Security

Permissions

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

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

These components need these permissions setup:

- IIS account running cc: Discover Web Portal – Read/Write permissions to the Audio Prompt Upload Directory and the Audio Recording Directory. If Survey 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 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 install program set permissions needed for the database and other CallCopy modules.

Encryption

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

Archiving

cc: Survey's audio files are not archived.

Configure Survey Score Linking to Calls

This feature currently works only with TDM Survey installations in Avaya TSAPI environments that have been configured to send UCID to the CallCopy core for every call.

Install the Survey 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. Check with Development to determine which script file needs to be copied to the Scripts folder.

Update the Settings.ini File

1. Locate a transfer to Survey 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|primaryOldDeviceI D=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 Core's Avaya TSAPI CTI module.

`[settings]`	Tells the survey module to load the TSAPI module.
`modules=`	Value should be **AvayaTsapi**.
`[AvayaTsapi]`	Tells the survey module how to configure the TSAPI module; settings should match the TSAPI settings from the core that is recording the calls being transferred.
`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]`	Tells the survey engine which column to match for recordings. UCID is in user8 for TSAPI by default.
`recordingmatchcolumn=`	Set to match the column being used to store UCID, which is required to link surveys. The default column 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 the customer has another trunk, they will need to find that identifier for that trunk and repeat this sequence for the channels that relate to that trunk.

Enable Survey Score Column in Call Lists

This task can be performed by an administrator or each user.

1. Log into cc: Discover.
2. Go to Web Player tab > Call Lists.
3. Click **Settings** in the upper-right corner.
4. Under **Other Columns**, select the box for **Survey Score.**
5. Click **Save**.

Survey Administration

Manage DNIS Values

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

Follow these steps to add DNIS values:

1. Log into the cc: Discover Web Portal and click Administration > Add-Ons > Surveys > DNIS List.
2. Click **Add**.
3. Enter a DNIS value and Comment value. The comment can be a client name or some explanation of how the DNIS will be used in the survey work.
4. Click the floppy disk icon to save the record.

Values can be edited or deleted by clicking the pencil and red X icons.

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 also 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 cc: Discover Web Portal and click Administration > Add-Ons > Surveys > DNIS List.
2. Click **Import**.
3. Browse to the location of the CSV file. Select it and click **OK**.
4. 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 option.
5. 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.
6. If the records are correct, click **Import**. The DNIS values appear as records in the list.

Specify Survey Audio Directory Settings

cc: Survey requires these two directories:

- 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.

Follow these steps to specify the directories:

1. Create the directories in the file system. cc: Discover does not require that they be specific names. Example: c:\SurveyPrompts.
2. Log into the cc: Discover Web Portal and click Administration > Add-Ons > Surveys > Survey Settings.
3. Enter full path names for both directories.
4. Set the Survey Audio Format for output, based on the type of surveys (T1 or SIP).
5. Click **Save**. The settings will be saved if the directory paths are correct, the directories exist, and the application has Create/Write permission for both directories.

Manage Surveys

	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

Survey Forms Listing — Import — Filter By Status: All

Pages: 1 — Go To Page: 1 of 1 Go

Click on the **Surveys** tab in the cc: 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 *cc: Discover Administration Manual*.

If you have permission to edit surveys, **Manage Surveys** will be available. Clicking this selection will display a list of surveys in your system, as shown above, and enables you to do the following tasks.

- The default view shows all active surveys in the system. You can alter this view by using the **Filter by Status** drop-down. The choices available are All, Active, Disabled, and In Progress.
- To edit the survey delivery information or survey form content, click the **Edit** button to the left of the survey name. This will launch the **Survey Editor**. For details, see Create A Survey.
- To quickly change the status of a survey from Disabled to Active (or vice versa), click the checkbox 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 A Survey

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

Create Survey will be available if you have permission to edit surveys. CallCopy recommends creating survey questions, responses, and actions on paper before trying to create the form. When you are ready to build your survey in the cc: Discover system, follow these steps:

1. Log into the cc: Discover Web Portal and 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 Survey 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 Survey 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

