

QNAP CMS Add-on Video Wall

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Introduction

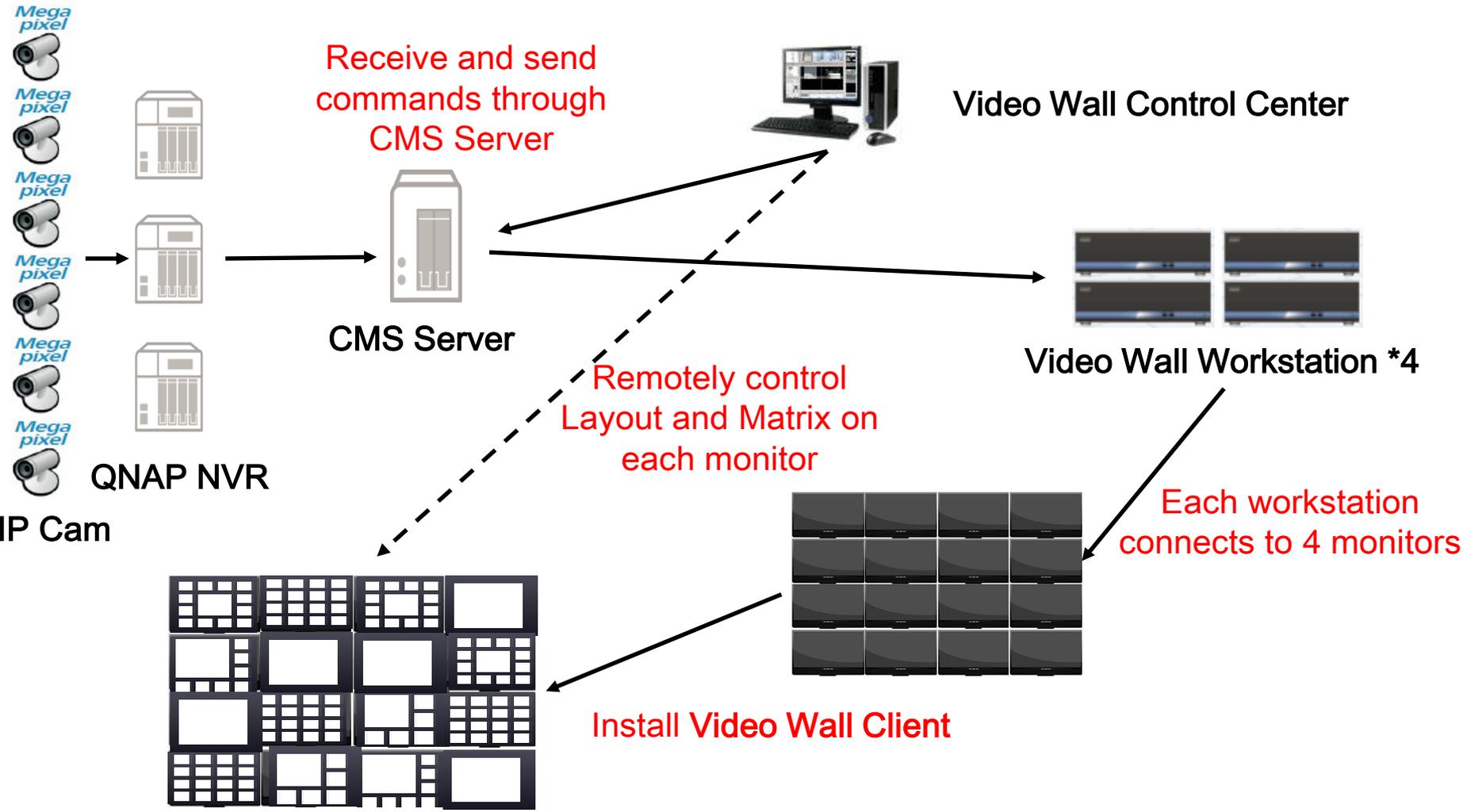
Background

- **Traditional Video Wall**
 - Computer monitors tile together contiguously or overlapped in order to form one large screen.
- **Surveillance Demands**
 - More and more channels and higher display quality brings out a larger scale of surveillance system, which offers users to manage a lot of video sources on screen.
- **Goals**
 - QNAP Security develop a security-purpose Video Wall solution to satisfy the need of high-end security system of monitor display, content control, and view layout.

