ENTERPRISE DATA WAREHOUSE OPTIMIZATION

Extend and maximize the value of your EDW with Isilon scale-out NAS and Hadoop

Rapid data growth is putting a strain on traditional Enterprise Data Warehouse (EDW) resources and related IT budgets for many organizations today. This often causes enterprises to discard or aggregate data before it is stored. Increasingly, EDW resources are also being used to handle the data wrangling and cleansing jobs instead of performing higher value-add analytics and Business Intelligence workloads. EDWs are also limited in semi-structured and unstructured data. These challenges have driven many enterprises to look for ways to optimize their EDW by offloading lower-value data storage and processing functions to a more affordable data lake platform that extend the value of their EDW and enhance their business intelligence activities.

EDW Optimization with Isilon and Hadoop

Dell EMC has partnered with Industry-leading Hadoop distribution vendors to deliver Isilon® scale-out NAS with Hadoop to provide organizations with a highly efficient, massively scalable, and secure data lake to optimize the use of EDW storage resources. With this solution, you can offload ETL and ELT processing from the EDW while providing an efficient active archive for cold data. Isilon, the industry’s #1 scale-out NAS platform, is an ideal choice for storing, managing and protecting data. It’s simple to manage and delivers unmatched efficiency and flexibility. With native HDFS support, the Isilon OneFS® operating system also allows you to use the industry-standard Hadoop distribution of your choice to provide a powerful and efficient big data storage and in-place analytics platform that can help you secure your data and gain added insights.

ESSENTIALS

- **Active archive**
  Optimize EDW storage by archiving less active data while analyzing it in place
- **Lower costs**
  Simplify data management and reduce EDW costs by leveraging scale-out NAS storage
- **Increase EDW performance**
  Offload ETL/ELT processing to an efficient Hadoop environment
- **Multi-protocol access**
  Support multiple IT applications and workloads on a single platform
- **Business decision-making**
  Gain new insights with semi/unstructured data analytics with new data sources
INCREASE EFFICIENCY WITH AN ACTIVE ARCHIVE

This solution enables you to move “cold data” – data that is typically used for batch-mode analytics and data discovery and visualization processes but is not accessed and analyzed continuously in real-time – from your EDW into an active archive within your Isilon data lake. This frees up valuable EDW resources for your more critical, real-time data analysis. Data in this active archive remains available to be queried, searched and analyzed using existing BI tools and applications.

OFFLOAD ETL AND ELT PROCESSES

With this solution, data wrangling and curation of data can be offloaded from your EDW and performed in the Isilon data lake by leveraging several of the applications available with Apache Hadoop YARN. Once processed, this data is then loaded into the EDW. This approach allows your EDW resources to focus on BI and operational analytics processes. As a result, you gain increased EDW performance and accelerated time-to-results.

HARNESS THE POWER OF AN ISILON DATA LAKE

With its robust multi-protocol support capabilities, Isilon data lake allows you to further lower costs and simplify management by consolidating data across your enterprise to support a wide range of workloads and applications on a single platform. An Isilon data lake offers new opportunities for you to increase efficiency, cut costs, improve data protection, and get more value from your data assets.

GAIN NEW INSIGHT

An Isilon data lake is ideal for storing, managing and analyzing semi-structured and unstructured data. With built-in HDFS support, the Isilon data lake provides a flexible Hadoop tool set that you can use to access and analyze this data easily without the need for investing in a separate analytics infrastructure. These powerful in-place analytics capabilities enable you to gain added insights to enhance your overall business intelligence effort and decision-making processes.

TAKE THE NEXT STEP

Contact your Dell EMC sales representative or authorized reseller to learn more about the advantages of optimizing your enterprise data warehouse with an Isilon data lake powered by Isilon scale-out NAS and Hadoop.