# Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Description</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2010</td>
<td>1.0</td>
<td>Initial version</td>
<td>CBeynon</td>
</tr>
<tr>
<td>July 2010</td>
<td>1.1</td>
<td>Added content</td>
<td>CBeynon</td>
</tr>
<tr>
<td>August 2010</td>
<td>1.2</td>
<td>Added content</td>
<td>LHarmon</td>
</tr>
<tr>
<td>August 2010</td>
<td>1.3</td>
<td>Prepared for release</td>
<td>CBeynon</td>
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<tr>
<td>August 2010</td>
<td>1.4</td>
<td>Added Blood Bank Clearance Statement</td>
<td>LHarmon</td>
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<tr>
<td>September 2010</td>
<td>1.5</td>
<td>Updates after review</td>
<td>CBeynon</td>
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<tr>
<td>October 2010</td>
<td>1.6</td>
<td>Changed dates to October</td>
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<tr>
<td>December 2010</td>
<td>1.7</td>
<td>Added content</td>
<td>LHarmon</td>
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<tr>
<td>December 2010</td>
<td>1.8</td>
<td>Changed days to January 2011 Fixed formatting</td>
<td>CBeynon</td>
</tr>
<tr>
<td>February 2011</td>
<td>1.9</td>
<td>• Changed dates to February 2011</td>
<td>CBeynon</td>
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<tr>
<td></td>
<td></td>
<td>• Made adjustments to the usage of <em>option</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Modified Introduction bullet points</td>
<td></td>
</tr>
<tr>
<td>April 2011</td>
<td>1.10</td>
<td>• Changed dates to April 2011</td>
<td>LHarmon</td>
</tr>
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<td></td>
<td></td>
<td>• Updates with IG</td>
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<tr>
<td>April 2011</td>
<td>1.11</td>
<td>• Changed dates to May 2011</td>
<td>CBeynon</td>
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<tr>
<td></td>
<td></td>
<td>• Added TL and DH updates (new checksums)</td>
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<tr>
<td>May 2011</td>
<td>1.12</td>
<td>• Added PMH updates</td>
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<tr>
<td></td>
<td></td>
<td>• Added updates from latest build t11</td>
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<td></td>
<td>• Updated Checksums</td>
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<tr>
<td>June 2011</td>
<td>1.13</td>
<td>• Changed dates to June 2011</td>
<td>CBeynon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated page 9: ‘IC’ to ‘I’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated page 36, #8: replace <em>is your best bet</em> with <em>works well for a majority of sites</em></td>
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<td>July 2011</td>
<td>1.14</td>
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<tr>
<td></td>
<td></td>
<td>• Added <strong>Note:</strong> 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.</td>
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<tr>
<td>August 2011</td>
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<td>• Changed dates to August 2011</td>
<td>CBeynon</td>
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<tr>
<td></td>
<td></td>
<td>• Updated with information for the release build</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Revision</td>
<td>Description</td>
<td>Author</td>
</tr>
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<td>-----------------</td>
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<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>September 2011</td>
<td>1.16</td>
<td>• Changed dates to September 2011</td>
<td>CBeynon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Changed dates to September 2011</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Changed BCE Compatible to Print at Point of Collection (PPOC) and BCE to PPOC</td>
<td></td>
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<tr>
<td>September 2011</td>
<td>1.17</td>
<td>• 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</td>
<td>LHarmon</td>
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<tr>
<td>October 2011</td>
<td>1.18</td>
<td>• Changed dates to October 2011</td>
<td>CBeynon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added note about Exclude Clinics</td>
<td></td>
</tr>
<tr>
<td>November 2011</td>
<td>1.19</td>
<td>• Changed dates to November 2011</td>
<td>CBeynon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated with information for the release build</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated with IG comments from MB</td>
<td></td>
</tr>
<tr>
<td>December 2011</td>
<td>1.20</td>
<td>• Changed dates to December 2011</td>
<td>CBeynon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated the Howdy Bot information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepped for national release</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated with info from DH</td>
<td></td>
</tr>
<tr>
<td>January 2012</td>
<td>1.21</td>
<td>• Changed dates to January 2012</td>
<td>CBeynon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated checksums</td>
<td></td>
</tr>
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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 system user logs in with unique access and verify codes

