Memotec NetPerformer™ Version 10.5.0 R1

Overview

We are pleased to announce the general availability of software version 10.5.0 R1, which provides significant enhancements for the Memotec NetPerformer SDM-9220/9230 and SDM-9606 Integrated Access Routers and the SDM-8400 Serial Port Extender.

This new software is available upon request to customers with current support agreements. Additionally, it will be shipped with all new NetPerformer units starting next month.

Version 10.5.0 R1 New Software Features

Below are highlights of the new software enhancements available in version 10.5.0 R1.

IP Support Enhancements

IP Header Compression
- IP Header Compression capabilities are now available, specifically using RFC 2507/08 standards:
    o The RFC 2507 (IPHC): This technique compresses, on a hop-by-hop basis, multiple IP headers including IPv4, TCP and UDP headers.
    o The RFC 2508 (CRTP): This technique compresses the headers of IP/UDP/RTP packets used for audio and video, reducing overhead on a hop-by-hop basis.

- Each unit enabled with IP Header Compression requires a license, which can be ordered using the following part number: 161-1088-001 - NETPERFORMER IP HEADER COMPRESSION LICENSE

SIP VoIP license
- Updated Session Initiation Protocol (SIP) support is now available. It uses a single binary code that handles either Voice over PowerCell or Voice over IP using SIP (SIP VoIP) applications. By default, the Voice over PowerCell application is resident on each NetPerformer unit using v10.5.0 R1. SIP VoIP is activated via a SIP license option. Each SIP-enabled unit requires a SIP license, which can be ordered using the following part number: *161-1025-000 - NETPERFORMER VOIP SIP LICENSE*

- With v10.5.0 R1, the NetPerformer SIP support utilizes an updated SIP stack, RFC 3261. This new stack supersedes the one previously used, RFC 2543.

DHCP Server Capabilities
- With version 10.5.0 R1, the NetPerformer's Ethernet 1 port is now configured by default with IP address 192.168.0.1, and provides DHCP server capabilities. With this new feature, the NetPerformer can provide IP addresses using DHCP to client devices attached to its Ethernet 1 port. Also, by default, the NetPerformer now provides access to its unit through standard private LAN IP address (192.168.0.1).

- This new DHCP mode can by disabled or switched back to DHCP client, which was previously supported on the NetPerformer.

Air Traffic Control (ATC) Enhancements

VHF over IP Standard Support (EUROCAE WG67 ED-136/137)
- The version 10.5.0 R1 introduces VHF over IP standard support following the approved versions of the EUROCAE WG67 ED-136/137 documents. The EUROCAE WG67 ED-136/137 documents provide the basis for interoperability between different VHF equipment and gateways over IP. This interoperability is achieved using standard SIP and RTP VoIP protocols for VHF voice transport, as well as the RTP extender field for the transport of the Push to Talk (PTT) on-hook/off-hook transitions.

Link Delay Compensation (LDC)
- With version 10.5.0 R1, the NetPerformer can now compensate for delay between satellite and terrestrial links. This feature can be utilized on PowerCell links and will work by adding compensation delay to terrestrial links when detecting the activation or presence of a satellite link in the network. This capability is required, for example, in Air Traffic Control networks where transmission of VHF audio should be synchronized with all locations.

- Each unit that needs Link Delay Compensation requires a license, which can be ordered using the following part number: *161-1089-001 - NETPERFORMER LINK DELAY COMPENSATION LICENSE*

Network Management System (NMS) Enhancements

Web Server Capabilities
- With version 10.5.0 R1, the base software now has internal web server capabilities for user-friendly configuration and monitoring of NetPerformer devices. This new interface replaces the legacy ACTview3000 Graphical User Interface application. For more information on this new web server interface, refer to the following manual: *025-Web Server Interface.pdf*

IPSwitch WUP (WhatsUp Professional)
- With the introduction of the web server interface, the NetPerformer can now be managed via any standard network management system (NMS) platform that supports device links to a web browser. Therefore, the NetPerformer now supports an SNMP-based NMS toolkits based on IPSwitch's WUP (WhatsUp Professional). This is possible by the product customization for the Memotec NetPerformer – adding SNMP MIBs, icons and device types to WUP. This solution enables an operator to build a NetPerformer network supervision, fault and performance monitoring application. For more information on this new NMS solution, refer to the following document: *Using WhatsUp Gold with Memotec NetPerformer_v1.pdf*

- The NetPerformer v10.5.0 R1 is still compatible with ACTview3000/HP OpenView SNMP-based systems. Customers with networks already equipped with that NMS don't need to upgrade to IPSwitch WUP to use v10.5.0 R1 on their NetPerformer units.

Other Enhancements

Automatic Backup on Degraded Link Quality
The version 10.5.0 R1 provides a new link monitoring capability. The main link ports and PVCs can be set to be declared down not only based on their availability, but also based on network quality degradation. This new mode enables the NetPerformer to activate backup links in case the primary link is not available or the network link experiences quality degradation.

Unframed E1 Support
- The version 10.5.0 R1 supports unframed E1 data (bundled of TS 0 to 31) for full 2,048 kbps utilization and transport by the NetPerformer. This allows the NetPerformer to transport a full structured E1 (2,048 kbps), coming from the user side, in un-compressed or lossless compressed (data) mode. It also enables the NetPerformer to use a full structured E1 on its WAN link. Prior to this new functionality, the NetPerformer was restricted, in both cases, with using only framed E1 with a maximum of 31 consecutive bundled timeslots (1,984 kbps).

DAMA/BoD Satellite Networks
- Version 10.5.0 R1 introduces two new parameters for the PowerCell over IP PVCs that are used to improve DAMA/BoD satellite network efficiency when using the NetPerformer.
  - The first parameter prevents the DAMA/BoD system from reserving time slots for "keepalives" when user applications are idle. With this parameter, the NetPerformer can keep the site logically connected for the applications even when they are idle, without using any satellite bandwidth.
  - The second parameter enables the NetPerformer to ensure that the DAMA/BoD satellite system has the time to wake up and activate effective connections for applications that are requesting bandwidth before starting transmission. This improves the efficiency of DAMA/BoD systems that are slow with their bandwidth allocation by preventing loss of user data.

More Information

To obtain the new software to upgrade existing NetPerformer units, please send an email to our support group at: netperformer.support@comtechefdata.com

The new user documentation mentioned above is available on our web site, http://www.comtechefdata.com/support/docs/netperformerdocs

To learn more about the NetPerformer, please refer to the NetPerformer page on our web site, http://www.comtechefdata.com/products/ran-wan-optimization/netperformer, or contact your Comtech EF Data sales associate.

sales@comtechefdata.com   **+1.480.333.2200**   **+1.480.333.2540**