VIEWSPAN NEXUS®
VIDEO DISPLAY CONTROL SOFTWARE

VIEWSPAN NEXUS is a software platform for management, processing & display of video and graphical data on video walls

VIEWSPAN NEXUS®
is a high performance software platform for video wall displays

VIEWSPAN NEXUS® software is a highly optimised display processing system for enterprise-level delivery of decoded video streams, graphical information and data feeds for control rooms.

| Secure distributed video controller software system

| Eliminates dependency on a single central server

| Enhanced system resilience for large video walls

| Highly optimised video-decoding for maximum performance

| Display IP cameras, AV, web pages, signage and applications

| Integrated browser-based management of multiple systems

| Stretch and position items anywhere on the video wall canvas

| Supports AV capture, VMS integration, VNC, web & VIEWCAST

veracity

VIEWSPAN NEXUS®
software optimises the simultaneous decoding of many video streams

Distributed system, not dependent on a central server.

VIEWSPAN NEXUS supports many different video wall layouts

Overview

VIEWSPAN NEXUS® is available as a fully featured software-only platform for the control and management of video and graphics displayed on everything from video walls to single screens, including distributed multi-monitor applications, operator workstations and spot monitors.

Available on a per full-HD-screen licence basis, NEXUS provides operators, shift supervisors and administrators with a simple to use, intuitive web browser management interface that allows users to connect to and control network-addressable display hardware devices with either mouse or touch interactivity.

Applications

VIEWSPAN NEXUS video and graphics display applications include:

| Command and Control Rooms
| CCTV, Traffic and Security Monitoring
| SOC (Security Operations Centres)
| NOC (Network Operations Centres)
| Industrial Process Control Centres
| Board Rooms, Meeting Rooms
  and Auditoriums
| Digital Signage for Retail
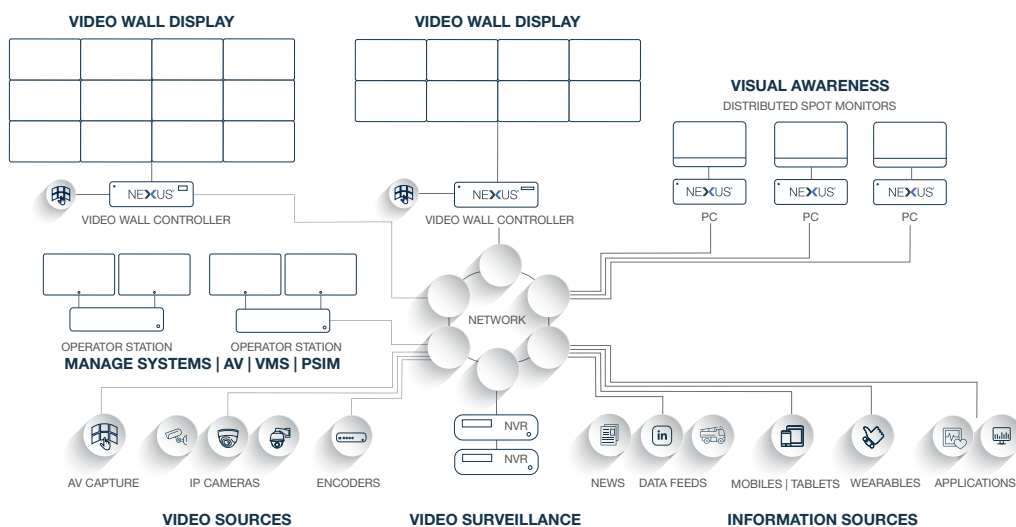
Distributed System

VIEWSPAN NEXUS architecture is a client-server system, where all video wall controllers are servers and therefore no centralised server is required. This eliminates a potential single point of failure and reduces costs, as the centralised servers are expensive and require an additional failover server.

Each VIEWSPAN NEXUS device (server) works in sync with all other NEXUS devices on the same network, with the software able to operate on multiple systems, processors and graphics hardware, e.g. Intel, AMD, Nvidia and others, including legacy PCs and third-party video wall controllers.

This capability enables the user to operate a mix of existing PCs with NEXUS software and dedicated VIEWSPAN server appliances.

