Integrating the Healthcare Enterprise

5 # IHE Technical Frameworks
General Introduction

10 # Appendix A:
IHE Actor Definitions

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IHE Actor Definitions

Actors are information systems or components of information systems that produce, manage, or act on information associated with operational activities in the enterprise.

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Archive	Stores the radiotherapy (RT) DICOM SOP Classes in addition to the computed tomography (CT) images and is capable of transmitting them.
Acquisition Modality	Acquires medical images, waveforms or measurements while a patient or specimen is present (e.g., a Computed Tomography scanner, a specimen microscope or a hemodynamic measurement system).
Acquisition Modality Importer	Integrates a non-DICOM-ready modality into workflows.
ADT/Patient Registration	Adds or updates patient demographic and encounter information, (Admission/Discharge/Transfer) to a Practice Management System (PMS) or a Hospital Information System (HIS), for example.
Analyzer	Performs testing on biological specimens and reports the resulting observations.
Audit Repository	Stores audit events.
Automation Manager	Schedules and manages operations on biological specimens on a set of robotic devices in a clinical laboratory.
Charge Processor	Receives posted charges and serves as a component of the financial system (for instance a PMS or billing system).
Client Authentication Agent	Provides local management of user authentication.
Code Set Master	Manages and provides code sets for laboratory panels, tests and observations
Code Set Consumer	Maintains its internal dictionary of laboratory panels, tests and observations relying on an external code set provided by a Code Set Master.
Content Consumer	Views, imports, or processes content created by a Content Creator Actor.
Content Creator	Creates content for later consumption by a Content Consumer.
Context Manager	Brokers context information (such as current patient subject) between context.
Contourer	Consumes CTs and creates RT Structure Sets.

Department System Scheduler/Order Filler	Manages the scheduling and performance of orders for diagnostic services (e.g., cardiology, radiology, cytology & anatomic pathology examinations, in vitro diagnostic testing) in a department or setting offering such services.
Device Observation Consumer	Consumes Patient Care Device data.
Device Observation Filter	Provides publish/subscribe-based filtering of Patient Care Device data.
Device Observation Reporter	Receives data from patient care devices and makes it available with consistent syntax and semantics.
Display	Requests and displays preformatted ("presentation-ready") data.
DNS Server	Provides authoritative network location information.
Document Consumer	Queries for document metadata meeting certain criteria, and may retrieve selected documents
Document Recipient	Receives a set of documents (e.g., a viewer or Health Record system).
Document Registry	Manages and provides query access to meta-data about registered documents such as the document type, subject and where it is stored.
Document Repository	Persistently stores documents and makes them available.
Document Source	Produces and publishes documents.
Dose Displayer	Consumes a Dosimetric Plan, CT, Structure Set and an RT Dose and displays the dose.
Dosimeter Planner	Consumes CT, and RT Structure Set, a Geometric Plan, and creates a Dosimetric Plan and an RT Dose.
Enterprise Report Repository	Receives Structured Report Export Transactions from the Report Manager and stores the report.
Evidence Creator	Creates evidence objects such as derived images, presentation states, Key Image Notes, and/or measurements (Evidence Documents), and transmits them to an Image Archive.
Export Manager	De-identifies, pseudonymizes and exports imaging data.
Export Selector	Selects and tags imaging data for export, e.g. to a teaching file or a clinical trial.
External Report Repository Access	Retrieves clinical reports generated outside the imaging department.

