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NXPowerLite for File Servers

User manual

Version 7.0.X, October 2016

neuxpower.com   Simple Storage Reduction Software

NXPowerLite for File Servers Help

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Reference

Adding Folders

Add a folder

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 subfolders are explicitly excluded. See 'Excluding Folders' in the 'Add Rules' section below for details.

Add multiple folders

It is possible to add multiple folders as a batch process which allows for easy entry of many folder paths. To do this use the 'Add multiple folders...' option in the 'File' menu item. Then either copy or type a new folder path, 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. You can click 'Edit' to change the settings for a folder, or use the 'Add Rule' dialog to customize settings for a specific sub-folder. Any paths that have been mistyped or do not exist will appear disabled in the folders list.

Add Rules

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.

Editing folder configuration

To edit either the 'settings profiles' or the path of a folder/rule, select the item in the list and press the 'Edit...' button or simply double-click the folder.

Network locations

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.

> ℹ️ *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

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

Selecting a folder or a configured sub-folder (excluded or different profiles) in the folder list and clicking the "Remove" button will remove the folder from the list. If an included folder has rules associated with it, removing that folder will automatically remove all its rules. It is possible to 'multiple select' folders and remove in bulk using the standard 'Ctrl-click' method.

Files to include

Custom File Types Profiles

NXPowerLite is configured with a default profile of 'Skip files modified in the last 7 days'. This can be changed either when you are adding a folder, or later by selecting the folder and clicking the 'Edit...' button. See **Adding Folders** for more information.

Supported File Types

NXPowerLite can optimize the following types of files with the following extensions:

- Microsoft PowerPoint 97-2003 binary format (.ppt, .pot, .pps)

- Microsoft PowerPoint 2007-2016 Open XML format (.pptx, .pptm, .potx, .potm, .ppsx, .ppsm)

- Microsoft Word 97-2003 binary format (.doc, .dot)

- Microsoft Word 2007 - 2016 Open XML format (.docx, .docm, .dotx, .dotm)

- Microsoft Excel 97-2003 binary format (.xls, .xlt)

- Microsoft Excel 2007-2016 Open XML format (.xlsx, .xlsm, .xltx, .xltm)

- PDF & PDF/A Documents (.pdf)

- JPEG images (.jpeg, .jpg, .jpe, .jfif, .jif, .jfi)

- TIFF files (.tiff, .tif)

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

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.

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

Exclude files that have been modified in the last:

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 depending on the length of time since the file was last modified (or accessed). Our default value of 7 days means that files that have been modified in the 7 days will NOT get processed.

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

Custom Settings profiles

Our default Settings profile is recommended because these offer the best trade-off between reduction performance and quality and should suit most cases. However, it is possible to create/select different Settings profiles if required. To create a new Settings profile, select the option 'New profile...' in the Settings drop-down when configuring a folder. See **Adding Folders** for more information.

> **Please note:** If you subsequently need to edit a custom profile, this is possible by clicking the relevant option in the 'Profiles' menu item.

Image Optimization

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.

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

> **Please note:** The JPEG Quality setting for both Microsoft Office Documents and PDF files refer to the JPEG images stored within the file. NXPowerLite does not resize any stand-alone JPEG files only ones within Office or PDF documents.

Hidden Content

Remove hidden content from

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 depending on the length of time since the file was last modified (or accessed). Our default value of 90 days for Hidden Content is based on the most common customer scenarios.

Discard cropped image data

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.

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.

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.

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. For example, you may want to call a particular profile 'Hidden data not deleted (12 months)' or 'Marketing area'.

Run mode

There are 2 ways in which NXPowerLite can be configured to run when it is processing files. To switch between run modes select the 'Run Mode' item under the 'Configure' menu option.

Loop Automatically [Default]

The default run mode for NXPowerLite is to automatically loop. This means that 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.

> **ℹ️** *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.

To configure NXPowerLite to skip current files, please see **Files to Include** and **Settings** to set custom profiles. To view NXPowerLite's progress, please see the **Live optimize report** by selecting the 'Live Report' menu item in the Reports menu option.