Follow these steps to create a question:

1. Click **Add New Question**.
2. Enter the text of the question in the text box. Your entry should correspond to the language 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	SIP-Based
Bit rate	128kbps	64kbps
Audio sample size	16-bit (Linear)	8-bit
Channels	1 (mono)	1 (mono)
Audio sample rate	8kHz	8kHz (G.711)
Audio format	PCM	CCITT u-Law

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

7. (Optional) Select the **Mark Survey Complete** option. 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** option. Use this option if you do not want this question included within the reporting values. Since the system considers greetings, closings, or transitions without responses to be "questions", it might be appropriate to uncheck this box for these items. Otherwise, this question will display with no data responses.

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

9. Select from the buttons at the top of the Survey Editor:

   ▪ **Export** to export the survey form as an XML file.
   ▪ **Delete** to remove 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 cc: Survey 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 on the **Surveys** tab in the cc: 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 *cc: Discover 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

cc: Survey reports are accessed through the **Reporting** tab of the cc: Discover Web Portal. Ad hoc reports can also be created for cc: Survey from this tab. The **Reporting** tab will only be available if you have been assigned at least one of the reporting-related permissions. Ad hoc reporting requires its own separate permission. For more information on permissions, see the "Permissions Definitions" section in the *cc: Discover Administration Manual*. For more information on ad hoc reports, see the *cc: Discover Reporting Manual*.

On the **Reporting** tab, click **Printable Reports** and then click **Survey Reporting** in the left navigation menu.

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. 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.
- **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 one or more survey taker's complete responses.

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

Note IP Address is not used at this time.

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

For each survey form in a time period, calculates these categories. 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 Bouclier, 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 Summary

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. Users can select a date range, the survey form to evaluate, DNIS/ANI numbers, and whether the survey completion status. The generated report displays how many of the chosen survey have been completed, average score, then counts and score percentages of 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 |

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 allows users to 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. For this report, one question can address a respondent's overall opinion of a product or service. Follow-up questions elicit the reasons or factors that cause that overall opinion.

Example: Car Satisfaction Survey – Customers who purchased any new car within the last year are surveyed. One question asked 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, 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 – Multiplies the number of response options 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

Example PBX Configurations

This section outlines *example* PBX configurations for T1s and trunk groups. This is not an inclusive list and CallCopy 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
```

eOn eQueue

The following screenshots layout trunk configurations on an eOn eQueue.

T1 Line Assignment

```
Oct 29 08:12:24 ONLN      eOn eQueue            Rev:7.00.00-b01  equeue-a
Find                 Add  Change  Delete        Print  Quit
                       Line Assignment Modification
 Number [E1750101]    Port [01.15.01 ]      Name [PRI TEST 1.15.1 ]

 Line Info 1 [              ]   2 [            ]  3 [               ]

 Type [TRUNK]    COS [1    ]      Group [1    ]      CallZone [  ]

 Port Class [4    ]   T1 Class [5    ]  Password [       ] VAN Grp [     ]
        Lamp [0    ]   Aux Lamp [0    ] Lamp Type [0 ]     Msg Lamp [0    ]
 Port Comm. [                                            ] IP [0     ]

 Skill Set for Routing          [     ]
 Hotline/Direct In  Number      [D801                  ]
 Ring no Answer default         [          ]


 ---------------------------  FORWARDS  -----------------------------------
            Busy [       ]  Active [N ]            Internal ? [N ]
             RNA [       ]  Active [N ]  Delay [  ]
        All Calls [          ]      Active [N  ]
 Forward Setup Allowed    Internal [N  ]  External [N  ]

Find an assignment                                 F1 = HELP
```

T1 Class

```
Oct 29 07:14:23 ONLN      eOn eQueue              Rev:7.00.00-b01  equeue-a
Find  Next  Back  Add  Change  Delete         Print  Quit
                          T1 Class Modification

      T1 Index                        [   5]
      Name                            [ISDN W/D NETWORK ]

