GTIMSMVP®

TIMS REVIEW SOFTWARE

SETUP AND
CONFIGURATION
GUIDE

Rev. 2



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TIMS MVP® Review Setup and Configuration Guide

Rev. 2 March 2022

About TIMS Medical & Foresight Imaging LLC

TIMS Medical is a division of Foresight Imaging LLC focused on finished medical devices for the recording, editing, archiving, and real-time collaboration on medical imaging studies. Applications include modified barium swallow studies, FEES, endoscopy, interventional radiology, ultrasound, surgery, DICOM & PACS/VNA connectivity, and much more. Over 5000 systems are installed in hospitals, imaging centers, and medical schools worldwide. For further information, visit www.tims.com or email info@tims.com.

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Preface

The TIMS Review Software consists of:

This guide provides software configuration information for users. The details on how to use the TIMS Review is contained in the **TIMS MVP Operator's Guide**.

What Is TIMS Review Software?

TIMS Review is a software-only version of the TIMS system (no video acquisition hardware). TIMS Review can be installed on any Windows 10 computer in the speech pathology lab, office area, or anywhere in the hospital.

To speed workflow and immediately free up the fluoroscopy suite for the next patient, the speech study can be instantly sent over the hospital network from the TIMS system in the fluoroscopy suite to one or more TIMS Review systems throughout the hospital. Speech pathologists can then edit, annotate, review, and analyze the studies, free from the pressure of creating a bottleneck in the fluoroscopy suite, in the comfort of their own office or lab area.

TIMS Review software consists of a background DICOM receive service and a software application program.

Consult the TIMS Review Release Notes

Latest details about what is new or different in the current TIMS Review release are contained in the Release Notes.

Open the Release Notes from the Start Menu > TIMS MVP > TIMS MVP Release Notes

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TIMS Review Setup and Configuration

Introduction

TIMS Review Software is a software-only version of the TIMS System.

It includes all functionality of the TIMS MVP system except for image and video capture. Studies from your TIMS systems can be immediately sent from the fluoroscopy or endoscopy suite to a TIMS Review system anywhere on your hospital network including your office, lab area, or outpatient facility.

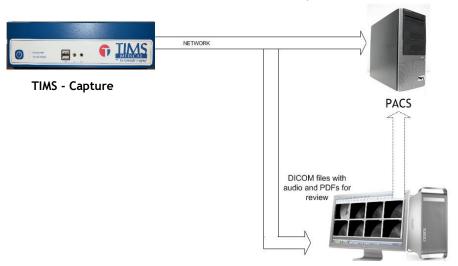
This provides for greater efficiency in the fluoroscopy suite, allowing more patients per day, because all review and analysis can be done in your speech pathology office or lab rather than the fluoroscopy suite.

All TIMS review and analysis tools are available to you with TIMS Review.

What's Included in this Guide

This document covers the setup and configuration between a user's workstation loaded with TIMS Review software, and a TIMS MVP capture station. A TIMS MVP capture station can send files (with audio) to a user's TIMS Review workstation for review and editing.

This eliminates the need to use TIMS located in the procedure room.



User Workstation with the TIMS Review software

Hardware Requirements

- Windows-based desktop or laptop computer
 - Sleep or Standby mode is not supported.
- Operating System: Windows 10 64 bit
 - o Firewall/services exceptions
- Memory: 4GB minimum, 8GB recommended
- Hard drive: 500GB 7200 rpm or better recommended, SSD drives recommended for best performance
- **CPU:** i3 7th generation or better recommended
- *UAC (User Access Control): Set to "Never notify" for installation of the TIMS Review software. After installation "Never notify" is the recommended operational setting.

