## Howdy Computerized Phlebotomy Login Process

### **C3-C1 Conversion Project**

**Technical Manual** 



Laboratory Patch LR\*5.2\*405

January 2012

Department of Veterans Affairs Office of Information and Technology (OIT) Office of Enterprise Development (OED)

# **Revision History**

Date	Revision	Description	Author
June 2010	1.0	Initial version	CBeynon
July 2010	1.1	Added content	CBeynon
August 2010	1.2	Added content	LHarmon
August 2010	1.3	Prepared for release	CBeynon
August 2010	1.4	Added Blood Bank Clearance Statement	LHarmon
September 2010	1.5	Updates after review	CBeynon
October 2010	1.6	Changed dates to October	CBeynon
December 2010	1.7	Added content	LHarmon
December 2010	1.8	Changed days to January 2011	CBeynon
		Fixed formatting	
February 2011	1.9	• Changed dates to February 2011	CBeynon
		• Made adjustments to the usage of <i>option</i>	
		• Modified Introduction bullet points	
April 2011	1.10	Changed dates to April 2011	LHarmon
		• Updates with IG	CBeynon
April 2011	1.11	Changed dates to May 2011	CBeynon
		• Added TL and DH updates (new checksums)	
May 2011	1.12	Added PMH updates	CBeynon
		• Added updates from latest build t11	
		Updated Checksums	
June 2011	1.13	Changed dates to June 2011	CBeynon
		• Updated page 9: 'IC' to 'I'	
		• Updated page 36, #8: replace <i>is your best</i> bet with works well for a majority of sites	
July 2011	1.14	Changed dates to July 2011	CBeynon
		• Added <b>Note:</b> The bingo board process was validated using a printer to verify functionality. Using a display monitor for the bingo board functionality was not tested, but may be included in a future release.	
August 2011	1.15	• Changed dates to August 2011	CBeynon
		• Updated with information for the release build	
January 2012		Howdy C3-C1 Conversion Project	

Date	Revision	Description	Author
September 2011	1.16	• Changed dates to September 2011	CBeynon
		• Changed dates to September 2011	
		• Changed BCE Compatible to Print at Point of Collection (PPOC) and BCE to PPOC	
September 2011	1.17	• Updated Sample Session: deleted reference to "Scan Re-try Attempts", data dictionary files #69.86, #69.87, external relationships to include Lab Services v. 5.2	LHarmon
October 2011	1.18	Changed dates to October 2011	CBeynon
		Added note about Exclude Clinics	
November 2011	1.19	Changed dates to November 2011	CBeynon
		• Updated with information for the release build	
		• Updated with IG comments from MB	
December 2011	1.20	Changed dates to December 2011	CBeynon
		• Updated the Howdy Bot information	
		• Prepped for national release	
		• Updated with info from DH	
January 2012	1.21	• Changed dates to January 2012	CBeynon
		Updated checksums	

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# Introduction

Patch LR\*5.2\*405 introduces the Howdy Computerized Phlebotomy Login Process as an automated laboratory check-in application which can be used within the Veterans Health Information Systems and Technology Architecture (VistA) Laboratory module. This software performs the following functions:

- Howdy automates laboratory check-in, accessioning of orders, and printing of specimen labels
- Howdy captures collection process times and provides the information required to create phlebotomy performance reports
- Howdy eliminates the need for a hand-written log book for sign-in where the patient's name and SSN can be compromised
- Howdy can utilize bar code technology to assist in the process of patient and specimen identification

## **Blood Bank Clearance**

VistA Laboratory Patch LR\*5.2\*405 contains changes to software controlled by VHA.

EFFECT ON BLOOD BANK FUNCTIONAL REQUIREMENTS: Patch LR\*5.2\*405 does not contain any changes to the VISTA BLOOD BANK Software as defined by VHA DIRECTIVE 2004-058 titled VISTA BLOOD BANK SOFTWARE VERSION 5.2. EFFECT ON BLOOD BANK FUNCTIONAL REQUIREMENTS: Patch LR\*5.2\*405 does not alter or modify any software design safeguards or safety critical elements functions. RISK ANALYSIS: Changes made by patch LR\*5.2\*405 have no effect on Blood Bank software functionality, therefore RISK is none.

VALIDATION REQUIREMENTS BY OPTION: Because of the nature of the changes made, no specific validation requirements exist as a result of installation of this patch.

# **Implementation and Maintenance**

This section contains information on how to evaluate the specific menu options and procedures for efficient functioning and to select the menu options and procedures for implementation. Once the Howdy software is installed by the IRM, ADPAC or LIM, you can define and set up your Howdy Site File (#69.86). After you configure the file, examine the menu options and functions available in Howdy.

### **Security Keys**

Assign the LRHYKEY security key to lab personnel who will configure the HOWDY SITE file (#69.86). The [LRHY SITE FILE EDIT] menu option on the [HOWDY MAIN MENU] and the [HOWDY PPOC MAIN MENU] is accessible only to the LRHYKEY keyholder.

Note: Give the key only to lab personnel (LIM/ADPAC) who understand:

- Business rules of the lab and
- How the HOWDY SITE File (#69.86) parameters dictate this functionality.

### Installation of Howdy Bot User

The post-installation process, which runs automatically after the installation of patch LR\*5.2\*405, populates file (#200).

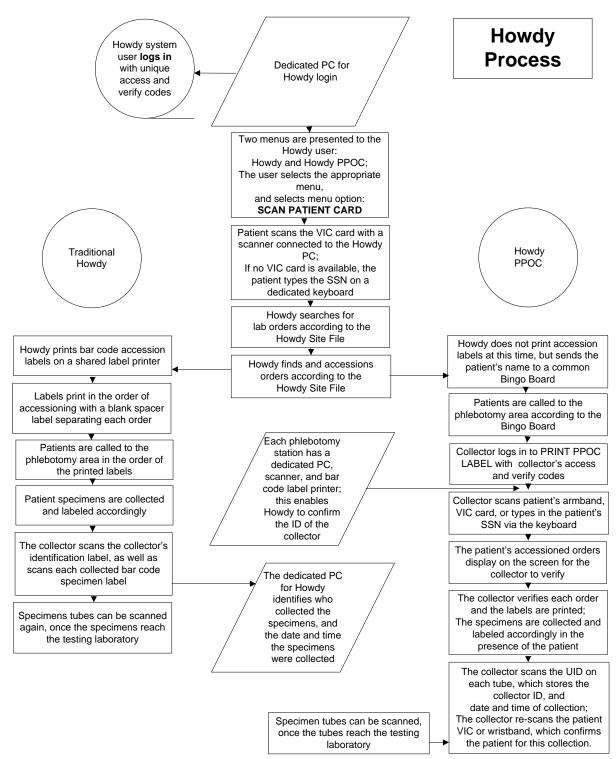
- Sites may enter the HOWDY,BOT proxy user into the HOWDY BOT field (#56) of the HOWDY SITE file (#69.86).
- This field is only to be used when the site does not have a system user.
- HOWDY,BOT is the user assigned to the logged event when a patient VIC is scanned and prohibits this user from accessibility to VistA, other than entering patient identification information.

### Installation of Howdy Hardware

LR\*5.2\*405 uses printers as they are currently configured for lab usage. No special changes are required for implementation of this patch.

Note: All printers must already be in the DEVICE FILE (#3.5).

