

## Revision History

Windows 10, Windows 11, Windows Server 2012, Windows Server 2016, Windows Server 2019 and Windows Server 2022 Compatible.

### Revision 2.63

#### NM Service

- Fixed bug in ALE where MS could not be used as in input point
- Fixed bug in FiberPatrol zone trouble parsing.

#### General

- Added updated openssl dlls to correction locations for Simulator and Example code.

### Revision 2.62

#### NM Service

- General
  - Fixed pesky bug in Front Panel Configuration of Text Interface "Fill" .
  - Fixed Korean Translation build.
  - Updated OpenSSL to Version 3.3.
  - Fixed crash on Symphony connect introduced in 2.61 caused by optimization.
- FiberPatrol
  - Minor Fix to representation of specific status change in RSU
- Silver
  - Fix memory issue in Fusion data with FlexZone introduced in 2.61.

### Revision 2.61

#### NM Service

- Fixed small memory leak in NMS
- Minor fix to MultiSensor relay message arriving at UCM
- Fixed MultiSensor time sync for DST

#### NM Front Panel

- Fixed crash on Language switch + configure action

#### NM DLL

- Fixed memory corruption in TXqueue

## Revision 2.60

### NM Service

- Added support for MultiSensor Network Manager.

## Revision 2.59

### NM Service

- Added support to NM Service for handling Temporary Configuration changes which can be triggered by SMS.
- Added Support for FP400 Temporary Configuration control.

### NM DLL

- Added support for new Temporary configuration message to be used in DLL form.
- Fixed bug in communications that in extremely rare frequency and circumstance would cause a message to be lost.

## Revision 2.58

### NM Service

- Added Support to FiberPatrol NMS for Historic Alarm Queue message retrieval via SMS TCP and DLL interfaces.

## Revision 2.57

### NM Service

- Added Support to Silver NMS for Historic Alarm Queue message retrieval via the SMS TCP and DLL interfaces.

## Revision 2.56

### NM Service

- Added Support for BR100
- Support added for the E5000 digital output selection of Gnd (Ground) or Hi-Z (High Impedance) normal state.

- Fixed bug in passing through UCM plot data messages to XField LT.

## Revision 2.55

### NM Service

- Support for windows vista, 7, 8.1 and Server 2008 discontinued.
- Added Simulation Mode
- Added Evad Viewer
- Fixed memory leak that could cause crashes after long run time
- Fixed bug in config messages passed between Omnitrax and Xfield to UCM.

### NM Front Panel

- Added Simulation Mode support

## Revision 2.54

### NM Service

- Korean Translation implemented
- Event Analysis data log now stored in Unicode to support non-ascii language translations.
- Event analysis data log now bilingual (selected + English for remote support purposes).
- Event log now stored in Unicode to support translations.
- Support for Message Start prefix characters in Generic Text Interface.
- Message End delimiters expanded to support up to 4 characters in Generic Text Interface.
- Support added for minimum transmitted buffer size and definition of padding characters in Generic Text Interface.
- Added support for Network Manager Watchdog Service.
- Added Support for Sensor Fusion capabilities to be used with FiberPatrol

## **NM Front Panel**

- Koren Translation implemented.

## **NMS Simulator**

- Added functionality for DB Version message on UCM config download and NMI request.

## **Revision 2.53**

### **NM Service**

- Support added for tool to display the order in which nodes are connected for Silver Loop networks.
- Method of specifying PCs used for redundancy changed. The IP address of both the primary and alternate PC is now entered. Based on the two IP addresses the NMS then determines based on its local IP address whether it should run as primary or alternate.
- Added option to save NM configuration along with node configurations via Tools\Config Retrieval menu item. Saving of NM configuration is only available when connected to NMS on local computer.
- Fix bug in UDP comms that was causing random NMS crash.
- Fixed bug blocking comms when transmitting Fusion data to multiple receivers.

## **Revision 2.52**

### **NM Front Panel/Service**

- Silver Network: Support added for the E5000 digital inputs and outputs when used to host the NMS as a NM Controller.
- Silver Network: Support added for the DBVersion check if a device's configuration has changed. An SMS can check this status with NM\_MT\_DB\_VERSION message.

### **NMS Simulator**

- Support added for E5000 digital inputs and outputs when used to host the NMS as a NM Controller.
- UCM Support updated for: FP400, Omnitrax, UltraWave.
- Device dialogs modified to reflect input and control availability based on optional hardware configured for simulation. Input point alarms that are not configured will not be available for selection.

Control points not configured will appear different when not configured.

### **Alarm Integration Module**

- Support added for E5000 digital inputs and outputs when used to host the NMS as a NM Controller.

### **Revision 2.51**

#### **NM Front Panel/Service**

- Silver: Added Startup allowance configuration setting to allow for slow initial loop hardware connections. Reporting of Comm fails and side faults is suppressed for this period.  
Scenario, the not recommended, sharing of NIU between redundant NMS which can delay failover over a minute.
- LM100: Fixed problem with assigning Output points, Starcom Points and Generic Text strings for Supervision alarm state.

### **Revision 2.50**

#### **NM Service**

- Fixed problem with extracting alarm velocity from FiberPatrol Mode 6 remote interface; requires FiberPatrol version 6.3.1 or later.
- Fixed bug in retrieval of non-contiguous LRange messages that resulted in returning empty ranges of zones not in use.
- Fixed bug in Crossfire that allowed the retrieval of location information message on NMS interface for messages that did not have location information, resulting in junk data.

### **Revision 2.49**

#### **NM Service**

- Silver: Added caching of critical configuration data retrieved from sensor nodes to expedite restart and failover of NMS so that alarms queued in sensors while NMS was offline are processed
- Added retention setting for Event and EvAD logging. When enabled, the NMS will delete log files after the selected (1-400) number of days to manage disk usage.
- Connection status to nodes is set to unknown when connection with service is lost.

## **NM Simul**

- Silver: Fixed crash caused by receiving of Fusion messages from SMS.
- FiberPatrol: Fixed enabling of Cut radio buttons based on Cut location.
- Sennet: Fixed simulation of Comm Fail alarm for LTU.

## **Revision 2.48**

### **NM Service**

- Silver: Added output point state check 2 seconds after last output state change is sent to a device. If reported state doesn't match requested state, last requested state for outputs is resent to the device. Subsequently every 2 minutes during periods of no state change activity, the check is repeated.
- Ultralink I/O: added sending of control statuses when expansion card reset is reported.

### **NMS Front Panel**

- For redundant installations, added the ability at the standby NMS Front Panel to request the transfer of control of the sensor network from the active to the standby NMS. Previously this could only be done from the Front Panel connected to the Active NMS.
- Fixed a bug that did not allow FlexZone versions other than 60 to enable Pre-Alarm.

## **Revision 2.47**

### **NMS Service**

- Fixed a problem where a redundant Network Manager would not go active due to a loss of communications with the Mate NM when only virtual sensors are defined.

## **Revision 2.46**

### **NMS Service**

- Fixed crash that occurred when SMS masked/unmasked a ranging input point in FlexZone.
- Fixed momentary card fails reported for unconfigured expansion cards when a UCM downloaded a new configuration to the ULIO

through the NMS.

## Revision 2.45

### NMS Service

- Bug fixed introduced in version 2.44 causing report of incorrect flexzone zone on alarm.
- Added ability to query NM\_MT\_LRANGE\_ALARMS and NM\_MT\_GPS\_PATH\_ALARMS messages in SN, CCC, XF and Starcom network types.
- Added prealarm state for FP1150.

## Revision 2.44

### NMS Service

- Support added for reporting location units for alarms and cuts in Event logs. Location unit information also added to the location information included in alarm messages (NM\_MT\_SENSOR\_ALARM and NM\_MT\_FILTER\_ALARM). Requires use of FiberPatrol Remote Interface Remote Mode 6.
- Support added for reporting of Cable Cut GPS location in event location data attached to Sensor Alarm messages (NM\_MT\_ALARM & NM\_MT\_FILTER\_ALARM). Reporting of cable cut GPS location information requires FiberPatrol version 6.3.0 or later.
- Fixed a problem where redundant Network Managers would not failover due to loss of communications with all physical sensors if a virtual node was define.
- Fixed problem with loss of point assignment data if node configuration was changed. Problem introduced with addition of configurable zone limit in version 2.42.
- Fixed a problem where redundant Network Managers would not failover due to loss of communications with all physical sensors if a virtual node was define.
- Support added for redundant Network Managers with only virtual sensors defined and no physical sensors. Previously the redundant NMS would failover back and forth due to the lack of sensor communications.

### NMS Front Panel

- Fixed bug with configuration retrieval tool that crashes on second start.

- Added user descriptions for Silver Sensors to be displayed in the device tree of the Front Panel and retrieved by the SMS.
- Added notification of any point assignment deletions that occur when loading an Archived configuration due to the targeted node not yet created in a crosslinked Network Manager configuration. Loading of crosslinked configurations can be accomplished by loading the configurations in two passes. The first pass will ensure target nodes are created, the second pass will load the crosslinked assignments.

## Revision 2.43

### NMS Service

- Bug created in previous release that causes NMS to crash on startup when FlexZone is installed, fixed.

## Revision 2.42

### NMS Service

- TLS bug fixed that caused rejected connections to close other valid connections.
- Fixed bug with UCM monitoring and configuring nodes above device address 63 in Crossfire.
- Fiber cut has been reclassified as warning diagnostic alarm.
- Extended support of FiberPatrol to 1440 zones.
- FiberPatrol is now configurable to report specified number of zones.
- Support added to query via SMS TCP/IP interface (NM\_MT\_GPS\_PATH\_ALARMS) for the GPS path taken by ranging zones. Currently only applicable for FiberPatrol.

## Revision 2.41

### NMS Service

- Bug fix in XF NMS that caused devices over device address 8 to not communicate properly and high CPU util.
- Support added to enable reporting alarm magnitude and velocity by FiberPatrol. Requires remote mode 6 and FiberPatrol version 6.2.1 or later
- Fixed bug with sms interfaces 2-4 causing NMS lockup caused by TLS support.
- Fixed bug with TLS interface not connecting.



## Revision 2.40

### NMS Simul

- Bug fix in simulator created with recent addition of TLS connection caused crashes when UCM connected.
- Fixed bug with TLS interface not connecting.

## Revision 2.39

### NM Applications

- Bug fix in MXNM an SMS retrieving the description text for node 0 (MX Controller) which resulted in the MxNM crashing

### NMS Front Panel

- FiberPatrol
  - Support added for Remote Configuration Interface, Remote Mode 6
- Genetec Security Center alarm assignment enabled only if Genetec-Senstar Gateway service is installed

### NM Service

- Added support for TLS 1.2 NMS connections

### NMI SDK

#### *NMS Simul*

- FiberPatrol
  - Support added for Sensor Unit configured as Redundant Sensor Unit source
  - Fixed problem with setting zone alarm location info for zones 17+.
- Added support for TLS communication
- Silver
  - LM100
    - Support added for enable/disable of Net Head network

#### *NM & NMx64 DLL*

- Added support for TLS communication.

