



DICOM Validation Tool Conformance Statement

Version 2.1
03 June 2005

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Revision History

Revision	Date	Reason for Change
2.0	20 May 2005	Initial Draft for DVT 2.0.49.
2.1	03 June 2005	Updated version number for DVT release 2.1.

1. Introduction

1.1 Scope and Audience

This document is a DICOM Conformance Statement for the DICOM Validation Tool (DVT). DVT is intended to provide a means to allow DICOM interfaces to be validated and tested. DVT is programmed using a simple scripting language and can play the role of either SCU or SCP in the test. DVT can also be used as a Storage SCU/SCP Emulator, Print SCP Emulator or to validate Media Stored Files.

A certain level of DICOM expertise is needed to get the most out of DVT. DVT includes a full on-line help facility and the release package contains a User Guide [1], together with a number of examples that will assist the User in becoming more familiar with DVT's capabilities.

NOTE: *It is very important to read and understand the DVT User Guide to be fully aware of DVT's capabilities.*

Because of the programmability of DVT, many of its capabilities and responses are dependent on the scripts being run. In order for DVT to be able to test a system's response to error conditions, it is expected that at time DVT will generate or accept DICOM messages that do not conform to the DICOM standard.

This document has been written using the guidelines provided in the DICOM Standard [2 – part 2].

1.2 References

- [1] DICOM Validation Tool (DVT) – User Guide.
(Provided as part of the DVT release package)
- [2] ACR/NEMA Standards Publications, No PS3, 2004
DICOM Standards -
Part 1 - Introduction,
Part 2 - Conformance
Part 3 - Information Object Definitions,
Part 4 - Service Class Specifications,
Part 5 - Data Structures and Encoding,
Part 6 - Data Dictionary,
Part 7 - Message Exchange,
Part 8 - Network Communication Support,
Part 10 - Media Storage and File Format for Media Interchange,
Part 11 - Media Storage Application Profiles,
Part 12 - Media Formats and Physical Media for Media Interchange,
Part 14 – Grayscale Standard Display Function,
Part 15 – Security Profiles,
Part 16 – Content Mapping Resource,
& various supporting Supplements.

1.3 Acronyms and Abbreviations

The following symbols and abbreviations are used in this conformance statement:

ACC:	American College of Cardiology
ACR:	American College of Radiology
AE:	Application Entity
ANSI:	American National Standard Institute
DICOM:	Digital Imaging and Communications in Medicine
DIMSE:	DICOM Message Service Element
ELE:	Explicit VR Little Endian
EBE:	Explicit VR Big Endian
FSR:	File-Set Reader
ILE:	Implicit VR Little Endian
IOD:	Information Object Definition
NEMA:	National Electrical Manufacturers Association
PDU:	Protocol Data Unit
RIS:	Radiology Information
RWA:	Real World Activity
SCP:	Service Class Provider
SCU:	Service Class User
SOP:	Service-Object Pair
TCP/IP:	Transmission Control Protocol/Internet Protocol
UID:	Unique Identifier

2. Implementation Model

DVT is a software tool used to validate DICOM connections from both SCU and SCP devices (DVT can therefore take the role of SCP or SCU). A full description of how DVT can be programmed to perform the validation of various DICOM SOP Classes is defined in [1].

Definition Files (See [1]) are used to provide DVT with the knowledge needed to validate messages.

DVT provides the following functionality:

