

Merge DICOM Toolkit™

5.18.0

Release Notes

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Symbols Glossary:

Symbol	Title
	Manufacturer
	Consult Instructions for Use

The full symbols glossary can be viewed at

<https://merative.com/content/dam/merative/enterprise-imaging/merge-healthcare-symbols-glossary.pdf>

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Part	Date	Revision	Description
COM-5678	January 2024	1.0	Updated bi-annually

The latest version of this document can be found at <https://merge.my.site.com/mergeusercommunity>.

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Chapter 1. About the Application

The Merge DICOM Toolkit provides a powerful and simplified interface to DICOM. It allows you to focus on the important details of your application and the immediate needs of your end users, rather than the complex details of the DICOM standard.

WARNING: If using the log feature to log information to a file, Personal Health Information (PHI) may be exposed. Client application and system should be aware of this risk and take necessary procedures to prevent and identify unauthorized use or access to PHI.

This release includes the following toolkits:

Merge DICOM Toolkits	Target Development Environment
Merge DICOM Toolkit – C/C++ Toolkit V5.18.0	32-Bit Windows – Visual C++
	64-Bit Windows – Visual C++
	64-Bit Windows (New Edition) – VS 2019
	32-Bit Windows – Borland
	32-Bit – Linux on Intel x86
	64-Bit – Linux on Intel x86_64
	64-Bit – Linux on Intel x86_64 (New Edition) – GCC 9.4.0
	64-Bit – Linux on ARMv8
	32-Bit – Solaris 10 on Intel x86 – GCC Compiler
	64-Bit – Solaris 10 on Intel x86_64 – GCC Compiler
	32-Bit – Solaris 8 Sparc – Sun Compiler
	32-Bit – Solaris 8 Sparc – GCC Compiler
	32-Bit – MAC OS on Intel and Power PC
	64-Bit – MAC OS on Intel
	64-Bit – macOS on Intel and M1 (New Edition)
	32-Bit Android on Armv7
	64-Bit Android on Armv8
64-Bit iOS	
Merge DICOM Toolkit – .NET Framework 2.0/C# Toolkit V5.18.0	32-Bit Windows
	64-Bit Windows
Merge DICOM Toolkit – .NET Framework 4.5/C# Toolkit V5.18.0	64-Bit Windows

Merge DICOM Toolkits	Target Development Environment
Merge DICOM Toolkit – .NET Framework 4.8/C# Toolkit V5.18.0	64–Bit Windows
Merge DICOM Toolkit – .NET Core/C# Toolkit V5.18.0	64–Bit Windows
	64–Bit Linux
Merge DICOM Toolkit – .NET 6/C# Toolkit V5.18.0	64–Bit Windows
	64–Bit Linux
Merge DICOM Toolkit – Java Toolkit V5.18.0	Windows, Solaris, Linux, Android, Mac OS X
Merge DICOM Toolkit – Python Toolkit V5.18.0	64–Bit Windows
	64–Bit Linux

This release includes the following:

- [CHAPTER 2. ENHANCEMENTS ON PAGE 6](#)
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- [CHAPTER 4. KNOWN ISSUES ON PAGE 9](#)

Chapter 2. Enhancements

NOTE: Supplements and change proposals apply to all toolkits.

This release adds support for the following DICOM supplements.

Supplement	Title
229	Photoacoustic Imaging
237	General 32-bit ECG

This release also contains updates to the DICOM standard. It addresses the following correction proposals (CP):

CP#	Title
2095	Add "Measurements" to various Echo CIDs
2209	Revise Recommended Rescale Values for Multi-energy CT Images
2217	Add Context Group for Radiation Dose Imaging Procedures
2222	Add missing Treatment Site Modifier
2238	Add Reject Flag items in RDSR for X-Ray and CT
2256	Drop 16-segment model of myocardium
2258	Add place to record date of manufacture of devices
2260	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset
2261	Clarify Inventory Production Rules
2268	Update Quantitative Diagnostic Imaging Procedure codes
2271	Add First Gen References to Treatment Preparation IOD
2272	Cleanup ROI Module
2274	Correct the description of the storage commitment failure reasons
2276	Update Interlock Codes for Ions
2277	Remove Scan Spot Size from RT Ion Record
2278	Support measurement of multiple amniotic sacs
2279	Update text for Dimension Organization in Enhanced US Image Module usage

In addition to updating the toolkit to reflect changes to the DICOM standard, this release also contains the following enhancements:

NOTE: Issue numbers can be used to request additional information from your account representative.

Issue	Description
COM-4138	Allow to increase DICOMDIR size up to 4 GB. This enhancement applies to all Merge DICOM Toolkits.
COM-4297	Add DICOM Web Services to Merge DICOM .NET Core Toolkit. This enhancement applies to Merge DICOM .NET Core Toolkit.
COM-4465	Add DICOM Web Services to Merge DICOM .NET 6 Toolkit. This enhancement applies to Merge DICOM .NET 6 Toolkit.
COM-5610	Enhanced code to withstand certain malformed DICOM data. This update applies to Merge DICOM C/C++ Toolkit.
COM-5647	Allow unconditional Merge DICOM Toolkit initialization. This enhancement applies to Merge DICOM .NET Toolkits.
COM-5656	Upgrade ICU4C library to version 73.2 with support of GB18030-2022 standard. This enhancement applies to Merge DICOM C/C++ Toolkit (64-bit Linux, macOS and Windows New Editions) and Merge DICOM Python Toolkit.

Chapter 3. Fixed Issues

The following table lists the issues that have been fixed in this release.

NOTE: Issue numbers can be used to request additional information from your account representative.

Issue	Description
COM-5453	Fix exception caused by invalid DICOM DateTime value. This update applies to Merge DICOM .NET Toolkit.
COM-5608	Fix decoding of BACKSLASH "\" separator character (0x5C) in multibyte character sets GB18030 and GBK. This update applies to all Merge DICOM Toolkits.
COM-5747	Fix validation of Patient Orientation attribute which value is designated by more than two abbreviations. This update applies to all Merge DICOM Toolkit.
COM-5748	Fix conversion large DICOM data (up to 2 GB) to DICOM JSON output. This update applies to Merge DICOM C/C++ Toolkit.
COM-5773	Fix exception in Structured Report Write call caused by invalid Basic Coded Entry object with null values. This update applies to .NET, Java and Python Merge DICOM Toolkits.
COM-5777	Fix allows to apply DECODER_PRIVATE_TAG_WHITELIST configuration parameter by setting in Merge Toolkit PRO configuration file. This update applies to all Merge DICOM Toolkit.

Chapter 4. Known Issues

At the time of this publication, there are no known issues.