Gallagher Command Centre

Panasonic PS-API VMS Integration

Release Note

Disclaimer

This document gives certain information about products and/or services provided by Gallagher Group Limited or its related companies (referred to as "Gallagher Group").

The information is indicative only and is subject to change without notice meaning it may be out of date at any given time. Although every commercially reasonable effort has been taken to ensure the quality and accuracy of the information, Gallagher Group makes no representation as to its accuracy or completeness and it should not be relied on as such. To the extent permitted by law, all express or implied, or other representations or warranties in relation to the information are expressly excluded.

Neither Gallagher Group nor any of its directors, employees or other representatives shall be responsible for any loss that you may incur, either directly or indirectly, arising from any use or decisions based on the information provided.

Except where stated otherwise, the information is subject to copyright owned by Gallagher Group and you may not sell it without permission. Gallagher Group is the owner of all trademarks reproduced in this information. All trademarks which are not the property of Gallagher Group, are acknowledged.

Copyright Notice

The software contains proprietary information of Gallagher Group Limited; it is provided under a license agreement containing restrictions on use and disclosure and is also protected by copyright law. Reverse engineering of the software is prohibited.

Due to continued product development this information may change without notice. The information and intellectual property contained herein is confidential between Gallagher Group Limited and the client and remains the exclusive property of Gallagher Group Limited. If you find any problems in the documentation, please report them to us in writing. Gallagher Group Limited does not warrant that this document is error-free.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of Gallagher Group Limited.

Contents

1 Introduction

This release note is for the 'Panasonic PS-API VMS Integration' of Gallagher Command Centre.

1.1 Purpose

The 'Panasonic PS-API VMS Integration' integrates Command Centre with the Panasonic Video Management System (VMS). This integration has been developed using the Panasonic SDK: **Panasonic PS-API SDK version 7.50.10**

1.2 Functionality

This integration provides the following functionality:

1. Live video viewing

- Drag and drop a camera icon from a site plan to a camera tile to view live video;
- Find a camera directly within a camera tile to view live video;
- Pre-configure a camera tile to constantly view live video from one camera;
- Pre-configure a camera tile to display live video in response to an event, (e.g. Door event or Intercom event);
- Place multiple camera tiles alongside each other to view video from multiple cameras simultaneously. Up to 16 camera tiles can be used to simultaneously display footage on a single Viewer;
- Adjust the camera's Pan, Tilt, and Zoom - as supported by the camera;
- Move a camera to a set position (preset) - as supported by the camera;
- Capture an image of the current frame (the image is saved as a .jpg file to the clipboard).

2. Stored video viewing

Video is stored by the Panasonic system. Video is retrieved by Command Centre and displayed in the Command Centre VMS user interface.

- View stored video associated with an alarm (video associated with an alarm is indicated by a filmstrip icon);
- View pre-alarm and post-alarm video;
- Search for stored video associated with an alarm;
- Adjust the speed and direction of video playback;
- Toggle between stored video and live video, for the camera;
- Capture an image of the current frame (the image is saved as a .jpg file to the clipboard);
- View stored video associated with an alarm on a Spot Monitor Viewer.

3. Bi-directional alarms interface

Command Centre to Panasonic:

- When a user configured event/alarm is generated in Command Centre, a message is sent to the Panasonic system to move a specified camera to a preset;
- When a user configured event/alarm is generated in Command Centre, a message is sent to the Panasonic system to retrieve stored video.

Panasonic to Command Centre:

- Motion detection and diagnostic events generated by Panasonic are forwarded to Command Centre.

1.3 Compatibility

This integration introduces the following Gallagher software:

- Gallagher Panasonic VMS Integration v7.60.09
- Gallagher Panasonic VMS Middleware v7.60.09

This integration supports the following Gallagher software:

- Gallagher FTCAPI Middleware Framework vMF7.60.04 (or later vMF7.60 release)
- Gallagher Command Centre vEL7.60.585 (or later vEL7.60 release)
- Gallagher Controller 6000 vGR7.60//b167 (or later vGR7.60 release)
- Gallagher legacy Controllers vBT7.60//b146 (or later vBT7.60 release)

Command Centre and this integration have been tested using the operating systems:

- Microsoft Windows 7 (64-bit)
- Microsoft Windows 10 (64-bit)
- Microsoft Windows Server 2012 R2 (64-bit)

This integration has been tested in a Command Centre multi-server environment. Ensure the Command Centre workstation has a direct connection to the camera. The configuration of remote items is excluded. Some scenarios where remote items are on a different network will not work.

Panasonic Command Alarms are not supported (i.e. Command Centre cannot be configured to control Command Alarms). It is recommended that you disable Command Alarms, as these may conflict with DVR Commands generated from Command Centre.

1.3.1 Panasonic SDK

This integration has been developed and tested using the Panasonic PS-API SDK version 7.50.10. This SDK is distributed with the Panasonic products that support the SDK.

Gallagher supports selected features of the SDK only. These features are described in the section *"1.2 Functionality"* earlier in this note. If you wish to query the exact features of the SDK that are supported, please contact Gallagher Technical Support.

1.3.2 Panasonic products

This integration has been tested using the following Panasonic products:

- NWDR (ND400 and NV200)
- Digital PTZ Camera (WV-SC384)
- Digital non-PTZ Camera (WV-SF332)
- HD600/HD700 (WJ-HD716)

Note: The Panasonic SDK supports additional products to that tested by Gallagher. Therefore these additional products may or may not operate correctly with this integration. Further effort may be required to support any untested products.

The ND400 requires firmware version 5.50 or later for use with Command Centre. This can be downloaded from here:
http://opendeye.com/firmware-assistant/59-wj-nd400-firmware-v550-new

Instructions to install the firmware are here:
http://panasonic.net/pss/security/support/technical/how_to_upgrade_recorder.html#ND400

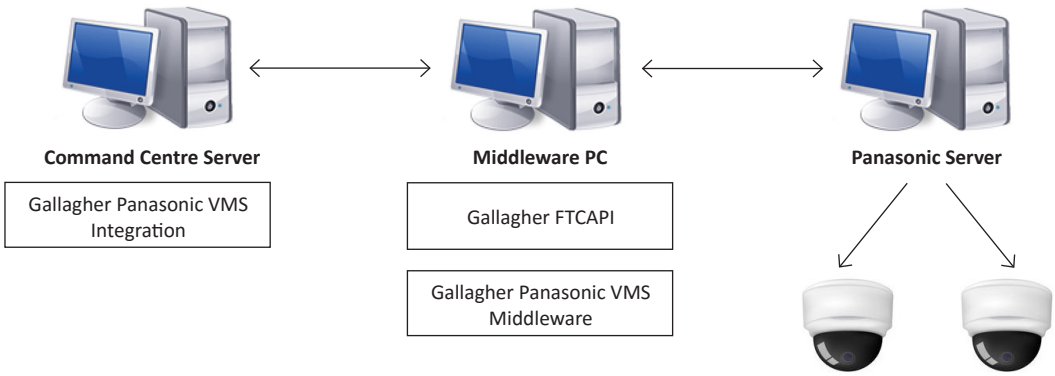
The above web links are subject to change, but were valid at the time of release.

1.3.3 Setup recommendations

The date and time (time zone) used on all devices must be the same (i.e. the date and time on the Command Centre server, middleware PC, and Panasonic devices must be the same). If the time zones are not synchronised, an operator may miss viewing an event associated with an alarm.

It is recommended that the Panasonic server is set to continuous recording. Setting the recording to motion detect only, may result in the integration not working correctly.

1.3.4 Deployment architecture



2 Panasonic configuration

Each Panasonic device contains its own installer for codecs (used for viewing and connecting to the device). This must be installed on the Command Centre server, all Command Centre workstations and the middleware PC before the PS-API can connect to the device. You will need to web browse to each device (using its IP address) and it will prompt you to install these.

If you try to view video without installing the codec the following error displays:

Failed to show live video. PS-API error = [SetParameter] library error(VIDEO_ERROR_GEN_MPEG_DECODER_FILTER)

You will need to configure each Panasonic device to send notifications via the Panasonic Alarm Protocol Notification to the Command Centre middleware PC. For further details, refer to the device documentation supplied with each Panasonic device.