Geometric Planner	Consumes a CT and RT Structure Set and creates a Geometric Plan.
Image Archive	Provides long term storage of imaging data such as images, measurements, presentation states, and manifests (e.g., a PACS).
Image Display	Queries for, retrieves and displays imaging data.
Image Manager	Manages and provides access to stored imaging objects.
Imaging Document Consumer	Retrieves imaging data based on references in a retrieved imaging manifest.
Imaging Document Source	Publishes imaging data and makes it available for retrieval.
Implantable Device Cardiac Consumer	Receives cardiac implantable device data.
Implantable Device Cardiac Reporter	Reports data from Cardiac Implantable Devices.
Importer	Imports and reconciles imaging data.
Information Source	Provides presentation-ready information or documents.
Initiating Gateway	Supports all outgoing inter-community communications.
Infusion Order Consumer	Programs an infusion pump based on order information.
Infusion Order Programmer	Provides infusion pump order information.
Kerberos Authentication Server	Provides central authentication of enterprise users.
Kerberized Server	Receives user authentication information
Label Broker	Delivers pre-identified labels or labeled containers for the collection of biological specimens requested for the performance of in vitro diagnostic testing orders.
Label Information Provider	Manages and provides specimen labeling instructions.
Master Patient Index (MPI)	Maintains unique enterprise-wide identifiers for patients.
Order Filler	See Department System Scheduler/Order Filler
Order Placer	Generates and distributes orders to various departments.
Order Result Tracker	Stores and manages laboratory or pathology observations and associated results.

Patient Context Participant	Initiates and responds to patient context changes.
Patient Demographics Consumer	Uses demographic information.
Patient Demographics Supplier	Provides a searchable repository of patient demographic information.
Patient Encounter Consumer	Uses patient encounter information.
Patient Encounter Supplier	Manages and provides information about new and existing encounters.
Patient Identifier Cross-reference Consumer	Obtains and uses the identification of a patient in different Patient Identifier Domains.
Patient Identifier Cross-reference Manager	Provides cross-referencing of patient identifiers across Patient Identifier Domains.
Patient Identity Source	Provides a unique identifier and identity traits for each patient.
Performed Procedure Step Manager	Re-distributes Performed Procedure Step information.
Personnel White Pages Consumer	Uses information from the Personnel White Pages Directory.
Personnel White Pages Directory	Holds authoritative Personnel White Pages information.
Pre/Post-Processor	Processes biological specimens (e.g., sorters, aliquoters, decappers, specimen conveyors, specimen storage systems).
Point Of Care Data Manager	Manages a set of point of care in vitro diagnostic devices and centralizes their results.
Point Of Care Results Generator	Produces in vitro diagnostic observations on the point of care.
Portable Media Creator	Marshals content and writes it to physical media such as CDs and USB storage.
Portable Media Importer	Reads imaging data on media, and reconciles and stores the instances.
Post-Processing Manager	Schedules and manages post-processing worklists.
Print Composer	Generates DICOM print requests to a Print Server.
Print Server	Renders hardcopy images based on print requests.
Receiver	Receives exported instances over the network.

Report Creator	Generates and transmits diagnostic reports.
Report Manager	Manages reporting worklists and short-term storage of Report objects during the reporting process then distributes reports to report repositories.
Report Reader	Accesses reports through network query/retrieve or reading interchange media and allow the user to view reports presented as DICOM Structured Reporting Objects.
Report Receiver	Receives and stores anatomic pathology reports.
Report Repository	Provides long-term storage and retrieval of diagnostic reports.
Report Sender	Creates or has access to anatomic pathology reports in final status and sends these reports or parts of these reports.
Requester	Forwards a part of a laboratory testing requisition together with the associated biological specimens to a subcontracting performer, and collects the resulting observations.
Responding Gateway	Supports all incoming inter-community communications.
Secure Application	Complies with IHE rules for user authentication, secure communications, security audit recording, and security policy enforcement. The specified application is compliant.
Secure Node	Complies with IHE rules for user authentication, secure communications, security audit recording and security policy enforcement. All software on the system is compliant.
Subcontractor	Manages the scheduling and performance of in vitro diagnostic tests in a subcontracting laboratory, and reports the resulting observations to the requesting laboratory.
Time Client	Maintains system clock synchronization with UTC based on time synchronization with one or more Time Servers.
Time Server	Provides NTP time services to Time Clients.
User Context Participant	Initiates and responds to user context changes.
X-Service Provider	Provides a service that needs an X-User Assertion.
X-Service User	Makes service requests of an X-Service Provider.