# CRemote – Remote Setup

## Purpose of Remote Control

Remote control enables a Supervisory Computer to change the settings on remote Mirion Fixed Contamination Monitors. A remote control software paired with CRemote provide the tools to access, monitor, maintain and diagnose our Fixed Contamination Monitors from a remote location. It allows viewing the remote Monitor's screen session and acting as a "master" for the keyboard and mouse input. On Windows XP operating system, CRemote uses *NetMeeting*[1] as a remote control software. On Windows 7 operating system, CRemote requires an alternative third party remote control package. This Application Note provides a solution for using CRemote with a third party remote control *package*[2]. The requirements are as follows (consult with your network administrator):

- The Supervisory Computer, and a Mirion Fixed Contamination Monitor must exist on the same local area network
- CRemote 1.60.4 (or higher) is installed on the Supervisory Computer (see *CRemote User's Manual*)
- Supervisory (Master) Computers running Windows XP (or higher) operating system are required to install third party remote control software

⚠ NOTE: All of Mirion Fixed Contamination Monitors are equipped with LAN adaptors to enable networking ability.

## Installation

An example third party remote control program that can be used with CRemote is TightVNC. The installation procedure of TightVNC is described in this section. A typical setup assumes the Monitor (Argos™, GEM™-5, Sirius™ and Cronos® unit) computer is running Windows XP operating system, and the Supervisory (Master) Computer is running Windows 7 operating system. For documentation outside the scope of this installation procedure, please refer to TightVNC at http://www.tightvnc.com/doc/win/TightVNC-installer-2.5.2.pdf.

⚠ NOTE: The installation of a third party remote control software is not required for Supervisory (Master) Computers running Windows XP operating system. NetMeeting, a remote control software, is pre-installed in Windows XP operating system.

## Download

TightVNC is available for download for free at http://www.tightvnc.com/download.php (see applicable End User License Agreement). Two versions are available, 32-bit and 64-bit. Download the 32-bit version onto a USB flash drive. The TightVNC 32-bit version is required on the Monitor Computer, Argos, GEM-5, Sirius and Cronos unit, and strongly recommended on the Supervisory (Master) Computer running either Windows 64-bit or Windows 32-bit operating systems.

⚠ NOTE: The downloaded installer needs to be installed onto both Supervisory (Master) Computer and Monitor Computer (see *Remote Supervisory Computer Setup* on page 5 and *Monitor Computer Setup* on page 3).



**Figure 1:**
TIghtVNC Installer Download for Windows.

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[1] NetMeeting is built into Windows XP and XP Embedded operating System.

[2] TightVNC is a third party remote control software package. Please consult with your local IT Administrator for suitability of this or other applicable third party software.

## Monitor Computer Setup

To install TightVNC, the Remote Monitor (Argos, GEM, Sirius, Cronos unit) Computer needs configuration. Follow the instructions below on the Monitor Computer.

⚠️ NOTE: The following procedure should be followed while logged in as an Administrator.

Follow the instructions as shown below:

1.  Open the TightVNC setup file (see section *Download* on page 2).

2.  Click **Run** on the Windows prompt (see the figure below).



**Figure 2:**
Windows XP Prompt to Open File.

3.  Click **Next** on the following Welcome prompt.

4.  Ensure the License Agreement dialogue box is checked, and click **Next**.

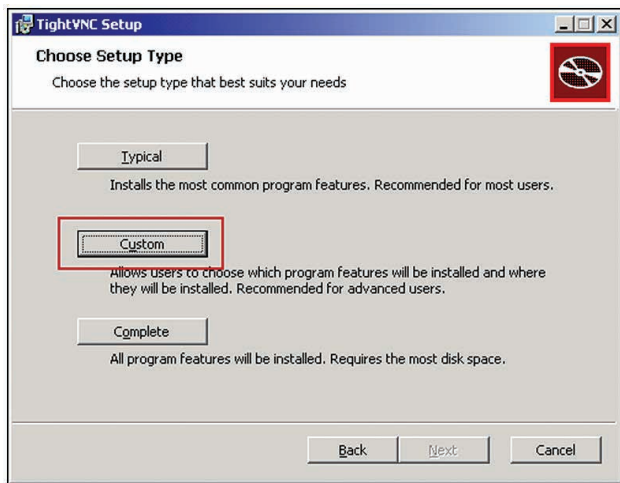5.  To proceed, click **Custom** (see the figure below).