Notes:

- The Command Centre middleware PC's default port number for receiving Panasonic Alarm Protocol communications is port 1818.
- Panasonic refers to motion detection as 'VMD' (Video Motion Detection).

3 Installation

Notes:

- If a previous version of this integration has been installed, this must be removed before installing this version. Refer to the topic *"Upgrading"* later in this note.
- This integration cannot be installed on a Command Centre Client workstation that has been deployed via Click-Once.

To install this integration, perform the following procedure:

1. Perform a backup of your Command Centre system.
2. Ensure your Command Centre licence file contains the following options:

   ```
   [Features]
   DVR-Panasonic=1

   [Plugin]
   PluginX=DVR-Panasonic
   ```

   (where `X` is a decimal number)
3. Exit Command Centre and stop the FT Services.
4. On the Command Centre server and all Command Centre workstations install Command Centre vEL7.60.585 (or later vEL7.60 release) from the Command Centre installation media, if not already installed.

Install the Gallagher Panasonic VMS Integration

5. Unzip the folder you have been provided. On the Command Centre server and all Command Centre workstations that will be using this feature, run the installation executable **Gallagher Panasonic VMS Integration Setup 7.60.009.msi**

Install the FTCAPI Middleware Framework

The middleware PC needs to have the FTCAPI Middleware Framework installed (vMF7.60.04 or later). Perform the following procedure on the middleware PC:

Note: Microsoft .NET Framework 4.5 is required on the middleware PC.

6. Copy the Command Centre licence file (**CommandCentre.lic**) to the %SystemRoot% directory, (e.g. C:\Windows) on the middleware PC.
7. Run the executable **FMFSetup.msi** located in the `'Utilities\System Interfaces\Middleware Framework vMF7.60.04'` folder on the Gallagher installation media.

   The Gallagher FTCAPI Middleware Framework Setup Wizard displays.
8. Click the **Next** button on each wizard screen and then the **Finish** button on the final screen. The following are installed on the middleware PC:
   - The Gallagher FTCAPI Middleware Framework.
   - A new service named FTCAPI Router Service which starts automatically. This service needs to remain running to enable FTCAPI functionality.

   Note: When installing the Gallagher FTCAPI you may receive the popup error *"Gallagher FTCAPI Middleware Framework. Error 1001. An exception occurred in the OnAfterInstall event handler of Cardax.FTCAPI.Framework.Service.Projectinstaller. --> Failed to configure Windows Firewall."*

This error indicates that the *"Windows Firewall/Internet Connection Sharing (ICS)"* service is not running. To install the Gallagher FTCAPI, you can temporarily start this service, install the Gallagher FTCAPI, then the service can be turned off again, if not required.

9. Ensure the middleware PC's Firewall is configured to allow the FTCAPI to listen on port 1072.

Enable the co-location of the FMF on the Command Centre server

Note: This part of the procedure (i.e. Steps 10–14) only needs to be performed if the FTCAPI Middleware Framework was installed on the same PC as the Command Centre server. If not, go to Step 15.

It is possible to locate the FTCAPI Middleware Framework on the same PC as the Command Centre server. This scenario is not enabled by default, however, because the Controller service and the FTCAPI both attempt to use the same IP port for communications.

To enable the co-location of FTCAPI Middleware Framework with the Controller service it is necessary to first re-configure the Controller service to use a different IP port for its communications. Use the following procedure:

10. Open up the registry editor and browse to `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\CARDAX\Command Centre FT`

    Note: If using a 32-bit system, browse to `HKEY_LOCAL_MACHINE\SOFTWARE\CARDAX\Command Centre FT`

11. Create a new DWORD value and rename it to `ListenPort`.

12. Edit the value of `ListenPort` by selecting the decimal radio button and then typing in the desired port number.

    Notes:

    - The valid range is 1024 to 65535. Do not try to use port numbers outside of that range, or use 1072 as this will be used by the FTCAPI Router Service. It is recommended that a 5 digit port number is used.
    - Restart the FTCAPI Router Service on the middleware PC.

13. Restart the FT Services and logon to Command Centre. All the Controllers will appear as offline and will not come online by themselves.

14. Select 'Push Configuration' on each Controller in turn. Each Controller should come online after it is pushed.

    Notes:

    - If multiple Controller communication servers are being used then steps 10 to 14 need to be repeated for each one.
    - When using a port number other than the default of 1072, if a Controller is restarted with DIP switch 2 on then it will be unable to communicate with the server until an operator selects 'Push Configuration' on that Controller. This causes a connection to be initiated by the server rather than from the Controller and tells the Controller what port number to connect to.
    - The command `"netstat –an"` can be used to check that the controller service is indeed now listening on a different port number, or after Step 10 to initially check that some other program is not already listening on the port number you intend to use.
    - All Controllers and the FTCAPI all still talk to each other using port 1072. It is only communication with the server that is now on a different port.

Install the Gallagher Panasonic VMS Middleware

15. On the middleware PC run the installation executable **Gallagher Panasonic VMS Middleware Setup 7.60.009.msi**.

    Note: If the Gallagher FTCAPI Middleware Framework has been installed on the same PC as the Command Centre server, ensure the FT Services have been stopped before running this installation executable.

16. Restart the FT Services and Command Centre.

Verify the installation

17. To ensure this integration has installed correctly, select the **Programs and Features** utility from the Windows/Control Panel.

    The following program should be listed as currently installed on the Command Centre server and all workstations that will be using this integration:

    - Gallagher Panasonic VMS Integration

    The following programs should be listed as currently installed on the middleware PC:

    - Gallagher FTCAPI Middleware Framework
    - Gallagher Panasonic VMS Middleware

4 Command Centre operator privileges

The following Command Centre operator privileges are applicable for this integration:

Privilege	is required to...
Adjust DVR PTZ controls	alter the Pan, Tilt and Zoom of DVR cameras
Edit Site	create, edit and delete most Site Items
View Digital Camera	view the feed from a Digital Camera
View Events and Alarms	view Events and Alarms
View Site	view Site Items

Assign the appropriate privileges to the appropriate operators. For instructions on how to assign operator privileges, refer to the topic *"Setting up Operator Groups"* in the Configuration Client Online Help.

Viewers

Ensure the appropriate Viewers are assigned to the appropriate operators. For example, an operator may wish to view video from an Alarm Viewer, Monitor Site Viewer, and Spot Monitor Viewer.

Within the Viewer Configuration, select the **Assign to Operators** button (located near the Viewer name) and select the appropriate Operator Groups to assign the Viewer to.

Reports

Ensure the appropriate Reports are assigned to the appropriate operators. For example, an operator may wish to run an Activity report to view the occurrence date and time for specific events. The operator can then search for the stored video associated with an event, by entering the occurrence date and time into the VMS user interface.

Within the Report Configuration, select the **Assign to Operators** button (located near the report name) and select the appropriate Operator Groups to assign the report to.

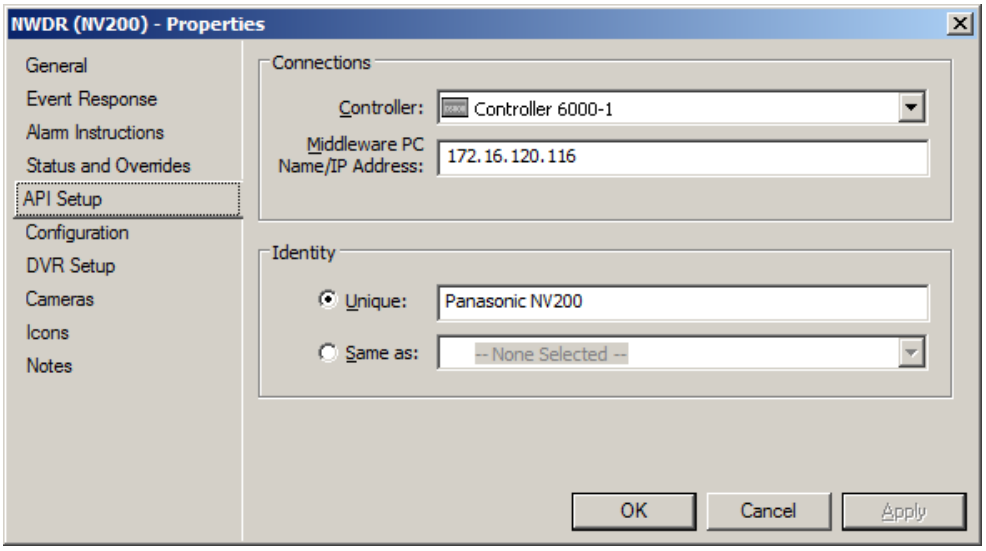
5 Command Centre configuration

To configure this integration, perform the following procedures on the Command Centre server:

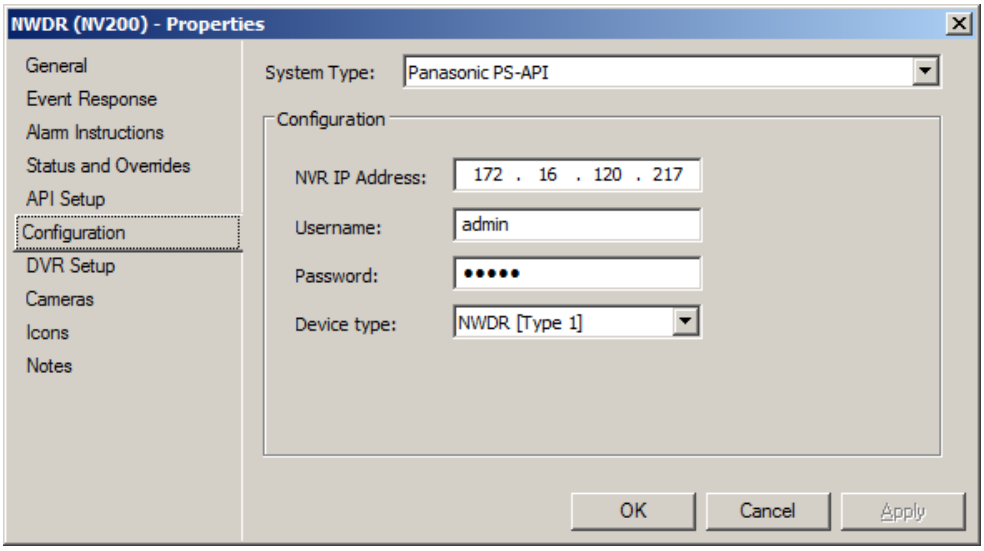
5.1 Configuring a Panasonic DVR system
5.2 Configuring a dummy DVR camera
5.3 Configuring a Panasonic DVR camera

5.1 Configuring a Panasonic DVR system

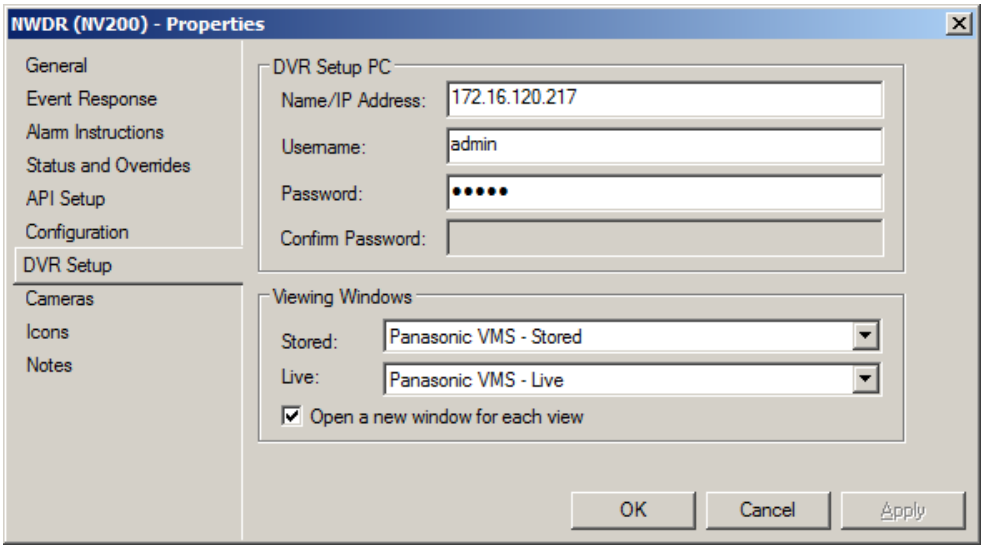
1. In Command Centre, open the External Systems master list window.
2. Right click and select **New...DVR system**.
3. Type in the Name (e.g. NWDR NV200), Description, and select the Division.
4. Click the **Event Response** tab, and assign a primary Alarm Zone for all events.
5. Click the **API Setup** tab.



6. Select the appropriate **Controller** from the drop-down list.
7. Enter the Middleware PC's IP Address in the **Middleware PC Name/IP Address** field. This field is limited to 255 alpha-numeric characters. This is the IP Address used by the Controller to see the Middleware PC.
8. Click the **Unique** radio button in the 'Identity' section of this screen and enter a unique identity string (e.g. Panasonic NV200). Maximum 64 characters.
9. Click the **Configuration** tab.
10. From the **System Type** drop-down list, select 'Panasonic PS-API' (the middleware plug-in to be used).
    The 'Configuration' section of this screen becomes populated, as shown:



11. Enter the Panasonic NVR IP Address in the **NVR IP Address** field.
12. Enter the **Username** and **Password** to logon to the Panasonic NVR.
13. Select the appropriate Panasonic device from the **Device type** drop-down list.
14. Click the **DVR Setup** tab.



15. Enter the Panasonic NVR IP Address in the **NVR IP Address** field.
16. Enter the **Username** and **Password** to logon to the Panasonic NVR.
17. From the drop-down lists in the 'Viewing Windows' section, select the following:

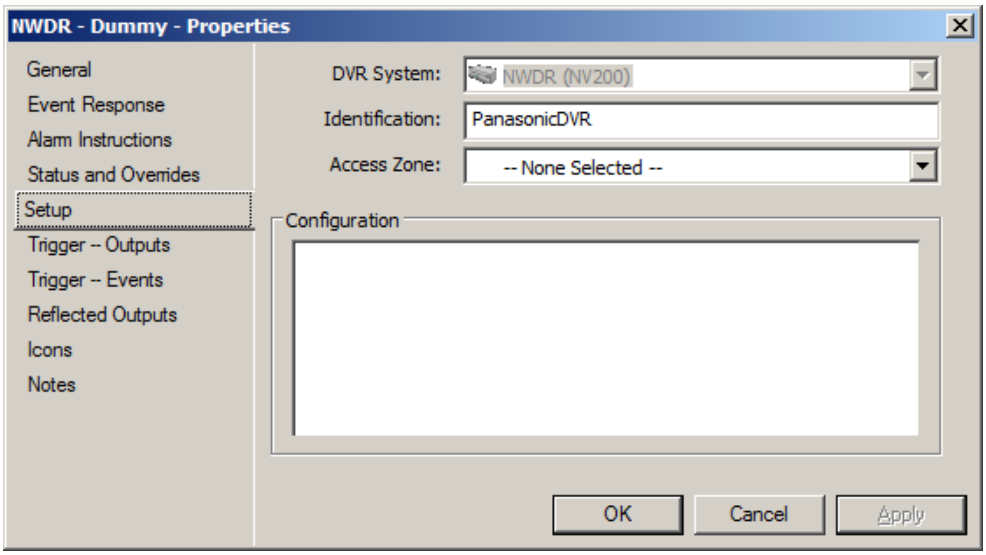
    Stored: **Panasonic VMS - Stored**
    Live: **Panasonic VMS - Live**

    Note: By installing this integration, these selections became available in the 'Viewing Windows' drop-down lists.
18. Click **OK** to exit and save your changes.

5.2 Configuring a dummy DVR camera

You will need to configure a dummy DVR camera for each Panasonic DVR system. This dummy DVR camera will be used to log all events that do not map to any configured cameras.