The maximum operational UAC setting for TIMS Review is: "Notify me only when programs try to make changes to my computer"

- Network: Wired 100/1000 Mb network connection
- TIMS Review Install Disk or downloaded TIMS Review zip file
- TIMS Review Software License provided by TIMS Support

TIMS Review Requirements

The TIMS Review system requires:

- firewall exceptions,
- TIMS/PACS has to be on the same network/subnet as the TIMS Review,
- a unique AE title,
- a resolvable system name or static IP address, and
- port assignment.

In addition to the system requirements above:

 The TIMS MVP capture station requires the TIMS Review station information to be listed under the TIMS MVP DICOM SEND destination. TIMS Review must be installed with system administrator rights. TIMS Review supports one logged in user at a time.

Important Information

The TIMS Review workstations are independent of PACS. The TIMS Review workstation cannot be used for:

- IDEA Auto-SYNC
- Speech therapy

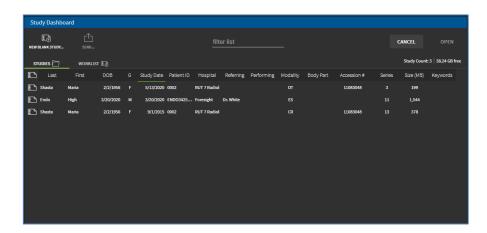
TIMS Review Setup Procedure

- Load or upgrade and enable the TIMS Review software on the user's workstation with an account that has system Administrator rights.
- The TIMS Review software must be configured to communicate with the TIMS DICOM capture station.
- Depending on workflow, the TIMS Review computer may need PACS access configuration.
- Once installed, the TIMS Review software must be licensed and enabled,

TIMS Review Software Configuration

To configure a TIMS Review system to communicate with TIMS:

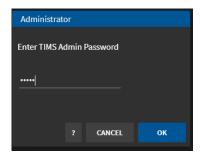
- 1. Install the TIMS Review software following the prompts.
- 2. Start the TIMS Review application. The TIMS Review opens with the **Study Dashboard** open.



3. Define the TIMS Review AE title and port number. Go to Help > Configuration.



Result: The Administrator login appears.



4. Log in to the **TIMS MVP Config** dashboard by entering the TIMS Admin Password. Click **OK**.

Note: If you have not changed the default Administrator password, you will receive a message asking you to consider changing the default TIMS MVP admin password. Click **OK**.

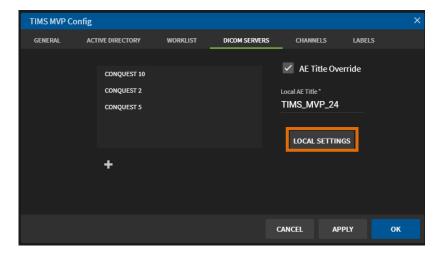


Result: The TIMS MVP Config dashboard appears.

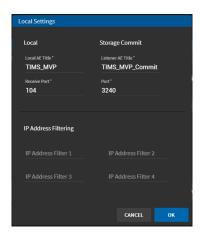
5. Click the DICOM SERVERS tab.



6. Click **Local Settings** to add the TIMS Review computer. These settings will allow the computer to receive studies or study images from TIMS MVP.



7. Complete the fields in the Local Settings page using the table below.

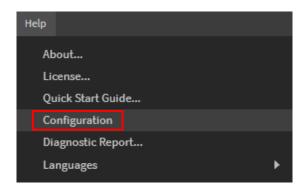


Option	Description	
Local		
IMPORTANT: Eac	ch additional TIMS Review system must have a unique	
AE Title and IP ad	ddress.	
Name	Provide a local Application Entity (AE) title. The	
	default is TIMS_MVP.	
Receive Port	Type in the port number for Service Class Provider of	
	the remote system. The default port is 104 .	
Storage Commit		
Listener AE	Type in the listener Application Entity (AE) title for the	
Title	PACS.	
Port Number	Type in the port number for the PACS.	
IP Address Filtering		
IP Address	Enter additional IP addresses or host names that	
Filtering (4)	DICOM Receive will respond to. This is helpful when	
	you move a TIMS system from one room to another	
	which is connected to a different network segment.	