## Revision 2.38

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008, Windows Server 2012 and Windows Server 2016 Compatible.

## NM Applications

- Crossfire (XfNM.exe), Sennet (SnNM.exe) and Silver (AgNM.exe) Network support discontinued in the Network Manager package (P/N 00SW0200). To support these networks, use the Network Manager Service. The Network Manager Service is available as part of the Network Manager Suite package (P/N 00SW0220).

## NM Service

- Silver Network
  - Senstar LM100
    - Fixed problem with reporting LM100 Head warning diagnostic alarms as fatal diagnostic alarms in SMS Device Summary (NM\_MT\_DEVC\_SMRY) message.
- FiberPatrol
  - Support added for reporting of Cable Cut location as a sensor tamper alarm. Event location data attached to Sensor Alarm messages (NM\_MT\_ALARM) location has been enhanced to report the location of the cable cut.
  - Redundant Sensor Unit
    - Fixed problem with Redundant Sensor Unit alarms latching if location tracking not enabled.

## NMI SDK

### *NM & NMx64 DLL*

- Added automatic NM Version (NM\_MT\_VERSION) request when connection is established to a Network Manager.

### *NMS Simul*

- Support added for configuring the SMS TCP/IP interface.
- FiberPatrol
  - Support added for reporting of Cable Cut location as a sensor tamper alarm. Event location data attached to Sensor Alarm messages (NM\_MT\_ALARM) location has been enhanced to report the location of the cable cut.

### *NM Simul*

- Support discontinued for Crossfire, Sennet and Silver Networks. Use *NMS Simul* instead.

## **Revision 2.37**

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008, Windows Server 2012 and Windows Server 2016 Compatible.

### **NM Service**

- FiberPatrol Network
  - Redundant Sensor Unit
    - Fixed problem with synchronizing configuration of Redundant Sensor Units between redundant NMS.

### **NM Simulator**

- Silver Network
  - Senstar LM100
    - Fixed bug with LM100 head configuring from UCM
  - Fixed bug in all Simulator with output points not displaying status created in last release

## **Revision 2.36**

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008, Windows Server 2012 and Windows Server 2016 Compatible.

### **NM Service**

- Silver Network
  - Added Fp400 Support
  - Senstar LM100
    - Fixed problem with reporting LM100 Head diagnostic alarms that are already active when Network Manager is started
- FiberPatrol
  - Processor, COM, Transmitter and Receiver Faults have been reclassified as warning diagnostic alarms.

### **NM Simulator**

- Silver Network
  - Added Fp400 Support

## NM Plot

- Silver Network
  - Added Fp400 Support

## NM Front Panel

- Silver Network
  - Added Fp400 Support

## Revision 2.35

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008, Windows Server 2012 and Windows Server 2016 Compatible.

## NM Service

- Silver Network
  - Alarm Logic Engine
    - Fixed problem with syncing Alarm Logic Element configurations between redundant Network Managers. Problem impacted syncing of Flash, Latch, Counter and Loopback elements.
- FiberPatrol
  - Support added for Redundant Sensor Unit virtual node.
  - Fiber cuts no longer reported as zone supervision alarms in addition to a diagnostic alarm. Instead they will be reported as a trouble state for the affected zones.
- Krypton Network
  - Support added for **Repeat Transmit** global setting.
  - Support added for bulk retrieval of Silver and Krypton Network node configurations via **Tools\Config Retrieval** menu item. Requires UCM version 1.51.
  - Support added to query via SMS TCP/IP interface for the linear range coverage of ranging zones (NM\_MT\_LRANGE\_ALARMS).
  - Notification added to Front Panel to indicate if connection to NM Service already in use by another Front Panel.

## Alarm Integration Module

- FiberPatrol
  - Support added for Redundant Sensor Unit virtual node.
  - Simplified Chinese translation implemented. Requires **NM Alr Integ - CHS.dll** file in Alarm Integration Module working directory.
  - Traditional Chinese translation implemented. Requires **NM Alr Integ -**

**CHT.dll** file in Alarm Integration Module working directory.

## **NMI SDK**

### *NM & NMx64 DLL*

- Added support for Alarm Point Linear Range (NM\_MT\_LRANGE\_ALARMS) message using NM\_RqstLRanges() and NM\_GetLRanges() functions.
- Added 64-bit version of NM dll

### *TestDLL, TestDLLx64 & TestTcplp*

- Support added for the Alarm Point Linear Range (NM\_MT\_LRANGE\_ALARMS) message.
- Added 64-bit version of TestDLL to demonstrate usage with corresponding 64-bit NM dll.

### *NMS Simul*

- Silver Network
  - Support added for Audio Mux.
- FiberPatrol
  - Support added for Redundant Sensor Unit virtual node.
  - Fiber cuts no longer reported as zone supervision alarms in addition to a diagnostic alarm. Instead they will be reported as a trouble state for the affected zones.
  - Support added for configuring linear range coverage of sensor alarms.
- Support added for 4 SMS TCP/IP interfaces.
- Support added for the Alarm Point Linear Range (NM\_MT\_LRANGE\_ALARMS) message.
- Modified status LEDs on device dialogs to facilitate automated test tool detection of on/off status.

## **Revision 2.34**

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008, Windows Server 2012 and Windows Server 2016 Compatible.

## **NM Service**

- Silver Network
  - Alarm Logic Engine
    - Fixed unintended redundant reporting of Control point statuses to a connected SMS when during status auditing between Network Managers.
    - Revised description of Input points reported to SMS to "Logic Element #"

- FlexZone, OmniTrax & XField
    - Fixed reporting status of Optional Aux Control points to SMS.
  - Senstar LM100
    - Fixed reporting status of Optional Aux Control points to SMS.
    - Supported added for activating zone lights at Level 1, Level 2 and Alarm light levels or Forcing Lights Off.
    - Support added for zone auxiliary inputs when supported by sensor heads.
- FiberPatrol
  - Support added to enable reporting alarm classification reported by FiberPatrol with the location information included in alarm messages (NM\_MT\_SENSOR\_ALARM and NM\_MT\_FILTER\_ALARM).

## Alarm Integration Module

- Support added for redundant Network Managers.
- Silver Network
  - Senstar LM100
    - Supported added for activating zone lights at Level 1, Level 2 and Alarm light levels or Forcing Lights Off.
    - Support added for zone auxiliary inputs when supported by sensing heads.

## NMI SDK

### *NM DLL*

- Added extended NM\_GetLocn() function that returns the size of the location block returned. Required because size of FiberPatrol SU location information structure (NM\_FP\_SU\_LOCN or NM\_FP\_SU\_LOCN2) returned depends on whether alarm classification is to be reported.

### *TestDLL & TestTcplp*

- FiberPatrol
  - Added support for displaying Alarm Classification information as part of the Alarm location information attached FiberPatrol Alarm (NM\_MT\_SENSOR\_ALARM & NM\_MT\_FILTER\_ALARM) messages.

### *NMS Simul*

- Silver Network
  - ALE
    - Revised description of Input points reported to SMS to "Logic Element #"

- Senstar LM100
    - Supported added for activating zone lights at Level 1, Level 2 and Alarm light levels or Forcing Lights Off.
    - Support added for zone auxiliary inputs when supported by sensor heads.
- FiberPatrol
  - Added support for reporting Alarm Classification information as part of the Alarm location information attached FiberPatrol Alarm (NM\_MT\_SENSOR\_ALARM & NM\_MT\_FILTER\_ALARM) messages.

## Revision 2.33

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008, Windows Server 2012 and Windows Server 2016 Compatible.

### NM Service

- Silver Network
  - Senstar LM100
    - Fixed crash of NMS that occurred if local relay activation was configured for a zone alarm.
  - 16I/16O and UltraLink I/O
    - User assigned Input and Output point identifiers can be retrieved using NM\_MT\_DESC message. Combine NM\_USER\_DESC with NM\_SENS\_DESC or NM\_CTRL\_DESC for the description type requested.
  - Added ability to adjust communication timeout from 15 to 60 seconds.
  - Improved recovery from node communication errors.
- FiberPatrol
  - Zone names assigned in the FiberPatrol can be retrieved using NM\_MT\_DESC message. Combine NM\_USER\_DESC with NM\_SENS\_DESC for the description type requested.
- Support added to query via SMS TCP/IP interface (NM\_MT\_CONTROL\_INUSE) which Sensor control points that are dependent on optional hardware being installed or on configuration settings (e.g. Senstar LM100 zones defined) are in-use.
- Fixed bug in the Mate NM status when forcing switchover from Active to Standby NMS.

### Alarm Integration Module

- Fixed a problem with reporting Communication and Diagnostic summary alarms when optional alarms are not selected for monitoring.

## NM Tools

### *NMS Simulator*

- Support added for the Control In-Use (NM\_MT\_CONTROL\_INUSE) message.

## NMI SDK

### *NM DLL*

- Added support for Control In-Use (NM\_MT\_CONTROL\_INUSE) message using NM\_RqstCtrlInUse() and NM\_GetInUse() functions.

### *TestDLL & TestTcpIp*

- Support added for the Control In-Use (NM\_MT\_CONTROL\_INUSE) message.

## Revision 2.32

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10,  
Windows Server 2008 and Windows Server 2012 Compatible.

## NM Service

- Crossfire Network
  - Support added for Star topology.
- Krypton Network
  - Support added for global setting of some Sensor Unit configuration parameters.
- Silver Network
  - rBOX510
    - Inclusion of new DLL provided from rBOX510 manufacturer for units with BIOS version A1.03. Changes made in the BIOS resulted in COM 3 & 4 being unusable with previous DLL.
- CCC, FiberPatrol, Krypton, Starcom, Sennet and Crossfire Networks
  - Support added to query via SMS TCP/IP interface (NM\_MT\_SMRY\_INUSE) which Diagnostic Summary points are applicable for a device.
  - Support added to query via SMS TCP/IP interface (NM\_MT\_SENSOR\_INUSE) which Sensor alarm points that are dependent on optional hardware being installed or on configuration settings (e.g. ranging sensor zones defined) are in-use. Which status bits (Alarm, Pre-alarm & Tamper) are applicable for each sensor alarm point is also provided.
- Support added to query via SMS TCP/IP interface (NM\_MT\_VERSION) for the NMS Version.
- Relaxed 60-day runtime limit for Beta versions of the NMS Front



Panel to allow 15 min of runtime if started after runtime limit reached.

### **Alarm Integration Module**

- Replaced 60-day runtime limit for Beta versions of the Alarm Integration Module with daily pop-up reminders to upgrade to a released version. After the 60-day limit is reached reminder frequency is increased to twice daily.

### **NM Tools**

#### *NMS Simulator*

- Support added to query via SMS TCP/IP interface (NM\_MT\_VERSION) for the NMS Simulator Version and Build numbers.

### **NMI SDK**

#### *NM DLL*

- Added support for retrieving NMS version (NM\_MT\_VERSION) using NM\_RqstVersion() and NM\_Version() functions.

