Social Security Administration
Change of Address / Direct Deposit
User Interface Specification
Last Saved: April 02, 2010

Knowledge-Based Authorization

4.15.4

OMB Attestation Addition
SARA3 DD-COA Module Change Request

NUANCE

Document History

Date	Spec	App	Summary of Changes	Revised by
12/20/04	**1.0**	1.0	Initial version.	Paul Sawyer
01/06/05	**1.1**	1.0	Minor corrections to prompt styles and formatting. Filled in missing prompt text at 5150. Fixed prompt names in 5040, 5900 (KBA instead of GLB). Filled in list of U.S. territories. **Changes based on review of 1/12/05:** Clarify the transfer of control between the Global section and this section – removed use of the word "caller" to mean transfer of control and reserve that word for humans dialing the telephone. Add separate prompts within 1090 to handle different values of parameter which_name. Correct GO TO error in 1000: if names_to_collect is LAST and spelling_only is true, then go to 1010. Correct GO TO error in 1060: If BOTH and names_to_collect is FIRST_LAST, then go to 1070. Clarify different kinds of confirmation prompts in 1070. Add Requirement IDs where needed, mostly. Requirement IDs are mostly not included in the GetName procedure because it reflects code that is being reused from BEVE. The nested conditionals in these DMs prevent the simple addition of Requirement IDs, and restructuring the DM specifications would put the DM specs out of sync with the existing code.	Paul Sawyer
02/18/05	**1.2**	1.0	Change prompt name suffixes in 1090 to be more consistent with other DMs for the Full, Alt , and Maiden variations. Fix prompt wording as adjusted during the recording session. Change 5010 confirmations to "never" as is usual for yes/no dialogs.	Paul Sawyer
03/04/05	**1.3**	1.0	Revised Requirement IDs in 5020, 5100, 5130, 5220, 5260, 5900, 1005, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1090, 1300, 1400	Steven Ligi
03/09/05	**2.0**	1.0	1. Removed MaxNoMatch row from 1060. Normal max retries behavior applies to this DM – goes to 1300. 2. Added clarification comment in 5210 for default confirmation prompt. 3. Add success prompt for Yes in 5010. 4. Add success prompt for Yes in 5130. 5. Add success prompt for Yes in 5210. 6. Disable DTMF input for yes/no confirmation in 5020 (SSN input). 7. Add silence spacer prompts in 5200.	Paul Sawyer
04/11/05	**2.1**	1.0	Changes following user testing. 1. Change prompts in 5020 to encourage callers to speak numbers quickly. Test participants came with the belief that the needed to speak s-l-o-w-l-y in order for the system to understand them, when in fact they were hitting timeouts due to speaking or punching keys too slowly. Also change timeout values. 2. Similar changes in 1010 and 1030 to encourage callers to spell faster.	Paul Sawyer

04/22/05	2.2	1.0	Changes following review. 1. Show increased timeout value in 1030 (as in 1010) 2. Remove extra space between letters in 1040 spelling.	Paul Sawyer
05/02/05	2.3	1.0	Fixes to "administrative" bugs. 1. Fix prompt file names in 1040 – two prompts with same name. 2. Clarified timeout values in 5020 (getting SSN) and restore DTMF input for confirmation.	Paul Sawyer
05/06/05	2.4	1.0	1. Fix prompt text that changed during recording. 2. Remove superfluous "Got it" from beginning of 5200. Calls to GetName always end with an acknowledgement, so no need to further acknowledge the user input of a name.	Paul Sawyer
06/16/05	2.5	1.0	1. Clarify in 5900 that it handles DM failures only in the main part of KBA, not within GetName which has it's own failure handler (1300). 2. Clarify the values of maxnomatches and maxnoinputs within GetName. 3. 5150 prompt is set to short silence. The failure message to the caller has already been played within GetName.	Paul Sawyer

08/12/2005	2.6	1.0	Changes (Paul Sawyer):
			
			   1. In 1090, fix Nomatch1 & 2 prompts to have generic wording ("the" instead of "your") so that they prompts work for caller's last name, caller's alternate name, and mother's maiden last name.
			
			Changes following the tuning report recommendations (Nadine Ozkan):
			- Prompt changes are in red (style : Table: RevisedRecordings)
			- Structural changes are highlighted in yellow:
			     o Replaced all GetName DMS (i.e. DMs 1000, 1005, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1090, 1300 and 1400) by new DMs corresponding to the Name OSDM version 2.0.1.
			     o The inclusion of the Name OSDM also affects parameters passing in DMs 5030, 5110 and 5140.
				Paul Sawyer & Nadine Ozkan

08/18/2005	2.7	1.0	Changes highlighted in yellow (highlights from previous version have been removed)
			- Changes to the Name OSMD specs:
			     o Changes to DMs : 1070 and 1080 – conditions and actions descriptions are clarified.
			     o DMs 1005 and 1020: removed the "NoMatch" condition
			- DMs 5030, 5110 and 5140: Changes to parameters passed to Name OSDM (exitfailureprompt and exitsuccessprompts parameter). Correspondingly added a note about the exit success prompt in 1400.
			- Prompt 1005-KBA-SayLastName-Prompt-initialprompt3-maiden: Minor prompt change.
				Nadine Ozkan

10/22/05	**2.8**	1.0	Changes following tuning 2. 1. Speech parameter changes in Name DMs: 1005_SayLastName, 1020_SayFirstName, 1010_SpellLastName, 1030_SpellFirstName. 2. Add synonyms in 1060_GetMistake. 3. In 1070_RespellFirst and 1080_RespellLast, suggest adding silence between letters in playback of spelling. 4. In 5130, suggest adding silence between parts of the date readback, and suggest supporting one-step correction in confirmation.. 5. Remove the word "spelled" from the prompts for say-and-spell in 1005 and 1020. The grammar for the Name OSDM does not include "spelled".	Paul Sawyer
11 Dec 05	**2.9**	1.0	1. Restore name collection in **Error! Reference source not found.** To use old code and tables instead of Name OSDM. These are NOT marked as revisions. 2. Simplified 5020 Confirmation Retry and Confirmation Timeout prompts to use what can be implemented: I think you said <SSN>. Is that correct?" 3. Edit prompt text of 5900-KBA-Dmfailure-Prompt1 to match what was recorded.	Paul Sawyer
2 Feb 06	**2.10**	1.0	Changes following Tuning 3: 1. Specify one-step correction in 5130, 5200, 1070, 1090. 2. Clarify that global grammars should not be active during name collection (1005, 1010, 1020, 1030, 1070, 1090). 3. In 5020, add synonyms to catch OOVs. Add "Yes or No" to end of Initial prompt. 4. Tweak prompts in 1005, 1010, 1020 to emphasize what caller should do. 5. Change (or re-emphasize) barge-in sensitivity in several Name collections.	Paul Sawyer
5 Feb 06	**2.11**	1.0	Add support for blocked accounts. Affects 5230, and adds 5270. Remove restriction in 5130 on date of birth.	Paul Sawyer
15 Feb 06	**2.12**	1.0	Changes following discussions and reviews: (previous revision marking left in place for SSA and CPT review): 1. Back out recommendation for one-step correction in 5130, 1070, 1090. These were recommended back in Tuning 2 but are difficult to implement and not essential, so will be removed for now. 2. Revised prompt in 5000 to encourage callers to stick with automation.	Paul Sawyer

21 Aug 06	2.13	1.0	Changes as a result of Tuning 4.	Paul Sawyer
			1. 5010: Remove agent synonyms from grammar. Tweak prompt to emphasize that exact dollar amount is needed (saves problems in 5210).	
			2. 5020: Increase incomplete timeout and max speech duration values.	
			3. 5020: Specify some optional prefixes to a SSN. Change low confidence threshold.	
			4. 1005: Tweak prompt to emphasize both saying and spelling. Tweak speech parameters.	
			5. 1005, 1010, 1020, 1030: Tweak speech parameters.	
			6. 1060: Add synonyms. Disable global commands.	
			7. 1070: Tweak speech parameters.	
			8. 5130: Tweak prompts to encourage correct statement of the date. Remove unneeded grammar options in dates. Remove global grammars.	
			9. 5200: Tweak prompt to encourage saying just STATE. Disable global Agent and Main Menu. Disable Agent from confirmation grammar.	
			10. 5210: Tweak speech parameters. Add "I don't know" option.	
19 Jan 07	2.14	1.0	Added Message Numbers to all prompts	Sean Stallings VZB
04 May 07	2.15	1.0	Made minor corrections to 1010, 1060, 1070,1090	Sean Stallings VZB
24 May 07	2.16	1.0	Made correction 5200	Sean Stallings VZB
19 July 07	2.16	1.0	Made correction 5000	Carol Cummings VZB

3 Aug 07	2.17	1.0	Removed "Quickly" from 50332 – 1030-SpellFirstName-VM Removed "Please" from 50333 - 1030-SpellFirstName-VM Added "Please say Yes or No" - 1040 ConfirmName Help Prompt Moved "Now" - 50208 (5020-KBA-GetSSNumber-ConfPrompt-SSN2)	Carol Cummings VZB
15 Aug 07	2.18	1.0	Updated 50346	Sean Stallings VZB
22 Aug 07	2.19	1.0	Updated Title and Headers	Sean Stallings VZB
06 Sept 07	2.20	1.0	Removed global defaults from retry 1 and retry 2 prompts	Sean Stallings VZB
08 Oct 07	2.21	1.0	Updated 1090 to resolve prompting issue for callers who have not spelled their first or last name yet.	Sean Stallings VZB
15 Oct 07	2.22	1.0	Added [Global Default] note to all retry 1 and 2 prompts (except for name capture)	Sean Stallings VZB

17 Oct 07	2.23	1.0	Corrected No Input/No match change to Timeout/ Retry	Sean Stallings VZB
19 Oct 07	2.24	1.0	Updated message 50367	Sean Stallings VZB
20 Feb 08	2.25	1.0	Added Check Condition modules, 5015, 5090, 5120, 5140,, 5190, 5205, 900 Added Privacy note to module notes for DM 5020, 5130, 5200, 5210, 1005, 1010, 1020, 1030, 1070, 1090 Added counter increment reporting to module notes for DM 5020, 5130, 5200, 5210, 1005, 1010, 1020, 1030, 1070, 1090	Sean Stallings VZB
26 Feb 08	2.26	1.0	Added DM 4999 Corrected Pathing for Name Collection Process Added DM 900	Sean Stallings VZB
27 Feb 08	2.27	1.0	Removed Name Collection DM's (900-1400) Added Name capture prompting/format from 1099	Sean Stallings VZB
28 Feb 08	2.28	1.0	Updated DM's 5035, 5045, 5090, 5140, changed confirmation from "if necessary" to ALWAYS.	Sean Stallings VZB
04 March 08	2.29	1.0	Added Privacy section the Global Behavior chapter	Sean Stallings VZB
10 March 08	2.3	1.0	Updated 5000 with new wording informer callers that they need to know the exact dollar amount of their last benefits payment. Removed 5010 Updated 5005, 5030, 5040, 5090, 5120, 5135, 5190, 5205; Corrected reporting information for "if else" conditions.	Sean Stallings VZB
19 March 08	2.31	1.0	Added new module, 5215 CantProceed-Msg.	Sean Stallings VZB
25 Mar 08	2.32	1.0	Corrected reporting string in module 5120	Sean Stallings VZB
04 Apr 08	2.33	1.0	Clarified wording for 4999 Check Null Condition Removed module 5025	Sean Stallings VZB
11 Apr 08	2.34	1.0	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. Prompt 50306 has been corrected. Module 5190 has been updated, added module note stating that DTMF 9 is disabled for this module.	Sean Stallings VZB
1 May 08	2.35	1.0	Added reporting string to modules 5020, 5035, 5045, 5100, 5110, 5130, 5140, 5200. 5210.	Sean Stallings VZB
12 May, 2008	2.36	1.0	Added reference to Reverse ANI lookup, per SARA, part 3. ➤ Added module 5003 to perform lookup ➤ Added text to Developer notes in module 5035 to reference use of parallel verification grammar for first name built from results of reverse ANI look-up ➤ Added text to Developer notes in module 5045 to reference use of parallel verification grammar for family name built from results of reverse ANI look-up	Peter Modesto Nuance

12 May, 2008	2.37	1.0	Corrections from internal review: broken links, etc.	PM
14 May 2008	2.38	1.0	Added "avoidsamemistake" to Global descriptions, 2.3 Adjusted reporting tag in DM 5003 Reverse ANI Lookup	Kim Rothlis VZB
15 May 2008	2.38	1.0	Made minor grammatical error updates and adjusted the reporting triggers to have 4 digits (i.e. 0000 = success)	Becky Stallings, VzB
29 May 2008	2.39	1.0	Note how we will handle multiple first names and initials in first name collection using reverse ANI lookup (DM 5003).	Peter Modesto, Nuance
30 May 2008	2.40	1.0	Added additional rules in handling of name collection using Reverse ANI Lookup (DM 5003)	Kim Rothlis VzB
2 June 2008	2.41	1.0	Clarification provided to handling of last name collection using Reverse ANI Look up (DM 5003)	Kim Rothlis VzB
24 June 08	2.42	1.0	Moved Module 5003 Reverse-ANI Look up. Is now 5032 Reverse-ANI Look up. ANI Look up should not occur until after 5030-GetFirstName Check Condition.	Sean Stallings VZB
11 July 2008	2.43	1.0	Updated module 4999, added in correct routing for 'If TVDC Items to collect= 0" condition, now routes to module 5003. Moved Reverse ANI Look up module, it is now located just before the Social Security Check Condition module.	Sean Stallings VZB
23 July 2008	2.44	1.0	Updated Module 5003, added new field 'reporting'. Re-inserted module notes erroneously removed in 2.42	Sean Stallings VZB

04 September 2008	4.0	1.0	BBN Findings Effort
			
			  a. Updated module 5100, updated retry 2, message 51003
			
			  b. Updated modules 5035, 5045, 5110, 5140, updated confirmation retry message 82055
			
			  c. Highlighted all BBN Findings changes in Green
				Sean Stallings
				
				VZB

19 September 2008	**4.01**	1.0	Merged KBA_v3.04_TNRS and KBA_4 UI's.	Sean Stallings VZB
			Updated module 4999, added in correct routing for 'If TVDC Items to collect= 0" condition, now routes to module 5003.	
			Moved Reverse ANI Look up module, it is now located just before the Social Security Check Condition module.	
			Broke Module 5035 GetFirstName into A and B sections, Say and Spell and Spell Only – for TNRS effort	
			Broke Module 5045 GetLastName into A and B sections, Say and Spell and Spell Only – for TNRS effort	
			Broke Module 5110 GetAltName into A and B sections, Say and Spell and Spell Only – for TNRS effort	
			Added Module 5115 PostSSN-DB – for TNRS effort	
			Updated Module 5003, added new field 'reporting'. Re-inserted module notes erroneously removed in 2.42	
			Added REQ ID's to modules 5035A, 5035B, 5045A, 5045B, 5110A, 5110B – for TNRS effort.	
			Added explanatory note to top of modules 5035A, 5035B, 5045A, 5045B, 5110A, 5110B – for TNRS effort.	
			Updated Modules 5110 A and 5110 B, corrected message name for confirmation apology, corrected 'condition' field for confirmation apology and success messages – this resolves tickets 22308 and 22307.	
			Updated Modules 5045 A and 5045 B, corrected 'condition' field for confirmation apology and success messages – for TNRS effort – this resolves tickets 22306 and 22305.	
			Updated Module 5120, added module 5100 to 'entering from' field – this resolves ticket 22309.	
			Updated module 5135, updated 'entering from' field to show that callers will be entering in from module 5130-DOB Check Condition – this resolves ticket 22311.	
			TNRS changes highlighted in Yellow	
			Verizon Business proprietary statement added to title page and page footers.	
			Updated Module 5110B, removed [global default] tag from retry 1/timeout 1. Because wording for this is contained in the message itself, the apology was playing twice – this resolves ticket 22347.	
			Updated Module 5035A and 5035B, corrected typo in confirmation apology condition field – this resolves ticket 22349	
22 September 2008	**4.02**	1.0	Updated Module 5045B, corrected typo in ReqID field for the confirmation apology prompt.	Sean Stallings VZB
30 September 2008	**4.03**	1.0	Updated module 5140, updated wording for Retry 1 prompt. Since the name OSDM works best with spell only on the retry, new prompting will no longer ask callers to say and spell their name.	Sean Stallings VZB

1 October 2008	**4.04**	1.0	Updated module 5045A, added more explanation in module description, corrected typo's in timeout 1 and 2 message names.	Sean Stallings VZB
			Updated module 5045B, corrected typo in Confirmation Apology message name.	
			Updated module 5110A, added more explanation in module description.	
			Updated module 5140, added correct text to confirmation retry 2, message 82055. Highlighted this change in Green.	
7 October 2008	**4.05**	1.0	Updated module 5110A, 'Confirmation' section 'Action' field now shows to play confirmation apology prompt on 'no' – this resolves ticket 22422.	Sean Stallings VZB
21 October 2008	**4.06**	1.0	Updated module 5035A; Added note to Action field for 'Max Retry', now plays [Global Default] message on exit. Updated 'action' column for Confirmation section, removing notes adding 'no' on confirmation condition.	Sean Stallings VZB
			Updated module 5035B; consolidated initial 1 and initial 2, since callers will not be entering on a condition. Updated 'action' column for Confirmation section, removing notes adding 'no' on confirmation condition.	
			Updated module 5045A; Added note to Action field for 'Max Retry', now plays [Global Default] message on exit. Updated 'action' column for Confirmation section, removing notes adding 'no' on confirmation condition.	
			Updated module 5045B; consolidated initial 1 and initial 2, since callers will not be entering on a condition. Updated 'action' column for Confirmation section, removing notes adding 'no' on confirmation condition.	
			Updated module 5110A; Added note to Action field for 'Max Retry', now plays [Global Default] message on exit. Updated 'action' column for Confirmation section, removing notes adding 'no' on confirmation condition.	
			Updated module 5110B; consolidated initial 1 and initial 2, since callers will not be entering on a condition. Updated 'action' column for Confirmation section, removing notes adding 'no' on confirmation condition.	
			Updated module 5115; consolidated all 'max retry' and 'no on confirmation' conditionals, since conditions are no longer in use. Conditions now only reference first, last and alt name.	
29 October 2008	**4.07**	1.0	Added REQID's to modules 4999, 5000, 5003, 5005,5155, 5030, 5040, 5050, 5090, 5120, 5135, 5190, 5200, 5205. Renamed 'name' column as 'REQID' in all modules that did not already have a REQID column. Removed 'name' column from modules that had both.	Sean Stallings VZB
			Renamed 'option' column as 'REQID' in all modules that did not already have a REQID column. Removed 'option' column from modules that had both	
4 November 2008	**4.08**	1.0	Updated module 5115, added parameters for reporting associated app ID.	Sean Stallings VZB
7 November 2008	**4.09**	1.0	Updated modules 5035A, 5035B, 5045A, 5045B, 5110A, 5110B. Corrected REQID columns to show the current requirement ID's being used by SSA.	Sean Stallings VZB

1 December 2008	4.10	1.0	COADD/BEVE-MRC Tuning 2 Effort-Recommendations From Nuance 1) Updated module 5035B, added entry to 'Module Notes' stating that confidence levels for this module should be set to .400. 2) Updated module 5045B, added entry to 'Module Notes' stating that confidence levels for this module should be set to .400. 3) Updated module 5110B, added entry to 'Module Notes' stating that confidence levels for this module should be set to .400.	Sean Stallings VZB
2 February 2009	4.11	1.0	Updated Header	Sean Stallings VZB
9 March 2009	4.12	1.0	Updated modules 5035A and 5035B; added developer note stating that single character recognition will be treated as an out of grammar response.	Sean Stallings VZB
24 March 2009	4.13	1.0	Updated module 5035B, changed note regarding max retries/timeouts now reads as 4—this resolves ticket 606153.	Sean Stallings VZB
28 April 2009	4.14	1.0	Updated section 2.2 Timeouts and Retries. Added prompting for timeout global default.	Sean Stallings VZB
21 May 2009	4.15	1.0	Added Chapter 3: Global Commands and Global Prompts, detailing global command exceptions for this application. Updated module 4999, corrected entry for 'entering from' field, now reads COA-DD Global. Updated modules 5045A and 5045B, corrected reporting tags for these modules.	Sean Stallings VZB
25 June 2009	4.15.1	1.0	Cover page update.	Kim Rothlis VzB
22 March 2010	4.15.2	1.0	<mark>OMB Attestation Addition Change</mark> Added DM 5001_Attestation Flag Check and DM 5002 AttestationYN between modules 5000-Need2Ask-Msg and 5003-Reverse ANI Lookup. Updated modules 5000 and 5003 with correct routing/hyperlinks.	Kim Rothlis VzB
01 Apr 2010	4.15.3	1.0	<mark>SARA3 DD-COA Module Change Request (OMB Attestation Change – additional requirements)</mark> Updated the verbiage for message #'s 50001, 50002, and 50003 in DM 5000-Need2Ask-Msg	Becky Stallings, VzB
02 Apr 2010	4.15.4	1.0	<mark>SARA3 DD-COA Module Change Request (OMB Attestation Change – additional requirements)</mark> Updated wording to messages 50001, 50002 and 50003 in DM 5000-Need2Ask-Msg per customer review.	Kim Rothlis VzB

Table of Contents

Chapter 1:   Introduction

This document is one part of a set of documents that describe the user interface for the Social Security Administration (SSA) Change of Address (COA) and Direct Deposit (DD) application. This document describes only the interaction for **knowledge-based authentication** (KBA). The call flow has passed through initial introduction and caller qualification before getting to this section. A caller will pass through either this module, or through the password authentication (PWA) module, but not both.

Note that this entire section is jumped into from the Global part of the application and returns to it. The only entry point to this section is from COA-DD 1330-CallKBAuth-Code. Exit from this section is by return to the same module (COA-DD 1330-CallKBAuth-Code)

Chapter 2: Global Behavior

2.1 Privacy

The following information is considered confidential; SSN, First Name, Last Name, Mother's Maiden Name, Other Last Name (as it appears on their Social Security card), Date of Birth, Place of Birth, and Payment Amount. The confidential flag should be set to true for all dialog modules collecting this information from the caller.

2.2 Timeouts and Retries

Retry prompts are specified in the DialogModule tables, and they are preceded by the appropriate apology prompt:

Message Number 00110	*retry 1*	*upon rejection of speech*	apology_re1	I'm sorry, I didn't understand you.
Message Number 00111		*upon confirmation*	apology_re1 –	My mistake.
Message Number 00112	*retry 2*	*upon rejection of speech*	apology_re2	I'm sorry, I still didn't understand you.
Message Number 00113		*upon confirmation*	apology_re2 –	My mistake again.
Message Number 00132	*Timeout 1*	*upon no input*	apology_re1	I'm sorry, I didn't hear anything.
Message Number 00111		*upon confirmation*	apology_re1 –	My mistake.
Message Number 00133	*Timeout 2*	*upon no input*	apology_re2	I'm sorry, I still didn't hear anything.
Message Number 00113		*upon confirmation*	apology_re2 –	My mistake again.
	excess retries		[…]	\<timeout / retry prompt(s) specified in DialogModule table\>

If callers reach maximum timeouts or retries they will be sent to 5900-DMfailure-Msg and then routed back to Global. For all other global behavior see chapter 4 in the Change of Address/Direct Deposit Global user interface document.

2.3 Avoid Same Mistake

(This section documents the already-existing system behavior. It is not a change.)

In accordance with OSDM default settings, "AvoidSameMistake" is allowed in all collection DMs unless specified otherwise. This is a global parameter and has no specific context.

"AvoidSameMistake" disallows an utterance that is recognized if the utterance was previously rejected by a negative response (i.e. No) during confirmation. The application advances to a retry because the No response given in the initial collection caused the DM to remove the spoken utterance from the list of possible interpretations.

"AvoidSameMistake" is set to TRUE by default and if it needs to be disabled in any individual DM, the Dialog Module Notes section or Developer Notes section will specify "avoidsamemistake = False".

Chapter 3:   Global Commands and Global Prompts

3.1   Global Commands

As per 4.5 Global Commands and Global Prompts section in COA-DD Global UI, 'Main Menu' global command will transfer to N8NN Main Menu module 1100-Main-DM.

Chapter 4: Detailed Dialog Specification

4.1 Call-Flow Tables

4999-Check Null Condition

Entering from		
COA-DD Global 1330-CallKBAuth-Code		

REQID	*Condition*	*Action*
4999-KBA-Check Null Condition-Condition-0	If TVDC Items to collect= 0	Go to: <u>5003-Reverse ANI Look up</u>
4999-KBA-Check Null Condition-Condition-Else	If TVDC items else	Go to: <u>5000-Need2Ask-Msg</u>
Developer Note:		
Increment speak item counter for each item that is null.		

5000-Need2Ask-Msg

Play Prompt
Prepare caller for sequence of questions.