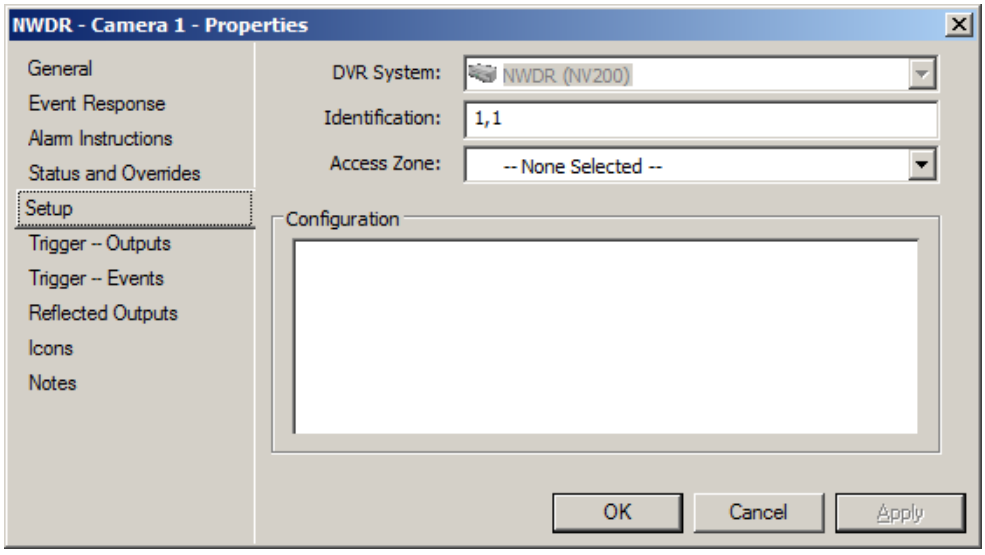
1. In Command Centre, open the External Systems master list window.
2. Right click and select **New...DVR Camera**.
3. Type in the Name (e.g. NWDR - Dummy), Description, and select the Division.
4. Click the **Event Response** tab and assign a primary Alarm Zone for all events.
5. Click the **Setup** tab.



6. Select the appropriate **Panasonic DVR system** from the drop-down list.
7. Enter the name 'PanasonicDVR' into the **Identification** field.
   This assigns the camera to logging all Panasonic DVR events. Maximum 64 characters.
8. Click **OK** to exit and save your changes.

5.3 Configuring a Panasonic DVR camera

1. In Command Centre, open the External Systems master list window.
2. Right click and select **New...DVR Camera**.
3. Type in the Name (e.g. NWDR - Camera 1) Description and select the Division.
4. Click the **Event Response** tab and assign a primary Alarm Zone for all events.
5. Click the **Setup** tab.



6. Select the appropriate **Panasonic DVR** system from the drop-down list.
7. Enter the Camera Number as configured in the Panasonic DVR system, followed by a comma, then the Device Type Number this camera is attached to into the **Identification** field. Maximum 64 characters.

Panasonic DVR system	Device Type Number
NWDR	1
Camera	2
Encoder	3
HD600/HD700	4

Notes:

- For PTZ cameras you will need to put a minus before the numbers, (e.g. -1,1).
- The camera name is checked for uniqueness within the same Panasonic DVR system.
- The camera name does not have to be unique across the entire set of cameras, as cameras belonging to different Panasonic DVR systems may share the same name, but the Identification field cannot be left blank.

8. Click **OK** to exit and save your changes.

6 Configuring DVR commands

If a user configured event/alarm is generated in Command Centre, the Panasonic DVR system can be configured to respond by:

- Moving a camera to a given preset (PTZ cameras only)
- Initiating a camera tour (PTZ cameras only)
- Activating the alarm output on a camera
- Deactivating the alarm output on a camera
- Resetting an alarm in the Panasonic DVR system
  Depending on your Panasonic DVR system, this DVR command will reset all alarms in the system. Test to see how your system works.

In order for the Panasonic DVR system to respond you will need to configure a DVR command, using a virtual Output and assign the DVR command to a camera.

You will then need to configure an Action Plan (assign the DVR command to the Action Plan) and assign the Action Plan to a camera in order for the camera to respond when an event/alarm is generated.

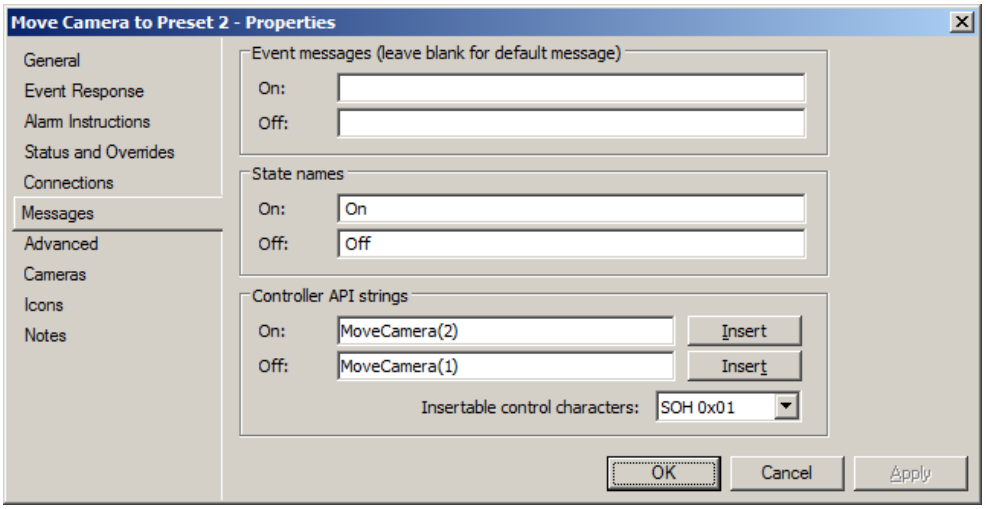
To configure DVR commands, perform the following procedures:

6.1 Configuring a DVR command
6.2 Assigning a DVR command
6.3 Configuring an Action Plan
6.4 Assigning the Action Plan

6.1 Configuring a DVR command

A DVR command is created using a virtual Output. You will need to configure a virtual Output for each DVR command you wish to issue.

1. Click **Configure** from the menu bar, then **Hardware**.
2. Right click and select **New...Output**.
3. Type in the Name and Description, and select the Division.
4. Click the **Event Response** tab and assign a primary Alarm Zone for all events. Use the primary Alarm Zone assigned to the Controller that this virtual Output will be assigned to.
5. Click the **Messages** tab.



6. Enter a DVR command (API string) into the **Controller API strings** fields. Where the "On" string is sent when the virtual Output turns ON and the "Off" string is sent when the virtual Output turns OFF.

   - The API string used to move a camera to a preset location is:
     MoveCamera(preset number)
     Where the "preset number" is a whole decimal number (e.g. 1), matching a preset position; a value set within the Panasonic DVR system.

   - The API string used to start a camera tour is:
     StartPtzTour(tour id)
     Where the "tour id" is a whole decimal number (e.g. 1), matching a preset tour id set within the Panasonic DVR system. This starts the camera tour cycling between preset views; a camera will rest on a preset view for a set period before transitioning to the next preset location.

   - The API strings used to activate and deactivate the alarm output for a camera are:
     Alarm(on) and **Alarm(off)**

Note: This will trigger an alarm in the Panasonic VMS and Command Centre, the camera itself may not have an alarm output.

   - The API string used to reset an alarm in the Panasonic System is:
     Alarm(reset)

7. Click **OK** to exit and save your changes.

8. Assign this virtual Output to the **Virtual Outputs** tab of a Controller.

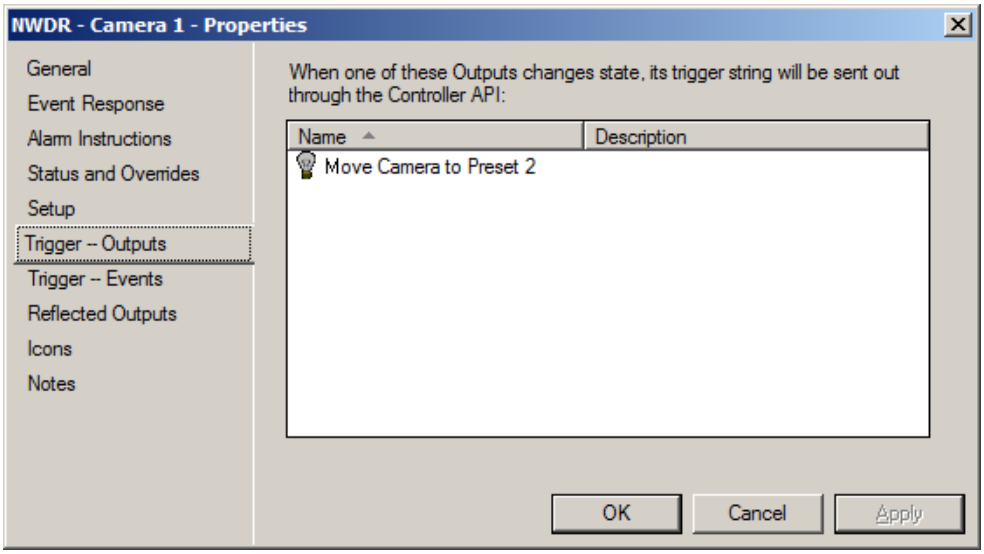
6.2 Assigning a DVR command

You will need to assign the DVR command to a camera, in order for the camera to respond when a user configured alarm occurs.

