

exacq[®]

Technologies



exacqVision Software Overview



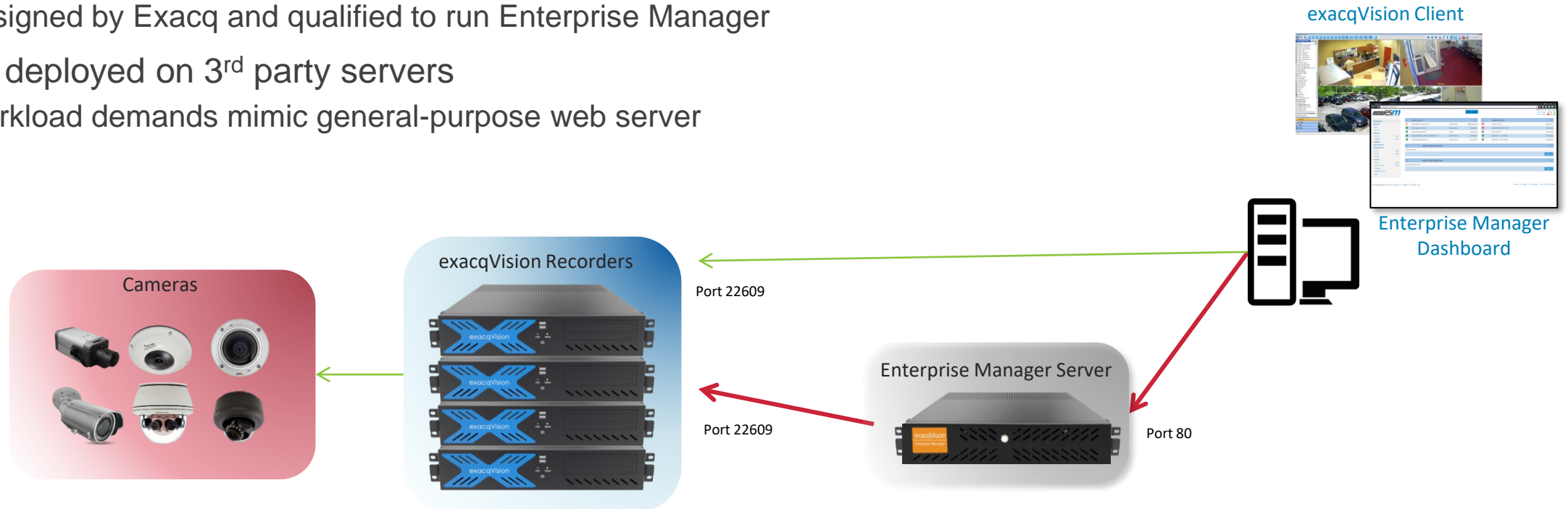
The Value Proposition of Enterprise Manager

- 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





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





Screen Tour: Real Time Dashboard

← → ↻ 🏠 ⓘ Not secure | esmdemo.exacq.com



ROOT USER 

Server Health: 1  1  1  0 

Camera Health: 4  0  20  36 

DASHBOARD

REPORTS

Alerts

Events

SERVERS

Servers [add]

User Roles [add]

CAMERAS

Inspection

WEB SERVICES

ORGANIZATION

Users [add]

Groups [add]

Domain

OPTIONS

Rules [add]

Fallover Groups [add]

Licensing




Available Versions

Settings






SUPPORT

Launch exacqVision Client

Servers 1-3 of 3

	exacqVision Hybrid Server	Not Monitoring
	exacqVision Illustra Server	Health Warning
	exacqVision Axis Server	Connected

Cameras 1-5 of 60

	Flex 4K (low res)	Video Loss
	P3375	Video Loss
	P3375 (2)	Video Loss
	P3375 (low)	Video Loss
	Donut Cam	Monitoring

Alerts for Open Server Events

No server alerts found. Visit **rules** page to define alert criteria.

[Delete All](#)

Alerts for Open Camera Events

No camera alerts found. Visit **rules** page to define alert criteria.