**Figure 3:**
Setup Choice Prompt for the Remote Monitor Computer.

6.  Click on the drop-down menu next to "TightVNC Viewer". Select "**Entire feature will be unavailable**" (see the figure below) to remove the TightVNC Viewer application.
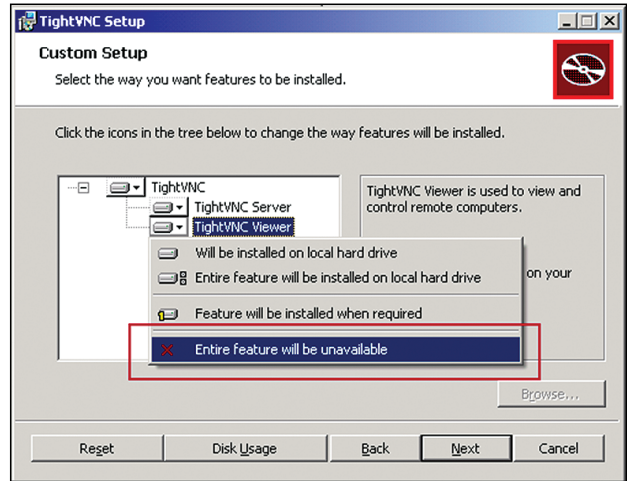


**Figure 4:**
Custom Setup Option for Remote Monitor Computer.

7.  Click **Next** to proceed.

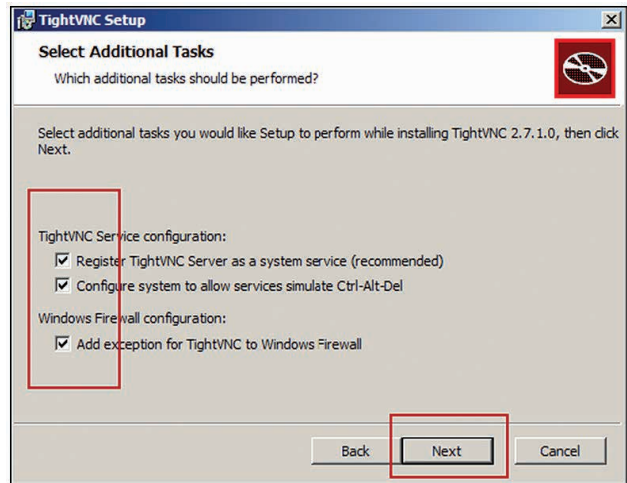8.  By default the dialogue boxes are checked; click **Next** (see the figure below).



**Figure 5:**
Select Additional Tasks Prompt on the Remote Monitor Computer.

9.  Click **Install** to proceed.

10. Create a password in the field "Password for Remote Access" (see the figure below). The Supervisory (Master) Computer will be prompted for authentication using this password for each remote access.

