# Social Security Administration BEVE/MRC

Transfer of Voice Data Collection BBN Findings

**User Interface Design Specification Last Saved: 2 October, 2008** 

2.2



# **Document History**

Date	Spec	Арр	Summary of Changes	Revised by
4/14/04	.01	1.0	Initial version	Robby Kilgore
4/16/04	.02	1.0	Sample Calls updated	Robby Kilgore
4/20/04	.03	1.0	Updated sample calls post review	Robby Kilgore
4/20/04	.04	1.0	Begin DM Tables	Robby Kilgore
4/21/04	.05	1.0	Adding Name 2.0 OSDM Tables	Robby Kilgore
4/21/04	.06	1.0	Added 2.0 plus post Name states	Robby Kilgore
4/22/04	.07	1.0	Added Visio details for main speech application	Robby Kilgore
4/22/04	<b>/22/04 .08</b> 1.0		Debugged tables	Robby Kilgore
4/22/04	<b>.09</b> 1.0		Consolidated exit tables, synced Visio flows, updated demographics slightly.	Robby Kilgore
4/23/04	.10	1.0	Added global handoffs, reconciled sample call text.	Robby Kilgore
4/23/04	.11	1.0	Included feedback from Joe and other tweaks for Draft release	Robby Kilgore
4/23/04	.12	1.0	Added Joe's changes for Draft	Robby Kilgore
4/26/04	.13	1.0	Folded in comments from CPT review call	Robby Kilgore
4/28/04	8/04 .20 1.0 Changed Name 2.0 to 1.12 interaction model		Robby Kilgore	
4/28/04	.21	1 1.0 Comb through for any bugs introduced by changes to interaction model		Robby Kilgore
4/28/04	.22	1.0	Reviewed and tracked changes with Joe Farhat and Jon Bloom	Robby Kilgore
4/29/04	.23	1.0	Folded in changes from last review	Robby Kilgore

Date	Spec	Арр	Summary of Changes	Revised by
4/29/04	1.0	1.0	Ready release for client review	Robby Kilgore
4/30/04	<b>04 1.01</b> 1.0		Received input from SSA / CPT review call	Robby Kilgore
5/2/04	1.02	1.0	Updated spec to reflect input from SSA / CPT review call	Robby Kilgore
5/4/04	1.03	1.0	Added MaxHelp hand-off prompts and miscellaneous other small changes covered in phone meeting 5/4/04	Robby Kilgore
5/5/04	704 1.04 1.0 Updated sample calls		Robby Kilgore	
<b>5/5/04 1.05</b> 1.0		1.0	Small changes to sample call and removal of "Agent" verbiage.	Robby Kilgore
<b>5/19/04 1.06</b> 1.0		1.0	Reconciled the document to reflect small text changes from the recording sessions as well as flagging marking global vs. local apologies.	Robby Kilgore
<b>5/27/04 1.07</b> 1.0 Reconciled		1.0	Reconciled prompt text with recordings.	Robby Kilgore
<b>6/11/04 1.11</b> 1.0		1.0	Reconciled against bugs, plus added changes from UT	Robby Kilgore
6/14/04	1.12	1.0	Created new document for safety sake. Removed punctuation from Grammars	Robby Kilgore
<b>6/15/04 1.13</b> 1.0		1.0	Updated based on review with SSA / MCI / CPT	Joe Farhat
		1.0	Updated to resolve CR1582, 1583, 1584, 1585, 1590, 1591, 1592, 1593, 1613, and 1624. Minor update to nomatch prompts in 1040_ConfirmName	Joe Farhat
6/17/04	1.16	1.0	Tiny tweak to the prompt text in 1400080, Added note about Confirmation Grammars	Robby Kilgore

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6/30/04	1.18 / 1.19.1	1.0	Fixing up the last few CRs	Robby Kilgore / Joe Farhat
8/9/04	1.20	1.0	Revisions based on Pilot tuning report.	Robby Kilgore
8/10/04	1.21	1.0	Finalized UI Doc changes post review with SSA	Robby Kilgore
9/15/04	1.23	1.0	Adjustments from Tuning Report #2	Robby Kilgore
10/25/04	1.24	1.0	Adjustments from final tuning	Robby Kilgore
10/28/04	1.25	1.0	Clarified deactivation of global agent grammar in 1000_SayLastName and 1020_SayFirstName	Joe Farhat
11/04/04	1.26	1.0	Final tweaks to verbiage to match recordings	Robby Kilgore
11/05/04	1.27	1.0	Last minute corrections and acceptance of all changes FINAL VERSION	Robby Kilgore

Date	Spe c			Revised by	
6/23/05 2.0 1.0		1.0	Changes based on tuning analysis and recommendations of June 2005.  1. 1020_SayFirstName – change Initial prompt to discourage spelling here.  2. 1040_ConfirmName – add more synonyms for Yes and No.  3. 1060_GetMistake – add synonym for Both.  4. DM9000_Check_For_Alt_Name – Change Initial prompt to discourage barge in and speaking of a name rather than Yes or No. Also turn off bargein.  5. DM11000_ReturnToMain_or_HangUP – no action – rejected recommendation of adding Yes/Yeah as synonyms for Main Menu and No as synonym for Goodbye. The number of occurrences is low. Yes seems just as likely a response to Goodbye as to Main Menu. The cost of failure to the caller in this DM is very low.  6. Eliminated useless Appendix A.  7. PP2000_Standard_Greeting – Added new prompts for the case when these services are invoked from the Speak Freely N8NN rather than the old DTMF N8NN.	Paul Sawyer	
15 Feb 06			Remove restriction on date of birth in DM5000.     Add support for blocked accounts. Affects PP1500, BR8000, DM11000.	Paul Sawyer	
23 Mar 06	2.2	1.0	1. Corrected 500_EntryPrompt module for subsequent module when Spelling  — TRUE and names_to_collect = LAST or LAST_FIRST  2. Fixed wording of default_name_spelllast_collection_noinputprompts1 in  1090_RespellLast  3. Fixed wording of default_name_spellfirst_collection_noinputprompts2 in  1070_RespellFirst  4. Fixed wording of default_name_spelllast_collection_reprompts1 in  1090_respellLast  5. Fixed wording of default_name_getmistake_collection_reprompts2 in  1060_GetMistake  6. Fixed wording of default_name_sayfirst_collection_nomatchprompts1 in  1020_SayFirstName	Phil Profili	
18 Apr 07	3 Apr 07  2.2  1.34  1. Removed references to BR8100 2. Added new state, DB3050 3. Updated DM3000 and BR3100		Sean Stallings VZB		
23 Apr 07 2.2 1.35 1. Updated 1000_SayLastName 2. Updated 1020_SayFirstName		Updated 1020_SayFirstName     Removed Confirmation logic from 1060_GetMistake     Updated PP2000     Removed PP9999	Sean Stallings VZB		

24 Mer: 07	0.0	4.00	Updated 1060 GetMistake	Coon Ctall's as
21 May 07	2.2	1.36	opuated 1000 Octiviistance	Sean Stallings VZB
05 July 07	2.2	1.37	Updated DM 4000, removed "great" from 50201	Sean Stallings VZB
10 July 07	2.2	1.38	Replaced wording in states 500 through 1090 with wording from corresponding KBA prompts.  Added developers notes to states 500 through 1090 stating that these states now share prompting with KBA.	Sean Stallings VZB
11 July 07	2.2	1.39	Corrected some changes made in states 500 through 1090	Sean Stallings VZB
12 July 07	2.2	1.40	Incorporated new message numbers in 6.1 Timeouts and Retries, DM 4000 and DM 9000	Sean Stallings VZB
19 July 07	2.2	1.41	Updated 50206, 50307, 50308, 50312, 50367, 10062	Carol Cummings VZB
21 July 07	2.2	1.42	Updated	Carol Cummings VZB
08 August 07	2.2	1.43	Corrected DM 11000 to show that only Global Agent Command is disabled	Sean Stallings VZB
15 Aug 07	Aug 07 2.2 1.44 Corrected prompting in message number 50204			Sean Stallings VZB
08 Oct 07	2.2			Sean Stallings VZB
31 Oct 07	2.2	1.46	Broke message 10054 into two parts, 10054 and 10088. Allowed barge in= True for 10088.	Sean Stallings VZB
3 Mar 08 2.2 1.47		1.47	Added Privacy paragraph to chapter 6 Global Behavior Added BR 1900 Added BR 3999 Added BR 4005 Added 400 Updated DM 4000, 5000, 1000, 1010, 1020, 1030, 1070, 1090 and 9000; Added confidential flag setting data to module notes	Sean Stallings VZB
06 Mar 08	2.2	1.48	Corrected broken hyperlink in 6.4 Help Prompts  Updated P2000, adjusted the wording to reflect the fact that we may or may not be collecting 5 pieces of information.	Sean Stallings VZB
10 Mar 08	2.2	1.49	Updated BR 1900, BR 3999, 400-Name Check Condition; ; Corrected reporting information for "if else" conditions.	Sean Stallings VZB
21 Mar 08	2.2	1.5	Corrected reporting string in BR3999 and 400	Sean Stallings VZB
1 Apr 08	2.2 1.51 Updated reporting string for first and last name re-use		Sean Stallings VZB	
4 Apr 08	Apr 08  2.2  Updated BR 1900, if callers information is complete callers now route to PP 6000.  Added BR 4005.  Clarified wording for BR1900 Check Null Condition			Sean Stallings VZB
	11 Apr 08  2.2  1.53 In order to assure that re-use items are properly reported, in Check Null Condition, if TVDC items to collect = 0, the call must then route to the next			
11 Apr 08	2.2	1.53		Sean Stallings VZB

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			is set to "false" for initial prompt, "true" for all others.	VZB
			Broke message 10054 into two parts, 10054 and 10088.	
21 Apr 08 2.2 1.5		1.55	Corrected broken link in table of contents.	Sean Stallings VZB
2 May 08	2.2	1.56	Corrected reporting strings for BR3999, BR4005, Module 400, BR5500  Updated reporting strings for BR3999, BR4005, Module 400, BR5500	Sean Stallings
7 May 08	2.2	1.57	Updated DM 9000, renumbered message 10088 to 10092, to prevent overlap.	VZB Sean Stallings VZB
13 June 08	2.2	1.58	Updated Module 4005, module is now correctly named DOB_Check_Condition.  Updated module 5000, 'entering from' field now shows entering from 4005	Sean Stallings VZB
23 June 08	June 08  2.2  Updated module 1090_RespellLast, 'Entering From' field no longer points to module 1070_RespellLast. This resolves ticket 20603.		Sean Stallings VZB	
4 August 08 2.2 1.60		1.60	Updated module 4000_Get_SS_Number.  To improve capture process the wording of all prompts has been changed to match SSN capture in KBA.  Audio for Initial prompt, message 54201, changed to match KBA 50201	Sean Stallings VZB
			Audio for Retry 1 prompt, message 54202, changed to match KBA 50202.  Corrected reporting tags in modules BR3999, BR4005 and 400. Removed spaces after commas.	
			Corrected dead hyperlink issue in "Entering From" fields found in module 1000, modules 3050 through 9000, and modules 11000 through 14000.  Updated Modules 4000 and 5000, updated 'results' column in the confirmation 'field' for Retry 1 and Timeout 1. Now shows an example of the	
			wording a caller would hear, not the specific data field.  Updated modules 1000, 1010, 1020, 1030 and 1040. Corrected references to 500_Intro. Now reads '500_EntryPrompt'.	
			Updated Module 4000, now shows entering from Module 3999.	
21 August 08	2.2	1.61	Highlighted Barge-in changes in pink	Sean Stallings VZB
09September 08	2.2	2.0	Updated DM 3000, on 'no' condition call should route to DB 3050.  BBN Findings Effort  1) Updated section 6.1 Time-outs and Retries, updated wording for confirmation retry 2, changed message 50345 to 50347.  2) Updated DM3000_CheckAOR, updated wording for retry 2, message 30022  3) Updated module 1040, for retry 2 replaced message 50345 with 50347.  4) Updated module 9000, updated message 10056  5) Highlighted all BBN Findings changes in Green	Sean Stallings VZB
25 September 08	2.2	2.1	Added Verizon Business proprietary statement to title page and all page footers.	Sean Stallings VZB
02 October 08	2.2	2.2	Updated 6.1 highlighted the BBN change to the global retry 2 in Green.  Updated 1000_SayLastName, added condition for 'Failure and Alt Name' which now routes to PP6000 – this resolves ticket 22408. Added new wording for Other Last Name, retry 1,message 50310, caller will now only be asked to spell their other last name.  Updated PP6000, now shows as entering in from 1000_SayLastName.	Sean Stallings VZB

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# **Chapter 2: Background and Motivation**

# 2.1 Executive Summary

The Social Security Administration serves callers currently receiving benefits as well as the general population with self-service and informational assistance. SSA is looking for ways to improve self-service options for both calling populations. Existing self-service options are currently available from the SSA web site or via the SSA N8NN telephone interface. SSA would like to enhance the telephone based self-service options to include advanced speech with a real-time request processing. The self-service functions contained within the scope of this project are 1) Automated replacement Medicare Card service 2) Automated benefit verification letter service.

