

# TIMS

DICOM REVIEW  
SOFTWARE (TDRS)

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SETUP AND  
CONFIGURATION  
GUIDE

Rev. 3



TIMS, the PACS Connectivity Solution™



# TIMS™ DICOM Review Software (TDRS) Guide

Rev. 3 March 2017

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## Preface

The TMS DICOM Review Software (TDRS) consists of:

- This guide provides software configuration information for users. The details on how to use the TDRS is contained in the **TMS Operator' Guide**.

## What Is TMS DICOM Review Software?

TDRS is a software-only version of the TMS system (no video acquisition hardware). TDRS can be installed on any Windows 7 or Windows XP 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 TMS system in the fluoroscopy suite to one or more TDRS 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.

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

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## Consult the TMS Release Notes

Latest details about what is new or different in the current TMS DICOM System release are contained in the Release Notes.

Open the Release Notes from the **Start** menu > **All Programs** > **TMS** > **Manuals** > **TMS Release Notes** or from **C:\Program Files (x86)\Foresight\TMS\Release Notes.htm**.

# Table of Contents

Preface .....	iv
Consult the TIMS Release Notes .....	iv
<b>Table of Contents .....</b>	<b>v</b>
<b>TDRS Configuration.....</b>	<b>1</b>
Overview.....	1
Hardware Requirements .....	2
TDRS Requirements .....	2
Important Information.....	2
Procedure.....	3
<b>TDRS Configuration.....</b>	<b>4</b>
Add the TDRS to a Windows Firewall Exclusion .....	7
<b>TIMS Configuration .....</b>	<b>10</b>
<b>Edit a Study .....</b>	<b>16</b>
<b>Sending a Study Simultaneously to PACS and a TDRS.....</b>	<b>19</b>
<b>Details on TDRS Functions .....</b>	<b>22</b>
TDRS License .....	22
For More Information .....	22

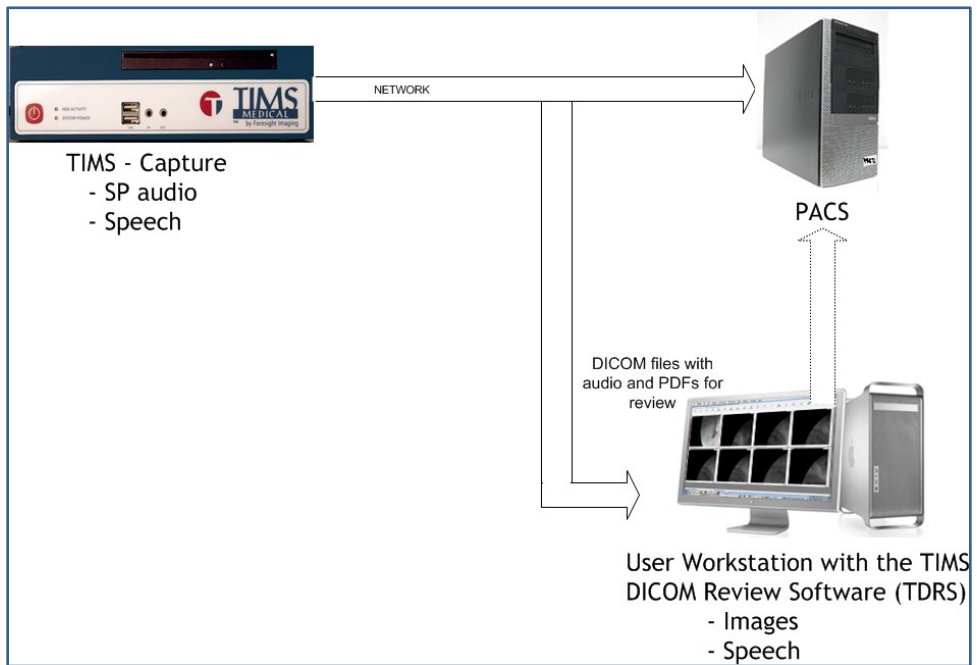


# TDRS Configuration

## Overview

This document covers the configuration between a user's workstation loaded with TIMS TDRS software, and a TIMS DICOM capture station. A TIMS capture station can send DICOM files (with audio and/or PDF) to a user's TDRS workstation for review and editing.