[Delete All](#)

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

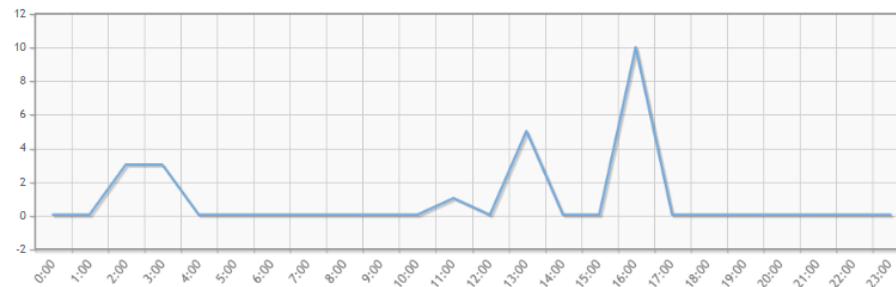
Upcoming Actions:

(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

Screen Tour: Camera Details

exacqVision Axis Server: P3375 

[Add camera image](#)

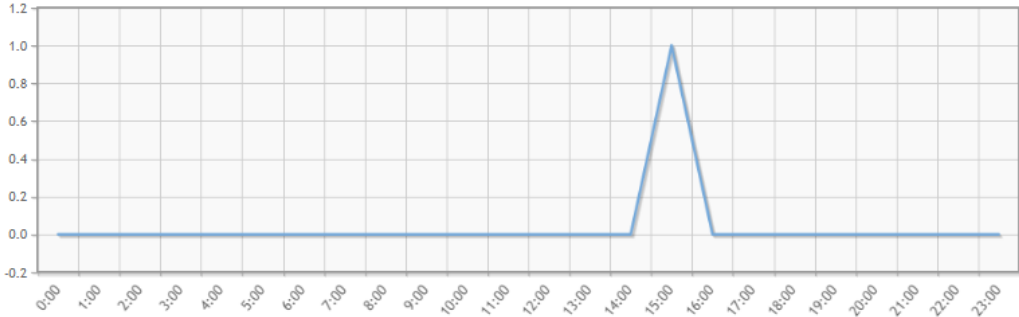
Model: AXIS VAPIX P3375-LV

 **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

Camera Inspection

<p>ESM / exacqVision Hybrid Server / Axis P3346</p> <p>Marked as GOOD by Isaac Penrod 4 weeks, 1 day ago</p> <p>Reference: Not Available</p> <p>Snapshot: </p> <p style="text-align: center;">Mark Good</p> <p style="text-align: center;">Mark Bad</p> <p style="text-align: center;">[view details]</p>	<p>ESM / exacqVision Hybrid Server / Axis P3346 (1)</p> <p>Marked as GOOD by Isaac Penrod 4 weeks, 1 day ago</p> <p>Reference: Not Available</p> <p>Snapshot: </p> <p style="text-align: center;">Mark Good</p> <p style="text-align: center;">Mark Bad</p> <p style="text-align: center;">[view details]</p>
<p>ESM / exacqVision Hybrid Server / Exacq Cafe</p> <p>Marked as GOOD by Isaac Penrod 4 weeks, 1 day ago</p> <p>Reference: Not Available</p> <p>Snapshot: </p> <p style="text-align: center;">Mark Good</p> <p style="text-align: center;">Mark Bad</p> <p style="text-align: center;">[view details]</p>	<p>ESM / exacqVision Hybrid Server / Input 1</p> <p>Not Inspected</p> <p>Reference: Not Available</p> <p>Snapshot: </p> <p style="text-align: center;">Mark Good</p> <p style="text-align: center;">Mark Bad</p> <p style="text-align: center;">[view details]</p>