#### *TestDLL & TestTcpIp*

- Support added for NMS version (NM\_MT\_VERSION) messages.

### **Revision 2.31**

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008 and Windows Server 2012 Compatible.

### **NM Service**

- Fixed a problem with the 60-day runtime limit for Beta versions of the NMS Front Panel that resulted in the limit also being applied to Release versions of NMS Front Panel.

### **Alarm Integration Module**

- Fixed a problem with the 60-day runtime limit for Beta versions of the NMS Front Panel that resulted in the limit also being applied to Release versions of NMS Front Panel.

### **NM Tools**

#### *NMS Simulator*

- Support added for pre-alarm state usage in sensor in-use (NM\_MT\_SENSOR\_INUSE) messages.

## **NMI SDK**

### *NM DLL*

- Added support for pre-alarm state usage in sensor in-use (NM\_MT\_SENSOR\_INUSE) message using NM\_RqstSensInUse() and NM\_GetInUse() functions.
- Added option of providing a Window handle to NM\_OpenNetwork() function to support different window handles for each network.

### *TestDLL & TestTcpIp*

- Support added for pre-alarm state usage in sensor in-use (NM\_MT\_SENSOR\_INUSE) messages.
- Support added for retrieving Network description (NM\_NET\_DESC) using NM\_MT\_DESC message.

## **Revision 2.30**

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008 and Windows Server 2012 Compatible.

## **NM Service**

- Silver Network
  - Support added for Senstar LM100.
  - Support added to query via SMS TCP/IP interface (NM\_MT\_SMRY\_INUSE) which Diagnostic Summary points are applicable for a device.
- Support added for retrieving Network description (NM\_NET\_DESC) using NM\_MT\_DESC message.
- Implemented a 60-day runtime limit for Beta versions of NMS Front Panel program.

## **Alarm Integration Module**

- Silver Network
  - Support added for Senstar LM100.
- Implemented a 60-day runtime limit for Beta versions of program.

## **NM Tools**

### *NMS Simulator*

- Silver Network
  - Support added for Senstar LM100.
- Silver Network
- Support added for summary point in-use (NM\_MT\_SMRY\_INUSE) messages.
  - Support added for retrieving Network description (NM\_NET\_DESC)

using NM\_MT\_DESC message.

## **NMI SDK**

### *NM DLL*

- Added support for diagnostic summary points are applicable for a device (NM\_MT\_SMRY\_INUSE) message using NM\_RqstSmryInUse () and NM\_GetInUse() functions.

### *TestDLL & TestTcpIp*

- Support added for summary point in-use (NM\_MT\_SMRY\_INUSE) messages.
- Support added for retrieving Network description (NM\_NET\_DESC) using NM\_MT\_DESC message.

## **Revision 2.29**

Released only as OEM version

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10,  
Windows Server 2008 and Windows Server 2012 Compatible.

## **NM Service**

- Silver Network
  - Support added to query via SMS TCP/IP interface (NM\_MT\_SENSOR\_INUSE) which Sensor alarm points that are dependent on optional hardware being installed or on configuration settings (e.g. ranging sensor zones defined) are in-use. Which status bits (Alarm & Tamper) are applicable for each sensor alarm point is also provided.

## **NM Tools**

### *NMS Simulator*

- Added support for sensor alarm point in use and alarm state usage (NM\_MT\_SENSOR\_INUSE) message.

## **NMI SDK**

### *NM DLL*

- Added support for sensor alarm point in use and alarm state usage (NM\_MT\_SENSOR\_INUSE) message using NM\_RqstSensInUse() and NM\_GetInUse() functions.
- Added NM\_SocketInit() helper function for when the DLL is being used from a secondary thread.

### *TestDLL & TestTcpIp*

- Support added for sensor in-use (NM\_MT\_SENSOR\_INUSE) message.

## **Revision 2.28**

Released as Network Manager Suite (00SW0220-228).

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008 and Windows Server 2012 Compatible.

### **NM Service**

- Fixed startup problem for new installations of Network Manager Suite that failed because "Network n" folders didn't initially exist.
- Silver Network
  - Alarm Logic Engine
    - Pulse and Flash Elements: The element reset (reset i/p activate or trigger i/p deactivate) will cancel the pulse or flash immediately instead of being delayed until next timed state transition.
    - Pulse Element: Fixed a problem where the pulse would be canceled if the trigger input deactivated when the pulse was active.
  - UltraLink I/O
    - Support added for Supervised Audio Switch card.
  - UltraWave
    - Fixed display of UltraWave Microwave alarm statistics in NM Status tool.
- Sennet & Starcom Networks
  - Fixed repetitive fail overs occurring between redundant NMS.

### **NM Tools**

#### *NMS Simul*

- Silver Network
  - UltraLink I/O
    - Support added for Supervised Audio Switch card.
- Support added for retrieving description of Diagnostic Summary points using NM\_MT\_DESC message.

## **Revision 2.27**

Released as Network Manager Suite (00SW0220-227).

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008 and Windows Server 2012 Compatible.

## **NM Service**

- Daily Event Log and EvAD files now created even if no activity to report.
- Communications between Front Panel and Service has been redesigned to simplify connecting between a wider variety of PC combinations. Previously connecting may not have worked if the PCs were not in the same Windows Domain or were running on different versions of Windows (e.g. Win7 & Win10). Note that it may be necessary to add "NMS Front Panel.exe" to the Windows Firewall list of applications allowed access through the firewall.
- Added Mate NMS Offline Starcom point to the SMS Starcom interface background audit.
- Fixed the automatic sending of NMS Offline status on the alternative SMS interfaces (Generic Text, Starcom, OnGuard & Genetec when the standby NMS detected the active NMS has failed).
- Silver Network
  - Alarm Logic Engine
    - Support added for Flash Logic Element.
    - Option added to disable recording Logic Element status changes in the Front Panel Event Log. Status changes are still recorded in Event Analysis Data Log.
  - Audio MUX
    - Make sure audio channels released if UDP client for audio (NMS Audio) is no longer connected.
  - FlexZone
    - Fixed a bug which could cause the NMS to crash when Pre-alarm reporting is enabled. The crash occurred when a pre-alarm was detected by a FlexZone-60 at cable locations assigned to Zone 9 or higher. For FlexZone-20 it occurred at cable locations assigned to Zone 4 or higher. For FlexZone-4 it occurred at cable locations assigned to Zone 2 or higher.

## **NMS Front Panel**

- If no running NMS are detected, unavailable selections on Tools menu are now disabled (greyed).
- Startup splash screen added.

## **Alarm Integration Module**

- Startup splash screen added.
- Korean translation implemented. Requires NM Alr Integ - KOR.dll file in Alarm Integration Module working directory.

## NM Tools

### *NM Event Log, NM Status*

- Startup splash screen added.

### *NM Plot*

- Startup splash screen added.
- Krypton Network
  - Fixed a problem with exporting plot data past node 64.
  - Fixed a column heading alignment problem in exported plot files.

### *NMS Simul*

- Startup splash screen added.
- Silver Network
  - FlexZone
    - Fixed Pre-alarm point number reporting error introduced when Auxiliary Input support added.
    - Fixed description string reported for Option Card Fail diagnostic alarm.

## Revision 2.26

Released as Network Manager (00SW0200-225) and Network Manager Suite (00SW0220-225).

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008 and Windows Server 2012 Compatible.

## NM Applications

- Senstar strongly recommends that any new Crossfire, Sennet or Silver Network installations use the Network Manager Service rather than the Network Manager application. The Network Manager application is being phased out for these networks and will receive minimal support and maintenance in the future. The Network Manager Service is available with the Network Manager Suite package (P/N 00SW0220).

### *Crossfire NM (XfNM.exe)*

- Fixed a problem where if a network connection failed after 24.9 days, there was no attempt to reconnect.

### *Silver NM (AgNM.exe)*

- Fixed a problem where if a network connection failed after 24.9 days, there was no attempt to reconnect.

## NM Service

- Silver Network
  - Support added for sharing of rBOX510 and Alarm Logic Engine outputs between networks running on the same computer. Ability to assignment the outputs existed but implementation of the linkage between the networks for those devices was missed.
  - FlexZone
    - Support added for optional Auxiliary 4 Input (p/n 00BA2400) and 4 Output (p/n 00BA2500) cards. Requires MSP firmware version 2.53.
    - Support added to report pre-alarms for cable zone alarms to an SMS using NM Output points and Generic Text, Starcom, OnGuard and Genetec interfaces.
- FiberPatrol Network
  - Fixed a problem with redundant FiberPatrol Network Managers doing constant failovers.
- Added a menu item **NMS Trace HD...** to **Tools** menu to launch the "High Definition" Trace tool (NMS Trace HD.exe).
- Fixed a problem where if a network connection failed after 24.9 days, there was no attempt to reconnect.

## Alarm Integration Module

- Silver Network
  - FlexZone
    - Support added for optional Auxiliary 4 Input (p/n 00BA2400) and 4 Output (p/n 00BA2500) cards. Requires MSP firmware version 2.53.

## NM Tools

### *NMS Simulator*

- Silver Network
  - FlexZone
    - Support added for optional Auxiliary 4 Input (p/n 00BA2400) and 4 Output (p/n 00BA2500) cards.

### *NMS Trace HD*

- Added **Export** button to the Trace dialog to transfer recorded logs to a known folder for easy access.

## Revision 2.25

Released as UltraLink (00SW0220-225)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10,  
Windows Server 2008 and Windows Server 2012 Compatible.

Certified for use with NMS Add-on for Lenel OnGuard 7.1, 7.2 and 7.3. Add-on available from Lenel download site.

## **NM Service**

- Krypton Network
  - Support added for 2nd generation IP Flare Sensor Unit and PPD.
- FiberPatrol Network
  - Fixed reporting of wrong affected points for sensor trouble state.

## **Alarm Integration Module**

- German translation implemented. Requires *NM Alr Integ - DEU.dll* and *PswdMaint - DEU.dll* files in Alarm Integration Module working directory.
- Notification of Demo mode operation added to Event log and About dialog.
- Support added for remote operation via Windows Remote Desktop.

## **Revision 2.24**

Released as UltraLink (00SW0220-224)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

## **NM Service**

- Silver Network
  - UltraWave
    - Transmitter Link Fail re-classified as fatal diagnostic alarm.
    - Transmitter Mismatch re-classified as warning diagnostic alarm.
  - Alarm Logic Engine
    - Fixed saving of "On Trouble" selection for Logic Element inputs.
  - Fixed repetitive fail overs occurring between redundant NMS for Star topology networks.
- Krypton Network
  - Fixed repetitive fail overs occurring between redundant NMS for Star topology networks.

## **Alarm Integration Module**



- Silver Network
  - UltraWave
    - Transmitter Link Fail re-classified as fatal diagnostic alarm.
    - Transmitter Mismatch re-classified as warning diagnostic alarm.