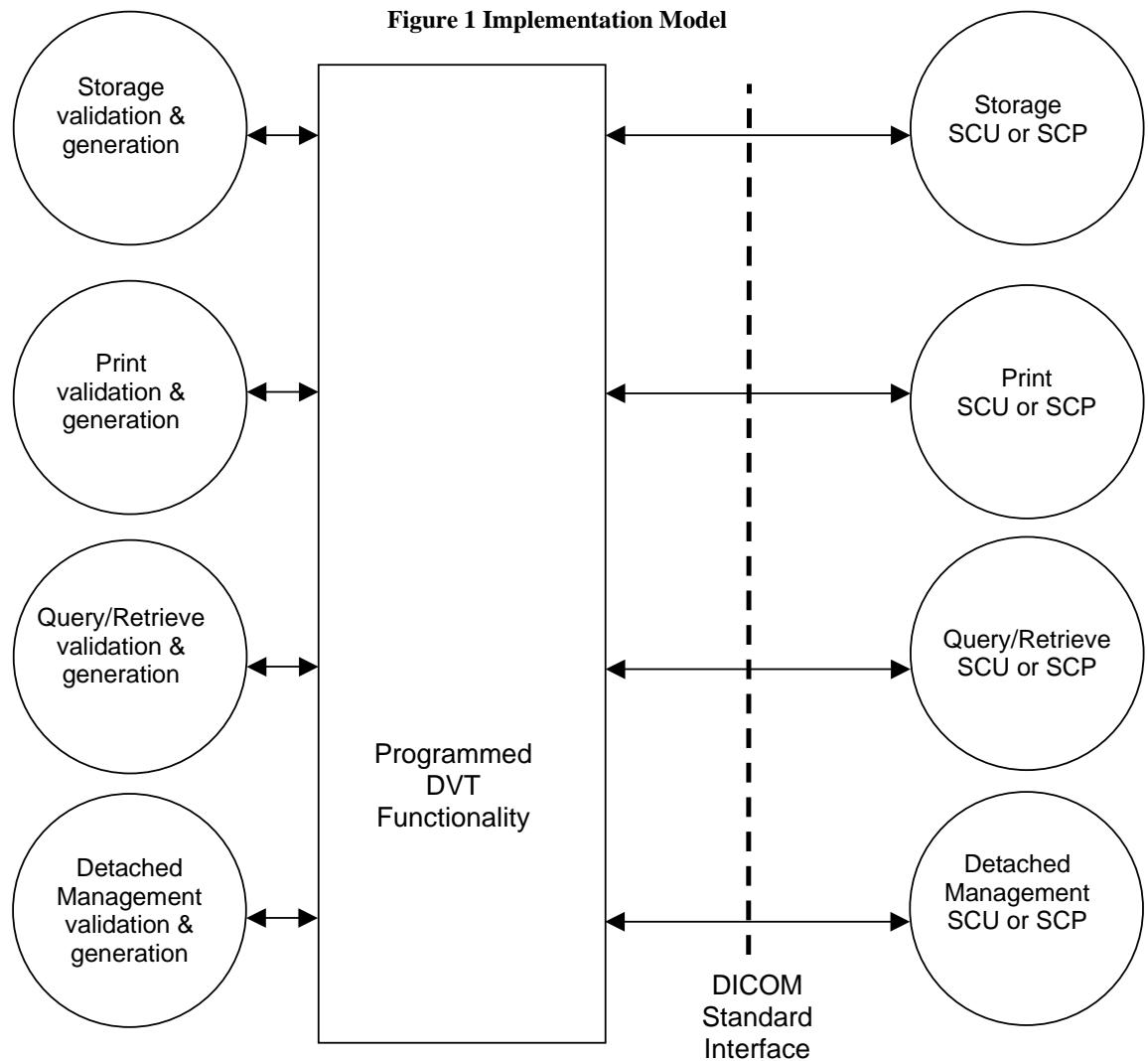
- SCU for Storage SOP Classes – DVT can be programmed to generate image instances and send them to the SCP. DVT will validate the responses.
- SCP for Storage SOP Classes – DVT can be programmed to receive and validate image instances from a SCU. The relationship between the image instances, based on Patient's Name, Patient ID, Study Instance UID and Series Instance UID, is determined. The image instances can either be stored in DICOM Media [Part 10] format or "raw" dataset format.
- SCU Emulator for Storage SOP Classes – DVT can be started as an SCU Storage device. The User selects Media Files to send to Storage SCP.
- SCP Emulator for Storage SOP Classes – DVT can be started as the SCP Storage device. DVT continually listens to the configured TCP/IP port for connections for the Storage SOP Classes. Image instances are validated in the same manner as the programmed Storage SCP.
- SCP Emulator for Storage Commitment SOP Class PUSH Model – works standalone or in conjunction with the SCP Emulator for Storage SOP Classes. DVT continually listens to the configured TCP/IP port for connections for the Storage Commitment SOP Class. DVT maintains a list of each storage instance received and flags any being committed for storage. DVT will then respond with a storage commitment event report.
- SCU for Print Management (Meta) SOP Classes – DVT can be programmed to generate film session instances and send the normalised objects to the SCP. Support for the optional Print Management SOP Classes is available. DVT will validate the responses.
- SCP for Print Management (Meta) SOP Classes – DVT can be programmed to receive and validate film session instances from a SCU. The order in which the normalised objects will be sent to DVT must be known (and programmed) in advance.
- SCP Emulator for Print Management (Meta) SOP Classes – DVT can be started as the SCP Print device. DVT continually listens to the configured TCP/IP port for connections for Print Management Meta SOP Classes. Film session instances are validated in the same manner as the programmed Print SCP. Various Printer Status (Info) attribute values are supported by DVT to allow the SCU behavior to be tested.
- SCU for Patient Root, Study Root & Patient/Study Only Query/Retrieve Information Models FIND, GET, MOVE – DVT can be programmed to generate query/retrieve instances and send them to the SCP. DVT will validate the responses.
- SCP for Patient Root, Study Root & Patient/Study Only Query/Retrieve Information Models FIND, GET, MOVE – DVT can be programmed to validate the query/retrieve instances from a SCU and generate responses.
- SCU for Detached Management (Meta) SOP Classes – DVT can be programmed to receive SCP events and generate queries.
- SCP for Detached Management (Meta) SOP Classes – DVT can be programmed to generate events and handle SCU queries.
- SCU for Modality Worklist Information Model FIND – DVT can be programmed to generate query instances and send them to the SCP. DVT will validate the responses.
- SCP for Modality Worklist Information Model FIND – DVT can be programmed to validate Query instances from a SCU and generate responses.
- SCU for Modality Performed Procedure Step – DVT can be programmed to generate performed procedure step instances and send them to the SCP. DVT will validate the responses.
- SCP for Modality Performed Procedure Step – DVT can be programmed to validate performed procedure step instances from a SCU and generate responses.
- SCU for Storage Commitment – DVT can be programmed to generate storage commitment instances and send them to

