

SecureFlow Pro™
HL7 Integration Process

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HL7 Integration Process

This document covers the integration process for companies looking to utilize the Remote Operations SecureFlow Pro™ platform for the exchange of HL7 messages.

All messages coming from the SecureFlow Pro system will be marked as *SFConnect* in the sending application segment.

There are four phases that make up the integration/implementation process. These are:

- Message Selection and Specification Validation
- Interface Adjustments
- Interface and Client Acceptance Testing
- Go Live

Message Selection and Specification Validation

Prior to starting any integration, the client's system must select the messages that it will use to send and receive HL7 information. The messages can be ADT/MDM, ORU/ORM, etc. After the message types have been selected, the next step is to verify what messages need to be exchanged.

Sample Message Exchange

Prior to entering the Interface Adjustments phase of the integration, the client's vendor must submit example messages that it expects to send and receive so they may be validated against the SecureFlow Pro specification.

A Remote Operations representative will send example messages generated by the SecureFlow Pro system.

Once the sample messages are exchanged, the interface adjustments are identified and coded.

Interface Adjustments

The SecureFlow Pro system strictly adheres to the HL7 version 2.3 specification at its core. However it is able to adjust to non-standard HL7 implementations. These adjustments are made to the interface portion of the engine and are client system specific.

Examples of such adjustments are:

- Pagination when not supported by the receiving system
- Maximum number of characters per OBX data segment
- Sending just the person code, name or both when referring to a person in a segment

Examples are not limited to the above items. They are merely representative of past adjustments.

Coding of the interface adjustments is made during a process that involves message testing. It is important for a representative of the client's software vendor be available to ensure that the adjustments meet the requirements of their system.

Interface and Client Acceptance Testing

The interface and client acceptance testing process typically takes three weeks to complete. It can be reduced, but only if the necessary testing is completed in time. The three weeks takes into account delays due to time zone differences, holidays, weekends and employee schedules.

Prior to going live the following items must be tested.

- HL7Coupler installation parameters
 - IP address
 - Port
 - Encryption key
- Client system message sent to SecureFlow Pro system and associated acknowledgement
 - Success ACK (AA)
 - Failure ACK (AE)
 - Verify the message reaches the SecureFlow Pro schedule system
- Unique record identification
 - Verify that the unique record is being used for all messages
 - Patient demographic (if used)
 - Exam order (if used)
- SecureFlow Pro message sent to client system and associated acknowledgement
 - Success ACK (AA)
 - Failure ACK (AE)
- Preliminary and final report testing
 - Verify preliminary reports are sent to client
 - Verify final report (LA) replaces preliminary reports
- Final report layout on client system
 - Verify pagination
 - Verify digital signature block (if used)

The client must be available to record or send example audio files so that the entire transcription process can be tested. Test patients must be created (whether in the live system or in a test environment).

Go Live

After the testing period has completed and the client has signed off on the successful integration, the SecureFlow Pro system is placed in production mode. The client's software vendor must be available during the go live period to ensure smooth system performance.

If a problem occurs during the go live phase, an action plan will be quickly developed and the necessary changes will be made. There is typically no reason to go from production back to test mode if the testing phase has been completed. If reports need to be regenerated with the new adjustments, they will be sent to the client system as usual.

A follow up meeting will take place to identify any adjustments that need to be made long term. At this point the system goes into an ongoing maintenance phase and is handed over to the technical operations group with Remote Operations.

Revision History

| Date | Version | Author | Notes |
|-------------|----------------|------------------|---------------|
| 8/9/2004 | 0.1 | Richard Bagdonas | Draft Version |
| 10/10/2005 | 1.0 | Richard Bagdonas | Final Version |