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

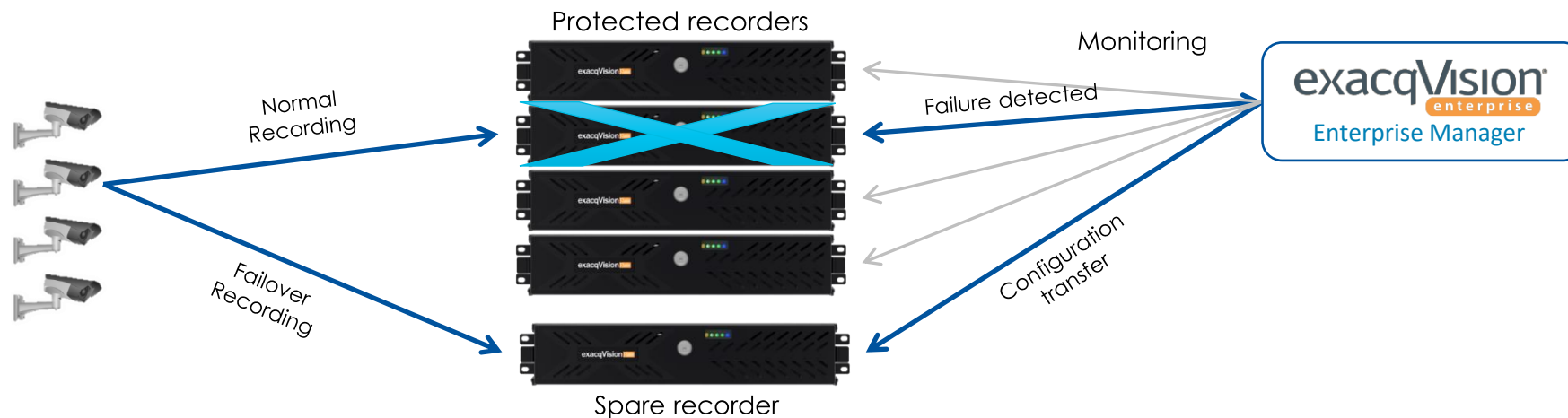
then display alert to 198 out of 198 users

