exacq®
Technologies

The power behind **your mission**

Johnson Controls

**exacqVision
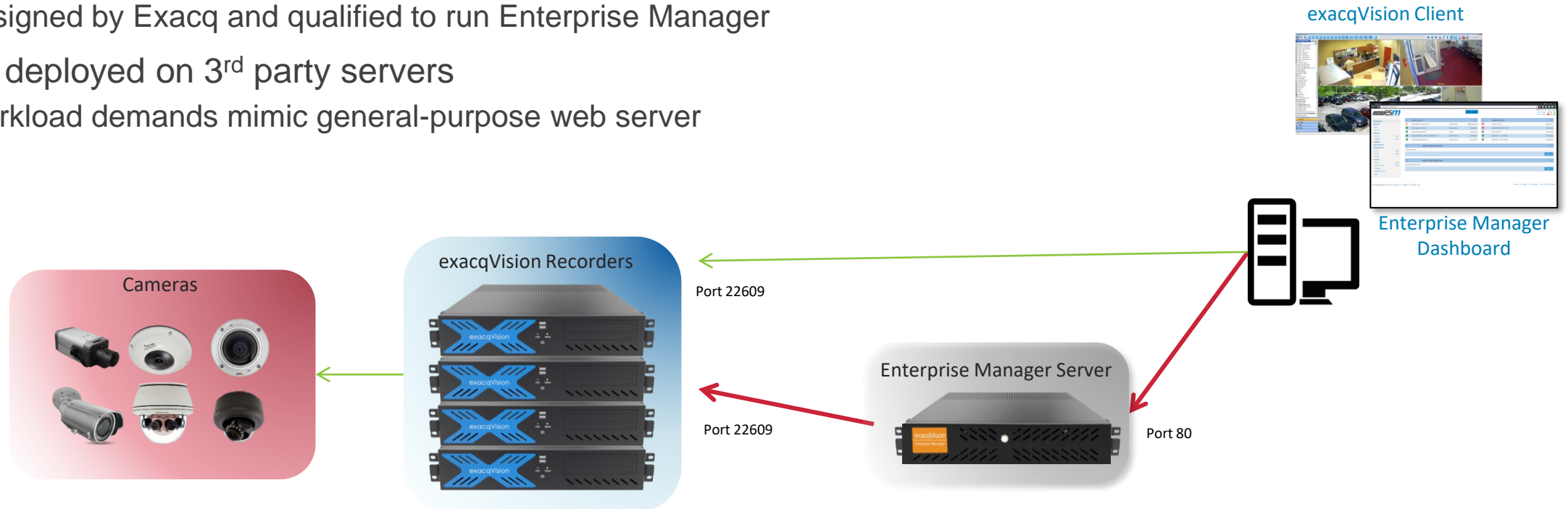Software Overview**

The Value Proposition of Enterprise Manager

- Maximize the uptime of exacqVision Enterprise recorders
  - Continuously monitors health of NVRs
  - Instant health assessment
  - Highly flexible e-mail notifications
  - Recorder failover to spare hardware
  - Quick backup and recover of recorder configurations

- Reduce administrator maintenance time
  - Automated, scheduled recorder updates
  - Enterprise user management automation
  - Manage exacqVision client-server connections

- Included at no charge with all exacqVision Enterprise deployments
  - NVRs must have exacqVision Enterprise Edition
  - NVRs do not need to have active SSA
  - NVRs do not need to be built-by-Exacq

Web Based Architecture

- Can be deployed on Exacq's EM-Series server
  - Built for redundancy, performance, robustness and maintainability
  - Designed by Exacq and qualified to run Enterprise Manager
- Can be deployed on 3rd party servers
  - Workload demands mimic general-purpose web server

exacqVision Client

Enterprise Manager Dashboard

exacqVision Recorders

Port 22609

Cameras

Port 22609

Enterprise Manager Server

Port 80

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# Fault-Tolerant Architecture

- exacqVision Deployment
  - NVRs can operate autonomously if Enterprise Manager down
  - NVRs can be managed independently with exacqVision Client if Enterprise Manager is down

- Enterprise Manager instance
  - Enterprise Manager provides scheduled exports and import of its configuration to reduce downtime
  - When deployed on EM-Series: HW fault tolerate with RAID
  - When deployed on virtualization: VM failover or recovery using hypervisor management tools

