DHCP

HEALTH LEVEL SEVEN

(HL7)

INSTALLATION GUIDE

Version 1.6

October 1995

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Resource Requirements

Minimum Versions Required

The following minimum package versions are required in order to install this version of DHCP HL7:

- Kernel V. 7.1
- VA FileMan V. 21.0
- VA MailMan V. 7.1
- OE/RR V. 2.5

Resource Consumption

- The ^HL global will consume approximately 17K of disk space for static file entries, and about 1K of disk space for every 10 entries in the HL7 MESSAGE TEXT file (#772).
- The ^HLCS global will consume approximately 50K of disk space for every 100 messages (500 byte average length) in the HL LOGICAL LINK (#870) file.
- The ^HLMA global will consume approximately 400 bytes for every 10 entries in the HL7 MESSAGE ADMINISTRATION file (#773).
- CPU usage is insignificant for a few links, but will increase linearly as more links are added.

Installation Instructions

This installation guide can be used to install the DHCP HL7 system into either a Test UCI (T) or a Production UCI (P) by following the steps in the table below. Users do not need to be off the system when installing this package if global placement (Step 1 below) is accomplished in advance. Installation will normally take 5 minutes or less.

Step	Description	UCI
1.	DSM: Disable journalling for HL* globals. MSM: Follow standard journalling practices.	T, P
2.	Check schedule for IVM and EDR background jobs (and any other applications that are using the DHCP HL7 V. 1.5 package). Reschedule for after install of V. 1.6.	T, P
3.	Global Placement: • If your site has never installed DHCP HL7 before, you must set the ^HL global to null and place it in the appropriate translation. • Whether or not your site has installed DHCP HL7 before, you must set the ^HLCS and ^HLMA globals to null and place them in the appropriate translation, then restart the configurations to activate translation. • READ/WRITE/DELETE access is recommended for all classes (system, world, group, and UCI or user, depending on OS). • It is recommended that the globals ^HL, ^HLCS, and ^HLMA be journaled.	T, P
4.	Sign into UCI where package is to be loaded. DSM: Logon into a standard partition. MSM: Logon into a 40k partition.	T, P
5.	Stop all V. 1.5 LLPs that are currently running. • Find tasks with a description of "HL7 Message Processor for XXX" (where XXX is the name of the Non-DHCP application). • Use the TaskMan User options [ZTMUSER] to request stopping of these tasks.	T, P
6.	Delete HLIN* routines.	T, P

Step	Description	UCI
7.	Load DHCP HL7 software tape. **D ^%RR** (See example on Page 7.)	T, P
8.	Run integrity routine(s). **D ^HLNTEG** *NOTE: Call your IRM Field Office if any routines fail the integrity routine.*	T, P
9.	Please insure that the variables DUZ and DUZ(0) are defined prior to attempting initialization. The initialization will abort if DUZ is not set to a valid user number and DUZ(0) does not equal "@". Additionally, the variables DT, DTIME, and U must be defined, and the variable DIRUT must not exist.	T, P
10.	Run the HLINIT routine to initialize the DHCP HL7 package files. **D ^HLINIT** (See example beginning on Page 8.)	T, P
11.	Add the HL7 MAIN MENU option to the menus of appropriate IRM staff. **D P^DI** (See example on Page 13.)	T, P
12.	Restart the V. 1.5 LLPs. • From the HL7 Main Menu [HL MAIN MENU] option, go to the V1.5 OPTIONS [HL MENU 1.5] submenu. • Use the Initiate Background Task option [HL TASK] to restart the LLPs that you stopped in Step 5.	T, P

Step	Description	UCI
13.	Start the incoming and outgoing filers. • From the HL7 Main Menu [HL MAIN MENU] option, go to the V1.6 OPTIONS [HL MENU 1.6] submenu. • Go to the Communications Server [HL COMMUNICATIONS SERVER] submenu. • Go to the Manage incoming and outgoing filers [HL MANAGE FILERS] submenu. • Choose the Start default number of incoming & outgoing filers [HL START DEFAULT FILERS] option.	T, P
14.	Delete the HLIN* routines.	T, P
15.	Move the HL* routines to all systems as necessary.	P
16.	Enable Journalling for HL* globals	T, P

NOTE: Examples of some of the above steps are provided on the following pages of this manual.