### **Howdy Flow Process**



**Howdy Process Flow** 

### **Configuration of the Howdy Site File (#69.86)**

The Howdy application has two files that come with the software contained in Patch LR\*5.2\*405.

- Howdy Site file (#69.86)
   File (#69.86) is a parametric file. It holds information related to the business practices of the site phlebotomy department. The Howdy Site file is considered a static file. This file (#69.86) will be edited when the site first goes live and then it will remain relatively unchanged.
- Howdy Specimens Times by UID file (#69.87)
   File (#69.87) is a data file that is dynamic. This file contains the times associated with the movement of a patient specimens through the phlebotomy department.

For more information on these files and their fields, refer to the patch documentation.

For the benefit of those interested in medical center services, a complete Data Dictionary (DD) is included. The DD contains information on data types, file pointing, and field cross-referencing. The M routines associated with the fields are annotated for the purposes of illumination.

#### Howdy Site File (#69.86)



The routine variable associated with the name field is **LRHYSITE**.

This variable is used throughout the Howdy software to differentiate between site file entries.

69.86,2 LAB TEST (TO EXCLUDE) 2;0 POINTER Multiple #69.862

```
69.862,.01 LAB TEST (TO EXCLUDE) 0;1 POINTER TO LABORATORY TEST FILE (#60
Multiply asked)
LAST EDITED: FEB 04, 2011
DESCRIPTION: Lab test that should be excluded when Howdy
runs.
CROSS-REFERENCE: 69.862^B
1)= S ^LRHY(69.86,DA(1),2,"B",$E(X,1,30),DA)=""
2)= K ^LRHY(69.86,DA(1),2,"B",$E(X,1,30),DA)
```

This field is used by code in the routine LRHYA

DATA	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE

69.86,4	COLLECTION SAMPLE (TO EXCLUDE) 4;0 POINTER Multiple #69.864
69.864,.01	COLLECTION SAMPLE (TO EXCLUDE) 0;1 POINTER TO COLLECTION SAMPLE FILE (#62) (Multiply asked)
	LAST EDITED: FEB 04, 2011 DESCRIPTION: Collection sample to be excluded when Howdy runs.
	CROSS-REFERENCE: 69.864^B 1)= S ^LRHY(69.86,DA(1),4,"B",\$E(X,1,30),DA)="" 2)= K ^LRHY(69.86,DA(1),4,"B",\$E(X,1,30),DA)

This field is used by code in LRHYA

runs.
DESCRIPTION: Site specimens to be excluded when Howdy
LAST EDITED: FEB 04, 2011
(not) (natcipiy abaca)
(#61) (Multiply asked)
.01 SITE SPECIMEN (TO EXCLUDE) 0;1 POINTER TO TOPOGRAPHY FIELD FILE
SITE SPECIMEN (TO EXCLUDE) 6;0 POINTER Multiple #69.861
•

```
CROSS-REFERENCE: 69.861^B

1)= S ^LRHY(69.86,DA(1),6,"B",$E(X,1,30),DA)=""

2)= K ^LRHY(69.86,DA(1),6,"B",$E(X,1,30),DA)
```

This field is used by code in LRHYA

```
69.86,8
              COLLECTION TYPES (TO EXCLUDE) 8;0 SET Multiple #69.868
69.868,.01
              COLLECTION TYPES (TO EXCLUDE) 0;1 SET (Multiply asked)
                                   'LC' FOR LAB COLLECTION;
                                   'WC' FOR WARD COLLECTION;
                                   'SP' FOR SEND PATIENT TO THE LAB;
                                   'IC' FOR IMMEDIATE COLLECT;
                LAST EDITED:
                                  APR 27, 2011
                DESCRIPTION:
                                 Collection types to be excluded when Howdy
                                  runs.
                CROSS-REFERENCE: 69.868^B
                                1) = S ^LRHY(69.86, DA(1), 8, "B", $E(X,1,30), DA) = ""
                                 2) = K ^LRHY(69.86, DA(1), 8, "B", $E(X, 1, 30), DA)
```

This field is used by code in the routine LRHYA

DATA ELEMENT	NAME TITLE	GLOBAL LOCATION	DATA TYPE
69.86,10	LABEL PRINTERS	10;0 PC	DINTER Multiple #69.863
69.863,.01	LABEL PRINTERS	0;1 ) (Multiply	POINTER TO DEVICE FILE (#3.5) / asked)
	LAST EDITED: DESCRIPTION:	FEB 04, 20	011
		Label prim	nters used with Howdy.
	CROSS-REFERENCE		(69.86,DA(1),10,"B",\$E(X,1,30),DA)="

2) = K ^LRHY(69.86, DA(1), 10, "B", \$E(X, 1, 30), DA)

This field is used by code in LRHYBLD

69.86,11 ORDER LABEL ROUTINE 11;1 FREE TEXT INPUT TRANSFORM: K:\$L(X)>8!(\$L(X)<3) X LAST EDITED: FEB 04, 2011 HELP-PROMPT: Answer must be 3-8 characters in length. DESCRIPTION: The name of the routine to print order labels.

This field is used by in the routine LRHYBLD for printing order labels

DATA	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE
69.86,16	EXCLUDE CLINICS	16;0 H	POINTER Multiple #69.8616
69.8616,.01	EXCLUDE CLINICS	0;1	POINTER TO HOSPITAL LOCATION FILE (#
		44) (Mult	tiply asked)
	LAST EDITED:	FEB 04, 2	2011
	DESCRIPTION:	This fiel	ld allows you to exclude the
		accession	ning of orders from those specialty
		clinics u	unless the collection date is for
		Today (mi	ultiple clinics allowed).
		Note: If	the order is for today for the
		"excluded	d" clinic, the order will accession.
		If there	is an order put in for TOMORROW, and
		you run t	the program, it will ignore that
		order.	
	CROSS-REFERENCE	: 69.8616 <sup>^</sup> H	В
		1)= S ^LRHY	Y(69.86,DA(1),16,"B",\$E(X,1,30),DA)="
		н	
		2)= K ^LRHY	Y(69.86,DA(1),16,"B",\$E(X,1,30),DA)

This field is used by code in the routine LRHYA

69.86,18	CHECK FOR FUTURE	ORDERS (DAYS) 18;1 FREE TEXT
	INPUT TRANSFORM: LAST EDITED:	K:\$L(X)>3!(\$L(X)<1) X FEB 04, 2011
	HELP-PROMPT:	Answer must be 1-3 characters in length.
	DESCRIPTION:	The number of days Howdy searches for orders in the future.

