Social Security Administration BEVE/MRC

2.5.4

User Interface Design Specification Last Saved: 10 May, 2010

OMB Attestation Addition





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	.08	1.0	Debugged tables	Robby Kilgore
4/22/04	.09	1.0	Consolidated exit tables, synced Visio flows, updated demographics slightly.	Robby Kilgore
4/23/04	.10 1.0 Added global handoffs, recond		Added global handoffs, reconciled sample call text.	Robby Kilgore
4/23/04	.11	.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
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4/28/04	.20	.20 1.0 Changed Name 2.0 to 1.12 interaction model		Robby Kilgore
4/28/04	.21	1.0	Comb through for any bugs introduced by changes to interaction model	
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	App	Summary of Changes	Revised by
4/29/04	1.0	1.0	Ready release for client review	Robby Kilgore
4/30/04	1.01	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	1.04	1.0	Updated sample calls	Robby Kilgore
5/5/04	1.05	1.0	Small changes to sample call and removal of "Agent" verbiage.	Robby Kilgore
5/19/04	1.06 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
5/27/04	1.07	1.0	Reconciled prompt text with recordings.	Robby Kilgore
6/11/04	i/11/04 1.11 1.0		Reconciled against bugs, plus added changes from UT	Robby Kilgore
6/14/04	6/14/04 1.12 1.0		Created new document for safety sake. Removed punctuation from Grammars	Robby Kilgore
6/15/04	4 1.13 1.0 Updated based on review with SSA / MCI / CPT		Updated based on review with SSA / MCI / CPT	Joe Farhat
6/16/04 1.14 <i>l</i> 1.0 1.15		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	1.16 1.0 Tiny tweak to the prompt text in 1400080, Added note about Confirmation Grammars		Robby Kilgore
6/30/04	1.18 /	1.0	Fixing up the last few CRs	Robby Kilgore /

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	1.19.1			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 Spec App Summary of Changes		Summary of Changes	Revised by	
6/23/05	2.0	1.0	Changes based on tuning analysis and recommendations of June 2005.	Paul Sawyer
			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 barge-in .	
			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.	
15 Feb 06 2.1 1.0		1.0	Remove restriction on date of birth in DM5000.	Paul Sawyer
			2. Add support for blocked accounts. Affects PP1500, BR8000, DM11000.	
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	2.2	1.34	Removed references to BR8100 Added new state, DB3050	Sean Stallings

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			3. Updated DM3000 and BR3100	VZB		
23 Apr 07	2.2	1.35	Updated 1000_SayLastName Updated 1020_SayFirstName Removed Confirmation logic from 1060_GetMistake Updated PP2000 Removed PP9999 Updated BR3100	Sean Stallings VZB		
21 May 07	2.2	1.36	Updated 1060 GetMistake	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	2.2	1.44	Corrected prompting in message number 50204	Sean Stallings VZB		
08 Oct 07	2.2	1.45	Removed msg. 50368 from 1070 Removed msg. 50382, from 1090	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	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; Sean			

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			Corrected reporting information for "if else" conditions.	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		
route to PI		1.52	Updated BR 1900, if callers information is complete callers now route to PP 6000. Added BR 4005.	Sean Stallings VZB		
			Clarified wording for BR1900 Check Null Condition			
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 Check Condition Module.			
17 Apr 08 2.2 1.54		1.54	Updated Module 9000 Added "Barge in" column to the prompt table, barge in is set to "false" for initial prompt, "true" for all others. Broke message 10054 into two parts, 10054 and 10088.	Sean Stallings VZB		
21 Apr 08	2.2	1.55	Corrected broken link in table of contents.	Sean		
,			Corrected reporting strings for BR3999, BR4005, Module 400,	Stallings VZB		
2 May 08	2.2	1.56	Updated reporting strings for BR3999, BR4005, Module 400, BR5500	Sean Stallings VZB		
7 May 08	2.2	1.57	Updated DM 9000, renumbered message 10088 to 10092, to prevent overlap.	Sean Stallings VZB		
13 June 08	2.2	1.58	Updated Module 4005, module is now correctly named DOB_Check_Condition.	Sean Stallings		
			Updated module 5000, 'entering from' field now shows entering from 4005 DOB_Check_Condition.	VZB		
23 June 08 2.2 1.59 Updated module 1090_RespellLast, 'Er		Updated module 1090_RespellLast, 'Entering From' field no longer points to module 1070_RespellLast. This resolves ticket	Sean Stallings VZB			
4 August 08	2.2	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.	Sean Stallings VZB		
			Audio for Initial prompt, message 54201, changed to match KBA 50201			
			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.			

