Howdy Computerized Phlebotomy Login Process C3-C1 Conversion Project

Technical Manual



Laboratory Patch LR*5.2*405

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Revision History

Date	Revision	Description	Author
June 2010	1.0	Initial version	REDACTED
July 2010	1.1	Added content	REDACTED
August 2010	1.2	Added content	REDACTED
August 2010	1.3	Prepared for release	REDACTED
August 2010	1.4	Added Blood Bank Clearance Statement	REDACTED
September 2010	1.5	Updates after review	REDACTED
October 2010	1.6	Changed dates to October	REDACTED
December 2010	1.7	Added content	REDACTED
December 2010	1.8	Changed days to January 2011	REDACTED
		Fixed formatting	
February 2011	1.9	Changed dates to February 2011	REDACTED
		Made adjustments to the usage of <i>option</i>	
		Modified Introduction bullet points	
April 2011	1.10	Changed dates to April 2011	REDACTED
•		Updates with IG	
April 2011	1.11	Changed dates to May 2011	REDACTED
•		Added TL and DH updates (new checksums)	
May 2011	1.12	Added PMH updates	REDACTED
•		Added updates from latest build t11	
		Updated Checksums	
June 2011	1.13	Changed dates to June 2011	REDACTED
		• Updated page 9: 'IC' to 'I'	
		Updated page 36, #8: replace is your best bet with works well for a majority of sites	
July 2011	1.14	Changed dates to July 2011	REDACTED
		• Added 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.	
August 2011	1.15	Changed dates to August 2011	REDACTED
		Updated with information for the release build	

Date	Revision	Description	Author
September 2011	1.16	Changed dates to September 2011	REDACTED
		• 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	REDACTED
October 2011	1.18	Changed dates to October 2011	REDACTED
		Added note about Exclude Clinics	
November 2011	1.19	Changed dates to November 2011	REDACTED
		Updated with information for the release build	
		• Updated with IG comments from MB	
December 2011	1.20	Changed dates to December 2011	REDACTED
		Updated the Howdy Bot information	
		Prepped for national release	
		Updated with info from DH	
January 2012	1.21	• Changed dates to January 2012	REDACTED
		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 \pm 5.2 \pm 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).

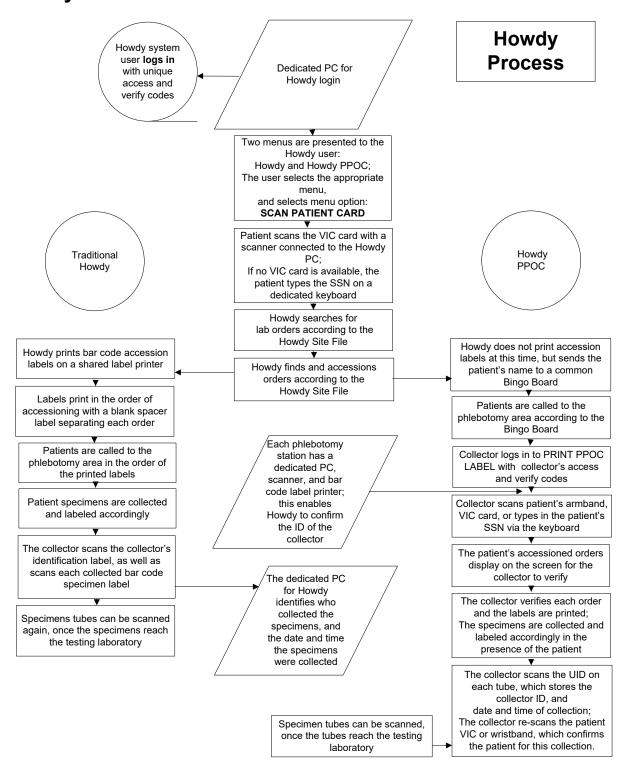
- Sites may enter the HOWDY,BOT proxy user into the HOWDY BOT field (#56) of the HOWDY SITE file (#69.86).
- This field is only to be used when the site does not have a system user.
- HOWDY,BOT is the user assigned to the logged event when a patient VIC is scanned and prohibits this user from accessibility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

