

Meeting Unstructured Data Storage

Table of Contents

Detailed Network Storage File Reporting and Analysis.....	1
Growth of Network-Stored Files	1
Data Storage, Compliance and Costs	1
Introducing NetIQ File Reporter	2
How NetIQ File Reporter Works	3
Reports and Analytics	3
Solving File Management Challenges through Reporting and Analytics	4
Unique Benefits of NetIQ File Reporter.....	8
Conclusion	9
About NetIQ by OpenText.....	9

One significant aspect of regulatory compliance is data retention, with mandates on how long data must be kept in storage—in some cases for 20 years or longer. The ability to effectively search and locate retained documents is paramount.

Another compliance aspect is security. Organizations must be able to identify files containing sensitive personal information such as credit card or Social Security numbers. Once identified, these files must be protected from unauthorized access. Network administrators need to know who has access rights to what areas on the network and how those rights were derived. Similarly, they need to know all documents a user has access rights to and how those rights were derived.

Finally, there are the challenges associated with costs. Without even a basic knowledge of how much your organization is storing, whether the data should be stored on primary or secondary storage, if you are storing duplicate files, and so on, how can you be sure you are spending wisely? Storage costs pertain not only to storage disk capacity, but include expenses associated with storage allocation, power consumption, maintenance, additional

How NetIQ File Reporter Works

We developed NetIQ File Reporter to examine and report on petabytes or even exabytes of data—in other words, millions of files, folders, and shares scattered among the various storage devices and Microsoft 365 cloud libraries that make up your network. This reporting includes the permissions to Microsoft network folders and shares, as well as the permissions to OneDrive for Business, SharePoint Online, and Teams files stored in the Microsoft 365 cloud.

To report on this data efficiently, NetIQ File Reporter disperses the work between an Engine, Agents, a Microsoft SQL Server or PostgreSQL database, the RabbitMQ message broker, and Microsoft Active Directory.

Through the Agent, NetIQ File Reporter takes a “scan” of the file system’s storage resource at a given moment. A storage resource can be a Microsoft network share or Microsoft 365 cloud application libraries.

Scans are indexed data that are specific to a storage resource. They are the means of generating a storage report or analytical data in one of the analytics tools. Scans include comprehensive information on the file types users are storing, if users have duplicated the files, where duplicate files reside, when users created the files, when they last modified the files, permission data on the folders where these files reside, files containing potentially sensitive information, and much more.

NetIQ File Reporter collects scans from the Agents, compresses them, and sends them to the Engine, where it stores them in the database.

The Engine is the mechanism that drives NetIQ File Reporter. The Engine:

- Stores scans in the database
- Schedules the scans that the Agents conduct
- Processes the scans and compiles them for inclusion in a report
- Provides all the report information to the user interface
- Runs scheduled reports
- Specifies in the dashboard that NetIQ File Reporter has completed a scan or generated a report

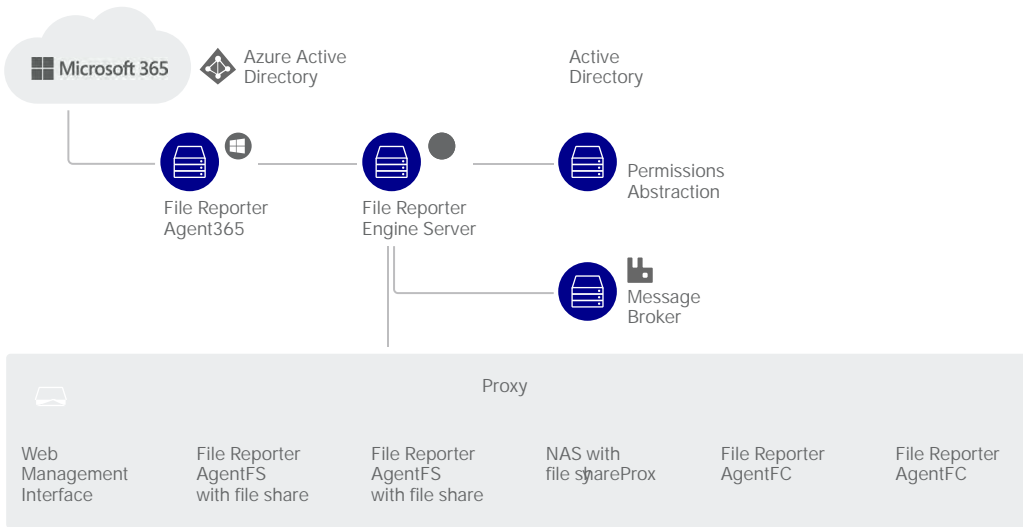
Reports and Analytics

The real power of NetIQ File Reporter is its ability to provide you the exact information you need to make management decisions about your stored data. There are 18 built-in report types that can be generated through a menu selection and some filtering parameters.

Custom Query reports allow administrators who are familiar with querying the database to generate very specific report data that might not be available through one of the built-in report types. The more SQL commands you enter, the more detailed the report. The SQL commands must be specific to the database (Microsoft SQL Server or PostgreSQL) that your deployment of NetIQ File Reporter is utilizing. SQL commands are entered through report editors available from the NetIQ File Reporter browser-based administrative interface and from the Report Designer client tool.

The analytics tools are an integrated set of data visualization applications that include a Dashboard, Pivot Grid, and Tree Map. Oftentimes, the visual presentation of findings through the analytics tools can provide needed information faster than the detailed information presented in a report.

NetIQ File Reporter 4.0 Components



Unauthorized Access

For a financial institution involved in a security audit that needs to know who has access to which areas of the network and how they got that access, NetIQ File Reporter can generate a Direct Assignments report.