Notes:

- The "MoveCamera" and "StartPtzTour" DVR commands must be assigned to PTZ cameras only. You can assign more than one DVR command to a PTZ camera (e.g. in order to move the camera to multiple presets).
- You will need to assign the DVR commands to all cameras you wish to control.

1. In Command Centre, click **Configure** from the menu bar, then **External Systems**.
2. Right click on the required device and select **Properties**.
3. Click the **Trigger--Outputs** tab.



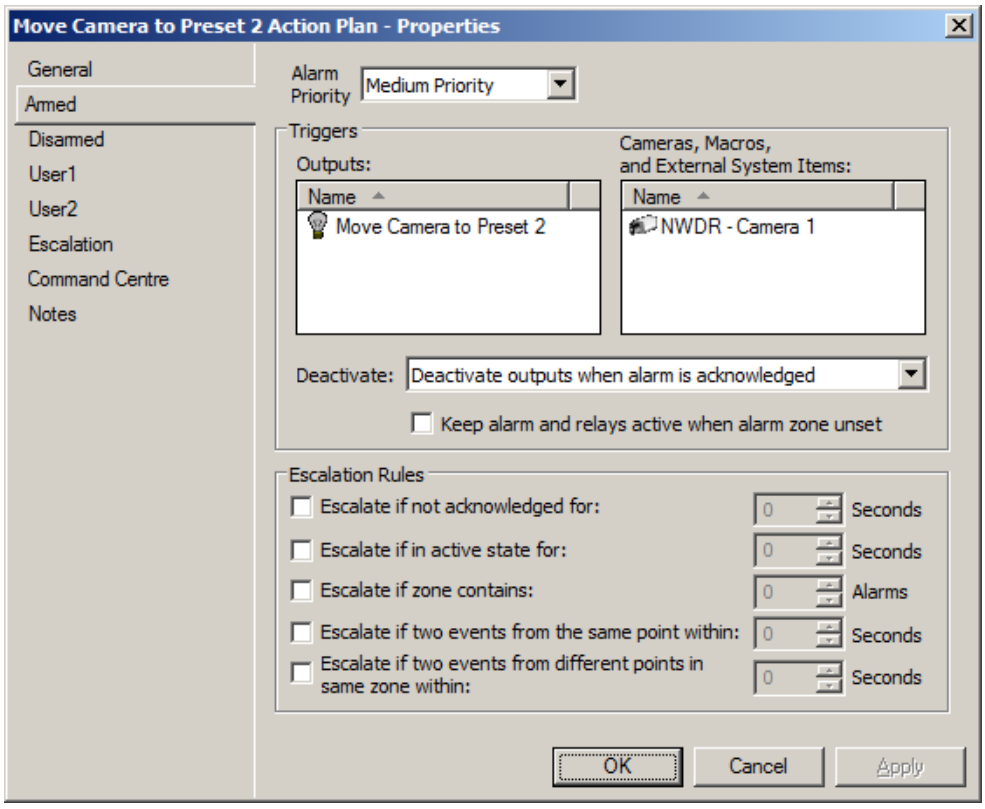
4. Drag and drop the virtual Output (DVR command) that you require to activate into the **Output** grid.
5. Click **OK** to exit and save your changes.

6.3 Configuring an Action Plan

You will need to configure an Action Plan and assign the Action Plan to a camera in order to generate an event/alarm in Command Centre when a camera event occurs.

Note: You will need to repeat this procedure for each camera.

1. Click **Configure** from the menu bar then **Action Plans**.
2. Right click and select **New...Action Plan**.
3. Type in the Name and Description, and select the Division.
4. Click the **Armed** tab. These settings define the responses when the item is linked with the Armed Alarm Zone.



5. Specify the priority of events or alarms generated, from the **Alarm Priority** drop-down list.

   Note: If the Alarm Priority is set to 'Not an Event' or 'Message only', the Output (DVR command) won't be activated.

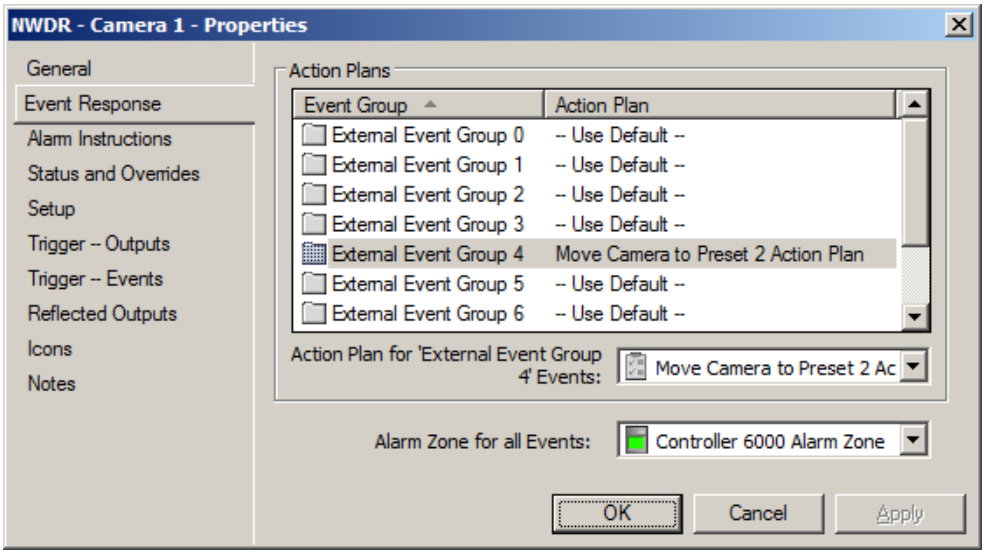
6. Drag and drop the virtual Output that is required to activate into the **Output** grid. This virtual Output will move the camera when triggered.
7. If required, drag and drop a camera to be triggered if this Action Plan causes an alarm to be generated, into the **Cameras, Macros, and External System Items** grid.
8. Click the **Disarmed** tab, and repeat Steps 5–7. These settings define the responses when the item is linked with the Disarmed Alarm Zone.
9. Configure the settings on each of the remaining tabs as appropriate. For the full procedure refer to the *"Creating a new Action Plan"* topic in the Configuration Client Online Help.

6.4 Assigning the Action Plan

1. In Command Centre, click **Configure** from the menu bar, then **External Systems**.
2. Right click on the required camera and select **Properties**.
3. Click the **Event Response** tab.
   The table below describes the event mapping from Panasonic to Command Centre. The default Command Centre Event Priorities can be changed on the **Event Priorities** tab in the Server Properties. Changing the default Event Priorities is a system-wide change.

Event Group	Panasonic Event	Default Command Centre Event Priority
External Event Group 1	Online	Message Only
External Event Group 4	MotionDetection	Medium Low Priority
External Event Group 5	VideoBlind	Medium Priority
External Event Group 6	VideoLoss	Medium High Priority
External Event Group 8	Offline	Very High Priority

4. Highlight the appropriate External Event Group.
   The Action Plan edit box is then enabled.
5. Click the drop-down menu box and select the appropriate Action Plan for the selected External Event Group.
6. Repeat Steps 4 and 5 for each External Event Group.