- 1. 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.
- 2. 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)

DATA	NAME	GLOBAL	DATA	
ELEMENT	TITLE	LOCATION	TYPE	
69.86,.01	NAME	0;1		FREE TEXT (Required)
CROSS				
REFERENCED	BY: NAME(B)			

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

69.86,6 SITE SPECIMEN (TO EXCLUDE) 6;0 POINTER Multiple #69.861
69.861,.01 SITE SPECIMEN (TO EXCLUDE) 0;1 POINTER TO TOPOGRAPHY FIELD FILE

LAST EDITED: FEB 04, 2011

DESCRIPTION: Site specimens to be excluded when Howdy

(#61) (Multiply asked)

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", $E(X, 1, 30), DA)$

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	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE

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)

LAST EDITED: FEB 04, 2011

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)

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 POINTER Multiple #69.8616
69.8616,.01	EXCLUDE CLINICS	0;1 POINTER TO HOSPITAL LOCATION FILE (# 44) (Multiply asked)
	LAST EDITED: DESCRIPTION:	FEB 04, 2011 This field allows you to exclude the accessioning of orders from those specialty clinics unless the collection date is for Today (multiple clinics allowed).
		Note: If the order is for today for the "excluded" clinic, the order will accession. If there is an order put in for TOMORROW, and you run the program, it will ignore that order.
		69.8616^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)

This field is used by code in the routine LRHYA

69.86,18 CHECK FOR FUTURE ORDERS (DAYS) 18;1 FREE TEXT

INPUT TRANSFORM: K:\$L(X)>3!(\$L(X)<1) X

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.

This field is used by code in LRHYB

DATA NAME GLOBAL DATA
ELEMENT TITLE LOCATION TYPE

69.86,20 CHECK FOR PAST ORDERS (DAYS) 20;1 FREE TEXT

INPUT TRANSFORM: K:\$L(X)>3!(\$L(X)<1) X

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 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: FEB 04, 2011

DESCRIPTION:

The test which will print order labels.

CROSS-REFERENCE: 69.8625^B

1) = S $^{LRHY}(69.86, DA(1), 25, "B", $E(X, 1, 30), DA) = "$

"

This field is used by code in LRHYA

DATA	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE

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)

LAST EDITED: FEB 04, 2011
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)

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: DESCRIPTION:	K: $L(X)>80!(L(X)<1)$ X FEB 04, 2011 Answer must be 1-80 characters in length.
		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

DATA	NAME	GLOBAL	DATA
ELEMENT	TITLE	LOCATION	TYPE

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

69.86,45 SPACER LABEL PRINTER 45;0 POINTER Multiple #69.8645

69.8645,.01 SPACER LABEL PRINTER 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: 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)

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 DEVICE 54;0 POINTER Multiple #69.8654 69.8654,.01 BINGO BOARD DEVICE 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) LAST EDITED: FEB 06, 2011 DESCRIPTION: 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 SAMP

LE (TO EXCLUDE) (#.01) LABEL PRINTERS: LABEL PRINTERS (#.01) DEVICE (#3.5) 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): USER #0 CAPTIONED 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)

DATA NAME GLOBAL DATA
ELEMENT TITLE LOCATION TYPE

69.87,.01 SPECIMEN UID 0;1 FREE TEXT (Required)

INPUT TRANSFORM: K:L(X)>10!(L(X)<10) X

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^B

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^SCAN

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^LT

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)

LAST EDITED: NOV 09, 2010

DESCRIPTION: This field contains the name of the person who

collects the specimen. Usually, this is the

person who scanned their ID badge.

CROSS-REFERENCE: 69.87^TECH

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^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 RECEIVER 12;1 FREE TEXT

INPUT TRANSFORM: K:\$L(X)>99!(\$L(X)<1) X

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 BH
```

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.

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.

