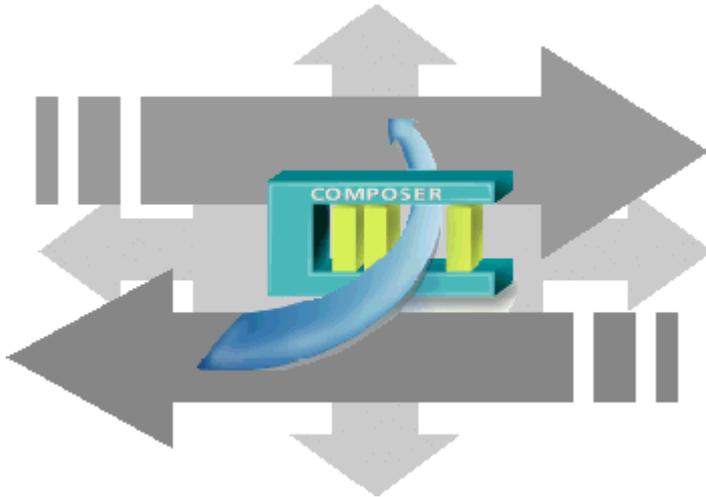


# SIEMENS



**DMS8000 MP4.60**

**Video Connectivity Guide**

**Building Technologies**

Fire Safety & Security Products



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# About this document

## Purpose

This manual is for use during the configuration of Danger Management Systems (DMS) and Building automation Systems (BMS) that include the following:

- MM8000 Management Station
- MT8001 Management Terminal
- MK8000 OPC Server for Subsystems
- NK8000 network devices
- DESIGO INSIGHT (for FS devices connectivity via MK8000)

It is a guide to, and reference for the manual configuration of intrusion subsystems supported by these products. The complete family including the above DMS, networks and subsystems is called MS8000. This guide is part of the engineering documentation set that includes the Composer Technical Manual, the DMS8000 Connectivity Guides (for Network, Fire, Access Control, Video, and OPC), and the Installation, Configuration and Commissioning manual (ICC) for each specific product.

## Target audience

This documentation is intended for the following users:

- Project Managers
- Project Engineers
- Commissioning Personnel

Individuals performing the operations described in this manual are expected to be already familiar with the concepts and terminology related to the field of security, as well as with the Siemens fire and security products, and the networks and subsystems supported by them.

## Operational and safety regulations



Before groups of persons begin work on any DMS system, they must have read and understood the related documents. In particular the Safety Regulations included in the Installation, Configuration, and Commissioning manual (ICC) for each specific product.

## Liability disclaimer for damage or injuries

Before products are delivered, they are tested to ensure they function correctly when used properly. Siemens disclaims all liability for damage or injuries caused by the incorrect application of the instructions, or the disregard of danger advisories. This disclaimer applies in particular to personal injuries or damage caused by:

- Improper and/or incorrect use.
- Disregard of safety instructions in the documentation or on the product.
- Poor maintenance or a lack of maintenance.

We have checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual are reviewed regularly and any necessary corrections are included in subsequent editions. Suggestions for improvement are welcome.

## Modification index

**Note:** For versions more than four years old, please visit the Siemens Asset Portal.

Version	Date	Notes
A6V10062457_a_en	06.2013	DMS8000 4.60. Support for Vectis HX HVR
A6V10062457_a_en	06.2012	DMS8000 4.50. Improved support of Bosch Video Systems and of Light-Integration devices. Support of ONVIF-compliant cameras as generic units
A6V10062457_a_en	06.2011	DMS8000 4.40. Support of Bosch Video Systems and for Generic DVR integration.
A6V10062457_a_en	06.2010	DMS8000 4.30. SDK 2.5 data model for SISTORE MX.

# 1 Safety regulations

This section describes the danger levels and the relevant safety regulations applicable to the use of the products described in this manual. Please read the following work instructions as well as the preceding section *About this document* thoroughly before beginning any work.

## 1.1 Country-specific standards

Siemens products are developed and produced in compliance with the relevant international and European safety standards. Should additional country-specific, and/or local safety standards or regulations concerning project planning, installation, and/or operation of the product(s) apply, then these standards and/or regulations must also be taken into account, in addition to the safety regulations mentioned in the product documentation.

## 1.2 Commissioning and testing

- Activate security-, fire- and third party systems or devices *only* in the presence of the person responsible.
- Abide by the safety regulations of the connected sub-systems when working on management stations. This especially applies when switching-off system components.
- Inform people before the testing of alarm devices; take the possibility of panic reactions into account.
- Inform the alarm and fault receiving stations connected to the system before carrying out any tests.

## 1.3 Modifications to system design and products




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Modifications to a system or to individual products may cause faults or malfunctioning.

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Please request written approval from Siemens Building Technologies, FS-DMS, and the relevant authorities concerning intended system modifications and system extensions.

## 2 Introduction

Siemens fire safety and security products are designed to work together. While there are many occasions where only one product may be used in a facility, when combined our products create a robust and flexible set of architectural and connectivity solutions. The possible combinations of Danger Management Systems (DMS), network choices, and subsystems used in any given plant are extensive. However, the time involved with commissioning tasks can be substantial.

With the aim of reducing time spent on configuration, Siemens BT FS has developed their products so that the DMS and the networks can all be configured with a single tool called WW8000 Composer.

The networks and subsystems supported by our Danger Management Systems are always configured in the same way within the Composer environment.

### What this document contains

This document includes the configuration procedures for the intrusion subsystems supported by our DMS8000 products. It discusses in detail how to configure these systems by hand.

### What this document does not contain

Each DMS carries a different set of technical and behavioural characteristics that interact with the networks and subsystems. These differences typically appear as additional tabs in the network and subsystem work areas of Composer. However, since these tabs are always associated with attributes specific to the DMS being used, they are not discussed in this manual. This information can be found in the corresponding product manual.

Reference documents are listed in the Resource Information document (see About this document).

## 2.1 What's new

Here is the list of modifications for new functions and software improvements.

Section	Modifications
Configuring SISTORE and Vectis DVRs [→ 30]	Support for Vectis HX HVR

## 2.2 Additional documents

Depending on your level of experience with Composer, and the architectural solutions available with our products, as well as where you are in the commissioning process, there are a number of additional documents that you may find useful. If you need a document that you do not have, you can download it on the Siemens Intranet.

Please see the following descriptions of relevant additional documents:

- The Composer WW8000 Technical Manual contains mostly introductory information for new users of Composer. In addition to general introductory information, it contains details about several functions and shortcuts that can be useful for users. This manual is typically included with the documentation set that comes with each product. The document number is A6V10062401.
- The Application and Planning guide (A6V10063710) shows the architectural solutions currently available with the DMS systems, including network and subsystem connectivity options. These documents are a kind of library of technical solutions, and are intended primarily as sales tools, but provide an

overview of the relationships within the system that may be useful when planning a configuration.

- The product-specific Installation Configuration & Commissioning manual (ICC) is the necessary complement to this manual for getting a complete view of the configuration process. Please refer to the latest edition of the following document:
  - MM8000 ICC (A6V10062413)
  - MT8001 ICC (A6V10096181)
  - MK8000 ICC (A6V10062407)
  - NK8000 ICC (A6V10062437)
- The Network Connectivity Guide (A6V10359485) contains detailed information about configuring the networks supported by DMS8000 products.

Reference documents are listed in the Resource Information document (see About this document).

## 3 Configuring CCTV network

The DMS8000 systems MM8000 and MK8000 can support the connection to various CCTV devices. The list includes:

### Video matrices

- Siemens SIMATRIX
- Philips/Burle LTC8000 family

### Siemens video networks

- Siemens SIMATRIX Switching matrix
- Siemens SISTORE AX Digital Video Recorder (DVR)
- Siemens SISTORE CX Digital Video Recorder (DVR)
- Siemens SISTORE MX Digital Video Recorder (DVR)

**Note:** SISTORE MX can be connected applying two data models, SDK 1.4 (valid for MX version 2.5 to 2.81) and SDK 2.5, which should be used for newer versions that can support it.

- Siemens SISTORE MX NVS Network Video Software (video recording software)
- Siemens Vectis HX HVR Digital Video Recorder (DVR)
- Siemens SISTORE SX Digital Video Recorder (DVR)
- Siemens TELSCAN Video web server
- Siemens IP Cameras CCIS 1337-LP, CFVA-IP, CVVA-IP

Cameras can be connected via SISTORE MX / MX NVS or directly over LAN. In the latter case, they are configured as single-line TELSCAN.

### Integration of 3rd party video networks

- BOSCH Encoders, Decoders, IP cameras
- 3rd party applying a light integration (video viewer only)
- 3rd party Generic DVR
- 3rd party ONVIF cameras

**Note:** Cameras are supported as 3rd party Generic DVR units.

- Axis ONVIF cameras

**Note:** Cameras are supported as 3rd party Generic DVR units.

- Specific units via add-on packages

**Note:** Refer to the documentation of add-on modules. Detailed information about supported devices is provided in the *MM8000/MK8000 Release Notes*.

Depending on the type of integration, MM8000 allows accessing to video images in MM8000 event treatment and navigation as well as providing states of video devices.

In the integration with the MK8000 OPC server, the states of video devices are provided in OPC format to the OPC clients.

## 3.1 Video Network Manager

The advanced video functionalities require a basic communication infrastructure between MM8000/MK8000 and the CCTV units; this is actually a LAN network.

In Composer, a **Video Network Manager (VNM)** and the associated drivers should be added to the MM8000/MK8000 main station in order to support the video network communication.

