

Virtualisation of NetManager 5.1 and 6.2

The NetManager is essential for the operation of EWSD¹, hiE² und hiS³. It is needed for all operation and maintenance tasks, for file transfer from/to NEs and finally also for the incorporation of patches. With increasing age of the NetM-HW the possibility of a HW-Outage rises significantly (some servers are running since more than 10 years!) and this might cause the total inoperability of the mentioned NEs. A simple HW change is impossible because of compatibility problems between actual server HW and the used operating systems (NetM 5.1 on Windows 2000, NetM 6.2 on Windows 2003). With the virtualisation of the NetManager hardware we can eliminate these hardware dependencies. In addition, it can increase the performance and the network security of the system.

Theoretically there would be the possibility to replace defective HW by second hand HW. But we will not recommend this because the danger of HW outage will not be reduced.

We are providing a safe, reliable and cost-effective solution by the virtualisation of the NetM-SW.

PRODUCT OVERVIEW

What can you expect from a virtualized NetManager:

- For the user nothing changes! The NetM GUI and its usage remains the same – very probably it might a bit faster because of the higher server performance.
- All basic functions (Workbench, LogViewer, AMD etc.) are available.
- Applications like AutoPatch may also be installed if needed
- All TCP/IP based protocols - Q3, MML over IP, MML over Bintec - can be used. The protocol X.25 via EiconCard is not supported as the virtualisation of the EiconCard is not possible.
- We support the virtualisation of any possible NetM configuration - like SiM, SIS and C/S - except the HAS. For the C/S you will even get a reduction of space as well as reduction of energy consumption.
- With the virtualisation you will get a simple and easy to handle backup solution, which wasn't the case before. The possibility of making snapshots allows you to freeze and restore system status. A simple copy of the VM can be easily restored on another HW in case of a server crash and so the system is up and running again after view moments.
- The used Hypervisor is based on the latest technologies and has an update function to be able to install error corrections and security patches

What we recommend:

- Especially in the C/S configuration of the virtualized NetM the network security can be significantly increased (compared to the old NetM-HW) by an optimized Firewall configuration. We also support you in that point.

PREREQUISITES

Under the following circumstances a virtualisation is possible:

- You own a NetM 5.1 or NetM 6.2 as Single Machine SiM, Single Server SIS or Client Server C/S installation inclusive all licenses – in operational state would be nice

- You own a complete set of the used software (needed for the installation as VM):
 - Windows 2000/2003 Server CD
 - Oracle Enterprise/PE CD
 - OEM Software CD
 - NetM Basic Software and the last patch
 - TP-Common and the used TPs for your NEs
 - latest Windows Security Package
 - NetM and EWSD Documentation

As we are not allowed to provide you with the software you may have to request this from Nokia.
- Your NEs communicate explicitly via TCP/IP with the NetM (Q3, MML over IP resp. MML over Bintec) and not via X.25 protocol (in case of a X.25 connection via EiconCard to a classic EWSD please contact us)

SOLUTION DESCRIPTION

For the realization of the virtualisation we must do in any case a detailed planning. This includes:

- Available Functions on the virtualized NetManager
- Hardware provided by whom?
- Configuration data (Communication Setup, User, new IP-Addresses)
- Maintenance contract

SilverEngine provides the following services:

Pos.	Service
01	Analysis of the working NetM incl. realization study
02	Dimensioning and ordering new hardware (Fujitsu)
03	Backup configuration data of the old NetManager
04	Setup new hardware and installation of Hypervisor VMWare ESXi
05	Installation and configuration of the NetManager as SiM, SiS or C/S
06	Integration of the new NetM into your Live-Net (parallel operation possible, but needs more effort in planning and configuration)
07	Continuous maintenance based on the maintenance contract

PRICE

Here you will find the standard prices for the virtualisation of a NetManager V5.1/V6.2 Single Machine (SiM) w/o applications including our services. If you have another configuration we will provide you a customized offer.

Virtualisation of a NetManager V5.1/6.2 Single Machine (SiM):

➤ Included Services

Package 1: Dimensioning, Ordering and Setup of the HW	
Pos.	Service
D10	Dimensioning and ordering hardware based on the committed functions of the virtualized NetM → The HW will be Fujitsu Primergy server (as rack solution w/ 1HE or as floorstand server).
D11	Setup of the HW and installation of the Hypervisor → Hypervisor VMWare ESXi free Edition is used.

Package 2: Analysis and Backup of the configuration data of the old NetM	
Pos.	Service
A10	Functional check of all basic functions of NetM - MML and Q3 command execution - Filetransfer from/to CP and MP - Alarm and Message Display and Logviewer - Layer Management - Online Documentation - etc.
A11	Backup of the configuration and logging data of the old NetM for later transfer to the new NetM → We will not guarantee the completeness of the logging data, the customer is fully responsible for backup of logging data

Package 3: Installation and Configuration of the new NetM	
Pos.	Service
I10	Installation of the NetM as SiM
I11	Transfer of configuration data
I12	Quick check of basic functions
I13	Delivery and setup
I14	Functional check (possible also via Remote Access)

➤ Price:

- Virtualisation of NetManager: **8.350, -- Euro (w/o Tax)**
- plus price of the ordered HW based on our recommendation from Fujitsu (Primergy Server as rack solution or floorstand server as requested)

➤ Delivery: for the hardware usually about 10-14 days

Of course, we also offer you a maintenance contract for the Virtual Machine as well as for the NetM itself. The price depends from the following parameters:

- runtime of the maintenance contract,
- expected availability of our Hotline-Services (e.g. 7/24 or 9to5 BD only),
- the committed KPIs for ticket handling.

We provide you with a customized offer.

For an offer or more information please contact:

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¹ EWSD - Elektronisches Wählsystem Digital

² hiE - SURPASS hiE 9200 performs the voice call and feature control and provides the interconnection to various networks

³ hiS - SURPASS hiS 700 is a powerful and versatile stand-alone signaling transfer point (STP) and stand-alone multiprotocol signaling gateway