VIEWSPAN NEXUS® APPLICATION DIAGRAM

VIDEO WALL DISPLAY

VIDEO WALL DISPLAY

VISUAL AWARENESS
DISTRIBUTED SPOT MONITORS

NEXUS
VIDEO WALL CONTROLLER

NEXUS
VIDEO WALL CONTROLLER

NEXUS
PC

NEXUS
PC

NEXUS
PC

OPERATOR STATION

OPERATOR STATION

MANAGE SYSTEMS | AV | VMS | PSIM

NETWORK

NVR

NVR

AV CAPTURE

IP CAMERAS

ENCODERS

NEWS

DATA FEEDS

MOBILES | TABLETS

WEARABLES

APPLICATIONS

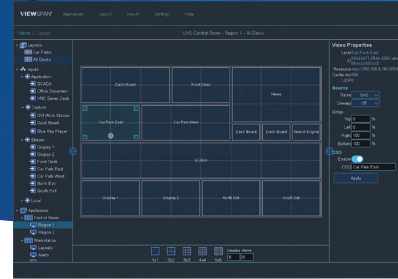**VIDEO SOURCES**

VIDEO SURVEILLANCE

INFORMATION SOURCES

The diagram illustrates the power and flexibility of the VIEWSPAN NEXUS® software, which requires no central server. NEXUS is shown here, running on separate 12-output and 8-output video wall controller hardware devices, with three other instances on standard PCs, each driving a distributed Spot Monitor display.

VIEWSPAN NEXUS handles both direct AV capture (of Audio-Visual outputs) and IP network sources. IP network sources may include recorded video playback, encoded AV, live IP cameras, news and data feeds, web pages, smart devices or IP-encoded graphics outputs from applications running on other computer systems, including VIEWCAST screen capture streams.

veracity

Fisheye lens dewarping can be performed on the GPU for optimum performance

VIEWSPAN NE**X**US supports AV capture and encoding systems, web page displays and Veracity's VIEWCAST screen capture streaming utility.

Multiple display monitor layouts can be defined, saved and selected under operator control or triggered by alarms.

System Management

Configuration, control and management of the system is done on a web browser via the Application Web Portal (AWP), which means that the client can be any PC, Mac, tablet or smartphone.

All NEXUS appliances are managed through a single web interface for ease of navigation and control.

Optimised Performance

VIEWSPAN NEXUS is built upon an accelerated multimedia SDK, which utilises all available hardware acceleration from the following vendors: Intel - MFX Interface, AMD - AMF Interface and NVIDIA - NVDEC\NVENC Interfaces.

VIEWSPAN NEXUS provides system-level, high performance memory and bandwidth gains over traditional methods. It will automatically switch the additional load to CPU codecs when hardware acceleration methods are saturated or indeed unsupported. Therefore the maximum possible performance can be extracted from each server appliance.

Sources

Video walls and auxiliary screens can flexibly display a very wide range of sources through the VIEWSPAN NEXUS system. These sources include IP cameras, recorded video, web pages, direct AV capture, encoded AV, computer applications running on

separate systems, scrolling text, date and time etc. For a complete list see Software Features on the back page.

VIEWSPAN Integration

All dedicated VIEWSPAN video wall controller appliances include the same NEXUS software.

It supports multiple third-party video management system integration, giving the user a unified software platform for viewing, control and collaboration. VIEWSPAN systems are also fully supported by Veracity's PSIM software solutions for centralised management of multiple security systems including existing legacy installations.

SOFTWARE | INTEGRATIONS

VIEWSPAN NE**X**US®

EXTERNAL CONTROLS - API	BENEFIT / EXPLANATORY DETAIL
VIEWSPAN NEXUS API HTTP Alarm Trigger Interface Extensive SDK APIs - HTTP(S), TCP, C# and C++ Alarm Script Management	The API allows third-party applications to control the VIEWSPAN system Alarms may be communicated to NEXUS over HTTP for simple integration Multiple options are available for direct integration to VIEWSPAN NEXUS Simple to complex scripts supported for display output actions on alarm triggers
VMS INTEGRATIONS	The following VMS systems are directly supported within VIEWSPAN NEXUS | Milestone Systems (XProtect) | Network Optix (Nx Witness) | Axis (Axis Camera Station) | Hanwha Vision (Wisenet Wave) | Genetec (Security Center) | Digital Watchdog (DW Spectrum) | Digifort (Digifort) | Wavestore (WaveView)
PSIM INTEGRATIONS	The following PSIM systems are directly supported within VIEWSPAN NEXUS | VIEWSCAPE Core (Veracity Solutions) | VIEWSCAPE (Veracity Systems)