To add the VNM to the configuration, proceed as follows:

1. In the MM8000 physical configuration, select the main station name:  
**Supervisor System Settings > MM8000 System > Physical configuration > <Station name>**

In the MK8000 project, the selection is quite similar:

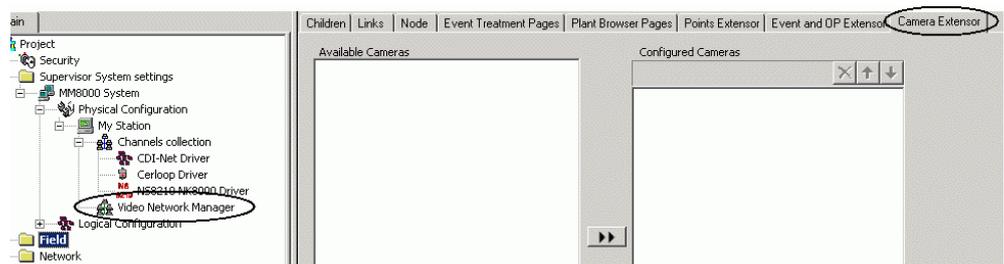
**MK8000 System > MK8000 > Physical configuration > <Station name>**

2. In the toolbar, click the **VNM icon** .

⇒ A new node is added. No further configuration is required for the VNM.

**Note:** Adding the VNM results in the entire Composer project being expanded in order to support the CCTV functions. Particularly, the new tab **Camera Extensor** is added to all nodes. Depending on the size of the configuration tree, the operation may take a few minutes.

The Composer plug-in #251701 is required.



*New tab added by the VNM in the MM8000 project*

### Camera Extensor tab

In the **Camera Extensor** tab, you can see the camera associations and manually add one or more cameras to the list associated with the selected node. Also, for dome and PTZ cameras, you can set the default **Preset Position** (where the camera is moved when it is first selected during event treatment).

Refer to the point customization section of the *MM8000 Installation, Configuration and Commissioning (ICC)* manual for more information about the **Camera Extensor** tab.

## 3.2 Video Drivers

The VNM can support the driver required to handle the network communication with:

- TELSCAN video web server
- SISTORE video digital recorders
- Vectis video digital recorder
- Bosch
- Generic DVR

**Note:** SIMATRIX units do not need any Video driver.

Depending on the specific configuration required, to add a driver to your project, proceed as follows:

1. Select the **VNM** node.
2. In the toolbar, click the **Video Driver** icon  corresponding to the driver you need:
  - **TELSCAN Driver**
  - **SISTORE Driver (also used for Vectis)**
  - **BOSCH Driver**
  - **Generic DVR Driver**

### Architectures and system limits

In small system, the Video Driver is installed on the MM8000 server. Large systems may include FEP stations with additional Video Drivers that can distribute the traffic load. In the FEP station, the IP address must be configured:

1. Select the **Video Driver** node and then the **Node** tab.
2. In the Server Settings section, enter the **AMS Server IP address**.



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**Note:** In general, each driver can support several video connections (at least 40). Please refer to the *MM8000/MK8000 Datasheet* (system limits) and *Release Notes* (recommendations and open issues) for getting the most recent information.

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### 3.3 CCTV components

If the VNM is present, the Video Folder  of the Composer toolbar on the left hand side includes also an additional set of icons, corresponding to the following CCTV components.



**Note:** The number of CCTV components icons may vary depending on the video system you're integrating.

Icon	Description
	<b>Simatrix</b> switching crossbar
	<b>Burle</b> switcher
	<b>Video Cameras</b> folder
	<b>Video Monitors</b> folder
	Siemens <b>Telscan</b> WEB Server
	<b>Telscan IP Camera</b> supporting Siemens TELSCAN protocol
	<b>Sistore AX</b> DVR
	<b>Sistore MX/MX</b> DVR applying <b>SDK 1.4</b> (MX version 2.5 to 2.81)
	<b>Sistore CX/SX</b> DVR
	<b>Sistore MX/MX</b> DVR applying <b>SDK 2.5</b> (from MX version 2.81-01)
	<b>Simatrix CCTV</b>
	<b>Light-Integrated Devices</b> folder (for 3rd party video or other applications)
	<b>BOSCH</b> video device
	<b>Generic DVR</b> (add a DVR using a customized profile)
	<b>Vectis HX</b> HVR
	<b>GEUTEBRUECK</b> DVR
	<b>NICE</b> (or  <b>RIVER</b> ) Digital Video Recorder
	<b>NICE</b> (or  <b>RIVER</b> ) Decoder



**Note:** The Simatrix could also be included in the configuration as a stand-alone subsystem, not included in the video network. This option is mainly available for backward compatibility.

## 3.4 Configuration checklist

Before starting the configuration, get in contact with the CCTV specialist and get the necessary information. Namely:

- Configuration schematic (block diagram or wiring diagram)
- Camera and Monitor types and models
- Matrix and DVR types and models
- IP addresses and other system-specific configuration information

Then, in setting up the video network, follow the sequence illustrated by the following procedure:

1. Configure Cameras.
2. Configure Monitors.
3. Configure TELSCAN/IP cameras.
4. Configure crossbar matrices.
5. Configure other video units and devices.

## 4 Configuring Cameras

### 4.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The number, names, and type of cameras: fixed, Dome, or PTZ
- The application type in relation to the video recording: Manual or Automatic. If the camera is used for motion detection applications or is somehow not meant for the direct control of the operators, set Automatic mode.
- The cameras connection to matrices and DVRs
- Plug-ins needed:
  - #352801

#### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the camera in the project structure tree.
3. Add the camera node to the folder.
4. Set the camera options.
5. Connect the camera.
6. Repeat steps 2 to 5 above for all the cameras in the project.

### 4.2 Configuration procedure

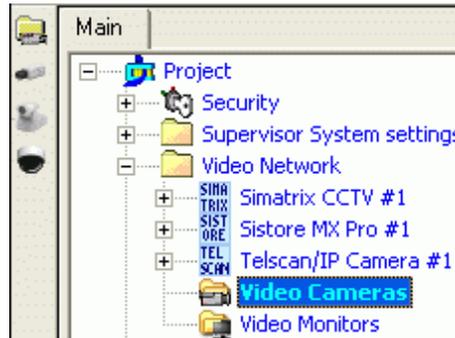
The following are the configuration procedures for the video cameras.

#### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

#### Adding the folder for cameras

1. In the left-hand bar, select the **Video folder** icon .
2. In the menu that displays, select the **Video Camera folder**  icon to add a folder.



*Adding a Video Cameras folder*

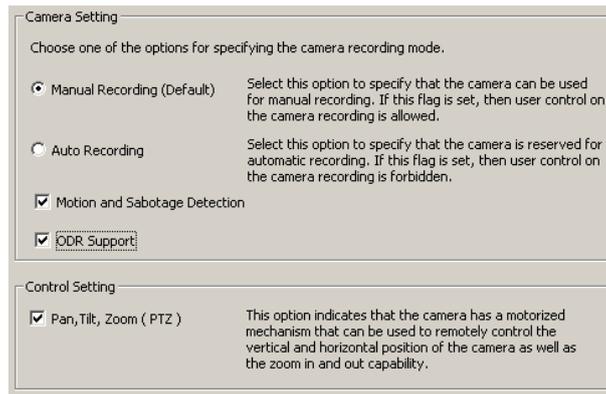
## Adding a video camera

1. Select the **Video Cameras** folder.
2. In the left-hand bar, select the type:
  -  **Fixed camera**
  -  **PTZ camera**
  -  **Dome camera**

Also, in the same menu you can add additional folders  that let you better organise the camera units according to type, location, etc.

## Setting camera options

1. Select the **camera** node.
2. Select the **Node** tab.  
**Note:** Here you can customise the camera name (**Description** field).
3. Set the camera options.  
For MM8000 (this step is not required for MK8000), you can select:
  - **Manual Recording** (default) or **Auto Recording**. If set in automatic mode, no manual control on video recording is available for the operator. Set this option according to the needs of the security application.
  - **Motion and Sabotage Detection** (available if supported by the DVR unit).
  - **Object detection and Removal (ODR)** (if supported by the DVR unit).
  - **Control Settings: Pan, Tilt and Zoom** control, which can be enabled according to the camera characteristics (this is possible for PTZ and Dome cameras, whereas it is not applicable to fixed cameras).

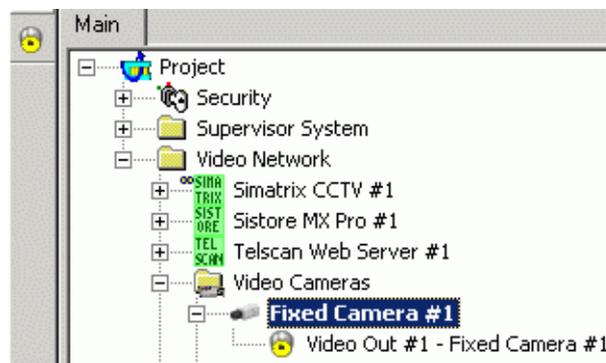


*Camera options*

### Connecting the cameras

1. Select and expand the **camera** node.
  - ⇒ A **Video Out** node is automatically provided for the camera. Additional nodes may be added to map video distribution devices or looping connectors that can route the video signal to multiple destinations.
2. If required, add additional **Video Out** nodes to a camera. Use the command icon on the left-hand bar.
3. Select the **Video Out** node.
4. Drag-and-drop the **Video Out** signal to the appropriate **Video In** node of the destination device.

Examples are provided in the sections about matrices and DVRs.



*Additional camera outputs*

## 4.3 Configuration tips

- Check which cameras are reserved for motion detection and set them in Automatic mode. The same applies to cameras reserved for system control only.
- Check which cameras have pre-trigger settings and adjust the time in the specific camera tool (e.g. SISTORE tool).
- Siemens IP cameras can be configured in two ways:
  - Connected to SISTORE MX and configured with an input number greater than 64.
  - Networked but without video recording. In this case, they can be configured as single-channel TELSCAN.

## 5 Configuring Monitors

### 5.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The number and type of monitors: Monochrome or Colour
- The connection to matrices and DVR units
- Plug-ins needed:
  - #352901

#### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the monitor in the project structure tree.
3. Add the monitor node to the folder.
4. Connect the monitor.
5. Repeat steps 2 to 4 above for all the monitors in the project.

