

# Video wall Controllers for Command & Control Center

Anytime Anywhere IN full CONTROL



cartronicgroup

DISTRIBUIDOR  
OFICIAL

# About us

- ❑ Founded in 2013, Israel
- ❑ Privately owned company
- ❑ Extensive experience in video processing & Networking
- ❑ Focus on software development using selected off-the-shelf Hardware and assembly outsourcing
- ❑ Operations in Israel, US, India
- ❑ Sales globally to VARs and A/V Integrators
- ❑ OEMs – Hyundai, WeyTec, PrimeView
- ❑ 350+ projects globally



# Customers & Partners



חברת החשמל

DEAD SEA WORKS LTD



הראל



ebay



NOKIA

אפיקון בקרה ואוטומציה  
מערכות בקרה תעשייתיות ומבנה

עיריית אשדוד

NICE



חברת המים הלאומית



PHILIPS



hispasat

AXIS BANK



CCS

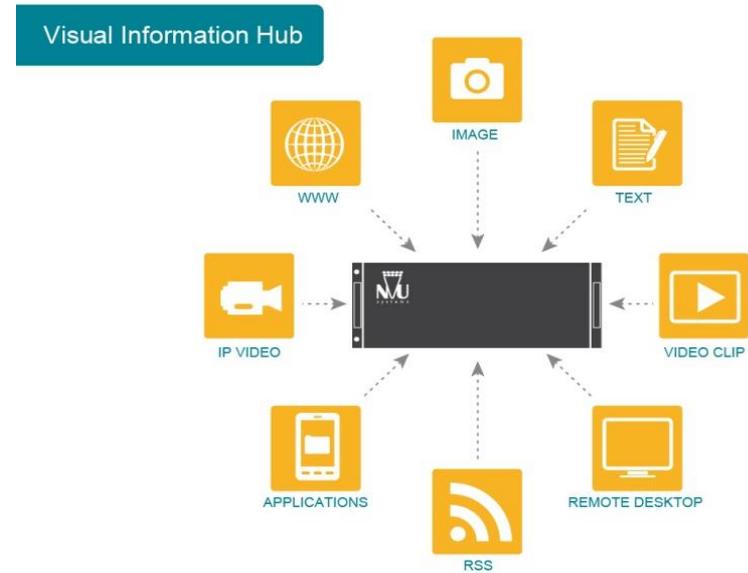


# Some Projects



# What Is Wall-Controller used for?

Collect multi-systems visual information, Process & Display on large surface



## End Customers and Applications:

- ❑ Traffic, Transportation and Surveillance monitoring
- ❑ Power / Water / Gas (SCADA) utilities command and control rooms
- ❑ Broadcast and Telecommunications facilities
- ❑ Healthcare and military applications
- ❑ Corporate Meeting room, Auditorium, Signage