8. Click **OK** when done.

TIMS Capture System Configuration

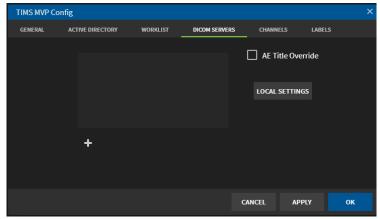
1. On the **TIMS MVP Capture** system, add the TIMS Review station as a DICOM destination. Go to **Help > Configuration**.



2. Click the DICOM SERVERS tab.



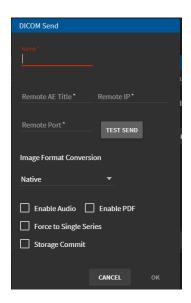
3. Click to add a DICOM server.



4. Complete the fields in the **DICOM Send** page using the table on the next page to add the TIMS Review system.

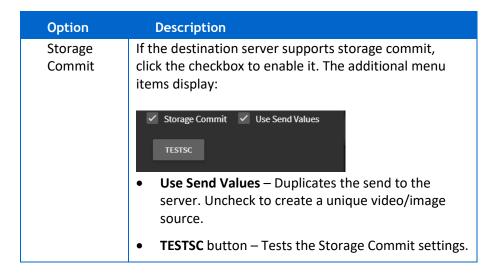
 Ensure the Remote AE title and Remote Port Number matches the TIMS Review SCP AE Title and Port Number.

IMPORTANT: Each TIMS Review system must be entered as another send/query destination on the TIMS system.



Option	Description
Name	Type in the name of the Service Class Provider (SCP).
Remote AE Title	Type in a name for the remote Application Entity (AE) Title of the DICOM send system.
Remote IP	Enter the remote IP address for the DICOM send system.

Option	Description
Image Format Conversion	From the drop-down menu, select the image compressions type you are using. • Native – Uses the current format of the image file.
	Uncompressed Explicit – Means the DICOM transfer syntax is Explicit VR, Little Endian. The images are converted to uncompressed if this is not the native capture format.
	Lossy - Uses some reduction in image quality.
	Lossless - Uses no reduction in image quality.
	Uncompressed Implicit – means the DICOM transfer syntax is Implicit VR, Little Endian. The images are converted to uncompressed if this is not the native capture format. Image Format Conversion Native Uncompressed Explicit Lossy Lossless Uncompressed Implicit
Enable Audio	If the destination server supports audio, click the
	checkbox to enable audio.
Enable PDF	If the destination server supports the PDF file format, click the checkbox to enable.
Force to	Click to take all the series residing in a study and send
Single	it as one large series. When the user sees it on the
Series	receiving end, it is one series.



- 5. Before you save the settings, you must test your entries:
 - a. If you enabled Storage Commit, click the **TESTSC** button. If the test is successful, you receive a message that the test completed successfully at the top of the page.

Connection Success

If the test is not successful, you receive an error message, check your settings and then click **TESTSC** again. An example message is shown below:

Error: Unable to connect to SCP (105)

b. For the DICOM Send settings, click the **TEST SEND** button. If the test is successful, you receive a message that the test completed successfully at the top of the page.



If the test is not successful, you receive an error message, check your settings and then click **TEST SEND** again. An example message is show below:

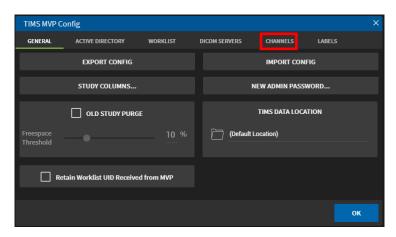


6. Click **OK** to save after the test(s) succeed.

Edit a Study

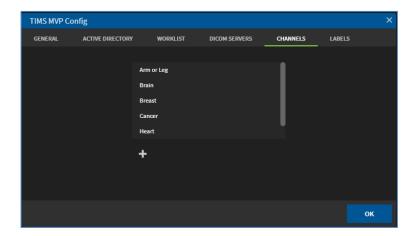
To edit TIMS studies received on the TIMS Review system:

- 1. On the TIMS Review system, go to the **Help** menu and select **Configuration**.
- 2. From the TIMS MVP Config page, click the Channels tab.