Entering from
<u>4999- Check Null Condition</u>

Prompts			
REQID	**Message Number**	**Condition**	**Wording**
5000-KBA-Need2Ask-Prompt-LC-1	50001	If pieces to collect = 1	Before I can make any changes, I'll need to ask a question to verify who you are. You will need to <mark>know</mark> the EXACT dollar amount of your last benefit payment <mark>to complete your transaction.</mark>
5000-KBA-Need2Ask-Prompt-LC-2	50002	else	Before I can make any changes, I'll need to ask <mark>you</mark> …
			speak item counter[2-8]
5000-KBA-Need2Ask-Prompt-LC-3	50003		questions to verify who you are. You will need to <mark>know</mark> the EXACT dollar amount of your last benefit payment <mark>to complete your transaction.</mark> If you'll work with me<mark>, you can make this change quickly .</mark>

Req ID	**Condition**	**Action**
5000-KBA-Need2Ask-Condition-Always	*Always*	Go to: <mark>5001-Attestation Flag Check</mark>

Event logging

Developer notes
No barge-in

5001-Attestation Flag Check

	➡ ✦

Entering from
5000-Need2Ask-Msg

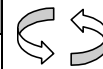| **REQID**	**Condition**	**Action**
5001-*KBA*-Attestation Flag Check-Condition-0	If Attestation Flag = 0	Go to: 5002-AttestationYN
5001-*KBA*-Attestation Flag Check-Condition-else	If Attestation Flag = else	Go to: 5003-Reverse ANI Look up

Module Notes
V-KBPW-ATT_1-(duration),T-KBPW-0000-(duration)

5002-AttestationYN

	YesNo	↺ ↻
OMB Attestation		

Entering from
5001-Attestation Flag Check

Prompts

Message Number	**REQID**	**Condition**	**Wording**	**Barge-in**
55010	5002-KBA-AttestationYN-Initial 1		Social Security is allowed to collect this information under 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.	NO
55011	5002-KBA-AttestationYN-Initial 2		Do you understand and agree to these terms?	Yes
55012	5002-KBA-AttestationYN-Retry1		[Global Default] Do you understand and agree to these terms? Please say YES or NO.	Yes
55013	5002-KBA-AttestationYN-Retry2		[Global Default] 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. If you understand and agree to these terms, press one. Otherwise press two	Yes
55014	5002-KBA-AttestationYN-Timeout1		Sorry, I didn't hear anything. Do you understand and agree to these terms? Please say YES or NO.	Yes

55015	*5002-KBA-AttestationYN-Timeout2*		I'm sorry, but I still didn't hear anything. 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 with these terms? You can say YES or press 1; or NO or press 2.	Yes
55016	*5002-KBA-AttestationYN-Help*		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.	Yes
00120	*5002-KBA-AttestationYN-Success1*	Caller says Yes	Alright.	N/A
12101	*5002-KBA-AttestationYN-Success2*	Caller says No or max retry/timeout	Thank you for calling Social Security. Goodbye.	N/A

REQID	Vocabulary	DTMF	Action	Confirm.
5002-KBA-AttestationYN-Option-Yes	Yes and usual synonyms (including "[Yes] I do")	1	Play 5002_AttestationYN-Prompt-Success-1 Set Attestation Flag to 1 Go to: 5003-Reverse ANI Look up	*Never*
5002-KBA-AttestationYN-Option-No	No and usual synonyms	2	Play 5002_AttestationYN-Prompt-Success-2 And then hang up	*Never*

Reporting					
Record = U-	RECL	-DM_5002-(Call Duration at start),T-RECL-	0000 = Success	-Call duration at process end
			0001 = Error	
			0002 = Max No Input	
			0003 = Max No Match	
			0200 = Caller Hang Up	

Developer notes

5003-Reverse ANI Look up

# Reverse ANI Lookup	
	Database Query
Upon Capturing ANI, acquire first and last name for this caller.	

Entering from
4999-Check Null Condition, 5001-Attestation Flag Check, 5002-AttestationYN

Input Field	*Description*
ANI Telephone number	Caller telephone number

Output Field	*Description*
Account Name	Account Name per this telephone number. To be returned as: First_Name, Last_Name OR First_Initial, Last_Name as indicated by the telephone listing

DB Return Value	Action
Status Code = 00	Write 0000 to reporting trigger, Go to: Condition Check
Status Code = 08	Write 0503 to reporting trigger, Go to: Condition DB failure
Status Code = 09	Write 0408 to reporting trigger, Go to: Condition DB failure

REQID	Condition	Action
5003-KBA-Reverse ANI Look Up-Condition-No Match	If no match for telephone	Set Caller-First-name to NULL Set Caller-Last-Name to NULL Go to: 5005-Social Security Check Condition
5003-KBA-Reverse ANI Look Up-Condition-Match and Confidential	If match and Name confidential	Set Caller-First-name to NULL Set Caller-Last-Name to NULL Go to: 5005-Social Security Check Condition
5003-KBA-Reverse ANI Look Up-Condition-Other	Else	Set Caller-First-name to first name found in White Pages, even if it is only an initial Set Caller-Last-Name to last name found in White Pages Go to: 5005-Social Security Check Condition
5003-KBA-Reverse ANI Look Up-Condition-Data Base Failure	DB failure	Set Caller-First-name to NULL Set Caller-Last-Name to NULL Go to: 5005-Social Security Check Condition

Reporting

Save call duration at module start time

[0000 = Success]

[0001 = System Error]

Record = D-KBPW-HDB_5003-(Call Duration at start),T-KBPW-[0408 = Resource Not Available]–Call duration at process end

[0503 = Not Valid Data]

[0004 = Caller Hang Up]

Developer Notes

Reverse ANI lookup returns name data in many formats. The following rules apply to the handling of first and last names received from the Reverse ANI Lookup string.

For all names:

All punctuation shall be removed
Numbers shall be removed
Single and double letters shall be ignored
Any titles or common suffixes shall be removed (Dr Jr II etc.)
Any contiguous collection of non-whitespace characters beside the above are taken as a name.
Very short names like 'Al' will be ignored on the assumption that these would fail to match SSA records.

First Names
Multiple names shall be broken down to individual names (i.e. John & Joan would be added to the verification grammar as 2 entries 1 for John and a second for Joan). These names will be sent to the parallel grammar referenced in DM 5035.

Last Name
Multiple last names will not be added individually to the verification grammar, but as a single entry (i.e. Smith-Jones would be added to the grammar as one entry Smith Jones.). This name will be sent to the parallel grammar referenced in DM 5045.

5005-Social Security Check Condition

Entering from
5003-Reverse ANI Look up

REQID	Condition	Action
5005-*KBA*-Social Security Check Condition-Condition-0	If SSN = null	Go to: 5020-GetSSNumber-SSN
5005-*KBA*-Social Security Check Condition-Condition-else	If SSN else	Report V Transaction per module note, Go to: 5030-GetFirstName Check Condition

Module Notes
V-KBPW-SSN_1-(duration),T-KBPW-0000-(duration)

5020-GetSSNumber-SSN

	Social Security DialogModule™	
Get the caller's Social Security Number		

Entering from
5005 Social Security Check Condition

Prompts		
Message Number	**REQID**	**Wording**
50201	5020-KBA-GetSSNumber-Prompt-Initial	Please say your Social Security number like this: 1 2 3 – 4 5 – 6 7 8 9, or enter it on your keypad.
50202	5020-KBA-GetSSNumber-Prompt-Retry1	[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	5020-KBA-GetSSNumber-Prompt-Retry2	[Global Default] Try entering it on the telephone keypad.
50204	5020-KBA-GetSSNumber-Prompt-Timeout1	Sorry, I didn't hear anything. Please enter or say your nine digit social security number now.
50205	5020-KBA-GetSSNumber-Prompt-Timeout2	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	5020-KBA-GetSSNumber-Prompt-Help	You can tell me your nine digit social security number by simply saying it one digit at a time. For example: 1 2 3 – 4 5 – 6 7 8 9. It works best if you don't use double digit numbers like sixty-seven or eighty-nine. Please try it again now.

Option	Vocabulary	DTMF	Action	Confirm.
5020-KBA-GetSSNumber-Option-SSN	<SSN> Allow prefix phrases: [ok | alright] [it is | [my] social security number is]	<SSN>	<no action here – confirm it>	*Always*

Confirmation prompts			
Message Number	**REQID**	**Wording**	**Result**
50207	5020-KBA-GetSSNumber-ConfPrompt-SSN1	This is important, so I want to make sure I have it right. Your social security number is:	
50208	5020-KBA-GetSSNumber-ConfPrompt-SSN2	Okay, now I think I've got it right. Your social security number is:	
	<SS_Num>	CPR	*1 2 3 – 4 5 – 6 7 8 9*
50209	5020-KBA-GetSSNumber-ConfPrompt-SSN3	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?*
00118 <SSN> 00119	5020-KBA-GetSSNumber-ConfPrompt-SSNretry <SSN> 5020-KBA-GetSSNumber-ConfPrompt-SSNtimeout	I think you said <SSN>. Is that correct?	

REQID	Vocabulary	Action	Confirm.
5020-KBA-GetSSNumber-ConfOption-Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	Go to: 5030-GetFirstName Check Condition	*Never*
5020-KBA-GetSSNumber-ConfOption-No	"No [it isn't]" "[No] that's not right"	Re-enter Dialog Module per default behavior	*Never*

DialogModule parameters	
Parameter	**Value**
5020-KBA-GetSSNumber-Parameter	
after_end_of_speech_timeout (incompletetimeout)	2500 msec
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True
max speech duration	20,000 msec
Interdigittimeout	5500 msec
low confidence threshold	**.100**

Event logging		
Record = U-KBPW-DM_5020-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	

	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes
DialogModule Notes

- Area, group or serial number containing only zeros 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)

Fill semantic item <SS_Num>

Set Confidential Flag to TRUE

5030-GetFirstName Check Condition

Entering from
5005-Social Security Check Condition, 5020-GetSSNumber-SSN

REQID	*Condition*	*Action*
5030-KBA-GetFirstName Check Condition-Condition-null	If First Name = null	Go to: 5035A-GetFirstName Say and Spell
5030-KBA-GetFirstName Check Condition-Condition-else	If First Name else	Report V Transaction per module note, Go to: 5040-Last Name Check Condition
Module Notes		

V-KBPW-FN_1-(duration),T-KBPW-0000-(duration)

5035A-GetFirstName Say and Spell

Name DialogModule™
Caller enters this module for standard name collection. No TNRS database check has occurred yet.

Entering from
5030-GetFirstName Check Condition

Prompts			
Msg. Number	**REQ ID**	**Condition**	**Wording**
82045	5035-A-KBA-GetFirstName Prompt-Initial-1	Initial	Now, please say and then spell just your FIRST name. [Short Pause] For example if your first name was Robin, you'd say "Robin, R O B I N". Go ahead.
82046	5035-A-KBA-GetFirstName Prompt-Timeout1	Time out 1	Sorry, I didn't hear you. Go ahead and say, then spell, just your first name.
82047	5035-A-KBA-GetFirstName Prompt-Timeout2	Time out 2	I'm afraid I still can't hear you. Please say your first name and then spell it, like this: "Susan, S U S A N".
50328	5035-A-KBA-GetFirstName Prompt-SayHelp	Help	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."

REQ ID	Vocabulary	DTMF	Action	Confirm.
5035-A-KBA-GetFirstName Option-FirstName	<first_name>	--	Play 5035-A-KBA-GetFirstName Prompt-Success-1 Go to: <u>5040-Last Name Check Condition</u>	*ALWAYS*
5035-A-KBA-GetFirstName Option-MaxTimeout	--	--	Go to: <u>5050-Name-ExitFailure-Msg</u>	--
5035-A-KBA-GetFirstName Option-MaxRetry	--	--	Play [Global Default] (I'm sorry, I didn't understand you) Go to: <u>5115-PostSSN-DB</u>,	--

Confirmation Prompts				
Msg. Number	**REQ ID**	**Wording**	**Result**	**Action**
82053	5035-A-KBA-GetFirstName ConfPrompt-FirstName-1	Let me read that back. First name:	*"Let me read that back. First Name < First Name > spelled < First Name Spelling >, did I get that right?"*	*If Yes: Play 5035-A-KBA-GetFirstName Prompt-Success-1* *Then Go to: <u>5040-Last Name Check Condition</u>* *If No: Play 5035-A-KBA-ConfirmationApology-Prompt, Go to: <u>5115-PostSSN-DB</u>*
		< First Name >		
50337	5035-A-KBA-GetFirstName ConfPrompt-FirstName-2	...spelled:		
	CPR	< First Name Spelling >		
50342	5035-A-KBA-GetFirstName ConfPrompt-FirstName-3	Did I get that right?		
82054	5035-A-KBA-GetFirstName ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no".	*Retry1 on Confirmation*	*If Yes: Play 5035-A-KBA-GetFirstName Prompt-Success-1 Then Go to: <u>5040-Last Name Check Condition</u>* *If No: Play 5035-A-KBA-ConfirmationApology-Prompt Go to: <u>5115-PostSSN-DB</u>*
82055	5035-A-KBA-GetFirstName ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes: Play 5035-A-KBA-GetFirstName Prompt-Success-1 Then Go to: <u>5040-Last Name Check Condition</u>* *If No: Play 5035-A-KBA-ConfirmationApology-Prompt Go to: <u>5115-PostSSN-DB</u>*

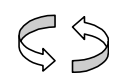|				
82056	5035-A-KBA-GetFirstName ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" *or* "no".	*Timeout1 on Confirmation*	*If Yes:* *Play 5035-A-KBA-GetFirstName Prompt-Success-1* *Then Go to: 5040-Last Name Check Condition* *If No:* *Play 5035-A-KBA-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
82057	5035-A-KBA-GetFirstName ConfPrompt-Timeout2	Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or* "no".	*Timeout2 on Confirmation*	*If Yes:* *Play 5035-A-KBA-GetFirstName Prompt-Success-1* *Then Go to: 5040-Last Name Check Condition* *If No:* *Play 5035-A-KBA-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
50348	5035-A-KBA-ConfirmationApology-Prompt	Sorry about that. Let's try again.	*Apology*	
00122	5035-A-KBA-GetFirstName Prompt-Success-1	Thanks	*Success*	
00250	5035-A-KBA-GetFirstName ConfPrompt-InvalidOrTimeout3	[250 ms silence]	Max Timeout OR Max Retry at Confirmation	*Go to:* 5050-Name-ExitFailure-Msg

Event logging

Record = U-KBPW-DM_5035-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes

Collection Max Retry is set to 0.

Collection Max Timeout is set to 2

Single character recognition will be treated as an out of grammar response.

If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system checks the ANI and SSN, loads all associated names into a custom grammar and then switches to the SPELL-ONLY fallback, which is announced in prompts Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.

Set Confidential Flag to TRUE

5035B-GetFirstName Spell Only

Name DialogModule™

Caller enters this module AFTER TNRS database transaction.

Entering from

5115-PostSSN-DB

Prerequisite

If SSN Post Flag = 1	Load all <First Name> returned from SSN Post into custom spell-only grammar

Prompts

Msg. Number	Req ID	Condition	Wording
82049	5035-B-KBA-GetFirstName Prompt-Respell1	Initial	Please just SPELL your first name, like this: "J O H N".
82051	5035-B-KBA-GetFirstName Prompt-Respell2	Timeout1/Retry1	Sorry, I didn't catch that. Saying just the letters of the alphabet, please spell your first name quickly. 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	5035-B-KBA-GetFirstName Prompt-Respell3	Timeout2/Retry2	[Global Default] Please spell your first name one more time. And remember, please use ONLY the letters of the alphabet and speak quickly. Go ahead.
82052	5035-B-KBA-GetFirstName Prompt-SpellHelp	Help	I need to get the spelling of your first name. For example, if your first name was Nick, you'd say "N I C K." Go ahead.

Req ID	Vocabulary	DTMF	Action	Confirm.
5035-B-KBA-GetFirstName Option-FirstName	<first_name>	--	Play 5035-B-KBA-GetFirstName Prompt-Success-1 Go to: 5040-Last Name Check Condition	ALWAYS
5035-B-KBA-GetFirstName Option-MaxTimeout	--	--	Go to: 5050-Name-ExitFailure-Msg	--
5035-B-KBA-GetFirstName Option-MaxRetry	--	--	Go to: 5050-Name-ExitFailure-Msg	--

Confirmation

Msg. Number	REQ ID	Wording	Result	Action
82053	5035-B-KBA-GetFirstName ConfPrompt-FirstName-1	Let me read that back. First name:	*"Let me read that back. First Name < First Name > spelled < First Name Spelling >, did I get that right?"*	*If Yes: Play 5035-B-KBA-GetFirstName Prompt-Success-1 Then Goto 5040- Last Name Check Condition*
		< First Name >		
50337	5035-B-KBA-GetFirstName ConfPrompt-FirstName-2	...spelled:		*If No: Play 5035-B-KBA-ConfirmationApology-Prompt, re-enter this module.*
	CPR	< First Name Spelling >		
50342	5035-B-KBA-GetFirstName ConfPrompt-FirstName-3	Did I get that right?		
82054	5035-B-KBA-GetFirstName ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no".	*Retry1 on Confirmation*	*If Yes: Play 5035-B-KBA-GetFirstName Prompt-Success-1 Then Goto 5040- Last Name Check Condition* *If No: 5035-B-KBA-ConfirmationApology-Prompt, re-enter this module.*
82055	5035-B-KBA-GetFirstName ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes: Play 5035-B-KBA-GetFirstName Prompt-Success-1 Then Goto 5040- Last Name Check Condition* *If No: Play 5035-B-KBA-ConfirmationApology-Prompt, re-enter this module.*

82056	5035-B-KBA-GetFirstName ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".*	*Timeout1 on Confirmation*	*If Yes:* *Play 5035-B-KBA-GetFirstName Prompt-Success-1* *Then Goto 5040- Last Name Check Condition* *If No:* *Play 5035-B-KBA-ConfirmationApology-Prompt, re-enter this module.*
82057	5035-B-KBA-GetFirstName ConfPrompt-Timeout2	Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".*	*Timeout2 on Confirmation*	*If Yes:* *Play 5035-B-KBA-GetFirstName Prompt-Success-1* *Then Goto 5040- Last Name Check Condition* *If No:* *Play 5035-B-KBA-ConfirmationApology-Prompt, re-enter this module.*
50348	5035-B-KBA-ConfirmationApology-Prompt	Sorry about that. Let's try again.	*Apology*	
00122	5035-B-KBA-GetFirstName Prompt-Success-1	Thanks	*Success*	
00250	5035-B-KBA-GetFirstName ConfPrompt-InvalidOrTimeout3	[250 ms silence]	Max Timeout OR Max Retry at Confirmation	*Go to: 5050-Name-ExitFailure-Msg*

Event logging

Record = U-KBPW-DM_5035-(Call Duration at start),T-KBPW-		
	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes

If condition = Success, load all returned names into custom spell-only grammar

If condition = Failure, use existing spell-only grammar

Single character recognition will be treated as an out of grammar response.

If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system checks the ANI and SSN, loads all associated names into a custom grammar and then switches to the SPELL-ONLY fallback, which is announced in prompts Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.

Respell 3 is conditional -- may not always play depending on the number of retries/confirmations played.

Max Timeout/ Retry set to 4

Set Confidential Flag to TRUE

When invoking recognition and the Caller-First-name variable is not null, invoke a parallel verification grammar provided by Nuance as a JSP, seeded with the contents of the Caller-First-name variable.

Set confidence levels to .400

5040-Last Name Check Condition

Entering from		
5030-GetFirstName Check Condition, 5035A-GetFirstName Say and Spell, 5035B-GetFirstName Spell Only		

REQID	Condition	Action
5040-KBA Last Name Check Condition-Condition-null	If Last Name = null	Go to: 5045A-GetLastName Say and Spell
5040-KBA-Last Name Check Condition-Condition-else	If Last Name else	Report V Transaction per module note, Go to: 5090-AltName Check Condition

Module Notes
V-KBPW-LN_1-(duration),T-KBPW-0000-(duration)

5045A-GetLastName Say and Spell

	Name DialogModule™
Caller enters this module for standard name collection, TNRS data has not been collected or is not yet in use.	

Entering from
5040- Last Name Check Condition

Prompts

Msg. Number	Req ID	Condition	Wording
82058	5045-A-KBA-GetLastName Prompt-Initial-1	Initial	Now I just need your last name. 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.
82059	5045-A GetLastName-Prompt-Timeout1	Time out 1	Sorry, I didn't hear you. Go ahead and say, then spell, your last name, for example, "Smith, S M I T H."
82060	5045-A-GetLastName-Prompt-Timeout2	Time out 2	I'm afraid I still can't hear you. Please say your last name and then spell it, for example, "Smith, S M I T H."
82066	5045-A-KBA-GetLastName Prompt-SayHelp	Help	I need you to say your last name and then spell it for me. For example, if your last name was O'Neal, you'd say, "O'Neal, O N E A L."

Req ID	Vocabulary	DTMF	Action	Confirm.
5045-A-KBA-GetLastName Option-LastName	<last_name>	--	Play 5045-A-KBA-GetLastName Prompt-Success-1 Go to: 5090-AltName Check Condition	ALWAYS
5045-A-KBA-GetLastName Option-MaxTimeouts	--	--	Go to: 5050-Name-ExitFailure-Msg	--
5045-A-KBA-GetLastName Option-MaxRetry	--	--	Play [Global Default] (I'm sorry, I didn't understand you) Go to: 5115-PostSSN-DB	--

Confirmation Prompts

Msg. Number	Req ID	Wording	Result	Action
82175	5045-A-KBA-GetLastName ConfPrompt-LastName-1	Let me read that back. Last name:	*"Let me read that back. Last Name < Last Name > spelled < Last Name Spelling >, did I get that right?"*	*If Yes:* *Play 5045-A-KBA-GetLastName Prompt-Success-1* *Then Go to: 5090-AltName Check Condition*
		< Last Name >		*If No:* *Play 5045-A-GetLastName-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
50337	5045-A-KBA-GetLastName ConfPrompt-LastName-2	...spelled:		
	CPR	< Last Name Spelling >		
50342	5045-A-KBA-GetLastName ConfPrompt-LastName-3	Did I get that right?		
82054	5045-A-KBA-GetLastName ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no".	*Retry1 on Confirmation*	*If Yes:* *Play 5045-A-KBA-GetLastName Prompt-Success-1* *Then Go to: 5090-AltName Check Condition* *If No:* *Play 5045-A-GetLastName-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
82055	5045-A-KBA-GetLastName ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes:* *Play 5045-A-KBA-GetLastName Prompt-Success-1* *Then Go to: 5090-AltName Check Condition* *If No:* *Play 5045-A-GetLastName-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
82056	5045-A-KBA-GetLastName ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" *or "no"."*	*Timeout1 on Confirmation*	*If Yes:* *Play 5045-A-KBA-GetLastName Prompt-Success-1* *Then Go to: 5090-AltName Check Condition* *If No:* *Play 5045-A-GetLastName-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
82057	5045-A-KBA-GetLastName ConfPrompt-Timeout2	Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".*	*Timeout2 on Confirmation*	*If Yes:* *Play 5045-A-KBA-GetLastName Prompt-Success-1* *Then Go to: 5090-AltName Check Condition* *If No:* *Play 5045-A-GetLastName-ConfirmationApology-Prompt Go to: 5115-PostSSN-DB*
50394	5045-A-KBA-GetLastName Prompt-Success-1	Got it.	*Success*	
50348	5045-A-KBA-ConfirmationApology-Prompt	Sorry about that. Let's try again.	*Apology*	
00250	5045-A-KBA-GetLastName ConfPrompt-InvalidOrTimeout3	[250 ms silence]	Max Timeout OR Max Retry at Confirmation	*Go to: 5050-Name-ExitFailure-Msg*

Event logging

Record = U-KBPW-DM_5045-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	

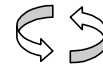|	
0003 = Max No Match	
0200 = Caller Hang Up	
0303 = Max No Confirm	
0304 = Max Help	
0310 = Caller Requested Main Menu	
0311 = Caller Requested Agent	

Developer notes

Collection Max Retry is set to 0.

Collection Max Timeout is set to 2

. If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system checks the ANI and SSN, loads all associated names into a custom grammar and then switches to the SPELL-ONLY fallback, which is announced in prompts Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.

Set Confidential Flag to TRUE

5045B-GetLastName Spell Only

Name DialogModule™

Caller enters this module AFTER TNRS database transaction.

Entering from

5115-PostSSN-DB

Prerequisite

If SSN Post Flag = 1	Load all <Last Name> returned from SSN Post into custom spell-only grammar

Prompts

Msg. Number	REQ ID	Condition	Wording
82062	5045-B-KBA-GetLastName Prompt-Respell1	Initial	Please SPELL your last name for me, like this: "S M I T H".
82064	5045-B-KBA-GetLastName Prompt-Respell2	Timeout1/Retry1	Sorry, I didn't catch that. Go ahead and spell your last name again. For example, if your name was O'Neal, you would say "O N E A L".
50322	5045-B-KBA-GetLastName Prompt-Respell3	Timeout2/Retry2	[Global Default]. 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.
82065	5045-B-KBA-GetLastName Prompt-SpellHelp	Help	I need you to spell your last name. For example, if your last name was O'Neal, you'd say "O N E A L."

REQ ID	Vocabulary	DTMF	Action	Confirm.
5045-B-KBA-GetLastName Option-LastName	<last_name>	--	Play 5045-B-KBA-GetLastName Prompt-Success-1 Go to: 5090-AltName Check Condition	*ALWAYS*
5045-B-KBA-GetLastName Option-MaxTimeouts	--	--	Go to: 5050-Name-ExitFailure-Msg	--

| 5045-B-KBA-GetLastName Option-MaxRetry | -- | -- | Go to: 5050-Name-ExitFailure-Msg | -- |

Confirmation Prompts

Msg. Number	REQ ID	Wording	Result	Action
82175	5045-B-KBA-GetLastName ConfPrompt-LastName-1	Let me read that back. Last name:	*"Let me read that back. Last Name < Last Name > spelled < Last Name Spelling >, did I get that right?"*	*If Yes: Play 5045-B-KBA-GetLastName Prompt-Success-1 Then Go to: 5090-AltName Check Condition*
		< Last Name >		
50337	5045-B-KBA-GetLastName ConfPrompt-LastName-2	...spelled:		*If No: Play 5045-B-KBA-GetLastName ConfirmationApology-Prompt, re-enter this module.*
	CPR	< Last Name Spelling >		
50342	5045-B-KBA-GetLastName ConfPrompt-LastName-3	Did I get that right?		
82054	5045-B-KBA-GetLastName ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no".	*Retry1 on Confirmation*	*If Yes: Play 5045-B-KBA-GetLastName Prompt-Success-1 Then Go to: 5090-AltName Check Condition* *If No: Play 5045-B-KBA-GetLastName ConfirmationApology-Prompt, re-enter this module.*
82055	5045-B-KBA-GetLastName ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes: Play 5045-B-KBA-GetLastName Prompt-Success-1 Then Go to: 5090-AltName Check Condition* *If No: Play 5045-B-KBA-GetLastName ConfirmationApology-Prompt, re-enter this module.*
82056	5045-B-KBA-GetLastName ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" *or* "no"."	*Timeout1 on Confirmation*	*If Yes: Play 5045-B-KBA-GetLastName Prompt-Success-1 Then Go to: 5090-AltName Check Condition* *If No: Play 5045-B-KBA-GetLastName ConfirmationApology-Prompt, re-enter this module.*
82057	5045-B-KBA-GetLastName ConfPrompt-Timeout2	Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".*	*Timeout2 on Confirmation*	*If Yes: Play 5045-B-KBA-GetLastName Prompt-Success-1 Then Go to: 5090-AltName Check Condition* *If No: Play 5045-B-KBA-GetLastName ConfirmationApology-Prompt, re-enter this module.*
50394	5045-B-KBA-GetLastName Prompt-Success-1	Got it.	*Success*	
50348	5045-B-KBA-GetLastName ConfirmationApology-A Prompt	Sorry about that. Let's try again.	*Apology*	
00250	5045-B-KBA-GetLastName ConfPrompt-InvalidOrTimeout3	[250 ms silence]	Max Timeout OR Max Retry at Confirmation	*Go to: 5050-Name-ExitFailure-Msg*

Event logging			
Record = U-KBPW-DM_5045-(Call Duration at start),T-KBPW-		0000 = Success	-Call duration at process end
		0001 = Error	
		0002 = Max No Input	
		0003 = Max No Match	
		0200 = Caller Hang Up	
		0303 = Max No Confirm	
		0304 = Max Help	
		0310 = Caller Requested Main Menu	
		0311 = Caller Requested Agent	

Developer notes
If condition = Success, load all returned names into custom spell-only grammar
If condition = Failure, use existing spell-only grammar
If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system checks the ANI and SSN, loads all associated names into a custom grammar and then switches to the SPELL-ONLY fallback, which is announced in prompts Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.
Respell 3 is conditional -- may not always play depending on the number of retries/confirmations played.
Set Confidential Flag to TRUE
When invoking recognition and the Caller-Last-name variable is not null, invoke a parallel verification grammar provided by Nuance as a JSP, seeded with the contents of the Caller-Last-name variable.
Set confidence levels to .400

5050-Name-ExitFailure-Msg

	Play Prompt	
Apologize on exit		

Entering from
5035A-GetFirstName Say and Spell, 5035B-GetFirstName Spell Only, 5045A-GetLastName Say and Spell, 5045B-GetLastName Spell Only, 5110A-GetAltName Say and Spell, 5110B-GetAltName Spell Only, 5140- GetMother'sMaiden

Prompts		
Message Number	REQID	Wording
51008	5050-Name-ExitFailure-Prompt-1	I'm sorry I'm having so much trouble.