Installation Screen Examples

This section provides screen examples (as indicated in the table beginning on Page 3) for some of the steps in the Installation Instructions. For ease of reproduction, user input is both underlined and in boldface type.

Step 7. Load DHCP HL7 Software Tape

D ^%RR


```
Routine Restore

Input Device ?  > **Enter site-specific device name **

Restore All (A), Selected (S), or Confirm on overwrite (C) ? A

HLCHK       HLCS        HLCS1       HLCSDL      HLCSDL1     HLCSDL2     HLCSDR      HLCSDR1
HLCSDR2     HLCSFMN     HLCSFMN0    HLCSFMN1    HLCSHDR     HLCSIN      HLCSLNCH    HLCSMM
HLCSMM1     HLCSMON     HLCSMON1    HLCSORA1    HLCSORA2    HLCSORAT    HLCSOUT     HLCSQUE
HLCSQUE1    HLCSQUED    HLCSRE1     HLCSREP     HLCSREQ     HLCSRES     HLCSRQ      HLCSRV
HLCSTERM    HLCSUTL     HLCSUTL1    HLCSUTL2    HLDTIW01    HLDTIW02    HLDTIW03    HLDTIW04
HLDTIW05    HLDTIW2A    HLDTIW2B    HLDTIW2C    HLDTIWP0    HLDTIWP1    HLDTIWP2    HLDTIWP3
HLDTIWP4    HLDTIWP5    HLDTIWP6    HLDTIWU0    HLDTIWU1    HLDTIWU2    HLDTIWU3    HLDTIWU4
HLDTIWU5    HLFNC       HLFNC1      HLFNC2      HLFNC3      HLINI001    HLINI002    HLINI003
HLINI004    HLINI005    HLINI006    HLINI007    HLINI008    HLINI009    HLINI00A    HLINI00B
HLINI00C    HLINI00D    HLINI00E    HLINI00F    HLINI00G    HLINI00H    HLINI00I    HLINI00J
HLINI00K    HLINI00L    HLINI00M    HLINI00N    HLINI00O    HLINI00P    HLINI00Q    HLINI00R
HLINI00S    HLINI00T    HLINI00U    HLINI00V    HLINI00W    HLINI00X    HLINI00Y    HLINI00Z
HLINI010    HLINI011    HLINI012    HLINI013    HLINI014    HLINI015    HLINI016    HLINI017
HLINI018    HLINI019    HLINI01A    HLINI01B    HLINI01C    HLINI01D    HLINI01E    HLINI01F
HLINI01G    HLINI01H    HLINI01I    HLINI01J    HLINI01K    HLINI01L    HLINI01M    HLINI01N
HLINI01O    HLINI01P    HLINI01Q    HLINI01R    HLINI01S    HLINI01T    HLINI01U    HLINI01V
HLINI01W    HLINI01X    HLINI01Y    HLINI01Z    HLINI020    HLINI021    HLINI022    HLINI023
HLINI024    HLINI025    HLINI026    HLINI027    HLINI028    HLINI029    HLINI02A    HLINI02B
HLINI02C    HLINI02D    HLINI02E    HLINI02F    HLINI02G    HLINI02H    HLINI02I    HLINI02J
HLINI02K    HLINI02L    HLINI02M    HLINI02N    HLINI02O    HLINI02P    HLINI02Q    HLINI02R
HLINI02S    HLINI02T    HLINI02U    HLINI02V    HLINI02W    HLINI02X    HLINI02Y    HLINIS
HLINIT      HLINIT1     HLINIT2     HLINIT3     HLINIT4     HLINIT5     HLLM        HLLM1
HLLP        HLMA        HLMA0       HLMA1       HLMA2       HLNTEG      HLNTEG0     HLONI001
HLONI002    HLONI003    HLONI004    HLONI005    HLONI006    HLONI007    HLONI008    HLONI009
HLONI010    HLONI011    HLONIT      HLONIT1     HLONIT2     HLONIT3     HLPOST      HLPOST16
HLPOSTQ     HLPRE16     HLSERV      HLTASK      HLTF        HLTF0       HLTF1       HLTP
HLTP0       HLTP01      HLTP1       HLTP2       HLTPCK1     HLTPCK1A    HLTRANS     HLUOPT
HLUOPT1     HLUTIL1     HLUTIL2     HLUTIL3

220 routines
```

