



COMVISION USER MANUAL

VITUAL MATRIX VIDEO WALL
LONGREACH NSR SERIES



TABLE OF CONTENTS

1.1.	ComVision Digital Video Wall – Virtual Matrix	3
1.2.	Logging on.....	3
1.2.1.	Changing Your Password.....	3
1.3.	Main Window	4
1.4.	Selecting cameras	5
1.4.1.	Camera selection from the group tab	5
1.4.2.	Camera selection from the Camera tab.....	6
1.4.3.	Camera selection from the DVR tab	6
1.5.	Controlling PTZ cameras	7
1.5.1.	Mouse-Over Image Control	7
1.5.2.	ComVision Touch Screen Keyboard Control.....	9
1.5.3.	Selecting Cameras with the Joystick	10
1.6.	Changing split modes	14
1.7.	The Function Menu.....	15
1.8.	Hot Keys	16
1.9.	ComVision Digital Video Recorder Playback	17
1.9.1.	Reviewing video from a ComVision NSR	18
1.9.2.	Reviewing from a file on a CD or DVD	21
1.9.3.	Snapshot functionality	21
1.9.4.	Exporting video.....	23
1.9.5.	Video Format.....	24
1.10.	ComVision NSR Export Utility	25
1.10.1.	Overview	25
1.10.2.	The Main Export Application	25
1.10.3.	The main toolbar	26
1.10.4.	Adding a camera	26
1.10.5.	Navigation	28
1.10.6.	Visual organisation	29
1.10.7.	Exporting video.....	30
1.10.8.	Incident Options	31
1.10.9.	Export Paths.....	32
1.11.	System Audit Reports	34

1.1. ComVision Digital Video Wall – Virtual Matrix

1.2. Logging on

The Virtual Matrix client can be configured to auto-log on, or require a user to provide a logon Role and Password.



Select your **'User Name'** from the drop down list, then select a **'Role'** and enter your **'Password'**. Clicking the **'Logon'** button at this point will log you onto the software and give you access to system components. Access to components such as live cameras, recorded video and system buttons have been allocated to you by your system administrator.

1.2.1. Changing Your Password

To change your password press the "Change Password" button on the logon screen. The following dialog will be displayed:



- Enter your old password in the **"Password"** field.
- Enter your new password in the **"New Password"** field.
- Confirm your new password by entering your new password again in the **"Confirm Password"** field.
- Press the **"Logon"** button to log onto the system and change your password.

1.3. Main Window



Depending on how the Virtual Matrix client has been configured, the main window will either contain blank video sectors or live video.

In normal operation you should see 'MX Registered' and 'MP Registered' in bottom left of the screen as indicated above. If these are flashing and say 'Unregistered' then the system has a fault and you should call a service engineer.

To select any menu item you must first move the mouse over the selection tabs on the LHS of the screen and then click the appropriate tab item. This will cause the menu to slide out and give you access to the respective functionality. Moving the mouse off the LHS tabs will cause the menu system to automatically slide back. If you want the slide out menu to stay out after the mouse is moved away, you can press the pin at the top of the slide out menu. The functions in each tab are described later in this manual.

There are also left, right and middle mouse click options on top of the video image. These are to access playback options for the camera being displayed in the window and to control PTZ cameras. This is described later in this manual.

1.4. Selecting cameras

There are several options available to select a camera for viewing, namely:

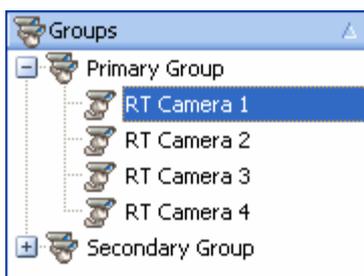
- **FROM A GROUP**
- **BY CAMERA NUMBER**
- **FROM A DVR**

Additionally, multiple cameras can be selected at once.



The highlighted area in this image indicates where each of the camera selections is made. When you move the mouse over the top of the selection area a pop-up caption indicates what that selection is.

1.4.1. Camera selection from the group tab



When the group tab is selected, you can drag one or more cameras from the tree view and drop it onto a video window.

Selecting multiple cameras is performed using CTRL + Left mouse button click (non-consecutive cameras) or SHIFT + Left mouse button click (consecutive cameras).

- If more than one camera is selected, they will be placed onto successive video windows.
- If you drag a group node onto a video window, then all cameras in that group will be displayed.
- If there are more cameras than available video windows then not all cameras will be displayed.

1.4.2. Camera selection from the Camera tab

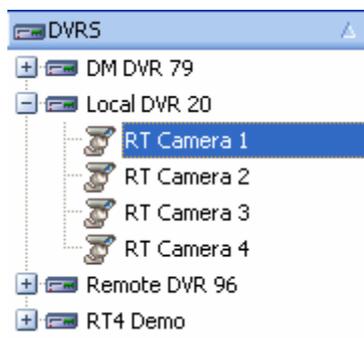


When the camera tab is selected you can choose one or more cameras and drag them onto the video windows.

Selecting multiple cameras is performed using CTRL + Left mouse button click (non-consecutive cameras) or SHIFT + Left mouse button click (consecutive cameras).

- If more than one camera is selected, they will be placed onto successive video windows.
- If there are more cameras than available video windows then not all cameras will be displayed.

1.4.3. Camera selection from the DVR tab



When the DVR tab is displayed you can choose one or more cameras and drag them onto the video windows.

Selecting multiple cameras is performed using CTRL + Left mouse button click (non-consecutive cameras) or SHIFT + Left mouse button click (consecutive cameras).

- If more than one camera is selected, they will be placed onto successive video windows.
- If you drag a DVR node onto a video window, then all cameras on that DVR will be displayed.
- If there are more cameras than available video windows then not all cameras will be displayed.

1.5. Controlling PTZ cameras

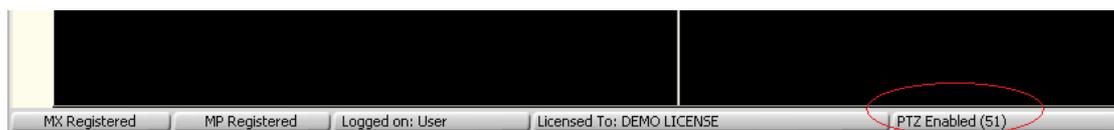
1.5.1. Mouse-Over Image Control

Middle mouse click anywhere on the camera image to activate PTZ control.....



The task bar at the bottom will indicate that PTZ is now enabled. This means instant playback controls will not work until you middle mouse click again to turn off PTZ controls.

You will see the following appear in the bottom task bar while PTZ is enabled:



The "(51)" means PTZ is enabled on monitor 51.

To control the pan and tilt on a PTZ camera move the mouse over the image while PTZ is enabled. The camera will follow the mouse, and as you move the mouse further from the centre of the image the camera will move faster. To stop pan and tilt simply move the mouse to the centre of the image or middle mouse click to disable PTZ control.

To 'zoom in' hold down the left mouse button and to 'zoom out' hold down the right mouse button.

Tip: You can pan, tilt and zoom simultaneously by using a combination of the above functions.

