DETEXI NVR Archive Viewer

The DETEXI Archive Viewer connects local and/or remote users to the DETEXI NVR Control Center recorded video database (NVR archive) for video retrieval and export.

USER GUIDE

NVR Archive Viewer

1. Overview

NVR Archive Viewer is intended to enhance *NVR Client* functionality when searching the archive. This program is part of the NVR and NVR Client installation.

NVR Archive Viewer can search the archive locally and remotely.
For remote viewing, user will be asked to provide user name and password.
NVR Archive Viewer also provides the ability to record and view any portion of the initial recorded material. This will be examined fully in section 4 of this document.

2. Start the program

To start the NVR Archive Viewer, click on the following icon located on Desktop:

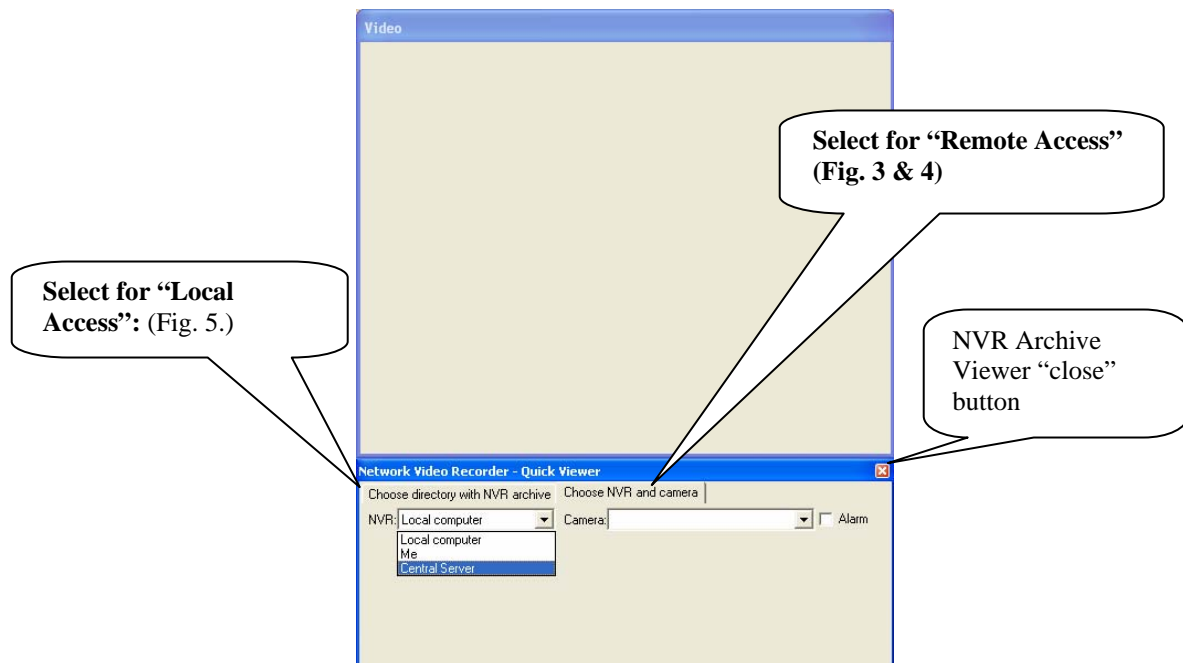NVR Archive Viewer start screen will appear: (Fig.1.)

Fig. 1. NVR Archive viewer

In order to access the archive, select one of the following:

> I. **Choose directory with NVR archive** (for local access).
> II. **Choose NVR and camera** (for remote access).
>> ✓ **NVR**
>>> o If you choose "Local computer", you do not need to login.
>>> o If you choose "Central Server" which is a remote machine, you have to login (Fig. 2.).
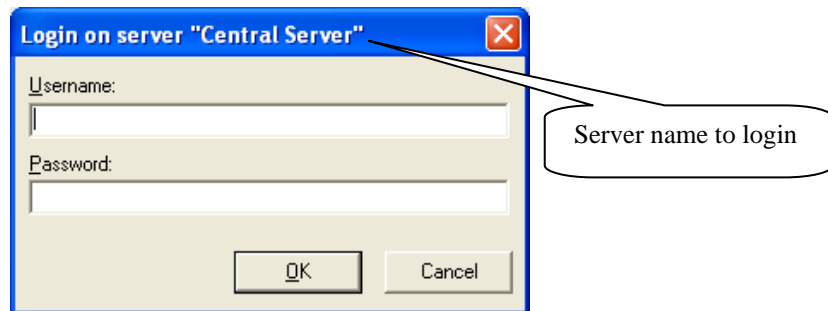>> ✓ **Camera**, choose a camera that you are interested in exporting video streams from.

Fig. 2. Login dialogue box (for remote access)

3. Search the archive and export video stream

> ❖ Choose a camera from the list of cameras available for this user (Fig. 3.).
> ❖ Select the "Date".
> ❖ Select the "Sub-Camera" if one exists.
> ❖ Click "Load"- program loads available recorded information for the selected date and camera (Fig. 4.)
> ❖ Now you can select the exact time that you are interested in from the time pull down menu.
> ❖ Motion Checkbox - if **checked**, program, will only play frames that contain motion (Fig. 4.).
> ❖ Alarm Checkbox - if **checked**, program will only play frames that contain alarm (Fig. 4.).