## NM Tools

### *NM Plot*

- Fixed backward compatibility problem with opening plots recorded with NM Plot version 2.11 to 2.20.
- When opening a plot file, the start of the plot is now displayed. Previously end of plot file was displayed

### *NMS Simulator*

- Silver Network
  - UltraWave
    - Transmitter Link Fail re-classified as fatal diagnostic alarm.
    - Transmitter Mismatch re-classified as warning diagnostic alarm.

## Revision 2.23

Released as Network Manager (00SW0200-223) and UltraLink (00SW0220-223)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

## NM Service

- Silver Network
  - Support added for Alarm Logic Engine virtual node type.
  - FlexZone
    - Fixed reporting a trouble condition for aux inputs when a cable supervision alarm occurred.
- Support added for UDP/IP connection for Generic Text SMS interface.

## NM Applications

### *Silver NM (AgNM.exe)*

- Revised the method of loading the driver used to interface via USB with Silver NIUs due to loader compatibility issues with some newer PCs.
- FlexZone

- Fixed a problem with not reporting to SMS a trouble state for cable zones with corresponding side supervision fault.
- Fixed reporting a trouble condition for aux inputs when a cable supervision alarm occurred.

#### *Voice over Ethernet NM (VoNM.exe)*

- Fixed a requiring the PTT input number to be specified as 1 higher than the actual input used.

### **Alarm Integration Module**

- Silver Network
  - Support added for Alarm Logic Engine virtual node type.

### **NM Tools**

#### *NMS Simulator*

- Silver Network
  - Support added for Alarm Logic Engine virtual node type.

### **Revision 2.22**

Released as UltraLink (00SW0220-222)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### **NM Service**

- Silver Network
  - OmniTrax
    - Fixed problem reporting zone alarm active messages via SMS TCP/IP interface. Zone alarm active messages were reported only when location tracking was enabled and only when the location status changed.

### **Revision 2.21**

Released as UltraLink (00SW0220-221)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### **NM Service**

- Silver Network
  - FlexZone-4/20/60

- Reporting of trouble status for sensor alarms for zones and GSMS which are not configured to be present is now suppressed.
  - Fixed disabling of location reporting in alarm messages via SMS TCP/IP interface. Missed being implemented in V2.19 due to oversight.
  - Fixed crash that occurred when responding to alarm point status request (NM\_MT\_SENSOR\_ALARM) when the point was in alarm.
- OmniTrax
  - Reporting of trouble status for sensor alarms for zones and optional input card which are not configured to be present is now suppressed.
  - Fixed disabling of location reporting in alarm messages via SMS TCP/IP interface. Missed being implemented in V2.19 due to oversight.
- UltraLink I/O
  - Reporting of trouble status for sensor alarms for expansion cards which are not configured to be present is now suppressed.
- X-Field/X-Field LT
  - Reporting of trouble status for sensor alarms for optional input card which are not configured to be present is now suppressed.
- Improved communications resiliency to delays in a node responding when the node writes on-board flash memory.
- TCP/IP Loop Network
  - After 15 seconds any open TCP socket is closed if there has been no response from any node via the socket. The socket is then re-opened in an attempt to resolve any connection issues.
- FiberPatrol
  - Reporting of trouble status for sensor alarms for zones which are not configured to be present is now suppressed.
- Crossfire
  - Redesigned communications to speed up side fail detection time and node poll rate under open loop condition. The improved responsiveness is especially noticeable for loops with a large number of nodes.
- Sennet Network
  - Sync node configuration between redundant Sennet NMS when standby NMS starts up.
- Star Networks (Silver, FiberPatrol, Krypton)
  - When a node communication fail occurs, in the event there is an open TCP socket to the node, that socket is closed. The socket is then re-opened in an attempt to resolve any connection issues.

## **rBOX510 Svc**

- Changed the method used to determine if the rBOX510 Svc service should be installed. When upgrading a pre V2.19 installation of UltraLink, the service was being installed in error on non rBOX510 PCs.
- New DLL from rBOX510 manufacturer for interfacing to WDT and DIO. Previously included DLL had handle leak resulting in periodic crash and rebooting of rBOX510.

## **NMS Front Panel**

- Fixed problem with deleting a node whose outputs have been assigned to other nodes.

## **NM Tools**

### *NM Plot*

- Silver & Krypton Network
  - Added GoTo button to plot dialogs to enter a date and time to scroll to in a recorded plot.
- Silver Network
  - FlexZone-4/20/60
    - Added plot playback controls to step between events.
  - UltraWave
    - Minor formatting fixes in exported .csv & .txt plot files.
- Sennet Network
  - Perimitrax
    - Recording rate reduced from 2 to 1 sample per second.

### *NMS Simulator*

- Silver Network
  - UltraLink I/O
    - Reporting of trouble status for sensor alarms for expansion cards which are not configured to be present is now suppressed.
- FiberPatrol
  - Added support for simulating alarm location.

### *NMS Trace HD*

- “High Definition” NMS Trace which records raw Network, SMS and UCM messages to hourly trace files. To reduce loading due to volume of data recorded, there is no live message window. Intent is for trace files to be reviewed offline.
  - Trace files are stored in “C:/Senstar/Network Manager/LogFiles” folder.
  - The filenames have the format:  
NMS*m* Infor*α*.txt

where

***m*** = NMS id number (1-10)

***n*** = Weekday number (1-7, 1 = Sunday, 2 = Monday ...)

***α*** = Letter for recording time

(a-x, a = 0-1 a.m., b = 1-2 a.m., c = 2-3 a.m. ...)

Example: File named “NMS1 Info4p.txt” is a recording of NMS 1 from a Wednesday between 3 p.m. and 4 p.m..

## **NMI SDK**

### *NM DLL*

- Added NM\_DeviceQtys() function to retrieve the number of Diagnostic, Sensor and Output points a node supports.

### *TestDLL & TestTcpIp*

- “File\Save As...” menu item added to enable dumping contents of display window to a file.
  - Expanded device type specific reporting of location for FiberPatrol.
  - Added device type specific reporting of location for Krypton Sensor Unit
- TestDLL only
  - Usage example added for NM\_DeviceType and NM\_DeviceQtys() functions.

## Revision 2.20

Released as UltraLink (00SW0220-220)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### NM Service

- Silver Network
  - FlexZone-4/20/60
    - Support added for Gate Sensor Modules. Requires MSP version 2.20 or later.
- Crossfire Network
  - Pass control to Standby NMS if no communications with any node for 60 seconds.

### NMS Front Panel

- When loading a configuration, added a warning message to report a serial port not available on the current computers.

### Alarm Integration Module

- The Alarm Integration module now sends sensor alarm mask status changes to the Network Manager for forwarding to other connected SMS. It will also accept mask status changes received from the Network Manager.

### NM Tools

#### *NMS Simulator*

- Silver Network
  - FlexZone-4/20/60
    - Support added for simulating Gate Sensor Modules

## Revision 2.19

Released as UltraLink (00SW0220-219)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### NM Service

- Support added to enable/disable location reporting in alarm messages (NM\_MT\_SENSOR\_ALARMS and NM\_MT\_FILTER\_ALARMS) via SMS TCP/IP interface.
- Silver Network
  - Support added for rBOX510 digital inputs and outputs when used to host the NMS as a NM Controller.
- FiberPatrol
  - Fixed alarm hold setting not effecting zone alarms.

### rBOX510 Svc

- Installed when the Network Manager Service Software package is installed on an rBOX510 embedded controller which has been configured as a NM Controller. It runs as a Windows service and supports the Digital I/O and Watchdog timer features of the rBOX510.

### Alarm Integration Module

- Silver Network
  - Support added for rBOX510 digital inputs and outputs when used to host the NMS as a NM Controller.

### NM Tools

#### *NM Plot*

- UltraWave
  - Added on-line help support.
  - Fixed crash that occurred when horizontally zooming out to "/20" setting.
  - Fixed tracking problem between crosshair and horizontal slider.

#### *NMS Simulator*

- Silver Network
  - Support added for rBOX510 digital inputs and outputs when used to host the NMS as a NM Controller.

## NMI SDK

### *TestDLL & TestTcpIp*

- Added device type specific reporting of location for ranging sensors.

## Revision 2.18

Released only as OEM version

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

## NM Service

- FiberPatrol
  - Fixed communication failure notification problems observed when Ethernet link lost between NMS and FiberPatrol PCs.
- The Front Panel event log now just reports when sensor alarm state changes are sent to the SMS. A non-zero Alarm Hold time can result in raw alarms that occur within the alarm hold time window to be merged into a single alarm report to the SMS. In addition target tracking information for ranging sensors is no longer recorded in the Event Log. The Event Analysis Data file contains a complete record for technical analysis including all raw alarm transitions, alarm tracking information and reporting of alarm state changes to the SMS.
- Fixed reporting of mate link status via NM, Starcom Output, OnGuard & Genetec Output and Generic Text.
- Fixed reporting of SMS link status via NM Output for redundant NMS.
- Adjusted timeout for detecting active redundant NMS on startup to stop occasional transfer of active control of sensor network.
- Fixed crash of NMS due to unexpected closing of TCP link to a Star topology Silver node.

## NM Tools

### *NM Plot*

- FlexZone
  - Fixed threshold calculation. Error affected numeric value displayed and display of relative plot data.



## Revision 2.17

Released as UltraLink (00SW0220-217)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### NM Service

- Support added for Genetec Security Center SMS interface.
- Silver Network
  - Fixed communication startup failure when running redundant with **Star** connection topology.
  - Revised the method of loading the driver used to interface via USB with Silver NIUs due to loader compatibility issues with some newer PCs.
  - FlexZone
    - Fixed a problem with not reporting to SMS a trouble state for cable zones with corresponding side supervision fault.
- Krypton Network
  - Fixed communication startup failure in redundant mode.

### Alarm Integration Module

- The Alarm Integration Module now classifies each individual Communication and Diagnostic alarm as a fatal, warning or enclosure alarm. A summary status (individual alarms ORed together) for each device is presented to the operator as Comm Fail, Comm Fault, Diag Fail, Diag Warn and Diag Enclosure alarms for processing. For maintenance purposes the status of the individual contributing alarms can be reviewed on the Diagnostic Tree tab.

### NMS Simulator

- Support added for Genetec Security Center SMS interface.

## Revision 2.16

Released as Network Manager (00SW0200-216) and UltraLink (00SW0220-216)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### NM Service

- Support added to enable/disable Alarm masking (NM\_MT\_FILTER\_ALARMS) and Pre-Alarm reporting (NM\_MT\_PRE\_ALARMS) via SMS TCP/IP interface.
- Silver Network
  - FlexZone
    - Support added for NM\_MT\_PRE\_ALARMS message to report pre-alarms for cable zone alarms to an SMS. See TCP/IP Network Manager Interface (d/n: 00DA0209) application note for message details.
  - Fixed a Loop topology communication problem that allowed a small possibility of a node comm fail every 49.7 days of PC run time that would require a restart of the NMS to repair.
  - Fixed a Star topology communication problem that resulted in communication failure to all nodes every 49.7 days of PC run time that would require a restart of the NMS to repair.
- Sennet Network
  - Added instructions to the on-line help for connecting to the Sennet Network Controller.
  - Fixed a problem selecting the baud rate when interfacing to the Network Controller via a serial port.
  - Fixed a problem handling a broken TCP/IP link to the Network Controller.
- Krypton Network
  - Fixed a communication problem that resulted in communication failure to all nodes every 49.7 days of PC run time that would require a restart of the NMS to repair.