11. Create a password in the field "Administrative Password" (see the figure below). This will password protect the administration control panel of TightVNC.
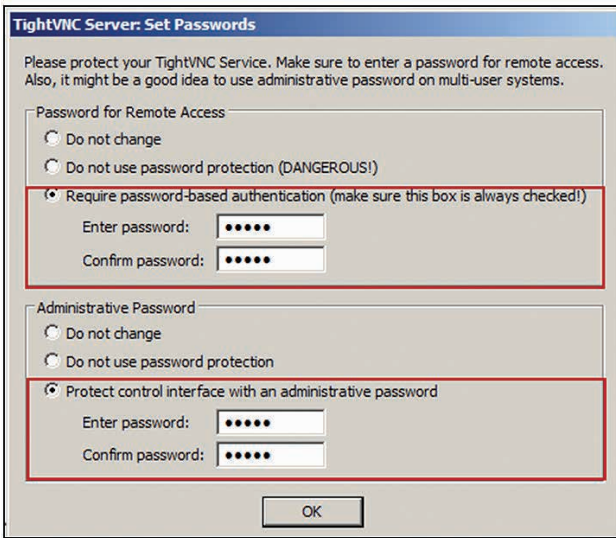


**Figure 6:**
Password Setup on the Remote Monitor Computer.

12. To complete the setup click **Finish**.
13. Reboot the computer for the settings to take effect.

⚠️ NOTE: The default location for the installation is C:\Program Files\TightVNC\

The server application is named tvnserver.exe

### Supervisory Computer Setup
The Supervisory (Master) Computer needs configuration to install TightVNC. Follow the instructions below on the Supervisory Computer.

⚠️ NOTE: This Procedure is intended for a Supervisory Computer running Windows 7 operating system. Supervisory Computers, running Windows XP operating system, may use the procedure intended for NetMeeting (refer to *CRemote User's Manual*).

The following procedure should be followed while logged in as an Administrator.

1. Open the TightVNC setup file (see section *Download* on page 1).
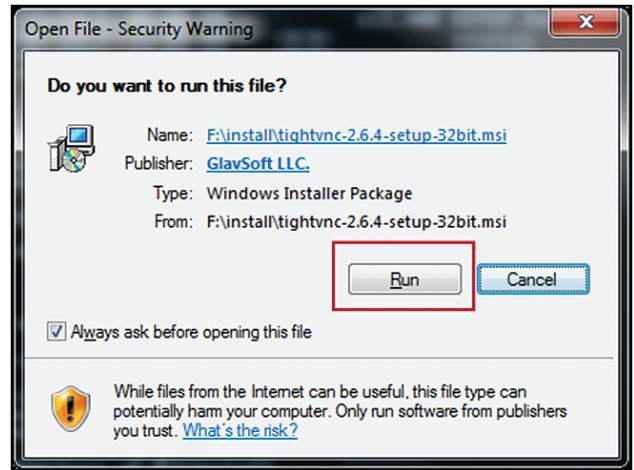2. Click **Run** on the Windows prompt (see the figure below).



**Figure 7:**
Windows 7 Prompt to Open File.

3. Click **Next** on the following Welcome prompt.
4. Ensure the License Agreement dialogue box is checked, and click **Next**.
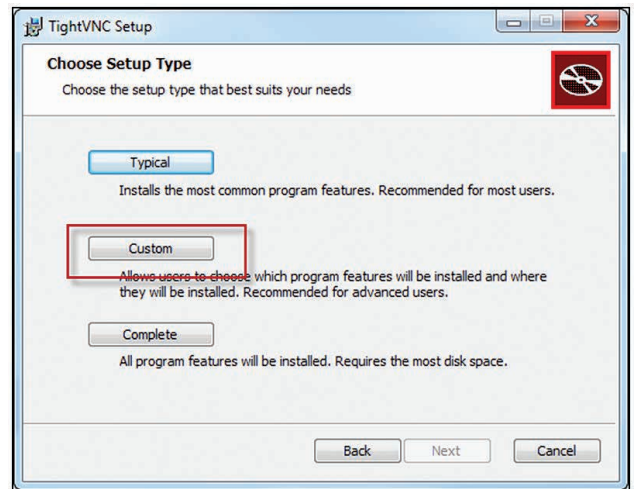5. To proceed, click **Custom** (see the figure below).