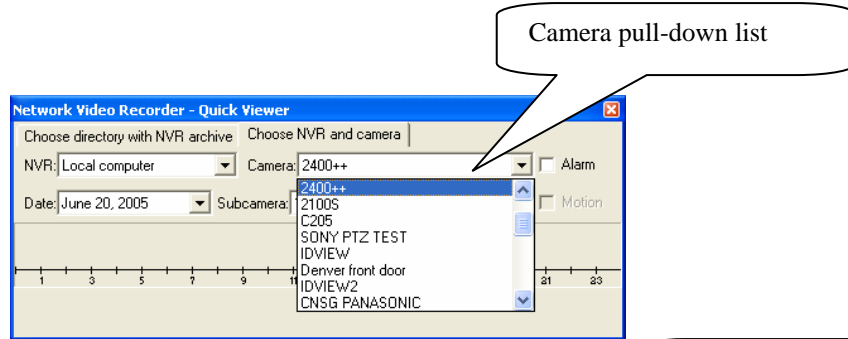*Note: Motion and Alarm check boxes are grayed out while viewing in Real Time.*
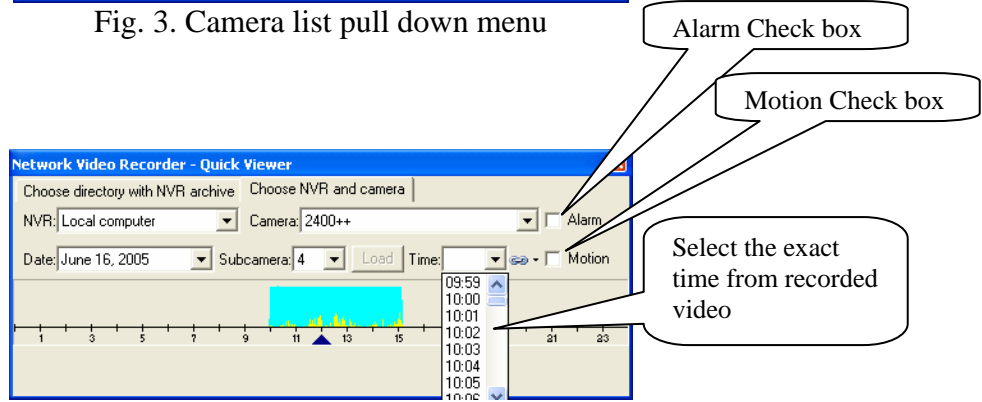
Camera pull-down list

Fig. 3. Camera list pull down menu

Alarm Check box

Motion Check box

Select the exact time from recorded video

Fig. 4. NVR quick viewer's Control Panel

Select the archive location.
Example:
If the archive is in directory "c:\arc",
to select the archive directory you
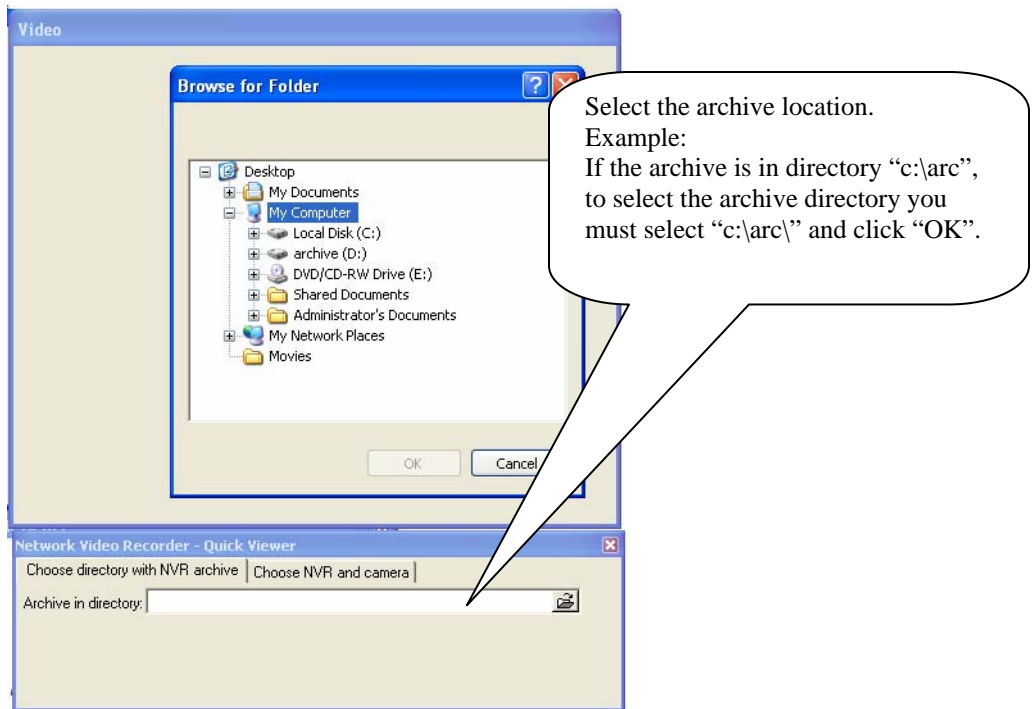must select "c:\arc\" and click "OK".

