Instructions for migrating NetWare 6.5 to OES 2 Linux using SEP sesam

Open Enterprise Server

OES 1.0

In 2003, Novell announced the successor product to NetWare: Open Enterprise Server (OES). First released in March 2005, OES completes the separation of the services traditionally associated with NetWare (e.g. Directory Services, file-and-print) from the platform underlying the delivery of those services. OES is essentially a set of applications (eDirectory, NetWare Core Protocol services, iPrint, etc.) that can run atop either a Linux or a NetWare kernel platform. Clustered OES implementations can even migrate services from Linux to NetWare and back again, making Novell one of the very few vendors to offer a multi-platform clustering solution.

OES 2.0

OES 2 was released on October 8, 2007. It includes NetWare 6.5 SP7, which supports running as a para virtualized guest inside the Xen hypervisor and new Linux based version using SLES10.

New features include:

- 64bit support

- Virtualization

- Dynamic Storage Technology, which provides Shadow Volumes

- Domain services for Windows (this will be in OES 2, due out in late 2008)

SEP AG with SEP sesam

SEP sesam allows fast and easy access to data for all Novell products. There are highly effective modules for Novell including Open Enterprise Server, SUSE LINUX Enterprise Server, Open Workgroup Suite, GroupWise, NetWare and eDirectory.

SEP sesam delivers media protection and data availability. Using SEP sesam's patented algorithm's users can multiplex several data streams assuring fast, accurate and time saving backup of enterprise data. Data can be directly stored to media (Client Free). Restores of required or needed data can be easily accomplished also in a very short time window. SEP sesam increases data availability in the LAN using Direct Access. Direct Access allows the intelligent access to backed up data and searches storage media rapidly to find the required data in the shortest possible time. This allows the data to be selectively restored, directories, files, etc. without requiring more data than necessary.

With SEP sesam and a well thought out data availability strategy you can assure data security, the product meets all German and European regulations. SEP sesam was developed for complex IT Environments and guarantees investment returns. The data can be restored to the same data location or restored to a new directory, disk, or server. Point-in-Time recovery for online backups is available. Disaster recovery for Linux and Microsoft to unlike environments is also possible, assuring a rapid recovery for an operating environment.

For optimal results in a Novell environment our online GroupWise module provides a simple and reliable backup and restore alternative for all data. The backup of the GroupWise server occurs without interruption to the working system. The restore of single emails is accomplished using the GroupWise interface.

SEP sesam is a valuable tool, as well, for backing up and restoring Cluster environments. Novell Storage Services (NSS) Cluster is fully supported for OES Linux and OES Netware. SEP sesam Dynamic Drive Sharing optimized the utilization of storage media in a SAN. Conversion from disk-to-disk-to-tape is also easily performed with SEP sesam for the LAN, WAN or SAN.

The newest version of SEP sesam 3.4 allows the migration from NetWare to OES Linux System in both the 32-bit and 64-bit versions, simply by backing up the data and restoring it to the new target system. It has never been easier to transfer the complete data tree from NetWare to OES Linux.
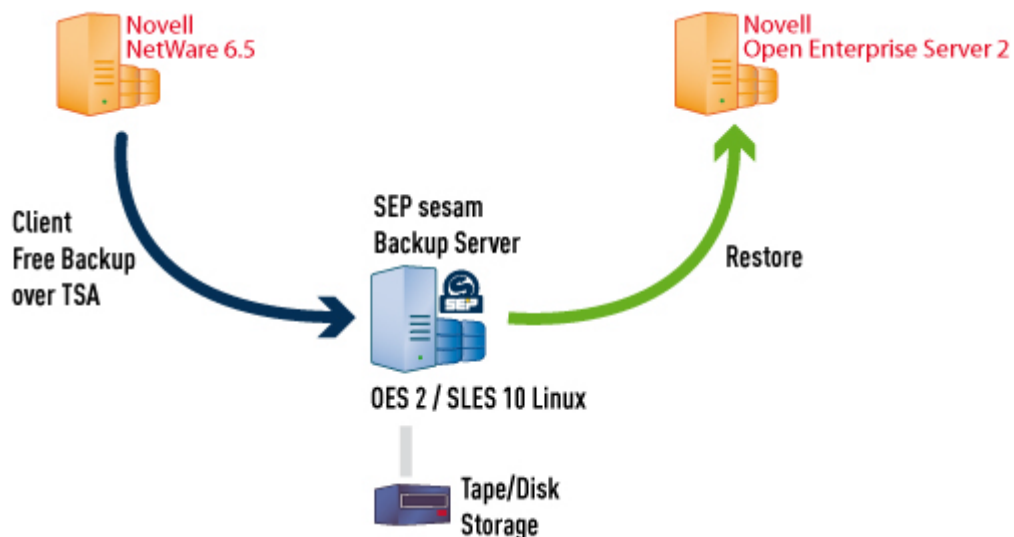
Preparation for NetWare and OES 2

