297-7001-306

DMS-100 Family **DMS VoiceMail** Voice Forms Application Guide

SPM 02 Standard 02.02 March 1994



DMS-100 Family **DMS VoiceMail**

Voice Forms Application Guide

Publication number:	297-7001-306
Product release:	SPM 02
Document release:	Standard 02.02
Date:	March 1994

Copyright © Northern Telecom 1994 All rights reserved

Information is subject to change without notice. Northern Telecom reserves the right to make changes in design or components as progress in engineering and manufacturing may warrant.

DMS is a trademark of Northern Telecom. TOUCH TONE is a trademark of Bell Canada.

Publication history

March, 1994

ii

Standard release 02.02 of the Voice Forms Application Guide for SPM 02.

Contents

About this document

Using voice form documentation vii Related documents viii Typographic conventions viii

Overview of DMS VoiceMail Voice Forms

What are voice forms? 1 How are voice forms implemented? 4 The administrator 4 The caller 4 The transcriber 4 System engineering 5 Determining system size 5 Storage 5 Scenarios 6 Scenario 1 6 Scenario 2 6 Creating voice form applications-an outline 7 Creating the form 7 Using the form 8 Transcribing the form 8 Maintaining the form 8

Planning voice forms

Before you begin 9 Recognizing the need for a voice form application 10 Obtain or draw a copy of the form 11 Sequence and/or flowchart the application 12 Confirmation mode 12 Answer length limit 14 Additional requests 15 Access to the form 15 Create a list of steps 15 Composing greetings, prompts and instructions 19 Testing your sequence 22 Defining general form characteristics 22 Identify the voice form ID 24 Choose a title 25 Choose a transcription password 25 Identify the maximum number of untranscribed responses 25 1

vii

9

Identify the overflow handling DN 26 Identify the new responses notification DN 26 Identify the new responses SMDI link name 27 Identify the special responses notification DN 28 Identify the special responses SMDI link name 28 Identify the transcription field separator 28 Identify the default field separator delay 29 Decide if the envelope should be played as the header 29 Identify the length of the delay after header 29 Identify the caller confirmation mode 30 Identify the default revert DN 30 Decide if callers are allowed to press "0" to transfer to an attendant 30 Identify the language for system messages 30 Defining No Answer fields 30 Assign a name to the field 32 Identify the action after field 32 Identify the revert DN 32 Determine if the system disconnect message is necessary 32 Determine whether the response should be saved if the caller hangs up 32 Defining Voice Answer fields 33 Assign a name to the field 35 Identify the answer length limit 35 Identify how to handle "no answer" situations 35 Identify the revert DN 36 Identify the number of repeats before disconnecting 36 Determine whether recording should stop if silence is detected 36 Identify whether the field needs to be confirmed 37 Determine whether the response should be saved if the caller hangs up 37 Identify the field separator delay 38 Identifying the service through which the voice form will be accessed 38 Identifying the transcription service DN 39 Using one generic transcription service 39 Using a number of transcription services 39

Configuring voice forms

Guidelines for configuring voice forms 41 Recording the prompts 41 Configuring voice forms in DMS VoiceMail 43 Viewing a list of existing voice forms: the Voice Forms screen 43 Adding a new voice form definition 46 Saving the voice form definition 55 Making voice forms accessible 56 Defining a VSDN for the transcription service 62 Testing a voice form 63 Modifying or viewing a voice form definition 64 Modifying an existing field 67 Moving a field 68 Deleting a field 69 Inserting a new field 69 Copying a voice form definition 69 Deleting a voice form definition 71

41

	Information collected by a voice form 74	
	information collected by a voice form 74	
-	and managing voice forms	75
Maintaining voi Managing voice		
	l records 76	
	erational measurements 76	
	anscriber activity 81	
	indom caller surveys 81	
	anscriber feedback forums 81	
Managing resp		
	response ID numbers 82	
Appendix A	: Worksheets	85
Annondiv B	- Comple accesione	95
	: Sample sessions	95
Sample caller s		
	riber session 97	
List of term	S	99
List of figur	es	
Figure 1	Typical voice form structure 3	
Figure 2	An address change form 11	
Figure 3	Sequence for a change of address form 16	
Figure 4	Detailed sequence for a change of address for	orm 17
Figure 5	Sample flowchart: change of address 18	
Figure 6	The Voice Administration menu 44	
Figure 7	The Voice Forms screen (before any voice fo 45	
Figure 8	The Voice Forms screen (after voice forms ha	ave been created)
Figure 9	The Add a Voice Form Definition screen 47	
Figure 10	The List of Fields screen (no voice forms defi	ned) 48
Figure 11	The List of Fields screen (existing voice forms	
Figure 12	The Insert New Field screen for a No Answer	type field 52
Figure 13	The List of Fields screen (with the Welcome field added) 52	
Figure 14	The Insert New Field screen for a Voice Answer type field 53	
Figure 15	The Voice Services-DN Table 56	
Figure 16	The Add DN Information screen (voice form d	
Figure 17	The Add a Voice Menu Definition screen 58	
Figure 18	The Add a Time-of-Day Control Definition scr	
Figure 19	The Add DN Information screen (transcription	i service) 62
Figure 20	Voice Service Summary report screen 77	
Figure 21 Figure 22	The Disk Usage Detail report 79 The Voice Menus Detail report 80	

List of procedures

Procedure 1 Procedure 2 Procedure 3 Procedure 4 Procedure 5	Configuring a voice form in DMS VoiceMail 43 Accessing the Voice Forms screen 44 Adding the first voice form definition 46 Adding subsequent voice form definitions 46 Opening/modifying fields 48
Procedure 6	Inserting a new field 51
Procedure 7	Recording field prompts and field names 54
Procedure 8	Saving the entire voice form definition 55
Procedure 9	Creating a VSDN for a voice form 56
Procedure 10	Creating a VSDN for a voice menu 59
Procedure 11	Creating a VSDN for a time-of-day controller 61
Procedure 12	Defining the transcription service VSDN 62
Procedure 13	Taking a voice form out of service 65
Procedure 14	Viewing a voice form definition 65
Procedure 15	Modifying a voice form definition 66
Procedure 16	Modifying an existing field 67
Procedure 17	Moving a field 68
Procedure 18	Deleting a field 69
Procedure 19	Copying a voice form definition 70
Procedure 20	Deleting a voice form definition 71

About this document

If Voice Forms are installed on your system, you should have the following documents:

- The *Voice Forms Application Guide* (this document)
- The Voice Forms Transcriber User Guide

This application guide is intended as a step-by-step guide to the successful implementation of voice forms. It includes both planning information as well as administration procedures to guide you through the actual configuration of a voice form application. Worksheets and forms are provided throughout to help you plan your voice form applications. Illustrations of the DMS VoiceMail administration screens and field descriptions are provided in the sections of this guide that document how to configure an application in DMS VoiceMail.

Using voice form documentation

Before you begin creating your first voice form application, it is recommended that you read through all of the relevant information to be sure that you understand what is involved in creating voice forms.

- 1 Read the *DMS VoiceMail Voice Forms Application Guide* to get an overview of voice forms, to see some examples of how they can be used, and to learn how to plan a voice form application effectively.
- 2 Plan your application using the worksheets that are provided.
- 3 When you have completed the planning phase, proceed to the chapter "Configuring voice forms" for instructions on how to configure the application in DMS VoiceMail.
- 4 When you are ready to learn about the transcription service, go to the *Voice Forms Transcriber User Guide* which shows you how to use the transcription service. For information about managing the transcription process, see the chapters "Transcribing voice forms" and "Maintaining and managing voice forms" in this document.

Related documents

Throughout this guide you may be asked to refer to any of the following documents:

Number	Title
297-7001-300	DMS VoiceMail System Administration Guide
297-7001-301	DMS VoiceMail Customer Administration Guide
	Voice Forms Transcriber User Guide
297-7001-307	DMS VoiceMail Voice Menus Application Guide

Typographic conventions

The names of documents that are referred to throughout this guide are set in italics. For example: The *Voice Forms Transcriber User Guide*.

When a chapter title or section heading is referred to, it is enclosed in double quotation marks. For example: See the section "Adding a voice form definition".

Words which are in italics (other than document names) can be found in the List of Terms at the end of this guide. For example: The caller's *answers* are recorded and stored in the DMS VoiceMail system as a *response*.

Spoken prompts are enclosed in double quotation marks and are set in italics. For example: "*If you require assistance, press 0 to speak with an operator.*"

Overview of DMS VoiceMail Voice Forms

What are voice forms?

A *voice form* is the electronic equivalent of a paper form. It is "filled out" by callers who dial a special number which connects them to the voice form. (Alternatively, callers can be connected to a voice form through a voice menu or time-of-day controller.) The form is made up of a series of questions that are played over the telephone to the caller. The caller listens to each question and responds by giving a verbal answer. If callers require assistance while responding to a form they can press 0 to transfer to an operator (this functionality can be enabled or disabled for each voice form). The caller's *answers* are recorded and stored in the system as a *response*.

1

Voice forms are intended to help fulfill an organization's information-gathering needs. Voice forms can replace paper forms as well as certain information gathering tasks that are currently carried out over the phone (such as order taking).

Voice forms can be used to collect information from external sources (such as customers or potential clients) or from internal sources (employees). The following are examples of both types of information-gathering functions.

External

- application forms (credit cards, mortgages, new jobs, club memberships)
- order taking (mail order catalogs)
- requests for equipment service and repairs
- customer complaints
- customer satisfaction surveys
- registrations for a convention
- ordering tickets to an event

Internal

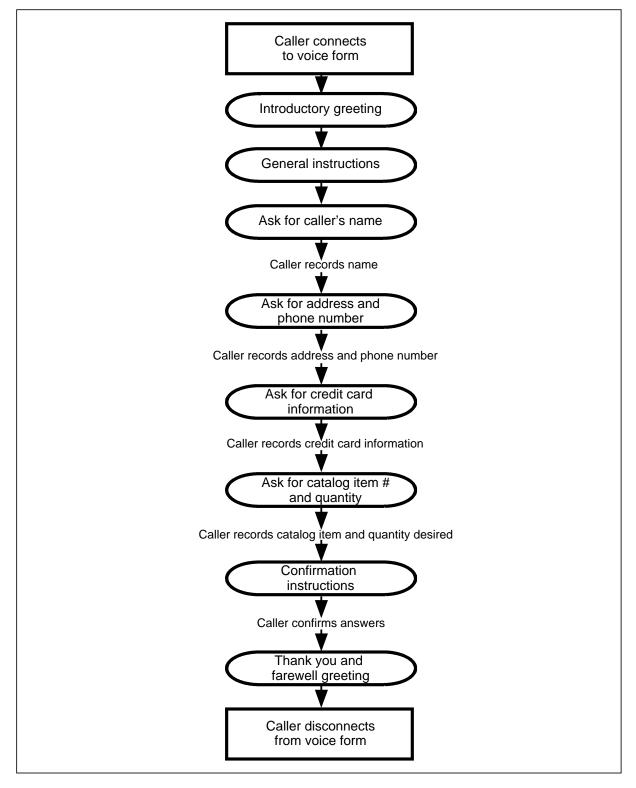
- notification of change of address
- suggestion box
- nominating employee of the month
- application for benefits
- registration for company picnic
- employee surveys

Voice forms can enhance your centrex customers' ability to reach customers, potential clients and employees, by making services available 24 hours a day, from any location. You can also create voice forms in order to survey your residential and small business subscribers regarding the services you provide.

A voice form can be a stand-alone application that a caller dials directly, or it can be integrated with other DMS VoiceMail features, such as voice menus. For example, you could have a voice menu that offers a series of voice forms for a product line: ordering the item, requesting service and repairs, completing a customer satisfaction survey, and applying for a credit card. Or, you could have a voice form activated during off-hours by a time-of-day controller so that orders can continue to be taken throughout the evening and on weekends.

Figure 1 is an example of the structure of a typical voice form.

Figure 1 Typical voice form structure



How are voice forms implemented?

The implementation of a voice form has three principal stages:

- 1 The voice form is planned, designed and configured.
- 2 Customers, potential clients, or employees call the voice form to provide the necessary information.
- 3 The information collected by the voice form is transcribed and processed.

With each of these stages, a different group of people is involved: the administrator, the caller, and the transcriber.

The administrator

The administrator identifies the need for a voice form, plans and designs the form, and configures it in DMS VoiceMail. Once the form has been created, the administrator also tests the form (by calling it and then transcribing it). The administrator keeps the voice form up-to-date by modifying or deleting the service as the needs of the organization change. He or she also manages any technical problems that may arise. This is generally the person who manages the overall DMS VoiceMail system. This job may be delegated, especially in a multi-customer environment.

The caller

This is the person who actually calls in and uses the voice form. All caller input is made by responding to the questions in the voice form verbally. Depending on how the voice form is configured, the caller may also be asked to confirm his or her questions by providing input from a telephone keypad (if the caller has a touch-tone phone).

For a detailed example of a caller session, including sample questions and answers, see Appendix B.

The transcriber

When a caller completes a voice form and hangs up, the caller's response is stored in DMS VoiceMail. It is the transcriber's responsibility to listen to the caller's response and process the information. You may even have an entire department of transcribers who are dedicated to transcribing voice forms. Transcribers should be trained by the administrator and have access to the *Voice Forms Transcriber User Guide*.

To transcribe a voice form, the transcriber logs on to the transcription service, using an access DN (much like users log on to DMS VoiceMail to listen to new messages). He or she plays back the responses that have been collected and processes the information (by entering the information into a database for tabulating or order processing, for example). The way in which the information is processed depends entirely on the reason that you are collecting the information.

If the notification feature is used, the message waiting indicator on the transcriber's phone is turned on when responses are present. If the notification feature is not used, the transcriber will log on to the voice form on a regular basis (predetermined by the administrator) in order to check for new responses. The notification feature is explained in the chapter "Transcribing voice forms".

See Appendix B for an example of a transcriber session.

System engineering

Before you configure any voice forms on your system, you will have to consider whether your current system configuration is capable of supporting this feature.

Determining system size

Review your system size and configuration with a qualified engineer. This is especially important if you are also using voice menus, because both voice menus and voice forms take a significant portion of storage space. The number of storage hours and channel allocations may change as a result. Identify your voice form (and voice menu) needs in as much detail as possible-how many do you plan on creating, how long will they be? The more detail the engineer has, the more accurate he or she can be when determining an appropriate system size.

Refer to NTP 297-7001-100, *Planning and Engineering Guide*. Read Chapter 1: "Determining service requirements".

Storage

Voice forms are stored in volume server 1 (VS1), regardless of the number of nodes on the system. (Note that voice menus are also stored on VS1). After you have configured your voice forms, back up VS1 to ensure the security of your applications and continue to back up this volume on a regular basis.

Note: Caller responses to voice forms are not stored in the VS1 volume, but are stored in a user volume along with voice messages.

If you are planning on implementing a large number of voice forms/menus (20 or more), or if any of your voice forms/menus are lengthy (longer than 10 minutes), review this with your system engineer. It may be necessary to move your voice menus and voice forms to another volume. This can be done by a representative of your Northern Telecom support organization or a Northern Telecom distributor.

If, while you are in the process of creating voice forms (and/or menus), the system becomes full, contact your Northern Telecom support organization. They will probably have to reassign your menus and forms to another volume.

Scenarios

A voice form application can be a stand-alone application that a caller directly dials or it can be part of a larger voice menu application in which it is one of many menu options from which to choose.

The following scenarios are intended to give you an idea of how voice forms can be used. You may already have some ideas of your own about how you would like to implement voice forms in your organization. This section may stimulate the recognition of opportunities you hadn't originally considered.

Scenario 1

You have just installed the voice forms feature on your DMS VoiceMail system and you are keen to put it to use. You are responsible for determining the need for voice form applications in your organization, designing the applications, and configuring them. You need some way of discovering the current information-gathering functions that go on. You also want to know how these functions are currently handled in order to determine which ones would effectively transfer to a voice form application.

Since this is in itself an information-gathering function, and because you would like to get some practice at designing and configuring a voice form application, you could create a voice form to survey the department managers to find where and how information is collected. This is a simple stand-alone application that is directly dialable by internal callers (an entry is therefore needed in the VSDN table). You yourself can record the prompts (this is generally true for any internal surveys that you would like to create). Send out a message to the managers asking them to take part in a survey about the types of information-gathering functions that occur in their departments.

Scenario 2

Your human resources department has some problems dealing with responses to a number of advertisements for new hires. The first problem is that many applicants are reluctant to call from open-plan offices or are too busy during normal hours to respond. Furthermore, there tends to be a flood of responses the day after several new ads appear in the newspapers and potential applicants get frustrated when they cannot get through to staff. The department wants to receive information from all interested applicants and would like to get more detailed information from applicants before calling back. You could help solve this problem by creating an automated attendant. The number is published in the newspaper ads as a 24-hour, seven-days-a-week service which provides more information about each position and which takes information from the caller. For example, the ad could say "Call 555-0011 to find out more about these positions and to tell us about yourself." The automated attendant is a voice menu application. Each menu option corresponds to one of the advertised positions. When a caller selects an option, he or she is connected to the appropriate voice form. The form begins with a greeting which gives more detail about the selected job opening. (If for example, a particular position has been filled, the greeting is re-recorded to reflect this.) It then asks interested callers to stay on the line and respond to various questions which will help the department to screen applicants. At the end, callers are given the opportunity to leave a general message or comment. The person who is notified of new responses (through a message waiting indicator) is the staff member in charge of the advertisement, interviewing or hiring for a particular position.

Creating voice form applications-an outline

The "life" of a voice form can be divided into four principal stages:

- 1 Creating the form
- 2 Using the form
- 3 Transcribing the form
- 4 Maintaining the form

Creating the form

Even the simplest of voice forms requires some planning before it can be configured. Be sure to plan the voice form on paper first. You should have a good overall picture of how the voice form will work before you begin to configure it.