Fig. 5. "Browse for folder" dialogue box

The following picture depicts the main screen in which user can view the archive.
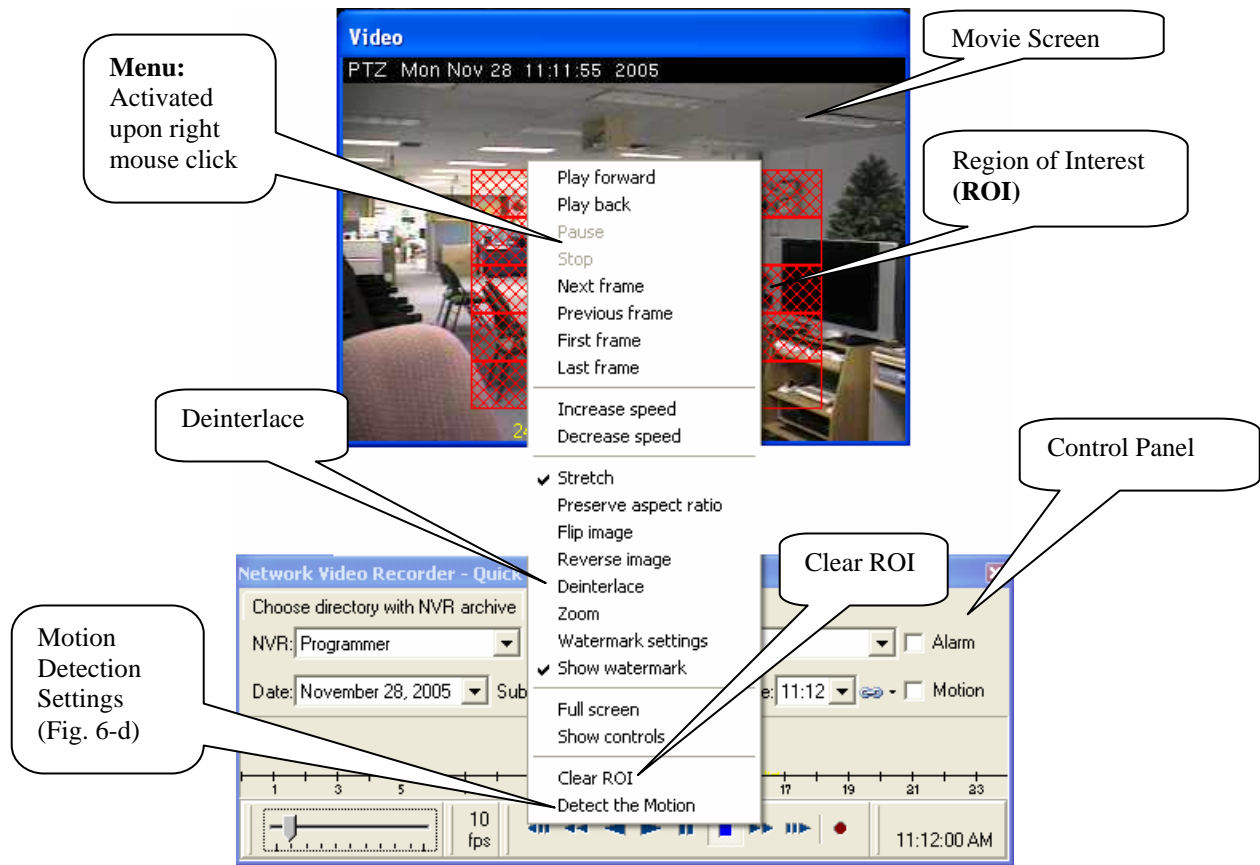

Fig. 6. Movie Screen, Popup Menu, and Control Panel

Main Screen consists of three different parts:

- Movie Screen (Fig. 6.)
- Popup Menu (Fig.6-a)
- Control Panel (Fig. 6-b)

