Management Summary in the DICOM Conformance Statement

Balaji Pandipotla
Philips Healthcare
Technical Specialist
Bangalore, India

Co-Author:
Satish Viswanathan
Senior Software Engineer

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Philips Healthcare
Technical Specialist
Bangalore, India

Co-Author:
Satish Viswanathan
Senior Software Engineer
Management Summary in the DCS

Introduction
DCS Overview – Chapter 1
Networking – Chapter 4
Management Summary
Dataflow Diagrams
Overview Table
Conclusions
DICOM Conformance Statements

• No compact system overview for the end user
• Do not give a clear picture of the system’s capabilities
• Information is scattered across several sections in different chapters
The DCS Overview has

- A brief description of the system
- A Table for Supported Network Services
- A Table for Media services

Table 1: Network Services

<table>
<thead>
<tr>
<th>SOP Class</th>
<th>UID</th>
<th>User of Service (SCU)</th>
<th>Provider of Service (SCP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verification SOP Class</td>
<td>1.2.840.10008.1.1</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Print Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Grayscale Print Management Meta SOP Class</td>
<td>1.2.840.10008.5.1.1.9</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>&gt;Basic Film Session SOP Class</td>
<td>1.2.840.10008.5.1.1.1</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>&gt;Printer SOP Class</td>
<td>1.2.840.10008.5.1.1.16</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>&gt;Basic Film Box SOP Class</td>
<td>1.2.840.10008.5.1.1.2</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>&gt;Basic Grayscale Image Box SOP Class</td>
<td>1.2.840.10008.5.1.1.4</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Query/Retrieve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Root QR Information Model - FIND SOP Class</td>
<td>1.2.840.10008.5.1.4.1.2.1.1</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Study Root QR Information Model - FIND SOP Class</td>
<td>1.2.840.10008.5.1.4.1.2.2.1</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Patient Root QR Information Model - MOVE SOP Class</td>
<td>1.2.840.10008.5.1.4.1.2.1.2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Study Root QR Information Model - MOVE SOP Class</td>
<td>1.2.840.10008.5.1.4.1.2.2.2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Transfer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grayscale Softcopy Presentation State Storage SOP Class</td>
<td>1.2.840.10008.5.1.4.1.1.11.1</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MR Image Storage SOP Class</td>
<td>1.2.840.10008.5.1.4.1.1.4</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
• The chapter “Networking” gives a functional description of the AEs

• Real-world DICOM activities are defined, along with supported SOPs & Transfer Syntaxes as SCP/SCU

• DICOM knowledge is a pre-requisite to comprehend the DCS document
The Management Summary will be a new sub-section in the Overview chapter.

- **Dataflow Diagrams**
  - Description of system’s capabilities vis-à-vis DICOM services

- **Overview Table**
  - Configuration parameters for the services and Links to the corresponding sections

This summary is a high level overview of the DCS
Dataflow Diagrams

System → RIS
- Worklist Query
- MPPS

System → Acquisition Modality/Workstation
- Export
- Storage Commitment
- Query/Retrieve Images
- Import

Dataflow Diagrams (cont’d..)
A block diagram depicting the System’s media capabilities
The above table briefly the user about the SCU/SCP capabilities of the system with respect to various DICOM services. The table also has the references to the corresponding chapters.

<table>
<thead>
<tr>
<th>DICOM Service</th>
<th>AE Title</th>
<th>Role (SCU/SCP)</th>
<th>Port</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Export</td>
<td>PACS_AE</td>
<td>SCU/SCP</td>
<td>Configurable</td>
<td>Chapter 4.2.1.3.6</td>
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<tr>
<td>MPPS</td>
<td>MPPS_AE</td>
<td>SCP</td>
<td>3011</td>
<td>Chapter 4.2.1.3.3</td>
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<tr>
<td>Worklist Query</td>
<td>MWL_AE</td>
<td>SCP</td>
<td>3010</td>
<td>Chapter 4.2.1.3.2</td>
</tr>
<tr>
<td>Storage Commitment</td>
<td>STRC_AE</td>
<td>SCP</td>
<td>105</td>
<td>Chapter 4.2.1.3.7</td>
</tr>
<tr>
<td>Print</td>
<td>PRINT_AE</td>
<td>SCP</td>
<td>Configurable</td>
<td>Chapter 4.2.2.3.1</td>
</tr>
</tbody>
</table>
Management Summary

• Simplifies the DICOM Conformance Statement
• High level perspective of the system, without delving too much into the technical specificities
• Ready reckoner for FSEs while addressing Field issues
• Helps the reader to get a clear picture of the system’s capabilities in a hospital environment
References

http://dicom.nema.org/
Authors Contacts

Balaji Pandipotla
balaji.pandipotla@philips.com

Satish Viswanathan
Satish.viswanathan@philips.com

Philips Innovation Campus, Bengaluru

Thank you for your attention!