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



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## Hardware Requirements

- Windows-based desktop or laptop computer
  - Sleep or Standby mode is not supported.
- **Operating System:** Windows 7 Professional 32/64 bit
- **Memory:** 4GB minimum
- **Hard drive:** 500GB 7200 rpm or better recommended, SSD drives recommended for best performance
- **CPU:** i3 or better recommended
- **\*UAC (User Access Control):** Set to “Never notify” for installation of the TDRS software. After installation “Never notify” is the recommended operational setting.  
The maximum operational UAC setting for TDRS is: “Notify me only when programs try to make changes to my computer”
- **Network:** Wired 100/1000 Mb network connection
- TDRS Install Disk or downloaded TDRS zip file
- TDRS Software License provided by TIMS Support

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## TDRS Requirements

The TDRS system requires:

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

In addition to the system requirements above:

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

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## Important Information

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

- IDEA Auto-SYNC
- Speech therapy



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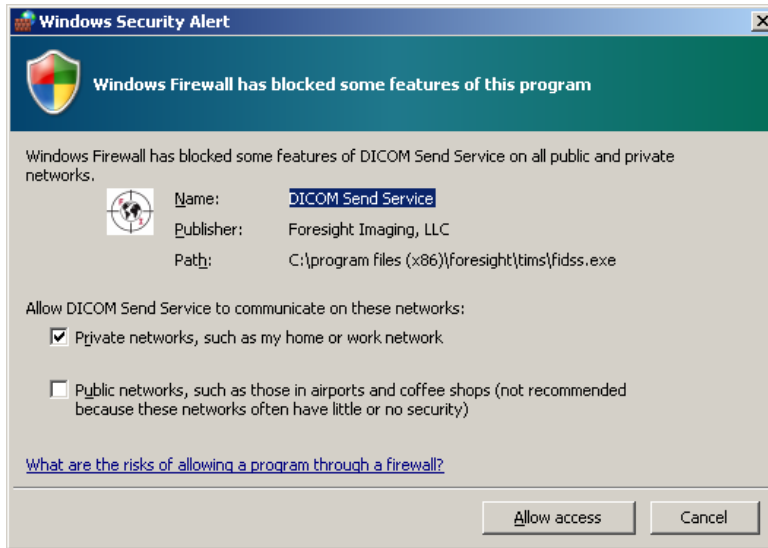
## Procedure

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

# TDRS Software Configuration

To configure a TDRS system to communicate with TIMS:

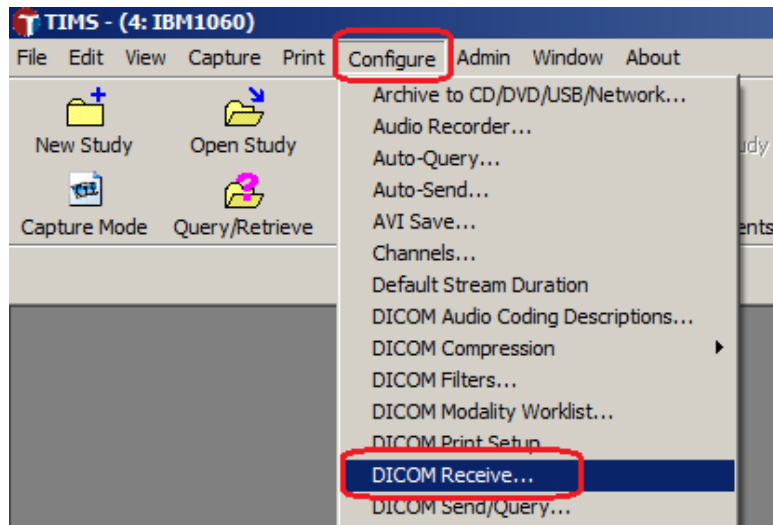
1. Install the TDRS software following the prompts.
2. Start the TDRS application. On TDRS application start-up, **the Windows Security Alert** about the **Windows Firewall** message appears. Click **Allow Access**.



If **Warning** messages appear, click the **Don't show this warning again** and click **OK**.



3. Define the **TDRS** AE title and port number.
4. Go to the **Configure > DICOM Receive**.



5. Enter the **IP Address Pattern** and the **SCP AE Title** in the Configure DICOM.
  - **IP Address Pattern:** Used to prevent the Receive Service from locking onto a transient or undesirable IP address during startup (for example, specifying "192.\*" will prevent any other type of IP address from being used by the TIMS DICOM Receive Service). There is no default for the pattern.
  - **SCP AE Title:** Defaults to TIMS.

**IMPORTANT:** Each additional TDRS system must have a unique AE Title and IP address.

**Configure DICOM Receive Service**

Enter the configuration for the DICOM Receive Service (TIMSDRS) and click 'Apply Settings' to restart the service. You should verify the service is not in use before changing the settings. Manually enabling the service does not guarantee the service will start on a reboot. Check the Windows Services list to see the startup status of the service.