This field is used by code in LRHYB

DATA	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE
69.86,20	CHECK FOR PAST OF	RDERS (DAYS)	20;1 FREE TEXT
	INPUT TRANSFORM:	K:\$L(X)>3!(	(\$L(X)<1) X
	LAST EDITED:	FEB 04, 201	11
	HELP-PROMPT:	Answer must	be 1-3 characters in length.
	DESCRIPTION:	The number	of days Howdy searches for orders in
		the past	

This field is used by code in **LRHYB** 

69.86,25	ORDER LABEL TESTS	25;0 POINTER Multiple #69.8625
69.8625,.01	ORDER LABEL TESTS	0;1 POINTER TO LABORATORY TEST FILE (#60 ) (Multiply asked)
	LAST EDITED: DESCRIPTION:	FEB 04, 2011 The test which will print order labels.
	CROSS-REFERENCE: 1	<pre>69.8625^B )= S ^LRHY(69.86,DA(1),25,"B",\$E(X,1,30),DA)="</pre>

### This field is used by code in LRHYA

DATA ELEMENT	NAME TITLE	GLOBAL LOCATION	DATA TYPE	
69.86,30	EXCLUDE URGENCY	30;0 P	POINTER Multiple #69.867	
69.867,.01	EXCLUDE URGENCY		POINTER TO URGENCY FILE (#62.05) Ly asked)	
	LAST EDITED: DESCRIPTION:		2011 s that will be excluded when Howdy	
	CROSS-REFERENCE		<pre>(69.86,DA(1),30,"B",\$E(X,1,30),DA)="</pre>	
		2)= K ^LRHY	<pre>(69.86,DA(1),30,"B",\$E(X,1,30),DA)</pre>	

#### This field is used by code in LRHYA

69.86,32	GREETING (IGNORE "	32;0 WORD-PROCESSING #69.8632
69.86,40	WELCOME TO	40;1 FREE TEXT
	INPUT TRANSFORM: LAST EDITED: HELP-PROMPT:	K:\$L(X)>80!(\$L(X)<1) X FEB 04, 2011 Answer must be 1-80 characters in length.
	DESCRIPTION:	Welcome statement.

#### This field is used by code in LRHY0

```
69.86,42 YOUR HOST IS 42;1 FREE TEXT

INPUT TRANSFORM: K:$L(X)>80!($L(X)<1) X

LAST EDITED: FEB 04, 2011

HELP-PROMPT: Answer must be 1-80 characters in length.

DESCRIPTION: Name of the host. (Chief P&LM)
```

This field is used by code in LRHY0

GLOBAL DATA	NAME	DATA
LOCATION TYPE	r title	ELEMENT

69.86,44	HOST TITLE	44;1 FREE TEXT
	INPUT TRANSFORM:	K:\$L(X)>80!(\$L(X)<1) X
	LAST EDITED:	FEB 04, 2011
	HELP-PROMPT:	Answer must be 1-80 characters in length.
	DESCRIPTION:	
		Title of the Host

This field is used by code in **LRHY0** 

This field is used by the label printer routine (selectable in file # 69.9)

```
69.86,52 DELETE SAME DAY DUPLICATES 52;1 SET

'Y' FOR YES;

'N' FOR NO;

LAST EDITED: OCT 09, 2011

DESCRIPTION: Used to delete duplicate lab tests from the

same day.
```

This field is used by code in LRHYA

DATA	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE
69.86,54	BINGO BOARD DEVIC	CE 54;0 PO	INTER Multiple #69.8654
69.8654,.01	BINGO BOARD DEV	/ICE 0;1 P (Multiply	OINTER TO DEVICE FILE (#3.5) asked)
	LAST EDITED: DESCRIPTION:	FEB 09, 20	11
		This is th	e bingo board device.
	CROSS-REFERENCI		69.86,DA(1),54,"B",\$E(X,1,30),DA)="
		2)= K ^LRHY(	69.86,DA(1),54,"B",\$E(X,1,30),DA)
69.86,56	HOWDY BOT	56;1 PO	INTER TO NEW PERSON FILE (#200)
	LAST EDITED: DESCRIPTION:	FEB 06, 2011	
		Used to run	Howdy as a non human user.

This field is used by code in LRHY0

	FILES POINTED TO	FIELDS		
	COLLECTION SAMPLE (#62)	COLLECTION SAMPLE (TO EXCLUDE):COLLECTION SAME	>	
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```
LE (TO EXCLUDE) (#.01)
DEVICE (#3.5)
                                 LABEL PRINTERS:LABEL PRINTERS (#.01)
                                 SPACER LABEL PRINTER: SPACER LABEL PRINTER (#.0
1)
                                 BINGO BOARD DEVICE: BINGO BOARD DEVICE (#.01)
HOSPITAL LOCATION (#44)
                                EXCLUDE CLINICS: EXCLUDE CLINICS (#.01)
LABORATORY TEST (#60)
                                LAB TEST (TO EXCLUDE):LAB TEST (TO EXCLUDE) (#
.01)
                                 ORDER LABEL TESTS: ORDER LABEL TESTS (#.01)
NEW PERSON (#200)
                                HOWDY BOT (#56)
TOPOGRAPHY FIELD (#61)
                       SITE SPECIMEN (TO EXCLUDE):SITE SPECIMEN (TO E
XCLUDE) (#.01)
URGENCY (#62.05)
                               EXCLUDE URGENCY: EXCLUDE URGENCY (#.01)
INPUT TEMPLATE(S):
PRINT TEMPLATE(S):
CAPTIONED
                                                 USER #0
SORT TEMPLATE(S):
FORM(S)/BLOCK(S):
```

#### Howdy Specimen Times by UID File (#69.87)

```
CROSS
REFERENCED BY: LAB ARRIVAL TIME(ARIV), SPECIMEN UID(B),
               COLLECTION TIME(COLT), TIME LABELS PRINTED(LT),
               INITIAL SCAN TIME(SCAN), COLLECTOR(TECH)
```

69.87,.01	SPECIMEN UID	0;1		FREE TEXT (Required)
ELEMENT	TITLE	LOCATION	TYPE	
DATA	NAME	GLOBAL	DATA	

INPUT TRANSFORM: K:\$L(X)>10!(\$L(X)<10) X</pre> LAST EDITED: NOV 09, 2010 HELP-PROMPT: Answer must be 10 characters in length. DESCRIPTION: This field contains the universal identification number (UID). CROSS-REFERENCE: 69.87<sup>B</sup> 1) = S ^LRHY(69.87, "B", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "B", \$E(X,1,30), DA) 69.87,2 INITIAL SCAN TIME 2;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: NOV 09, 2010 DESCRIPTION: This field contains the date and time a patient scans their VIC at the Howdy station. CROSS-REFERENCE: 69.87<sup>SCAN</sup> 1) = S ^LRHY(69.87, "SCAN", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "SCAN", \$E(X,1,30), DA) xref the initial scan field 69.87,4 TIME LABELS PRINTED 4;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X MAR 01, 2009 LAST EDITED: This field contains the date and time the DESCRIPTION: Phlebotomist prints the specimen labels. CROSS-REFERENCE: 69.87<sup>LT</sup> 1) = S ^LRHY(69.87, "LT", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "LT", \$E(X,1,30), DA) This xref is the time the labels were printed 69.87,6 6;1 POINTER TO NEW PERSON FILE (#200) COLLECTOR LAST EDITED: NOV 09, 2010 This field contains the name of the person who DESCRIPTION: collects the specimen. Usually, this is the person who scanned their ID badge. CROSS-REFERENCE: 69.87<sup>TECH</sup> 1) = S ^LRHY(69.87, "TECH", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "TECH", \$E(X,1,30), DA)

This is the Phlebotomist who signed in. 69.87,8 COLLECTION TIME 8;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: MAR 01, 2009 DESCRIPTION: This field contains the time the specimen was collected. CROSS-REFERENCE: 69.87<sup>^</sup>COLT 1) = S ^LRHY(69.87, "COLT", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "COLT", \$E(X,1,30), DA) This xref if is for the specimen collection time 69.87,10 LAB ARRIVAL TIME 10;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: NOV 09, 2010 DESCRIPTION: This field contains the time the specimen arrived in the lab. CROSS-REFERENCE: 69.87^ARIV 1) = S ^LRHY(69.87, "ARIV", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "ARIV", \$E(X,1,30), DA) This xref is for the lab arrival time 69.87,12 12;1 FREE TEXT RECEIVER INPUT TRANSFORM: K:\$L(X)>99!(\$L(X)<1) X</pre> LAST EDITED: NOV 09, 2010 HELP-PROMPT: Answer must be 1-99 characters in length. DESCRIPTION: This field contains the name of the person who received the specimen in the lab. FILES POINTED TO FIELDS NEW PERSON (#200) COLLECTOR (#6) INPUT TEMPLATE(S): PRINT TEMPLATE(S): SORT TEMPLATE(S):

#### Sample session: Edit Howdy Site File

