



eFilm Workstation®

4.3

RELEASE NOTES

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INSTRUCTIONS FOR USE:

Instructions for use are available electronically in PDF format. Paper format can be requested for supported languages by contacting Customer Support, and will be provided free of charge within seven calendar days of receiving the request. The paper format can also be provided at the time of delivery if so requested at the time of order.

INDICATIONS FOR USE:

eFilm Workstation with Modules is a software application that is used for viewing medical images.

eFilm Workstation with Modules receives digital images and data from various sources (including but not limited to CT, MR, US, RF units, computed and direct radiographic devices, secondary capture devices, scanners, imaging gateways or imaging sources).

eFilm Workstation with Modules can be used to communicate, process and display medical images.

Users have access to various image processing and measurement tools to assist them in viewing images. In addition, users can overlay templates on medical images to aid in preoperative planning.


eFilm Workstation with Modules can be integrated with an institution’s existing HIS or RIS for a fully integrated electronic patient record.

CANADIAN DEVICE IDENTIFIER: EFILM 01



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The symbols glossary is provided electronically at <https://developer.ibm.com/watsonhealth/ibm-merge-statements-and-patches/>

For application support or to report issues with user documentation, contact Customer Support:

- In North America: call toll-free 1-877-741-5369
- Outside of North America: +31.40.299.0773
- <https://estore.merge.com/na/eFilmCommunity/index.aspx>

| Part | Date | Revision | Description |
|----------|------------|----------|---------------------------------------|
| EFW-2896 | April 2020 | 1.0 | Initial version for 4.3 |
| | | 2.0 | Updated copyright |
| | June 2020 | 3.0 | Added Security Considerations section |

The latest revision of this document can be found in <https://estore.merge.com/na/eFilmCommunity/index.aspx>.

About the Solution

The eFilm application is used to view and manipulate medical images. Digital images and data from various sources (including CT, MR, US units, computed and digital radiographic devices, secondary capture devices, scanners, imaging gateways, or imaging sources) can be displayed, analyzed, processed, stored and sent across computer networks using this software. When viewing images, users can perform adjustments of window width and level, image stacking, annotation and measurement of regions of interest, and various image alterations. In addition, eFilm can be integrated with an institution's existing Hospital Information System (HIS) or Radiology Information System (RIS), providing seamless access to reports for fully-integrated electronic patient records.

System Requirements

This section describes the hardware and software required to run eFilm.

Required Hardware

The eFilm application must be run on a computer that meets the following minimum hardware requirements:

- Pentium 4-class processor
- 4 GB RAM
- 40 GB free hard drive space (1 GB for installing eFilm and 39 GB for image storage)
- Display resolution 1280 x 1024 with 32 bit/true color

For 3D Volume Rendering

- Video Card with at least 128 MB video
- RAM that fully supports DirectX 9.0 or higher

When choosing computer hardware, users should note that the most substantial performance gains result when RAM is increased. In order to prevent poor performance of the software, Merge Healthcare does not recommend that eFilm be run on a less powerful system than that listed above. Hard drive space should be added as image storage requirements increase.

Required Software and Operating Systems

eFilm Workstation operates with the following software programs and operating systems:

- Windows 8.1 Professional and Core (64-bit)
- Windows 10 Professional (64-bit)
- Microsoft Internet Explorer 11.0 or higher (if eFilm is integrated with iConnect Cloud Archive)

The eFilm Workstation also requires some prerequisite software that the application installer installs during a successful installation process. This prerequisite software includes the following:

- SQL Express 2017
- .NET Framework 4.6.1
- Microsoft Visual C++ 2015 Redistributable Package (x86)
- Microsoft OLE DB Driver for SQL Server

NOTE: 32-bit workstations and Windows 7 are no longer validated.

Security Considerations

It is strongly recommended that you implement countermeasures to reduce the risk of having your critical systems and data compromised by attackers.

Refer to <https://docs.microsoft.com/en-us/windows/security/> to search for security-related instructions.

Windows Operating System Minimum Security Standards

User account security:

- Ensure your administrator, system, and user account passwords meet industry password best practices and policies.
- Configure group or local policies, such as:
 - Account lockout
 - Password complexity and length requirements
 - Password expiration
 - Password history

- Disable the Local Administrator whenever possible.
- Disable the Guest Account where applicable.
- Refrain from using shared accounts.
- Apply user accounts with the Principle of Least Privilege (PoLP), allowing only enough access to perform the required job.

Network basic security practices:

- Enable Windows firewall for all profiles (domain, private, public).
- Do not allow shared resources to be accessed anonymously.
- Deny guest accounts the ability to log on as a service, locally, or via Remote Desktop Protocol (RDP).
- RDP is only accessible to authorized users.

General security settings:

- Disable any unneeded services.
- Enable the built-in encrypting feature BitLocker.
- Ensure the audit policy has definitions for user login auditing, successful logins, and failed attempts.
- Configure event log retention.
- Enable Windows audit policy, defining what types of events are written in the security logs of your Windows servers.

