

# NXPowerLite for File Servers

User manual

Version 9.0.X, September 2021

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## Reference

## Adding Folders

### Add a folder

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To configure the drives and folders that are to be processed click on the 'Add folder...' button on the Dashboard and select the folder or drive to include from the folder browser. By default, these folders will be added to the list with Default profiles for both **Files to include** and **Settings**.

To configure a custom profile, please select the 'New profile..' option in the relevant drop-down controls. See **Files to include** and **Settings** pages for more information.



**Please note:** Folders are searched recursively, so all sub-folders of the selected locations will be processed unless certain sub-folders are explicitly excluded. See 'Excluding Folders' in the 'Add Rules' section below for details.

### Add multiple folders

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It is possible to add multiple folders as a batch using the 'Add multiple folders...' button on the Dashboard. Then either paste or type folder paths, one per line, into the textbox provided. After they are added folders will appear in the folder list on the Dashboard with default file types and settings profiles selected.

### Add Rules

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When a folder is added to the list for processing, by default all sub-folders of each added folder will be processed by NXPowerLite in the same way. To exclude specific sub-folders or set different **Files to include** and **Settings** to be used, click on the parent folder then click the 'Add Rule...' button.


#### Excluding Folders

This feature is useful if you do not want certain areas of your data processed by NXPowerLite. By excluding a folder, all files in this folder and all of its child folders will not be considered for optimization. Once a folder is excluded it will appear in the list of locations with this icon  indicating all files inside will be skipped.

#### Changing settings for sub-folders

It is possible to change the File Types and Optimizations by selecting this radio button in the dialog. This is a useful feature, if for instance, you have a parent folder where all file types are considered for optimization, but have a specific sub-folder where only PDF file should be optimized. In this case, you would:

- Select the parent folder in the list
- Click 'Add Rule...' button
- Choose the sub-folder you want to apply the settings on
- Enable the bottom radio button
- Select or create a new File Types profile (where only PDF selected) from the drop-down.
- Click OK

Sub-folder rules will be added to the list with this icon  indicating there are different rules to their parent folder.

## Edit folders

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To edit the settings or path of a folder, select it and press the 'Edit...' button or simply double-click the folder.

Alternatively use the 'Add Rule' option to customize settings for a specific sub-folder.

## Network locations

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As well as local drives and folders, shared network locations can also be added to the list. For example, it is possible to optimize data on a shared SAN or NAS, providing that it resides in the same Windows domain as the machine on which NXPowerLite is installed. The NXPowerLite File Server service may also need to be configured with an account that has full permissions to those locations. See **Configuring the NXPowerLite Service** for more information.



**Please note:** When adding a location via a mapped network drive (e.g. N:), the drive letter displayed in the folders list will be replaced with the equivalent UNC path (e.g. \\server\share). This is because Windows manages drive mappings on a per-user basis, and as such, they may not be available to the NXPowerLite service when it needs to process files.

## Moved or deleted folders

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Folders that have previously been configured but have subsequently been moved or deleted will appear "grayed out" in the list of locations. This is to indicate that the folder no longer exists at the specified path.

## Remove

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Selecting one or more folders in the folder list and clicking the "Remove" button will remove the selected folders from the list. If an included folder has rules associated with it, removing that folder will automatically remove all its rules.

## Files to include

### Custom File Types Profiles

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#### Supported File Types

NXPowerLite can optimize files with the following extensions:

- Microsoft PowerPoint 97-2003 binary format (.ppt, .pot, .pps)
- Microsoft PowerPoint 2007-2019 Open XML format (.pptx, .pptm, .potx, .potm, .ppsx, .ppsm)
- Microsoft Word 97-2003 binary format (.doc, .dot)
- Microsoft Word 2007 - 2019 Open XML format (.docx, .docm, .dotx, .dotm)
- Microsoft Excel 97-2003 binary format (.xls, .xlt)
- Microsoft Excel 2007-2019 Open XML format (.xlsx, .xlsm, .xltx, .xltm)
- PDF documents (.pdf)
- JPEG images (.jpeg, .jpg, .jpe, .jfif, .jif, .jfi)
- TIFF files (.tiff, .tif)
- PNG files (.png)

To enable or disable individual file types expand the tree view and check or uncheck the corresponding check-boxes.

#### Zip archives

By default NXPowerLite optimizes any of the selected file types that it finds inside Zip archives. This behavior can be altered by using the check-box control.