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Screen Tour: Real Time Dashboard

tyco | Exacq

Screen Tour: Server Details

exacqVision Axis Server ✏️ 📅 🗑️

Add server image
➕ Status: Connected
➕ SSA Through: Jul 25, 2024 [detail]
➖ Version: 9.8.4.150001
➕ Oldest Content: 374 days

Upcoming Actions:

(None)

Details:

Address:	axis.exacq.com
Port:	22609
Hostname:	axis.exacq.com
Server Connection Type:	Inbound
Server Platform:	Windows 64-bit
Version:	9.8.4.150001
Group:	root
Username:	admin
Serial:	F8-32-E4-6E-63-DD
Mac:	F8-32-E4-6E-63-DD
Desired Oldest Content:	0 days
Password Strengthening:	Disabled
Live Streaming:	Enabled

Server Events

Open Server Events:

(None)

Additional Data:

(None)

Cameras	Events	Saved Configurations

Cameras

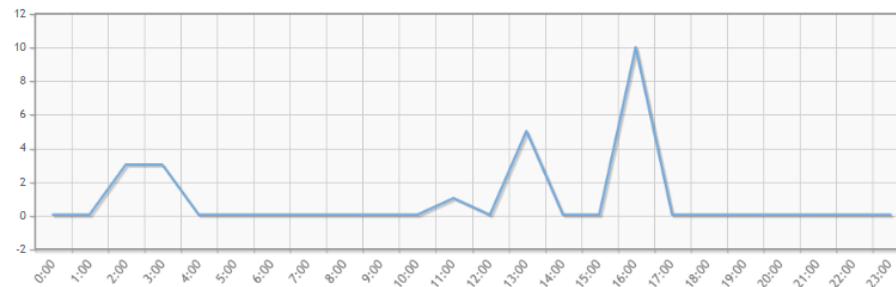| Cameras 1-5 of 6	
➕ P1367 - Perimeter Defender	Monitoring
➕ P3375	Monitoring
➕ Q1921 (thermal) - 5.50.2	Monitoring
➕ Q3709-PVE - Center	Monitoring
➕ Q3709-PVE - Left	Monitoring

Events

Server Events 1 - 5 of 17		
3778592	Jan 10, 2019, 04:25:33 p.m. EST	Server disconnected
3778615	Jan 10, 2019, 04:25:30 p.m. EST	Update success
3778530	Jan 10, 2019, 04:25:00 p.m. EST	Update installing
3778527	Jan 10, 2019, 04:25:00 p.m. EST	Update downloading
3778532	Jan 10, 2019, 04:25:00 p.m. EST	Update pending

Saved Configurations

Saved Configuration 1 of 1	
newconfig	Oct 4, 2018, 02:52:29 p.m. EDT ✏️ 🗑️

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Screen Tour: Camera Details

exacqVision Axis Server: P3375 ✏️

Add camera image

Model: AXIS VAPIX P3375-LV

➕ Status: Monitoring

Details:

Address:	172.19.232.145
Server:	exacqVision Axis Server
Mac Address:	AC-CC-8E-93-F6-E2
Firmware:	7.25.1
Last Connection:	Jan 10, 2019, 04:26:00 p.m. EST
Last Recorded Video:	Jan 10, 2019, 04:56:26 p.m. EST

Camera Events
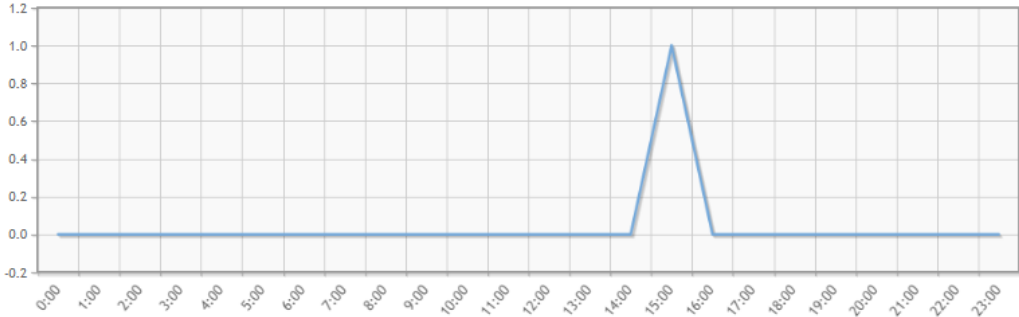
Open Camera Events:

(None)

Additional Data:

(None)