Planning

- 1 Identify and analyze the need for an application.
- 2 If a paper form already exists, obtain a copy. If not, draw a copy of it.
- 3 Flow chart or sequence the voice form.
- 4 Compose greetings, prompts and instructions.
- 5 Identify the general characteristics of the form.
- 6 Identify the fields within the form.
- 7 Identify the service through which the voice form will be accessed.
- 8 Identify the transcription service DN.

Configuring

- 1 Configure the form in DMS VoiceMail.
- 2 Choose a speaker and record the prompts.
- 3 Build the service through which the form will be accessed.

- 4 Define the transcription service DN.
- 5 Test the voice form.
- 6 Provide training to transcribers.
- 7 Cut the service over.

Using the form

1 Callers call into the form and record their responses.

Transcribing the form

- 1 Transcribers access the form through the transcription service and process the information collected by the form.
- 2 The information is then used to perform other tasks applicable to the organization (mail out an order, update a personnel file, approve a loan application, respond to a survey, and so on).

Maintaining the form

1 The form is monitored and updated as necessary or deleted from the system if no longer needed. This can involve conducting caller surveys and holding transcriber feedback forums.

Depending on your organization, a number of different people will probably be involved in this process. For example, an analyst (either internal to the organization or hired externally on a consulting basis) may be responsible for performing a needs analysis to determine the applications that will be created. The analyst may also be responsible for designing the application in the form of a flowchart. Otherwise, the administrator will be responsible for these stages of voice form creation.

At this stage, the administrator would take over and use the flowchart to configure the application. The administrator would then see to the scripting and recording of prompts. There are services which specialize in writing, editing and recording prompts. These services are especially useful when you have to create a complex application that involves voice menu applications (that may include announcements, thru-dialers and voice menus) as well as voice forms. A service is more likely to create a professional-sounding application because they will take care to ensure a high standard and consistency in the style and tone in which prompts are written. They will also have contacts with professionals who have been trained in speaking (such as actors). Smaller applications (and those that are internal to the organization, such as staff surveys) can probably be scripted by the administrator. In this case, the administrator could interview staff to find people who have suitable speaking voices. The administrator would also be responsible for arranging and/or delivering training for those people in the organization who have been designated as transcribers. Finally, the administrator will be responsible for maintaining the application and keeping it up-to-date.

Planning voice forms

Don't just jump in and begin configuring your application without planning it. Designing your voice form application on paper first is advantageous for several reasons. Identifying and sequencing the required prompts (or creating a flow chart) will give you an overall picture of the form structure before you begin. This will help you to see whether or not you have all of the necessary prompts. Furthermore, with the prompts there in front of you, you can test the structure of the form to see if it flows properly or if any questions or instructions have been left out. You may decide to leave certain prompts out, include prompts you didn't originally think of, or reorder the prompts to better achieve your information-gathering goals. Eighty percent of the work you will do to create a voice form is done during the planning stage. If you thoroughly plan your voice form, all you will need to do is copy your information into the system and test it.

Before you begin

Obtain the following materials to plan your voice form application:

- 1 One blank copy of the Voice Form Sequence Worksheet (Appendix A).
- 2 One blank copy of the Voice Form Definition Worksheet (Appendix A).
- 3 One blank copy of the No Answer Field Worksheet (Appendix A).
- 4 One blank copy of the Voice Answer Field Worksheet (Appendix A).
- 5 A note pad and pencil.

Recognizing the need for a voice form application

The first step in creating a voice form application is recognizing the need for one. Use the following guidelines to determine where information-gathering needs can be met with voice forms.

- 1 If some voice form applications have already been created, check the system to confirm if any of the existing voice forms can fulfill the need as they are or with some minor modifications.
- 2 Investigate the information-gathering functions that are currently being carried out. Talk to middle managers, department heads, directors, executives and employees. Some of these functions may currently be fulfilled by paper forms, whereas others may be carried out over the phone. For example:
 - monthly mail-out material
 - employee surveys
 - order forms that are mailed out in response to called-in requests
 - applications (for membership, credit card, mortgage, and so on)
 - order taking
 - requests for service and repairs
 - customer complaints
 - customer satisfaction surveys
 - update information (address change, new phone number)
 - polls
- 3 Identify which information-gathering functions could best be served by using a voice form.

For every function that you identify, describe how information is gathered today. If a form is currently used, get a copy of the form. Would a voice form provide a more reliable way of gathering information? Would a voice form be more convenient for your customers? If information is gathered over the phone, could a voice form do the job as well or better? Also look at how the collected information is currently processed. For example, is the information transferred to a database? Being aware of these issues will help you identify how the transcription process might work. You may need to design the voice form to support this process.

A poll of all the members of your organization could uncover major or minor communications problems that wouldn't be apparent otherwise. In fact, you could create a voice form application to do this survey for you.

Obtain or draw a copy of the form

If you are going to create a voice form to replace a paper form, get a copy of the form. If there is no existing paper form, imagine what it would be like and draw a copy for yourself. This will give you a good starting point for the design process. See Figure 2 for an example of an address change form.

For longer, more complex forms, group together similar questions. For example, in a credit card application, you might group together personal information (name, social security #, address, and so on); employment information; financial obligations (current credit cards, mortgages, and loans).

Figure 2xxx An address change form

	Ad	ddress Change	
Date change goes	into effect:		
Name:			
Social Security Nur	mber:		
<u></u>			
Str	reet		Apt.
City	/	State/Province	Zip/Postal Code
Old Telephone Nun	nber: () Area Code		
New Address:			
Str	eet		Apt.
City	/	State/Province	Zip/Postal Code
New Telephone Nu	mber: ()		
	Area Code		

Sequence and/or flowchart the application

Get your notepad and a copy of the Voice Form Sequence Worksheet. In this step you will take the written form and either draw a flowchart or simply put it into a numbered sequence or list.

You will use your list to verify whether or not the order is sound and logical, and to spot any "information holes"-did you forget to ask a question or provide an instruction to the caller? You might even find that a particular form just cannot be completed using voice forms. Obviously, it's better to find this out early in the process.

Before you create your list or flowchart, read the following sections on "Confirmation mode", "Answer length limit", "Additional requests" and "Access to the form". These voice form elements will affect the structure of your voice form. Build the considerations brought up in these sections into your list (if appropriate).

Confirmation mode

One of the general form characteristics that you will be configuring in DMS VoiceMail is the caller Confirmation Mode. *Confirmation* is the process of asking a caller to confirm his or her answer to a question. This gives the caller a chance to re-record an answer up to three times. There are three confirmation modes to choose from: "None", "Whole Form" and "At Each Field" and they are described below. Because the confirmation mode that you select affects the flow and structure of the voice form, you should consider how you want to handle confirmation at this stage.

As you identify each question that will be included in the form, decide whether or not it needs to be confirmed. Try to decide early on whether you want the confirmation mode to be Whole Form or At Each Field (see the descriptions below) and incorporate this in your list or flowchart to get the most accurate representation of the form structure.

For each voice form that you create, select one of the following confirmation modes:

None

If you select "None", callers are not asked to confirm any of their answers.

Whole form

If you select "Whole Form" callers are asked to confirm their answers when the confirmation marker is reached.

When you select Whole Form as the confirmation mode, it does not mean that callers will automatically be asked to confirm each question in the voice form. The confirmation mode simply indicates where confirmation should occur. When you configure a voice form field in DMS VoiceMail, you specify whether or not it should be included for confirmation. Therefore, if you only want callers to confirm seven out of ten questions, you would "tag" those seven fields for confirmation. The seven questions are played back when the confirmation marker is reached (typically near the end of the form before the farewell greeting) and callers have the opportunity to confirm or re-record their answers.

The caller hears the following prompts:

"Selected answers will now be played back to you so that you can confirm them." (This prompt is played if some, but not all questions were tagged for confirmation. See the note below for other prompts that may be played.) The first answer requiring confirmation is played. "If this is correct, press 1. To re-record the answer press 2."

Note: If only one question was marked for confirmation, the caller hears "*The following answer will now be played back to you so that you can confirm it.*" If all questions were marked for confirmation, the caller hears "*Your answers will now be played back to you so that you can confirm them.*"

At each field

If you select "At Each Field", callers are asked to confirm an answer immediately after it is recorded.

As with Whole Form confirmation, when you select At Each Field, this does not mean that callers will be required to confirm each question. You decide which specific questions are to be included in the confirmation process when you are defining the particular fields. This is described in detail later on.

If you select At Each Field as the confirmation mode, and a caller has just answered a question that is marked for confirmation, the caller hears the following:

"Your answer will now be played back to you so that you can confirm it." The caller's answer is played back. "If this is correct, press 1. To re-record the answer press 2."

Confirmation for rotary phone users

Because confirmation requires input from a telephone keypad, callers that are using rotary phones will not be able to confirm their answers.

If confirmation mode is either Whole Form or At Each Field, the system will try to determine if the caller has a touch-tone phone by playing the following prompt just before asking for the first confirmation: "*If you are using a touch-tone telephone, press 1 now.*" If the caller does not respond with

14 Planning voice forms

DTMF input within a few seconds, the system assumes that this is a rotary phone user and the system will not ask for confirmation of questions. (If the caller has used DTMF during their session, for example to access the voice form through a voice menu, the system will know that the caller has a touch-tone phone and will not play this prompt.)

If you expect that a significant number of callers will have rotary phones, you may want to design a special confirmation process into your voice form especially for these users. Consider the following solutions.

Solution 1: At the end of the form, create a prompt that asks rotary phone users to stay on the line to confirm their answers. For example: "*If you have a rotary phone, please stay on the line to confirm some of your answers. If you have already confirmed your answers using a touch-tone phone, you may hang up now. Thank you for calling."* Then create one prompt for each field that needs to be confirmed. However, you will not be able to play the caller's initial answer back. Your prompt should say something like: "*If the new address you provided was correct, say YES. If not, please tell us the correct address.*"

Note: Solution 1 is a very laborious process. Solution 2 is recommended.

Solution 2: At the end of the form, insert a single step that allows callers to correct any of their answers. You could create a prompt along the following lines: "*If you have a rotary phone, please stay on the line if you need to correct any of your answers. If you have already confirmed your answers using a touch-tone phone, you may hang up now. Thank you for calling. If any of your original answers were incorrect, please record a correct response now."*

Answer length limit

There is a maximum answer length limit for caller's answers. The default maximum length for any answer is 30 seconds. (This value can be changed by your Northern Telecom representative if it is not sufficient.) Keep this in mind as you identify your steps. Make sure no step demands so much information that it would take a caller longer than the maximum time allowed to respond. For questions demanding longer responses, see if you can break them down into several steps (questions) asking for more specific information. Make any necessary changes to your sequence now if you anticipate this problem.

Additional requests

In the case of a voice form designed to take product orders, you should consider what to do if the caller wants to order more than one item, or a different product. One solution is to insert a step asking callers to indicate the number of items (of the same product) they want to order. To handle callers who want to order a different product, you could insert a step to inform callers of how to order other products (this could be another voice form). Modify your sequence accordingly.

Access to the form

Consider how callers will access the form. You have the following options:

- Callers dial directly into the voice form. In other words, a VSDN is created specifically for the voice form.
- Callers dial into a voice menu service.

One of the options in the voice menu connects the caller to the voice form when selected. If you have a number of voice forms to be made available, you may be able to group some of them together and create a voice menu application as a front end. (For example, "*To order Product A*, *press 1*. *To order Product B*, *press 2*.") If this is the case, you will have two applications to design: the voice form and the voice menu. (Voice menu configuration is discussed in the *Voice Menus Application Guide*.)

• Callers dial into a time-of-day controller.

The caller is connected to the voice form application that is indicated in the time-of-day control definition for the day and time at which the call is received. Two applications are required: the voice form and the time-of-day controller. (Time-of-day controller configuration is discussed in the *Voice Menus Application Guide.*)

Create a list of steps

Working from your copy of the paper form (an actual copy or your hand-drawn version) and keeping the preceding points in mind, do the following.

1 On your notepad, create a numbered list where each item represents a "step" in the voice form.

A step might be a greeting that is played to a caller, a question that is asked, or a request for confirmation. (You can, of course, change the order of this list at any time.) The list should therefore include: every prompt, the order in which prompts are played to callers, and the point(s) at which confirmation occurs. Once you have finished the sequence, run through it in your head, or better still, with someone else, to see if the sequence you have devised makes sense and to see if you have left anything out. 2 Once you are satisfied with your list, transfer it to the Voice Form Sequence Worksheet.

In this worksheet you classify each field as either a No Answer field or a Voice Answer field. Greetings and instructional prompts that do not require an answer from the caller are considered No Answer fields. Questions and requests are examples of Voice Answer fields. They require the caller to respond. (See the following section, "Composing greetings, prompts and instructions" for more information about the types of greetings and instructions you may have to include in your voice form.)

3 For each No Answer field, make a copy of the No Answer Field Worksheet. For each Voice Answer field, make a copy of the Voice Answer Field Worksheet.

For example, in the change of address voice form, you would need seven copies of Voice Answer Field Worksheet and three copies of the No Answer Field Worksheet.

Figure 3 is a sample sequence based on the change of address form. In this example, Whole Form confirmation has been selected and two fields have been tagged for confirmation.

Figure 3 Sequence for a change of address form

- 1. Welcome
- 2. General instructions
- 3. Get date address change goes into effect
- 4. Get name
- 5. Get social security number
- 6. Get old street address, apartment, city, state/province and zip/postal code
- 7. Get old telephone number (including area code)
- 8. Get new street address, apartment, city, state/province and zip/postal code
- 9. Get new telephone number (including area code)
- 10.Caller confirms new address and phone number
- 11. Thank you and goodbye
- 12.Disconnect

If you want to include more detail (such as information about field type and confirmation), you might want to use the following worksheet to plan your sequence. Figure 4 shows a more detailed sequence using the same example of a change of address voice form. There is a blank copy of this worksheet in Appendix A of this guide.

Figure 4 Detailed sequence for a change of address form

	Prompt (Field Name)	Answer?	Confirm?
1	Welcome	no	
2	General Instructions	no	
3	Date of address change	yes	no
4	Name	yes	no
5	Social security number	yes	no
6	Old street address, apartment, city, state/province, zip/postal code	yes	no
7	Old telephone number (and area code)	yes	no
8	New street address, apartment, city, state/province, zip/postal code	yes	yes
9	New telephone number (and area code)	yes	yes
10	Caller confirms new address and phone number	no*	
11	Thank you and goodbye	no	
12	Disconnect		

*Although you don't create a confirmation field, you should prepare a No Answer Field Worksheet for it as a reminder of where the confirmation marker will be.

The list follows the original copy of the form. The main difference is that it includes any greetings, instructions and the confirmation process. Notice that some of the steps are combined into one prompt (address, apartment, city, state/province, and zip/postal code). This information can be readily managed in one prompt.

If you prefer to follow the structure of an application by using a flow chart, refer to the sample flowchart in Figure 5. In this example, ovals represent prompts and rectangles represent points of confirmation.

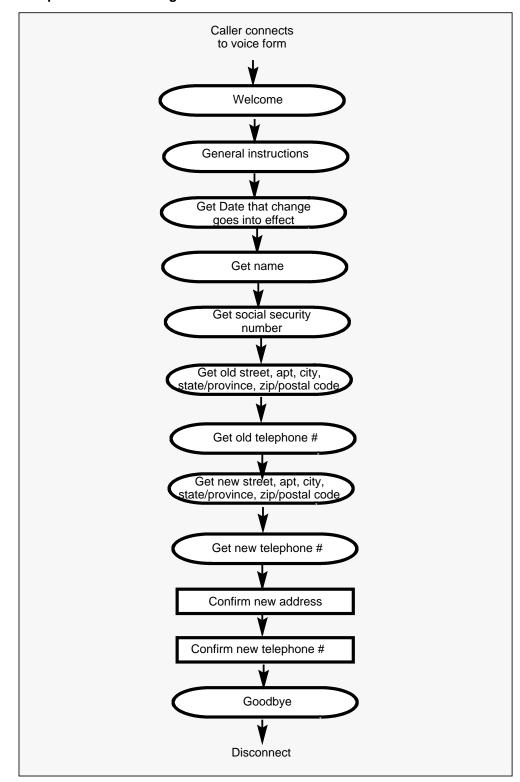


Figure 5 Sample flowchart: change of address

Composing greetings, prompts and instructions

When using a voice form, callers cannot see the instructions or blank spaces as they can with a paper form. Therefore, these elements need to be provided verbally. Ask yourself what the caller needs to know in order to fill in the form. For example, all voice forms should begin with an introductory greeting to welcome the caller (this usually includes the name of your organization as a means of identification). In addition, you will need a thank you and farewell greeting at the end of the form as well as instructional prompts to help callers use the form effectively.

The introductory greeting

The introductory greeting (or welcome) is the first prompt that callers will hear. It should identify your organization so that callers know where the call is being answered. It should also identify the service to which they have been connected. The introductory greeting is the first field in your voice form. Some examples are:

"Welcome to the Bank of Moosejaw FastCredit application system."

"Thank you for calling the Corona Confection Company. We appreciate you taking some time out to participate in our customer survey to help us assess your satisfaction with our products."

Instructional prompts

Instructions are necessary if callers are to use the form easily and effectively. Some of your instructions will inform callers of the keys they can press while using the voice form (if they have a touch-tone phone), others will outline how the form is structured or what information is expected from the caller. The following are examples of the types of instructional prompts you may need to include.

Number sign to stop recording

If a caller has finished responding to a question, or does not want to respond to a particular question, he or she can press number sign (#) to stop recording. Once recording stops, the next action in the voice form (next field, confirmation, disconnection) is carried out immediately. This makes it faster for callers to complete a form since they do not have to wait until the time specified in the Answer Length Limit field has expired. Appropriate wording would be "After answering a question, press number sign to stop recording. You will either be presented with the next question or asked to confirm your answer."