Rights Knowledge

Network Data Growth

For a network administrator at an organization experiencing large data growth, NetIQ File Reporter has an extensive array of customizable reports that can show who is storing files,

Microsoft 365 Reporting

Through Custom Query reports, NetIQ File Reporter can report on the metadata and permissions of files stored in the Microsoft 365 cloud. This includes files created and stored for OneDrive for Business, SharePoint Online, and Teams. A scan of the Microsoft 365 tenant gathers information on the data, sites, teams, channels, groups, users, relationships, and permissions of the tenant, where the scan can be used to generate prebuilt Custom Query reports, complete with report layouts.

Advanced Duplicate File Reporting

While NetIQ File Reporter has always had a Duplicate File report option in its built-in reports, its reporting is based solely on metadata comparisons. Another option that provides even more flexibility and accuracy is to generate a duplicate file report through content hash comparisons. When scanning a target path, you can create a cryptographic hash record based on the content of each file scanned. These hashes can then be compared through a Custom Query report to find duplicate files based on hash comparisons.

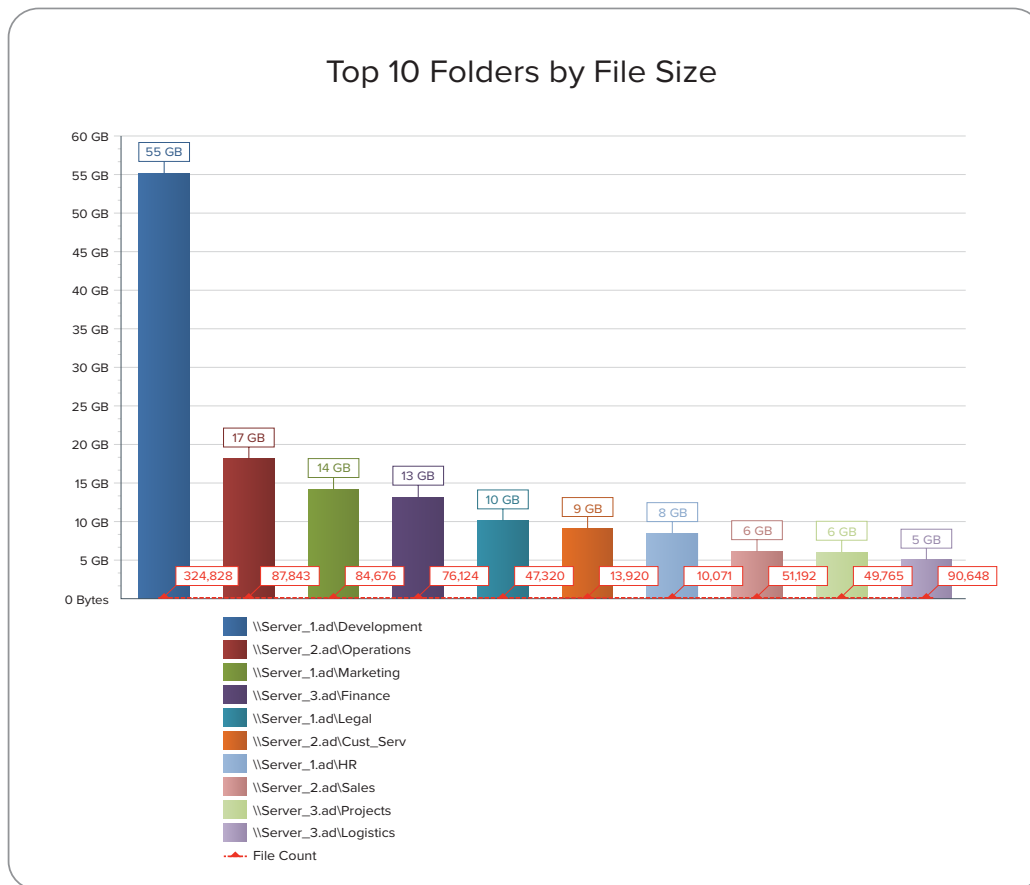


Figure 3. This figure shows a sample graphical report.

Unique Benefits of NetIQ File Reporter

We developed NetIQ File Reporter to be unlike other network reporting products. By utilizing your existing network hardware and software investments, NetIQ File Reporter gathers and presents a comprehensive set of file system data and thus, offers many unique benefits.

Analytics

Through powerful visual presentation options, the NetIQ File Reporter analytics tools can be the means of quickly providing you the information you need to make decisions. For example, while a Date-Age report will list files that have not been accessed for a given time, the Tree Map analytics tool can present graphical representations of the files in a hierarchical display, letting you not only know when the files were last accessed, but their relative size within the share or folder where they are being stored.

Enterprise Reporting

For a large corporation with multiple departments, rather than gathering data individually, one server at a time, network administrators can gather storage data across multiple department servers at once, or even across the entire enterprise.

Compliance Answers

With regulations dictating that you be able to demonstrate file retention and security, NetIQ File Reporter gives you the ability to not only identify and locate specific documents, but quickly determine how secure those documents are. There are Permissions reports that can specify who can access a network folder and how that access is derived. Other Permissions reports can specify what access rights a user has to folders throughout the network.

Enterprise Level Reporting

Unlike other reporting products that provide limited file system reporting at the server level, NetIQ File Reporter lets you inventory all the storage devices that make up your enterprise network. NetIQ File Reporter provides you the flexibility to structure your reporting for just a single server volume, for all the servers in a department, or for the entire network.

Identity-Based Reporting

NetIQ File Reporter integrates with Active Directory to ascertain and report on permissions tied to the file system.

Filtered Reporting

When NetIQ File Reporter creates a report, it contains all the file-based or security data for the storage resources from which you want information. This report has the potential to be gigabytes in size, and possibly hundreds of thousands of pages long.

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