**Figure 8:**
Setup Choice Prompt for the Supervisory (Master) Computer.

6. Click on the drop-down menu next to "TightVNC Server". Select "**Entire feature will be unavailable**" (see the figure below) to remove the TightVNC Server application.
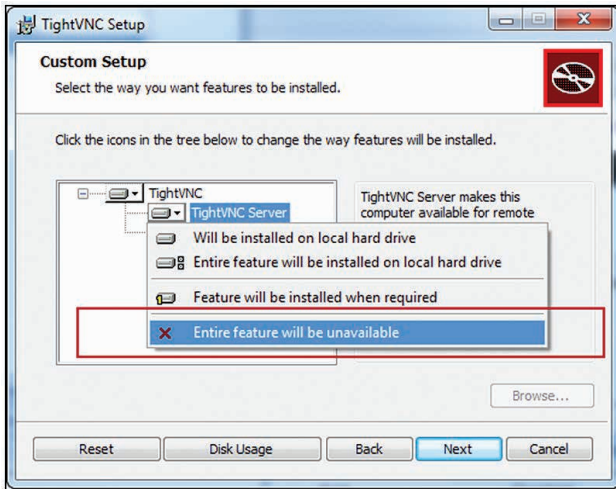


**Figure 9:**
Custom Setup Options for the Supervisory (Master) Computer Setup.

7. Click **Next** to proceed.
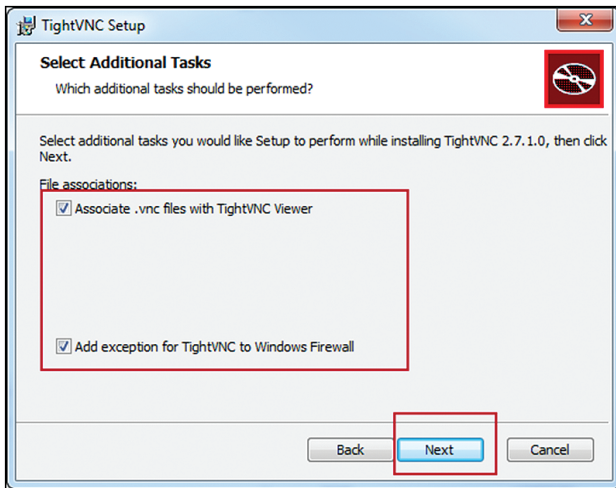8. By default the dialogue boxes are checked; click **Next** (see the figure below).



**Figure 10:**
Select Additional Tasks Prompt on the Supervisory (Master) Computer.

9. Click **Install** to proceed.
10. To complete the setup click **Finish**.
11. Reboot the computer for the settings to take effect.

NOTE: The default location for the installation is C:\Program Files\TightVNC\

The viewer application tvnviewer.exe

## Modify RemoteSetup.cmd Batch File

CRemote (on the Supervisory Computer) has the ability to call out a remote control application, also known as the viewer. In Windows XP operating system, the user may click the Remote Setup button to launch NetMeeting. In Windows 7 operating system, to launch a third party remote control application, a batch file needs configuration. The batch file is a list of commands which are executed when the Remote Setup button is clicked. The following describes the configuration to RemoteSetup.cmd batch file.

1. Open Notepad from the list of windows programs.
2. Select **File|Open** from the drop down menu.
3. Locate the folder where CRemote is installed.

NOTE: C:\CANBERRA\CRemote\ is the default location for CRemote installation.

4. Select "**All Files** (*.*)" from the drop down selection.
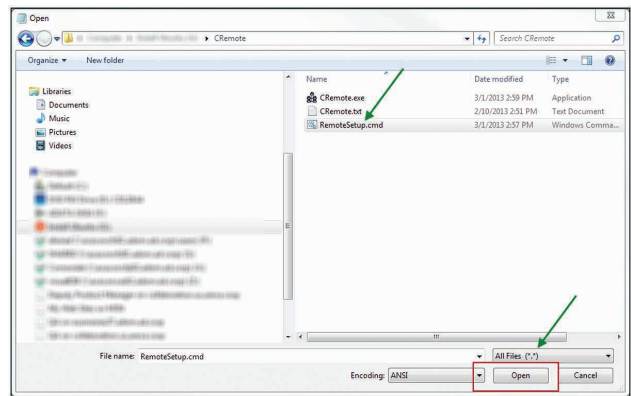5. Select RemoteSetup.cmd (or RemoteSetup) and click **Open** (see the figure below).