Video Feed

No live privilege on the server

Camera Events

Camera Event 1 of 1		◀ ▶
3776103	Jan 4, 2019, 03:07:45 p.m. EST	Camera disconnected

Ensure Consistent Scene Quality

- Camera Inspection process
  - Inspect by group/date/name
  - Mark views bad or good
  - Generate reports for techs

Powerful Rule-Based Notifications

- Customize which events create alerts or send notifications
- Customize alerts to trigger immediately or after x time
- Customize which servers and cameras create alerts
- Customize who to send alerts to
- Customize to send immediately or in batches

Add Rule

if   30 out of 32 events   starts   in   any group   on   any server   for   any camera

then   display alert   to   198 out of 198 users

Add Rule

	Enterprise Manager	exacqVision Client
Overall workflow	Define triggers and recipients in one workflow	Define message profiles, then define Event Linking rules that send email using those message profiles
Email format	Formatting pre-defaulted	Must build email with subject, message, and keywords
Recipients	Pick users from drop-down	Manually specify email addresses

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Ensure Availability of Recorders

- In case of recorder failure, Enterprise Manager can failover to spare hardware
  - Failover takes ~ 1 minute
  - Automatic failback
  - Users automatically updated with new recorder
  - Manual mode for maintenance of exacqVision recorders
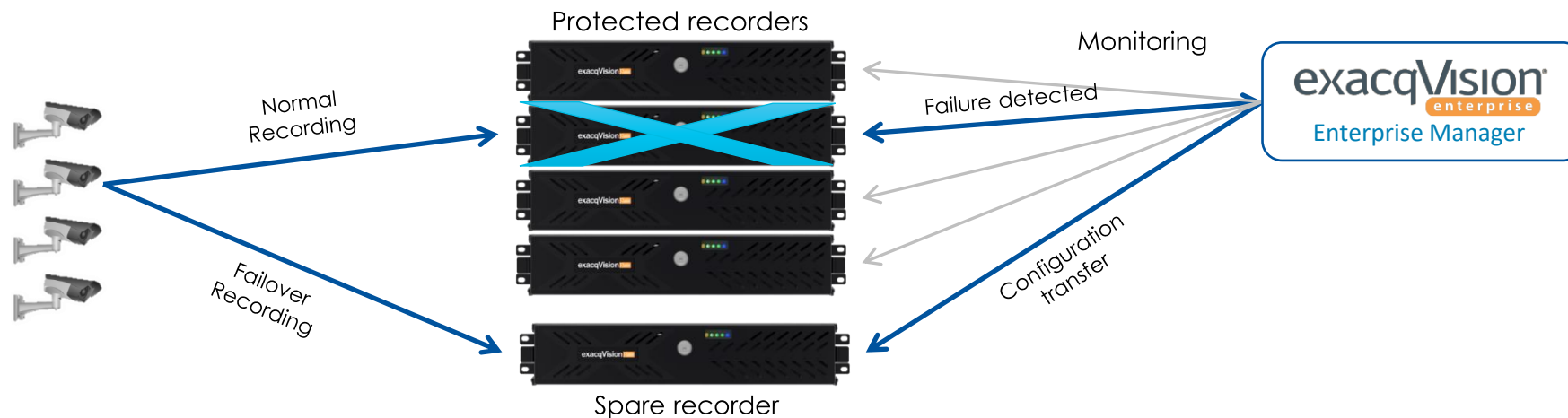
Define one or more Failover Groups

- Multiple spares protect against multiple simultaneous failures

One spare...