The following diagram illustrates the mouse over PTZ controls:



1.5.2. ComVision Touch Screen Keyboard Control

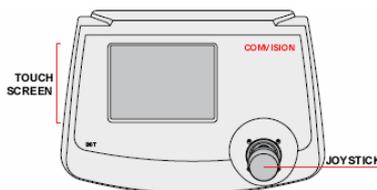
Joystick Overview

The ComVision NSR-DCT Touch Screen Keyboard is an industrial grade keyboard designed specifically for use with the ComVision NSR Virtual Matrix system and the ComVision Hybrid Matrix system.



Its ergonomic design, back-lit graphic display and integrated touch screen make it perfect for use in today's busy security control rooms.

Featuring 30 programmable GUI (Graphical User Interface) maps, users can customise the look and feel of the touch screen display. An easy to use Windows application is used to design and upload the keyboards configuration and customised maps.

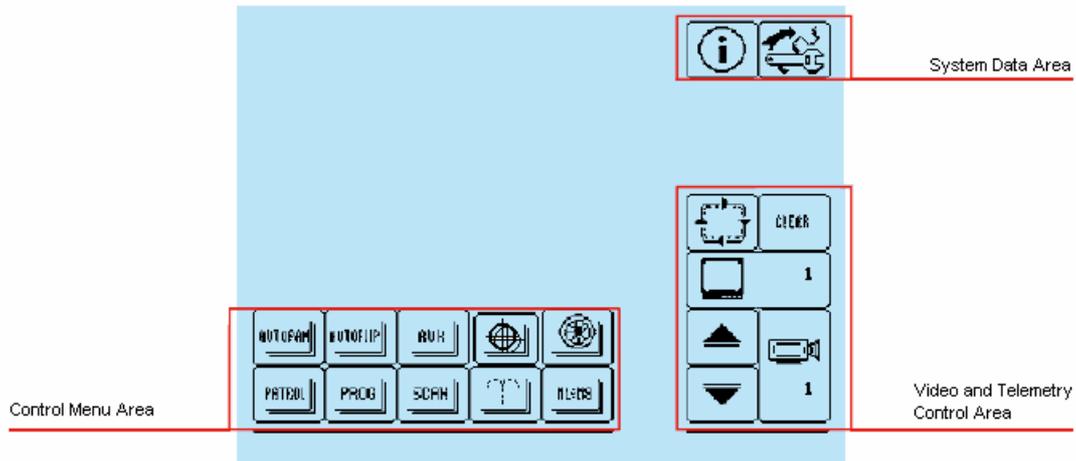


The three axis joystick allows simple manual control of cameras and gives the users the ability of controlling variable speed PTZ (Pan / Tilt / Zoom) cameras.

1.5.3. Selecting Cameras with the Joystick

The following screen shot outlines the basic functional areas of the Joystick

Main Camera Control screen:

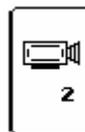


1.5.3.1. Video and Telemetry control Area:

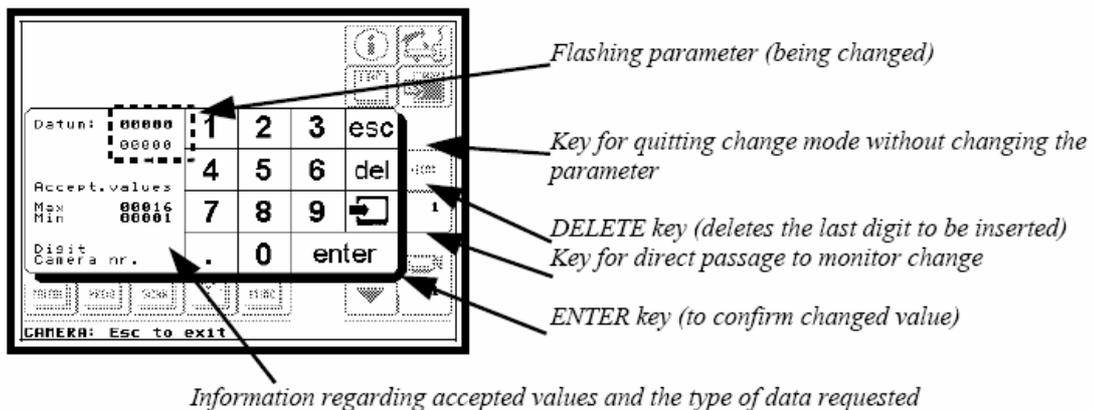
This area is used to select monitors and cameras....

Selecting Cameras:

To select a camera, press the Camera icon



The following pop-up menu will appear:



Type in the camera number and press the “enter” button. The selected camera will then be switched to the active monitor.

Press the “esc” button to close the pop-up menu.

Selecting Monitors:

To select a monitor, press the Monitor icon



A similar pop-up menu to the above will then appear. Type in the monitor number and press the “enter” button.

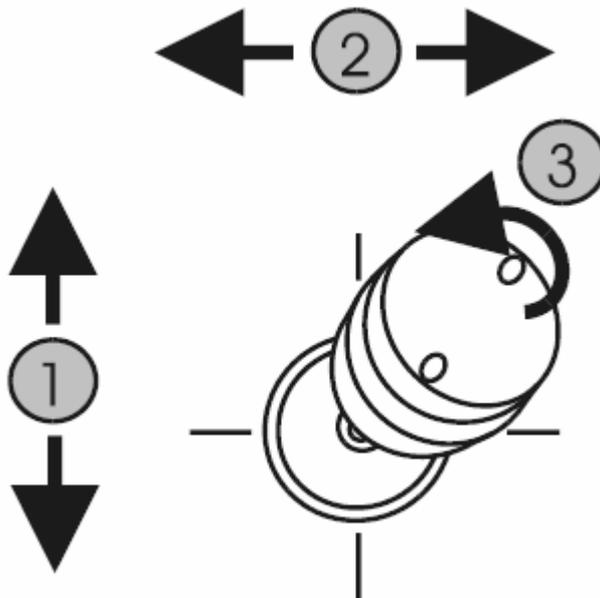
Press the “esc” button to close the pop-up menu.

Your new monitor number should now be indicated in the monitor icon.

Tip: Use the up and down buttons to switch cameras sequentially to your active monitor.



Moving Cameras:



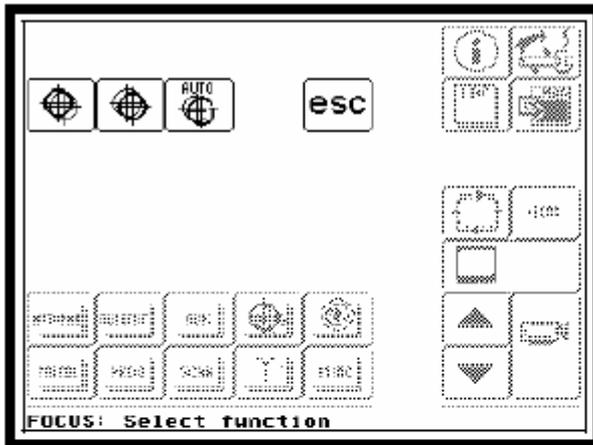
1. To ‘tilt’ a currently selected PTZ camera up and down, move the joystick up and down respectively.
 - The further you move the joystick from the center position, the faster the camera will move.
2. To ‘pan’ a currently selected PTZ camera left and right, move the joystick left and right respectively.
 - The further you move the joystick from the center position, the faster the camera will move.
3. To ‘zoom’ a currently selected PTZ camera, turn the joystick clockwise to zoom in and anti-clockwise to zoom out.