**Figure 11:**
Open File Prompt in Notepad.

6. A list of comments, with the string "REM" as a prefix, is displayed. These lines are non-executable. Edit line 15, "`rundll32.exe msconf.dll,OpenConfLink %3`", to "`REM rundll32.exe msconf.dll,OpenConfLink %3`" (the prefix "REM" turns the NetMeeting launcher command line into a remark i.e. non-executable).

7. Edit line 18, "`REM "%ProgramFiles%\TightVNC\ tvnviewer.exe" %1`", to "`"%ProgramFiles%\ TightVNC\tvnviewer.exe" %1`". The line is now executable. This enables the RemoteSetup.cmd to launch TightVNC Viewer (see Section Remote Control (TightVNC Viewer) on page 6). The batch file should appear EXACTLY as shown in Table 2.

NOTE: It is NOT recommended to install TightVNC outside the default directory. If TightVNC is installed outside the default directory, step 7 from the above must be edited accordingly.

**Table 1:**
RemoteSetup.cmd (Batch File) Before Changes.

```
@ECHO OFF
REM - Remote Setup called by CRemote
REM - %1 is remote computer's IP address
REM - %2 is remote computer's ComputerName
REM - %3 is remote computer's NetMeeting configuration file
ECHO Remote Setup
ECHO %1
ECHO %2
ECHO %3


REM - NetMeeting call (place REM in front of line below to "not run")
rundll32.exe msconf.dll,OpenConfLink %3
REM - TightVNC call (remove REM from line below to have it "run")
REM "%ProgramFiles%\TightVNC\tvnviewer.exe" %1
```

**Table 2:**
RemoteSetup.cmd (Batch File) After Changes.

```
@ECHO OFF
REM - Remote Setup called by CRemote
REM - %1 is remote computer's IP address
REM - %2 is remote computer's ComputerName
REM - %3 is remote computer's NetMeeting configuration file
ECHO Remote Setup
ECHO %1
ECHO %2
ECHO %3


REM - NetMeeting call (place REM in front of line below to "not run")
REM rundll32.exe msconf.dll,OpenConfLink %3
REM - TightVNC call (remove REM from line below to have it "run")
"%ProgramFiles%\TightVNC\tvnviewer.exe" %1
```
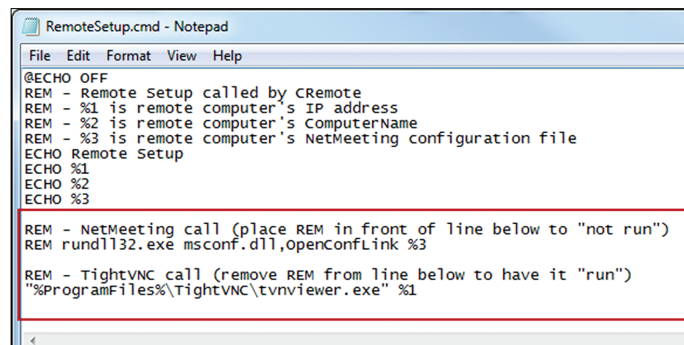


**Figure 12:**
Modifications to Batch File After Changes.

## Remote Control (TightVNC Viewer)

TightVNC is a third party remote control application (see *Installation* on page 1). The Mirion Fixed Contamination Monitors can install; the installation process remains the same for all Monitors (see section *Monitor Computer Setup* on page 2). The remote Monitor Computer is installed with the Server application (tvnserver.exe). A viewer application, tvnviewer.exe, is installed on the Supervisor Computer (see section *Supervisory Computer Setup* on page 3). The installation directory for the tvnviewer.exe is C:\Program Files\TightVNC\.