## NM Applications

### *Silver NM (AgNM.exe)*

- Fixed a communication problem that allowed a small possibility of a node comm fail every 49.7 days of PC run time that would require a restart of the NM to repair.

## NM Tools

### *NM Plot*

- Support added for FlexZone-60.

### *NMS Simulator*

- Silver Network
  - Add ability to simulate Pre-alarms for zone alarms.
- FiberPatrol Network
  - Fixed a crash that occurred when FiberPatrol network type was selected for simulation.

## NMI SDK

### *NM dll*

- Added support for Pre-Alarm (NM\_MT\_PRE\_ALARMS) message using NM\_RqstPreAlrm and NM\_GetAlarm functions.

### *TestDLL & TestTcpIp*

- Support added for NM\_MT\_PRE\_ALARMS message.

## **Revision 2.15**

Released as UltraLink (00SW0220-215)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

Certified for use with NMS Add-on for Lenel OnGuard 7.0. Add-on available from Lenel download site.

## **NM Service**

- Silver Network
  - UltraLink I/O
    - Reporting of diagnostic and sensor alarms for expansion cards which are not configured to be present is now suppressed.
  - Support added reporting Diagnostic Summary points via all SMS interfaces (Generic Text, Starcom, etc.).
  - Support added for reporting sensor alarm trouble status via OnGuard SMS interface. Requires OnGuard 7.0.

## **NM Tools**

### *NMS Simulator*

- Silver Network
  - OmniTrax & FlexZone-20/60
    - Changed the way Ranging Alarms are reported to a SMS to better simulate the real world interaction of "Alarm Hold" on reporting alarms with location information.
  - FlexZone-20/60
    - To better simulate the real world sensor operation, moving the cable alarm location now ends an active alarm. The sensor does not track a target moving laterally down the fence.
  - UltraLink I/O
    - Fixed problem with uploading configuration to UCM.
  - UCM support updated for
    - FlexZone: MSP V2.23, FPGA V2.10
- Sennet Network

- Added support for Device summary and sensor point trouble alarms. Missed when support added for other networks in V2.11.
- OnGuard SMS Interface
  - Supported added for Comm and Diag alarm Summary states to activate OnGuard zones.
  - Added reporting of Trouble state for OnGuard zones associated with Sensor point whose alarm reporting capability may be compromised due to a diagnostic alarm. Requires OnGuard 7.0.
- Support added for archiving and reloading Simulator configurations.

## Revision 2.14

Released as Network Manager (00SW0200-214) and UltraLink (00SW0220-214)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 Compatible.

### NM Service

- Support added for Sennet Network.  
Devices supported:
  - Support added for Sennet Network
  - LTU
  - NC (Network Controller)
  - SM (Perimitrax)
  - TU
- Silver Network
  - Fixed a problem with assigning an output on another network to a Silver Network node input point.
- Added ability to export Output assignments to a .csv file for review. Available on the TCP/IP sub-tab of the Configuration dialog SMS tab.
- Added reporting of overflow of the event log communication link between the NMS and the NMS Front Panel. The complete event log can be retrieved using the Event Log Tool.

### NM Tools

#### *NM Plot*

- Fixed problem with the wrong Network Type being displayed for the selected Device Type when the Connect dialog is initially displayed.
- Fixed formatting error in exported FlexPS plot data.

#### *NM Simulator, NMS Simulator*

- Fixed problem with saving and reloading FlexZone-20 configuration

changes.

## Revision 2.13

Released as Network Manager (00SW0200-213) and UltraLink (00SW0220-213)

Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008 and Windows Server 2012 compatible.

- Windows XP support discontinued.
- Fixed a problem with the installation procedure that didn't correctly enable Windows Auto-Login on 64-bit operating systems.

## NM Applications

- Added signature line to Event Log files to identify creating application.

### *Silver NM (AgNM.exe)*

- Support added for accessing sensor Remote configuration parameters for UltraLink I/O NM Mode.

Note: A Network Manager <b>cannot</b> be connected to network containing a UltraLink I/O running in NM Mode.
--------------------------------------------------------------------------------------------------------------

- FlexZone
  - Fixed a problem with connecting to a FlexZone-60 that would cause NM to crash.
  - Fixed a labeling mix up of FlexZone-20 & -60 devices on NM Status Tool reports.
- Improved reliability of connecting through a standby NIU to devices beyond a break in a network loop on startup.

## NM Service

- Silver Network
  - Support added for accessing sensor Remote configuration parameters for UltraLink I/O NM Mode.

Note: A Network Manager <b>cannot</b> be connected to network containing a UltraLink I/O running in NM Mode.
--------------------------------------------------------------------------------------------------------------

- Fixed a labeling mix up of FlexZone-20 & -60 devices on NM Status Tool reports.
  - Improved reliability of connecting through a standby NIU to devices beyond a break in a network loop on startup
- Crossfire Network
  - Fixed reporting Intelli-Flex/Fiber and Intelli-Field diagnostic alarms via output points and OnGuard, Starcom and Generic

Text SMS interfaces.

- Generic Text SMS interface
  - Fixed activating outputs on CCC, Crossfire, Krypton and Starcom networks using output point strings.
- Added support for sharing of outputs between networks running on the same computer. An alarm on a node on one network can now be configured to activate a relay on a node on another network running on the same computer.
- Fixed a problem with reporting side fails via output points and OnGuard, Starcom and Generic Text SMS interfaces.
- Added signature line to Event Log and EvAD files to identify creating service.

## **NM Tools**

### *NM Plot*

- Krypton Network
  - Fixed the program crashing or the wrong data being displayed when hovering over the info spot.

### *NM Status*

- Added export feature.

### *NMS Audio Tool*

- Removed from UltraLink (00SW0220-XXY) software package. Now available as 00SW0250-XXY.

### *NM Simulator, NMS Simulator*

- Silver Network
  - Fixed problem with simulating FlexZone-20 cable alarms. Problem was introduced in V2.12.
  - Fixed problem with using the UCM to configure a FlexZone which would cause the simulator to crash.
  - UCM support for updated for:

▪ FlexPS	MSP V3.10	
▪ FlexZone	MSP V2.10	FPGA V2.10
▪ OmniTrax	MSP V2.90	FPGA V13.05
▪ UltraLink I/O	MSP V1.04	
▪ UltraWave	MSP V2.10	
▪ XField	MSP V6.10	FPGA V7.03

## **Revision 2.12**

Released as Network Manager (00SW0200-212) and UltraLink (00SW0220-212)

Windows XP, Windows Vista, Windows 7, Windows 8, Windows Server 2008 and Windows Server 2012 compatible.

### **Alarm Integration Module**

- Silver Network
  - Support added for FlexZone-60.
  - Monitoring of diagnostic alarms for uninstalled ultraLink I/O expansion cards may now be disabled.
- FiberLR Network
  - Product rebranded as FiberPatrol.
- Fixed a problem with limiting the size of the Event Log that would eventually cause a NM crash.

### **NM Applications**

- Changes made to support day by day event log loading by Event Log tool.

#### *Silver NM (AgNM.exe)*

- Support added for the FlexZone-60.
- Fixed reporting of input supervision status in NM Status report.
- Added delay between loop polls to increase communication resiliency.
- FlexZone
  - Support added for the FlexZone-60.
  - Fixed incorrect alarm location reporting when multiple FlexZone cable alarms occur. This can result in the alarm being reported in the wrong zone.
  - Support added FlexZone Audio for UCM access. Note, no support for NMS Audio tool.

#### *MX-5000, Sennet, Sentrax & VoE NM (MxNM.exe, SnNM.exe, SxNM.exe & VoNM.exe)*

- Fixed a problem with limiting the size of the Event Log that would eventually cause a NM crash.

### **NM Service**

- Support added for Krypton Network.  
Devices supported:
  - Sensor Unit (SU)
- Support added for Generic Text SMS interface

**Supports:**

- Connection via Serial Port, as TCP/IP Client, or as TCP/IP Server
- Entry of point specific strings that will be sent for alarm (Comm, Diagnostic and Sensor) On/Off states
- Entry of point specific strings that when received will trigger output points
- Entry of heart-beat string with adjustable send interval setting
- Strings up to 64 characters long
- Selection between "8-bit ASCII" (ISO 8859-1) and Unicode UTF-16 (Little endian) encoding
- Support added for reporting a Standby NMS status via device output, OnGuard and/or Starcom SMS interfaces.
- Support added for a Starcom SMS interface via Serial Server and StarcomIP protocol.
- Support added to launch NMS Audio Tool for currently selected network.
- Silver Network
  - Support added for Audio MUX virtual node for switching FlexZone Audio.
  - Added delay between loop polls to increase communication resiliency.
  - Fixed reporting of FlexPS cable supervision alarm counts in NM Status report.
  - FlexZone
    - Support added for the FlexZone-60.
    - Support added for FlexZone Audio.
    - Fixed incorrect alarm location reporting when multiple cable alarms occur. This can result in the alarm being reported in the wrong zone.
    - Fixed a problem with recording a Dual Pass Sensitivity profile over the network. Data for just one side was passed through to the UCM.
- Starcom Network
  - Support added for StarcomIP client and server interfaces.
- FiberLR Network
  - Product rebranded as FiberPatrol.
  - Fixed a problem with processing XML messages from the FiberLR which could cause the NMS to lockup.
- Fixed a problem with a Redundant NMS failover where the NMS taking control did not enable UCM or SMS connections.

**NM Tools**

*Network Manager Service Audio*



- Baseline release of application to listen to the audio signal from FlexZone sensor zones via an Audio MUX node.

### *Network Manager Event Log*

- Loading for a range of days is now done day by day to allow aborting unnecessary loading when maximum number of lines to be displayed is reached.

### *Network Manager Plot*

- Krypton Network
  - Support added for the Sensor Unit.
- Silver Network
  - FlexZone
    - Support added for threshold redesign made in FlexZone MSP version 1.02.

### *Network Manager Simulator*

- Silver Network
  - FlexZone
    - Support added for the FlexZone-60.
    - UCM support for FlexZone updated up to MSP V1.87, FPGA V1.90.

### *Network Manager Service Simulator*

- Silver Network
  - FlexZone
    - Support added for the FlexZone-60.
    - UCM support for FlexZone updated up to MSP V1.87, FPGA V1.90.
- FiberLR Network
  - Product rebranded as FiberPatrol.

## **Revision 2.11**

Released as Network Manager (00SW0200-211) and UltraLink (00SW0220-211)

Windows XP, Windows Vista, Windows 7 & Windows 8 compatible.

