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*An Electronic Medical Record and Document Management Company*

# **iMDsoft CIS-DataBridge [DSIHB 1.1]**

## **INSTALLATION GUIDE**

# Installation Guide

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Version Number 1.1

Oct 2013

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This build contains the CIS-DataBridge components for the IMDSOFT Anesthesia Record Keeper (ARK) and Intensive Care Unit (ICU) applications. IMDSOFT can either be an ARK or an ICU application or they can be both. The build allows IMDSOFT ARK and/or ICU to send and receive HL7 messages and interface with Vista using the DSS VistA Gateway.

## Pre/Post-Installation Considerations

This build **requires** the following patches/builds:

DSIH 1.8 (or higher)\*.

\* DSIH 1.9 adds the ability to send BCMA and consult order messages. Without DSIH 1.9, those messages will not be sent.

For this build the installer will be prompted whether the site is a IMDsoft ARK, IMDsoft ICU or Both. Dependent upon the answer to the prompt will dictate the HL7 components that are setup. Unless ARK and/or ICU vendors are changing, then no special post-installation prompts apply. If ARK or ICU vendors are changing then the installer will be prompted to keep or replace the current vendor settings during installation.

A new prompt has been added that will ask the installer whether they want to use the Radiology 2.3 or Radiology 2.4 protocol based on the whether Radiology patch 47 (RA\*5\*47) is installed in the environment. If the site has not installed patch 47 then the installer will not be presented with this prompt and the post install process will use the Radiology 2.3 protocol.

### **\*\*NOTE\*\***

If the site is going to use Radiology 2.4 HL7 messaging (patch RA\*5\*47 has been installed) and this is an existing DataBridge site then the installer needs to unsubscribe the 'DSIHB DATABRIDGE RAD CLIENT' from the DSIH DATABRIDGE RAD SERVER' before performing the installation. Also the DSIH DATABRIDGE RAD ROUTER needs to be unsubscribed from the RA RPT 2.3 event protocol before performing the install.

Conversely, if the site is going to use Radiology 2.3 HL7 messaging (patch RA\*5\*47 has not been installed) and the site was utilizing RAD 2.3 HL7 messaging then unsubscribing DSIH DATABRIDGE RAD ROUTER 2.4 from the RA RPT 2.4 event protocol is required.

If this is an existing DataBridge site that is rolling back from 2.4 to 2.3 then the installer needs to unsubscribe the 'DSIHB DATABRIDGE RAD CLIENT' from the DSIH DATABRIDGE RAD SERVER' before performing the installation. Also the DSIH DATABRIDGE RAD ROUTER 2.4 needs to be unsubscribed from the RA RPT 2.4 event protocol before performing the install.

### **For Existing CIS-DataBridge Sites:**

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HL7 links should always be stopped before installing the DSIHC package. The pre/post installation will save off the link IP/Port settings, but to avoid message loss, the links themselves should be shut down.

There is a 'DSIH' Logical Link View that provides all of the IMDSOFT-specific CIS-DataBridge link names. Using the HL MONITOR option, enter a 'V' – Views, at the 'Select a Command:' prompt and then type 'DSIH' to view the DSIH logical links. The links are namespaced according to the following rule:

DSIHBApp and/or DSIHBlapp

B = Vendor specific character (B =IMDSOFT)

A = ARK and/or I = ICU

app = VistA application for messages (ADT=ADT, AL1=Allergies, PS=Pharmacy, etc)

### **For New CIS-DataBridge Sites:**

=====

The post-installation for new sites will preset the parameters and HL7 components required for processing, but link definitions (assigning ports and IP addresses) must be set up by the site.

IRM must assign the secondary menu option DSIHB VISTA GATEWAY and the DSIHH key allocations (DSIHH SAVLINK, DSIHH ICULINK, DSIHH ADMIN and DSIHH DATALINK) to the appropriate IMDSOFT users.

## **Installation Procedure**

This build may be installed with users on the system. It is recommended that users exit the CIS-DataBridge GUI while the install is taking place.