...or multiple spares

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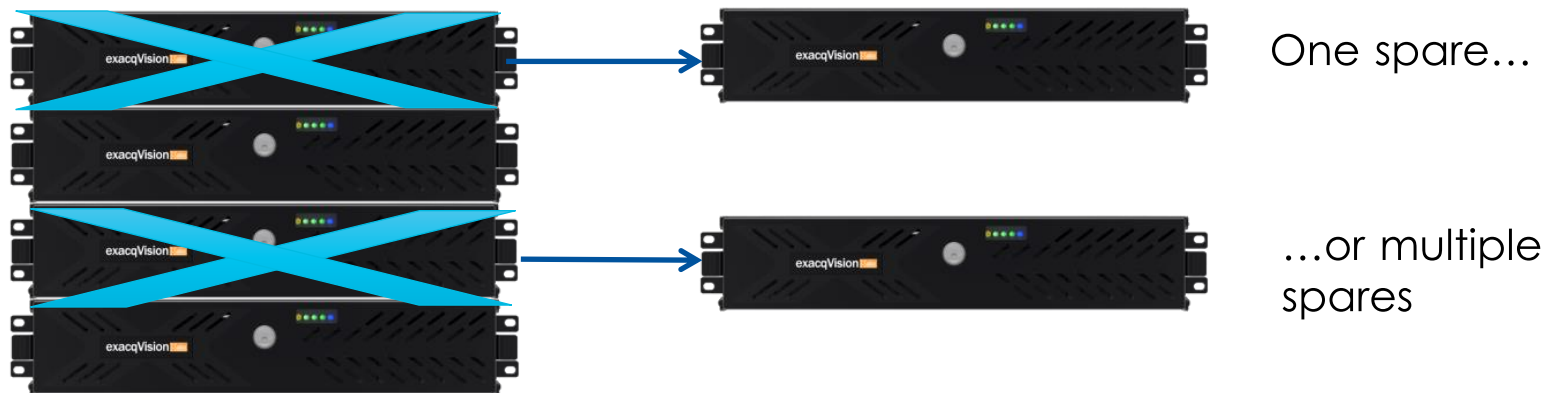
Designed for Local Availability

- Define failover groups according to physical proximity
    - Not designed for WAN failover
    - Failure detected by network timeout

Not recommended

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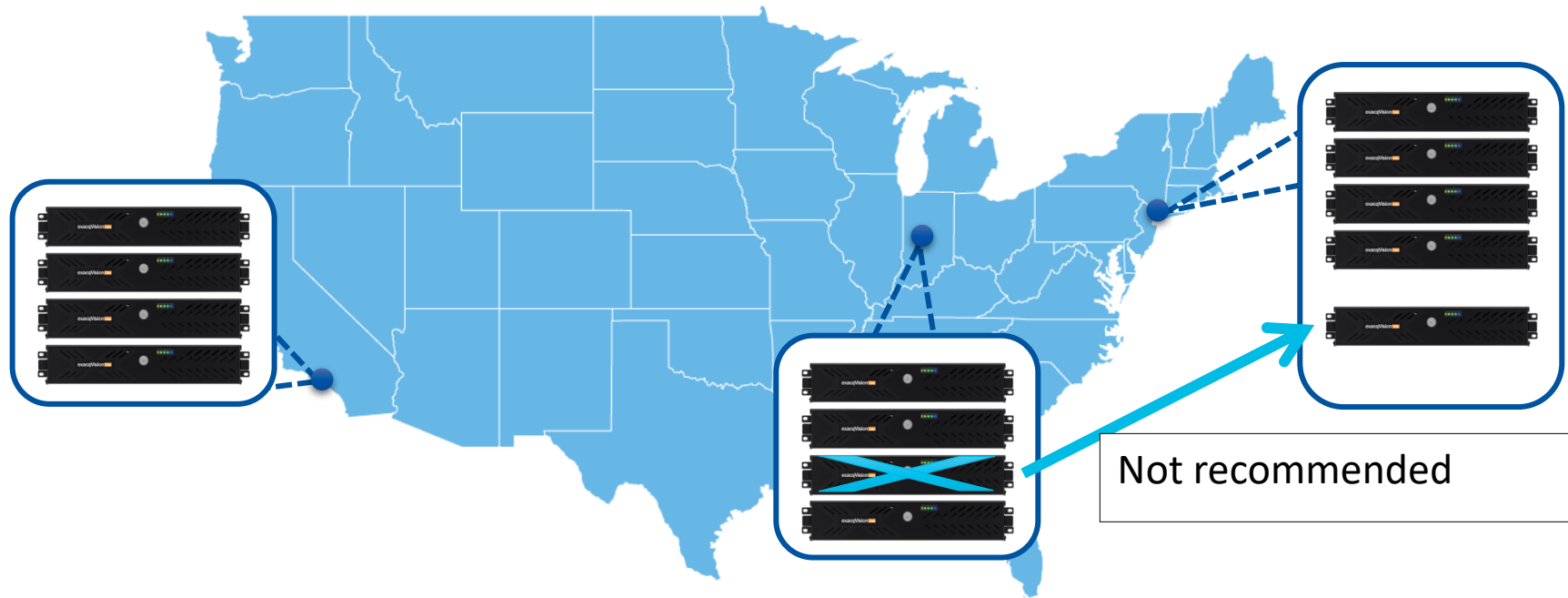
Manual Transfer