REQID	Condition	Action
5050-KBA-Name-ExitFailure-Condition-Always	Always	Go to: 5150-NoName-Msg

| Module Settings |
|---|
| No barge-in |
| Note: This is the parameter exitfailureprompt and can be configured by setting this parameter. |

5090-AltName Check Condition

Entering from		
5040-Last Name Check Condition, 5045A-GetLastName Say and Spell, 5045B-GetLastName Spell Only		

REQID	Condition	Action
5090-KBA-AltName Check Condition-Condition-null	If Alt Name = Null	Go to: 5100-CheckForAltName-YN
5090-KBA-AltName Check Condition-Condition-else	If Alt Name else	Report V Transaction per module note, Go to: 5120-DOB Check Condition

Module Notes
V-KBPW-OtherLastName_1-(duration),T-KBPW-0000-(duration)

5100-CheckForAltName-YN

	YesNo
Check to see if Caller might be listed under an alternate name	

Entering from
5090-AltName Check Condition

Prompts		
Message Number	**REQID**	**Wording**
51001	5100-KBA-CheckForAltName-Prompt-Initial	Some people have another last name - for example, a professional or maiden name - that might be listed under their social security number. Do you have another last name? Please say Yes or No.
51002	5100-KBA-CheckForAltName-Prompt-Retry1	[Global Default] Would you like me to also check under another last name? Please say YES or NO.
51003	5100-KBA-CheckForAltName-Prompt-Retry2	[Global Default] If you think you might be listed under another last name, press one. Otherwise, press two.
51004	5100-KBA-CheckForAltName-Prompt-Timeout1	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.
51005	5100-KBA-CheckForAltName-Prompt-Timeout2	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.
51006	5100-KBA-CheckForAltName-Prompt-Help	I need to know if you might be listed under an alternate last name. For example you may also have a professional name, or a maiden name, or one from a previous marriage. Would you like me to include another last name with this request? YES or NO.

REQID	Vocabulary	DTMF	Action	Confirm.
5100-KBA-CheckForAltName-Option-Yes	"Yes [please]" "[Yes] I do" "[Yes] I would" "Yeah"	1	Go to: 5110A-GetAltName Say and Spell	*Never*
5100-KBA-CheckForAltName-Option-No	"No [thanks]" "[No] I don't" "[No] I do not" "[No] I wouldn't" "[No] I would not"	2	AltNameCollected := True Go to: 5120-DOB Check Condition	*Never*

DialogModule parameters	
Parameter	**Value**
5100-KBA-CheckForAltName-Parameter	
after_end_of_speech_timeout	500 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging			
Record = U-KBPW-DM_5100-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes

5110A-GetAltName Say and Spell

Name DialogModule™
Caller enters this module for standard name collection. TNRS data has not been collected or is not yet in use.

Entering from
5100-CheckForAltName-YN

Prompts			
Msg. Number	**REQ ID**	**Condition**	**Wording**
50305	5110-A-KBA-GetAltName Prompt-Initial-1	Initial	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.
82072	5110-A-KBA-GetAltName Prompt-Timeout1	Time out 1	Sorry, please say AND SPELL your other last name, for example, "Smith, S M I T H."
82073	5110-A-KBA-GetAltName Prompt-Timeout2	Time out 2	I still didn't hear you. Please say your other last name, and then spell it, like this: "Smith, S M I T H".
82080	5110-A-KBA-GetAltName Prompt-SayHelp	Help	I need you to say your other last name and then spell it for me. For example, if your other last name was Jones, you'd say, "Jones, J O N E S."

REQ ID	Vocabulary	DTMF	Action	Confirm.
5110-A-KBA-GetAltName Option-Altname	<other_last_name>	--	Play 5110-A-KBA-GetAltName Prompt-Success-1 Go To: 5120-DOB Check Condition	*ALWAYS*
5110-A-KBA-GetAltName Option-MaxTimeouts	--	--	Go to: 5050-Name-ExitFailure-Msg	--
5110-A-KBA-GetAltName Option-MaxRetry	--	--	Play [Global Default] (I'm sorry, I didn't understand you) Go to: 5115-PostSSN-DB	--

Confirmation Prompts

Msg. Number	REQID	Wording	Result	Action
82175	5110-A-KBA-GetAltName ConfPrompt-LastName-1	Let me read that back. Last name:	*"Let me read that back. Last Name < Other Last Name > spelled < Other Last Name Spelling >, did I get that right?"*	*If Yes:* *Play 5110-A-KBA-GetAltName Prompt-Success-1 Then Go to: 5120-DOB Check Condition* *If No:* *Play 5110-A-KBA-GetAltName ConfirmationApology-Prompt, Go to: 5115-PostSSN-DB,*
		< Other Last Name >		
50337	5110-A-KBA-GetAltName ConfPrompt-LastName-2	...spelled:		
	CPR	< Other Last Name Spelling >,		
50342	5110-A-KBA-GetAltName ConfPrompt-LastName-3	Did I get that right?		
82054	5110-A-KBA-GetAltName ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no".	*Retry1 on Confirmation*	*If Yes:* *Play 5110-A-KBA-GetAltName Prompt-Success-1 Then Go to: 5120-DOB Check Condition* *If No:* *Play 5110-A-KBA-GetAltName ConfirmationApology-Prompt, Go to: 5115-PostSSN-DB,*
82055	5110-A-KBA-GetAltName ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes:* *Play 5110-A-KBA-GetAltName Prompt-Success-1 Then Go to: 5120-DOB Check Condition* *If No:* *Play 5110-A-KBA-GetAltName ConfirmationApology-Prompt, Go to: 5115-PostSSN-DB,*
82056	5110-A-KBA-GetAltName ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" or "no"."	*Timeout1 on Confirmation*	*If Yes:* *Play 5110-A-KBA-GetAltName Prompt-Success-1 Then Go to: 5120-DOB Check Condition* *If No:* *Play 5110-A-KBA-GetAltName ConfirmationApology-Prompt, Go to: 5115-PostSSN-DB,*

				If Yes: *Play 5110-A-KBA-GetAltName Prompt-Success-1 Then Go to: 5120-DOB Check Condition* *If No:* *Play 5110-A-KBA-GetAltName ConfirmationApology-Prompt, Go to: 5115-PostSSN-DB,*
82057	5110-A-KBA-GetAltName ConfPrompt-Timeout2	Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".*	*Timeout2 on Confirmation*	
00120	5110-A-KBA-GetAltName Prompt-Success-1	Alright.	*Success*	
50348	5110-A-KBA-ConfirmationApology-Prompt	Sorry about that. Let's try again.	*Apology*	
00250	5110-A-KBA-GetAltName ConfPrompt-InvalidOrTimeout3	[250 ms silence]	Max Timeout OR Max Retry at Confirmation	*Go To: 5050-Name-ExitFailure-Msg*

Event logging		
Record = U-KBPW-DM_5110-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes

Collection Max Retry is set to 0.

Collection Max Timeout is set to 2

. If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system checks the ANI and SSN, loads all associated names into a custom grammar and then switches to the SPELL-ONLY fallback, which is announced in prompts Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.

Set Confidential Flag to TRUE

5110B-GetAltName Spell Only

Name DialogModule™
Caller enters this module AFTER TNRS database transaction.
Entering from
5115-PostSSN-DB

Prerequisite	
If SSN Post Flag = 1	Load all <Alt Name> returned from SSN Post into custom spell-only grammar

Prompts			
Msg. Number	**REQ ID**	**Condition**	**Wording**
82075	5110-B-KBA-GetAltName Prompt-Respell1	Initial	Please SPELL your other last name for me, like this: "S M I T H".
82077	5110-B-KBA-GetAltName Prompt-Respell2	Timeout1/Retry1	Sorry, I didn't catch that. Go ahead and spell your other last name again. For example, if the name was O'Neal, you would say "O N E A L".
82149	5110-B-KBA-GetAltName Prompt-Respell3	Timeout2/Retry2	[Global Default]. If the 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 name one more time.
82079	5110-B-KBA-GetAltName Prompt-SpellHelp	Help	I need you to spell your other last name. For example, if your other last name was Jones, you'd say "J O N E S."

REQ ID	Vocabulary	DTMF	Action	Confirm.
5110-B-KBA-GetAltName Option-Altname	<other_last_name>	--	Play 5110-B-KBA-GetAltName Prompt-Success-1 Go To: 5120-DOB Check Condition	*ALWAYS*
5110-B-KBA-GetAltName Option-MaxTimeouts	--	--	Go to: 5050-Name-ExitFailure-Msg	--
5110-B-KBA-GetAltName Option-MaxRetry	--	--	Go to: 5050-Name-ExitFailure-Msg	--

Confirmation Prompts				
Msg. Number	**REQ ID**	**Wording**	**Result**	**Action**
82175	5110-B-KBA-GetAltName ConfPrompt-LastName-1	Let me read that back. Last name:	*"Let me read that back. Last Name < Other Last Name > spelled < Other Last Name Spelling >, did I get that right?"*	*If Yes: Play 5110-GetAltName-B-KBA-Prompt-Success-1 Then Goto 5120-DOB Check Condition*
		< Other Last Name >		
50337	5110-B-KBA-GetAltName ConfPrompt-LastName-2	...spelled:		
	CPR	< Other Last Name Spelling >,		*If No: Play 5110-B-KBA-GetAltName ConfirmationApology-Prompt re-enter this module*
50342	5110-B-KBA-GetAltName ConfPrompt-LastName-3	Did I get that right?		
82054	5110-B-KBA-GetAltName ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no".	*Retry1 on Confirmation*	*If Yes: Play 5110-B-KBA-GetAltName Prompt-Success-1 Then Goto 5120-DOB Check Condition* *If No: Play 5110-B-KBA-GetAltName ConfirmationApology-Prompt re-enter this module*

82055	5110-B-KBA-GetAltName ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes:* *Play 5110-B-KBA-GetAltName Prompt-Success-1 Then Goto 5120-DOB Check Condition* *If No:* *Play 5110-B-KBA-GetAltName ConfirmationApology-Prompt re-enter this module*
82056	5110-B-KBA-GetAltName ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" *or "no"."*	*Timeout1 on Confirmation*	*If Yes:* *Play 5110-B-KBA-GetAltName Prompt-Success-1 Then Goto 5120-DOB Check Condition* *If No:* *Play 5110-B-KBA-GetAltName ConfirmationApology-Prompt re-enter this module*
82057	5110-B-KBA-GetAltName ConfPrompt-Timeout2	Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".*	*Timeout2 on Confirmation*	*If Yes:* *Play 5110-B-KBA-GetAltName Prompt-Success-1 Then Goto 5120-DOB Check Condition* *If No:* *Play 5110-B-KBA-GetAltName ConfirmationApology-Prompt re-enter this module*
00120	5110-B-KBA-GetAltName Prompt-Success-1	Alright.	*Success*	
50348	5110-B-KBA- ConfirmationApology-B Prompt	Sorry about that. Let's try again.	*Apology*	
00250	5110-B-KBA-GetAltName ConfPrompt-InvalidOrTimeout3	[250 ms silence]	Max Timeout OR Max Retry at Confirmation	*Go To: 5050-Name-ExitFailure-Msg*

Event logging

Record = U-KBPW-DM_5110-(Call Duration at start),T-KBPW-		
	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

_____

Developer notes
If condition = Success, load all returned names into custom spell-only grammar
If condition = Failure, use existing spell-only grammar
If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system checks the ANI and SSN, loads all associated names into a custom grammar and then switches to the SPELL-ONLY fallback, which is announced in prompts Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.
Respell 3 is conditional -- may not always play depending on the number of retries/confirmations played.
Set Confidential Flag to TRUE Set confidence levels to .400

5115-PostSSN-DB

	Database Query
In this DM, the collected SSN is "posted" using the TNRS request.	

Entering from
5035A-GetFirstName Say and Spell, 5045A-GetLastName Say and Spell, 5110A-GetAltName Say and Spell

Prerequisite

REQID	*Condition*	*Action*
--NA--	SSN Post Flag = 0	Continue in this form
KBPW-PSSN-5115-Option-NC-7	*SSN Post Flag = 1, Entering from First Name*	Go to: 5035B-GetFirstName Spell Only, Condition Failure
KBPW-PSSN-5115-Option-NC-8	*SSN Post Flag = 1, Entering from Last Name*	Go to:5045B-GetLastName Spell Only , Condition Failure
KBPW-PSSN-5115-Option-NC-9	*SSN Post Flag = 1, Entering from Alt Name*	Go to: 5110B-GetAltName Spell Only Condition Failure

Input Field	*Description*	*Value*
SSN	The SSN collected in 5020-GetSSNumber-SSN	SSN: 9-digit SSN
associatedAppID	Varchar (8 max)	*TKCA, TKDD*
ANI	System provided ANI	ANI: 10-digit calling number, if no ANI available, or ANI is less than 10 digits send all zeros.

Output Field	*Description*
<FirstName> <LastName> <OtherLastName>	First Name, Last Name, Alt Name associated with the ANI/SSN.

Req ID	*Condition*	*Action*
KBPW-PSSN-5115-Option-NC-1	*If Success and First Name*	Set SSN Post Flag to 1, Go to: 5035B-GetFirstName Spell Only, Condition Success
KBPW-PSSN-5115-Option-NC-2	*If Success and Last Name*	Set SSN Post Flag to 1, Go to:5045B-GetLastName Spell Only , Condition Success
KBPW-PSSN-5115-Option-NC-3	*If Success and Alt Name*	Set SSN Post Flag to 1, Go to: 5110B-GetAltName Spell Only Condition Success

KBPW-PSSN-5115-Option-NC-4	*Else and First Name*	Set SSN Post Flag to 1, Go to: 5035B-GetFirstName Spell Only, Condition Failure
KBPW-PSSN-5115-Option-NC-5	*Else and Last Name*	Set SSN Post Flag to 1, Go to:5045B-GetLastName Spell Only , Condition Failure
KBPW-PSSN-5115-Option-NC-6	*Else and Alt Name*	Set SSN Post Flag to 1, Go to: 5110B-GetAltName Spell Only Condition Failure

Reporting				

Developer Notes
For associatedAppID; *TKCA = Change of Address, TKDD = Direct Deposit.*

5120-DOB Check Condition

Entering from
5090-AltName Check Condition, 5100-CheckForAltName-YN, 5110A-GetAltName Say and Spell, 5110B-GetAltName Spell Only,

REQID	**Condition**	**Action**
5120 KBA- DOB Check Condition-Condition-null	If DoB = null	Go to: 5130-GetDOB-Date
5120-KBA-DOB Check Condition-Condition-else	If DoB else	Report V Transaction per module note, Go to: 5135-Mother'sMaiden Check Condition

Module Notes
V-KBPW-DOB_1 (duration),T-KBPW-0000-(duration)

5130-GetDOB-Date

	Date DialogModule™	
Get the caller's Date Of Birth		

Entering from
5120-DOB Check Condition

Prompts		
Message Number	**REQID**	**Wording**
51301	5130-KBA-GetDOB-Prompt-Initial	Now please tell me your date of birth. For example, you could say…May fifth, 1937. [Note: no pause between the 2 sentences]
51302	5130-KBA-GetDOB-Prompt-Retry1	[Global Default] Try saying the month followed by the date and then the year you were born, for example May fifth, 1937.
51303	5130-KBA-GetDOB-Prompt-Retry2	[Global Default] Just say the month followed by the date and then the year you were born. For example July fourth, 1976.
51304	5130-KBA-GetDOB-Prompt-Timeout1	Sorry, I didn't hear you. Please tell me your birth date.. For example, you could say May fifth, 1937.
51305	5130-KBA-GetDOB-Prompt-Timeout2	I'm sorry, but I'm still having trouble hearing you. I need the month, day and year for your birthday, for example July fourth, 1976.

51307	5130-KBA-GetDOB-Prompt-Help	I need to know when you were born as a calendar date. You can say this in a number of ways. For example you can say "July fourth, 1976", or "the fourth of July, 1976". Go ahead. What's YOUR date of birth?
00122	5130-KBA-GetDOB-Prompt-SuccessYes	Thanks.

REQID	*Vocabulary*		*DTMF*	*Action*	*Confirm.*
5130-KBA-GetDOB-Option-Date	<date> Remove unneeded options from the DATE grammar – days of the week, and partially specified dates. Require a fully specified date.		<...>		*Always*
	Remove all global grammars for this DM.				

Confirmation prompts

Message Number	*REQID*	*Wording*	*Result*
51308	5130-KBA-GetDOB-ConfPrompt-Date1	Okay, so that's:	
	<Date>	CPR	*January 12th 1931*
51309	5130-KBA-GetDOB-ConfPrompt-Date2	Is THAT right?	*Okay, so that's: <January 12th, 1931>. Is that right?*
51310	5130-KBA-GetDOB-ConfPrompt-DateRetry	Sorry. I didn't catch that. Please say "YES" if I have the right date.	Sorry. I didn't catch that. Please say "YES" if I have the right date.
51311	5130-KBA-GetDOB-ConfPrompt-DateTimeout	I wasn't sure if you said anything. Please say "YES" if I have the right date.	*I wasn't sure if you said anything. Please say "YES" if I have the right date.*

Confirmation Option	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
5130-KBA-GetDOB-ConfOption-Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	play SuccessYes prompt Go to: <u>5135-Mother'sMaiden Check Condition</u>	*Never*
5130-KBA-GetDOB-ConfOption-No	"No [it isn't]" "[No] that's not right"	2	Re-enter Dialog Module per default behavior	*Never*

DialogModule parameters

Parameter	*Value*
5130-KBA-GetDOB-Parameter	
date_reference_date	System date
date_range_allowed_earliest	1 January 1900
date_range_allowed_latest	Today
date_range_expected_earliest	Today – 75 years
date_range_expected_latest	Today – 25 years
date_disambiguation_mode	ASSUME_NOTHING
after_end_of_speech_timeout (incomplete timeout)	1500 msec
max speech duration	16,000 msec
before_begin_of_speech_timeout	7,000 msec
allowing_barge_in	True

Event logging

Record = U-KBPW-DM_5130-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at

	0001 = Error	process end
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

DialogModule Notes
• Although the application does not explicitly guide callers to use DTMF for the Date of Birth entry, it is enabled.
• Date entry should be in the form of MM/DD/YY to be accepted.
• Trim the grammar so that the day of the week is not allowed
• For CPR of date playback, insert 250 msec silence between month and day, and 500 msec silence between day and year.
• Fill semantic item <Date_Of_Birth>
• ***Set Confidential Flag to TRUE***

5135-Mother'sMaiden Check Condition

Entering from
5090-AltName Check Condition 5100-CheckForAltName-YN 5130-GetDOB-Date

REQID	*Condition*	*Action*
5135-KBA-Mother'sMaiden Check Condition-Condition-null	If Mother's Maiden Name = null	Go to: 5140-GetMother'sMaiden
5135-KBA-Mother'sMaiden Check Condition-Condition-else	If Mother's Maiden Name else	Report V Transaction per module note, Go to: 5190-WhereBorn Check Condition

Module Notes
V-KBPW-MMName_1-(duration),T-KBPW-0000-(duration)

5140- GetMother'sMaiden

	Name DialogModule™
Entering from	
5135-Mother'sMaiden Check Condition	

Prompts			
Msg. Number	**REQID**	**Condition**	**Wording**
50306	5140-GetMother'sMaiden-Prompt-Initial-1		What was your mother's MAIDEN LAST name including the spelling? For example if the name was Smith, you'd say "Smith, S M I T H". Go ahead.
50307	5140-GetMother'sMaiden-Prompt-Timeout1		Sorry, I didn't hear you. Please give me the last name with the spelling.
50308	5140-GetMother'sMaiden-Prompt-Timeout2		I'm afraid I still can't hear you. Please give me the last name and spell it.
50311	5140-GetMother'sMaiden-Prompt-Retry1		[Global Default] Just spell your mother's maiden last name for me.
50348	5140-FT-ConfirmationApology-Prompt	If "no" on confirmation	Sorry about that. Let's try again.
50321	5140-GetMother'sMaiden-Prompt-Respell1		Using only the letters of the alphabet, please spell your mother's maiden last name quickly. For example, if her name was O'Connor, you would say O C O N N O R. Please spell her maiden last name now
50317	5140-GetMother'sMaiden-Prompt-Respell2	If caller has Timeout1 OR Retry1	Sorry I didn't hear you. Using only the letters of the alphabet, please spell your mother's maiden last name quickly, one letter at a time.
50322	5140-GetMother'sMaiden-Prompt-Respell3	If caller has Timeout OR Retry in response to the Respell2 prompt This prompt may not always play depending on the number of retries/ confirmations played.	[Global Default] 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	5140-GetMother'sMaiden-Prompt-SpellHelp	If last prompt was spell only	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.
50312	5140-GetMother'sMaiden-Prompt-SayHelp	If last prompt was say and spell	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".
00120	5140-GetMother'sMaiden-Prompt-Success-1		Alright.

REQID	Vocabulary	DTMF	Action	Confirm.
5140-GetMother'sMaiden-Option-Altname	<other_last_name>	<...>	Play 5140-GetMother'sMaiden-Prompt-Success-1 Go To: 5190-WhereBorn Check Condition	ALWAYS

5140-GetMother'sMaiden-Option-MaxTimeouts	--	--	Go to: 5050-Name-ExitFailure-Msg	--
5140-GetMother'sMaiden-Option-MaxRetries	--	--	Go to: 5050-Name-ExitFailure-Msg	--

Confirmation Prompts- The user is navigated to the Confirmation process only if the software receives a medium confidence level. If the confidence is low, the input is invalid. If the confidence is high, then the caller will proceed forward.				
Msg. Number	**REQID**	**Wording**	**Result**	**Action**
82175	5140-GetMother'sMaiden-ConfPrompt-LastName-1	Let me read that back. Last name:	*"Let me read that back. Last Name < Mother's Maiden Name> spelled < Mother's Maiden Name Spelling >, did I get that right?"*	*If Yes:* *Play 5140-GetMother'sMaiden-Prompt-Success-1* *Then Go to: 5190-WhereBorn Check Condition* *If No:* *Play 5140-FT-ConfirmationApology-Prompt5140-GetMother'sMaiden-Prompt-Respell1*
		< Mother's Maiden Name Spelling >		
50337	5140-GetMother'sMaiden-ConfPrompt-LastName-2	...spelled:		
	CPR	< Mother's Maiden Name Spelling >		
50342	5140-GetMother'sMaiden-ConfPrompt-LastName-3	Did I get that right?		
82054	5140-GetMother'sMaiden-ConfPrompt-Retry1	Sorry, I didn't catch that. Please say "yes," or "no,".	*Retry1 on Confirmation*	*If Yes:* *Play 5140-GetMother'sMaiden-Prompt-Success-1* *Then Go to: 5190-WhereBorn Check Condition* *If No:* *Play 5140-FT-ConfirmationApology-Prompt5140-GetMother'sMaiden-Prompt-Respell1*
82055	5140-GetMother'sMaiden-ConfPrompt-Retry2	Sorry, I still didn't catch that. If 'yes' press one, otherwise press two	*Retry2 on Confirmation*	*If Yes:* *Play 5140-GetMother'sMaiden-Prompt-Success-1* *Then Go to: 5190-WhereBorn Check Condition* *If No:* *Play 5140-FT-ConfirmationApology-Prompt5140-GetMother'sMaiden-Prompt-Respell1*
82056	5140-GetMother'sMaiden-ConfPrompt-Timeout1	Sorry, I didn't hear you. I need to know if I got your name right. Please say "yes" *or "no"."*	*Timeout1 on Confirmation*	*If Yes:* *Play 5140-GetMother'sMaiden-Prompt-Success-1* *Then Go to: 5190-WhereBorn Check Condition* *If No:* *Play 5140-FT-ConfirmationApology-Prompt5140-GetMother'sMaiden-Prompt-Respell1*

| 82057 | 5140-GetMother'sMaiden-ConfPrompt-Timeout2 | Sorry, I still didn't hear you. I need to know if I got your name right. Please say "yes" *or "no".* | *Timeout2 on Confirmation* | *If Yes:*
Play 5140-GetMother'sMaiden-Prompt-Success-1
Then Go to: 5190-WhereBorn Check Condition

If No:
Play 5140-FT-ConfirmationApology-Prompt5140-GetMother'sMaiden-Prompt-Respell1 |
| 00250 | 5140-GetMother'sMaiden-ConfPrompt-InvalidOrTimeout3 | [250 ms silence] | Max Timeout OR Max Retry at Confirmation | *Go To: 5050-Name-ExitFailure-Msg* |

Event logging

Record = U-KBPW-DM_5140-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes

The following prompts use SAY AND SPELL grammars: Initial-1, Timeout1, Timeout2, and SayHelp.

If there is a no-match/rejection error, OR if the caller gives a "No" confirmation to the name, the system switches to the SPELL-ONLY fallback, which is announced in prompts Retry1, Retry2, Respell1, Respell2, Respell3, and SpellHelp. This matches the spell-only fallback strategy in TPPW, which is based on the Nuance Name OSDM callflow.

In spell-only fallback collections, use spell-only grammar.

Respell 3 is conditional -- may not always play depending on the number of retries/confirmations played.

Set Confidential Flag to TRUE

5150-NoName-Msg

	Play Prompt	
Apologize to caller for not being able to collect a name.		

Entering from

5050-Name-ExitFailure-Msg

Prompts		
Message Number	**REQID**	**Wording**
00250	5150-KBA-NoName-Prompt-1	[250 ms silence]

Req ID	Condition	Action
5150-KBA-NoName-Condition-Always	*Always*	return status := failure return to Global (COA-DD 1330-CallKBAuth-Code)

Event logging

Developer notes
No barge-in
The prompt has been set to short silence. The failure message to the caller has already been said within GetName so no additional message is needed here.

5190-WhereBorn Check Condition

	➡✖

Entering from
5135-Mother'sMaiden Check Condition 5140-GetMother'sMaiden

REQID	Condition	Action
5190-KBA-WhereBorn Check Condition-Condition-null	If PoB = null	Go to: 5200-WhereBorn-VM
5190-KBA-WhereBorn Check Condition-Condition-else	If PoB else	Report V Transaction per module note, Go to: 5205-LastPmt Check Condition

Module Notes
V-KBPW-POB_1-(duration),T-KBPW-0000-(duration)

5200-WhereBorn-VM

Custom Context DialogModule™	
Ask caller for state or territory where they were born.	↩↪

Entering from
5190-WhereBorn Check Condition

Prompts		
Message Number	**REQID**	**Wording**
52001	5200-KBA-WhereBorn-Prompt-Initial1	Only two more questions.
00500	silence_500	[500 ms silence]
52002	5200-KBA-WhereBorn-Prompt-Initial2	Please say the name of the American STATE or TERRITORY where you were born, such as Texas, or say OTHER if you were born somewhere else.

52003	5200-KBA-WhereBorn-Prompt-Retry1	[Global Default] I don't need the city. Please say just the STATE or territory where you were born, Texas for example. If you were born somewhere else, just say "Other". If you aren't sure about the territories, say "Question".
52004	5200-KBA-WhereBorn-Prompt-Retry2	[Global Default] If you aren't sure about territories, say Question. Otherwise, just say the name of the state or territory.
52005	5200-KBA-WhereBorn-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you aren't sure about territories, say Question. Otherwise, just say the name of the state or territory or say OTHER.
52006	5200-KBA-WhereBorn-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you aren't sure about territories, say Question. Otherwise, just say the name of the state or territory or say OTHER.
52007	5200-KBA-WhereBorn-Prompt-Help1	As part of the verification process, I need to know the name of the state or U S territory where you were born. If you aren't sure and would like to hear a list of the TERRITORIES, just hang on and I'll list them for you, otherwise please say the name of the state or territory now. [4 sec pause] The current and former territories of the United States are:
00500	silence_500	[500 ms silence]
52008	5200-KBA-WhereBorn-Prompt-Help2	American Samoa, Federated States Of Micronesia, Guam , Marshall Islands, Northern Mariana Islands, Palau, Puerto Rico, and Virgin Islands.
01000	silence_1000	[1 sec silence]
52009	5200-KBA-WhereBorn-Prompt-Help3	So let me ask again: In which state or territory were you born?