Dedicated PC for Howdy login

Two menus are presented to the Howdy user:
- Howdy
- Howdy PPOC
The user selects the appropriate menu, and selects menu option:
SCAN PATIENT CARD

Patient scans the VIC card with a scanner connected to the Howdy PC;
If no VIC card is available, the patient types the SSN on a dedicated keyboard

Howdy searches for lab orders according to the Howdy Site File

Howdy finds and accesses orders according to the Howdy Site File

Labels print in the order of accessioning with a blank spacer label separating each order

Patients are called to the phlebotomy area in the order of the printed labels

Patient specimens are collected and labeled accordingly

The collector scans the collector's identification label, as well as scans each collected bar code specimen label

Specimen tubes can be scanned again, once the specimens reach the testing laboratory

Howdy does not print accession labels at this time, but sends the patient's name to a common Bingo Board

Patients are called to the phlebotomy area according to the Bingo Board

Collector logs in to PRINT PPOC LABEL with collector's access and verify codes

Collector scans patient's armband, VIC card, or types in the patient's SSN via the keyboard

The patient's accessioned orders display on the screen for the collector to verify

The collector verifies each order and the labels are printed; The specimens are collected and labeled accordingly in the presence of the patient

Specimen tubes can be scanned, once the tubes reach the testing laboratory

The collector scans the UID on each tube, which stores the collector ID, and date and time of collection; The collector re-scans the patient VIC or wristband, which confirms the patient for this collection.
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)**

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME TITLE</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.86,.01</td>
<td>NAME</td>
<td>0;1</td>
<td>FREE TEXT (Required)</td>
</tr>
</tbody>
</table>

**CROSS REFERENCED BY:** NAME(B)

**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)

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 |
This field is used by code in the routine LRHYA

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
</table>

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)

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 (#61) (Multiply asked)
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**

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME TITLE</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.86,10</td>
<td>LABEL PRINTERS</td>
<td>10;0 POINTER</td>
<td>Multiple #69.863</td>
</tr>
<tr>
<td>69.863,.01</td>
<td>LABEL PRINTERS</td>
<td>0;1 POINTER TO DEVICE FILE (#3.5)</td>
<td>(Multiply asked)</td>
</tr>
</tbody>
</table>

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)="
This field is used by code in **LRHYBLD**

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

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

```
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: 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.

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)
```
This field is used by code in the routine **LRHYA**

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

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

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL</th>
<th>DATA</th>
</tr>
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<tbody>
<tr>
<td>TITLE</td>
<td>LOCATION</td>
<td>TYPE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>69.86,20</th>
<th>CHECK FOR PAST ORDERS (DAYS) 20;1 FREE TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPUT TRANSFORM:</strong></td>
<td>( K: $L(X) &gt; 3! ($L(X) &lt; 1) \times )</td>
</tr>
<tr>
<td><strong>LAST EDITED:</strong></td>
<td>FEB 04, 2011</td>
</tr>
<tr>
<td><strong>HELP-PROMPT:</strong></td>
<td>Answer must be 1-3 characters in length.</td>
</tr>
<tr>
<td><strong>DESCRIPTION:</strong></td>
<td>The number of days Howdy searches for orders in the past</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>69.86,25</th>
<th>ORDER LABEL TESTS 25;0 POINTER Multiple #69.8625</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.8625,.01</td>
<td>ORDER LABEL TESTS 0;1 POINTER TO LABORATORY TEST FILE (#60 ) (Multiply asked)</td>
</tr>
</tbody>
</table>

| **LAST EDITED:** | FEB 04, 2011 |
| **DESCRIPTION:** | The test which will print order labels. |

<table>
<thead>
<tr>
<th><strong>CROSS-REFERENCE:</strong></th>
<th>69.8625^B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>( S \ ^{LRHY(69.86, DA(1), 25, &quot;B&quot;, $E(X, 1, 30), DA)} = &quot; )</td>
</tr>
<tr>
<td>2</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
This field is used by code in **LRHYA**

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
</table>

| 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**

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
</table>

| 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.
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