# Visual Content is key for Decisions

TV channels



Maps



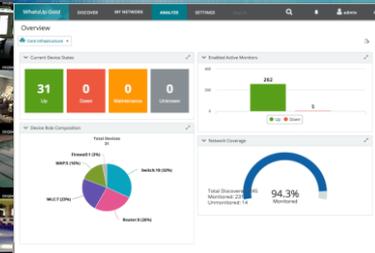
Safe City



Time/Date/Text

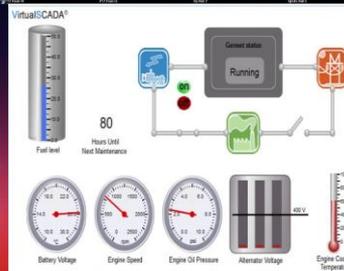


Traffic



Surveillance

IP Camera Feeds



Monitoring

Broadcast

Signage

CAD Data

Collaboration



## Full Range

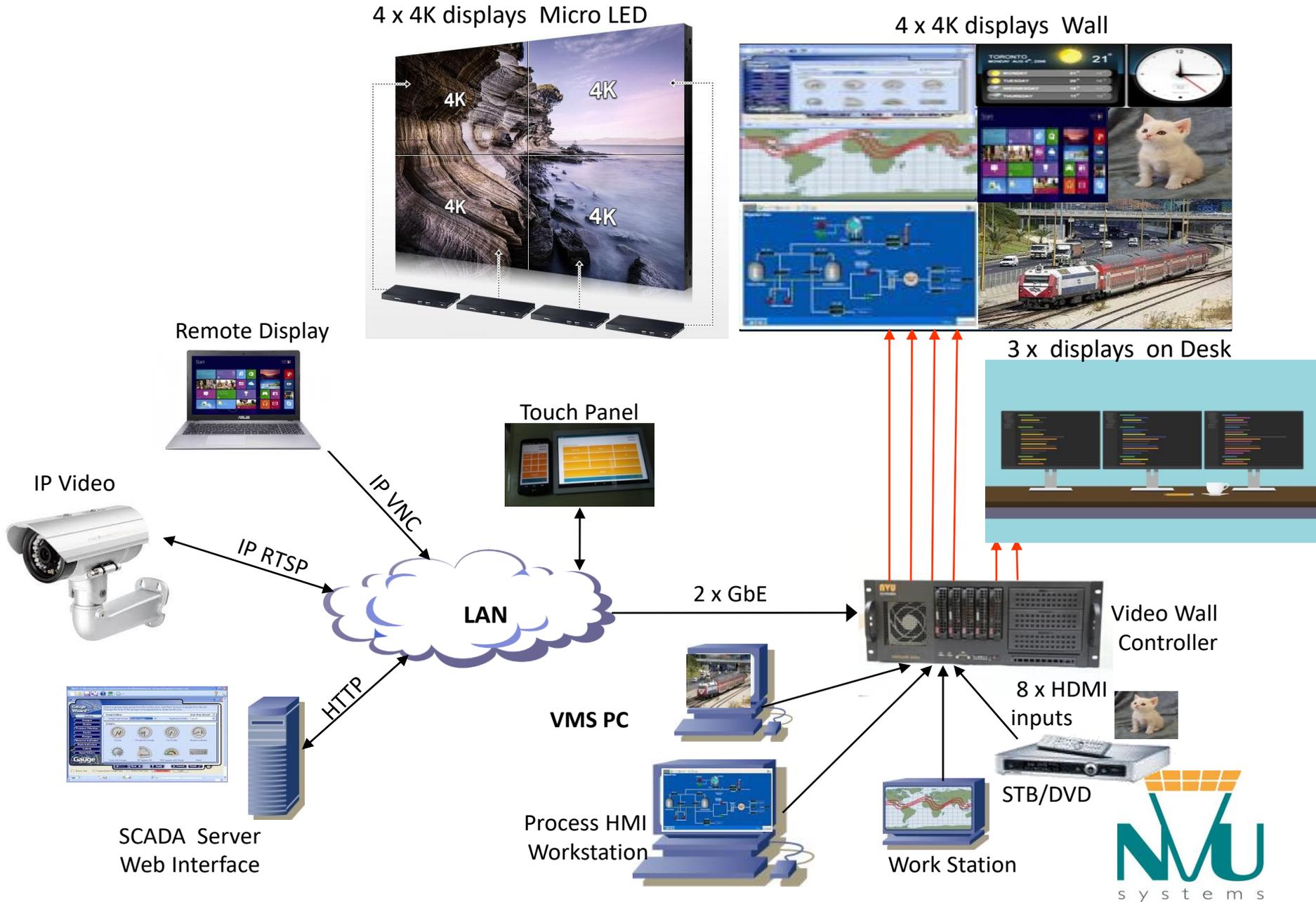
- Collact – Mini Computer (NUC) 2 FHD in/4 UHD Out
- Concert – Desktop 8 in/ 6 Out
- Arena (2 models) – 12 in / 12 Out
- Vista – 64 in / 48 out

## Unified SW

- Windows® Win10 Pro, 64bit OS
- WallBrix 64bit Windows application
- Remote Agent (Win Desktop)
- IP video
- Remote control (LAN) - Telnet, XML API



# System Architecture



# Vista2020

## High-End High-availability Controller

- ❑ Target Markets
  - ❑ Large Command & Control Centers
  - ❑ Broadcast studios
  - ❑ Multiple walls
- ❑ Sample Configuration
  - ❑ 24 x FHD inputs
  - ❑ 16 x H.264/5 IP video
  - ❑ 12 x UHD (4K) outputs



# Arena4806

## Mid Range (Most used) controller

- ❑ Target Markets
  - ❑ Medium Command & Control Centers
  - ❑ Safe City, Highway, Process monitoring
- ❑ Sample Configuration
  - ❑ 8 x FHD inputs
  - ❑ 8 x H.264/5 IP video
  - ❑ 12 x FHD Displays



### Note:

Arena4809 is the same controller, with dual redundant PS and dual SSD @RAID1, (for the same configuration)