**Please note:** NXPowerLite cannot optimize any file or Zip archive that is encrypted or password protected

#### Read-only files

By default, files with the "read-only" attribute are not processed by NXPowerLite. These files can be included by checking the "Include read-only files" checkbox.

## Limiting files by date

Typically, servers contain some files that users will access and edit regularly and other files that are not actively in use, but may be consulted for reference purposes. To reflect this, NXPowerLite can apply different settings in relation to when the file was last modified (or accessed).

## Profile Name

Each profile has to be given a unique name, although you can use the same profile name for another type of profile i.e. **Settings** profile or **Schedule** profile. We suggest using a descriptive name to help explain what it does or a specific area to which it should be applied. For example, you may want to call a particular profile 'All file types except PDF' or 'Marketing area'.



## Settings

### Settings

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#### JPEG Quality

This sets the level of quality used by NXPowerLite when recompressing JPEG files. Lower values will result in more disk space reclaimed, but will reduce the visual quality of images. We recommended using our default settings because these offer an excellent balance between space saving and quality

#### Resize images for display at:

Documents often contain very large images, taken with digital cameras for example, which contain far more visual information than will ever be seen by a user in normal use. NXPowerLite can scale these images down to target a particular display resolution.

#### Allow JPEG conversion

If enabled NXPowerLite will convert images in other formats to JPEG if it makes them smaller.

### PDF

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#### Delete private application data

Applications that create PDFs files, such as Adobe Photoshop or Acrobat, are able to store information within a PDF file that they can use when opening or editing the file. This information can only be used by the application which created the file and is not needed to display a PDF file. For most cases, we recommend deleting this data as it will have no effect on the use of the PDF file.

#### Subset Embedded Fonts

Enabling this feature means only those characters that are actually used in the lay-out are stored in the PDF. If the “\$” character doesn’t appear anywhere in the text, that character is not included in the font. This means that PDF files with subsetted fonts are smaller than PDF files with embedded fonts.

### Microsoft PowerPoint, Word & Excel

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## Delete cropped areas of pictures

Enabling this feature will trim cropped images within documents so that only the visible portion is stored in the file. This will reduce the size of the files, but users will no longer be able to edit cropped images to reveal the areas that have been removed.

## Flatten embedded objects

Enabling this feature will cause embedded documents within document files to be 'flattened', converting them into pictures. This will reduce the size of the files but users will no longer be able to double-click embedded documents to edit them.

For example, a Word document might contain an embedded Excel sheet with a table of figures. Double-clicking the table would normally open Excel to edit the figures, but flattening the document converts the table to a simple picture, preventing this from happening.

## Reduce color depth of PNG images

When this feature is enabled NXPowerLite will reduce the number of colors used in PNG images within Office files, where it is appropriate. This method is called quantization and while it is a lossy process, compressed images look the same as the originals. NXPowerLite uses the same approach for standalone PNG images.

## Microsoft PowerPoint Only

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### Optimize images on slide masters

It is possible to select whether or not images that appear on slide masters will be optimized. If this setting is enabled then all images in the PowerPoint will be optimized. If it is disabled NXPowerLite will not process images that appear on slide masters.

## JPEG

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### Remove EXIF data

JPEG images normally include extra information (metadata) inside the file such as the device on which the image was taken or location the image was taken plus many more. By default NXPowerLite will retain this data however, this option enables this data to be removed from each JPEG file.



**Please note:** There are currently no settings for PNG or TIFF files.

## Profile Name

Each profile has to be given a unique name, although you can use the same profile name for another type of profile i.e. **Files to include** profile or **Schedule** profile. We suggest using a descriptive name to help explain what it does or a specific area to which it should be applied.

## Preferences

### Run Mode

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To switch between run modes select 'Preferences...' under the 'File' menu.

### Single Pass

NXPowerLite will process all the files inside the configured folders and drives and then stop and produce a report, needing to be manually restarted or re-configured. A detailed report of NXPowerLite's progress through the Single Pass run is available in the 'Reports' item 'Single Pass Reports'.

### Loop Automatically

NXPowerLite will process all the files in the configured folders/drives and then automatically re-start processing the same folders again. This means that subsequent runs it is likely to process files that have been added since the original pass through the folders/drives or files that were skipped due to configured age rules. This option enables administrators to set the configuration once and ensure that NXPowerLite always processes these folders/drives in the background.



**Please note:** If NXPowerLite does not find any data to optimize then it will automatically pause for 24 hours before trying the same folders again.