      Protocol (ESF/D4/TR8)           [ESF  ]
      Zero Suppression (AMI/B8Z)      [B8ZS ]
      Default CSU (P/S)               [P  ]
      ISDN Signaling (Y/N)            [Y  ]
      Clear D-Channel (Y/N)           [Y  ]
      Maintenance Channel Format (0/1) [0 ]
      Network or User (N/U)           [N ]
      Line Build Out                  [0 ]




 Find an assignment                                  F1 = HELP
```

Port Class

```
Oct 29 08:12:39 ONLN      eOn eQueue              Rev:7.00.00-b01  equeue-a
Find  Next  Back  Add  Change  Delete         Print  Quit
                        Port Class Modification

   Port Class No.  [   4]    Name [ISDN B CHANNEL  ]  Type [   14]

   Pad Value    1000 Rx [ 0]  Tx [ 0]    2000 [ 0]

   Shelf Parameters :
   1 [    0]  2 [    0]  3 [    0]  4 [    0]  5 [    0]  6 [    0]
   7 [    0]  8 [    0]  9 [    0] 10 [    0] 11 [    0] 12 [    0]

   Inbound Setup            Outbound Setup    Release Protocol
   ------------------------  --------------   ---------------------------
   Rx Ring            [N ]  Tx Ring [N ]    Can't be Released    [N ]
   Tx Ack             [N ]  Rx Ack  [N ]    Re-Seize Guard Timer [   0]
   Tx Ans             [N ]  Rx Ans  [N ]
   Decoder            [Y ]  Tx Blck [N ]
   No Answer on CONNECT [N ]

   Electr. Set [N ]     Can Sup Inbound   [Y ]       Nailed       [N ]
   Aux Line    [N ]     Can Sup Outbound  [Y ]

 Find an assignment                                  F1 = HELP
```

cc: Survey TDM Administration Guide, v5.3

ISDN Group

```
Oct 29 07:14:59 ONLN      eOn eQueue              Rev:7.00.00-b01   equeue-a
Find   Next   Back   Add   Change   Delete            Print   Quit
                              ISDN Group Modification
     ISDN Group Number  [    2]     Supergroup Number [0  ]


     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
        1              [  0]         [01.15.01 ]      [23]
        2              [   ]         [         ]      [  ]
        3              [   ]         [         ]      [  ]
        4              [   ]         [         ]      [  ]
        5              [   ]         [         ]      [  ]
        6              [   ]         [         ]      [  ]
        7              [   ]         [         ]      [  ]
        8              [   ]         [         ]      [  ]
        9              [   ]         [         ]      [  ]
       10              [   ]         [         ]      [  ]


   Find an assignment                               F1 = HELP
```

ISDN Parameter

```
Oct 30 10:05:05 ONLN      eOn eQueue              Rev:7.00.00-b01   equeue-a
Find   Next   Back   Add   Change   Delete            Print   Quit
                              ISDN Parameter Modification
     Number  [    4]    Name    [NI SERV EXPL CH ]

     Protocol Variant                [NIS ]

     Implicit Channel Identifier     [N ]
     Release vs Disconnect           [N ]
     Trunk Release (Transfer)        [N ]
     Protocol Test Mode              [N ]
     UUI Option                      [    ]

     QSIG    Name Delivery           [N ]
     QSIG    Trunk Release (Forward) [N ]
     QSIG    Message Waiting         [N ]

     Default Values :
     DNIS Type        [  0]          DNIS Plan       [  0]
     ANI  Type        [  0]          ANI  Plan       [  1]
     Facility         [  0]          Bearer          [  0]


   Find an assignment                               F1 = HELP
```

Hotline

```
Oct 30 10:07:04 ONLN      eOn eQueue              Rev:7.00.00-b01  equeue-a
Find  Next  Back  Add  Change  Delete        Print  Quit
                        Inbound Routing Modification
  Number [   17]  Pilot [D801   ] Name [survey pri    ] Copy From [    ]
  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][                              ]

  Enter inbound route entry name.                   F1 = HELP  CHANGE
```

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
```

.

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.