Managed Video Network Services

Video That's There When It's Needed

For Fixed Surveillance Systems

MARCH® networks

An Infinova Company

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Introduction

Purchasers of video surveillance systems justify their decisions based on one premise: Video will be there when it's needed. To ensure that high-quality video is always recorded, the health of your video surveillance system and all its components needs to be maintained. If a disk drive is not recording or a camera is not working properly, valuable video evidence will be lost and your technology investment diminishes. At the same time, while most organizations recognize the value video surveillance for security and operations, most don't have resources dedicated to overseeing and maintaining the health of the system on a daily basis. Outsourcing this health monitoring function to experts is a cost-effective alternative to ensuring optimum system performance.

Read this application note to learn more about the benefits and details of March Networks® Managed Services for video surveillance health monitoring.

Managed Services

WHAT ARE MARCH NETWORKS MANAGED SERVICES?

March Networks Managed Services consist of the daily monitoring of the health of your March Networks video surveillance equipment to confirm that video is being recording as it should, and that established system policies (e.g. video retention guidelines) are being met. By providing a daily review of the status of your surveillance cameras, DVR disk drives, fans, video/audio storage, network connectivity, configuration issues and other system parameters, Managed Services identify potential issues before they can affect performance.

Managed Services also include: the application of software updates to keep the surveillance network current with all the latest features and patches; remote configuration adjustments when necessary; troubleshooting; and recommendations for onsite corrective actions. Service impacting notification reports are issued daily or as required.

Additional monthly reporting provides you with a summary of all events and activities reported by March Networks.

HOW DO MANAGED SERVICES WORK?

A typical video surveillance system is composed of multiple elements. In addition to cameras and recording devices (NVRs and DVRs), various client tools resident on customer workstations are an integral part of the surveillance solution. There is also a March Networks management server – either a server running the Enterprise Service Manager (ESM) or a Command Enterprise Server (CES) – located on the customer premises or within the March Networks Network Operation Center (NOC).

The March Networks NOC requires access to the customer ESM or CES management platform, whichever is currently in use. The remote access is achieved while maintaining security policies for connectivity and data/video traffic. It is also important to note that video traffic is not downloaded by the NOC. See Appendix C, which outlines two standard scenarios for Managed Services remote access.

Once access to the management platform is established, experienced March Networks professionals working in the NOC start the daily monitoring of all devices. Customers receive notifications and reports when issues are identified. All issues are logged and monitored through to resolution.

Note that organizations have the option of including the hosting of their March Networks management platform (ESM or CES) in the standard Managed Services offering.
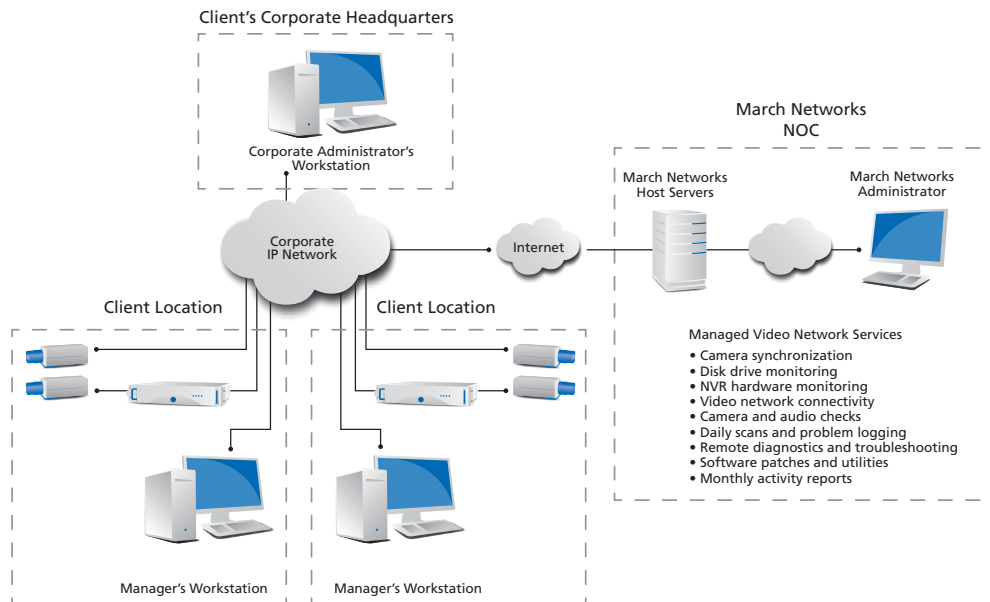
MANAGED SERVICES ACCESS OPTIONS