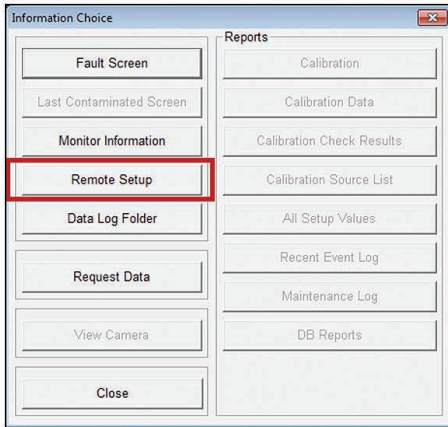To launch the viewer application, click **Remote Setup** in CRemote (see the figure below).



**Figure 13:**
Remote Setup Launcher in CRemote.

A prompt appears requesting the IP address for the Monitor Computer. For example, the IP address of an Argos-5 Monitor is requested. Contact your network administrator for information on IP address of remote Monitors. Enter the IP address in the Connection Field and click **Connect** (see the figure below).
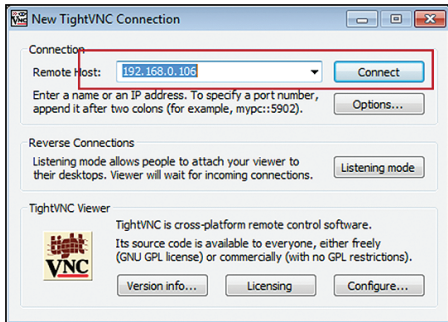


**Figure 14:**
New TightVNC Connection Prompt.

If successful, the Supervisory (Master) Computer will initiate communication with the Monitor Computer. An authentication prompt will appear requesting Password credentials (see the figure below). The password is created during the installation of TightVNC (see procedure step 11 in section *Monitor Computer Setup* on page 2). Enter the credentials in the Password field and click **OK**.
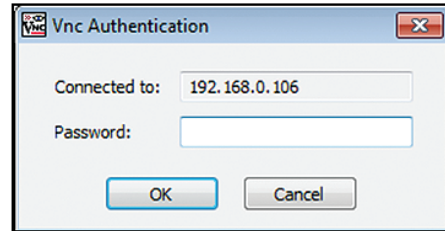


**Figure 15:**
TightVNC Authentication Prompt.

The TightVNC Viewer captures the screen session of the Monitor computer. The Viewer allows the Supervisory (Master) Computer to view the screen session in real time. Shortcuts are available on the Top Panel of the TightVNC Viewer (See the figure below). The shortcuts provide functionality such as, CTRL+ESC, ALT, Transfer files, Zoom in/out etc. The Supervisory (Master) Computer may also exercise further control through mouse gestures, and keystrokes. For further information on features and functionality, please visit TightVNC's Homepage at http://www.tightvnc.com/.
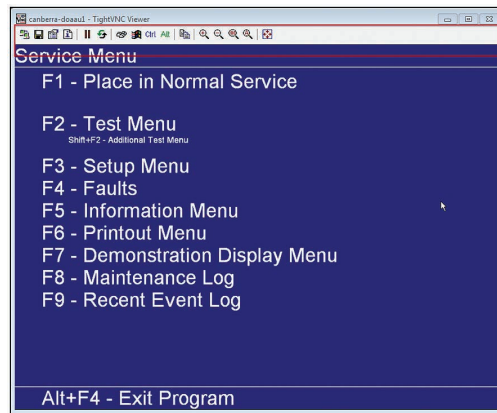


**Figure 16:**
TightVNC Viewer Screen Session With a Monitor Computer.

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