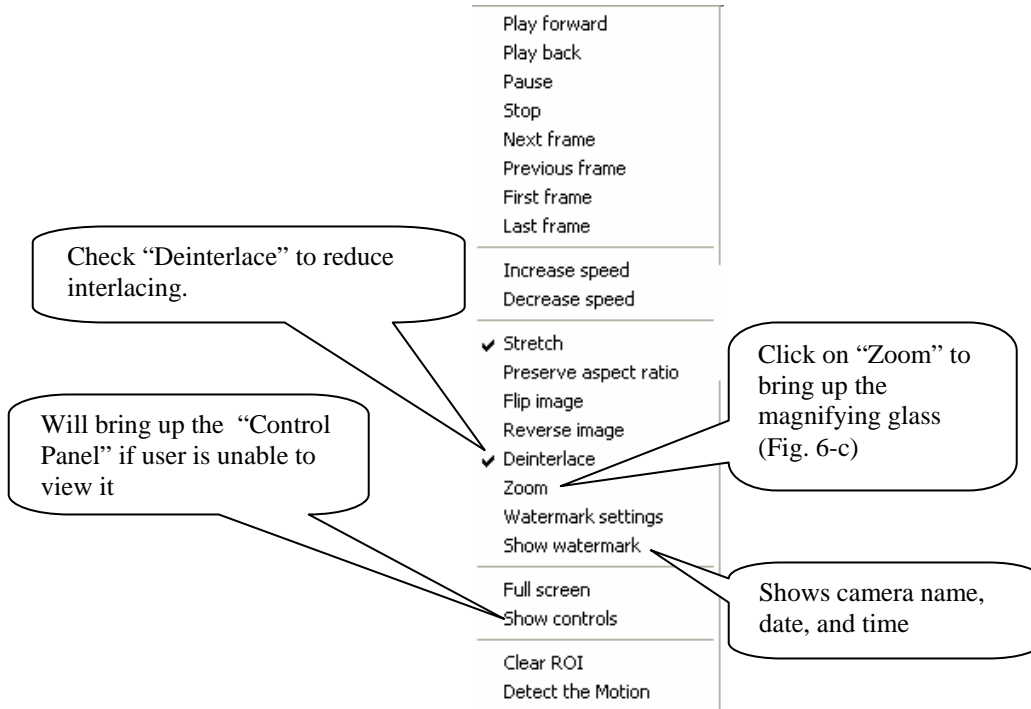*Note: Right-click on the picture to launch the popup Menu.*

Fig. 6-a Popup Menu

Some of the attributes of the pop up menu are as follows:

- **First frame** is the first frame within the current minute.
- **Last frame** is the Last frame within the current minute.
- **Stretch – if checked,** enables the user to change the picture size.
- **Preserve aspect ratio** (grayed out until "Stretch" is checked) keeps the screen proportional, while the screen is resized (by dragging).
- **Deinterlace –** It affects interlacing.
- **Zoom -** Brings up the magnifying glass (Fig. 6-c).
- **Show watermark -** Shows the camera name, and date, and time of the recording (Fig. 6-h).
- **Full Screen – If checked**, it will show the recorded material in full screen.
- **Show Controls –** Will bring up the "Control Panel" if required.
- **Clear ROI –** Clears the Region Of Interest, if it was set.

Right mouse click switches speed to **"Real time Mode"** (1 frame per second)

Convert to AVI button You can use **Right/Left-mouse click** to Set/Record AVI files

Playing in real time

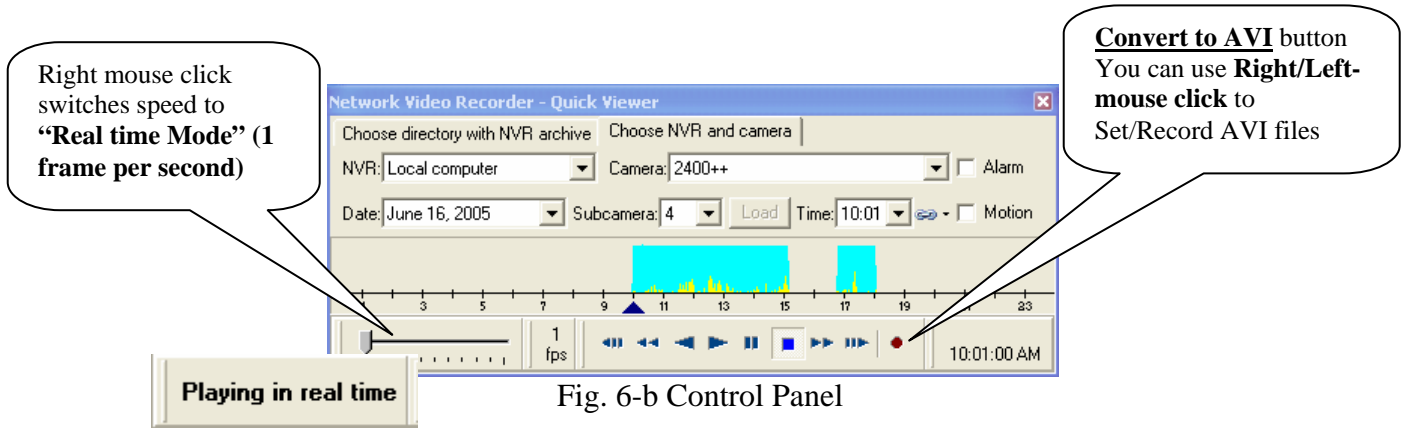Fig. 6-b Control Panel

Default Zoom = 1.5

Magnifying glass

Fig. 6-c. Movie Screen, and Magnifying glass

Move the magnifying glass by clicking on it and dragging it over the movie. It can also be resized, like any other window.