REQID	Vocabulary	DTMF	Action	Confirm.
5200-KBA-WhereBorn-Option-state	<50 states plus territories plus OTHER – see list below>	—	Go to: 5205-LastPmt Check Condition	*If necessary*
	Remove global Agent and Main Menu from this DM.			

Confirmation prompts

Message Number	REQID	Wording
00118	5200-KBA-WhereBorn-ConfPrompt-you_said	[I think you said] <state>
00119	5200-KBA-WhereBorn-ConfPrompt-is_that_correct	[Is that correct?]
52011	5200-KBA-WhereBorn-ConfPrompt-AS	American Samoa
52012	5200-KBA-WhereBorn-ConfPrompt-FM	Federated States of Micronesia
52013	5200-KBA-WhereBorn-ConfPrompt-GU	Guam
52014	5200-KBA-WhereBorn-ConfPrompt-MH	Marshall Islands
52015	5200-KBA-WhereBorn-ConfPrompt-MP	Northern Mariana Islands
52016	5200-KBA-WhereBorn-ConfPrompt-PW	Palau
52017	5200-KBA-WhereBorn-ConfPrompt-PR	Puerto Rico
52018	5200-KBA-WhereBorn-ConfPrompt-VI	Virgin Islands
52019	5200-KBA-WhereBorn-ConfPrompt-FF	Other
Remove global Agent from confirmation grammars for this DM.		

DialogModule parameters

Parameter	Value
5200-KBA-WhereBorn-Parameter	
after_end_of_speech_timeout	1,000 ms

before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging		
Record = U-KBPW-DM_5200-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes

DTMF 9 is disabled in this Module.

State grammar: [note some synonyms for DC and Washington]

Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, District of Columbia, D C, Washington D C, Washington State

Territory grammar:

American Samoa, Guam, Puerto Rico, Virgin Islands, Federated States Of Micronesia, Marshall Islands, Northern Mariana Islands, Palau.

Additional grammar:

Other

Implement **one-step correction** in confirmation: accept [no] [it's] (state name), confirm again if necessary, and route to 5210.

Set Confidential Flag to TRUE

5205-LastPmt Check Condition

Entering from
5190-WhereBorn Check Condition 5200-WhereBorn-VM

REQID	*Condition*	*Action*
5205-KBA-LastPmt Check Condition-Condition-null	If Last Payment = null	Go to: 5210-LastPmt-VM
5205-KBA-LastPmt Check Condition-Condition-else	If Last Payment else	Report V Transaction per module note, Go to: 5220-CheckingNow-Msg
Module Notes		

V-KBPW-LBP_1-(duration),T-KBPW-0000-(duration)

5210-LastPmt-VM

		Currency DialogModule™	⤵⤴
Ask caller the amount of the last benefit payment they received.			
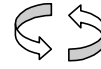
Entering from
5205-LastPmt Check Condition

Prompts

Message Number	REQID	Wording
52101	5210-KBA-LastPmt-Prompt-Initial1	One last question.
52102	5210-KBA-LastPmt-Prompt-Initial2	What was the amount of the last benefit check you received in dollars and cents.
52103	5210-KBA-LastPmt-Prompt-Retry1	[Global Default] I need the amount in dollars and cents, such as one hundred twenty nine DOLLARS and thirty seven CENTS. How much was your last payment?
52104	5210-KBA-LastPmt-Prompt-Retry2	[Global Default] Please speak slowly and clearly and tell me the amount again.
52105	5210-KBA-LastPmt-Prompt-Timeout1	I'm sorry, I didn't hear anything. I need the amount in dollars and cents, such as one hundred twenty nine DOLLARS and thirty seven CENTS. How much was your last payment?
52106	5210-KBA-LastPmt-Prompt-Timeout2	I'm sorry, I still didn't hear anything. You'll need to know the exact amount of your last benefit check in dollars, but you can skip the cents. If you don't know the amount, we can't proceed and you'll need to call back later when you do know. So if you know the payment amount, please say it now.
52107	5210-KBA-LastPmt-Prompt-Help	You'll need to know the exact amount of your last benefit check in dollars, but you can skip the cents. If you don't know the amount, we can't proceed and you'll need to call back later when you do know. So if you know the payment amount, please say it now.
50394	5210-KBA-LastPmt-Prompt-SuccessYes	Got it.

REQID	Vocabulary	DTMF	Action	Confirm.
5210-KBA-LastPmt-Option-Currency	<currency>	<...>	play SuccessYes prompt Go to: 5220-CheckingNow-Msg	*If necessary* *Check This*
5210-KBA-LastPmt-Option-DontKnow	I don't know I'm not sure	—	Go to: 5215-CantProceed-Msg	*Never*
	remove Agent from global grammar for this DM			

Confirmation prompts

Message Number	Option / Name	Wording
	Currency	Default confirmation, as handled by DialogModule™ "I think you said xxx dollars and xxx cents. Is that correct?" after Yes, play SuccessYes prompt

DialogModule parameters

Parameter	Value
5210-KBA-LastPmt-Parameter	
Currency type	US Dollars

Allowed currency range	$10.00 - $9,999.00	
Expected currency range	$10.00 - $999.00	
Allowed currency granularity	1 cent	
Expected currency granularity	1 cent	
after_end_of_speech_timeout (incomplete timeout)	1500 msec	
before_begin_of_speech_timeout	7,000 msec	
allowing_barge_in	True	
high confidence threshold	.995	
max speech duration	16,000 msec	
Event logging		
Record = U-KBPW-DM_5210-(Call Duration at start),T-KBPW-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	
Developer notes		
Usability note: The back end will ignore the cents, but it's best to ask for it anyway to make explaining what to say easier. Also, the caller is likely to be looking at a written amount, so if they know the dollars they'll know the cents too.		
Set Confidential Flag to TRUE		

5215-CantProceed-Msg

	Play Prompt	
Tell caller we can't proceed without those numbers.		

Entering from
5210-LastPmt-VM

Prompts		
Message Number	***REQID***	***Wording***
50401	5215-KBA-CantProceed-Prompt-1	I'm sorry but we can't proceed without those numbers. You may want to call back when you have those numbers with you.

Req ID	Condition	Action
5215-KBA-CantProceed-Condition-Always	*Always*	return code := failure
		return to Global (COA-DD 1330-CallKBAuth-Code)

Event logging

Developer notes
No barge-in ← Be sure of this setting!

5220-CheckingNow-Msg

Play Prompt
Tell the caller there may be a short delay while we check the information they gave us.

Entering from
5210-LastPmt-VM

Prompts			
Message Number	REQID		Wording
52201	5220-KBA-CheckingNow-Prompt1		Hold on while I check our database. It may take a few seconds.

Req ID	Condition	Action
5220-KBA-CheckingNow-Condition-Always	*Always*	Go to: 5230-QueryKB-DB

Event logging

Developer notes
No barge-in

5230-QueryKB-DB

Database Query
Check the Knowledge Base database.

Entering from
5220-CheckingNow-Msg

Input Field	Description
SSN	
first name	
last name	
alternate last name	may be null
date of birth	
mother's maiden last name	
state or territory of birth	
dollar amount of last payment	set the cents to zero before the query
Output Field	Description
verification status	success or failure

Req ID	Condition	Action
5230-KBA-QueryKB-Condition-Succ	*IF success*	Go to: 5250-SaySuccess-Msg
5230-KBA-QueryKB-Condition-Fail	*Else if failure because data doesn't match*	Go to: 5260-SayFailure-Msg
5230-KBA-QueryKB-Condition-AcctBlocked	*Else if failure because account is blocked*	Go to: 5270-AccountBlocked-Msg

Event logging

5250-SaySuccess-Msg

Play Prompt
Tell caller they've been verified.

Entering from
5230-QueryKB-DB

Prompts		
Message Number	**REQID**	**Wording**
52501	5250-KBA-SaySuccess-Prompt1	OK, everything checks out.

Req ID	Condition	Action
5250-KBA-SaySuccess-Condition-Always	*Always*	return code := success
		return to Global COA-DD 1330-CallKBAuth-Code)

Event logging

Developer notes
No barge-in

5260-SayFailure-Msg

Play Prompt
Tell caller they could not be verified.

Entering from
5230-QueryKB-DB

Prompts		
Message Number	**REQID**	**Wording**
52601	5260-KBA-SayFailure-Prompt1	I'm afraid that some of the information you gave me doesn't match what we have in our records.

	Condition	Action
5260-KBA-SayFailure-Condition-Always	*Always*	return code := failure
		return to Global (COA-DD 1330-CallKBAuth-Code)

Event logging

Developer notes
No barge-in

5270-AccountBlocked-Msg

Play Prompt
Tell caller they blocked their own account from telephone access.

Entering from
5230-QueryKB-DB

Prompts

Message Number	REQID	Wording
52701	5270-KBA-AccountBlocked-Prompt1	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.

	Condition	Action
5270-KBA-AccountBlocked-Condition-Always	*Always*	return code := account_blocked return to Global (COA-DD 1330-CallKBAuth-Code)

Event logging

Developer notes
No barge-in

5900-DMfailure-Msg

Play Prompt
Apologize that we can't understand the caller.

Entering from
any DM in the KBA (but **not** GetName module) that hits max retries or max timeouts

Prompts

Message Number	REQID	Wording
59001	5900-KBA-DMfailure-Prompt1	I'm so sorry I'm not able to understand you.

	Condition	Action
5900-KBA-DMfailure-Condition-Always	*Always*	return status := failure return to Global (COA-DD 1330-CallKBAuth-Code)

Event logging

Developer notes
No barge-in

—End of Specification —

Social Security Administration
Change of Address / Direct Deposit
User Interface Specification
Last Saved: 20 Jul 2012

COA-DD Global
FOAP Effort

2.34.2

Document History

Date	Spec	App	Summary of Changes	Revised by
12/06/04	**1.0**	1.0	Initial version for review of sample calls and basic global specifications. The top-level routing application is not here yet.	Paul Sawyer
12/10/04	**1.1**	1.0	Added top-level application tables. The tables are complete, but there is not yet text for retry, timeout, and help prompts.	Paul Sawyer
12/15/04	**1.2**	1.0	After first review. System timeout changed to 15 minutes. Prompt wording: 1040-Initial: retirement, survivor, disability. 1100-Help1: add that routing number is usually on left. 1200-Initial: "say xxx or press nnn" 1310-Initial and 1410-Initial: change "issued" to "set up" Other changes: 1370 COAdone renamed to just "done" 1450: several fixes relating to changing it to DD rather COA 1460 renamed to DDcheckstatus 1310 changes to Voice Menu rather than Yes/No to allow other responses. Several DMs added to check and handle system and operator availability, and details of max retries and timeouts, and global commands: 0010, 0020, 2010, 2100, 2110, 2211, 2212, 2213. 1200 goes away, replaced in function by 2010.	Paul Sawyer
12/17/04	**1.3**	1.0	Add prompt text for retry, timeout, and help prompts. These prompts are NOT flagged with Word revision marking. A few other minor corrections ARE flagged.	Paul Sawyer
12/21/04	**1.4**	1.0	Minor changes based on review: * Change "insurance" to "income" in 1050. * Clarify that saying Question repeatedly gets the same Help text each time (intro to section 5.2). * Fill in the list of U.S. territories in 1060. * Fill in password process in new 1032. One major change: Move the question about password to the beginning of the interaction, so that the correct service can be pinged as early as possible. Remove 1310, 1410. Replace them with internal branch tests. Add new 1032 to ask the password question, and 1038 to introduce the remaining questions. The ping and check now happens in 1034, 1035, and 1036.	Paul Sawyer

01/06/05	1.5	1.0	Correct the flow out of 1030 – don't ask if caller has password if we already know they do. Minor fixes to prompt styles and text. Filled in list of current and former U.S. territories. Eliminate redundant DMs: 1400, 1410, 1420, 1430, 1440, 1460. Added Requirement IDs to all conditionals and to conditions within PlayPrompts and DB accesses.	Paul Sawyer
01/28/05	1.6	1.0	Minor tweaks Correct the table and text in section 4.1 regarding timeouts and retries.	Paul Sawyer
03/01/05	1.7	1.0	Fix prompt text changed during recording.	Paul Sawyer
03/04/05	1.8	1.0	Revised Requirement IDs in 1010, 1020, 1030, 1038, 1300, 1310, 1340, 1360, 1500, 2010, 2100, 2110	Steven Ligi
03/09/05	2.0	1.0	1. Remove references to audio icons. They will not be used. 2. Add spacer silence prompts wherever multiple prompts are to be played. (1030, 1100, 1090, 1110) 3. Add success prompts to 1032. 4. Remove "yes or no" from 1050 Initial. 5. Add success prompt for "yes" in 1060.	Paul Sawyer
04/12/05	2.1	1.0	Changes following user testing. 1. Change 1120 to a play prompt that always transfers to 2100 for an agent if one is available. 2. Improve prompt wording in 2110, 2211. 3. Remove "Goodbye" as a global command. Recognize it only in ???? 4. Refer to "agent" everywhere instead of "representative". 5. Add 'retirement' etc. to grammar for 1040 in case a caller says one of those instead of simply 'yes'.	Paul Sawyer
04/21/05	2.2	1.0	Change following review of previous version. 1. Add a "wait a minute" feature for bank account info, as had been in the DD module. Changes to 1100, and new DM 1105.	Paul Sawyer
05/02/05	2.3	1.0	"Administrative" fixes for bugs found by Q/A and others. 1. Fix prompt text to match what was recorded in the studio. 2. Change file names of "I think you said" and "Is that correct?" to match current OSDM specifications. 3. Fix Requirement IDs for confirmation options in 2211. 4. Add list of common synonyms for "yes" and "no" grammars	Paul Sawyer
05/06/05	2.4	1.0	1. Fix prompt text changed during recording. 2. Fix DTMF assignments in 2211: Main menu is 9, no DTMF equivalent for goodbye (just hand up).	Paul Sawyer
06/03/05	2.5	1.0	1. Clarify reuse of prompts ("same as ...") in 1110, 1370, 1510. Some timeout 2 prompts lack the word "still", but it will have no effect on usability. **Spec changes only** – no code changes required.	Paul Sawyer
6/30/05	2.6	1.0	1. Make the conditions in 1000 more generic, since menu item numbers change for various reasons unrelated to COA-DD. Requirement IDs were NOT changed, so we don't mess up existing test cases. 2. Clarify cases where there are multiple prompt files associated with a single condition. Affects 1040, 1050, 1060, 1070, 1090, 1100, 1110. May require code change if the misunderstanding caused the code to be written differently.	Paul Sawyer

8/10/05	2.7	1.0	Changes (Paul Sawyer): 1. Correct spelling in 1370-GLB-done-Prompt-Timeout1 and 1370-GLB-done-Prompt-Timeout2. 2. Update ScanSoft address in Properties. 3. Add alternate entry phrases for the case of getting here from the new SpeakFreely Main Menu (added 1012, 1022). 4. Added DMs to describe handling of Voice Genie errors. New DMs are 2101, 2111, 2112. Changes following the tuning report recommendations (Nadine Ozkan) - All prompt changes are in red (style : Table: RevisedRecordings) - Other changes, like grammars, parameters & settings are highlighted in yellow.	Paul Sawyer & Nadine Ozkan
10/21/05	2.8	1.0	Changes following tuning 2 1. Added 'agent' and synonyms to the confirmation (yes/no) grammar. 2. Open issues section added. 3. Improved Initial prompt for 1032 to clarify what we mean by password. 4. Added new DM 1130 for case where caller is not qualified to perform the function, offering Main Menu or hang up. This applies if caller says "no" in 1040, 1060, or 1070. 5. Improve synonyms in 'yes' grammar for 1050. 6. Change 1100 grammar from "I have the numbers" to "I'm ready" to avoid recognition confusion with "I don't have them". 7. In 1105, add synonyms for I'm Ready, and add a new option Repeat to allow callers to hear the question again. 8. In 1110, add some synonyms for several global commands.	Paul Sawyer
10/25/05	2.9	1.0	1. Change in policy from SSA: Of the four qualifying questions, only "not receiving benefits" should result in the message that the caller cannot do the function even with an agent. Failure in any of the other three qualifying questions should make the Agent option available, as had been done prior to versions 2.8. Affects 1060 and 1070, which have been reverted to their previous behavior, and prompt 1130-GLB-CantDoThat-Prompt-Initial1 which is now specific to not receiving benefits. 2. Add retry and timeout prompts to 1130 that had been inadvertently omitted.	Paul Sawyer
10/27/05	2.10	1.0	1. Correct prompt text for 1130-GLB-CantDoThat-Prompt-Help1.	Paul Sawyer
12 Dec 05	2.11	1.0	Edited prompt 1100-GLB-KnowBank-Prompt-Help3 to mention Don't Have Them and Wait A Minute.	Paul Sawyer

2 Feb 06	2.12	1.0	Changes for Tuning 3:	Paul Sawyer
			1. Move Open Issues about one-step correction and grammar duplications into specific modules. Remove issue about touch tone sounds coming through to recognizer – seems to be fixed now.	
			2. Clarify that "help" in not in any grammar.	
			3. Improve the flexibility of the "agent" synonyms grammar.	
			4. Change the requirement regarding agent synonyms in confirmation (yes/no) grammars.	
			5. Downweight "I don't know it" in the Help grammar.	
			6. Clarify Help option grammar in 1032.	
			7. In 1050, tweak grammar and set to Never confirm.	
			8. In 1100, change grammar for "I'm ready" to make "I'm" optional. Set DontHave option to Always Confirm. Improve the DontHave confirmation prompt so that it's clear what a "no" response means. Specify one-step correction for "no, I have them".	
			9. Highlight sensitivity setting in 1105, which was specified at the previous tuning but may not have been implemented.	
			10. Add Goodbye option in 1370.	
			11. Add synonyms for goodbye in 1510 to catch some OOVs.	
5 Feb 06	2.13	1.0	Changes after review and discussion:	Paul Sawyer
			1. Add support for blocked accounts. Affects 1340.	
			2. Fixed wording in 1130 to explain other options when caller is disqualified.	
3 March 06	2.14	1.0	1. Remove conflicting specifications for the grammar for "agent" synonyms, and refer instead to the agent grammar in the N8NN UI spec.	Paul Sawyer
			2. Change handling of max retry and max timeout in 1510, so that it hangs up instead of the default behavior to go to 2010. Field experience showed a significant number of cases where infinite looping occurred when the caller said nothing. These may be undetected hang-ups, but even if a caller is still there, they've had every explicit opportunity to reach an agent or the main menu, so hanging up is a reasonable action.	
21 Aug 06	2.15	1.0	Changes based on Tuning 4.	Paul Sawyer
			1. Note that "agent" grammar needs tightening.	
			2. 1032: Add "I don't know" to "maybe" grammar so that it's caught as "maybe" rather than as "no". Remove "agent" global grammar for this DM.	
			3. 1130 remove Agent global grammar but keep other globals. Add "menu" as synonym for "main menu". Tweak initial prompt to suggest they can try again.	
			4. 1050: Add "SSI" as another synonym for "yes". Tweak low-confidence threshold.	
			5. 1040: Improve prompts to be clear that SSI benefits don't count, and catch "SSI" as a synonym for "no".	
			6. 1090: Remove agent synonyms for this DM.	
			7. 1100: Add "yes" and "I have it" as synonyms for "I'm ready". Set barge-in sensitivity to less sensitive.	
			8. 1110: Add note about missing grammars for "main menu" and "question".	
			9. 1510: Add "agent agent" as synonym for "agent" in this DM.	

23 Aug 06	2.16	1.0	Change following *review* of tuning changes. 1. Re-order the qualification questions about getting benefits (1040) and getting SSI (1050). If we ask the SSI question first, the benefits question can be simpler. 2. Rework 1500 and 1510 to help reduce agent requests: Add silence after 1500. Flush speech input before entering 1510. Re-order the prompt options in 1510 to put Agent last. 3. Minor change to 1050-GLB-GetSSI-Prompt-Initial (removal of "First"), to improve flow from 1038.	Paul Sawyer
5 Sept 06	2.17	1.0	1. Rework handling of "more information" for 1130 so that the Agent synonyms are recognized only if the caller asks for and hears the "more information" message. 2. Edit prompts for 1090 to omit mention of Agent synonyms, which are no longer available in this DM. 3. Fixed 1050-GetSSI-YN which should send the caller to 1130 – not 11210 – if they are receiving SSI.	Paul Sawyer/Phil Profili
8 Sept 06	2.18	1.0	Removing the confusion over handling of SSI recipients: 1. In 1040, if a caller says "no" then 1130 is the correct destination, but if they say "SSI" then they should go to 1120 2. In 1050, callers who respond in the affirmative should go to 1120. Clarified confirmation prompting in $1130\_CantDoThat\_DM$.	Phil Profili
23 Apr 07	2.18	1.0	Added DB 1065 Added DB 1365	Sean Stallings VZB
22 May 07	2.19	1.0	Changed message number for silences from 02000/03000 to 20000/30000	Sean Stallings VZB
25 May 07	2.20	1.0	Updated 1060	Sean Stallings VZB
25 May 07	2.21	1.0	Updated 1060	Sean Stallings VZB
09 August 07	2.22	1.0	Corrected DB 1065	Sean Stallings VZB
22 August 07	2.23	1.0	Corrected dates	Sean Stallings VZB
06 Sep 07	2.24	1.0	Removed default global from retry 1 and retry 2 messages Added appropriate prompting for 1110-GLB-CantProceed-Prompt-Help1 and Help2 Added "that" to text of Message Number 10407	Sean Stallings VZB
29 Feb 08	2.25	1.0	Added more detailed privacy statement to 1.1.5 Business rules	Sean Stallings VZB
15 April 08	2.26	1.0	Updated Module 1030, message 10303, reduced pause to 1 second. Updated Module 1500, reduced 3 second silence to 1 second.	Sean Stallings VZB
21 April 08	2.26	1.0	Updated footer to the correct UI version 2.26 Updated [silence] message numbers to reflect correct numbering system	Becky Stallings, VzB
05 May 08	2.27	1.0	Updated Section 1.1.5 Business Rules, removed wording regarding privacy statements in other applications. Added Privacy statement to Global Behavior chapter.	Sean Stallings VZB

26 August 08	2.28	1.0	Highlighted Barge-in changes in <mark>pink</mark>
			
			For BBN Findings Effort:
			   1. Updated module 1032, simplified wording for message 10323
			   2. Updated module 1040, simplified wording for message 10403
			   3. Updated Module 1050, simplified wording for message 10503
			   4. Updated module 1060, simplified wording for message 10603
			   5. Updated module 1070, simplified wording for message 10703
			   6. Updated module 1090, simplified wording for message 10903
				Sean Stallings
				
				VZB

05 September 08	2.29	1.0	Updated Module 1032, corrected wording for Retry 2, incorrect prompt had been changed for BBN Findings Effort.	Sean Stallings VZB
09 September 08	2.30	1.0	Updated modules 1032, 1040, 1050, 1060, 1070, 1090, 1100, 1105, 1110, 1130, 1140, 1370, 1510, 2211. Updated all retry 1 and retry prompts, [Global Default] tag now shows before the wording for each prompt – this resolves ticket 22304.	Sean Stallings VZB
16 September 08	2.31	1.0	Highlighted BBN Findings changes in <mark>Green.</mark> Added Verizon proprietary statement to title page and page headers.	Sean Stallings VZB

01 December 08	2.32	1.0	COADD/BEVE-MRC Tuning 2 Effort-Recommendations From Nuance
			
			  1) Updated module 1060, added state and territory to vocabulary for Yes.
			
			  2) Updated module 1510, added representative, customer service, and [I have a] question to the vocabulary for Agent.
				Sean Stallings
				
				VZB

02 February 09	2.33	1.0	Updated Header	Sean Stallings VZB
21, May 09	2.34	1.0	**FOAP Effort** Updated section 4.5 Global Command and Global Prompts, added documentation to show that 'main menu' requests only route to module 2212 in COA-DD Global. In all other COA-DD applications 'main menu' will route to Main Menu module 1100. Updated module PP 2212, added flag check and routing for FOAP condition. Removed all highlights and struck through text for previous efforts.	Sean Stallings VZB
25 June 09	2.34.1	1.0	Added a hyperlink to DM 1100. Corrected typographical errors in DM's 1038, 1040, 1050, 1130, 1140, 1370 and 2212.	Kim Rothlis VzB
31 July 2009	2.34.2	1.0	DM 1510 :Updated the Action field for 'agent' to reflect current logic. DM 1140 : Updated the Action field for 'agent to reflect current logic. DM 2112: Updated the Action field for 'Condition 1' to reflect current logic.	

Table of Contents

Chapter 5:   Background and Motivation

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) Change of Address, and 2) Set-up or change of Direct Deposit.

5.1   Executive Summary

5.1.1   What the application does

The Change of Address / Direct Deposit application enables callers who are receiving Social Security benefits to change their mailing address and set up or change direct deposit of benefits to a bank account.

5.1.2   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 handling of change-of-address and direct-deposit 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.

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.

5.1.3   Callers' goals

Callers are seeking simple self service.

5.1.4   Caller profiles

Callers who receive benefits are either retired or disabled.

5.1.5   Business rules

The privacy of caller's personal information must be protected. Caller identity must be verified before allowing changes to information that determines where benefit checks are sent.

5.2   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.

Chapter 6:   About the Callers

Caller characteristics are believed to be mostly similar to those described in the UI specification for the BEVE-MRC application that is Phase 1 of the call automation project. Those characteristics are incorporated here by reference.

SSA anticipated that the number of repeat callers will be higher for the Change-of-Address function due to callers who spend time in two or more locations each year, such as living in Florida for the winter and a northern state for the summer. For this reason, this application needs to encourage callers to set up and use a Personal Identification Number (PIN) so that they can avoid the lengthy verification process on each call.

Chapter 7:   Call Examples

Callers arrive at this portion of the system by navigating through the N8NN main menu 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 "change of address" or "direct deposit" path. The Speech system will receive a flag signifying the task the caller is attempting to complete. For both functions, caller identity must first be verified using either a social security number (SSN) plus password, or SSN plus several items of personal information such as mother's maiden name.

The sample calls shown here are an early draft and do not necessarily reflect the current call flow or wording. Sample calls will be updated at a later time.

7.1   Sample Call Design Considerations

7.1.1   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.

7.1.2   Confirmation Strategy

All of the actual data elements need to be confirmed at some point. Where possible confirmations are grouped, as with full name and full address so that with high-confidence recognitions, callers hear only one confirmation. Where confidence is lower, or where an item isn't part of a logical group, individual data items are confirmed.

7.1.3   Longevity

Since callers aren't expected to use the system frequently (say twice a year at most), Jill is slightly biased towards relatively severe hand-holding to minimize the number of callers who opt for a live agent. Jill doesn't advertising operator assistance, though she will eventually recommend it as a path of last resort.

