C-DAC's
Medical Informatics
Software Development Kit
for DICOM

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C-DAC's Medical Informatics Software Development Kit is a suite of API libraries & toolkit that provides medical standards compliance to the implementing applications/medical devices

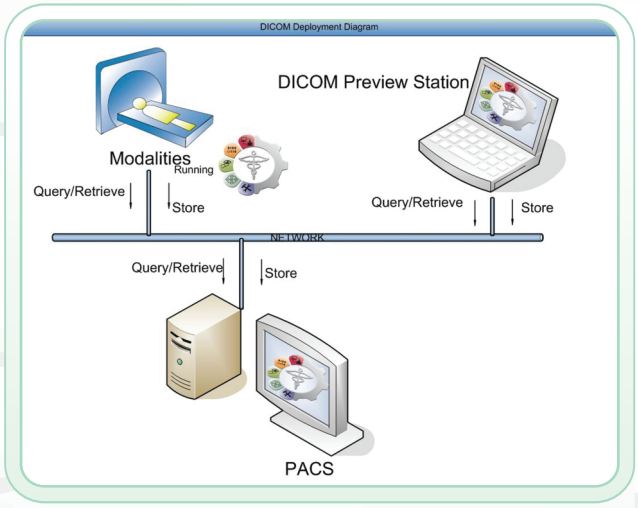
C-DAC's Medical Informatics Software Development Kit (SDK) for DICOM PS3.0-2015 is an implementation of Digital Imaging and Communications in Medicine (DICOM) PS3.0-2015.

The SDK is a Free and open-source software (FOSS) which facilitates incorporation of NEMA's DICOM PS3.0-2015 in healthcare applications.

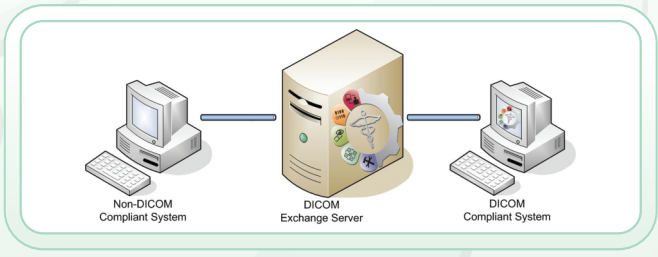
The API library can also be used by Medical device manufacturers for making their medical device medical standards compliant.

Digital **I**maging and **Co**mmunications in **M**edicine **(DICOM)** is a comprehensive set of standards for handling, storing, printing and transmitting information in medical imaging proposed by National Electrical Manufacturers Association (NEMA) (www.nema.org)

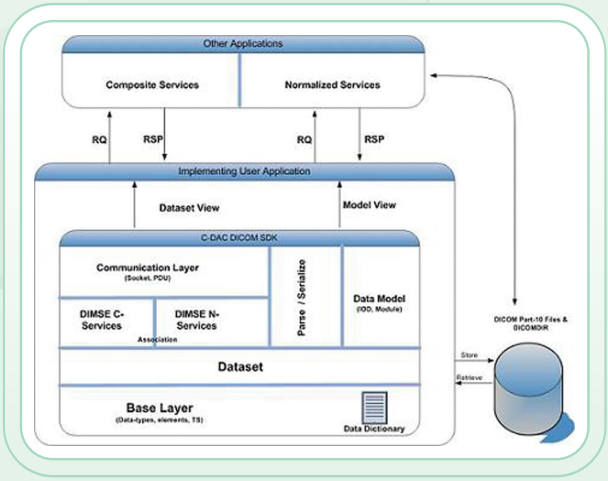
Usage Scenario



Data Exchange Scenario



Architecture



Advantages

- SDK is licensed under Apache License v2.0 (Open Source License) that makes it free for both personal / commercial use.
- SDK allows building Service Class User (SCU) and Service Class Provider (SCP) components for all standard defined modalities
- Integrates with Rapid Application Development Tools so programmer can continue using IDE of choice
- Apart from standard deployable packages, custom packaging allows to target specific memory, storage, and cost requirements
- Layered API packaging approach makes it possible to target currently needed DICOM capabilities and enhance / extend later
- Cost effective complete implementation of the standard provides high Return-On-Investment
- Suitable for both DICOM expert and general object-oriented programmer
- Start early with SDK using variety of samples, test codes, documentation available with the toolkit
- Designed to easily deliver and update revisions to standard

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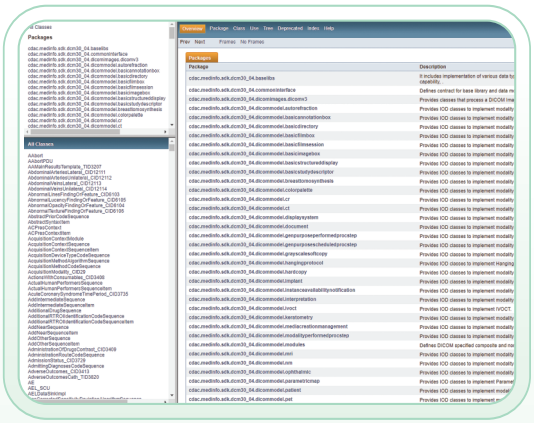
Salient Features

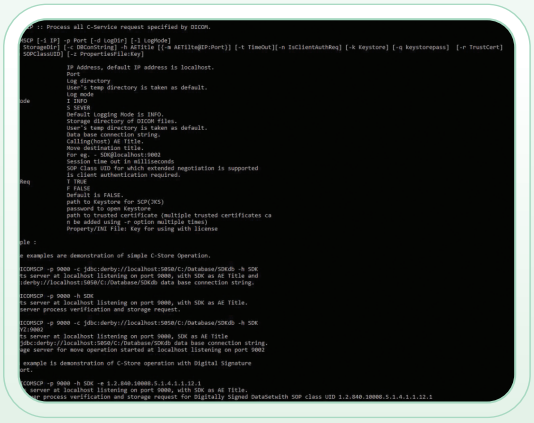
- Complete object-oriented implementation of the standard
- Implements all standard defined data types, sequences, macros, IOD's
- Manipulate data using Dataset and/or IOD Data Model approch
- Provides network communication capability with advanced application-level support for security / compression
- Efficient handling of memory and native platform multicore / multiprocessing capabilities
- Comprehensive Error / Warning Logging capability to assist debugging
- Allows customisation through extensible interfaces
- Ready-to-run command line utilities and sample codes based on SDK included in package
- Complete API and Help documents for easy understanding, reference, and use
- Source code available for download and reference

Sample Applications

Java API Documentation



Command line Utilities



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Download: https://www.cdac.in/index.aspx?id=hi_hs_medinfo_dicom_download

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