

# 90000-5x

## Advanced NMS version 8.2.1 Release Notes

Document version: 1.00  
Release Date: June 12<sup>th</sup>, 2020  
Type of Release: Production Release

### Lentronics Multiplexers

For SONET/SDH Multiplexers & T1/E1 Multiplexers

### Lentronics JunglePAX Platform

JunglePAX MPLS Platform (firmware 1.16c)

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## RELEASE SUMMARY

### PRODUCT/COMPONENT

- Software Version: 8.2.1 for Appliance (host server) & Client
- 90000-5x Advanced NMS Licenses (for JunglePAX)
  - 90000-50, Standard NMS license per Network Element
  - 90000-51, Standard (High Availability) NMS license per Network Element
  - 90000-50/G, GOLD NMS license per Network Element
  - 90000-51/G, GOLD (High Availability) NMS license per Network Element
- 86456-7x Advanced NMS Licenses (for Lentrionics Multiplexers)

### REQUIREMENTS

- VistaNET version 5.10+ is a required software component for Multiplexer products. VistaNET can be downloaded from GE's website <http://www.gegridsolutions.com/communications/Multiplexers.asp>
- Ad^NMS version 8.0.3 is compatible with JunglePAX firmware package version 1.14a
- Ad^NMS version 8.2.1 is compatible with JunglePAX firmware package version 1.16c
- CentOS version 7 for the Host Server (NMS Appliance)
- Windows 10 for the NMS Client (Client)
- Version 8.2.1 of the Advanced NMS Appliance (Host Server) is typically installed on a Virtual Machine running within Linux (v7) and connected over a secure network to the Utilities Optical Communications Network (MUX or JPAX). This appliance is connected to
  - GE's VistaNET NMS platform to manage Lentrionics Multiplexers via the SNMP protocol,
  - GE JunglePAX (Primary and/or Secondary Gateway node(s)) via the Netconf protocol
- One user seat is offered by default. Customers needing support for concurrent users have the option of purchasing additional RTU seat licenses
- Advanced NMS client(s) are installed on customers laptops with Windows 10 OS

### DOCUMENTATION CONTROL

Version 1.00	Production Release	June 12 <sup>th</sup> , 2020
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## RELEASE DETAILS

### NEW FEATURES

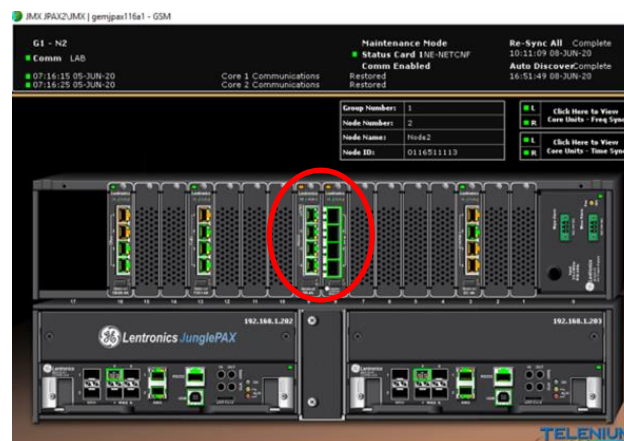
GE's release of the Advanced Network Management System (Ad^NMS) software is now available for Lentonics Multiplexers and GE's newest Hybrid MPLS & SONET/SDH JunglePAX platform. This version provides like-for-like functionality for managing Lentonics Multiplexers as the previous version 8.0.3 but now supports **JunglePAX firmware version 1.16c**.

JunglePAX users running Ad^NMS version 8.2.1 can now create Services onto Virtual ports, that is, ports that don't physically exist in the NE. Ideal for network planners who would prefer to reserve network resources completely prior to receipt of the physical hardware. After unit arrival, technicians then have the simplified task of installing the card - all the programming is automatically downloaded into the unit without any user intervention. All access cards support virtual port mode<sup>1</sup>.

Due to the expanded set of service options now supported within JPAX firmware 1.16c, a hierarchical list has been implemented within the NMS traffic manager to significantly simplify user interactions. Building a protected or unprotected service from one network edge to the other is continues be supported over MPLS-TP tunnels using this version of the software.



Service Creator Hierarchy



Example of Virtual Ports 8 & 9

Please refer to GE's [Advanced\\_NMS\\_User's\\_Guide](#) for more details.

## ENGINEERING RULES

VistaNET version 5.10 or newer is required and licensed with VistaNET SNMP (p/n 86456-51, 1 license per system) to manage Multiplexer alarms (Traps, Active and Cleared alarm tables). VistaNET Traffic Manager right-to-use licenses (p/n 86456-21, 1 license per node) can be optionally added to additionally manage Physical & Logical Entities, Performance Monitoring, Activity Logs and other general information.