### 5.2 Configuration procedure

The following are the configuration procedures for the video monitors.

#### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

#### Adding the folder for monitors

1. In the left-hand bar, select the **Video folder** icon .
2. In the menu that appears, select the **Video Monitor folder** icon  to add a folder.



*Adding a Video Monitors folder*

## Adding a monitor

1. Select the **Video Monitors** folder.
2. In the left-hand bar, select the type:
  -  **Monochrome**
  -  **Colour Monitor**
3. In addition, in the same menu, you can add additional folders  to better organise monitors according to their type, location, etc.

## Connecting the monitor

1. Select and expand the monitor node.
  - ⇒ A **Video In** node is automatically provided for the monitor.
  - ⇒ Additional input nodes may be added in case of video signal received from multiple sources.
    - Note:** In the **Node** tab, you can customise the monitor name (**Description** field).
2. If required, add additional Video Out nodes.
3. Select the appropriate **Video Out** node of the source unit.  
Examples are given below in the sections about matrices and DVRs.
4. Drag-and-drop the **Video Out** signal to the **Video In** node of the monitor.

## 6 Configuring TELSCAN Units and IP Cameras

The Siemens *TELSKAN* is a video web server capable of connecting up to 4 video cameras, acquiring the video images, and transferring them over an IP network to the networked hosts.

*IP cameras* supporting the TELSCAN protocol can also be individually connected to the DMS8000 systems over the LAN.

### 6.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The number, names, and type of TELSCAN units and/or IP cameras
- The TELSCAN/IP Camera configuration settings:
  - IP address
  - Diagnostic settings: Ping frequency and Number of retries
- The cameras connections on the TELSCANs
- Plug-ins needed:
  - #251801

#### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the unit in the project structure tree.
3. Add the unit node to the folder.
4. Set the unit options.
5. Connect the unit to the video driver and, if necessary, to the cameras.
6. Repeat steps 2 to 5 above for all the units in the project.

### 6.2 Configuration procedure

The following are the configuration procedures for TELSCAN units and IP Cameras.

#### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

#### Adding the Video Driver

1. Select the **Video Network Manager** node.
2. If not already done, add the **TELSKAN** Video Driver.

#### Adding a folder for the TELSCAN/IP Cameras

- Optionally, create a folder for the TELSCAN/IP Cameras.

## Adding the TELSCAN or IP Camera node

1. Select the new folder.
2. In the left-hand bar, select the **Video folder** icon .
3. In the menu that displays, select one of the following icons:
  -  **TELSCAN** – to add a TELSCAN unit.
  -  **TELSCAN IP Camera** – to add a video camera.



**Note:** You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.

## Configuring the TELSCAN protocol settings

1. Select new node and click the **Node** tab.
2. In the **Telscan Setting** section, type the following fields:
  - **IP address**, which should match the value set in the TELSCAN unit (see TELSCAN documentation).  
**Note:** The button **Set Default Value** can be used to reset any change in the IP address field and go back to the factory setting.
  - Fault diagnostic fields: **Ping frequency** (default 10 sec) and **Retry times** (default 3 times).  
**Note:** Do not change these values unless instructed by technical support.
  - **User Name** and **Password** as required to access the IP device (refer to the device's configuration).
3. For MM8000 (this step is not required for MK8000): once the correct IP address is set, press the **Send HTML file** button.
  - ⇒ This results in a specialised HTML page being downloaded into the TELSCAN via FTP (File Transfer Protocol) service. The page is required for the interface to operate properly with the TELSCAN.



### **WARNING**

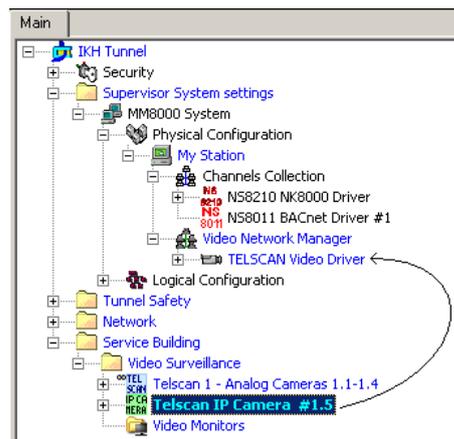
Failing in loading this page at least once causes defective displaying of the video camera pages.

Children	Links	Node	Configuration	Points Extensor	Event and DP Extensor	Camera Extensor
<b>Descriptions</b> Description: <input type="text" value="Telscan/IP Camera #1"/> Technical Text: Telscan/IP Camera						
<b>Security</b> <input checked="" type="checkbox"/> Profile Inherit      Profile Id: <input type="text" value="1 - Default Profile"/>						
<b>Telscan Setting</b> IP address : <input type="text" value="192 . 168 . 100 . 100"/> Ping frequency (sec.): <input type="text" value="10"/> Retry times: <input type="text" value="3"/> User Name : <input type="text" value="config"/> Password : <input type="text" value="*****"/> <input type="button" value="Send HTML File"/> <input type="button" value="Set Default Value"/>						

*TELSCAN / IP Camera Settings*

### Connecting the TELSCAN/IP Camera to Video Driver

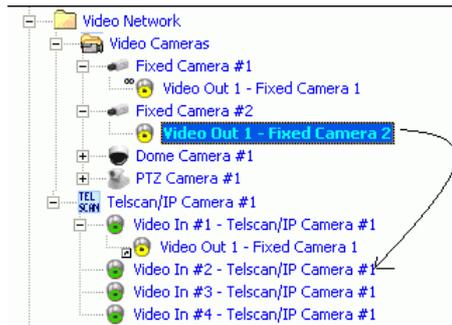
1. Select the **TELSCAN/IP camera** node.
2. Select the **TELSCAN Video Driver**.
3. Drag-and-drop the **TELSCAN/IP camera** to the driver.



*Connecting a Telscan IP Camera to the video driver*

### Connecting the video cameras to TELSCAN

1. Select and expand the **TELSCAN** node.
2. Select and expand the **camera** node.
3. Select the **Video Out** node of the camera.
4. Drag-and-drop the **Video Out** signal to a **TELSCAN Video In** node.



*Connecting the Camera Output to the TELSCAN Video In*

## 6.3 Configuration tips

- Check that TELSCAN firmware version is V2.0 or later.  
**Note:** Firmware update is possible with the support of the CCTV Hotline.
- Do not forget to transfer to TELSCAN the HTML customisation file from the setting page in Composer.
- Video applications recommended for TELSCAN:
  - MozillaControl15 ActiveX (recommended for better performance and mandatory for Siemens IP cameras).

### Limitation

- MM8000 and MK8000 do not support the TELSCAN connection from a SIMATRIX video out:  
each camera must be wired directly to the TELSCAN.
- The IP camera directly connected to the DMS8000 are fixed (no PTZ) and must be equipped with one of the following communication components: CCIS 1337-LP (cameras), CFVA-IP or CVVA-IP (domes).

## 7 Configuring SIMATRIX crossbars

The SIMATRIX is a CCTV crossbar, capable of connecting CCTV cameras and video monitor for local and distributed video surveillance systems. It also provides support for security alarm inputs, and camera fault detection.

Depending on the hardware configuration – specifically the models 16-4, 64-8, SYS, and NEO – the matrix can connect 16, 64, 256, or 224 cameras, and 4, 8, 64, or 32 monitors, respectively. The connection to host is based on a RS232 serial line, and on the CDDL/CDSF protocol.

**Note:** CDDL/CDSF protocol is an option available on specific SIMATRIX EPROMs.

The alarm states in SIMATRIX can be triggered by digital inputs on hardware contacts, or via alarm messages from DMS8000 host. The SIMATRIX foresees up to three types of alarm modes, and they are different depending on the way the alarm reset is handled:

- *Manual alarms:* Reset action is required from the operator.
- *Automatic alarms:* Reset action is not required.
- *Stack alarms:* Alarms are associated to cameras and *stacked* on the monitors. They get reset when the corresponding monitor is switched to another camera.

The physical and logical configuration for a SIMATRIX is first defined for the hardware unit set-up. In the Composer environment, the configuration structure must be entered again, and it must perfectly match what was physically and logically defined in the SIMATRIX set-up.

### SIMATRIX configuration

The configuration of the SIMATRIX is possible both as a *Stand-alone subsystem* and as a part of the *Video network*.

In comparison with the Stand-alone solution, the Video network configuration presents the same approach for defining the alarm inputs and for connecting the SIMATRIX to the CDI-Net or NK8000 communication network.

Instead, some differences concern:

- The definition of cameras: in the Video network, cameras are separated objects that should be linked to the SIMATRIX Video In points.
- The definition of monitors: in the Video network, monitors are also separated objects and should be linked to the SIMATRIX Video Out points.
- The import of texts from existing LMSmodular database, which is no longer available when the SIMATRIX is a component of the Video network.



---

**Note:** The configuration of the SIMATRIX as stand-alone subsystem is not recommended for MM8000 systems. It is available for backward compatibility and for other DMS8000 products (e.g. MK8000 OPC server).

---

## 7.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

### Items needed for configuration

- The SIMATRIX model: 16-4, 64.8, SYS, or NEO
- The SIMATRIX parameter settings, including complete information about the camera inputs, monitor outputs, and alarm points (number and type). If available, the LMS database including the SIMATRIX unit may be imported in the stand-alone model (but not if the Video network is used).
- The local address (0, 1, etc.)
- The connection to the DMS: CDI-Net or NK8000  
**Note:** CDI-Net and NK8000 require a specific line available on the gateway.
- Plug-ins needed:
  - #353301

### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the SIMATRIX in the project structure tree.
3. Add the SIMATRIX node to the folder.
4. Connect the monitor.
5. Configure the SIMATRIX options.
6. If available, import existing LMS configuration.
7. Add alarm points to the SIMATRIX.
8. Connect cameras and monitors to the SIMATRIX.
9. Connect the SIMATRIX to the network.
10. Repeat steps 2 to 8 above for all the monitors in the project.

