REMOTE DETEXI CLIENT

Frequently Asked Questions

I keep getting the **"Socket Error: connection is forcefully rejected"** message when I try and log in.

> This message indicates that a connection cannot be made with the defined Server Settings (IP Address and Port). Check the following:
>
> 1. A **Central Server Address** has been chosen in the **Authentication Server Setup** section of the **Client Settings**. If there are none available to choose from, use the **Servers Settings** to define one, and then choose it.
> 2. Check that there is both an **IP Address** and **Port** defined for the Central Server Address chosen, and check that they are correct. The Port should match the **Port to Listen** defined in the NVR Global Settings.
> 3. Make sure that you can **Ping** the IP Address of the Central Server, to be sure you are on the same network as the server.
> 4. Make sure that the **NVR Services** are **running** on the Central Server.
> 5. Make sure there are no hardware or software **firewalls** on or between the server and client machines, blocking communication on the Port defined for the Central Server Address chosen. Windows XP and all Windows Server editions include a software firewall which is often enabled by default.

I keep getting the **"Either the Server is down, or the Server Address is not Configured Correctly"** message when I try and log in.

> This message indicates that a connection cannot be made with the defined Server Settings (IP Address and Port). Check the following:
>
> 1. A **Central Server Address** has been chosen in the **Authentication Server Setup** section of the **Client Settings**. If there are none available to choose from, use the Servers Settings to define one, and then choose it.
> 2. Check that there is both an **IP Address** and **Port** defined for the Central Server Address chosen, and check that they are correct. The Port should match the **Port to Listen** defined in the NVR Server Global Settings.
> 3. Make sure that you can **Ping** the IP Address of the Central Server, to be sure you are on the same network as the server.
> 4. Make sure that the **NVR Services** are **running** on the Central Server.
> 5. Make sure there are no hardware or software **firewalls** on or between the server and client machines, blocking communication on the Port defined for the Central Server Address chosen. Windows XP and all Windows Server editions include a software firewall which is often enabled by default.

Why is the **Central Server Address** drop-box in the **Authentication Server Setup** section of my **Client Settings** empty?

> Central Server Definitions must first be defined by clicking the **Servers Settings** button and **adding**, **configuring**, and **saving** entries, before they can be chosen in the Authentication Server Setup section of the Client Settings.

How do I know what to define in my **Servers Settings**?

Start by using the **Add** button to add a Server Definition. Then, give the server a descriptive name – this can be anything you want. In the **Central Server Address** fields, enter the **IP Address** of the NVR Server, and the **Port to Listen** defined in the NVR Server Global Settings. The **Central Server Proxy** fields can be left **blank,** unless a proxy is needed in order to access the server.

The **Use Local Connection Only** checkbox is only necessary when the NVR Server is accessible on more than one network. For instance, clients inside a Local Area Network and clients out on the Internet, or clients inside a separated security network and clients on the regular or corporate network. If the NVR Server is accessible on more than one network, clients existing on the same network as the cameras should have this checkbox checked.

When I'm configuring my Server Settings, do I need to put anything in the **Central Server Proxy** fields?

In most cases, the **Central Server Proxy** fields can be left blank when defining a Central Server Definition. These settings allow the client to communicate with the NVR Server through a Proxy Server if necessary. Proxy Servers are used on highly-secured networks to filter out unwanted traffic and requests.

Do I need to click **Save Globally** or any other button to save my changes before exiting the Settings page?

No. When changes are made on the Settings page, they are saved as soon as you move out of the changed field.

However, Client Settings are specific to the Windows User logged into the client computer. This means that if you configure Client Settings (including Server Settings) while logged into Windows as one user, and then log into Windows as a different user and run the Client, the settings will not be preserved for that different user. The **Save Globally** button allows you to save the current set of Client Settings for all Windows users defined on the computer.

Why are some of my cameras smaller than others in the Multiscreen?