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21 August 08	2.2	1.61	Highlighted Barge-in changes in pink	Sean Stallings VZB
09September 2.2 2.0		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
01 December 08	2.2	2.3	COADD/BEVE-MRC Tuning 2 Effort-Recommendations From Nuance 1) Updated module 1070, added entry to 'Module Notes' stating that confidence levels for this module should be set to .400. 2) Updated module 1090, added entry to 'Module Notes' stating that confidence levels for this module should be set to .400	Sean Stallings VZB
29 January 09	2.2	2.4	Updated Header	Sean Stallings VZB
22, May 09	2.2	2.5	FOAP Effort Updated module PP 12000, added flag check and routing for FOAP condition.	Sean Stallings VZB
25 June 09	2.2	2.5.1	Corrected broken links in DM's 1030 and PP10000. Fixed typographical errors in DM's 4000 and 500.	Kim Rothlis VzB
23 March 10	2.2	2.5.2	Global Commands and Global Prompts (section 6.6), added Action for 'agent' command. OMB Attestation Addition Change Added DM 2988 Attestation Flag Check and DM2990_AttestationYN between modules P2000_Standard_Greeting and DM3000_Check_AOR Updated modules P2000 and DM3000 with correct routing/hyperlinks. Updated Section 5.2, High-Level Call Flow Diagram with the	Kim Rothlis VzB

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			added DM's. MISC: Corrected entering from field for module PP1500_Getting Help_Operator	
29 April 10 05 May 10	2.2	2.5.3	Issue Fix (TBEV-5): Updated module 1070 RespellFirst, message 50367 with correct wording. 2990 – AttestationYN – Updated Success2 with MaxHelp	Kim Rothlis, VzB Carol Cummings VzB
10 May 2010	2.2	2.5.4	Updated PP13000_Goodbye , message #10078 to reflect 'as built' wording.	Kim Rothlis, VzB

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DM11000 ReturnIoMain or HangUP	ತ
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Chapter 2: Background and Motivation

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.

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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.

Open Issues

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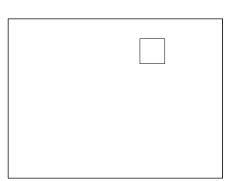
Chapter 3: About the Callers

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.

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.

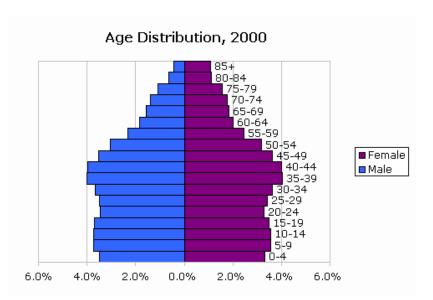
MRC: Of the 785,000 callers requesting Medicare Replacement

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)

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.



lim 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.

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.

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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.

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: 1 2 3 - 3 9 - 8 1 4 5

Jill: 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?

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?

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

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.

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

Caller: Main Menu.

Jill: Sure. I'll transfer you now.

[Closing Audio Icon]

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?

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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.

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[Closing Audio Icon]

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: 1 2 3 - 4 5 - 6 7 8 9. Is

that right?

Caller: Yeah.

Jill: And what's your date of birth? [Big pause] For example,

you can say...May 5th, 1957.

Caller: January 22nd, 1989

Jill: Okay, so that's: January 22nd, 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.

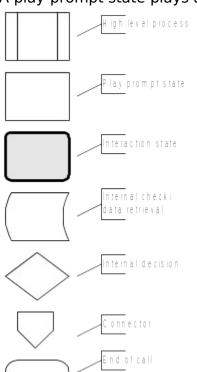
[Transfer Call]

Chapter 5: Call-Flow Diagrams

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.

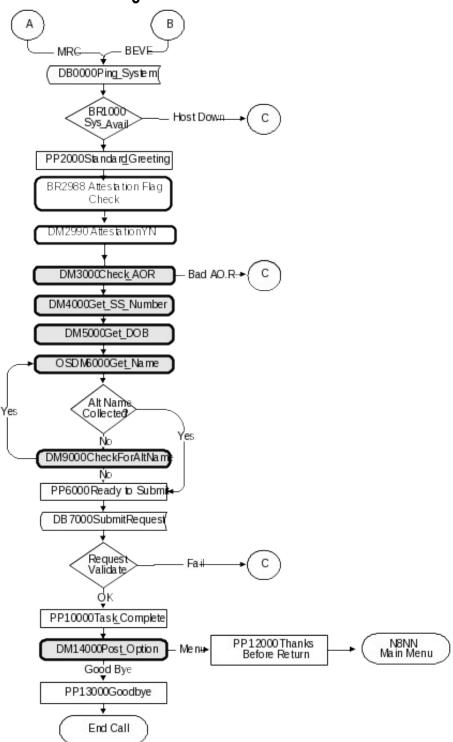
Connectors link different call-flow diagrams.

An end-of-call is a transfer, to another service or customer

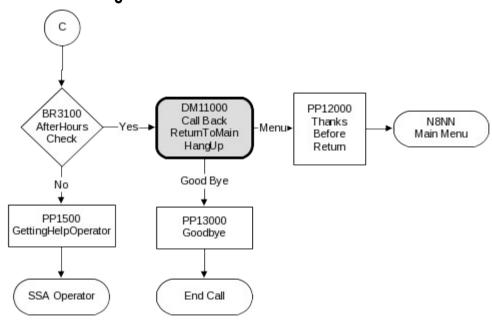
representative, or a system hang-up.

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.

