

## NSM5200 Network Storage Manager

This document describes the new features, improvements, and resolved issues for the NSM5200 network storage manager. Review the release notes to determine if an upgrade is required. For additional information about the unit (including the latest updates to documentation, product specifications, and software downloads), visit the Pelco Web site at [www.pelco.com](http://www.pelco.com).

**NOTE:** For technical issues, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international).

### 2.3.3.0056 Release

#### New Features and Improvements

- Improved event recording to greatly increase the number of events that can be recorded while reducing the resource load required for recording such events, all without significantly reducing expected retention periods. This change alters the way in which video and event data are organized on the disc, which may affect quick search results when using the Workstation software.  
**NOTE:** To take advantage of event-based recording improvements, it is recommended that you configure recording schedules with at least 120 seconds post-alarm and 30 seconds of dwell time or more. Recording schedules not meeting these criteria can cause your NSM (and pool) to use an excess of resources. If you cannot meet these recording schedule criteria for events, it is recommended that you record continuously.
- User credentials can now be verified against the Endura system manager by selecting the System Manager option under Account Settings. With this option selected, Endura users must be assigned the Administrator role or a role with one of the following permissions to log in to the NSM5200 Web interface: System Configuration - Configure System, NVR Configuration for all devices, or NVR Configuration for the particular pool the user attempts to access. Local logon access is still supported for users who do not want to authenticate users against the system manager, or in the event that the unit loses its connection to the system manager (with the Fallback local logon option). However, to maintain consistency across authentication methods, local logon authentication now requires a user name. After updating to the 2.3.3 release, you will logon to the NSM5200 using the *admin* user name, and the password (or security question) you used prior to the 2.3.3 update. You can change your user name, password, and enable system manager authentication from the Account Settings page.
- Added a Timeout field to the Account Settings page, allowing administrators to set the period of inactivity that will end a user session for the unit's Web interface.
- Added the ability to enable or disable the RTSP server through the Web interface. The RTSP server is disabled by default.
- Added a powerStatus object to the MIB file. The object returns the status (online or offline) of the unit's power supplies.
- Added a "Drive Model" field to the Disk Information table on the system status page, exposing the model of disk drives installed in the unit.
- Added a System Manager status field to the System Status page, showing whether or not the system manager is online or offline.

## Major Fixes

- Corrected an issue that caused units to report erroneous or duplicate diagnostic messages and alarms when under heavy load.
- Corrected an issue that prevented a member of a pool from recording streams following a failover. The issue only occurred following a failover if any cameras or encoders being recorded by the member fell offline and then came back online.
- Corrected an issue that occasionally prevented the NSM5200 from sending camera associations to the Endura system manager; when this issue occurred, the unassociated (or incorrectly associated cameras) failed to record.
- Corrected an issue causing the unit to occasionally display errors that audio channels were not recording, when audio was not (and had never been) enabled.
- Corrected a number of issues causing streams or units to stop recording in environments configured for high-volume motion recording. The improvements to event and motion recording in this release allow a unit or pool, with schedules configured for at least 120 seconds post alarm and 30 seconds of dwell time, to gracefully handle events, preventing recording failures.
- Corrected an issue preventing multiple users from simultaneously playing back a video stream from the same camera through Endura VCD or Workstation products, when any user connected to the stream engaged high-speed (60X or greater) playback.
- Corrected an issue preventing 300X fast-forward speeds when viewing streams on units containing a large number of file entries.
- Removed SNMP OIDs for coreTemp and hardDriveTemperature. Neither OID relayed valid information for current hardware.
- Corrected an issue preventing users from saving changes to schedules for offline cameras.