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.86,54</td>
<td>BINGO BOARD DEVICE</td>
<td>54;0</td>
<td>POINTER Multiple #69.8654</td>
</tr>
<tr>
<td>69.8654,.01</td>
<td>BINGO BOARD DEVICE</td>
<td>0;1</td>
<td>POINTER TO DEVICE FILE (#3.5) (Multiply asked)</td>
</tr>
</tbody>
</table>

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

COLLECTION SAMPLE (#62)
```

```
FIELDS

COLLECTION SAMPLE (TO EXCLUDE): COLLECTION SAMP
```
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)

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL LOCATION</th>
<th>DATA TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.87, .01</td>
<td>SPECIMEN UID</td>
<td>0;1</td>
<td>FREE TEXT (Required)</td>
</tr>
<tr>
<td>Field Code</td>
<td>Field Name</td>
<td>Description</td>
<td>Last Edited</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>69.87^B</td>
<td>Initial Scan Time</td>
<td>This field contains the date and time a patient scans their VIC at the Howdy station.</td>
<td>Nov 09, 2010</td>
</tr>
<tr>
<td>69.87^SCAN</td>
<td>Time Labels Printed</td>
<td>This field contains the date and time the Phlebotomist prints the specimen labels.</td>
<td>Mar 01, 2009</td>
</tr>
<tr>
<td>69.87^LT</td>
<td>Collector</td>
<td>This field contains the name of the person who collects the specimen. Usually, this is the person who scanned their ID badge.</td>
<td>Nov 09, 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
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 24 HR 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
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.

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.

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)=""
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)

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)

69.86,32 GREETING 32;0 WORD-PROCESSING #69.8632
(IGNORE ")

(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 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)

69.86,52 DELETE SAME DAY 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 DEVICE 54;0 POINTER Multiple #69.8654
69.8654,.01 BINGO BOARD DEVICE 0;1 POINTER TO DEVICE FILE (#3.5)
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)

DESCRIPTION:
Used to run Howdy as a non human user.

FILES POINTED TO

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.

<table>
<thead>
<tr>
<th>DATA ELEMENT</th>
<th>NAME</th>
<th>GLOBAL</th>
<th>DATA LOCATION</th>
<th>TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>69.87,.01</th>
<th>SPECIMEN UID</th>
<th>0;1 FREE TEXT (Required)</th>
</tr>
</thead>
</table>

