

TOP REASONS TO CHOOSE DELL EMC ISILON FOR HADOOP ANALYTICS

1

NATIVE HADOOP INTEGRATION

Dell EMC® Isilon® Scale-out storage is the first and only scale-out NAS platform that natively integrates with the Hadoop Distributed File System (HDFS) layer. By treating HDFS as an over the wire protocol, you can deploy a Big Data solution that combines the industry-standard Hadoop distribution of your choice with Isilon storage to provide a powerful, highly efficient and flexible data storage and in-place analytics ecosystem.

2

REDUCE CAPITAL COST REQUIREMENTS

Traditional deployments of Hadoop have largely been implemented on a dedicated infrastructure, not integrated with any other applications, and based on inefficient direct attached storage (DAS) that is typically mirrored up to three times or more. In addition to requiring a separate capital investment and added management resources, this approach poses a number of other inefficiencies. By leveraging Isilon's native HDFS support and in-place Big Data analytics capabilities, you can avoid significant capital expenditures and related costs required for a separate, dedicated Hadoop infrastructure.

3

LOWER OPERATING COSTS

With Isilon, you can streamline your storage infrastructure by consolidating large-scale file and unstructured data assets, eliminating silos of storage. Isilon solutions allow you to achieve a storage utilization rate of over 80 percent. You can further reduce your storage requirements by up to 35 percent with Isilon SmartDedupe™ data deduplication. This unmatched efficiency means that with Isilon, you need less storage capacity and physical space to house the same amount of data than with other alternatives—reducing both initial capital outlay and ongoing costs. And because an Isilon solution is simple to manage, it requires fewer IT resources for storage administration. This further reduces overall operating costs.

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FASTER TIME TO RESULTS

Isilon's in-place analytics approach allows you to eliminate the time and resources required to replicate your Big Data into a separate infrastructure. For example, it can take over 24 hours to copy 100 TB of data over a 10 GB line. Instead, with Isilon, you can initiate data analytics projects immediately and get results in a matter of minutes. And when your data changes, simply rerun the job with no re-ingest requirement.

5

SIMULTANEOUSLY SUPPORTS MULTIPLE HADOOP DISTRIBUTIONS AND VERSIONS

Isilon storage and analytics solutions support multiple instances of Apache Hadoop distributions from different vendors simultaneously including Pivotal HD, Cloudera CHD and Hortonworks Data Platform. Our solutions also support both HDFS 1.0 and HDFS

2.0. This allows you to leverage the specific tools you need for each of your unstructured data analytics projects. You're also not locked-in to using any particular vendor's Hadoop distribution or version.

6

LOWER RISK WITH HIGHLY RESILIENT ARCHITECTURE

Isilon solutions eliminate the “single-point-of-failure” risk associated with traditional Hadoop deployments. We do this by enabling all nodes in a Dell EMC Isilon storage cluster to become, in effect, Hadoop NameNode. This greatly improves the resiliency of your Hadoop environment.

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ROBUST DATA PROTECTION

Unlike traditional Hadoop deployments, Isilon solutions offer enterprise data protection options for your unstructured data. For fast and efficient data backup and recovery, you can schedule snapshots as frequently as needed to meet your specific recovery-point objectives. For disaster recovery protection, we offer fast data replication, along with push-button failover and failback simplicity, to further increase the availability of your data assets.

8

SECURITY AND COMPLIANCE

Isilon solutions offer robust security options, including roles-based access control (RBAC) to provide a clear separation between storage administration and file system access, and SEC 17a-4 compliant write once-read many (WORM) data protection to prevent accidental or malicious data alteration or deletion. Our solutions allow you to establish authentication zones that serve as secure, isolated storage pools for specific departments within your organization. We also offer file system auditing to help your organization address important regulatory and compliance requirements including FISMA, HIPAA and Sarbanes-Oxley (SOX).

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MULTI-PROTOCOL SUPPORT

Isilon solutions include integrated support for a wide range of industry-standard protocols, including NFS, SMB, HTTP, FTP, and REST-based Object access for your cloud initiatives. As a result, with Isilon, you can gain a highly flexible storage infrastructure that allows you to simplify workflows, accelerate business analytics projects, support cloud infrastructure initiatives, and get more value from your enterprise applications and data.

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FLEXIBLE AND SIMPLE TO MANAGE

Isilon storage solutions are designed for enterprises that want to manage their data, not their storage. Our storage systems are powerful yet simple to install, manage, and scale. You can quickly add nodes to your Isilon cluster as needed without downtime, manual data migration, or application logic reconfiguration, thereby saving IT management resources and avoiding operational interruptions. Unlike traditional Hadoop deployments, with Isilon you also gain the flexibility to scale storage resources independently from your compute resources. And our solutions stay simple no matter how much capacity is added, how much performance is required, or how business needs change in the future.