If you see some cameras ¼ the size of the rest of your cameras on the Multiscreen, you are likely looking at a combination of Video Servers and Network Cameras. By default, a 4-port Video Server (a device that converts four analog CCTV cameras into one IP signal) will show in **Quad-View** in the Multiscreen. This means that all four analog video streams are tiled into a single IP video stream. If you prefer to treat each analog input on the Video Server as an individual video stream in the Multiscreen, enable the **Never Show QUAD View** checkbox in the **Multiscreen** section of the **Client Settings.**

Why do the cameras in my Multiscreen freeze when I use the Enlarge or GOTO option to open the controls for a camera?

By default, when the Video Popup (single video control window) is opened either over the top of the Multiscreen (GOTO) or embedded within the Multiscreen (Enlarge), all video streams in the Multiscreen are frozen. This is done to preserve bandwidth consumption and allow the best possible frame-rate for the video stream in the Video Popup. If you would like all background video streams to stay live while you are viewing or controlling a single video stream in the Video Popup, click the **AliveB** button located at the top of the Video Popup. The button will become a **FreezeB** button, which can be then clicked to freeze all of the background video streams once again.

If you would prefer not to have to click the AliveB button to bring the background video streams to life, the **Always Show Live** checkbox can be enabled in the **Multiscreen** section of the **Client Settings**. Please be aware, however, that this will have an effect on the performance, since opening a video stream in the Video Popup requires more resources than

Why do I get the **"Reduce MAX FPS on multicamera screen"** message when I close the Multiscreen?

By default, the Multiscreen is set to limit the cumulative FPS (Frames Per Second) of all cameras being displayed to 30. This means that if 10 cameras are being viewed, each camera would stream at an average 3 FPS. The Multiscreen has some troubleshooting capabilities built into it, which detects when 30 cumulative FPS is not possible due to lack of network or video card resources, and notifies you when the Multiscreen is closed.

The message will tell you what the current setting is, and a suggested setting based on the resources currently available to the machine such as: **FPS Set = 30, FPS Calculated = 15.** For best performance, adjust the **Max Cumulative FPS** setting in the **Multiscreen** section of the **Client Settings** to be closer to the suggested (calculated) number. The suggested setting can vary with each time the client is run, based on the current network traffic and number of people connected to the cameras. After adjusting the setting for better performance, the notification can be disabled by un-checking the **Show/Adjust FPS** checkbox in the **Multiscreen** section of the **Client Settings.**

If the suggested (calculated) setting is very low, check your network and video card resources. The minimum suggested Video Card specification for a DETEXI Client machine is to have at least 128MB of dedicated **on-board** memory. Many video cards do not have on-board memory, but share memory with the Operating System – such video cards are not robust enough for live video streaming, as is done in the DETEXI Client software.

How can I change the order in which my cameras are displayed on the Multiscreen?

In some Multiscreen layouts, it is important to have the most critical video stream in the first position for maximum visibility. You can change the desired order of your cameras by using the **Sort Cameras** button in the **Client Settings.** This will change the order of your cameras on that Client only, and will not affect other clients.

I can log into my server, but all of my cameras show a broken connection.

If you can successfully connect (log in) to the NVR Server, but the cameras don't show video, it is likely a networking issue. Check the following:
1. Make sure you have the **Use Local Connection Only** setting configured properly in the Server Settings of the Client Settings, based on the network structure between the Client machine and the cameras.
2. Make sure that you can **Ping** the IP Addresses of the cameras, to be sure you have an unblocked communication path between this machine and the cameras.
3. Make sure there are no hardware or software **firewalls** on or between the server and cameras, or add the IP Addresses and HTTP Ports (if applicable) of the cameras to the firewall's exceptions list. Windows XP and all Windows Server editions include a software firewall which is often enabled by default.
4. Make sure you can see the cameras from your NVR Server machine, using the Local and Remote Clients located on that machine.

I keep getting the **"Unrecognized User"** message when I try and log in.

