Turning Big Data into Business Insights

Optimize management and analytics leveraging
Dell Cloudera Apache Hadoop solutions

Big data: an opportunity and a challenge

Data is being created and consumed at an unprecedented pace. From social media and transactional systems to IT operations and the Internet of Things, data is flooding organizations of all sizes with unprecedented volume, variety and velocity. This is a both an opportunity and a challenge.

As for the opportunity, the insights buried in large amounts of data can allow your organization to connect with customers and stakeholders in more personalized ways, create new revenue streams, detect threats proactively and meet other business-driven or mission-oriented goals.

And then there is the challenge: How do you capture, analyze and manage a tidal wave of structured and unstructured data? How do you turn this data into operational intelligence? And how do you overcome the limitations of databases and data management tools that weren't designed for a world of big data.

Big data is not a storage issue—it is a process challenge

Big data is not about lots of inexpensive or large storage systems. Big data is about practical steps along a journey to create processes that transform structured and unstructured data into useful information.

The practical steps include the selection of your ideal IT infrastructures and software tools from a myriad of choices. A practical big data process begins with exercises to identify the right questions

you want answers for, and then to build an ongoing step-by-step, flexible and expandable approach to find success.

Results will always be more important than performance. Every organization will be different—some will want to save money, some will want to make money and some will be looking only to find answers to their unique questions and requirements.

Dell can help you achieve success

Dell understands fundamentally what disruptive technologies can do to IT strategies and requirements. Our consultants have extensive experience in helping our public and commercial customers navigate the big data landscape with the right technologies.

For example, Dell SecureWorks leverages Hadoop to identify billions of security threats. Our Security experts, meanwhile, use the same information to predict where these threats will turn into real security issues. Skillful use of big data protects our customers.

Dell experts can have a practical conversation on the big data topic—with no axe to grind— to assist your organization in understanding your big data process issues and where it may make sense to look for value in the data you already have as a first step. Big data Hadoop, for instance, is nothing more than a framework—the solution depends on the tools you use to source, gather, ingest, work and analyze the data, so the results can then be recognized as valuable information and insights.

At Dell, we believe that Hadoop and other big data technologies should be treated as an evolutionary step—but with the potential to deliver revolutionary results and insights. Let's talk and have that big data conversation.

Strengths of Hadoop in meeting the big data challenge

The Hadoop data storage and processing system offers compelling benefits for organizations that want to extract value out of huge amounts of structured and unstructured data. With Hadoop, you can use and store any kind of data, from any source, in its native format. Significantly, Hadoop allows you to perform a wide variety of analyses and transformations on that data.

Among other advantages, Hadoop enables your organization to:

- Use and store any data in its native format—without forcing transformation.
- Control costs with open source software that runs on commodity hardware.
- Leverage a global user and developer community that spans industries.
- Scale up with ease to meet your evolving data storage and processing needs.

Why Dell?

When you work with Dell for your Hadoop project, you have the confidence that comes with a partner who has provided innovative server platforms for big data since 2009 and was an early leader in Hadoop implementations. Dell has designed custom Hadoop platforms since 2009 and published its first Hadoop Reference Architecture on Cloudera in 2011.

With its deep roots in big data solutions and the Hadoop platform, Dell, working with leading partners in big data analytics, has the knowledge, expertise, tools and solutions you need for a successful, flexible and scalable Hadoop deployment

To learn more, visit Dell.com/Hadoop or DellBigData.com

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Enterprise-ready solution

Our enterprise-ready Dell | Cloudera Apache Hadoop Solution is built using our tested and optimized Reference Architectures, and integrates with varied operating systems, hardware, data warehouses, databases and business intelligence tools. Together with Cloudera and Intel, we leverage your existing tools and resources to help solve your big data challenges with robust end-to-end Hadoop solutions and processes.

In-memory appliance

Another option for your Hadoop deployment is the Dell In-Memory Appliance for Cloudera Enterprise. It enables your organization to analyze large amounts of streaming data from connected devices and machines with embedded sensors. This purpose built, turnkey and Apache Spark-powered, leading-edge appliance is ideal for stream processing and predictive and iterative analytics.[2]

2 Apache Spark is an open source, parallel data processing framework that complements Apache Hadoop.

Enterprise data warehouse offload or hub

Dell can help your organization put Hadoop to work in an enterprise data warehouse (EDW) offload solution or an enterprise data hub that allows you to gain greater insights from your existing data.

Take control of your data

Big data has become the next frontier for innovation, competition and productivity. To capitalize on the opportunity, your organization needs solutions that allow you to take control of the data deluge and turn it to your advantage. Dell can help you get there today.

Working closely with key industry partners, Dell is uniquely positioned to help your organization implement cost-effective solutions for collecting, managing and analyzing data—and turning big data into valuable business insights.

To learn more

To explore Dell solutions and services for Hadoop and other big data deployents, visit Dell.com/Hadoop or DellBigData.com.

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