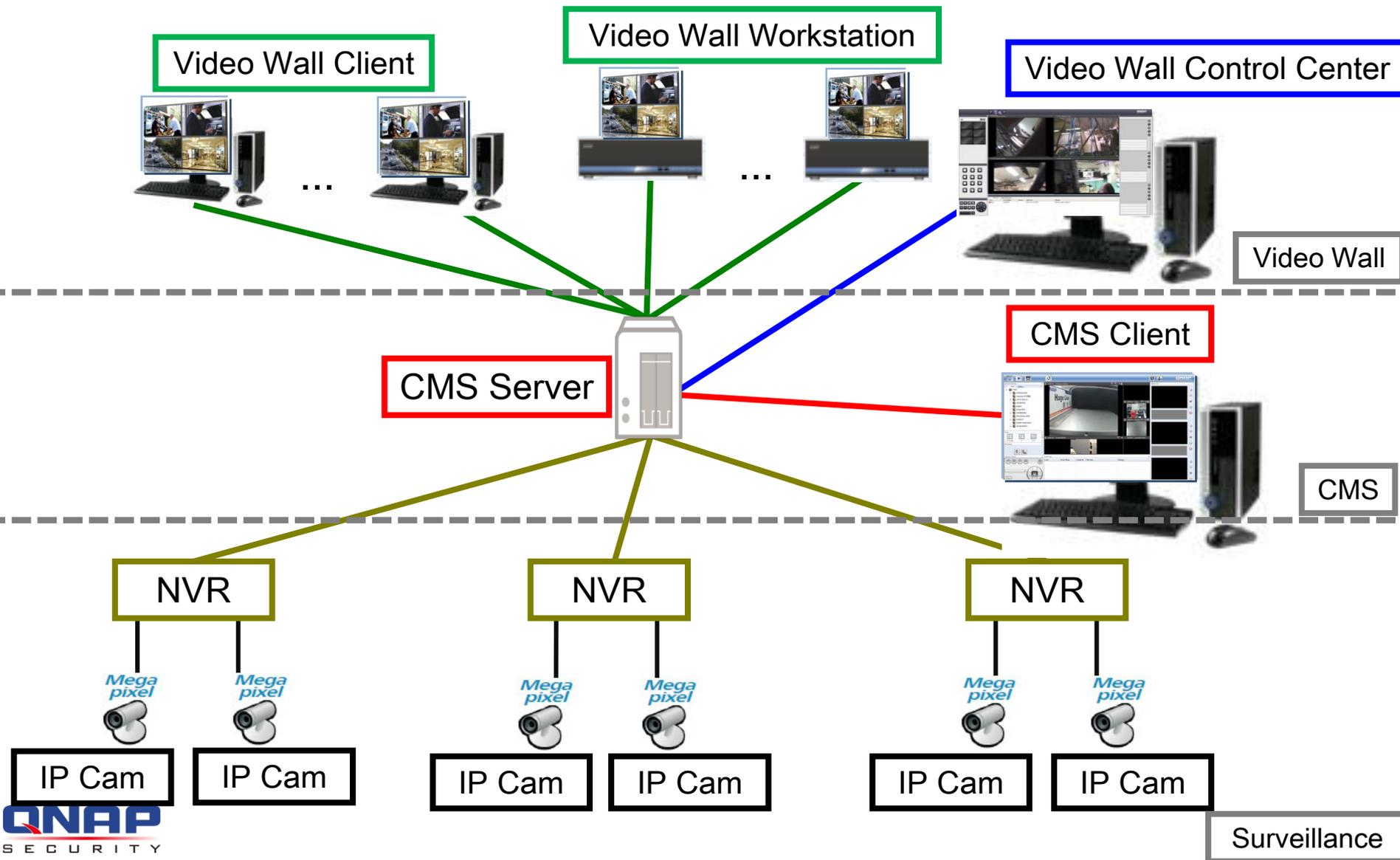
Definitions

- **Video Wall Client**
 - A software installed on PC/workstation to receive commands from control center and display the videos
- **Video Wall Control Center**
 - A software remotely controlling one or more Video Wall Clients or Workstations
- **Video Wall Workstation**
 - A machine finest-tuned with Video Wall monitor display