DICOM Receive Service

IP Address Pattern:

SCP AE Title:

Port Number:

Maximum Disk Space Use Before Rejecting Incoming Studies:  %

Retention Period for Incomplete Studies:  day(s)

Include Debug Logging Information

The other selections on this dialog include:

- **Port Number:** Defaults to 104.
  - **Maximum Disk Space Use Before Rejecting Incoming Studies:** Defaults to 80%.
  - **Retention Period for Incomplete Studies:** Defaults to 30 days.
  - **Include Debug Logging Information:** Defaults to Disabled (unchecked).
6. Click **Apply Settings**.

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## Add the TDRS to a Windows Firewall Exclusion

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

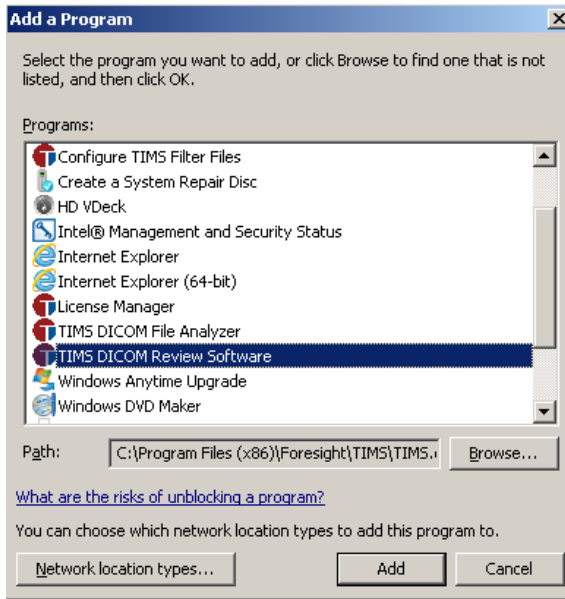
**NOTE:** For Firewalls other than Microsoft Windows, contact your IT administrator.

To add Windows Firewall exclusion:

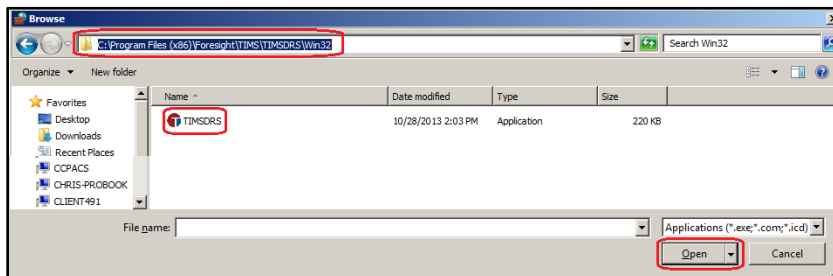
1. Select **Start > Control Panel > System and Security > Windows Firewall**.  
If you are using the Control Panel icon view, select **Start > Control Panel > Windows Firewall**.
2. Select **Allow a program or feature through Windows Firewall**. The Add a Program dialog appears.