```
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)
```

<table>
<thead>
<tr>
<th>69.87,2</th>
<th>INITIAL SCAN TIME</th>
<th>2;1 DATE</th>
</tr>
</thead>
</table>
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 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):

Routines

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

<table>
<thead>
<tr>
<th>Checksum</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRHY0</td>
<td>B3945989</td>
</tr>
<tr>
<td>LRHY01</td>
<td>B42068305</td>
</tr>
<tr>
<td>LRHY22</td>
<td>B4209641</td>
</tr>
<tr>
<td>LRHY4X</td>
<td>B60499659</td>
</tr>
<tr>
<td>Symbol</td>
<td>Value</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>LRHYA</td>
<td>B29476770</td>
</tr>
<tr>
<td>LRHYAFT</td>
<td>B93475288</td>
</tr>
<tr>
<td>LRHYB</td>
<td>B41480183</td>
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<tr>
<td>LRHYBC1</td>
<td>B65673282</td>
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<td>LRHYBC9</td>
<td>B188141</td>
</tr>
<tr>
<td>LRHYBL1</td>
<td>B187386</td>
</tr>
<tr>
<td>LRHYBLD</td>
<td>B5635430</td>
</tr>
<tr>
<td>LRHYDEL</td>
<td>B58771394</td>
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<td>LRHYED</td>
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<td>LRHYF2</td>
<td>B1996292</td>
</tr>
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<td>LRHYF4</td>
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<td>LRHYLS1</td>
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<td>LRHYPH0</td>
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<td>LRHYPH2</td>
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<td>LRHYPL</td>
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<td>B12777188</td>
</tr>
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<td>B3165610</td>
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<td>LRHYU4</td>
<td>B116774</td>
</tr>
<tr>
<td>LRHYU5</td>
<td>B83020</td>
</tr>
<tr>
<td>LRHYUTL</td>
<td>B160482</td>
</tr>
</tbody>
</table>

done
Exported Menu Options

The following is a list of new menu options included in this patch:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRHY HOWDY PPOC MAIN MENU</td>
<td>menu</td>
</tr>
<tr>
<td>LRHY HOWDY MAIN MENU</td>
<td>menu</td>
</tr>
<tr>
<td>LRHY PPOC LABEL PRINT</td>
<td>action</td>
</tr>
<tr>
<td>LRHY PATIENT CARD SCAN</td>
<td>run routine</td>
</tr>
<tr>
<td>LRHY PATIENT CARD SCAN (PPOC)</td>
<td>run routine</td>
</tr>
<tr>
<td>LRHY PATIENT WAIT TIME</td>
<td>run routine</td>
</tr>
<tr>
<td>LRHY PHLEBOTOMY LOG</td>
<td>run routine</td>
</tr>
<tr>
<td>LRHY SCAN SPECIMENS INTO LAB</td>
<td>action</td>
</tr>
<tr>
<td>LRHY SITE FILE EDIT</td>
<td>run routine</td>
</tr>
<tr>
<td>LRHY TRACK COLLECTION</td>
<td>run routine</td>
</tr>
<tr>
<td>LRHY HOWDY BOT</td>
<td>action</td>
</tr>
</tbody>
</table>

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:

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
ITEM: LRHY SCAN SPECIMENS INTO LAB
SYNONYM: IN
ITEM: LRHY SITE FILE EDIT
SYNONYM: EDIT
TIMESTAMP: 62046,58901
TIMESTAMP OF PRIMARY MENU: 61947,39250

NAME: LRHY HOWDY BOT
MENU TEXT: LRHY SET HOWDY USER
TYPE: action
CREATOR: MANAGER, SYSTEM
ENTRY ACTION: D VET^LRHYAFT
TIMESTAMP OF PRIMARY MENU: 61417,56303

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

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
NAME: LRHY PATIENT CARD SCAN

TYPE: run routine

DESCRIPTION: This option initiates the Howdy process using the greeting from Howdy site file & prints labels.

ROUTINE: VET^LRHY0

NAME: LRHY PATIENT CARD SCAN (PPOC)

TYPE: run routine

DESCRIPTION: This option confirms Patient, displays accessioned tests and allows the Collector to choose test(s) actually collected.

ROUTINE: VET^LRHY01

NAME: LRHY PATIENT WAIT TIME

TYPE: run routine

DESCRIPTION: This option displays how long a Patient waits to have a sample drawn.

ROUTINE: LRHY4X

NAME: LRHY PHLEBOTOMY LOG

TYPE: run routine

DESCRIPTION: This is the log used to track the collector's phlebotomy performance times.

ROUTINE: LRHYPL

NAME: LRHY SCAN SPECIMENS INTO LAB

TYPE: action

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

NAME: LRHY SITE FILE EDIT

TYPE: run routine

LOCK: LRHYKEY

DESCRIPTION: This option enables the Keyholder to edit the Howdy site file.

ROUTINE: EDIT^LRHYU
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^LRHYFL1  UPPERCASE MENU TEXT: TRACK COLLECTION

Global Variables

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