# Concert41

## Desktop controller

- ❑ Target Markets
  - ❑ Meeting rooms, Lobbies, Videoconference
  - ❑ Signage mixed with live broadcast, Sport Bars

- ❑ Sample Configuration

- ❑ 4 x FHD inputs
- ❑ 8 x H.264/5 IP video
- ❑ 6 x FHD outputs



# Colact22

## Mini Controller

### ❑ Target Markets

- ❑ Meeting rooms, Lobbies, Videoconference, User Work-stations
- ❑ Signage mixed with live broadcast, Sport Bars

### ❑ Configuration

- ❑ 2 x FHD direct inputs
- ❑ 4-10 x H.264/5 IP video
- ❑ 2-4 x UHD outputs (HD daisy-chained)



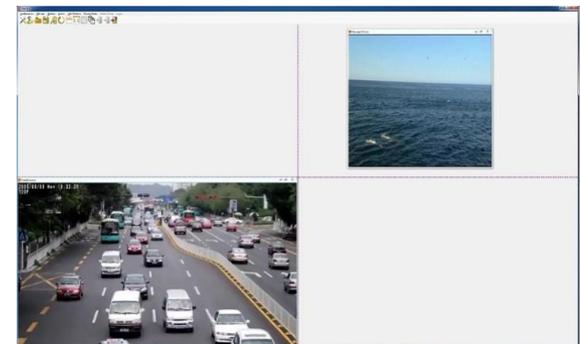
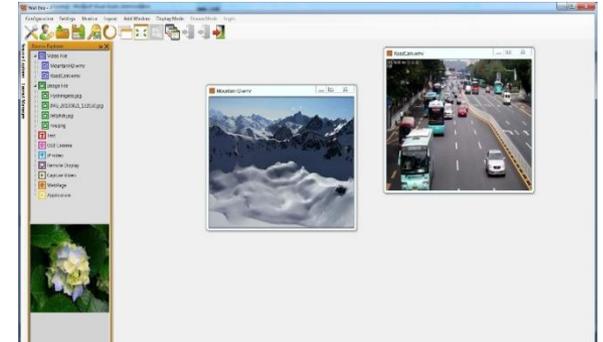
# Platform Highlights

## Flexible and highly integrated solution for Custom made

- ❑ Industrial grade PC platform with PS/Fan redundancy
- ❑ Intel Xeon CPU, 16GB DDR4, dual 240GB RAID-1 SSD
- ❑ Windows® 10 pro, 64bit OS
- ❑ Captured Sources – any video/audio format
- ❑ GPU based multi display – 6 x FHD / UHD
- ❑ Dual (redundant/load balanced) 1/10 Gb LAN inputs for Video over IP
  - ❑ Remote PC Screen/Keyboard sharing Over IP (VNC)
  - ❑ IP video streams (RTSP/RTP)
  - ❑ Web interface (HTTP)
- ❑ IP Streaming out (optional)
- ❑ Multiple logical independent walls (up to 5)
- ❑ Local or Remote control
- ❑ Open API for 3rd party application integration

# Operation

- ❑ Any source can be displayed anywhere and scaled to any size up to full screen/wall
- ❑ Drag & drop, Snap to grid Layout construction tool-set
- ❑ Any sources Layout can be previewed, saved and recalled (single key/mouse click)
- ❑ The user can pre-define unlimited number of layouts
- ❑ Each source can be viewed with/without frame
- ❑ Operator can add special Status bar + text to a specific input
- ❑ Set background, Logo image etc.
- ❑ Local & remote (networked) operation
- ❑ Scheduled Layout loop



# Custom-made per order

## Customer Requirements

- No. of Displays 2K/4K, No. & Type of inputs
- IP video – No. of Sources /Formats, Resolution/Bit-rate, Web sites (browser), Remote Desktops (VNC/RDP)
- High Availability, Redundancy level
- Operation – Remote control, Features (layout, drag & drop)

## Cost/Performance Optimization

- Windows10 Pro, 64bit OS
- GPUs and Input cards – No. of Slots
- CPUs performance/Memory size

## Integration Services

- Additional Features
- Crestron / Extron integration
- Customer Domain Policy
- Customer Setup and Support