3. Scroll down to TIMS DICOM Review Software and click Add.

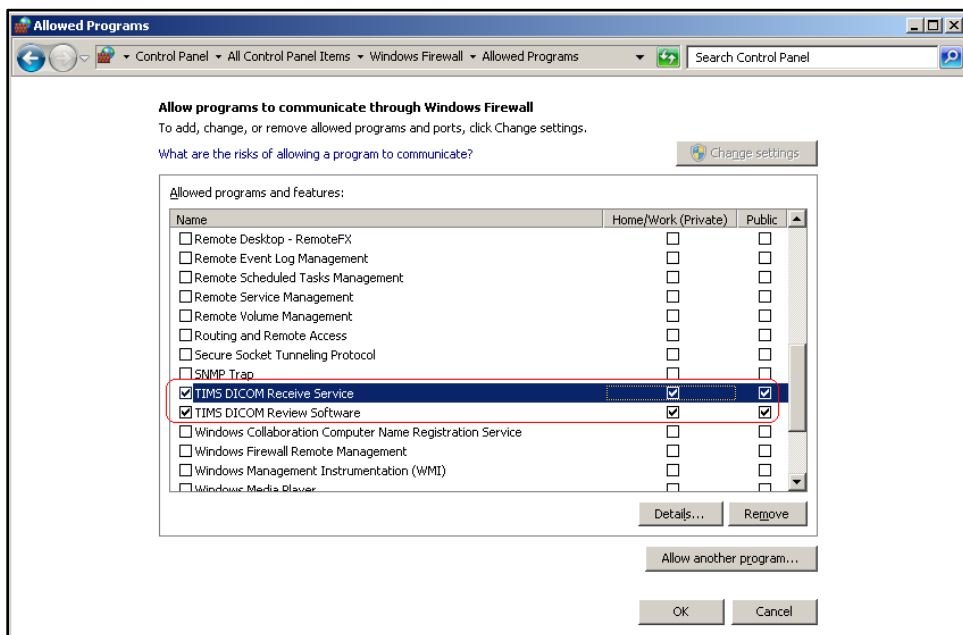


4. Select **Allow another program....**
5. Browse to C:\Program Files (x86)\Foresight\TIMS\TIMSTDRS\Win64 (or Win32) directory. Select TIMSDRS, click Open and then Add.



6. Enable the TIMS TDRS Receive Service for both Private and Public by clicking the checkboxes.

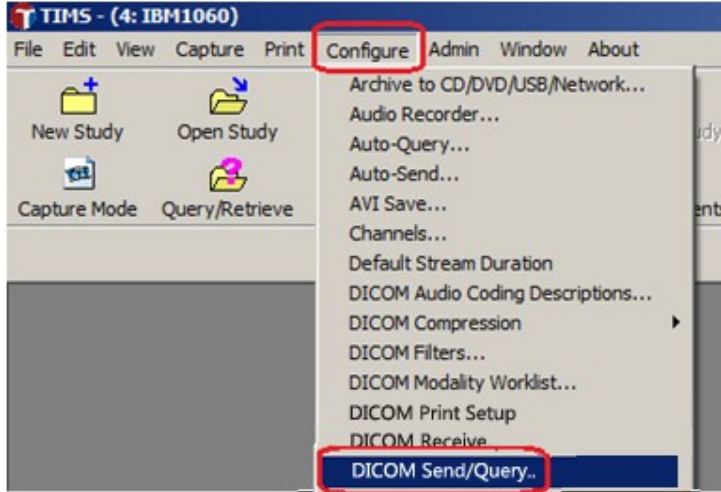
Both the TIMS DICOM Receive Software and TIMS DICOM Review Software should be enabled in the Windows Firewall.



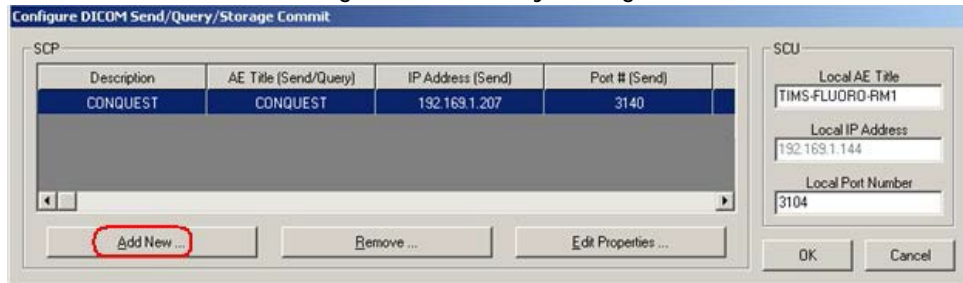
7. Click OK.
8. Reboot the TDRS system.

# TIMS Capture System Configuration

1. On the TIMS Capture system, add the TDRS station as a DICOM destination. Go to **Configure > DICOM Send/Query**.



2. Click **Add New** on the **Configure Send/Query/Storage Commit**.



3. Add the TDRS system:

- Ensure the **Remote AE title** and **Remote Port Number** matches the TDRS SCP AE Title and Port Number from Step 4.
- Enable Hostname resolution by checking the **Resolve Hostname for IP Address** checkbox. Make sure the Hostname matches the TDRS system name.

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



4. Click **Test Send**. A successful C-ECHO should be displayed.

If a C-ECHO Successful is NOT displayed:

- Verify the TDRS system is powered up and accessible on the network.
- Verify the TDRS Hostname and/or IP address is correct and can be resolved.
- Verify the TDRS system has a Windows Firewall Exclusion for TDRS.