```
INPUT TO WHAT FILE: HOWDY SITE FILE//
EDIT WHICH FIELD: ALL//
Select HOWDY SITE FILE NAME: DALLAS
NAME: DALLAS//
Select LAB TEST [to exclude]: OCC
1 OCCULT BLOOD 1
2 OCCULT BLOOD 2
3 OCCULT BLOOD 3
4 OCCULT BLOOD PROFILE
CHOOSE 1-4: 4 OCCULT BLOOD PROFILE
Are you adding 'OCCULT BLOOD PROFILE' as a new LAB TEST (the 1ST for this HOWDY
SITE FILE)? No// Y(Yes)
Select COLLECTION SAMPLE [to exclude]: 24
1 24 HR CTNR URINE-5 HR URINE 24 HR CTNR
2 24 HR.CTNR. URINE, 12 HOUR URINE 24 HR.CTNR.
3 24HR CTNR URINE-24 HR URINE-24 HR 24HR CTNR
CHOOSE 1-3: 3 URINE-24 HR URINE-24 HR 24HR CTNR
Are you adding 'URINE-24 HR' as a new COLLECTION SAMPLE (the 1ST for this HOWDY
SITE FILE)? No// Y(Yes)
Select SITE SPECIMEN:
Select COLLECTION TYPES: LC
Are you adding 'LC' as a new COLLECTION TYPES (the 1ST for this HOWDY SITE FILE)?
No// Y(Yes)
Select PRINTERS: LABLABEL
Are you adding 'LABLABEL' as a new PRINTER (the 1ST for this HOWDY SITE FILE)? No//
Y (Yes)
ORDER LABEL ROUTINE: LRHYLABX
Select EXCLUDE CLINICS: ER
1 ER PORTABLE
2 ERC El Reno SCP (999)
3 ERDAY EMERGENCY ROOM/DAY 8 to 4 PM
4 ERE El Reno FCI
5 ERECTIL UROLOGY ED CLINIC 3th Floor
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 ER PORTABLE
Are you adding 'ER PORTABLE' as a new EXCLUDE CLINICS (the 1ST for this LR
HOWDY SITE FILE)? No// Y (Yes)
CHECK FOR FUTURE ORDERS (DAYS): 1
CHECK FOR PAST ORDERS (DAYS): 7// 30
Select ORDER LABEL TESTS: AFB SMEAR & CULTURE
```

Are you adding AFB SMEAR & CULTURE as a new ORDER LABEL TESTS (the 1ST for this HOWDY SITE FILE)? No// Y (Yes) Select EXCLUDE URGENCY: STAT Are you adding 'STAT' as a new URGENCY (the 1ST for this HOWDY SITE FILE)? No//Y(Yes) **GREETING:** 1>Welcome to the VA. 2> EDIT Option: WELCOME TO: Pathology and Laboratory Medicine YOUR HOST IS: Dr HowdyProvider,One HOST TITLE: Chief of Service Select SPACER LABEL PRINTER: HOWDY PRINTER// DELETE SAME DAY DUPLICATES: YES// Select BINGO BOARD DEVICE: GTM-UNIX-CONSOLE// HOWDY BOT: HOWDY, BOT RН

### Bingo Board Device (Print at Point of Collection-PPOC)

This field contains the device on which patient names display when using the Print at Point of Collection (PPOC) menu of Howdy. The entry in this field points to the DEVICE file (#3.5) and can be a monitor (CRT), printer, or any output device.

When setting up a dedicated public display device, such as the bingo board, only devices defined in the DEVICE FILE (#3.5) with the sub-type C-VT should be entered in the Bingo Board Device field. To install the hardware, follow the instructions provided with the equipment.

**Note:** The bingo board process was validated using a printer to verify functionality. Using a display monitor for the bingo board functionality was not tested, but may be included in a future release.

### **Howdy Bot**

The post-install routine automatically adds the HOWDY,BOT as a cyber (non-human) proxy user to the NEW PERSON file (#200).

- The HOWDY,BOT is used to populate the Howdy Bot field (#56) of the HOWDY SITE file (#69.86).
- HOWDY,BOT is the user assigned to the logged event when a patient VIC is scanned.

# Files

### Howdy Site File (#69.86)

The Howdy Site File allows each local phlebotomy lab to customize the *look and feel* of Howdy by allowing each site to configure the fields contained in the HOWDY SITE FILE (#69.86) The Information Resource Manager (IRM) at each site controls access to the Howdy Site File. Howdy can be used in a standalone outpatient phlebotomy lab, or an integrated site, such as a VA Medical Center that has Community-based Outpatient Clinics associated with it.

This file can be locally customized using site-specific criteria to identify existing unprocessed and pending orders for each encounter. Not all lab orders that exist for a patient are processed by staff in a routine outpatient setting, which is primarily where Howdy is used.