This message indicates that either the user you are entering does not exist in the active NVR Server configuration, or that you have entered the credentials incorrectly. Check the following:
1. Check that the user credentials exist in the **Users** section of the NVR Server configuration.
2. Make sure that the services have been **Synchronized** since the user credentials were defined.
3. Note that both the username and password are **case sensitive.**

When I try to do anything in my Multiscreen, including close it, it does not respond – but my cameras are still updating.

This behavior indicates a serious lack of resources, preventing the client from functioning properly. Check your network and video card resources, to be sure that they can handle the requested traffic and are up to specifications for the software.

This is typically a sign of a lack of Video Card resources. The minimum suggested **Video Card** specification for a DETEXI Client machine is to have at least 128MB of dedicated **on-board** memory. Many video cards do not have on-board memory, but share memory with the Operating System – such video cards are not robust enough for live video streaming, as is done in the DETEXI Client software.

DETEXI NVR SERVER & CONFIGURATION

Frequently Asked Questions

Does the NVR support runtime configuration?

Yes. For most settings in the NVR, changes can be made while the NVR Services are running, without interrupting functionality for users logged in on Remote Clients. After making all desired changes, simply click the **Synchronize** button located in the upper-right corner of the **NVR Setup** application to make those changes live. The NVR will continue to run, and users will not be kicked off the system.

Some settings, such as the **Archive Path** and **Port to Listen** do not support runtime configuration, and cannot be changed while the NVR Servers are running. These settings will be grayed out while the NVR is running.

My Archive Path and Settings on the General Settings Tab of the NVR Setup application are grayed out, why can't I change them?

A few settings located on the **General Settings Tab** of the **NVR Setup** application do not support runtime configuration, so they are grayed out while the NVR Services are running. To change the Archive Path, you first need to stop the NVR with the **Stop NVR Service** button the **General Settings Tab**. Any users logged onto the system on a Remote Client will be disconnected.

After making the changes, simply click the **Start NVR Service** button to start the NVR once again.

The Port to Listen setting on the General Settings Tab of the NVR Setup application is grayed out, why can't I change it?

A few settings located on the **General Settings Tab** of the **NVR Setup** application do not support runtime configuration, so they are grayed out while the NVR Services are running. To change the Port to Listen, you first need to stop the NVR with the **Stop NVR Service** button the **General Settings Tab**. Any users logged onto the system on a Remote Client will be disconnected.

After making the changes, simply click the **Start NVR Service** button to start the NVR once again. If you change the Port to Listen in the NVR, do not forget to adjust the **Server Settings** defined in all Remote Clients appropriately so they will be able to connect on the new Port.

When configuring my camera definitions, what Type should I choose for my Axis cameras or video servers?

In DETEXI NVR versions prior to 5.4.2, driver type configuration for camera definitions may not be obvious. Configuration for Axis network cameras is specifically a challenge due to the many different types to choose from. Use the following guidelines to choose the correct Axis type:

- **Fixed Axis network cameras** including models 206, 207(W/MW), 209FD-R, 210(A), 211(A/W/M), 212, 216FD(V/M), 221, 223M, and 225FD should use the **Axis 2120 2.12 or higher** type.
- **PTZ Axis network cameras** including models 213, 214, 215, 231D+, 232D+ and 233 should use the **Axis 2130 2.12 or higher** type.
- **Single Channel Axis Video Servers** including models 2401(+), 241S(A), 243SA, and 247S should use the **Axis 2401 2.12 or higher** type.

- **4-Channel Axis Video Servers** including models 240Q, 241Q(A), and 243Q should use the **Axis 241Q 2.12 or higher** type.
- The **2400(+) Axis Video Servers** (discontinued by Axis) should use the **Axis 2.12 or higher** type.
- The rest of the Axis types are meant for other Legacy Axis network cameras and video servers.