System Framework



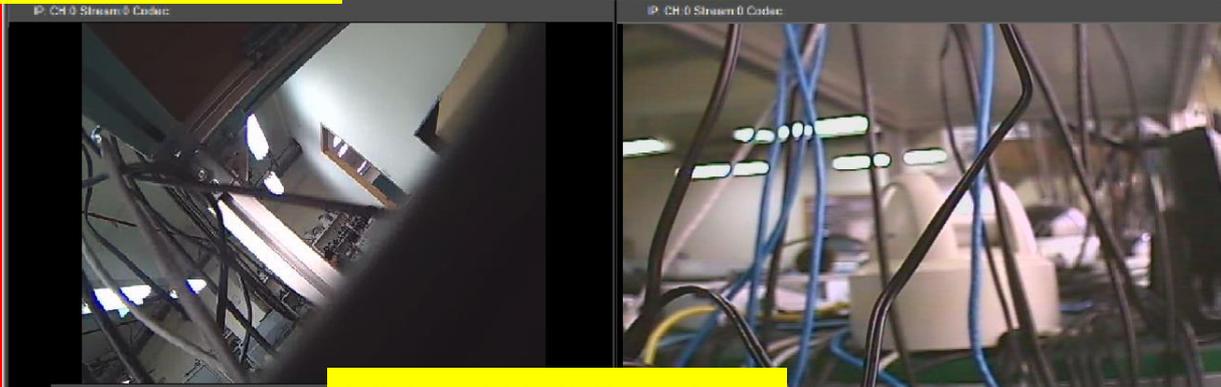
Architecture



Interface Overview

Video Wall Control Center

Video Wall Client list & Monitor Index



Video Wall Preview

Alarm List

Camera / E-map / View



PTZ Control



Level	Device Name	Channel	Date Time	Message
Error	CMS-NVR	5	2010-10-21 19:36:42	Failed to connect Camera 5.

Alarm message



Drag and Drop

The screenshot displays the QNAP Security Center interface. On the left, there is a control panel with a grid of camera view thumbnails and a numeric keypad. The main area shows a 2x2 grid of camera feeds. Two yellow callout boxes with red arrows illustrate drag-and-drop actions:

- A yellow box with the text "Drag a view in whole monitor" has a red arrow pointing from a camera view thumbnail in the left control panel to the top-left camera feed in the main grid.
- A yellow box with the text "Drag a camera in layout of a monitor" has a red arrow pointing from a camera view thumbnail in the left control panel to the bottom-left camera feed in the main grid.

At the bottom of the interface, there is a log table with the following data:

Level	Device Name	Channel	Date Time	Message
Error	CMS-NVR	5	2010-10-21 19:36:42	Failed to connect Camera 5.

Single Channel Live View

The screenshot displays the QNAP Security NVR interface. The main window shows a live video feed from a camera, with the text "IP CH 0 Stream 0 Codec:" at the top. A red arrow points from a smaller thumbnail of the same camera feed on the right side of the interface to the main live view. Two yellow callout boxes provide instructions: "Double-Click a camera to show 1-channel live view" (pointing to the "VR150" camera in the NVRs list) and "Click to show 1-channel live view" (pointing to the main live view area).