```
STORED IN ^LRHY(69.86, (2 ENTRIES) SITE: TEST.BECKLEY.MED.VA.GOV UCI: TST,ROU
(VERSION 5.2)
DATA
                                    GLOBAL
              NAME
                                                   DATA
ELEMENT
              TTTLE
                                    LOCATION
                                                   TYPE
This file is used to run the Howdy software and to reflect the sites business
rules.
              DD ACCESS:
              RD ACCESS:
              WR ACCESS:
             DEL ACCESS:
           LAYGO ACCESS:
           AUDIT ACCESS:
        (NOTE: Kernel's File Access Security has been installed in this UCL.)
CROSS
REFERENCED BY: NAME(B)
69.86,.01
             NAME
                                     0;1 FREE TEXT (Required)
              INPUT TRANSFORM: K:$L(X)>30!(X?.N)!($L(X)<3)!'(X'?1P.E) X</pre>
              HELP-PROMPT:
                                NAME MUST BE 3-30 CHARACTERS, NOT NUMERIC OR
                                STARTING WITH PUNCTUATION
              CROSS-REFERENCE: 69.86<sup>^</sup>B
                                1)= S ^LRHY(69.86, "B", $E(X,1,30), DA)=""
```

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**Note:** The bingo board process was validated using a printer to verify functionality. Using a display monitor for the bingo board functionality was not tested, but may be included in a future release.

2) = K ^LRHY(69.86, "B", \$E(X,1,30), DA) 69.86,2 LAB TEST (TO EXCLUDE) 2;0 POINTER Multiple #69.862 69.862,.01 LAB TEST (TO EXCLUDE) 0;1 POINTER TO LABORATORY TEST FILE (#60) (Multiply asked) LAST EDITED: FEB 04, 2011 DESCRIPTION: Lab test that should be excluded when Howdy runs. CROSS-REFERENCE: 69.862^B 1) = S ^LRHY(69.86, DA(1), 2, "B", \$E(X, 1, 30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 2, "B", \$E(X,1,30), DA) 69.86,4 COLLECTION SAMPLE (TO EXCLUDE) 4;0 POINTER Multiple #69.864 69.864,.01 COLLECTION SAMPLE (TO EXCLUDE) 0;1 POINTER TO COLLECTION SAMPLE FILE (#62) (Multiply asked) FEB 04, 2011 LAST EDITED: Collection sample to be excluded when Howdy DESCRIPTION: runs. CROSS-REFERENCE: 69.864<sup>^</sup>B 1) = S ^LRHY(69.86, DA(1), 4, "B", \$E(X, 1, 30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 4, "B", \$E(X,1,30), DA) 69.86,6 SITE SPECIMEN (TO EXCLUDE) 6;0 POINTER Multiple #69.861 SITE SPECIMEN (TO EXCLUDE) 0;1 POINTER TO TOPOGRAPHY FIELD FILE 69.861,.01 (#61) (Multiply asked) LAST EDITED: FEB 04, 2011 DESCRIPTION: Site specimens to be excluded when Howdy runs. CROSS-REFERENCE: 69.861^B 1) = S ^LRHY(69.86, DA(1), 6, "B", \$E(X, 1, 30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 6, "B", \$E(X,1,30), DA)

69.86,8 COLLECTION TYPES (TO EXCLUDE) 8;0 SET Multiple #69.868 COLLECTION TYPES (TO EXCLUDE) 0;1 SET (Multiply asked) 69.868,.01 'LC' FOR LAB COLLECTION; 'WC' FOR WARD COLLECTION; 'SP' FOR SEND PATIENT TO THE LAB; 'IC' FOR IMMEDIATE COLLECT; APR 27, 2011 LAST EDITED: DESCRIPTION: Collection types to be excluded when Howdy runs. CROSS-REFERENCE: 69.868^B 1) = S ^LRHY(69.86, DA(1), 8, "B", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 8, "B", \$E(X, 1, 30), DA) 69.86,10 LABEL PRINTERS 10;0 POINTER Multiple #69.863 69.863,.01 LABEL PRINTERS 0;1 POINTER TO DEVICE FILE (#3.5) (Multiply asked) FEB 04, 2011 LAST EDITED: DESCRIPTION: Label printers used with Howdy. CROSS-REFERENCE: 69.863^B 1) = S ^LRHY(69.86, DA(1), 10, "B", \$E(X, 1, 30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 10, "B", \$E(X,1,30), DA) 69.86,11 ORDER LABEL ROUTINE 11;1 FREE TEXT INPUT TRANSFORM: K:\$L(X)>8!(\$L(X)<3) X</pre> FEB 04, 2011 LAST EDITED: HELP-PROMPT: Answer must be 3-8 characters in length. DESCRIPTION: The name of the routine to print order labels. 69.86,16 EXCLUDE CLINICS 16;0 POINTER Multiple #69.8616 0;1 POINTER TO HOSPITAL LOCATION FILE (# 69.8616,.01 EXCLUDE CLINICS 44) (Multiply asked) LAST EDITED: FEB 04, 2011 DESCRIPTION: Clinics to exclude when Howdy is run. CROSS-REFERENCE: 69.8616<sup>^</sup>B

1)= S ^LRHY(69.86, DA(1), 16, "B", \$E(X, 1, 30), DA)="" 2) = K ^LRHY(69.86, DA(1), 16, "B", \$E(X,1,30), DA) 69.86,18 CHECK FOR FUTURE ORDERS (DAYS) 18;1 FREE TEXT INPUT TRANSFORM: K:\$L(X)>3!(\$L(X)<1) X</pre> LAST EDITED: FEB 04, 2011 HELP-PROMPT: Answer must be 1-3 characters in length. DESCRIPTION: The number of days Howdy searches for orders in the future. 69.86,20 CHECK FOR PAST ORDERS (DAYS) 20;1 FREE TEXT INPUT TRANSFORM: K:\$L(X)>3!(\$L(X)<1) X</pre> LAST EDITED: FEB 04, 2011 HELP-PROMPT: Answer must be 1-3 characters in length. The number of days Howdy searches for orders in DESCRIPTION: the past 69.86,25 ORDER LABEL TESTS 25;0 POINTER Multiple #69.8625 69.8625,.01 ORDER LABEL TESTS 0;1 POINTER TO LABORATORY TEST FILE (#60) (Multiply asked) FEB 04, 2011 LAST EDITED: DESCRIPTION: The test which will print order labels. CROSS-REFERENCE: 69.8625^B 1) = S ^LRHY(69.86, DA(1), 25, "B", \$E(X, 1, 30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 25, "B", \$E(X,1,30), DA) 69.86,30 EXCLUDE URGENCY 30;0 POINTER Multiple #69.867 69.867,.01 EXCLUDE URGENCY 0;1 POINTER TO URGENCY FILE (#62.05) (Multiply asked) FEB 04, 2011 LAST EDITED: DESCRIPTION: Urgencies that will be excluded when Howdy runs. CROSS-REFERENCE: 69.867^B 1) = S ^LRHY(69.86, DA(1), 30, "B", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 30, "B", \$E(X,1,30), DA) 69.86,32 GREETING 32;0 WORD-PROCESSING #69.8632 (IGNORE "|")

69.86,40	WELCOME TO	40;1 FREE TEXT
	INPUT TRANSFORM:	K:\$L(X)>80!(\$L(X)<1) X
	LAST EDITED:	FEB 04, 2011
	HELP-PROMPT:	Answer must be 1-80 characters in length.
	DESCRIPTION:	
		Welcome statement.
69.86,42	YOUR HOST IS	42;1 FREE TEXT
	INPUT TRANSFORM:	K:\$L(X)>80!(\$L(X)<1) X
	LAST EDITED:	FEB 04, 2011
	HELP-PROMPT:	Answer must be 1-80 characters in length.
	DESCRIPTION:	
		Name of the host. (Chief P&LM)
69.86,44	HOST TITLE	44;1 FREE TEXT
	INPUT TRANSFORM:	K:\$L(X)>80!(\$L(X)<1) X
	LAST EDITED:	FEB 04, 2011
	HELP-PROMPT:	Answer must be 1-80 characters in length.
	DESCRIPTION:	
		Title of the Host
69.86,45	SPACER LABEL PRIN	NTER 45;0 POINTER Multiple #69.8645
69.8645,.01	SPACER LABEL PF	RINTER 0;1 POINTER TO DEVICE FILE (#3.5)
		(Multiply asked)
	LAST EDITED:	FEB 09, 2011
	DESCRIPTION:	Used for the name of the printer that is used
		to print a spacer label.
	CROSS-REFERENCE	E: 69.8645^B
		1)= S ^LRHY(69.86,DA(1),45,"B",\$E(X,1,30),DA)=""
		2)= K ^LRHY(69.86,DA(1),45,"B",\$E(X,1,30),DA)
69.86,52	DELETE SAME DAY I	DUPLICATES 52;1 SET
		'Y' FOR YES;
		'1' FOR YES;
	LAST EDITED:	FEB 09, 2011
	DESCRIPTION:	Used to delete duplicate lab tests from the same day.
69.86,54	BINGO BOARD DEVIC	CE 54;0 POINTER Multiple #69.8654
69.8654,.01	BINGO BOARD DEV	/ICE 0;1 POINTER TO DEVICE FILE (#3.5)

(Multiply asked) LAST EDITED: FEB 09, 2011 DESCRIPTION: This is the bingo board device. CROSS-REFERENCE: 69.8654^B 1) = S ^LRHY(69.86, DA(1), 54, "B", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.86, DA(1), 54, "B", \$E(X,1,30), DA) 69.86,56 HOWDY BOT 56;1 POINTER TO NEW PERSON FILE (#200) FEB 06, 2011 LAST EDITED: DESCRIPTION: Used to run Howdy as a non human user. FILES POINTED TO FIELDS COLLECTION SAMPLE (#62) COLLECTION SAMPLE (TO EXCLUDE):COLLECTION SAMPLE (TO EXCLUDE) (#.01) DEVICE (#3.5) LABEL PRINTERS:LABEL PRINTERS (#.01) SPACER LABEL PRINTER: SPACER LABEL PRINTER (#.01) BINGO BOARD DEVICE: BINGO BOARD DEVICE (#.01) HOSPITAL LOCATION (#44) EXCLUDE CLINICS: EXCLUDE CLINICS (#.01) LABORATORY TEST (#60) LAB TEST (TO EXCLUDE):LAB TEST (TO EXCLUDE) (#.01)ORDER LABEL TESTS: ORDER LABEL TESTS (#.01) HOWDY BOT (#56) NEW PERSON (#200) TOPOGRAPHY FIELD (#61) SITE SPECIMEN (TO EXCLUDE):SITE SPECIMEN (TO EXCLUDE) (#.01) URGENCY (#62.05) EXCLUDE URGENCY: EXCLUDE URGENCY (#.01) INPUT TEMPLATE(S): PRINT TEMPLATE(S): SORT TEMPLATE(S): FORM(S)/BLOCK(S):

### Howdy Specimen Times by UID File (#69.87)

The HOWDY SPECIMEN TIMES BY UID file (#69.87) captures the specifics about the accession. It lists the tests that are included in an order, who placed the order, who accessioned it (Howdy or manually by lab staff), who collected it, who verified it and the timestamp of each event. The fields in this file are used to calculate the true Turnaround Time (TAT), which tracks each step for a more detailed view.

This file has a number of cross references to make data storage more efficient.