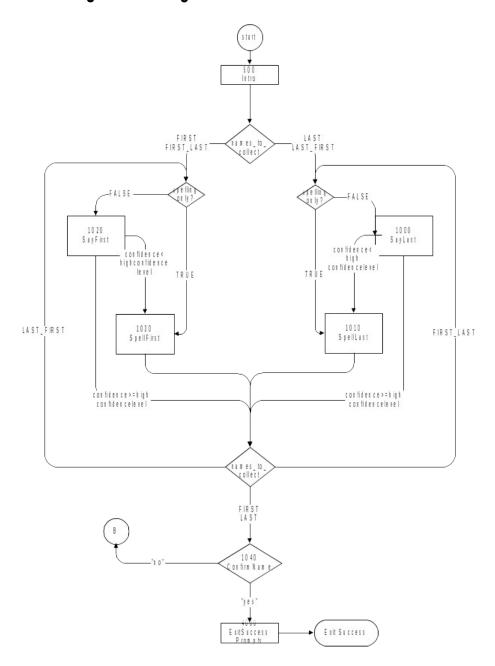
High-Level Call Flow Diagram

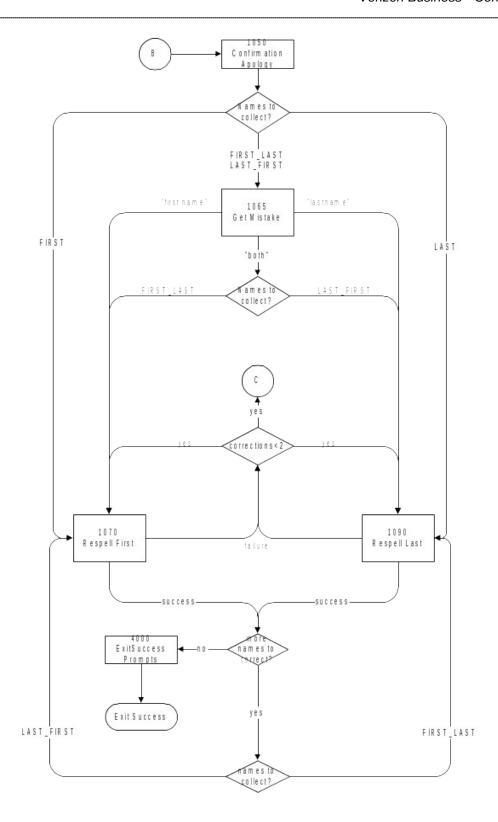


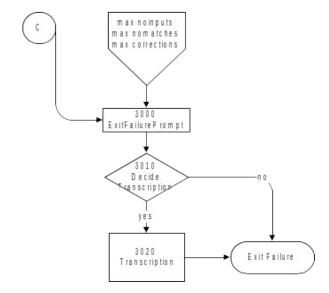
Outbound Transfer Logic



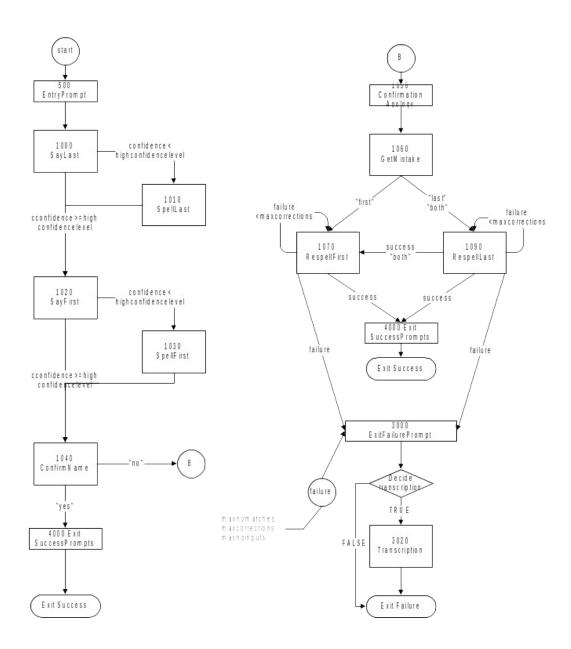
Name OSDM High-Level Diagram



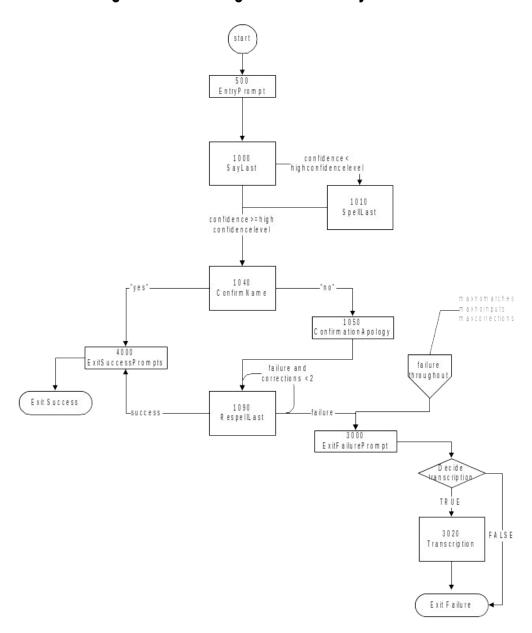




Name DM Diagram – Default Configuration



Name DM Flow Diagram – Collecting Last Name Only.



Chapter 6: Global Behavior

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 Confirmation	n Retry 1	default_confirmation_r eprompts1	Please say YES or NO.	
50347	Upon Confirmation 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.

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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.