To increase zoom: click "+" on the keyboard.
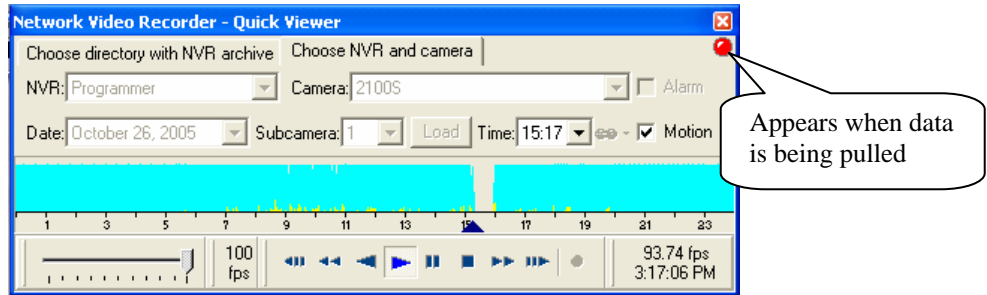To decrease zoom: click "-" on the keyboard.

Fig. 6-d Control Panel

It is possible to enable motion detection while playing back the entire picture, or inside the region of interest (Fig. 6-e).
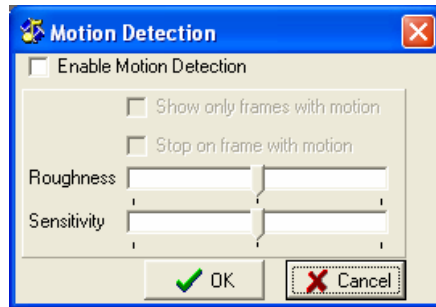

Fig. 6-e. "Motion detection" Dialogue Box

NVR Archive Viewer makes it possible to view recorded sequences from several (up to 9) cameras simultaneously.
Select the main video input (main camera) first and link additional cameras to it (Fig. 6-f). This is possible only for cameras that were recording on the same day as the main selected camera.
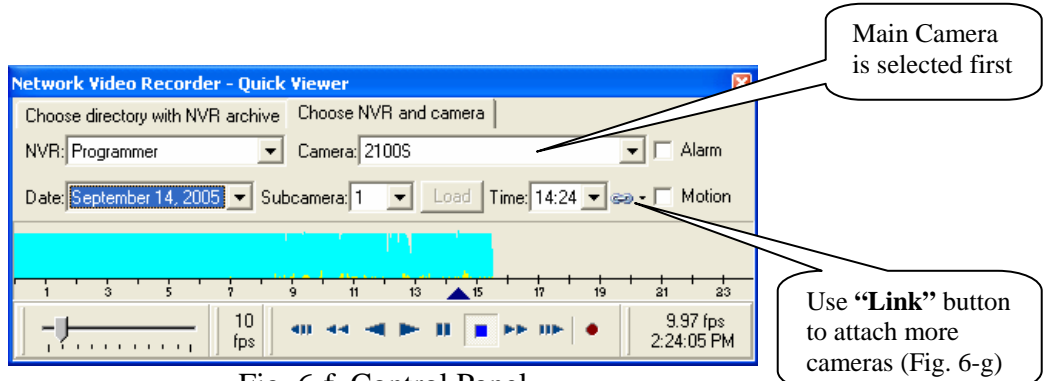

Fig. 6-f. Control Panel

If checked, shows water mark on the picture of the selected camera (Fig. 6-h)

List of cameras that recorded on the selected Date

Different patterns to place pictures on the screen (e.g. 2x2)

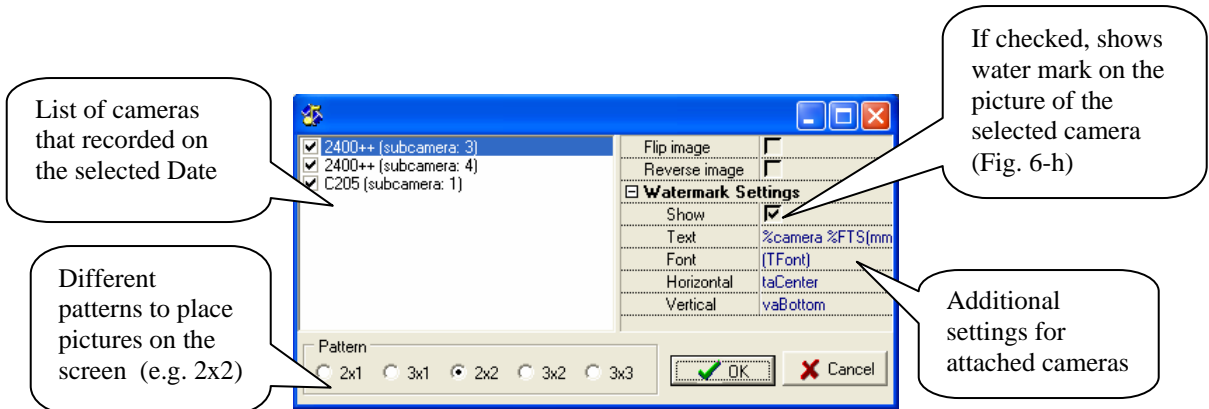Additional settings for attached cameras

Fig. 6-g. Three other cameras are selected to be linked
and viewed simultaneously on the same screen

The example depicted in Fig. 6-f and 6-g show that, three additional cameras (sub-cameras) were recording on the same day. Additional cameras could be linked to the main camera. Select any or all additional cameras and Click "OK" to confirm "link" (Fig. 6-g).