To meet different customer requirements, March Networks offers three options for its Managed Services:
• Hosted Managed Services

• Remote Access Managed Services
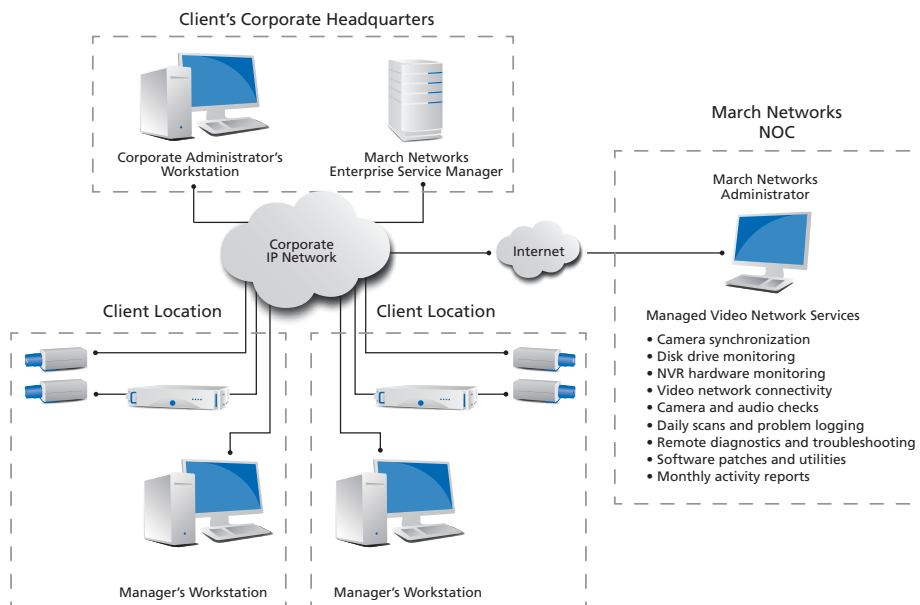
• Onsite Managed Services

Hosted Managed Services

With Hosted Managed Services, devices are remotely accessed from a management platform within March Networks' infrastructure. This management platform can be either ESM or CES. The platform software is hosted on virtual servers and full redundancy is used to provide for the high availability services. Hosted Managed Services are ideal for retailers, for example, since they remove the need for a complete IT infrastructure within individual stores.
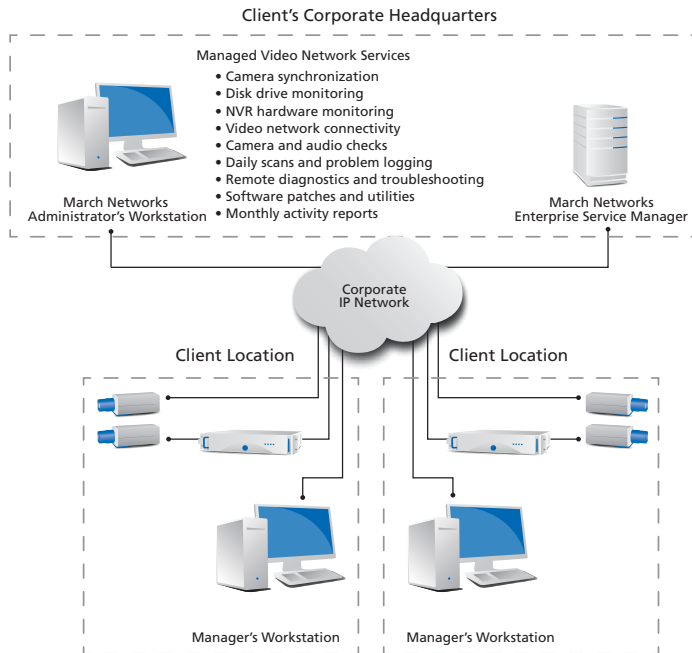

Remote Access Managed Services (VPN)

When security policies demand that your management platform remains within the domain of your organization, our Remote Access Managed Services with VPN access are ideal. Two examples of how this managed services offering is achieved appear in Appendix C.

