Invasive Cardiology Security Website

Interventional - Invasive Cardiology

Product Group: Interventional Invasive Products

Products:
- Mac-Lab, CardioLab and ComboLab Recording Systems
- Centricity Cardiology Data Management Systems

Version: AltiX (v7)

Subject: Security Information

Date: 05 November 2019

Summary
The following information is provided to GE Healthcare Technologies customers in regards to known technical security vulnerabilities associated with Mac-Lab® Hemodynamic, CardioLab® Electrophysiology, SpecialsLab and ComboLab IT Recording Systems for Cath Lab, EP Lab and other interventional labs as well as the Centricity® Cardiology Data Management Systems.

Security Patch Base Configuration
The security patch base configuration of the Mac-Lab and CardioLab product at release is listed within the MLCL Base Configuration under the Hemodynamic, Electrophysiology and Cardiovascular Information Technologies section of the http://www3.gehealthcare.com/en/Support/Invasive_Cardiology_Product_Security website.

Process
The following actions are taken whenever Microsoft/OEMs releases new security patches:

- The Invasive Cardiology Engineering Team performs a security analysis process for supported Mac-Lab, CardioLab, GE Acquisition/Client Review and INW Server hardware/software.
- If a vulnerability meets Mac-Lab and CardioLab validation criteria, the vulnerability is communicated through the GEHC Product Security Database and Invasive Cardiology Security Website within three weeks of the patch release.
- Upon validation of the Mac-Lab and CardioLab vulnerability, the GEHC Product Security Database and Invasive Cardiology Security Website and affected Mac-Lab and CardioLab Security Patch Installation Instructions are updated.
The Mac-Lab and CardioLab vulnerability validation criteria are as follows: Any vulnerability that allows malware to alter or deny Mac-Lab and CardioLab functionality and/or infect and propagate through normal system use.

Customers are responsible to stay informed with Microsoft vulnerability notifications and to visit the Invasive Cardiology websites to understand the Mac-Lab and CardioLab impact. Once a security patch is validated, customers are responsible for the installation of security patches. All Mac-Lab and CardioLab Security Patch Installation Instructions are available on the Invasive Cardiology Security Website.

Vulnerabilities exposed after the Mac-Lab and CardioLab product release which do not meet the criteria to be validated are not listed within the GEHC Product Security Database and Invasive Cardiology Security Website. These vulnerabilities are deemed to be non-critical and/or outside normal clinical workflow of the Mac-Lab, CardioLab and Centricity INW systems and will not be validated.
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Revision History

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<tr>
<th>Revision</th>
<th>Date</th>
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<tr>
<td>1.0</td>
<td>05 November 2019</td>
<td>• Listed Qualified August 2019 Patches</td>
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<tr>
<td></td>
<td></td>
<td>• Listed Qualified September 2019 Patches</td>
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<td></td>
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<td>• Listed Service Stack Update Patch for server</td>
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Document layout

The document is structured to show
- Requirements for installation of patches
- How to confirm the version of AltiX application.
- How to logon to the system
- Subsections that are referenced from patch update sections
- Unqualified patches
- Patch update sections

Installation of the Security Patches on MLCL systems

Requirements:
- Updates may be applied at any time other than while the Mac-Lab or CardioLab application is open.
- Updates must be re-applied if the system is re-imaged.
- Updates apply to both networked and standalone systems.
- Best practice is to update all applicable MLCL systems at the site. This document provides list of qualified patches for INW Server (Windows Server 2016), Acquisition (Windows 10) and Review (Windows 10) systems.

This document applies to AltiX only. Please verify that you are running AltiX using the following procedure before proceeding:

1. Launch the Mac-Lab CardioLab application from the acquisition or review system.
2. Select Help > About Mac-Lab (or CardioLab, as applicable).
3. Verify the version number is 7.0.0
4. Click Close.
5. Close the application.

Recommendation: Use Internet Explorer (IE) for Catalog download. If you are using the cart feature to download patches, to see the cart it requires opening another tab or new window for http://catalog.update.microsoft.com
How to Log On to Acquisition/Review/INW Server Systems

Login as user who has administrative privilege to deploy the security patches.

NOTE: For initial install MLCLTechUser account can be used and for follow up account contact the site for appropriate account information.
The patches displayed below are qualified on an independent basis and can be installed on a one-by-one basis, although it is recommended that all qualified patches are installed. There are dependencies within the qualified patch list. In the table below, it is recommended the patches are installed in order from top to bottom to ensure all pre-requisites are met for all patches. On occasion the patch dependencies require system reboots which are identified in the table below.

**NOTE:** Due to site configurations, system patch set, qualified patches which have been installed previously or patch dependencies, some patches could fail to install due to the functionality is already installed. The Microsoft patch installer will alert you to this issue. If this occurs, please continue with the next patch installation.

It is the responsibility of the Hospital to assure all the qualified patches have been installed on the systems.

### Unqualified Patches MLCL v7.0.0

<table>
<thead>
<tr>
<th>Operating System Platform</th>
<th>INW Server</th>
<th>Acquisition</th>
<th>GE Client Review Workstation</th>
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<tbody>
<tr>
<td>Windows Server 2016</td>
<td></td>
<td>Windows 10</td>
<td>Windows 10</td>
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<tr>
<td>Current Unqualified Vulnerability</td>
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### MLCL V7 2019 Patches

**Note:** During installation of patches, if message box appears requesting system restart. Kindly restart the system.

#### Windows 10 LTSB 1607 x64 (Acquisition & GE Review)

<table>
<thead>
<tr>
<th>KB</th>
<th>Link</th>
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### Windows Server 2016 (INW)

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<th>Notes</th>
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### Software Only Review (Windows 10 Pro, Windows 10 Enterprise)

Note: All applicable released patches are qualified, and it is the responsibility of hospital to keep them up to date.
Contact Information

If you have any additional questions, please contact our Technical Support Department.