PACS Scan

HL7 Implementation Statement

ENG-PS-HL7IS-REVE

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Documentation Notice

Revision History

Date	Revision	Authors	Description
16 DEC 2010	A	Chris Barnett	New
12 SEP 2011	B	Todd Wysuph	Updates
15 APR 2016	C	Lev Weisfeiler	Reviewed, rebranding
03 OCT 2018	D	Andrew Robinson	Rebranded with new corporate information
23 OCT 2023	E	Tammy Matthews	Rebranded for Hyland Software, Inc. Minor formatting updates.

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Introduction

The purpose of this document is to communicate to interested vendors and customers the HL7 feature set supported by the PACS Scan product (hereinafter, “PACS Scan”). PACS Scan allows users to scan documents, capture video, import images from cameras, import JPEG/AVI/MPEG and other file formats to any PACS/EHR. PACS Scan has the ability to notify, via an HL7 message, the availability of a study that it has sent successfully to a DICOM archive or repository. The PACS Scan HL7 implementation described herein can easily be changed and configured to meet the needs of each individual customer.

Communication Support

Protocols

Minimal Lower Layer Protocol (MLLP)

PACS Scan supports the HL7 minimal lower layer protocol for the framing of HL7 messages for transmission over TCP/IP. The default characters used by PACS Scan are:

- Start character: hex <0B>
- End character: hex <1C><0D>

Connection Initiation

PACS Scan can only be configured as a client. It is the responsibility of PACS Scan to maintain the connection to the information system.

Acknowledgements

PACS Scan supports both Original and Enhanced mode acknowledgment messages.

Messages

PACS Scan is a highly configurable application that enables the user to configure and send any HL7 message.

Z-Segments

PACS Scan fully supports the processing and sending of any HL7 Z-segment.

HL7 Messages

PACS Scan provides complete processing of any HL7 message segment and accompanying fields.

Segment/Field Mappings

The segments and fields presented in this section demonstrate a typical set of fields that PACS Scan would generate for an outbound HL7 message. Please note that the PACS Scan field mappings can be easily modified to reflect the need for any receiving PACS or EHR.

MSH Segment

Sequence	Optional	Name	Comment
1	R	Field Separator	Default “|”
2	R	Encoding Characters	
3	O	Sending Application	
4	O	Sending Facility	
5	O	Receiving Application	
6	O	Receiving Facility	
7	R	Date/Time of Message	
8	O	Security	
9	R	Message Type	
10	R	Message Control ID	Uniquely identifies this message
11	R	Processing ID	
12	R	Version ID	

Example

```
MSH|^~\&|PACSGEAR|DERM|EPIC|MERCY|2003121115483||OMG^O19|1071186519.0|P|2.3.1
```

PID Segment

Sequence	Optional	Name	Comment
3	R	Internal Patient ID	MRN
5	R	Patient Name	
7	O	Date/Time of Birth	
8	O	Patient Sex	

Example

```
PID|||18021830||SMITH^JANE^C||19710810|M
```

PV1 Segment

Sequence	Optional	Name	Comment
2	R	Patient Class	Indicates inpatient, outpatient
3		Assigned Patient Location	
19		Visit Number	Epic installs, this is the encounter#

Example

```
PV1||O|ADM^^^^REG|||||||||||||||||||01038074
```

ORC Segment

Sequence	Optional	Name	Comment
1	R	Order Control	
3	R	Filler Order Number	Accession number
4	R	Universal Service ID	
5	O	Order Status	
7	O	Quantity/Timing	
12	O	Ordering Provider	

Example

```
ORC|SC||01038074||SC||^^^20030821073000^^R^^^^|||||^A P THOMAS|
```

BR Segment

Sequence	Optional	Name	Comment
3	R	Filler Order Number	Accession number
4	R	Universal Service ID	Use the exam code and procedure description
7	O	Observation Date/Time	
16	O	Ordering Provider	

Sequence	Optional	Name	Comment
20	O	Filler Field #1	
21	O	Filler Field #2	
22	O	Result Report Status Change Date/Time	Upload date/time
25	O	Result Status	
31	O	Reason For Study	
32	O	Principal Results Interpreter	

Example

```
OBR|||01038074|EXAMCODE^PROCEDURE
DESCRIPTION^PACS|||20030821073000|||||||||^A P
THOMAS||||||20030821073000|||F||||||DIGITAL PHOTOS|CAB342
```

OBX Segment

Sequence	Optional	Name	Comment
1	O	Set ID – OBX	
2	O	Value Type	
3	O	Observation Identifier	
5	O	Observation Value	

Example

```
OBX|1|TX|&GDT||DIGITAL PHOTO
```


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