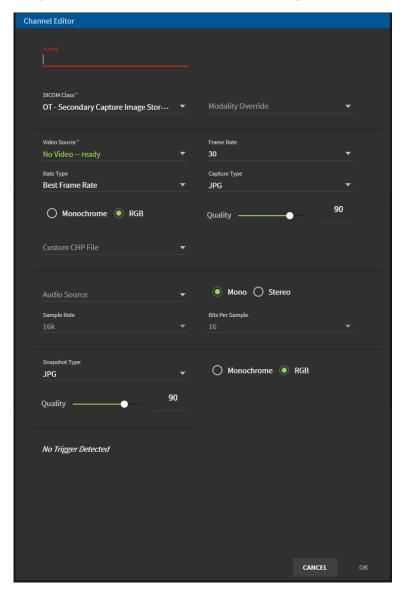


Result: The Channel Editor opens.

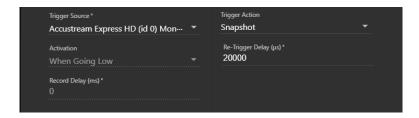
3. Click to add a channel.







When a trigger is detected the following options appear at the bottom of the Channel Editor.



Option	Description
Name	Provide a name which helps you identify how the
DICOM Class	channel is used. For example, type the name Heart. From the drop-down menu, select the modality type. Scroll through the list to find the correct modality. For example, for the heart, select PT-Positron Emission Tomography Image Storage.
	OT - Secondary Capture Multi-Frame Grayscale Word Image Storage OT - Secondary Capture Multi-Frame True Color Image Storage PT - Positron Emission Tomography Image Storage
	RF - X-Ray RF Image Storage RT - RT Image Storage

Option	Description
Modality Override (Optional)	From the drop-down menu, select the shortened modality identifier name. Scroll through the list to find the correct modality.
	For example, you might want to use PT rather than PT-Positron Emission Tomography Image Storage.
	Modelitu Override NM
	от
	РТ
	RF
	RT
	SM
Video Source	Select the video source from the drop-down menu. Select the connection on the AccuStream board that is being used for the channel.
	Accustream Express HD (id 0) Component Video ready [DVI, Rear] ●
	Accustream Express HD (id 0) DVI Video [DVI, Rear]
	Accustream Express HD (id 0) HDMI Video [HDMI, Rear]
	Accustream Express HD (id 0) MonoOnBlue Video [DVI, Rear] ●
	Accustream Express HD (id 0) MonoOnGreen Video ready [DVI, Rear]

Option	Description
Frame Rate	The playback speed is determined by the default animation speed of 30 frames per second or another value that you can set from the drop-down menu. It recommended you keep the default of 30, unless you need the lower animation speed. 30 25 15 8
Rate type	Two options for choosing a frame rate type: • Best Frame Rate – This will use the actual frame rate as close as possible to the rate chosen in the Frame Rate field.
	 Fixed Frame Rate – This will always give you the frame rate specified in the Frame Rate field.
Capture Type	Select the capture type you will use with the modality. It is either a JPEG (JPG) image or an MP4 video.
Video Monochrome or RGB	Click the video type that you will capture. It is either Monochrome (Black/White) or RGB color (Red, Green, Blue)
Quality	This option sets the compression for video. The Quality default is 90% for the best video size and quality. If you need to change this option, use the slider to select the compression percentage you want.