- Upon max timeout (two timeouts):
 Play Max Timeout verbiage described above then
 Go to: <u>BR3100_AfterHours_Check</u>; NeedAssistanceWith = MaxTimeout
- Upon max retry (two retries):
 Play Max Retry verbiage described above then
 Go to: <u>BR3100_AfterHours_Check</u>; set NeedAssistanceWith = MaxRetry
- Upon max help (two request for help):
 Play Max Help verbiage described above then
 Go to: <u>BR3100_AfterHours_Check</u>; set NeedAssistanceWith = MaxHelp
- Upon call completion, hang-up or call transfer, call end processing (call tracking information for reporting) will be performed.

Global Default Settings

Unless otherwise noted, all DMs should use default settings for confidence levels. Exceptions include: 1000_SayLastName, 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.

4 Help prompts

Start each Help prompt with the Help prompt audio icon (prompt file: *icon_help*), 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 *without playing the initial prompt again*. This is because the prompt for the input will be contained *in the Help prompt itself*, perhaps with a slightly different verbiage.

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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).

Default Confirmation Grammars

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

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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	Go to: BR3100_AfterHours_Check; NeedAssistanceWith = UserRequestedAgent	Always		

Confirmation prompts							
Message Number	Option	Name	Wording				
51011	Operator	gl_conf_operator	You said you wanted to talk to one of our operators, Is that right?				
Confirmation Option		Vocabulary	DTMF	Action	Confirm.		
Yes		"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	Go to: <u>BR3100_AfterHours_Check;</u> 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

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 < Get_Social_Security_Number> state, 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 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:

- 1) 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.
- 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 playmessage 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 keyahead is possible over database hits that need more time, or over playstates 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.