## 7.2 Configuration procedure

The following are the configuration procedures for TELSCAN units and IP Cameras.

### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

### Adding a folder for the SIMATRIX

- Optionally, create a folder for the SIMATRIX unit.

### Adding the SIMATRIX node

1. Select the new folder.
2. In the left-hand bar, select the **Video folder** icon .

3. In the menu that displays, select one of the following icons:

-  SIMATRIX (*green*) – to add a stand-alone crossbar unit
-  SIMATRIX (*light blue*) – to add the video network subsystem.

### Setting the SIMATRIX Local Address and Type

1. Select the **SIMATRIX** node.
2. In the **Node** tab form, set the **Local Address**.

**Note:** The address value should range from 0 to 15 and it should match what is set in the configuration of the SIMATRIX unit.

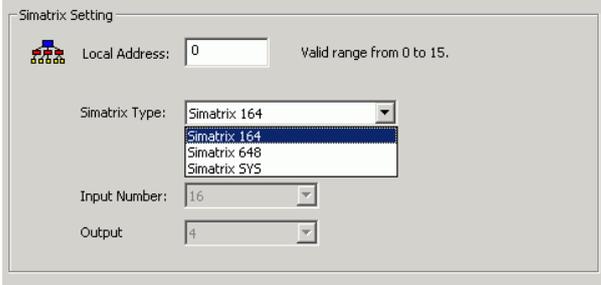
1. Select the **Simatrix Type**:

- **SIMATRIX 16-4**
- **SIMATRIX 64-8**
- **SIMATRIX SYS**

**Note:** Be aware that it may not be possible to later modify the type. More precisely, the only modification allowed is to select a bigger model but not to change to a smaller one. For example, you can change from 16-4 (default) to 64-8 but not vice-versa. If you want to change to a smaller type, delete the unit and create a new one (note that this results in the existing connections being lost).

2. Set the number of Video In and Video Out points.

If you selected the type 64-8 or SYS, then you can specify the exact number of inputs and outputs needed.



*SIMATRIX Type Selection*



**Note:** If you are installing a SIMATRIX NEO, just select one the three models according to the number of connections required.

### Importing the LMSmodular configuration (Stand-alone model only)

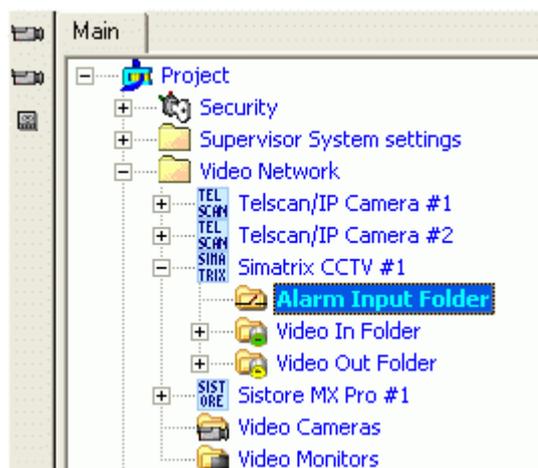
1. Select the **SIMATRIX** node.
2. Select **Tools > Import** in the Composer menu to start SIMATRIX import.
  - ⇒ After a confirmation request, the software presents a browsing window to search for the files to import.
3. Using standard Windows controls, do the following:
  - Look for LMS files, selecting the extension DBF in the browsing window.
  - Locate the DB\_SUB.DBF file.

- Select the file and click **Open**.
  - When prompted, select the language of the DBF file.
  - If more than one SIMATRIX unit is present in the metafile, the software presents a list. Select the one you want to import and click **OK**.
  - ⇒ In a few moments, the SIMATRIX structure is imported, and the node is represented in the Composer tree.
4. Skip the sections about alarms, cameras, and monitors, and go directly to the communication network link.

### Adding the alarm points

Add to the SIMATRIX the alarm points according to the actual configuration.

1. Select the **SIMATRIX** node.
2. Select the **Alarm Input** folder.



*Alarm Input Selection*

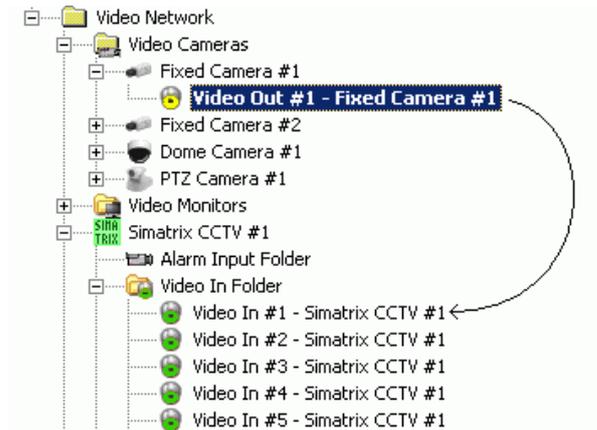
3. Add the **Alarm** points.  
In SIMATRIX, there are three types of alarm inputs, depending on the type of alarm reset that the unit expects. They include:
  -  **Stack alarms**, which are associated to the CCTV monitors with a shifting technique (the alarmed cameras are shown on the monitors according to a programmed priority), and then reset by switching the monitor to an-other camera. Only the *top of stack* alarm can be reset;
  -  **Automatic reset** when the alarm contact is back to normal;
  -  **Manual reset** from DMS operators.



**Note:** In the SIMATRIX configuration (and consequently in Composer), you can use only one of the three alarm types.

### Connecting the cameras (Video network model only)

1. Select and expand the **SIMATRIX** node.
2. Select and expand the **SIMATRIX Video In** folder.
3. Select and expand the **Video Camera** folder.
4. Select the **Video Out** node of the camera.
5. Drag-and-drop the **Video Out** signal to the **SIMATRIX Video In** node.



*Connecting Camera Out to Simatrix Video In*

### Connecting the monitors (Video network model only)

1. Select and expand the **SIMATRIX** node.
2. Select and expand the **SIMATRIX Video Out** folder.
3. Select and expand the **Video Monitor** folder.
4. Select the **Video Out** node of the SIMATRIX.
5. Drag-and-drop the **Video Out** signal to the **monitor Video In** node.

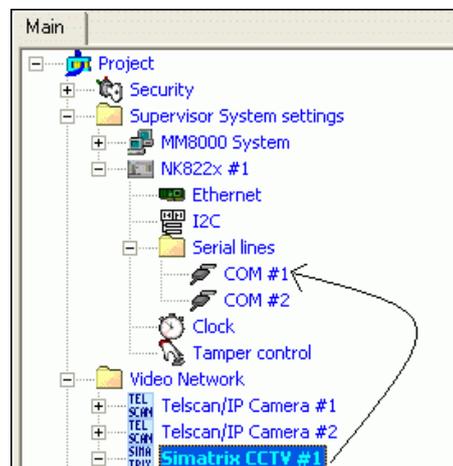


*Connecting Simatrix Video out to Monitor In*

## Linking the SIMATRIX to the Communication network

Link the SIMATRIX node to the CDI-Net or NK8000.

1. Expand the network folders until you reach the node that represents the network that is physically connected to the SIMATRIX (CDI-Net or NK8000).
2. Select the **SIMATRIX** node.
3. Drag-and-drop the **SIMATRIX** node to the **network port** node.



Linking SIMATRIX to NK8223

## 7.3 Configuration tips

- Use only one of the alarm modes (manual, automatic or stack alarm).
- SIMATRIX is not connected over the LAN. It connects via the serial line, typically to an NK822x unit.
- Normally, no special SIMATRIX EPROM needs to be ordered for new units. In case of installed matrices, check with CCTV support the required upgrading steps.
- In the SIMATRIX tool, you need to set the host protocol to CDDL/CDSF. The COM physical port settings should then be set to the following values:
  - 2400 baud
  - 8N1 (8 Data bits, No parity, 1 Stop bit)



**Note:** The SIMATRIX software provides two template data files, LMS\_1 (16) or LMS\_6 (64) depending on the SIMATRIX model, which already include the configuration options required for the CDDL/CDSF communication. Please refer to these examples.

### Limitations

- The SIMATRIX sends out an alarm input Quiet status upon a DMS8000 host restart (status request) and after switching the matrix OFF and then ON again. This results in all alarms being cleared in the DMS8000 host but not on the SIMATRIX (alarm may still be present).
- PTZ commands are not supported.

## 8 Configuring SISTORE and Vectis DVRs

The Siemens SISTORE and Vectis are families of Digital Video Recorders capable of acquiring the video signals from a number of input cameras, showing the images on a local monitor, and storing them in digital form on a local hard disk for later analysis. Also, direct alarm inputs and outputs can be managed.

The host connection is based on a TCP/IP connection on a LAN network.

The following DVR models are currently integrated in the DMS8000 Video Network:

- SISTORE AX
- SISTORE CX
- SISTORE MX
- SISTORE MX NVS
- SISTORE SX
- Vectis HX HVR

Although the models feature different characteristics, their configuration in Composer is quite similar, as discussed in this section.

### 8.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The software tools installed and operating properly with the DVR units  
E.g.: RAS software (AX/Vectis), RemoteView software (MX), SISTORE Config program (SX/CX), etc.
- The DVR model and line capacity
- The allocation of DVR units on Server/FEP stations and related video drivers
- The number of video inputs and outputs
- The DVR parameter settings, including:
  - IP address and TCP port
  - Username and password for the unit configuration
  - Username and password for live-setting administration
  - Username and password for playback-setting administration
- The camera and monitor connections
- The alarm input logic (NO: Normally Open or NC: Normally Closed)
- The alarm output pulse duration
- Plug-ins needed:
  - #353101

#### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the DVR in the project structure tree.
3. Add the DVR node to the folder.
4. Configure the DVR options.
5. Connect cameras and monitors to the DVR.
6. Add alarm points to the DVR.

