Updated 13/1/2007 – Added /noptz switch explanation
Updated 07/04/2008 – Notes on Quad\16 Camera View, PLAY/PAUSE behaviour

The integration between the GuardPointPro and a DVR will consist primary on a viewer that will be launched from within GuardPointPro and will provide live picture of a selected camera or viewing of a recorded event related to a system alarm.
The viewer should support two modes of operation:
1.   Live mode
If display a live picture is should also:
a.   select another preset
b.   Zoom in / out
c.   Focus near / far
d.   PTZ
e.   If viewer supports Quad or 16 X Cameras View, support it. If double-clicking on a camera it will zoom to view the camera in single view.
2.   Playback mode
If displaying a playback it should also:
a.   Allow fast forward/rewind of a recorded sequence
b.   Pause/Play
c.   Jump to a certain time/Date
d.   Change camera
e.   Change the playback speed

The mode of operation Live/Playback depends on the parameters list provided in the command line. See below.
When playback, the "STOP" and "PAUSE" button should be enabled, and the "PLAY" button should be disabled. In stop or pause mode, the STOP" and "PAUSE" button should be disabled, and the "PLAY" button should be enabled.

Command Line parameters

The viewer should start by the following command line parameters:

Viewer.exe   /ip <IP Address>
        /user <user>
        /password <password>
        /camera <Camera number>
        /language <Language Code>
         /single
        [/preset <Preset Number>]
        [/goto StartTimeFormated   /until EndPlayback]

For example:

Viewer.exe /ip 192.168.168.19 /user user /password password /camera 1 [/preset 2] [/goto StartTimeFor-
mated   /until EndPlayback] /language EN /single

Below is explanation for each parameters

   /ip the ip of the DVR machine

   /user the user name

   /password - the user password in order to authenticate the viewer with the DVR machine.

   /camera give the camera number we want to display the live video or the play back

   /preset give the number of the preset we want to camera to go to. Optional.

   /language <Language Code>: allows defining the user interface language for label and tooltips. This should
be in external text file, where user can add its own language. The supported language codes are the following:

EN	ENGLISH		RU	RUSSIAN
FR	FRENCH		CAT	Catalan
SIC	CHINESE		PL	POLISH
HGR	Hungarian		CL	Chilean
DEU	GERMAN		ARA	Arabic
ES	SPANISH		KOR	Korean
DEU	GERMAN		SK	Slovak
POR	PORTUGUESE		GRK	Greece

The format of a text file should be as follows:

The file name should be :

DVR_<Language code>.txt

For example, the English text file would be called:

DVR_EN.txt

The context of the text file should contain an id number/name of the button in the application and the tooltip text that should appear when the mouse hovers over the button, for example:

1010 Move Dom Left
1011 Move Dom Down
1012 Move Dom Up
1013 Move Dom Right
1014 Zoom In
1015 Focus Near
1017 Zoom Out
1018 Focus Far
1027 Move PTZ Up
1095 Enter Preset
1096 Set Preset
1214 Slow Playback
1215 Fast Playback
1238 Pause/Play
1452 View Sixteen Cameras
1498 View Single Camera
1499 View Four Cameras
1500 Select Camera Number
1501 Enter Camera Number
1504   Playback Speed Slider
32772Next
2773 Previous

This solution will enable our customers to edit the file for the required language and change the message content. The text file should support Unicode.

When positioning the mouse pointer over a button, a yellow tooltip text should appear explaining the purpose of the button. The explanation should be according to the language selected using the command line / language parameter.

/single - indicates the application to stay in a unique windows even if we execute it many times. For example executing Camera 1 and then camera 3, need to swap to camera 3 and not to open a second viewer on camera The following extra parameters should be added to the command line in order to to run the viewer in playback mode.

/goto StartTimeFormated   Used when we want to playback. We indicate the start date of the video sequence we want to see. The StartTimeFormated date format should be:

yyyy-MM-dd-HH-mm-ss

where :