7.2   Call #1: <u>Abbreviated</u> knowledge base auth plus change of address, no problems

This example shows what the call flow *could* be if we're allowed to ask fewer questions for verification. The present client requirement is to ask all of the questions shown in Call 2, but there's a chance they'll be able to relax that requirement to the subset shown here.

prompt ID	prompt text
CallOne0010	[Leisurely pace, not too fast.] Hello! You've reached the automated Change of Address service. I'll be asking you several questions, and you can SPEAK your answers. Just be sure to speak clearly and loud enough for me to hear over the phone. Note that this call may be monitored or recorded for quality assurance purposes.
CallOne0015	If you've gotten to the wrong place, or you change your mind about proceeding, you can say * Main Menu * at any time. And if you have a question about anything I ask you, you can say * Question * at any time. <2 sec pause> OK, let's get started. First I have to ask a few questions to see whether you can use this automated service.
CallOne0020	Are you currently receiving Social Security disability, retirement, or survivor benefits? Yes or no.
CallOne0030	*Yes.*
CallOne0040	OK. And are you also receiving S S I or supplemental security insurance payments? Yes or no.
CallOne0050	*No.*
CallOne0060	Alright. Are you currently residing in a state or territory of the United States?
CallOne0070	*Yes.*
CallOne0080	Good. Is the change you're calling about for your OWN benefit or payment?
CallOne0090	*Yes.*
CallOne0100	Alright. Now, let's see what we need to update. Please say Change My Address, Change My Phone Number, or Change Both.
CallOne0110	*Change address.*
CallOne0120	OK, I can help you with that.
CallOne0130	Do you have a password that was issued to you by the Social Security Administration? Yes or No. <4 sec pause> If you aren't sure, just say NO and we'll go on.
CallOne0140	*No.*

CallOne0150	That's OK. Before I can make any changes, I'll need to ask you some questions to verify who you are. There are just four questions so it won't take long. You'll need to know your social security number, and the zip code of your new address. Do you have both of those numbers handy?
CallOne0160	*Yes.*
CallOne0170	Great. What's your social security number?
CallOne0180	*One two three, four five, four three two one.*
CallOne0190	So that's * one * two * three *** four * five *** four * three * two * one. Is that correct?
CallOne0200	*Yes.*
CallOne0210	Now I need your full name.
CallOne0220	Let's start with your last name. Please say and spell your last name. For example, if your last name was Kusack, you'd say "Kusack spelled K U S A C K."
CallOne0230	*Jones spelled J O N E S.*
CallOne0240	And now let me get your first name including spelling.
CallOne0250	*Christine spelled C H R I S T I N E.*
CallOne0260	Let me read that back. Last name * Jones * spelled * J O N E S. First name * Christine * spelled * C H R I S T I N E. Did I get that right?
CallOne0270	*Yes.*
CallOne0280	Next I need to know your date of birth with month, day, and year, such as January fifth, nineteen thirty five. What's your date of birth?
CallOne0290	*December twenty fifth nineteen thirty nine.*
CallOne0300	That's * December * twenty fifth * nineteen thirty nine. Is that correct?
CallOne0310	*Yes.*
CallOne0320	Got it. Hold on while I check our database. It may take a few seconds. <4 sec pause> OK, everything checks out. Now let's get on to your address change.
CallOne0330	I need to know the effective date for this change. You can say Immediately, or say a specific date in the next three months.
CallOne0340	*Immediately.*
CallOne0350	Got it. Now for the new address, ...
CallOne0360	I need to get the zip code first so I can look up the city and state. Please say the five-digit zip code now.
CallOne0370	*Oh two one three eight.*

CallOne0380	OK, I got the city and state information from your zip code. Now I need just your street address, P. O. Box, or rural route number. For example, you could say 1 2 3 Main Street West, or P. O. Box 1 2 3 4 5. Go ahead and say your address.
CallOne0390	*Eleven Garden Street*
CallOne0400	If there's an apartment number, please say it now. Otherwise, just say No Apartment.
CallOne0410	*No apartment.*
CallOne0420	Let me make sure I've got it right. I have * Eleven * Garden Street * Cambridge * Massachusetts * zero two one three eight. Is that correct?
CallOne0430	*Yes.*
CallOne0440	Hold on while I send your information. This may take a few seconds. <4 sec pause> OK, the update was accepted. Your information change has been sent for processing which may take up to three business days, and you won't be able to make any other changes during that time. As you requested, this change will be effective on * December * third * two thousand four.
CallOne0450	If there's anything else we can do for you, I can either put you back at the main menu, or transfer you to an agent. If you're finished, you can just hang up. So, Main Menu, Agent, or Goodbye?
CallOne0460	*Goodbye.*
CallOne0470	Thank you. Goodbye.

7.3   Call #2: <u>Full</u> knowledge base auth plus change of address, lots of confirmations

This example shows how lengthy a call could be with all the verification questions and trouble understanding the caller.

prompt ID	prompt text
CallTwo0010	[Leisurely pace, not too fast.] Hello! You've reached the automated Change of Address service. I'll be asking you several questions, and you can SPEAK your answers. Just be sure to speak clearly and loud enough for me to hear over the phone. Note that this call may be monitored or recorded for quality assurance purposes.
CallTwo0015	If you've gotten to the wrong place, or you change your mind about proceeding, you can say * Main Menu * at any time. And if you have a question about anything I ask you, you can say * Question * at any time. <2 sec pause> OK, let's get started. First I have to ask a few questions to see whether you can use this automated service.
CallTwo0020	Are you currently receiving Social Security disability, retirement, or survivor benefits? Yes or no.
CallTwo0030	*(something mumbled)*
CallTwo0040	Sorry, I didn't hear you. I need to know whether you're currently receiving Social Security benefits in the form of a check or direct deposit. Please speak clearly and say Yes or No.
CallTwo0050	*Yes.*
CallTwo0080	OK. And are you also receiving S S I or supplemental security insurance payments? Yes or no.
CallTwo0090	*No.*
CallTwo0100	Are you currently residing in a state or territory of the United States? Yes or no.
CallTwo0110	*Yes.*
CallTwo0120	Is the change you're calling about for your OWN benefit or payment?
CallTwo0130	*Yes.*
CallTwo0140	Alright. Now, let's see what we need to update. Please say Change My Address, Change My Phone Number, or Change Both.
CallTwo0150	*Well, I moved so I guess I need to change everything.*
CallTwo0160	I'm sorry, I didn't understand you. I only understand certain words, so let's try again. You can say Change My Address. Or you can say Change My Phone Number. Or, Change Both.
CallTwo0170	*Change both.*
CallTwo0180	OK, I can help you with that.

CallTwo0190	Do you have a seven-digit password that was issued to you by the Social Security Administration? Yes or No. <4 sec pause> If you aren't sure, just say NO and we'll go on.
CallTwo0200	*What?*
CallTwo0210	I'm sorry, I didn't understand you. If you have a seven-digit password that was mailed to you by the Social Security Administration, say YES. If you don't have a password, or you aren't sure, just say NO and we'll go on. <4 sec pause> Yes or No.
CallTwo0220	*No.*
CallTwo0230	That's OK. Before I can make any changes, I'll need to ask you some questions to verify who you are. There are eight questions and it'll take a couple of minutes to go through them. In addition to questions about your name and date and place of birth, you'll need to know your social security number, the dollar amount of your last benefit payment, and the zip code of your new address. Do you have all of those numbers handy?
CallTwo0240	*I think so.*
CallTwo0250	I'm sorry, I didn't understand you. If you have your social security number, the amount of your last benefit payment, AND your new zip code with you right now, please say YES. Otherwise, say NO.
CallTwo0260	*Yes.*
CallTwo0270	Great. What's your social security number?
CallTwo0280	*One two three, four five, four three two one.*
CallTwo0290	So that's * one * two * three *** four * five *** five * three * two * one. Is that correct?
CallTwo0300	*No.*
CallTwo0310	Sorry, my mistake. Let's try again. Please say your social security number, or enter it on your telephone keypad.
CallTwo0320	*One two three, four five, four three two one.*
CallTwo0330	So that's * one * two * three *** four * five *** four * three * two * one. Is that correct?
CallTwo0340	*Yeah.*
CallTwo0350	Sorry. Did I get the number correct? Yes or No.
CallTwo0360	*YES!*
CallTwo0370	Thank you. Now I need your full name.
CallTwo0380	Let's start with your last name. Please say and spell your last name. For example, if your last name was Kusack, you'd say "Kusack spelled K U S A C K.
CallTwo0390	*Smyth spelled S M Y T H.*
CallTwo0400	I think you said * Smith * spelled * S M I T H. Is that correct?

CallTwo0410	*No.*
CallTwo0420	Sorry, just spell your last name for me.
CallTwo0430	*S M Y T H.*
CallTwo0440	I think you said * Smyth * spelled * S M Y T H. Is that correct.
CallTwo0450	*Yes.*
CallTwo0460	And now let me get your first name including spelling.
CallTwo0470	*Davida spelled D A V I D A.*
CallTwo0480	I think you said Davida spelled D A V I D A. Is that correct?
CallTwo0490	*Yes.*
CallTwo0500	Let me read that back. Last name * Smyth * spelled * S M Y T H. First name * Davida * spelled * D A V I D A. Did I get that right?
CallTwo0510	*Yes.*
CallTwo0520	Good. Some people have another last name that is associated with their social security account, such as a maiden name or a professional name. Do you have an ALTERNATE last name? Yes or no?
CallTwo0530	*Yes, Jones.*
CallTwo0540	Please say and spell your other last name.
CallTwo0550	*Jones spelled J O N E S.*
CallTwo0560	Let me read that back. That's * Jones * spelled * J O N E S. Did I get that right?
CallTwo0570	*Yes.*
CallTwo0580	Next I need to know your date of birth with month, day, and year, such as January fifth, nineteen thirty five. What's your date of birth?
CallTwo0590	*December twenty fifth, nineteen oh nine.*
CallTwo0600	That's * December * twenty fifth * nineteen oh five. Is that correct?
CallTwo0610	*No, it's nineteen oh NINE.*
CallTwo0620	Sorry, my mistake. Please say your full date of birth one more time.
CallTwo0630	*December twenty fifth nineteen oh nine.*
CallTwo0640	That's * December * twenty fifth * nineteen oh nine. Is that correct?
CallTwo0650	*Yes.*
CallTwo0660	I also have to ask your mother's maiden name.
CallTwo0670	Please say and spell your mother's maiden last name.
CallTwo0680	*Schwartz spelled S C H W A R T Z.*
CallTwo0690	Let me read that back. That's * Schwartz * spelled S C H W A R T Z. Did I get that right?

CallTwo0700	*Yes.*
CallTwo0710	Got it. Only two more questions and you'll be verified.
CallTwo0720	I need to know where you were born. Please say the name of the STATE or territory where you were born, or say OTHER if it wasn't a state or territory.
CallTwo0730	*North Dakota.*
CallTwo0740	I think you said * South Dakota. Is that correct?
CallTwo0750	*No, north.*
CallTwo0760	Sorry, my mistake. Please tell me the state or territory again.
CallTwo0770	*NORTH Dakota.*
CallTwo0780	I think you said * North Dakota. Is that correct?
CallTwo0790	*Yes.*
CallTwo0800	One last question. What was the amount of the last benefit payment you received in dollars and cents?
CallTwo0810	*One forty seven fifty three.*
CallTwo0820	I'm sorry, I didn't understand that. Please say the amount as dollars and cents, such as one hundred twenty nine DOLLARS and thirty seven CENTS.
CallTwo0830	*One hundred forty seven dollars and fifty three cents.*
CallTwo0840	I think you said * one * hundred * forty seven * dollars and * fifty three * cents. Is that correct?
CallTwo0850	*Yes.*
CallTwo0860	Got it. Hold on while I check our database. It may take a few seconds. <4 sec pause> OK, everything checks out. Now let's get on to your address change.
CallTwo0870	I need to know the effective date for this change. You can say Immediately, or say a specific date in the next three months.
CallTwo0880	*Immediately.*
CallTwo0890	Got it. Now for the new address, ...
CallTwo0900	I need to get the zip code first so I can look up the city and state. Please say the five-digit zip code now.
CallTwo0910	*Oh two one three eight.*
CallTwo0920	Please say the five-digit zip code again, saying the digits one by one.
CallTwo0930	*Oh. Two. One. Three. Eight.*
CallTwo0940	OK, I got the city and state information from your zip code. Now I need just your street address, P. O. Box, or rural route number. For example, you could say 1 2 3 Main Street West, or P. O. Box 1 2 3 4 5. Go ahead and say your address.

CallTwo0950	*Eleven Garden Street*
CallTwo0960	Sorry, I didn't understand that. I need your street address or P. O. box number. For example, you can say one twenty-four Belvedere Street, or P. O. Box 1 2 3 4 5. I also understand rural routes. Please say your address now.
CallTwo0970	*Eleven. Garden. Street.*
CallTwo0980	I think you said * eleven * Garden Street. Is that correct?
CallTwo0990	*Yes.*
CallTwo1000	If there's an apartment number, please say it now. Otherwise, just say No Apartment.
CallTwo1010	*No apartment.*
CallTwo1020	Let me make sure I've got it right. I have * eleven * Garden Street * Cambridge * Massachusetts * zero two one three eight. Is that correct?
CallTwo1030	*Yes.*
CallTwo1040	Great! Hold on while I send your information. This may take a few seconds. <4 sec pause> OK, the update was accepted. Your information change has been sent for processing which may take up to three business days, and you won't be able to make any other changes during that time. As you requested, this change will be effective on * December * third * two thousand four.
CallTwo1050	If there's anything else we can do for you, I can either put you back at the main menu, or transfer you to an agent. If you're finished, you can just hang up. So, Main Menu, Agent, or Goodbye?
CallTwo1060	*G'Bye.*
CallTwo1070	I think you said Goodbye. Is that correct?
CallTwo1080	*YES!*
CallTwo1090	Thank you. Goodbye.

7.4   Call #3: Password plus direct deposit, no problems

This example shows how quick the flow could be if the caller has a password. It also shows an example of help.

prompt ID	prompt text
CallThree0010	[Leisurely pace, not too fast.] Hello! You've reached the automated Direct Deposit service. I'll be asking you several questions, and you can SPEAK your answers. Just be sure to speak clearly and loud enough for me to hear over the phone. Note that this call may be monitored or recorded for quality assurance purposes.
CallThree0020	If you've gotten to the wrong place, or you change your mind about proceeding, you can say * Main Menu * at any time. And if you have a question about anything I ask you, you can say * Question * at any time. <2 sec pause> OK, let's get started. First I have to ask a few questions to see whether you can use this automated service.
CallThree0030	Are you currently receiving Social Security disability, retirement, or survivor benefits? Yes or no.
CallThree0040	*Yes.*
CallThree0050	OK. And are you ALSO receiving S S I or supplemental security insurance payments?
CallThree0060	*No.*
CallThree0070	Alright. Are you currently residing in a state or territory of the United States? Yes or no.
CallThree0080	*Yes.*
CallThree0090	OK. Is the change you're calling about for your OWN benefit or payment?
CallThree0100	*Yes.*
CallThree0110	Good. Do you have a password that was issued to you by the Social Security Administration? Yes or No.
CallThree0120	*Yes.*
CallThree0130	Great, that'll make this much quicker.
CallThree0140	Before I can make any changes, I'll need to ask you a couple of questions to verify who you are. You'll need to know your social security number * your password * your bank account number * and the routing number for YOUR bank account, which you can get from one of your checks, or from your financial institution. Do you have all of those numbers handy?
CallThree0150	*Yes.*
CallThree0160	OK, here's the first question.. What's your social security number?
CallThree0170	*One two three, four five, four three two one.*

CallThree0180	So that's * one * two * three *** four * five *** four * three * two * one. Is that correct?
CallThree0190	*Yes.*
CallThree0200	What's your seven-digit password?
CallThree0210	*Seven nine two oh oh six one.*
CallThree0220	That's * seven nine two * zero zero * six one. Did I get it right?
CallThree0230	*Yes.*
CallThree0240	Got it. Hold on while I check our database. It may take a few seconds. <4 sec pause> OK, everything checks out.
CallThree0250	Now let's move on to your direct deposit information.
CallThree0260	For the account you want to use, are you the owner of the account?
CallThree0270	*Yes.*
CallThree0280	Good. Now tell me the type of account this is. Your choices are * Checking * Savings * Investment * or * Other.
CallThree0290	*Checking.*
CallThree0300	OK. I need to know the effective month for this change. Because of the lead time in processing checks, your choices are * January * February * or * March.
CallThree0310	*February.*
CallThree0320	Sure * February * is fine.
CallThree0330	Now, you'll need to know two numbers that you can find on the bottom of a check, or you can get them from your financial institution. The first is a nine-digit bank routing number. <1 sec pause> The second is your personal account number. <1 sec pause> If you have these numbers, say I Have The Numbers. Otherwise say More Information.
CallThree0340	*More information.*
CallThree0350	Sure, here's a bit more information about those numbers. The bank routing number is exactly nine digits and is printed on the bottom of each check in between two marks that look like a vertical bar followed by a colon.
CallThree0360	Your account number is some number of digits ending with a symbol that looks like two vertical bars followed by a square dot. Don't confuse your ACCOUNT number with your CHECK number that is both at the bottom and at the top right of your check.
CallThree0370	If you don't have these numbers, you'll need to get them from your financial institution before we can set up or change direct deposit. If you DO have the numbers now, say I Have The Numbers.

CallThree0380	If you need to speak with an agent, say Agent. If you'd like to do something else, say Main Menu. If you want to call again later, say Goodbye or just hang up. To hear this information again, say More Information.
CallThree0390	*I have the numbers.*
CallThree0400	Great. What's the nine-digit bank routing number?
CallThree0410	*One two four seven zero two six four four.*
CallThree0420	That's * one two four * seven zero * two six * four four. Is that correct?
CallThree0430	*Yes.*
CallThree0440	Got it. And what's your account number?
CallThree0450	*Seven six five four three two.*
CallThree0460	That's * seven * six * five *** four * three * two. Is that correct?
CallThree0470	*Yes.*
CallThree0480	Alright. Hold on while I send your information. This may take a few seconds. <4 sec pause> OK, the update was accepted. Your information change has been sent for processing which may take up to three business days, and you won't be able to make any other changes during that time. This change will be effective with your * February * benefit payment.
CallThree0490	If there's anything else we can do for you, I can either put you back at the main menu, or transfer you to an agent. If you're finished, you can just hang up. So, Main Menu, Agent, or Goodbye?
CallThree0500	*Goodbye.*
CallThree0510	Thank you. Goodbye.

Chapter 8:   Global Behavior

8.1   Time-outs and Retries

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

Retry 1 & 2	IF retry 1	Message Number 00110	upon rejection of speech	apology_re1	I'm sorry, I didn't understand you.
		Message Number 00111	upon rejection of speech		My mistake.
	IF retry 2	Message Number 00112	upon confirmation	apology_re2	I'm sorry, I still didn't understand you.
		Message Number 00113	upon rejection of speech	apology_re2_	My mistake again.
			upon confirmation	[…]	<retry prompt(s) specified in DialogModule table>

Note that Timeout prefixes for the *collection* phase (rejection of speech) are included as part of the Timeout prompts in each DM, whereas Timeout prefixes for the *confirmation* phase are usually not specified in the DM tables.

Timeout 1		apology_to1	I'm sorry, I didn't hear anything.
Timeout 2		apology_to2	I'm sorry, I still didn't hear anything.

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.
When either max timeouts or max retries is reached, transfer to the DM indicated for this purpose.

8.2 Privacy

No information collected in this application is considered sensitive.

8.3 System Timeout

In addition to the regular timeouts, there is also a global *System Timeout*, set to a specific number of minutes. If the duration of one call exceeds this System Timeout, the call-flow will be interrupted with the prompt below to inform the caller that the maximum amount of time for the call duration has been exceeded. After the playout of this prompt, the call will be terminated. (This also means that *barge-in* is OFF during the play-out of these prompts, since there is no recognition state following.)

System Timeout	Message Number	Time Limit		System Timeout message	
	00114	15 minutes		system_timeout_a	I'm sorry to interrupt, but it looks like you're having trouble since we've been on this call for more than …
				[CPR]	<system-timeout in minutes> *e.g. "…30…"*
	00115			system_timeout_b	…minutes. I'll need to hang up now. You might want to call back and ask to speak with an agent. Good bye.

8.4 Help prompts

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.

In summary:

1) Play Help prompt(s) specified in the UI table

2) Unless otherwise specified in the table, re-enter the same state to listen for caller input

3) 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).

Note well that *Help* is an historical term for assistance to callers. The word "help" is specifically *not* included in the grammars because as a single-syllable global command it causes too many recognition problems. Callers are advised that they can say "more information" and there are other synonyms listed in the global table. There is also evidence

from usability studies that callers are more likely to make use of a neutral term such as "more information" that does not make them feel inadequate by asking for help.

8.5   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.				

Application	*Commands*	*DTMF*	*Action (unless re-specified by the module)*	*Confirm.*
All	Question [I] don't know [it] (but downweight this one in the grammar) More information NOTE: "Help" is NOT in this grammar, nor in any grammar for this application unless specifically noted for a single DM table.	*	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*
All	Agent (Refer to the N8NN UI spec for the grammar for agent synonyms.) Tuning 4 recommends "tightening" the agent grammar so that phrases without verbs are not included. A new Agent grammar will be supplied for use in both N8NN and COA-DD.	0	Go to: 2100-AfterHours-Check	*Always*
COA-DD Global	Main menu [please	9	Go to: 2212-ThanksBeforeReturn-Msg	*If necessary*
Direct Deposit, Password Auth, Knowledge Based Auth, Change of Address	Main menu [please]	9	Go to: N8NN Main Menu module 1100-Main-DM	*If necessary*

Confirmation prompts		
Option	*Name*	*Wording*
Operator	gl_conf_operator	[I think you said] you want to talk to an agent. [Is that correct?]
Main menu	gl_conf_mainmenu	[I think you said] you want to return to the Main Menu. [Is that correct?]

Developer Notes
NOTE ON GOODBYE: Recent wisdom among UI designers is that Goodbye is seldom used by callers and therefore only causes recognition problems. We have traditionally included Goodbye because some callers like the closure it seems to provide. However, the usability data we've accumulated suggests that it causes more problems than it solves. Therefore, we propose to remove Goodbye from this application, and simply offer callers the option of hanging up.

Table: Auxiliary Global Prompts

These prompts are used in several locations throughout the application, and are listed here simply to ensure they show up in the prompt recording lists.		

Generic Prompts	
Name	*Wording*
default_confirmation_initialprompt_part1	I think you said ...

default_confirmation_initialprompt_part2	Is that correct?

Table: Grammar Synonyms

In several places, synonyms are needed for common grammar items. This table lists the synonyms that should be defined.	

Basic grammar	Synonyms
yes	yeah, sure, correct, that's correct, yes ma'am, right, OK
no	nope, no that's not it, no that's not right, no ma'am, wrong

Note on Confirmation Grammars

The preceding requirement has been rescinded — tuning studies have shown that including "agent" synonyms in confirmation grammars catches too many utterances that are really statements of Yes or No. Also, including agent synonyms interferes with one-step correction where it is used. So agent synonyms should **not** be in confirmation grammars unless there is an explicit note otherwise.

8.6   DTMF Collection

8.6.1   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 social security number, 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.

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

8.6.2   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 8.6.1 "Termination of digit strings using the pound sign" 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*.

8.6.3   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 multi-digit 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 play-message with *barge-in* turned off. Only where necessary, we eliminate this risk by using the *inter-digit timeout* even after the last digit of fixed-length or maximum-length string.

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

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

8.6.4   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 a end-of-DTMF-input countdown. If we were to introduce such a delay after each complete DTMF input, then we would seriously hinder the ability of power-users to comfortably 'key-ahead' through menus.

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

8.7   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 any kind of digit string: phone numbers, SSNs, credit card numbers, etc. Valid input to this function is a string of digits, where a hyphens and spaces can be used to indicate grouping. Examples of valid input are: "123456", "1-617-428-4444", "017-85-3229", "4356 8900 0220 0392". 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 prompt: 1/4 second silence.

See http://looknohands.com/digit-string-cpr/ for a demonstration of how the playout of various different kinds of strings is constructed using prompts from the sets listed above.

8.8   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.

8.9   Internal DialogModule Functionality

This diagram shows the typical flow within a Dialog Module, including retry and timeout cases.
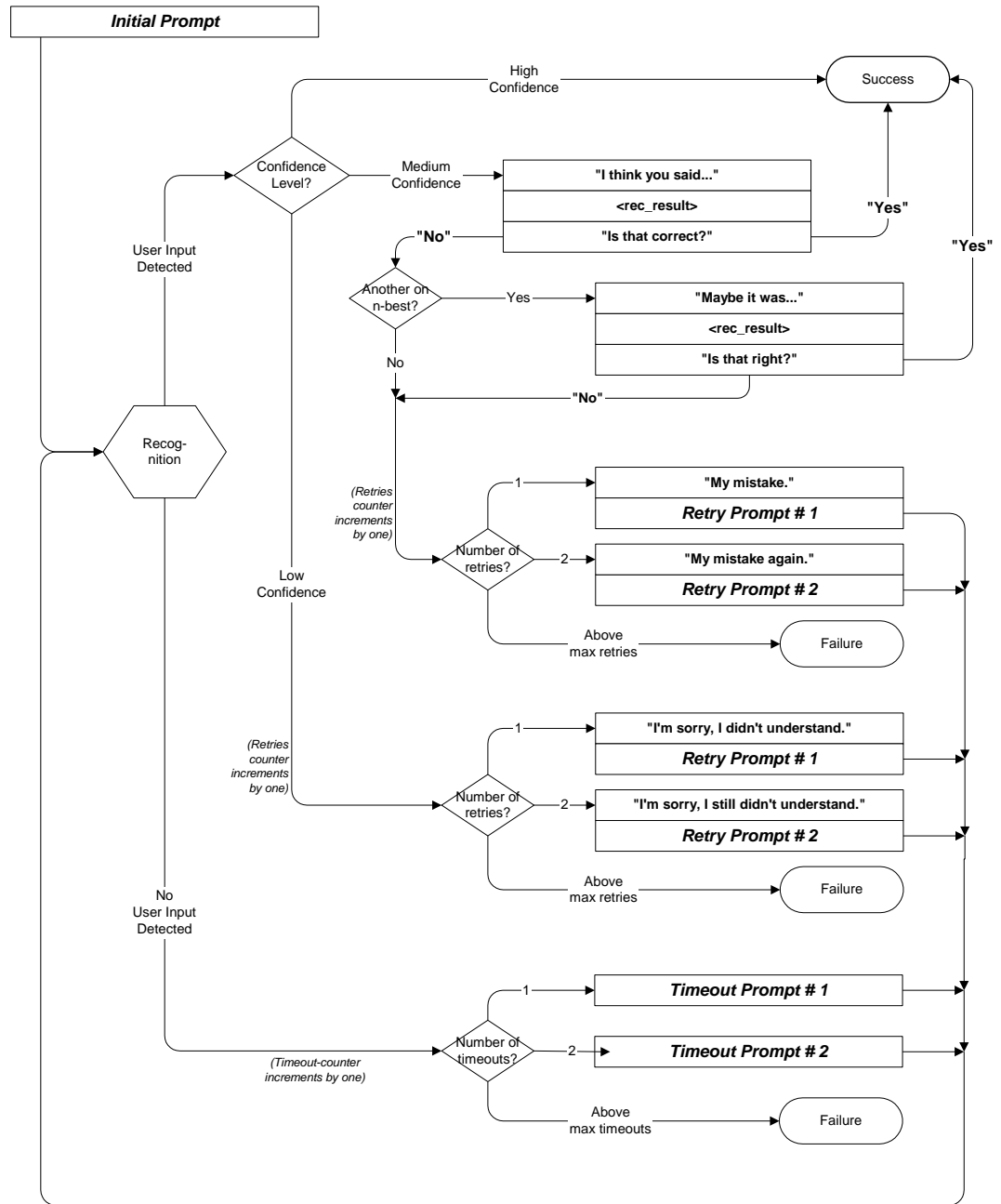
Chapter 9:   Detailed Dialog Specification

9.1   How to Read the Call-Flow Tables

2100_Finance_Forex_Menu

Speech Input				Item List
Entering from				
2000_Finance_Menu				
Prompts				
Message Number	**Type**	**Name**	**Wording**	
21001	Initial	21001	For which currency would you like to [...] the exchange rate?	
21002	Timeout 1	21002	I'm sorry, I didn't hear you. Please say the currency you w[...] exchange rate for, for example "Sterling Pound".	
21003	Timeout 2	21003	I'm sorry, I still didn't hear you. Please say the currency you want to hear the exchange rate for, such as the "Japanese yen", or, to hear a full list to choose from, say "List all currencies".	
21004	Retry 1	21004	Please say the currency you want an exchange rate for, for ex[...] "Australian dollar".	
21005	Retry [...]		Please say the currency you want to hear the exchange rate [...] such as the "Japanese yen", or, to hear a full list to choose fr[...] "Dutch guilder".	
21006	Help	21006	You are in the foreign exchange menu. If you specify a currency, such as the "Danish krone", I'll give you the exchange rate for it against the US Dollar.	