```
STORED IN ^LRHY(69.86, (2 ENTRIES) SITE: TEST.BECKLEY.MED.VA.GOV UCI: TST,ROU
(VERSION 5.2)
DATA
             NAME
                                    GLOBAL
                                                   DATA
ELEMENT
             TITLE
                                    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 UCI.)
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
              HELP-PROMPT:
                                NAME MUST BE 3-30 CHARACTERS, NOT NUMERIC OR
                                STARTING WITH PUNCTUATION
              CROSS-REFERENCE: 69.86^B
                                1) = S ^LRHY(69.86, "B", $E(X, 1, 30), DA) = ""
```

	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)
	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)
69.86,6	SITE SPECIMEN (TO EXCLUDE) 6;0 POINTER Multiple #69.861
69.861,.01	SITE SPECIMEN (TO EXCLUDE) 0;1 POINTER TO TOPOGRAPHY FIELD FILE (#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
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", $E(X, 1, 30), DA)$
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)
	LAST EDITED: FEB 04, 2011 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
	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.
69.86,16	EXCLUDE CLINICS 16;0 POINTER Multiple #69.8616
69.8616,.01	EXCLUDE CLINICS 0;1 POINTER TO HOSPITAL LOCATION FILE (# 44) (Multiply asked)
	LAST EDITED: FEB 04, 2011
	DESCRIPTION:
	Clinics to exclude when Howdy is run.
	CROSS-REFERENCE: 69.8616^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 LAST EDITED: FEB 04, 2011 Answer must be 1-3 characters in length. HELP-PROMPT: 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 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) LAST EDITED: FEB 04, 2011 DESCRIPTION: The test which will print order labels. CROSS-REFERENCE: 69.8625^B 1) = $S \land 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 0;1 POINTER TO URGENCY FILE (#62.05) 69.867,.01 EXCLUDE URGENCY (Multiply asked) LAST EDITED: FEB 04, 2011 DESCRIPTION: Urgencies that will be excluded when Howdy CROSS-REFERENCE: 69.867^B 1) = $S \land 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 "|")

60.06.40	WELCOME TO	40.1 PDDP MPVM
69.86,40	WELCOME TO	
	LAST EDITED:	K:\$L(X)>80!(\$L(X)<1) X
		Answer must be 1-80 characters in length.
	DESCRIPTION:	Answer must be 1 00 characters in Tength.
	BBOOKIT TION.	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 PR	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	<u>*</u>
69.8654,.01	BINGO BOARD DEV	
2012	11	(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)

LAST EDITED: FEB 06, 2011

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)

NEW PERSON (#200) HOWDY BOT (#56)

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 UCI.)
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
              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^B
                                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^SCAN

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^LT

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)

LAST EDITED: NOV 09, 2010

DESCRIPTION: This field contains the name of the person who

collects the specimen. Usually, this is the

person who scanned their ID badge.

CROSS-REFERENCE: 69.87^TECH

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^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 $^{\text{LRHY}}(69.87, ^{\text{RAIV}}, \$E(X, 1, 30), DA) = ""$ 2) = K $^{\text{LRHY}}(69.87, ^{\text{RAIV}}, \$E(X, 1, 30), DA)$ This xref is for the lab arrival time

69.87,12 RECEIVER 12;1 FREE TEXT

INPUT TRANSFORM: K:\$L(X)>99!(\$L(X)<1) X