Step 10. Initialization

NOTE: This example assumes that your site previously installed DHCP HL7 V. 1.5.

```
>D ^HLINIT

This version (#1.6) of 'HLINIT' was created on 13-SEP-1995
        (at ALBANY CAMPUS DEVELOPMENT, by VA FileMan V.21.0)

I AM GOING TO SET UP THE FOLLOWING FILES:

   101       PROTOCOL  (Partial Definition)
Note:  You already have the 'PROTOCOL' File.

   770       HL7 NON-DHCP APPLICATION PARAMETER
Note:  You already have the 'HL7 NON-DHCP APPLICATION PARAMETER' File.

   771       HL7 APPLICATION PARAMETER
*BUT YOU ALREADY HAVE 'HL7 DHCP APPLICATION PARAMETER' AS FILE #771!
Shall I change the NAME of the file to HL7 APPLICATION PARAMETER? NO// YES

   771       HL7 APPLICATION PARAMETER
Note:  You already have the 'HL7 APPLICATION PARAMETER' File.

   771.1     HL7 FIELD  (including data)
Note:  You already have the 'HL7 FIELD' File.
I will OVERWRITE your data with mine.

   771.2     HL7 MESSAGE TYPE  (including data)
Note:  You already have the 'HL7 MESSAGE TYPE' File.
I will OVERWRITE your data with mine.

   771.3     HL7 SEGMENT TYPE  (including data)
*BUT YOU ALREADY HAVE 'HL7 SEGMENT NAME' AS FILE #771.3!
Shall I change the NAME of the file to HL7 SEGMENT TYPE? NO// YES

   771.3     HL7 SEGMENT TYPE  (including data)
Note:  You already have the 'HL7 SEGMENT TYPE' File.
I will OVERWRITE your data with mine.

   771.4     HL7 DATA TYPE  (including data)
Note:  You already have the 'HL7 DATA TYPE' File.
I will OVERWRITE your data with mine.

   771.5     HL7 VERSION  (including data)
Note:  You already have the 'HL7 VERSION SUPPORTED' File.
I will OVERWRITE your data with mine.
```

Step 10. Initialization

```
771.6     HL7 MESSAGE STATUS  (including data)
Note:  You already have the 'HL7 MESSAGE STATUS' File.
I will OVERWRITE your data with mine.

771.7     HL7 ERROR MESSAGE  (including data)
Note:  You already have the 'HL7 ERROR MESSAGE' File.
I will OVERWRITE your data with mine.

   771.8     HL7 STANDARD  (including data)
Note:  You already have the 'HL7 STANDARD' File.
I will OVERWRITE your data with mine.

   772       HL7 MESSAGE TEXT
*BUT YOU ALREADY HAVE 'HL7 TRANSMISSION' AS FILE #772!
Shall I change the NAME of the file to HL7 MESSAGE TEXT? NO// YES

   772       HL7 MESSAGE TEXT
Note:  You already have the 'HL7 MESSAGE TEXT' File.

   773       HL7 MESSAGE ADMINISTRATION
Note:  You already have the 'HL7 MESSAGE ADMINISTRATION' File.

   779.001   HL7 EVENT TYPE CODE  (including data)
Note:  You already have the 'HL7 EVENT TYPE CODE' File.
I will OVERWRITE your data with mine.

   779.002   HL7 ACKNOWLEDGMENT CODE  (including data)
Note:  You already have the 'HL7 ACKNOWLEDGMENT CODE' File.
I will OVERWRITE your data with mine.

   779.003   HL7 ACCEPT/APPLICATION ACK CONDITION  (including data)
Note:  You already have the 'HL7 ACCEPT/APPLICATION ACK CONDITION' File.
I will OVERWRITE your data with mine.

   779.004   COUNTRY CODE  (including data)
Note:  You already have the 'COUNTRY CODE' File.
I will OVERWRITE your data with mine.

   869.1     HL LOWER LEVEL PROTOCOL TYPE  (including data)
Note:  You already have the 'HL LOWER LEVEL PROTOCOL TYPE' File.
I will MERGE your data with mine.

   869.2     HL LOWER LEVEL PROTOCOL PARAMETER
Note:  You already have the 'HL LOWER LEVEL PROTOCOL PARAMETER' File.

   869.3     HL COMMUNICATION SERVER PARAMETERS
Note:  You already have the 'HL COMMUNICATION SERVER PARAMETERS' File.

   870       HL LOGICAL LINK
Note:  You already have the 'HL LOGICAL LINK' File.

SHALL I WRITE OVER FILE SECURITY CODES? No// <RET> (No)
NOTE: This package also contains INPUT TEMPLATES
      SHALL I WRITE OVER EXISTING INPUT TEMPLATES OF THE SAME NAME? Yes// <RET>
(Yes)
```