[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

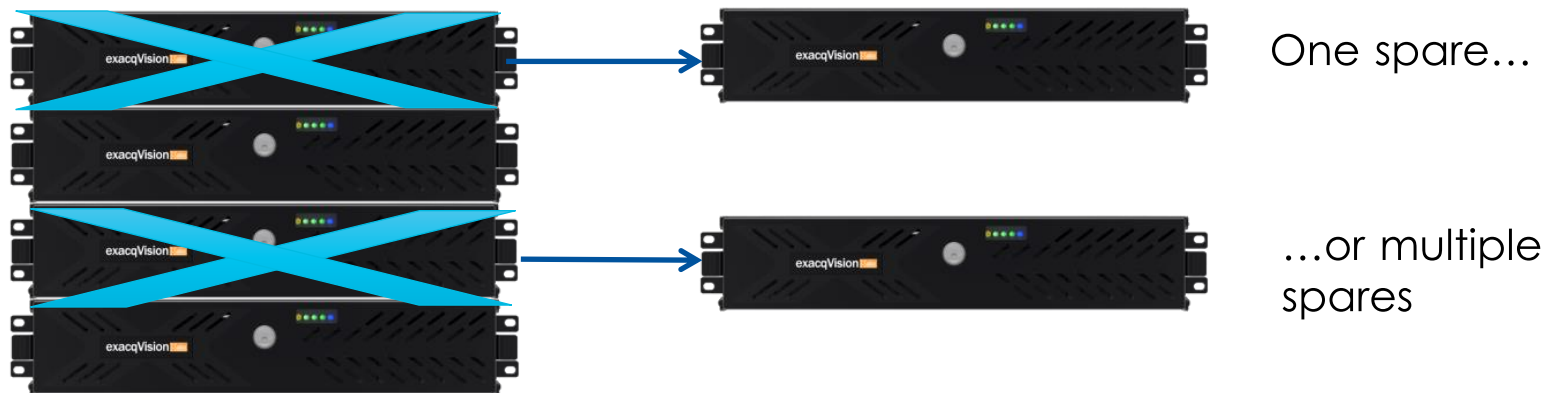
Ensure Availability of Recorders

- 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



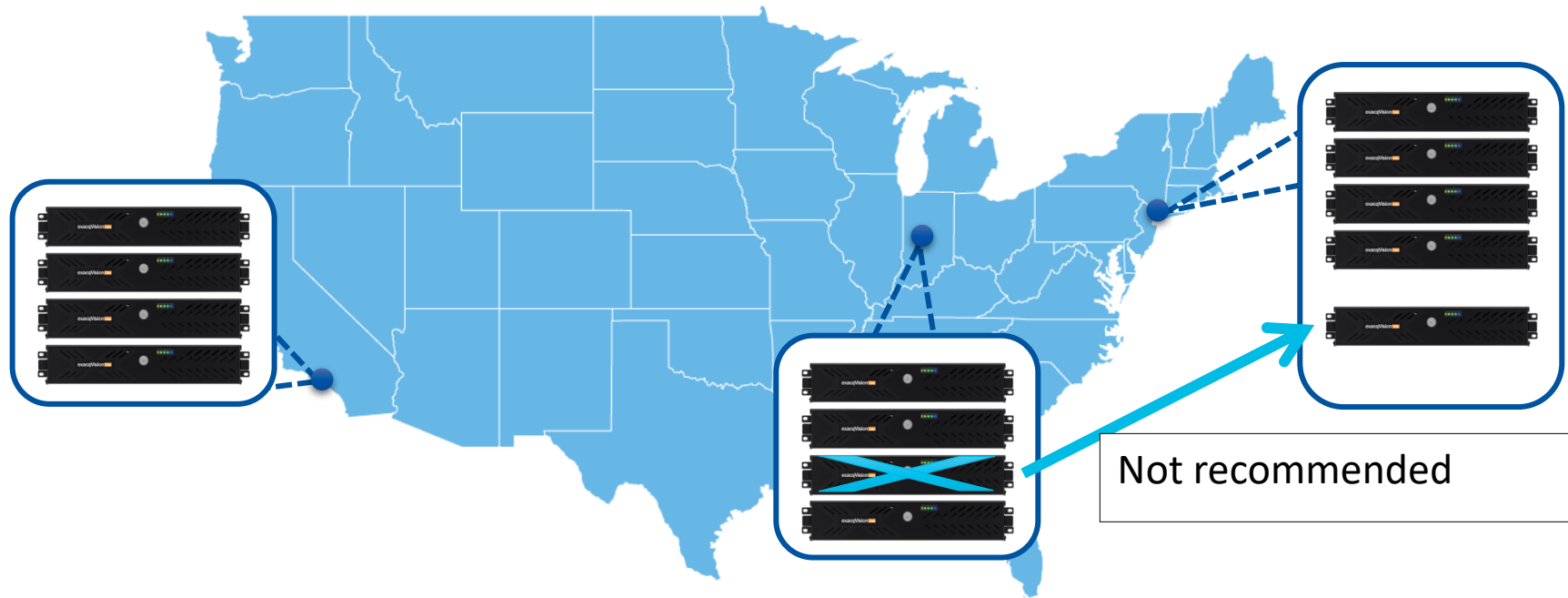
Define one or more Failover Groups

- Multiple spares protect against multiple simultaneous failures



Designed for Local Availability

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



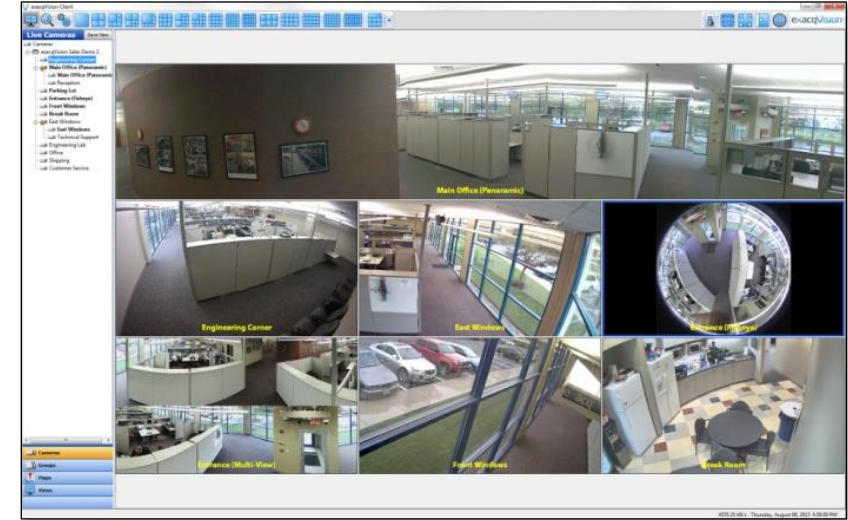
Manual Transfer

- Manually transfer recording before maintenance downtime

The image shows two overlapping windows from the Exacq software interface. On the left is a 'Perform Maintenance' dialog box with a close button (X) in the top right. It contains the text 'Available Spares:' followed by a dropdown menu showing 'spare2' and a blue 'Failover' button. On the right is the 'Matt's Server' details page. At the top right of this page is a wrench icon, which is highlighted with a red box. A red arrow points from this wrench icon to the 'Failover' button in the maintenance dialog. A tooltip above the wrench icon reads 'Failover Matt's Server'. Below the server title are several status indicators: a green plus icon for 'Status: Connected', a green plus icon for 'SSA Through: Sept. 3, 2021, 3 a.m.', a yellow minus icon for 'Version: 6.5.37.71430', and a green plus icon for 'Oldest Content: 272 days'. Below these is a 'Details:' section with key-value pairs: Address: 10.16.1.100, Port: 22609, Group: root, User Name: admin, Web Server: (blank), Web Server Version: (blank), Serial: 00-24-E8-07-FE-B1, Mac: 00-24-E8-07-FE-B1, and Desired Oldest Content: 0 days. At the bottom is a 'Failover:' section with a yellow minus icon for 'Status: Compatibility Warning' and 'Protected By: Failover Group'. A large blue wrench icon is overlaid on the bottom center of the image.

