An Electronic Medical Record and Document Management Company

PICIS CIS-DataBridge [DSIHD 1.3]

INSTALLATION GUIDE

Installation Guide

Version Number 1.3 **Aug 2013**

Table of Contents

This build contains the CIS-DataBridge components for the PICIS Anesthesia Record Keeper (ARK) and an Intensive Care Unit (ICU) application. It allows PICIS ARK and ICU applications 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.

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 'DSIHD 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 'DSIHD 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:
    ================================
HL7 links should always be stopped before installing the DSIHD 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 PICIS-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:

DSIHDapp
D = Vendor specific character (D =PICIS)
app = VistA application for messages (ADT=ADT, AL1=Allergies, PS=Pharmacy, etc)

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.

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 DSIHD VISTA GATEWAY and the DSIHH key allocations (DSIHH SAVLINK, DSIHH ICULINK, DSIHH ADMIN and DSIHH DATALINK) to the appropriate PICIS 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 DSIHD package. However, if this is an existing PICIS 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 DSIHD logical link port/IP information for restoration after the install for existing sites. The post-install defines the PICIS 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 DSIHD zip file w/build   DSIHD_1_3.zip      (binary)
```

The DSIHD_1_3.zip file contains the following files:

```
File Name               Description
------------------      --------------------------------------------
DSIHD_1_3.KID           KIDS file to install one KIDS build: DSIHD 1.3
DSIHD_1_3_ig.pdf        Installation guide
DSIHD_1_3_rn.pdf        Release notes
```

1. LOAD TRANSPORT GLOBAL

Retrieve the DSIHD_1_3.KID from the DSIHD_1_3.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 DSIHD_1_3.KID was saved.
  (e.g.,SYS$SYSDEVICE:[ANONYMOUS]DSIHD_1_3.KID).

 Enter a Host File: DSIHD_1_3.KID

 KIDS Distribution saved on Mar 22, 2013@13:23:04
 Comment: DSIHD 1.3

 This Distribution contains Transport Globals for the following
 Package(s):
 Build DSIHD 1.3
 Distribution OK!

 Want to Continue with Load? YES//

Loading Distribution...

    DSIHD 1.3
Use INSTALL NAME: DSIHD 1.3 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 **DSIHD 1.3**

  a. Choose the **Install Package(s)** option to start the patch install.

  b. Install Questions for DSIHD 1.3

      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 DSIHD 1.3 :
              Mar 22, 2013@13:03:47

Build Distribution Date: Mar 22, 2013

 Installing Routines:
              Mar 22, 2013@13:03:47

 Running Pre-Install Routine: PRE^DSIHDPST
Saving HL Logical Links Port and IP Address Information
  DSIHDADT    IEN: 323  Port: 1882 Addr: 10.4.33.101 Saved.
  DSIHDPS     IEN: 327  Port: 1992 Addr: 10.3.390.239 Saved.
```

```
  Installing PACKAGE COMPONENTS:

  Installing HL LOGICAL LINK

  Installing HL7 APPLICATION PARAMETER

  Installing PROTOCOL

  Installing OPTION
                Mar 22, 2013@13:03:48

  Running Post-Install Routine: EN1^DSIHDPST

      Select one of the following:

          A        ARK
          I        ICU
          B        Both
          O        Other

PRODUCT TYPE: Both



      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
  DSIHDADT    IEN: 323  Port: 1882 Addr: 10.4.33.101 Restored.
  DSIHDPS     IEN: 327  Port: 1992 Addr: 10.3.390.239 Restored.

Vendor Name is listed as: PICIS
Product Type is listed as: BOTH
```

```
Updating PICIS Components
Product Type - BOTH set up for Vendor – PICIS


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


      Logical Link view DSIH is PRESENT
   Including logical links:    SEQ#
            DSIHDAL1          2


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


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