Tip: You can pan, tilt and zoom simultaneously by using the three functions above simultaneously.

1.5.3.2. Control Menu Area

Focus:

Pressing the 'Focus' button will display the following pop-up menu and functions:



FOCUS FAR
Activates the FOCUS FAR function



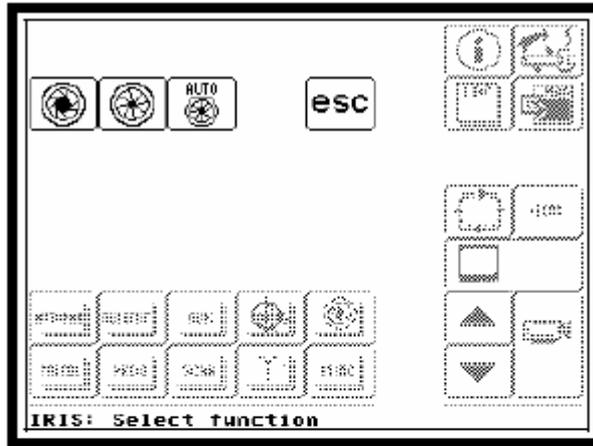
FOCUS NEAR
Activates the FOCUS NEAR function



AUTOFOCUS TOGGLE
Activates/deactivates the AUTOFOCUS function

Iris: 

Pressing the “Iris” button will display the following pop-up menu and functions:



-  **IRIS OPEN**
Activates the IRIS OPEN function
-  **IRIS CLOSE**
Activates the IRIS CLOSE function
-  **AUTOIRIS**
Activates the AUTOIRIS function

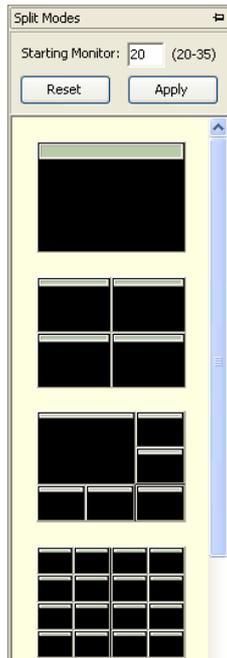
- Auto-pan:  Used to pan auto pan cameras left and right.
- Auto-Flip:  Not supported
- Aux:  Used to trigger dome camera auxiliary outputs
- Patrol:  Not supported
- Prog:  Used to program presets
- Scan:  Used to move cameras to presets
- Wiper:  Used to control camera washers and wipers

1.6. Changing split modes



The Virtual Matrix is capable of displaying video in different window layouts. The highlighted area indicates which tab allows you to change the current layout.

Note: The number of available monitor layouts may differ from one installation to another. The System Administrator will configure the required monitor layouts.



When the Split Modes tab is expanded you will be presented with various layout options, as shown in this example.

To change to a different split mode just click on the layout that you require.

The top region of this tab allows you to re-arrange the monitor sequence for the currently viewed split mode. To re-arrange the monitor sequence, enter the starting monitor number and click the **Apply** button.

If you want to change the monitor sequence *and* select a different split mode then enter the starting monitor number and select the required split mode. The main viewing area will be altered based on your selection.

If you want to restore the monitor sequence, click the **Reset** button, followed by the **Apply** button.

1.7. The Function Menu

Selecting the Function tab provides various options depending on your installation and whether you are logged on as a 'User' or a 'Manager'.

 Lock	The Lock option prevents a user from operating the Virtual Matrix software until logged on again. All current live video remains streaming.
 Change User	The Change User option allows you to logon as a different 'user' or 'role'
 Log Off	The Log Off option disconnects all current live video and locks the Virtual Matrix software until another operator logs on.
 Disconnect All	The Disconnect All option disconnects all currently viewed live video.
 Refresh	The Refresh option is used to reload all configuration information. This is used by a Manager / Operator when DVR configuration has changed.
 Playback	The Playback option will launch the Comvision NSR Player application, allowing the operator to view recorded video.
 Remote Control	The Remote Control option will launch the Comvision DVRG Remote Control application. This allows you to change split modes on remote Video Walls.
 Configurator	The Configurator option will launch the Virtual Matrix configuration tool.
 Virtual Joystick	The Virtual Joystick option will launch the Comvision Virtual Joystick application, allowing you to control PTZ cameras.

1.8. Hot Keys

The Virtual Matrix client application provides the following hotkey buttons:

F10: Pressing F10 will instantly display the Telemetry tab.

F11: Pressing F11 will instantly display the Split Mode tab.

F12: Pressing F12 will expand the viewing area such that only live video is displayed. All additional tabs are temporarily removed from view.

To toggle between showing the slide out tabs and not showing them, simply press the respective function key again.

F9: Pressing F9 will lock the Matrix software.

SHIFT + F9: Pressing this key combination will display the “Change User” dialog.

CTRL + ALT + F9: Pressing this key combination will “Log Off” the Matrix software.

1.9. ComVision Digital Video Recorder Playback

The Comvision NSR Player application is used to review recorded video, print individual frames and export a time period to disk or CD/DVD.



The main window is initially displayed as shown. Depending on how the application is launched you may be prompted to enter your user name, role and password.

The left scrollbar is a speed indicator. The middle location (indicated by the red bar) is normal speed (1x). Positions above this location will increase the playback speed and lower positions will decrease the playback speed.

The scrollbar at the bottom represents a time range; this is updated when video is being reviewed. This will be explained in further detail later.

The buttons across the bottom perform the following functions (**from left to right**):

Maximize: Increase the video area to fill the entire screen (or to the dimensions configured in the INI file).

Stop: Stop the current playback and close the recorded file.

Pause: Pause the current video playback.

Play: Plays the current file forward, in real time.

Play reverse: Plays the video in reverse. Clicking this button multiple times will increase the playback speed (in reverse). Please note, due to the advanced encryption techniques used it is impossible to play video in reverse in real-time.

Frame back: Moves back one frame and pauses the video playback.

Frame forward: Moves forward one frame and pauses the video playback.

Play forward: Plays the video forward, increasing the playback speed each time the button is clicked.

- Snapshot:** Opens the snapshot window allowing individual frames to be printed. This is explained in greater detail later in this manual.
- Launch Export:** This button will open the ComVision Export Application and automatically load the video that you are playing into the Export Application.
- Export:** Opens a form that gives you the ability to export the video directly to CD, DVD or Hard Disk. It also gives you the ability to export as Comvision video file format or AVI format.
- Goto:** Allows you to load a period of recorded video directly from a DVR.
- Files:** This option allows you to manually open a recorded file. This mode is useful when you need to review video that has been burnt to a CD/DVD.

