superna

An Integrated Approach to Content Searching

Andrew Mackay,
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Much of the file-based data in today's digital world—including text documents, images, videos, and social media content—are unstructured, and the information contained in the files is not always easy to access and identify. What enterprises now need is an efficient way to manage and index this unstructured data, making it easily available, searchable, accessible, and relevant. Aligned with the growing demand for managing and indexing different aspects of unstructured file-based data, Massachusetts-based Superna offers Eyeglass, a portfolio of solutions for metadata, or content, indexing over scale out Network-Attached Storage (NAS) devices. From improved disaster recovery (DR) measures, and fortified security against ransomware and unauthorized file access, to cluster management and user behavior reporting, Superna's Eyeglass portfolio is fully capable of managing, protecting, securing and searching billions of unstructured data files. We focus on extracting value out of the largest pool of sensitive enterprise data—the data trapped within Enterprise NAS devices, and assisting those enterprises to better manage their data thus turning that data into an asset.

In an interview with CIO Applications, Andrew Mackay, President & CTO of Superna, shares his insights into the company, the value proposition, and the industry-grade enterprise search solution the company brings to the table.

What are the challenges in the enterprise search landscape?

The enterprise search landscape has hundreds of terabytes of unmanaged data residing on Network-Attached Storage (NAS) devices. Existing vendors only manage small pools of data in diverse systems versus the scale required to manage billions of files on NAS. Enterprise customers cannot extract value from their data nor can they gain knowledge of what they own due to their inability to analyze, search and report.

Most vendors focus on extracting data from smaller systems like SharePoint, databases or CRM applications which require data mapping between systems and adds a new layer of security for data within their index. As a result, professional services and experts are required to map data and fields for custom solution deployment.

Scale also stands out as a hurdle with some customers requiring millions to 10's of millions of files to be indexed on a daily basis.

Could you elaborate on the features and benefits your solution provides?

Our solution offers true real-time data indexing for large Enterprise customers with billions of data files and a daily change rate of millions to 10's of millions of files being created, modified or deleted. Our storage solution, in conjunction with Dell EMC's product, Isilon—a scale-out NAS that can store billions of files—leverages the storage array capabilities and APIs to scan the entire file system for only the changes and re-indexing. Our solution is tightly integrated with the features of the storage array, which allows us to offer true real-time data indexing without the need for weekly/monthly file system scans. Most vendors are unable to accomplish this due to their usage of a generic solution that supports any storage device and requires a full rescan and re-index of changed files. This does not scale to the billions of files required for large Enterprises.

The other aspect of our solution is security. Every storage device has distinctive security configurations for data access and searching. Our solution natively utilizes existing security features configured on the storage array to secure the search results. The solution is easy to install and deploy in an enterprise environment without customizing storage device security configurations. The Superna Eyeglass solution enables customers

> We believe our approach of integrating storage device capabilities into our solution offers customers scalability, integrated security and extreme ease of use. This approach allows customers to focus on extracting value from their data without complexity

to import and dynamically retain the storage device security configuration to ensure search results are as secure as the device that stores the data.

How does Superna stand out in the enterprise search market?

Legacy enterprise search products are not designed to scale to the large file systems offered by Scale out NAS platforms, leaving customers with no commercial solutions that can answer even the most basic questions about their own data. Most vendors develop a generic set of capabilities to accommodate a wide variety of application integrations as their primary value and ability to customize. This often comes at the expense of scalability required for very large pools of data. Our platform is designed for scalability and ease of use by customers whose largest untapped data asset resides on a Scale out NAS platform.

We specifically integrate and leverage the hardware capability of a storage device into our solution to offer a scalable, and secure solution without sacrificing ease of use. We provide an end-user installable product without the need for professional services, modifying security configurations, changing data storage procedures, or understanding schema or field mapping.

Kindly elaborate on a client success story.

One of our manufacturing customers who stored, and created millions of new images on Dell EMC Isilon were using a regular PC connected to the storage device to search for desired images taken on specific dates and locations. The searches took over 10 hours to complete due to the sheer number of image files. Typically, they would run these searches overnight and check for the results next morning, often requiring re-runs due to unavailability of test results. With our solution the customer was able to efficiently index all the image files on their storage device by name, creation dates, and modification dates. Now, they can run a search that supports a partial match, either with the file name or a date range and obtain results within minutes.

What does the future hold for your company?

We plan to combine our security products user behavior analytics with user search behavior to assist storage administrators optimize the cost of managing large pools of data by identifying active and stale data. This will allow enhanced business decisions to control costs of where data should be stored based on data access patterns. **CA**