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	В3945989
LRHY01	Value	В42068305
LRHY22	Value	B4209641
LRHY4X	Value	В60499659

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 B21719177 LRHYF1 Value B1996292 LRHYF4 Value B1996292 LRHYF4 Value B1258345 LRHYLS1 Value B9947241 LRHYPH0 Value B38997897 LRHYPH2 Value B9505821 LRHYPD Value B856379 LRHYT1 Value B12777188 LRHYU Value B3762458 LRHYU Value B3762458 LRHYUT Value B83020 LRHYUTL Value B160482				
LRHYB Value B41480183 LRHYBC1 Value B65673282 LRHYBC9 Value B188141 LRHYBL1 Value B5635430 LRHYBLD Value B58771394 LRHYDL Value B54493 LRHYFI Value B21719177 LRHYF2 Value B1996292 LRHYF4 Value B53704668 LRHYLX Value B1258345 LRHYLS1 Value B9947241 LRHYPHO Value B38997897 LRHYPL Value B12074115 LRHYPL Value B12074115 LRHYPL Value B9505821 LRHYPL Value B856379 LRHYTT Value B12777188 LRHYT1 Value B3762458 LRHYU Value B3762458 LRHYU Value B3020 LRHYUTL Value B83020 LRHYUTL Value B30020 LRHYUTL Value B30020 LRHYUTL Value B360482	LRHYA	Value	B29476770	
LRHYBC1 Value B188141 LRHYBL1 Value B187896 LRHYBLD Value B5635430 LRHYDL Value B58771394 LRHYED Value B54493 LRHYF1 Value B21719177 LRHYF2 Value B1996292 LRHYF4 Value B53704668 LRHYLX Value B1258345 LRHYLS1 Value B38997897 LRHYPHO Value B38997897 LRHYPL Value B12074115 LRHYPL Value B9505821 LRHYPL Value B856379 LRHYT1 Value B3165610 LRHYU Value B3762458 LRHYU Value B16774 LRHYU Value B116774 LRHYU5 Value B83020 LRHYUT1 Value B83020 LRHYUT1 Value B83020 LRHYUTL Value B83020 LRHYUTL Value B83020 LRHYUTL Value B160482	LRHYAFT	Value	В93475288	
LRHYBC9 Value B188141 LRHYBL1 Value B5635430 LRHYDEL Value B58771394 LRHYED Value B54493 LRHYF1 Value B21719177 LRHYF2 Value B1996292 LRHYF4 Value B53704668 LRHYLRX Value B9947241 LRHYPHO Value B388997897 LRHYPHO Value B12074115 LRHYPL Value B9505821 LRHYPL Value B856379 LRHYT1 Value B12777188 LRHYT1 Value B3762458 LRHYU Value B3762458 LRHYU Value B160482	LRHYB	Value	B41480183	
LRHYBLD Value B187896 LRHYDEL Value B5635430 LRHYDEL Value B58771394 LRHYED Value B54493 LRHYF1 Value B21719177 LRHYF2 Value B1996292 LRHYF4 Value B53704668 LRHYLRX Value B1258345 LRHYLS1 Value B38997897 LRHYPHO Value B38997897 LRHYPH2 Value B12074115 LRHYPL Value B9505821 LRHYPL Value B856379 LRHYT1 Value B856379 LRHYT1 Value B12777188 LRHYT2 Value B3165610 LRHYU Value B3762458 LRHYU4 Value B16774 LRHYU5 Value B83020 LRHYUTL Value B83020 LRHYUTL Value B160482	LRHYBC1	Value	B65673282	
LRHYBLD Value B58371394 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 LRHYPL Value B856379 LRHYT1 Value B3165610 LRHYU Value B3762458 LRHYU Value B16774 LRHYU4 Value B83020 LRHYU5 Value B83020 LRHYUT5 Value B83020 LRHYUTL Value B160482	LRHYBC9	Value	B188141	
LRHYDEL Value B58771394 LRHYED Value B54493 LRHYF1 Value B21719177 LRHYF2 Value B1996292 LRHYF4 Value B53704668 LRHYLRX Value B9947241 LRHYPH0 Value B38997897 LRHYPH2 Value B12074115 LRHYPL Value B9505821 LRHYPD Value B856379 LRHYPD Value B12777188 LRHYT1 Value B3762458 LRHYU Value B3762458 LRHYU4 Value B16774 LRHYU5 Value B83020 LRHYUTL Value B83020 LRHYUTL Value B160482	LRHYBL1	Value	B187896	
LRHYED Value B54493 LRHYF1 Value B21719177 LRHYF2 Value B1996292 LRHYF4 Value B53704668 LRHYLRX Value B9947241 LRHYPH0 Value B38997897 LRHYPH2 Value B12074115 LRHYPL Value B9505821 LRHYPOST Value B856379 LRHYT1 Value B12777188 LRHYT2 Value B3765610 LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B83020 LRHYUTL Value B160482	LRHYBLD	Value	B5635430	
LRHYF1 Value B1996292 LRHYF4 Value B53704668 LRHYLRX Value B1258345 LRHYLS1 Value B38997897 LRHYPH0 Value B12074115 LRHYPH2 Value B9505821 LRHYPL Value B856379 LRHYT1 Value B12777188 LRHYT2 Value B3165610 LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYDEL	Value	B58771394	