#### 2.1.1 What the application does

- Self-Serve Medicare Card Replacement Requests Use of this application requires that you currently receive Medicare Benefits, or that you are eligible to receive benefits. This application will allow callers to request a new or replacement Medicare Card, and will receive approximately 785K calls annually.
- Self-Serve Benefit Verification Requests Use of this application is for Social Security beneficiaries and will allow callers to request a statement of Social Security benefit verification letter for various purposes. This application will receive approximately 1.9 million calls annually.

#### 2.1.2 Social Security Administration's goals

Primary goals of the speech application are to:

- Provide universal access to the SSA's automated services by providing an access channel for callers including the visually impaired.
- Offer real-time fulfillment of Benefit Verification letter requests or Medicare
  Replacement Card requests without needing to transcribe information collected by
  the existing automated Touch Tone system. Doing so will eliminate transcription
  time and transcription errors, as well as minimize the time lag between callers
  making the request and transcription of the request. Transcription time introduces
  delays in mailing out the forms, resulting in callers calling back to find out if their
  forms have been mailed.

One business objective for the speech application is cost reduction. Automating calls and minimizing the number of calls to SSA agents is the primary mechanism towards this goal. As such, the application will be implemented in a way to streamline and automate requests.

### 2.1.3 Callers' goals

Callers are seeking simple self service.

### 2.2 Aesthetics

Jill converses with caller in a clean yet informal, role-appropriate female voice. She is friendly, competent and resourceful. Even when she's unable to complete a caller's request, she usually provides helpful suggestions on how they can proceed.

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# 2.3 Open Issues

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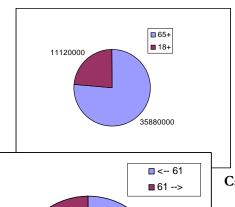
# **Chapter 3: About the Callers**

### 3.1 Introduction

The design of the user interface is driven, in part, by ScanSoft's understanding of the population of callers to the system. Generally, callers will access the system for one of two reasons. They are either Medicare recipients looking to replace a Medicare card or Social Security recipients looking to receive a letter verifying their Social Security benefits. These two caller populations will call an 800 number to access the N8NN Main Menu system, and will eventually route themselves to the new BEVE/MRC speech application to request a replacement Medicare Card or request a verification of Social Security benefits.

It is presumed that all callers are first timers who will not call again.

# 3.2 Demographics Data



#### General Population: Age of Recipients

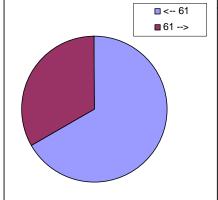
Thirty nine million people are receiving benefits. Eight percent of them are disabled and range in age from 18 on up. The rest are 65 and older. There are also 8 million people of any age on Supplemental Security Income (SSI)

Caller Population: Age Distribution

BEVE: Of the 1.9 million annual callers,

66% are below 61 years of age.

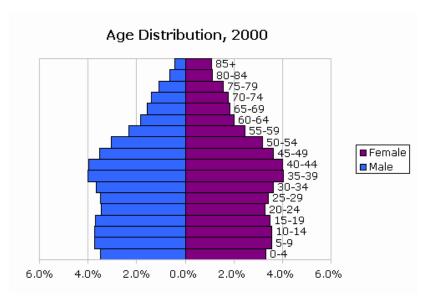
**MRC:** Of the 785,000 callers requesting Medicare Replacement Cards, 66% are above 70 years of age.



The chart below shows the age distribution within the general US population. It is included here because it is assumed that the age distribution of the potential caller population roughly matches that of the general population.

# Who are SSA beneficiaries?

- Elderly (62+ years)
   35.8 million.
   Most likely have not
   had experience with
   VUI
- Disabled (18+ years)
   3.12 Million
   ~8% of the population?
- Low Income (18+) 8 Million
   Supplemental Security
   Income (SSI)



# 3.3 Caller Archetypes



#### James Richards

James is 67 years young, living in Grand Forks, North Dakota, 90 miles south of the Canadian border in eastern North Dakota. He has a small woodworking shop that's attached to his garage. The bank has told him he needs to provide a verification letter from the SSA as proof of income for a home improvement loan.



#### Jane Preston-Blair

She is originally from Norwalk, Connecticut. She married her hometown sweetheart 39 years ago and they enjoyed 28 years of US Air Force life. They traveled all over before retiring and settling in North Carolina and that is where they call home. They have four wonderful daughters, who have rewarded them with seven beautiful grandchildren. Jane is requesting a verification letter. Her name is hyphenated. She'll have to spell her name.



#### Julia Davis (Brewer)

Born in Tampa Florida in 1948, Julia is disabled. She is a Medicare recipient and has also received Supplemental Security Income for the last several years. She is seeking a Replacement Medicare Card. Recently divorced; she is still listed under her ex-husband's name. Her request fails on name mismatch and prompts for an alternate.



#### Jim Trouble

This boy is a 15 year old wanna-be hacker, randomly trying Social Security numbers. He has no criminal intent, but is curious to see if he can retrieve social security numbers by using the system. The information he gives does not validate and his request is rejected out of hand. He will likely hang up when he learns he is being transferred to an operator.

# **Chapter 4: Call Examples**

Callers arrive at this portion of the system by navigating through the N8NN main menu (via DTMF or Simple Speech) system. This can take a minute or more of DTMF interactions. The design of the interactions should accommodate this change in interaction style between the DTMF portion of the larger system and the "conversational" nature of the Speech Application. This may be accomplished through audio iconography, signposting and prompt text.

Callers have explicitly chosen the self service route, and are transferred to the speech system AFTER choosing either the "replacement card" or "verification letter" path. The Speech system will receive a flag signifying the task the caller is attempting to complete.

The call scenarios covered here include:

• Benefits Verification Letter No errors.

Benefits Verification Letter Handling hyphenated name / spelling.

• Medicare Card Request Listed under an alternate name.

Medicare Card Request Rejected request.

# 4.1 Sample Call Design Considerations

#### 4.1.1 Verboseness

Jill's audio and prompts are designed to accommodate the vast majority of callers whose VUI experience is either limited or perhaps nonexistent. The verbiage is designed to convey a clear mental model of how Jill behaves and what her capabilities are. This subtly helps callers remember to avoid chatty responses.

#### 4.1.2 Confirmation Strategy:

When designing speech interfaces, it's often desirable to group confirmations together whenever possible; as in "So that's Tuesday at 10AM for an hour. Right?", but in Jill's case, the data-types seem too unrelated. Because of the nature of her application, she's forced to confirm at every turn. To justify this, she goes out of her way to acknowledge the importance of "getting things right". Her prompting for confirmations becomes briefer as the caller progresses.

### 4.1.3 In Session Tracking:

There are some prompts which exploit a simple form of in session tracking. Jill's exit and hand-off phrases are context sensitive. That is, they specifically talk to the issues that have lead to the hand-off.

### 4.1.4 Longevity:

Since the system is basically a one shot (first time is the last time) system where the task completion is more important than longevity, Jill is slightly biased towards relatively severe hand-holding to minimize dropout. Jill doesn't advertising operator assistance, though she will eventually recommend it, as a path of last resort.

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### 4.2 Call #1: No Collection Problems

#### James Richards

James is 67 years young, living in Grand Forks, North Dakota, 90 miles south of the Canadian border in eastern North Dakota. He has a small woodworking shop that's attached to his garage. The bank has told him he needs to provide a verification letter from the SSA as proof of income for a home improvement loan.

<Audio Icon>

Jill: Hello. You've reached the automated Benefits Verification service. Before I

send out your letter, there are five questions I'll need to confirm with you. We'll go through them one at a time, and you can speak your answers.

To get started, I want to make sure I'll be sending it to the right place. Have

you had a change of address recently? Please say "YES" or "NO".

Caller: No.

Jill: Great. Now - Please enter or say your nine digit Social Security number.

Caller: 123-39-8145

Jill: This is important, so I want to make sure I have it right. Your social

security number is: 123 - 45 - 6789. Is that right?

Caller: Yes.

Jill: And what's your date of birth? [Two second pause] For example, you can

say...May 5th, 1957.

Caller: January 12th, 1931

Jill: Okay, so that's: < January 12th, 1931>. Is that right?

Caller: Yeah.

Jill: Okay. Now, for your name, I'll ask you to say it, then, I may ask you to spell

it. Please say just your last name.

Caller: Richards

Jill: Thanks. Now I'll need your first name. Please say it now.

Caller: James

Jill: Okay. Let me read that back to you to make sure I've got it right.

Last name: Richards, spelled R I C H A R D S.

First name, James, spelled J A M E S.

Did I get it right?

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Caller: Yes.

Jill: Alright. We're almost done. Before I send this off, do you have any other

last name – for example, a professional or maiden name - that might be

listed under this social security number?

Caller: No.

Jill: Okay. I've got everything we need. Hold on while I process your request.

Okay. You're all set. You should receive your Benefits Verification Letter in

the mail within two weeks.

If there's anything else you'd like to do, say "MAIN MENU". Otherwise

you can say "GOODBYE" or just hang-up.

Caller: Goodbye.

Jill: Okay Bye.

[Closing Audio Icon]

End Call

# 4.3 Call #2: Handling Hyphenated Name with Spelling

#### Jane Preston-Blair

She is originally from Norwalk, Connecticut. She married her hometown sweetheart 39 years ago and they enjoyed 28 years of US Air Force life. They traveled all over before retiring and settling in North Carolina and that is where they call home. They have four wonderful daughters, who have rewarded them with seven beautiful grandchildren. Jane is requesting a verification letter. Her name is hyphenated. She'll have to spell her name.

[Opening Audiomark]

Jill: Okay. Now, for your name, I'll ask you to say it, then, I may ask you to spell

it.

Please, say just your last name.

Caller: Preston-Blair

Jill: Could you spell that for me?

Caller: Yes. That's PRESTON BLAIR

Jill: Thanks. Now I'll need your first name. Please say it now.

Caller: Jane.

Jill: Okay. Let me read that back to you to make sure I've got it right.

Last name: Preston-Blair, spelled PRESTONBLAIR.

First name, Jane, spelled J A N E.

Did I get that right?

Caller: Yes.

Jill: Alright. We're almost done. Before I send this off, do you have any other

last name - for example, a professional or maiden name - that might be

listed under this social security number?

Caller: No.

Jill: Okay. I've got everything we need. Hold on while I process your request.

Okay. You're all set. You should receive your Benefits Verification Letter in

the mail within two weeks.

If there's anything else you'd like to do, say "MAIN MENU". Otherwise

you can say "GOODBYE" or just hang-up.

Caller: Main Menu.

Jill: Sure. I'll transfer you now.

[Closing Audio Icon]

# 4.4 Call #3: MRC - Misrecognized Name plus Alternate Name

#### Julia Davis (Brewer)

Born in Tampa Florida in 1948, Julia is disabled. She is a Medicare recipient and has also received Supplemental Security Income for the last several years. She is seeking a Replacement Medicare Card. Recently divorced; she is still listed under her ex-husband's name. Her request fails on name mismatch and prompts for an alternate.

Jill: Hello. You've reached the automated Medicare Replacement Card service.

Before I send out your replacement card, there are five questions I'll need to confirm with you. We'll go through them one at a time, and you can

speak your answers.

•••

Jill: Okay. Now, for your name, I'll ask you to say it, then, I may ask you to spell

it.

Please, say just your last name.

Caller: Davis

Jill: Thanks. Now I'll need your first name. Please say it now.

Caller: Julia

Jill: Okay. Let me read that back to you to make sure I've got it right.

Last name: Davies, spelled D A V I E S. First name, Julia, spelled J U L I A.

Did I get it right?

Caller: No.

Jill: Sorry about that. Which part is wrong? The first name, the last name or

both?

Caller: The last name.

Jill: Please spell your last name, one letter at a time.

Caller: DAVIS

Jill: Got it. We're almost done. Before I send this off, do you have any other

last name – for example, a professional or maiden name - that might be

listed under this social security number?

Caller: Yes. My ex-husband's name was Brewer.

