EXA+CT

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Use Guide
for Weasis Medical Viewer with the ExactVu Micro-Ultrasound System
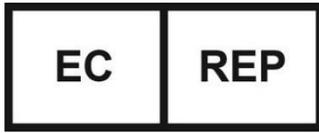

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2797

Preface

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EC | **REP**

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Trademarks
Exact Imaging trademarks:
- ExactVu™
- Exact Imaging™
- FusionVu™

The Weasis Medical Viewer is used in accordance with the *Eclipse Public License* (http://www.eclipse.org/legal/epl-v20.html).

Warranty information
The ExactVu micro-ultrasound system and its accessories, when supplied and delivered new, in the original shipping container to the original purchaser, are covered under a one-year warranty that covers damage due to defective materials and workmanship, and/or failure of the equipment to operate in accordance with information in the *Operation and Safety Manual for ExactVu™ High Resolution Micro-Ultrasound System*.

Version information
System: ExactVu™ High Resolution Micro-Ultrasound System
Use Guide for Weasis Medical Viewer with the ExactVu Micro-ultrasound System, revision 1.5, *original instructions*
This Use Guide is written with reference to Weasis version 3.0.4-EI.60.

DICOM Conformance Statement
The *DICOM Conformance Statement for Weasis* provides details about the Weasis software's conformity to the DICOM standard and is available from Exact Imaging.

Table of Contents

Chapter 1   Introduction

Use Guide for Weasis Medical Viewer with the ExactVu Micro-ultrasound System provides instructions to properly use Weasis Medical Viewer ("Weasis") with the ExactVu system. Weasis is to be used by qualified healthcare providers to add fiducial marks to the MRI images derived from the radiology report or MRI image annotations made by another qualified healthcare provider (e.g., a radiologist) in order to permit import into the ExactVu *FusionVu™* feature.

It is important to use this *Use Guide for Weasis Medical Viewer with the ExactVu Micro-ultrasound System* in conjunction with other instructions for using the ExactVu system, particularly:

Document
Operation and Safety Manual for ExactVu™ High Resolution Micro-Ultrasound System
Use Guide for Weasis Medical Viewer with the ExactVu Micro-ultrasound System (this document)

Table 1: Weasis Labeling

Exact Imaging catalog references for configurations of the ExactVu micro-ultrasound system are:

- EV-SYS-220: ExactVu™ Micro-Ultrasound Imaging System (220V)

- EV-SYS-120: ExactVu™ Micro-Ultrasound Imaging System (120V)

- EV-SYS-100: ExactVu™ Micro-Ultrasound Imaging System (100V)

WARNING
EN-W1

⚠

Failure to follow the safety instructions and/or using the software for purposes other than those described in the Weasis Labeling constitutes improper use.

WARNING
EN-W6

⚠

The use of this equipment is intended for qualified operators only.
Operators should be thoroughly familiar with the safe operation of this equipment, and should be knowledgeable in the use of urological ultrasound procedures in order to reduce discomfort and possible injury to the patient.
Read all *Labeling* provided with this equipment.

WARNING
EN-W2

⚠

Unauthorized modification of this software is not permitted and may compromise the safe operation of the software.

Chapter 2   General Information

1   Product Safety

1.1   General

WARNING
EN-W85

If Weasis malfunctions, fails to respond, or if the image is severely distorted or degraded, or you suspect the software is not functioning correctly in any way, please contact Technical Support using the contact information in Appendix A.

1.2   Support for DICOM

The ExactVu system reads MRI study data in DICOMDIR format, where the study is marked up using a DICOM workstation that supports DICOM GSPS (Grayscale Softcopy Presentation State) for MRI markup.

The *DICOM Conformance Statement for Weasis* provides details about the Weasis software's conformity to the DICOM standard.

2   General Precautions

2.1   System

CAUTION
EN-C53

Exact Imaging recommends that institutions take necessary steps to protect workstations that are used to perform Weasis tasks against malware, unauthorized remote access and other cyber security threats.

CAUTION
EN-C54

Exact Imaging recommends that institutions take necessary steps to protect patient data when using external storage devices (i.e., USB and hard drives).

Chapter 3   Installing DICOM Viewer for FusionVu (Weasis)

This section provides instructions to download and install the Weasis Medical Viewer on a workstation other than the ExactVu system.

The installation consists of two parts:

1. Download and install 64-bit Java Runtime

2. Download and install Weasis

Prerequisites:

- To install Weasis, a computer running Windows 7 or newer 64-bit operating system is required.

Download and install 64-bit Java Runtime

1. In web browser navigate to https://java.com/en/download/manual.jsp.

2. Choose the *Windows Offline (64-bit) download*.

3. Open the .exe file and follow the on-screen instructions to complete the installation.

Download and install Weasis

1. Navigate to the downloads page, <u>https://www.exactimaging.com/downloads</u>

2. Fill out the web form to activate the link to download the DICOM Viewer for FusionVu (Weasis). Clicking the link will save the installer to your designated download folder.