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.
```

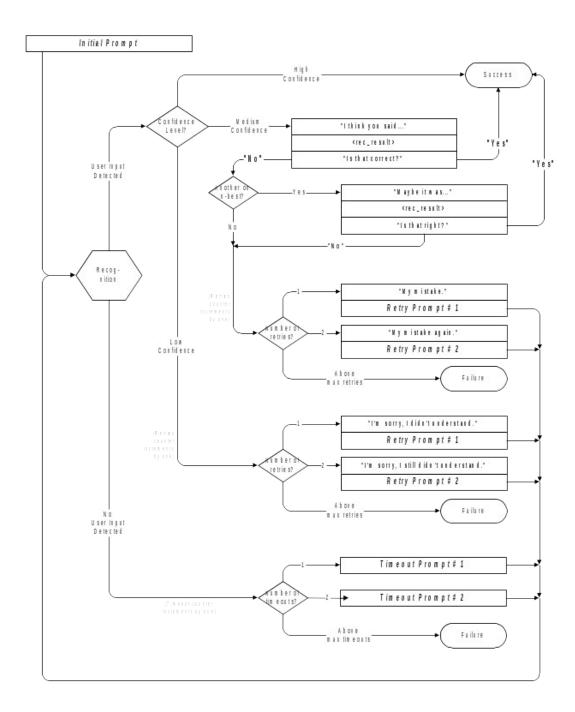
Event Logging

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.

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6.10

Internal DialogModule Functionality



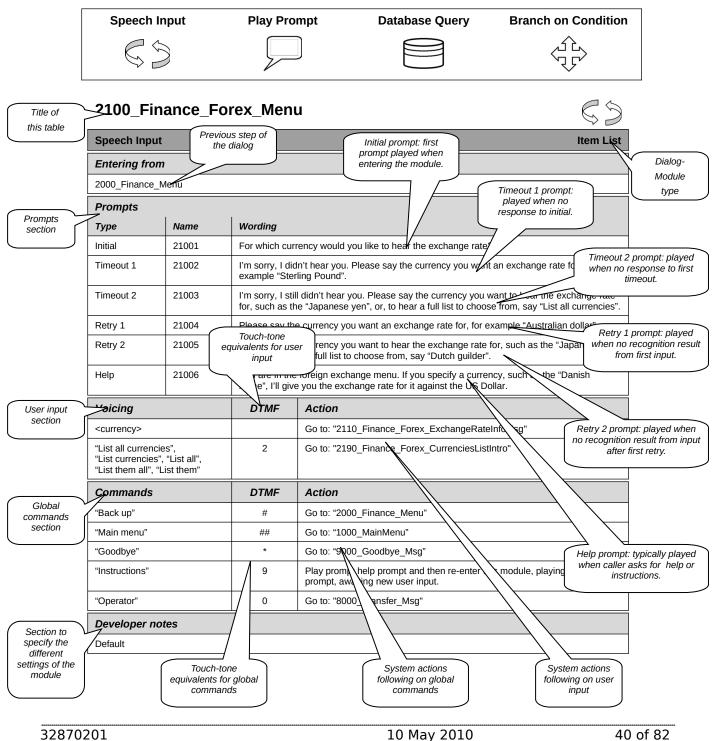
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7.1

Chapter 7:

Detailed Dialog Specification

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 = False; NeedAssistanceWith = NULL				

BR1000_System_And_Operator_Availability

		Branch on Condition
Branch of availability of syst	tem and operators.	\(\frac{1}{2}\)
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	1	

PP1500_Getting_Help_Operator

Call needs assistance from live operator

Entering from

BR3100_AfterHours_Check

_				
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			

BR1900 Check Null Condition

No barge-in



Entering from		
BR1000_System_And_Operator_Availability		
Condition	Action	
If TVDC Items to collect= 0	Go to: BR3999 Social Security Check Condition	

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If TVDC items else Go to: P2000_Standard_Greeting

P2000_Standard_Greeting

	au a_Or coming				
			Play Prompt		
Standard Greeting					
Entering from					
BR1900 Check Null	Condition				
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	ondition Action				
Always	Go to: BR2988-Attestation Flag Check				
Event logging					
Developer notes					
No barge-in					

BR2988-Attestation Flag Check

Entering from P2000 Standard Greeting	
Condition	Action
If Attestation Flag = 0	Go to: DM2990_AttestationYN
If Attestation Flag = else	Go to: DM3000_Check_AOR

DM2990 AttestationYN

DW230_Attestation in		
	YesNo	0
OMB Attestation		
Entering from		
BR2988-Attestation Flag Check		

Prompts Message Number **Type** Name Wording Barge-in 29901 29901 Social Security is allowed to collect this information under Initial-1 NO the Social Security Act. This information collection meets the requirements of the Paperwork Reduction Act under O.M.B. number zero, nine, six, zero, zero, five, nine, six. We estimate that it will take about 10 minutes to listen to the instructions, gather the facts, and answer the questions. Please note that any person who makes a false representation in an effort to alter or obtain information from the Social Security Administration may be punished by a fine or imprisonment, or both. <mark>29902</mark> <mark>29902</mark> Initial-2 Do you understand and agree to these terms? Yes [Global Default] Do you understand and agree to these terms? Please say YES or NO. 29903 Retry1 <mark>29903</mark> Yes Yes [Global Default] Any person who makes a false representation in an effort to alter or obtain information from <mark>29904</mark> <mark>29904</mark> Retry2 the Social Security Administration may be punished by a fine or imprisonment, or both. If you understand and agree to these terms, press one. Otherwise press two Yes Sorry, I didn't hear anything. Do you understand and agree **29905** Timeout1 29905 to these terms? Please say YES or NO. Yes 29906 <mark>29906</mark> I'm sorry, but I still didn't hear anything. Any person who Timeout2 makes a false representation in an effort to alter or obtain information from the Social Security Administration may be punished by a fine or imprisonment, or both. Do you understand and agree with these terms? You can say YES or press 1; or NO or press 2. 29907 Help 29907 Yes Before we can continue, I need to know that you understand and agree with the following warning. Any person who makes a false representation in an effort to alter or obtain information from the Social Security Administration may be punished by a fine or imprisonment, or both. Do you understand and agree to these terms? You can say YES or press 1, or NO or press 2. N/A 00120 00120 Success-1 Alriaht. (Caller says Yes) N/A 12101 Success-2 12101 Thank you for calling Social Security. Goodbye. (Caller says No or max retry/timeout <mark>or</mark> Max Help) **Confirmation Option Vocabulary** DTMF **Action** Confirm. Yes and usual Play Success-1 Yes 1 **Never** synonyms Set Attestation Flag to 1 (including "[Yes] I Go to: DM3000_Check_AOR do") 2 No **Never** No and usual Play Success-2 synonyms And then hang up Reporting 0000 = Success Record = U-**RECL** -DM 2990-(Call Duration at start), T-RECL-0001 = Error

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DM3000_Check_AOR

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

BR2988-Attestation Flag Check, DM2990 Attestation YN

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		Go to: DB3050 Check AOR Ping	
	not]"			

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 = 13 is to be used if caller enters this state.						
Entering from						
DM3000_Check_AOR						
Condition	Action					
Go to: BR3100_AfterHours_Check						
Event logging						

BR3100_AfterHours_Check

	Branch on Condition	<u>4</u> 17.		
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, BR1900	Check Null Condition				
Condition	Action				
If SSN = null Go to: <u>4000_Get_SS_Number</u>					
If SSN else Report V Transactions per module note, Go to: BR4005 Get DoB Check Condition					
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 Message Numbe	r	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 your keypad.
50203		Retry 2		400030	< default global > Try entering it on the telephone keypad.
50204		Timeout 1		400040	Sorry. I didn't 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.		
0	1/		DTME	A -4'	0

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

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

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 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	If DOB else Report V Transactions per module note, <u>400- Name Check Condition</u>					
Module Notes						
V-MEDI-DOB_1-(duration),T-MEDI-0000-(duration)						

5000_Get_DOB

DialogModule parameters

date_range_allowed_earliest
