

Built-in Components

- HTTP interface with basic information about the component
- Control of video, audio and data connections
- Management of device resources and parameters
- Arbitration based on multiple user rights levels and priorities

- HTTP/HTTPS interface with basic information about the component
- Control of PTZ camera functions
- Management of device resources and parameters
- Arbitration based on multiple user rights levels and priorities

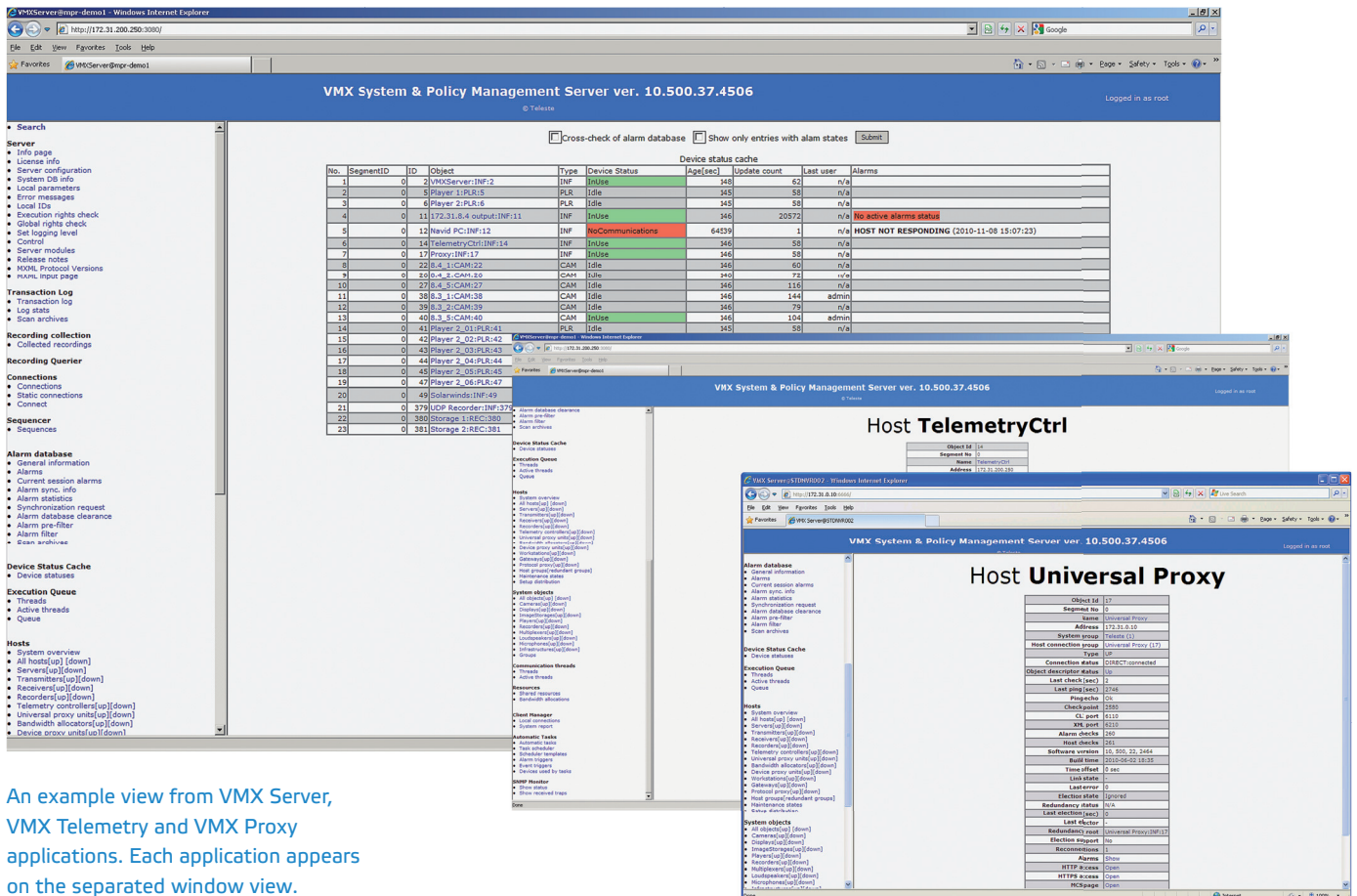
Proxy

VMX Proxy is an optional component of Teleste video system. The VMX Proxy provides control interface for devices without native XML support.