3. Double click on weasis.msi file and follow the instructions.

4. Use Weasis shortcut in Windows Start Up menu to launch Weasis.

NOTE EN-N173	Depending on version of antivirus software installed on the workstation it might be necessary to adjust antivirus settings to allow installation of both Weasis and Java Runtime Environment.
	Consult your System Administrator for help if needed.

Chapter 4   Using Weasis with ExactVu

To annotate MRI images for use with FusionVu, Weasis software is installed on a workstation separate from the ExactVu system.

MRI images are retrieved from either an external drive (such as a USB storage device or DVD) or from a PACs system connected to the Weasis workstation.

After retrieving MRI images, Weasis is used to annotate them to use with FusionVu.

1   Retrieving MRI Images from an External Drive

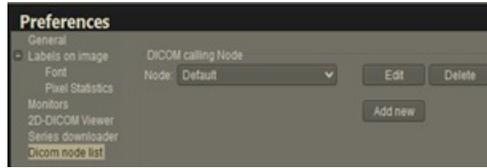**To retrieve MRI images from an external drive:**

1. Open the Weasis software.

2. Click the **Import** icon (in the top left corner of the screen) to import a study.

   - Alternatively, from the menu select **File>Open>DICOM**.

3. From the *Import DICOM* dialog, select the button to browse for studies.

4. From the *Open* dialog, navigate to the external drive and select the MRI study.   Click **OK**.

5. Select **Import and Close**. The MRI images load.

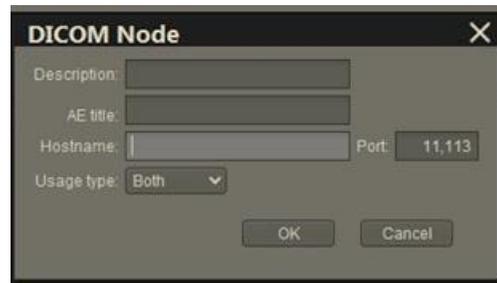6. Proceed to section 4 on page 9.

2   Configuring Weasis to PACS

Please note that this configuration is performed one time only.

1. Open the Weasis software.

2. From the menu select **File > Preferences > DICOM node list**.

3. Set up a local workstation:

- Under *DICOM calling node*, select **Add new**

- Type a **Description** of the workstation

- Type the *AE title*, *Hostname* and *Port* for the workstation

- Select **Both** from the *Usage type* dropdown

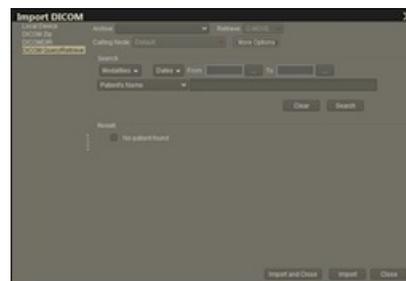- Select **OK**. From the confirmation prompt, select **Close**

4. Set up a connection to the PACS system:

- Under *DICOM Node*, select **Add new**

- Type the *AE title*, *Hostname* and *Port* for the PACS server

- Select **Both** from the *Usage type* dropdown (to match the Usage type for the *DICOM calling node*)

- Select **OK**. From the confirmation prompt, select **Close**

3   Retrieving MRI Images from a Connected PACS System

- From the menu select **File > Open > DICOM**
- Select **DICOM Query/Retrieve**
- Search for the patient study and select it when found
- From the menu select **Open > Import and Close**
- Proceed to section 4 on page 9

4   Annotating Retrieved MRI Images

After selecting and importing images from a MRI study from either an External Drive or connected PACS server (as described in section 1 and section 2 respectively), retrieving images from a selected MRI study, annotate the images for use with FusionVu.

To annotate images using Weasis:

1. From the *Layout* context menu select **1x2 Views**.

2. Select the sagittal and axial planes.

   - Any sequence may be used (i.e., T1, T2 or DWI)
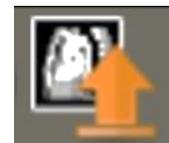
   - Ensure the sequences are paired

3. With the imported series displayed in *1x2 View*, select **Line** from *Measurements tools*.

4. Draw a line parallel to prostate length on the inner rectal wall (sagittal series). Ensure the line is:

   - within 20 mm and 90 mm

   - ~25% longer than prostate length

5. Select **Ellipse** from *Measurement tools*.

6. Draw a circle around each suspicious area.

5   Exporting Marked MRI images

1. To export, click on the Export icon (in the top left corner of the screen) to import a study.

   - Alternatively, from the menu select **File > Export > DICOM**

2. Select the parent series as well as the New (i.e., annotated) series.

3. Click the **Export and Close** button.

4. Navigate to destination drive location where the series will be exported.

5. Create a new folder.

    - Type the name the folder using the patient's name, plus the word "marked" (or similar word).

    - Click **New Dir** and then click **OK**.

    - A progress indicator is displayed in the bottom left corner of the screen while the study is exported.