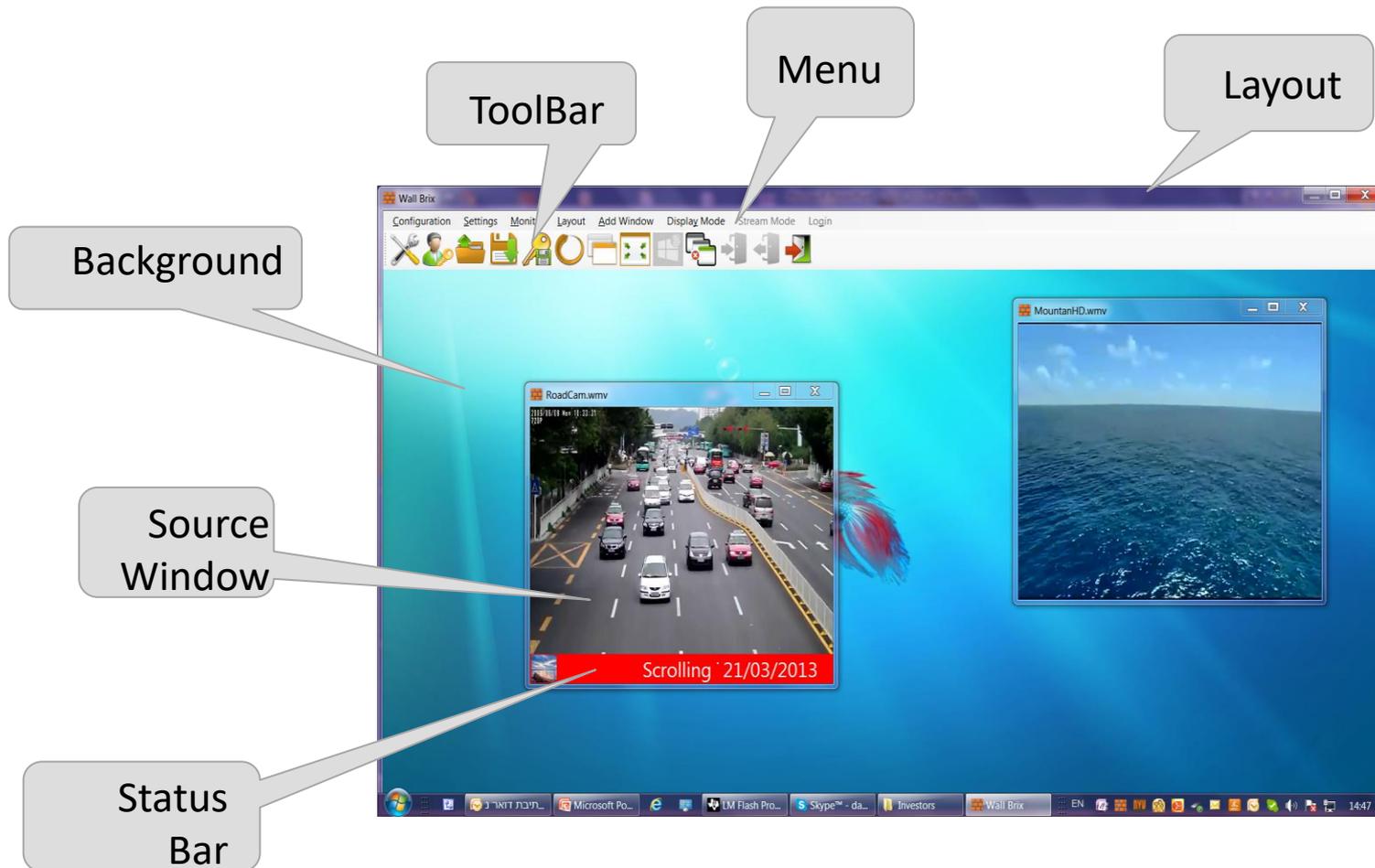
# WallBrix Features

- Windows 10 Pro OS
- Complete I/O and display control
- User friendly dual control option (tools bar & context menu)
- Drag, drop, resizing, and set properties of windows
- Crop, Carousal, Color filters, Rotate
- Multi - User remote clients with Offline/Online operation modes
- Privileges attributes per user, sources, and views
- LDAP/Local user authentication option
- Can run Windows and Linux (emulation) applications
- Telnet/Web Services for 3rd party interface
- Events report log file
- Presets view and time based 24h loop views
- Web and Applications windows
- Video over IP – Remote desktop, Streaming
- Grid utility for snapping windows in layout design
- Collaboration –Video wall streaming to/from remote client



