Intel IT Center

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Vendor Spotlight

Faster Time to Value through HP* Big Data Analytics

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Irshad Raihan explains how HP* solutions for big data, built on the Intel® Xeon® processor family, deliver value quickly and cost-effectively to companies analyzing both structured and unstructured data.

IT decision makers tell us that one of their biggest challenges with big data is that since their current information systems are built primarily to produce and consume structured data (data that can be laid out neatly into rows and columns), it is becoming prohibitively expensive to use the same systems to analyze extremely large volumes of arbitrarily unstructured data (data that lacks a predefined, predictable format).

Organizations need both structured and unstructured data—in fact, the sweet spot is being able to analyze both data types together. Think of product managers, for example. Structured data gives them one side of the story, such as revenue numbers from past quarters, but combining that data with tweets and blogs and customer opinions from review sites may provide the insights they need to create better forecasts for more informed decision making.

Big Data Equals Big Challenges for IT

CEOs are thrilled by the possibility of analyzing structured and unstructured data together. But for IT organizations, this presents major challenges. They have to ask themselves: How can we cost-effectively and securely collect unstructured data? Once we've collected the data, how do we separate signal from noise? Once the data is in a usable format, how do we transform it into something meaningful that can be analyzed in combination with structured data?

They also have to think about scale: How can we build systems that can keep up with almost unprecedented growth in unstructured data? Finally, at the highest level, they have to consider the most important challenge of all: value. How can IT ensure that their organization derives value from big data as quickly and cost-effectively as possible?

HP's solutions for big data are built to address all of these challenges. Our ultimate goal is to ensure that we give customers a low acquisition cost and the fastest possible time to value.

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Delivering Value Quickly and Cost-Effectively

HP is able to deliver fast, cost-effective time to value for two primary reasons:

- First, we offer openness and choice. All of our solutions are built on industry-standard infrastructure, so that customers don't have to worry about lock-in at any level of the IT stack. HP solutions are built to integrate seamlessly into existing business intelligence systems. In addition, our solutions and services for Hadoop* are designed to lower time and cost of acquisition.
- Second, we provide the expertise that comes from being one of the leading data management vendors in the world. HP manages more than 3 million square feet of data center space and has more experience than any other vendor in managing customer data. We have significant experience in scale-out computing projects and have been a contributor to Apache* Hadoop via the Apache Software Foundation.

HP Big Data Solutions, Built on Intel

HP and Intel are joined at the hip in developing solutions for big data. If you look at the sheer volume and speed of processing required to support big data analytics, it demands smart servers running on smart processors. It's as simple as that.

In June, HP and Intel announced the availability of a portfolio of solutions for Hadoop built in partnership with the three major Hadoop distribution vendors: Cloudera, Hortonworks, and MapR. We can give customers pretested, preintegrated, preoptimized solutions that provide the fastest time to value and risk-free scalability.

HP solutions for Hadoop are built around four major components:

- HP ProLiant* Gen8 servers powered by the Intel Xeon processor family
- HP Insight Cluster Management Utility (CMU), a utility for deploying and managing Linux*-based nodes in large clusters
- The HP A5830 Switches for extremely high-bandwidth, high-speed networking
- The Hadoop distribution of choice, which offers the end-to-end management for Hadoop

In addition, HP also offers powerful solutions to create an end-to-end analytics platform:

- The Vertica* Analytics Platform enables organizations to analyze immense amounts of data in real time. Vertica offers dramatically faster performance at a far lower cost than traditional relational database management systems.
- Through Autonomy, we offer meaning-based technology that enables businesses to process and draw business value from unstructured data, including e-mail, phone messages, video, sensor data, tweets, blogs, and so on.

Additionally, HP and Intel are working with many different ISVs to create solutions for big data analytics. Both the HP Enterprise Data Warehouse, developed with Microsoft, and the HP App System for SAP* HANA*, developed with SAP, are built on ProLiant servers that use the Intel Xeon processor family for maximum speed and a low carbon footprint.

HP and Intel: Focused on the End Game

At the end of the day, organizations implementing big data analytics have to be able to prove the return on their investment. Organizations have to be able to say: "These were the insights we derived from our structured data, these were the additional insights provided through unstructured data, and here is how we were able to act on this data"—all in a way that justifies the amount of money they've invested in big data systems.

That's exactly where we're focused—ensuring that organizations can analyze both structured and unstructured data in a way that's cost-effective and that delivers true, tangible business value. With Intel as our partner, we're confident that we can deliver.

For more information, visit www.hp.com/go/hadoop.

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