1.9.1. Reviewing video from a ComVision NSR

There are two methods of viewing recorded video from a particular camera. The first method is to use the 'Instant Playback' functionality, and the second is to manually 'Goto' a time and date.

1.9.1.1. Instant Playback

When you are viewing any camera live in the Virtual Matrix application and you want to view recorded footage for this camera you can simply double left click on the video stream. This double click action will automatically launch the Playback application and will instantly take you back a pre-programmed period on time. This time period is setup by your system administrator and would typically be 1 minute.

Alternatively you can right click on the image and you will be presented with the following pop-up menu.



If you then select 'Playback' you will be presented with a number of time options. These options indicate how far back the instant playback will go. These times are configurable and are setup by your systems administrator.

1.9.1.2. Goto Time and Date

This method requires you to launch the Playback application from the slide out function menu.

To review recorded video from a DVR, click the **Goto** button on the Player application.

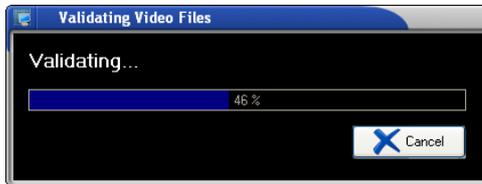


You will be presented with this dialog. All available cameras are selected from the Channel drop-down combo box.

You can open a video period using the **Goto** or **Goto Range** button.

The **Goto** button is used to quickly open a pre-defined period of video as per the applications configuration – this is typically 10 or 15 minutes. To use this mode, enter a **From Date/Time** value and click the **Goto** button.

The **Goto Range** button is used to open a specific range of video, whether it be 1 minute or 1 hour. Please note opening large periods of video will consume considerable amounts of memory. If performance is observed to be reduced, try opening shorter periods of video. To use this mode, enter a **From and To Date/Time** value and click the **Goto Range** button.



The validity of the video data is checked prior to displaying it. This includes checking to make sure there are no breaks in the video and that all frame indexes are sequential.

A check is also performed to ensure the data has not been tampered with.



If the selected period is not available, a message will be displayed – similar to this example.

When the recorded file is opened, the playback controls become enabled. This allows you to quickly move forward and backward within the time period.



Video files are recorded in blocks of time, such as 5, 10 or 15 minute periods. When opening a date/time range it is most likely that the player will open files such that the beginning and ending times do not exactly match the values you entered.

The yellow band shown in this example indicates the time period you requested to view. You can manually reduce or extend this range using the bracket buttons on the right hand side of the timeline scrollbar. The brackets are only available when you **pause** the video stream. If you still have the **Goto** window open, the new beginning and end times will be updated to match the yellow band.

1.9.2. Reviewing from a file on a CD or DVD



The **Files** button allows you to manually open a file.

Click the **Files** button and select a file from the explorer window presented.

The playback operation is identical to the previous section with the only difference that no yellow band is displayed.

1.9.3. Snapshot functionality

Individual frames from a video recording can be printed along with operator notes. When video is being reviewed, the Snapshot button becomes enabled. Click this button to display the Snapshot window.



The **Lock Image** option freezes the current frame, allowing you to continue reviewing the currently opened video period. If you find a frame that better represents what you're looking for, click the **Refresh** button and the current frame will replace the *locked* frame.

If the **Lock Image** option is not selected, the image displayed in the Snapshot window is updated as the recorded file is reviewed in the player application.

The bottom of the window provides an area for operator notes that will be printed along with the image.

The **Preview** button displays a window showing how the image and notes will be printed.

The **Print** button allows the operator to select a printer and send the image to it. Your systems administrator must first setup a printer for the PC that you are working on.

The **Save** button allows the operator to save the displayed frame as a bitmap image.

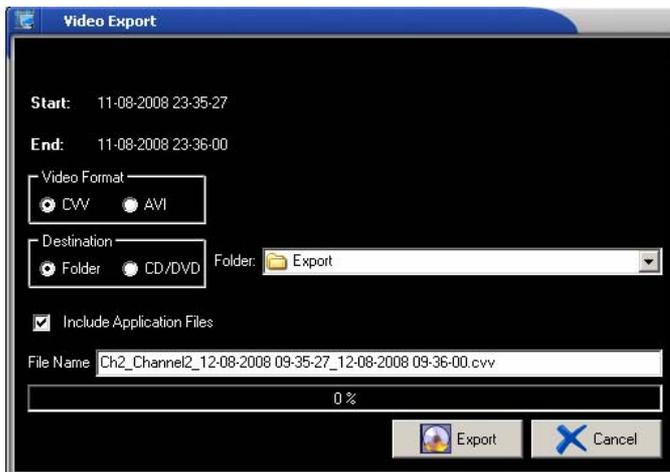
1.9.4. Exporting video



Video can only be exported from video reviewed directly from a DVR. The **Goto** window provides an **Export** option, as indicated by the highlighted area in this image.

Pressing the 'Export' button will display the following menu:

This menu allows users to export directly to a CD, DVD or Folder (Hard Disk). It also allows users to export as a CVV file or AVI file.



The range of video required is collected from the DVR and validated when the export button is pressed.

By default, video is exported to disk based on pre-configured information.

If you wish to export to CD/DVD select the appropriate option in the destination area.

If you need to burn the video to CD/DVD it is recommended to select the "Include Application Files" option. This will allow you to review the video directly from the CD/DVD.

Click the **Export** button when you are ready to export the video.

- If you have selected a folder for the destination the files will be exported directly to your desired location.
- If you have selected a CD or DVD just follow the on screen prompts and the files will be copied to your selected media. The maximum burn speed is pre-configured by your systems administrator.
 - If you have selected 'Include Application files' you can put the CD or DVD into any PC and the playback application will automatically start.
 - Note after each export the CD or DVD is closed off. This means you can only do one export to the CD or DVD. This is to prevent anyone

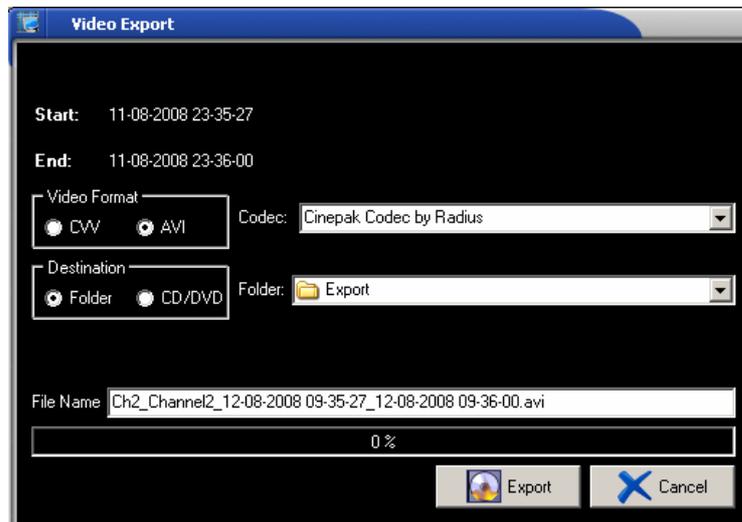
tampering with the footage on the CD or DVD after an export. If you require more than one camera to be included in the export then you need to use the ComVision NSR Export Utility. This is outlined in the next section.