```
STANDARD DATA DICTIONARY #69.87 -- HOWDY SPECIMEN TIMES BY UID FILE
   STORED IN ^LRHY(69.87, (50 ENTRIES) SITE: TEST UCI: TST,ROU
   DATA
                 NAME
                                       GLOBAL
                                                    DATA
   ELEMENT
                 TITLE
                                      LOCATION
                                                    TYPE
                                ------
   _____
   This file is used to capture and retain the specimen demographics.
                 DD ACCESS:
                 RD ACCESS:
                 WR ACCESS:
                DEL ACCESS:
              LAYGO ACCESS:
              AUDIT ACCESS:
           (NOTE: Kernel's File Access Security has been installed in this UCL.)
   CROSS
   REFERENCED BY: LAB ARRIVAL TIME(ARIV), SPECIMEN UID(B),
                  COLLECTION TIME(COLT), TIME LABELS PRINTED(LT),
                  INITIAL SCAN TIME(SCAN), COLLECTOR(TECH)
   69.87,.01
                 SPECIMEN UID
                                       0;1 FREE TEXT (Required)
                 INPUT TRANSFORM: K:$L(X)>10!($L(X)<10) X</pre>
                 LAST EDITED:
                                  NOV 09, 2010
                 HELP-PROMPT:
                                  Answer must be 10 characters in length.
                 DESCRIPTION:
                                  This field contains the universal
                                   identification number (UID).
                 CROSS-REFERENCE: 69.87<sup>B</sup>
                                   1) = S ^LRHY(69.87, "B", $E(X,1,30), DA) = ""
                                   2) = K ^LRHY(69.87, "B", $E(X,1,30), DA)
   69.87,2
                 INITIAL SCAN TIME
                                        2;1 DATE
                                                                                    23
January 2012
                             Howdy C3-C1 Conversion Project
                                   Patch LR*5.2*405
```

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INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: NOV 09, 2010 DESCRIPTION: This field contains the date and time a patient scans their VIC at the Howdy station. CROSS-REFERENCE: 69.87<sup>SCAN</sup> 1) = S ^LRHY(69.87, "SCAN", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "SCAN", \$E(X,1,30), DA) xref the initial scan field 69.87,4 TIME LABELS PRINTED 4;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: MAR 01, 2009 DESCRIPTION: This field contains the date and time the Phlebotomist prints the specimen labels. CROSS-REFERENCE: 69.87<sup>LT</sup> 1) = S ^LRHY(69.87, "LT", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "LT", \$E(X,1,30), DA) This xref is the time the labels were printed 69.87,6 COLLECTOR 6;1 POINTER TO NEW PERSON FILE (#200) NOV 09, 2010 LAST EDITED: This field contains the name of the person who DESCRIPTION: collects the specimen. Usually, this is the person who scanned their ID badge. CROSS-REFERENCE: 69.87<sup>TECH</sup> 1) = S ^LRHY(69.87, "TECH", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "TECH", \$E(X,1,30), DA) This is the Phlebotomist who signed in. 69.87,8 COLLECTION TIME 8;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: MAR 01, 2009 DESCRIPTION: This field contains the time the specimen was collected. CROSS-REFERENCE: 69.87<sup>^</sup>COLT 1) = S ^LRHY(69.87, "COLT", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "COLT", \$E(X,1,30), DA)

This xref if is for the specimen collection time 69.87,10 LAB ARRIVAL TIME 10;1 DATE INPUT TRANSFORM: S %DT="ET" D ^%DT S X=Y K:Y<1 X LAST EDITED: NOV 09, 2010 DESCRIPTION: This field contains the time the specimen arrived in the lab. CROSS-REFERENCE: 69.87^ARIV 1) = S ^LRHY(69.87, "ARIV", \$E(X,1,30), DA) = "" 2) = K ^LRHY(69.87, "ARIV", \$E(X,1,30), DA) This xref is for the lab arrival time 69.87,12 12;1 FREE TEXT RECEIVER INPUT TRANSFORM: K:\$L(X)>99!(\$L(X)<1) X</pre> LAST EDITED: NOV 09, 2010 HELP-PROMPT: Answer must be 1-99 characters in length. DESCRIPTION: This field contains the name of the person who received the specimen in the lab. FILES POINTED TO FIELDS NEW PERSON (#200) COLLECTOR (#6) INPUT TEMPLATE(S): PRINT TEMPLATE(S): SORT TEMPLATE(S):

## Routines

The checksums below are new checksums, and can be checked with CHECK1^XTSUMBLD.

LRHY0	Value	B3945989
LRHY0	1 Value	B42068305
LRHY2	2 Value	B4209641
LRHY4	X Value	B60499659

LRHYA	Value	B29476770	
LRHYAFT	Value	B93475288	
LRHYB	Value	B41480183	
LRHYBC1	Value	B65673282	
LRHYBC9	Value	B188141	
LRHYBL1	Value	B187896	
LRHYBLD	Value	B5635430	
LRHYDEL	Value	B58771394	
LRHYED	Value	B54493	
LRHYF1	Value	B21719177	
LRHYF2	Value	B1996292	
LRHYF4	Value	B53704668	
LRHYLRX	Value	B1258345	
LRHYLS1	Value	B9947241	
LRHYPH0	Value	B38997897	
LRHYPH2	Value	B12074115	
LRHYPL	Value	B9505821	
LRHYPOST	Value	B856379	
LRHYT1	Value	B12777188	
LRHYT2	Value	B3165610	
LRHYU	Value	B3762458	
LRHYU4	Value	B116774	
LRHYU5	Value	B83020	
LRHYUTL	Value	B160482	
done			

## **Exported Menu Options**

The following is a list of new menu options included in this patch: Option Name Type \_\_\_\_\_ \_\_\_\_ LRHY HOWDY PPOC MAIN MENU menu LRHY HOWDY MAIN MENU menu LRHY PPOC LABEL PRINT action LRHY PATIENT CARD SCAN run routine LRHY PATIENT CARD SCAN (PPOC) run routine LRHY PATIENT WAIT TIME run routine LRHY PHLEBOTOMY LOG run routine LRHY SCAN SPECIMENS INTO LAB action LRHY SITE FILE EDIT run routine LRHY TRACK COLLECTION run routine LRHY HOWDY BOT action

# Archiving

There is no archiving capability at this time.

# Callable Routines/Entry Points/Application Programmer Interfaces

This software does not contain routines callable by other applications.

# **External Relationships**

The installation environment for version 1.0 of the Howdy Computerized Phlebotomy Login Process software on the VistA server includes:

- VA FileMan V. 22 or greater
- Kernel V. 8.0 or greater
- Kernel Toolkit V. 7.3 or greater
- Kernel RPC Broker V. 1.1 or greater
- VistA Lab Service V. 5.2

### **Internal Relationships**

The following are the Howdy PPOC Main Menu options and the Howdy Main Menu options. The LRHY menu options can function independently.