- Manually transfer recording before maintenance downtime

What Fails Over

- Cameras
- Recording Schedules
- Users
- Event Linking
- Saved Layouts, Views, Groups and Maps
- Serial Profiles
- Archiving configuration
- Notification Rules
- Auto Export Rules

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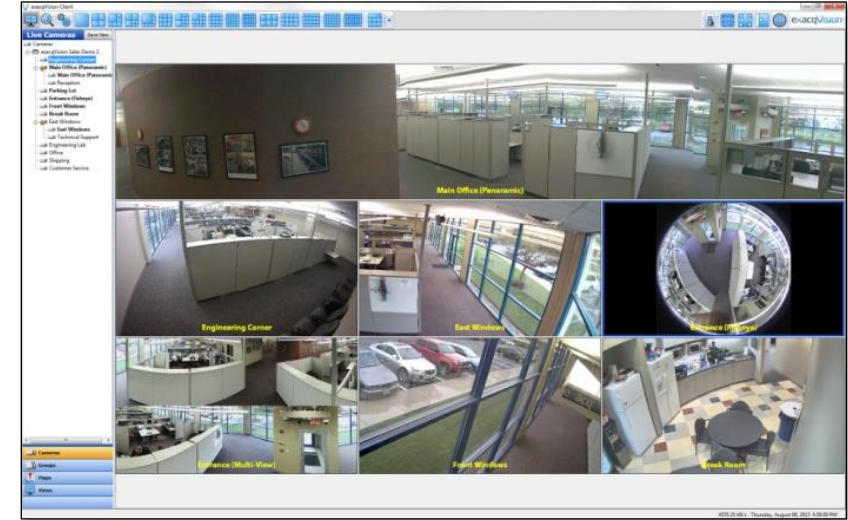
What Fails Back?

- Enterprise Manager will automatically failback all configuration to the production recorder

  - Today: Video remains on the spare recorder
    - Admin can manually copy video to production recorder
  - V19.06 new feature
    - Video automatically restores to the production recorder

Keep Everything Up-to-Date with Enterprise Manager

- From Enterprise Manager…
  - Update recorders
  - Update web services
  - Update Enterprise Manager itself
  - Prompt clients to update

Enterprise Manager

exacqVision
Web Service

exacqVision
Recorders

exacqVision
Clients

Audit Versions Installed

- Audit what versions are running in the environment

Running Versions

A new (Recommended) server version is available. See Recommended Server Versions list.

Version	Product	Platform Name	Count	Actions
7.6.0.93050	ExacqVision Server	Edge illustra 610	1	
7.6.0.93050	ExacqVision Server	Linux	3	
7.6.0.93050	ExacqVision Server	Windows	1	
7.6.0.93050	ExacqVision Server	Windows 64-bit	5	
7.6.0.93040	ExacqVision Web Service	Linux	2	

Download

Perform Administration on Your Schedule

- Schedule configuration backups

- Schedule configuration loads

- Schedule software updates

- Schedule license imports

- Schedule maintenance
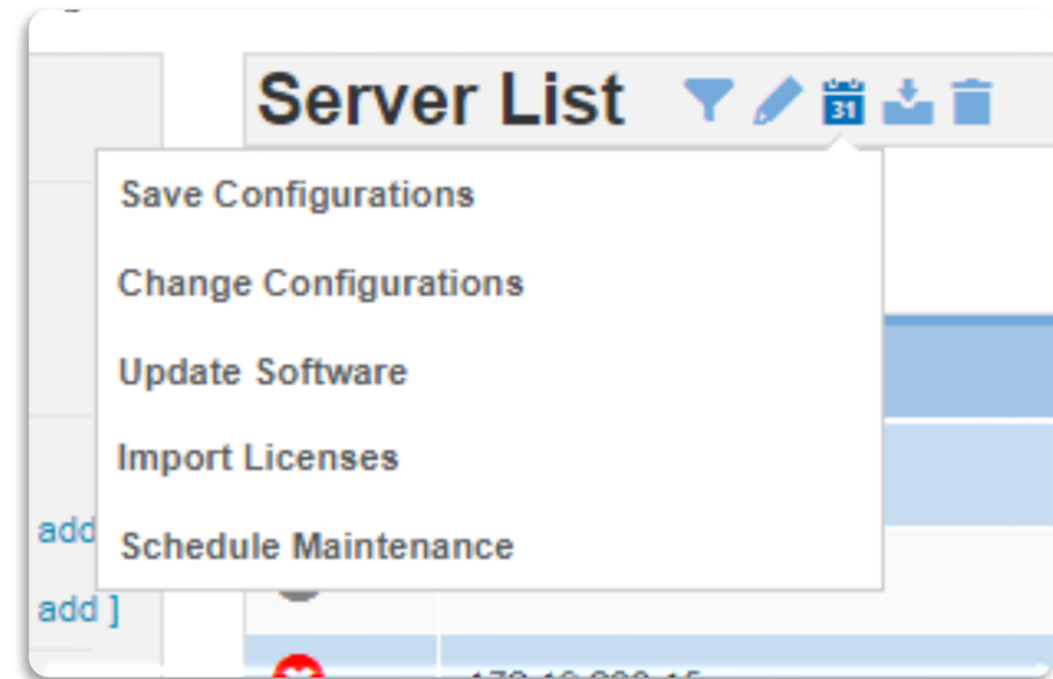
Automate Client Configuration