SOFTWARE FEATURES | BENEFITS

VIEWSPAN NEXUS®

USER CONTROLS	BENEFIT / EXPLANATORY DETAIL
Web Browser Interface	Control from any platform (Windows, Mac, iOS, Android, Linux)
Touch Control Interface	Supports tablet and smartphone interfaces
Drag-and-Drop-Interface	Simple, fast and intuitive source display control or configuration
Unlimited Simultaneous Operator Connections	Ideal for control rooms and system operations centres
Multi-Region Management from a Single Controller	Each video wall display controller can handle multiple display regions
Multiple Controller Management from Client Interface	A single client can manage multiple display controllers as one integrated system
Region, Grid & Desktop Alignment for Item(s) or Layout(s)	Sources and layouts can be automatically aligned to grids and regions
Snap-to-Grid Source Re-Sizing	Sources can automatically re-size and snap-to-grid
Offline Layout Creation	Layouts can be configured and defined offline and called up during live operation
Layout Scheduler	Layouts can be displayed according to a pre-defined time schedule
Source Sequencing (Playlist/Carousel)	Individual or multiple sources can be sequenced within grid slots
Quick Source Maximise - Region or Canvas	Expansion of a source to fill a Region or full Canvas temporarily
Remote KVM (Keyboard/Video/Mouse)	Connect to NEXUS server appliance for access within the browser interface

SOURCE CONTROL OPTIONS	
On-Screen Text Display	Enables labelling of sources and text overlay on video and graphics
Source Cropping	Video and graphics sources may be cropped to display only part of the source
Fisheye Video Lens Correction	Allows real-time de-warping of fisheye lens cameras, including digital PTZ
Aspect Ratio Control	Image aspect ratios may be set to original ratio or may be scaled to fit
Coloured Borders (Static or Flashing)	Highlighted borders on any display slot or grid item to indicate status (e.g. alarm)
Audio Enable/Disable	Audio from capture sources may be switched on or off
Ability to Rename a Source	All sources may be renamed with more user-friendly or informative labels
Folder System for Sources	Sources may be grouped in folders (akin to camera-grouping in VMS systems)

CONTENT SOURCES	
Images	Static photos or graphic images
Videos	All types of video sources (all formats supported)
IP Video Network Streams	All IP video formats are supported with GPU acceleration and CPU rollover
ONVIF Profile S	Profile S video streams supported with auto-discovery
Video and Audio Capture Sources	Via encoders, PCIe capture cards or USB capture devices (for HDMI, DP etc.)
Microsoft Office Applications:	Any MS Office application window may be displayed as a channel source
Third-party Applications	Any third-party application supporting DirectX 9, 10, 11, 12 and OpenGL
VNC Application View	Built-in VNC integration allows display of any VNC application or desktop source
VIEWCAST Screen Encoding Software	Operator desktops or applications can be mirrored onto the video wall
Integrated Web Page Viewer	Support direct display of web pages
Digital Clock Display	Time & date display of UTC or local time zone in static or horizontally scrolling text

ADMIN & CONFIGURATION	
Auto-Appliance Discovery	All VIEWSPAN NEXUS appliances on network are discovered & listed automatically
Multi-Appliance Network Sync	All NEXUS devices automatically sync layouts and input sources with each other
User Rights Management (URM)	Proprietary URM database for secure user management and access
Remote Web Portal Login	Browser-based login and portal for configuration and management
Force-Output Display Mode	Enables correct output to correct display on reboot or monitor disconnection

VSPAN-NEX-KEY1	VIEWSPAN NEXUS 1	NEXUS Software. Full HD output server licence key for 1 channel
VSPAN-NEX-KEY2	VIEWSPAN NEXUS 2	NEXUS Software. Full HD output server licence key for 2 channels
VSPAN-NEX-KEY3	VIEWSPAN NEXUS 3	NEXUS Software. Full HD output server licence key for 3 channels
VSPAN-NEX-KEY4	VIEWSPAN NEXUS 4	NEXUS Software. Full HD output server licence key for 4 channels
VSPAN-NEX-KEY5	VIEWSPAN NEXUS 5	NEXUS Software. Full HD output server licence key for 5 channels
VSPAN-NEX-KEY6	VIEWSPAN NEXUS 6	NEXUS Software. Full HD output server licence key for 6 channels
VSPAN-NEX-KEY7	VIEWSPAN NEXUS 7	NEXUS Software. Full HD output server licence key for 7 channels
VSPAN-NEX-KEY8	VIEWSPAN NEXUS 8	NEXUS Software. Full HD output server licence key for 8 channels
VSPAN-NEX-KEY9+	VIEWSPAN NEXUS 9	NEXUS Software. Full HD output server licence key for 9 or more channels

veracity

Veracity HQ
Prestwick International Aerospace Park
4 Dow Road
Prestwick
UK
KA9 2TU
Tel +44 (0) 1292 264967
www.veracityglobal.com
sales@veracityglobal.com

*See www.veracityglobal.com website
for country and region specific contacts.*