7. Click **OK** to exit and save your changes.
8. Repeat this procedure for each camera.

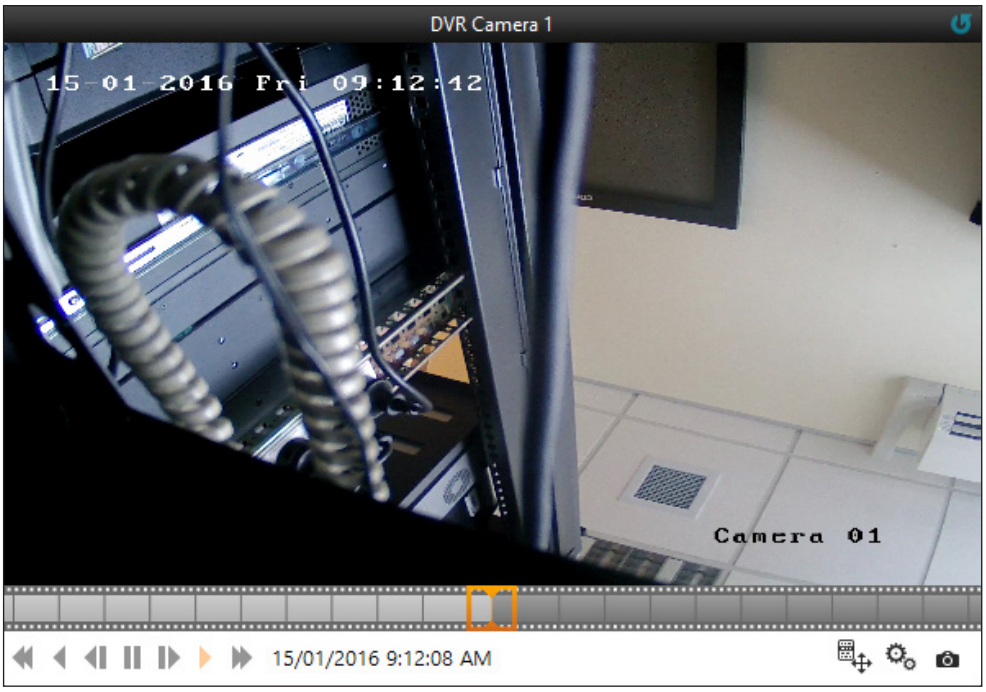
7 Viewing video

7.1 Live video viewing

A Camera tile in the Command Centre Client can be configured to display live feed from a camera. Refer to the topics *"Adding Tiles to Panels"* and *"Configuring a Camera Tile"* in the Command Centre Client Online Help.

To view live video in Command Centre:

1. From the Command Centre Client toolbar, select the **Viewer** that has been configured with a Camera tile. The Camera tile displays.

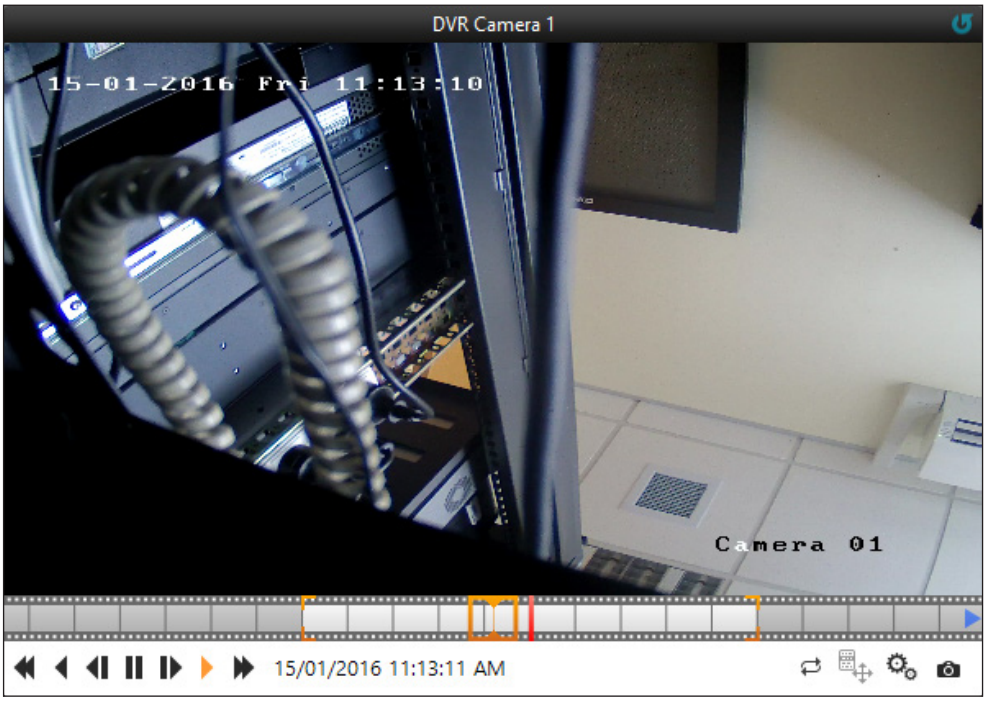


7.2 Stored video viewing

When alarms occur that have associated stored video. These alarms can be recognised in the Alarm Viewer Navigation Panel by the Film Strip icon to the left of the alarm message.

Note: Operators require the "View Digital Camera" and "View Events and Alarms" operator privileges to perform this procedure.

1. From the Command Centre Client toolbar, select the **Alarm Viewer.**
2. Select the appropriate alarm that has the Film Strip icon to the left of the alarm message.
3. If a Camera tile has been configured for the Event Group associated with the alarm, the Camera tile displays.
4. If multiple cameras have been configured for the Action Plan associated with the alarm Event Group, select the appropriate camera tab.



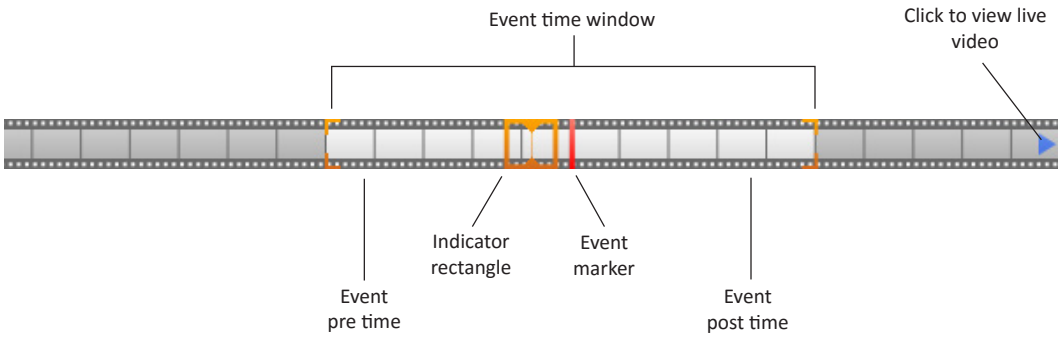
8 Using the VMS user interface

The Command Centre VMS user interface appears within the camera tile. This chapter describes the functionality of the VMS user interface.

Refer to the appropriate topic:

8.1 Using the trackbar

The trackbar represents the video being played. The current time is represented by an indicator rectangle that sits within the centre of the trackbar. The trackbar filmstrip moves either forward or backward depending on the direction and speed that the video is being played at.



An operator can drag forward and backward the indicator rectangle to view video at a specific time. When you click and drag the indicator rectangle, the orange marker will remain at the point you are currently viewing until you release the mouse button.

The time within the event pre and post time is shown in white, the time outside this is shown in light grey, and the time beyond the current live time is shown in dark grey.

An event marker (red marker) indicates the location of the event. When off-screen, an event arrow (red arrow) indicates the direction of the event marker. Hovering over either the event arrow or the event marker displays the event date and time. Clicking the event arrow will jump playback to the event pre-time.

To view the live video, an operator can either drag the indicator rectangle forward until they 'hit' live time or they can click the live arrow (blue arrow) which displays when live video is off-screen and when the forward event arrow is not visible.

8.2 Using the playback speed and direction controls

The following table describes the functionality of the playback speed and direction controls.