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession</td>
<td>A sequential identifier made up of a number and a month/day/year</td>
</tr>
<tr>
<td>ADPAC</td>
<td>Automated Data Processing Application Coordinator</td>
</tr>
<tr>
<td>Bingo Board</td>
<td>Nickname given to an electronic monitor display board within the phlebotomy waiting area</td>
</tr>
<tr>
<td></td>
<td>It is used to notify patients that it is their turn to proceed to the phlebotomy lab</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> 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.</td>
</tr>
<tr>
<td>BOT</td>
<td>Cyber non-human proxy user</td>
</tr>
<tr>
<td>CAC</td>
<td>Clinical Application Coordinator</td>
</tr>
<tr>
<td>Class 1</td>
<td>Software produced inside of the Office of Enterprise Development (OED) organization</td>
</tr>
<tr>
<td>Class 3</td>
<td>Also known as Field Developed Software</td>
</tr>
<tr>
<td></td>
<td>Refers to all VHA software produced outside of the Office of Enterprise Development (OED) organization</td>
</tr>
<tr>
<td>CPRS</td>
<td>Computerized patient Record System</td>
</tr>
<tr>
<td>DOB</td>
<td>Date of Birth</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
</tr>
<tr>
<td>HCW</td>
<td>Health Care Worker</td>
</tr>
<tr>
<td>HIS</td>
<td>Hospital Information System</td>
</tr>
<tr>
<td>IEN</td>
<td>Internal Entry Number – A patient-specific Identifier</td>
</tr>
<tr>
<td>IRM</td>
<td>Information Resource Manager</td>
</tr>
<tr>
<td>LRHY</td>
<td>Namespace assigned to Howdy Computerized Phlebotomy Login Process by the Database Administrator</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>The process of drawing samples from patients for laboratory analysis</td>
</tr>
<tr>
<td>PII</td>
<td>Personally Identifiable Information</td>
</tr>
<tr>
<td>PPID</td>
<td>Positive Patient Identification</td>
</tr>
<tr>
<td>PPOC</td>
<td>Print at Point of Collection</td>
</tr>
<tr>
<td>Proxy User</td>
<td>A <em>non-human</em> 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.</td>
</tr>
<tr>
<td>RSD</td>
<td>Requirements Specification Document</td>
</tr>
<tr>
<td>Section 508</td>
<td>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.</td>
</tr>
</tbody>
</table>
### Term Definition

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSN</td>
<td>Social Security Number</td>
</tr>
<tr>
<td>TAT</td>
<td>Turn Around Time (patient time spent in phlebotomy)</td>
</tr>
<tr>
<td>UID</td>
<td>Unique Specimen Identifier</td>
</tr>
<tr>
<td>VA</td>
<td>Department of Veterans Affairs</td>
</tr>
<tr>
<td>VAMC</td>
<td>Department of Veterans Affairs Medical Center</td>
</tr>
<tr>
<td>VHA</td>
<td>Veterans Health Administration</td>
</tr>
<tr>
<td>VIC</td>
<td>Veteran’s Identification Card</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Accession labels do not print</td>
<td>• No orders for patient</td>
</tr>
<tr>
<td></td>
<td>• Multiple orders</td>
</tr>
<tr>
<td></td>
<td>• No printer assigned at sign on</td>
</tr>
<tr>
<td></td>
<td>• Printer not connected to network</td>
</tr>
<tr>
<td></td>
<td>• Card scanner not connected</td>
</tr>
<tr>
<td></td>
<td>• Incompatible printer in use</td>
</tr>
<tr>
<td>2. Order labels do not print</td>
<td>• Entry in Howdy Site File is not defined</td>
</tr>
<tr>
<td></td>
<td>• Wrong printer routine defined in Howdy Site File</td>
</tr>
<tr>
<td></td>
<td>• Check solutions described in problem 1</td>
</tr>
<tr>
<td></td>
<td>• Check order label field in Howdy Site File</td>
</tr>
<tr>
<td>3. Label type printing incorrectly</td>
<td>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).</td>
</tr>
<tr>
<td></td>
<td>• This field is a pointer to the DEVICE file (#3.5).</td>
</tr>
<tr>
<td></td>
<td>• Specific information and support pertaining to Lab Label printer configurations are detailed in the Lab patch descriptions: LR<em>5.2</em>161 and LR<em>5.2</em>218.</td>
</tr>
<tr>
<td>4. Specimen labels do not print</td>
<td>• No orders for patient</td>
</tr>
<tr>
<td></td>
<td>• Check that the date range agrees with the order date</td>
</tr>
<tr>
<td></td>
<td>• Check for exclusions in the Howdy Site File</td>
</tr>
<tr>
<td></td>
<td>a. Test exclusion</td>
</tr>
<tr>
<td></td>
<td>b. Status exclusion</td>
</tr>
<tr>
<td></td>
<td>c. Location exclusion</td>
</tr>
<tr>
<td></td>
<td>• Check that the printer name is correct in the device file</td>
</tr>
</tbody>
</table>
**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.