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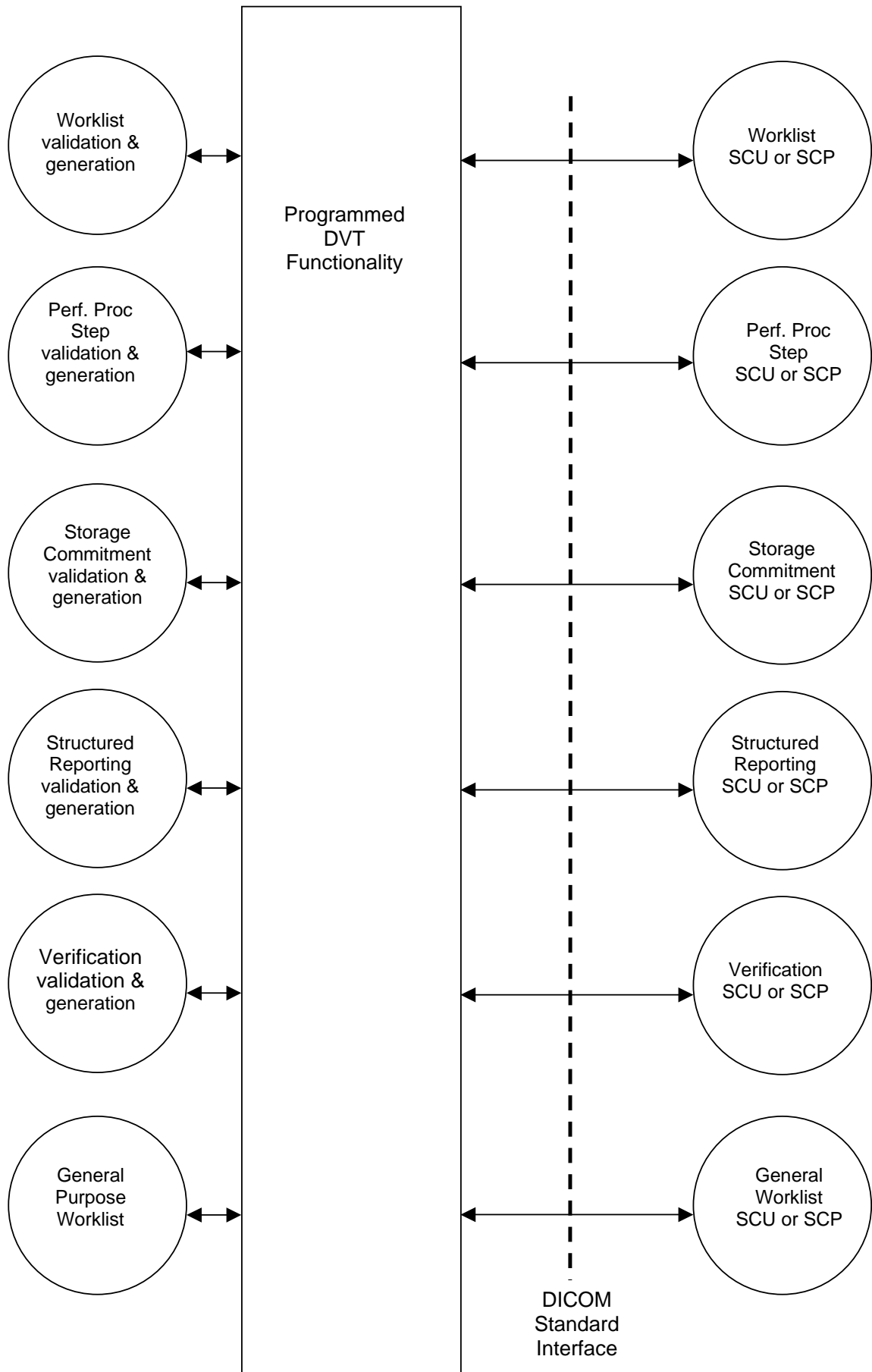
the SCP. DVT will validate the responses.

- SCP for Storage Commitment – DVT can be programmed to validate storage commitment instances from a SCU and generate responses.
- SCU for Verification SOP Class – DVT can be programmed to generate a verification object instance and send it to the SCP. DVT will validate the response.
- SCP for Verification SOP Class – DVT can be programmed to validate a verification object instance and generate a response.
- SCU for Structured Reporting – DVT can be programmed to generate structured report instances and send them to the SCP. DVT will validate the responses.
- SCP for Structured Reporting – DVT can be programmed to validate structured report instances from a SCU and generate responses.
- FSR for the Media Storage Directory Storage SOP Class and Storage SOP Classes. DVT can be started as a File-Set Reader to validate any file that can be accessed via PC – hard-disk, floppy or CD-ROM.
- SCU for General Purpose Worklist (Meta) SOP Class - DVT can be programmed to generate query instances and send them to the SCP and to generate performed procedure step instances and send them to the SCP. DVT will validate the responses.
- SCP for General Purpose Worklist (Meta) SOP Class - DVT can be programmed to validate Query instances and to validate performed procedure step instances from a SCU and generate responses

2.1 Application Data Flow Diagram



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2.2 Functional Definition of AE

DVT can be programmed to perform the functions outlined in Figure 1. This section describes the sequences of real-world activities that are involved in performing these functions.

2.3 Sequencing of Real World Activities

2.3.1 Storage SCU & SCP

DVT will associate and generate C-STORE-RQ/RSP messages as programmed. The instances will be stored in Media Format [2 - part 10] and validated against the appropriate DICOM Storage Definition File.

The Storage SCU Emulator will associate according to the list of Media Files selected to send and validate all C-STORE-RSP messages received.

The Storage SCP Emulator will associate according to the Definition Files loaded and validate all C-STORE-RQ messages received.

2.3.2 Print Management SCU & SCP

DVT will associate and generate N-xxx-RQ/RSP messages as programmed. The Film Session instances will be validated against the appropriate DICOM Print Definition File. C-STORE-RQ/RSP messages are supported for Referenced Print.

The Print SCP Emulator will associate according to the Definition Files loaded and validate all N-xxx-RQ/RSP (C-STORE-RQ/RSP) messages received.

2.3.3 Query/Retrieve SCU & SCP

DVT will associate and generate C-FIND-RQ/RSP, C-GET-RQ/RSP & C-MOVE-RQ/RSP messages as programmed. The query/retrieve instances will be validated against the appropriate DICOM Query/Retrieve Information Model Definition File.

2.3.4 Detached Management SCU & SCP

DVT will associate and generate N-xxx-RQ/RSP messages as programmed. The detached object instances will be validated against the appropriate DICOM Detached Management Definition File.

2.3.5 Modality Worklist SCU & SCP

DVT will associate and generate C-FIND-RQ/RSP messages as programmed. The query instances will be validated against the DICOM Modality Worklist Information Model FIND Definition File.

2.3.6 Modality Performed Procedure Step SCU & SCP

DVT will associate and generate N-xxx-RQ/RSP messages as programmed. The performed procedure step object instances will be validated against the DICOM Modality Performed Procedure Step Definition File.

2.3.7 Storage Commitment SCU & SCP

DVT will associate and generate N-xxx-RQ/RSP messages as programmed. The storage commitment object instances will be validated against the appropriate DICOM Storage Commitment Management Definition File.

The Storage Commitment Emulator will associate according to the Definition Files loaded and validate all N-xxxRQ/RSP messages received.

2.3.8 Structured Reporting SCU & SCP

DVT will associate and generate C-STORE-RQ/RSP messages as programmed. The structured reporting object instance will be validated against the appropriate DICOM Structured Report Definition File.