By starting to play the archive, video streams from all selected cameras will be seen on the screen. (Fig. 6-h)

Main Camera

Additional Camera

Additional Camera

Watermark

Fig. 6-h. Linked view of the four different cameras (Pattern 2x2)

Internet traffic between NVR Archive Viewer and NVR is always encrypted.
This is acceptable in heavy security environment, but very costly in terms of the computer resources and in most cases absolutely not necessary. (Or you can use another level of security like VPN (Virtual Private Network) or hardware encryption/decryption)
In order to start unencrypted traffic between NVR Archive Viewer and NVR, start archive viewer with the parameter shown in Fig. 7.
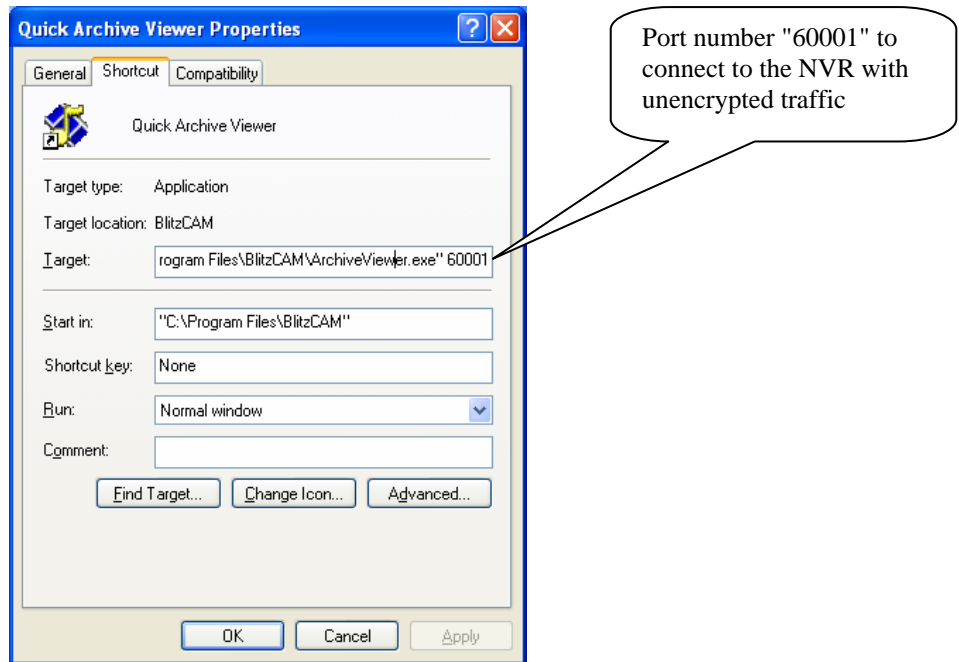

Fig. 7. "Quick Archive Viewer Properties" dialogue box

4. Record and view recorded files using NVR Archive viewer

NVR Archive viewer enables the user to record any portion of a video stream for special purposes. The specific recoded portion of the video stream can later be provided to any third party (e.g. police) who requests a copy of the recorded material. In order to do the latter, the following steps are taken:

- Open the NVR Archive Viewer program.

- Refer to section 2 and 3 of this document in order to export video stream.

- Create a new folder for the new files to be saved in.

- Right click on the Record button provided on the Control Panel, as a result a popup menu will appear (Fig. 8.).
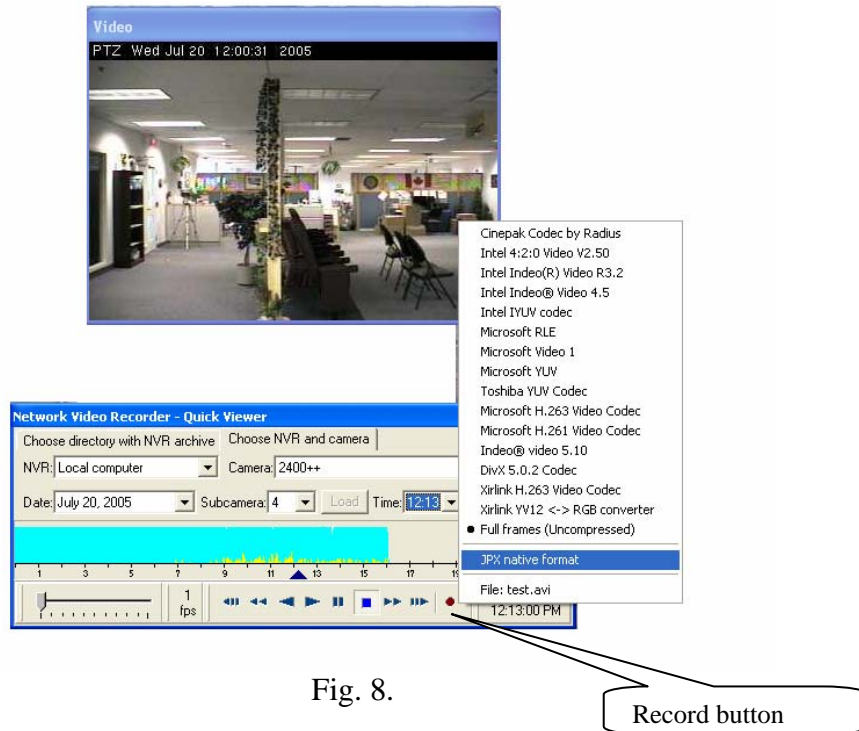

Fig. 8.