yyyy- year, MM- month , dd - day, HH- hours, mm – minutes, ss - seconds

/until EndPlayback . used when we want to playback. We indicate the end date of the video sequence we want to see. The playback will show the video until it reaches the EndPlayback date-time. The EndPlayback date format should be:
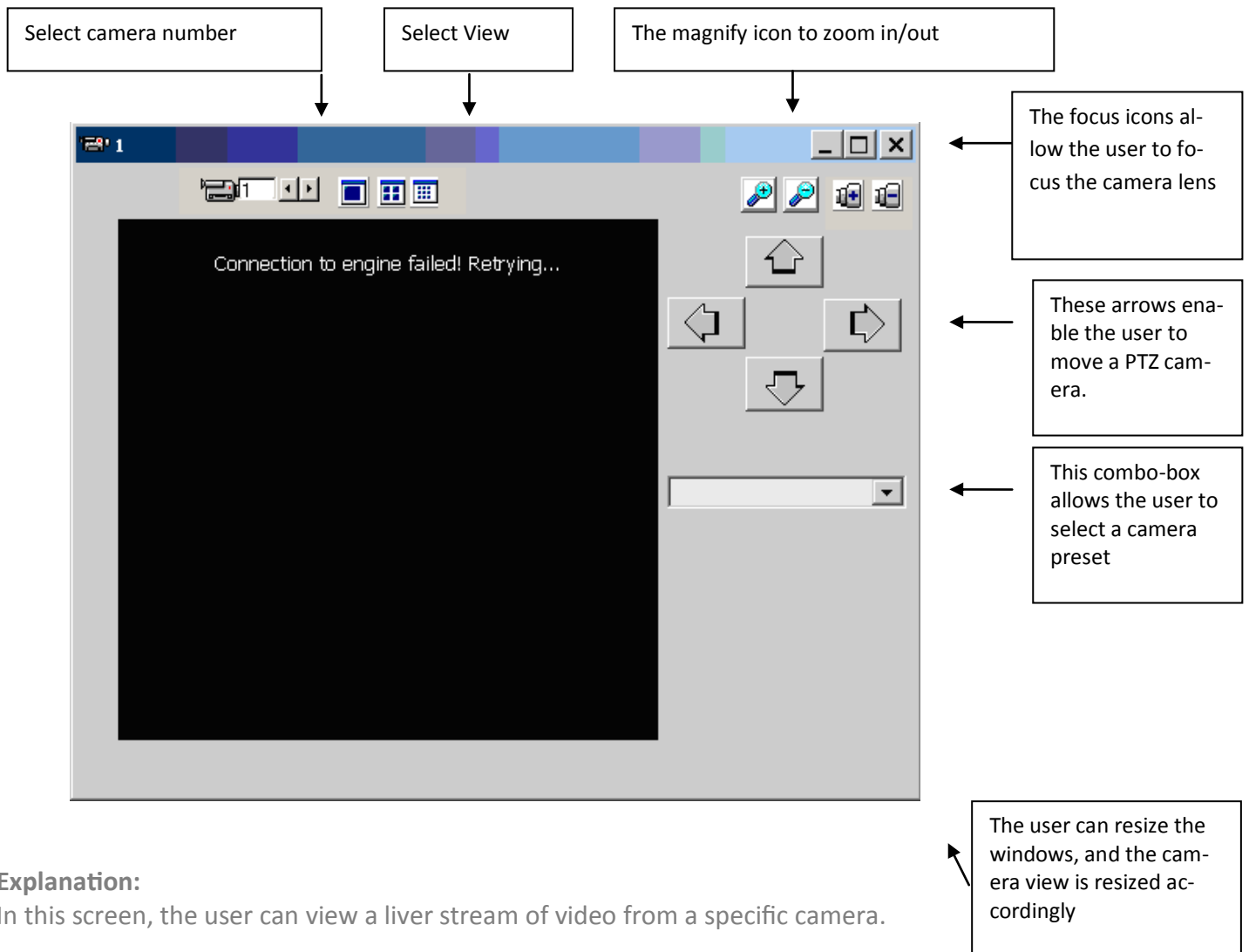
yyyy-MM-dd-HH-mm-ss

where :

yyyy- year, MM- month , dd - day, HH- hours, mm – minutes, ss - seconds

/noptz   This switch informs the viewer that the camera about to be viewed does not support PTZ controls and therefore the viewer shouldn't display any PTZ controls. Also the Viewer window should resize itself so there is not dead space were the PTZ buttons were once.

Specification for DVR viewer integration with GuardPointPro

Live mode screen presentation

Select camera number

Select View

The magnify icon to zoom in/out

The focus icons allow the user to focus the camera lens

These arrows enable the user to move a PTZ camera.

This combo-box allows the user to select a camera preset

```
1
1  ▸
Connection to engine failed! Retrying...
⬆
⬅      ➡
⬇
▾
```

The user can resize the windows, and the camera view is resized accordingly

Explanation:
In this screen, the user can view a liver stream of video from a specific camera.

Select camera number: The user can select camera number by entering the camera number into a text box or pressing the left-right selector. Any change to the camera number will imminently cause the viewer to change to the request camera.
Select View: If the DVR support multiple views of camers , there should be icons displaying the available views (4x4 , 3x3, 2x2 matrix)
Arrows: The arrows allow the user to control the PTZ. If the PTZ supports also diagonal moving of the camera than also diagonal arrows should appear on the viewer screen.
Magnify: The magnify buttons allow the user to zoom in or out if the camera supports PTZ

