

# C-DAC's Medical Informatics Software Development Kit (SDK) v3.5 for DICOM Release Note

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## About SDK

C-DAC's Medical Informatics Software Development Kit v3.5 for DICOM is an implementation of NEMA's Digital Imaging and Communications in Medicine (DICOM) PS3.0-2015 Standard. The SDK is developed on JAVA 8, which facilitates incorporation of DICOM PS3.0-2015 in healthcare applications. The API library can also be used by Medical software and device manufacturers for making their medical software and device medical standards compliant.

## Salient Features of SDK

- Easy to use Object-Oriented implementation of NEMA's DICOM PS3.0-2015 Standard
- Allows customization or extension by implementing provided interfaces
- Comprehensive Error/Warning Logging capability to assist debugging
- Set of API Documentation
- Sample test codes to demonstrate the capabilities of SDK
- Ready to run Command Line Utilities
- Source Code of SDK and also for Utilities
- Readme and Help document to give assistance to the user while using SDK

## What's New in C-DAC's Medical Informatics SDK v3.5 for DICOM PS3.0-2015?

- Enhanced the capabilities of the SDK by providing support to Media Storage Application Profiles
  - Implemented Media Storage Operations (M-WRITE, M-READ, M-DELETE, M-INQUIRE FILE-SET and M-INQUIRE FILE)
  - Implemented classes for Roles and Service Class Options (File Set Creator, File Set Reader, File Set Updater)
  - Provided test codes to demonstrate the feature.
- Updated Content Mapping Resource
  - Implemented all Identifier of a Context Group (Context ID) and Identifier of a Template (Template ID)
  - Updated classes to reflect changes in SNOMED DICOM Microglossary
  - Updated library for all uses of SNOMED coded terms in DICOM to indicate by the Coding Scheme Designator "SRT"
- Resolved bugs and improvements

## Capabilities of C-DAC's Medical Informatics SDK for DICOM PS3.0-2015

**Release Date: September 11 2018**

- Support to all standard define datatypes, sequences, macros and IODs
- Parsing and serialization of DICOM file as per part 10 DICOM specification
- Manipulation of data using Dataset and/or IOD data model approach
- Service Class User and Service Class Provider components of SOP classes
- Support to Content Mapping Resource
- Support to Security Profile and Media Storage Application Profiles

Note: This SDK is an implementation of DICOM PS3.0-2015 standard, and does not include component or API for processing or viewing of images/pixel-data.

### Availability

The C-DAC's Medical Informatics Software Development Kit v3.5 for DICOM PS3.0-2015 is available as downloadable package from C-DAC's Portal (<http://www.cdac.in>) under Apache License v2.0 as free and open source software.

For any information regarding C-DAC's Medical Informatics Software Development Kit v3.5 please write to C-DAC at [sdk-eng@cdac.in](mailto:sdk-eng@cdac.in).