## **Alarm Integration Module**

- Silver Network

- Support added for FlexZone-4 & FlexZone-20.
- Support added for Starcom Network.  
Devices supported:
  - Device Controller (Device number 00)
- Added support for trouble status reported from Network Manager. The trouble status for a sensor point indicates its reporting capability might be compromised due to active Diagnostic alarms.
- Fixed problem with re-acknowledging manually reset active alarms when Auto Mode was enabled.
- Fixed problem with securing accessed alarms when turning Auto Mode on.
- Fixed problem with not being able to print the event log.

## **NM Applications**

- Added a NM\_MT\_DEVC\_SMRY message for an SMS to retrieve a communication and diagnostic alarm summary for a device.
- Added a NM\_MT\_SENSOR\_TRBL message for an SMS to retrieve the sensor points whose alarm reporting capability might be compromised due to active Comm. fail, Device mismatch or Diagnostic alarms.

### *Silver NM (AgNM.exe)*

- Support added for the FlexZone-4 & FlexZone-20.
- Support added for the FlexPS SC.

**Note** Support is limited to the UCM TCP/IP interface. FlexPS SC is not supported via the SMS TCP/IP interface.

- Added synchronizing of output states between redundant Network Managers.
- Network Manager number added to Event Analysis Data (EvAD) records. This simplifies merging EvAD files for analysis.
- Added SMS Sensor Alarm and Output activation records to Event Analysis Data.
- Battery fault diagnostic alarm only reported to SMS if Battery Charger enabled. Affects 16I/16O, FlexPS, OmniTrax and XField devices.
- Sync Shunt status on alternate NM startup.
- Suppress real time clock synchronization of OmniTrax, XField and 16I/16O devices with MSP firmware older than versions 2.80, 6.00 and 1.03 respectively. Setting the real time clock would occasionally cause watchdog resets in earlier firmware versions.

### *Sennet NM (SnNM.exe)*

- Fixed a problem with Alarm Hold which resulted in alarms latching on the

- last defined node.
- Sync Shunt status on alternate NM startup.

### *Sentrax NM (SxNM.exe)*

- Fixed communicating with CM via TCP/IP.
- Fixed syncing of TM thresholds between redundant Network Managers.
- Fixed wrap around problem with plot magnitudes sent to UCM.

### **NM Service**

- Support added for Starcom Network.  
Supports:
  - Serial port and TCP/IP serial convertor interfaces
  - Configurable Communication Fail timeout (0-30 seconds, 0 = disabled)
  - Device number 00 ("Device Controller")
  - Hardware status message
    - NM Diagnostic alarms 1-5
  - Detection & Tamper states for up to 1024 Input points
    - Starcom Points 0-1023 => NM Sensor alarms 1-1024
  - Up to 1024 Output points
    - NM Controls 1-1024 => Starcom Points 0-1023
  - Date/Time message
    - Responds to date/time request
    - Can be configured to automatically send date/time.
  - Print Data-Logger Text message
    - Processed and added to NM event log
- Support for SMS increased to 4 simultaneous connections.
- Support added for a Starcom SMS interface via a TCP/IP serial convertor.
- Network Manager number added to Event Analysis Data (EvAD) records. This simplifies merging EvAD files for analysis.
- Added SMS Sensor Alarm and Output activation records to Event Analysis Data.
- Fixed a problem with the alternate NMS, when active, not correctly reporting to SMS the status of its connection to its mate NMS.
- Fixed a problem with sensor alarms reported to SMS latching when alarm hold time is inactive (set to 0).
- Sync Shunt status on alternate NMS startup.
- Silver Network
  - Support added for the FlexZone.
  - Support added for the FlexPS SC.

**Note** Support is limited to the UCM interface. FlexPS SC is not supported via either the SMS TCP/IP or Starcom or OnGuard

interfaces.

- Battery fault diagnostic alarm only reported to SMS if Battery Charger enabled. Affects 16I/16O, FlexPS, OmniTrax and XField devices.
- Suppress real time clock synchronization of OmniTrax, XField and 16I/16O devices with MSP firmware older than versions 2.80, 6.00 and 1.03 respectively. Setting the real time clock would occasionally cause watchdog resets in earlier firmware versions.
- CCC Network
  - Fixed a problem processing messages from odd addresses of wide (GPRU & VPRU) devices.
  - Fixed a problem that alarm hold time was not implemented.
- Crossfire Network
  - Added Control point retransmission every 10 sec.
- FiberLR Network
  - Fixed a problem reconnecting to a Sensor Unit.
  - Fixed problems setting and clearing zone supervision (cut) alarms when a fiber is cut and repaired.

## **NM Tools**

### *Network Manager Event Log*

- Fixed a problem with saving the Event Log information to a file. Only the first 4 columns were being saved.

### *Network Manager Plot*

- Changes to Horizontal & Vertical zoom controls for improved functionality.
- Silver Network
  - Support added for the FlexZone.
  - FlexPS
    - Support added for reporting cable type selected using jumpers on FlexPS h/w version 3. Requires MSP version 3.00.
  - OmniTrax
    - Support added for reporting 25% duty cycle. Requires FPGA version 14.00.
- Sentrax Network
  - TM
    - Fixed wrap around problem with plot magnitudes.

### *Network Manager Simulator,*

## *Network Manager Service Simulator*

- Added a NM\_MT\_DEVC\_SMRY message for an SMS to retrieve a communication and diagnostic alarm summary for a device.
- Added a NM\_MT\_SENSOR\_TRBL message for an SMS to retrieve the sensor points whose alarm reporting capability might be compromised due to active Comm. fail, Device mismatch or Diagnostic alarms.
- Silver Network
  - Support added for the FlexZone-4 & FlexZone-20.
  - UCM support for FlexPS updated to Hardware V3 and MSP V3.00.
  - UCM support for OmniTrax updated up to FPGA V14.00.
  - UCM support for X-Field updated up to MSP V6.00, FPGA V7.00.

## **Revision 2.10**

Released as Network Manager (00SW0200-210) and UltraLink (00SW0220-210)

Windows XP, Windows Vista & Windows 7 compatible.

## **Alarm Integration Module**

- Silver Network
  - Support added for the XField LT.
- Support added for FiberLR Network.  
Devices supported:
  - Sensor Unit (SU)

## **NM Applications**

### *Silver NM (AgNM.exe)*

- Support added for the XField LT.
- Support added for XField Service Required diagnostic alarms.  
Requires XField MSP Version 6.00 and FPGA Version 7.00 or later.
- Fixed the display of ultraLink I/O diagnostic alarms in NM Status tool.

### *Voice over Ethernet NM (VoNM.exe)*

- Fixed a problem with the Microphone Active tone on startup of the VoNM.

## NM Service

- Added ability to disable a configured network
- Support added for OnGuard SMS interface.
- Support added for FiberLR network.  
Devices supported:
  - Sensor Unit (SU)
- Silver Network
  - Support added for the XField LT.
  - Support added for XField Service Required diagnostic alarms. Requires XField MSP Version 6.00 and FPGA Version 7.00 or later.
  - Fixed the display of µltraLink I/O diagnostic alarms in NM Status tool.
- Fixed export of event analysis data so recent events are included.

## NM Tools

### *Network Manager Plot*

- Support added for the XField LT.
- Silver XField
  - Support added for Profiles 5 & 6. Requires at a minimum XField MSP/FPGA version combinations 4.20/5.10 & 5.00/6.00 respectively.
  - Support added for Alarm Masking of Field alarms after initial alarms. Requires XField FPGA version 6.20.
- Fixed accessing context sensitive online help by pressing F1.

### *Network Manager Simulator*

- Silver Network
  - Support added for the XField LT.

### *Network Manager Service Simulator*

- Silver Network
  - Support added for the XField LT.
- Support added for OnGuard SMS interface.
- Support added for FiberLR network.  
Devices supported:
  - Sensor Unit (SU)

## Revision 2.03

Released as Network Manager (00SW0200-203) and UltraLink (00SW0220-203)

Windows XP, Windows Vista & Windows 7 compatible.

## **Alarm Integration Module**

- Support added for the µltraLink I/O.
- Support for CCC Network devices via a Network Manager Service  
CCC devices supported:
  - FOST (Innofence)
  - GPRU
  - SPRU (DTR)
  - VPRU (Barricade)
  - YAEL-16
- Fixed a problem where Automatic Operation mode if active when cleared in the configuration, would lock in the active state.
- Improved the efficiency of event logging to reduce the loading being caused by heavy alarm traffic from sensors.

## **NM Applications**

### *Common changes*

- Added a NM\_MT\_DESC message for an SMS to request the NM's description for devices and device points.
- Improved the efficiency of event logging to reduce the loading being caused by heavy alarm traffic from sensors.
- Fixed a memory leak which could potentially cause a Network Manager crash.

### *Silver NM (AgNM.exe)*

- Support added for the µltraLink I/O modules.
- FlexPS
  - Audio Select state changes made by an SMS are now automatically reported to all SMS and UCM.
  - Fixed reporting of Audio Select status in a NM\_MT\_CONTROLS report to an SMS.
- Support added to automatically synchronize the real time clocks of Silver devices with the time of the PC on which the Network Manager is running.
- An Alarm Hold time may now be specified to define how long the NM will report an alarm as active to an SMS after the alarm has reset. This helps filter "chattering" alarm points to reduce alarm message traffic. Event logging by the NM, and event reporting to the UCM are not affected.
- Fixed a problem with reporting to an SMS the Alternate Network Manager was available when it came on-line.

- Fixed a problem with a SMS controlling the last relay on the FlexPS (relay 4), ultraWave (relay 2) and X-Field (relay 12).

### *Sennet NM (SnNM.exe)*

- An Alarm Hold time may now be specified to define how long the NM will report an alarm as active to an SMS after the alarm has reset. This helps filter "chattering" alarm points to reduce alarm message traffic. Event logging by the NM, and event reporting to the UCM are not affected.

### **NM Service**

- Support added for Crossfire network.  
Devices supported:
  - PLC-410
  - PLC-420
  - PLC-430
  - MPS-4100
  - Intelli-Flex/Fiber
  - Intelli-Field
- Support added for CCC Network.  
Devices supported:
  - FOST (Innofence)
  - GPRU
  - SPRU (DTR)
  - VPRU (Barricade)
  - YAEL-16
- Silver Network
  - Support added for the ultraLink I/O modules.
  - Support added for Silver Network Star connection topology. Communication to nodes via TCP/IP over Ethernet. Requires supporting firmware in Silver Devices.
  - Support added to configure the automatically synchronize the real time clocks of Silver devices with the time of the PC on which the Network Manager is running.
  - FlexPS
    - Audio Select state changes made by an SMS are now automatically reported to all SMS and UCM.
    - Fixed reporting of Audio Select status in a NM\_MT\_CONTROLS report to an SMS.
- Added a NM\_MT\_DESC message for a SMS to request the NM's description for devices and device points.
- An Alarm Hold time may now be specified to define how long the NM will report an alarm as active to an SMS after the alarm has reset. This helps filter "chattering" alarm points to reduce alarm message traffic.



