

Password Authentication



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Document History

Date	Spec	App	Summary of Changes	Revised by
01/18/05	1.0	1.0	Initial version.	Paul Sawyer
01/24/05	1.1	1.0	Changes following review: Allow entry of 8 digits for password, advise caller that they might have entered a password request code instead of a password, let 'em try again. Fix several Request IDs that had wrong number or code.	Paul Sawyer
01/27/05	1.2	1.0	Remove previous change to allow 8 digits for password entry – too expensive to implement for now. Instead, edit the wording of prompts to emphasize that passwords are 7 digits. Revision marking from the previous version has been left in place since some reviewers haven't finished reviewing yet.	Paul Sawyer
02/01/05	1.3	1.0	Change wording of 7100-PPA-GetPassword-Prompt-Initial to say that pwd is chosen by user, not assigned.	Paul Sawyer
03/01/05	1.4	1.0	Fix prompt text changed during recording.	Paul Sawyer
03/04/05	1.5	1.0	Revised Requirement IDs in 7000, 7020, 7100, 7220, 7230, 7250, 7260, 7900	Steven Ligi
03/09/05	2.0	1.0	1. Removed extra "now" in 7020 Success prompt. 2. Disable DTMF input for yes/no confirmation in 7020.	Paul Sawyer
0411/05	2.1	1.0	Changes following usability testing. 1. Change prompts in 7020 to encourage callers to speak faster. Also change timeout values. 2. Rework 7100 to allow "I don't have one", and transfer to KBA. 3. Rework 7900 (max retries or timeouts) to transfer to KBA.	Paul Sawyer
05/02/05	2.2	1.0	Changes for "administrative" bugs. 1. Restore DTMF input for confirmation in 7020, and adjust timeout parameters for balance between accepting input from slow users and not seeing extra digits as confirmation input.	Paul Sawyer
06/30/05	2.3	1.0	1. Change 7100 "don't have one" option to "never confirm". Also mention "don't have one" in the retry and timeout prompts.	Paul Sawyer
08/15/05	2.4	1.0	Changes following the tuning report recommendations (Nadine Ozkan): - All prompt changes are in red (style : Table: RevisedRecordings) - Other changes pertaining to structure or grammars are highlighted in yellow.	Nadine Ozkan

This document is a User-Interface specification

The purpose of this document is to lay out the user-interface in all its detail. Readers of this document are assumed to also have read the requirements specification and to have an understanding of the purpose of the application.

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10/22/05	2.5	1.0	Changes following second tuning. 1. In 7100, change prompts to offer "don't have one" earlier. Add more synonyms for "don't have one".	Paul Sawyer
12 Dec 05	2.6	1.0	Simplify 7020 Confirmation Retry and Confirmation Timeout prompts to use what can be implemented: "I think you said <SSN>. Is that correct?"	Paul Sawyer
2 Feb 06	2.7	1.0	Changes following Tuning 3: 1. Tweak grammar in 7100.	Paul Sawyer
5 Feb 06	2.8	1.0	Add support for blocked accounts. Affects 7230, adds 7270.	Paul Sawyer
22 Aug 06	2.9	1.0	Changes resulting from Tuning 4. 1. 7100: Add more synonyms for "I don't have one". Tweak speech parameters. Remove Agent from global grammar for this DM. 2. 7020: Add optional prefixes for entering SSN. Tweak speech parameters.	Paul Sawyer
5 Sept 06	2.10	1.0	Fix wording of 7100-PPA-GetPassword-Prompt-Timeout2 to omit mention of agent, which is no longer available in this DM.	Paul Sawyer
29 Jan 06	2.11	1.0	Added message numbers to all prompts	Sean Stallings VZB
4 May 07	2.11	1.0	Made minor changes to 7020, 7270, 7900	Sean Stallings VZB
24 May 07	2.12	1.0	Made minor changes to 7020, 7270, 7900	Sean Stallings VZB
22 Aug 07	2.13	1.0	Updated Title and Headers	Sean Stallings VZB
06 Sep 07	2.14	1.0	Updated message 71006 Removed default globals from retry 1 and retry 2 prompting	Sean Stallings VZB
28 Feb, 2008	2.15	1.0	Added DM 6998. 7015, 7090. Changed the wording of message 70001 in DM 7000 to reflect that we may have to collect one or two pieces of data. Updated Introduction to include new privacy directives Updated DM 7020, DM 7100 added note to set confidential flag to true.	Sean Stallings VZB
29 Feb, 2008	2.16	1.0	Added Global Behavior chapter, including subsections on Privacy and Time-outs and Retries. Added further clarification for instances where callers are routed back to Global, listed the module in Global callers are returning to.	Sean Stallings VZB
06 Mar, 2008	2.17	1.0	Corrected broken hyperlink in DM 7100	Sean Stallings VZB
10 Mar, 2008	2.18	1.0	Updated 7015 and DM 7099; Corrected reporting information for "if else" conditions.	Sean Stallings VZB
1 Apr, 2008	2.19	1.0	Updated reporting string for password re-use.	Sean Stallings VZB
4 Apr, 2008	2.2	1.0	Updated 6998, now routes the caller to 7220 if no information is being collected. Clarified wording for 6998 Check Null Condition	Sean Stallings VZB
11 Apr, 2008	2.21	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. Corrected hyperlink error in 7110.	Sean Stallings VZB