Zero (0) for assistance

If the *Caller '0' Allowed* field in the Voice Form Definition screen is set to yes, callers can press "0" at any time to connect with an operator. This gives callers the option of speaking with someone should they have problems

completing the form or if they become uncomfortable using the application. Appropriate wording would be "*If you require assistance, press 0 to speak with an operator.*"

Note: If there are rotary phone users in your area, you will have to modify your prompt to indicate that only callers with touch-tone phones can use this feature. For example: "*After answering a question, please wait on the line for the next question, or if you have a touch-tone phone, you can go immediately to the next question by pressing number sign. If you would like to speak to an operator at any time, press 0 if you have a touch-tone phone."*

Organization of the form

Since callers cannot "glance" over a voice form to get an idea of what information is expected of them, a brief summary at, or near the beginning of the form may be useful. For example, if you have created a credit card application, your questions will be organized into several categories. This summary could provide a breakdown of the categories in the order in which they will be presented.

For example: "This application is broken down into four parts. The first part asks personal questions such as your name and current address. The second part asks questions regarding your employer. The third part asks about your resources. The fourth part asks about your financial obligations."

Information required on-hand

Will you be asking for any information that the caller may not have on hand? For example, if you require a bank account number, the caller may not have this information handy and may have to look for it. If you suspect that callers may not have all of the necessary information on hand, include a prompt at the beginning of the voice form to point out the information that they will need to complete the voice form. If a caller does not have all of the necessary information, they should hang up and call back. This can save callers the frustration of getting halfway through a voice form and then having to hang up to retrieve the necessary information.

For example: "You will need your current credit card numbers, bank account numbers, driver's license number and employer's address to complete this application. If you do not have all of this information on hand, please hang up, find the necessary information and call back."

Confirmation

If you will be requiring callers to confirm (some of) their answers, you might want to tell them so at the beginning of the form. You could also specify when confirmation will occur (after each answer or at the end of the form.) This gives callers an idea of what to expect. Because confirmation requires input from a telephone keypad, callers with rotary phones must be offered an alternative procedure for confirmation. You might want to create a very brief prompt at the beginning of your voice form such as: "At the end of this survey, you will have an opportunity to confirm your answers." Just before the caller is asked to confirm his or her first answer, you should have a more detailed prompt to identify how each type of user (rotary and touch-tone) will confirm. For example: "You have reached the end of the survey. You will now have the opportunity to confirm your answers. If you are using a rotary phone, please stay on the line. Thank you."

General guidelines for creating instructional prompts

You can combine all necessary instructions into one single announcement. When a number of these prompts are played back one after the other, the only silence that separates them is any silence that was recorded along with the prompt itself. Therefore, even if you split up the information into several prompts, they will string together nicely when played back as long as there isn't any extra recorded silence. Alternatively, you can divide them up into separate segments. This is a good idea if you think you may need to update just a small section on a regular basis or if you feel that you are presenting too much information at one time if you put all instructions into one prompt.

Write your general instructions down on your notepad. If you need to cover several or all of the above mentioned points, this can be a rather long prompt. If possible, read the script aloud to someone else to see if you are trying to present too much information at one time. If your general instructions are too long they will not be effective since most people will not remember much past the first three or four points. If you feel that there is too much information, review the script and see if you can inset some of the information during other steps. For example, if you will be offering your callers the chance to change their mind and cancel an order, insert the information at the field where this action takes place, rather than at the beginning. Once you have come to a decision about how to present your instructions, write out a good copy on your notepad. You can transfer this information to the field definition worksheets when you are defining your fields.

The farewell greeting

This greeting should let the caller know that they have completed the form. Although there is a system "Goodbye" prompt, it is recommended that you turn it off and then record "Goodbye" as part of your farewell greeting so that the voice is the same for the greeting and the goodbye. For example: "*Thank you for calling the Corona Confection Company. We appreciate your business. Your order will be processed within 24 hours. Goodbye.*"

Testing your sequence

When you have finished, the best way to see if your entire form works is to read each individual script aloud to someone. As you do so, write down their responses. Don't let the person responding to the form see the scripts or your copy of the written form. Ask your colleague for feedback on the flow of the form and the instructions/prompts. If your colleague is able to respond to your scripts and the form is complete when you have finished, your script works. If it doesn't fine tune it and find someone else to test it. Continue with this process until you have scripts that work. This process is especially important for long voice forms.

Before proceeding to the next section, you should have the following:

- A blank copy of the Voice Form Definition Worksheet
- One copy of the No Answer Field Worksheet for each No Answer field and one copy of the Voice Answer Field Worksheet for each Voice Answer field in your application

Staple these forms together to create a booklet which you can later use to configure the information in DMS VoiceMail and which you can keep as a record of this voice form.

Defining general form characteristics

For each voice form that you create, fill out a Voice Form Definition Worksheet (see page 23) to define the general characteristics of the voice form application. There is a blank copy of this worksheet in Appendix A.

Voice form characteristics can be classified into three groups: general form characteristics, caller characteristics, and transcriber characteristics. In the Voice Form Definition Worksheet, general form characteristics are designated with an F, caller characteristics with a C and transcriber characteristics, with a T. The worksheet lists these characteristics in the order in which they appear in the Add a Voice Form Definition screen. However, when you are planning your form, you might want to plan the form characteristics, followed by the caller characteristics, and finally finish with the transcriber characteristics.

Each item in the worksheet represents a field in the Add a Voice Form Definition screen. The following sections describe each of the fields in this screen in detail. As you decide how you want to configure these general characteristics, fill in the worksheet.

Voice Form Definition Worksheet

Page 1 of 2

F: Voice Form ID: ____

This is a unique voice service ID. It is not the VSDN.

F: Title:

T: Transcription Password: _

Do you want transcribers to have to use a password to access the form for transcription? If not, leave blank.

C: Maximum Untranscribed Responses:

How many untranscribed responses will you allow to be stored on the system? If you have a lot of voice forms, or if the voice form is long, keep this number low. When the maximum is reached, callers are transferred to the DN specified below.

C: Overflow Handling DN: _

When the number of untranscribed responses exceeds the maximum limit, where should callers be transferred?

T: New Responses Notification DN:

When a new response is recorded, who should be notified? If you are not using the notification feature, leave this field blank.

T: New Responses SMDI Link Name: _

If you have multi-SMDI links, what is the name of the SMDI link (as defined in the hardware database) on which you want to send the new responses notification?

T: Special Responses Notification DN: ____

When a response is marked as special, who should be notified? If you are not using the notification feature, leave this field blank.

T: Special Responses SMDI Link Name: _

If you have multi-SMDI links, what is the name of the SMDI link (as defined in the hardware database) on which you want to send the special responses notification?

T: Transcription Field Separator: Field Name Tone Silence

What do you want the transcriber to hear before the answer to each field is played?

T: Default Field Separator Delay: Stop Delay deciseconds

During transcription, should playback stop after an answer is played or should it delay for a number of deciseconds between each response. This gives the transcriber time to process the answer.

T: Play Envelope for Header: No Yes

Do you want the transcriber to hear the header (response status and number) or the entire envelope (also includes the form name or ID and a date and time stamp)?

T: Delay after Header: ______ deciseconds

Do you want a delay to follow the header/envelope? (Only necessary if the header information needs to be transcribed.)

C: Caller Confirmation Mode: None At Each Field Whole Form

When will confirmation occur, if at all?

C: Default Revert DN: _

If there is a problem using the form or the caller presses 0 (if allowed), where should he or she be transferred?

C: Caller '0' Allowed: No Yes

Do you want callers to be able to press 0 for direct access to an operator?

24 Planning voice forms

Voice Form Definition Worksheet			Page 2 of 2	
C: System Messages File: (language) If you have a multilingual system, in what language should SYSTEM prompts be played?				
How will callers access the ser	vice? **			
1. Direct Access:	VSDN:			
2. Via Voice Menu Service:	VSDN: Title of Menu Service:			
3. Via Time of Day Controller:	VSDN:			
Transcription Service VSDN: _		**		

**The VSDNs of the voice form (or the service through which it is accessed) and the transcription service can be configured after you have created the voice form. These VSDNs are discussed in the sections "Making voice forms accessible" and "Defining the VSDN for the transcription service" in the chapter "Configuring voice forms". When you define these DNs, be sure to enter them into the worksheet so that your record is complete.

Identify the voice form ID

This is the identification number that uniquely identifies this voice form definition. Within a customer group, this ID must be unique among all voice service application IDs (voice menus, announcements, thru-dialers, time-of-day controllers, and voice forms). You can however, duplicate IDs between customer groups. For example, you can assign the voice form ID 1001 to a form in Customer Group 1 and then to another form in Customer Group 5. If you assign a duplicate ID, an error message will be displayed on the command line of the administration terminal. (In a single-customer system, this ID must be unique among all IDs on the system.) The voice form definition cannot be saved until you assign a unique ID number to it.

Come up with some sort of numbering scheme so that when you look at an ID you will know that it belongs to a voice form. For example, if all of your voice menus are numbered 333xxx, you may want to number your voice forms 444xxx.

Choose a title

Choose a title for the voice form. Ensure that it is descriptive enough of the form's purpose to allow you to easily recognize which voice form application you are dealing with.

Choose a transcription password

This password is optional. If you enter a password in this field, transcribers trying to access the voice form will have to enter this password before being allowed to listen to caller responses. You may enter a password of 4 to 16 numeric characters in length (no spaces allowed). (To alter the minimum password length, contact your Northern Telecom support representative.) If you do not want transcribers to have to enter a password, leave this field blank.

Identify the maximum number of untranscribed responses

Decide how many untranscribed responses are allowed to exist at any one time for this voice form application. It is not recommended that you enter a value greater than 1000 (although this field will accept higher values).

If you will be creating a large number of voice form applications, be careful of how high you set this value. As the number of untranscribed responses is allowed to accumulate, the amount of free disk space will decrease and you may eventually reach full capacity. Prioritize your voice forms in terms of the importance of the responses you are expecting. Assign higher values to your more important applications. For example, forms that are designed to take orders or record customer complaints and/or problems may be considered more important than customer surveys and probably warrant a higher value. In general, you should advise your transcribers to retrieve new responses as soon as possible. When this maximum limit is reached, callers can be reverted to an overflow handling DN.

You can also use this field to limit caller responses to a specific number. A good example is a phone-in giveaway in which the first 100 callers receive some sort of complementary gift. In this situation you could enter 100 as the maximum value so that only the first 100 caller responses are recorded.

Identify the overflow handling DN

This DN is used when the maximum number of untranscribed responses is reached. If the limit has been reached or surpassed, callers who try to access the voice form are transferred to the overflow handling DN. The DN may be from 1 to 30 characters in length using the following characters: 0-9, #, *, (,), -, _, \$ (however, the DN cannot start with '\$').

If you do not define an overflow DN (that is, if you leave the field blank when configuring the voice form definition), the following prompt is played to callers who reach the voice form when the maximum number of untranscribed responses has been recorded: "*No more responses can be recorded. Your call cannot be completed at this time. Please try again later. Goodbye.*"

Identify the new responses notification DN

This is the DN to which notification, indicated by a lit MWI or interrupted dial tone, is sent to indicate that caller responses exist. This is necessary only if you want to use the notification feature. If you do not specify a notification DN, you will have to inform transcribers to log in on a regular basis to determine if any new responses have arrived.

The DN may be from 1 to 30 characters in length using the following characters: 0-9, #, *, (,), -, _, \$ (however, the DN cannot start with '\$').

If a transcriber is also a DMS VoiceMail voice messaging user, you cannot send the notification to his or her regular telephone set because the MWI (message waiting indicator) feature cannot differentiate between caller responses and voice messages. The new responses notification DN and the special response notification DN *must* be unique across all notification DNs in the system.

If you are going to use the notification feature, transcribers need separate telephones for notification of new voice form responses. Persons handling special responses also require a separate telephone for notification.

Select one of the following methods for notifying transcribers (and those who handle special responses). The first three methods use the notification feature. The fourth method does not use the notification feature at all and is an alternative to providing a separate phone for each voice form.

One form with multiple transcribers

If more than one person will be transcribing the same form, a central telephone can be installed, allowing everyone to see the message waiting indicator. If the transcribers are in different locations, the telephone sets must all be defined for multiple appearance. In this scenario, the new response notification DN is the primary DN for the sets.

Multiple forms with one transcriber

If you assign several forms to one transcriber, you will need to provide a separate telephone set for MWI for each voice form. Note that because the new responses notification DN must be unique across all notification DNs, you must assign one telephone set per voice form since you cannot enter the same notification DN for two different voice forms. If the transcriber is responsible for many voice forms, this can become unwieldy.

Multiple forms with multiple transcribers

You may decide to have several transcribers transcribing a number of voice forms. For example, there are five transcribers who are collectively responsible for twelve voice forms. Transcribers are not responsible for a particular voice form, but the first available transcriber is expected to log on to a voice form for which a new response has been recorded. In this case, you can install a row of telephones with MWI in a central location. Label each phone for a particular voice form. Any one of the transcribers can call any voice form to transcribe. Several transcribers can even transcribe the same voice form at the same time because each transcriber is presented with the oldest response that has not been transcribed.

Transcribers check their voice forms on a regular basis

If you cannot provide separate telephone sets to your transcribers or simply find it too unwieldy, an alternative solution is to assign a number of transcribers to a specific group of voice forms. The transcribers will then log on to their assigned voice forms and check for new responses on a regular basis (every hour, twice a day, once a day, and so on).

In this scenario, you will have to determine how often responses need to be transcribed for each voice form. This will depend on how critical the responses to a particular voice form are. For example, if the voice form logs customer requests for equipment repairs, you would want transcribers to check the form on a regular basis, such as every hour. Customer surveys or opinion polls that do not require a rapid response do not need to be transcribed as often. Inform each transcriber how often to log on to each voice form that he or she is responsible for.

Identify the new responses SMDI link name

This is necessary only for DMS VoiceMail systems using an SMDI link to connect to the switch. This is the name of the Simplified Message Desk Interface link in the hardware database which should be used for setting the MWI for new responses. Check the SMDI data port screen using Hardware Administration to determine the setting.

Identify the special responses notification DN

This is the DN to which notification, indicated by a lit MWI or interrupted dial tone, is sent to indicate that caller responses, marked as "Special" by transcribers, exist. Responses may be marked special if they could not be transcribed for some reason yet need to be taken out of the list of new responses. For example, the response may have been given in a language that the transcriber could not translate.

The DN may be from 1 to 30 characters in length using the following characters: 0-9, #, *, (,), -, _, \$ (however, the DN cannot start with '\$').

See the description of the new responses notification DN for an explanation of the various notification options. The same conditions apply.

Identify the special responses SMDI link name

This is necessary only for DMS VoiceMail systems using an SMDI link to connect to the switch. This is the name of the simplified message desk interface link in the hardware database which should be used for setting the MWI for special responses. Check the SMDI data port screen using Hardware Administration to determine the setting.

Identify the transcription field separator

This field separator is used to indicate the start of an answer during transcriber playback. The field separator is heard immediately before an answer is played back. There are three transcription field separators to choose from: Field name, Tone, or Silence.

Field name

If this option is selected, a recording of the field name precedes the answer. The actual name is recorded in the Insert New Field or View/Modify Field screen using the [Voice] softkey.

Tone

If this option is selected, the transcriber hears a short tone before hearing the answer.

Silence

If this option is selected, each answer is preceded by a brief period of silence.

Identify the default field separator delay

This delay is used to provide some sort of pause after each answer to give the transcriber a chance to transcribe an answer. There are two options.

Stop

If this option is selected, the voice form stops playback after each answer is played. The transcriber must use the Play or Skip Forward command to go to the next answer.

Delay

This delay is specified in deciseconds. If this option is selected, playback will pause for the amount of time you have specified. The system then automatically resumes playback and goes on to the next answer.

A decisecond equals one tenth (1/10th) of a second. Therefore, to determine the number of deciseconds required, decide on the required duration of the delay in seconds and then multiply this value by 10. For example, to configure a delay of 1.5 seconds, enter 15 in this field. This delay can range from 0 to 32767 deciseconds.

Note: This parameter is also configurable for each field in the voice form. The value entered here is used as a default when new voice form fields are created.

Decide if the envelope should be played as the header

The header is played to transcribers each time they retrieve a new caller response. There are two headers that can be played: the standard response header or the envelope which contains additional information.

The standard header contains the status (new, special, or deleted) and the response number. The full header envelope contains the status, response number, form ID or form name and the date and time the response was recorded.

Identify the length of the delay after header

This is the delay that follows the standard header or envelope. This delay is useful if part of the header needs to be transcribed.

The delay can range from 0 to 32767 decise conds. (1 decisecond = 1/10th of a second.)

Identify the caller confirmation mode

Confirmation and confirmation modes are described in detail earlier in this chapter (beginning on page 12) because the confirmation mode affects the structure of your voice form. You should, therefore, have already chosen your confirmation mode.

Identify the default revert DN

This is the DN to which callers are transferred if there is a problem accessing the voice form or if they explicitly ask to be transferred to an attendant by pressing "0". The DN may be from 1 to 30 characters in length using the following characters: 0-9, #, *, (,), -, _, (however, the DN cannot start with '\$').

A revert DN can also be configured for each field in the voice form. The DN entered here is used as a default for each new voice form field that is created.

Decide if callers are allowed to press "0" to transfer to an attendant

If Caller 0 is allowed, callers are permitted to press "0" to transfer to an attendant. (Callers are transferred to the DN specified in the *Revert DN* field.) If it is not allowed in the voice form and a caller tries pressing "0" anyway, a message is played indicating that no operator is available. They have the option of continuing with the voice form or cancelling their call.

Note: If you allow callers to use "0", your introductory greeting should inform callers of this capability.

Identify the language for system messages

This is necessary only if more than one language is installed. The selection you make determines the language in which system prompts are played to callers and transcribers using this voice form. This field does not affect your custom recordings.

Defining No Answer fields

This section describes the parameters that have to be configured for No Answer fields. You will fill out one No Answer Field Worksheet per field. As you fill out these worksheets, keep the Voice Form Definition Worksheet next to you as you will probably refer to it several times.