What Fails Over

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



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

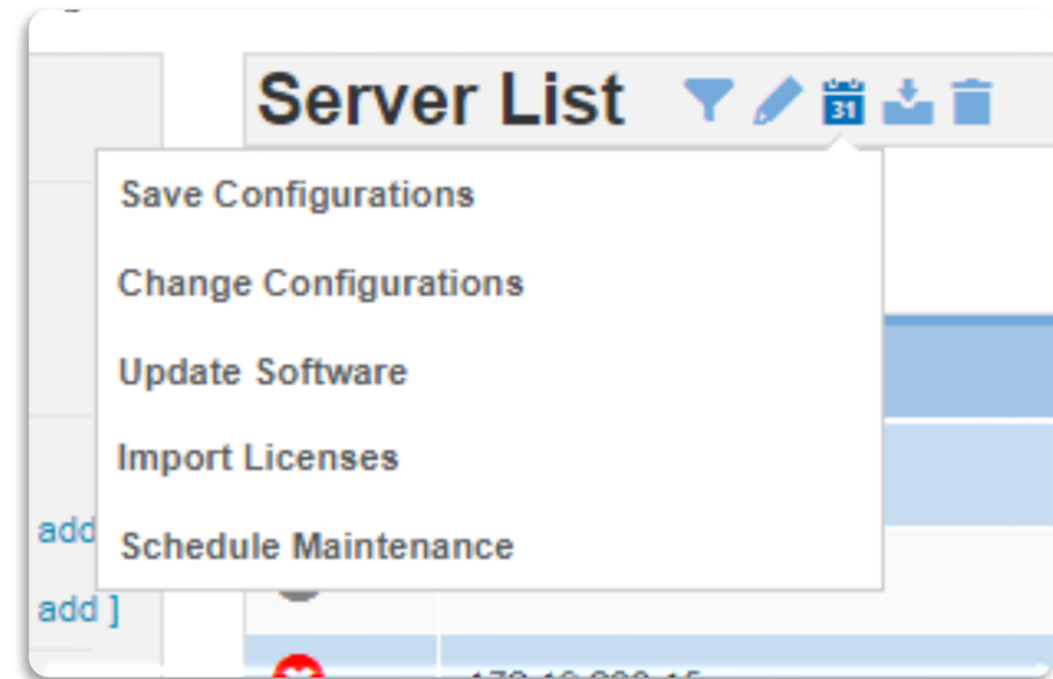
A new (Recommended) server version is available. See Recommended Server Versions list. 

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

The screenshot displays a configuration dialog box with two main sections: "Manual Import" and "Automatic Import".

Manual Import: Includes a "Location:" text input field, a browse button "...", an "Import" button, and an "Export" button.

Automatic Import:

- Enable:** A checked checkbox .
- Type:** Three radio button options: "File on startup" (unselected), "URL on startup" (unselected), and "Synchronize with ESM" (selected and highlighted with a red box).
- URL:** A text input field containing "https://esmdemo.exacq.com".
- Credentials:** Two radio button options: "Always prompt for credentials" (unselected) and "Use credentials entered below:" (selected).
- ESM User Name:** A text input field containing "rhulse".
- ESM Password:** A password input field with seven dots.
- Status:** A label "Status: Connected" in green text.
- Buttons:** "Apply" and "Cancel" buttons at the bottom right.

