CHAPTER 8

Lab and Test Overview

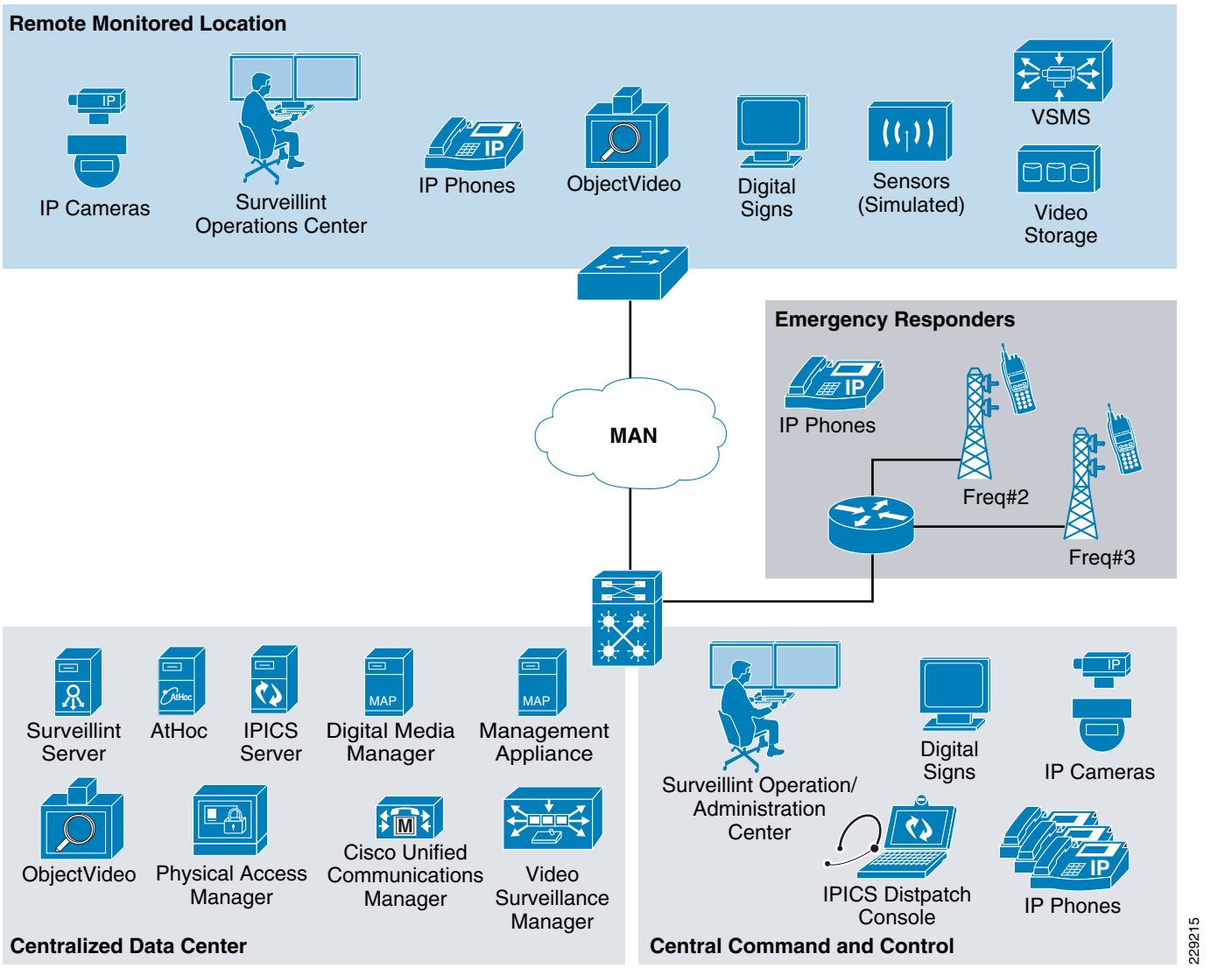
Test Overview

The main goal of the Urban Security solution was to simulate a security environment with various locations and diverse requirements. The main emphasis was on validating the interoperability of various devices and integrating them into a single security monitoring environment. Various events were used to integrate ObjectVideo analytics and access control into Surveillint's single command and control system. In turn, notifications were communicated to IPICS and AtHoc for incident response and mass notification.

The lab environment includes a centralized command and control center, remote monitored locations, and emergency responders connecting via land mobile radios. By centralizing the main communication devices, a large distributed environment can be created, with cameras, sensors, and security devices distributed to resolve security incidents quickly.

The solution did not focus on testing Layer 2 or Layer 3 features typical of a campus network or distributed deployments, because those features have been extensively documented in other solution guides. Figure 8-1 shows the various locations configured for the test environment.

Figure 8-1 Lab Environment



Cisco Video Surveillance

A single Cisco video surveillance Operations Manager was deployed at the centralized data center to manage Media Servers deployed at remote locations. The local Media Servers were able to archive video from local cameras to reduce the bandwidth requirements across the MAN. Because each Media Server acts as a proxy to the local IP cameras and viewers, the video traffic is contained as much as possible.

Cisco Physical Access Control

A single CPAM server was deployed at the central command and control center to manage access gateways deployed at various remote locations. Because the testing focused on integrating various components, rather than scalability, access gateways were installed only at the central site. Proximex Surveillint is able to send and receive alerts from multiple access gateways distributed in many locations.

Proximex Surveillint

A single Surveillint was deployed at the central command and control center, with multiple clients connecting from all remote locations. Surveillint is able to scale to support a large number of clients/sensors by distributing its services across multiple servers and locations.

Hardware/Hardware

Table 8-1 shows the different harware devices and software releases used during the solution testing.

Table 8-1 Device and Software versions

Device	Location	Software Release
Cisco VSOM	Command and control	4.2
Cisco VS Media Server	Command and control and remote locations	6.2
Cisco 2500 IP Cameras	Command and control and remote locations	2.1.2
Cisco 2521V Dome IP Cameras	Command and control and remote locations	2.1.2
Cisco 4300 IP Cameras	Command and control and remote locations	1.0.3
Cisco 4500 IP Cameras	Command and control and remote locations	1.0.1
Cisco CPAM	Command and control	1.2
Cisco Access Gateway	Command and control and remote locations	1.2
Cisco IPICS	Command and control	4.0
Cisco Unified Communications Manager	Command and control	7.1.3.1.10000-11
Cisco DMP	Command and control and remote locations	5.1
ObjectVideo	Command and control and remote locations	5.1.0
Proximex Surveillint	Command and control	5.0
AtHoc	Command and control	6.1.8.76