In Version 5.4.2 of the DETEXI NVR software, the list of camera types and drivers has been updated for easier configuration. In the case of Axis network cameras and video servers, users should allow the NVR to choose the appropriate driver with the **Determine Camera Driver** button. Not only does this ensure that the correct driver is used, but the camera is queried to determine the exact camera type and firmware. This allows for more camera-specific configuration information such as supported resolutions, and more efficient communications with the camera, resulting in better performance.

I am configuring an Axis network camera in my NVR, but when I click the Determine Camera Driver button, it tells me "Camera's driver could not be determined".

This message indicates that the NVR failed to communicate with the camera based on the settings configured. The three pieces of information required for the NVR to successful query the camera and determine the driver are:

- **IP Address** – The NVR needs to be able to communicate with the camera on this IP Address, so it should be in reachable IP range.
- **Port** – The HTTP port on which the camera communicates. By default, this port is usually 80.
- **Camera Authentication** – If a username and password is required to enter the Setup section of the camera, it needs to be defined on the Security & Alarm Tab of the camera definition. Typically, the administrative (or root) username and password should be entered in the Adm fields, and the other levels can be left blank.

If you have all of these settings defined, check that your camera is on, and accessible with these settings from the NVR Server machine.

I can connect to my camera with a Web Browser, so I know the IP Address is correct, but I cannot see the video in the DETEXI software.

If you can connect to the camera with a Web Browser *from the NVR Server machine* with the defined network settings, then make sure that you have the correct **Type**, **Driver**, and **Authentication** settings defined. The most commonly forgotten required setting is the camera authentication defined on the **Security & Alarm Tab**. The camera definition should have at least the **Adm** username and password defined to allow full communication with the camera.

I can see the video of my camera in the **Recording Tab** of the **NVR Setup** application, but I get a Broken Connection when I try to view the camera in the Client software.

This usually indicates that either the **Driver** or **Authentication** settings (on the **Security & Alarm Tab**) are not configured properly for the camera. A simple video stream can often be pulled with the wrong driver, and when no authentication is defined (if anonymous viewing is allowed in the camera), allowing the Recording Tab to see the video even though a proper connection to the camera is not available.

Which **Names and Passwords** fields on the **Security & Alarm Tab** do I need to fill in when I'm configuring camera definitions?

Many cameras support multiple users to be defined within their firmware, allowing different levels of security when connecting to the camera. For this reason, the NVR includes support for three levels of authentication to the camera. However, it is highly recommended that an NVR user's permissions to a camera be defined in the NVR Users definitions, rather than in the camera itself.

For typical configurations, it is recommended to define the **Administrative (or root)** level username and password for the camera in the **Adm** level on the **Security & Alarm Tab**. You can either leave the **User** and **Oper** levels blank, or enter the same username and password in for those levels as well. Just be sure that the Authentication levels assigned to users for cameras in the NVR User definitions match your configuration here.

Recording has been turned on in the NVR for several days, but I can't see any recordings from before yesterday.

The Archives are cleaned up according to the retention time settings each night at midnight. Since there is no way for the software to know an appropriate retention time based on the resources available and cameras and recording schedules to be configured, the retention time is set to 1 day by default. It can be very harmful to the operating system performance if the primary drive does not have sufficient free space. Since the default Archive Path is on the same drive as the NVR installation and the NVR software is often installed on the primary disk drive, the minimum retention time is defined by default.

To change the retention time of the Archive, adjust the **Keep Information for [ ] Days** setting located on the General Settings Tab of the NVR Setup application. It is highly recommended that the **DETEXI Storage Calculator** found on the installation disk is used to determine how many days can safely be stored on the system based on the storage resources available and recording specifications planned.

Both the **Monitor Page** of the **NVR Setup** application and the **Recorder Interface** can be used to check the current recording status.

The Monitor Page of the NVR Setup application shows the current recording status of all cameras defined in the NVR. A red status indicates active recording, motion analysis, or input status analysis.

The Recorder Interface can be launched by double-clicking the Recorder icon (looks like a hand holding a video camera) located in the System Tool Tray (next to the computer's clock). This interface can be used to see what cameras are currently recording or being analyzed for motion or input status changes, and if a successful video connection is available on them.