Record button

- Click on JPX native format, which is located on the popup menu.
  Note: This step must not be forgotten under any circumstances.

- Click on "File:" which is located on the popup menu. This will open a Dialogue Box in which you can choose the new file you created to save your JPX file. Select a name for the file (e.g. test.jpx), and click on save button (Fig. 9.).
  Note: If any other file exists already, it will be overwritten.

- Start recording by pressing on the record button. You can stop recording at any time by pressing on the stop button.

- As a result of your recording, two files will be created: test.idx and test.jpx (Fig. 10.).

- In order for the person who requested a copy of the file to be able to view this file, a copy of the **ArchiveViewer.exe** is also provided (Fig. 10.).
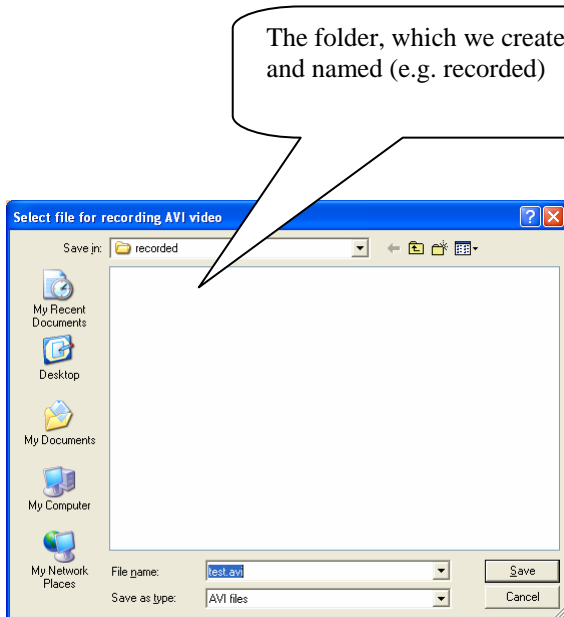 *Note: JPX files are not viewed unless with the help of a software (NVR Archive Viewer).*

The folder, which we created and named (e.g. recorded)

test.ipx, test.jpx, and ArchiveViewer.exe are in the folder that we called "Recorded"

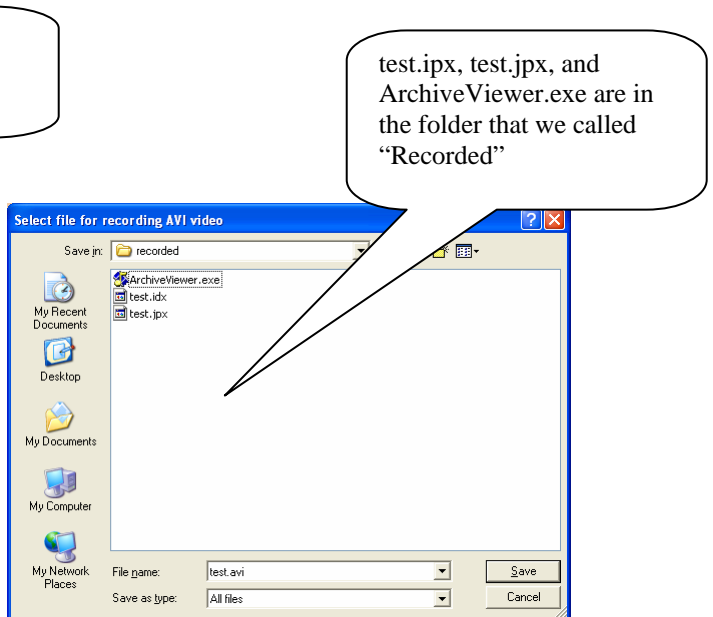Fig. 9. "Select file for recording" Dialogue Box