```
NAME: LRHY HOWDY MAIN MENU
                                      MENU TEXT: HOWDY MAIN MENU
TYPE: menu
                                       CREATOR: MANAGER, SYSTEM
DESCRIPTION: This is the traditional Howdy main menu.
ITEM: LRHY SCAN SPECIMENS INTO LAB
                                     SYNONYM: IN
                                      SYNONYM: SCAN
ITEM: LRHY PATIENT CARD SCAN
ITEM: LRHY PATIENT WAIT TIME
                                     SYNONYM: WAIT
ITEM: LRHY PHLEBOTOMY LOG
                                     SYNONYM: PL
                                     SYNONYM: TRAK
ITEM: LRHY TRACK COLLECTION
ITEM: LRHY SITE FILE EDIT
                                     SYNONYM: EDIT
TIMESTAMP OF PRIMARY MENU:
  UPPERCASE MENU TEXT: HOWDY MAIN MENU
                                       MENU TEXT: HOWDY PPOC MAIN MENU
NAME: LRHY HOWDY PPOC MAIN MENU
  TYPE: menu
                                       CREATOR: MANAGER, SYSTEM
             Howdy PPOC main menu.
DESCRIPTION:
ITEM: LRHY PATIENT CARD SCAN (PPOC)
                                      SYNONYM: SCAN
ITEM: LRHY PPOC LABEL PRINT
                                       SYNONYM: PPOC
ITEM: LRHY TRACK COLLECTION
                                       SYNONYM: TRAK
ITEM: LRHY PATIENT WAIT TIME
                                       SYNONYM: TAT
ITEM: LRHY SCAN SPECIMENS INTO LAB
                                     SYNONYM: IN
ITEM: LRHY SITE FILE EDIT
                                      SYNONYM: EDIT
TIMESTAMP: 62046,58901
                                   TIMESTAMP OF PRIMARY MENU: 61947,39250
  UPPERCASE MENU TEXT: HOWDY PPOC MAIN MENU
 NAME: LRHY PPOC LABEL PRINT
                                        MENU TEXT: PRINT PPOC LABEL
  TYPE: action
                                       CREATOR: MANAGER, SYSTEM
  E ACTION PRESENT: YES
 DESCRIPTION: Labels for collected tests are printed on the designated label
 printer. This option captures collector and collection date & time.
  ENTRY ACTION: D VET^LRHYAFT
                                       TIMESTAMP OF PRIMARY MENU: 61417,56303
  UPPERCASE MENU TEXT: PRINT PPOC LABEL
NAME: LRHY HOWDY BOT
                                       MENU TEXT: LRHY SET HOWDY USER
  TYPE: action
                                       CREATOR: MANAGER, SYSTEM
  E ACTION PRESENT: YES
                                       X ACTION PRESENT: YES
 DESCRIPTION: This option sets the Howdy user that will run the Howdy scan
 option.
  EXIT ACTION: D ^XUS
                                       ENTRY ACTION: D USER^LRHYU D VET1^LRHY0
```

TIMESTAMP OF PRIMARY MENU: 62027, 38442 UPPERCASE MENU TEXT: LRHY SET HOWDY USER NAME: LRHY PATIENT CARD SCAN MENU TEXT: SCAN PATIENT CARD TYPE: run routine CREATOR: MANAGER, SYSTEM DESCRIPTION: This option initiates the Howdy process using the greeting from Howdy site file & prints labels. ROUTINE: VET^LRHY0 TIMESTAMP OF PRIMARY MENU: 62019,31579 UPPERCASE MENU TEXT: SCAN PATIENT CARD NAME: LRHY PATIENT CARD SCAN (PPOC) MENU TEXT: SCAN PATIENT CARD (PPOC) CREATOR: MANAGER, SYSTEM TYPE: run routine DESCRIPTION: This option confirms Patient, displays accessioned tests and allows the Collector to choose test(s) actually collected. ROUTINE: VET^LRHY01 TIMESTAMP: 61913,40894 UPPERCASE MENU TEXT: SCAN PATIENT CARD (PPOC) NAME: LRHY PATIENT WAIT TIME MENU TEXT: PATIENT WAIT TIME TYPE: run routine CREATOR: MANAGER, SYSTEM DESCRIPTION: This option displays how long a Patient waits to have a sample drawn. ROUTINE: LRHY4X TIMESTAMP OF PRIMARY MENU: 60103,45630 UPPERCASE MENU TEXT: PATIENT WAIT TIME NAME: LRHY PHLEBOTOMY LOG MENU TEXT: PHLEBOTOMY LOG TYPE: run routine CREATOR: MANAGER, SYSTEM DESCRIPTION: This is the log used to track the collector's phlebotomy performance times. ROUTINE: LRHYPL UPPERCASE MENU TEXT: PHLEBOTOMY LOG NAME: LRHY SCAN SPECIMENS INTO LAB MENU TEXT: SCAN SPECIMENS INTO LAB TYPE: action CREATOR: MANAGER, SYSTEM E ACTION PRESENT: YES DESCRIPTION: This option allows the Receiver to scan collected specimen labels in order to capture Lab Receipt Time. ENTRY ACTION: S LRTECH=DUZ D LABIN^LRHYBC1 UPPERCASE MENU TEXT: SCAN SPECIMENS INTO LAB NAME: LRHY SITE FILE EDIT MENU TEXT: EDIT HOWDY SITE FILE TYPE: run routine CREATOR: MANAGER, SYSTEM LOCK: LRHYKEY DESCRIPTION: This option enables the Keyholder to edit the Howdy site file. ROUTINE: EDIT^LRHYU TIMESTAMP OF PRIMARY MENU: 61852,35530 UPPERCASE MENU TEXT: EDIT HOWDY SITE FILE