All NetWare systems after Version 6.5 with the requisite patches are eligible for a migration. Experience for the possible migration from older versions of NetWare, with the exception of NetWare 5.1 SP 6, is not available.

The target OES 2 Linux System (32/64) must have all current SLES10 and OES2 patches installed. In addition, they must be at the current revision levels. Please confirm the status of all versions and patches before initiating a test!

In General we recommend setting up and performing a test migration in a controlled, non-critical environment. Afterward, the accumulated experience will ease the migration on the production systems.
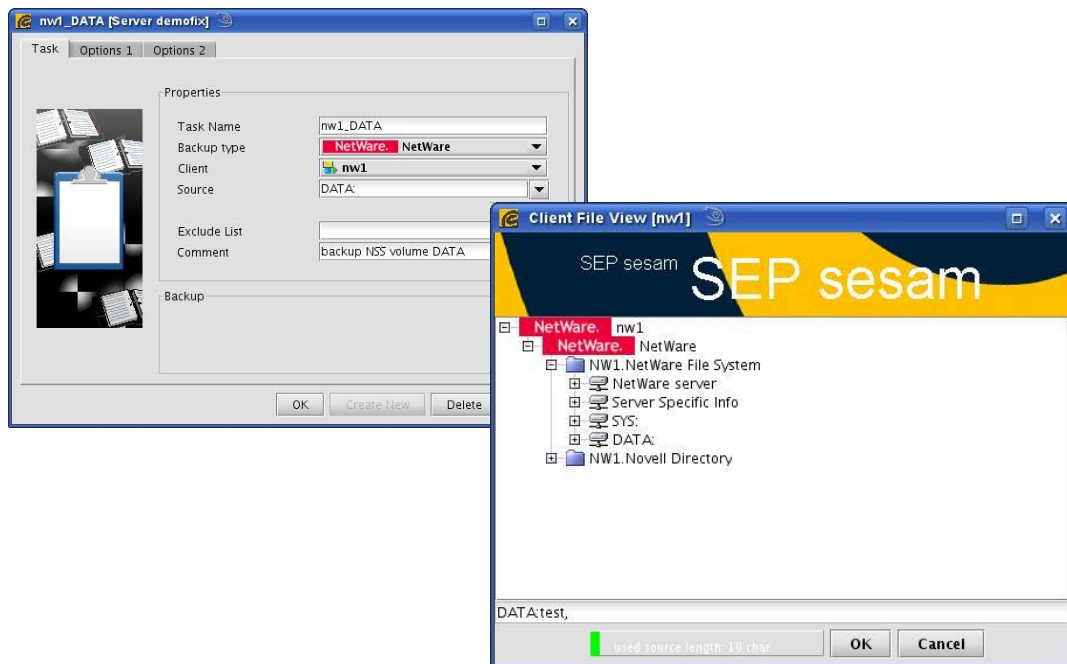
Preparing for Migration using SEP sesam

The installation of SEP sesam Client software is not required on the NetWare system that will be transferred to OES2!