Step 10. Initialization

```
NOTE: This package also contains OPTIONS
      SHALL I WRITE OVER EXISTING OPTIONS OF THE SAME NAME? Yes// <RET> (Yes)

ARE YOU SURE EVERYTHING'S OK? No// YES

Starting Pre-Init
Pre-Init Finished

...EXCUSE ME, I'M WORKING AS FAST AS I CAN....................................
.............................................................................
......................................................

Compiling Cross-Reference(s)  of File 101.

...SORRY, THIS MAY TAKE A FEW MOMENTS...

'ORD11' ROUTINE FILED.
'ORD12' ROUTINE FILED.
'ORD13' ROUTINE FILED.
'ORD14' ROUTINE FILED.
'ORD15' ROUTINE FILED.
'ORD16' ROUTINE FILED.
'ORD17' ROUTINE FILED.
'ORD18' ROUTINE FILED.
'ORD19' ROUTINE FILED.
'ORD110' ROUTINE FILED.
'ORD111' ROUTINE FILED.
'ORD112' ROUTINE FILED.
'ORD1' ROUTINE FILED......................................................
......
'HL CLEAR COMMUNICATIONS ERROR' Option Filed
'HL CLEAR QUEUE' Option Filed
'HL COMMUNICATIONS SERVER' Option Filed
'HL COPY QUEUE ENTRY' Option Filed
'HL CRE/ED QUEUE TEST ENTRY' Option Filed
'HL CUSTOM REPORT' Option Filed
'HL EDIT APPL PARAM' Option Filed
'HL EDIT COMM SERVER PARAMETERS' Option Filed
'HL EDIT SITE PARAM' Option Filed
'HL FILER MONITOR' Option Filed
'HL INTERFACE WORKBENCH' Option Filed
'HL MAIN MENU' Option Filed
'HL MANAGE FILERS' Option Filed
'HL MENU 1.5' Option Filed
'HL MENU 1.6' Option Filed
'HL MESSAGE MONITOR' Option Filed
'HL MESSAGE REQUEUER' Option Filed
'HL MS SERVER' Option Filed
'HL PRINT APPL PARAM' Option Filed
'HL PRINT DATA TYPE' Option Filed
'HL PRINT FAILED TRANS' Option Filed
'HL PRINT FIELDS' Option Filed
'HL PRINT MENU' Option Filed
'HL PRINT MSG TYPE' Option Filed
'HL PRINT PENDING TRANS' Option Filed
'HL PRINT SEGMENT' Option Filed
'HL PRINT SITE PARAM' Option Filed
```