Option	Description
Custom CHP File	 If you want to use a custom Common Hardware Profile, use the drop-down menu to make your selection. None – The default selection – no custom CHP file chosen.
	 Import Format To import a CHP file, select this option and the Import CHP File dialog appears. Browse for the file and select it, click the Import button.
	 Reveal formats folder Open to directory that contains the formats.
Audio Source	Use the drop-down menu to select the TIMS audio sources available on your TIMS computer. All available audio sources appear in green. If the audio source is connected to the TIMS, the selection will indicate the connection type (such as USB) or the location of the connection on the TIMS unit. The selections also include TTS (Text to Speech) audio. Headset (Bose QC35 II Hands-Free AG Audio) [Digital] Microphone (Realtek(R) Audio) [1/8 inch jack, Front] Microphone (Realtek(R) Audio) Internal AUX Jack (NVIDIA High Definition Audio) Stereo Mix (Realtek(R) Audio) rea
Mono or Stereo	Select the audio type you are using with TIMS – Mono or Stereo.

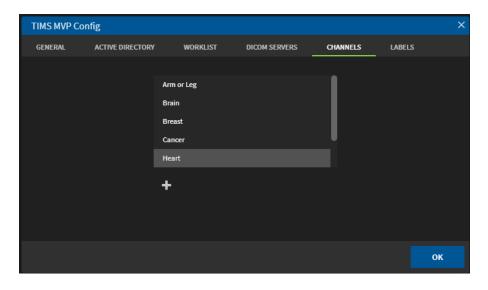
Option	Description
Sample Rate	Select an audio sample rate from the drop-down menu. Sample Rate defines the number of samples per second taken from a continuous audio signal. 48k 32k 22k
Bits Per Sample	Select the bits per sample from the drop-down menu. The Bits Per Sample indicates the sample size for the audio file in bits per sample.
Snapshot Type	Select the image Snapshot Type from the drop-down menu. The default selection is a JPEG (JPG) file.
Image Monochrome or RGB	Click the image type that you will capture. It is either Monochrome (Black/White) or RGB color (Red, Green, Blue)
Quality	This option sets the compression for image. The Quality default is 90% for the best image size and quality. If you need to change this option, use the slider to select the compression percentage you want.
Trigger Source	Use the drop-down menu to select the Trigger Source available on your TIMS computer. Trigger Source * Accustream Express HD (id 0) Mon…

Option	Description
Trigger Action	 Select how you want to use the trigger for capturing video and images. There five options: None – Trigger is attached to the TIMS unit but is not going to be used Toggle Record – Use the foot pedal to start and stop recording multiple times for a video so you can
	 capture specific intervals Record – Use the trigger to start recording and stop
	recording a video.
	Record For – Records for a set amount of time when trigger is activated.
	None
	Toggle Record
	Snapshot
	Record
	Record For
Trigger Activation	This allows streaming capture of video to be started and stopped each time the pedal is depressed. Choose the selection that fits the pulse from the trigger when it is depressed.
	While Low
	If the foot pedal creates a LOW going pulse, and stream capture is desired only while the pedal is
	depressed, use this option.
	While High
	If the foot pedal creates a HIGH going pulse, and stream capture is desired only while the pedal is
	depressed, use this option.

Option	Description
Retrigger Delay (μs)	Enter the milliseconds that must elapse before another trigger event is recognized.
Record Delay (ms)	Enter the milliseconds that must elapse before another trigger event is recognized.

5. Click **OK** to add the channel.

Result: The channel is added to the list of channels.

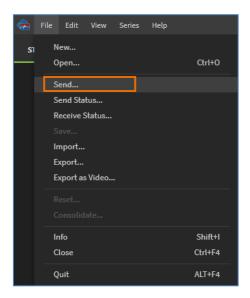


Sending a Study Simultaneously to PACS and a TIMS Review

The TIMS MVP capture station can send the study simultaneously to PACS and a TIMS Review station.