The VMX Proxy acts as protocol translator converting communication between the VMX system and SNMP device such as IP camera, encoder or other from XML to SNMP. Proxy functionality is by default built-in into server module, but it is also available in own hardware for stand-alone use.

Telemetry

VMX Telemetry is an optional component of Teleste video system. The VMX Telemetry provides an interface for PTZ camera control. Telemetry functionality is by default built-in into server module, but it is also available in own hardware for stand-alone use.



An example view from VMX Server, VMX Telemetry and VMX Proxy applications. Each application appears on the separated window view.

Add-on (Optional) Features

Serial Client

Serial Client add-on feature allows incorporating HW PTZ joysticks into the server machine.

OPC Client

OPC Client add-on feature allows the VMX Server to communicate with integrated systems over OPC protocol.

Bandwidth Manager

VMX Bandwidth Manager is an add-on software feature for Teleste video system nodes. It provides tailored network monitoring and management. This innovative application is designed to enable maximum video streaming capacity in heterogeneous networks. The module provides monitoring of video bandwidth allocated in the system (database of network allocation), real-time monitoring of network devices, data flow and network topology.

VMX Bandwidth Manager interact with system server to resolve network resource conflicts for connection establishment. It allows selection of stream parameters available in current network state. The application generates of bandwidth allocation reports and enable reports grouping for different categories.

VMX Bandwidth Manager can be configured for any PIM multicast routing capable network supporting both static or dynamic environments. In dynamic environments the VMX system is communicating with the network devices and performing a real-time monitoring of network topology. Bandwidth Manager supports route tracking and it is able to quickly react on link failures using SNMP and ICMP protocols.

- Resolves network resource conflicts
- Stream priorities by users
- Overbooking protections by users
- Customization of stream parameters based on available bandwidth
- Administrative and maintenance level reports of network usage and bandwidth allocation
- Reports grouping by users, connection and devices

An example view from Serial Client, OPC Client and Bandwidth Manager applications. Each application appears on the separated window view.

The image shows three overlapping 'Setup' dialog boxes. The top-left window is for a 'Serial client' with System ID 174, Name 'Joystick controller', and IP address 10.64.11.20. The middle window is for an 'OPC client' with System ID 118, Name 'OPC client', and IP address 172.17.66.13. The bottom-right window is for a 'Bandwidth manager unit' with System ID 2144, Name 'BGTN-BWM', and IP address 10.252.16.11. It includes a 'List of communication links' table and 'Bandwidth manager control flags' section.