- Use Enterprise Manager to avoid managing lists of server connections per client
- The user logs into the client using Enterprise Manager credentials (or SSA)
- Enterprise Manager feeds the list of servers for the users group membership

License Transfers

- Transfer camera channels between NVRs
    - Free of charge; no wait for PO processing
    - Channel must be 'unused' – Fewer cameras connected than maximum
    - SSA of target NVR remains the same – Transferred channel assumes SSA of target NVR

- Store camera channels in Enterprise Manager Channel Pool
    - SSA does not "count down" while in the Channel Pool
    - New channel SSA does "spread" to target NVR following normal add-camera logic

Groups

- **Enterprise Manager Groups are different than exacqVision Client Groups**

- **Groups contain servers and users**
  - A new user can be quickly added to a group to get access to all member server
  - A new server can be quickly added to a group to get all required users

- **Groups are defined in a hierarchy**
  - Users can only see servers in their group membership
  - No visibility to parent or sibling groups

Example hierarchy based on geographies
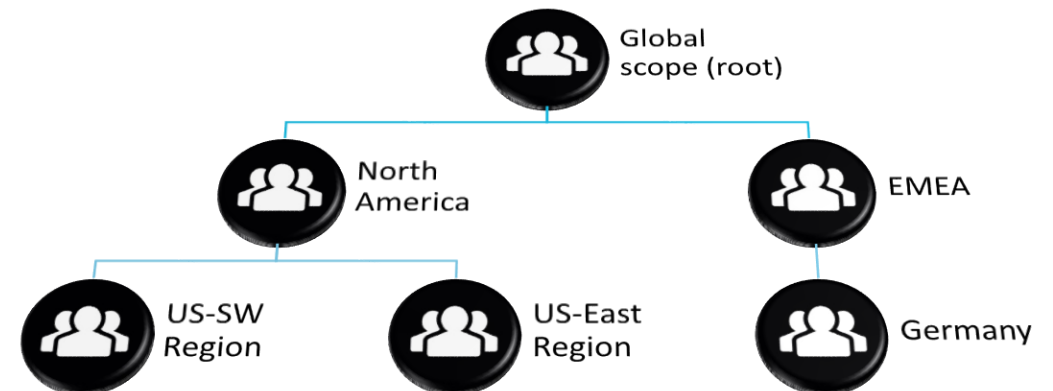
Benefits of Groups
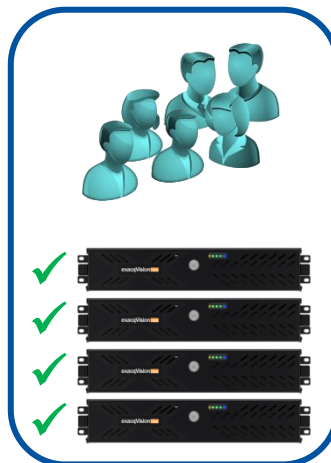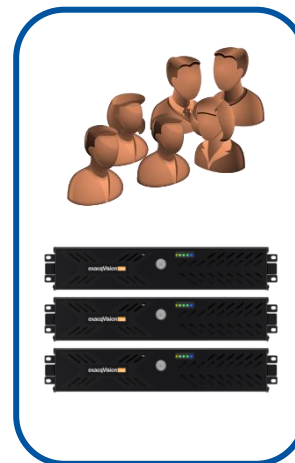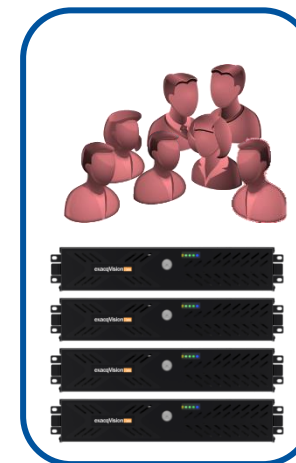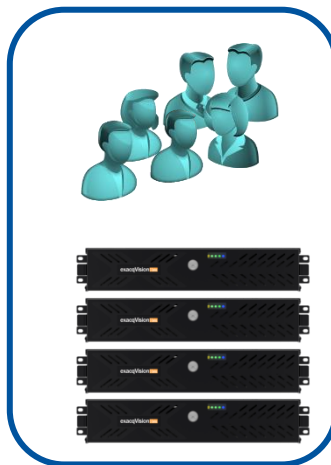
Add a new user to a group…