2.3.9 Verification SCU & SCP

DVT will associate and generate C-ECHO-RQ/RSP messages as programmed. The verification instances will be validated against the Verification Definition File.

2.3.10 Media Storage FSR

DVT will read the media files and validate the contents against the Media Storage Directory Storage Definition File and the appropriate Storage Definition Files.

2.3.11 General Purpose Worklist SCU & SCP

DVT will associate and generate messages as programmed. The query instances will be validated against the DICOM General Purpose Worklist Definition File.

3. AE Specification

DVT provides standard DICOM conformance as a SCU and SCP to the following SOP Classes:

<i>Table 1 - Storage SOP Class - Definition File Names</i>		
Storage SOP Class	SOP Class UID	Definition File Name (.def)
Computed Radiography Image	1.2.840.10008.5.1.4.1.1.1	ComputedRadiographyImageStorage
Digital X-Ray Image – for Presentation	1.2.840.10008.5.1.4.1.1.1.1	DigitalX-RayImageStorage-ForPresentation
Digital X-Ray Image – for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	DigitalX-RayImageStorage-ForProcessing
Digital Mammography X-Ray Image – for Presentation	1.2.840.10008.5.1.4.1.1.1.2	DigitalMammographyX-RayImageStorage-Presentation
Digital Mammography X-Ray Image – for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	DigitalMammographyX-RayImageStorage-Procrocessing
Digital Intra-Oral X-Ray Image – for Presentation	1.2.840.10008.5.1.4.1.1.1.3	DigitalIntra-oralX-RayImageStorage-Presentation
Digital Intra-Oral X-Ray Image – for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	DigitalIntra-oralX-RayImageStorage-Procrocessing
CT Image	1.2.840.10008.5.1.4.1.1.2	CTImageStorage
Enhanced CT Image	1.2.840.10008.5.1.4.1.1.2.1	EnhancedCTImageStorage.def
Ultrasound Multi-frame Image	1.2.840.10008.5.1.4.1.1.3.1	UltrasoundMulti-frameImageStorage
MR Image	1.2.840.10008.5.1.4.1.1.4	MRImageStorage
Enhanced MR Image	1.2.840.10008.5.1.4.1.1.4.1	EnhancedMRImageStorage
MR Spectroscopy	1.2.840.10008.5.1.4.1.1.4.2	MRSpectroscopyStorage
Ultrasound Image	1.2.840.10008.5.1.4.1.1.6.1	UltrasoundImageStorage
Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7	SecondaryCaptureImageStorage
Multi-frame Single Bit Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.1	Multi-frameSingleBitSecondaryCaptureImageStorage
Multi-frame Grayscale Byte Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.2	Multi-frameGrayscaleByteSecondaryCaptureImageStorage
Multi-frame Grayscale Word Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.3	Multi-frameGrayscaleWordSecondaryCaptureImageStorage
Multi-frame True Color Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.4	Multi-frameTrueColorSecondaryCaptureImageStorage
Standalone Overlay	1.2.840.10008.5.1.4.1.1.8	StandaloneOverlayStorage
Standalone Curve	1.2.840.10008.5.1.4.1.1.9	StandaloneCurveStorage
12-lead ECG Waveform	1.2.840.10008.5.1.4.1.1.9.1.1	12-LeadECGWaveformStorage
General ECG Waveform	1.2.840.10008.5.1.4.1.1.9.1.2	GeneralECGWaveformStorage
Ambulatory ECG Waveform	1.2.840.10008.5.1.4.1.1.9.1.3	AmbulatoryECGWaveformStorage
Hemodynamic Waveform	1.2.840.10008.5.1.4.1.1.9.2.1	HemodynamicWaveformStorage
Cardiac Electrophysiology Waveform Storage	1.2.840.10008.5.1.4.1.1.9.3.1	CardiacElectrophysiologyWaveformStorage
Basic Voice Audio Waveform	1.2.840.10008.5.1.4.1.1.9.4.1	BasicVoiceAudioWaveformStorage
Standalone Modality LUT	1.2.840.10008.5.1.4.1.1.10	StandaloneModalityLUTStorage
Standalone VOI LUT	1.2.840.10008.5.1.4.1.1.11	StandaloneVOILUTStorage
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	SoftcopyPresentationStateStorage
X-Ray Angiographic Image	1.2.840.10008.5.1.4.1.1.12.1	X-RayAngiographicImageStorage
X-Ray Radiofluoroscopic Image	1.2.840.10008.5.1.4.1.1.12.2	X-RayRadiofluoroscopicImageStorage
Nuclear Medicine Image	1.2.840.10008.5.1.4.1.1.20	NuclearMedicineImageStorage
Raw Data	1.2.840.10008.5.1.4.1.1.66	RawDataStorage
VL Endoscopic Image	1.2.840.10008.5.1.4.1.1.77.1.1	VLEndoscopicImageStorage

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<i>Table 1 - Storage SOP Class - Definition File Names</i>		
Storage SOP Class	SOP Class UID	Definition File Name (.def)
VL Microscopic Image	1.2.840.10008.5.1.4.1.1.77.1.2	VLMicroscopicImageStorage
VL Slide-Coordinates Microscopic Image	1.2.840.10008.5.1.4.1.1.77.1.3	VLSlide-CoordinatesMicroscopicImageStorage
VL Photographic Image	1.2.840.10008.5.1.4.1.1.77.1.4	VLPhotographicImageStorage
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11	BasicTextSR
Enhanced SR	1.2.840.10008.5.1.4.1.1.88.22	EnhancedSR
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33	ComprehensiveSR
Procedure Log Storage	1.2.840.10008.5.1.4.1.1.88.40	ProcedureLogStorage
Mammography CAD SR	1.2.840.10008.5.1.4.1.1.88.55	MammographyCADSR
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59	KeyObjectSelectionDocument
Positron Emission Tomography Image	1.2.840.10008.5.1.4.1.1.128	PositronEmissionTomographyImageStorage
Standalone PET Curve	1.2.840.10008.5.1.4.1.1.129	StandalonePETCurveStorage
RT Image	1.2.840.10008.5.1.4.1.1.481.1	RTImageStorage
RT Dose	1.2.840.10008.5.1.4.1.1.481.2	RTDoseStorage
RT Structure Set	1.2.840.10008.5.1.4.1.1.481.3	RTStructureSetStorage
RT Beams Treatment Record	1.2.840.10008.5.1.4.1.1.481.4	RTBeamsTreatmentRecordStorage
RT Plan	1.2.840.10008.5.1.4.1.1.481.5	RTPlanStorage
RT Brachy Treatment Record	1.2.840.10008.5.1.4.1.1.481.6	RTBrachyTreatmentRecordStorage
RT Treatment Summary Record	1.2.840.10008.5.1.4.1.1.481.7	RTTreatmentSummaryRecordStorage
Media Storage Directory Storage	1.2.840.10008.1.3.10	MediaStorageDirectoryStorage