#### Troubleshooting:

To verify TIMS can access the TDRS over the network:

- a. On the TIMS system, select the **Start** menu.
- b. Enter **cmd** in the search box and press Enter.
- c. In the command window, type:  
**ping** <TDRS computer hostname OR IP address>

For example, using the entries from step 7, you would type:

```
>ping SPEECHLAB1
```

or

```
> ping 192.169.1.123
```

- d. Verify four successful responses. If the destination is unreachable, contact your IT department for assistance.

```
ca C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\AL.DOMAIN>ping SPEECHLAB1
Pinging SPEECHLAB1 [192.169.1.123] with 32 bytes of data:
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Ping statistics for 192.169.1.123:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Documents and Settings\AL.DOMAIN>
```

OR

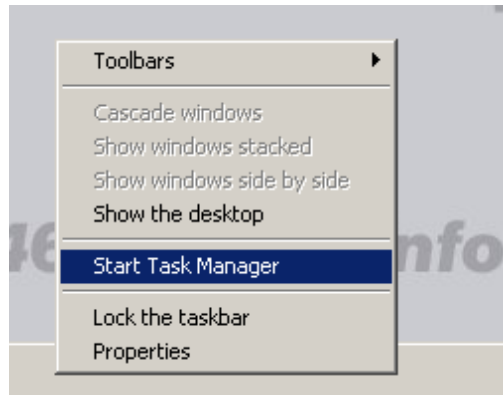
```
ca C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\AL.DOMAIN>ping 192.169.1.123
Pinging 192.169.1.123 with 32 bytes of data:
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Reply from 192.169.1.123: bytes=32 time<1ms TTL=128
Ping statistics for 192.169.1.123:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Documents and Settings\AL.DOMAIN>
```

5. On the TIMS Capture station, select **Open Study** and click on desired study or studies.

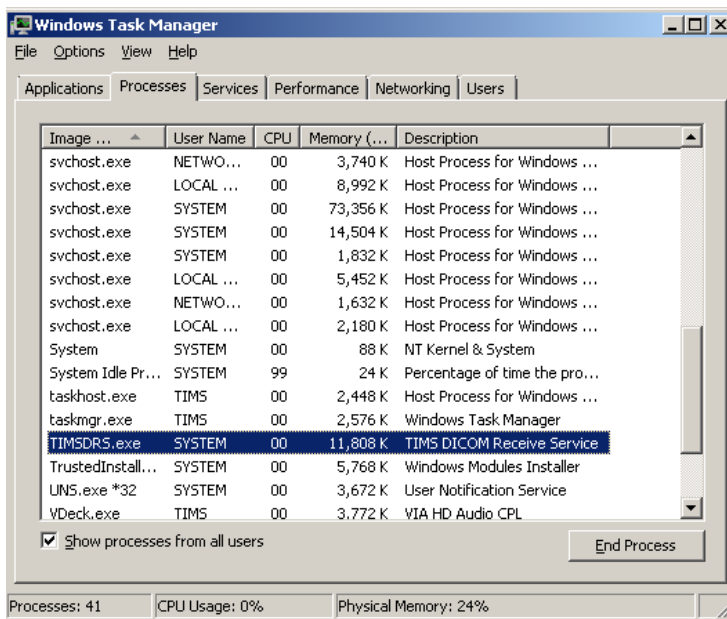
The TDRS service will receive studies without the TDRS application running.

To verify the TDRS service is running on your computer:

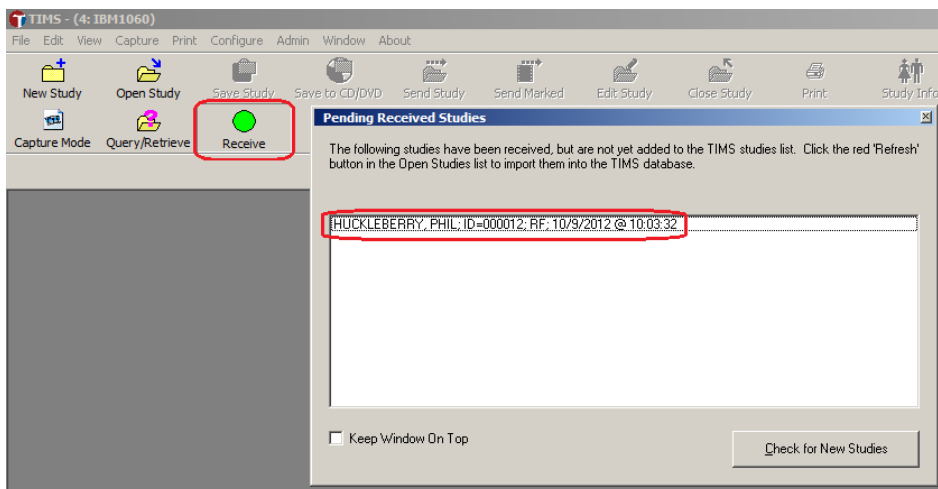
- a. Right-click on the Taskbar.
- b. Select **Start Task Manager**.