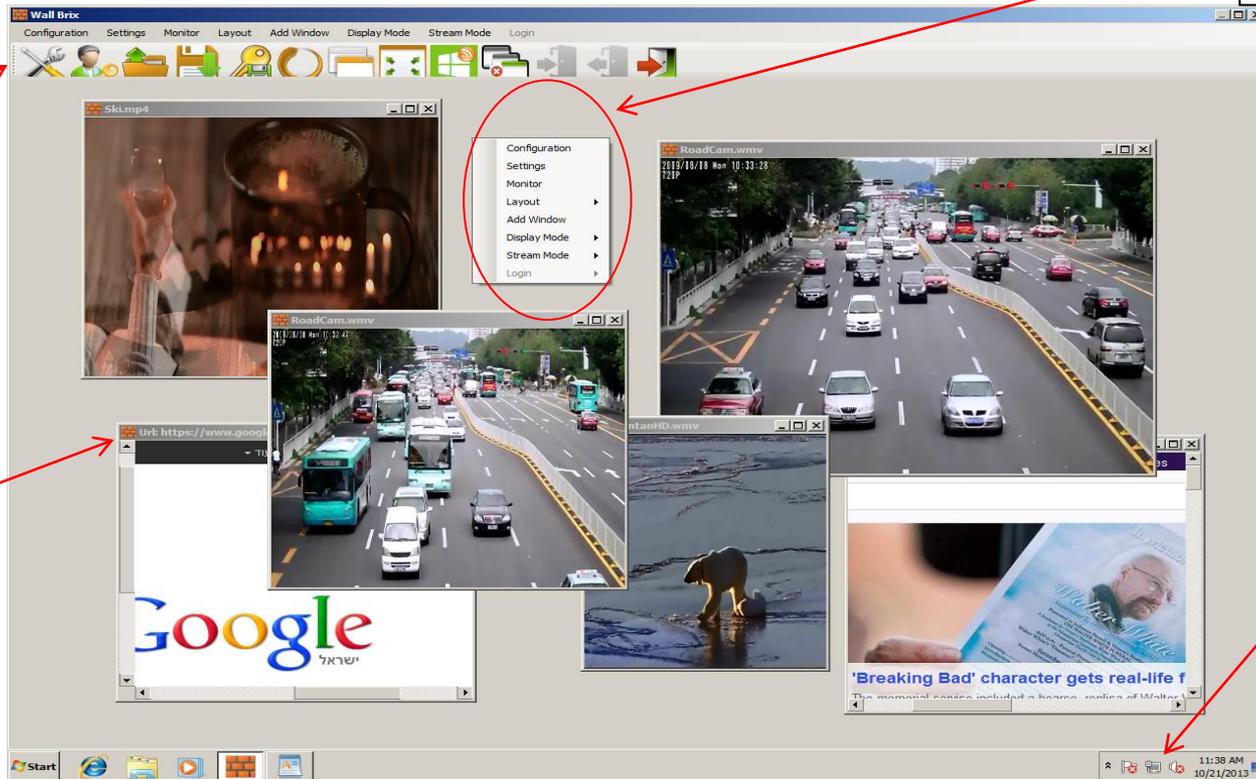
# Launching WallBrix

Secured Login to application (user privileges , Active-Directory)  
Startup with Default Layout  
Grid Utility  
Create, save, recall Layouts



# Controlling the Wall

- ✓ Local Mouse Keyboard (Setup & Configuration)
  - Toolbar, Popup Menu, Status bar, App menu
  - Shortcuts for Presets
- ✓ Remote Client (Operations via IP Network)
  - Presets, Drag & drop, Source Switching