<i>Table 2 - Query / Retrieve SOP Class – Definition File Names</i>		
Query / Retrieve SOP Class	SOP Class UID	Definition File Name (.def)
Patient Root QR – FIND	1.2.840.10008.5.1.4.1.2.1.1	PatientRootQueryRetrieve-FIND
Patient Root QR - MOVE	1.2.840.10008.5.1.4.1.2.1.2	PatientRootQueryRetrieve-MOVE
Patient Root QR - GET	1.2.840.10008.5.1.4.1.2.1.3	PatientRootQueryRetrieve-GET
Study Root QR – FIND	1.2.840.10008.5.1.4.1.2.2.1	StudyRootQueryRetrieve-FIND
Study Root QR – MOVE	1.2.840.10008.5.1.4.1.2.2.2	StudyRootQueryRetrieve-MOVE
Study Root QR – GET	1.2.840.10008.5.1.4.1.2.2.3	StudyRootQueryRetrieve-GET
Patient Study QR - FIND	1.2.840.10008.5.1.4.1.2.3.1	PatientStudyOnlyQueryRetrieve-FIND
Patient Study QR - MOVE	1.2.840.10008.5.1.4.1.2.3.2	PatientStudyOnlyQueryRetrieve-MOVE
Patient Study QR - GET	1.2.840.10008.5.1.4.1.2.3.3	PatientStudyOnlyQueryRetrieve-GET
Patient Root QR Relational - FIND	1.2.840.10008.5.1.4.1.2.1.1	PatientRootQRRelational-FIND
Patient Root QR Relational - MOVE	1.2.840.10008.5.1.4.1.2.1.2	PatientRootQRRelational-MOVE
Patient Root QR Relational - GET	1.2.840.10008.5.1.4.1.2.1.3	PatientRootQRRelational-GET
Study Root QR Relational - FIND	1.2.840.10008.5.1.4.1.2.2.1	StudyRootQRRelational-FIND
Study Root QR Relational - MOVE	1.2.840.10008.5.1.4.1.2.2.2	StudyRootQRRelational-MOVE

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Table 2 - Query / Retrieve SOP Class – Definition File Names

Query / Retrieve SOP Class	SOP Class UID	Definition File Name (.def)
Study Root QR Relational - GET	1.2.840.10008.5.1.4.1.2.2.3	StudyRootQRRelational-GET
Patient Study QR Relational - FIND	1.2.840.10008.5.1.4.1.2.3.1	PatientStudyOnlyQRRelational-FIND
Patient Study QR Relational - MOVE	1.2.840.10008.5.1.4.1.2.3.2	PatientStudyOnlyQRRelational-MOVE
Patient Study QR Relational - GET	1.2.840.10008.5.1.4.1.2.3.3	PatientStudyOnlyQRRelational-GET

Table.3 - Print Management SOP Class – Definition File Names

Print Management SOP Class	SOP Class UID	Definition File Name (.def)
Basic Film Session	1.2.840.10008.5.1.1.1	BasicFilmSession
Basic Film Box	1.2.840.10008.5.1.1.2	BasicFilmBox
Basic Grayscale Image Box	1.2.840.10008.5.1.1.4	BasicGrayscaleImageBox
Basic Color Image Box	1.2.840.10008.5.1.1.4.1	BasicColorImageBox
Basic Grayscale Meta	1.2.840.10008.5.1.1.9	BasicGrayscalePrintManagementMeta
Print Job	1.2.840.10008.5.1.1.14	PrintJob
Basic Annotation Box	1.2.840.10008.5.1.1.15	BasicAnnotationBox
Printer	1.2.840.10008.5.1.1.16	Printer
Printer Configuration Retrieval	1.2.840.10008.5.1.1.16.376	PrinterConfigurationRetrieval
Basic Color Meta	1.2.840.10008.5.1.1.18	BasicColorPrintManagementMeta
Presentation LUT	1.2.840.10008.5.1.1.23	PresentationLUT
Basic Print Image Overlay Box	1.2.840.10008.5.1.1.24.1	BasicPrintImageOverlayBox
Print Queue Management	1.2.840.10008.5.1.1.26	PrintQueueManagement
Stored Print Storage	1.2.840.10008.5.1.1.27	StoredPrintStorage
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	HardcopyGrayscaleImageStorage
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	HardcopyColorImageStorage
Pull Print Request	1.2.840.10008.5.1.1.31	PullPrintRequest
Pull Stored Print Management Meta	1.2.840.10008.5.1.1.32	PullStoredPrintManagementMeta

Table 4 - Worklist SOP Class - Definition File Names

Worklist SOP Class	SOP Class UID	Definition File Name (.def)
Modality Worklist	1.2.840.10008.5.1.4.31	ModalityWorklist-FIND
General Purpose Worklist Management Meta	1.2.840.10008.5.1.4.32	GeneralPurposeWorklistManagementMeta
General Purpose Worklist	1.2.840.10008.5.1.4.32.1	GeneralPurposeWorklist-FIND
General Purpose Scheduled Procedure Step	1.2.840.10008.5.1.4.32.2	GeneralPurposeScheduledProcedureStep
General Purpose Performed Procedure Step	1.2.840.10008.5.1.4.32.3	GeneralPurposePerformedProcedureStep