7. Repeat steps above for all devices in the project.

## 8.2 Configuration procedure

The following are the configuration procedures for a SISTORE unit:

### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

### Adding the Video Driver

1. Select the **Video Network Manager** node.
2. If not already done, add the **SISTORE** Video Driver.

### Adding the folder for the SISTORE system

- Optionally, create a folder for the SISTORE unit.

### Adding the SISTORE node

1. Select the new folder.
2. In the left-hand bar, select the **Video folder** icon .
3. In the menu that appears, select one of the **SISTORE** icons  to add a:
  - **SISTORE AX** DVR
  - **SISTORE MX** applying SDK 1.4  
**Note:** Check for compatible MX firmware in MM8000 Release Notes (A6V10062509)
  - **SISTORE CX** (and SX) DVR
  - **SISTORE MX** applying SDK 2.51
  - **VECTIS HX** HVR



**Note:** You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.

### Configuring the SISTORE settings

1. Select new **SISTORE** node and click the **Node** tab.
2. Fill in the following fields:
  - **Type**, to be selected in the drop down list according to the actual number of video connections.
  - **IP address** of the SISTORE unit, which should match the value as set in the SISTORE device. You can find the address in the following ways:
    - For **AX / Vectis**, run the **Siemens RAS software**, and select **System > Setup** in the menu. In the window that displays, click the **Remote Sites** tab and select the **AX / Vectis unit** in the list (the unit has to be created first in such a list; here we assume that it has been already configured in the RAS program).
    - For **MX / MX NVS**, start the **SISTORE MX** program, and, in the program menu, select **Administration > Configuration > Network**.
    - For **SX / CX**, start the **SISTORE SX/CX** Config program, select the

SISTORE unit in the list and just read the IP address in the data window on the right.

- **TCP port** (do not change this value unless the default value is also changed in the CCTV system).
- **Username** (usually *IVM\_SERVER*) and **Password** for the SISTORE configuration (do not change this value unless you really know what you are doing).

**Note:** the **Set Default Value** button can be used to reset any change and go back to the factory setting.

3. Additionally, set the **Admin** (or **Administrator** for MX/MX-Pro) account **Password** and **TCP port** for:

- Displaying live video images (**Display**).
- Retrieving archived video images (**Playback**).

**Note:** Username and password must match the corresponding account configuration set in the SISTORE software in order to enable M8000 to access the video functions over the network. You can find the usernames (passwords will not be shown and must be asked to the CCTV manager) in the following ways:

→ **AX / Vectis:** the required user account (the same can be used for both **Display** and **Playback**) is the one used by the Siemens RAS software.

→ **MX / MX (NVS):** the required user account can be found in the **Administration > Configuration > User Management** of the SISTORE MX software.

→ **SX / CX:** the required user account can be found in the user **Administration Client** program of the SISTORE SX/CX.



#### WARNING

Failing to set the same usernames and passwords results in errors being reported by MM8000 when video is requested in event treatment and plant browser operations.

SISTORE AX / Vectis model

IP Address, read it in **System > Setup > Remote Sites** tab of RAS software

Admin user, find it in **System > Setup > Remote Sites** tab of RAS software

SISTORE Setting			
Type :	<input type="text" value="Sistore AX"/>		
IP address :	<input type="text" value="192 . 168 . 40 . 161"/>	<input type="button" value="Set Default Value"/>	
TCP/IP port :	<input type="text" value="17655"/>		
User name :	<input type="text" value="IVM_SERVER"/>		
Password :	<input type="text" value="IVM_SERVER"/>		
SISTORE Live Settings			
User :	<input type="text" value="Admin"/>	Password :	<input type="text" value="12345678"/>
		Port :	<input type="text" value="8016"/>
SISTORE Play Back Settings			
User :	<input type="text" value="Admin"/>	Password :	<input type="text" value="12345678"/>
		Port :	<input type="text" value="10019"/>

*SISTORE AX / Vectis settings*

SISTORE Setting

SISTORE MX/MX NVS model → Type :

SISTORE MX IP Address: read it in the Administration > Configuration > Network page of SISTORE MX software → IP address :

TCP/IP port :

User name :

Password :

---

SISTORE Live Settings

SISTORE user(s): find it in the Administration > Configuration > User Management page of the SISTORE MX software → User :  Password :  Port :

---

SISTORE Play Back Settings

Note: Check that user(s) is/are enabled to Display and Playback functions → User :  Password :  Port :

*SISTORE MX / MX NVS (SDK 1.4) settings*

SISTORE Setting

SISTORE SX/CX/MX models (SDK 2.5) → Type :

SISTORE IP address: read it in the SISTORE Config page → IP address :

DVR port :

Telemetry port :

User name :

Password :

---

SISTORE Live Settings

Admin user: find it in the user Administration Client software → User :  Password :  Port :

---

SISTORE Play Back Settings

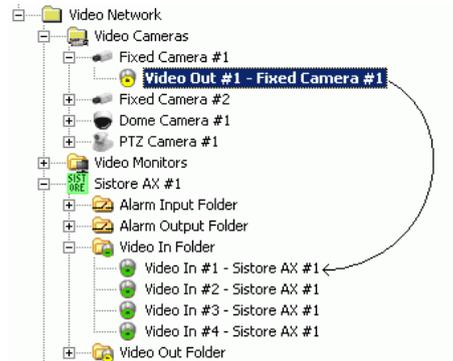
User :  Password :  Port :

*SISTORE SX / CX / MX (SDK 2.5) settings*

**Creating video inputs and connecting the cameras**

1. Select and expand the **SISTORE** node.
2. Select and expand the **Video In** folder.
3. Add the required **Video In** nodes.  
The input number can be customised.
4. Select and expand the **Video Cameras** folder.

5. Select the **Video Out** node of the camera.
6. Drag-and-drop the **Video Out** signal to the **SISTORE Video In** node.



*Connecting Camera Out to SISTORE Video In*

### Creating video outputs and connecting the monitors

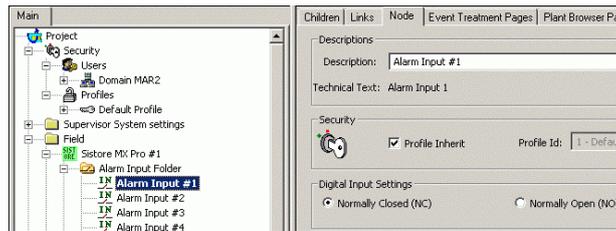
1. Select and expand the **SISTORE** node.
2. Select and expand the **Video Out** folder.
3. Add the required **Video Out** nodes: note that output number can be customised.
4. Select and expand the **Video Monitors** folder.
5. Select the **Video Out** node of the SISTORE.
6. Drag-and-drop the **Video Out** signal to the monitor **Video In** node.



*Connecting SISTORE Video Out to Monitor Video In*

### Configuring alarm inputs (NC/NO logic)

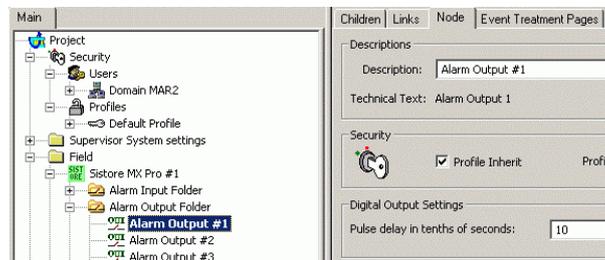
1. Select and expand the **SISTORE** node.
2. Select and expand the **Alarm Input Folder**.
3. Add the required **alarm inputs**: note that input number can be customised.
4. Select the **Alarm Input** node and its **Node** tab.
5. Set **NC** (default) or **NO** logic.



*SISTORE Alarm Input Settings*

### Configuring alarm outputs (Pulse duration)

1. Select and expand the **SISTORE** node.
2. Select and expand the **Alarm Output Folder**.
3. Add the required **alarm outputs**: note that output number can be customised.
4. Select the **Alarm Output** node and its **Node** tab.
5. Set the **Pulse delay in tenth of sec.**



*SISTORE Alarm Output Settings*

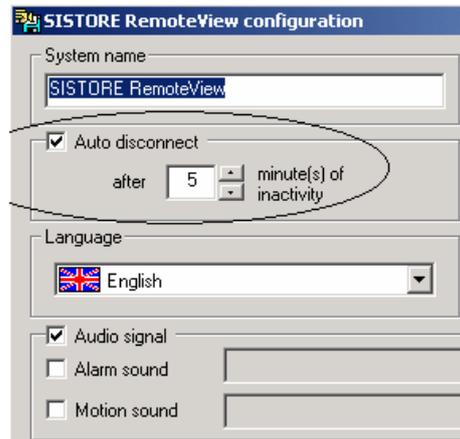
## 8.3 Configuration tips

### SISTORE AX / Vectis

- Check MM8000/MK8000 and SISTORE AX / Vectis Release Notes about known problems and specific compatibility issues.
- Be sure that Usernames and Passwords, IP address and Ports are set in Composer as in the Siemens RAS software (System > Setup > Remote Sites).
- Do not use the Siemens RAS application on the same PC as MM8000. After using the RAS viewer, the MM8000 may no longer display live video pictures. To fix this, you need to launch the Init\_CCTV\_ENV.exe in the MM8000 Utility folder.
- Do not connect from another PC with RAS Software at the same time as MM8000. When starting RAS, stop the MM8000 client temporarily and then start it again when RAS is no longer connected.
- Only one playback per station at the time is possible, even when the quad-view is used.

