JAM
S O F T W A R E

Inhalte

TreeSize Professional on NetApp Storage Systems

Intelligent Disk Space Management

Users hoard data - be it a private or professional environment. While cheap storage floods the markets, the amount of data downloaded and stored continues to grow. Conserving or managing disk space seldom comes to mind.

A high performance storage system is a company's backbone - but it doesn't not come cheap. A NetApp storage system for business use will cost ten thousand dollars and upward. Systems sold by EMC, HP, Dell, or IBM are not much cheaper.

If each megabyte means additional costs, disk space management will pay off quickly. Many customers use the TreeSize Professional Edition to manage or monitor valuable disk space. Here are some examples as told to us by our business partners.

Emergency Measures: Storage System Reaches Capacity

Operating errors, bugs in a software, or unexpected data growth are just some of the reasons a storage system can reach maximum capacity.

The NetApp system of one of our customers ran full of data. The reason: An error in an application created a huge number of log files. The administrator used TreeSize Professional to find the cause of the data growth and clean up the system. The company now uses the monitoring tool **ServerSentinel** to keep an eye on the shares.

Approach

1 The administrator runs TreeSize Professional on the servers and scans the provided shares. He uses the **Top 100 view** to identify several redundant files and deletes them.

2 The storage system is safe for the moment, now it is time to clear up disk space: The administrator starts the **temporary file search**. Old temporary files are found and deleted.

3 Once the system's functionality is ensured the root of the problem needs to be addressed. The administrator consults a **Snapshot** of the system to check when exactly disk space usage began to rise. The NetApp filer creates such snapshots automatically at regular intervals. The administrator changes the configuration of the malfunctioning app and deletes all logs created due to the error.

> You want to use this feature?
> **Activate the Snapshots on your NetApp!**

Case Study TreeSize on Storage Systems

July 2015

www.jam-software.com/treesize
JAM Software GmbH · Am Wissenschaftspark 26 · 54296 Trier · Germany · Tel. +49 651-145653-0 · treesize@jam-software.com

Hot and Cold Data: Clean Up Disk Space With the TreeSize File Search

A software company combines two different storage systems to save money:

› Primary storage: NetApp Storage System   4,8 TB net
› Secondary storage: Synology NAS 8 x 4 TB drives, RAID 6   20,6 TB net

The secondary storage system costs only a fraction of a NetApp system of the same size. Cheaper storage, however, means less performance: The fast system is reserved for hot data, while cold data is stored on the slower secondary storage.

Setup and log files created by the continuous build server shall be moved from the NetApp filer to the secondary system in regular intervals. This ensures that only hot data is stored on the fast storage system.

Approach

1 The administrator configures a search routine in the **TreeSize Professional File Search**. The search will find all files created before the last release cycle started.

2 All files found by the File Search shall be **moved** to the secondary storage system. This operation can be performed manually or automatically. When moving files TreeSize can create a symbolic link. This link is transparent for programs or scripts, no changes in code are required.

3 To ensure that the moving operation will be performed at regular intervals the administrator uses the TreeSize **Task Planer**. TreeSize Professional will run the search (and move files, if applicable) automatically each Sunday.

Automated Status Updates: Keeping Track of Disk Space

Our customers often use TreeSize to create automated reports concerning disk space usage. One company generates a status update reporting disk space usage on their EMC storage system and sends it via email to their system administrators.

Approach

1 TreeSize Professional offers a wide range of reporting options. The administrator selects the information he requires.

2 In the next step the administrator creates a **task** to collect the selected information and compiles them in clear reports:

› Disk space usage of the first folder level as pie chart
› The Top100 file view as an XLSX file
› Disk space usage per user as an XLSX file

3 The sysadmin will now receive emails containing all required information and can act before the expensive storage system reaches maximum capacity.

An major international enterprise uses the even more flexible and powerful disk space manager **SpaceObServer** to monitor the size of user profiles. A skript informs users via email if their profile exceeds a predefined size. Users can then delete or archive files they no longer require. Learn more in our **Case Study Disk Space Management**.

Costs:

1 x Synology DS1813+	$ 798
8 x 4TB hard drive	$ 1,811
net	$ 2,609

The Command Line:

TreeSize.exe
/NOGUI
/HTML
/EMAIL „example@company .com"
/EXPAND 1
/USERSLIST
/PIECHART
/TOPFILESLIST \\server\data

Case Study TreeSize on Storage Systems

JAM

Enforce Compliance – Monitor Storage Systems

Many companies define standards of conduct for their employees. Compliance officers ensure that all employees adhere to the rules. TreeSize Professional can help them perform their tasks.

Case I: Forbidden Files on the Company Server

Employees of an advertising agency used the company server to store and share illegal copies of movies and TV series. After the administrator stumbled upon the cache, new official policies were instated: Permission to store video files in user profiles has to be granted explicitly.

Approach

1 To ensure that no video files are stored in user profiles the system administrator creates an automated **TreeSize File Search** for known file types and keywords collected from titles of movies or series, e.g. "Avengers", "Jurassic", "Big Bang", "Thrones" etc. The search is triggered at the end of each working day.

2 If the search finds video files, the administrator is informed via email. The email lists the file name or names as well as the user names.

3 The sysadmin checks the profile for forbidden files and informs the compliance officer or the employee's superior.

Case II: Forbidden Statistics

A big automobile company has to adhere to German law. The law states that statistics concerning sick days may never be created per employee. TreeSize is used to search file servers for files containing such statistics.

Approach

1 Compliance officers and Betriebsrat create a list of selectors marking forbidden data collections. They search, for example, for patterns like *sick days*;*sick leave*; *sick*; *medical leave* for files containing unwanted lists.

2 The sysadmin uses the list to create a **custom file search** in TreeSize Professional (wildcards), for example:
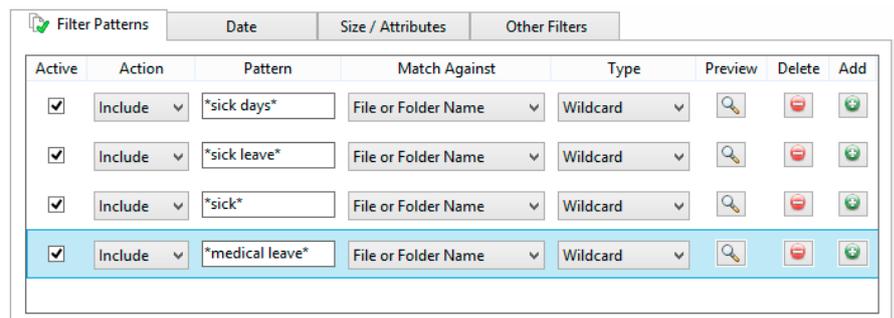
3 The file search finds all files with relevant content. A list of files is forwarded to the compliance team, the compliance officers check each file for unwanted content.

TreeSize Professional enables users to control and optimize disk space usage and covers an even wider range of applications. **Contact us**, if you want to learn more.

Case Study TreeSize on Storage Systems

JAM

www.jam-software.com/treesize
JAM Software GmbH · Am Wissenschaftspark 26 · 54296 Trier · Germany · Tel. +49 651-145653-0 · treesize@jam-software.com