It is not necessary to disable any options in the DSIHB package. However, if this is an existing IMDSOFT CIS-DataBridge site and the installation is going to be queued to run after hours then do not queue the install to run when any of the following queues options may be executing

DSIHH HL7 MESSAGE PURGE

DSIHH AUTO CHECK LINKS

DSIHH HL7 STATUS UPDATE

Installation will take less than 1 minute to complete.

The pre-installation saves off the DSIHB logical link port/IP information for restoration after the install for existing sites. The post-install defines the IMDSOFT CIS-DataBridge parameters, sets up and/or verifies the HL7 events and protocols for all sites and restores the logical link information for existing sites.

### **Software Retrieval:**

The software is available from a DSS FTP directory. Sites will be provided the link, username and password to access the FTP site when they are authorized to install the software.

Below is a list of the files related to this package:

File Description	File Name	FTP Mode
CIS-DataBridge DSIHB zip file w/build	DSIHB_1_1.zip	(binary)

The DSIHB\_1\_1.zip file contains the following files:

File Name	Description
DSIHB_1_1.KID	KIDS file to install one KIDS build: DSIHB 1.1
DSIHB_1_1_ig.pdf	Installation guide
DSIHB_1_1_rn.pdf	Release notes

## 1. **LOAD TRANSPORT GLOBAL**

Retrieve the DSIHB\_1\_1.KID from the DSIHB\_1\_1.zip file.

Start up the Kernel Installation and Distribution System Menu  
[XPD MAIN]:

Edits and Distribution ...  
Utilities ...  
Installation ...

Select Kernel Installation & Distribution System Option: INStallation

---  
Load a Distribution  
Print Transport Global  
Compare Transport Global to Current System  
Verify Checksums in Transport Global  
Install Package(s)  
Restart Install of Package(s)  
Unload a Distribution  
Backup a Transport Global

Select Installation Option: LOAD a Distribution

----  
When prompted for "Enter a Host File:", enter the full directory path where the host file DSIHB\_1\_1.KID was saved.  
(e.g.,SYSSYSDEVICE:[ANONYMOUS]DSIHB\_1\_1.KID).

Enter a Host File: DSIHB\_1\_1.KID

KIDS Distribution saved on Oct 9, 2013@15:18:55

Comment: DSIHB 1.1

This Distribution contains Transport Globals for the following

Package(s):

Build DSIHB 1.1

Distribution OK!

Want to Continue with Load? YES//

Loading Distribution...

DSIHB 1.1

Use INSTALL NAME: DSIHB 1.1 to install this Distribution.

## **2. SELECT Optional INSTALLATION OPTION(s)**

On the Installation Menu, the following are OPTIONAL:

- a. Backup a Transport Global - This option will create a backup message of any routines exported with this patch. It will not backup any other changes such as DD's or templates.
- b. Compare Transport Global to Current System - This option will allow the installer to view all changes that will be made when this patch is installed. It compares all components of this patch (routines, DD's, templates, etc.).
- c. Verify Checksums in Transport Global - This option will allow the installer to ensure the integrity of the routines that are included the transport global.

## **3. INSTALL PACKAGE**

When prompted for Install Name, choose **DSIHB 1.1**

- a. Choose the **Install Package(s)** option to start the patch install.
- b. Install Questions for DSIHB 1.1

Want KIDS to Rebuild Menu Trees Upon Completion of Install? **NO//**

Want KIDS to INHIBIT LOGONs during the install? **NO//**

Want to DISABLE Scheduled Options, Menu Options, and Protocols? **NO//**

Enter the Device you want to print the Install messages.

You can queue the install by enter a 'Q' at the device prompt.

Enter a '^' to abort the install.

DEVICE: HOME// [or select device for output]

Install Started for DSIHB 1.1 :

Oct 9, 2013@16:19:47

Build Distribution Date: Oct 9, 2013

Installing Routines:

Oct 9, 2013@16:19:47

Running Pre-Install Routine: PRE^DSIHBPST

Installing PACKAGE COMPONENTS:

Installing HL LOGICAL LINK

Installing PROTOCOL

Installing OPTION

Oct 9, 2013@16:19:48

Running Post-Install Routine: EN1^DSIHBPST

Select one of the following:

A	ARK
I	ICU
B	Both

PRODUCT TYPE: **Both** [this is an example, please enter the correct type]

Select one of the following:

1	2.3
2	2.4

Please select your facility's current Radiology HL7 version: ?