The access to the system is afforded by completely using the TSA/SMS interface from Novell, and does not impact the operating NetWare environment.

Step by Step:

- Target OES 2 Server Linux SP1 with TSAFS in dual mode -> allows the access to the NetWare File System structure without additional adaption after the migration

- In the SEP sesam GUI Select the Target Server for the migration (OES Linux)

- Again using the SEP sesam GUI select the NetWare server that is to be migrated to OES2 ->This does not require the installation of client software on the NetWare server (client free).

- Configure the NSS volume(s) as backup source via the client browser

Whitepaper

- Backup to a selected Disk or Tape using SEP sesam

- Prepare the selected NSS Volumes with the appropriate capacity on the target system (OES2) -> A successful migration of NetWare including Trustees is only possible for/to NSS Volumes; ext3 and other files systems do not support the expanded permissions structure.

- Restore of the migrating data volumes is accomplished using the SEP sesam Restore Wizard which is contained within the SEP sesam GUI ->Choose the backup path and Restore with Level FULL
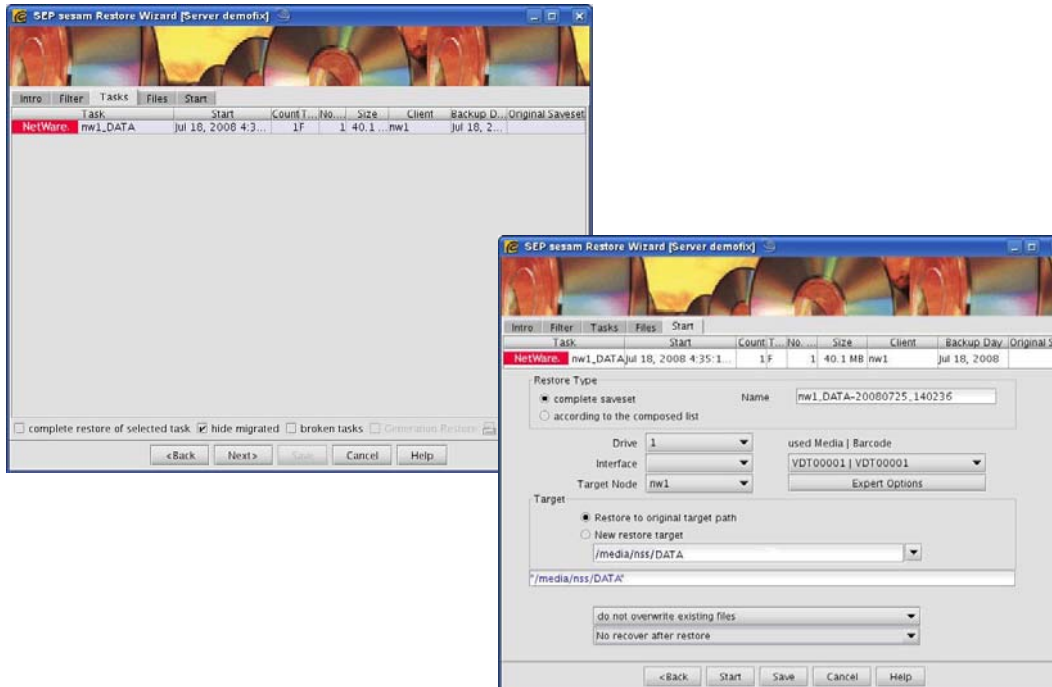
- Select the Source Server (OES Server shown as NetWare) and the Target Server, set the migration target in UNIX notation (e.g. ‚/media/nss/DATA')

- Control of the restored data on the new OES2 System

More detailed technical information regarding migration can be found at:
http://wiki.sepsoftware.com/wiki/index.php/Sesam_README_for_Novell_OES_Linux_%26_OES_Netware

How To for the migration from NetWare to OES 2 SP1:
http://wiki.sepsoftware.com/wiki/index.php/NetWare_migration_NetWare_to_OES2_SP1