A Guide To

HL7 Integration Identification

INTRODUCTION

This guide is prepared to help to:

- Identify if any HL7 Integration existing for the client.
- Which type of Communication methods used to Transmit/Receive HL7 data?
- Identify Service commands to start/stop/restart HL7 Sender/Receiver.

Identify if HL7 is in use

It can be identified by checking the Database tables. Following is the list of tables which may contain records if any HL7 interface is working in outbound or inbound. List given below containing the table names with the column names to check recent value. You can sort result in descending order to view most recent datetime stamp of record. If this is live interface then it must of recent date records.

Table Name	**Column name to check recent value** (view result in descending order)	**Type**	**Comments**
tblathenaposts	fldDateTimeCreated	Inbound	Used is very old interfaces like DedhamEye, BSC_ASC, Tufts etc.
hl7_received	saved_on	Inbound	Used for most of interfaces.
hl7_received_forum	saved_on	Inbound	Used on Tufts.
hl7_sent	saved_on sent_on sftp_sent_on	Outbound	Used for most of interfaces.
hl7_sent_forum	saved_on sent_on	Outbound	Used on Tufts.
hl7_interface_messages_in	saved_on	Inbound	Used on berkeleyEye only for now.
hl7_interface_messages_out	saved_on	Outbound	Used on berkeleyEye only for now.

If any of these tables don't have any data, it means, HL7 Integration done for this Database.

Which type of Communication Method used?

OUTBOUND INTERFACE CONFIGURATION

For this answer, practice configuration file need to be checked. If HL7 Integration is in use (which you idenfied from previous step, then you will definitely find some of these variables.

Variables given below sets the outbound method for created HL7 messages. Variable "OUTBOUND_HL7_DIR" can be found having some path value, so created message can be placed in a directory. This is called File Based outbound system. Local directory can also be mapped with some network location to put message on other system.

```
define("OUTBOUND_HL7_DIR",
$webserver_root.'/data/'.PRACTICE_PATH.'/HL7_OUTBOUND');
```

Variable "SSH_OUTBOUND" can be found there if outbound configured is SFTP method.

```
$GLOBALS["SSH_OUTBOUND"]      =
array('domainIP'=>'000.00.00.00','port'=>'22','path'=>'dirName/dir2','user'
=>'userName','pass'=>'password');
```

Variable "HL7_SENDER" can be found configured, if outbound method selected is TCP/IP. You can find the destination IP and PORT values there.

```
$GLOBALS['HL7_SENDER'] = array('IP'=>'0.0.0.0', 'PORT'=>'0000',
'ACK_WAIT'=>10);
```

Variable "HL7_SENDER_ARRAY" can be found configured, if outbound method selected is TCP/IP and for each message type, there is different destination detail.

```
$GLOBALS['HL7_SENDER_ARRAY'] = array('DFT'=>array('IP'=>'10.11.150.17',
'PORT'=>'12205', 'ACK_WAIT'=>15),'ADT'=>array('IP'=>'18.101.204.161',
'PORT'=>'49203', 'ACK_WAIT'=>15));
```

INBOUND INTERFACE CONFIGURATION

Variable "INBOUND_HL7_DIR" can be found set if iMW configured to receive HL7 from text file a directory. This is called File Based inbound system.

```
define("INBOUND_HL7_DIR",$webserver_root.'/data/'.PRACTICE_PATH.'/HL7_INBOUND');
define("HL7_READ_EXTENSION", 'txt');
```

Variable "SSH_INBOUND" can be found set if inbound method selected is SFTP based.

```
$GLOBALS["SSH_INBOUND"]=array('domainIP'=>'X.X.X.X','port'=>'22','path'=>'dirpath','user'=>'un','pass'=>'pw');
```

Variable "LISTENING_IP" can be found set if inbound method selected is TCP/IP. "HL7_LISTENING" is another array which is configured if multiple listening ports configured.

```
define('LISTENING_IP','0.0.0.0');
$GLOBALS['HL7_LISTENING'][0]['PORT'] = '43001';
$GLOBALS['HL7_LISTENING'][1]['PORT'] = '43002';
```

IDENTIFY SERVICE COMMANDS

On Linux boxes, we have to make service commands using bash scripting. Some bash files are created for convenience.

TCP/IP

{iDoc}/hl7sys/receiver/hl7receiver – This triggers the TCP/IP inbound interface.
Syntax: `hl7receiver {start|stop|restart} {practice_name}`
Example value: `hl7receiver restart iDoc`

{iDoc}/hl7sys/sender/hl7sender – This triggers the TCP/IP outbound interface.
Syntax: `hl7sender {start|stop|restart} {practice_name}`
Example value: `hl7sender restart iDoc`

SFTP

{iDoc}/hl7sys/sftp/hl7-sftpreceiver – This triggers the SFTP inbound interface.
Syntax: `hl7-sftpreceiver {start|stop|restart} {practice_name}`
Example value: `hl7-sftpreceiver restart iDoc`

{iDoc}/hl7sys/sftp/hl7-sftpsender – This triggers the SFTP outbound interface.
Syntax: `hl7-sftpsender {start|stop|restart} {practice_name}`
Example value: `hl7-sftpsender restart iDoc`

DIRECTORY/FILE BASED

{iDoc}/hl7sys/old/data_receiver/hl7receiverFiles – This triggers directory read program.
Syntax: `hl7receiverFiles {start|stop|restart} {practice_name}`
Example value: `hl7receiverFiles restart iDoc`

For outbound file based interface, no service need to set. If `"OUTBOUND_HL7_DIR"` path is set, message files will be created automatically as soon message is formed.

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