- c. Select the Processes tab and verify the TIMSDRS.exe process is listed and running.



6. On the TDRS system, the Receive light MUST be green to receive. Clicking on Receive green light displays received studies.



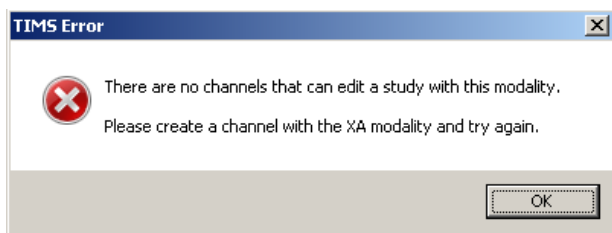
Once studies are on the TDRS system, they can be reviewed with synchronized audio and video, labeled/annotated, edited, or archived to DVD/USB/ Network Drive.

- The TDRS studies can then be sent to PACS or another TDRS station. (Sending to PACS requires TDRS and PACS configuration.)
- Editing the study on TDRS may require a compatible DICOM channel to be created on TDRS.
- The TDRS service **MUST** be running on the workstation to receive. The TDRS application can be closed during DICOM receive.
- Refresh the TDRS application studies list to view new received files.

# Edit a Study

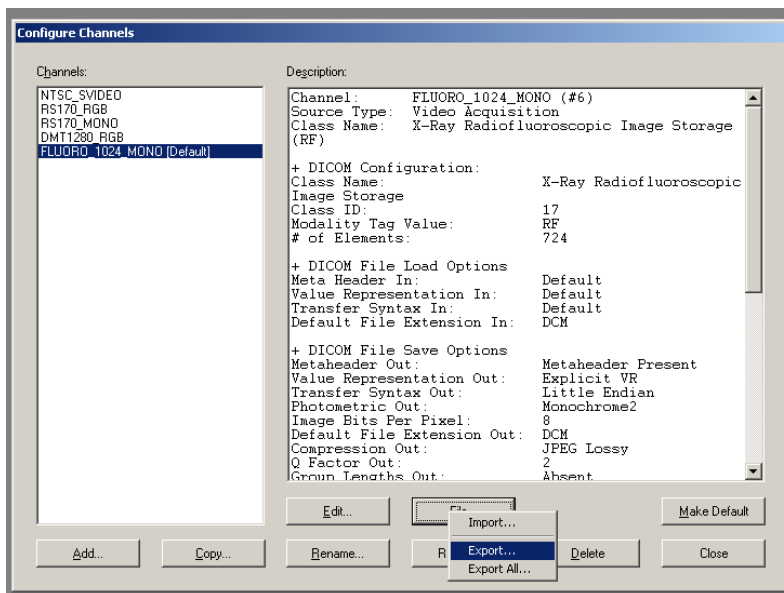
To edit TIMS studies received on the TDRS, a channel matching the TIMS study modality is needed.

A message appears when a TIMS study does not have a corresponding channel on the TDRS application.

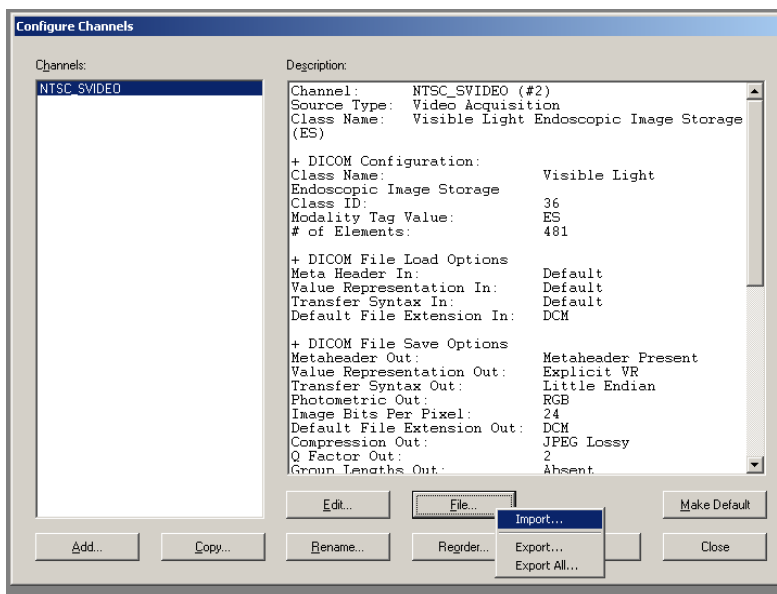


To resolve this issue:

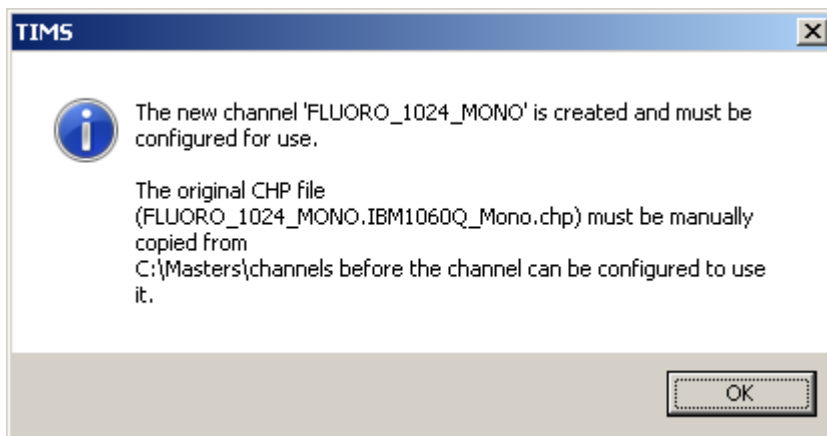
1. On the TIMS system, go to the **Configure** menu and select **Channels**.
2. Select the channel you want to export on the **Configure Channels** dialog and click the **File** button and select **Export**. Export the channel to a memory stick or shared directory.



- On the TDRS system, go the **Configure** menu and select **Channels**. On the **Configure Channels** dialog, click on the **File** button and select **Import**. Locate the memory stick or shared directory where you placed the channel and click **Open**.

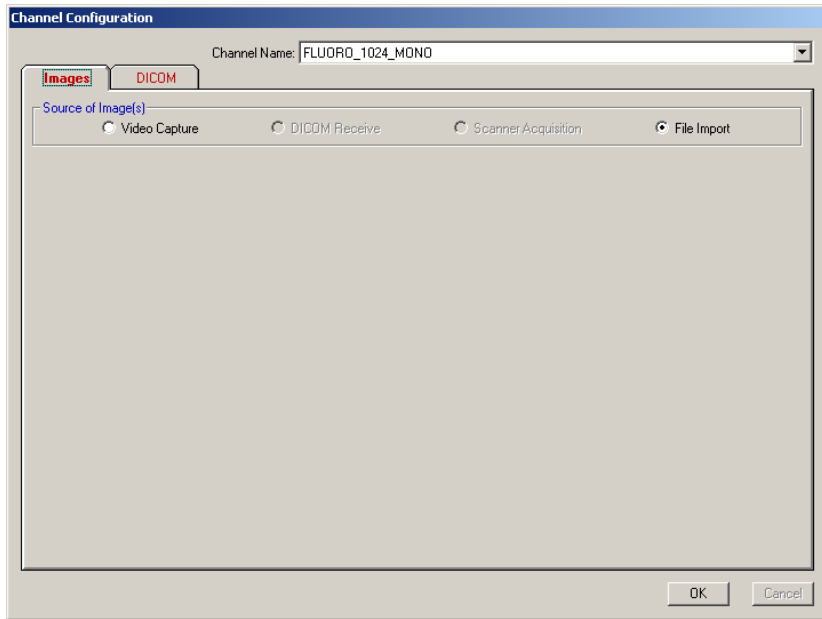


- After you select the channel file to import, a message appears confirming the import. Click **OK**.



5. When the Channel Configuration dialog appears:
  - Verify the FILE IMPORT selection, and
  - Click OK.

The study can now be edited on the TDRS computer.