Field Name:	No Answer Field Worksheet
Action After Field (circle one): NextField Revert Disconnect Choose the action that takes place after the field prompt is played to the caller. Revert DN: If Revert is selected, enter the DN to which the caller is transferred. System Disconnect Message (circle one): No Yes If Disconnect is selected, choose Yes if you want the system to play "Goodbye" upon disconnecting. Save Response if Hangup (circle one): No Yes Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable	Field Name:
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	Field Prompt:
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	······································
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
Choose the action that takes place after the field prompt is played to the caller. Revert DN:	
If Revert is selected, enter the DN to which the caller is transferred. System Disconnect Message (circle one): No Yes If Disconnect is selected, choose Yes if you want the system to play "Goodbye" upon disconnecting. Save Response if Hangup (circle one): No Yes Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable	
If Disconnect is selected, choose Yes if you want the system to play "Goodbye" upon disconnecting. Save Response if Hangup (circle one): No Yes Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable	
Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable	
Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable information has been saved at this point). Choose No if the information collected so far is not of use on its own.	
	Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable information has been saved at this point). Choose No if the information collected so far is not of use on its own.

Assign a name to the field

Choose a name for the field. This name should be unique and descriptive enough to identify the function of the field. You may enter a name that is between 1 and 29 characters in length. (You cannot save the field without a name.)

Identify the action after field

Once the field prompt is played, what action should be taken? Choose from one of the following.

Next field

If this option is selected, the next field prompt will be played.

Revert

If this option is selected, the caller will be transferred to the revert DN (see next field description).

Disconnect

If this option is selected, the call is disconnected. This action is typically selected for the last field in the voice form that plays the farewell greeting and is used to disconnect the caller from the voice form.

Identify the revert DN

This is necessary only if the action after field is to revert the caller to another number. If this is the case, identify the DN.

Determine if the system disconnect message is necessary

This is necessary only if the action after field is to disconnect the call (because this is the last field in the form). If this is the last field, do you want the system to play its generic "Goodbye" prompt before disconnecting? If you have included a "Goodbye" in your farewell greeting, it is not necessary to do so.

Determine whether the response should be saved if the caller hangs up

If the caller hangs up while listening to this field prompt, should the system save the response (all of the answers recorded so far, if any) or discard it?

This should be given some consideration. If you want to be informed of all calls made to the voice form (complete and incomplete), set this field to "Yes" for all fields in the voice form. If you are not interested in incomplete responses, set this field to "No" for all fields except the last one. If you want

to keep incomplete responses only if they contain some useful information, you will have to decide at which point in the form enough useable information has been gathered. In the third case, you would probably set this field to "No" for the fields at the top of the form and then set it to "Yes" for all fields after a particular point (the point at which you believe enough useful information has been gathered). However, be sure that all fields after this point are set to "Yes", because whether a response is saved or discarded is determined by the setting of the field on which the caller hangs up.

Defining Voice Answer fields

This section describes the parameters that have to be configured for voice answer fields. You will fill out one Voice Answer Field Worksheet per field. As you fill out these worksheets, keep the Voice Form Definition Worksheet next to you as you will probably refer to it several times.

34 Planning voice forms

Voice Answer Field Worksheet
Field Name:
Field Prompt:
Field Name recorded:
State the field name as a descriptive of the field. Callers and transcribers will hear this "label" before the response is played back to them.
Answer Length Limit: seconds
This field determines the maximum length of the caller's answer to this prompt. The maximum value is 30 seconds.
No Answer Handling (circle one): NextField Revert Disconnect Repeat Choose the action that should be taken if the caller does not record an answer once the field prompt is played: NextField - The next field prompt will be played. Revert - The caller will be transferred to the revert DN specified for this field. Disconnect - The call is disconnected. Repeat - The field prompt is repeated for an adjustable but limited number of times; when this limit is reached, the caller is disconnected. The next field is not played.
Revert DN:
Repeats before Disconnect:
Stop Recording on Silence (circle one): No Yes
This field determines what happens if the caller is silent for a predetermined length of time during recording (This time period, in seconds, can be adjusted by the NT support organization). If Yes is selected, recording stops and the next action in the form is taken. If No is selected, the recording period continues for the amount of time specified in the Answer Length Limit field.
Field to be Confirmed (circle one):NoYesIf Confirmation Mode is Whole Form or At Each Field, select Yes if you want callers to confirm their answer to this question.
Save Response if Hangup (circle one): No Yes
Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable information has been saved at this point). Choose No if the information collected so far is not of use on its own.
Field Separator Delay (circle one):StopDelay (deciseconds:)This field affects the transcription process. Choose Stop if you want playback to stop after the caller's answer has been played (the transcriber has to enter a specific command to resume playback). Choose Delay (and specify a value) if you want playback to pause for the specified amount of time after which playback will automatically resume.

Assign a name to the field

Choose a name for the field. This name should be unique and descriptive enough to identify the function of the field. You may enter a name that is between 1 and 29 characters in length. (You cannot save the field without a name.)

Identify the answer length limit

This is the maximum recording length (in seconds) allowed for a caller's answer to the prompt recorded for this field. The minimum value is 1 second and the default maximum value is 30 seconds. This upper limit can be changed by a representative of your Northern Telecom support organization (and may have already been changed during installation). Use shorter limits for yes/no answers and longer limits for answers that require more detailed information. If you feel that the question cannot be answered in the maximum time allowed, reword it so that it asks for more specific information or break it into several questions if possible. If you find that this is the case for many of the questions you are including in voice forms, call your Northern Telecom support organization and ask to have this upper limit changed.

Identify how to handle "no answer" situations

If a caller does not provide an answer for this field, what action should the system take? There are four options.

Next field

If this option is selected, the next field prompt is played. Transcribers will hear the message "No answer was recorded" when this field is reached during transcription.

Revert

If this option is selected, the caller is transferred to the revert DN specified for this field. This could be the DN of an operator designated to handle calls from people having trouble filling in forms or a transcriber if he or she is usually situated at his or her telephone set.

Disconnect

If this option is selected, the call is disconnected if the caller does not record an answer. The system plays "*Goodbye*" before doing so. (Don't mistake this with the Action After Field disconnect.) This action may be selected for high-volume voice forms where it is important that callers do not tie up lines or if all questions must be answered for the form to be processed. Otherwise, this option is not recommended. If during testing, or while the form is in use, it is noticed that callers are being disconnected unexpectedly, it may be because "Disconnect" was unintentionally selected for a field. This is the first thing to check should this occur.

Repeat

If this option is selected, the field prompt is repeated. If the caller still fails to record an answer, the field prompt will be played again. This continues until the number of repeats specified in the *Repeats Before Disconnect* field has been reached. Once this limit is reached, the caller is disconnected from the voice form. The next field is *not* played.

Note: Silence compression must be enabled for this feature to work. See the chapter "Set silence compression" in the *System Administration Tools Guide*.

Identify the revert DN

This is necessary only if "No answer handling" is set to revert. If this is the option you selected, identify the DN to which the caller should be reverted.

Identify the number of repeats before disconnecting

This is necessary only if "No answer handling" is set to repeat. If this is the option you selected, identify the maximum number of times the prompt is to be repeated before disconnecting the caller from the voice form.

Determine whether recording should stop if silence is detected

If there is silence (four seconds) while a caller is recording an answer, you have the option of stopping recording or recording the silence until the maximum answer length limit has been reached.

It is generally recommended that you do not record silence for two reasons:

- Rotary phone users cannot press # (number sign) to go to the next question. This means that they will have to wait a considerable amount of time between their recorded answer and the next question.
- Even though you may inform callers to press # to go to the next question in your greeting, many will not and will just wait on the line. As with rotary phone users, they will be required to wait until the maximum answer length limit has been reached.

If callers find they have to wait a long time between questions, they may get frustrated and hang up.

If you find that callers are being inadvertently cut off (if they are searching for information, for example), you can call your Northern Telecom technical support center and ask them to change the four second default.

Note: Silence compression must be enabled for this feature to work. See the chapter "Set silence compression" in the *System Administration Tools Guide*.

Identify whether the field needs to be confirmed

This is necessary if the confirmation mode for this voice form is Whole Form or At Each Field. You can selectively choose to have this field confirmed, or not confirmed by the caller.

If the confirmation mode is At Each Field and this field is marked to be confirmed, callers will be asked to confirm their answer for this voice form field immediately after their answer has been recorded.

If the confirmation mode is Whole Form and this field is marked to be confirmed, callers will be asked to confirm their answer for this voice form field when the confirmation marker is reached, along with any other fields that have been marked for confirmation.

Determine whether the response should be saved if the caller hangs up

If the caller hangs up while listening to this field prompt, should the system save the response (all of the answers recorded so far, if any) or discard it?

This should be given some consideration. If you want to be informed of all calls made to the voice form (complete and incomplete), set this field to "Yes" for all fields in the voice form. If you are not interested in incomplete responses, set this field to "No" for all fields except the last one. If you want to keep incomplete responses only if they contain some useful information, you will have to decide at which point in the form enough useable information has been gathered. In the third case, you would probably set this field to "No" for the fields at the top of the form and then set it to "Yes" for all fields after a particular point (the point at which you believe enough useful information has been gathered). However, be sure that all fields after this point are set to "Yes", because whether a response is saved or discarded is determined by the setting of the field on which the caller hangs up.

Identify the field separator delay

This delay is used to provide some sort of pause after each answer to give the transcriber a chance to transcribe an answer. There are two options.

Stop

If this option is selected, the voice form stops playback after the answer to this field is played. The transcriber must use the Play or Skip Forward command to go to the next answer.

Delay

This delay is specified in deciseconds. If this option is selected, playback will pause for the amount of time you have specified. The system then automatically resumes playback and goes on to the next answer.

A decisecond equals one tenth (1/10th) of a second. Therefore, to determine the number of deciseconds required, decide on the required duration of the delay in seconds and then multiply this value by 10. For example, to configure a delay of 1.5 seconds, enter 15 in this field. This delay can range from 0 to 32767 deciseconds.

Identifying the service through which the voice form will be accessed

Decide how the voice form will be accessed by callers. A voice form can be accessed in one of three ways:

- 1 Directly. The caller dials a DN that has been dedicated to the voice form and is immediately connected to the voice form application. The VSDN of the voice form is the published number.
- 2 Indirectly, through a voice menu application. The published number connects the caller to a voice menu. The caller accesses the voice form by pressing the appropriate menu key.

If you have a number of voice forms that are related in some way (for example, they all relate to a particular product line), you can create a voice menu as a front end. Publish the number of the voice menu to your customers and tell them to call it if they would like to place an order for Product X, register a complaint against Product X, respond to a customer satisfaction survey, or apply for a credit card. Each of these options would be an menu action.

3 Indirectly, through a time-of-day controller. If the voice form is associated with the time of day at which the call is received (business hours, off-hours, or a holiday), the caller is connected to the voice form. This is useful if you want operators to take customer orders during the day, but would like to continue to take orders in the evenings or on weekends when they are not around. Simply associate the voice form with off-hours in the time-of-day control definition.

If you are going to modify an existing voice menu or time-of-day controller, find the service DN in the VSDN table. If you are going to create a special voice form service, or a new menu or time-of-day controller, find an available DN. Enter the DN on the second page of the Voice Form Definition Worksheet.

Identifying the transcription service DN

Once you have completed your first voice form, you will have to define a VSDN for the transcription service. To transcribe a form, you must first access the transcription service, much like you access voice messaging to retrieve voice messages. You can either configure one generic transcription service or you can create a number of transcription services.

Using one generic transcription service

This configuration allows any transcriber to log on to any form for transcription. When the transcriber dials the DN, he or she is prompted for the voice form ID (as entered in the Voice Form Definition Worksheet). If you specify a transcription password, the transcriber must also provide a password to access the form. This is the most flexible way of configuring the transcription service.

Identify an available DN and enter it on the second page of the Voice Form Definition Worksheet.

Using a number of transcription services

In this configuration, you create one transcription service per voice form. When a transcriber dials the DN, he or she is automatically logged on to the specified voice form that is associated with the VSDN. The transcriber will still have to enter a password if you define a transcription password in the Add a Voice Form Definition screen. If you have a small number of voice forms on the system, you might want to use this method. However, the first method is recommended in most situations.

Identify an available DN and enter it on the second page of the Voice Form Definition Worksheet.

40 Planning voice forms

Configuring voice forms

With the planning phase behind you, the majority of your work is already done. The worksheets that you completed are outlines of the DMS VoiceMail administration screens you will be using to configure your voice form application. Now it is just a matter of copying the data in your worksheets directly into the system, recording the prompts that you have scripted, and testing the service.

You can configure a voice form in stages or all at once. However, it is recommended that you configure the form in one session if possible because you will be less likely to make mistakes. Furthermore, the voice form administration screens are designed so that one step leads you into the next. For example, general form characteristics are defined in the Add a Voice Form Definition screen. Once you are finished with this stage and are ready to define your fields, you access the List of Fields screen from the Add a Voice Form Definition screen. From the List of Fields screen, you insert a new field.

Guidelines for configuring voice forms

The following topics should be considered before you begin configuring your voice forms.

Recording the prompts

You can approach voice form configuration in one of two ways: you can either (a) make the necessary recordings (the field name and the field prompt) for each field as you define the fields or (b) define the fields first without recording the prompts and then go back and record the prompts in a separate recording session.

Note: Voice form prompts cannot be recorded or maintained using the voice prompt maintenance service. The administrator must access the voice form through the local administration terminal (or a remote terminal) to make or update recordings.

Record as you define fields

This is the recommended method for short voice forms. You will need to coordinate a time when both the administrator and the person doing the recordings can work together. Choose a time when the environment is quiet-perhaps outside business hours. Minimize air-conditioning noise if it is intrusive, and allow only the people essential to the recording in the room while recording is taking place.

Record after the fields are defined

This is the recommended procedure for lengthy or complex applications. It can take quite a while just to define the fields which tends to break up the flow of the recordings. By having 90% of the configuration process complete before you record, you (and the speaker) can totally focus on the recording process and the recording can be done in one session. This will make it easier for the person to maintain the same voice quality throughout the application as much as possible. Furthermore, if you are using a professional service to record your prompts, you should not have to interrupt a recording session to configure fields.

Choosing the speaker

Remember that no matter how well your applications are designed, if the recorded voice you use is unpleasant or difficult to understand reaction to the applications will not be positive.

Though telephone lines reproduce low-pitched voices best, a clear voice is better than one that sounds 'gravelly'. If practical, try to use only one voice or one gender, because callers may be distracted by changes in speakers. Choose a voice and accent that projects the image your organization wants to promote. The voice itself and the prompts should sound relaxed, confident, efficient, and friendly. If you have a lot of recordings that will need updating regularly, choose someone who can be available to update them. If this is difficult, select a few people with similar voice qualities who can share the responsibility.

Audition prospective speakers in a quiet room, then play back samples of their voices over the telephone. A good way to audition speakers is to have them leave messages or read sample scripts in your mailbox. The same technology that stores the voice in a mailbox is used for voice forms, so you'll have an accurate account of the end result.

Configuring voice forms in DMS VoiceMail

Procedure 1 details the steps that are necessary to configure a voice form in DMS VoiceMail.

Procedure 1xxx

Configuring a voice form in DMS VoiceMail

Step	Description	See this section
1	View the voice forms screen.	"Viewing a list of existing forms: the Voice Forms screen"
2	Add a new voice form definition using the [Add] softkey.	"The Add a Voice Form Definition screen"
3	Define the form characteristics by filling out the Add a Voice Form Definition screen.	"Defining form characteristics"
4	View the list of existing fields for the voice form.	"The list of fields screen"
5	Open a field for each question or prompt that will make up the voice form.	"Opening/modifying fields"
6	Define the voice form fields.	"Inserting a new field"
7	Record the field prompts.	"Recording field prompts and field names"
8	Save the voice form definition.	"Saving the voice form definition"
9	Build the service through which the voice form will be made accessible.	"Making voice forms accessible"
10	Build the transcription service.	"Defining a VSDN for the transcription service"

All voice forms administration screens will display the customer's name in the upper left-hand corner.

Viewing a list of existing voice forms: the Voice Forms screen

Voice forms are administered from the Voice Administration menu (see Figure 6). The voice form administration screens are invoked by selecting the Voice Form Definitions item from the menu which causes the Voice Forms screen to be displayed. If you have just installed voice forms and have not yet created any voice form applications, this screen will not list any voice forms and appear as depicted in Figure 7. Once you have created at least one voice form, additional softkeys appear at the bottom of the screen, as shown in Figure 8. This screen presents a complete list of the voice form definitions currently defined for the customer group.

Procedure 2xxx Accessing the Voice Forms screen

Starting point: The Customer Administration menu

1 Select Voice Administration <Return>. The Voice Administration menu (Figure 6) is displayed.

Figure 6xxx The Voice Administration menu

ABC Company	Voice Administration
1 Voice Messaging Options	
2 Voice Security Options	
3 Voice Services Administration	n
* 4 Outcalling Administration	
5 Voice Form Definitions	
Select an item > 5	
Exit	

* This item is displayed only if Outcalling is installed.

2 Select Voice Form Definitions <Return>.

The Voice Forms screen (Figure 7 on a new system or Figure 8 if voice forms have been created) is displayed.

From this screen it is possible to add a new voice form definition, copy from an existing definition, view an existing definition, modify an existing definition, delete an existing definition, or return to the Voice Administration menu. These actions are described in the following pages.

Figure 7xxx The Voice Forms screen (before any voice forms are created)

ABC Company	Voice Administration
Voice Forms	
voice Forms	
ID Title	
	Move the cursor to the item and press the spacebar to select. >
Exit	Add

Figure 8xxx

The Voice Forms screen (after voice forms have been created)

ompany Voice Administration
inpuny voice running unon
ms
Title
Automatic Deposit Authorization
Credit Card Application
Consumer Loans
Small Business Loans
Car Loans
Consumer Overdraft Protection Plan
Pre-Authorized 1st Mortgage
Application for 2nd Mortgage
Application for Convenience Card
Pre-Authorized Payment Plans
Address Change
Personal Cheque Orders * Incomplete Recordings
Move the cursor to the item and press the spacebar to select. >
Add/Copy View/Modify Delete

The following information is displayed for each existing voice form definition:

• The form ID number. This number is defined when you add a voice form definition.