Tool Bar

App Menu

Popup menu

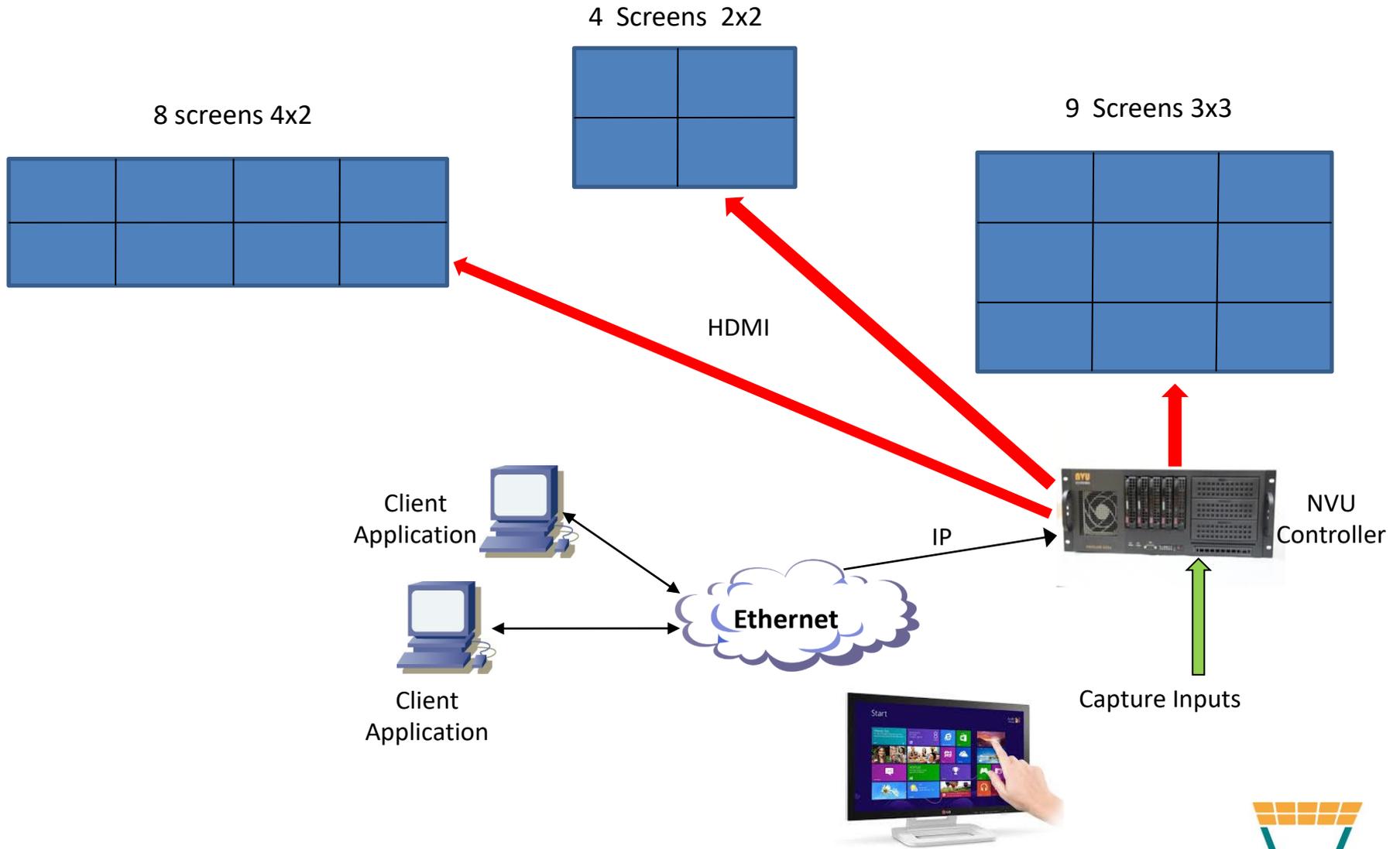
Status Bar

# Multi-Wall

**Single shared Platform, with dedicated Software that enables connecting and operating multiple video-walls**

- Up to five video-walls (M x N)
- Each wall is independently managed
- Each wall have its own layouts / presets
- The inputs are common to all walls and can be open at any or multiple walls in parallel. (each at different size and location)
- Each client can connect to one wall at a time
- WallBrix feature-set is available to each wall

# Multi-Wall Example



# Competitive Advantage - Focus

- ❑ Extensive, hands-on experience in Command center installations
- ❑ Highly competitive best price/performance
- ❑ Highly integrated using cutting edge CPU & GPU based embedded platform.
  - ❑ Ultra High 4K/8k HDR Resolution
  - ❑ Highest Input & Output port density
  - ❑ Highest throughput – PCIe v3.0 switch
  - ❑ Video encode/decode
    - Hardware acceleration by GPU
  - ❑ Latest Intel 2<sup>nd</sup> generation of scalable Xeon processors
- ❑ Integrated, built-in (no additional HW), Video over IP support
- ❑ Easy setup and operation with Windows/Android clients
- ❑ Open and flexible solution lowering the Integration and operation costs
- ❑ Flexible for customization and 3<sup>rd</sup> party integration via API

# Talk to us!!

[www.nvusystems.com](http://www.nvusystems.com)



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