date range allowed latest

date range expected earliest

Parameter

date reference date

Date DialogModule™ Get the callers Date Of Birth Entering from **BR4005 DOB Check Condition Prompts** Message Number Wording Name 50010 Initial 500010 And what's your date of birth? [big pause] For example, you can say...May 5th, 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 Sorry, I didn't hear you. Tell me your birth date again. 500040 I'm sorry, but I'm still having trouble hearing. I need the month, day and year for 50014 Timeout 2 500050 your birthday. You know like...July 4th, 1976. Aside from your social security number, I'll need your date of birth. You can say 50015 Help 500060 this in a number of ways. For example you can say "July 4th 1976", or "the fourth of July, 1976" Go ahead. What's your date of birth? **DTMF** Option Vocabul Action Confirm. ary Date <date> <...> Always Confirmation prompts Message Number Name Wordina Result Option Okay, so that's:: 500070 50016 Date <Date> CPR January 12th 1931 50017 500071 Is that right? Okay, so that's: <January 12th, 1931>. Is that 50018 500080 Sorry. I didn't catch Sorry. I didn't catch that. Please say Retry 1 that. Please say "YES" if I have the right date. <January "YES" if I have the 12th, 1931>. Is that right? right date. I wasn't sure if you said anything. Please say 50019 Timeout 1 500090 I wasn't sure if you said anything. Please "YES" if I have the right date. < January 12th, 1931>. Is that right? say "YES" if I have the right date. Confirmation Vocabulary DTMF Action Confirm. Option "Yes [it is]" 1 Go to: 400- Name Check Condition Never Yes "[Yes] that's right" names_to_collect = LAST_FIRST "Riaht" "[That's] correct" 2 No "No [it isn't]" Re-enter Dialog Module per default behavior Never "[No] that's not right"

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Value

19000101

System date [yyyymmdd]

Today - 75 years [yyyymmdd]

Today [yyyymmdd]

Today – 25 year [yyyymmdd]
ASSUME_NOTHING
1,250 ms
7,000 ms
True
Although the application does not explicitly ed. Date entry should be in the form of Trim the grammar so that the day of the

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 (30 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 collection ground rules to user							
Entering from							
400- Name Check Co	<u>ondition</u>						
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			
		Else		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

CustomContext



Get the user's last name.

Entering from

500_EntryPrompt; DM9000_Check_For_Alt_Name, 400- Name Check Condition

Prompts						
Message Number	Туре	Condition		Name	Wording	
50304	Initial 1	If from 500_EntryPrompt		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	iginally ion_nomatchprompts1 om 00_Entr		<default global=""> . Please say JUST your last name including the spelling.</default>	
50310	Retry 1	If originally from DM9000	default_name_saylast_collect ion_nomatchprompts2		<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			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 \rightarrow Accept, Medium and Low Confidence \rightarrow 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 overall confirmation parameter. If overall confirmation = NEVER , Go to 4000_ExitSuccessPrompts instead 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	default_name_spelllast_colle	Now please JUST spell that for me, and spell it
30314	(On entry from 1000_SayLastName) spellingonly = FALSE.	ction_initialprompt1	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	Confirm.
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.

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Developer notes

Set Confidential Flag to TRUE

1020_SayFirstName

CustomContext



Get the user's first name.

Entering from

500_EntryPrompt,1000_SayLastName ,1010_SpellLastName, 400- Name Check Condition

Prompts	Promnts				
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 \rightarrow Accept, Medium and Low Confidence \rightarrow 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 overall confirmation parameter. If overall confirmation = NEVER, Go to 4000_ExitSuccessPrompts instead 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

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				YesNo C
Confirm name collectio	n			
Entering from				
1000_SayLastName, 1	010_SpellLastName, 1020_	<u>SayFirstName</u>	, 1030_SpellFirstName	
Pre-Conditions				
If name to collect = Firs	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	Type	Name		Wording
50335	Турс	Initial on ent	ry	Okay. Let me read that back to you to make sure I've got it right.
50336	Play this series of	default_nam	ne_lastname	Last name:
	prompts if we need to play out the last name			<lastname> or use TTS</lastname>
50337		default_nam	ne_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_nam	ne_lastnamespelled	Last name spelled
50339	Play this series of prompts if we need to play out the first name	default_nam	ne_firstname	First name:
				<firstname> or use TTS</firstname>
50340		default_nam	ne_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_nam	ne_firstnamespelled	First name spelled
50342		default_conf part2	firmation_initialprompt_	Did I get that right?
50343	Timeout 1	default_conf pts1	firmation_noinputprom	Sorry I didn't hear you. Did I get the name right? Please say yes or no.

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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_collec tion_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

1050_ConfirmationApology

Play Prom	pt
User rejected name, apologize, and set up a second try.	

Entering from

1040_ConfirmName

Prompts				
Message Number	Condition	Name	Wording	
50348	Always	default_name_confirmationap ology	Sorry about that. Let's try again.	

Condition	Action
If names_to_collect = LAST	Go to: 1090_RespellLast
If names_to_collect = FIRST	Go to: 1070_RespellFirst
<pre>If names_to_collect = LAST_FIRST or FIRST_LAST</pre>	Go to: 1060_GetMistake