- The title of the voice form application.
- A status flag, if necessary, to indicate incomplete recordings. This flag is displayed if a voice form definition has been saved with one or more of its required field prompts or field names left unrecorded or if the form does not contain at least one field.

Note: A voice form application cannot be used if there are incomplete recordings.

You may have to check the Voice Forms list from time to time to keep yourself updated on the current application load, as well as to verify which forms are incomplete, and therefore nonfunctional.

Adding a new voice form definition

If you are creating your first voice form, or if the required application is significantly different from other existing voice form applications, you will need to add a new voice form definition. This creates a file which contains all of the information that is relevant to the particular voice form application.

Defining general form characteristics

New voice form definitions are added to the system using the Add a Voice Form Definition screen (Figure 9). The fields in this screen define the general structure of the voice form application. See the chapter "Planning voice forms" for a description of the fields.

The procedure for adding a voice form definition is different if you are adding the very first voice form. Follow Procedure 3 to add the first voice form to a customer group. For all subsequent voice forms, follow Procedure 4.

Procedure 3xxx Adding the first voice form definition

Starting point: The Voice Forms screen

Press the [Add] softkey.
 The Add a Voice Form Definition screen is displayed (see Figure 9).

Procedure 4xxx Adding subsequent voice form definitions

Starting point: The Voice Forms screen

- 1 Press the [Add/Copy] softkey.
- 2 A new set of softkeys is displayed as shown below.

Select a softkey >				
	Cancel	Add New Form	Copy Form	

3 Select [Add New Form].

The Add a Voice Form Definition screen is displayed (see Figure 9).

Figure 9 The Add a Voice Form Definition screen

ABC Company	Voice Administration	
Add a Voice Form Definition		
Voice Form ID:	<u>02</u>	
Title:	Credit Card Application	
Form Name Recorded (Voice):	No	
Transcription Password:	<u>6060</u>	
Maximum Untranscribed Responses:	<u>1000</u>	
Overflow Handling DN:	<u>8050</u>	
New Responses Notification DN:	8051	
*New Responses SMDI Link Name DN	:	
Special Responses Notification DN:	8052	
*Special Responses SMDI Link Name:		
select a softkey>		MORE BELOW
	Onen Medify Vision	
Save Cancel	Open/Modify Voice Fields	
	Open/Modify Fields Voice Administration	MORE ABOVE
Save Cancel		MORE ABOVE
Save Cancel ABC Company		MORE ABOVE
Save Cancel ABC Company Add a Voice Form Definition	Voice Administration	MORE ABOVE
SaveCancelABC CompanyAdd a Voice Form DefinitionTranscription Field Separator:	Voice Administration [Field Name] Tone Silence	MORE ABOVE
SaveCancelABC CompanyAdd a Voice Form DefinitionTranscription Field Separator:Default Field Separator Delay:	Voice Administration [Field Name] Tone Silence Stop [Delay] deciseconds: 0_	MORE ABOVE
SaveCancelABC CompanyAdd a Voice Form DefinitionTranscription Field Separator:Default Field Separator Delay:Play Envelope for Header:	Voice Administration [Field Name] Tone Silence Stop [Delay] deciseconds: <u>0</u> [No] Yes	MORE ABOVE
SaveCancelABC CompanyAdd a Voice Form DefinitionTranscription Field Separator:Default Field Separator Delay:Play Envelope for Header:Delay After Header (deciseconds):	Voice Administration [Field Name] Tone Silence Stop [Delay] deciseconds: 0 [No] Yes 30	MORE ABOVE
SaveCancelABC CompanyAdd a Voice Form DefinitionTranscription Field Separator:Default Field Separator Delay:Play Envelope for Header:Delay After Header (deciseconds):Caller Confirmation Mode:	Voice Administration [Field Name] Tone Silence Stop [Delay] deciseconds: 0 [No] Yes 30 [None] At_Each_Field Whole_Form	MORE ABOVE
SaveCancelABC CompanyAdd a Voice Form DefinitionTranscription Field Separator:Default Field Separator Delay:Play Envelope for Header:Delay After Header (deciseconds):Caller Confirmation Mode:Default Revert DN:	Voice Administration [Field Name] Tone Silence Stop [Delay] deciseconds: 0 [No] Yes 30 [None] At_Each_Field Whole_Form 0	MORE ABOVE

* These fields are displayed only on dedicated SPM systems.

Cancel

Save

This field is displayed only if more than one language is installed.

Open/Modify Fields

Voice

4 Use your worksheet to fill in the fields.

Opening and modifying voice form fields

Once you have defined the characteristics of the form as a whole, you are ready to add and define the necessary fields. Each greeting, instruction, prompt and question that is to be included in the voice form application requires a field. The field definition that you create contains the actual recorded prompt, the recorded field name (for Voice Answer fields) which is played back to transcribers and to callers during confirmation and characteristics that are specific to each field.

Procedure 5xxx Opening/modifying fields

Starting point: The Add a Voice Form Definition screen

1 Press the [Open/Modify Fields] softkey.

The List of Fields screen is displayed. See Figures 10 and 11. Figure 10 shows how this screen looks if no fields have been defined. Figure 11 shows an example of how this screen looks if fields have already been defined.

Figure 10xxx

The List of Fields screen (no voice forms defined)

ABC Company	ıy	Voice Administra	ation	
List of Fields	Form ID: 02 Ti	itle: Credit Card Applic	ation	
Field Name		Prompt Rec. RMATION> F-FORM>	Name Rec.Modified	
Move selection b	ear to a field, then se	lect a softkey>		
Close Fields	Insert New Field			

The only entry in this screen is the <END-OF-FORM> marker in the Type column. If you have selected Whole Form as the confirmation mode, the <CONFIRMATION> marker will precede the <END-OF-FORM> marker.

ABC Company		Voice Administr	ation	
st of Fields Fo	orm ID: 02 Title:	Credit Card Appli	cation	
Field Name	Туре	Prompt Rec.	Name Rec.Modified	
Welcome	No Answer	Yes		
Name	Voice Answer	Yes	Yes	
Social Security	Voice Answer Ye	s Yes		
Street Address	Voice Answer Ye	s Yes		
City/State/Prov.	Voice Answer Ye	s Yes		
Zip/Postal Code	Voice Answer Ye	s Yes		
Phone number	Voice Answer	Yes Y	es	
Years at address	Voice Answer Ye			
Employer	Voice Answer	Yes Y	es	
Street Address	Voice Answer Ye			
City/State/Prov.	Voice Answer Ye			
Zip/Postal Code	Voice Answer Ye			
Phone Number	Voice Answer		Yes	
Years Employed	Voice Answer <confirma< td=""><td></td><td>es</td><td></td></confirma<>		es	
Thank you	No Answer <end-of-fc< td=""><td>Yes DRM></td><td></td><td></td></end-of-fc<>	Yes DRM>		
ove selection bar	to a field, then select	a softkey>		
Close	Insert New	View/Modify	Delete	Move Field
Fields	Field	Field	Field	

Figure 11xxx The List of Fields screen (existing voice forms)

* The CONFIRMATION marker is displayed only if Confirmation Mode is Whole Form.

The following read-only fields are displayed:

- *Form ID* Serves to remind you of the voice form definition you have selected to modify.
- *Title* Serves to remind you of the voice form definition you have selected to modify.
- *Field Name* The name of the existing field.
- *Type* This field indicates whether or not an answer is expected for the field. There are, therefore, two types of fields:
 - *No Answer* fields only play a prompt. No answer is expected from the caller.
 - V oice Answer fields play a prompt and record an answer.
- **Prompt Rec** This field indicates whether or not a voice prompt has been recorded for the associated field. (A voice prompt can be a welcome or farewell greeting, a question or an instruction.) If there are incomplete recordings, that is, fields for which there is no prompt recording, callers will not be able to use the voice form.

- *Name Rec* This field indicates whether or not a recording of the field name has been made. Only Voice Answer fields can have field names. This name is announced to callers during confirmation and to transcribers during transcription.
- *Modified* An asterisk (*) in this field indicates that the field has been modified at any time since this voice form has been opened for editing.

Markers

There are two markers that can appear in the Type field.

<END OF FORM>

This marker is always present and cannot be deleted or moved. It is the final entry in the *Type* field and indicates the end of the list of fields for this form. All of the fields that you create will appear above this marker.

<CONFIRMATION>

This marker only appears if you set the Caller Confirmation mode to "Whole Form" in the Add a Voice Form Definition screen.

It indicates the place at which the caller will be asked to confirm his or her answers. By default, this marker appears just before the <END-OF-FORM> marker, but you can move it using the [Move Field] softkey. This may be necessary if you want to include a thank you or farewell prompt just before the caller is disconnected from the form (and therefore, after confirmation). Or, after the caller confirms his or her answers, you may want to include a prompt that asks callers to leave comments of a more general nature. See the section "Moving a field" for more information.

If "At Each Field" was selected as the confirmation mode, callers are asked to confirm an answer immediately after it is recorded. You will not, however, see the <CONFIRMATION> marker in the List of Fields screen.

Inserting a new field

If you are creating a voice form from scratch, you will have to define all of the fields that are to make up the application. New fields are added to a voice form definition using the [Insert New Field] softkey in the List of Fields screen. Once you have created a voice form, you can always return to it and insert more fields if required. (See the section "Modifying or viewing a voice form definition" on page 64 for details.)

Before pressing the [Insert New Field] softkey, make sure that the cursor is in the correct location and that the <Spacebar> has been pressed to highlight the current line. When you insert a new field, it is placed in the row above the cursor. Step 2 in Procedure 6 describes the correct cursor placement for adding fields. For procedure 6, get the New Field Worksheets for No Answer Fields and the New Field Worksheets for Voice Answer Fields that you filled out while planning your voice form. You will have one worksheet per field. Simply enter the values from these worksheets into the Insert a New Field screen. See the chapter "Planning voice forms" for a description of the fields on this screen.

Note: You can define up to 150 fields for a single voice form application.

Procedure 6xxx Inserting a new field

Starting point: The List of Fields screen

- 1 If this is the first field to be added to the voice form, go to step 1a. For subsequent fields, go to step 1b.
 - a. Position the cursor on the <CONFIRMATION> marker (if it is present). If there is no <CONFIRMATION> marker, position the cursor on the <END-OF-FORM> marker.
 - b. Position the cursor to indicate where the new row should be inserted. The new row will be inserted above the row in which the cursor is placed. When you are ready to insert the last field in the form, position the cursor on the <END-OF-FORM> marker.
- 2 Press the <Spacebar> to select the row.
- 3 Press [Insert New Field].

The Insert New Field screen is displayed.

4 Select the Field Type.

Your selection will affect the screen display. See Figure 12 for No Answer fields. Figure 13 shows you how the display will look after you insert the first field. Figure 14 shows how the screen will look for a Voice Answer type field.

ABC Company	Voice Administration
Insert New Field Form ID: 02	Title: Credit Card Application
Field Type:	[No-Answer] Voice-Answer
Field Name:	Welcome
Field Prompt Recorded (Voice): N	ło
Action After Field:	Next Field [Revert] Disconnect
*Revert DN:	<u>0</u>
**System Disconnect Message:	[No] Yes
Save Response if Hangup:	No [Yes]
Move selection bar to a field, then sel	lect a softkey>
Save Cancel	Voice

Figure 12xxx The Insert New Field screen for a No Answer type field

* This field is displayed only if Action After Field is Revert.

** This field is displayed only if Action After Field is Disconnect

Figure 13xxx

```
The List of Fields screen (with the Welcome field added)
```

ABC Compa	ny	Voic	e Administra	tion	
t of Fields	Form ID: 02	Title: Credi	t Card Applic	ation	
Field Name Welcome	<c0< td=""><td>nswer NFIRMATIO D-OF-FORM:</td><td></td><td>Name Rec.Modified</td><td></td></c0<>	nswer NFIRMATIO D-OF-FORM:		Name Rec.Modified	

ABC Company	Voice Administration
Insert New Field Form I	D: 02 Title: Credit Card Application
Field Type:	No-Answer [Voice-Answer]
Field Name:	Welcome
Field Prompt Recorded (Voic	e): No
Field Name Recorded (Voice): No
Answer Length Limit (second	ls): <u>46</u>
No Answer Handling:	Next Field Revert Disconnect [Repeat]
*Revert DN:	0
**Repeats Before Disconnect	: <u>1</u>
Stop Recording on Silence:	No [Yes]
***Field to be Confirmed:	No [Yes]
Save Response if Hangup:	No [Yes]
Field Separator Delay:	Stop [Delay] deciseconds:
Move selection bar to a field	i, then select a softkey>
Save	Cancel Voice

Figure 14xxx The Insert New Field screen for a Voice Answer type field

This field is displayed only if No Answer Handling is Revert.

** This field is displayed only if No Answer Handling is Repeat.

- *** This field is displayed only if Confirmation Mode is Whole-Form or At-Each-Field.
- 5 Fill in the required information (according to your New Field worksheets). The fields in this screen are described in the chapter "Planning voice forms".
- 6 For Voice Answer fields, record the field name. If you are using a professional to record the prompt, or if this is a long voice form and you want to record all prompts in one session, this step can be done later. However, the same voice should be used to record the field names (since it is heard by callers during confirmation) and the field prompts.

To record a prompt, move the cursor to the *Field Name Recorded (Voice)* field, press the [Voice] softkey. Follow Procedure 7 on page 54 to record a prompt.

Note: All field names must be recorded before the voice form can be used.

7 You can either record the field prompt now (for shorter applications) or during a separate recording session (for longer applications). While the cursor is on the *Field Prompt Recorded (Voice)* field, press the [Voice] softkey. Follow Procedure 7 on page 54 to record a prompt.

Note: All field prompts must be recorded before the voice form can be used.

8 To save the field definition, go to step 8a. If you do not want to save the field definition, go to step 8b.

a. Press [Save].

If all of the mandatory fields have been filled in, the field definition is saved. If something is missing from your definition, you will be informed and the field definition will not be saved until all of the required information has been entered.

Note: When you return to the Add a Voice Form Definition, be sure to use the [Save] softkey that is displayed. If you do not save the voice form, the fields you have just created will not be saved.

b. Press [Cancel].

Any changes that have been made are discarded. The List of Fields screen is displayed.

Note: When you save a voice form field, you are returned to the List of Fields screen and the cursor is automatically positioned on the first row. This means that you will have to cursor down to the field you just finished defining before you insert the next field.

When your voice form is complete, it should look similar to Figure 11 on page 49.

Recording field prompts and field names

For each Voice Answer field in the form, you must record both a field name and a field prompt. (No Answer fields require a field prompt only.) The field name is played to transcribers during transcription if the Field Name is used as the field separator. It is also played to callers during Whole Form confirmation. You can record the field name as you define each field. However, you may want to record your field prompts during a separate recording session. See the section "Recording the prompts" on page 41 (the first page of this chapter) for a discussion.

Procedure 7

Recording field prompts and field names

Starting point: The Insert New Field or View Modify Field screen

- 1 To record a prompt, position the cursor on the desired *Prompt Recorded* field (either *Field Prompt Recorded* or *Field Name Recorded*).
 - a. Press the [Voice] softkey.

You are prompted for a phone number.

b. Enter the phone number of the phone set you are going to use to make the recording and press <Return>.

The phone rings.

- c. Pick up the telephone handset.
- d. To record the field prompt, press the [Record] softkey. At the sound of the beep, begin speaking into the handset.

When you pressed the [Record] softkey, a new [Stop] softkey appeared in its place. Press the [Stop] softkey to stop recording.

e. To hear the prompt, press the [Play] softkey.

The recording is played over the phone.

If you want to rerecord the prompt, return to step 1d.

f. When you are satisfied with the recording, press either [Disconnect] or [Return] to display the original softkeys.

When you use [Return], the line is not disconnected (unless you hang up the receiver). This means that if you decide to re-record or listen to the recording, you do not have to re-enter the telephone number after pressing the [Voice] softkey. This is recommended if you will be recording a number of prompts.

When you use [Disconnect], the line is disconnected and if you press [Voice] to access the recording softkeys again, you will have to re-enter the telephone number. Use this softkey when you have recorded the last prompt for this session.

- 2 Press [Save] to save the recordings.
- 3 Return to step 8 in Procedure 6 to save the field.

Saving the voice form definition

Follow Procedure 8 when you have defined all of your fields. If the confirmation mode is Whole Form, make sure the *<*CONFIRMATION*>* marker is positioned correctly.

Procedure 8xxx Saving the entire voice form definition

Starting point: The List of Fields screen

- 1 Press [Close Fields]. The Add a Voice Form Definition screen is displayed.
- 2 Press [Save] to save the entire voice form definition, including fields. *The Voice Forms screen is displayed.*

Making voice forms accessible

Once a voice form has been created, it can be made accessible for testing and for callers in one of three ways:

Direct access

Callers access the form by dialing a special DN that connects them directly to the voice form. Follow Procedure 9 to create a VSDN for the voice form. This procedure assumes that there are available UCD queues on the switch.

Procedure 9xxx Creating a VSDN for a voice form

Starting point: The Customer Administration menu

- 1 Select Voice Administration. The Voice Administration menu is displayed.
- 2 Select Voice Services Administration. The Voice Services Administration menu is displayed.
- 3 Select Voice Services-DN Table. The Voice Services-DN Table is displayed. See Figure 15.