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16 Apr, 2008	2.22	1.0	Broke message 71001 into two message, 71001 and 71007. Updated message 71002, reduced silence from 4 seconds to 2. Updated message 71004, reduced silence from 4 seconds to 2.	Sean Stallings VZB
1 May, 2008	2.23	1.0	Added reporting strings to module 7020 and 7100	Sean Stallings VZB
6 May, 2008	2.24	1.0	Updated module 7110, corrected 'entering from' field. Should now read 'entering from 7100.'	Sean Stallings VZB
23 May 08	2.25	1.0	Removed an extraneous sentence that somehow got added to DM7100, Timeout2 prompt. This sentence was prompting the caller to say Agent, but this is disabled in this DM. The audio was fine, just a UI update.	Becky Stallings, VzB
21 August, 2008	2.26	1.0	Highlighted Barge-in changes in pink	Sean Stallings VZB
16 September, 2008	2.27	1.0	Added Verizon proprietary message to title page and page headers.	Sean Stallings VZB
2 February, 2009	2.28	1.0	Updated Header	Sean Stallings VZB

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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 **Password authentication** (PPA). 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 knowledge base authentication (KBA) 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 the beginning DM, 7000. Exit from this section is by return to Global

The caller is *not* given a second chance to enter SSN or password, as is sometimes done in other kinds of systems. Since both SSN and password are explicitly confirmed with the caller, there is no point in putting the caller through a second attempt to enter these numbers.

Chapter 2: Global Behavior

2.1 Privacy

The following information is considered confidential; SSN and Password. The confidential flag should be set to true for all dialog modules collecting this information from the caller.

2.2 Time-outs and Retries

If callers reach maximum timeouts or retries they will be sent to [7900-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.

Chapter 3: Detailed Dialog Specification

3.1 Call-Flow Tables

6998- Check Null Condition



Entering from	
COA-DD 1320-CallPwdAuth-Code	
Condition	Action
If TVDC Items to collect= 0	Go to: 7015 Social Security Check Condition
If TVDC items else	Go to: 7000-Need2Ask-Msg

7000-Need2Ask-Msg

Play Prompt			
Prepare caller for sequence of questions.			
Entering from			
6998- Check Null Condition			
Prompts			
Message Number	Name	Wording	
70001	7000-PPA-Need2Ask-Prompt1	Before I can make any changes, I'll need to ask you one or two questions to verify who you are.	
Req ID	Condition	Action	
7000-PPA-Need2Ask-Condition-Always	Always	Go to: 7015 Social Security Check Condition	
Event logging			
Developer notes			
No barge-in			