Module Settings

No barge-in

Developer notes

1060_GetMistake

Isolate the mistake. First Last or Both

Entering from

1050_ConfirmationApology

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	Timeout 2	default_name_getmistake_ collection_noinputprompts 2	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

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1070_RespellFirst

CustomContext



Ask for a respelling of first.

Entering from

1050_ConfirmationApology,1060_GetMistake, 1090_RespellLast

"Right"

"No"

MaxFailure

"[That's] correct"

"No [it isn't]"

"[No] that's not right"

Prompts Message Number	Туре		Name			Wording	
50367	Initial (if we needed to spell the first name previously			default_name_respellfirst_ collection_initialprompt1		Saying just the letters of the alphabet, please spell your first name again.	
50369	Timeout 1			ame_spellfirs		Sorry I didn't hear name one letter at	you. Please spell your first a time.
50370	Timeout 2	Timeout 2		ame_spellfirs pinputprompt		I'm afraid I still can your first name nov	't hear you. Please spell v.
50371	Retry 1		default_name_spellfirst_col lection_reprompts1		< default global > 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, just say R O B I N. Go ahead. Spell your first name now.		
50372	Retry 2		default_na lection_re	ame_spellfirs prompts2	t_col	< default global > Please spell your first name one more time.	
50373	Help		default_name_spellfirst_col lection_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.		
Option			Vocabul	lary		DTMF	Confirm.
<firstname></firstname>			<alpha in<="" td=""><td>put></td><td></td><td>N/A</td><td>Always</td></alpha>	put>		N/A	Always
Confirmation Pro Message Number	mpts Option	Name			Wor	ding	Result
50374	Confirm		_name_con ompt_part1	firmation_i		/. 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 part2	on_initialpr	Did I	get that right?	
00118	command	default_ ompt_p	_confirmatio part1	on_initialpr	I thin	k you said	"I think you said <> Did I get that right?
50342		default_confirmation_initialpr Did I ompt_part2			Did I	get that right?	
Confirmation Options	Vocabulary		DTMF	Action			Confirm.
"Yes"	"Yes [it is]" "[Yes] that's right"		1	Go to: 4000	O_Exits	SuccessPrompts	Never

behavior

2

N/A

Re-enter Dialog Module per default

Go to:3000_ExitFailurePrompt

Never

Module Settings

Note: Confidence Level should be set to .72

Developer notes

Set Confidential Flag to TRUE

Set confidence levels to .400

1090_RespellLast

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CustomContext



Get the user's first name.

Entering from

1050_ConfirmationApology, 1060_GetMistake

Prompts	Promote				
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 H try it again. Please spell your last name for me now.		

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

Confirmation Pro	Confirmation Prompts						
Message Number	Option	Name	Wording	Result			
50392	Confirm	default_name_confirmation_init 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_initialpron part2	npt_ Did I get that right?				
00118	command	default_confirmation_initialpron part1	npt_ I think you said	"I think you said <> Did I get that right?			
50342		default_confirmation_initialpron part2	npt_ Did I get that right?				
Option V	ocabulary	DTMF Action		Confirm.			

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

Module Settings

Note: Confidence Level should be set to .72

Developer notes

Set Confidential Flag to TRUE

Set confidence levels to .400

3000_ExitFailurePrompt

3000_EXILFAIIUI 6	EPIOIIIPL						
		Play Prompt					
Apologize on exit	Apologize on exit						
Entering from							
1000_SayLastName, 1010 1070_RespellFirst,1090_R		lame, 1030_SpellFirstName, 1040_ConfirmName, 1060_GetMistake,					
Prompts Message Number	Name	Wording					
50393	default_name_exitfailurepro	ompt I'm sorry I'm having so much trouble with your name.					
Condition	Action	Action					
	Go to:BR3100_AfterHours_Check NeedAssistanceWith = MaxNameRecognitionFailures						
Module Settings							
No barge-in							
Note: This is the paramete	r exitfailureprompt and can be cor	nfigured by setting this parameter.					

4000 ExitSuccessPrompts

4000_LXII30CC6	235FTOIIIPLS		
			Play Prompt
Get the user's first name.			
Entering from			·
1040_ConfirmName, 1070	O_RespellFirst, 1090_RespellLast		
Prompts			
Message Number	Condition	Name	Wording
00120	If nomatchcount =1	default_successprompts1	Alright.
50294	If nomatchcount =2	default_successprompts2	Got it.
	Or		
	confirming Alt Name		
50295	If nomatchcount =3	default_successprompts3	Thanks for being patient.
Condition	Action		
Always	Go to: BR5500_Alt_Name_	Collected	
Module Settings			
No barge-in			
Note: This is the exitsucce	essprompts parameter and can be	configured by setting this parameter.	

BR5500_Alt_Name_Collected

D110000_7 (11_11a1110					
		Branch on Condition	<u>4</u> 17,		
< <in branch="" cell,="" condition="" explanation="" of="" on="" this="" write="" your="">></in>					
Entering from					
400- Name Check Condition, 400-	400- Name Check Condition, 4000_ExitSuccessPrompts				
Condition	Action				
IF AltNameCollected = True	Go to: PP6000_Ready_To_Submit				
Else	Go to: DM9000_Check_For_Alt_Name				
Event logging					
V-MEDI-OtherLastName_1-(dura	V-MEDI-OtherLastName_1-(duration), T-MEDI-0000-(duration)				

PP6000_Ready_To_Submit

			Play Prompt				
Tell caller we're ready to submit information							
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 in	fo 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_1st)					
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

Developer notes

				•••••				
						YesNo		
Check to see if Caller might be listed under an alternate name								
Entering f	rom							
BR8000_DE		_Validate	<u>_1st</u>					
Prompts Message N	umber	Туре			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		Initial2	2			Do you have another last name? Yes or No.	Yes	
10055		Retry 1		900020	< default global.> Would you like me to also check under another last name? Please say "YES" or "NO".	Yes		