Double-Click a camera to show 1-channel live view

Click to show 1-channel live view

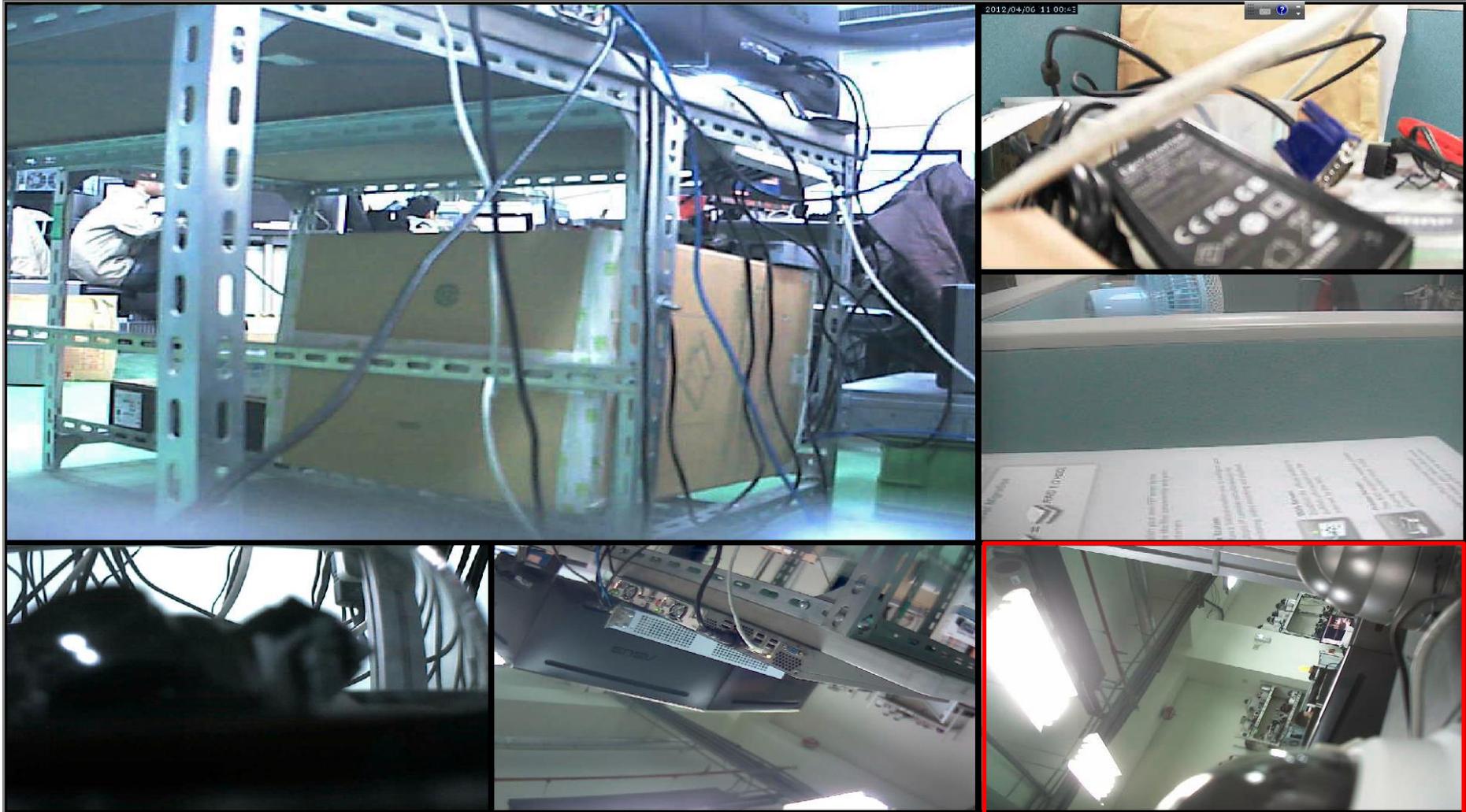
NVRs

- VR150
- Vivitek IP616Z
- Panasonic Generic
- TestCam1
- TestCam2
- TestCam3
- TestNVR-1
 - TestNVR-1 TestCam1
 - TestNVR-1 TestCam2
 - TestNVR-1 TestCam3

Event Log

Level	Device Name	Channel	Date Time	Message
Error	CMS-NVR	5	2010-10-21 19:36:42	Failed to connect Camera 5.

Video Wall Client



Summary

- **Client/Server based architecture**
 - Administrator software for remote client management and view update through CMS server
- **Intuitive Control Interface**
 - Simple content management software for view layout and placement
 - Manually drag and drop in monitor index or active view layout to update content easily