7015 Social Security Check Condition



Entering from	
7000-Need2Ask-Msg , 6998- Check Null Condition	


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Condition	Action
If SSN = null	Go to: 7020-GetSSNumber-SSN
If SSN else	Report V Transaction per module note, Go to: 7090 Password Check Condition
Module Notes	
V-KBPW-SSN_1-(duration)	T-KBPW-0000-(duration)

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7020-GetSSNumber-SSN

Social Security DialogModule™ 				
Get the callers Social Security Number				
Entering from				
7015 Social Security Check Condition				
Prompts				
Message Number	Name	Wording		
70002	7020-PPA-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.		
70003	7020-PPA-GetSSNumber-Prompt-Retry1	Please say your nine digit social security number quickly like this: 1 2 3 – 4 5 – 6 7 8 9, or enter if on your keypad.		
70004	7020-PPA-GetSSNumber-Prompt-Retry2	Try entering it on the telephone keypad.		
70005	7020-PPA-GetSSNumber-Prompt-Timeout1	Sorry. I didn't hear anything. Please enter or say your nine digit social security number now.		
70006	7020-PPA-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.		
70007	7020-PPA-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.
7020-PPA-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	Name	Wording	Result	
70008	7020-PPA-GetSSNumber-ConfPrompt-SSN1	This is important, so I want to make sure I have it right. Your social security number is:		
70009	7020-PPA-GetSSNumber-ConfPrompt-SSN2	Okay I think I've got it right now. Your social security number is:		
	<SS_Num>	CPR	1 2 3 – 4 5 – 6 7 8 9	

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70010	7020-PPA-GetSSNumber-ConfPrompt-SSN3	Is that right?	<i>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?</i>
00118		I think you said	
		<SSN>	
00119		Is that correct?	
70201	7020-PPA-GetSSNumber-ConfPrompt-Success	Great	

Confirmation Option	Vocabulary	DTMF	Action	Confirm.
7020-PPA-GetSSNumber-ConfOption-Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	play SuccessPrompt Go to: 7090 Password Check Condition	Never
7020-PPA-GetSSNumber-ConfOption-No	"No [it isn't]" "[No] that's not right"	2	Re-enter Dialog Module per default behavior	Never

DialogModule parameters	
Parameter	Value
7020-PPA-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-KBFW-DM_7020-(Call Duration at start),T-KBFW-	0000 = Success 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	-Call duration at process end

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Developer notes

Note that the case of a caller not having a password at this point should be extremely rare since the caller already said (in Global or in N8NN) that they DO have a password.

The option "I Don't Have One" will need to be in a parallel grammar.

Turn Barge-in OFF in initial prompt to discourage callers from giving their SSN a second time.

Set Confidential Flag to TRUE

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7090 Password Check Condition

Entering from	
7020-GetSSNumber-SSN , 7015 Social Security Check Condition	
Condition	Action
If password = null	Go to: 7100-GetPassword-VM
If password else	Report V Transaction per module note, Go to: 7220-CheckingNow-Msg
Module Notes	
V-KBPW-PWD_1-(duration), T-KBPW-0000-(duration)	