Event logging by the NM, and event reporting to the UCM are not affected.

- Added synchronizing of output states between redundant Network Managers.
- Supported added for the Network Manager to activate outputs on a device based on the connection status of an SMS.
- Added synchronizing of Starcom and output activation assignments between redundant Network Managers. Missed being implemented when features were implemented in Version 2.01.
- Improved the efficiency of event logging to reduce the loading being caused by heavy alarm traffic from sensors.
- Fixed a problem with reporting to an SMS the Alternate Network Manager was available when it came on-line.
- Fixed a memory leak which could potentially cause a Network Manager crash.

## **NM Tools**

### *Network Manager Simulator*

- Silver Network
  - Support added for µltraLink I/O.
  - Added UCM support for FlexPS Power Grid filter and Silver Star network topology.
  - UCM support for Silver X-Field updated to MSP V5.10, FPGA V6.20.
- Added a NM\_MT\_DESC message for an SMS to request the NM's description for devices and device points.

### *Network Manager Service Simulator*

- Baseline release of Network Manager Service Simulator with support for:
  - Silver Network
    - 16I/16O
    - FlexPS
    - MPS-4100
    - OmniTrax
    - µltraLink
    - µltraWave
    - XField
  - Crossfire Network
    - Intelli-Field
    - Intelli-Flex/Fiber
    - MPS-4100

- PLC-410
- PLC-420
- PLC-430
- CCC Network
  - FOST (Innofence)
  - GPRU
  - SPRU (DTR)
  - VPRU (Barricade)
  - YAEL-16

## Revision 2.02

Released as Network Manager (00SW0200-202) and UltraLink (00SW0220-202)

Windows XP, Windows Vista & Windows 7 compatible.

### NM Applications

#### *Silver NM (AgNM.exe)*

- Fixed a problem with "Kick starting" ultraWave plots which caused the wrong data to be provided for plotting. "Kick starting" occurs when a sensor unexpectedly stops sending plot data while a plot is being recorded.
- Fixed a problem with "Kick starting" ultraWave plots which caused the wrong data to be provided for plotting. "Kick starting" occurs when a sensor unexpectedly stops sending plot data while a plot is being recorded.

### NM Tools

#### *Plot Tool*

- In addition to a specific plot duration, an indefinite duration may now be selected. The plot will continue to record until manually stopped by the user or it runs out of storage space.
- If a plot file is incorrectly closed or unexpectedly truncated, on opening an attempt is made to recover as much plot data as possible.
- Horizontal lines have been added to FlexPS plots to indicate cut (dotted line) and climb (dashed line) threshold levels.

## Revision 2.01

**Note** Released only as OEM Version

Released only as OEM Version.

Windows XP, Windows Vista& Windows 7 compatible.

## Alarm Integration Module

- Support added for the µltraWave.
- Default installation folder changed to  
**\Senstar\Network Manager\Alr Integ**

**Note** If the optional status map is used this may require updating the map **Image File** path in the Alarm Integration Module's configuration.

## NM Applications

### *Common changes*

- Changes to an Alarm Shunt state and resulting Filtered alarm changes are now reported to all connected SMS not just the originating SMS.
- Event logging of a switch to Standby mode expanded to identify if it was initiated by a SMS, User or Failover.

### *Silver NM (AgNM.exe)*

- Support added for the OmniTrax LT.

**Note** Support is limited to the UCM TCP/IP interface. OmniTrax LT is not supported via the SMS TCP/IP interface.

- Fixed a problem which would cause the active NM to transfer control to the standby NM if the active NM was unable to communicate with any devices on a single configured loop channel. The transfer of control should only occur when the active NM cannot communicate to any devices on all configured loops.
- Fixed a problem which could cause the UCM to be left with a "busy" cursor when uploading or downloading a configuration.
- Fixed reporting of µltraWave Transmitter Link Fault and Mismatch diagnostic alarms.
- Fixed reporting the status of too many output points in NM Status reports when the X-Field's optional relay card was installed.

## NM Service

- Support added for a SMS interface via a serial port using the Starcom protocol.
- Supported added for the Network Manager to activate outputs on a device based on the alarm status of another device.

- Support added for the OmniTrax LT.

**Note** Support is limited to the UCM TCP/IP interface. OmniTrax LT is not supported via either the SMS TCP/IP or Starcom interfaces.

- Changes to an Alarm Shunt state and resulting Filtered alarm changes are now reported to all connected SMS not just the originating SMS.
- Fixed a problem which would cause the active NM to transfer control to the standby NM if the active NM was unable to communicate with any devices on a single configured loop channel. The transfer of control should only occur when the active NM cannot communicate to any devices on all configured loops.
- Fixed a problem which could cause the UCM to be left with a "busy" cursor when uploading or downloading a configuration.
- Fixed reporting of µltraWave Transmitter Link Fault and Mismatch diagnostic alarms.
- Fixed not reporting the status of the OmniTrax optional input card in the NM Status Tool.
- Fixed reporting the status of too many output points in NM Status reports when the X-Field's optional relay card was installed.

## **NM Tools**

### *Plot Tool*

- Fixed the displaying the µltraWave crawl and upright thresholds. Values were displayed 1000 times larger than the correct value.

## **Revision 2.00**

Released as Network Manager (00SW0200-200) and UltraLink (00SW0220-200)

Windows XP, Windows Vista & Windows 7 compatible.

## **Alarm Integration Module**

- Baseline Release

## **NM Applications**

### *Common changes*

- Terminology change from *Display and Control* application to *Security Management System* application.

### *Silver NM (AgNM.exe)*

- Support added for extending the network length of up to 60 nodes.

OmniTrax, X-Field and 16I/16O nodes require network interface cards  
**Note** (00BA03xx) with firmware version 3.00.

MPS-4100 is not supported on 60 node networks.

**Note** Selecting a network length of 60 nodes results in the maximum alarm response time increasing from ½ sec to 1 sec.

- Support added for the µltraWave.
- Event data is now available in a tab delimited Unicode text format that is suitable for analysis in Microsoft Excel Pivot tables. See “Export Event Analysis Data” in online help for details on how to export the data.
- Fixed problem reporting Input Power fails caused Under Voltage and Over Current conditions were not reported to a SMS for FlexPS.

### **NM Service**

- Baseline release of Network Manager Service with support for:
  - Silver Network
    - µltraWave
    - 16I/16O
    - FlexPS
    - MPS-4100
    - OmniTrax
    - XField

### **NM Tools**

#### *Event Log Tool*

- Support added for Network Manager Service.

#### *Plot Tool*

- Support added for the Silver µltraWave.
- Support added for extending the Silver network length of up to 60 nodes.
- Maximum plot recording duration increased from 10 to 45 days.  
Recordings lasting longer than 2 days default to being stored in daily plot files.
- Implemented Print and Export functions for OmniTrax plots.
- Fixed a problem with OmniTrax plot file which mis-identified the contents as Perimitrax plot data.

#### *NM Simulator*

- Support added for simulating 60 Node Silver Networks.
- Support added for Silver µltraWave.
- UCM support for Silver FlexPS brought up to date.
- UCM support for Silver X-Field 5<sup>th</sup> profile added.
- Fixed Output Point status not being displayed.

## **Revision 1.23**

Released as Network Manager (00SW0200-123)

Windows XP, Windows Vista & Windows 7 compatible.

### **NM Applications**

#### *Common Changes*

- Network Manager is no longer copy protected. Sentinel USB copy protection key no longer required.

## Revision 1.22

Released as Network Manager (00SW0200-122)

Windows XP, Windows Vista & Windows 7 compatible.

**Note** The default location for new installations is now “C:\Senstar\Network Manager”. This change was made to avoid file saving issues involving the Windows Vista/7 User Account Control (UAC) technology access rules for the “C:\Program Files” folder.

## NM Applications

### *Common changes*

- Now Windows 7 and Windows User Access Control (UAC) technology compatible.
- Fixed a problem with selecting a date-time range of event log data to view which could result in some or all of the events not being displayed if a month or year boundary was crossed.
- Fixed **Save & Restart** storing configuration data in the wrong folder after using **Archive** or **Load** to restore/backup the configuration. The problem was evident only after shutting down and restarting the Network Manager. It occurred when using Windows XP or Server 2003, but not with Windows Vista.

### *Crossfire NM (XfNM.exe)*

- Fixed a problem which would cause the NM to crash if the state of a PLC-420 output was changed.
- Fixed an "out by one" problem with reporting control point changes to display clients. State changes were reported for one point number lower than they should have been.
- Removed filtered alarm status information from the upper nibble of the sensor alarm message sent to display clients. This could cause problems for clients that did not ignore the undefined bits in the message. This was a "leftover" from development of alarm shunting prior to creation of the separate filtered alarm message.

### *Silver NM (AgNM.exe)*

- Support added for the FlexPS.
- Fixed a problem with detecting polling by the redundant mate NM which could result in an active alternate NM going into standby mode. This would cause a loss of communications for ~10 sec if the primary NM was not available to go online.

### *VoE NM (VoNM.exe)*

- Finished implementing the **Microphone Active Tone** configuration item. Disabling of the tone had been missed in the original implementation.
- Fixed a timing issue which occasionally resulted in no audio being heard at a Control IPCC until the PTT was pressed and released.
- Fixed a problem with saving the viewed event log to a Unicode text file.

### **NM Tools**

#### *Event Log Tool*

- Now Windows 7 and Windows User Access Control (UAC) technology compatible.

#### *Plot Tool*

- Now Windows 7 and Windows User Access Control (UAC) technology compatible.
- Support added for the Silver FlexPS.
- Fixed a problem with Device information only being saved in the first day's file when performing a multi-day recording and saving the plot data in separate daily files.
- Fixed a problem with Intelli-Flex plots that resulted in only one sensor's plot data being stored in each record.

#### *Status Tool*

- Now Windows 7 and Windows User Access Control (UAC) technology compatible.

#### *NM Simulator*

- Added support for FlexPS simulation
- Replaced 2hr timeout and shutdown of the Display interface with an hourly connection break for 5 sec.
- Added sending NM\_MT\_NULL message every 10 sec to generate minimum traffic to display clients so O/S will timeout a socket dropped by client.
- Default OmniTrax cable configuration changed to simulate 4 zones.
- Fixed handling of replying to NM\_MT\_SENSOR\_ALARM & NM\_MT\_FILTER\_ALARM query. Previously the query was ignored for node 0.
- Fixed implementation of replying to NM\_MT\_COMM\_STAT & NM\_MT\_DEVC\_TYPE all nodes query so the correct number of



devices are reported for the simulated network type. Previously the status of 210 nodes was always reported.

- Fixed a memory leak associated with the reply to some message queries.
- Removed filtered alarm status information from the upper nibble of the sensor alarm message. This could cause problems for clients that did not ignore the undefined bits in the message. This was a "leftover" from development of alarm shunting prior to creation of the separate filtered alarm message.
- Fixed NM\_MT\_FILTER\_ALARM message generation. Raw alarm status reported rather than filtered status.
- Fixed setting controls and shunts for scrolled points. Previously setting points scrolled out of view would crash the simulator.
- Fixed handling of shunting OmniTrax zone alarms that could cause crashing the simulator.