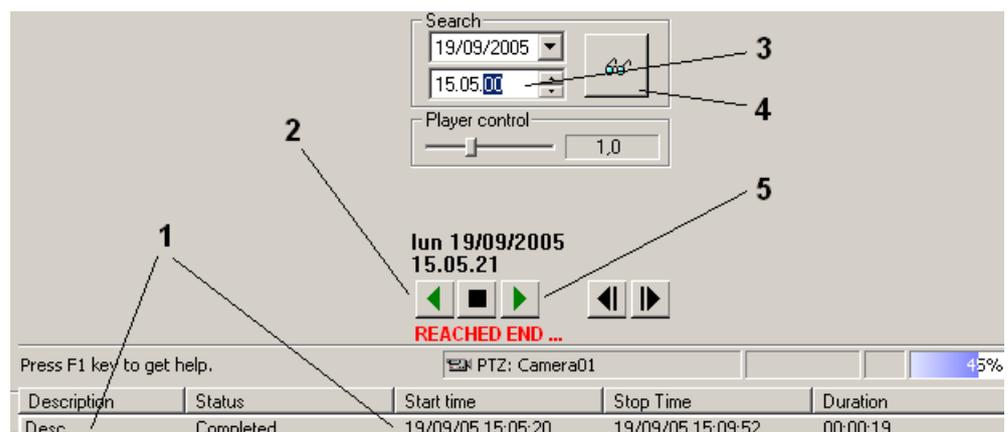
### SISTORE MX/MX NVS

- Check MM8000/MK8000 and SISTORE Release Notes about known problems and specific compatibility issues.
- On each client station with video functions, disable the Auto-disconnect option in the SISTORE MX RemoteView configuration. Default setting is auto-disconnect time enabled after 5 min. and causes the live video in MM8000 to freeze when the time expires.



*Auto-disconnect option in the SISTORE MX RemoteView configuration*

- Be sure that the IP address and Ports are set in Composer as in the SISTORE MX program (Network tab)
- Be sure that the Usernames and Passwords are set in Composer as in the SISTORE MX program (User Management tab).
- Be sure that the pre- and post-trigger are correctly set in the SISTORE MX program (Ring Recording tab). Note that:
  - The time settings should be greater or equal the ones used in the MM8000 Operating Procedures (see MM8000 ICC manual).
  - The Software Trigger flag should be checked for each camera involved in automatic event recording.
- In case of recorded video with a pre-trigger, note that the player does not directly show the pre-trigger time. For example, supposing you have recorded a video at time “t0” with pre-trigger set at “t0-pt”, the player initially starts at “t0” ignoring the preceding part. In order to show the images from the very beginning, you need to click the left (back) green arrow and reach “t0”, then manually enter a new starting time (earlier enough to get the previous images, up to “t0-pt”) in the search field. This procedure unlocks the pre-trigger sequence to be shown and searched.



*How to view pre-trigger images in the MX player*

1. Double click on the **recorded video** entry.
2. Click the **Back** button to reach the starting point (not including pre-trigger).
3. Enter the **new time**, as earlier as necessary.

4. Click the **Search** button.
  5. Click **Play** to show the images from the earlier starting point.
- PTZ commands are only available via separate control fields (no in-window control).
  - If you log-in locally on the SISTORE MX, the PTZ commands in MM8000 do not work any more.

### SISTORE SX/CX

- Check MM8000/MK8000 and SISTORE SX/CX Release Notes about known problems and specific compatibility issues.

### Special registry settings

Note the registry-based settings available in the file folder:

<installation folder>\Utilities\Reg\...

- EnableExternalRecording.reg
- DisableExternalRecording.reg

These commands include or exclude the externally-commanded video recording (e.g. 24h recording) in the related DVR status event. If disabled, only the video recordings commanded by MM8000 are reported as an event.



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For more information about the special registry scripts, refer to the *MM8000 ICC* manual (A6V10062413).

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## 9 Configuring Philips/Burle CCTV switchers

DMS8000 products support the LTC8000 family of Philips/Burle CCTV switchers. The LTC8000 family includes various switching units ranging from 8 to 4096 camera inputs and from 2 to 512 monitor outputs. Alarms inputs (8 to 1024) are also supported for triggering alarm-handling switching procedures.

### 9.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The number and type of LTC8x00 units
- The switcher parameter settings, which can be provided in two ways:
  - The LMSmodular databases DB\_PUL.DBF and DB\_SUB.DBF to import
  - Complete information about the CCTV configuration, including cameras, monitors, and alarm inputs
- Plug-ins needed:
  - #352301

#### Configuration overview

1. Add the folder(s) required to identify the location of the CCTV unit in the project structure tree.
2. Add the Philips/Burle CCTV switcher node to the folder.
3. Do one of the following:
  - Import the DMS7000 or LMS database, if available.
  - Define the detailed configuration of the switcher, adding cameras, monitors, and alarm inputs.
4. Link the switcher to the assigned NK8000 port.
5. Repeat previous steps for all the Philips/Burle CCTV switcher in the project.

### 9.2 Configuration procedure

The following are the configuration procedures for the Philips/Burle switcher unit:

#### Adding the folder for the Philips/Burle subsystems

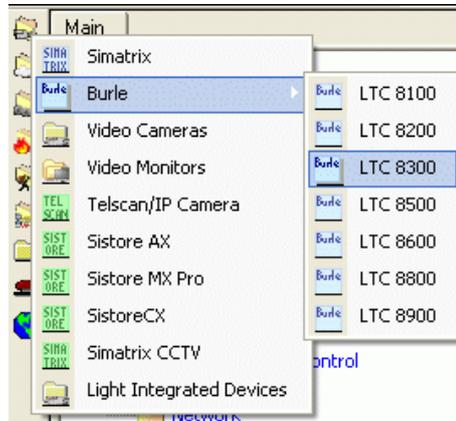
1. Open the Composer project.
2. Create a folder for the CCTV components.  
⇒ A new node appears in the Composer tree

#### Adding the Philips/Burle switcher node

1. Select the new folder.
  2. In the left-hand bar, select the **Video folder** icon .
  3. In the menu that appears, select the **Burle** icon  to add a switcher node.
    - You must select the exact model in the list.
- ⇒ A new node appears in the Composer tree.



**Note:** You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.



Selecting the Burle icon to add a CCTV switcher node

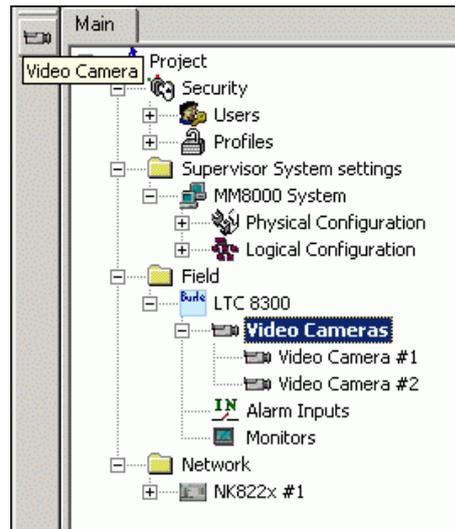
### Importing the LMSmodular configuration

1. Select the **Philips/Burle switcher** node.
2. Select **Tools > Import** in the Composer menu to start the import.
  - ⇒ After a confirmation request, the software presents a browsing window to search for the files to import.
3. Using standard Windows controls, do the following:
  - Look for **LMS files**, selecting the extension **DBF** in the browsing window.
  - Locate the **DB\_SUB.DBF** file.
  - Select the file and click **Open**.
  - When prompted, select the **language** of the DBF file.
  - ⇒ If more than one Philips/Burle unit is present in the metafile, the software presents the complete list.
4. Select the **unit** you want to import and click **OK**.
  - ⇒ In a few moments, the CCTV structure is imported, and the node is represented in the Composer tree.

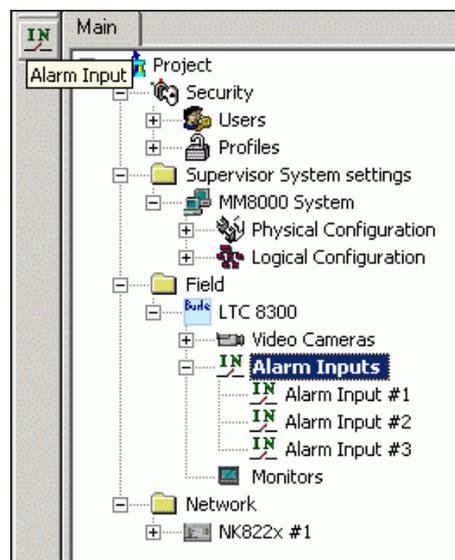
### Defining the switcher detailed configuration

If no configuration can be imported, you will need to configure the switcher by hand to reflect the actual hardware configuration. The following list shows where different items are located in the physical and logical trees in Composer.

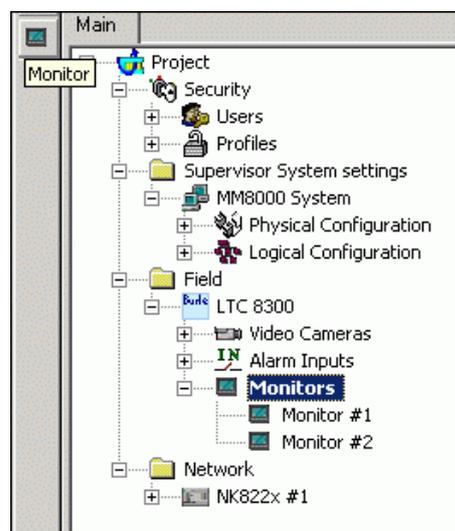
1. Select the **switcher** node.
2. Select the **Video Cameras** folder and add the **video camera** node(s).
3. Select the **Alarm Inputs** folder and add the **alarm input** node(s).
4. Select the **Monitors** folder and add the monitor node(s).