Single Pass

Once started in this mode, 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'.

Scheduling

Custom schedule profiles

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

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.

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

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 **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

Enter Registration Key \ Server ID

When NXPowerLite for File Servers is purchased, an email containing either a registration key or Server ID will be sent. To enter your registration key or server ID, click the 'Register...' option under the 'Help' menu item. Enter your registration key or Server ID 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 or Server ID, it will continue to run in Evaluation mode and will not reduce files.

What changes when I register?

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. Our default settings suffice for most cases but while evaluating you may want to see the effect of various settings on the expected space reclaimed.

> *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

Below is an explanation of each section of the report produced at the end of the run.

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 the 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 **Files to include**)
Not Old Enough	Files have been skipped because they had been accessed or modified more recently than the minimum threshold (See **Files to include**)
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.
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 dues 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

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 summaries the amount of space reclaimed by NXPowerLite per month.

Support

System Requirements

System Requirements

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

- 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 with .NET framework V3.5 and above

Quick Scan Utility

Launched from the 'Tools' menu, this additional application enables the user to gain a quick understanding as to whether NXPowerLite is likely to be effective on the selected files. Running the software in Evaluation mode can often be a slow process, due to the fact that NXPowerLite actually copies each file to a temporary folder, processes it and then discards the processed file and temporary folder. The quick scan utility performs at a similar speed to Windows Explorer when set to find out the size of a directory.

The detailed report that is produced at the end of a quick scan is intended to be an indication of space savings that can be achieved.The estimated reductions are based on average reduction achieved on thousands of files tested. The Quick Scan utility can be used while NXPowerLite for File Servers is running without conflict. To save time, we

recommend using this utility prior to running NXPowerLite for File Servers in Evaluation Mode.

Configuring the NXPowerLite service

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 v6' folder on the installation server\machine

  Configure the service:

  Either

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

  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.**

Troubleshooting

There may be times when NXPowerLite encounters errors and it is necessary to

undertake some troubleshooting to resolve. We have categorized these errors into 3 sections described below.

Bad configuration data

If one or more of the NXPowerLite configuration files has become corrupted or is missing, NXPowerLite will detect this and inform the user. More details of the specific file/s affected will be shown in the Windows Application Event Log.

Resolution
In order to resolve this issue, there are 2 options that can be taken.

- Reset NXPowerLite to default settings using the option that appears in the interface. This means that any configuration that has been previously applied to NXPowerLite will be lost and the default settings will be restored.

- Close the application and inspect the NXPowerLite settings files for errors. These files are stored in a subfolder of the "All Users profile" folder named "Neuxpower\NXPowerLite for File Servers"

> Depending on the version and configuration of Windows, the "All Users profile" may be in a number of different locations. The %ALLUSERSPROFILE% environment variable should contain the full path to this folder.

Access Denied

If the 'NXPowerLite File Server' Windows Service detects that it cannot access either the configuration files or the registry settings, then it will display a warning. This is normally due to the fact that the account that the service uses has been changed (sometimes to enable optimization of content on network folders) but it cannot access the settings folders on the machine on which the software is installed.

Resolution

1. Review Application Event Log messages and errors for more detailed information about the specific issue.

2. **Configure/re-configure the Service**

Please ensure that the service for the account is configured with full(Read/Write/Update/Delete) permissions to both:

- All the folders selected for optimization

- The configuration files stored in a sub-folder of the "All Users profile" folder named "Neuxpower\NXPowerLite for File Servers"

> In order to configure the service account that NXPowerLite uses it is possible to use the 'Windows Service...' option in the 'Configure' item in the menu.

Unexpected error

Rarely a message box will appear when something happened that NXPowerLite was not expecting. This error message could indicate a problem occurred in windows or in the hardware. Often the reason for this is infinite recursion, lack of memory or insufficient hardware, drivers or firmware. Generally speaking, these errors have to do with problems outside the NXPowerLite environment.

