C# .Net MergeCOM-3 Types Overview

DICOM Object Classes
Classes from this group provide abstraction layer for DICOM objects and enable quick implementation for most common DICOM operations.

DICOM Services
DICOM Services classes provide implementation for DICOM services, as defined in Part 4 and Part 10 of the DICOM standard. Both DIMSE and media services are implemented with this group of classes.

Exception Handling Classes
MergeCOM-3 provides hierarchy of exception classes that can be thrown throughout operation of a DICOM interface. For each operation, an application developer can elect to handle each individual type of exception or handle whole categories of exceptions through base types.

Attribute Sets
Attribute set classes encapsulate DICOM data sets in the context of DIMSE messages, Part 10 files and DICOMDIR file structures.

Association Management
Association management classes provide capability to initiate, manage and terminate associations. This capability includes handling multiple associations, allowing association requests, initiating associations remotely and listening for incoming association requests.

Attribute and Value Classes
Classes from this group provide abstraction to registration and dictionary validation capability of core MergeCOM-3 run-time library. Application developers can rely on classes from this group to conduct all of attribute/value validation on incoming messages, as well as initial parsing when preparing an outgoing message.

Bulk Data Handling
Bulk data handling classes provide capability for pixel data management. This capability also includes file I/O and compression/decompression functions necessary for handling variety of DICOM-supported transfer syntaxes.

Logging

Classes from this group provide abstraction to core MergeCOM-3 run-time's logging facility. Full capability from the traditional MergeCOM-3 implementation, including various log destinations, custom log handlers and filters is included.

Configuration and Toolkit Management
Access to MergeCOM-3 run-time configuration files, along with basic initialization and registration functions for MergeCOM-3 run-time, is abstracted through this group of classes.

MergeCOM-3 Core Libraries
Object-oriented implementation relies on core set of optimized MergeCOM-3 libraries. While abstracted away from an application developer, these libraries provide core functionality of MergeCOM-3 toolkit.