Improvements in Version 4.3

Passwords

eFilm Workstation and Lite now require passwords of at least 15 characters.

SQL Express

SQL Express has been upgraded from 2014 to 2017.

Image Viewing

Improved eFilm better handle mismatches between the DICOM header and the JPEG image header. In the case of a mismatch, eFilm considers the JPEG image header.

InstallShield

Upgraded to InstallShield 2018.

Visual Studio

Upgraded eFilm projects from Visual Studio 2005 to Visual Studio 2015.

Time Stamp Authority URL

Updated Time Stamp Authority URL to timestamp.digicert.com.

Other Changes in Version 4.3

The Accustitch component and associated Image Stitch feature are no longer available in eFilm.

Fixed Issues

NOTE: This list is a subset of the complete list of Resolved Issues and represents issues that are material and/or will affect a significant number of clients. Contact Customer Support for additional information or a more complete listing.

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

The following table lists the issue that has been fixed in this release.

| Issue | Description |
|----------|--|
| EFW-2761 | Resolved an issue that caused the eFilm display to flicker in dual monitor mode. |
| EFW-2580 | Resolved an issue that prevented CT reports from being viewable. |
| EFW-2573 | Resolved an issue that caused eFilm to terminate unexpectedly when attempting to display large (1 GB or larger) image files. |
| EFW-2568 | Resolved an issue that caused pixel data values to change after burning, causing images to look brighter than original images. |
| EFW-2481 | Resolved an issue that caused eFilm Workstation to occasionally terminate unexpectedly when viewing studies directly from a remote device. |
| EFW-2762 | Resolved an issue in which certain objects in a study failed to transfer to eFilm from IBM iConnect Access. |
| EFW-2810 | Resolved an issue that caused an incorrect image count to be reported when multiframe images were present. |
| EFW-2910 | Resolved an issue that prevented the ability to burn studies to DVD. |
| EFW-2912 | Resolved an issue that prevented images from being displayed as thumbnails in the scrapbook. |

Known Issues

The following table lists the known issues for this release of the eFilm application.

NOTE: This list of Known Issues for this product release is a subset of the complete list of Known Issues, representing the issues that are material and/or will affect a significant number of clients. The Known Issues list may not include issues that have been identified and/or addressed in prior version maintenance releases for this product. Contact Customer Support for additional information or a more complete listing.

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

| Issue | Description |
|---------|---|
| EFW-72 | PET study images that are exported as graphic files may produce images that are too small to yield legible overlay information. |
| EFW-103 | Split multi-phase fails to function as designed when performing a retrieve and view. |

| Issue | Description |
|----------|---|
| EFW-104 | Automatic synchronization fails if the user clicks Auto Series Synchronization before both series have been retrieved in their entirety. |
| EFW-109 | CD recording speed does not appear to be applied to CD burning as expected. |
| EFW-958 | In a dual-monitor configuration that does not use the Windows Classic theme, the display may flicker. If this condition occurs, it is recommended that you set the default theme to Windows Classic instead of the options available under Aero Themes. |
| EFW-977 | <p>The Unshare button in the Cloud Archive tab is not enabled after the study was shared with another Cloud Archive account.</p> <p>To unshare a study, the All Storage Spaces option should be selected. The study filter options can be used to narrow down a search if the list returned from Cloud Archive is truncated and the desired study is not appearing in the study list.</p> |
| EFW-1072 | If “Append to latest key image series by default” and “Enable Generate GSPS objects” are enabled in the Preferences tab of the Edit Properties window, images that are marked and saved as key images are not appended to the most recent key image series. |
| EFW-1121 | After searching for studies in the eFilm Lite Viewer and changing the language to Chinese or Spanish, study details are not displayed in the search window. |
| EFW-1662 | <p>eFilm fails to install on Windows 8 Home Edition due to a failure to install .NET Framework 3.5.</p> <p>If you don't have Windows 8 setup disk or if you don't want to install .NET Framework 3.5 from setup disk, navigate to the setup folder of Windows 8 on your hard drive. Click Browse and navigate to the Windows 8 setup folder. Navigate to sources/sxs and then click Install to install .NET Framework 3.5 on your system.</p> |
| EFW-1673 | When upgrading from Windows XP, the watermark level is not retained. It must be manually reset. |
| EFW-2087 | Text is truncated on the viewport when a text annotation is copied and pasted. |
| EFW-2122 | <p>When customizing the toolbar while a study is displayed, the thumbnail panel is displayed in the Toolbar Properties window.</p> <p>Workaround: Click the Toolbar Properties title bar to hide the Thumbnail Panel window.</p> |

| Issue | Description |
|----------|---|
| EFW-2768 | Measurement values do not appear in scrapbook images. Workaround: Create Key Images instead of scrap book images to save the measurement values. |
| EFW-3011 | Burning a CD/DVD may produce an error. Workaround: Burn the studies using "Create Package but do not burn" option in eFilm Media Burning Setup and burn the created package to CD using windows default CD burning option. |