Jill: I'm sorry, but I didn't understand. Would you like me to check under

another last name? Please say "YES" or "NO".

Caller: Yes.

Jill: Okay. Let's try it. Give me the other last name.

Caller: Brewer

Jill: Could you spell that for me?

Caller: BREWER

Jill: Okay. Let me read that back to you to make sure I've got it right.

Last name: Brewer, spelled B R E W E R.

Did I get that right?

Caller: Yes

Jill: Okay. I've got everything we need. Hold on while I process your request.

Okay. You're all set. You should receive your Medicare Replacement Card in the mail within four weeks. If you live in Puerto Rico, please allow eight

weeks for delivery.

If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.

Caller: Main Menu

Jill: Sure. I'll transfer you now.

[Closing Audio Icon]

### 4.5 Call #4: A Rejected Request

#### Jim Trouble

This boy is a 15 year old wanna-be hacker, randomly trying Social Security numbers. The information he gives does not validate and his request is rejected out of hand.

<Audio Icon>

Jill: Hello. You've reached the automated Medicare Replacement Card service.

Before I send out your replacement card, there are five questions I'll need to confirm with you. We'll go through them one at a time, and you can

speak your answers.

To get started, I want to make sure I'll be sending it to the right place. Have

you had a change of address recently? Please say "YES" or "NO".

Caller: No.

Jill: Great. Now - Please enter or say your nine digit Social Security number.

*Caller:* 123-45-6789

Jill: This is important, so I want to make sure I have it right.

Your social security number is: 123-45-6789. Is that right?

Caller: Yeah.

Jill: And what's your date of birth? [Big pause] For example, you can say...May

5<sup>th</sup>, 1957.

Caller: January 22<sup>nd</sup>, 1989

Jill: Okay, so that's: January 22<sup>nd</sup>, 1989. Is that right?

Caller: Yeah.

Jill: Okay. Now, for your name, I'll ask you to say it, then, I may ask you to spell

it.

Please, say just your last name.

Caller: Jetson

Jill: Thanks. Now I'll need your first name. Please say it now.

Caller: George

Jill: Okay. Let me read that back to you to make sure I've got it right.

Last name: Jetson, spelled J E T S O N. First name, George, spelled G E O R G E.

Did I get it right?

Caller: Yes.

Jill: Alright. We're almost done. Before I send this off, do you have any other

last name – for example, a professional or maiden name - that might be

listed under this social security number?

Caller: No.

Jill: Okay. I've got everything we need. Hold on while I process your request.

I'm sorry, but I wasn't able to process your request. Let me transfer you to someone who can help you with this. Please hold while I transfer your call.

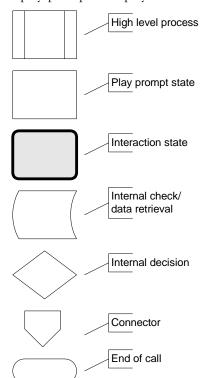
[Transfer Call]

# **Chapter 5: Call-Flow Diagrams**

# 5.1 Legend for the call-flow diagrams

A high level process indicates a *series* of play-prompt or interaction states or data retrieval steps, etc.

A play-prompt state plays a waveform, or a series of waveforms, to the caller.



An interaction state prompts the caller for input. It also handles all default timeout and retry behavior. It typically exits (continues to the next state) upon a successful recognition.

The 'data retrieval' icon represents back-end transactions, to a database, for example.

The 'internal decision' icon represents a logical check in the program code to branch on decision.

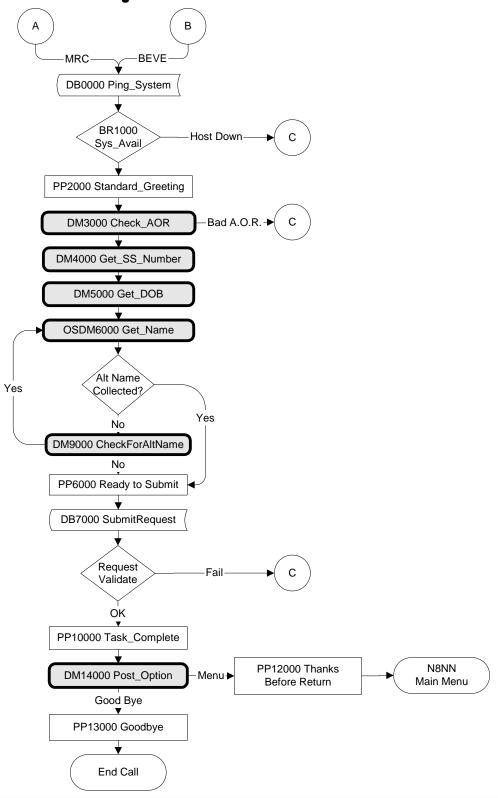
Connectors link different call-flow diagrams.

An end-of-call is a transfer, to another service or customer representative, or a system hangup.

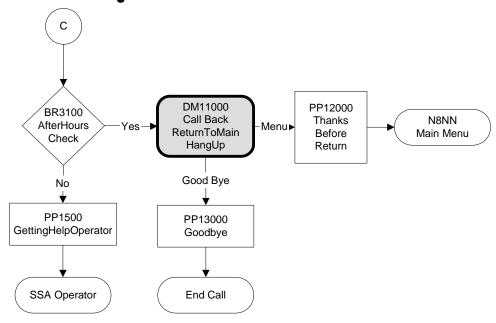
Call-flow diagrams built up of high-level process icons represent the global dialog structure of the application. These high-level diagrams parallel with the more detailed call-

flow diagrams that outline every play-prompt, interaction state, data retrieval step, internal decision and possible ends of the call. These low-level charts give a precise graphical representation of the flow of the state tables in the section "Chapter 7: Detailed Dialog Specification", using the same (or matching) naming convention for easy reference.

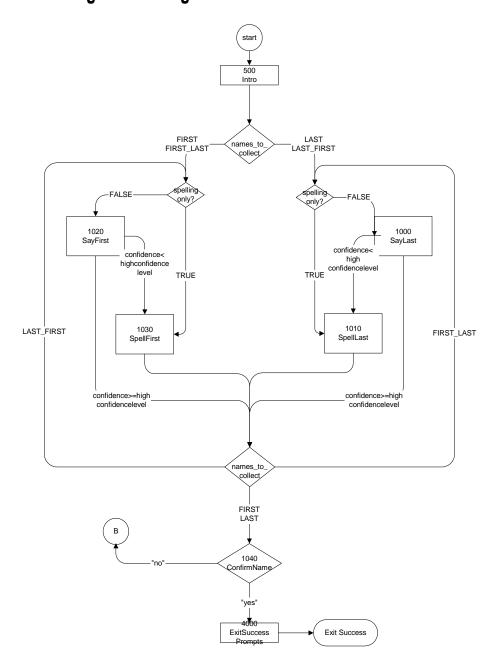
# 5.2 High-Level Call Flow Diagram

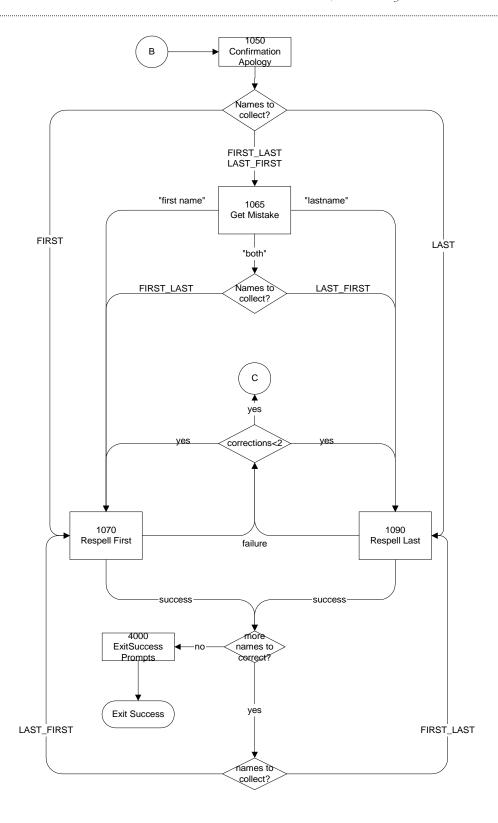


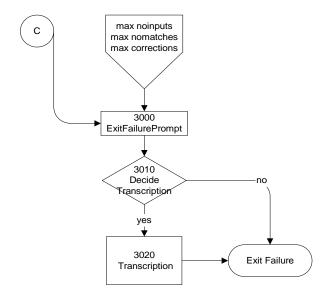
# 5.3 Outbound Transfer Logic



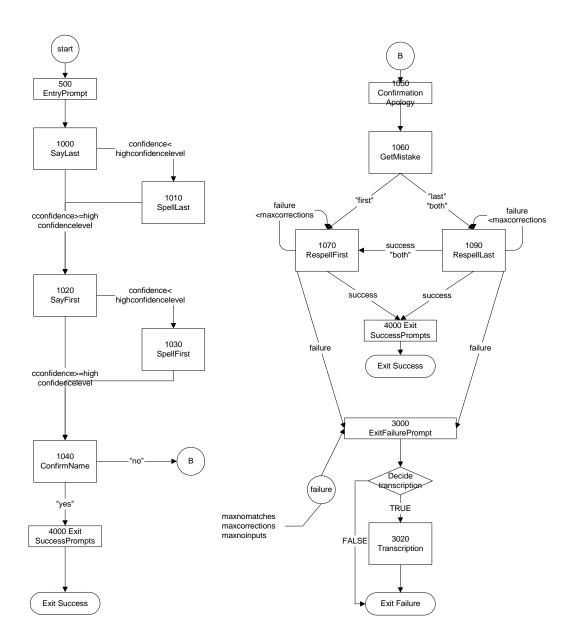
# 5.4 Name OSDM High-Level Diagram



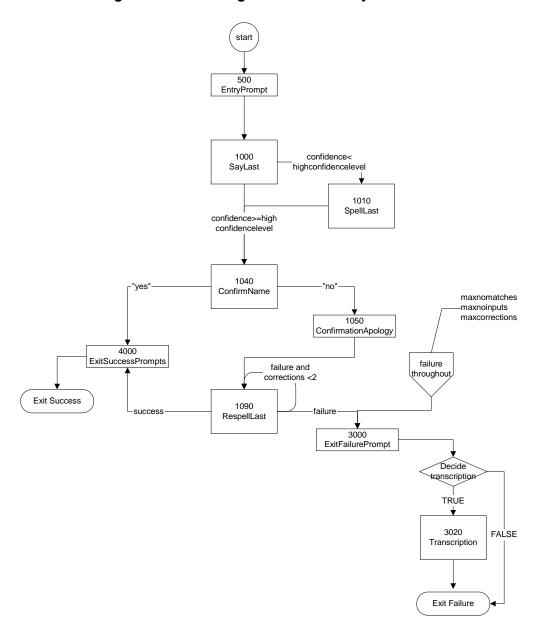




# 5.5 Name DM Diagram – Default Configuration



# 5.6 Name DM Flow Diagram – Collecting Last Name Only.



# **Chapter 6: Global Behavior**

#### 6.1 Time-outs and Retries

While the timeout and retry prompts are specified in the DialogModule tables, they are to be preceded by the appropriate apology prompt as outlined below:

55004	Retry 1&2	IF retry 1	upon rejection of speech	default_noanswerapol ogies1	I'm sorry, but I didn't understand you.
55005			upon rejection of DTMF	apology_dtmf1	Sorry, I'm not sure what you entered.
00111			upon confirmation	default_collection_wro nganswerapologies1	My mistake.
55006		IF retry 2	upon rejection of speech	default _noanswerapologies2	I'm sorry, but I still didn't understand you.
51007			upon rejection of DTMF	apology_dtmf2	Sorry, I'm still not sure what you entered.
00113			upon confirmation	default_collection_wro nganswerapologies2	My mistake again.
51008	Max Timeout		default_failureprompt	I'm sorry I'm having so much trouble.	
51008	Max Retry			default_failureprompt	I'm sorry I'm having so much trouble.
51008	Max Help			default_failureprompt	I'm sorry I'm having so much trouble.
51009	Upon Confirmatio	n Timeout 1		default_confirmation_ noinputprompts1	Sorry, I didn't hear you. Please say YES or NO.
51010	Upon Confirmatio	n Timeout 2		default_confirmation_ noinputprompts2	I'm sorry, but I still didn't hear anything. Please say YES or NO.
50345	Upon Confirmatio	n Retry 1		default_confirmation_r eprompts1	Please say YES or NO.
50347	Upon Confirmatio	n Retry 2		default_confirmation_r eprompts2	If 'yes' press one, otherwise press two.