Table 5 – Performed Procedure Step SOP Class - Definition File Names

PPS SOP Class	SOP Class UID	Definition File Name (.def)
Modality Performed Procedure Step	1.2.840.10008.3.1.2.3.3	ModalityPerformedProcedureStep

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Table 5 – Performed Procedure Step SOP Class - Definition File Names

PPS SOP Class	SOP Class UID	Definition File Name (.def)
Modality PPS Retrieve	1.2.840.10008.3.1.2.3.4	ModalityPerformedProcedureStepRetrieve
Modality PPS Notification	1.2.840.10008.3.1.2.3.5	ModalityPerformedProcedureStepNotification

Table 6 - Detached Management SOP Class – Definition File Names

Detached SOP Class	SOP Class UID	Definition File Name (.def)
Detached Patient Management	1.2.840.10008.3.1.2.1.1	DetachedPatientManagement
Detached Patient Management Meta	1.2.840.10008.3.1.2.1.4	DetachedPatientManagementMeta
Detached Visit Management	1.2.840.10008.3.1.2.2.1	DetachedVisitManagement
Detached Study Management	1.2.840.10008.3.1.2.3.1	DetachedStudyManagement
Study Component Management	1.2.840.10008.3.1.2.3.2	StudyComponentManagement
Detached Results Management	1.2.840.10008.3.1.2.5.1	DetachedResultsManagement
Detached Results Management Meta	1.2.840.10008.3.1.2.5.4	DetachedResultsManagementMeta
Detached Study Management Meta	1.2.840.10008.3.1.2.5.5	DetachedStudyManagementMeta
Detached Interpretation Management	1.2.840.10008.3.1.2.6.1	DetachedInterpretationManagement

Table 7 – Storage Commitment SOP Class - Definition File Names

Commitment SOP Class	SOP Class UID	Definition File Name (.def)
Storage Commitment Push Model	1.2.840.10008.1.20.1	StorageCommitmentPush
Storage Commitment Pull Model	1.2.840.10008.1.20.2	StorageCommitmentPull

Table 8 – Study Content Notification SOP Class - Definition File Names

Notification SOP Class	SOP Class UID	Definition File Name (.def)
Basic Study Content Notification	1.2.840.10008.1.9	BasicStudyContentNotification

Table 9 - Verification SOP Class - Definition File Names

Verification SOP Class	SOP Class UID	Definition File Name (.def)
Verification	1.2.840.10008.1.1	Verification

Table 10 – Procedural Event Logging SOP Class - Definition File Names

Procedural SOP Class	SOP Class UID	Definition File Name (.def)
Procedural Event Logging	1.2.840.10008.1.40	ProceduralEventLogging

3.1 Association Establishment Policies

3.1.1 General

DVT will attempt to initiate an Association in response to a *SEND ASSOCIATE-RQ* command or accept an Association in response to a *RECEIVE ASSOCIATE-RQ* command. The Called AE Title and Calling AE Title can be programmed from the GUI (or script).

The maximum size PDU transmitted by DVT is configurable. If a value lower than the configured maximum is specified during Association Negotiation, that value will be used. If a value of 0 is specified in the Association Negotiation, DVT will use a value of 1 Megabyte.

3.1.2 Number of Associations

A DVT Test Session supports a single Association. However, it is possible to run multiple DVT Test Sessions simultaneously.

3.1.3 Asynchronous Nature

DVT does not support Asynchronous Operations at the application level, although an Asynchronous Window Negotiation is supported.

3.1.4 Implementation Identifying Information

By default, DVT will be identified by:

- Implementation Class UID d.v.t.<year>.<version_major>.<version_minor>
- example 100.118.116.2004.2.0
- Implementation Version Name dvt<version_major>.<version_minor>
- example dvt2.0

3.1.5 Transfer Syntaxes

DVT can be programmed to use any of the following Transfer Syntaxes with any SOP Class.

Table 11 Transfer Syntaxes

Name-list	UID-list
DICOM Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2
DICOM Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1
DICOM Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2
JPEG Baseline, 1	1.2.840.10008.1.2.4.50
JPEG Extended, 2 & 4	1.2.840.10008.1.2.4.51
JPEG Extended, 3 & 5	1.2.840.10008.1.2.4.52
JPEG Spectral Selection, Non-Hierarchical, 6 & 8	1.2.840.10008.1.2.4.53
JPEG Spectral Selection, Non-Hierarchical, 7 & 9	1.2.840.10008.1.2.4.54
JPEG Full Progression, Non-Hierarchical, 10 & 12	1.2.840.10008.1.2.4.55
JPEG Full Progression, Non-Hierarchical, 11 & 13	1.2.840.10008.1.2.4.56
JPEG Lossless, Non-Hierarchical, 14	1.2.840.10008.1.2.4.57
JPEG Lossless, Non-Hierarchical, 15	1.2.840.10008.1.2.4.58
JPEG Extended, Hierarchical, 16 & 18	1.2.840.10008.1.2.4.59
JPEG Extended, Hierarchical, 17 & 19	1.2.840.10008.1.2.4.60
JPEG Spectral Selection, Hierarchical, 20 & 22	1.2.840.10008.1.2.4.61
JPEG Spectral Selection, Hierarchical, 21 & 23	1.2.840.10008.1.2.4.62
JPEG Full Progression, Hierarchical, 24 & 26	1.2.840.10008.1.2.4.63
JPEG Full Progression, Hierarchical, 25 & 27	1.2.840.10008.1.2.4.64
JPEG Lossless, Hierarchical, 28	1.2.840.10008.1.2.4.65
JPEG Lossless, Hierarchical, 29	1.2.840.10008.1.2.4.66
JPEG Lossless, Non-Hierarchical, First Order Prediction, 14	1.2.840.10008.1.2.4.70
JPEG-LS Lossless Image Compression	1.2.840.10008.1.2.4.80

DVT Conformance Statement

Name-list	UID-list
JPEG-LS Lossy (Near-Lossless) Image Compression	1.2.840.10008.1.2.4.81
JPEG 2000 IC Loss Less Only	1.2.840.10008.1.2.4.90
JPEG 2000 IC	1.2.840.10008.1.2.4.91
RLE Lossless	1.2.840.10008.1.2.5

NOTE: Support of JPEG and RLE is provided by requiring that the User encode the Pixel Data, using the agreed compression technique, into a file. DVT merely reads the file contents, generates the Pixel Data Element (7FE0,0010) and transports it according in the transfer syntax agreed (Explicit VR Little Endian).