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7100-GetPassword-VM

		Digits DialogModule™
Get the caller's password.		
Entering from		
7090 Password Check Condition		
Prompts	Message Number	Type / Name
	71001	7100-PPA-GetPassword-Prompt-Initial
		<i>Now that I have your Social Security Number, I'll need the seven digit password you chose and registered with the Social Security Administration. Be sure you're looking at a SEVEN digit number. If you have an EIGHT digit number, that might be your request code rather than your password.</i>
	71007	7100-PPA-GetPassword-Prompt-Initial2
		<i>So, what is your seven digit password? [2 sec pause] If you aren't sure, say Question or press star. If you don't have a password, say I Don't Have One.</i>
	71002	7100-PPA-GetPassword-Prompt-Retry1
		<i>If you don't have a password, say I Don't Have One. Otherwise, please enter or say your seven-digit password. [2 sec pause] If you aren't sure, say Question or press star.</i>
	71003	7100-PPA-GetPassword-Prompt-Retry2
		<i>If you need more information, you can say Question, or say I Don't Have One. Otherwise, please enter or say your seven-digit password.</i>
	71004	7100-PPA-GetPassword-Prompt-Timeout1
		<i>I'm sorry, I didn't hear anything. If you don't have a password, say I Don't Have One. Otherwise, please say your seven-digit password, or enter it on your telephone keypad. [2 sec pause] If you need more information, you can say Question or press the star key.</i>
	71005	7100-PPA-GetPassword-Prompt-Timeout2
		<i>I'm sorry, I still didn't hear anything. If you need information, say Question or press the star key. Otherwise, please say your seven-digit password, or enter it on your telephone keypad.</i>

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Deleted: If you need assistance, say Agent or press zero.

71006	7100-PPA-GetPassword-Prompt-Help	The password I'm referring to would have been chosen and registered by you online or over the telephone. 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 using the same process you used before. If you have this seven-digit password and you plan to use it today, say the digits now or enter them on your telephone keypad. [2 sec pause] If you DON'T have a password, say I Don't Have One and we'll confirm your identity another way.
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Option	Vocabulary	DTMF	Action	Confirm.
7100-PPA-GetPassword-Option-Digits7	<7 digit string>	<...>	<always confirm>	Always
7100-PPA-GetPassword-Option-DontHave	[I] don't have one I don't have it I (don't /do not) have a [seven digit] password I don't know what you mean I (don't / didn't) understand no password I have none I have forgotten it I forgot I have no idea I don't know	-	Go to: 7110-DontHave-Msg	Never
	Disable Agent synonyms and "I don't know" from the global grammar for this DM			

Confirmation prompts			
Message Number	Option	Name / Wording	Result
	7100-PPA-GetPassword-ConfPrompt-Digits	Default confirmation, as handled by DialogModule™, using CPR for the digit string.	"I think you said 1 0 4, 2 3 9 0. Is that correct?"

Confirmation Option	Vocabulary	DTMF	Action	Confirm.
7100-PPA-GetPassword-ConfOption-Yes	"Yes [it is]" "[Yes] that's right" "Right" "[That's] correct"	1	Go to: 7220-CheckingNow-Msg	Never
7100-PPA-GetPassword-ConfOption-No	"No [it isn't]" "[No] that's not right"	2	Re-enter Dialog Module per default behavior	Never

DialogModule parameters	
Parameter	Value
7100-PPA-GetPassword-Parameter	
entry_list	<< not used >>
minimum_length	7
maximum_length	7
restrict_to_entries	FALSE << this feature not used >>
after_end_of_speech_timeout (incomplete timeout)	2250 msec ← note increased time
before_begin_of_speech_timeout	7,000 msec


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allowing_barge_in	True											
max speech duration	16,000 msec											
Event Logging												
Record = U-KBPW-DM_7100-(Call Duration at start),T-KBPW-	<table border="1"> <tr> <td>0000 = Success</td> <td rowspan="8">-Call duration at process end</td> </tr> <tr> <td>0001 = Error</td> </tr> <tr> <td>0002 = Max No Input</td> </tr> <tr> <td>0003 = Max No Match</td> </tr> <tr> <td>0200 = Caller Hang Up</td> </tr> <tr> <td>0303 = Max No Confirm</td> </tr> <tr> <td>0304 = Max Help</td> </tr> <tr> <td>0310 = Caller Requested Main Menu</td> </tr> <tr> <td>0311 = Caller Requested Agent</td> <td></td> </tr> </table>	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	
0000 = Success	-Call duration at process end											
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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												
<p>Note that the case of a caller not having a password at this point should be extremely rare since the caller already said (in Global or in N8NN) that they DO have a password.</p> <p>The option "I Don't Have One" will need to be in a parallel grammar.</p> <p>Turn Barge-in OFF in initial prompt to discourage callers from giving their SSN a second time.</p> <p>Set Confidential Flag to TRUE</p>												