Typically the timeout and retry prompt specified in the table will be one and the same prompt, but they can also be a set of prompts, and they can also differ between timeout versus retry, or the first versus the second timeout or retry. In exceptional cases, different behavior is specified in the table for the second timeout or retry than outlined above.

Max. timeout is globally set to 2 – exceptions will be indicated in the tables. Max. retry is globally set to 2 – exceptions will be indicated in the tables. Max. help is globally set to 2 – exceptions will be indicated in the tables.

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- Upon max timeout (two timeouts):
   Play Max Timeout verbiage described above then
   Go to: BR3100\_AfterHours\_Check; NeedAssistanceWith = MaxTimeout
- Upon max retry (two retries):
   Play Max Retry verbiage described above then
   Go to: BR3100\_AfterHours\_Check; set NeedAssistanceWith = MaxRetry
- Upon max help (two request for help):
   Play Max Help verbiage described above then
   Go to: BR3100\_AfterHours\_Check; set NeedAssistanceWith = MaxHelp
- Upon call completion, hang-up or call transfer, call end processing (call tracking information for reporting) will be performed.

# 6.2 Global Default Settings

Unless otherwise noted, all DMs should use default settings for confidence levels. Exceptions include: <a href="mailto:1000\_SayLastName">1000\_SayLastName</a>, 1020\_SayFirstName, 1070\_RespellFirst, and 1090\_RespellLast.

# 6.3 Privacy

The following information is considered confidential; **SSN**, **Date of Birth**, **First Name**, **Last Name**, and **Other Last Name**. The confidential flag should be set to true for all dialog modules collecting this information from the caller.

# 6.4 Help prompts

Start each Help prompt with the Help prompt audio icon (prompt file: <code>icon\_help</code>), immediately followed by the Help prompt(s) as specified in the table. Unless otherwise specified by the DialogModule table, the default behavior will always be to 're-enter' the DialogModule directly after the Help prompt has played, so the application will listen for the input again. It does this while resetting any timeout and retry counters, thus as if it were the initial try, but <code>without playing the initial prompt again</code>. This is because the prompt for the input will be contained <code>in the Help prompt itself</code>, perhaps with a slightly different verbiage.

In summary:

- 1) Start with icon\_help, which is the Help audio icon
- 2) Play Help prompt(s) specified in the UI table
- 3) Unless otherwise specified in the table, re-enter the same state to listen for caller input
- 4) Do not play the initial prompt of this state after the Help prompt

Important note: caller can barge-in on the Help prompt (unless otherwise specified by the table) which will cause the Help prompt to immediately *stop* playing and the recognizer to parse the caller's input according to the vocabulary of the state following the Help prompt (this state typically is the same state). While the caller can start speaking before the end of the Help prompt, the *beginning\_of\_speech* timer will not start until the Help prompt has finished playing (which is the same behavior as with any other prompt played that callers can barge-in on).

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### 6.5 Default Confirmation Grammars

Unless otherwise overwritten by local grammars, all Dialog Modules will use the default (standard) confirmation grammars.

### 6.6 Global Commands and Global Prompts

#### **Global Commands Vocabulary**

Speech input
This table specifies the global commands that can be spoken from anywhere in the application. The
application behavior upon these commands is always the same, unless the DialogModule specifically
overrides the global behavior.



Commands	DTMF	Action (unless re-specified by the module)	Confirm.
"Help"	*	First play the Help prompt as specified for the module, then wait for input again. (New prompt for input will be part of each Help message.)	Never
"Agent", "Operator", "Representative" "Talk to an agent", "Talk to an operator", "Talk to a representative"	0		Always

Confirmation prof Message Number	mpts Option	Name	Wording	7	_
51011 Operator		gl_conf_operator	•	l you wanted to talk to one of our oper	ators, Is that
Confirmation Opt	ion	Vocabulary	DTMF	Action	Confirm.
Yes		"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	Go to: BR3100_AfterHours_Check; NeedAssistanceWith = UserRequestedAgent	Never
No		"No [it isn't]" "[No] that's not right"	2	Re-enter Dialog Module and play retry 1 or Nomatch 1 prompt as appropriate for the Dialog Module	Never

#### **Developer Notes**

On a negative confirmation of the "Agent" global command, return to the Dialog Module where the command was issued and play the retry 1 or nomatch 1 prompt as appropriate for the Dialog Module

### 6.7 DTMF Collection

### 6.7.1 General DTMF Usage

DTMF functionality is available by default through ScanSoft's OpenSpeech Dialog Modules in collections where numbers are being collected. Although DTMF functionality is native to the Date DialogModule, it has been decided *not* to advertise its use through the prompting in the application. This will eliminate lengthy or possibly confusing prompts. The underlying DTMF functionality will still reside within the Dialog Module and will be active within the application should a caller enter DTMF digits when prompted for their Date of Birth.

#### 6.7.2 Termination of digit strings using the pound sign

Any state prompting for input of which the DTMF equivalent is a digit string, such as the <<u>Get Social Security Number> state</u>, should accept the DTMF 'pound' sign as the immediate terminator of such a string. Naturally, this 'pound' sign should not be taken as part of the actual input or passed on as such to other parts of the application or any databases; it is merely an indicator that the digits before it form the complete numeric input. For example, while 1-5-0-0-0 indicates \$150.00 in states collecting dollar amounts, input of the form 1-5-0-0-0-# is a valid indicator as well of that same amount.

Single-digit DTMF equivalents—such as '1', '2', '3', etc. for menu options—do not allow a terminating character.

#### 6.7.3 Invalid DTMF input should be rejected

Any input that does not match to a menu option or other command, or does not match to numeric input prompted for at that point, should be rejected by the application, and lead to the application entering a retry. For example, when a state has only four menu options with DTMF equivalents '1' through '4', we should enter a rejection if someone enters '5' at that point. Another example would be a state asking for a sequence of digits: if someone provides DTMF input that contains an asterisk in the sequence, we should reject that input as well. (An alternative would be to go to *Help* in that situation, since '\*' is the DTMF equivalent for it, but it's probably better to just reject digit-strings containing an '\*'.) As outlined in the paragraph 6.7.2 above, the DTMF 'pound' sign should be accepted as a valid terminator of digit strings.

Please note that DTMF equivalents of global commands should always be accepted, even if they are not explicitly offered by any of the prompts in a given state. Examples of these are the 'star' sign for *Help* and '0' for an *Associate*.

#### 6.7.4 End-of-DTMF timeout

The application's response time to DTMF input should always be as short as possible, but will depend at any point on whether the DTMF input given so far in a particular state is either clearly *unfinished*, or is *ambiguous*.

An example of clearly unfinished DTMF input would be a caller having entered '1' in a state where digit strings of various lengths can be collected, with the shortest input being a single digit. In this situation we give the caller *n* seconds to enter the remainder of a possible multidigit string, where *n* is specified by some *inter-digit timeout* parameter. After each non-final digit entered by the caller, a countdown will start with a duration indicated by this parameter. If the countdown runs out before the caller has entered the next necessary digit, the application will go into a rejection.

Once the caller has entered the number of digits required to make the input complete—which is 9 digits in the case of an SSN, or 10 digits in case of a US phone number including area code—the application could take that input immediately and parse it, without running the countdown again. However, because the caller may enter the '#' sign to terminate the string, we will look at two variables to determine whether or not we indeed terminate the digit string based upon satisfaction of the number of digits alone:

 Fixed-length versus not-fixed-length digit strings. If the expected digit-string is of a fixed length, then we can terminate the string as soon as we have reached the correct number of digits. If its length varies, then we cannot, unless we have reached the maximum allowable length.

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2) Next state being a collection state or not. If the next state in the application is another collection state, and we are not using an inter-digit timeout after the last digit in a fixed-length or maximum-length string, then we run the risk that any '#' terminator entered by the caller will not get detected until the application has moved on to that next collection state. We do not have this risk if the next state is not listening for input, for example a database hit, or a play-message with barge-in turned off. Only where necessary, we eliminate this risk by using the inter-digit timeout even after the last digit of fixed-length or maximum-length string.

In short: we will terminate finished fixed-length and maximum length digit-strings *immediately* when the next state is *not listening for input*, and when the next state *is a collection state*, then for the maximum duration of the *inter-digit timeout* we will wait for a possible '#' terminator. When a '#' terminator is detected, we also *immediately* terminate the string.

Unfinished DTMF input can be ambiguous. This is the case when the digit(s) entered so far can be interpreted as *complete input* for other options or other numeric input. While the input could be considered complete under one interpretation it is *incomplete* under another interpretation, e.g. someone entered a '0' as the first digit of their Social Security Number, but '0' is also used to request an Associate. In this situation too, we use the *inter-digit timeout* to wait for possible further input, unless we have reached the maximum length.

#### 6.7.5 Key-ahead

In any case, when we know that DTMF input is complete for a given context, the application should respond immediately and not run an end-of-DTMF-input countdown. If we were to introduce such a delay after each complete DTMF input, then we would seriously hinder the ability of power-users to comfortably 'key-ahead' through menus.

The so-called 'key-ahead' feature automatically works because of the zero-length timeout upon unambiguous DTMF input. As soon as the caller hits one of the numbers on the keypad to choose a menu option, the application takes that digit and moves to the next state accordingly. If that response to the DTMF input takes a fraction of a second and the next state is a collection state again, then this next state will automatically take the next digit if it is a voice menu or the next sequence of digits if it is expecting a digit string. If the next state was a database hit instead, for example, then no input will be accepted during the database hit (because the app is not listening for anything), and once the application returns to a collection state, further input is listened for from then on. This means that if that database hit happened to have sub-zero response time, the user could have run right over it using 'key-ahead' and never noticed anything. No key-ahead is possible over database hits that need more time, or over play-states that have barge-in turned off. Naturally, over states expecting variable-length digit-string input, 'key-ahead' can only be achieved by using the '#' terminator.

# 6.8 Digit-String Playback

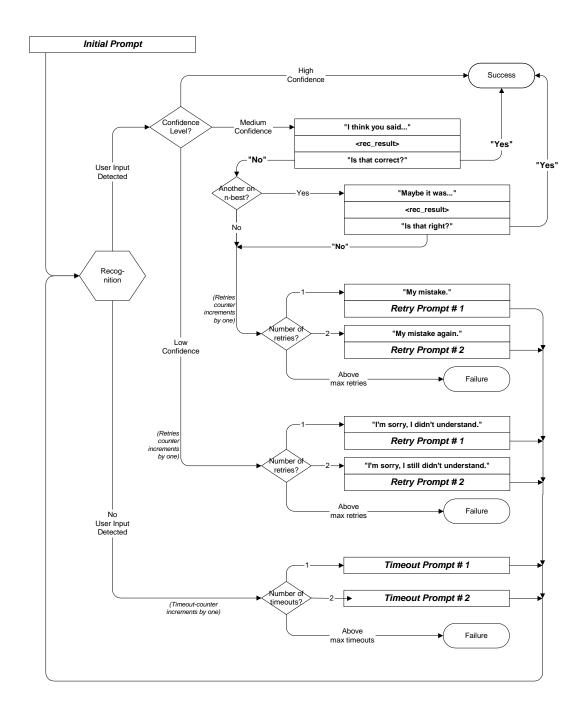
Variable digit-strings to be presented to the caller will be passed through a global routine that builds prompt lists to fluently play back Social Security Numbers. Valid input to this function is a string of digits, where a hyphens and spaces can be used to indicate grouping. For example: "017-85-3229". For each hyphen or space, the routine will insert a pause. The prompt set to be used for this consists of the following 1,231 prompts:

```
1,000 prompts: "...0 0 0, ..." through "...9 9 9, ..." (Non-final intonation) 100 prompts: "...0 0, ..." through "...9 9, ..." (Non-final intonation) 100 prompts: "...0 0." through "...9 9." (Final intonation) 10 prompts: "0..." through "9..." (Rising intonation) 10 prompts: "...0, ..." through "...9, ..." (Non-final intonation) 10 prompts: "...0." through "...9." (Final intonation) 1 prompts: 1/4 second silence.
```

# 6.9 Event Logging

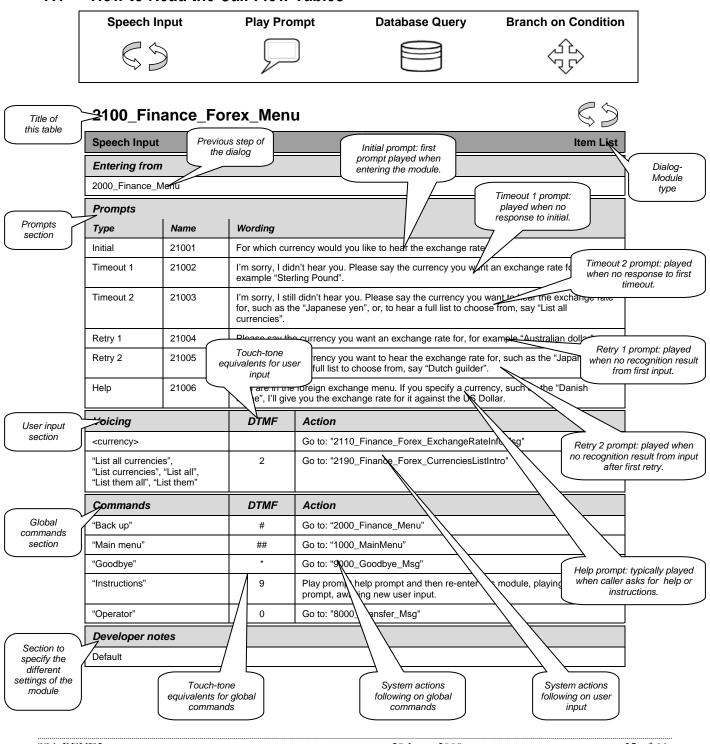
Throughout all the User Interface Specifications, each state calls out the event logging that is unique to that state. For an overview of all of Event Logging, including global behavior for events such as what to do if an info token is not available; see the Event Logging section in the Functional Requirements Specification document.