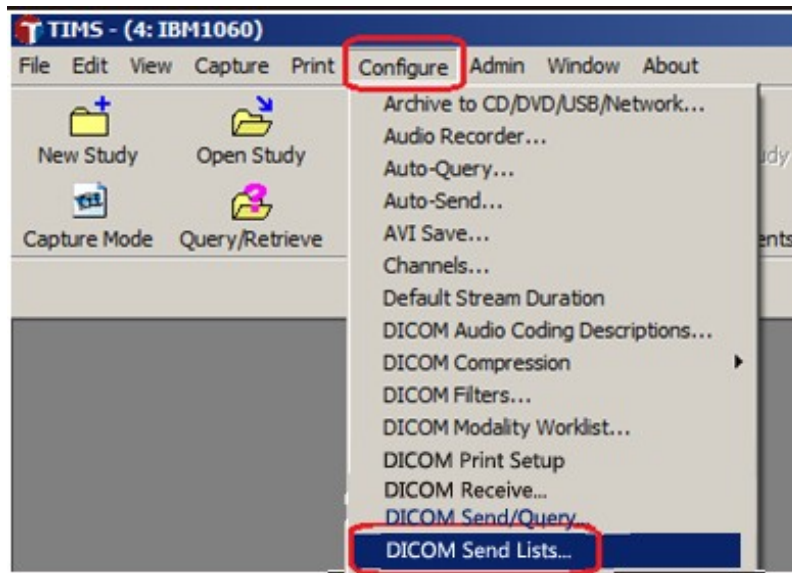


# Sending a Study Simultaneously to PACS and a TDRS

The TIMS capture station can send the study simultaneously to PACS and a TDRS station by creating a DICOM Send List.

To configure a DICOM SendList:

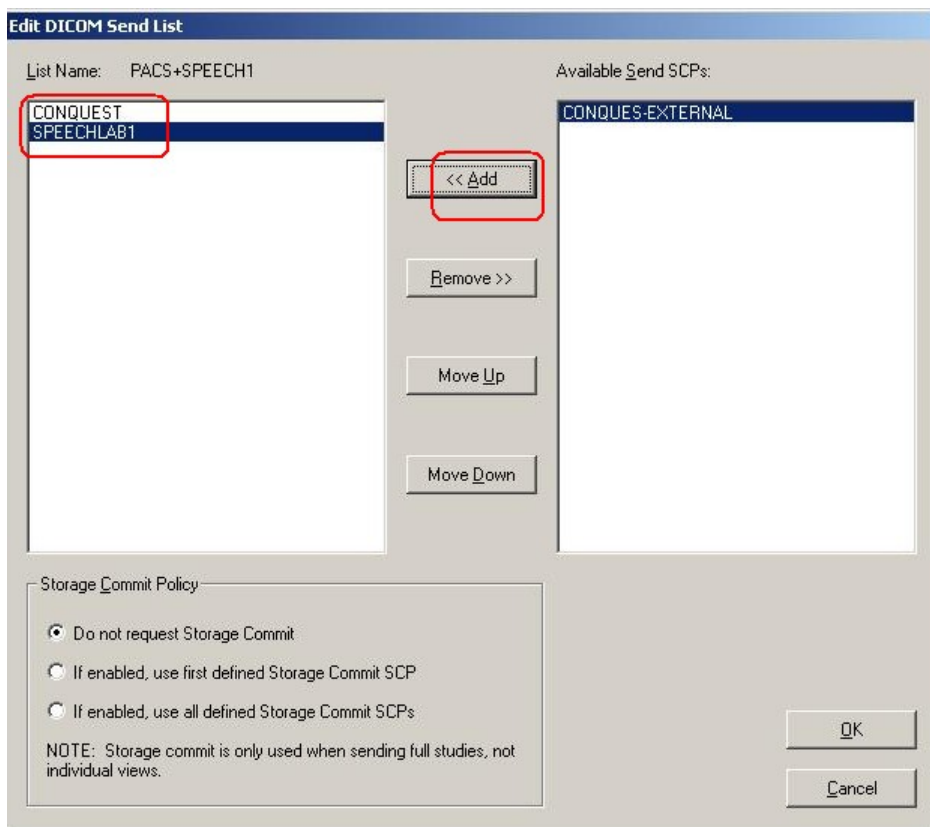
1. on the **TIMS capture** station, select **Configure** and select **DICOM Send Lists...**



2. Enter a name for the list.



3. Add the desired DICOM destinations and the list will be a selection on DICOM Send.



# Details on TDRS Functions

TDRS functions are listed in the **TIMS DICOM System Operators Guide**. The Operators Guide is located on any TDRS or TIMS system in the **C:\Program Files (x86)\Foresight\TIMS\Doc** directory.

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## TDRS License

To license the TDRS, follow the instructions listed in the **TIMS Setup and Configuration Guide**, Appendix B. The TIMS Setup and Configuration Guide is also located in the **C:\Program Files (x86)\Foresight\TIMS\Doc** directory.

For additional information or assistance, contact:  
**support@tims.com** or **978-458-4624 x204**

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## For More Information

This addendum completes the TDRS configuration and installation. For additional information regarding the use of TIMS software and features, go to the **TIMS DICOM System Operator's Guide** regarding the TIMS/TDRS application and features.





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