Step 10. Initialization

```
'HL PRINT VERSION' Option Filed
'HL PURGE TRANSMISSIONS' Option Filed
'HL QUEUE MANAGEMENT' Option Filed
'HL SERVER' Option Filed
'HL SHOW COMMUNICATIONS ERROR' Option Filed
'HL START' Option Filed
'HL START DEFAULT FILERS' Option Filed
'HL START ONE INCOMING FILER' Option Filed
'HL START ONE OUTGOING FILER' Option Filed
'HL STOP' Option Filed
'HL STOP ALL INCOMING FILERS' Option Filed
'HL STOP ALL OUTGOING FILERS' Option Filed
'HL STOP ONE INCOMING FILER' Option Filed
'HL STOP ONE OUTGOING FILER' Option Filed
'HL TASK' Option Filed
'HL TRANSMISSION LOG' Option Filed
'HL V16 SERVER' Option Filed..
NO SECURITY-CODE PROTECTION HAS BEEN MADE

Initial entry in HL COMMUNICATION SERVER PARAMETER file
(#869.3) has been created.




This version of 'HLONIT' was created on 13-SEP-1995
        (at ALBANY CAMPUS DEVELOPMENT, by OE/RR V.2.5)


    PROTOCOL INSTALLATION

...OK, this may take a while, hold on please..................................
..............................................
'HL CS/RQ - DESELECT MESSAGES' Protocol Filed
'HL CS/RQ - SELECT MESSAGES' Protocol Filed
'HL CS/RQ - VIEW MESSAGE' Protocol Filed
'HL CS/RQ MENU - SCREEN 2' Protocol Filed
'HL DT/IW - ACTIVATE/INACTIVATE APPLICATION' Protocol Filed
'HL DT/IW - AI FOR SCREEN 1' Protocol Filed
'HL DT/IW - BLANK 1' Protocol Filed
'HL DT/IW - BLANK 2' Protocol Filed
'HL DT/IW - BLANK 3' Protocol Filed
'HL DT/IW - CA FOR SCREEN 1' Protocol Filed
'HL DT/IW - CC FOR SCREEN 4' Protocol Filed
'HL DT/IW - CL FOR SCREEN 2' Protocol Filed
'HL DT/IW - CREATE APPLICATION' Protocol Filed
'HL DT/IW - CREATE CLIENT PROTOCOL' Protocol Filed
'HL DT/IW - CREATE LOGICAL LINK' Protocol Filed
'HL DT/IW - CREATE SERVER PROTOCOL' Protocol Filed
'HL DT/IW - CS FOR SCREEN 3' Protocol Filed
'HL DT/IW - DA FOR SCREEN 1' Protocol Filed
'HL DT/IW - DC FOR SCREEN 4' Protocol Filed
'HL DT/IW - DELETE APPLICATION' Protocol Filed
'HL DT/IW - DELETE CLIENT PROTOCOL' Protocol Filed
'HL DT/IW - DELETE LOGICAL LINK' Protocol Filed
'HL DT/IW - DELETE SERVER PROTOCOL' Protocol Filed
'HL DT/IW - DL FOR SCREEN 2' Protocol Filed
```