# 6.10 Internal DialogModule Functionality



# **Chapter 7: Detailed Dialog Specification**

### 7.1 How to Read the Call-Flow Tables



### 7.2 Call-Flow Tables

### DB0000\_Ping\_System

		Database Query	
Ping system upon entry to ensure the presence of the back end			
Entering from			
N8NN Main Menu			
Condition	Action		
	Go to: <u>BR1000 System And Operator Availability</u>		
Event logging			
AltNameCollected = Fa	lse; NeedAssistanceWith = NULL		

# BR1000\_System\_And\_Operator\_Availability

		Branch on Condition
Branch of availability of system and operators.		450
Entering from		
DB0000_Ping_System		
Condition	Action	
IF System is unavailable	Go to: BR3100_AfterHours_Check	
	NeedAssistanceWith = SysUnavailable	
Else	Go to:BR1900 Check Null Condition	
Event logging		

# PP1500\_Getting\_Help\_Operator

# **Play Prompt** Call needs assistance from live operator

#### **Entering from**

DM3000\_Check\_AOR, BR8000\_DB\_Request\_Validate\_1st

Prompts				
Message Numbers	Condition	Name	Wording	
15005	NeedAssistanceWith = BadAOR	15001	Alright. To make sure we have your most recent address on file, I'll connect you with an agent. They'll be able to help you with this.	
15006	NeedAssistanceWith = ValidationFailure	15002	I'm sorry, but I wasn't able to process your request. Let me connect you to someone who can help you with this. Please hold while I transfer your call.	
15007	NeedAssistanceWith = AccountBlocked	15003	Our records show that you requested that your account be blocked from access by this automated system, as well as by the Internet, even with a password, so I'll need to send you to an agent to complete this transaction. If you want to unblock your account, the agent must handle that as well. Hold on while I connect you to someone who can help you with this.	
15008	NeedAssistanceWith = SysUnavailable	15004	I'm sorry, but the system is unavailable at this time. Please hold while I transfer your call to someone who can help you.	
15009	NeedAssistanceWith = MaxNameRecognitionFai lures	15005	Let me connect you with someone who can help you. Please hold while I transfer your call.	
15010	NeedAssistanceWith = MaxTimeout	15006	<default> Let me connect you to an agent who can help you. Please hold while I transfer your call.</default>	
15011	NeedAssistanceWith = MaxRetry	15007	<default> Let me connect you to an agent who can help. Please hold while I transfer your call.</default>	
15012	NeedAssistanceWith = MaxHelp	15009	You know what? Let me connect you to an agent who can help. Please hold while I transfer your call.	
15013	NeedAssistanceWith = UserRequestedAgent	15008	Sure. One moment. I'll transfer you to someone who can help.	

Condition	Action
Always	Go to: [TRXF TO AGENT]

### Event logging

#### Developer notes

No barge-in

## **BR1900 Check Null Condition**



Entering from			
BR1000 System And Operator Availability			
Condition	Action		
If TVDC Items to collect= 0	Go to: BR3999 Social Security Check Condition		
If TVDC items else Go to: P2000_Standard_Greeting			

			Play Prompt	
Standard Greeting				
Entering from				
BR1900 Check Null	<u>Condition</u>			
Prompts				
Message Number	Condition	Name	Wording	
20004	Entering from SpeakFreely N8NN AND Task=BEVE	20004	I'd be happy to help you get a Benefits Verification letter. To do that, I'll need to ask you up to five questions.	
20005	Entering from SpeakFreely N8NN AND Task=MRC	20005	I'd be happy to help you get a replacement Medicare card. To do that, I'll need to ask you up to five questions.	
Condition	Action			
Always	Go to: DM3000 Check AOR			
Event logging				
Developer notes				
No barge-in	_			

# DM3000\_Check\_AOR

	YesNo	0
Check if the caller's address of record is correct		

#### Entering from

P2000 Standard Greeting

Prompts				
Message Numbers	Туре	Name	Wording	
30020	Initial	300010	To get started, I want to make sure I'll be sending it to the right place. Have you been at the same mailing address for at least a month?	
30021	Retry 1	300020	< default global .> For the past 30 days, have you been at the same mailing address? Please say "YES" or "NO".	
30022	Retry 2	300030	< default global > If you have been at the same mailing address for at least a month press one. Otherwise, press two	
30023	Timeout 1	300040	I'm sorry but I didn't hear you and I want to make sure you'll receive the mail I send. Have you been at the same mailing address for at least a month? Please say "YES" or "NO".	
30024	Timeout 2	300050	I'm sorry but I still didn't hear you. Please answer "YES" or "NO". For the past 30 days, have you been at the same mailing address?	
30025	Help	300060	Sure. If you've moved recently or your mailing address has changed, it may not be up to date in our records. Have you been at the same mailing address for at least a month? Please answer "YES" or "NO". If you're unsure what to answer, say "Agent" and I'll connect you with someone who can help.	

Option	Vocabulary	DTMF	Action	Confirm.
Yes	"Yes"	1	Go to: BR3999 Social Security Check Condition	Never
	"[Yes] I have"			
No	"No [I haven't]"	2	NeedAssistanceWith = BadAOR	Never
	"No [I have not]"		Go to: DB3050 Check AOR Ping	
	,			

DialogModule parameters				
Parameter	Value			
after_end_of_speech_timeout	500 ms			
before_begin_of_speech_timeout	7,000 ms			
allowing_barge_in	True			

## **Event logging**

#### Developer notes

There are no special developer notes for this DM

# DB3050\_Check\_AOR\_Ping

		Database Query	
Message to host for Mi			
Entering from			
DM3000_Check_AOR			
Condition	Action		
	Go to: BR3100_AfterHours_Check		
Event logging			

# BR3100\_AfterHours\_Check

	Branch on Condition	
Branches on whether operators are standing by.		
Entering from		
DB3050_Check_AOR_Ping BR8000_DB_Request_Validate_1st		
Condition	Action	
If During Hours	Go to: PP1500 Getting Help Operator	
IF After Hours Go to: DM11000 ReturnToMain_or_HangUP		
Event logging		
Pass NeedAssistanceWith value onto next state		

# **BR3999 Social Security Check Condition**

Entering from		
DM3000_Check_AOR, BR190	0 Check Null Condition	
Condition	Action	
If SSN = null	Go to: 4000_Get_SS_Number	
If SSN else	Report V Transactions per module note, Go to: <u>BR4005 Get DoB Check Condition</u>	
Module Notes		
V-MEDI-SSN_1-(duration),T-MEDI-0000-(duration)		

# 4000\_Get\_SS\_Number

# Social Security DialogModule™



Get the callers Social Security Number

#### Entering from

**BR3999 Social Security Check Condition** 

Prompts	Prompts				
Message Number	Туре	Name	Wording		
54201	Initial	400010	Please say your Social Security number like this: 1 2 3 – 4 5 – 6 7 8 9, or enter it on your keypad.		
54202	Retry 1	400020	[Global Default] Please say your nine digit social security number quickly like this: 1 2 3 – 4 5 – 6 7 8 9, or enter it on you keypad.		
50203	Retry 2	400030	< default global > Try entering it on the telephone keypad.		
50204	Timeout 1	400040	sorry. I didnt hear anything. Please enter or say your nine digit social security number now.		
50205	Timeout 2	400050	I'm sorry, but I still didn't hear anything. Try saying your social security number one digit at a time. It works best if you speak at a normal pace. For example: 1 2 3 – 4 5 – 6 7 8 9.		
50206	Help	400060	You can tell me your nine digit social security number by simply saying it one digit at a time. For example: 1 2 3 – 4 5 – 6 7 8 9. It works best if you don't use double digit numbers like sixty-seven or eighty-nine. Please try it again now.		

Option	Vocabulary	DTMF	Action	Confirm.
SSN	<ssn></ssn>	<ssn></ssn>		Always

Confirmation pro	Confirmation prompts						
Message Number	Option	Name	Wording	Result			
50207	SSN	400070	This is important, so I want to make sure I have it right. Your social security number is:				
50208		400070b	Okay now I think I've got it right. Your social security number is:				
		<ss_num></ss_num>	CPR	123-45-6789			
50209		400071	Is that right?	This is important, so I want to make sure I have it right. Your social security number is: 1 2 3 – 4 5 – 6 7 8 9. Is that right?			
40015	Retry 1	400080	Sorry. I didn't catch that. Please say "YES" if I have the right number.	Sorry. I didn't catch that. Please say "YES" if I have the right number. 1 2 3 – 4 5 – 6 7 8 9. Is that right?			
40016	Timeout 1	400090	I wasn't sure if you said anything. Please say "YES" if I have the right number.	I wasn't sure if you said anything. Please say "YES" if I have the right number. 1 2 3 – 4 5 – 6 7 8 9. Is that right?			

Confirmation Option	Vocabulary	DTMF	Action	Confirm.
Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	Go to:BR4005 Get DoB Check Condition	Never

No	"No [it isn't]" "[No] that's not right"	2	Re-enter Dialog Module per default behavior	Never
DialogModule parameters Parameter		Value		
after_end_of_speech_timeout		2,000 ms		
before_begin_of_speech_timeout		7,000 ms		
allowing_barge_in		True		

#### **Event logging**

Fill semantic item <SS\_Num>

#### DialogModule Notes

- · Area, group or serial number containing only zeros are invalid
- Area numbers greater than or equal to 800 are invalid
- "Dashes" and "hyphens" should be ignored when uttered by the caller, but these utterances may be discarded by the recognizer itself
- DTMF and speech expect 9 digits. It may be possible to speak more than 9 digits, but only nine digits will be recognized

Note: Point to non-standard grammar that includes Natural Numbers

Set Confidential Flag to TRUE

#### **BR4005 DOB Check Condition**

Entering from  DM4000 Get SS Number, BR3	3999 Social Security Check Condition			
Condition	Action			
If DOB = null	Go to: 5000 Get DOB			
If DOB else	Report V Transactions per module note, 400- Name Check Condition			
Module Notes				
V-MEDI-DOB_1-(dura	tion),T-MEDI-0000-(duration)			

## 5000\_Get\_DOB

# Date DialogModule™ Get the callers Date Of Birth

#### Entering from

**BR4005 DOB Check Condition** 

Prompts			
Message Number	Type	Name	Wording
50010	Initial	500010	And what's your date of birth? [big pause] For example, you can sayMay 5 <sup>th</sup> , 1957.
50011	Retry 1	500020	< default global .> Please tell me your birth date again. It works best if you speak at a normal pace.
50012	Retry 2	500030	< default global > Try saying the month followed by the date and the year you were born. For example July 4th, 1976.
50013	Timeout 1	500040	Sorry, I didn't hear you. Tell me your birth date again.
50014	Timeout 2	500050	I'm sorry, but I'm still having trouble hearing. I need the month, day and year for your birthday. You know likeJuly 4th, 1976.
50015	Help	500060	Aside from your social security number, I'll need your date of birth. You can say this in a number of ways. For example you can say "July 4 <sup>th</sup> 1976", or "the fourth of July, 1976" Go ahead. What's <i>your</i> date of birth?