Button	Mode	Description
	Fast backward	Click to play fast backward at a speed of x2, x4, x8, x16, x32 and x64. If the button is clicked again, the play backward speed will return to normal.
	Play backward	Click to play backward at normal speed.
	Step backward	When clicked the video will pause and the video steps backward one frame per click. When held for more than a second, the video begins playing backward at a slower than normal playback speed.
	Pause	Click to pause video playback.
	Step forward	When clicked the video will pause and the video steps forward one frame per click. When held for more than a second, the video begins playing forward at a slower than normal playback speed.
	Play	Click to play forward at normal speed.
	Fast forward	Click to play fast forward at a speed of x2, x4, x8, x16, x32 and x64. If the button is clicked again, the play forward speed will return to normal. **Note:** Sometimes a "connection lost" error message displays when fast forwarding through video content and the current time is reached. Simply refresh the viewer to clear the error.

8.3 Changing the event playback mode

The event playback mode button is only visible when an event is present. Clicking this button toggles between the following modes:

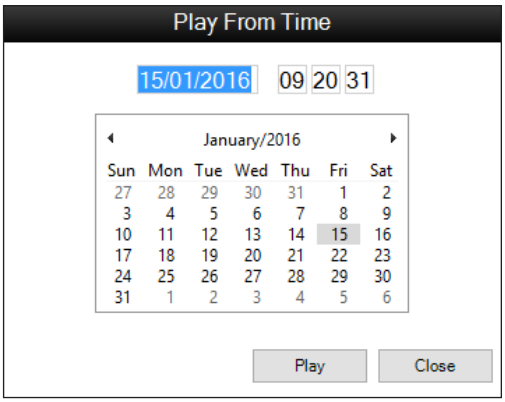
Button	Mode	Description
	Pause	When video playback reaches the end of the event playback window the video will pause. This also functions in reverse (i.e. when playing backwards, the video will pause when the start of the event window has been reached).
	Loop	When video playback reaches the end of the event playback window the video will begin playing from the start of the event window. This also functions in reverse (i.e. when playing backwards, the video will begin playing from the end of the event window when the start of the event window is reached).
	Continue	When the end of the event playback window is reached, video playback will continue as normal. This also functions in reverse (i.e. when playing backwards and the start of the event playback window is reached, the video will continue to play backwards).

8.4 Playing video from a specific date and time

To play stored video from a specific date and time, perform the following procedure:

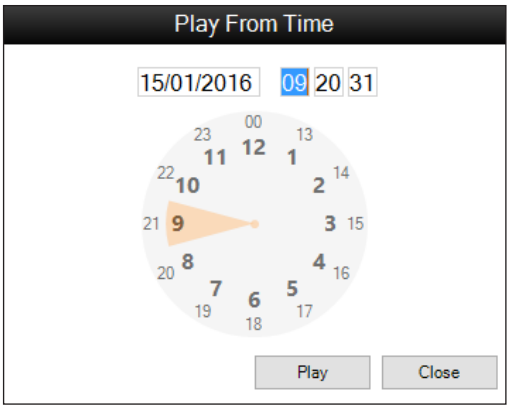
1. Click the date and time label.
   The 'Play From Time' pop-up displays.

   Note: This label displays the date and time for the current frame.



2. Click within the date field and enter a date. Alternatively, select a date from the date picker.

3. Click within the time field and enter a time. Alternatively, select a time from the time control.



4. Click the **Play** button.
   The video for the date and time selected displays.

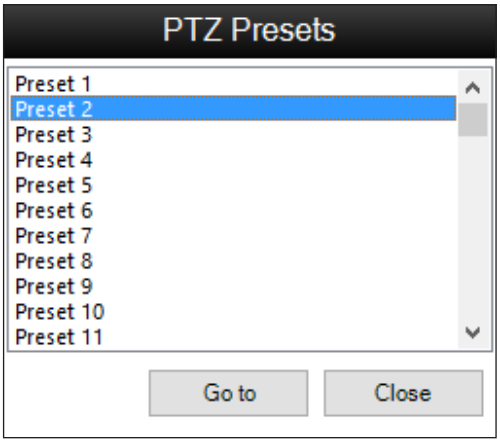
   Note: Selecting a future date or time will return you to the current live video.

8.5 Selecting a PTZ preset

The PTZ presents button displays when viewing live video only. This button displays if the camera is PTZ enabled. An operator requires the "Adjust DVR PTZ controls" operator privilege to select a PTZ preset.

To select a PTZ preset, perform the following procedure:

1. Click the button.
   The PTZ Presets pop-up displays.



   This window displays the presets available for the camera. However, not all presets will be configured within Panasonic. If a preset is selected that hasn't been configured, the camera will not move.

2. Select the required preset.
3. Click the **Go to** button.

8.6 Controlling a PTZ camera

An operator requires the "Adjust DVR PTZ controls" operator privilege to control a PTZ camera.

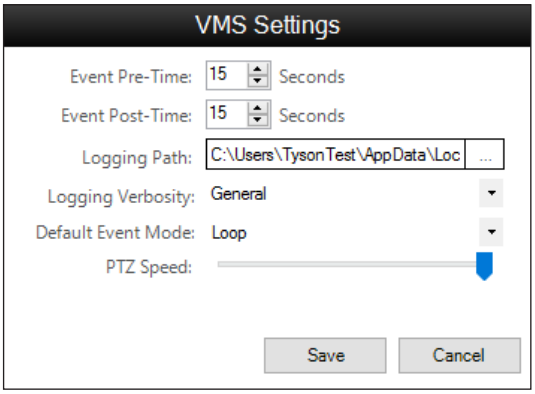
Control	Function
On-screen pan/tilt	For a PTZ enabled camera, hover the cursor over the video. The cursor will change to a directional arrow showing the PTZ direction that will take effect once the left mouse button is clicked. The direction is calculated based on the position of the directional arrow from the centre of the video control.
Mouse-wheel zoom	Use the mouse wheel to zoom in and out.
Keyboard PTZ	Use the keyboard arrow keys to pan/tilt. Use the keyboard **+** and **-** keys to zoom in and out respectively.

8.7 Editing the VMS settings

To edit the VMS settings, perform the following procedure:

Note: VMS settings are applied to all camera tiles configured for the workstation.

1. Click the button.
   The 'VMS Settings' pop-up displays.



2. Edit the VMS settings as required.

Option	Description
Event Pre-Time	When viewing stored video associated with an alarm, this is the period of time that will be displayed prior to the event occurrence time. Hence this option defines the start point for the event time window. Default 15 seconds. Range 0-300 seconds.
Event Post-Time	When viewing stored video associated with an alarm, this is the period of time that will be displayed post the event occurrence time. Hence this option defines the end point for the event time window. Default 15 seconds. Range 0-300 seconds.
Logging Path	Defines the location of the log files PanasonicCCVMSPlayer.log and gglPanasonicProxy.log
Logging Verbosity	Defines the level of logging. • General: Low level logging. • Debug: Medium level logging. • Trace: High level logging. Set the logging verbosity to trace when supplying the log file to Gallagher Technical Support.
Default Event Mode	Defines the event playback mode. • Pause: Video will pause when playback reaches the end of the event time window. • Loop: Video will loop when playback reaches the end of the event time window. • Continue: Video will continue when playback reaches the end of the event time window.
PTZ Speed	Defines the pan, tilt and zoom speeds for PTZ enabled cameras.

3. Click the **Save** button.
4. Refresh the Viewer in order for the changes to take effect.

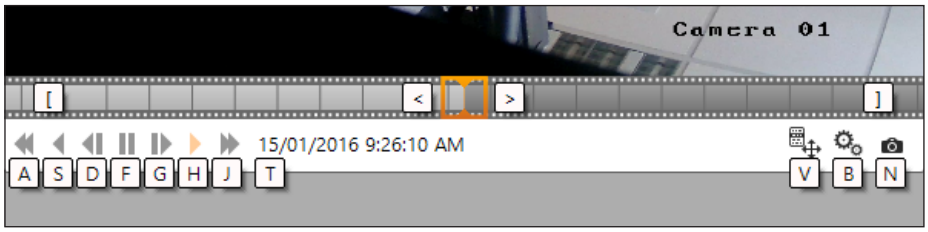
8.8 Capturing an image

Click the button to capture an image of the current frame. The image is saved as a .jpg file to the clipboard.