Onsite Managed Services

When required, Onsite Managed Services can be provided with the assistance of a fully certified March Networks employee working at the customer premises. This premium option ensures an experienced resource is 100 percent dedicated to the monitoring and management of your surveillance network.

Client's Corporate Headquarters

Managed Video Network Services
- Camera synchronization
- Disk drive monitoring
- NVR hardware monitoring
- Video network connectivity
- Camera and audio checks
- Daily scans and problem logging
- Remote diagnostics and troubleshooting
- Software patches and utilities
- Monthly activity reports

March Networks
Administrator's Workstation

March Networks
Enterprise Service Manager

Corporate
IP Network

Client Location

Client Location

Manager's Workstation

Manager's Workstation

BENEFITS

Managed Services deliver substantial benefits to both end user customers and March Networks certified partners.

- Significantly improved video system availability and reliability

- Automated software updates to keep the video network current with all the latest features and upgrades*

- Real-time monitoring of system health
  - Proactive repair
  - Automatic Return Material Authorizations (RMAs)
  - Ability to focus all attention on core business processes rather than managing a video network

SUMMARY

With straight forward implementation, powerful timely reporting, and a long list of benefits, March Networks Managed Services represent an excellent and cost-effective option to ensure the optimum performance of your video surveillance network.

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* Some new software features may require purchase
  Certification and update schedules require customer approval in advance

APPENDIX A › FINANCIAL CASE STUDY

Below is an example of the benefits realized through the use of March Networks Managed Services by a leading U.S. financial customer.
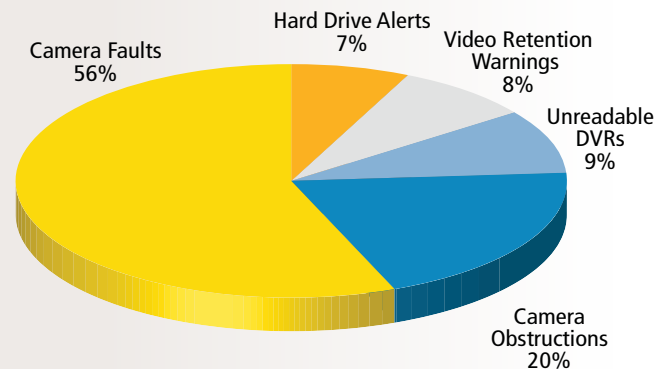
CASE STUDY – A LEADING U.S. BANK

"Managed Services from March Networks play a crucial role in our video objectives. With our use of fewer cameras through megapixel deployment, minimum downtime of cameras and DVRs is extremely important. In addition, analytics and transaction investigation are only of value if the cameras and DVRs are functioning properly, making managed services a vital and necessary part of the overall solution."

— Bank Security Director

Summary of Reported System Activity

Over an 8-Month Period Scale of Deployment

The equipment monitored includes 10,000 cameras, 2,500 hard drives and 700 DVRs distributed over a few hundred sites across multiple states.

Camera Faults 56%
Hard Drive Alerts 7%
Video Retention Warnings 8%
Unreadable DVRs 9%
Camera Obstructions 20%

Here are the Security Director's comments:

• **Predictive Hard Drive Health Monitoring** – "We would never be able to stay on top of this. March Networks knows better when hard drives need to be replaced than we do. Previously, we didn't do anything until the hard drive completely stopped working. We now replace drives when they become a problem, taking preventative measures before they go down, which obviously means less downtime."