Resolution

- Review Application Event Log messages and errors for more detailed information about the specific issue.

- Restart the 'NXPowerLite File Server' Windows service and restart the Dashboard.

- If this is not successful contact customer support.

Technical Support

Using NXPowerLite for File Servers without the user interface

It is possible to control NXPowerLite without the use of the graphical user interface once the folders configuration has been set. For example, this can be useful when you want to make NXPowerLite resume after a file backup software has finished, so that you don't have any overlapping time.

NXPowerLite uses the windows service 'NXPowerLite for File Server' to do all of it's processing. This can be controlled in the standard way by use of the standard Windows command line program, 'SC'. However 'pause' and 'continue' are the only supported commands.

For example, if you want to pause the file server enter the command or make a script that executes the following code:

sc pause "NXPowerLite File Server"

or for resuming after a pause

sc continue "NXPowerLite File Server"

> **Please note:** If a schedule has been set within the user interface then the software may not resume immediately after a 'continue' command is received. The configured schedule will always be respected so if it is on a scheduled break it will not resume until the next scheduled resume time.

Login to eDirectory for a windows service (Novell NetWare only)

On machines where the Novell Client for Windows is installed, sometimes it is desired that an application running as a Windows service be able to access Novell network resources. There are several Windows service-specific differences in how this occurs as compared to a normal interactive Windows user login. NXPowerLite installs a service to the machine on which it is installed and by default will be installed under the "Local System" account. A login session for this service will not be able to be created by default and despite the fact that you will be able to select a location on a NetWare setup, you will not be able to analyze or optimize that data.

Resolution

- Configure the Windows service to start with a specific Windows user account name and password. Create the Windows user account with the same name as the eDirectory user object you will want the service to login with. For example, if the service will be expected to login as "AVUPDATE.Accounting.WidgetCo", create the Windows account name as "AVUPDATE". You then assign the Windows service to start as the specific Windows account "AVUPDATE" in the Windows "Services" control panel.

- Set the "Tree:" and "Name context:" pair in the "Client" tab of the Novell Client Properties such that the "Name context:" reflected for the eDirectory tree the service will be logging in to is set to the correct context for the service's eDirectory user. For example, if the service will be expected to login to the eDirectory tree "MYTREE" as "AVUPDATE.Accounting.WidgetCo", the "Name context:" for "MYTREE" will need to be "Accounting.WidgetCo". This configuration can be established by editing the "Client" tab directly, or by logging on interactively as any eDirectory user from the "Accounting.WidgetCo" container.

  At this point, once the Windows service is restarted, when the service attempts to access a UNC path to a Novell resource, the Novell Client will attempt to login to eDirectory on the non-Novell-aware Windows service's behalf. The Windows user name and password the service started with will be attempted in conjunction with the context shown in the "Name context:" shown in the "Client" tab for the target eDirectory tree. If this login is successful, the Windows service will be able to access eDirectory with the rights of this eDirectory login that has been established specific for the Windows service.

For more information please visit this support page from Novell.

Known Issues

NXPowerLite does not pause in a scan cycle

We are aware that sometimes NXPowerLite will appear not to be pausing when either it is scheduled to be on a break or when it is manually paused. This is due to the fact that during the initial scan period while NXPowerLite builds a list of files to process in the configured folders we are unable to stop the scan. This will result in the activity indicator in the Status bar on the Dashboard appearing to show that something is happening. During this phase no files are being processed and are completely safe.

This will occur in both Evaluation and Optimize modes. We anticipate that it will go completely un-noticed in Evaluation mode, however in Optimize mode it may be more prominent due to the cyclic nature of the processing of files.

Work around
For most cases this will not be a problem, but where it is required that there is completely no activity from NXPowerLite during specific time periods, we suggest ensuring that NXPowerLite is scheduled to pause prior to the desired time. For example, if you want to schedule an optimize job to end at 09:00 then we suggest finishing it at 08:45 to allow any scanning that is required to complete.

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