*Adding cameras to Philips/Burle switcher*

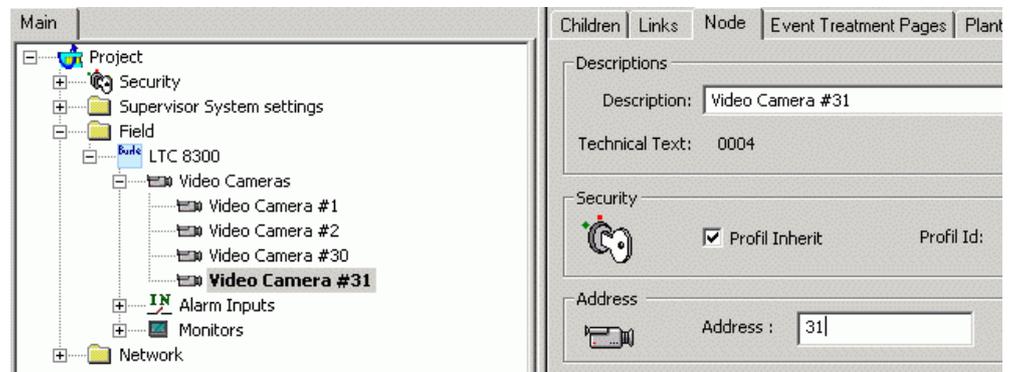


*Adding alarm inputs to Philips/Burle switcher*



*Adding monitors to Philips/Burle switcher*

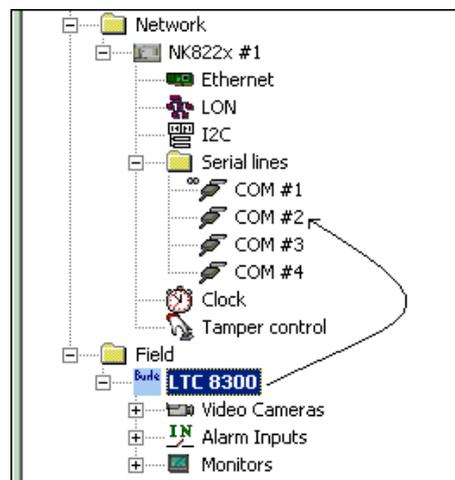
The new nodes will be named and numbered sequentially starting from 1. Should the actual CCTV configuration be different, you can change the default address in the **Node** tab. We recommend changing the node name as well so that it will still correspond to the address.



*Changing address for cameras (alarm inputs, monitors)*

### Linking the switcher to the communication network (NK8000 COM port)

1. Expand the network folders until you reach the node that represents the NK82xx COM port that is physically connected to the switcher serial line.
2. Select the top node of the switcher subsystem.
3. Drag-and-drop the node to the network port devoted to Burle/Philips unit.



*Linking Philips/Burle switcher to NK822x port*

## 10 Configuring Bosch video systems

The following Bosch video devices can be integrated in MM8000:

- Bosch Divar 700 series: Digital Video Recorders (DVR).
- VIP X1600: encoder unit for analog cameras (analog to IP adapter with external recording) supporting multiple encoding modules.
- VIP X1 XF: single encoder module for analog cameras (analog to IP adapter with I/O).
- VIP XD: single decoder module for video monitors (IP to composite/VGA with I/O).
- IP Cameras (with I/O).
- VRM (Video Recording Manager).

For more information about Bosch video systems, please refer to the Bosch documentation ([www.boschsecurity.com](http://www.boschsecurity.com)).



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**Note:** The Bosch software MPEG\_ActiveX\_5.11.0024.x86.exe, available free of charge on the DMS8000 CD, must be installed on the MM8000 server, client and FEP stations. Note that this new software must replace any Bosch SDK installed with previous versions. Therefore, in case of update, we recommend to uninstall the previous Bosch SDK and install the new one (refer to the *MM8000/MK8000 Release Notes*).

---

### 10.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The number and type of Bosch video units
- IP addresses as well as Usernames and Passwords to access the video units
- If used, the protocol applied for motorised camera control (PTZ, dome)
- The required connections to cameras and monitors
- The required alarm inputs and outputs
- Plug-ins needed:
  - #359801
  - #359901

#### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the video unit in the project structure tree.
3. Add the Bosch video unit node to the folder.
4. Configure the parameters of the unit.
5. Connect cameras and monitors.
6. Repeat steps 2 to 5 above for all the SISTORE devices in the project.

## 10.2 Configuration procedure

The following are the configuration procedures for the Bosch video units:

### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

### Adding the Video Driver

1. Select the **Video Network Manager** node.
2. If not already done, add the Bosch Video Driver.

### Adding the folder for the Bosch system

- Optionally, create a folder for the Bosch unit(s).

### Adding the Bosch video unit node

1. Select the new folder.
2. In the left-hand bar, select the **Video folder** icon .
3. In the menu that appears, select the **Bosch** icon  and then one of the sub-menu options to add one of the following:
  - **Bosch Digital Video Recorder (DVR)**
  - **Bosch Decoder module** (digital to analog adapter for monitors)
  - **Bosch Encoder module** (analog to digital adapter for cameras)
  - **Bosch IP Camera**
  - **Bosch Video Recording Manager (VRM)**, a software component that can handle a large set of video storage units.



**Note:** You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.

Depending on the type of units, select one of the following configuration procedures, then jump to the *Configuring camera and monitor links* section.

### Configuring the Recorder settings

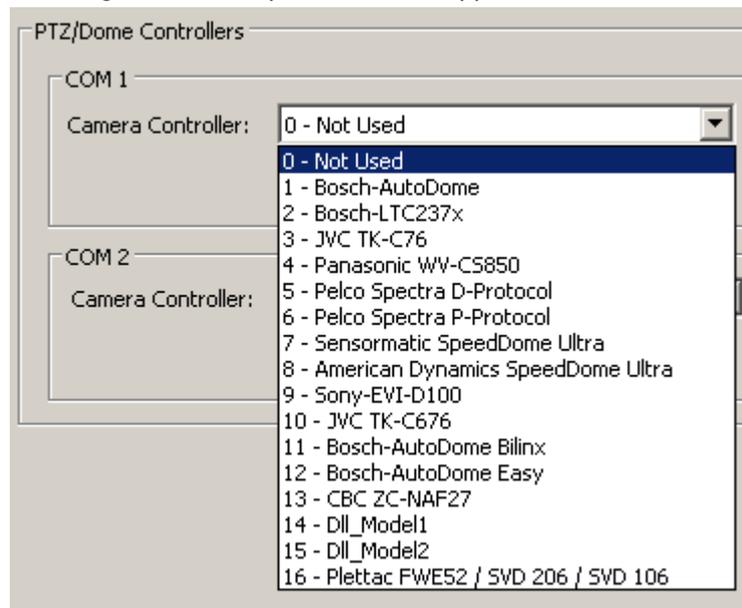
1. Select new **Recorder** node and click the **Node** tab.
2. Fill in the following fields:
  - **IP address** of the unit.
  - **Username** and **Password** to access the unit.
  - **Enable Recording** check box, to enable video recording.
3. Select the **Alarm Input** folder and add as many inputs as required.
4. Select the **Alarm Output** folder and add as many outputs as required.
5. Select the **Video In** folder and add as many video inputs as required.
6. Select the **Video Out** folder and add as many video outputs as required.

## Configuring the Decoder settings

1. Select new **Decoder** node and click the **Node** tab.
2. Fill in the following fields:
  - **IP address** of the unit.
  - **Username** and **Password** to access the unit.
  - **Enable Recording** check box, to enable video recording.
3. Select the **Alarm Input** folder and add as many inputs as required.
4. Select the **Alarm Output** folder and add as many outputs as required.
5. Select the **Video Out** folder and add as many video outputs as required.

## Configuring the ENCODER settings

1. Select new ENCODER node and click the **Node** tab.
2. Fill in the following fields:
  - **IP address** of the unit.
  - **Username** and **Password** to access the unit.
  - **Enable Recording** check box, to enable video recording.
  - **COM1** and **COM2 Camera Controller** protocol for PTZ/Dome control. The following PTZ control protocols are supported:



3. Select the **Alarm Input** folder and add as many inputs as required.
4. Select the **Alarm Output** folder and add as many outputs as required.
5. Select the **Video In** folder and add as many video inputs as required.

## Configuring the IP Camera settings

1. Select new **IP Camera** node and click the **Node** tab.
2. Fill in the following fields:
  - **IP address** of the unit.
  - **Username** and **Password** to access the unit.
  - **Enable Recording** check box, to enable video recording.
3. Select the **Alarm Input** folder and add as many inputs as required.
4. Select the **Alarm Output** folder and add as many outputs as required.

## Configuring the VRM settings

1. Select new **VRM** node and click the **Node** tab.
2. Fill in the following fields:
  - **IP address** of the unit.
  - **Username** and **Password** to access the unit.

## Configuring camera and monitor links

1. Connect camera video outputs to Bosch video inputs as required.
2. Connect Bosch video outputs to monitor video inputs as required.

## Linking the Bosch video unit to the communication network

Connect recorders, decoders, encoders, IP cameras, and VRMs to the Bosch Video Driver as required.

1. Select and expand the **MM8000 Physical configuration** to show the Bosch Video Driver node.
2. Select **Bosch video unit** node (e.g. a Bosch Recorder).
3. Drag-and-drop the video unit node to the driver node.




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**Note:** The VRM node represents a software component that can handle a large number of video cameras. In large configurations (exact limits are discussed in the *MM8000/MK8000 Datasheets* and *Release Notes*), the cameras may need to be split on multiple DMS8000 Server/FEP stations.

In such cases, while cameras are normally linked to the corresponding Server/FEP stations, the unique VRM node must be linked more than once, specifically on the driver of all Server/FEP stations involved with video recording. In addition, in the link node, enable the

**VRM Diagnostics** check box on one FEP only (the first one by default).

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# 11 Configuring Light-integration Devices (External Viewer)

Third party units, e.g. IP cameras or other devices can be integrated in MM8000 systems for providing basic viewing functions. In fact, such devices can be supported with a Data Viewer in the MM8000 Page Browser. No event or history treatment is foreseen.