When I search my archives, I do not have video for as many days as I have told the NVR to save data for, even though I have been recording for longer.

If archived video is not kept for as long as is defined in the NVR configuration, the storage directory does not have enough space available to hold as many days of video as desired. If the archive **Free Space Minimum** setting defined on the **Global Settings Tab** of the **NVR Setup** application is ever reached, archives will be overwritten as needed to keep that minimum of free space available, regardless of how many days worth of video are saved.

It is highly recommended that either the retention time in days (**Keep Information for [ ] Days** setting) is adjusted, or more storage is made available to the system to remedy this problem. Constant overwriting (rather than cleaning up old data once a day as in normal operation) is very hard on the hard drive, and much more processor intensive. The **DETEXI Storage Calculator**, found on the installation disk, should be used to estimate how much storage is required based on the desired recording specifications.

What do the **colors** (blue, red) mean on the list of **Servers** on the **Monitor Page** of the **NVR Setup** application?

The colors of the service names indicate the current status of those services. A service listed in **Blue** indicates that the service is **currently running**, listed in Red indicates that the service is **currently stopped**. Each service can be clicked on to toggle that service on or off.

What are the **Checkboxes** next to the **Servers** listed on the **Monitor Page** of the NVR Setup application for?

The base services of NVR Server (Monitor, Alarm, Remote, and Socket Services) run automatically with Windows. The Monitor can be started and stopped with the button located on the **General Settings Tab** of the **NVR Setup** application. It is the responsibility of the Monitor Service to start and stop other NVR Services along with it. The checkboxes define which services are to be started automatically when the NVR starts up (either with Windows or the button the Global Settings Tab). These checkboxes also define which services are being monitored for health, when Service Health Tasks are defined.

How do I configure the NVR Services to start automatically with Windows?

The base services of the NVR Server (Monitor, Alarm, Remote, and Socket Services) run automatically with Windows by default. The rest of the services will start and stop automatically with the Monitor Service as long as they are **checked** on the **Monitor Page** of the **NVR Setup** application.

No. For maximum performance, only the services necessary to provide the functionality desired in the NVR should be configured to run.

- **Monitor** – Required to run, this is one of the fundamental services of the NVR, and is responsible for starting, stopping, and monitoring all services in the NVR.

- **Server** – Responsible for remote authentication and permissions, this service should always be running.

- **Recorder** – Responsible for all recording and motion detection functionality, this service should always be running if any type of recording is desired.

- **FTP** – Responsible for FTP communications between the NVR and Cameras, this service is only necessary if using FTP Push or FTP IP Notification features.

- **Check Drive** – Responsible for connection to and maintaining the archives, this service must be running when the Recorder is running.

- **Check Alive** – Responsible for monitoring the heath of cameras, this service is only necessary when alarming (executing Tasks) when connection to a camera is lost.

- **Check Alarm** – Responsible for monitoring the status of camera inputs, this service is only necessary when alarming (executing Tasks) when a status change is seen on the input of a camera.

- **Tour** – Responsible for driving guard tours on cameras, this service is only necessary when tours are configured and used on cameras.

- **Get Shots** – Responsible for taking Alarm Snapshots during the execution of Recording Tasks, this service is only necessary if the **Take Alarm Shot** option is checked in Recording Task configurations.

- **Mapper** – Responsible for IP Translation between two NIC (Network Interface Connection) cards in the computer, this service is only necessary if the NVR Server machine communicates on two networks, with cameras and/or clients existing on both networks. Port Mapping configuration is required for such an application.

- **Port Listener** – Responsible for alarm communication with Legacy COM-Port alarm devices such as DigiOp, this service is only necessary when communicating with such devices.

- **Alarm, Remote, and Socket Servers** – Responsible for low level TCP/IP and alarm and event functionality in the NVR, these services should **always** be running.