Fig. 10. Two created files and the executable file

- This folder is now ready to be presented to the requester.
    - The folder contains three files, test.idx, test.jpx, and ArchiveViewer.exe.
    - Clicking on ArchiveViewer.exe file will open the NVR Quick viewer window on the requester's computer (Fig. 11).
    - Drag and drop the JPX file into the "File name" space on the NVR Quick Archive Viewer Control Panel (Fig. 12).
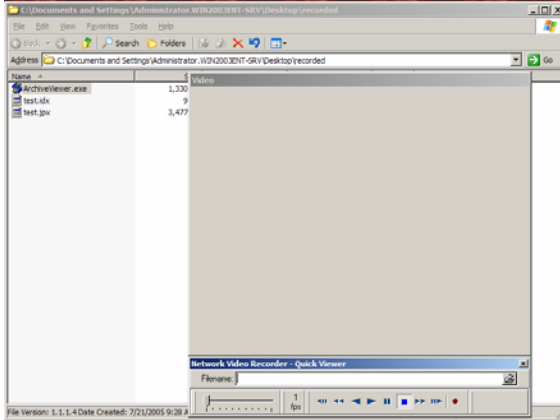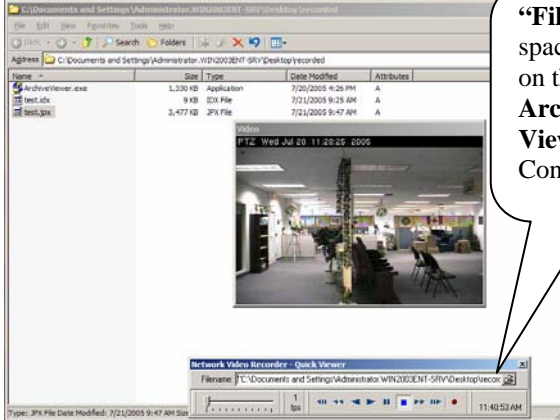   - View the recorded JPX file

Fig. 11. NVR Quick viewer is opened

Fig. 12. test.jpx is dragged and dropped into the "File name space"

"File name" space provided on the **Quick Archive Viewer's** Control Panel

It is worth mentioning that the user can record any part of this recorded JPX file again. This could be done only in AVI format. The newly created AVI file can be played on any kind of media player.

Note: The purpose of saving the file in JPX format is that, JPX format is a secure file format; this guarantees that every frame in the stream is exactly the same as the frame that was taken at the time of recording.

The program will issue a warning in case if the video stream has been changed manually (Fig. 13).
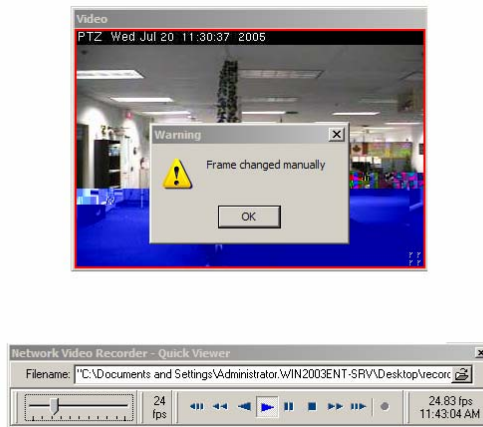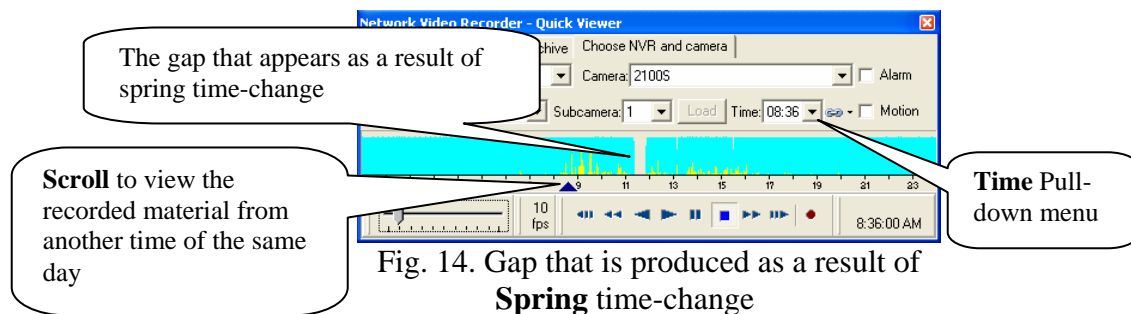

Fig. 13. Warning issued in case of manual frame change

5. An Important Note about Daylight Saving Time

Recorded sequence on the Archive Viewer's "Control Panel" will show some irregularities when time changes as a result of **Daylight Saving Time**. For instance this will produce a gap on the recorded sequence when time is changed in Spring (Fig. 14.).

- **In Fall,** clocks fall back from 1:59 a.m. to 1:00 a.m. (in most of the North America). This is when the recording is done twice for the same hour. Since one hour is added, there will be a loop presentation while playing the recorded material; this means that the time will reach 1:59 a.m., then will go back to 1:00 a.m. again (loop). This only happens once a year (Last Sunday of October).

- **In Spring,** clocks move forward from 1:59 a.m. to 3:00 a.m. (in most of the North America). This is represented by a gap on the recorded sequence located at the Archive Viewer's Control panel (Fig. 14.). This only happens once a year (First Sunday of April).

*Note: Time **pull-down menu** can be used to view the recorded material from another time of the same day. It is not possible to use the **Scroll** to do the time change for recorded material of this specific day (Fig. 14.).*

The gap that appears as a result of spring time-change

Scroll to view the recorded material from another time of the same day

Time Pull-down menu

Fig. 14. Gap that is produced as a result of **Spring** time-change

*Note: In the **European Union**, Summer time begins and ends at 1:00 a.m.Universal time (Greenwich Mean Time). It begins the last Sunday in March and ends the last Sunday in October. In the EU all time zones change at the same time.*