NOTE
EN-N172

Exact Imaging recommends saving studies from the Weasis workstation to PACS or to an external storage device.

6   Changing Weasis Default Font Size

1. Begin by locating the Weasis installation directory, where Weasis is located.

2. Navigate to the Weasis->conf subdirectory.

3. Edit the "config.properties" using Microsoft WordPad (or a similar editor that supports Unix line-spaces). (The Notepad application does not handle Unix line endings well and is not recommended.) To open config.properties using WordPad:

    - In Windows Explorer, right-click config.properties.

    - Select **Open With**.

    - Select WordPad when prompted with a list of applications. Refer to Figure 1.
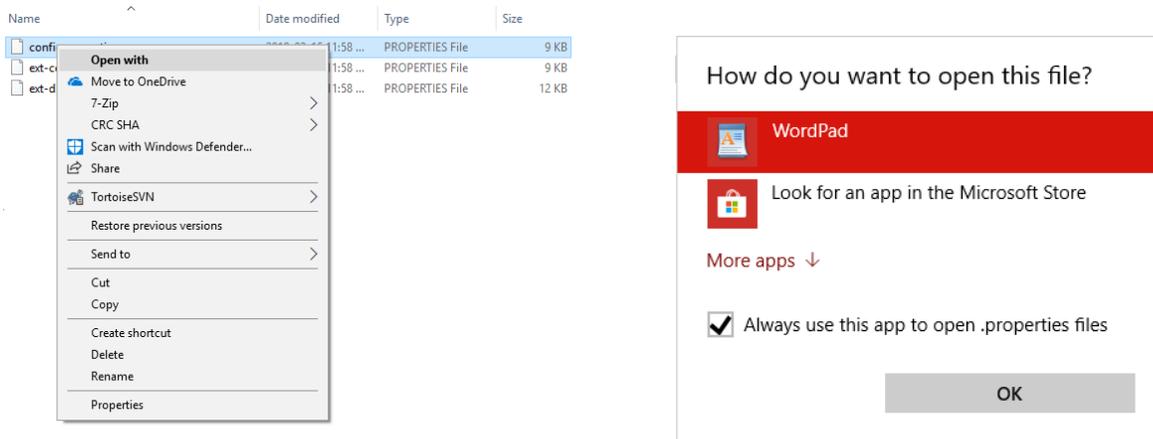

Figure 1: Open config.properties using WordPad

4. Locate the "weasis.defaultfontsize=16" line.

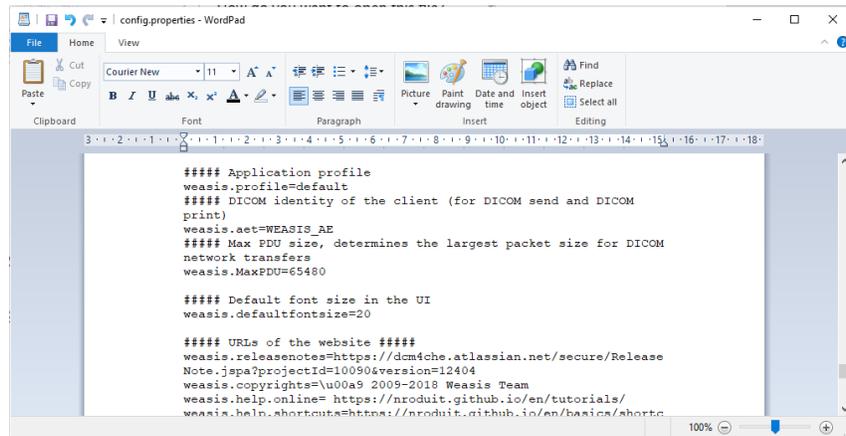5. Change the default 16 to the desired font size. Figure 2 shows the default font size being changed from 16 to 20.

Figure 2: Example of changing the default Weasis font size from 16 to 20 pts

6. Save the file and restart Weasis to use the new font size.

7   Changing Thumbnail Size

1. Once Weasis is open, click on the "More Options" button (left side of the screen above the thumbnails).

2. Change the thumbnail size to your like. Be careful with long file names that may not be fully displayed depending on the size selected.

If assistance is required, contact Technical Support using the contact information in Appendix A.

Appendix A   Contact Information

For Technical Support

Region	Phone number	Email address
All regions except North America – contact EDAP TMS	+33(0)472 153 150	ccc@edap-tms.com
North America (US, CA, MX) – contact EDAP USA	+1 (512) 852-9685	service@edap-usa.com

For ordering consumables and other accessories and parts

Region	Phone number	Email address
France (FR), Belgium (BE) - contact EDAP TMS	+33(0)472 153 150	order@edap-tms.com
Germany (DE), Austria (AT), Switzerland (CH) - contact EDAP TMS GmbH	+49 461 80 72 590	order@edap-tms.de
North America (US, CA, MX) - contact EDAP USA	+1 (512) 832-7956	order@edap-usa.com
All other regions - contact EDAP TMS	+33(0)472 153 150	order@edap-tms.com