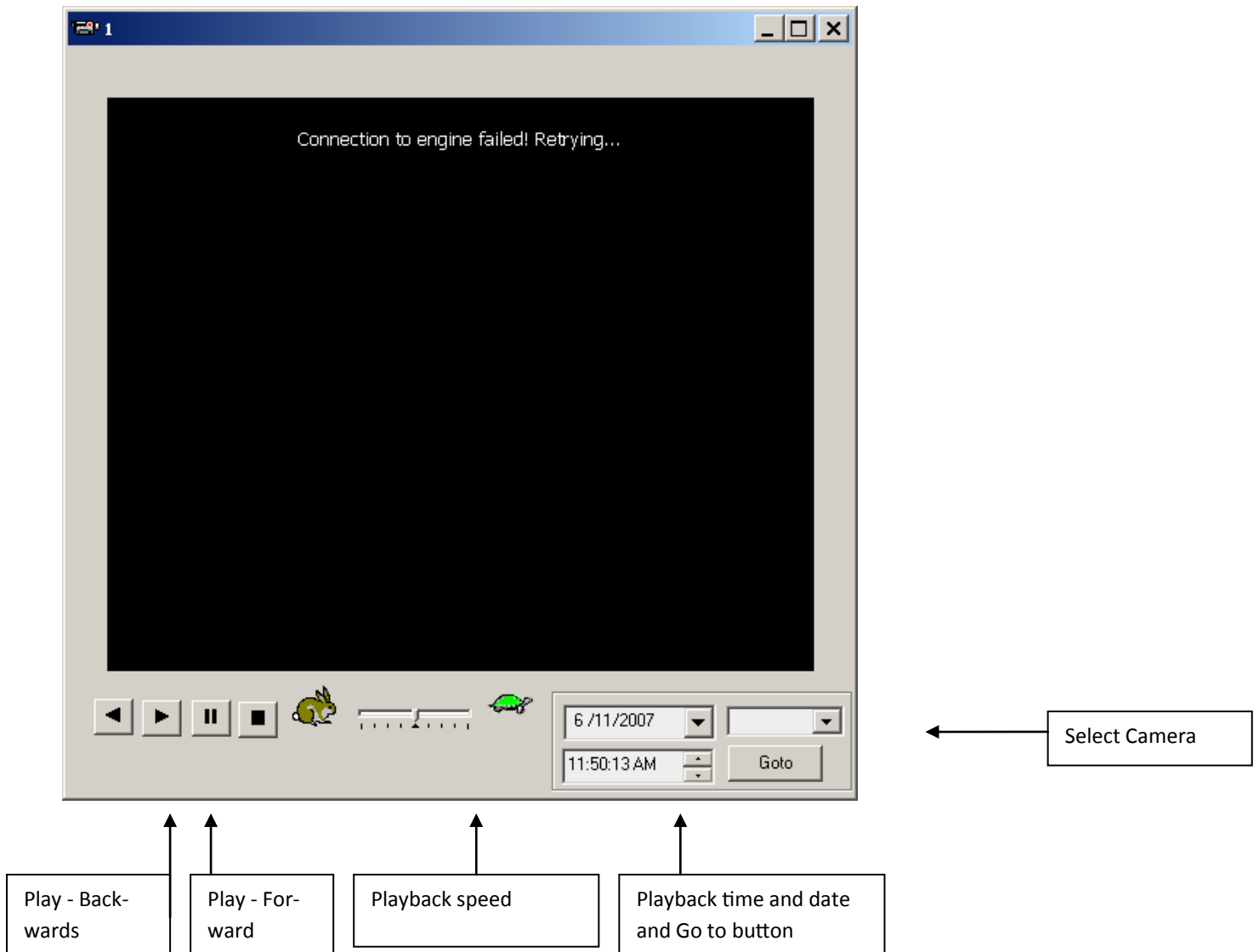Focus: This button allows focusing the camera lens

Preset: If defined presets for a camera are available from the DVR, the viewer should list the available presets in a combo-box thus allowing the user to select a preset. If a preset was already chosen in the command –line than the viewer should display the selected preset in the combo-box.

Tile: the window title should have the camera name/number displayed. If possible , it should be able to switch camera number from within the viewer

Window: The window should be resizable, so when changing the window width and/or height the camera display should adjust accordingly

Playback mode presentation

Select Camera

Play - Backwards

Play - Forward

Playback speed

Playback time and date and Go to button

Explanation:

When the viewer is launched from command line specifying the date and time of playback, the viewer should start immediately playing the request recorded sequence, and displaying the start date and time in the appropriate text boxes. During the playback, the viewer should display also the current frame time somewhere in the viewer window.

Playback buttons: The stop/pause/play backwards/play forward buttons should allow the user to freeze the playback/ continue playing or go backwards in the playback in order to reviewer a certain part of the recording.

Playback Speed slider: allows changing the playback speed from normal to fast or slow

Time, Date, Camera & Goto buttons: By selecting a date, time and camera, the viewer will allow to view a different sequence. Entering this information into the appropriate textboxes, and pressing the "Goto" button will start playing the requested sequence.

Window: The window should be resizable, so when changing the window width and/or height the playback display should adjust accordingly