## 2.3.1.0259 Release

### New Features and Improvements

- Added SNMP health monitoring messages and trap support for input air temperature, hard disk drive status, system fan status, CPU fan status, CPU load, memory load, and so forth. Users who received pre-release MIBs are required to repeat the integration with updated MIBs available at [www.Pelco.com](http://www.Pelco.com).
- Added support for multicast recording. This allows the system to record the same multicast stream used for live view to conserve network bandwidth between the camera and the recorder. Unicast recording is the default configuration.
- Added support for redundant recording, allowing the same camera(s) to be recorded on two different storage pools. Each pool can have its own independent schedule. The Endura® viewing devices will query the primary pool for QuickSearch information and both pools for Enhanced Search Results.
- Added support for NSM failover on demand. In situations where storage pooling might not be an option, failover on demand allows one NSM5200 pool to monitor any number of NSM5200s set up as individual recorders. If a unit fails, the monitoring pool assumes responsibility for recording the impacted camera(s). NSM5200 failover on demand works across subnets.
- Added support for Unicode schedule naming.
- The RTSP server, previously installed manually for third-party integrations, is now part of the unit's image. This aids the integration of Endura with third-party access control or with other systems.
- Improved the algorithm used to refresh cameras on the Web configuration application. This speeds up camera displays.
- Changed the distribution algorithm in storage pools to balance video retention across all members of the pool as opposed to arbitrarily moving cameras from one storage unit to another. This was necessary as when cameras with different bit rates were recorded in the same pool, one NSM might have started to retire a particular camera's video before other members of the pool did, which would lead to apparent gaps in older video recordings.

- Increased the reserved buffer size for NSM5200 arrays to improve system reliability and uptime under heavy load scenarios. Reserving more space for the buffer impacts retention times. Please consult with your Pelco Sales Representative before updating to ensure that your video retention needs continue to be met. New effective storage values are as follows:
  - **NSM5200-03 (OBS):** 2.21 TB
  - **NSM5200-06:** 4.49 TB
  - **NSM5200-09 (OBS):** 6.77 TB
  - **NSM5200-12:** 9.05 TB
  - **NSM5200-24:** 17.75 TB
  - **NSM5200-36:** 26.66 TB

## Resolved Issues

- Resolved an issue in which the "storage full" diagnostic alarm failed to reset after the issue had been fixed.
- Resolved an issue in which a camera name with an ampersand failed to appear in the available cameras list for NSM pools.
- Resolved an issue in which extra characters appeared in a dialog box in the Web configuration application. Extra characters appeared in the dialog box when the Web application logon password was changed but the security question and answer remained the same.
- Resolved an issue preventing the NSM RTSP server from pulling two concurrent live streams from Sarix cameras onto a third-party application and one of the Endura user interfaces.
- Resolved an issue preventing the NSM from playing back streams requested from Cardax (now Gallagher™) systems.
- Resolved an issue causing the RTSP service on NSM5200s to send error messages to the system manager indefinitely, which could have resulted in the system manager slowing down or locking up.

## 2.1.7.0088 Release

### New Features and Improvements

No new features or improvements were added in this release.

### Resolved Issues

- Updated drivers to support a new motherboard in units built after October 2012. This update is required for customers purchasing an NSM5200 after October 2012 with the intent to add the unit to a storage pool consisting of previously purchased NSM5200 units. Before adding the new NSM5200 to the storage pool, you must upgrade all units in the storage pool to the 2.1.7 release.

## 2.1.5.0001 Release

### New Features and Improvements

No new features or improvements were added in this release.

### Resolved Issues

Resolved an issue in the NSM5200's schedule management services that caused recurring schedules to fail to record on specified dates. When configured, a recording schedule is saved in universal time clock (UTC) time. When a schedule is set up to record Monday through Friday, the UTC offset may cause the loss of a Monday recording. A correction has been made to the time zone offset from UTC to adjust the saved recording schedule.

## 2.1.4.004 Release

This release is required when using Sarix®-based PTZ cameras with version 1.6 firmware.

### New Features and Improvements

No new features or improvements were added in this release.

### Resolved Issues

Resolved an issue where the NSM5200 failed to parse frames correctly when recording from a Sarix-based PTZ camera (TXB-N for Spectra® IV IP or Spectra HD). To reduce latency, the Endura viewing devices take advantage of a flag that is set when a camera begins to pan, tilt, or zoom. In version 1.6 of the Sarix firmware, the location of the flag changed. This change caused the NSM5200 to react to the flag, which resulted in gaps in recorded video while the camera was moving.

## Contact Information

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## Document Revision History

Document #	Date	Comments
C1036RN	5/11	Created document per CR24474.
C1036RN-A	9/11	Updated release information CR24906.
C1036RN-B	6/12	Updated release information per CR24519.
C1036RN-C	8/12	Removed obsolete release information.
C1036RN-D	10/12	Added version 2.1.7.0088 release information.
C1036RN-E	12/12	Added version 2.3.1.0227 release information.
C1036RN-F	11/13	Added version 2.3.3.0056 release information.

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