Figure 15xxx The Voice Services-DN Table

ABC Compan	у	Voice Services Administra	tion		
oice Services-	DN Table				
Customer #	DN	Service		Comment	
00 00 00 00 00 00 00	2663650 2663651 2663654 2663661 2663662 2663663 2663665	EM PM VM RA TS EM AS	2000 2001	Prompt N Voice Remote A Thru-Dia Expre	ess Messaging Aaintenance e Messaging Activation 1 2 ess Messaging ement Service
Nove the curso	r to the item and pre	s the space bar to select >			
	Add	View/Modify	D	elete	Find

4 Press the [Add] softkey.

The Add DN Information screen is displayed. See Figure 16.

Figure 16xxx The Add DN Information screen (voice form datafill)

\mathcal{C}		
ABC Company	Voice Services Administration	
*Add DN Information		
Choice of Services:		
AN AMIS Networking	AS Announcement Service EM Express Messaging	
GS Greetings Service	PM Prompt Maintenance RA Remote Activation	
TS Thru-Dial Service VF Voice Forms Service	TD Time-of-Day Controls TR Transcription Service MS Voice Menu Service VM Voice Messaging	
vi voice i onnis service	his voice monu bei vice vivi voice messaging	
Customer Number: 1	Customer Name: COVM 2	
Access DN: <u>3651</u>		
Service: VF	Voice Form ID: 6054	
Service: <u>VF</u>	voice Form ID: 6034	
Comment: <u>Personnel Divisi</u>	ion	
Save	Cancel	

* All possible services are listed in this screen for illustration purposes.

5 Enter the access DN.

This is the number that callers will dial to access the voice form.

6 Enter "VF" in the *Service* field.

An additional field, Voice Form ID, is displayed.

- 7 Enter the ID of the voice form that will be retrieved when callers dial the access DN.
- 8 Enter a comment (this is an optional step).

For a detailed description of the VSDN table, see the chapter "Voice Administration" in the DMS VoiceMail *Customer Administration Guide*.

Indirect access through a voice menu

Callers dial the DN of a voice menu. The voice form is presented as one of the menu choices and is accessed when the caller presses the appropriate key. Figure 17 shows a datafill for a voice menu that serves as a front end to a number of voice forms. For instructions on planning and creating a voice menu application, see the *DMS VoiceMail Voice Menus Application Guide*.

58 Configuring voice forms

Figure 17 The Add a Voice Menu Definition screen

ABC Company	Voice Services Administration
Add a Voice Menu Definition	on
Choice of Menu Actions: AS Announcement Service DS Disconnect PM Prompt Maintenance MM Return to Main Mer TR Transcription Service V VM Voice Messaging	EMExpress MessagingGSGreetings ServicePPPlay PromptRPRepeat Menu ChoicesnuTSThru-Dial ServiceTDTime-of-Day Control
Voice Menu ID: <u>100</u>	Title: <u>Forms Menu</u>
Revert DN: 0	
Access Password: 3295341	Update Password: <u>39243221</u>
Greeting Recorded (Voice)	: [Yes] Menu Choices Recorded (Voice): [Yes]
* Silent Disconnect:	[No] Yes
Language for Prompts: [AmericanEnglish] CanadianFrench AmericanSpanish French
Key 1 2 3 4 5 6 7 8 9 Initial No Response <u>F</u> Delayed Response	Action Comments VF Voice Form ID: 201 Product X Order Form VF Voice Form ID: 202 Product Y Order Form VF Voice Form ID: 203 Product Z Order Form VF Voice Form ID: 203 Product Z Order Form PP Recorded (Voice): Yes
Select a softkey >	
Save	Cancel Voice

* Some of these actions are feature-dependent and may not appear on your screen. Menu Actions are displayed in alphabetical order by description, unless otherwise

configured in the Set Display Options screen by the system administrator. Menu Actions can also be hidden (this option also appears in the Set Display Options screen).

If the Next Scrn hardkey is pressed to view fields that are currently hidden, the list of Menu Actions will remain on the screen as guide text.

** This field is displayed if multiple languages are installed on your system.

You can either add a voice form to an existing voice menu, or create a new voice menu to serve as a front end to a number of voice form applications only.

If the voice menu already exists, the VSDN will already be defined. If you are going to create a new voice menu, you will have to add the VSDN of the voice menu to the VSDN Table as described in Procedure 10. This procedure assumes that there are available UCD queues on the switch.

Procedure 10xxx Creating a VSDN for a voice menu

Starting point: The Customer Administration menu

- 1 Select Voice Administration. The Voice Administration menu is displayed.
- 2 Select Voice Services Administration. The Voice Services Administration menu is displayed.
- 3 Select Voice Services-DN Table. The Voice Services-DN Table is displayed. See Figure 15.
- 4 Press the [Add] softkey. The Add DN Information screen is displayed. See Figure 16.
- 5 Enter the access DN. This is the number that callers will dial to access the voice menu.
- 6 Enter "MS" in the *Service* field. An additional field, Voice Menu ID, is displayed.
- 7 Enter the ID of the voice menu that will be retrieved when callers dial the access DN.
- 8 Enter a comment (this is an optional step).

For a detailed description of the VSDN table, see the chapter "Voice Administration" in the DMS VoiceMail Customer Administration Guide.

Indirect access through a time-of-day controller

Callers dial the DN of the active time-of-day controller and are routed to the voice form depending on the day and time of day. Figure 18 shows a datafill for a time-of-day controller that routes callers to a voice form. For instructions on planning and creating a time-of-day controller, see the DMS *VoiceMail Voice Menus Application Guide*.

Figure 18xxx The Add a Time-of-Day Control Definition screen

ABC Company	Voice Services Administration
Add a Time-of-Day Control Definit	ion
ime-of-Day Control ID: 500	Business Hours Service ID: 409
Off-Hours Service ID: <u>202</u>	Holiday Service ID: <u>410</u>
Friday No [Y	Business Hours Yes $[Yes]$ 08:30 to 17:00 [Yes] 08:30 to 17:00 [Yes] 08:30 to 17:00 Yes 10:30 to 13:30 Yes 10:30 to 13:30
Select a softkey >	
Save Cancel	1

In the example shown in Figure 18, any one of the three IDs (Business Hours Service ID, Off-Hours Service ID, of Holiday Service ID), could be the ID of a voice form, depending on the time of day at which you want the voice form to be activated when the time-of-day controller is accessed.

You can either modify an existing time-of-day controller definition or create a new time-of-day controller. If the time-of-day controller already exists, the VSDN will already be defined. If you are going to create a new time-of-day controller, you will have to add the VSDN of the time-of-day controller to the VSDN table as described in Procedure 11. This procedure assumes that there are available UCD queues on the switch.

Procedure 11xxx Creating a VSDN for a time-of-day controller

Starting point: The Customer Administration menu

- 1 Select Voice Administration. The Voice Administration menu is displayed.
- 2 Select Voice Services Administration. The Voice Services Administration menu is displayed.
- 3 Select Voice Services-DN Table. The Voice Services-DN Table is displayed. See Figure 15.
- 4 Press the [Add] softkey. The Add DN Information screen is displayed. See Figure 16.
- 5 Enter the access DN. This is the number that callers will dial to access the time-of-day controller.
- 6 Enter "TD" in the *Service* field. *An additional field, Time-of-Day Control ID, is displayed.*
- 7 Enter the ID of the time-of-day controller that will be retrieved when callers dial the access DN.
- 8 Enter a comment (this is an optional step).

For a detailed description of the VSDN table, see the chapter "Voice Administration" in the DMS VoiceMail Customer Administration Guide.

Defining a VSDN for the transcription service

After you have created your first voice form application, define a DN for the transcription service in the VSDN table. Transcribers have to access the transcription service (much like you would access voice messaging) in order to transcribe a voice form.

You can have one generic transcription service which is used by all transcribers to log on to all voice forms. To create a generic transcription service, follow Procedure 12.

Procedure 12xxx Defining the transcription service VSDN

Starting point: The Customer Administration menu

- 1 Select Voice Administration.
- 2 Select Voice Services Administration.
- 3 Select Voice Services-DN Table.
- 4 Press the [Add] softkey to define a DN for the transcription service. *The Add DN Information screen (Figure 19) is displayed.*

Figure 19 The Add DN Information screen (transcription service)

ABC Company	Voice Services Administration
*Add DN Information	
Choice of Services:	
AN AMIS Networking GS Greetings Service	AS Announcement Service EM Express Messaging PM Prompt Maintenance RA Remote Activation
TS Thru-Dial Service	TD Time-of-Day Controls TR Transcription Service
VF Voice Forms Service	MS Voice Menu Service VM Voice Messaging
Customer Number: 1	Customer Name: COVM 2
Access DN: _2009	
Service: <u>TR</u>	Voice Form ID:
Comment:	
	—
Save	Cancel
Save	Canvoi

All possible services are listed in this screen for illustration purposes.

5 Enter the access DN for the service.

This is the number that transcribers will dial to access the transcription service.

- 6 In the *Service* field, enter TR (for transcription). You are prompted for the voice form ID.
- 7 Leave the *ID* field blank.

This will allow transcribers to specify the voice form they want to retrieve. If you enter an ID in this field, the transcriber will automatically be logged on to the specified voice form.

8 Save the DN information.

If you want to create a special transcription DN for each voice form application, enter the voice form ID in the *ID* field instead of leaving it blank (see step 7 in the above procedure). Using this method, transcribers do not have to specify the voice form ID when they log on. However, they will have to remember a different transcription service access DN for each voice form.

For more information about adding DNs, see the section "The Voice Services-DN Table" in the *DMS VoiceMail Customer Administration Guide*. Also see the *Voice Form Transcriber User Guide* for a description of how transcribers log on to voice forms.

Testing a voice form

When you have finished configuring a voice form and have defined a DN for the form and the transcription service, test it before making it available. Test the caller interface and the transcriber interface. If you have to make any modifications to the voice form based on your testing, be sure to test the form again. (See the following section, "Modifying a voice form definition".) Continue with this process until you are satisfied with the way in which the voice form and the transcription service operate.

The administrator should be the first one to test the form to verify that it works as planned and configured. Call the form a few times and record a few responses. As you are testing, try to activate each feature that you have configured. For example, if you configured the New Responses Notification DN as 2005, record a response and see if extension 2005 has its MWI turned on. Then log on to the transcription service and test it.

Once you have tested it, find a few people who would be willing to call the voice form and review it from the caller's perspective. Ask them to complete the caller survey that is included in Appendix A. Give the callers the DN and the survey form only. Do not provide any other instructions, clues, things to look out for, and so on. Real callers won't have the benefit of such "inside information".

64 Configuring voice forms

Have a few people (actual transcribers if possible) access the transcription service and transcribe the test responses. Use the transcriber survey that is included in Appendix A to get some feedback on the voice form from the transcriber's perspective.

Based on the information collected from your callers and transcribers, identify solutions that resolve the needs of both the caller and the transcriber.

Note: If an improvement to the transcription interface has an adverse effect on the caller interface, consider the change carefully. The voice form is there for the caller's use and you should try to avoid sacrificing customer service.

Modify the voice form definition as required, save it and conduct a back up to save this most recent version. (If voice forms are stored on VS1, only a partial backup is required. If voice forms are saved on any other volume, you will have to do a full backup.) Update your worksheets and file them for future reference.

Modifying or viewing a voice form definition

After testing your voice form, you will probably discover that modifications are necessary to make the voice form work properly or more smoothly. Depending on the application, you may also need to modify a voice form on a regular basis in order to keep it up-to-date.

When you select the [View/Modify] softkey from the Voice Forms screen, a second layer of softkeys is displayed (as shown in Procedure 14). There are two modify softkeys: [Modify In-Service] and [Modify Out-of-Service].

Modifying a voice form while it is in-service

When you choose to keep a form in-service when modifying it, incoming calls to the form and existing caller responses are not affected. However, because the form is still functional, you can only make simple changes to it that do not affect its structure. You can modify all of the fields in the Modify Field screen except *Field Type*. You can also re-record voice prompts without affecting incoming calls. You cannot, however, make changes that will alter the structure of the voice form application.

While the form is in-service, you cannot:

- insert, delete, or move the fields within the selected form
- change the Field Type (from No Answer to Voice Answer or vice-versa).

If you need to make any of these changes, you will have to use the [Modify Out-Of-Service] softkey.

Modifying a voice form while it is out-of-service

While a voice form is out-of-service you can make any changes you wish. While the form is out-of-service, callers that try to connect to the form are told that the form is not available at this time and to try calling again at a later time. If you take the form out-of-service while a call is in progress, the caller's response will be discarded when he or she hangs up.

When you press the [Modify Out-of-Service] softkey, the system checks for any untranscribed responses. If there are any outstanding caller responses, a message is displayed on the command line. A new layer of softkeys is also presented, allowing you to [Delete All Responses] or [Cancel] the current command. To proceed with the modification you must transcribe all existing responses first or press the [Delete All Responses] softkey. (This is not recommended unless you are sure you don't need the responses.)

If the voice form generates a lot of calls, the best way to put the form out of service (without dropping calls or losing responses) is to build an announcement that informs callers that the voice form is currently being serviced. To do this:

Procedure 13xxx Taking a voice form out of service

- 1 Create an announcement. You can make a single "generic" announcement which can be used whenever you need to take a form out of service. See the section "Adding an announcement" in the *DMS VoiceMail Voice Menus Application Guide*.
- 2 Reassign the VSDN for the voice form to the announcement service. See the section "The Voice Services-DN Table" in the *DMS VoiceMail Customer Administration Guide*.
- **3** Transcribe any existing responses. See the *Voice Forms Transcriber User Guide*. (You can ask the transcriber to do this step.)
- 4 Modify the voice form and save the changes. See Procedure 15.
- 5 Reassign the announcement VSDN back to the voice form.

Use Procedure 14 if you do not need to make changes to the voice form definition but need to view its configuration. If, while viewing the definition, you discover that you need to make a change, you will have to get out of the View a Voice Form Definition screen and access the Modify a Voice Form Definition screen. Use Procedure 15 if you need to modify the voice form definition.

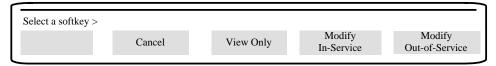
Procedure 14xxx Viewing a voice form definition

Starting point: The Voice Forms screen

- 1 Position the cursor on the voice form definition that you want to view and press the <Spacebar> to select it.
- 2 Press [View/Modify].

66 Configuring voice forms

A new set of softkeys is displayed.



3 Press the [View Only] softkey.

The View/Modify a Voice Form Definition screen is displayed. (It is identical to the Add a Voice Form Definition screen except that all fields are read only.)

- 4 Press the [Open Fields] softkey if you want to view any of the field definitions. *The List of Fields screen is displayed.*
- 5 Move the cursor to the field definition that you want to view and press the <Spacebar> to select it.
- 6 Press the [View Field] softkey. The View Field screen is displayed.

Procedure 15xxx Modifying a voice form definition

Starting point: The Voice Forms screen

- 1 Position the cursor on the voice form definition that you want to modify and press the <Spacebar> to select it.
- 2 Press [View/Modify].

The following softkeys are displayed:

Select a softkey >				
	Cancel	View Only	Modify In-Service	Modify Out-of-Service

3 Press the [Modify In-Service] or [Modify Out-of-Service] softkey.

Note: Be sure you understand the difference between these two methods of modifying a voice form before proceeding. See page 64 for details.

If you selected [Modify In-Service] the View/Modify a Voice Form Definition screen is displayed. (It is identical to the Add a Voice Form Definition screen.)

If you selected [Modify Out-of-Service] and there are outstanding untranscribed responses, a subset of softkeys is displayed.

Cancel Delete All Responses	Caller responses exist for this voice form. Select a softkey. >								
Responses		Cancel	Delete All Responses						

Important: Do not press the [Delete All Responses] softkey unless you are sure you do not need the responses. Use [Cancel] and exit the form to transcribe responses. See page 64 for more information.

If the reponses are important to you press the [Cancel] softkey and exit the voice form. If it is important that you do not lose any calls or responses while servicing the form, see Procedure 13. Transcribe existing responses and log back onto the form (return to step 1).

If you are sure that the responses are not needed (for example, they are invalid because the form is out-of-date), press the [Delete All Responses] softkey.

4 Press the [Open/Modify Fields] softkey if you want to modify any of the field definitions.

The List of Fields screen is displayed.

- 5 Move the cursor to the field definition that you want to modify and press the <Spacebar> to select it.
- 6 Press the [View/Modify Field] softkey.

The View/Modify Field screen is displayed.

Modifying an existing field

Once you have created the fields that make up your voice form applications, they can be modified at any time. The View/Modify Field screen is identical to the Insert New Field screen. For a description of the fields in this screen, see the preceding section, "Inserting a new field".

Note: If you want to change the Field Type (from "No Answer" to "Voice Answer" for example), you will have to modify the form while it is out-of-service.

Procedure 16xxx Modifying an existing field

Starting point: The List of Fields screen

- 1 Position the cursor on the field that you want to modify and press the <Spacebar> to select it.
- 2 Press [View/Modify Field].

The View/Modify Field screen is displayed.

- 3 Make the necessary changes, including re-recording the field prompt and field name if required.
- **4** To save the field definition, go to step 4a. If you do not want to save the field definition, go to step 4b.
 - a. Press [Save].

If all of the mandatory fields have been filled in, the field definition is saved. If something is missing from your definition, you will be informed and the field will not be saved until all of the required information has been entered.

b. Press [Cancel].

Any changes that have been made are discarded. The List of Fields screen is displayed.

Moving a field

It may be necessary to move some fields around if you decide that the application would flow more smoothly if you changed the order of voice form fields.

The <CONFIRMATION> marker can be moved to a different location in the field list but cannot be modified or deleted. This enables you to place additional questions after the confirmation field. These questions could, for example, inquire as to the caller's opinion about the current level of service he or she is presently receiving when dealing with your organization. It is also recommended that you play a thank you or farewell prompt to the caller after confirmation, before disconnecting the call.

Note: The form must be out-of-service in order to move a field.

Procedure 17xxx Moving a field

Starting point: The List of Fields screen

- 1 Position the cursor on the field you want to move and press the <Spacebar> to select it.
- **2** Press the [Move Field] softkey.