1.9.5. Video Format

The 'Video Format' area on the Video Export menu allows users to select two different video formats to export.

- 'CVV' format stands for 'ComVision Video' format. This is the **recommended format** because it is the original video file in a compressed / encrypted file. Because it is compressed you will be able to fit more video on you CD/DVD. Because it is encrypted it cannot be tampered with.
- 'AVI' format. This is a standard format that Windows Media Player is capable of playing. Also some DVD players are capable of playing AVI files. The compression on AVI files is not as good as the CVV files and you will find that the file size becomes very large.

When you select the 'AVI' radio button you will be presented with the available codec's that are on your PC. You should use the most common codec's to ensure that the PC that is used to play the AVI file also has the same codec.



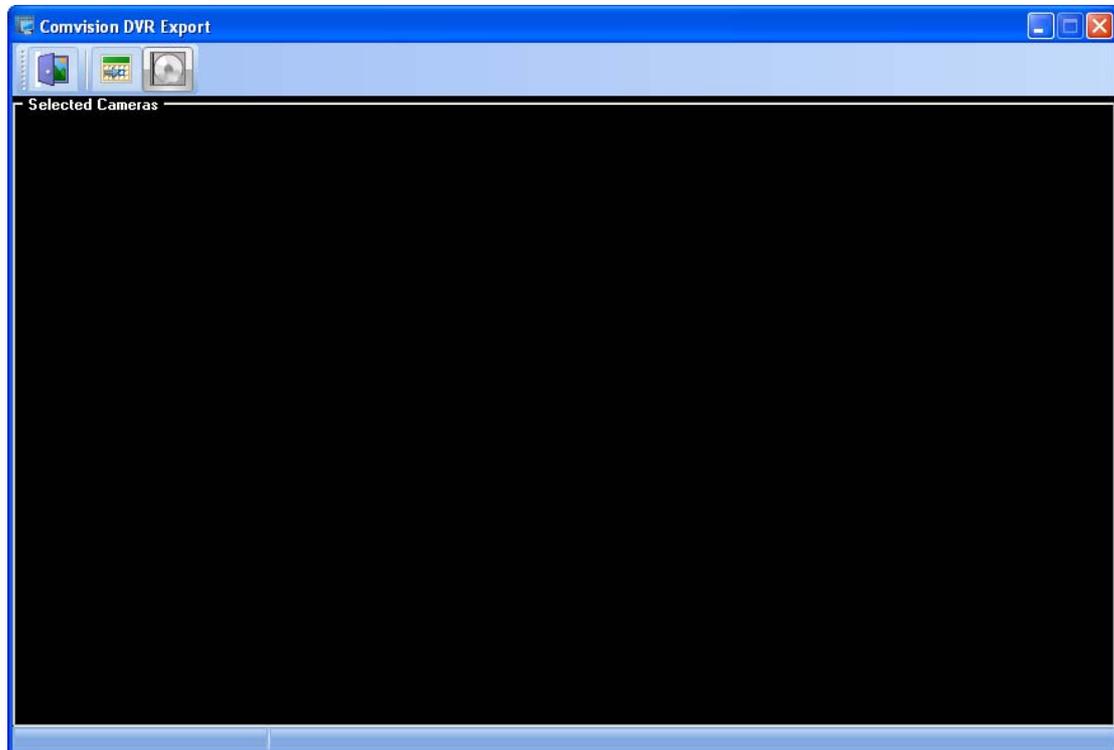
1.10. ComVision NSR Export Utility

1.10.1. Overview

The Comvision NSR Export utility allows the user to export a number of cameras for the same (or different) time range(s). The number of cameras and length of time period exported is governed by the amount of free space on the storage medium, whether it is CD, DVD or an internal/external hard disk.

1.10.2. The Main Export Application

The main application window, as shown below, contains three buttons on the top toolbar and a larger viewing area that is used to display each camera that makes up an incident.



1.10.3. The main toolbar



The three buttons, from left to right, perform the following functions:



“Exit”: Exits the application.



“Add”: Adds another camera for exporting.



“Export”: Prepares to export the video to CD, DVD or a hard disk.

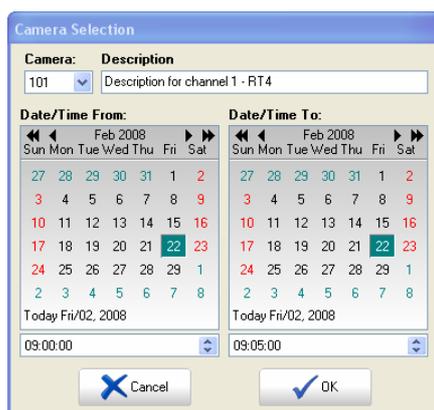
1.10.4. Adding a camera

Cameras can be loaded into the Export application in two ways. The first method is to use the ‘Add’ button detailed above, while the second is to use the ‘Launch Export’ button on the Comvision Player application.

1.10.4.1. Using the ‘Add’ button



When the  button is pressed, the user is presented with a dialog requesting the camera and date/time range required for export.

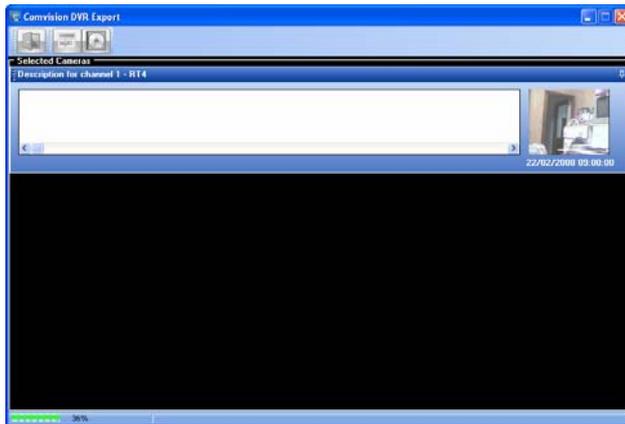


In the example screen shot shown, Camera 101 has been selected for export between 09:00am and 09:05am.

Tip: When entering the time details, use the right arrow keys to move between the hours, minutes and seconds fields.

When the OK button is clicked, the CVDVRExport application will request the video range from the associated DVR.

The new camera item is added to the main view within its own viewing panel. Once the connection has been made to the DVR, a preview of the video is shown in the rightmost area of the panel (capable of performing basic playback operation).



The application next prepares up to 50 thumbnail images that span the selected video time period.

This progress is indicated in the main status bar.

The camera panel is updated with each of the thumbnail images, as shown in the next screen shot.