License Transfers

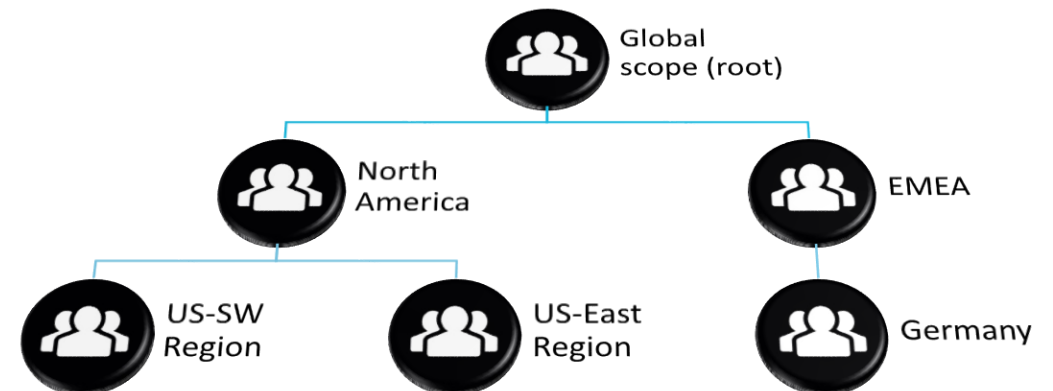
- Transfer camera channels between NVRs
 - Free of charge; no wait for PO processing
 - Channel must be 'unused' – Fewer cameras connected than maximum
 - SSA of target NVR remains the same – Transferred channel assumes SSA of target NVR
- Store camera channels in Enterprise Manager Channel Pool
 - SSA does not “count down” while in the Channel Pool
 - New channel SSA does “spread” to target NVR following normal add-camera logic

The screenshot displays the 'Transfer Licenses' interface in the ExacqVision Enterprise web application. The browser address bar shows the URL 'esmdemo.exacq.com/servers/transferlicenses'. The interface includes a navigation sidebar on the left and a main content area. The main content area has a title 'Transfer Licenses' and three dropdown menus: 'Source' (selected as 'ExacqVision Illustra Server'), 'Transfer', and 'Target' (selected as 'Select server'). Below these is a summary of available channels: 'Available: 25 channels', 'Total: 33 channels', 'Used: 8 channels', 'Pending: 0 channels', and 'Expiration Date: Sep 25, 2022'. At the bottom right of the main area are buttons for 'REMOVE', 'ADD ANOTHER', and 'APPLY'.