…Enterprise Manager pushes the user to all servers

exacqVision enterprise
Enterprise Manager

East Group

Midwest Group

West Group

Johnson Controls

Benefits of Groups

Add a new server to a group… →

…Enterprise Manager pushes all the users to that server →

exacqVision® enterprise

Enterprise Manager

East Group

Midwest Group

West Group

Johnson Controls

Benefits of Groups

If any user's permissions are changed on a server...

...Enterprise Manager can undo the change

exacqVision enterprise
Enterprise Manager

East Group

Midwest Group

West Group

Johnson Controls
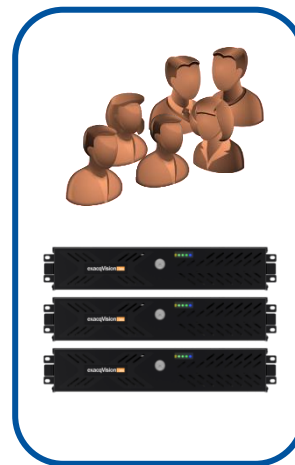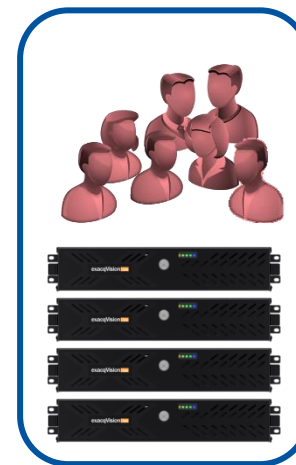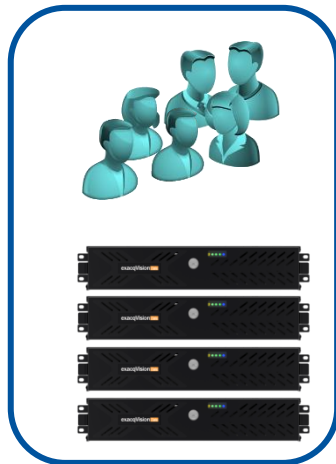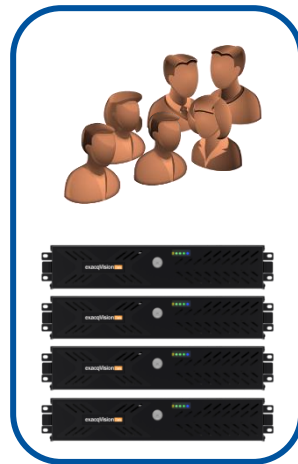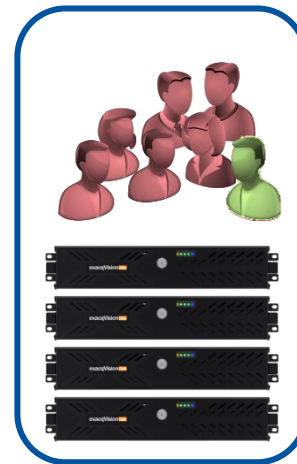
Managing Users: Defining User Roles

- Create and manage users in Enterprise Manager

- Define custom user roles spanning multiple servers with specific privileges and camera visibility

User Role

Name: ⓘ

Priority: ⓘ
1

Group: ⓘ
root

☑ Use same permissions for live and search ⓘ
☑ Include all future servers ⓘ

Privileges ⓘ   [hide]

Search...