Enter 1 for Radiology HL7 2.3 or 2 for Radiology HL7 2.4.

Select one of the following:

1	2.3
2	2.4

Please select your facility's current Radiology HL7 version: 2 2.4

DataBridge Protocols will be set up...



## Restoring HL Logical Links Port and IP Address Information

Vendor Name is listed as: iMDsoft

Product Type is listed as: ARK

Vendor and associated Product Type are NOT Stored in the Parameters file  
19670

### Updating iMDsoft Components

Product Type - ARK set up for Vendor - iMDsoft

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBAA DT 1

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBAA L1 2

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBALAB 3

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBARAD 6

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBASCH 7

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBAVITL 8

### Configuring iMDsoft CLIENT SIU SERVERS AND CLIENTS PROTOCOLS:

6796, DSIHB-ARK DATABRIDGE SIU-S12 CLIENT  
6797, DSIHB-ARK DATABRIDGE SIU-S13 CLIENT  
6798, DSIHB-ARK DATABRIDGE SIU-S14 CLIENT  
6799, DSIHB-ARK DATABRIDGE SIU-S15 CLIENT

### Configuring iMDsoft CLIENT Surgery MessagePROTOCOLS:

6800, DSIHB-ARK DATABRIDGE SURG ORU CLIENT

### Configuring iMDsoft CLIENT ORU SURGICAL PROTOCOLS:

6800, DSIHB-ARK DATABRIDGE SURG ORU CLIENT  
DSIHB-ARK DATABRIDGE SURG ORU CLIENT is already a Subscriber on DSIH  
DATABRIDGE SURG ORU SERVER

Configuring iMDsoft CLIENT ADT SERVERS AND CLIENTS PROTOCOLS:

6801,       DSIHB-ARK DATABRIDGE ADT-A01 CLIENT  
6802,       DSIHB-ARK DATABRIDGE ADT-A02 CLIENT  
6803,       DSIHB-ARK DATABRIDGE ADT-A03 CLIENT  
6804,       DSIHB-ARK DATABRIDGE ADT-A04 CLIENT  
6805,       DSIHB-ARK DATABRIDGE ADT-A08 CLIENT  
6806,       DSIHB-ARK DATABRIDGE ADT-A11 CLIENT  
6807,       DSIHB-ARK DATABRIDGE ADT-A12 CLIENT  
6808,       DSIHB-ARK DATABRIDGE ADT-A13 CLIENT

Configuring iMDsoft CLIENT LAB SERVER AND CLIENT PROTOCOLS:

6814,       DSIHB-ARK DATABRIDGE LAB CLIENT

Radiology Patch 47 is installed at this site

Based on the installers input the 2.4 RAD event was subscribed for  
DataBridge.

Configuring iMDsoft CLIENT RAD CLIENT 2.4 PROTOCOLS:

6809,       DSIHB-ARK DATABRIDGE RAD CLIENT

Configuring iMDsoft CLIENT VITALS CLIENT PROTOCOLS:

6810,       DSIHB-ARK DATABRIDGE VITALS CLIENT

Configuring iMDsoft CLIENT ALLERGY CLIENTS PROTOCOLS:

6811,       DSIHB-ARK DATABRIDGE ORU R01 AL1 CLIENT  
6812,       DSIHB-ARK DATABRIDGE ORU R01 ADAS CLIENT  
6813,       DSIHB-ARK DATABRIDGE ORU R01 ADREAC CLIENT