1.10.4.2. Using the 'Launch Export' button on the Comvision Player Application.



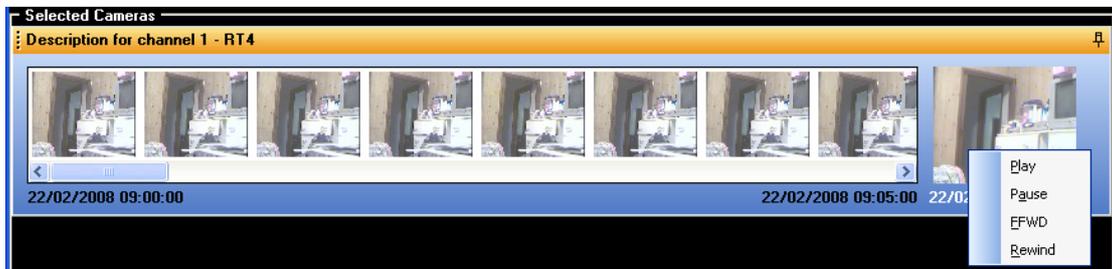
This button becomes enabled when you 'pause' the video playback.

When pressed, it will start the ComVision Export application and automatically load the camera with its time and date range into the thumbnail area.

This allows users to refine the time and date range in the player before loading the Export Application. The bracket icons are used to increase or decrease the yellow playback range.

1.10.5. Navigation

Video navigation can be accomplished by selecting a thumbnail image to reposition the playback preview. Additionally, right mouse clicking the playback preview allows the user to perform basic playback operation.



Play – Plays the video forward at real time speed.

Pause – Pauses the video.

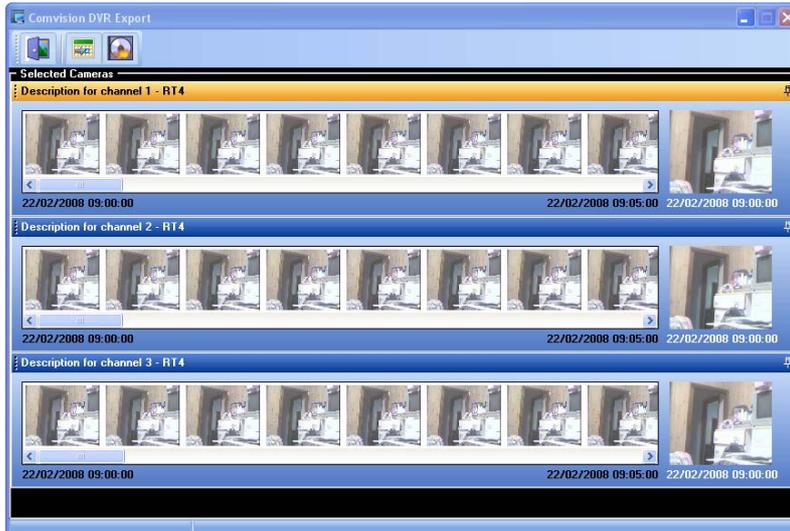
FFWD – Plays the video forward at approximately 8x speed.

Rewind – Plays the video in reverse at approximately 8x speed.

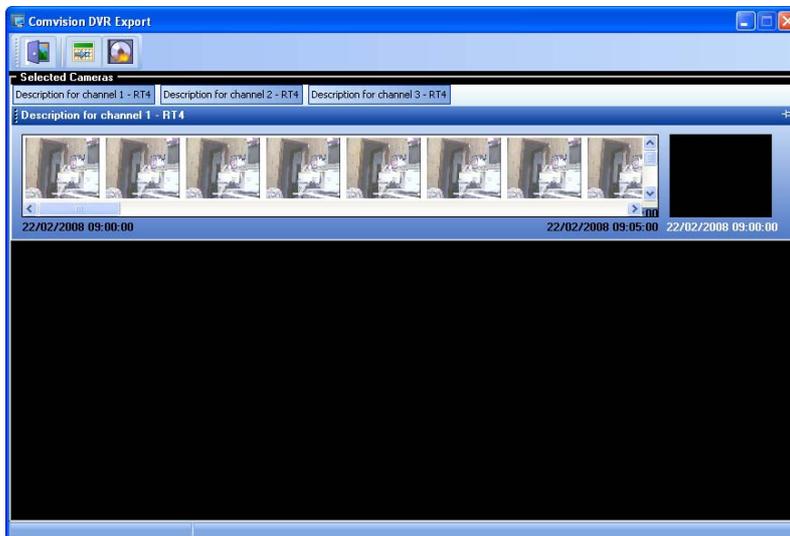
1.10.6. Visual organisation

By default, the video files will be exported in the order in which they are added (although this can be changed - as discussed later in this document). Visually, though, you may prefer to re-organize the viewed cameras.

Each camera panel is locked (pinned) when first added to the main viewing area. If you unpin the panels, you can change the layout to look something like the following screen shot.



In this default view, three cameras have been added.



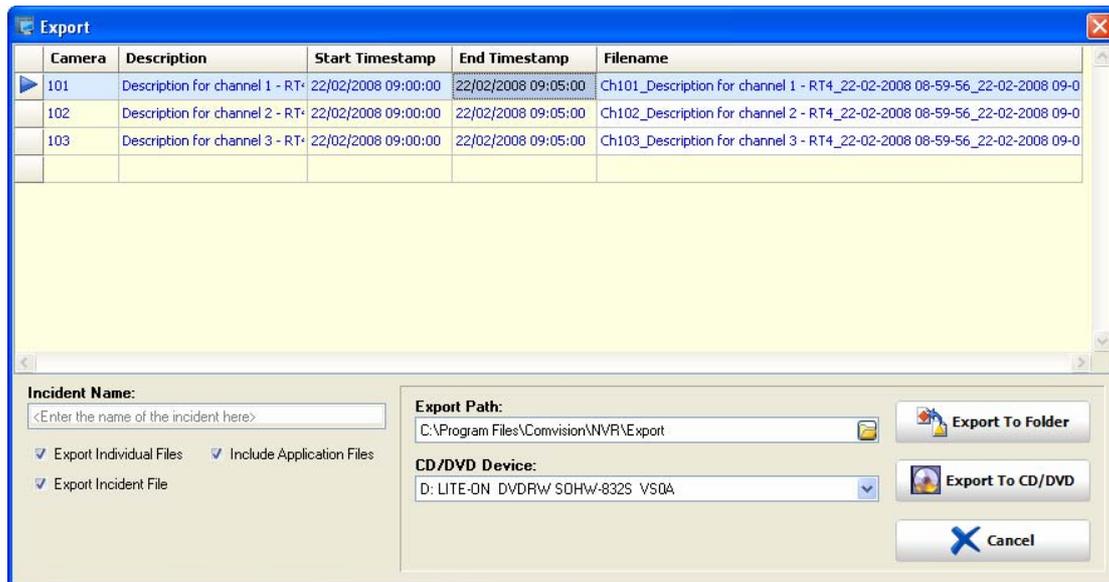
By unlocking (pressing the pin icon) each of the panels, they are organised into tabs.

Move the mouse over a tab (or click the tab) to have the video panel drop into view.

Each panel can be locked and unlocked in any order.