3.2 Association Initiation & Acceptance Policy

DVT can be programmed to be either SCU or SCP. The following sections define the Presentation Contexts that can be programmed.

3.2.1 Storage

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 12 for Storage.

Presentation Contexts

Table 12 Storage Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Stored Print Storage SOP Class	1.2.840.10008.5.1.1.27	All Transfer Syntaxes of Table 11	SCU & SCP	None
Hardcopy Grayscale Image Storage SOP Class	1.2.840.10008.5.1.1.29	All Transfer Syntaxes of Table 11	SCU & SCP	None
Hardcopy Color Image Storage SOP Class	1.2.840.10008.5.1.1.30	All Transfer Syntaxes of Table 11	SCU & SCP	None
Computed Radiography Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Digital X-Ray Image Storage SOP Class – for Presentation	1.2.840.10008.5.1.4.1.1.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Digital X-Ray Image Storage SOP Class – for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Digital Mammography Image Storage SOP Class – for Presentation	1.2.840.10008.5.1.4.1.1.1.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Digital Mammography Image Storage SOP Class – for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Digital Intra-Oral X-Ray Image Storage SOP Class – for Presentation	1.2.840.10008.5.1.4.1.1.1.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
Digital Intra-Oral X-Ray Image Storage SOP Class – for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
CT Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Enhanced CT Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.2.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Ultrasound Multi-frame Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.3.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
MR Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.4	All Transfer Syntaxes of Table 11	SCU & SCP	None
Enhanced MR Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.4.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Ultrasound Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.6.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Secondary Capture Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.7	All Transfer Syntaxes of Table 11	SCU & SCP	None
Standalone Overlay Storage SOP Class	1.2.840.10008.5.1.4.1.1.8	All Transfer Syntaxes of Table 11	SCU & SCP	None
Standalone Curve Storage	1.2.840.10008.5.1.4.1.1.9	All Transfer Syntaxes of Table 11	SCU & SCP	None

DVT Conformance Statement

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
12-lead ECG Waveform Storage SOP Class	1.2.840.10008.5.1.4.1.1.9.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
General ECG Waveform Storage SOP Class	1.2.840.10008.5.1.4.1.1.9.1.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Ambulatory ECG Waveform Storage SOP Class	1.2.840.10008.5.1.4.1.1.9.1.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
Hemodynamic Waveform Storage SOP Class	1.2.840.10008.5.1.4.1.1.9.2.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Cardiac Electrophysiology Waveform Storage SOP Class	1.2.840.10008.5.1.4.1.1.9.3.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Basic Voice Audio Waveform Storage SOP Class	1.2.840.10008.5.1.4.1.1.9.4.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Standalone Modality LUT Storage	1.2.840.10008.5.1.4.1.1.10	All Transfer Syntaxes of Table 11	SCU & SCP	None
Standalone VOI LUT Storage	1.2.840.10008.5.1.4.1.1.11	All Transfer Syntaxes of Table 11	SCU & SCP	None
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
X-Ray Angio-graphic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.12.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
X-Ray Radio-fluoroscopic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.12.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Nuclear Medicine Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.20	All Transfer Syntaxes of Table 11	SCU & SCP	None
VL Endoscopic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.77.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
VL Microscopic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.77.1.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
VL Slide-Coordinates Microscopic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.77.1.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
VL Photographic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.77.1.4	All Transfer Syntaxes of Table 11	SCU & SCP	None
Basic Text SR Storage SOP Class	1.2.840.10008.5.1.4.1.1.88.11	All Transfer Syntaxes of Table 11	SCU & SCP	None
Enhanced SR Storage SOP Class	1.2.840.10008.5.1.4.1.1.88.22	All Transfer Syntaxes of Table 11	SCU & SCP	None
Comprehensive SR Storage SOP Class	1.2.840.10008.5.1.4.1.1.88.33	All Transfer Syntaxes of Table 11	SCU & SCP	None
Mammography CAD SR SOP Class	1.2.840.10008.5.1.4.1.1.88.50	All Transfer Syntaxes of Table 11	SCU & SCP	None
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59	All Transfer Syntaxes of Table 11	SCU & SCP	None
Positron Emission Tomography Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.128	All Transfer Syntaxes of Table 11	SCU & SCP	None
Standalone PET Curve Storage SOP Class	1.2.840.10008.5.1.4.1.1.129	All Transfer Syntaxes of Table 11	SCU & SCP	None
RT Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
RT Dose Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
RT Structure Set Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
RT Beams Treatment Record Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.4	All Transfer Syntaxes of Table 11	SCU & SCP	None

DVT Conformance Statement

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
RT Plan Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.5	All Transfer Syntaxes of Table 11	SCU & SCP	None
RT Brachy Treatment Record Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.6	All Transfer Syntaxes of Table 11	SCU & SCP	None
RT Treatment Summary Record Storage SOP Class	1.2.840.10008.5.1.4.1.1.481.7	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- C-STORE

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.2 Print Management

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 13 for Print Management.