• **Video Retention** – "Knowing which DVRs are not meeting our retention time requirements is critical for investigations. Corrective action can be taken accordingly"

• **IP Network Support** – "DVRs not connected, cameras not connected, hard drive partitioning, removing ghost hard drives, camera configuration, data rates and IP addressing. This was an unexpected service that I highly value. Many a problem has been corrected quickly and efficiently without having to send a vendor out to look at a camera or DVR. Tremendous cost saving!"

• **Daily Reports** – "Getting information on retention, cameras, hard drives and unreachable DVRs allows us to fix issues much faster than we could perform this work ourselves. This results, again, in less down time."

• **Firmware Upgrades** – "Test, soak, fix and deploy. What more could I ask for? I only need to oversee and approve each step."

• **Video Snapshots** – "This allows us to see cameras that are not giving us proper video at a glance. We found many cameras that weren't having sync problems or showing video error messages, but were not providing usable video. These previously slipped through the cracks. The time it takes to scan across the snapshots is far quicker than it takes to bring up every single camera to check the video. With 10,000 plus cameras, this is almost impossible."

• **DVR Programming** – "Recording schedules, frame rates and retention. A great time-saver for me that March Networks provides solutions when a problem or change occurs, and then goes into the appropriate DVRs and takes care of the programming."

APPENDIX B > MANAGED SERVICES DESCRIPTION

CONTACT DETAILS

- Email: ManagedServices@marchnetworks.com
- Telephone: 1 800 472 0116

SERVICE TIMES

- Mon-Fri 8am-5pm ET
- 2-hour pager response off hours

REMOTE MONITORING AND DIAGNOSTIC SERVICES

March Networks' Network Operations Center (NOC) personnel will remotely monitor a customer's video network to track system performance. Using a VPN connection between March Networks and the customer's video network, our NOC personnel will provide daily monitoring and reporting on the health status of all DVRs and disk drives in the customer's video network including:

a) Camera synchronization

b) Disk drives

c) DVR hardware

d) Video network connectivity

e) Audio inputs

Reports

a) Daily health reports

b) Audit reports, upon request

c) Monthly activity reports

Monthly reports include the following information:

I.   Number of tickets opened/closed for the month

II. Number of outstanding tickets for the month

III. Tickets categorized by event type

Other

a) Daily scans and problem logging

b) Remote diagnostics and troubleshooting

c) Software patches and upgrades

Managed Services are priced per month per DVR and are payable quarterly in advance (minimum 1 year commitment required).

APPENDIX C > REMOTE ACCESS EXAMPLES

SECURITY POLICY 1: NO NETWORK TRAFFIC TO LEAVE CUSTOMER PREMISES

Solution:

March Networks software running on PCs on customer network, with very strict access to those PCs in accordance with the customer's internal security policy.

- Customer provided VPN concentrator located within secure DMZ at March Networks

- Full time IPSEC point-to-point tunnel established on a private circuit between VPN Concentrator inside March Networks DMZ and customer facility

- Telecom service provided and monitored by customer's telecom provider

- Within DMZ, March Networks-provisioned, purpose-built systems on a secure VLAN

- Each system loaded with customer-provided security software (NetOps or Citrix)

- Allows a strict connection to a unique counterpart on customer network

- Authorized and named March Networks employees can remotely connect to purpose-built systems on a secure VLAN inside March Networks secure DMZ

- No customer network traffic ever traverses the link

- Only data transmitted is the health status of DVRs to the March Networks ESM on the customer network.

SECURITY POLICY 2: MEET VERY STRICT SECURITY POLICIES IN A LARGE U.S. BANK

Solution:

- March Networks connects to customer network using customer's standard VPN Client from a customer-specific, purpose-built VM

- As each client's management systems at March Networks are purpose built, any VPN client can be used

- March Networks uses Remote Desktop Connection to control a PC on customer's network

- Customer VPN connection only allows connection to one PC on customer network

- PC contains all March Networks software required to administer and maintain DVRs   (i.e. Admin Console, Live Monitoring Console, Investigator, March Networks SDK)

- PC has access to all DVRs on the customer network, but nothing else

- March Networks does not have direct access to ESM servers

- Customer tightly controls and monitors PC for any non-approved activity

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