1.10.7. Exporting video

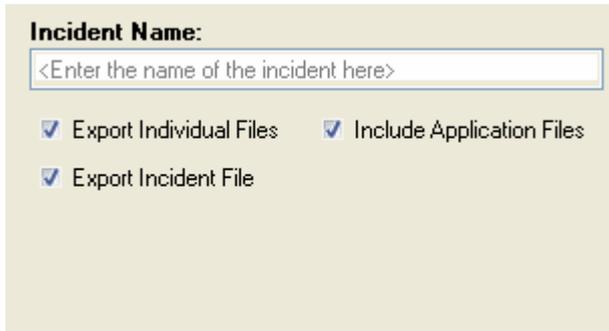
When the  button is pressed an Export dialog is presented, as shown in the following screen shot.



The top half of the window shows the order in which the cameras will be exported. The order can be modified by dragging a row from one position to another. To move a row, click the area immediately to the left of the required camera number and move it to the desired location (you can move any row, not just the currently selected row).

The order of export is only important if you intend to export an Incident File (a file that combines all cameras into a single video file).

1.10.8. Incident Options



The screenshot shows a dialog box titled "Incident Name:". It contains a text input field with the placeholder text "<Enter the name of the incident here>". Below the input field are three checked checkboxes: "Export Individual Files", "Include Application Files", and "Export Incident File".

Each export operation can be configured to perform a number of tasks. These are outlined next.

Incident Name: When exporting to a folder (hard disk), the Incident Name is used to name the folder that will contain the exported video. The Incident Name is also used to name the Incident File (see below). An Incident Name must be provided except in the instance you're only exporting individual files to a folder. The application will prompt you if you haven't entered an Incident Name when it is required.

Export Individual Files: This option indicates you require each of the cameras to be exported to their own unique file. The default filename is based on the camera number, description and the actual timestamp range being exported. You can edit this name by clicking on it and typing. The application does not check for duplicate names so be careful to ensure you provide unique names for each camera file.

Export Incident File: This option exports the video from each camera (in the displayed grid order) into a single video file. This file is given a name based on the Incident Name.

Include Application Files: This option exports the CVDVRPlayer application and its supporting files. If exporting to CD/DVD then this will allow the video to be replayed on another computer.

1.10.9. Export Paths

Export Path:
  

CD/DVD Device:
  

The CVDVRExport utility allows the user to export to a folder or a CD/DVD.

If exporting to a folder, browse to the required location (if required), and click the 'Export To Folder' button.

If exporting to a CD/DVD, select the required recording device, and click the 'Export To CD/DVD' button.

The following series of screen shots show the export progress.

Camera	Description	Start Timestamp	End Timestamp	Filename
101	Description for channel 1	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch101_Description for channel 1 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
▶ 102	Description for channel 2	22/02/2008 09:00:00	22/02/2008 09:05:00	 20%
103	Description for channel 3	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch103_Description for channel 3 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv

Exporting an individual file

Camera	Description	Start Timestamp	End Timestamp	Filename
101	Description for channel 1	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch101_Description for channel 1 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
▶ 102	Description for channel 2	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch102_Description for channel 2 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
103	Description for channel 3	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch103_Description for channel 3 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
	< Combined Files >			 18%

Exporting the Incident file (Combined File)

Camera	Description	Start Timestamp	End Timestamp	Filename
101	Description for channel 1	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch101_Description for channel 1 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
▶ 102	Description for channel 2	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch102_Description for channel 2 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
103	Description for channel 3	22/02/2008 09:00:00	22/02/2008 09:05:00	Ch103_Description for channel 3 - RT4_22-02-2008 08-59-56_22-02-2008 09-05-00.cvv
	< Application Files >			 68%

Exporting the application files

If exporting to CD/DVD the user will be prompted for a blank disk if there isn't one already in the drive. Other than that, the video data and associated files will automatically be burnt to CD/DVD and verified.

Note: If using a CD/DVD device that is not capable of closing itself you will be prompted during the burning process to close the CD/DVD draw.

1.11. System Audit Reports

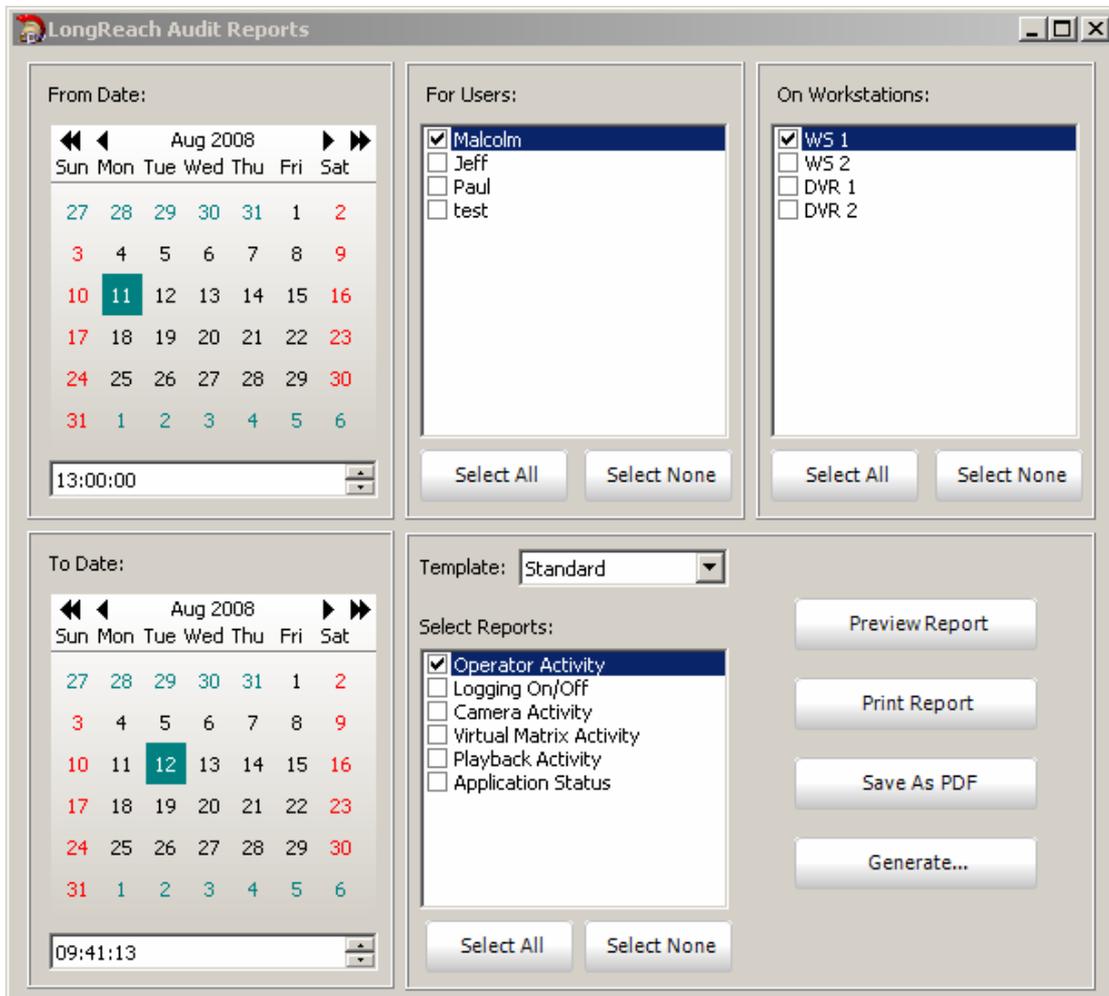
The ComVision Virtual Matrix application keeps a complete record of all operator activity in its SQL database. The activity of all users is kept in a central database on the security network.