8.9 Using keyboard hotkeys

The VMS user interface is usable from the keyboard.

When **Ctrl** is pressed (and no pop-up is open), the interface hotkeys appear.



Note: The hotkeys will not work if the camera tile is configured to not show camera controls or if the tile is minimised so that camera controls are not visible.

The following table lists the available hotkeys:

Hotkeys	Function
F5	Refresh the camera tile
CTRL – A	Fast backward
CTRL – S	Play backward
CTRL – D	Step backward
CTRL – F	Pause
CTRL – G	Step forward
CTRL – H	Play
CTRL – J	Fast forward
CTRL – T	Open the 'Play From Time' pop-up
CTRL – C	Toggle event playback mode
CTRL – V	Open the 'PTZ Presets' pop-up
CTRL – B	Open the 'VMS Settings' pop-up
CTRL – N	Capture image
CTRL – [	Click left trackbar arrow (if available)
CTRL –]	Click right trackbar arrow (if available)
CTRL – <	Press and hold to move trackbar playback left
CTRL – >	Press and hold to move trackbar playback right

9 Upgrading

9.1 Upgrading this feature from vEL7.40 to vEL7.60

1. Perform a backup of your Command Centre system.
2. Exit Command Centre and stop the FT Services.
3. Using the Windows **Programs and Features** utility, remove the program 'Gallagher Panasonic VMS Integration' from the Command Centre server and all Command Centre workstations.
4. Using the Windows **Programs and Features** utility, remove the program 'Gallagher Panasonic VMS Middleware' from the middleware PC.
5. Upgrade Command Centre to vEL7.60.585 (or later vEL7.60 release).
   Refer to the document *"3E0068 Gallagher Command Centre - Release Note vEL7.60.585 (Upgrade Procedures).pdf"* located on the Command Centre installation media, for further detail.
6. Install the Gallagher FTCAPI Middleware Framework vMF7.60.04 on the middleware PC. Refer to the middleware framework installation instructions earlier in this note, if required.
7. Unzip the new folder you have been provided and run the installation executable **Gallagher Panasonic VMS Integration Setup 7.60.009.msi** on the Command Centre server and all Command Centre workstations that will be using this integration.
8. From the folder you have been provided run the installation executable **Gallagher Panasonic VMS Middleware Setup 7.60.009.msi** on the middleware PC.
9. Restart the FT Services and Command Centre.
10. Test to ensure this integration operates as before.

9.2 Upgrading this feature from vEL7.50 to vEL7.60

1. Perform a backup of your Command Centre system.
2. Exit Command Centre and stop the FT Services.
3. Using the Windows **Programs and Features** utility, remove the program 'Gallagher Panasonic VMS Integration' from the Command Centre server and all Command Centre workstations.
4. Using the Windows **Programs and Features** utility, remove the program 'Gallagher Panasonic VMS Middleware' from the middleware PC.
5. Unzip the new folder you have been provided and run the installation executable **Gallagher Panasonic VMS Integration Setup 7.60.0xx.msi** on the Command Centre server and all Command Centre workstations that will be using this integration.
6. From the folder you have been provided run the installation executable **Gallagher Panasonic VMS Middleware Setup 7.60.0xx.msi** on the middleware PC.
7. Restart the FT Services and Command Centre.

10 Uninstallation

To permanently uninstall this integration, perform the following procedure:

1. Perform a backup of your Command Centre system.
2. Delete all Command Centre items configured for this integration.
3. Exit Command Centre and stop the FT Services.
4. Using the Windows **Programs and Features** utility, remove the program 'Gallagher Panasonic VMS Integration' from the Command Centre server and all Command Centre workstations.
5. Using the Windows **Programs and Features** utility, remove the following programs from the middleware PC:
   - Gallagher FTCAPI Middleware Framework (if not used elsewhere)
   - Gallagher Panasonic VMS Middleware
6. Restart the FT Services and Command Centre.

11 Enable FMF logging

To enable debug logging:

1. On the middleware PC, open the **FTCAPIRouterService.exe.config** file located in the 'C:\Program Files\CARDAX\FTCAPI\Middleware Framework' directory.

   Note: Due to rebranding and depending on what version you are upgrading from the location may be 'C:\Program Files\Gallagher\FTCAPI\Middleware Framework'. Likewise, wherever else the "CARDAX" folder is mentioned in this document, it could be "Gallagher".
2. Locate the line with **"<!--<add name="Debug" />-->"**
3. Remove the "**<!--**" characters from the beginning of the line and the "**-->**" characters from the end of the line.
4. Save the **.config** file.
5. Restart the 'FTCAPI Router Service'.

12 Error Messages

The following table describes the error messages that may be displayed in the Camera Viewer.

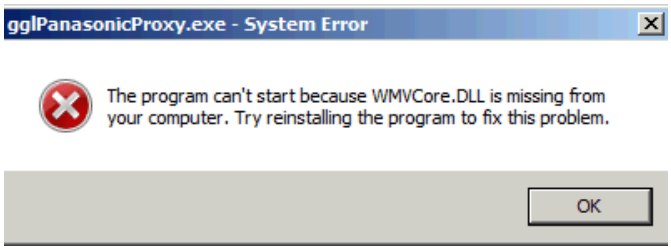
Message	Description
No live viewer control was assigned to the camera in the Configuration Client	Navigate to the Command Centre DVR System item and add the Panasonic stored and live options.
Command initialize failed to execute successfully	The camera you have assigned to the Camera tile may not exist. Check the camera name is correct and that the DVR setup is correct. Alternatively, try refreshing the Camera tile.
Connection lost	Most likely the camera has been disconnected from the network or the Panasonic server is offline.
Connection not available	The camera is not connected.
Viewer is currently not licensed	You are not licensed for this integration.
Specified Camera Panasonic VMS not found	The camera has been incorrectly configured.

13 Troubleshooting

- If the configuration has been changed within the Panasonic DVR system, the FTCAPI Router Service will need to be restarted in order for the Gallagher Panasonic VMS Middleware to recognise the change.
- Obscure error messages are sometimes generated by the Panasonic DVR system. For example, if the wrong logon details are used for the WV-SC384 IP Camera, the error message *"Failed to show live video. PS-API error = Network error(VIDEO_ERROR_NETWORK)"* occurred.
- When a viewer window is first opened, an operator will be unable to move the Indicator Rectangle (located on the trackbar) until the camera is fully initiated.
- On some of the Panasonic devices, (e.g. the NV200 NVR) the oldest connection to the device may have it's connection revoked when a new connection is made. If the Panasonic VMS Middleware is used to monitor the status of the device, off-line events may be generated when a new viewer window is opened and the connection limit has been reached.

  For such devices, we recommend keeping the number of concurrent viewer connections to a minimum in order to conserve connections. We also recommend configuring the device to deny new connections when the connection limit is reached.
- The time clocks for all devices must be synchronised. If not synchronised, the stored viewer may display the wrong footage. Time clocks are:
  - the camera's clock
  - the NVR's clock
  - the Middleware PC's clock
  - the Command Centre server's clock
  - the Command Centre workstation's clock
- Cameras associated with an Action Plan in Command Centre must be configured for constant recording. If the correct footage cannot be found, the stored viewer will display the wrong footage.

- When viewing stored footage within a Camera tile, slow rewind/play will not work. The Panasonic SDK does not support continued slow rewind/play mode.
- When running this integration on Windows Server 2012, you will need to install the Windows Desktop Experience feature. If not installed, an operator will be unable to view video and the following message will display:



- If using a later web browser, you may need to enable 'Compatibility View' in order to download the Panasonic Viewer software. Select **Compatibility View settings** within the web browser's **Settings** menu, then add the IP address of the Panasonic server.
- If a camera is reporting an incorrect status, perform a 'Push Configuration' on the camera item, or restart the FTCAPI Router Service on the middleware PC.

14 Limitations

- The VMS user interface is not available in the Configuration Client (i.e. live and stored camera footage is available in the Command Centre Client only). When attempting to view a camera in the Configuration Client the message *"This VMS integration is not supported in the Configuration Client. Please launch the Command Centre Client in order to view video footage using this integration"* displays.
- This integration cannot be installed on a Command Centre Client workstation that has been deployed via Click-Once.