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	LRHYED	Value	B54493	
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 B16774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYF1	Value	B21719177	
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	LRHYF2	Value	B1996292	
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	LRHYF4	Value	B53704668	
LRHYPHO 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	LRHYLRX	Value	B1258345	
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	LRHYLS1	Value	В9947241	
LRHYPL Value B9505821 LRHYPOST Value B856379 LRHYT1 Value B12777188 LRHYT2 Value B3165610 LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYPH0	Value	в38997897	
LRHYPOST Value B856379 LRHYT1 Value B12777188 LRHYT2 Value B3165610 LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYPH2	Value	B12074115	
LRHYT1 Value B12777188 LRHYT2 Value B3165610 LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYPL	Value	В9505821	
LRHYT2 Value B3165610 LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYPOST	Value	В856379	
LRHYU Value B3762458 LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYT1	Value	B12777188	
LRHYU4 Value B116774 LRHYU5 Value B83020 LRHYUTL Value B160482	LRHYT2	Value	B3165610	
LRHYUT Value B83020 LRHYUTL Value B160482	LRHYU	Value	В3762458	
LRHYUTL Value B160482	LRHYU4	Value	B116774	
	LRHYU5	Value	В83020	
dana	LRHYUTL	Value	B160482	
done	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
ITEM: LRHY PATIENT CARD SCAN
                                     SYNONYM: SCAN
ITEM: LRHY PATIENT WAIT TIME
                                    SYNONYM: WAIT
ITEM: LRHY PHLEBOTOMY LOG
                                    SYNONYM: PL
ITEM: LRHY TRACK COLLECTION
                                    SYNONYM: TRAK
ITEM: LRHY SITE FILE EDIT
                                   SYNONYM: EDIT
TIMESTAMP OF PRIMARY MENU:
  UPPERCASE MENU TEXT: HOWDY MAIN MENU
NAME: LRHY HOWDY PPOC MAIN MENU
                                      MENU TEXT: HOWDY PPOC MAIN MENU
 TYPE: menu
                                      CREATOR: MANAGER, SYSTEM
DESCRIPTION: Howdy PPOC main menu.
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
                                    SYNONYM: IN SYNONYM: EDIT
ITEM: LRHY SCAN SPECIMENS INTO LAB
ITEM: LRHY SITE FILE 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)

TYPE: run routine CREATOR: MANAGER, SYSTEM

TYPE: run routine CREATOR: MANAGER, SYSTEM

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 COLLECTION MENU TEXT: TRACK COLLECTION

TYPE: run routine CREATOR: MANAGER, SYSTEM

DESCRIPTION: This option is used to display patient specimen collection

demographics.

ROUTINE: SINGLE^LRHYF1 UPPERCASE 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	
	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.	
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.	

Term	Definition	
SSN	Social Security Number	
TAT	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 health record used throughout the Department of Veterans Affairs medical system	
VistA 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

Printers

	Problem	Solution
1.	Accession labels do not print	• No orders for patient
		 Multiple orders
		 No printer assigned at sign on
		 Printer not connected to network
		 Card scanner not connected
		• Incompatible printer in use
2.	Order labels do not print	• Entry in Howdy Site File is not defined
		Wrong printer routine defined in Howdy Site File
		• Check solutions described in problem 1
		• Check order label field in Howdy Site File
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 REDACTED 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.