Users can access this information by using the ComVision Longreach Audit Reports application. It should be noted that users can only read the audit information from the SQL database, this information cannot be altered.



Press the  button located in the function menu of the Comvision Virtual Matrix application. You will only be able to see this button in the function menu if your system administrator has given you access rights to it.

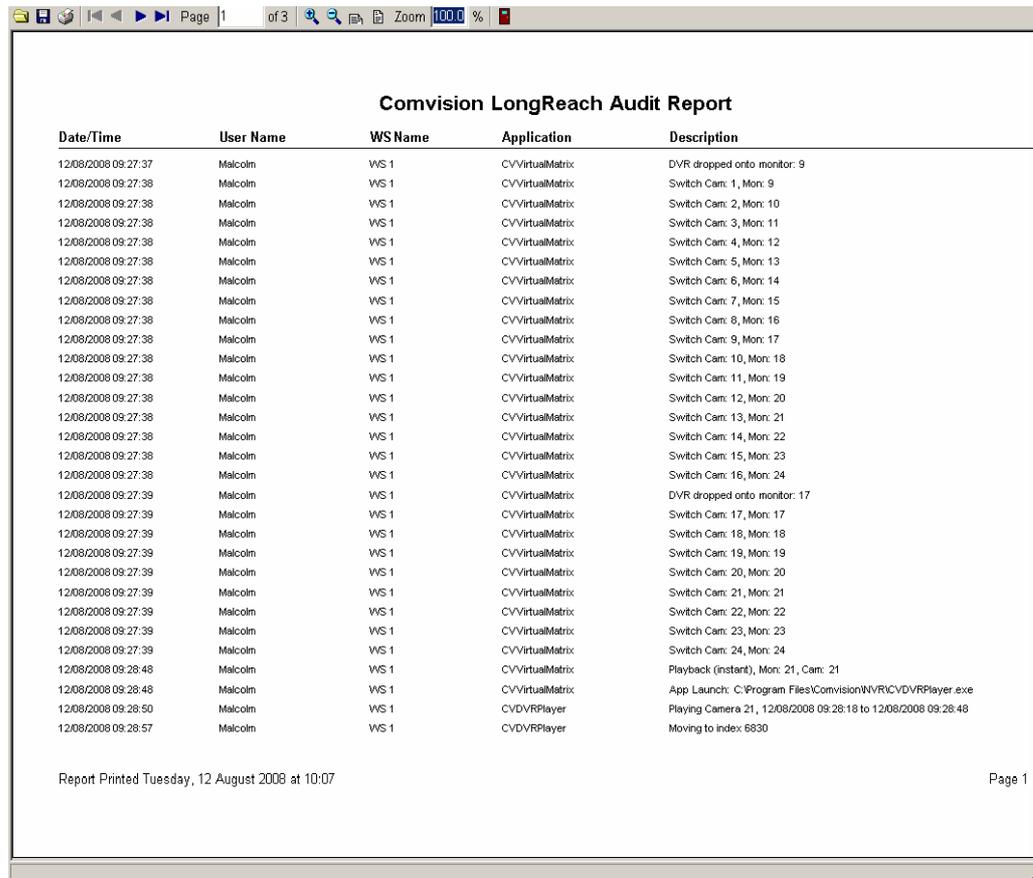
This will start the Audit Report application shown below:



The Audit Report form is divided into the following areas:

- From Date:*** This area allows users to enter the start time and date for the report.
- To Date:*** This area allows users to enter the finish time and date for the report.
- For Users:*** This area displays all users on the system. You then select one or more users to include in the audit.
- On Workstations:*** This area displays all workstations on the system. You then select one or more workstations to include in the audit.
- Template:*** Currently there is only one supported template (Standard).
- Select Reports:*** All available audit report filters are displayed in this area. You can select one or more report filters to produce the desired report.
- 'Preview Report' Button:*** This button produces a report and displays it to screen for preview. An example is shown on the following page.
- 'Print Report' Button:*** This button produces the report and sends it directly to your printer. Your systems administrator must setup a default printer for your computer first. Otherwise you might experience a system error.
- 'Save as PDF' Button:*** This button brings up a dialog to allow you to save the report to file in a standard PDF format. This will allow anyone with Acrobat Reader to open the report at a later date.
- 'Generate' Button:*** This button displays a dialog to allow the end user to select the type of report output.

Example Preview Report:



Comvision LongReach Audit Report				
Date/Time	User Name	WS Name	Application	Description
12/08/2008 09:27:37	Malcolm	WS 1	CVVirtualMatrix	DVR dropped onto monitor: 9
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 1, Mon: 9
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 2, Mon: 10
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 3, Mon: 11
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 4, Mon: 12
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 5, Mon: 13
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 6, Mon: 14
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 7, Mon: 15
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 8, Mon: 16
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 9, Mon: 17
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 10, Mon: 18
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 11, Mon: 19
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 12, Mon: 20
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 13, Mon: 21
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 14, Mon: 22
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 15, Mon: 23
12/08/2008 09:27:38	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 16, Mon: 24
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	DVR dropped onto monitor: 17
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 17, Mon: 17
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 18, Mon: 18
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 19, Mon: 19
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 20, Mon: 20
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 21, Mon: 21
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 22, Mon: 22
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 23, Mon: 23
12/08/2008 09:27:39	Malcolm	WS 1	CVVirtualMatrix	Switch Cam: 24, Mon: 24
12/08/2008 09:28:48	Malcolm	WS 1	CVVirtualMatrix	Playback (instant), Mon: 21, Cam: 21
12/08/2008 09:28:48	Malcolm	WS 1	CVVirtualMatrix	App Launch: C:\Program Files\Comvision\NVR\CVDRPlayer.exe
12/08/2008 09:28:50	Malcolm	WS 1	CVDRPlayer	Playing Camera 21, 12/08/2008 09:28:18 to 12/08/2008 09:28:48
12/08/2008 09:28:57	Malcolm	WS 1	CVDRPlayer	Moving to index: 6830

Report Printed Tuesday, 12 August 2008 at 10:07 Page 1

The audit report displays the time and date of each operator action, the workstation the action took place on, the application the operator was using and a detailed description of the operator action.

The supported applications for audit reports are:

1. The ComVision Virtual Matrix application
2. The ComVision Touch Screen Joystick
3. The ComVision Player application
4. The ComVision Export application

All these applications must be used on machines that are correctly networked to the Comvision Audit Database. When applications like the player are run from CD/DVD, no auditing will take place.

The preview dialog above gives users standard Windows functionality to access the report. This includes next and previous page selectors, zoom in and out functions, save and print functions.

Each report will include a standard header and footer which details dates and page numbers.