Step 10. Initialization

```
'HL DT/IW - DS FOR SCREEN 3' Protocol Filed
'HL DT/IW - EA FOR SCREEN 1' Protocol Filed
'HL DT/IW - EC FOR SCREEN 4' Protocol Filed
'HL DT/IW - EDIT APPLICATION' Protocol Filed
'HL DT/IW - EDIT CLIENT PROTOCOL' Protocol Filed
'HL DT/IW - EDIT LOGICAL LINK' Protocol Filed
'HL DT/IW - EDIT SERVER PROTOCOL' Protocol Filed
'HL DT/IW - EL FOR SCREEN 2' Protocol Filed
'HL DT/IW - ES FOR SCREEN 3' Protocol Filed
'HL DT/IW - JUMP TO APPLICATION (SCREEN 1)' Protocol Filed
'HL DT/IW - JUMP TO CLIENT (SCREEN 4)' Protocol Filed
'HL DT/IW - JUMP TO LINK (SCREEN 2)' Protocol Filed
'HL DT/IW - JUMP TO NEXT APP (SCREEN 1)' Protocol Filed
'HL DT/IW - JUMP TO NEXT CLIENT (SCREEN 4)' Protocol Filed
'HL DT/IW - JUMP TO NEXT LINK (SCREEN 2)' Protocol Filed
'HL DT/IW - JUMP TO NEXT SERVER (SCREEN 3)' Protocol Filed
'HL DT/IW - JUMP TO NEXT SERVER (SCREEN 5)' Protocol Filed
'HL DT/IW - JUMP TO PREVIOUS APP (SCREEN 1)' Protocol Filed
'HL DT/IW - JUMP TO PREVIOUS CLNT (SCREEN 4)' Protocol Filed
'HL DT/IW - JUMP TO PREVIOUS LINK (SCREEN 2)' Protocol Filed
'HL DT/IW - JUMP TO PREVIOUS SRVR (SCREEN 3)' Protocol Filed
'HL DT/IW - JUMP TO PREVIOUS SRVR (SCREEN 5)' Protocol Filed
'HL DT/IW - JUMP TO SERVER (SCREEN 3)' Protocol Filed
'HL DT/IW - JUMP TO SERVER (SCREEN 5)' Protocol Filed
'HL DT/IW - REBUILD SCREEN 1' Protocol Filed
'HL DT/IW - REBUILD SCREEN 2' Protocol Filed
'HL DT/IW - REBUILD SCREEN 3' Protocol Filed
'HL DT/IW - REBUILD SCREEN 4' Protocol Filed
'HL DT/IW - REBUILD SCREEN 5' Protocol Filed
'HL DT/IW - REMOVE SUBSCRIPTION' Protocol Filed
'HL DT/IW - RS FOR SCREEN 5' Protocol Filed
'HL DT/IW - S2 FOR SCREEN 5' Protocol Filed
'HL DT/IW - SHOW CLIENT PROTOCOLS' Protocol Filed
'HL DT/IW - SHOW LOGICAL LINKS' Protocol Filed
'HL DT/IW - SHOW SERVER PROTOCOLS' Protocol Filed
'HL DT/IW - SUBSCRIBE' Protocol Filed
'HL DT/IW - SUBSCRIBE TO SERVER' Protocol Filed
'HL DT/IW MENU - SCREEN 1' Protocol Filed
'HL DT/IW MENU - SCREEN 2' Protocol Filed
'HL DT/IW MENU - SCREEN 3' Protocol Filed
'HL DT/IW MENU - SCREEN 4' Protocol Filed
'HL DT/IW MENU - SCREEN 5' Protocol Filed


OK, Protocol Installation is Complete.


'HL INTERFACE WORKBENCH - 1' List Template...Filed.
'HL INTERFACE WORKBENCH - 2' List Template...Filed.
'HL INTERFACE WORKBENCH - 3' List Template...Filed.
'HL INTERFACE WORKBENCH - 4' List Template...Filed.
'HL INTERFACE WORKBENCH - 5' List Template...Filed.
'HL MESSAGE REQUEUER - 1' List Template...Filed.
'HL MESSAGE REQUEUER - 2' List Template...Filed.
'HL MESSAGE REQUEUER - 3' List Template...Filed.


Select output device for file conversion: HOME// <RET>  LAT
```

Step 10. Initialization

- File conversions started on 13-SEP-95 @ 06:39:31 -

Copying entries from HL7 NON-DHCP APPLICATION PARAMETER file (#770)
to HL7 APPLICATION PARAMETER file (#771)

Purging data from HL7 MESSAGE TEXT file (#772)
....

Converting newly defined fields in HL7 MESSAGE TEXT file (#772) ...

- File conversions completed on 13-SEP-95 @ 06:39:51 -

>

Step 11. Add The HL7 Main Menu

>**D P^DI**

VA FileMan 21

Select OPTION: **ENTER** OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: OPTION// **19**   OPTION   (3071 entries)
EDIT WHICH FIELD: ALL// **MENU**
     1   MENU   (multiple)
     2   MENU TEXT
CHOOSE 1-2: **1**
   EDIT WHICH MENU SUB-FIELD: ALL// **<RET>**
THEN EDIT FIELD: **<RET>**

Select OPTION NAME: **EVE**   System Manager Menu
Select ITEM: **HL MAIN MENU**   HL7 Main Menu
   ARE YOU ADDING 'HL MAIN MENU' AS A NEW MENU (THE 9TH FOR THIS OPTION)? **Y**
  (YES)
   MENU SYNONYM: **<RET>**
  SYNONYM: **<RET>**
  DISPLAY ORDER: **<RET>**
Select ITEM: **^**

Select OPTION NAME: **<RET>**

Select OPTION: **<RET>**
>