## Revision 1.21

Released as Network Manager (00SW0200-121)

Windows XP & Vista Compatible

## NM Applications

### *Common changes*

- Configuration dialog
  - A password may now be defined to restrict the use of the **Save and Restart** button on Configuration dialog. The password may be defined and changed by using the **Tools/Password Maintenance...** menu item. Use of the password is optional
  - **Archive/Load** capability has been added to allow archiving of Network Manager configurations. The archive file naming convention is

xxNM\_# YYYYMMDD\_hhmm

xx NM = NM executable filename (e.g. AgNM for Silver NM)

# = Network Id

YYYY = 4-digit year

mM = 2-digit month

DD = 2-digit day

hh = 2-digit 24hr format hour

mm = 2-digit minute.

- Added alarm statistic gathering. Basic alarm statistics consist of a count of

each alarm occurrence. Some alarm types may also include additional alarm origin statistics. For example, counts of alarms occurring at different locations for a ranging sensor. Note that the sum of these additional statistics may be higher than the basic statistics if there were multiple contributing factors to an alarm. Statistics are displayed and reset by using the NM Status tool.

- A non-configurable Local UCM connection point has been added for connection of a Local UCM or Plot Tool. It supports connecting using IP address 127.0.0.1.
- Added support for shunting of Sensor alarms and tampers by Displays. See the **Network Manager Interface Application Note** (00DA0209-001 Rev E) for details.

#### *Crossfire NM (XfNM.exe)*

- Support added for Network Manager Plot Tool. The Plot Tool connects to the Network Manager using a UCM connection point. The Plot Tool supports Intelli-Flex response plots.
- **Tools/Device Status...** and **Tools/Network Plot...** menu items have been added to locally launch Network Manager Status and Plot Tools from the Network Manager.  
Note: Local launching of the NM Plot Tool requires an available UCM connection via IP address 127.0.0.1.
- Fixed a problem introduced in version 1.20 with redundancy which could cause the active Network Manager to crash when the standby Network Manager was started.

#### *MX-5000 NM (MxNM.exe)*

- **Tools/Device Status...** menu item has been added to locally launch Network Manager Status Tool from the Network Manager.

#### *Sennet NM (SnNM.exe)*

- Support added for Network Manager Plot Tool. The Plot Tool connects to the Network Manager using a UCM connection point. The Plot Tool supports Perimitrax and Intelli-Flex response plots.
- **Tools/Device Status...** and **Tools/Network Plot...** menu items have been added to locally launch Network Manager Status and Plot Tools from the Network Manager.  
Note: Local launching of the NM Plot Tool requires an available UCM connection via IP address 127.0.0.1.
- Fixed a problem with providing Aux Input voltage levels to the Network Manager Status Tool.
- Fixed a problem with synchronizing the Network Controller configuration between redundant Network Managers which would cause the Standby

- NM to exit with an "Encountered an improper argument" error message.
- Fixed a problem introduced in revision 1.11 which resulted in TU alarm reports being blocked because the NM did not believe the TU was configured.

#### *Sentrax NM (SxNM.exe)*

- Baseline release of Sentrax Network Manager with support for:
  - Control Module
  - Transceiver Module

#### *Silver NM (AgNM.exe)*

- Support added for Network Manager Plot Tool. The Plot Tool connects to the Network Manager using a UCM connection point. The Plot Tool supports XField and OmniTrax response plots.
- Tools/Device Status...** and **Tools/Network Plot...** menu items have been added to locally launch Network Manager Status and Plot Tools from the Network Manager.  
Note: Local launching of the NM Plot Tool requires an available UCM connection via IP address 127.0.0.1.
- Alarm location information added to event logging of OmniTrax alarms.

#### *VoE NM (VoNM.exe)*

- Tools/Device Status...** menu item has been added to locally launch Network Manager Status Tool from the Network Manager.
- Added support for relaying Public Address audio between Network Managers.
- Fixed problem with the length field of the data block in the generated .wav file that resulted in a Windows Media Player displaying an error message when playing back the file. The file would otherwise playback successfully.

### **NM Tools**

#### *Plot Tool*

- Added minimum firmware version check for Sennet Intelli-Flex/Fiber, ver. 2.21 or later required.

#### *Status Tool*

- Support added for display and resetting of alarm statistics gathered by Network Managers.

### *NM Simulator*

- Added support for Sentrax Network
- Added support for shunting alarms

## **Revision 1.20**

Released as Network Manager (00SW0200-120)

Windows XP & Vista Compatible

## **NM Applications**

### *Common changes*

- Support added for Network Manager Event Log and Status Tool.
- Added support for Display Clients to request the status of single alarm point. The Network Manager replies with a NM\_MT\_SENSOR\_ALARM message which includes alarm location information for ranging sensors. See the Network Manager Interface application note (00DA0209-001) for additional details.
- Added low level null message traffic to Display and UCM TCP/IP connections to ensure connection loss detection. Applies when a Display or UCM application is connecting over a network and the network connection is broken. Previously this might not be detected and the Network Manager would maintain its end of the connection blocking any subsequent attempts to connect.

### *Crossfire NM (XfNM.exe)*

- A redundant Network Manager is now automatically updated of any device type node assignments.

### *Sennet NM (SnNM.exe)*

- Fixed a computer loading problem which could occur when an Ethernet to serial converter was used to connect to the Network Controller. If the Network Manager could connect to the converter but not to the Network Controller then heavy loading of the PC would occur for 10 seconds every 5 seconds.

### *Silver NM (AgNM.exe)*

- Fixed a problem with OmniTrax zone alarms. Targets that remained at the same location for an extended period of time would be not immediately clear when the target left the location but would remain for a period of time equal to the time at the location.

### *VoE NM (VoNM.exe)*

- Baseline release of Voice over Ethernet Network Manager with support for:
  - IPCC

### **NM Tools**

#### *Event Log Tool*

- Baseline Release

#### *Plot Tool*

- Baseline Release with support for:
  - Crossfire Intelli-Flex/Fiber
  - Sennet Intelli-Flex/Fiber (min. requirement: Firmware ver. 2.21)
  - Sennet Perimitrax
  - Sentrax Transceiver Module
  - Silver OmniTrax (min. requirement: MSP ver. 2.70 and FPGA ver. 12.02)
  - Silver XField

#### *Status Tool*

- Baseline Release

#### *NM Simulator*

- Added support for VoE Network

### **Revision 1.11**

Released as Network Manager (00SW0200-111)

Windows XP Compatible

### **NM Applications**

#### *Common NM changes*

- Added a message hold feature to Display Client interfaces. The Network Manager will queue messages for an unconnected client for the programmed Hold time. If the client connects before the Hold time elapses, the messages are delivered. Otherwise the messages are discarded.
- The Active Network Manager now sends state change messages to the Standby Network Manager in addition to Display Clients.

- These two features protect against state changes being lost when switching control between Network Managers in a Redundant Network Manager installation. When control transfers to the Standby Network Manager, any state changes occurring within the programmed Hold Time period will be resent to the Display Client to ensure it was not missed.
- Added a shutdown confirmation dialog to protect against accidental shutdown of the Network Manager by a user.
- Improved error handling of TCP/IP socket errors.

#### *Silver NM (AgNM.exe)*

- Node communication failure detection is now separate from side fault communication detection. The Node communication failure reports on the integrity of communications to the processor card. Side fault detection checks data link integrity to the communication daughter card..

### **NM Tools**

#### *NM Simulator*

- Added a message hold feature to Display Client interfaces. The Network Manager will queue messages for an unconnected client for the programmed Hold time. If the client connects before the Hold time elapses, the messages are delivered. Otherwise the messages are discarded.

### **Revision 1.10**

Released as Network Manager (00SW0200-110)

Windows XP Compatible

### **NM Applications**

#### *Common changes*

- Added a NM\_MT\_MATE\_STAT message for reporting the connection status to a standby Network Manager.
- Added command line option "/D-n" for delayed startup where n is the delay in seconds.
- Fixed a problem with the Standby button not being active when redundant Network Managers were started simultaneously.

#### *Crossfire NM (XfNM.exe)*

- Baseline release of Crossfire Network Manager with support for:

- PLC-410
- PLC-420
- PLC-430
- MPS-4100
- Intelli-Flex/Fiber
- Intelli-Field

#### *MX-5000 NM (MxNM.exe)*

- Baseline release of MX-5000 Network Manager

#### *Sennet NM (SnNM.exe)*

- Added support for Perimitrax (SM) Local Mode Diagnostic point

#### *Silver NM (AgNM.exe)*

- Support added for the MPS-4100 microwave.
- Fixed a problem with 16I/16O where only 12 of the 16 available outputs were fully supported.

### **NM Tools**

#### *NM Simulator*

- Baseline release of Network Manager Simulator which can be configured to simulate any of the current Network Managers from a Display perspective. It can also simulate the UCM interface for Silver OmniTrax, X-Field and MPS-4100 devices. It can be used for testing during development of 3<sup>rd</sup> party Display application interfaces and testing of databases of connected Display applications.

### **Revision 1.02**

Released as Network Manager (00SW0200-102)

Windows XP Compatible

### **NM Applications**

#### *Common changes*

- For redundant Network Manager automatic switchover, the active Network Manager will automatically transfer control to the standby Network Manager after being unable to communicate with any nodes for 1 minute.

### *Sennet NM (SnNM.exe)*

- Protection added against over long messages from overloading Network Manager's receive buffer (preventative change).

### *Silver NM (AgNM.exe)*

- Support added for the 16I/16O processor.

## **Revision 1.01**

Released as Network Manager (00SW0200-101)

Windows XP Compatible

## **NM Applications**

### *Common NM changes*

- Enter, ESC and Space characters no longer cause the Network Manager to close.

### *Silver NM (AgNM.exe)*

- The XField side A & B supervision alarm points were moved to 12 & 13 (previously 14 & 15), and the side A & B spoof alarm points were moved to 14 & 15 (previously 12 & 13). This makes XField diagnostic alarm numbering consistent with OmniTrax.
- Added event logging of OmniTrax Zone and Auxiliary alarms.
- Added event log information messages for status of A->B & B->A side links and polling activity on the A & B sides.
- A complete audit of device status is now done on recovery after a comm fail to a device or when a device resets.
- Background auditing of device status is done approximately every 2 minutes.



## Revision 1.00

Released as Network Manager (00SW0200-100)

Windows XP Compatible

### **NM Applications**

#### *Sennet NM (SnNM.exe)*

- Baseline release of Sennet Network Manager with support for:
  - Network Controller
  - TU
  - LTU
  - Perimitrax (SM)
  - Intelli-Flex/Fiber

#### *Silver NM (AgNM.exe)*

- Baseline release of Silver Network Manager with support for:
  - OmniTrax
  - XField