Voicing	**DTMF**	**Action**	
<currency>		Go to: "2110_Finance_Forex_ExchangeRateInf[...]sg"	
"List all currencies", "List currencies", "List all", "List them all", "List them"	2	Go to: "2190_Finance_Forex_CurrenciesListIntro"	

Commands	**DTMF**	**Action**	
"Back up"	#	Go to: "2000_Finance_Menu"	
"Main menu"	##	Go to: "1000_MainMenu"	
"Goodbye"	*	Go to: "9000_Goodbye_Msg"	
"Instructions"	9	Play promp[...] help prompt and then re-enter [...] module, playing [...] prompt, aw[...]ing new user input.	
"Operator"	0	Go to: "8000_[...]ansfer_Msg"	

Developer notes			
Default			

9.2   Call-Flow Tables

General note on prompt specification: Where there are two or more Initial prompts, all are played in sequence on entry to the DM. Likewise with multiple Help prompts – all are played in sequence when the caller says Question or presses star. In contrast, Retry1 and Retry2 are played individually on the first or second retry respectively, and similarly for Timeout1 and Timeout2. The Initial and Help prompts are broken into pieces to reduce problems with recording long prompts accurately, and also to avoid the voice talent gasping for breath. Note that if a caller says Question (or any synonym) repeatedly in the same DM, they hear the same sequence of help prompts each time. There is presently no upper limit on how many times a caller can say Question in a DM. There is, however, a limit on the total length of the call, as specified in section 8.2 above.

1000-BeginApplication-Check

Branch on Condition
This is the entry point for the Change of Address (COA) and Direct Deposit (DD) application.

Entering from
1036-SystemAvailability-Check

Req ID	Condition	Action
1000-BeginApplication-Condition-Menu2	*If COA from Main Menu*	Go to: 1020-WelcomeCOA-Msg
1000-BeginApplication-Condition-Menu3	*Else IF DD from Main Menu*	Go to: 1010-WelcomeDD-Msg
1000-BeginApplication-Condition-Menu4COA	*Else IF COA from Password Services*	Go to: 1020-WelcomeCOA-Msg
1000-BeginApplication-Condition-Menu4DD	*Else IF DD from Password Services*	Go to: 1010-WelcomeDD-Msg
1000-BeginApplication-Condition-SFCOA	*Else IF COA from SF Main Menu*	Go to: 1022-SFWelcomeCOA-Msg
1000-BeginApplication-Condition-SFDD	*Else DD from SF Main Menu*	Go to: 1012-SFWelcomeDD-Msg

Event logging

1010-WelcomeDD-Msg

Play Prompt
Welcome the caller to the Direct Deposit application.

Entering from
1000-BeginApplication-Check

Prompts		
Message Number	Type Name	Wording
10105	1010-GLB-WelcomeDD-Prompt1	Hello! You've reached the automated Direct Deposit service.

Req ID	Condition	Action
1010-GLB-WelcomeDD-Condition-Always	*Always*	Go to: 1030-DoUqualify-Msg

Event logging

Developer notes
No barge-in

1012-SFWelcomeDD-Msg

Play Prompt
Welcome the caller to the Direct Deposit application from SpeakFreely Main Menu. Since SF N8NN introduces the process, we don't need to welcome the caller here.

Entering from
1000-BeginApplication-Check

Prompts		
Message Number	*Name*	*Wording*
10121	1012-GLB-SFWelcomeDD-Prompt1	[0.5 sec silence]

Req ID	*Condition*	*Action*
1012-GLB-SFWelcomeDD-Condition-Always	*Always*	Go to: 1030-DoUqualify-Msg

Event logging

Developer notes
No barge-in

1020-WelcomeCOA-Msg

Play Prompt
Welcome the caller to the Change of Address application.

Entering from
1000-BeginApplication-Check

Prompts		
Message Number	*Name*	*Wording*
10200	1020-GLB-WelcomeCOA-Prompt1	Hello! You've reached the automated Change of Address service.

Condition	*Action*
Always 1020-GLB-WelcomeCOA -Condition-Always	Go to: 1030-DoUqualify-Msg

Event logging

Developer notes
No barge-in

1022-SFWelcomeCOA-Msg

| Play Prompt |
|---|
| Welcome the caller to the Change of Address application from SpeakFreely Main Menu. Since SF N8NN introduces the process, we don't need to welcome the caller here. |

Entering from
1000-BeginApplication-Check

Prompts		
Message Number	**Name**	**Wording**
10121	1020-GLB-SFWelcomeCOA-Prompt1	[0.5 sec silence]

Condition	Action
Always 1020-GLB-SFWelcomeCOA - Condition-Always	Go to: 1030-DoUqualify-Msg

Event logging

Developer notes
No barge-in

1030-DoUqualify-Msg

Play Prompt
Introduce caller to automated application, say we need to see whether they qualify to use the application.

Entering from
1010-WelcomeDD-Msg, 1020-WelcomeCOA-Msg

Prompts		
Message Number	**Name**	**Wording**
10302	1030-GLB-DoUqualify-Prompt1	I'll be asking you several questions, and you can SPEAK your answers. Just be sure to speak clearly and loud enough for me to hear over the phone.
10121	silence_500	[500 ms silence]
10303	1030-GLB-DoUqualify-Prompt2	If you've gotten to the wrong place, or you change your mind about proceeding, you can say Main Menu at any time. And if you have a question about anything I ask you, you can say Question at any time. <1 sec pause> OK, let's get started.

Req ID	Condition	Action
1030-GLB-DoUqualify-Condition-pwd	*Came from Main 3 (pwd)?*	Go to: 1035-PingPwd-DB
1030-GLB-DoUqualify-Condition-nopwd	*Else from Main 2*	Go to: 1032-HavePwd-VM

Event logging

Developer notes
No barge-in

1032-HavePwd-VM

Voice Menu DialogModule™
Ask caller if they plan to use a password now, so we can ping the correct service.

Entering from
1030-DoUqualify-Msg

Prompts

Message Number	Type / Name	Wording

10321	1032-GLB-COAhavepwd-Prompt-Initial	It's not required, but do you have a seven-digit password that you set up with the Social Security Administration? Yes or No. <4 sec pause> If you're not sure, say Question.
10322	1032-GLB-COAhavepwd-Prompt-Retry1	[Global Default] If you have a password, say Yes. Otherwise say No. If you're not sure, say Question.
10323	1032-GLB-COAhavepwd-Prompt-Retry2	[Global Default] If you have a password, press one. Otherwise, press two.
10324	1032-GLB-COAhavepwd-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you have a seven-digit password that you set up with the Social Security Administration, say Yes or press one. If you don't have one, say No or press two. If you're not sure, say Question or press the star key.
10325	1032-GLB-COAhavepwd-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you have a seven-digit password that you set up with the Social Security Administration, say Yes or press one. If you don't have one, say No or press two. If you're not sure, say Question or press the star key. [4 sec pause] If you need assistance, say Agent or press zero.
10326	1032-GLB-COAhavepwd-Prompt-Help	The password I'm referring to would have been chosen and registered by you online or over the phone. You would have received a password request code in the mail, which you would have used along with your social security number and other information to register a seven-digit password to access your personal benefit information. If you've forgotten the password, you can request a new one by using the same process you used before. If you have this seven-digit password and you plan to use it today, say Yes. Otherwise say No and I'll verify your identity another way.
10327	1032-GLB-COAhavepwd-Prompt-SuccessYes	Great. It'll save time.
10328	1032-GLB-COAhavepwd-Prompt-SuccessNO	That's OK.

Option	Vocabulary	DTMF	Action	Confirm.
1032-GLB-COAhavepwd-Option-yes	yes and usual synonyms	1	play SuccessYes prompt Go to: 1035-PingPwd-DB	*never*
1032-GLB-COAhavepwd-Option-no	no and usual synonyms	2	play SuccessNo prompt Go to: 1034-PingKBA-DB	*never*

| 1032-GLB-COAhavepwd-Option-maybe | global Help grammar plus: maybe [I'm] not sure I don't know | * | same as Question – play the Help prompt and reenter this DM as usual for help | *never* |
| Note: remove global "agent" grammar for this DM. | | | | |

Confirmation prompts	
Option / Name	**Wording**
no confirmations for Yes / No	

DialogModule parameters	
Parameter	**Value**
1032-GLB-COAhavepwd-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Developer notes

Use the standard Yes/No DM and its associated grammar (variations on yes and no). The global Help/Question grammar is overridden for this DM in order to catch additional utterances including "maybe".

1034-PingKBA-DB

| | **Database Query** | |
| Ping KBA system upon entry to ensure the presence of the back end. | | |

Entering from

1032-HavePwd-VM

| **Req ID** | **Condition** | **Action** |
| 1034-GLB-PingKBA-Condition-Always | *Always* | Go to: 1036-SystemAvailability-Check |

Event logging

1035-PingPwd-DB

| | **Database Query** | |
| Ping Password system upon entry to ensure the presence of the back end. | | |

Entering from

1030-DoUqualify-Msg

| **Req ID** | **Condition** | **Action** |
| *1035-GLB-PingPwd-Condition-Always* | *Always* | Go to: 1036-SystemAvailability-Check |

Event logging

....

1036-SystemAvailability-Check

		Branch on Condition
Branch on availability of system.		

Entering from
1035-PingPwd-DB, 1034-PingKBA-DB

	Condition	Action
1036-GLB-SystemAvailability-Condition-Unavailable	*IF System is unavailable*	NeedAssistanceWith = SysUnavailable Go to: 2100-AfterHours-Check
1036-GLB-SystemAvailability-Condition-Available	*Else*	NeedAssistanceWith = UserRequestedAgent (this is an initial setting that may be overridden by later events) Go to: 1038-IntroQual-Msg

Event logging

1038-IntroQual-Msg

	Play Prompt
Introduce the series of qualifying question we're about to ask.	

Entering from
1032-HavePwd-VM

Prompts		
Message Number	Name	Wording
10381	1038-GLB-IntroQual-Prompt1	First I have to ask a few questions to see whether this automated service can help you.

Req ID	Condition	Action
1038-GLB-IntroQual-Condition-Always	*Always*	Go to: 1050-GetSSI-YN

Event logging

Developer notes
No barge-in

1040-GetBeneNow-YN

	Custom Context DialogModule™
Ask whether caller is currently receiving benefits. This question now occurs AFTER the question about SSI (1050).	

Entering from
1050-GetSSI-YN

Prompts			
Message Number	Type	Name	Wording
10401	Initial	1040-GLB-GetBeneNow-Prompt-Initial	Are you currently receiving Social Security retirement, survivor, or disability benefits? Yes or no.
10402	first retry	1040-GLB-GetBeneNow-Prompt-Retry1	[Global Default] If you're currently receiving Social Security retirement, survivor, or disability benefits, please say Yes. Otherwise say No.

....

10403	second retry	1040-GLB-GetBeneNow-Prompt-Retry2	[Global Default] If you currently get a benefit check or deposit from Social Security, press one. Otherwise, press two.
10404	first timeout	1040-GLB-GetBeneNow-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you currently get a benefit check or deposit from Social Security, say Yes or press one. Otherwise, say No or press two. If you're not sure, say Question or press the star key.
10405	second timeout	1040-GLB-GetBeneNow-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you currently get a benefit check or deposit from Social Security, say Yes or press one. Otherwise, say No or press two. If you're not sure, say Question or press the star key. [pause 4 sec] If you need assistance, say Agent or press zero.
10406	Help – play all of these	1040-GLB-GetBeneNow-Prompt-Help1	[slowly] OK, I'll try to help with more explanation. You can use this automated service to change your address or phone number with Social Security only if you meet certain conditions. One of those conditions is that you must already be receiving a Social Security benefit due to retirement, disability, or being a survivor of someone who would have received a benefit.
500		silence_500	[500 ms silence]
10407		1040-GLB-GetBeneNow-Prompt-Help2	[slowly] If you're not currently receiving a monthly check or deposit from Social Security, you can't use this AUTOMATED service to change your address or phone number. In most cases, though, just putting your new address and phone number on your income tax return is all that we need. If you'd like more information or need personal assistance, you can say Agent or press zero.
500		silence_500	[500 ms silence]
10408		1040-GLB-GetBeneNow-Prompt-Help3	So please let me ask you again: Are you currently receiving Social Security retirement, survivor, or disability benefits? Yes or no.

Option	*Vocabulary*	DTMF	*Action*	*Confirm.*
1040-GLB-GetBeneNow-Option-yes	yes and usual synonyms	1	Go to: 1060-LiveInUS-YN	*never*
1040-GLB-GetBeneNow-Option-no	no and usual synonyms	2	Go to: 1130_CantDoThat_DM	*never*
1040-GLB-GetBeneNow-Option-specific	retirement [benefits] survivor [benefits] disability [benefits]	—	Go to: 1060-LiveInUS-YN	*never*
1040-GLB-GetBeneNow-Option-SSI	S S I [benefits]	—	Go to: 1120-CantUse-Msg	*never*

Confirmation prompts	
Option / Name	*Wording*
no confirmations for Yes / No	

DialogModule parameters	
Parameter	*Value*
1040-GLB-GetBeneNow-Parameter	

after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Developer notes
Play all three help prompts if the caller says Question. Note that 'retirement' etc. are accepted as equivalent to 'yes'.

1050-GetSSI-YN

Yes/No DialogModule™	
Is caller receiving SSI? (Correct answer is no)	

Entering from
1038-IntroQual-Msg

Prompts			
Message Number	*Type*	*Name*	*Wording*
10501	Initial	1050-GLB-GetSSI-Prompt-Initial	Are you receiving S S I, also known as Supplemental Security Income payments?
10502	first retry	1050-GLB-GetSSI-Prompt-Retry1	[Global Default] If you're receiving S S I payments, say Yes. Otherwise say No.
10503	second retry	1050-GLB-GetSSI-Prompt-Retry2	[Global Default] If you're receiving S S I payments press one. Otherwise, press two.
10504	first timeout	1050-GLB-GetSSI-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you're receiving S S I payments, say Yes or press 1. Otherwise say No or press 2. If you're not sure, say Question or press the star key.
10505	second timeout	1050-GLB-GetSSI-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you're receiving S S I payments, say Yes or press 1. Otherwise say No or press 2. If you're not sure, say Question or press the star key. [pause 4 sec] If you need assistance, say Agent or press zero.
10506	Help – play all of these	1050-GLB-GetSSI-Prompt-Help1	[slowly] OK, I'll try to help with more explanation. You can use this automated service to change your address or phone number with Social Security only if you meet certain conditions. One of those conditions is that you must NOT be receiving SSI, also known as supplemental security income payments.
500		silence_500	[500 ms silence]
10507		1050-GLB-GetSSI-Prompt-Help2	[slowly] If you're receiving supplemental security income payments, you cannot use this automated system to change your address or phone number. If this is the case for you, please say Agent or press zero.
500		silence_500	[500 ms silence]
10508		1050-GLB-GetSSI-Prompt-Help3	So please let me ask you again: Are you receiving S S I, also known as supplemental security income payments? Yes or no.

Option	Vocabulary	DTMF	Action	Confirm.
1050-GLB-GetSSI-Option-yes	yes [yes] I receive SSI [yes] I get S S I S S I	1	Go to: 1120-CantUse-Msg	*Never*
1050-GLB-GetSSI-Option-no	no	2	Go to: 1040-GetBeneNow-YN	*Never*

Confirmation prompts	
Option / Name	**Wording**
no confirmations for Yes / No	

DialogModule parameters	
Parameter	**Value**
1050-GLB-GetSSI-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True
low confidence threshold	.400

Event logging

Developer notes
Use the standard Yes/No DM and its associated grammar (variations on yes and no). Play all three help prompts if caller says Question.
Avoid double parsing – remove duplicate grammars or duplicate vocabulary.

1060-LiveInUS-YN

Yes/No DialogModule™	
Ask if caller lives in U.S.	

Entering from
1040-GetBeneNow-YN

Prompts			
Message Number	**Type**	**Name**	**Wording**
10601	first timeout second timeout Help – play all of these	1060-GLB-LiveInUS-Prompt-Initial	Are you currently residing in a state or territory of the United States? Yes or no.
10602	first retry	1060-GLB-LiveInUS-Prompt-Retry1	[Global Default] If you're currently living in a state or territory of the United States, say Yes. If you're living somewhere else, say No.
10603	second retry	1060-GLB-LiveInUS-Prompt-Retry2	[Global Default] If you're currently living in a state or territory of the United States, press one. Otherwise, press two.
10604	first timeout	1060-GLB-LiveInUS-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you're currently living in a state or territory of the United States, say Yes or press one. If you're living somewhere else, say No or press two. If you're not sure, say Question or press the star key.

10605	second timeout	1060-GLB-LiveInUS-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you're currently living in a state or territory of the United States, say Yes or press one. If you're living somewhere else, say No or press two. If you're not sure, say Question or press the star key. [pause 4 sec] If you need assistance, say Agent or press zero.
10606	Help – play all of these	1060-GLB-LiveInUS-Prompt-Help1	[slowly] OK, I'll try to help with more explanation. You can use this automated service to change your address or phone number with Social Security only if you meet certain conditions. One of those conditions is that you must currently be living in a state or territory of the United States.
500		silence_500	[500 ms silence]
10607		1060-GLB-LiveInUS-Prompt-Help2	[slowly] I only need a Yes or No answer at this point. You don't need to tell me which state or territory you live in - I'll ask you about that later if we change your address. If you do live in one of the states or territories of the United States, just say Yes or press one. If you live somewhere else, please say No or press two. [2 sec pause] If you still aren't sure and want to hear a list of the territories, just hang on and I'll list them for you. [4 sec pause] The current and former territories of the United States are:
500		silence_500	[500 ms silence]
10608		1060-GLB-LiveInUS-Prompt-Help3	American Samoa, Federated States Of Micronesia, Guam , Marshall Islands, Northern Mariana Islands, Palau, Puerto Rico, and Virgin Islands.
10609		silence_1000	[1 sec silence]
		1060-GLB-LiveInUS-Prompt-Help4	So please let me ask again: Are you currently residing in a state or territory of the United States? Yes or no.
10610	Success Yes	1060-GLB-LiveInUS-Prompt-SuccessYes	Alright, ...

Option	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
1060-GLB-LiveInUS-Option-yes	Yes State Territory	1	play SuccessYes prompt Go to: 1070-OwnBene-VM	*If necessary*
1060-GLB-LiveInUS-Option-no	no	2	[no success prompt for No] If Direct Deposit go to: 1065_MI 53 Host Transaction else go to: 1120-CantUse-Msg	*If necessary*

Confirmation prompts	
Option / Name	*Wording*
no confirmations for Yes / No	

| *DialogModule parameters*	
Parameter	*Value*
1060-GLB-LiveInUS-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Developer notes
Use the standard Yes/No DM and its associated grammar (variations on yes and no). Play all help prompts if caller says Question.

1065_MI 53 Host Transaction

Database Query
Message to host for MI = 53 is to be used if caller enters this state.

Entering from
1060-LiveInUS-YN

Condition	*Action*
	Go to: 1120-CantUse-Msg

Event logging

1070-OwnBene-VM

Yes/No DialogModule™
Ask caller to confirm they're changing their own account.

Entering from
1060-LiveInUS-YN

Prompts

Message Number		Type / Name	Wording
10701		1070-GLB-OwnBene-Prompt-Initial	Is the change you're calling about for your OWN benefit or payment? Yes or no.
10702		1070-GLB-OwnBene-Prompt-Retry1	[Global Default] If you're calling about your own benefit or payment, say Yes. If you're calling about someone else's benefit, say No.
10703		1070-GLB-OwnBene-Prompt-Retry2	[Global Default] If you're calling about your own benefit or payment, press one. Otherwise, press two.
10704		1070-GLB-OwnBene-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you're calling about your own benefit or payment, say Yes or press one. If you're calling about someone else's benefit, say No or press two. If you're not sure, say Question or press the star key.
10705		1070-GLB-OwnBene-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you're calling about your own benefit or payment, say Yes or press one. If you're calling about someone else's benefit, say No or press two. If you're not sure, say Question or press the star key. [pause 4 sec] If you need assistance, say Agent or press zero.
10706	Help — play all of these	1070-GLB-OwnBene-Prompt-Help1	[slowly] OK, I'll try to help with more explanation. You can use this automated service to change your address or phone number with Social Security only if you meet certain conditions. One of those conditions is that can make changes only for your own account. You cannot make changes for someone else's account even if they asked you to do it. Social Security privacy regulations don't allow us to do that with this automated system.
500		silence_500	[500 ms silence]
10707		1070-GLB-OwnBene-Prompt-Help2	[slowly] If you ARE calling on behalf of someone else, you should say Agent or press zero for assistance. [2 sec pause] So please let me ask again: Is the change you're calling about for your OWN benefit or payment? Please say Yes or No.

Option	Vocabulary	DTMF	Action	Confirm.
1070-GLB-OwnBene-Option-yes	yes	1	Go to: 1080-COAorDD-Check	*If necessary*
1070-GLB-OwnBene-Option-no	no	2	Go to: 1120-CantUse-Msg	*If necessary*

Confirmation prompts	
Option / Name	**Wording**
no confirmations for Yes / No	

DialogModule parameters	
Parameter	**Value**
1070-GLB-OwnBene-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Developer notes
Use the standard Yes/No DM and its associated grammar (variations on yes and no).

1080-COAorDD-Check

Branch on Condition
Up to here, other than the initial greeting, everything was the same for both COA and DD. Now we split and do different things.

Entering from
1070-OwnBene-VM

Req ID	Condition	Action
1080-GLB-COAorDD-Condition-COA	*IF doing COA*	Go to: 1090-KnowZip-VM
1080-GLB-COAorDD-Condition-DD	*Else doing DD*	Go to: 1100-KnowBank-VM

Event logging

1090-KnowZip-VM

Yes/No DialogModule™
Ask caller if they have their new zip code and / or new phone number handy.

Entering from
1080-COAorDD-Check

Prompts		
Message Number	**Type / Name**	**Wording**
10901	1090-GLB-KnowZip-Prompt-Initial	To change your address, you'll need to know your new five-digit zip code. To change your phone number, you'll need to know your new ten-digit phone number including area code. Do you have the numbers you'll need with you now? Yes or no.
10902	1090-GLB-KnowZip-Prompt-Retry1	[Global Default] If you have your new zip code or new phone number with you right now, say Yes. If you don't have them, say No.

10903		1090-GLB-KnowZip-Prompt-Retry2	[Global Default] If you have your new zip code or new phone number with you right now, press one. Otherwise, press two.	
10904		1090-GLB-KnowZip-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you have your new zip code or new phone number with you right now, say Yes or press one. If you don't have them, say No or press two. If you're not sure, say Question or press the star key.	
10905		1090-GLB-KnowZip-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you have your new zip code or new phone number with you right now, say Yes or press one. If you don't have them, say No or press two. If you're not sure, say Question or press the star key.	
10906	Help – play all of these	1090-GLB-KnowZip-Prompt-Help1	[slowly] OK, I'll try to help with more explanation. To change your address with this automated system, I need to know your new zip code. To change your phone number, you'll need to tell me the new one with area code. If you don't have these numbers available, you can always call back later when you do have them.	
20000		silence_2000	[2 sec silence]	
10907		1090-GLB-KnowZip-Prompt-Help2	So please let me ask you again: Do you have your new zip code or new phone number with you? Yes or no.	

| *Option*	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
1090-GLB-KnowZip-Option-yes	yes	1	Go to: 1300-PWDorKB-Check	*If necessary*
1090-GLB-KnowZip-Option-no	no	2	Go to: 1110-CantProceed-VM	*If necessary*
Note: remove agent synonyms from global grammar for this DM.				

Confirmation prompts	
Option / Name	*Wording*
no confirmations for Yes / No	

DialogModule parameters	
Parameter	*Value*
1090-GLB-KnowZip-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	15,000 ms ← Note increased value
allowing_barge_in	True

Event logging

Developer notes
Use the standard Yes/No DM and its associated grammar (variations on yes and no).

1100-KnowBank-VM

VoiceMenu DialogModule™	
Tell caller they'll need bank routing and account numbers and ask if they have them.	

Entering from
1080-COAorDD-Check

Prompts			
Message Number	**Type / Name**		**Wording**
11040	Initial – play all of these	1100-GLB-KnowBank-Prompt-Initial1	To set up or change direct deposit of your benefits, you'll need to know two numbers that you can get from your personal check, or from your financial institution. The first is the bank routing number. [1 sec pause] The second is your personal account number.
1000		silence_1000	[1 sec silence]
11041		1100-GLB-KnowBank-Prompt-Initial2	If you have those numbers now, say I'm Ready. If you're not sure, say More Information. If you need a moment to find the numbers, say Wait A Minute. If you DON'T have the numbers, say I Don't Have Them.
11042	first retry	1100-GLB-KnowBank-Prompt-Retry1	[Global Default] If you DO have the bank numbers, say "I'm Ready", or press one. If not, say "I Don't Have Them", or press two. If you need a moment to find them, say "Wait A Minute", or press three. If you're not sure whether you have the numbers, say "More Information", or press the star key. If you no longer want to set up or change direct deposit, say "Main Menu" or press 9.
11043	second retry	1100-GLB-KnowBank-Prompt-Retry2	[Global Default] If you DO have the bank numbers, say "I'm Ready", or press one. If not, say "I Don't Have Them", or press two. If you need a moment to find them, say "Wait A Minute", or press three. If you're not sure whether you have the numbers, say "More Information", or press the star key. If you no longer want to set up or change direct deposit, say "Main Menu" or press 9.
11044	first timeout	1100-GLB-KnowBank-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you DO have the bank numbers, say I'm Ready, or press one. If not, say I Don't Have Them, or press two. If you need a moment to find them, say Wait A Minute, or press three. If you're not sure whether you have the numbers, say More Information, or press the star key. Or, if you'd like to do something else, say Main Menu or press 9.
11045	second timeout	1100-GLB-KnowBank-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you DO have the bank numbers, say I'm Ready, or press one. If not, say I Don't Have Them, or press two. If you need a moment to find them, say Wait A Minute, or press three. If you're not sure whether you have the numbers, say More Information, or press the star key. If you no longer want to set up or change direct deposit, say Main Menu or press 9. [4 sec pause] If you need assistance, say Agent or press zero.
	third timeout	1100-GLB-KnowBank-Prompt-Timeout3	<same as Timeout2>
11046	Help – play all of these	1100-GLB-KnowBank-Prompt-Help1	Sure, here's a bit more information about those numbers. The bank routing number is exactly nine digits and is printed on the bottom of each check in between two marks that look like a vertical bar followed by a colon. It's usually the left-most number at the bottom of the check.
500		silence_500	[500 ms silence]
11047		1100-GLB-KnowBank-Prompt-Help2	Your account number is some number of digits ending with a symbol that looks like two vertical bars followed by a square dot. Don't confuse your ACCOUNT number with your CHECK number that is both at the bottom and at the top right of your check.
500		silence_500	[500 ms silence]

11048		1100-GLB-KnowBank-Prompt-Help3	If you don't have these numbers, you'll need to get them from your financial institution before we can set up or change direct deposit. If you DO have the numbers now, say I'm Ready. If you need a moment to find the numbers, say Wait A Minute. If you DON'T have the numbers, say I Don't Have Them.
20000		silence_2000	[2 sec silence]
11049		1100-GLB-KnowBank-Prompt-Help4	If you want to call again later, just hang up. If you no longer want to set up or change direct deposit, say Main Menu. To hear this information again, say More Information.