Deactivating iMDsoft Clients that are not needed

Setting menu DSIHB VISTA GATEWAY into menu tracker file 19672.1

Restoring HL Logical Links Port and IP Address Information

Vendor Name is listed as: iMDsoft

Product Type is listed as: ICU

Vendor and associated Product Type are NOT Stored in the Parameters file  
19670

Updating iMDsoft Components

Product Type - ICU set up for Vendor - iMDsoft

Logical Link view DSIH is PRESENT

Including logical links:     SEQ#  
                          DSIHBIA DT       1

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBIAL1 2

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBILAB 3

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBIIORD 4

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBIPS 5

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBIRAD 6

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBIVITL 8

Logical Link view DSIH is PRESENT  
Including logical links: SEQ#  
DSIHBIBCMA 9

Configuring iMDsoft CLIENT ADT SERVERS AND CLIENTS PROTOCOLS:

6815, DSIHB-ICU DATABRIDGE ADT-A01 CLIENT  
6816, DSIHB-ICU DATABRIDGE ADT-A02 CLIENT  
6817, DSIHB-ICU DATABRIDGE ADT-A03 CLIENT  
6818, DSIHB-ICU DATABRIDGE ADT-A04 CLIENT  
6819, DSIHB-ICU DATABRIDGE ADT-A08 CLIENT  
6820, DSIHB-ICU DATABRIDGE ADT-A11 CLIENT  
6821, DSIHB-ICU DATABRIDGE ADT-A12 CLIENT  
6822, DSIHB-ICU DATABRIDGE ADT-A13 CLIENT

Configuring iMDsoft CLIENT LAB SERVER AND CLIENT PROTOCOLS:

6824, DSIHB-ICU DATABRIDGE LAB CLIENT

Configuring iMDsoft CLIENT PS ORDER CLIENT PROTOCOLS:

6832, DSIHB-ICU DATABRIDGE PS CLIENT

Configuring iMDsoft CLIENT LAB ORDER PROTOCOLS:

6826, DSIHB-ICU DATABRIDGE ORM-O01 LAB ORDER CLIENT

Configuring iMDsoft CLIENT DIET ORDER PROTOCOLS:

6825,        DSIHB-ICU DATABRIDGE ORM-001 FH ORDER CLIENT

Configuring iMDsoft CLIENT RADIOLOGY ORDER PROTOCOLS:

6828,        DSIHB-ICU DATABRIDGE ORM-001 RAD ORDER CLIENT

Configuring iMDsoft CLIENT NURSING ORDER PROTOCOLS:

6827,        DSIHB-ICU DATABRIDGE ORM-001 NUR ORDER CLIENT

Based on the installers input the 2.4 RAD event was subscribed for DataBridge.

Configuring iMDsoft CLIENT RAD CLIENT 2.4 PROTOCOLS:

6833,        DSIHB-ICU DATABRIDGE RAD CLIENT

Configuring iMDsoft CLIENT VITALS CLIENT PROTOCOLS:

6834,        DSIHB-ICU DATABRIDGE VITALS CLIENT

Configuring iMDsoft CLIENT ALLERGY CLIENTS PROTOCOLS:

6831,        DSIHB-ICU DATABRIDGE ORU R01 AL1 CLIENT

6829,        DSIHB-ICU DATABRIDGE ORU R01 ADAS CLIENT

6830,        DSIHB-ICU DATABRIDGE ORU R01 ADREAC CLIENT

Deactivating iMDsoft Clients that are not needed

Updating Routine file...

Updating KIDS files...

DSIHB 1.1 Installed.

Oct 9, 2013@16:19:51

No link to PACKAGE file

NO Install Message sent

## Post-Installation Steps

1. On an existing IMDSOFT CIS-DataBridge site each logical link that was saved during the pre-install – IP address and port number defined – will be restored and their ‘State’ and ‘Autostart’ fields will be set to ‘Enabled’.
2. For new sites, assign the secondary menu option DSIHB VISTA GATEWAY to the appropriate IMDSOFT users, edit each Logical Link to add the correct IP and Port# and then start the link.
  - a. Adding the menu option can be accomplished via the Edit Existing Users option on the User Management menu.

