

DESKTOP RTSP STREAMER
VIEWCAST®



Application | VIEWCAST® enables real-time streaming of operator workstation displays in any environment

VIEWCAST® is a professional RTSP video streaming utility for Windows desktop displays

VIEWCAST® captures workstation displays to generate RTSP video streams for NVR recording, video wall display or remote viewing on client PCs.

- | Network video stream generation of workstation displays
- | Accelerated display encoding for smooth motion video
- | Low latency AVC/H.264 compression
- | Low system resource utilization (Intel and NVIDIA acceleration)
- | Secure RTSP video streams (digest authentication)
- | Software system tray solution for Microsoft Windows®
- | Text overlay option for logging, tracking and event management



Secure, high quality desktop screen streaming for recording and display



VIEWCAST® enables streaming and recording of PC workstation displays for security, teaching, monitoring and audit trail applications.

VIEWCAST to remote displays or auxiliary monitors with VIEWSPAN Solo

Video Streamer

VIEWCAST® is a software utility for generating high quality video streams from Windows PC desktop displays and selected application windows in order to display them on video walls or auxiliary monitors, and also for recording on an NVR.

The video streams generated are encoded and transported over RTSP as secure H.264 or MJPEG video streams and can be recorded securely by most video management system recorders.

Installation and Use

VIEWCAST is a utility which can be installed on any compatible Microsoft Windows platform and is controlled from

the system tray. The VIEWCAST software installation allows users the option to specify a username and password for both authentication and protection of the generated video stream.

Application

Designed for enterprise-level or professional applications, VIEWCAST allows operator client workstation displays (or specific application windows) to be streamed over a network onto other remote client PC displays, onto video wall displays or recorded onto NVR systems. It uses standard RTSP video stream protocols, compatible with almost any video management or NVR system.

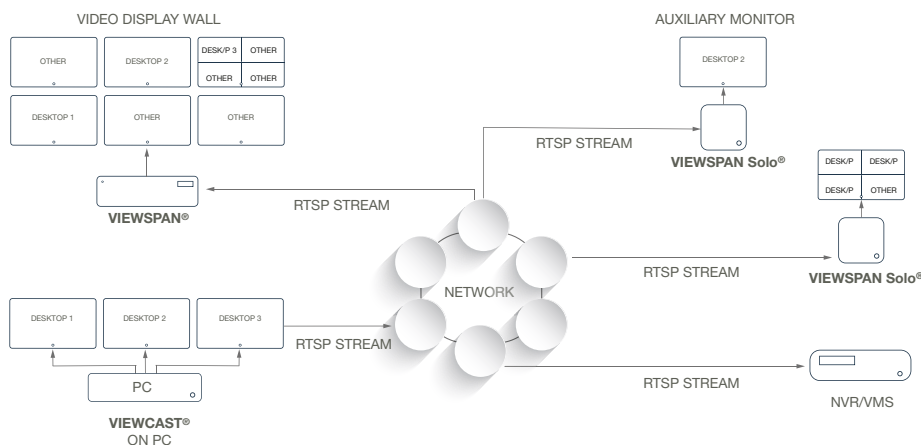
Authentication

The VIEWCAST® software for the Microsoft Windows platform allows users to optionally specify username and password for both digest authentication and local stream configuration protection. Once installed, operators or authenticated administrators have access to various options including text overlay and encoding parameters through an intuitive system tray application.

Optimised Software

Whenever possible, VIEWCAST encoding of desktop displays and applications is performed by accelerated GPU methods. Intel or NVIDIA graphics provide low background resource use

VIEWCAST® APPLICATION DIAGRAM



VIEWCAST can stream multiple desktop displays or application windows. In this example of a three-monitor workstation, VIEWCAST produces

three desktop video streams which can be recorded by an NVR, displayed on a VIEWSPAN video wall or on local or remote auxiliary monitors.



Accelerated GPU methods can be used for encoding

Accelerated GPU methods are used for the encoding of desktop and application window video streams wherever possible, minimising the impact on PC system resources.

on client workstations allowing CPU resources to remain available for additional processing tasks. A built-in 'Test URL' feature allows local users to test streaming functionality without installing third party software.

Technical Operation

The operation and configuration of the VIEWCAST utility may be password-protected. Once configured, the application window or desktop screen will be accessible as an RTSP URL on the network. The URL can be used to specify the stream for recording in an NVR, for display through a video display controller or on another PC using a suitable

decoding client such as VLC. Application windows can exist on or off the desktop in any z-order (layer order). Note: application windows cannot be captured when minimised or accelerated, but desktop displays can always be captured. Multiple application windows may be streamed independently. Configured application window streams are automatically detected and re-streamed as they become available after any system reboot.

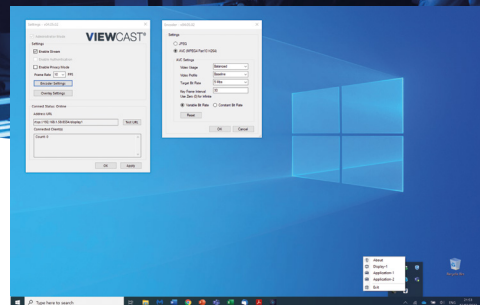
VIEWCAST Configuration

The VIEWCAST video stream(s) can be enabled or disabled through the configuration dialogue box. Settings

include authentication, privacy mode and adjustment of frame rate output. An optional text overlay can be added to the output. The URL of the video is displayed for other systems to access, and can also be tested locally. The number of connected clients is also displayed in the configuration.

Encoder Settings

VIEWCAST video encoder settings allow selection of either JPEG or H.264 compression type. JPEG compression settings are fixed, although the frame rate may be changed. For H.264, the user can set the profile target, bit rate and key frame interval, in addition to variable or constant bit rate.



The screenshot shows the settings dialogue for one desktop display, including the test button, with the encoder settings detail alongside.



TECHNICAL SPECIFICATION

VIEWCAST®

SYSTEM REQUIREMENTS

Operating System MS Windows 10 (64bit) or higher

PERFORMANCE

Processors Optimised for Intel or NVIDIA GPU hardware acceleration
(Software encoding supported when hardware acceleration not available)
Minimum impact on system performance

STREAMED VIDEO

Format RTSP (RFC 2326)
Resolution Maximum 1920 x 1200 (downscaled when source is larger)
Compression AVC (MPEG4-Part10 H.264) or MJPEG, selectable
Frame rates 1, 5, 10, 15, 25 or 30 FPS
AVC Usage Quality, Balanced, Speed
AVC Profile Baseline, Main, Extended, High
AVC Target Bit Rate 100Kbps; 500Kbps; 1Mbps; 5Mbps; 10Mbps
AVC Bit Rate Control Variable, Constant
AVC Key Frame (GOP) User Defined

SECURITY

RTSP Authentication Digest authentication, enabled or off
Admin login Username & Password

PRODUCT CODE

VW-CAST-KEY VIEWCAST® Software licence key

MINI GLOSSARY

RTSP Real-Time Streaming Protocol (A video / media streaming protocol)
GPU Graphic Processor Unit (A CPU dedicated to graphics processing)
AVC Advanced Video Codec (A video compression encoder / decoder)
URL Universal Resource Locator (Web address)
GOP Group of Pictures (The number of frames between key frames)
NVR Network Video Recorder (A device or software for recording IP video streams)



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

© Veracity UK Ltd 2023. All rights reserved. DV1.3EN
Under no circumstances should this document be reproduced,
distributed or changed, partially or wholly, without written,
formal authorisation from Veracity UK Ltd.
VIEWCAST® is a registered trademark of Veracity UK Ltd.

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