To select a TIMS Review station and a PACS:

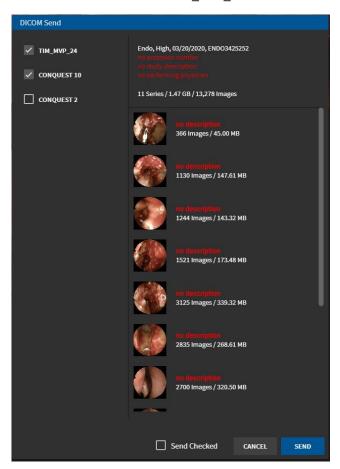
1. Select File > Send.



Result: The DICOM Send page appears.

2. Click to select the PACS and the TIMS Review system you want to which you want to send the study.

In this example, the PACS selected is CONQUEST 10 and the TIMS Review station selected is TIM_MVP_24.



3. Click Send.

You can monitor the send status by selecting File > Send Status.

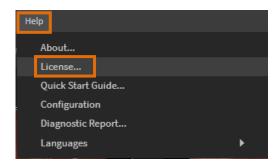
TIMS Review License

TIMS Review functions are listed in the TIMS MVP Operator's Guide. The Operators Guide is located on any TIMS Review or TIMS MVP system in the Start Menu > TIMS MVP Documentation directory.

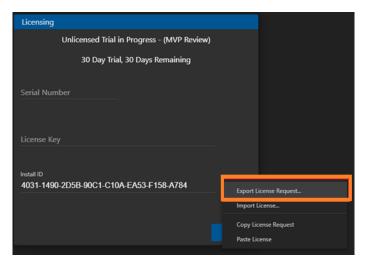
License a TIMS Review Station

To license an TIMS Review station after installing the TR software:

1. Select Help > License.



2. If you are obtaining a license by a file and email, select the Install ID drop-down menu and select **Export License Request**.



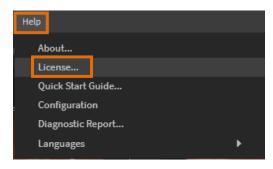
3. Email the LICENSEREQUEST.LIR file to support@tims.com.

If TIMS Customer Support is unable to email the license file for any reason, contact support and have them read the 32-digit INSTALL ID to you.

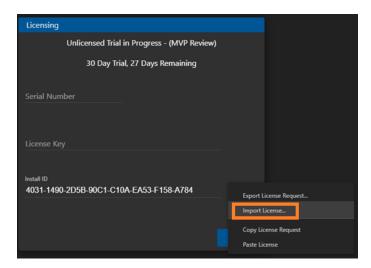
Enter the License

To enter the TIMS Review License:

1. On the TIMS Review system, select **Help** > **License**.



Go to INSTALL ID and click and select Import License from the drop-down menu.



3. To install the license manually, enter in the 16-digit **Serial Number** and the 32-digit **License Key** exactly as it appears in the license file:

```
===== license begin =====

{
    "installID": "403114902D5B90C1C10AEA53F158A784",
    "serialNumber": "80000123MVPR0001",
    "licenseKey": "a66f94608bcacb451ab073e021eb874a",
    "time": 1589226870376,
    "nonce": "TIMS MVP4ybbSM4aMK"

}
===== license end ======
```

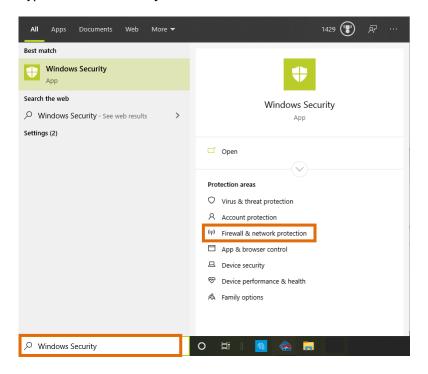
Add the TIMS Review to a Windows Firewall Exclusion

The TIMS Review computer system may need an exclusion to allow the TIMS Review application and service to receive studies.