<sup>1</sup> See list of known limitations affecting virtual ports



## KNOWN LIMITATIONS

1. Support to build VTUs (SONET VT and SDH TU-12s) is not supported in this software. Upgrade to software version 8.3 is required.
2. **GE-80:** If LAN cards (EC, EF) and CBUS cards are configured offline, i.e., if the access card types are selected as LAN/CBUS, but the cards physically don't exist, then GSM will not show the cards graphically.  
*Severity:* This will occur only when the cards don't exist physically.  
*Fix version:* 8.3
3. **GE-82:** Traffic manager is unable to produce unprotected ethernet services with pre-configured bulk ports.  
*Severity:* This is a rare case. Unprotected services generally use 1:1 tunnels and shared ports which is working fine with Traffic manager.  
*Fix version:* 8.3
4. **GE-84:** While creating a "T1 to iDS0" service, all available T1 slots and iDS0 slots in both nodes show up allowing users to choose T1 ports at both ends or iDS0 ports at both ends. Same goes with "CBUS to iDS0" services.  
*Severity:* "T1 to iDS0" or "CBUS to iDS0" service provision works fine if user chooses T1/CBUS ports at Node A and iDS0 ports at Node Z. The goal will be to eliminate unwanted ports while creating the service.  
*Fix version:* 8.4
5. **GE-87:** When a core card is removed temporarily or by accident, GSM graphics still shows the core card.  
*Workaround:* All expected alarms will show up in Alarm Chrono upon sudden removal of a core card. Companion core card and neighboring core card also indicate alarms in GSM.  
*Fix version:* 8.3
6. **GE-90:** Unnamed zCOMM alarm is showing up in Alarm chrono sometimes.  
*Severity:* This is a false alarm. It does not affect normal Telenium operations.  
*Fix version:* 8.3
7. **GE-91:** After the first installation, DB-Backup process does not run as per schedule (every midnight).  
*Workaround:* Developers will initiate DB-Backup manually for the first time. After that the process will run automatically as per schedule.  
*Fix version:* 8.3
8. **GE-92:** Connection to TRAP-listener fails.  
*Severity:* This alarm does not affect normal Telenium operations.  
*Fix version:* 8.3



## RESOLVED LIMITATIONS

1. **GE-72:** When moving SFPs between different IEEE C37.94 Card ports (e.g. removing from port 1 and placing into port 2) will incorrectly show both old and new ports having SFPs equipped in the GSM graphical view.
2. **GE-74:** Bulk Load is delaying new node import because of auto-discovery.
3. **GE-81:** “unmonitored” status for 1:1 tunnels. Traffic manager will correctly display the tunnels as monitored.
4. **GE-85:** NETCONF alarm. These alarms are no longer raised for cards that are configured in the database but not present on the equipment.

## SOFTWARE UPGRADE PROCEDURE

To migrate the existing NMS environment from version 7.4.2 or 8.0.3 to version 8.2.1, GE will create a new VM and install CentOS 7 and NMS version 8.2.1.

This “Software Upgrade Procedure” will install a blank database where all history (alarm, pm, attribute, user changes, policies, etc.) has been discarded. The Bulk Import/Export and Policy Manager applications will be used to export data (NEs, Sites, Users, Policies, etc.) from your NMS version 7.4.2 or 8.0.2 database and import it to your new NMS version 8.2.1 database. Refer to the appropriate chapters of the Telenium System Administration documentation for instructions to perform the export and import of data and policies (Chapter 10 Policy Manager and Chapter 26 Telenium Power Tools).

### Upgrade requirements

1. A customer resource with access to, and administrator rights on the VM Host server. This access can be remote but should be able to go to the location of the server in a timely manner if hands on intervention is required.
2. GE will require access to a customers’ Windows desktop with the following software installed:
  - Appliance v8.x.x (must be the matching version purchased by the customer).
  - WinSCP
  - Putty
3. The Windows desktop must be able to access the VM Host server as GE requires access to the built-in console of the VM Host Software to install CentOS 7 on the VM. This desktop must also be able to access the VM once CentOS 7 has been installed and an IP assigned to the VM.
4. The new VM must be able to access the existing software Appliance via the network if the databases are being migrated from the existing Appliance to the new v8.2.1 Appliance.
5. Download the latest CentOS 7 ISO from [http://isoredirect.centos.org/centos/7/isos/x86\\_64/](http://isoredirect.centos.org/centos/7/isos/x86_64/) and have that ISO file available on the Windows desktop that GE will have access to.



6. The VM will need access to the following URLs to complete the CentOS install. This access can be via the internet or from a standalone/offline mirror repository that is maintained by the customer:
- CentOS
    - [http://mirror.centos.org/centos/7/os/x86\\_64/](http://mirror.centos.org/centos/7/os/x86_64/)
    - [http://mirror.centos.org/centos/7/extras/x86\\_64/](http://mirror.centos.org/centos/7/extras/x86_64/)
    - [http://mirror.centos.org/centos/7/updates/x86\\_64/](http://mirror.centos.org/centos/7/updates/x86_64/)
  - EPEL
    - <http://dl.fedoraproject.org/pub/epel/7/>
  - MySQL-8.0
    - [http://repo.mysql.com/yum/mysql-8.0-community/el/7/x86\\_64/](http://repo.mysql.com/yum/mysql-8.0-community/el/7/x86_64/)
  - Percona-release-x86\_64
    - [http://repo.percona.com/percona/yum/release/7/RPMS/x86\\_64/](http://repo.percona.com/percona/yum/release/7/RPMS/x86_64/)
  - Microsoft dotNET
    - <http://packages.microsoft.com/rhel/7/prod/>
7. The VM will need access to a repository to complete the installation of the v8 Appliance. This access can be via the internet (SSH or HTTP connection to ssh.megasys.com) or via a standalone repository that has been pre-downloaded and copied to the Windows desktop GE will have access to.

## CONTACTS

For additional details or technical assistance, you may contact:

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