expand | collapse | select all | deselect all

☑ Live Viewing
  ☑ Allow Live Viewing Privileges

  ☑ ExacqReplay
  ☑ Allow Ptz

  ☑ Web Panels

☑ Search
  ☑ Allow Searching Privileges
  ☑ Available in Search Cameras
  ☑ Available in Search Groups
  ☑ Available in Search Maps
  ☑ Available in Search Views

Permissions ⓘ   [hide]

Search...

expand | collapse

> ☑ sfsfdssfd
> ☑ 172.19.233.160
> ☑ 10.16.1.204
> ☑ 1234141432143
> ☑ exacqVision Hybrid Server
> ☑ exacqVision Arecont Server
> ☑ PVTR4Z
> ☑ Spare 6
> ☑ Spare 6
> ☑ exacqVision Arecont Server
> ☑ Web/Mobile M-Series
> ☑ Spare 6
> ☑ SEGL11114182
> ☑ S-Series Demo
> ☑ exacqVision Panasonic Server
> ☑ 172.19.233.15
> ☑ exacqVision Vivotek Server
> ☑ exacqVision Illustra Server

Search filter

Specific camera permissions

Save & New   Save

Managing Users (Cont.)

- ■ Create a user and define
  - ■ Accessibility to Enterprise Manager monitoring
  - ■ What servers the user can see in Enterprise Manager
  - ■ What groups of NVRs the user can access
  - ■ The user role (level of permissions) the user has for each group of NVRs

Define unique user role per group

Add User

Main Settings

Username: ⓘ
| TestUser | Search |

Password: ⓘ
| OKAmig0$ | Hide |

Group: ⓘ
| root / server_army ▾ |

Server User Roles ⓘ

Group:	User Role:		
root	(No Server Access) ▾	👁	🔽
root / ESM	(No Server Access) ▾	👁	
root / server_army	Power User ▾	👁	🔽
root / server_army / server_army2	Power User ▾	👁	
root / FailoverTest	(No Server Access) ▾	👁	
root / bluish	(No Server Access) ▾	👁	
root / vktestgroup	(No Server Access) ▾	👁	

User Settings

☑ Allow access ⓘ
☐ Is admin ⓘ

First name: ⓘ

Last name: ⓘ

☐ Create default alert rule for user ⓘ
☐ Show launch dialog prior to opening exacqVision client application ⓘ

Image: ⓘ
Drag and drop image files here or click to select from the file system.

Email Settings

Email address: ⓘ

Throttle email count: ⓘ
| 100 |

Throttle minutes: ⓘ
| 15 |

Batch email frequency: ⓘ
| 15 minutes ▾ |

☐ Send batch with no activity ⓘ

| Save & New | Save |

Controls

Enterprise Manager

Maximize Uptime of Your exacqVision Enterprise Recorders

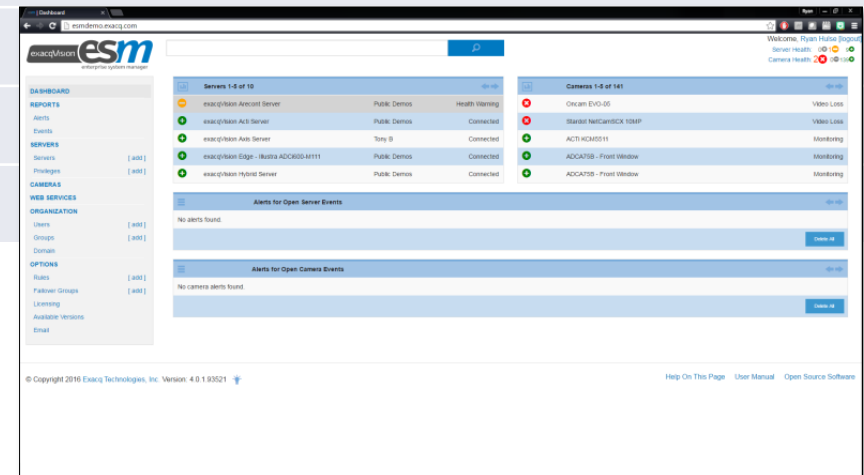Real-time health monitoring of all exacqVision Enterprise recorders and cameras

Available anywhere with web access: PC's, tablets, smart phones, etc.

Highly flexible alerting and email notifications

Active-passive failover

Update recorders remotely on schedule

Simplify user management

tyco | Exacq

Q&A

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