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


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


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


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


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

Configuring PICIS CLIENT SIU SERVERS AND CLIENTS PROTOCOLS:
    6195,    DSIHD DATABRIDGE SIU-S12 CLIENT
    6196,    DSIHD DATABRIDGE SIU-S13 CLIENT
    6197,    DSIHD DATABRIDGE SIU-S14 CLIENT
    6198,    DSIHD DATABRIDGE SIU-S15 CLIENT
    6660,    DSIHD DATABRIDGE SIU-S17 CLIENT


Configuring PICIS CLIENT Surgery Message PROTOCOLS:
    6199,    DSIHD DATABRIDGE SURG ORU CLIENT


Configuring PICIS CLIENT ORU SURGICAL PROTOCOLS:
```

```
    6199,    DSIHD DATABRIDGE SURG ORU CLIENT

Configuring PICIS CLIENT ADT SERVERS AND CLIENTS PROTOCOLS:
    6200,    DSIHD DATABRIDGE ADT-A01 CLIENT
    6201,    DSIHD DATABRIDGE ADT-A02 CLIENT
    6202,    DSIHD DATABRIDGE ADT-A03 CLIENT
    6203,    DSIHD DATABRIDGE ADT-A04 CLIENT
    6204,    DSIHD DATABRIDGE ADT-A08 CLIENT
    6205,    DSIHD DATABRIDGE ADT-A11 CLIENT
    6206,    DSIHD DATABRIDGE ADT-A12 CLIENT
    6207,    DSIHD DATABRIDGE ADT-A13 CLIENT

Configuring PICIS CLIENT LAB SERVER AND CLIENT PROTOCOLS:
    6208,    DSIHD DATABRIDGE LAB CLIENT

Configuring PICIS CLIENT PS ORDER CLIENT PROTOCOLS:
    6209,    DSIHD DATABRIDGE PS CLIENT

Configuring PICIS CLIENT BCMA CLIENT PROTOCOLS:
    6583,    DSIHD DATABRIDGE BCMA CLIENT

Configuring PICIS CLIENT LAB ORDER PROTOCOLS:
    6211,    DSIHD DATABRIDGE ORM-O01 LAB ORDER CLIENT

Configuring PICIS CLIENT DIET ORDER PROTOCOLS:
    6210,    DSIHD DATABRIDGE ORM-O01 FH ORDER CLIENT

Configuring PICIS CLIENT RADIOLOGY ORDER PROTOCOLS:
    6213,    DSIHD DATABRIDGE ORM-O01 RAD ORDER CLIENT

Configuring PICIS CLIENT NURSING ORDER PROTOCOLS:
    6212,    DSIHD DATABRIDGE ORM-O01 NUR ORDER CLIENT

Radiology Patch 47 is installed at this site
Based on the installers input the 2.4 RAD event was subscribed for
DataBridge.

 Configuring PICIS CLIENT RAD CLIENT PROTOCOLS:
    6214,    DSIHD DATABRIDGE RAD CLIENT

Configuring PICIS CLIENT VITALS CLIENT PROTOCOLS:
    6215,    DSIHD DATABRIDGE VITALS CLIENT

Configuring PICIS CLIENT ALLERGY CLIENTS PROTOCOLS:
    6216,    DSIHD DATABRIDGE ORU R01 AL1 CLIENT
    6217,    DSIHD DATABRIDGE ORU R01 ADAS CLIENT
    6218,    DSIHD DATABRIDGE ORU R01 ADREAC CLIENT

Deactivating PICIS Clients that are not needed
```

```
    Updating Routine file...


    Updating KIDS files...


    DSIHD 1.3 Installed.
                 Mar 22, 2013@13:03:52


   No link to PACKAGE file


   NO Install Message sent
```

Post-Installation Steps

1. On an existing PICIS 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 DSIHD VISTA GATEWAY to the appropriate PICIS 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 PICIS 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: DSIHDADT
```

```
                          HL7 LOGICAL LINK
        ------------------------------------------------------------------

                  NODE: DSIHDADT

             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--------------------
                       DSIHDADT

     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 <PF1>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: **DSIHDADT**
The LLP was last shutdown on DEC 01, 2011 15:29:07.
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.
   ;;1.3;DATA BRIDGE;;Apr 6, 2012;Build 2

Before and after checksums are available for existing PICIS CIS-DATABRIDGE sites running DSIHD 1.3. Some sites may be on a previous DSIHD build so the 'Before' checksums may not match. If this is a new PICIS 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
--------  ------------  -----------
DSIHD                     224267
DSIHDIN                     6098
DSIHDPST                   73814
```

SUPPORT CONTACT INFORMATION

HELP   DESK (561) 284-7200
HOURS OF OPERATION 8:00 AM TO 7:00 PM (EST)
AFTER-HOURS SUPPORT (561) 284-7200 Option 1