Option	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
1100-GLB-KnowBank-Option-Have	[I'm] ready yes I have it	1	Go to: 1300-PWDorKB-Check	*If necessary*
1100-GLB-KnowBank-Option-DontHave	[I] don't have [them | the numbers]	2	Go to: 1110-CantProceed-VM	*Always*
1100-GLB-KnowBank-Option-WaitAMinute	wait a minute	3	Go to: <u>1105-SayReady-VM</u>	*Never*

Confirmation prompts		
Message Number	*Option / Name*	*Wording*
11050	1100-GLB-KnowBank-ConfPrompt-HaveThem	[I think you said] that you have the numbers. [Is that correct?]
11051	1100-GLB-KnowBank-ConfPrompt-DontHave	[I think you said] that you DON'T have the numbers so you'll need to call back later. [Is that correct?]

| *DialogModule parameters*	
Parameter	*Value*
1100-GLB-KnowBank-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	20,000 ms ← Note increased value
allowing_barge_in	True
collection_maxnoinputs	3

Event logging

Developer notes
Note the extra long timeout value in case caller needs to fumble around to find the numbers. Also the number of timeouts allowed is increased. And if that isn't enough, there's also a Wait A Minute feature.
set SWI_scoreDelta to +200 to increase bias towards utterance, -200 to decrease (down-weight) bias towards utterance in grammar e.g. <item><tag>AGENT='agent'; SWI_scoreDelta=-200</tag>agent</item>
Add one-step correction to confirmation grammar for this DM "no, I have (them | the numbers)" Route the same as "I'm ready".

1105-SayReady-VM

	VoiceMenu DialogModule™	
Caller asked to wait.		

Entering from
1100-KnowBank-VM

Prompts

Message Number	Type / Name	Wording
11052	1105-DD-SayReady-Prompt-Initial	OK, I'll wait a bit. When you're ready, say I'm Ready or press one on your keypad.
11053	1105-DD-SayReady-Prompt-Retry1	[Global Default] Are you ready now?
11054	1105-DD-SayReady-Prompt-Retry2	[Global Default] If you're ready now, say I'm Ready or press one, otherwise say Wait A Minute or press two. [4 sec pause] If you need assistance, say Agent or press zero.
11055	1105-DD-SayReady-Prompt-Timeout1	When you're ready, say I'm Ready or press one on your keypad.
11055	1105-DD-SayReady-Prompt-Timeout2 and 3 and 4	<same as Timeout 1>
11056	1105-DD-SayReady-Prompt-Help	I'm waiting for you to find the bank numbers you'll need to set up direct deposit. When you have them, say I'm Ready. Otherwise say Wait A Minute. [1 sec pause] If you can't find the numbers, just hang up now and call back when you find them. [4 sec pause] If you need assistance, say Agent or press zero.

Option	Vocabulary	DTMF	Action	Confirm.
1105-DD-SayReady-Option-Ready	[yes] I'm ready I have the numbers yes hello OK I got it	1	Go to: 1300-PWDorKB-Check	*If necessary*
1105-DD-SayReady-Option-NotReady	wait a minute no	2	re-enter this DM, replaying the Initial prompt	*If necessary*
1105-DD-SayReady-Option-Repeat	repeat repeat the question	3	Go to: 1100-KnowBank-VM	*If necessary*

Confirmation prompts

Message Number	Option / Name	Wording
11057	1105-DD-SayReady-ConfPrompt-Ready	[I think you said] that you're ready with the bank numbers. [Is that correct?]
11058	1105-DD-SayReady-ConfPrompt-NotReady	[I think you said] that you need more time. [Is that correct?]
11059	1105-DD-SayReady-ConfPrompt-Repeat	[I think you said] you'd like to hear the question again. [Is that correct?]

DialogModule parameters

Parameter	Value
1105-DD-SayReady-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	20,000 ms ← Note large value
allowing_barge_in	True
collection_maxnoinputs	4 ← Note increased value for number of timeouts
barge-in sensitivity	**0.9**

Event logging

Developer notes
Be sure sensitivity parameter is set as indicated.

1110-CantProceed-VM

VoiceMenu DialogModule™
The caller said they don't have the required numbers (zip or bank info), so tell them we can't proceed and offer the usual options. Note this is different from not being qualified to use the application. The caller is allowed to use the application, but just doesn't have the required numbers handy.

Entering from
1090-KnowZip-VM, 1100-KnowBank-VM

Prompts Message Number	*Type*	*Name*	*Wording*
11101		1110-GLB-CantProceed-Prompt-Initial1	I'm afraid we can't proceed without those numbers. Please call back as soon as you have them and I'll be glad to help you with these changes.
1000		silence_1000	[1 sec silence]
11102		1110-GLB-CantProceed-Prompt-Initial2	If you'd like to do something else, you can say Main Menu. Otherwise just hang up.
11103		1110-GLB-CantProceed-Prompt-Retry1	[Global Default] Please say Main Menu or press nine, or just hang up.
11104		1110-GLB-CantProceed-Prompt-Retry2	[Global Default] Please say Main Menu or press nine, or just hang up.
11105		1110-GLB-CantProceed-Prompt-Timeout1	I'm sorry, I didn't hear anything. Please say Main Menu or press nine, or just hang up.
11105		1110-GLB-CantProceed-Prompt-Timeout2	I'm sorry, I didn't hear anything. Please say Main Menu or press nine, or just hang up.
11101		1110-GLB-CantProceed-Prompt-Help1	I'm afraid we can't proceed without those numbers. Please call back as soon as you have them and I'll be glad to help you with these changes.
11102		1110-GLB-CantProceed-Prompt-Help2	If you'd like to do something else, you can say Main Menu. Otherwise just hang up.

Option	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
1110-GLB-CantProceed-Option-Ready	same grammar as 1105-DD-SayReady-Option-Ready	1	Go to: 1300-PWDorKB-Check	*If necessary*
1110-GLB-CantProceed-Option-Goodbye	thank you goodbye OK	—	hang up	*Never*
Note: Be sure that global grammars for "main menu" and "question" are active.				

Confirmation prompts		
Message Number	**Option / Name**	**Wording**
11107	1110-GLB-CantProceed-ConfPrompt-Ready	[I think you said] that you're ready with the numbers. [Is that correct?]

DialogModule parameters	
Parameter	**Value**
1110-GLB-CantProceed-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Developer notes

1120-CantUse-Msg

	Play Prompt
The caller has given a disqualifying response to a screening question so they aren't allowed to use this application, but an agent may be able to help.	

Entering from
1050-GetSSI-YN, 1060-LiveInUS-YN,
1070-OwnBene-VM.1065_MI 53 Host Transaction

Prompts		
Message Number	**Name**	**Wording**
11200	1120-GLB-CantUse-Prompt-Initial1	Based on that information, you won't be able to use this automated system, but we'd still like to help if we can.

Condition	Action
1120-GLB-IntroQual-Condition-Always	NeedAssistanceWith = ValidationFailure Go to: 2100-AfterHours-Check

Event logging

Developer notes
No barge-in

1130_CantDoThat_DM

	CustomContext DialogModule™
The caller has given a disqualifying response to a screening question, so they can't perform the function at all, even using an agent.	

Entering from
1040-GetBeneNow-YN

Prompts

Message Number	Type	Name	Wording
11301	Initial	1130-GLB-CantDoThat-Prompt-Initial1	Based on that information, you cannot perform this function even with the help of an agent. To perform this function, you must be RECEIVING benefit payments. For further details, and some tips on what you CAN do, say More Information. [2 sec pause] If there's something else you need to do with Social Security, or if you want to try again, you can say Main Menu. If you're done, just hang up.
11302	Retry 1	1130-GLB-CantDoThat-Prompt-Retry1	[Global Default] Please say Main Menu, or just hang up.
11303	Timeout 1	1130-GLB-CantDoThat-Prompt-Timeout1	I'm sorry, I didn't hear anything. Please say Main Menu, or just hang up.

Option	Vocabulary	DTMF	Action		Confirm.
			disable all global grammars for this DM		
main menu	main menu menu	9	Go to 2212-ThanksBeforeReturn-Msg		*If necessary*
more info	more information	*	Go to 1140_HelpForCantDoThat_DM		*Never*
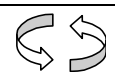
Confirmation prompts

Option	Name	Wording	
main menu	gl_conf_mainmenu		[I think you said] you want to return to the Main Menu. [Is that correct?]

DialogModule parameters

Parameter	Value
incompletetimeout	1,000 ms
timeout	7,000 ms
bargein	True
maxnomatches	1
maxnoinputs	1

Event logging

Developer notes

1140_HelpForCantDoThat_DM

	CustomContext DialogModule™	

Entering from

1130_CantDoThat_DM

Prompts			
Message Number	*Type*	*Name*	*Wording*
11402	Initial	1140-GLB-HelpForCantDoThat-Prompt-Initial1	I'll try to explain it more. The function you requested, either change of address or setup of direct deposit, can be performed only by people who are currently receiving Social Security retirement, disability, or survivor benefit payments. If you don't meet this requirement, our agents can't help you with these functions either, because Social Security doesn't maintain address information for you in our files. If you've APPLIED to receive benefits and need to change your address, say Agent now and the agent will refer you to the office that has your pending claim. If you are neither receiving benefits nor have applied for benefits, but still need to change the address to which we send Social Security statements, you'll have to do that through the Internal Revenue Service. The easiest way to do that is just enter your new address on your tax return, but if you need to do it sooner, you can use IRS form 8-8-2-2, which you can get by calling 1-800-829-3676. [2 sec pause] If there's something else you need to do with Social Security, you can say Main Menu. If you're done, just hang up. To hear this message again, say More Information.
11403	Retry 1	1130-GLB-CantDoThat-Prompt-Retry1	[Global Default] Please say Main Menu, or just hang up.
11404	Timeout 1	1130-GLB-CantDoThat-Prompt-Timeout1	I'm sorry, I didn't hear anything. Please say Main Menu, or just hang up.

| *Option*	*Vocabulary*	*DTMF*	*Action*		*Confirm.*
			disable all global grammars for this DM		
main menu	main menu menu	9	Go to 2212-ThanksBeforeReturn-Msg		*If necessary*
more info	more information question	*	re-enter this DM		*never*
agent	agent synonyms	0	Set NeedAssistanceWith = UserRequestAgent Go to 2100-AfterHours-Check		*If necessary*

Confirmation prompts				
Message Number	*Option*	*Name*	*Wording*	
117	main menu	gl_conf_mainmenu	[I think you said] you want to return to the Main Menu. [Is that correct?]	
130	agent	gl_conf_operator	[I think you said] you want to talk to an agent. [Is that correct?]	

DialogModule parameters	
Parameter	*Value*
incompletetimeout	1,000 ms
timeout	7,000 ms
bargein	True
maxnomatches	1
maxnoinputs	1

Event logging	

Developer notes

1300-PWDorKB-Check

Branch on Condition
The caller is qualified to use the application and wants to do a change of address or phone. See how we entered the application – directly from main or indirectly from password services – and branch accordingly.

Entering from
1090-KnowZip-VM

Req ID	*Condition*	*Action*
1300-GLB-PWDorKB-Condition-PwdUnsure	*IF Main Menu option 2 (COA) OR option 3 (DD)*	Go to: 1310-UsingPwd-Check
1300-GLB-PWDorKB-Condition-UsingPwd	*Else IF Main Menu option 4 (Pwd svcs) plus COA OR plus DD*	Go to: 1320-CallPwdAuth-Code
—-	*Else impossible condition*	—

Event logging

1310-UsingPwd-Check

Branch on Condition
Check the answer to our earlier question about whether the caller plans to use a password.

Entering from
1300-PWDorKB-Check

Req ID	*Condition*	*Action*
1310-GLB-UsingPwd-Condition-Pwd	*IF using password*	Go to: 1320-CallPwdAuth-Code
1310-GLB-UsingPwd-Condition-KBA	*Else using KBA*	Go to: 1330-CallKBAuth-Code

Event logging

1320-CallPwdAuth-Code

Entered from 1300-PWDorKB-Check, 1032-HavePwd-VM
Call PwdAuth
no parameters
expect return code of Success or Failure
Go to: 1340-authstatus-Check
Event Logging: <to be specified>

1330-CallKBAuth-Code

Entered from 1310-UsingPwd-Check
Call KBAuth

no parameters
expect return code of Success or Failure
**Go to:** 1340-authstatus-Check
Event Logging: <to be specified>

1340-authstatus-Check

	Branch on Condition
We called one of the authorization routines, either PwdAuth or KBAuth. See what they returned.	

Entering from

1320-CallPwdAuth-Code, 1330-CallKBAuth-Code

Req ID	Condition	Action
1340-GLB-authstatus-Condition-SuccCOA	*IF auth success AND doing COA*	Go to: 1350-CallCOA-Code
1340-GLB-authstatus-Condition-SuccDD	*else if auth success AND doing DD*	Go to: 1450-CallDD-Code
1340-GLB-authstatus-Condition-AcctBlockedCOA	*else auth failure because account blocked*	NeedAssistanceWith = ValidationFailure Go to: 2100-AfterHours-Check
1340-GLB-authstatus-Condition-Fail	*else auth failure for some other reasons*	NeedAssistanceWith = ValidationFailure Go to: 1500-CantAuth-Msg

Event logging

1350-CallCOA-Code

Entered from 1340-authstatus-Check
Call COA
no parameters
expect return code of Success or Failure
**Go to:** 1360-checkstatus-Check
Event Logging: <to be specified>

1360-checkstatus-Check

	Branch on Condition
We called the COA or the DD routine. See what it returned.	

Entering from

1350-CallCOA-Code, 1450-CallDD-Code

Req ID	Condition	Action
1360-GLB-checkstatus-Condition-Succ	*IF Success from COA or DD*	Go to: 1370-done-VM
1360-GLB-checkstatus-Condition-Fail	*Else DD Failure*	Go to: 1365_MI_54
1360-GLB-checkstatus-Condition-Fail	*Else COA Failure*	Go to: 1510-NowWhat-VM

Event logging

1365 MI 54 Host Transaction

Database Query
Message to host for MI = 54 is to be used if caller enters this state.

Entering from
1360-checkstatus-Check

Condition	Action
	Go to: 1510-NowWhat-VM

Event logging

1370-done-VM

VoiceMenu DialogModule™
Change completed successfully. Ask if caller wants anything else.

Entering from
1360-checkstatus-Check

Prompts

Message Number	Type / Name	Wording
13701	1370-GLB-done-Prompt-Initial	If you'd like to do something else, you can say Main Menu. Otherwise just hang up.
13702	1370-GLB-done-Prompt-Retry1	[Global Default] Please say Main Menu or just hang up.
13703	1370-GLB-done-Prompt-Retry2	[Global Default] Please say Main Menu or press nine, or just hang up.
13704	1370-GLB-done-Prompt-Timeout1	I'm sorry, I didn't hear anything. If you'd like to do something else, please say Main Menu or press nine. Otherwise you can just hang up.
13705	1370-GLB-done-Prompt-Timeout2	I'm sorry, I didn't hear anything. If you'd like to do something else, please say Main Menu or press nine. Otherwise you can just hang up.
13706	1370-GLB-done-Prompt-Help	We've collected all your information and sent it off for processing. Now if you'd like to do something else with this automated system, say Main Menu or press nine. Otherwise, if you're finished, you can just hang up.

Option	Vocabulary	DTMF	Action	Confirm.
1370-GLB-done-Option-Goodbye	goodbye thanks thank you OK	1	hang up	*Never*

Confirmation prompts	
Option / Name	Wording
none	

DialogModule parameters	
Parameter	Value
1370-GLB-done-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms

allowing_barge_in	True

Event logging

Developer notes

1450-CallDD-Code

Entered from 1340-authstatus-Check
Call DD
no parameters
expect return code of Success or Failure
Go to: 1360-checkstatus-Check
Event Logging: <to be specified>

1500-CantAuth-Msg

Play Prompt	
Caller failed authentication. Say so.	

Entering from
1340-authstatus-Check

Prompts		
Name	*Name*	*Wording*
15002	1500-GLB-CantAuth-Prompt-1	Since I couldn't validate your identity, we can't continue with the change you requested.
1000	silence_1000	[1 sec silence]

Req ID	*Condition*	*Action*
1500-GLB-CantAuth-Condition-Always	*Always*	Go to: 1510-NowWhat-VM

Event logging

Developer notes
No barge-in ← Check this setting!

1510-NowWhat-VM

VoiceMenu DialogModule™	
The caller failed in authentication.	

Entering from
1500-CantAuth-Msg

Prompts

Message Number	Type / Name	Wording
15101	1510-GLB-NowWhat-Prompt-Initial	If you'd like to do something else, say Main Menu. If you're done, say Goodbye or just hang up. [2 sec pause] If you need assistance, say Agent or press zero.
15102	1510-GLB-NowWhat-Prompt-Retry1	[Global Default] Please say Agent or press zero, or say Main Menu or press nine, or just hang up.
15103	1510-GLB-NowWhat-Prompt-Retry2	[Global Default] Please say Agent or press zero, or say Main Menu or press nine, or just hang up.
15104	1510-GLB-NowWhat-Prompt-Timeout1	I'm sorry, I didn't hear anything. There's nothing more I can help you with in this part of the system. Please say Agent or press zero, or say Main Menu or press nine, or just hang up.
15015	1510-GLB-NowWhat-Prompt-Timeout2	I'm sorry, I didn't hear anything. There's nothing more I can help you with in this part of the system. Please say Agent or press zero, or say Main Menu or press nine, or just hang up.
15106	1510-GLB-NowWhat-Prompt-Help	There's nothing more I can help you with in this part of the system. Please say Agent or press zero, or say Main Menu or press nine, or just hang up.

Option	Vocabulary	DTMF	Action	Confirm.
1510-GLB-NowWhat-Option-Goodbye	goodbye OK no	—	Hang Up	never
max timeout or max retry in this DM	—	—	Hang Up	—
Agent in this DM	Agent Agent Agent Representative Customer Service [I have a] question	0	Set NeedAssistanceWith = UserRequestAgent Go to: 2100-AfterHours-Check	Always

Confirmation prompts

Option / Name	Wording
none	

DialogModule parameters

| Parameter	Value
1510-GLB-NowWhat-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Developer notes

Before entry to this DM, discard any speech input that was received.

2010-DMfailure-Msg

Play Prompt
The number of retries or timeouts exceeded the maximum.

Entering from
any DM in this global module

Prompts		
Message Numbers	**Name**	**Wording**
20101	2010-GLB-DMfailure-Prompt1	I'm so sorry I'm not able to understand you.

Req ID	Condition	Action
2010-GLB-DMfailure-Condition-Always	*Always*	NeedAssistanceWith := MaxRetry or MaxTimeout as appropriate Go to: 1510-NowWhat-VM

Event logging

Developer notes
No barge-in

2100-AfterHours-Check

Branch on Condition
Branches on whether operators are standing by.

Entering from
1036-SystemAvailability-Check, Global Commands Vocabulary

Req ID	Condition	Action
2100-GLB-AfterHours-Condition-During	*If During Hours*	Go to: 2110-GettingHelpOperator-Msg
2100-GLB-AfterHours-Condition-After	*Else After Hours*	Go to: 2211-ReturnToMain_or_HangUP-VM

Event logging
Pass NeedAssistanceWith value onto next state

2101-ErrorAfterHours-Check

Branch on Condition
An error has occurred. Branch according to whether agents are available.

Entering from
anywhere, when an error occurs

Req ID	Condition	Action
2101-GLB-ErrorAfterHours-Condition-During	*IF During Hours*	Go to: 2111-ErrorGettingHelpOperator-Msg
2101-GLB-ErrorAftersHours-Condition-After	*Else After Hours*	Go to: 2112-ErrorAfterHours-Msg

Event logging
Pass NeedAssistanceWith value onto next state

....

2110-GettingHelpOperator-Msg

Play Prompt
Call needs assistance from live operator

Entering from
2100-AfterHours-Check

Prompts

Message Number	Condition	Name	Wording
21101	NeedAssistanceWith = ValidationFailure	2110-GLB-GettingHelpOperator -Prompt1	Hold on while I connect you to someone who can help you with this.
21102	NeedAssistanceWith = SysUnavailable	2110-GLB-GettingHelpOperator -Prompt2	I'm sorry, but the system is unavailable at this time. Please hold while I transfer your call to someone who can help you.
21103	NeedAssistanceWith = MaxTimeout or MaxRetry	2110-GLB-GettingHelpOperator -Prompt3	I'm sorry, but I just don't seem to understand you. Let me connect you to an agent who can help you. Please hold while I transfer your call.
21104	NeedAssistanceWith = UserRequestedAgent	2110-GLB-GettingHelpOperator -Prompt4	Sure. One moment. I'll transfer you to someone who can help.

Condition	Action
Always 2110-GLB-GettingHelpOperator-Condition-Always	Go to: [TRXF TO AGENT]

Event logging

Developer notes
No barge-in. The structure and wording here are taken from the BEVE/MRC application.

2111-ErrorGettingHelpOperator-Msg

Play Prompt
Anerror occurred and agents are available.

Entering from
2101-ErrorAfterHours-Check

Prompts

Message Number	Condition	Name	Wording
21111	Always	2111-GLB-ErrorGettingHelpOperator-Prompt1	I'm sorry, but there's a problem with the system and I can't continue. Hold on while I transfer you to an agent.

Req ID	Condition	Action
2111-GLB-ErrorGettingHelpOperator-Condition-1	*Always*	[TRXF TO AGENT]

Event logging

Developer notes
No barge-in

....

2112-ErrorAfterHours-Msg

Play Prompt
An error occurred and agents are NOT available.

Entering from

2101-ErrorAfterHours-Check

Prompts

Message Number	Condition	Name	Wording
21121	Always	2112-GLB-ErrorAfterHours-Prompt1	I'm sorry, but there's a problem with the system and I have to hang up now. Please call again during business hours.

Req ID	Condition	Action
2111-GLB-ErrorGettingHelpOperator-Condition-1	*Always*	Hang Up

Event logging

Developer notes

No barge-in

2211-ReturnToMain_or_HangUP-VM

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

2100-AfterHours-Check

Prompts

Message Number	Type	Condition	Name	Wording
22110	Initial	NeedAssistanceWith = SysUnavailable	2211-GLB-ReturnToMain-Prompt-Initial1	I'm sorry, but the system is currently unavailable. Please 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 just hang-up.

22111		NeedAssistanceWith = ValidationFailure	2211-GLB-ReturnToMain-Prompt-Initial2	Our offices are closed now, but you can call back to speak with an agent. Agents are available seven A M to seven P M, Monday through Friday, except national holidays. [2 sec pause] In the mean time, if there's something else you'd like to do, you can say Main Menu. Otherwise, just hang up now.
22112		*NeedAssistanceWith = MaxTimeout or MaxRetry*	2211-GLB-ReturnToMain-Prompt-Initial3	I'm sorry, but I just don't seem to understand you. 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 just hang-up.
22113		*NeedAssistanceWith = UserRequestedAgent*	2211-GLB-ReturnToMain-Prompt-Initial4	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 just hang-up.
22114	2211-GLB-ReturnToMain-Prompt-Retry1			[Global Default] I'm afraid 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 or press nine. Otherwise you can just hang-up.
22115	2211-GLB-ReturnToMain-Prompt-Retry2			[Global Default] 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 or press nine. Otherwise you can just hang up.
22116	2211-GLB-ReturnToMain-Prompt-Timeout1			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 or press nine. Otherwise you can just hang-up.
22117	2211-GLB-ReturnToMain-Prompt-Timeout2			Sorry, I still 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 you'd like to return to the main menu, say MAIN MENU or press nine. If you'd like to end your call you can simply hang up.
22118	2211-GLB-ReturnToMain-Prompt-Help			At this point, I'm afraid our offices are 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 press nine, or you can end the call by simply hanging up.

Option	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
2211-GLB-ReturnToMain-Option-MainMenu	"Main Menu"	9	Go to: 2212-ThanksBeforeReturn-Msg	*If necessary*
2211-GLB-ReturnToMain-Option-Goodbye	"Goodbye"	—	Hang Up	*never*

Confirmation prompts		
Message Number	*Name*	*Wording*
22119	2211-GLB-ReturnToMain-ConfPrompt-MainMenu	[I think you said] you wanted to return to the Main Menu. [Is that correct?]

Confirmation Options	Vocabulary	DTMF	Confirm.
2211-GLB-ReturnToMain-ConfOption-Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	*Never*
2211-GLB-ReturnToMain-ConfOption-No	"No [it isn't]" "[No] that's not right"	2	*Never*

DialogModule parameters	
Parameter	**Value**
2211-GLB-ReturnToMain-Parameter	
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 MaxTimeout, Max Retry or MaxHelp in this DM Hang Up.

Disable Global Command Grammar.

The structure and wording here are taken from the BEVE/MRC application.

2212-ThanksBeforeReturn-Msg

	Play Prompt
Thank caller before returning them to the main menu (N8NN).	