Option	Vocabul	DTMF	Action	Confirm.
	ary			
Date	<date></date>	<>		Always

Confirmation pro	Confirmation prompts					
Message Number	Option	Name	Wording	Result		
50016	Date	500070	Okay, so that's::			
		<date></date>	CPR	January 12 <sup>th</sup> 1931		
50017		500071	Is that right?	Okay, so that's: <january 12<sup="">th, 1931&gt;. Is that right?</january>		
50018	Retry 1	500080	Sorry. I didn't catch that. Please say "YES" if I have the right date.	Sorry. I didn't catch that. Please say "YES" if I have the right date. <january 12<sup="">th, 1931&gt;. Is <i>that</i> right?</january>		
50019	Timeout 1	500090	I wasn't sure if you said anything. Please say "YES" if I have the right date.	I wasn't sure if you said anything. Please say "YES" if I have the right date. <january 12<sup="">th, 1931&gt;. Is that right?</january>		

Confirmation Option	Vocabulary	DTMF	Action	Confirm.
Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	Go to: 400- Name Check Condition names_to_collect = LAST_FIRST	Never
No	"No [it isn't]" "[No] that's not right"	2	Re-enter Dialog Module per default behavior	Never

DialogModule parameters					
Parameter		Value			
date_reference_date		System date [yyyymmdd]			
date_range_allowed_earliest		19000101			
date_range_allowed_latest		Today [yyyymmdd]			

date_range_expected_earliest	Today – 75 years [yyyymmdd]
date_range_expected_latest	Today – 25 year [yyyymmdd]
date_disambiguation_mode	ASSUME_NOTHING
after_end_of_speech_timeout	1,250 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

#### **Event logging**

Fill semantic item <Date\_Of\_Birth>

#### DialogModule Notes

- Although the application does not explicitly guide callers to use DTMF for the Date of Birth entry, it
  is enabled.
- Date entry should be in the form of MM/DD/YYYY to be accepted.
- Trim the grammar so that the day of the week is not allowed

#### Set Confidential Flag to TRUE

#### **400- Name Check Condition**

400- Name Check	Condition				
Entering from					
BR4005 Get DoB Check Condit	ion. 5000 Get DOB				
Condition	Action				
If First Name, Last Name = null	Set names to collect to Last_First; Go to: 500_EntryPrompt				
If First Name = else Last Name = null	Report V Transactions per module note, Set names to collect to Last; Go to: 1000-EntryPrompt-Msg				
If First Name = null and Last Name = else	Report V Transactions per module note, Set names to collect to First, Go to: 1020 SayFirstName				
If First Name, Last Name = else	Report V Transactions per module note, Go to: BR5500_Alt_Name_Collected				
Module Notes					
First: V-MEDI-FN_1-(duration),T-MEDI-0000-(duration)					
Last: V-MEDI–LN_1-(duration),T-MEDI-0000-(duration)					

# 500\_EntryPrompt

				Play Prompt			
Explain name collecti	Explain name collection ground rules to user						
Entering from							
400- Name Check Co	ondition on the state of the st						
Prompts							
Message Number	Name		Wording				
50301	default_name_entry	prompt	Now I need your	full name. Let's start with your LAST name.			
Condition		Action					
If "names_to_collect" = FIRST or FIRST_LAST		If spelling_only = TRUE		Go to: 1030_SpellFirstNameplaying initialprompt2			
				Go to: 1020 SayFirstNameplaying initialprompt1			
If "names_to_collect" = LAST or LAST_FIRST		If spelling_only = TRUE		Go to 1010_SpellLastName: playing initialprompt2			
		Else		Go to:1000 SayLastName playing initialprompt1			
Module Settings							
No barge-in							
Note: This is the parameter entry prompt and can be user-specified.							
Developer notes							
This state shares prompting with KBA 1000_EntryPrompt							

# 1000\_SayLastName

Get the user's last name.

#### CustomContext



#### Entering from

500\_EntryPrompt; DM9000\_Check\_For\_Alt\_Name, 400- Name Check Condition

Prompts Message Number	Wording				
50304	Type Initial 1	If from 500_EntryPrompt		Name  default_name_sayl ast_collection_initia lprompt	For now I just need your last name – I'll get your first name later. Please SAY and then SPELL JUST your last name. For example, if your last name was Kusack, you'd say Kusack, K U S A C K. Go ahead.
50305	Initial 2	If from DM9000		default_name_saya ndspelllast_collecti on_initialprompt3	Please say your OTHER LAST name including the spelling. [Short Pause] For example if it was Jones, you'd say "Jones, J O N E S". Go ahead.
50307	Timeout 1	default_name_saylast_collection_noinputp rompts1			Sorry, I didn't hear you. Please give me the last name with the spelling.
50308	Timeout 2	default_name_saylast_collection_noinputp rompts2			I'm afraid I still can't hear you. Please give me the last name and spell it.
50309	Retry 1	If originally from 500_Entr yPrompt	m O_Entr		<default global=""> . Please say JUST your last name including the spelling.</default>
50310	Retry 1	If originally from DM9000			<default global=""> Please SPELL your other last name for me, like this: "S M I T H"</default>
50312	Help	default_name_saylast_collection_helppro mpts1		t_collection_helppro	I need you to say the last name and then spell it for me. For example, if the last name was O'Neal, you'd say "O'Neal O N E A L".

Condition	Sub condition	DTMF	Action	Confirm.
Confidence>=high confidence level	IF names_to_collect = LAST_FIRST		Go to: "1020_SayFirstName"	Never
(High Confidence)	ELSE (we're done, see note below)		Go to: "1040_ConfirmName"	
Confidence <high confidence="" level<="" td=""><td></td><td></td><td>Go to: "1010_SpellLastName"</td><td></td></high>			Go to: "1010_SpellLastName"	
(Low and Medium Confidence)				
Failure and Last Name			Go to: "3000_ExitFailurePrompt"	
Failure and Alt Name			Go to: "PP6000 Ready To Submit"	

**Module Settings** 

Note: High confidence → Accept, Medium and Low Confidence → Spell. In the case of low confidence, we ask spelling directly rather than reprompt. Therefore, Nomatch 1 is only played when a caller utters a global command and then negatively confirms a global command.

Note: Test always\_ask\_spelling parameter. If true, Go to: 1010\_SpellLastNameregardless of confidence score.

Note: Test overallconfirmation parameter. If overallconfirmation = NEVER , Go to 4000\_ExitSuccessPromptsinstead of going to 1040\_Confirmname.

Note: High Confidence should be set to .875

Deactivate global "AGENT" and "HELP" grammar in this DM. This will remove all agent vocabulary items described in section 6.6 from this collection (e.g. "agent", "representative", "operator", etc.)

#### Developer notes

#### Set Confidential Flag to TRUE

# 1010\_SpellLastName

# Ask user to spell their last name.

#### Entering from

1000 SayLastName, 500 EntryPrompt

Prompts					
Message Number	Туре	Name	Wording		
50314	Initial 1 (On entry from 1000_SayLastName) spellingonly = FALSE.	default_name_spelllast_colle ction_initialprompt1	Now please JUST spell that for me, and spell it quickly.		
10019	Initial 2 (On entry from 500_EntryPrompt) spellingonly = TRUE.	default_name_spelllast_colle ction_initialprompt2	Please spell your last name, one letter at a time.		
10020	Spellingonly=TRUE & namestocollect = FIRST_LAST	default_name_spelllast_colle ction_initialprompt3	Now, spell your "last" name.		
50315	Timeout 1	default_name_spelllast_colle ction_noinputprompts1	Sorry I didn't hear you. Using only the letters of the alphabet, please spell your last name quickly, one letter at a time.		
50318	Timeout 2	default_name_spelllast_colle ction_noinputprompts2	I'm afraid I still can't hear you. It works best if you use ONLY letters and speak at a quick pace. For example, to spell 'Smith, you don't need to say S as in Sam, M as in Michael, just say S M I T Htry it again.		
50319	Retry 1	default_name_spelllast_colle ction_reprompts1	< default global > Using only the letters of the alphabet, please spell your last name quickly. For example, if your name was O'Connor, you would say O C O N N O R. Please spell the last name now.		
50322	Retry 2	default_name_spelllast_colle ction_reprompts2	< default global > If the last name has an apostrophe, space or a hyphen in it, you can just skip that. For example, if it's a two part name like Folsom hyphen Jones, you should just drop the hyphen and not worry about capital letters. Just say f-o-l-s-o-m-j-o-n-e-s. Try spelling the last name one more time.		
50323	Help	default_name_spelllast_colle ction_helpprompts1	I need you to spell just the last name. If the last name has an apostrophe, space or a hyphen in it, you can just skip that. It works best if you use ONLY letters and speak at a quick pace. For example, to spell Smith, you don't need to say S as in Sam, M as in Michael, just say S M I T H try it again. Please spell the last name for me now.		

Condition	Action	
If names_to_collect = LAST_FIRST	Go to: 1020 SayFirstName	Never
ELSE	Go to: 1040 ConfirmName	
failure	Go to: 3000 ExitFailurePrompt	

Module Settings	
Play success prompt.	

#### Developer notes

Set Confidential Flag to TRUE

## 1020\_SayFirstName

# Get the user's first name.

#### Entering from

500 EntryPrompt,1000 SayLastName ,1010 SpellLastName, 400- Name Check Condition

Prompts	Prompts						
Message Number	Туре	Name	Wording				
50324	Initial	default_name_sayfirst_collection_initi alprompt	Now say and spell your FIRST name. [Short Pause] For example if your first name was Robin, you'd say "Robin, R O B I N". Go ahead.				
50325	Timeout 1	default_name_sayfirst_collection_noi nputprompts1	Sorry, I didn't hear you. Please give me your first name with the spelling.				
50326	Timeou 2	default_name_sayfirst_collection_noi nputprompts2	I'm afraid I still can't hear you. Please give me your first name and spell it.				
50327	Retry 1	default_name_sayfirst_collection_no matchprompts1	<default global=""> Please give me your first name including the spelling.</default>				
50328	Help	default_name_sayfirst_collection_hel pprompts1	I need you to say your first name and then spell it for me. For example if your first name was Nick, you'd say "Nick, N I C K".				

Condition	Sub Condition	Action	Confirm.
Confidence>=high confidence level	IF names_to_collect =FIRST_LAST	Go to: "1000 SayLastName"	Never
(High Confidence)	Else (see note below)	Go to: "1040_ConfirmName"	
Confidence <high confidence="" level<="" td=""><td></td><td>Go to: "1030_SpellFirstName"</td><td></td></high>		Go to: "1030_SpellFirstName"	
(Low and Medium Confidence)			
failure		Go to: "3000_ExitFailurePrompt"	If necessary

#### **Module Settings**

Note: High confidence → Accept, Medium and Low Confidence → Spell. In the case of low confidence, we ask spelling directly rather than reprompt. Therefore, Nomatch 1 is only played when a caller utters a global command and then negatively confirms a global command.

Note: Test "alwaysaskspelling" parameter. If true, Go to: 1030\_SpellFirstNameregardless of confidence score.

Note: Test overallconfirmation parameter. If overallconfirmation = NEVER, Go to 4000\_ExitSuccessPromptsinstead of going to 1040 Confirmname.

Note: High Confidence should be set to .85

Deactivate global "AGENT" and "HELP" grammar in this DM. This will remove all agent vocabulary items described in section 6.6 from this collection (e.g. "agent", "representative", "operator", etc.)

#### Developer notes

#### Set Confidential Flag to TRUE

# 1030\_SpellFirstName

# Ask user to spell first name.

### Entering from

,1020\_SayFirstName, 500\_EntryPrompt

Prompts Message Number	Туре	Name	Wording
50329	Initial 1 (on entry from 1020_SayFirstName) spellingonly = FALSE	default_name_spellfirst_colle ction_initialprompt1	Now, please SPELL your first name for me quickly using just the letters in the alphabet.
10032	Initial 2 (On entry from 500_EntryPrompt) spellingonly = TRUE.	default_name_spellfirst_colle ction_initialprompt2	Please spell your first name, one letter at a time.
10033	Initial 3 Spellingonly=TRUE & namestocollect = LAST_FIRST	default_name_spellfirst_colle ction_initialprompt3	Now, spell your "first" name.
50330	Timeout 1	default_name_spellfirst_colle ction_noinputprompts1	Sorry I didn't hear you. Please spell your first name one letter at a time.
50331	Timeout 2	default_name_spellfirst_colle ction_noinputprompts2	I'm afraid I still can't hear you. Using only the letters of the alphabet, please spell your first name now.
50332	Retry 1	default_name_spellfirst_colle ction_reprompts1	Saying just the letters of the alphabet, please spell your first name. For example, if your name were Robin, instead of saying R as in Radar, O as in Oscar, you could just say R O B I N. Go ahead. Spell your first name now.
50333	Retry 2	default_name_spellfirst_colle ction_reprompts2	< default global > Please spell your first name one more time. And remember, please use ONLY the letters of the alphabet and speak quickly. Go ahead.
50334	Help	default_name_spellfirst_colle ction_helpprompts1	I need you to spell just your first name. If your first name has an apostrophe or a hyphen in it, you can just skip that. Now, go ahead and spell your first name.