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7110-DontHave-Msg


Play Prompt		
Caller doesn't seem to have a password after all. Send 'em to KBA.		
Entering from		
7100-GetPassword-VM		
Prompts		
Message Number	Name	Wording
71101	7110-PPA-DontHave-Prompt1	Since you don't have a password, let's try this a different way.
Condition		
Condition	Action	
Always	Go to: KBA (4999 Check Null Condition)	
Event logging		
Developer notes		
No barge-in		

7220-CheckingNow-Msg


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

Entering from		
7100-GetPassword-VM.		
Prompts		
Message Number	Name	Wording
72201	7220-PPA-CheckingNow-Prompt1	Got it. Hold on while I check our database. It may take a few seconds.
Req ID	Condition	Action
7220-PPA-CheckingNow-Condition-Always	Always	Go to: 7230-QueryPP-DB
Event logging		
Developer notes		
No barge-in		

7230-QueryPP-DB


Database Query		
Check the PIN/password database.		
Entering from		
7220-CheckingNow-Msg		
Input Field	Description	
SSN		
password		
Output Field	Description	
verification status	success or failure	
Req ID	Condition	Action
7230PPA-QueryPP-Condition-succ	<i>IF success</i>	Go to: 7250-SaySuccess-Msg
7230PPA-QueryPP-Condition-AcctBlocked	<i>Else if failure because account blocked</i>	Go to: 7270-SayAcctBlocked-Msg
7230PPA-QueryPP-Condition-fail	<i>Else failure for some other reason</i>	Go to: 7260-SayFailure-Msg
Event logging		

7250-SaySuccess-Msg


Play Prompt		
Database query succeeded on SSN and password. Tell the caller.		
Entering from		
7230-QueryPP-DB		
Prompts		
Message Number	Name	Wording
72501	7250-PPA-SaySuccess-Prompt1	OK, everything checks out.

Req ID	Condition	Action
7250-PPA-SaySuccess-Condition-Always	Always	return code := success return to Global (1320-CallPwdAuth-Code)
Event logging		
Developer notes		
No barge-in		

7260-SayFailure-Msg


Play Prompt		
Tell caller they could not be verified.		
Entering from		
7230-QueryPP-DB		
Prompts		
Message Number	Name	Wording
72601	7260-PPA-SayFailure-Prompt1	I'm afraid that the social security number and password you gave me don't match what we have in our records.
Req ID	Condition	Action
7260-PPA-SayFailure-Condition-Always	Always	return code := failure return to Global (1320-CallPwdAuth-Code)
Event logging		
Developer notes		
No barge-in		

7270-SayAcctBlocked-Msg

Play Prompt		
Tell caller their account is blocked.		
Entering from		
7230-QueryPP-DB		
Prompts		
Message Number	Name	Wording
52701	7270-PPA-SayAcctBlocked-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.
Req ID	Condition	Action
7270-PPA-SayAcctBlocked-Condition-Always	Always	return code := account_blocked return to Global (1320-CallPwdAuth-Code)

Event logging
Developer notes
No barge-in

7900-DMfailure-Msg

Play Prompt		
Apologize that we can't understand the caller.		
Entering from		
any DM in the PPA module that hits max retries or max timeouts		
Prompts		
Message Number	Name	Wording
79001	7900-PPA-DMfailure-Prompt1	I'm so sorry that I can't understand you. Let's try this a different way.
Condition	Action	
7900-PPA-DMfailure-Condition-Always	Go to: KBA (4999 Check Null Condition)	
Event logging		
Developer notes		
No barge-in		

—End of Specification —