Entering from

2211-ReturnToMain_or_HangUP-VM

Prompts			
Message Number	**Condition**	**Name**	**Wording**
22121	If FOAP flag = 0	2212-GLB-ThanksBeforeReturn-Prompt-Initial	Sure. I'll transfer you now.
250	else	2212-GLB-ThanksBeforeReturn-Prompt-Initial2	250 milliseconds silence

Req ID	Condition	Action
2212-GLB-ThanksBeforeReturn-Condition-Always	Always	Transfer to N8NN Main Menu module 1100-Main-DM

Event logging

Developer notes

No barge-in

—End of Specification —

Social Security Administration
Change of Address / Direct Deposit
User Interface Specification
Last Saved: June 25, 2009

Direct Deposit

FOAP Effort

2.24.1

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Document History

Date	Spec	App	Summary of Changes	Revised by
01/10/05	1.0	1.0	Initial version.	Paul Sawyer
01/18/05	1.1	1.0	**Changes based on review and submitted comments:**	Paul Sawyer
			Advise callers up front about the types of accounts that are acceptable (6000 and 6010) and get them to confirm that they have such an account.	
			Remove the "second chance" for account ownership (6020) since the new wording in 6000 and 6010 is more explicit.	
			Remove "other" as an option for account type.	
			Add keypad hints in more places. The general rule is to offer keypad hints in retry 2 and timeout 1 and 2.	
			Add "as soon as possible" as an option for effective month, with a keypad alternative of 1.	
			Remind callers that the bank routing number is usually the left-most number at the bottom of a check.	
			Change final wording for both success (6210) and failure (6220). This wording may change — SSA is pondering it.	
03/01/05	1.2	1.0	Change 6130 to a Custom Context DM and use a list of valid routing numbers for the grammar. Delete 6140 and 6150 which are now obsolete.	Paul Sawyer
			Revise prompt text that was changed during recording.	
03/04/05	1.3	1.0	Revised Requirement IDs in 6000, 6030, 6110, 6170, 6200, 6210, 6220, 6300	Steven Ligi
03/11/05	2.0	1.0	1. Inserted missing word "be" in 6000 prompt1.	Paul Sawyer
			2. Add spacer silence prompts to 6100, 6160.	
04/11/05	2.1	1.0	Changes following usability testing.	Paul Sawyer
			1. Change prompts in 6130 to encourage callers to speak quickly. Also lengthen timeout values.	
			2. Remove the questions about whether caller has bank numbers, since we do it in Global. 6100, 6110, 6120.	
			3. Combine 6010 and 6040, ask only one question.	
			4. Change 6050 calculation of possible effective months, and warn about the ambiguity of ASAP.	
04/22/05	2.2	1.0	Changes following review.	Paul Sawyer
			1. Mark 6100 as obsolete. (See item 2 in previous changes.)	
			2. Change text of 6210 Prompt1 to say it may not happen before next payment.	

04/25/05	2.3	1.0	"Administrative" fixes to bugs found by Q/A.	Paul Sawyer
06/03/05	2.4	1.0	1. Clarify wording of confirmation prompt in 6160. **Spec change only** – no code change required. 2. Change 6130 (collection of bank routing number) to ALWAYS confirm, at request of SSA. **This IS a code change**.	Paul Sawyer
08/15/2005	2.5	1.0	In 6040, remove condition on playing success prompts, so that success prompts are always played. **Code was already implemented this way**. (Paul Sawyer) Change following tuning report recommendations (Nadine Ozkan): - Prompt changes are in red (style : Table: RevisedRecordings) - Other changes (grammar or confirmation play-back) are highlighted in yellow.	Paul Sawyer & Nadine Ozkan
10/20/2005	2.6	1.0	Changes following second tuning, and other changes requested by SSA. (All previous revision marking and highlighting removed.) 1. Reword 6210-DD-Success-Prompt1 to discourage callers from calling back or calling a field office to verify that the change happened. 2. In 6050, specify that recognition grammar should include the current month and treat it the same as "as soon as possible".	Paul Sawyer
10/25/05	2.7	1.0	1. Change of policy from SSA: Change prompt 6210-DD-Success-Prompt1 to omit suggestion for following up by using Password Services. Just say it will "take about three business days." 2. Correct the explanation in 6050 regarding which month names are recognized and how they are mapped.	Paul Sawyer
2 Feb 06	2.8	1.0	Changes following Tuning 3: 1. Emphasize that double parsing should be avoided in 6040, 6160.	Paul Sawyer
21 Mar 06	2.9	1.0	Corrected wording of prompt 6050-DD-EffectiveMonth-Prompt-Help	Phil Profili
22 Aug 06	2.10	1.0	Changes resulting from Tuning 4. 1. 6040: Remove Agent from global grammar for this DM. Tweak prompt accordingly. 2. 6050: Remove Agent from global grammar for this DM. Tweak prompt accordingly. 3. 6130: Tweak prompts to clarify we need info for the NEW bank. Remove Agent synonyms from global grammar for this DM. Change confirmation to "if necessary". Tweak speech parameters. 4. 6160: Note concern that max speech duration may not be what is shown in this spec.	Paul Sawyer
29 Jan 07	2.11	1.0	Added message numbers to all prompts	Sean Stallings VZB
01 May 07	2.12	1.0	Updated 6210 per Nuances direction	Sean Stallings VZB
21 May 07	2.13	1.0	6050 updated, corrected minor typographical errors.	Sean Stallings VZB
22 Aug 07	2.14	1.0	Updated title and header	Sean Stallings VZB
06 Sep 07	2.15	1.0	Corrected number for message number 60536	Sean Stallings

			Removed default globals from retry 1 and retry 2 prompts	VZB
24 Oct 07	**2.16**	1.0	Added Global Behavior chapter. This was done to clarify the purpose of DM 6300-DDDMfailure-Msg	Sean Stallings VZB
29 Feb 08	**2.17**	1.0	Added privacy statement to Global Behavior chapter. Updated DM 6160, added note telling developer to set privacy flag to true.	Sean Stallings VZB
17 Apr 08	**2.18**	1.0	<mark>Updated Module 6160, reduced silence from 1 second to 2.</mark> <mark>Updated Module 6210, reduced silence from 1 second to 2.</mark>	Sean Stallings VZB
01 May 08	**2.19**	1.0	Added reporting strings to dialogue modules 6040, 6050, 6130, 6160.	Sean Stallings VZB
02 May 08	**2.20**	1.0	Corrected reporting strings in all dialogue modules, replaced KBPW with COAD. Updated module 6130; added confidentiality note to module notes.	Sean Stallings VZB
21 August 08	**2.21**	1.0	Highlighted Barge-in changes in <mark>pink</mark>	Sean Stallings VZB
16 September 08	**2.22**	1.0	Added Verizon proprietary statement to title page and all page headers.	Sean Stallings VZB
02 February 09	**2.23**	1.0	Updated Header	Sean Stallings VZB
21 May, 09	**2.24**	1.0	Updated Chapter 1: Introduction, reference to Global changed to COA-DD Global UI. Updated Chapter 2: Global Behavior, reference to Global changed to COA-DD Global UI. Updated modules 6000, 6030, 6210, 6220, 6300, references to Global changed to COA-DD Global UI. Added Chapter 3: Global Commands and Global Prompts, detailing global command exceptions for this application.	Sean Stallings VZB
25 Jun 09	**2.24.1**	1.0	Cover page update.	Kim Rothlis VzB

Table of Contents

Chapter 10:   Introduction

This document is one part of a set of documents that describe the user interface for the Social Security Administration (SSA) Change of Address (COA) and Direct Deposit (DD) application. This document describes only the interaction for **Direct Deposit** (DD). The call flow has passed through initial introduction, caller qualification, and authentication (password or knowledge-based) before getting to this section.

Note that this entire section is jumped into from the global part of the application and returns to it. The only entry point to this section is the beginning DM, 6000. Exit from this section is by RETURN to COA-DD Global UI.

Chapter 11:   Global Behavior

11.1   Privacy

Bank Account Number is considered confidential. The confidential flag should be set to true for all dialog modules collecting this information from the caller.

11.2   Time-outs and Retries

If callers reach maximum timeouts or retries they will be sent to 6300-DDDMfailure-Msg and then routed back to COA-DD Global UI. For all other global behavior see chapter 4 in the Change of Address/Direct Deposit Global user interface document.

Chapter 12:   Global Commands and Global Prompts

12.1   Global Commands

As per 4.5 Global Commands and Global Prompts section in COA-DD Global, 'Main Menu' global command will transfer to N8NN Main Menu module 1100-Main-DM.

# Chapter 13: Detailed Dialog Specification

13.1 Call-Flow Tables

6000-IntroDD-Msg

	Play Prompt	
Introduce caller on entry to the DD service.		

Entering from
COA-DD Global UI (1450CallDD-Code)

Prompts		
Message Numbers	**Name**	**Wording**
60001	6000-DD-IntroDD-Prompt1	Let's move on to your direct deposit information. For direct deposit, you'll need a CHECKING, SAVINGS, or INVESTMENT account that YOU own. It must be a type of account that has a BANK ROUTING number and an ACCOUNT number, and from which you can withdraw funds.

Req ID	**Condition**	**Action**
6000-DD-IntroDD-Condition-Always	*Always*	Go to: 6040-WhatType-VM

Event logging

Developer notes
No barge-in

6030-CantHelp-Msg

	Play Prompt	
Caller says doesn't have an account s/he owns. Say sorry we can't help them.		

Entering from
6040-WhatType-VM

Prompts		
Message numbers	**Name**	**Wording**
60301	6030-DD-CantHelp-Prompt1	I'm afraid we can't set up direct deposit for you until you have a checking, savings, or investment account that you own.

Req ID	**Condition**	**Action**
6030-DD-CantHelp-Condition-Always	*Always*	return to COA-DD Global UI (1450CallDD-Code)

Event logging

Developer notes
No barge-in

6040-WhatType-VM

	VoiceMenu DialogModule™
Caller has a personally-owned bank account. Ask 'em what type it is.	

Entering from
6000-IntroDD-Msg

Prompts		
Message Numbers	**Type / Name**	**Wording**
60401	6040-DD-WhatType-Prompt-Initial	So, tell me the type of account: Checking, Savings, or Investment. Or say Question, or I Don't Have One.
60402	6040-DD-WhatType-Prompt-Retry1	Please say Checking, Savings, or Investment.
60403	6040-DD-WhatType-Prompt-Retry2	Please say Checking or press one, Savings or press two, or Investment or press three. You can also say Question or press the star key.
60404	6040-DD-WhatType-Prompt-Timeout1	I'm sorry, I didn't hear anything. Please say Checking or press one, Savings or press two, Investment or press three, or Question or press star.
60405	6040-DD-WhatType-Prompt-Timeout2	I'm sorry, I still didn't hear anything. You can say Question or press star if you need more information.
60407	6040-DD-WhatType-Prompt-Help	Here are a few details that may help. In order to set up direct deposit of your benefits to a bank or investment account, you must have a checking, savings, or investment account that you own. We can't deposit into other types of accounts, nor can we deposit into an account owned by someone else. I need to know the TYPE of account it is so that we and the bank are sure that we use the correct account. So please say Checking, or Savings, or Investment, or I Don't Have One.
50394	6040-DD-WhatType-Prompt-Success	Got it.

Option	**Vocabulary**	**DTMF**	**Action**	**Confirm.**
6040-DD-WhatType-Option-checking	[it's a] checking [account]	1	remember the value play Success prompt Go to: 6050-EffectiveMonth-VM	*If necessary*
6040-DD-WhatType-Option-savings	[it's a] savings [account]	2	remember the value play Success prompt Go to: 6050-EffectiveMonth-VM	*If necessary*
6040-DD-WhatType-Option-investment	[it's an] investment [account]	3	remember the value play Success prompt Go to: 6050-EffectiveMonth-VM	*If necessary*
6040-DD-WhatType-Option-DontHave	I don't have one	4	Go to: 6030-CantHelp-Msg	*if necessary*
	remove Agent synonyms from global grammar for this DM.			

Confirmation prompts		
Message Numbers	**Option / Name**	**Wording**
60408	6040-DD-WhatType-ConfPrompt-checking	[I think you said] checking. [Is that correct?]

60409	6040-DD-WhatType-ConfPrompt-savings	[I think you said] savings. [Is that correct?]
60410	6040-DD-WhatType-ConfPrompt-investment	[I think you said] investment. [Is that correct?]
60411	6040-DD-WhatType-ConfPrompt-DontHave	[I think you said] you don't have such an account. [Is that correct?]

DialogModule parameters	
Parameter	**Value**
6040-DD-WhatType-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

| **Event logging**		
Record = U-COAD-DM_6040-(Call Duration at start),T-COAD-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes
Bias the grammar toward "checking". Set the confidence threshold a little higher so we don't get false acceptances.
"One Step Correction" strategy should be available to the Caller (e.g., "No, checking") – This means both the collection grammar and the confirmation grammar are active during the confirmation phase. (This can be done as a parallel grammar.)
Set SWI_scoreDelta to +200 to increase bias towards utterance, -200 to decrease (downweight) bias towards utterance in grammar e.g. <item><tag>AGENT='agent'; SWI_scoreDelta=-200</tag>agent</item>
Avoid double parsing – remove duplicate grammars or duplicate vocabulary

6050-EffectiveMonth-VM

VoiceMenu DialogModule™		
Ask caller for effective month. Give them a choice of three specific months based on the current date.		

Entering from		
6040-WhatType-VM		

Prompts		
	Type / Name	**Wording**
60501	6050-DD-EffectiveMonth-Prompt-Initial	I need to know when this direct deposit change should be effective. You can say As Soon As Possible, or you can say ...
	6050-DD-EffectiveMonth-Prompt-MonthChoices	<month 1 medial> <month 2 final>

60502	6050-DD-EffectiveMonth-Prompt-Retry1	Please say "As Soon As Possible", or say *** just a month ***, among the following ...
	6050-DD-EffectiveMonth-Prompt-MonthChoices	as above
60503	6050-DD-EffectiveMonth-Prompt-Retry2	The effective month for your direct deposit change must be one of these choices. Please say "As Soon As Possible" or press one, or say *** just a month ***, among these: ...
	6050-DD-EffectiveMonth-Prompt-MonthChoices	as above
60504	6050-DD-EffectiveMonth-Prompt-Timeout1	I'm sorry, I didn't hear anything. The effective month for your direct deposit change must be one of these choices. Please say "As Soon As Possible" or press one, or say *** just one of the following months *** ...
	6050-DD-EffectiveMonth-Prompt-MonthChoices	as above
60505	6050-DD-EffectiveMonth-Prompt-Timeout2	I'm sorry, I still didn't hear anything. You can say Question or press star if you need more information. Otherwise say "As Soon As Possible" or press one, or say *** just a month, among these ***:
	6050-DD-EffectiveMonth-Prompt-MonthChoices	as above
60506	6050-DD-EffectiveMonth-Prompt-Help	The effective month for your direct deposit change must be one of the months I've listed, which is as soon as possible but no more than three months from now. If this is not what you wanted, you can start over by saying Main Menu. Otherwise, please say **just** one of these:
	6050-DD-EffectiveMonth-Prompt-MonthChoices	as above
60507	6050-DD-EffectiveMonth-Prompt-Success1	Sure, ...
	—	<month medial>
	6050-DD-EffectiveMonth-Prompt-Success2	... is fine.
60508	6050-DD-EffectiveMonth-Prompt-Success3	OK, it will be as soon as possible, but that might or might not be for your NEXT benefit payment, depending on several factors.
	Concatenated prompts for months	
60509	6050-DD-EffectiveMonth-Prompt-ASAP	... as soon as possible ...
60510	6050-DD-EffectiveMonth-Prompt-JanMed	... January, ...
60511	6050-DD-EffectiveMonth-Prompt-JanFin	... or January.
60512	6050-DD-EffectiveMonth-Prompt-FebMed	... February, ...

| 60513 | 6050-DD-
EffectiveMonth-
Prompt-FebFin | ... or February. |
60514	6050-DD- EffectiveMonth- Prompt-MarMed	... March, ...
60516	6050-DD- EffectiveMonth- Prompt-MarFin	... or March.
60517	6050-DD- EffectiveMonth- Prompt-AprMed	... April, ...
60518	6050-DD- EffectiveMonth- Prompt-AprFin	... or April.
60519	6050-DD- EffectiveMonth- Prompt-MayMed	... May, ...
60520	6050-DD- EffectiveMonth- Prompt-MayFin	... or May.
60521	6050-DD- EffectiveMonth- Prompt-JunMed	... June, ...
60522	6050-DD- EffectiveMonth- Prompt-JunFin	... or June.
60523	6050-DD- EffectiveMonth- Prompt-JulMed	... July, ...
60524	6050-DD- EffectiveMonth- Prompt-JulFin	... or July.
60525	6050-DD- EffectiveMonth- Prompt-AugMed	... August, ...
60526	6050-DD- EffectiveMonth- Prompt-AugFin	... or August.
60527	6050-DD- EffectiveMonth- Prompt-SepMed	... September, ...
60528	6050-DD- EffectiveMonth- Prompt-SepFin	... or September.
60529	6050-DD- EffectiveMonth- Prompt-OctMed	... October, ...
60530	6050-DD- EffectiveMonth- Prompt-OctFin	... or October.
60531	6050-DD- EffectiveMonth- Prompt-NovMed	... November, ...

60532	6050-DD-EffectiveMonth-Prompt-NovFin	... or November.
60533	6050-DD-EffectiveMonth-Prompt-DecMed	... December, ...
60534	6050-DD-EffectiveMonth-Prompt-DecFin	... or December.

Option	*Vocabulary*	*DTMF*	*Action*	*Confirm.*
Note: Constrain the grammar to the valid months plus ASAP and synonyms! See Note.	—	—	*The caller will be reminded of the valid choices in the retry prompts.*	—
6050-DD-EffectiveMonth-Option-ASAP	as soon as possible right now immediately today	1	use current month plus 1 play Success3 prompt Go to: 6130-GetRouting-VM	*if necessary*
6050-DD-EffectiveMonth-Option-Jan	January	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Feb	February	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Mar	March	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Apr	April	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-May	May	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Jun	June	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Jul	July	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Aug	August	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Sep	September	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Oct	October	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Nov	November	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
6050-DD-EffectiveMonth-Option-Dec	December	—	remember choice Go to: 6130-GetRouting-VM	*If necessary*
	remove Agent synonyms from global grammar for this DM			

Confirmation prompts		
Message Numbers	**Option / Name**	**Wording**
60535	6050-DD-EffectiveMonth-ConfPrompt-ASAP	[I think you said] as soon as possible. [Is that correct?]
60536	6050-DD-EffectiveMonth-ConfPrompt-Jan	[I think you said] January. [Is that correct?]
60537	6050-DD-EffectiveMonth-ConfPrompt-Feb	[I think you said] February. [Is that correct?]
60538	6050-DD-EffectiveMonth-ConfPrompt-Mar	[I think you said] March. [Is that correct?]
60539	6050-DD-EffectiveMonth-ConfPrompt-Apr	[I think you said] April. [Is that correct?]
60540	6050-DD-EffectiveMonth-ConfPrompt-May	[I think you said] May. [Is that correct?]
60541	6050-DD-EffectiveMonth-ConfPrompt-Jun	[I think you said] June. [Is that correct?]
60542	6050-DD-EffectiveMonth-ConfPrompt-Jul	[I think you said] July. [Is that correct?]
60543	6050-DD-EffectiveMonth-ConfPrompt-Aug	[I think you said] August. [Is that correct?]
60544	6050-DD-EffectiveMonth-ConfPrompt-Sep	[I think you said] September. [Is that correct?]
60545	6050-DD-EffectiveMonth-ConfPrompt-Oct	[I think you said] October. [Is that correct?]
60546	6050-DD-EffectiveMonth-ConfPrompt-Nov	[I think you said] November. [Is that correct?]
60547	6050-DD-EffectiveMonth-ConfPrompt-Dec	[I think you said] December. [Is that correct?]

DialogModule parameters	
Parameter	**Value**
6050-DD-EffectiveMonth-Parameter	
after_end_of_speech_timeout	1,000 ms
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True

Event logging

Record = U-COAD-DM_6050-(Call Duration at start),T-COAD-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

6130-GetRouting-VM

Custom Context DialogModule™	
Ask the caller for the bank routing number.	

Entering from
6050-EffectiveMonth-VM

Prompts

Message Number	Type / Name	Wording
61301	6130-DD-GetRouting-Prompt-Initial	Please say the nine digit routing number for your NEW bank quickly like this: 1 2 3 – 4 5 6 – 7 8 9. Go ahead.
61302	6130-DD-GetRouting-Prompt-Retry1	... or the number you gave me isn't a valid routing number. Please be sure you're giving me the ROUTING number for your NEW bank and not your ACCOUNT number. Please say the routing number quickly.
61303	6130-DD-GetRouting-Prompt-Retry2	... or that's still not a valid routing number. If you aren't sure, say Question and I'll help you out. Otherwise, please say the nine-digit routing number or enter it on your keypad.
61304	6130-DD-GetRouting-Prompt-Timeout1	I'm sorry, I didn't hear anything. Please say the nine-digit bank routing number or enter it on your keypad.
61305	6130-DD-GetRouting-Prompt-Timeout2	I'm sorry, I still didn't hear anything. Please say the nine-digit bank routing number or enter it on your keypad.
61306	6130-DD-GetRouting-Prompt-Help	OK, here's a detail that may help. The bank routing number is exactly nine digits and is printed on the bottom of each check in between two marks that look like a vertical bar followed by a colon. It's usually the left-most number at the bottom of the check. So ... what's your bank routing number?

Option	Vocabulary	DTMF	Action	Confirm.
6130-DD-GetRouting-Option-Digits	<list of valid routing numbers>	—	Go to: 6160-GetAccount-VM	*If necessary*
	remove Agent synonyms from global grammar for this DM.			

Confirmation prompts		
Message Number	**Option / Name**	**Wording**
61307	6130-DD-GetRouting-ConfPrompt-Digits	[I think you said] <routing number> [Is that correct?] Note: Add 100 ms silence between each digits file (i.e. triplets) – This value may need to be revised at the next tuning phase.

DialogModule parameters	
Parameter	**Value**
6130-DD-GetRouting-Parameter	
termchar	#
entry_list	<<not used>>
minimum_length	9
maximum_length	9
restrict_to_entries	FALSE
before_begin_of_speech_timeout	7,000 ms
allowing_barge_in	True
incompletetimeout	2500 ← Note increased value. Check this!
Interdigittimeout	default + 500 ms
low confidence rejection threshold	.300
high confidence threshold	.900
max speech duration	20,000 msec

Event logging		
Record = U-COAD-DM_6130-(Call Duration at start),T-COAD-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes
Note that because recognition is against a list of valid routing numbers, it is not possible for the caller to say and confirm a number that is not in the list. If the list continues to be unreliable, we may have to switch to pure digit recognition of 9-digit strings. **Set Confidential Flag to TRUE**

6160-GetAccount-VM

Digits DialogModule™		
Ask the caller for the bank account number.		

Entering from
6130-GetRouting-VM

Prompts		
Message Number	**Type / Name**	**Wording**
61601	6160-DD-GetAccount-Prompt-Initial	Now please enter your bank account number on the keypad followed by the pound key, or speak the account number clearly, one digit at a time.
61602	6160-DD-GetAccount-Prompt-Retry1	Please enter your account number on your keypad followed by the pound key, or say the number one digit at a time.
61603	6160-DD-GetAccount-Prompt-Retry2	Please enter your account number on your keypad followed by the pound key, or say the number one digit at a time.
61604	6160-DD-GetAccount-Prompt-Timeout1	I'm sorry, I didn't hear anything. Please enter your account number on your keypad followed by the pound key, or say the number one digit at a time.
61605	6160-DD-GetAccount-Prompt-Timeout2	I'm sorry, I still didn't hear anything. If you're uncertain, say Question or press star. If you need assistance, say Agent or press zero. [2 sec pause] Otherwise, please enter your account number on your keypad followed by the pound key, or say the number one digit at a time.
61606	6160-DD-GetAccount-Prompt-Help1	OK, here's a detail that may help. On the bottom of your check, your account number is some number of digits ending with a symbol that looks like two vertical bars followed by a square dot. Don't confuse your ACCOUNT number with your CHECK number that is both at the bottom and at the top right of your check.
1000	silence_1000	[1 sec silence]
	6160-DD-GetAccount-Prompt-Help2	< same as 6160-DD-GetAccount-Prompt-Initial>

Option	**Vocabulary**	**DTMF**	**Action**	**Confirm.**
6160-DD-GetAccount-Option-Digits	<digits>	<...>	Go to: 6170-SendingNow-Msg	*Always*

Confirmation prompts		
Message Number	**Option / Name**	**Wording**
	6160-DD-GetAccount-ConfPrompt-Digits	Default confirmation, as handled by DialogModule™, using CPR for the digit string. The result is "I think you said N N ... N. Is that correct?" Note: Add 100 ms silence between each digits file (i.e. single, pair and triplets) – This value may need to be revised at the next tuning phase.

DialogModule parameters	
Parameter	**Value**
6160-DD-GetAccount-Parameter	
termchar	#
entry_list	<<not used>>
minimum_length	1
maximum_length	17
restrict_to_entries	FALSE
before_begin_of_speech_timeout	7,000 ms

allowing_barge_in	True
incompletetimeout	3000 ms ← Note increased incompletetimeout.
Swirec_max_speech_duration	45000ms (default is 40000ms) CHECK THIS!

Event logging		
Record = U-COAD-DM_6160-(Call Duration at start),T-COAD-	0000 = Success	-Call duration at process end
	0001 = Error	
	0002 = Max No Input	
	0003 = Max No Match	
	0200 = Caller Hang Up	
	0303 = Max No Confirm	
	0304 = Max Help	
	0310 = Caller Requested Main Menu	
	0311 = Caller Requested Agent	

Developer notes
Set Confidential Flag to TRUE
Note that confirmation is ALWAYS.
Avoid double parsing – remove duplicate grammars or duplicate vocabulary.

6170-SendingNow-Msg

	Play Prompt	
Tell caller to hold on while we send the numbers to the database.		

Entering from
6160-GetAccount-VM

Prompts		
Message Number	**Name**	**Wording**
61701	6170-DD-SendingNow-Prompt1	Hold on while I send your information for processing. This may take a few seconds.

Req ID	**Condition**	**Action**
6170-DD-SendingNow-Condition-Always	*Always*	Go to: 6200-SendDDinfo-DB

Event logging

Developer notes
No barge-in

6200-SendDDinfo-DB

	Database Query	
Send the numbers collected to the database, and check the result.		

Entering from	
6170-SendingNow-Msg	

Input Field	Description
bank routing number	
bank account number	

Output Field	Description
success / failure status	

Req ID	Condition	Action
6200-DD-SendDDinfo-Condition-Success	*IF send succeeded*	Go to: 6210-Success-Msg
6200-DD-SendDDinfo-Condition-Failure	*Else*	Go to: 6220-Failure-Msg

Event logging

Developer notes

6210-Success-Msg

	Play Prompt
Tell caller the send succeeded.	

Entering from
6200-SendDDinfo-DB

Prompts		
Message Number	**Name**	**Wording**
62101	6210-DD-Success-Prompt1	OK, your information has been sent for processing, which will take about three business days.
1000	silence_1000	[1 seconds silence]

Req ID	Condition	Action
6210-DD-Success-Condition-Always	*Always*	set return code to SUCCESS return to COA-DD Global UI (1450CallDD-Code)

Event logging

Developer notes
No barge-in.

6220-Failure-Msg

	Play Prompt
Tell caller that the send failed.	

Entering from
6200-SendDDinfo-DB

Prompts		
Message Number	**Name**	**Wording**
62201	6220-DD-Failure-Prompt1	I'm sorry, for some reason I'm not able to send your request right now. You might want to try again later.

Req ID	Condition	Action
6220-DD-Failure-Condition-ALways	*Always*	set return code to FAILURE return to COA-DD Global UI (1450CallDD-Code)

Event logging

Developer notes
No barge-in

6300-DDDMfailure-Msg

	Play Prompt
All DM failures due to max retries or max timeouts within the DD service should transfer here.	

Entering from
Any DM in the DD service.

Prompts		
Message Number	**Name**	**Wording**
59001	6300-DD-DDDMfailure-Prompt1	I'm so sorry I'm not able to understand you.

Req ID	Condition	Action
6300-DD-DDDMfailure-Condition-Always	*Always*	set return code to FAILURE return to COA-DD Global UI (1450CallDD-Code)

Event logging

Developer notes
No barge-in

—End of Specification —