- b. Allocating the key assignments can be accomplished via the Allocation of Security Keys option on the Key Management menu.
- c. Editing the IP/Port for the Logical Link can be accomplished via the 'HL EDIT LOGICAL LINKS' within the 'HL7 Main Menu' option. The procedures to perform this task are noted within the 'Logical Link edit' section below.
- d. Next start the link when messages are ready to be sent. This can be accomplished via 'START/STOP LINKS' within the 'HL7 Main Menu'. The procedures to perform this task are noted within the 'Enable Logical Link' section below

## **Logical Link edit:**

### **Do this for each IMDSOFT Logical link!**

From the HL7 Main Menu Option :

```

Systems Link Monitor
Filer and Link Management Options ...
Message Management Options ...
Interface Developer Options ...
Site Parameter Edit

```

Select HL7 Main Menu Option: Filer and Link Management Options

```

SM      Systems Link Monitor
FM      Monitor, Start, Stop Filers
LM      TCP Link Manager Start/Stop
SA      Stop All Messaging Background Processes
RA      Restart/Start All Links and Filers
DF      Default Filers Startup
SL      Start/Stop Links
PI      Ping (TCP Only)
ED     Link Edit
ER      Link Errors ...

```

Select Filer and Link Management Options Option: **ED** Link Edit

Select HL LOGICAL LINK NODE: **DSIHBAAL1**

HL7 LOGICAL LINK

---

NODE: DSIHBAAL1

INSTITUTION:

MAILMAN DOMAIN:

AUTOSTART: Enabled

QUEUE SIZE: 10

LLP TYPE: TCP [enter here for next page]

DNS DOMAIN:

COMMAND: Press <PF1>H for help    Insert

```

-----TCP LOWER LEVEL PARAMETERS-----
DSIHBAAL1

TCP/IP SERVICE TYPE: CLIENT (SENDER)
TCP/IP ADDRESS: 10.4.33.101
TCP/IP PORT: 1882
TCP/IP PORT (OPTIMIZED):

ACK TIMEOUT: 20                RE-TRANSMISION ATTEMPTS: 2
READ TIMEOUT: 2                EXCEED RE-TRANSMIT ACTION: restart
BLOCK SIZE:                    SAY HELO:
                                TCP/IP OPENFAIL TIMEOUT:
STARTUP NODE:                  PERSISTENT: NO
RETENTION: 30                  UNI-DIRECTIONAL WAIT:

-----

COMMAND:                        Press <PFl>H for help      Insert

```

## Enable Logical Link:

From the HL7 Main Menu Option :

```

Systems Link Monitor
Filer and Link Management Options ...
Message Management Options ...
Interface Developer Options ...
Site Parameter Edit

```

Select HL7 Main Menu Option: **Filer** and Link Management Options

```

SM      Systems Link Monitor
FM      Monitor, Start, Stop Filers
LM      TCP Link Manager Start/Stop
SA      Stop All Messaging Background Processes
RA      Restart/Start All Links and Filers
DF      Default Filers Startup
SL      Start/Stop Links
PI      Ping (TCP Only)
ED      Link Edit
ER      Link Errors ...

```

Select Filer and Link Management Options Option: **SL** Start/Stop Links

This option is used to launch the lower level protocol for the appropriate device. Please select the node with which you want to communicate

Select HL LOGICAL LINK NODE: **DSIHBAAL1**

The LLP was last shutdown on SEP 13, 2013 10:39:22.

This LLP has been enabled!

## Routine Summary

See DSIH\_1\_9\_tm.pdf for the full Technical Manual for this build.

The following is a list of the routine(s) included in this build.

The second line of each routine will look as follows.

;1.1;DATA BRIDGE;;Jan 11, 2011;Build 1

Before and after checksums are available for existing IMDSOFT CIS-DATABRIDGE sites running DSIHB 1.1. Some sites may be on a previous DSIHB build so the 'Before' checksums may not match. If this is a new IMDSOFT CIS-DATABRIDGE site then 'Before' checksums will not be available. There is no Patch list since this is a full build and not a patch.

Routine	Before Build	After Build
-----	-----	-----
DSIHB		224255
DSIHBIN		6086
DSIHPST		73680

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#### SUPPORT CONTACT INFORMATION

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HELP DESK (561) 284-7200

HOURS OF OPERATION 8:00 AM TO 7:00 PM (EST)

AFTER-HOURS SUPPORT (561) 284-7200 Option 1