## Performance

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Rescanning data is used to speed up compression by quickly skipping incompressible files. Compression will be slower after clearing this data

## Scheduling

### Custom schedule profiles

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By default NXPowerLite will run without a schedule i.e. it will run without interruption until either the job is complete (Evaluation mode) or the software pauses awaiting new content (Optimize mode). However, because it may not be optimal to run NXPowerLite at the same time as say a Backup tool, it may be desirable to set a custom schedule so that NXPowerLite runs only during "quiet" periods. For example, you may want to run the software in the evenings during the week and all day at weekends but start at a specific future time and date.

### Creating a custom schedule

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You can create a custom schedule by selecting 'New profile...' option in the Schedule drop-down control on the Dashboard. A schedule profile is made up of 1 or more time slots. There are many repeat options and these options vary depending on the start date and time selected.



**Please note:** NXPowerLite will automatically adjust the schedule according to changes to the system clock, time zone or Daylight saving.

### Profile Name

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Each profile has to be given a unique name, although you can use the same profile name for another type of profile i.e. **Settings** profile or **Files to include** profile. We suggest using a descriptive name to help explain what it does or a specific area to which it should be applied. For example, you may want to call a particular profile 'Evenings & weekends' or 'Marketing area'.

## Registration

### Registration

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To enter your registration key, click the 'Register...' option under the 'Help' menu item. Enter your registration key in the resulting window; the key will be validated when the 'OK' button is clicked. If the code is valid, the 'About NXPowerLite for File Servers' window will appear showing the confirmed registration details.



**Please note:** Until NXPowerLite is registered using a registration key, it will continue to run in Evaluation mode and will not reduce files.

### What changes when I register?

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#### Evaluation mode

Prior to registration NXPowerLite will be locked in 'Evaluation mode' and in this mode, you will be able to point NXPowerLite at your server folders and produce a report of the estimated space savings. In this mode, NXPowerLite copies each file in turn to create a temporary file and then optimizes it. It then deletes the temporary file, taking note of the difference between the size of the original and optimized versions of the file. When it has finished processing all of the candidate files, NXPowerLite generates a report detailing the total expected space savings.



**Please note:** In Evaluation mode, the original file is never modified, deleted or replaced.

#### Optimize mode

Once registered NXPowerLite for File Servers will be in optimize mode. This means that the software will now replace files with smaller versions, reclaiming valuable disk space. A live report can be generated at any time showing the amount of disk space reclaimed over time.

## Reports

### Evaluation and Single Pass Reports

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#### Results

This section shows the actual space savings you will achieve using the paid version of NXPowerLite. During the scan NXPowerLite copies each file in turn to create a temporary file and then optimizes it. It then deletes the temporary file, taking note of the difference in size between the original and optimized versions.

#### Supported Files

This shows a breakdown of the supported file by file types.

#### Your Data

This section shows the amount of files in the selected folders that NXPowerLite can process (Supported Files) and those that NXPowerLite cannot process. (Unsupported)

#### Supported Files Skipped

There are many reasons why supported files could be skipped. The table below details these reasons one or more of which may appear on a report.

Skipped File Reason	Explanation
Cannot reduce with current Settings	The Settings selected cannot reduce these files. Amending the Settings may provide better reduction performance, however, the quality of the processed files may be affected.
Configuration Settings	These files have been skipped because the 'File Types' settings configured excluded them. (See <b>Files to include</b> )
Not Old Enough	Files have been skipped because they had been accessed or modified more recently than the minimum threshold (See <b>Files to include</b> )
Offline	Files that NXPowerLite did not process because they had the "offline" attribute set.
Read-Only	Files that NXPowerLite did not process because they had the "read-only" attribute set.
Encrypted	NXPowerLite cannot process Microsoft Office documents that are encrypted or password protected. This is because there is currently no way to make the necessary passwords and/or encryption keys available to NXPowerLite.
Already Optimized	Files that have already been optimized by NXPowerLite.
JPEG too small	JPEGs that NXPowerLite did not process because they were deemed too small.
Unknown Error	Files that NXPowerLite failed to optimize for any other reason than those specified in this table.