NOTE: For Firewalls other than Microsoft Windows, contact your IT administrator.

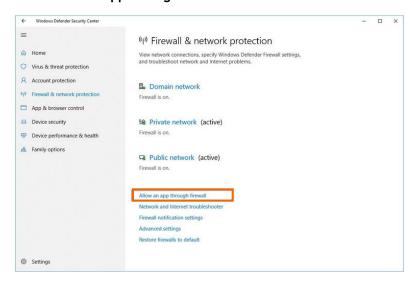
To add Windows Firewall exclusion:

1. Type Windows Security in the Windows taskbar search.

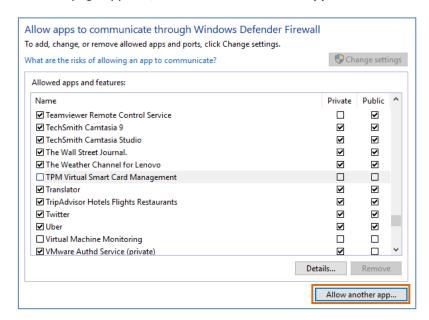


2. Click Firewall & network protection on the right-hand side menu.

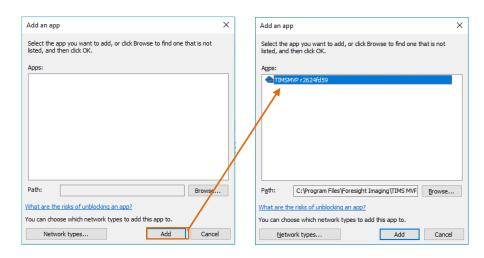
3. Click Allow an app through firewall.



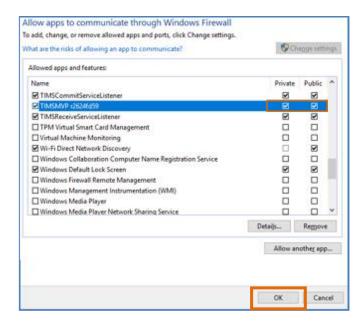
- 4. Click the Change settings button.
- 5. When the Allow apps to communicate through the Windows Defender Firewall page appears, click the Allow another app button.



6. When the Add an app dialog appears, click Browse to locate and select the TIMS Review program (Windows10_OS (C:) > Program Files > Foresight Imaging > TIMS MVP > TIMS MVP-win32-x64).



7. Click **Add** and then click the checkboxes for both **Private** and **Public**. Click **OK** to close the **Allowed apps and features** dialog.

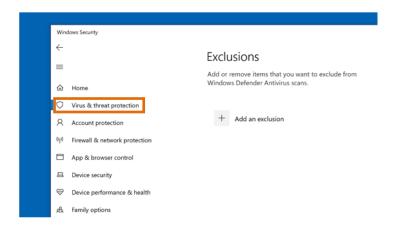


8. Reboot the computer with the TIMS Review system.

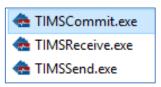
Add a Security Exclusion for TIMS Review Services Executable Programs

To allow exceptions in Windows security for TIMS Review services .exe files located in the folder C:\Program Files\Foresight Imaging\TIMS MVP\Services:

 Go to Start > Settings > Update & Security > Windows Security > Virus & threat protection.



- 2. Under Virus & threat protection settings, select Manage settings, and then under Exclusions, select Add or remove exclusions.
- 3. Select Add an exclusion, and then select the executable programs (.exe) in the C:\Program Files\Foresight Imaging\TIMS MVP\Services folder, including:



More Information

For Assistance

TIMS Customer Support: support@tims.com or 978-458-4624 x204

For More Information

This addendum completes the TIMS Review configuration and installation. For additional information regarding the use of TIMS Review software and features, go to the TIMS MVP Operator's Guide regarding the TIMS Review application and features.



Three easy ways to get support:

- WebEx conference
- Email
- Phone/Fax

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