Condition	Action	Confirm.
names_to_collect = FIRST_LAST	Go to: "1000 SayLastName"	Never
Else	Go to: 1040_ConfirmName	
failure	Go to: DM3000 Check AOR	

#### **Module Settings**

Default: Play success prompt.

#### Developer notes

Set Confidential Flag to TRUE

## 1040 ConfirmName

				YesNo C
Confirm name collectio	n			
Entering from				
1000_SayLastName, 1	010 SpellLastName, 1020	SayFirstName,	1030_SpellFirstName	
Pre-Conditions				
If name to collect = First	st		Start at msg. # 50336,	default_name_lastname
If name to collect = Las	st		Start at msg. # 50339,	default_name_firstname
If name to collect = Firs	st and Last		Start at msg. # 50336,	default_name_lastname
Prompts Message Number	Туре	Name		Wording
50335		Initial on entr	ry	Okay. Let me read that back to you to make sure I've got it right.
50336	Play this series of	default_name	e_lastname	Last name:
	prompts if we need to play out the last name			<lastname> or use TTS</lastname>
50337		default_name	e_spelled	Spelled:
00250				250 ms silence
				<letter (1="" )=""></letter>
00250				250 ms silence
				<letter (2)<="" td=""></letter>
00250				250 ms silence
				<letter (n)<="" td=""></letter>
00250				250 ms silence
50338	If no audio is available for the last name, play this prompt instead	default_name_lastnamespelled		Last name spelled
50339	Play this series of prompts if we need to play out the first name	default_name	e_firstname	First name:
				<firstname> or use TTS</firstname>
50340		default_name	e_spelled	Spelled:
00250				250 ms silence
				<letter (1="" )=""></letter>
00250				250 ms silence
				<letter (2)<="" td=""></letter>
00250				250 ms silence
				<letter (n)<="" td=""></letter>
00250				250 ms silence
50341	If no audio is available for the first name, play this prompt instead	default_name	e_firstnamespelled	First name spelled
50342		default_confi part2	irmation_initialprompt_	Did I get that right?

50343	Timeout 1	default_confirmation_noinputprom pts1	Sorry I didn't hear you. Did I get the name right? Please say yes or no.
50344	Timeout 2	default_name_confirmname_collec tion_noinputprompts2	I'm afraid I still can't hear you. Did I understand your name correctly?
50345	Retry 1	default_name_confirmname_collection_reprompts1	< default global > Please say "yes" or "no".
50347	Retry 2	default_confirmation_reprompts2	< default global > If 'yes' press one, otherwise press two.
50346	Help	default_name_confirmname_collec tion_helpprompts1	If I got it right, just say "yes", otherwise if I made a mistake, say "no". Now, did I get it right?

Option	Vocabulary	DTMF	Action	Confirm.
Yes	"Yes [you did]" "You did" "[Yes] [that's] right" "[That's] correct" "okay"	1	Go to: 4000 ExitSuccessPrompts	Never
No	"No [you didn't]" "[No] that's wrong" "[No] that's not right" "wrong" "no you did not"	2	Go to: 1050 ConfirmationApology	Never
failure			Go to: 3000 ExitFailurePrompt	

#### **Module Settings**

Note: Play the series of prompts in the order specified by the parameter "namestocollect".

Note Also: The failure prompt for this state is only played in the case where the DM exited due to maxnoinputs or maxnomatches. Suppress YesNo success prompts.

Developer notes

No barge-in

# 1050\_ConfirmationApology

				Play Prompt	
User rejected name, apologize, and set up a second try.					
Entering from					
1040_ConfirmName					
Prompts					
Message Number	Con	dition	Name	Wording	_
50348	Alwa	default_name_confirmationap Sorry about that. Le			
Condition		Action			
If names_to_collect = LAST		Go to: <u>1090</u>	RespellLast		
If names_to_collect = FIRST Go to: 1070 RespellFirst					
If names_to_collect = LAST_FIRST Go to: 1060_GetMistake or FIRST_LAST					
Module Settings					

#### Developer notes

# 1060\_GetMistake

# Isolate the mistake. First Last or Both

### Entering from

1050\_ConfirmationApology

Prompts	Prompts					
Message Number	Туре	Name	Wording			
50349	Initial	default_name_getmistake_ collection_initialprompt	Which part is wrong? The first name, the last name, or both names?			
50350	Timeout 1	default_name_getmistake_ collection_noinputprompts 1	Sorry I didn't hear you. Which part of the name did I get wrong? "The first name", "the last name", or "both names"?			
50360	collection_noinputprompts what I got v		I'm afraid I still can't hear you. Please tell me what I got wrong: "the first name", "the last name", or "both names".			
50361	Retry 1	default_name_getmistake_ collection_reprompts1	<default global=""> I know I don't have the name right just yet. Please tell me which part is wrong: "the first name", "the last name", or "both names".</default>			
50362	Retry 2	default_name_getmistake_ collection_reprompts2	<default global=""> Which part of the name do I need to fix? Please say 'the first name", "the last name", or "both.</default>			
50363	Help	default_name_getmistake_ collection_helpprompts1	I need to know which name I got wrong to correct it. Just say the part of the name that I didn't catch: "the first name", "the last name", or "both names".			
	Maxnomatch		N/A Play failure prompt and Go to: 3000 ExitFailurePrompt			

Option	Vocabulary	Action		Confirm.
"firstname"	[the]first name		Go to: 1070 RespellFirst	
"lastname"	[the]last name		Go to: 1090 RespellLast	
"both"	Both [of them	If "names_to_collect" = FIRST_LAST	G to: 1090_RespellLast	
	names] the first [name] and the last [name]	If "names_to collect" = LAST_FIRST	Go to: 1090 RespellLast	
failure		Go to: 3000 ExitFailurePrompt		

#### **Module Settings**

#### Developer notes

# 1070\_RespellFirst

	CustomContext //	7
Ask for a respelling of first.	\$	<u> </u>
Enterine from		_

### Entering from

1050 ConfirmationA	pology,1060 GetM	listake, 1	1090_Respe	ellLast			
Prompts Message Number	Туре		Name			Wording	
50367	Initial (if we need spell the first nat previously			default_name_respellfirst_ F collection_initialprompt1			st name for me again. I'll ter if you just say "s" 'Sam". Go ahead.
50369	Timeout 1			ame_spellfirs		Sorry I didn't hear y name one letter at a	ou. Please spell your first a time.
50370	Timeout 2			ame_spellfirs		I'm afraid I still can't your first name now	t hear you. Please spell
50371	Retry 1		default_name_spellfirst_col lection_reprompts1		alphabet, please sp example, if your nan saying R as in Rada	aying just the letters of the ell your first name. For me were Robin, instead of ar, O as in Oscar, just say d. Spell your first name	
50372	Retry 2		default_na lection_re	ame_spellfirs	st_col	< default global > P one more time.	lease spell your first name
50373	Help	Help		default_name_spellfirst_col lection_helpprompts1		I need you to spell just your first name. If y first name has an apostrophe or a hyphen it, you can just skip that. Now, go ahead ar spell your first name	
Option			Vocabulary		DTMF	Confirm.	
<firstname></firstname>			<alpha input=""></alpha>		N/A	Always	
Confirmation Pro Message Number	mpts Option	Name		_	Wor	ding	Result
50374	Confirm		_name_con ompt_part1	firmation_i		v. I think I've got it now.	"Okay. I think I've got it right now. First name spelled <>, Did I get that right?
50341		default ed	_name_first	namespell	First	name spelled:	
50342		default ompt_p	_confirmatio	n_initialpr	Did I	get that right?	
00118	command	default ompt_p	_confirmatio	on_initialpr	I thin	k you said	"I think you said <> Did I get that right?
50342		default ompt_r	_confirmatio	on_initialpr	Did I	get that right?	
Confirmation Options	Vocabulary		DTMF	Action			Confirm.
"Yes"	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correc	1		Go to: <u>400</u>	0 Exit	SuccessPrompts	Never
"No"	"No [it isn't]" "[No] that's not right"		2	Re-enter D behavior	ialog N	Module per default	Never

MaxFailure		N/A	Go to:3000_ExitFailurePrompt	
Module Settings				
Note: Confidence Leve	el should be set to .72	2		
Developer notes				
Set Confidential Flag to TRUE				

# 1090\_RespellLast

# Get the user's first name.

#### Entering from

1050 ConfirmationApology, 1060 GetMistake

TOOO_COMMITMATION/COOK					
Prompts Message Number	Туре	_	Wording		
50379	Initial (if we needed to spell the last name previously	default_name_respelllast_ collection_initialprompt1	Saying just the letters of the alphabet, please spell your last name again.		
50385	Timeout 1	default_name_spelllast_col lection_noinputprompts1	Sorry I didn't hear you. Please spell the last name one letter at a time.		
50386	Timeout 2	default_name_spelllast_col lection_noinputprompts2	I'm afraid I still can't hear you. It works best if you use <i>only</i> letters and speak at a normal pace. For example, to spell 'Smith, don't say S as in Sam, M as in Michael, just say S M I T Htry it again. Please <i>spell</i> your last name for me now.		
50387	Retry 1	default_name_spelllast_col lection_reprompts1	< default global > Saying just the letters of the alphabet, please spell your last name. For example, if your name were O'Connor, you would say O C O N N O R. Please spell the last name now.		
50388	Retry 2	default_name_spelllast_col lection_reprompts2	< default global > If your last name has an apostrophe, space or a hyphen in it, you can just skip that. For example, if you have a two part name like Folsom-Jones, you should drop the hyphen and not worry about capital letters. Just say f-o-l-s-o-m-j-o-n-e-s. Try spelling the last name one more time.		
50389	Help	default_name_spelllast_col lection_helpprompts1	I need you to spell just your last name. If your last name has an apostrophe, space or a hyphen in it, you can just skip that. It works best if you use ONLY letters and speak at a normal pace. For example, to spell 'Smith, you don't need to say S as in Sam, M as in Michael, just say S M I T Htry it again. Please spell your last name for me now.		

Option	Vocabulary	DTMF	Confirm.
<lastname></lastname>	<alpha input=""></alpha>	N/A	Always

Confirmation Pron Message Number	npts Option	Name	Wording	Result
50392	Confirm	default_name_confirmation_initialp rompt_part1	Okay. I think I've got it right now.	"Okay. I think I've got it right now. Last name spelled <>, Did I get that right?
50340		default_name_lastnamespelled	Last name spelled:	
50342		default_confirmation_initialprompt_ part2	Did I get that right?	
00118	command	default_confirmation_initialprompt_ part1	I think you said	"I think you said <> Did I get that right?
50342		default_confirmation_initialprompt_ part2	Did I get that right?	

Option	Vocabulary	DTMF	Action	Confirm.
"Yes"	"Yes [it is]" "[Yes] that's right" "Right"	1	If "names_to collect" = LAST_FIRST Go to: 1070_RespellFirst	Never
	"[That's] correct"		ELSE Go to: 4000 ExitSuccessPrompts	
"No"	"No [it isn't]" "[No] that's not right"	2	Re-enter the dialog module per default behavior	Never
MaxFailure			Go to:3000_ExitFailurePrompt	

### **Module Settings**

Note: Confidence Level should be set to .72

#### Developer notes

Set Confidential Flag to TRUE

3000_ExitFailureP	rompt					
		Play Prompt				
Apologize on exit						
Entering from						
1000_SayLastName, 1010_S 1070_RespellFirst,1090_Res		SpellFirstName, 1040_ConfirmName, 1060_GetMistake,				
Prompts Message Number	Name	Wording				
50393	default_name_exitfailureprompt	I'm sorry I'm having so much trouble with your name.				
Condition	Action					
Go to: <u>BR3100 AfterHours Check</u> NeedAssistanceWith = MaxNameRecognitionFailures						
Module Settings						
No barge-in						
Note: This is the parameter e	kitfailureprompt and can be configured by	setting this parameter.				