# NXPowerLite for File Servers Help

Wrong Extension or corrupted file	Files with an extension that NXPowerLite expected to be able to process, but which are actually of a different file type than is indicated by the file extension. One common example is RTF (Rich Text Format) files with a ".doc" extension. Microsoft Word will open such files without complaint, but NXPowerLite is unable to optimize RTF files.
File in use	To avoid the possibility of data loss, NXPowerLite will not attempt to process files that are in use (e.g. because a user has the file open for editing).
Created with an old version of MSOffice (Pre office 97)	Documents created by versions of Office pre-Office 97 will be skipped by NXPowerLite, and the total size of such files will be counted in this category.
Could not add tagging data	NXPowerLite adds a small amount of data upon completion of successful reduction in size. This ensures that when we encounter it again we can handle it appropriately. We failed to add this data to files in this category and therefore skipped these files.
Unparsable	Files that are of an optimizable file type, but which NXPowerLite failed to process due to encountering an unexpected condition while processing them.
Fast Saved Microsoft Word Documents	NXPowerLite is currently unable to process Microsoft Word documents that have been saved with the "Allow fast saves" option enabled. The "fast saves" feature has been disabled by default since Word 2002 and has been removed entirely as of Word 2007.
PDF Processing error	NXPowerLite failed to process these PDF files, normally due to the file being badly formed or corrupt.
Deleted/ moved/ renamed	Files in this category are ones that have been deleted, moved or renamed since NXPowerLite initially scanned them.
Internal error	These are files that caused an error in the software when parsing them.
Non-optimizable PDF subset	NXPowerLite currently optimizes all known PDF subsets at time of release. It will not be able to optimize subsequently released subsets and the files will be listed here.
Created by an unsupported application	These are files that have been last saved by Office applications other than Microsoft Office.
Already compressed TIFF file	NXPowerLite cannot optimize TIFF files where one or more images are compressed.
TIFF file contains unsupported tags	TIFF file(s) contain information that NXPowerLite does not recognise, so it has not processed these files in order to protect the integrity of your data.

## Unsupported Files

This table shows the top 15 plus consolidated 'other' file types that NXPowerLite did not process. User settings have no affect on this table because NXPowerLite can only process the following file types; PowerPoint, Word, Excel, JPEG, PDF, TIFF and Zip.

## Inaccessible Folders

Folders listed in this category were selected to be included in the evaluation, however, NXPowerLite was unable to access these folders. If the majority of your



dataset is in this section please check that the 'NXPowerLite File Server Windows service is configured with an account that has full permission (Read/Write/Update/Delete) to these folders.

## Live Report

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The live optimize report shows an overview of what space has been reclaimed by NXPowerLite. The report can be generated at any time once the software has been registered and will always show up to date information. The report is split into three main sections.

### Data Reclaimed Summary

This section shows the total space reclaimed by NXPowerLite and breaks that down by File Type.

### Last 30 days

This is a summary of the last 30 days worth of progress by NXPowerLite. It details how much disk space has been reclaimed each 24 hr period.

### Previous Months

This table summarizes the amount of space reclaimed by NXPowerLite per month.

Support

## System Requirements

### System Requirements

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NXPowerLite for File Servers can be run on any Microsoft Windows environment detailed below:

- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows Server 2019
- Windows 8/8.1
- Windows 10

All of the above with .NET framework V4.5.2 and above

## Configuring the NXPowerLite service

### Configure Windows Service user account access permissions

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NXPowerLite uses a windows service to manage and perform the optimization processing. This service is configured with an account (LOCAL SYSTEM by default) to enable optimization of data residing locally on most server configurations. However, if you have a non-standard security model or you wish to optimize data that resides on external devices, then the service may need to be configured with an account that has FULL permissions (Read/Write/Update/Delete) to the following folders:

- All the folders selected for optimization
- The '%ALLUSERSPROFILE%\Neuxpower\NXPowerLite for File Servers v9' folder on the installation server\machine
- The TEMP folder of the local machine
- Installation folder (usually:C:\Program Files (x86)\NXPowerLite for File Servers)
- Registry hive:  
Computer\HKEY\_LOCAL\_MACHINE\SOFTWARE\WOW6432Node\Neuxpower\NXPowerLite Fileserver\9.0

### Configure the service

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#### **Either**

Open NXPowerLite for File Server Dashboard and choose the 'Configure Windows Service...' option under the 'File' menu.

or

without starting NXPowerLite for File Servers:

- Open services.msc
- Double click "NXPowerLite File Server"
- Switch to the "Log On" tab
- Select the "This account:" radio button
- Enter details of an account permissions as described above

- Click "OK"
- Right-click on the NXPowerLite File Server service and select "Restart" from the menu

If you are configuring NXPowerLite to access a Novell NetWare installation via eDirectory, please see 'login to eDirectory for a windows service' section in [Technical Support](#).

## Legal Notices

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### Based in part on libzip by Dieter Baron and Thomas Klausner

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