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

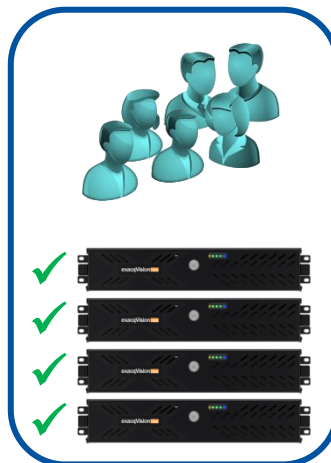
Example hierarchy based on geographies



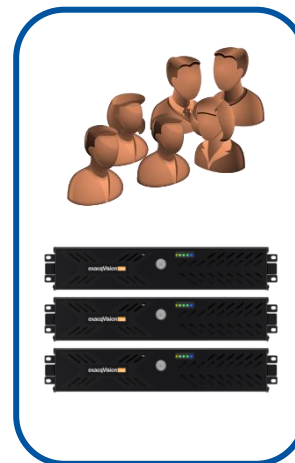
Benefits of Groups



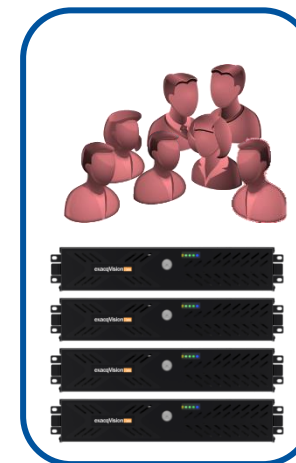
East Group



Midwest Group



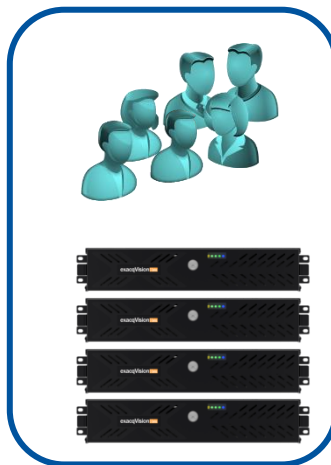
West Group



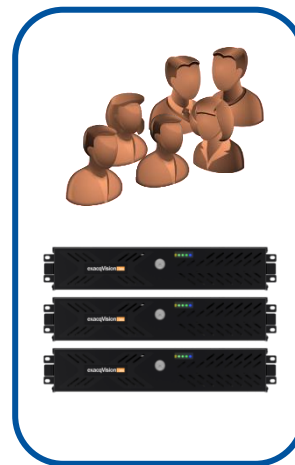
Benefits of Groups



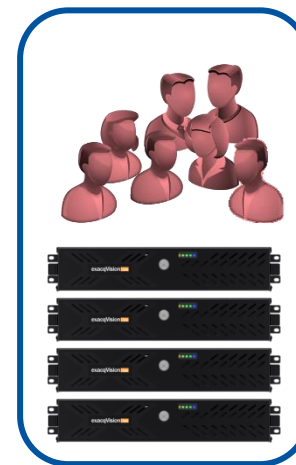
East Group



Midwest Group



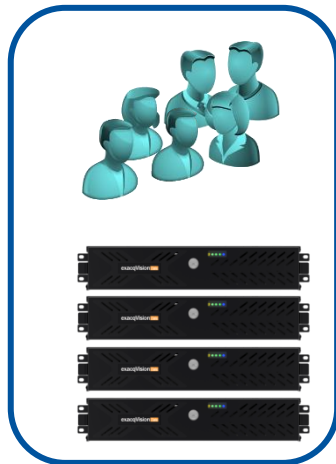
West Group



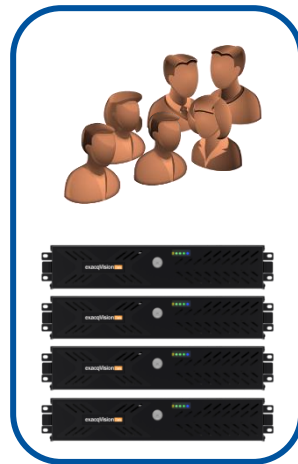
Benefits of Groups



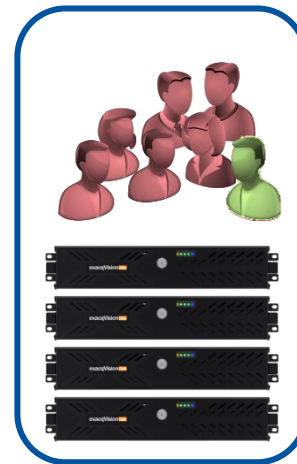
East Group



Midwest Group



West Group



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:

Group:

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...

- 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

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: Search

Password: Hide

Group:

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:

Server User Roles

Group:	User Role:	Visibility	Dropdown
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)	👁️	

Email Settings

Email address:

Throttle email count:

Throttle minutes:

Batch email frequency:

Send batch with no activity

Save & New Save

Enterprise Manager

Maximize Uptime of Your exacqVision Enterprise Recorders

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

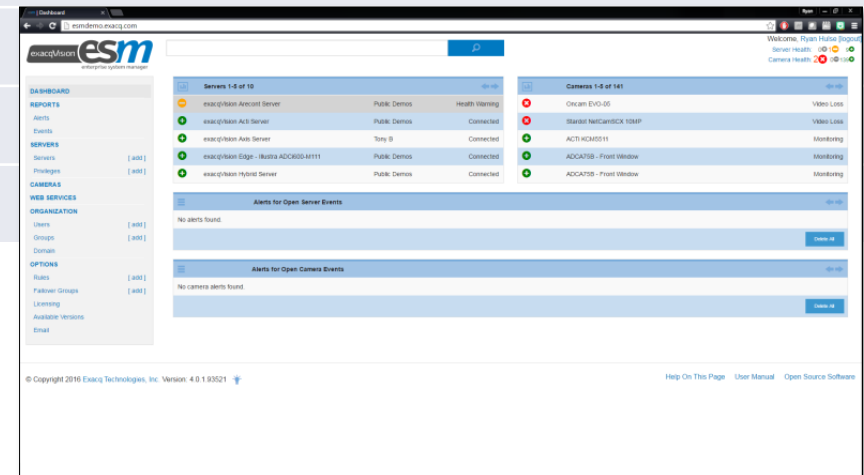
Available anywhere with web access: PC's, tablets, smart phones, etc.

Highly flexible alerting and email notifications

Active-passive failover

Update recorders remotely on schedule

Simplify user management



tyco

| Exacq

Q&A



The power behind **your mission**

Johnson
Controls 