The viewer can be either locally installed software (EXE file) or WEB based (HTML URL).

## 11.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

### Items needed for configuration

- The number of devices and the corresponding type of viewer (Application or Web-based)
- In case of application viewer:
  - The application (to be installed on each client station) and the corresponding folder path.
- In case of web-based viewer:
  - The URL address (www....)
- Plug-ins needed:
  - #358001

### Configuration overview

1. Add the folder(s) required to identify the location of the 3<sup>rd</sup>-party device in the project structure tree.
2. Add the device node to the folder.
3. Configure the viewer.
4. Repeat the steps above for all the devices in the project.

## 11.2 Configuration procedure

The following are the configuration procedures for a 3<sup>rd</sup>-party device:

### Adding the folder for the Light-integration Devices

1. Open the Composer project.
2. Select or add the destination folder in the tree.
3. Select the **Video folder** icon .
4. In the menu that appears, select **Light Integrated Device** 
  - ⇒ A new folder node appears in the Composer tree.
  - Note:** To allocate appropriate positions for multiple devices, you can insert multiple folder nodes in various locations of the system structure tree.
5. Select the select **Light Integrated Device** node and then the **Node** tab.
6. In the **Light Integrated System Customization** section, you can customize the default description texts for the devices:

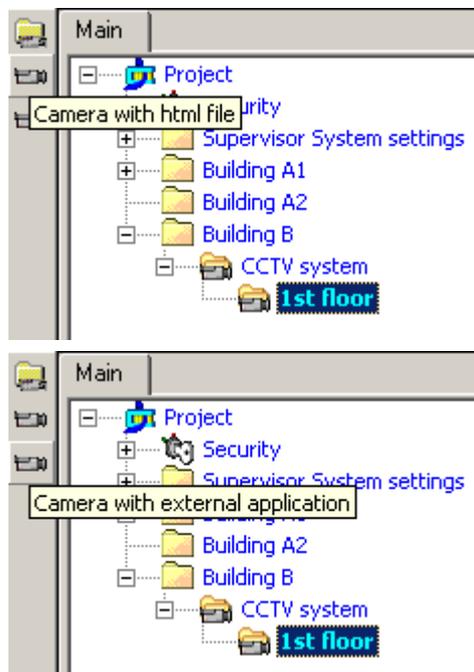
- The **Application Window Title**, the text string that will appear in the caption bar of the viewer.
- The **Context Menu Command**, the text string describing the activation of the viewer in the right-click menu of the device points.

## Adding the device

1. Select the **Light Integrated Devices** node.
2. If required, add more folders .
3. Add a new device, selecting either the unit with HTML-based viewer or the one with installed application viewer.

⇒ A new node appears in the Composer tree.

**Note:** The icon  is the same for both types; move the cursor of the mouse on the icons and use the tooltip text to identify the one you need.



4. Select the new node, press **F2** (or click on it again), and then rename the device description appropriately.

## Configuring the viewer

1. Select the new device node and then the associated **Node** tab.
2. In case HTML-based viewer, enter the **file path** of the local **HTML page**  
**Note:** HTTP protocol is not supported.  
 OR  
 in case of installed application, enter the **Application path** and, optionally, the related launch parameters.
3. In either case, you can modify the default texts defined for the entire folder:  
 Uncheck the **Customization Inherit** check box and enter the customized text.



**Important:** The viewer application should be installed on all the MM8000 client stations using the same installation folder.

The screenshot displays the configuration interface for a web-based viewer. On the left, a tree view shows the project structure, with 'Camera with html viewer' selected under 'Light Integrated Devices #1'. The right pane shows the configuration details for this device, including:

- Descriptions:** Description: Camera with html viewer; Technical Text: Camera with html file
- Security:** Profile Inherit (checked)
- Configuration File (Full Path Name):** file:///C:/Integrated\_Device/htmlPage.htm
- Light Integrated System Customization:** Customizations Inherit (checked); Application Window Title: Integrated Application; Context Menu Command: Show Application

*Example of web-based viewer configuration*

The screenshot displays the configuration interface for an application viewer. On the left, a tree view shows the project structure, with 'Camera with application viewer' selected under 'Light Integrated Devices #1'. The right pane shows the configuration details for this device, including:

- Descriptions:** Description: Camera with application viewer; Technical Text: Camera with external application
- Security:** Profile Inherit (checked)
- External Application Configuration:** External Application Path: C:\Program Files\XYZvideo\C; Parameters: 1
- Light Integrated System Customization:** Customizations Inherit (unchecked); Application Window Title: XYZ Camera #1; Context Menu Command: Show Live Video

*Example of application viewer configuration*

## 12 Configuring a Generic DVR (External Viewer & OPC Diagnostics)

Third party DVR units can be integrated in MM8000 for providing video viewing functions as well as event handling and status diagnostics. Unlike the light-integration described in the section Configuring Light-integration Devices (External Viewer) [→ 46], this solution can:

- Start a viewer application or HTML page with configurable parameters.
- Acquire diagnostic information and issue control commands via OPC interface (the third party DVR unit should provide an OPC DA server).

As a prerequisite to this configuration phase, note that an appropriate definition of the DVR must be defined in advance with a specific configuration as described in the *Generic DVR Integration Guide* (A6V10331273).

### Predefined ONVIF viewers

Two ONVIF viewers are preconfigured and available for an easier integration of ONVIF-compliant camera viewers. No support for diagnostics is provided by default. The viewers are predefined for the following uses:

- **ONVIF-compliant Axis cameras**, for example:
  - Axis P5532 PTZ IP Cam
  - Axis Q1755 IP Cam
- **ONVIF-compliant generic cameras**, for example:
  - Samsung SNB-3000P
  - AutoDome Junior HD IVA
  - Dinion NBN-921-P IVA
  - FlexiDome NDC 455 P



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**Note:** Viewers must be installed separately and the appropriate references configured as described in the *Generic DVR Integration Guide* (A6V10331273). Without such a configuration, the OPVIF camera viewer will not operate.

---

### 12.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

#### Items needed for configuration

- The number of devices and the corresponding type of viewer (Application or Web-based)
- Access information is required for all IP-based units: IP address and username/password.  
More parameters may be required depending on the specific DVR.
- Plug-ins needed:
  - #360001
  - #360101

### Configuration overview

1. If necessary, add the Video Network Manager.
2. Add the folder(s) required to identify the location of the DVR unit in the project structure tree.
3. Add the DVR unit node to the folder.
4. Configure the parameters of the unit as required.
5. Connect cameras and monitors.
6. If used, configure the OPC connectivity.
7. Repeat steps 2 to 6 above for all the DVR units in the project.

## 12.2 Configuration procedure

The following are the configuration procedures for the generic DVR units:

### Adding the Video Network Manager

1. Open the Composer project.
2. If not already done, add the Video Network Manager.

### Adding the Video Driver

1. Select the **Video Network Manager** node.
2. If not already done, add the **Generic DVR** Video Driver.

### Adding the folder for the video system

- Optionally, create a folder for the video unit.

### Adding the DVR node(s)

1. Select the new folder.
2. In the left-hand bar, select the **Video folder** icon .
3. In the menu that appears, select the **DVR** icon  and then one of the submenu options to add the DVR. The following DVR options are predefined and available by default:
  - **ONVIF Axis** (ONVIF viewer for Axis cameras)
  - **ONVIF Common** (general purpose ONVIF viewer)



**Note:** You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.

---

## Configuring the DVR settings

1. Select the **DVR** node and click the **Node** tab.
2. Select the **Custom Settings** tab and configure the parameters as required, typically the IP address and access parameters.  
Predefined ONVIF viewers require the configuration of the following parameters:
  - **IP address**
  - **Invocation parameters**
  - **Username**
  - **Password**
3. In addition, depending on the DVR customized profile, a number of additional may be available:
  - Select the **Alarm Input** folder and add as many inputs as required.
  - Select the **Alarm Output** folder and add as many outputs as required.
  - Select the **Video In** folder and add as many video inputs as required.
  - Select the **Video Out** folder and add as many video outputs as required.

## Configuring camera and monitor links

1. Connect camera video outputs to DVR video inputs as required.
2. Connect DVR video outputs to monitor video inputs as required.

## 12.2.1 Configuring the OPC connectivity

The configuration procedure to connect to an OPC DA server to establish a bidirectional communication based on a certain number of data items is described in the *OPC Connectivity Guide (A6V10065253)*.

As a general guideline, here are the main procedure steps:

1. Add the **OPC Driver** to the Physical Configuration of the Station.
2. Link the **DVR** node to the **OPC Driver**.
3. From the driver, browse and connect to the **OPC Server**.
4. Browse the server's address space, and select the OPC items.
5. Link the **OPC items** to the corresponding **DVR objects**.
6. In the linked items, define the OPC Class that defines states and commands.  
**Note:** as far as video functions are concerned, the list of predefined OPC classes includes:
  - Video input: motion detection quiet/ active
  - Video input and control command: video recording on/off
  - Video input: camera signal normal/lost
  - Alarm input: alarm input quiet/ active
  - Alarm output and control command: alarm output quiet/ active

### Technical notes

- The DVR objects are defined in the Generic DVR model according to the specifications of the *Generic DVR Integration guide (A6V10331273)*.
- In the Generic DVR data point configuration, you cannot apply the XML import procedure for generic OPC subsystems as documented in the *OPC Connectivity Guide (A6V10065253)*. The Generic DVR point structure can be pre-defined in the model discussed in the *Generic DVR Integration Guide (doc. no.A6V10331273)*.
- Referring to the OPC server configuration, the OPC item list for the Generic DVR can be imported from a CVS file using the standard Composer functions described in the *OPC Connectivity Guide (A6V10065253)*.
- Video and alarm OPC classes can be customized and other classes can be created in the OPC server Advanced Settings using the OPC XML editor. Refer to the *OPC Connectivity Guide (A6V10065253)*.



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