Cisco and Barco
Cisco VSOM integrates with Barco CMS visualization

Cisco
Cisco offers breakthrough VMS technology that’s field proven at thousands of installations globally. The company’s flagship Cisco Video Surveillance IP security and surveillance platform delivers open architecture, scalability and superior process automation. Cisco Video Surveillance solutions use the IP network to deliver and receive live and recorded video surveillance media. This solution is suited for multiple-site and remote-site IP video surveillance and provides excellent scalability, reliability, and bandwidth management. The Video Surveillance Operations Manager (VSOM) is a web-based user interface that authenticates and manages access to video feeds. It is a centralized administration tool for the management of Media Servers, cameras, encoders, and viewers.

Barco
Barco provides flexible and mission-critical visualization software and hardware products consisting of high-quality displays, rear-projection and near-seamless LCD video walls, professional grade graphics controllers and a Control Room Management suite (CMS) – an advanced software for easy display wall management, efficient inter-control-center collaboration and fast decision making based on easily sharing the right visual information to the right decision-makers at the right time easily.

General Concept
VSM, Cisco’s flagship IP video surveillance platform, is a comprehensive video management system. VSM represents the latest evolution in IP video surveillance and security. It includes a full-fledged video management system (VMS) for streaming, recording and managing an unlimited number of cameras at multiple sites. VSM video content is now made available on Barco video walls. The Barco video wall controller will independently request and decode the sources from the Media Server and display them on the Barco video wall grid, managed through the Barco CMS software.

Advantages
- **Enhanced interoperability** towards multitudes of cameras and NVRs supported by Cisco through the integration of Cisco SM into the Barco collaborative visualization platform (“scalable & maintainable interoperability”)
- **Situational awareness anywhere** since Cisco’s integration takes full advantage of the fact that Barco CMS is able to manage and distribute content and layouts on several displays, not just one video wall, thus creating situational awareness wherever needed (“share faster and resolve quicker”)
- **Proven solution** due to an integrated display management and visual collaboration making full use of the distributed nature of Barco’s CMS (Control Room Management Suite) visualization platform (“one integrated system for visualization and collaboration”)
System control through Barco CMS

- Camera sources are made available in the Barco CMS Sidebar as the main GUI for use in perspectives and sharing on displays.
- Sources between the Cisco VSM database and Barco CMS are synchronized through use of the Barco CMS API and the Cisco VSM API. Alternatively both databases can be synchronized manually when API synchronization is unavailable.

Architecture

Integration flow

Local camera sources are defined within the Video Surveillance platform. The camera sources are stored in the Video Surveillance system. The Cisco Video Surveillance Operations Manager (VSOM) is polled every 20 - 30 seconds (configurable) and the list of available sources is copied over to the CMS Server database. The Barco Sidebar client is updated with the camera sources automatically. These are identified by a "[CiscoVS]" prefix. Sources that are shared to a perspective and eventually the display wall will be taken from the Sidebar sources created when the CMS database is updated. The Barco MGS media gateway handles the required protocol conversions.
Process

- To synchronize the available sources in the CMS Sidebar, the list of cameras is requested through the SOAP API.
- Since a video stream cannot be requested directly from the camera, it is requested to the Cisco VSOM using the SOAP API.
- The Media Server generates a unicast video stream that is then decoded on the Barco controlled display.
- The video streams are compliant with RTP, MPEG-4 and H.264 standards.
- Cameras and encoders that are common between Cisco VSM and the Barco CMS interoperability matrixes are supported.

Solution requirements

- Cisco VSM platform version 7 or higher consisting of the following components (installed/licensed):
  - Cisco Video Surveillance Operations Manager
  - One or more Cisco Video Surveillance Media Servers (VSMS)
  - For Cisco customers currently using previous versions of Cisco VSM, please contact Cisco.
- Barco TransForm N system (installed/licensed):
  - CMS Suite including MGS (Media Gateway Server)
    - CMS Server version 2.6
    - MGS version 2.2
  - Licences:
    - Standard applicable CMS and MGS licenses
    - Alliance Integration License - Cisco VSOM
- In general, widely available standard H.264 and MPEG-4 cameras and/or encoders are supported by both Cisco and Barco. For confirmation on a particular brand and model number, please contact Barco and Cisco for their interoperability lists or forward plans.
- Please always contact Barco and Cisco for needs analysis and documented quotes.
Request more information

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About the Barco Strategic Alliances program

Great products need great focus. That is why Barco allies with other top players in their fields of expertise to build the best solutions available. By combining complementary strengths, we can optimize the integration of the systems and offer one single system to the customer. This simplifies deployment, optimizes efficiency, minimizes reaction time, and reduces costs in a variety of selected professional markets. This creates a win/win situation for all parties involved, our customers in the first place.

More information? Please visit our dedicated webpage www.barco.com/alliances