```
NAME: LRHY TRACK COLLECTIONMENU TEXT: TRACK COLLECTIONTYPE: run routineCREATOR: MANAGER,SYSTEMDESCRIPTION:This option is used to display patient specimen collectiondemographics.ROUTINE: SINGLE^LRHYF1UPPERCASE MENU TEXT: TRACK COLLECTION
```

# **Global Variables**

There are no non-standard global variables used in this software.

# Glossary

Term	Definition		
Accession	A sequential identifier made up of a number and a monthdayyear		
ADPAC	Automated Data Processing Application Coordinator		
Bingo Board	Nickname given to an electronic monitor display board within the phlebotomy waiting area		
	It is used to notify patients that it is their turn to proceed to the phlebotomy lab		
	<b>Note:</b> The bingo board process was validated using a printer to verify functionality. Using a display monitor for the bingo board functionality was not tested, but may be included in a future release.		
BOT	Cyber non-human proxy user		
CAC	Clinical Application Coordinator		
Class 1	Software produced inside of the Office of Enterprise Development (OED) organization.		
Class 3	Also known as Field Developed Software		
	Refers to all VHA software produced outside of the Office of Enterprise Development (OED) organization		
CPRS	Computerized patient Record System		
DOB	Date of Birth		
GUI	Graphical User Interface		
HCW	Health Care Worker		
HIS Hospital Information System			
IEN	Internal Entry Number – A patient-specific Identifier		
IRM	Information Resource Manager		
LRHY	Namespace assigned to Howdy Computerized Phlebotomy Login Process by the Database Administrator		
Phlebotomy	The process of drawing samples from patients for laboratory analysis		
PII	Personally Identifiable Information		
PPID	Positive Patient Identification		
PPOC Print at Point of Collection			
Proxy User	A <i>non-human</i> user in the NEW PERSON file (#200) which is assigned to the user when a patient VIC card is scanned or SSN entered; it is used to limit the accessibility of the person logged in.		
RSD	Requirements Specification Document		
Section 508	Under Public Law, agencies must provide employees and members of the public who have disabilities access to electronic and information technology that is comparable to the access available to employees and members of the public who are not individuals with disabilities.		
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Term	Definition	
SSN	Social Security Number	
ТАТ	Turn Around Time (patient time spent in phlebotomy)	
UID	Unique Specimen Identifier	
VA	Department of Veterans Affairs	
VAMC	Department of Veterans Affairs Medical Center	
VHA	Veterans Health Administration	
VIC Veteran's Identification Card		
VistA	Veterans Health Information Systems and Technology Architecture	
An enterprise-wide information system built around an electronic healt used throughout the Department of Veterans Affairs medical system		
VistA Lab	Lab         The legacy Laboratory application into which Howdy is placed	

## **External Interfaces**

There are no RPC or VistA HL7 messages contained in this software.

# **Cross References**

There are no non-standard or special cross-references in this software.

# **Software Security**

Howdy follows the overall VistA login specifications for system security. However, as a Howdy user, you need to possess the same pre-set security levels as set for the VistA Lab application. The security levels are tied to the users in the NEW PERSON file by the system manager or the ADPAC.

# Troubleshooting

Accession labels do not print

### **Printers**

1.

Problem

#### Solution

•

•

•

•

- No orders for patient
  - Multiple orders
  - No printer assigned at sign on
  - Printer not connected to network

Entry in Howdy Site File is not defined

Check solutions described in problem 1

Check order label field in Howdy Site File

Wrong printer routine defined in Howdy Site File

- Card scanner not connected
- Incompatible printer in use
- 2. Order labels do not print
- 3. Label type printing incorrectly

Entries in the Howdy Site File (#69.86), Printers (#10) field should also exist in the LABORATORY SITE file (#69.9), Label Device field (#360).

- This field is a pointer to the DEVICE file (#3.5).
- Specific information and support pertaining to Lab Label printer configurations are detailed in the Lab patch descriptions: LR\*5.2\*161 and LR\*5.2\*218.
- 4. Specimen labels do not print

• No orders for patient

- Check that the date range agrees with the order date
- Check for exclusions in the Howdy Site File
  - a. Test exclusion
  - b. Status exclusion
  - c. Location exclusion
- Check that the printer name is correct in the device file

Note: A new Item was created in Remedy for Howdy, Patch LR\*5.2\*405. If you have any questions concerning the implementation of this application, contact the VA Service Desk at 1-888-596-4357 or directly log a Remedy ticket via Remedy Requester application using Category: Applications-VistA Type: Lab 5.2 Item: Howdy

### **Frequently Asked Questions (FAQs)**

### 1. What equipment is required with Howdy?

Using the Howdy Main Menu

- Dedicated PC with an attached scanner
- Optional keyboard for patient check-in
- Shared barcode label printer
- Shared PC with scanner for phlebotomy staff

Using the Howdy PPOC Main Menu

- Dedicated PC with an attached scanner
- Optional keyboard for patient check-in
- Barcode label printer per phlebotomy station
- Display (Bingo) board

#### 2. With Howdy, what type of scanners do I use?

It does not matter, as long as the scanner is a magnetic or a bar code scanner; either will work with the patient's VIC.

### 3. Does Howdy require someone to *man the station* at the receiving desk?

No, as long as there is someone available to address issues.

It is better not to have someone at the receiving desk; patients want the personnel to scan for them. Without someone at the receiving desk, the patient will read signage and automatically scan the VIC without assistance.

#### 4. Why have signage?

Signage is an important piece for Howdy--to be most efficient.

Using Howdy, the check-in process does not require the assistance of a staff member for over 80% of the patients; the patient does need instruction on what to do. Once patients are familiar with this process, they like to assist new patients.

### 5. What is the advantage of having a keyboard available with a dedicated Howdy PC?

When a patient cannot use the VIC, (do not have it or it is damaged), the patient can type the SSN on the keyboard, which serves the same purpose as scanning the VIC. This eliminates the need for a staff member to assist and saves time.

#### 6. Does the Bingo Board have to be a wall-mounted screen?

No, you can use a computer screen, as long as it is visible to the phlebotomy staff.

**Note:** The bingo board process was validated using a printer to verify functionality. Using a display monitor for the bingo board functionality was not tested, but may be included in a future release.

### 7. Should there be laboratory policies pertaining to Howdy?

#### Yes

Once you determine how Howdy works best for your site, you develop your policies accordingly. Be sure to communicate this to your providers and scheduling staff, so the ordering practices match. This makes the flow of patients through the phlebotomy check-in process much smoother.

#### 8. What is the optimum date range for Howdy to find orders?

Optimum date range is up to the individual site.

- If you set the range short, you get too many **no orders found**.
- If you set the range wide, you get too many **multiple orders**.

We have found that +7 days and back 31 days works well for a majority of sites.

### 9. Does Howdy change laboratory *turnaround time* (TAT) in VistA?

No

Howdy retrieves information only from VistA. Generating reports from Howdy is a standalone tool to help you with your laboratory practices. TAT in the Laboratory package is still accession time to verification time.