# 4000\_ExitSuccessPrompts

			Play Prompt				
Get the user's first name.							
Entering from							
1040_ConfirmName, 1070	RespellFirst, 1090_RespellLast						
Prompts Message Number	Condition	Name	Wording				
00120	If nomatchcount =1	default_successprompts1	Alright.				
50294	If nomatchcount =2 Or confirming Alt Name	default_successprompts2	Got it.				
50295	If nomatchcount =3	default_successprompts3	Thanks for being patient.				
Condition	Action						
Always	Go to: BR5500 Alt Name	Go to: BR5500_Alt_Name_Collected					
Module Settings							

No barge-in

Note: This is the exitsuccessprompts parameter and can be configured by setting this parameter.

# BR5500\_Alt\_Name\_Collected

Branch on Condition							
< <in cell,="" explar<="" th="" this="" write="" your=""><th>ation of this Branch on Condition&gt;&gt;</th><th></th><th>(£)</th></in>	ation of this Branch on Condition>>		(£)				
Entering from							
400- Name Check Condition, 4	000_ExitSuccessPrompts						
Condition	Action						
IF AltNameCollected = True	neCollected = True Go to: PP6000 Ready To Submit						
Else Go to: DM9000 Check For Alt Name							
Event logging							
V-MEDI-OtherLastNa	me_1-(duration), T-MEDI-0000-(duration)						

# PP6000\_Ready\_To\_Submit

	<u> </u>							
Tell caller we're read	Fell caller we're ready to submit information							
		O11						
Entering from								
BR5500 Alt Name	Collected, 1000_Say	<u>/LastName</u>						
Prompts								
Message Number		Name	Wording					
10052	From 4000_ExitSuccess Prompts	60001	I've got everything we need. Hold on while I send off your request.					
10053	From DM9000 or BR 1900	60002	Alright. I've got everything we need. Hold on while I send off your request.					
Condition			Action					
Always			Go to: DB7000 SubmitRequest					
Event logging								
Developer notes								
No barge-in								

# DB7000\_SubmitRequest

		Database Query
Send off callers inf	o for the first time for validation	
Entering from		
PP6000_Ready_T	o Submit	
Condition	Action	
Always	Go to: BR8000 DB Request Validate 1st	
Event logging		

# BR8000\_DB\_Request\_Validate\_1st

	Branch on Condition					
Branch on the return values from DB Dip 1 (DB7000_SubmitRequest_1 <sup>st</sup> )						
Entering from						
DB7000 SubmitRequest						
Condition	Action					
IF DB Returns OK	Go to: PP10000 Task Complete					
Else if DB returns Account Blocked	NeedAssistanceWith = AccountBlocked					
	Go to: BR3100_AfterHours_Check					
IF DB Rejects	NeedAssistanceWith = ValidationFailure					
Go to: BR3100_AfterHours_Check						
Event logging						

# DM9000\_Check\_For\_Alt\_Name

						YesNo	C 5		
Check to se	e if Caller migl	ht be li	sted under	an alt	ternate nam	e			
Entering t	from								
BR8000_DE	3 Request Va	alidate_	<u>1st</u>						
Prompts						I "			
Message N		Type			Name	Wording	Barge-in		
10054		Initial			900010	Some people use another last name, such as a professional or maiden name, that might be listed under this social security number.	No		
10092	ı	Initial2				Do you have another last name? Yes or No.	Yes		
10055	F	Retry 1			900020	< default global.> Would you like me to also check under another last name? Please say "YES" or "NO".	Yes		
10056	D56 Retry 2		Retry 2		900030	< default global > If you think you might be listed under another last name, press one. Otherwise, press two.	Yes		
10057	٦	Timeout 1		Timeout 1			900040	I'm sorry, but I didn't hear anything. Would you like me to also check under another last name? Please say "YES" or "NO".	Yes
55003	٦	Timeout 2			900050	My apologies, but I still didn't hear if you said anything. Please say "YES" if you think you might be listed under another last name, otherwise, say "NO".	Yes		
10058	ŀ	Help			900060	Before I send off your request, I need to know if you might be listed under an alternate last name. For example you may also have a professional name, or maiden name or one from a previous marriage. Please tell me if you'd like me to include another last name with this request. Please say "YES" or "NO".	Yes		
Option	Vocabula	ary	DTMF	Ac	tion		Confirm		
Yes	"Yes [pleas "[Yes] I do"	res [please]" 1 res] I do" res] I would"			Go to: <a href="mailto:1000">1000</a> SayLastName  NOTE: names_to_collect = LAST; AltNameCollected = True				
No	"No [thanks "[No] I don' "[No] I do n' "[No] I wouldn't" "[No] I wou not"	2		Go to: PP6000_Ready_To_Submit  AltNameCollected = True					

DialogModule parameters	
Parameter	Value
after_end_of_speech_timeout	500 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	TRUE (For message 10054 = FALSE) <- Note change from usual setting.
Event logging	

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# Developer notes Set Confidential Flag to TRUE

			Play Prompt				
Acknowledge Task C	Completion						
Entering from							
BR8000_DB_Reque	st_Validate_1 <sup>st</sup>						
Prompts Message Number	Condition	Name	Wording				
10089	Task = BEVE	100001	Okay. You're all set. You should Verification Letter in the mail with th				
10090	Task = MRC	100002	Okay. You're all set. You should Replacement Card in the mail we live in Puerto Rico, please allow delivery.	vithin four weeks. If you			
Condition		Action					
Always		Go to: DM14000_Post_Op	o: DM14000 Post Options				
Event logging							
			<u> </u>	<u> </u>			
Developer notes							
No barge-in							

# DM11000\_ReturnToMain\_or\_HangUP

#### CustomContext



Caller needs assistance with something, but operators are not available. Ask if the caller wants to return to the main menu or hang up.

#### Entering from

BR3100\_AfterHours\_Check

Prompts Message Number	Туре	Condition	Name	Wording
10059	Initial	NeedAssistanceWith = SysUnavailable	1100011	I'm sorry; but the system is currently unavailable. I'm afraid you'll have to try your call again later or try during business hours if you'd prefer to speak with an agent. But, it there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10061		NeedAssistanceWith = BadAOR	1100012	I'm sorry, but I can't be sure if your new address is in the system yet. I'm afraid you'll need to speak with an agent to complete your request. Please call again during business hours. If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10062		NeedAssistanceWith = ValidationFailure	1100013	I'm sorry, but I couldn't process your request. I'm afraid you'll have to call back and speak with an agent during business hours. In the meantime, if there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10063		NeedAssistanceWith = MaxNameRecognition Failures	1100014	Unfortunately there are no agents available at this time. I'm afraid you'll have to call back during business hours. But, if there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10064		NeedAssistanceWith = MaxTimeout	1100015	<default> To speak with an agent, please call back during business hours. If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.</default>
10065		NeedAssistanceWith = MaxRetry	1100016	<default> To speak with an agent I'm afraid you'll have to call back during business hours. If there's anything else you'd like to do, say main menu. Otherwise you can say goodbye, or just hang up</default>
10066		NeedAssistanceWith = UserRequestedAgent	1100017	Unfortunately, our offices are closed. To speak with an agent, please call back during business hours. If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10067		NeedAssistanceWith = MaxHelp	1100019	You know what? You might want to go through this with one of our agents. I'd suggest you try your call during business hours. If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.

10068			NeedAssistance AccountBlocked				With	=	1100021	Our records show that you requyour account be blocked from a this automated system, as well. Internet, even with a password, need an agent to complete this If you want to unblock your according agent must handle that as well. Unfortunately, our offices and specagent during business hours. In time, if there's anything else you do, say "MAIN MENU". Otherwisay "GOODBYE" or just hang-u	ccess by as by the so you'll transaction. bunt, the beed so ak with an the mean a'd like to se you can
10069			Retry 1				1100020	< default global > I'm afraid you'll have to call back and speak with an agent during business hours. In the mean time, if there anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.			
10071			Retry 2					1100030	< default global > Unfortunately, there are no agents available at this time. I'm afraid you'll have to call back during business hours. But if there's anything else you'd lik to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang up.		
10072			Timeout 1					1100040	Sorry, I didn't hear you and I'm afraid our offices are currently closed. To speak with an agent, you'll have to call back. If there anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.		
10073			Timeout 2				1100050	Sorry, I still didn't hear you and our offices are currently closed. with an agent, you'll have to cal you'd like to return to the main r "MAIN MENU". If you'd like to e you can say "GOODBYE" or sin up.	To speak I back. If nenu, say nd your call		
10074			Help						1100060	At this point, I'm afraid our office closed, so you'll have to call bad like to speak with an agent. But have two other options. You car "MAIN MENU", or you can end saying "GOODBYE" or simply h	ck if you'd you do n either say the call by
Option	Vocab	oulary		DTMF	=	Action	)				Confirm.
MainMenu	"Main N	/lenu"		1		Go to: F	PP1	2000	Thanks_Be	fore_Return	If necessary
Goodbye	"Goodb	ye"		2		Go to: F	PP1	3000	_Goodbye		If necessary
Confirmation Mossage Nu		pts		Optio		Name		14/0	rdina		
· ·			MainN		110008	0	You said you wanted to return to the 'Main Menu', is that right?				
10076 Good			bye	1100081 You want to end this call; Is that right?			I this call; Is that right?				
	Confirmation Vocabulary			Dī	TMF	C	onfii	rm.			
"Yes"	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"				1	Ne	ever	20 Ivas 20		(2 of ((	

"No"	"No [it isn't]"		2	Never			
	"[No] that's not right"						
DialogModule parameters Parameter			Value				
after_end_of_s	peech_timeout		1,000 r	1,000 ms			
before_begin_c	of_speech_timeout		7,000 ms				
allowing_barge	_in		True				
Event loggin	g						
Developer notes							
On DM11000 M	MaxTimeout, Max Retry or Max	Help Go	to: <u>PP13</u>	3000 Goodbye			
Disable Global	Agent Command						

# PP12000\_Thanks\_Before\_Return

	Play Prompt								
Thank caller before ret	Thank caller before returning them to the main menu (N8NN).								
Entering from									
DM11000_ReturnToM	ain_or_HangUP								
Prompts									
Message Number	Name	Wording							
10077	120001	120001 Sure. I'll transfer you now. [Closing Audio Icon]							
Condition	Action								
Always	Go to: [TRXF	F_N8NN]							
Event logging	Event logging								
Developer notes									
No barge-in									

# PP13000\_Goodbye

			Play Prompt	
Say goodbye to the ca	aller.			
Entering from				
DM11000_ReturnToM	lain or HangUP			
Prompts				
Message Number	Name	Wording		
10078	130001	Goodbye. [Closing Audio Icon]		
Condition	Action			
Always	Go to: [HANG UP]			
Event logging				
Developer notes	_		_	
No barge-in				

# DM14000\_Post\_Options

## CustomContext



Ask if the caller wants to return to the main menu or hang up.

"No [it isn't]"

"[No] that's not right"

#### Entering from

PP10000 Task Complete

Prompts			
Message Number	Туре	Name	Wording
10079	Initial	1400010	If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10081	Retry 1	1400020	< default global.> If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hangup.
10082	Retry 2	1400030	< default global > If you'd like to return to the main menu, say "MAIN MENU". If you'd like to end your call you can say "GOODBYE" or simply hang up.
10083	Timeout 1	1400040	Sorry, I didn't hear you. If there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up.
10084	Timeout 2	1400050	Sorry, I still didn't hear you. If you'd like to return to the main menu, say "MAIN MENU". If you'd like to end your call you can say "GOODBYE" or simply hang up.
10085	Help	1400060	At this point, you have two options. You can either return to the main menu by asking for the "MAIN MENU", or you can end your call by saying "GOODBYE" or hanging up.

Option	Vocabulary	DTMF	Action	Confirm.
MainMenu	"Main Menu"	1	Go to: PP12000_Thanks_Before_Return	If necessary
Goodbye	"Goodbye",	2	Go to: PP13000 Goodbye	If necessary

Confirmation prompts				
Message Number	Option	Nam	е	Wording
10086	MainMenu	1400	080	You said you wanted to return to the 'Main Menu', is that right?
10087	Goodbye	1400	081	You want to end this call; Is that right?
Confirmation Options	Vocabulary	DTMF	Confir	m.
"Yes"	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	Never	

DialogModule parameters		
Parameter	Value	
after_end_of_speech_timeout	1,000 ms	
before_begin_of_speech_timeout	7,000 ms	
allowing_barge_in	True	

Never

2

#### Event logging

"No"

#### Developer notes

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Disable Global Command Grammar

On DM14000 MaxTimeout, Max Retry or MaxHelp Go to: PP13000 Goodbye

[End of Specification]