# NXPowerLite for File Servers deployment considerations

## Performance Considerations

When planning for a deployment of NXPowerLite for File Servers please consider the following:

DISK I/O

NXPowerLite uses a temporary folder on the machine on which it is installed to make a copy of each file and do its processing. The path to this temporary folder is determined by the TMP environment variable for the user account used by the NXPowerLite File Server service. We recommend ensuring that the disk that NXPowerLite is using is as fast as possible to avoid server slowdown.

CPU / RAM

To a lesser extent, NXPowerLite will be limited by CPU or RAM. This will depend on the size and content of each individual file, but a system with dual-core CPU and 4GB RAM would usually be more than enough.

If resources are scarce or heavily contested then you may want to consider installing NXPowerLite on a separate machine or VM from the file server. The software can be installed on any Windows machine as long as it can access the data that you want to reduce.

Remote deployment / Network bandwidth

If NXPowerLite is installed on a system where the data to reduce is not stored locally, please be aware that there will an increase in network traffic. Before processing a file, NXPowerLite copies each file to the machine on which it is installed. It will then overwrite the original. This increases the network traffic and means the performance of the software may be limited by the available network bandwidth.

Speed

On average, NXPowerLite will compress around 100GB of data in a 24hr period. This can vary depending on infrastructure and network performance. We are focusing on improving the speed significantly for a planned release in early 2017.

For large datasets, we recommend using multiple installations of NXPowerLite all configured to process discrete subsets of the entire data. This means the processing will be performed in parallel, bringing the time for completion down considerably.

## Device Compatibility

NXPowerLite needs to be installed on a Windows machine but it can reduce data on any device in the same Windows domain as the machine on which it is installed.

NXPowerLite can be deployed to reduce data on SAN, NAS and other file systems. At the time of writing we do not know of any storage system on which NXPowerLite cannot reduce data, provided it is a member of the same Windows domain.

Customers have successfully deployed NXPowerLite to reduce data on the following devices:

- EMC SAN
- NetApp SAN
- Novell Netware SAN*
- An extensive range of NAS devices
- Local storage disks

* Windows Service configuration required: Please see Novell's website.

## General considerations

### Users

NXPowerLite is a completely transparent process to users, with specific features designed to minimize the chance that it will affect their everyday interactions with files. Users can continue to use the same tools and processes without interruption from NXPowerLite. Here's how NXPowerLite achieves this:

- Last-accessed or last-modified dates of files are not altered
- Files that are in use are skipped
- Files that have recently been modified are skipped by default

### Deduplication

NXPowerLite file reduction is a complementary technology, amplifying the compression achieved by deduplication. It works well with file types where deduplication is not effective, and can be successfully deployed alongside any deduplication strategy.

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Depending on the configuration of any active deduplication process, NXPowerLite will trigger and increase the activity from the deduplication process if it is enabled and active on the same data. NXPowerLite's first cycle is likely to have the largest impact but subsequent NXPowerLite cycles should see this activity decrease dramatically.

To minimize the probability of conflicts, you may wish to configure deduplication such that NXPowerLite's supported files (PDF, JPEG, Office Files & TIFF) are not deduplicated.

In case of adding a large amount of data to a new system, we advise that NXPowerLite is run prior to the deduplication process or deduplication is disabled during NXPowerLite's processing. This will ensure that the two processes are not competing for resources.

## Replication/Clustering/Mirroring/Backup

NXPowerLite works well with all of these technologies. The most important consideration is that NXPowerLite modifies a large number of files very rapidly, which might then trigger increased replication, mirroring or backup activity. This effect will be amplified if the activity involves remote distributed locations over WAN.

The first time NXPowerLite is run it will generate the most file activity. We would recommend using NXPowerLite's scheduling features to run it at quiet times and minimize the probability of conflicts and resource drains. NXPowerLite maintains its state and progress, so it can resume processing files after a scheduled pause, ensuring all the configured content is processed.

## Anti-virus

NXPowerLite is fully compatible with all anti-virus solutions. When deploying, please consider the increased activity that NXPowerLite will create. If your anti-virus solution employs on-demand scanning, please see this NXPowerLite support article for configuration advice.

# NXPowerLite™
## FOR FILE SERVERS

## System Requirements

Windows Server 2003

Windows Server 2003 R2

Windows Server 2008

Windows Server 2008 R2

Windows Server 2012

Windows Server 2012 R2

Windows XP (with Service Pack 3)

Windows Vista

Windows 7

Windows 8/8.1

Windows 10

*All of the above must have .NET framework V3.5 or above*

## Network connection

Active internet connection required for metered credit operation.

## Supported file types

PDF Documents

JPEG images

PowerPoint Presentations

Word Documents

Excel spreadsheets

TIFF Images