The following softkeys are displayed:

Press spacebar, move c	cursor to new posit	ion, press spacebar,	then press	s Done. >	
	Cancel				Done

- **3** Press the <Spacebar> to deselect the field you want to move. *This allows you to move the cursor to indicate the new position.*
- 4 Move the cursor to indicate where the row should be inserted. (When positioning the cursor remember that the row will be moved to the row above the cursor location.)
- 5 Press the <Spacebar> to indicate the new location.
- 6 Press [Done] to continue or [Cancel] to cancel the operation.

If [Done] is pressed, the field is moved to the specified location.

The Move Field softkeys are removed from the screen and the original List of Fields softkeys are displayed.

7 To move another field, go to step 1.

Deleting a field

Once you have created your voice form application, you may discover that certain fields are not very effective or that they have become obsolete with time. The [Delete Field] softkey on the List of Fields screen allows you to remove fields that are no longer needed.

Note: The form must be out-of-service in order to delete a field.

Procedure 18xxx Deleting a field

Starting point: The List of Fields screen

- 1 Position the cursor on the field you want to delete and press the <Spacebar> to select it.
- 2 Press the [Delete Field] softkey.

The Delete Field screen is displayed. This screen is identical to the Insert New Field screen except that all of the fields are read-only. This allows you to view the field definition and verify that this is the field you want to delete.

- 3 To delete the field, go to step 3a. To cancel the operation, go to step 3b.
 - a. Press [OK to Delete].

The field is deleted and the List of Fields screen is displayed.

b. Press [Cancel].

The field is not deleted. The List of Fields screen is displayed.

Inserting a new field

If you need to insert a new field in an existing voice form, follow Procedure 6 on page 51. Because this affects the structure of the voice form, you will have to modify the form while it is out-of-service.

Copying a voice form definition

If the voice form application you are about to create is similar to an existing one you may want to copy the existing definition, and then modify only those fields that need to be changed. Depending on how long the voice form is, this method can save you a lot of time.

When you copy a voice form, all fields will remain the same with the exception of:

- the voice form ID
- the new response notification DN
- the special response notification DN

These fields are intentionally left blank when you a copy a form because the values in these fields must be unique across all voice services (voice forms,

70 Configuring voice forms

voice menus, announcements, thru-dialers, and time-of-day controllers). You are required to enter new values.

When you copy from an existing definition, you will be working with the Copy a Voice Form Definition screen. The fields in this screen are identical to those in the Add a Voice Form Definition screen.

Procedure 19xxx Copying a voice form definition

Starting point: The Voice Forms screen

- 1 Position the cursor on the voice form definition that you want to copy and press the <Spacebar> to select it.
- 2 Press the [Add/Copy] softkey.
- 3 A new set of softkeys is displayed.

Select a softkey. >				
	Cancel	Add New Form	Copy Form	

4 Select [Copy Form].

The Copy a Voice Form Definition screen is displayed. It is identical to the Add a Voice Form Definition screen shown in Figure 9 except that the following fields are blank and must be redefined: Voice Form ID, New Responses Notification DN, and Special Responses Notification DN.

- 5 Assign a new voice form ID and title and modify the necessary fields. These fields are described in the section, "Adding a voice form definition".
- 6 Press [Open/Modify Fields].

The List of Fields screen is displayed. This screen lists all of the fields that have been defined for this voice form application.

- 7 Move the cursor to one of the fields that you want to modify.
- 8 Press [View/Modify Field] to modify the field definition.

The View/Modify Field screen is displayed (it is identical to the Insert New Field screen). Modify any fields and recordings that need to be changed to suit the new application.

9 Press [Save] to save the field definition.

The List of Fields screen is displayed. To modify another field, go to step 7. To exit this screen go to step 10.

10 Press [Close Fields].

The Copy a Voice Form Definition screen is displayed.

11 Press [Save] to save the voice form definition. *The Voice Forms screen is displayed.*

Deleting a voice form definition

Selecting the [Delete] softkey from the Voice Forms screen allows you to remove an existing voice form definition from the system. The Delete a Voice Form Definition screen is displayed so that you can view the voice form definition and confirm that it is really the one you want to delete. The fields in this screen are read-only.

You will not be able to delete a voice form definition if there are any outstanding untranscribed responses unless you first transcribe or delete all of the untranscribed responses. When you select the [Delete] softkey a prompt appears on the screen's command line to advise you if there are any outstanding caller responses. A new layer of softkeys is also presented, allowing you to [Delete All Responses] or [Cancel] the current command. If you choose to delete all responses, any calls that are currently in progress will be discarded when the caller(s) hang up and any future calls to the voice form application will result in an appropriate 'Out of Service' recording. This remains in effect until the VSDN for the voice form has been removed or the form has been removed from the menu service or time-of-day controller through which it is accessed. Refer to the procedure on page 65.

Procedure 20xxx

Deleting a voice form definition

Starting point: The Voice Forms screen

- 1 Position the cursor on the voice form definition that you want to delete and press the <Spacebar> to select it.
- 2 Press the [Delete] softkey.

If there are no outstanding caller responses, the Delete a Voice Form Definition screen is displayed. This allows you to view the configuration and ensure that this is the voice form that you want to delete. Go to step 3.

If there are any caller responses that have not been transcribed, the following softkeys are displayed.

Caller responses exist for this voice form. Select a softkey. >								
	Cancel	Delete All Responses						

Important: Do not press the [Delete All Responses] softkey unless you are sure you do not need the responses. Use [cancel] and exit the form to transcribe responses.

If the responses are important to you, press the [Cancel] softkey and exit the voice form. If it is important that you do not lose any calls or responses while servicing the form, see Procedure 13. Transcribe existing responses and log back onto the form (return to step 1).

If you are sure that the responses are not needed (for example, they are invalid because the form is out-of-date), press the [Delete All Responses] softkey.

- 3 To delete the voice form go to step 3a. To cancel go to step 3b.
 - a. Press [OK to Delete]. The voice form is deleted. The Voice Forms screen is displayed.
 - b. Press [Cancel].

The voice form is not deleted. The Voice Forms screen is displayed.

4 If this form is directly accessed, remove its VSDN from the VSDN table. If the form is accessed through a voice menu or time-of-day controller, delete the voice form from the appropriate voice menu or time-of-day controller definition.

Providing training/support and cutting the service over to the customer

If this is the first voice form implemented for the organization, or if this voice form is for a new group of transcribers, you will have to provide training for the transcribers *prior to cutting over the voice form*. For detailed information about the transcription process, read the section "Transcribing voice forms".

- 1 Schedule training time for the transcribers. A minimum of one hour is recommended (especially if the transcribers are not familiar with voice messaging). This will allow time to review how a voice form works, how to transcribe as well as time for practice and questions.
- 2 Provide an overview of voice forms, and let the transcribers access the voice form and leave responses themselves. The more familiar they are with the service, the better.
- 3 Review the transcription process, allowing the transcribers to use the service and practice transcribing. Keep adding responses to the voice form if they need more practice.
- 4 Review the administrative procedures for collecting data: who will transcribe what form; the importance of transcribing on a regular basis to protect storage limits; how to report system problems. If the transcribers are anticipating a large number of responses they may also want to work out some administrative procedures prior to going live.
- 5 When the transcribers are comfortable with the voice form and the transcription service, make sure you reset the response ID number back to zero before going live. This is described in the section "Managing response IDs" on page 82.

Upon completion of these steps, your voice form is ready for general use.

Transcribing voice forms

When a caller has completed a voice form and hangs up, the response is saved in DMS VoiceMail. If the notification feature is enabled, the system sends a message waiting indication to a predetermined DN. When the transcriber observes the MWI, he or she knows to log on to the voice form.

The transcriber dials the VSDN of the transcription service to log on to the transcription service and hear the responses for the voice form. If the transcriber just listens to the response and does not delete it, the response will keep its New response status and the MWI will stay on. The MWI is turned off only after all responses have been deleted or marked special. If there are multiple responses, the MWI stays on until all responses have been deleted (or marked as special).

If, for some reason, a transcriber cannot fully transcribe a response, he or she can mark it as special. This indicates that the response needs further attention, usually from a supervisor or the administrator. For example, the response may be in a foreign language that the transcriber does not understand, or the response may have been left by an irate customer. After tagging a response as special, the transcriber can continue transcribing any remaining responses.

Transcribers are notified in the following way. If you enable the notification feature when you configure the voice form (that is, if you enter a DN in the New Responses Notification DN field—see the Voice Form Definition worksheet), the transcriber responsible for the form will receive a notification in the form of a MWI on their phone whenever new responses exist. The transcriber then logs on to the voice form and transcribes the response.

If you choose not to use the notification feature, transcribers will not be automatically notified of new responses. Instead, they will simply have to log on to the voice form on a regular basis in order to check for new responses. In this case, you will have to direct your transcribers regarding the frequency with which they should transcribe responses. As the number of untranscribed responses is allowed to accumulate, the amount of free disk space will decrease. Work with transcribers and their supervisors to prioritize voice forms in terms of the importance of the responses that will be collected and have transcribers monitor the voice forms carefully. Under certain circumstances, you may need to lower the maximum number of untranscribed responses that are allowed for a voice form.

See the section "Defining general form characteristics" in the chapter "Planning voice forms" for more information that will help you decide which method to use.

Note: Be very careful of departments that work in cycles. For example, accounting departments go through a month end closing. Everyone's work load increases and transcribers may be too busy to transcribe until closing is over. Develop alternate procedures for transcribing during busy periods. The responses should not be allowed to stack up on the system.

Read the *Voice Forms Transcriber User Guide* for detailed information about how the transcription service works.

Processing the information collected by a voice form

It is up to the organization to identify how it will compile the data it collects from voice forms. Your organization will probably have specific processes for compiling data.

Although we cannot recommend how you process your data, we do recommend the following if you are anticipating a high volume of responses to a voice form:

- 1 Provide your transcribers with headsets to help free up both hands for writing down or typing in information.
- 2 Wherever possible, have your transcribers transcribe directly into your data collection/processing system as they listen to the responses.

Make sure you set the response ID numbers back to zero before going "live" with the service. See page 83 for details.

Maintaining and managing voice forms

Maintaining voice forms

Maintenance of a voice form application may include any of the following:

- viewing an existing voice form
- modifying the voice form definition (form characteristics)
- modifying an existing field
- moving an existing field
- deleting an existing field
- inserting a new field
- re-recording prompts
- resetting response ID numbers to zero
- changing transcription passwords for security
- copying a voice form to create a similar application
- deleting a voice form when it is no longer needed

Note: Before you make any changes to the voice form definition, modify your worksheets first.

See the section "Modifying or viewing a voice form definition" in the chapter "Configuring voice forms". Pay special attention to the subsections that discuss modifying a voice form while it is in service versus modifying it while it is out-of-service.

Remember that voice form prompts cannot be recorded or maintained using the voice prompt maintenance service. The administrator must access the voice form through the administration terminal to update recordings.

Whenever you modify a voice form, test it to make sure it still works the way you expect. If the form has undergone major changes, test it as if you had just created it, using the guidelines on page 63. Perform a backup and file your modified worksheets.

Managing voice forms

Here are some tips to help you manage your voice forms.

Keep good records

Make sure all worksheets are kept up to date and filed. Whenever a change is made to a voice form, always update the worksheets. You may also want to keep a master list of all the voice forms on your system for quick reference.

Monitor operational measurements

When a new voice form is introduced, it is especially important to monitor it on a daily basis. The following reports are applicable to voice forms. They are described in detail in the "Operational Measurements" chapter in the DMS VoiceMail System Administration Guide.

Note: If the Multi-Customer feature is installed on your system, these screens are accessible only from the system administration level.

Voice Service Summary report

The Voice Service Summary report (Figure 20) provides a summary of the activity of all voice forms and all transcription services (among other services) in the system.

Operational Measurements							
Voice Ser	vice Summary						
				Average	Voice		
			Number of	U	il Usage		
Interval	Start-End	Service Name	Accesses (in s	econds) (in CCS	5)		
04/22	09:00-10:00	Thru-Dial	53	7	4		
04/22	09:00-10:00	Voice Menus	301	12	36		
04/22	09:00-10:00	Voice Messaging	1022	65	664		
04/22	09:00-10:00	Call Answering	1437	29	416		
04/22	09:00-10:00	AMIS	0	0	0		
04/22	09:00-10:00	Express Messaging	86	49	42		
04/22	09:00-10:00	Voice Announcements	31	111	34		
04/22	09:00-10:00	Voice Administration	0	0	0		
04/22	09:00-10:00	Voice Prompt Admin	0	0	0		
04/22	09:00-10:00	Time of Day Control	53	0	0		
04/22	09:00-10:00	Delivery to Non User	0	0	0		
04/22	09:00-10:00	Remote Notification	26	42	11		
04/22	09:00-10:00	Remote Activation	0	0	0		
04/22	09:00-10:00	Voice Forms	3	400	12		
04/22	09:00-10:00	Transcription Service	0	0	0		

Figure 20xxx Voice Service Summary report screen

Each report covers a certain interval of time. For that interval, the following information is provided:

- the number of times that all voice forms and all transcription services have been accessed during the reporting interval.
- the average length of all voice form sessions and transcription sessions that occurred during the interval.
- the voice mail usage (in CCS) which indicates the amount of time that voice form applications or transcription services were active during the interval.

CCS (centa-call-seconds) is a traffic measurement statistic. One CCS equals 100 seconds of call connection time in one hour.

See the "Operational Measurements" chapter in the DMS VoiceMail System Administration Guide for more details.

The Voice Service Summary report is useful for determining whether or not voice forms in general are generating a lot of traffic. Consider the following points when analyzing the Voice Service Summary report:

- If the number of accesses is lower than you expected, it could because
 - the feature is not working properly and attempts to access it have fallen off

- people are not aware of the feature and are, therefore, not using it
- If an unusually high amount of traffic is being generated by voice forms, you may encounter system performance problems, such as no free channels. As the administrator, you may need to do more research beyond checking the OM reports to learn more about the nature of the problem and possibly come up with a solution. For example, you need to determine if the high traffic level was due to some unusual event that affected your organization (if so, the high traffic would not be expected to continue).

If the high traffic is expected to continue, one solution may be to dedicate a channel to the feature so that the feature does not tie up the whole system. Another solution is to expand the system if overall traffic for the whole system is higher than what was originally anticipated for the system.

• Another area to check is the average length for voice form accesses. If the average length is long, review your voice forms to see if they can be shortened or rearranged for more efficient use.

Disk Usage Detail report

This report will tell you how much voice storage space has been used on each volume (See Figure 21). It does not, however, report how much space is being used by voice forms specifically. It is a general statistic. Generate this report periodically to monitor the volume on which voice forms are stored. Since a large number of voice form applications can potentially take up a lot of space, it is important that you notice potential shortage problems as early as possible. As a guideline, if the voice space used percentage is over 80%, monitor the volume carefully. If the percentage is over 90%, a SEER is generated, and steps should be taken to reduce the amount of voice space used.

You should also monitor the user volumes. This is where the responses are stored and this could fill up these volumes if not checked on a regular basis. These volumes are also where voice messages are stored, so it is very important that they do not fill up with voice form responses.

Disk Usage Detail				
Interval Start-End Name	Volume Size (hh:mm)		Voice Space Used (%)	Text Space
09/30 10:00-11:00	VS1 1:51	33	47	
	VS203	25:45	10	30
	VS204	25:45	10	30
09/30 11:00-12:00	VS1 1:51	33	47	
	VS203	25:45	10	30
	VS204	25:45	10	30
09/30 12:00-13:00	VS1 1:51	33	47	
Select a softkey >				
, 				

Figure 21xxx The Disk Usage Detail report

The "Next Page" softkey appears when the information fills more than one screen.

See the "Operational Measurements" chapter in the DMS VoiceMail System Administration Guide for more details.

Voice Menus Detail report

If a voice form has been integrated with a voice menu, this report, shown in Figure 21, may provide additional information. You will be able to see how many times the voice menu has been accessed. Also, because this report records the number of accesses for each menu item in the menu, you can determine how many times the voice form has been accessed by checking the number of accesses for the menu item that corresponds to the form. For example, is users press 3 to connect to the voice form, check the number of accesses for menu item 3.

Figure 22xxx The Voice Menus Detail report

Service Accesses	1 2	acmin				her o	facce	sses a	ro.			
	1 2	3	4	5 5	6 Hull	7	8	9 sees a	0	*	#	
												0
-										-		0
11	0	0			~							0
1	1	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0
42	6	21	0	6	4	0	0	0	0	1	2	0
21	5	4	6	0	4	0	0	0	0	1	0	0
5	0	0	1	0	0	1	0	2	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	1	0	0	0	0	0	0	0	0
	1 1 42 21 5 2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							

* The "Next Page" softkey appears when the information fills more than one screen.

When reviewing this report, consider the following:

- If the menu items that are at the end of the menu (for example, item 8 or 9) are being accessed more frequently than earlier items, you may wish to reorganize the menu so that the popular items are presented first. This structure prevents users from having to wait through all the earlier options before hearing the one the way want, thus reducing the call length.
- If a menu item has few or no accesses, the reason may be a lack of training or awareness regarding those items, or that those items are simply not required. If you find that certain menu items or announcements are not required, either remove them or replace them with a more useful menu item or announcement. Be sure to re-record the greetings and menu choices to reflect the changes.

Manage transcriber activity

Transcribers should be guided regarding the frequency with which they transcribe responses. As the number of untranscribed responses is allowed to accumulate, the amount of free disk space will decrease significantly and you may reach full capacity. Work with the transcribers and their supervisors to prioritize voice forms in terms of the importance of the responses expected and have transcribers monitor the voice forms carefully.

Be very careful of departments that work in cycles. For example, accounting departments go through month end closings. Everyone's work load increases and transcribers may be too busy to transcribe until closing is over. Develop an alternate procedure for transcribing during busy periods. The responses should not be allowed to stack up on the system.