10056 Retry 2		2	2		< default global > If you think you might be listed under another last name, press one. Otherwise, press two.	Yes		
10057 Timeou		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 Timed		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 Heli		Help	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	Vocab	ulary	DTMF	Ac	tion		Confirm.	
Yes	"[Yes] I	I do" NOTE: nai			_	<u>ayLastName</u> _to_collect = LAST;	Never	
		Go to: <u>PP6000_Ready_To_Submit</u> AltNameCollected = True		Never				
DialogMod Parameter	dule para	meters				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 log	ging					1		

Set Confidential Flag to TRUE

PP10000_Task_Complete

1 10000_14							
					Play Prompt		
Acknowledge Task C	Completion						
Entering from							
BR8000_DB_Reques	st_Validate_1st						
Prompts	1						
Message Number	Condition		Name		Wording		
10089	Task = BEVE		100001		Okay. You're all set. You should receive your Benefits Verification Letter in the mail within two weeks.		
10090	Task = MRC		100002		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.		
Condition	•	Actio	n				
Always G			Go to: DM14000_Post_Options				
Event logging							
Developer notes							
No barge-in							

DM11000_ReturnToMain_or_HangUP

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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		l a	1			
Message Number 10059	Type Initial	Condition NeedAssistanceWith = SysUnavailable	1100011	Wording 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, if 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.		

NeedAssistanceWith = 1100021 10068 Our records show that you requested that AccountBlocked your account be blocked from access by this automated system, as well as by the Internet, even with a password, so you'll need an agent to complete this transaction. If you want to unblock your account, the agent must handle that as well. Unfortunately, our offices are closed so you'll have to call back and speak with an agent during business hours. In the mean time, if there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up. 1100020 < default global > I'm afraid vou'll have to 10069 Retry 1 call back and speak with an agent during business hours. In the mean time, if there's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up. 10071 1100030 < default global > Unfortunately, there are Retry 2 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. sav "MAIN MENU". Otherwise vou 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's anything else you'd like to do, say "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-up. 10073 1100050 Sorry, I still didn't hear you and I'm afraid Timeout 2 our offices are currently closed. To speak with an agent, you'll have to call back. 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. 10074 1100060 At this point, I'm afraid our offices are Help closed, so you'll have to call back if you'd like to speak with an agent. But you do have two other options. You can either say "MAIN MENU", or you can end the call by saying "GOODBYE" or simply hanging up. DTMF Confirm. Option Vocabulary Action MainMenu "Main Menu" If necessary 1 Go to: PP12000_Thanks_Before_Return Goodbye "Goodbye" 2 Go to: PP13000 Goodbye If necessary Confirmation prompts Message Number Option Name Wording 10075 MainMenu 1100080 You said you wanted to return to the 'Main Menu', is that right? 10076 Goodbye 1100081 You want to end this call; Is that right? **Confirmation** Vocabulary **DTMF** Confirm. **Options** "Yes" "Yes [it is]" 1 Never "[Yes] that's right"

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"Right"

"[That's] correct"

"No" "No [it isn't]" 2 Never "[No] that's not right" DialogModule parameters Parameter Value after_end_of_speech_timeout 1,000 ms before_begin_of_speech_timeout 7,000 ms allowing_barge_in True **Event logging** Developer notes On DM11000 MaxTimeout, Max Retry or MaxHelp Go to: PP13000_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_ReturnToMa	ain_or_HangUP					
Prompts						
Message Number	Condition	Name	Wording			
10077	FOAP flag = 0	120001	Sure. I'll transfer you now. [Closing Audio Icon]			
00250	else	120002	250 milliseconds silence.			
Condition	lition Action					
Always	Go to: N8NN Main Menu 1100-Main-DM					
Event logging						
Developer notes						
No barge-in						

PP13000_Goodbye

			Play Prompt
Say goodbye to the calle	er.		
Entering from			
DM11000_ReturnToMaii	n_or_HangUP		
Prompts			
Message Number	Name	Wording	
10078	130001	OK. Goodbye. [Closing Audio Icon]	
Condition	Action		
Always	Go to: [HANG UP]		
Event logging			
Developer notes			
No barge-in			

DM14000_Post_Options

allowing_barge_in

Event logging

Developer notes

CustomContext Ask if the caller wants to return to the main menu or hang up. Entering from PP10000 Task Complete **Prompts** Message Wording Type Name Number 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 1400020 < default global.> If there's anything else you'd like to do, say Retry 1 "MAIN MENU". Otherwise you can say "GOODBYE" or just hang-< default global > If you'd like to return to the main menu, say 10082 Retry 2 1400030 "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 1400060 At this point, you have two options. You can either return to the Help 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 Wording Name 10086 MainMenu 1400080 You said you wanted to return to the 'Main Menu', is that right? 10087 Goodbye 1400081 You want to end this call; Is that right? Confirm. Confirmation Vocabulary DTMF **Options** Never "Yes" "Yes [it is]" 1 "[Yes] that's right" "Right" "[That's] correct" "No" "No [it isn't]" 2 Never "[No] that's not right" DialogModule parameters Parameter Value after_end_of_speech_timeout 1,000 ms 7,000 ms before_begin_of_speech_timeout

True

On DM14000 MaxTimeout, Max Retry or MaxHelp Go to: PP13000_Goodbye Disable Global Command Grammar

[End of Specification]