Presentation Contexts

Table 13 Print Management Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Basic Grayscale Print Management Meta SOP Class	1.2.840.10008.5.1.1.9	All Transfer Syntaxes of Table 11	SCU & SCP	None
Basic Color Print Management Meta SOP Class	1.2.840.10008.5.1.1.18	All Transfer Syntaxes of Table 11	SCU & SCP	None
Print Job SOP Class	1.2.840.10008.5.1.1.14	All Transfer Syntaxes of Table 11	SCU & SCP	None
Basic Annotation Box SOP Class	1.2.840.10008.5.1.1.15	All Transfer Syntaxes of Table 11	SCU & SCP	None
Printer SOP Class	1.2.840.10008.5.1.1.16	All Transfer Syntaxes of Table 11	SCU & SCP	None
VOI LUT Box SOP Class	1.2.840.10008.5.1.1.22	All Transfer Syntaxes of Table 11	SCU & SCP	None
Presentation LUT SOP Class	1.2.840.10008.5.1.1.23	All Transfer Syntaxes of Table 11	SCU & SCP	None
Basic Print Image Overlay Box SOP Class	1.2.840.10008.5.1.1.24.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Pull Stored Meta SOP Class	1.2.840.10008.5.1.1.32	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

DVT Conformance Statement

- N-ACTION
- N-CREATE
- N-DELETE
- N-EVENT-REPORT
- N-GET
- N-SET
- C-STORE

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.3 Query/Retrieve

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 14 for Query/Retrieve.

Presentation Contexts

Table 14 Query/Retrieve Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Patient Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Patient Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.1.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Patient Root Query/Retrieve Information Model – GET	1.2.840.10008.5.1.4.1.2.1.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
Study Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.2.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Study Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.2.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Study Root Query/Retrieve Information Model – GET	1.2.840.10008.5.1.4.1.2.2.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
Patient/Study Only Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.3.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Patient/Study Only Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.3.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Patient/Study Only Query/Retrieve Information Model – GET	1.2.840.10008.5.1.4.1.2.3.3	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- C-FIND
- C-GET
- C-MOVE

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
FF00H	Pending	Match returned.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.4 Detached Management

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 15 for Detached Management.

Presentation Contexts

Table 15 Detached Management Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Detached Patient Management Meta SOP Class	1.2.840.10008.3.1.2.1.4	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Study Management Meta SOP Class	1.2.840.10008.3.1.2.5.5	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Results Management Meta SOP Class	1.2.840.10008.3.1.2.5.4	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Patient Management SOP Class	1.2.840.10008.3.1.2.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Visit Management SOP Class	1.2.840.10008.3.1.2.2.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Study Management SOP Class	1.2.840.10008.3.1.2.3.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Study Component SOP Class	1.2.840.10008.3.1.2.3.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Results Management SOP Class	1.2.840.10008.3.1.2.5.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Detached Interpretation Management SOP Class	1.2.840.10008.3.1.2.6.1	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- N-CREATE
- N-DELETE
- N-EVENT-REPORT (it can't be maintained optimally)
- N-GET
- N-SET

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.5 Modality Worklist

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 16 for Modality Worklist.

Presentation Contexts

Table 16 Modality Worklist Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Modality Worklist Information Model - FIND	1.2.840.10008.5.1.4.31	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- C-FIND

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
FF00H	Pending	Match returned.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.6 Modality Performed Procedure Step**Associated Real-World Activity**

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 17 for Modality Performed Procedure Step.

Presentation Contexts

Table 17 Modality Performed Procedure Step Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Modality Performed Procedure Step SOP Class	1.2.840.10008.3.1.2.3.3	All Transfer Syntaxes of Table 11	SCU & SCP	None
Modality Performed Procedure Step Retrieve SOP Class	1.2.840.10008.3.1.2.3.4	All Transfer Syntaxes of Table 11	SCU & SCP	None
Modality Performed Procedure Step Notification SOP Class	1.2.840.10008.3.1.2.3.5	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- N-CREATE
- N-EVENT-REPORT
- N-GET
- N-SET

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
Other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.7 Storage Commitment

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 18 for Storage Commitment.

Presentation Contexts

Table 18 Storage Commitment Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Storage Commitment Push Model SOP Class	1.2.840.10008.1.20.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
Storage Commitment Pull Model SOP Class	1.2.840.10008.1.20.2	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- N-ACTION
- N-EVENT-REPORT

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.8 Verification

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 19 for Verification.

Presentation Contexts

Table 19 Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Verification SOP Class	1.2.840.10008.1.1	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- C-ECHO

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
Other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

3.2.9 General Purpose Worklist

Associated Real-World Activity

DVT can be programmed to request/accept any of the Presentation Contexts defined in Table 20 for Verification.

Presentation Contexts

Table 20 Presentation Context Table

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
General Purpose Worklist Management Meta SOP Class	1.2.840.10008.5.1.4.32	All Transfer Syntaxes of Table 11	SCU & SCP	None
General Purpose Worklist SOP Class	1.2.840.10008.5.1.4.32.1	All Transfer Syntaxes of Table 11	SCU & SCP	None
General Purpose Scheduled Procedure Step SOP Class	1.2.840.10008.5.1.4.32.2	All Transfer Syntaxes of Table 11	SCU & SCP	None
General Purpose Performed Procedure Step SOP Class	1.2.840.10008.5.1.4.32.3	All Transfer Syntaxes of Table 11	SCU & SCP	None

Specific SOP Class Conformance

The following DIMSE Services are supported:

- C-FIND

The DIMSE Services can return the following Error Codes:

Code	Status	Meaning
0000H	Success	Successful operation.
other	Warning/Failure	Other User programmed Warning or Failure.

The User may program the attribute values. DVT will validate attribute values against the Enumerated Values and Defined Terms available in the Definition Files.

4. Communications Profiles

4.1 Supported Communications Stacks

DVT uses TCP/IP for the protocol stack.

By default DVT uses TCP/IP port number 104. The port number is configurable.

5. Extensions / Specialisation's / Privatisation's

The DVT release package provides Standard DICOM Definition Files for the SOP Classes defined above. The User is able to make Extensions to Standard Definition Files or generate Private Definition Files to suit the device being tested by DVT. See [1] for full details.

6. Configuration

DVT is a highly configurable software tool. See [1] for full details.