If transcribers are not transcribing on a regular basis and disk space is in jeopardy, access the voice form definition and lower the maximum untranscribed responses that are allowed. All overflow calls will be routed to the overflow handling DN.

Conduct random caller surveys

If the voice form is a permanent feature, it is a good idea to conduct random caller surveys, perhaps once a month, to see if caller needs have changed. Find people who can be "callers" and have them access the voice form. Ask them to complete the caller survey. Determine if the callers' needs have changed and if the voice form is therefore in need of maintenance.

Conduct transcriber feedback forums

If the voice form is a permanent feature, arrange meetings with your transcribers occasionally to see how things are going. Bring your operational measurement reports if necessary. Look for the following:

- Has the department changed the way it operates? If so, this may change the way transcribers are managing the transcription process.
- Do they get caller complaints? Is the special response notification DN getting good use? What are the reasons responses are being marked special? Does the voice form need to be modified?
- Are there any voice forms that are not being transcribed at all? Identify all voice forms that are no longer needed and delete them from the system.

Managing response IDs

When a caller calls into a voice form, the caller's response is assigned a response ID.

Each voice form has its own independent response numbering plan. For example, you have two voice forms: a credit card application and a customer survey. The first response that is recorded for the credit card application voice form is numbered 1, the second is numbered 2 and so on. This is also true of responses recorded for the customer survey. The first response that is left is numbered 1, the second is numbered 2, and so on.

When the existing responses for a voice form have been transcribed, the response ID numbering will *not* be reset to zero. Instead, as new responses are recorded, the count will continue to increase. This creates a running total and allows you have an inventory/tracking system for each voice form.

Obviously, the count can go on indefinitely, but there may be some situations where you would want to reset the count back to zero. For example:

- Once you have tested a voice form and are ready to put it to use, you should reset the count to zero in order to get an accurate count of the voice form's use from the time that it is put into general use.
- You may decide to reset the count at the beginning of a fiscal/calendar year or other business cycle. This allows you to compare results from one cycle to the next.
- Each time the form is slightly modified, reset the count to zero. In the truest sense, it is no longer the original form.
- DMS VoiceMail doesn't announce the response number in the conventional counting manner (that is, "response eleven" or "response one hundred and fifty-one"). Instead, the transcriber hears "response one one" or "response one five one". Some transcribers may not like this format.

Resetting response ID numbers

There is no way to "set the clock" back to zero. Instead, you will "trick" the system by copying the voice form and giving the copy a new voice form ID, deleting the original voice form, and then reassigning the original voice form ID to the copy. As far as the system is concerned, a new voice form has been created and response ID numbering is set to zero.

To reset response ID numbers:

- 1 Select Voice Administration from the main menu.
- 2 Select Voice Form Definitions.

- 3 Move the cursor to the voice form you want to copy and press the <Spacebar> to select it.
- 4 Press the [Add/Copy] softkey.

A new set of softkeys is displayed.

- 5 Press the [Copy Form] softkey.
- 6 Enter a unique Voice Form ID, then press [Save].

(This is necessary because you cannot save a voice form if its ID is the same as that of another voice form.)

7 Move the cursor to the original voice form, press <Spacebar> to select it and press [Delete].

A new set of softkeys is displayed.

- 8 Press [OK to Delete] to remove the original voice form.
- 9 Move the cursor to the newly copied voice form and press the <Spacebar> to select it.
- 10 Press [Add/Copy].
- 11 Press [Copy Form].
- 12 Enter the *original* voice form ID. Also fill in the new and special notification DNs.
- 13 Press [Save].
- 14 Delete the copied form.

This "new" voice form now has response ID numbering reset to zero. The next response that is received will be assigned an ID of "1".

84 Maintaining and managing voice forms

Appendix A: Worksheets

Use the worksheets on the following pages to plan your voice forms. Make copies of them as the need arises.

86 Appendix A: Worksheets

Voice (for V	Form Sequence Wo oice Form):	rksheet						
Page of Confirmation Mode:								
Step	Prompt (Field Name)	Answer	Confirm?				
				_				

Voice Form Definition Worksheet

Page 1 of 2

F: Voice Form ID: ____

This is a unique voice service ID. It is not the VSDN.

F: Title: _

T: Transcription Password: _

Do you want transcribers to have to use a password to access the form for transcription? If not, leave blank.

C: Maximum Untranscribed Responses: _

How many untranscribed responses will you allow to be stored on the system? If you have a lot of voice forms, or if the voice form is long, keep this number low. When the maximum is reached, callers are transferred to the DN specified below.

C: Overflow Handling DN: _

When the number of untranscribed responses exceeds the maximum limit, where should callers be transferred?

T: New Responses Notification DN: _

When a new response is recorded, who should be notified? If you are not using the notification feature, leave this field blank.

T: New Responses SMDI Link Name: ____

If you have multi-SMDI links, what is the name of the SMDI link (as defined in the hardware database) on which you want to send the new responses notification?

T: Special Responses Notification DN: ____

When a response is marked as special, who should be notified? If you are not using the notification feature, leave this field blank.

T: Special Responses SMDI Link Name: _

If you have multi-SMDI links, what is the name of the SMDI link (as defined in the hardware database) on which you want to send the special responses notification?

T: Transcription Field Separator: Field Name Tone Silence

What do you want the transcriber to hear before the answer to each field is played?

T: Default Field Separator Delay: Stop Delay _____ deciseconds

During transcription, should playback stop after an answer is played or should it delay for a number of deciseconds between each response. This gives the transcriber time to process the answer.

T: Play Envelope for Header: No Yes

Do you want the transcriber to hear the header (response status and number) or the entire envelope (also includes the form name or ID and a date and time stamp)?

T: Delay after Header: ______ deciseconds

Do you want a delay to follow the header/envelope? (Only necessary if the header information needs to be transcribed.)

C: Caller Confirmation Mode: None At Each Field Whole Form

When will confirmation occur, if at all?

C: Default Revert DN: _

If there is a problem using the form or the caller presses 0 (if allowed), where should he be transferred?

C: Caller '0' Allowed: No Yes

Do you want callers to be able to press 0 for direct access to an operator?

88 Appendix A: Worksheets

Voice Form Definition Wor	Page 2 of 2						
C: System Messages File: (language) If you have a multilingual system, in what language should SYSTEM prompts be played?							
How will callers access the ser	vice? **						
1. Direct Access:	VSDN:						
2. Via Voice Menu Service:	VSDN:						
	Title of Menu Service:						
3. Via Time of Day Controller:	VSDN:						
	Time of Day Controller ID:						
Transcription Service VSDN: _		**					

** The VSDNs of the voice form (or service through which it is accessed) and the transcription service can be configured after you create the voice form. These VSDNs are discussed in the sections "Making voice froms accessible" and "Defining the VSDN for the transcription service" in the chapter "Configuring voice forms". When you define these DNs, be sure to enter them into the worksheet so that your record is complete.

Voice Answer Field Worksheet
Field Name:
Field Prompt:
Field Name recorded:
State the field name as a descriptive of the field. Callers and transcribers will hear this "label" be- fore the response is played back to them.
Answer Length Limit: seconds
This field determines the maximum length of the caller's answer to this prompt. The maximum value is 30 seconds.
No Answer Handling (circle one): NextField Revert Disconnect Repeat
Choose the action that should be taken if the caller does not record an answer once the field prompt is played: NextField - The next field prompt will be played. Revert - The caller will be transferred to the revert DN specified for this field. Disconnect - The call is disconnected. Repeat - The field prompt is repeated for an adjustable but limited number of times; when this limit is reached, the caller is disconnected. The next field is not played.
Revert DN:
If Revert is selected for No Answer Handling, enter the DN to which the caller is transferred.
Repeats before Disconnect:
If Repeat is selected for No Answer Handling, enter the number of times the current prompt should be repeated before the caller is disconnected from the voice form. Note that the next field is not played when Repeat is selected.
Stop Recording on Silence (circle one): No Yes
This field determines what happens if the caller is silent for a predetermined length of time during recording (This time period, in seconds, can be adjusted by the NT support organization). If Yes is selected, recording stops and the next action in the form is taken. If No is selected, the recording period continues for the amount of time specified in the Answer Length Limit field.
Field to be Confirmed (circle one): No Yes
If Confirmation Mode is Whole Form or At Each Field, select Yes if you want callers to confirm their answer to this question.
Save Response if Hangup (circle one): No Yes
Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (that is, enough valuable information has been saved at this point). Choose No if the information collected so far is not of use on its own.
Field Separator Delay (circle one): Stop Delay (deciseconds:)
This field affects the transcription process. Choose Stop if you want playback to stop after the caller's answer has been played (the transcriber has to enter a specific command to resume playback). Choose Delay (and specify a value) if you want playback to pause for the specified amount of time after which playback will automatically resume.

C	aller Survey for Voice Form ID:	Title:	_ (page 1)
1	Was the voice form easy to use? If not, please	se explain.	
2	Were you given all of the instructions necess explain.	ary to be able to use the form effectively?	lf not,
3	Did you ever become frustrated while you we why?	ere using the form? If so, at which prompt a	Ind
4	Were there difficulties understanding any of	the prompts? If so, which ones and why?	
5	Were any of the prompts or greetings too wo	rdy? Which ones?	
6	Did you want any of the prompts, greetings o	or instructions repeated? If yes, which ones	?
7	Did you have enough time to answer all of th enough time?	e questions? If not, which questions didn't	allow

Caller Survey for Voice Form ID:	_ Title:	_ (page 2)
8 Did the voice form take too long to complete?	Would this dissuade you from using it?	
9 Were you able to revert out of the voice form a	and speak to someone if you needed to?	
10 Were you unexpectedly disconnected from the	e voice form at any time?	
When did the disconnect occur?		
Did you hear a disconnect prompt (goodbye)?		
11 When you heard your confirmation, did you un was wrong?	derstand what you were hearing? If not, v	vhat
12 Do you have any additional comments or sugg	estions regarding this voice form?	

Т	ranscriber Survey for Voice Form ID: Title: (page 1)
1	Were you able to access the transcription service? If not, which part did not work: access number password other If other, explain.
2	Were you notified of a new response through your MWI? Yes No
3	After you logged on to the voice form, what did you hear before the first response was played back? Envelope (status, form ID or name, response number, date and time response was recorded) Header (status and response number only)
	Did you find this helpful? If not, would you prefer the other option (and why)?
4	After the header or envelope, what happened? There was a delay It continued automatically and played back the first field
	If there was a delay, did it give you enough time to write down the information in the header? Yes No
	If there was no delay, would you have liked a delay? Yes No
5	During transcription, what did you hear between each field? Field name a tone silence
	Did you find this helpful? If not, what would you prefer? Please explain.

Transcriber Survey for Voice Form ID: Title:	(page 2)
6 During transcription, what happened after each answer was pla It stopped There was a delay and then it continu	
Did you find this helpful? If not, what would you prefer? Please	explain.
7 Do you have any additional comments or suggestions regarding	g this voice form?

94 Appendix A: Worksheets

Appendix B: Sample sessions

Sample caller session

The following is an example of how a caller session would run. In this example, the caller has a touch-tone phone and confirmation mode is Whole Form.

1 A caller dials the number published to submit an address change. This directly connects the caller with the voice form. The introductory greeting is played, followed by some caller instructions.

"Thank you for calling Laing's Department store to inform us of your new address and phone number."

"You will be asked for your old address and phone number followed by your new address and phone number. After each question, simply speak your answer into the receiver. Once you have recorded an answer to a question, you can press number sign to go to the next question. At the end of this application, you will be asked to confirm some of your answers unless you are calling from a rotary phone. If you have a touch-tone phone and require assistance at any time, press "0" to speak to an operator."

2 The first question is asked.

"Please speak your name after the tone. Speak your last name first, followed by its spelling. Then speak your first name."

3 The caller says: "*Frith, f-r-i-t-h, Frank*" and then presses #.

"Please speak your old address. Tell us the street, city, state or province and zip or postal code."

4 The caller says: "801 Sparrow Crescent, London Ontario, M2T 7J7" and presses #.

"Please speak your old phone number, starting with the area code."

5 The caller says: "519-555-1001" and presses #.

"Please speak your new address. Include the street, city, state or province and zip or postal code." 6 The caller says: "90 Weatherview Avenue, London Ontario, M5E 1Z3" and presses #.

"Please speak your new phone number."

- 7 The caller says: "519-555-8290".
- 8 Since DTMF input has been received, the answers will be confirmed. The following prompt is played to indicate that confirmation is about to begin:

"Selected answers will now be played back to you so that you can confirm them."

"New address. 90 Weatherview Avenue, London Ontario, M5E 1Z3 If this is correct, press 1. To re-record the answer press 2."

9 The caller presses 1.

"New phone number. 519-555-8290. If this is correct, press 1. To re-record the answer press 2."

10 The caller has made a mistake and presses 2 to correct it. The field prompt is played:

"Please speak your new phone number." The caller says: *"519-555-2890."*

Your answer will now be played back to you. 519-555-2890 If this is correct, press 1. To re-record the answer press 2."

- 11 The caller presses 1.
- 12 The goodbye greeting is played.

"You new address will be entered in our files. Thank you for shopping at Laing's."

13 The caller is disconnected.

Sample transcriber session

The following is a sample run through a transcription session.

In this example, transcription parameters are configured as follows:

Form Name Recorded	Yes
Transcription Password	54332
Play Envelope for Header	Yes
Transcription Field Separator	Field Name
Field Separator Delay	Delay (different for each
	field)

1 A transcriber is notified that a new response has been received. He calls the telephone number of the voice forms transcription service and logs on:

"Transcription Service. Please enter the form number, followed by number sign."

2 The transcriber enters 1#.

"Please enter the Form Password, followed by number sign."

3 The transcriber enters **54332**#.

The login summary is played. This includes the recorded form name and the number of new responses.

"Address change Number of new responses: one"

4 Either the header or envelope is played. In this example, the envelope is played, containing the following information: response status, form name, response number, date and time recorded.

"New, address change, response one, recorded October 31st at 11:13 a.m." 5 The first field name is played followed by the caller's recorded answer. The answer is followed by a delay during which the transcriber transcribes the answer. After the specified delay, the next field name is played, followed by the answer. This continues until the final answer is played back.

```
"Name"
   "Frith, f-r-i-t-h, Frank"
<delay>
"Old Address"
   801 Sparrow Crescent, London Ontario, M2T 7J7"
<delay>
"Old Phone Number"
   519-555-1001
<delav>
New Address
   "90 Weatherview Avenue, London Ontario, M5E 1Z3"
<delay>
"New Phone Number"
   "519-555-2890"
<delay>
"End of Response"
```

6 While listening to the response, the transcriber transfers the information to another application. When the transcriber is done with this response, he presses **76** to delete it.

"Response deleted."

7 The transcriber is finished transcribing responses. He hangs up.

List of terms

Answer

A reply to a particular question within a voice form. For example:

"What is your name?" Answer: Peter Murphy

Confirmation

The process whereby a caller has an opportunity to review his or her answers and confirm if they are correct. If an answer is incorrect, the caller can re-record it. Confirmation requires keypad interface.

Customer group

In a multicustomer system, the entire DMS VoiceMail system will be divided into a number of customer groups. All users on the system are added to a particular customer group. Features and operating parameters can be selectively configured for each customer group and billing data can be collected separately for each customer group.

DMS

Digital Multiplex System.

DN

Directory number.

A system that does not have the Multi-Customer feature can be thought of as a single-customer system or one large customer group.

Envelope

The information played at the beginning of a response if Play Envelope for Header is "Yes" or when the transcriber presses 72 while positioned on a response. It informs the transcriber of the status (new), response number, the voice form ID or name, the date and time of the response. (See header.)

Field

This word can have one of two meanings. In DMS VoiceMail administration screens, a field is a location on the screen in which you can either enter data or select one of several predetermined options. For example, in the Add a Voice Form Definition screen, you have the Voice Form ID field. This is one type of field.

Within a voice form application, the term field takes on another meaning. A voice form consists of a series of recorded greetings, instructions and questions which are played to callers. Each of these recorded elements is referred to as a *prompt*. For each prompt that you want to include in a voice form, you must define a field in the voice form definition. The voice form field therefore contains the actual recorded prompt and information about how the field should act within the context of the voice form. Voice form fields are configured in the Insert New Field screen.

Header

The information played at the beginning of a response. It informs the transcriber of the status (new, special) and the response number. The Envelope contains additional information.

MWI

Message waiting indicator.

No Answer Field

A field within a voice form that does not require a caller to record an answer in response. This type of field is an information-only field (such as a greeting or instruction).

Notification DN

The DN to which a message waiting indicator (MWI) message is sent when a new response is recorded (New Response Notification DN) or when a response is marked as special (Special Response Notification DN). This is the DN of the transcriber in the first case or the person responsible for handling special responses in the second case.

Prompt

A greeting, instruction or question that is played to a caller while in a voice form. For example:

Prompt: "What is your name?"

Response

A completed voice form (all of the answers together). For example, a response might be:

Peter Murphy, 555-8001, 85 Eastwick Drive, Tinytown, Illinois, 60544.

SMDI

Simplified message desk interface.

Transcriber

The person who listens to callers responses and processes the information.

Transcription

The process of listening to and collecting caller responses for further processing.

Voice Answer Field

A field within a voice form that requires a caller to provide a verbal response.

Voice form

A DMS VoiceMail application that is the electronic equivalent of a paper form. Callers dial into the voice form and "fill it out" by responding verbally to a series of questions. It is used as an information-gathering tool.

VSDN

Voice services directory number.

DMS-100 Family
DMS VoiceMail

Voice Forms Application Guide

© 1994 Northern Telecom All rights reserved

Information is subject to change since Northern Telecom reserves the right, without notice, to make changes in equipment, design or components as progress in engineering or manufacturing methods may warrant.

DMS is a trademark of Northern Telecom. TOUCH TONE is a trademark of Bell Canada. Publication number: 297-7001-306 Product release: SPM 02 Document release: Standard 02.02 Date: March 1994 Printed in the United States of America