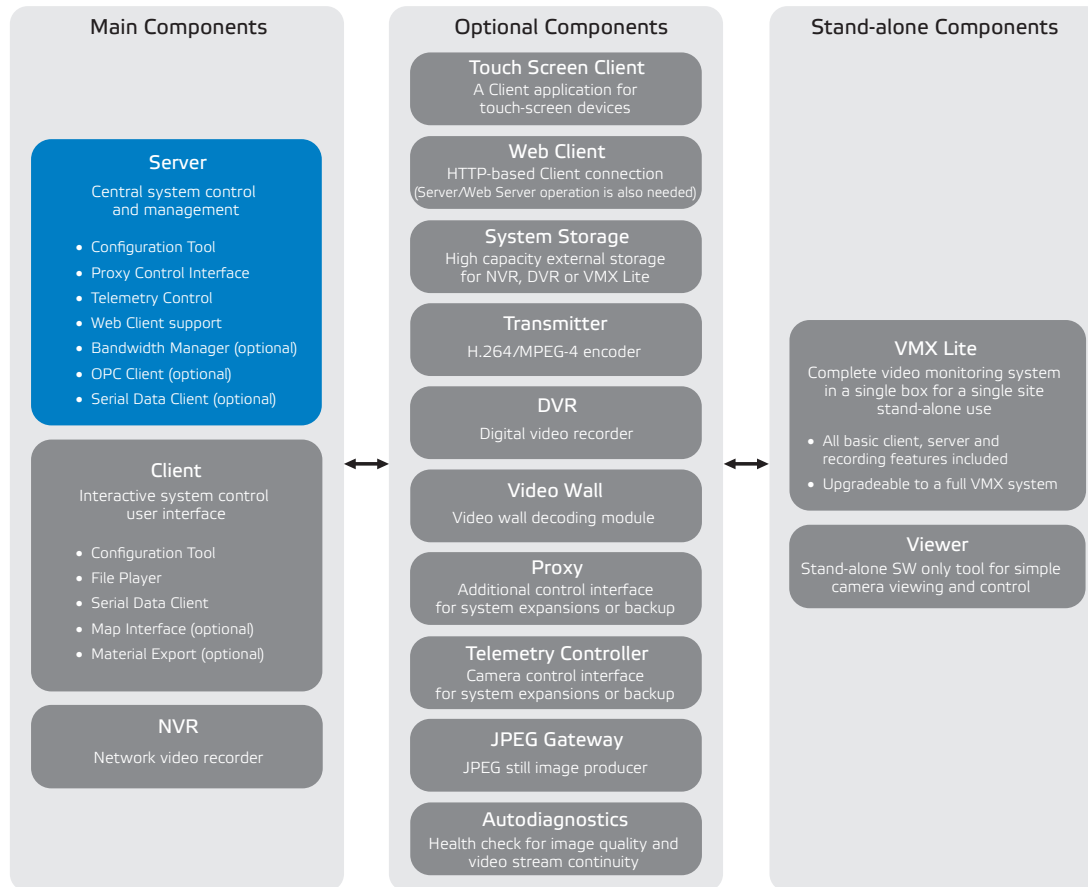
	Use	Serial port	Terminal server IP add	Terminal s
1.	<input checked="" type="checkbox"/>		10.64.11.30	7001
2.	<input checked="" type="checkbox"/>	0	10.64.11.33	7001

	Use	Serial port	Terminal server IP add	Terminal s
1.	<input checked="" type="checkbox"/>		10.64.11.30	7001
2.	<input checked="" type="checkbox"/>	0	10.64.11.33	7001

Bandwidth manager control flags:

- Overload monitor enabled
- Neighbour monitor enabled
- Disconnect on overload
- Multicast monitor enabled
- Trap listener enabled
- Dump XML to log

VMX system components



Features

- Arbitration based on multiple user rights levels and priorities as well as character of device (public/private)
- Management of system resources – Management of video recordings for whole system or specified stations
- System health monitoring, presentation and distribution of alarms and status notifications
- Alarm history database – Alarm database for historical data access
- System activity log
- Detailed status information about selected system components
- Control of video, audio and data connections
- Display and camera control – PTZ, auxiliary functions (wiper, washer), overlays

Technical specifications (Typical values unless otherwise stated)

Network		Max tested performance on Teleste HW ***	
Transport	TCP/IP, HTTP/HTTPS	Number of fixed cameras	500
Software		Number of PTZ cameras	100
Operating system	MS windows XP embedded, XP professional, Windows Server 2008	Number of Clients	100
Application	VMX Server main application VMX Proxy, VMX Telemetry built-in applications VMX Bandwidth Manager, VMX OPC Client, VMX Serial Client add-on applications *	General	
Hardware		Supply voltage	100...240 V AC / 50...60 Hz (± 3 Hz)
Processor	Intel I5	Power consumption	200 W
Motherboard	ATX	Operating temperature	+5... +40 °C (+41...+104 °F)
Memory	2048 MB	Relative humidity	< 90% (no condensing)
Boot device *	HDD, SSD	Housing	Industrial PC 19" wide rack mount (2U, 3U or 5U high) and tower
Monitor output	DVI, VGA, HDMI	Weight **	20...25 kg (44...55 lbs) R2 15...22 kg (33...48.5 lbs) R3 20...30 kg (44...66 lbs) R5, T5
Ethernet	2 x 1000Base-Tx	Dimensions (H x W x D)	2U x 19" x 450 mm (2U x 19" x 17.7") R2 3U x 19" x 445 mm (3U x 19" x 17.5") R3 5U x 19" x 550 mm (5U x 19" x 21.6") R5 425 x 220 x 552 mm (8.3 x 17.7" x 21.7") T5
Power supply	Standard, redundant *	Safety	EN60950
HW watchdog	Built-in R2, R3, R5	Notes	
		* = optional	
		** = depends on configuration options	
		*** = tested for suite 4.0	