

# Dell Positions Itself in the Enterprise Cloud

## Abstract

On March 24, 2010 as a part of its “Solutions for Virtual Era” meeting in San Francisco, Dell outlined its enterprise strategy and announced a bevy of products and services designed to help customers build and run efficient and affordable data centers. Dell sees the computer industry at a critical inflection point that will redefine the types of products and services customers demand from their technology providers. This report outlines Dell’s approach to these new customer demands and looks at the solutions that leverage their new and existing technology assets. Dell says it will deliver these solutions directly and through channel partners to customers in either business-ready configurations or through the cloud as a service.

## Event

This is a very extensive announcement covering cloud infrastructure solutions, partner programs, server hardware, cloud services, and data management solutions. They are summarized as follows:

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This is the right announcement  
at the right time for Dell.

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- Integrated cloud infrastructure solutions comprised of pre-tested, pre-assembled and fully-supported hardware, software and services enabling public and private cloud builders to easily and quickly deploy and manage cloud infrastructures with confidence
- Cloud Partner Program where Dell will work with leading independent software vendors (ISVs) to offer customers easy-to-buy and easy-to-deploy cloud solutions and blueprints optimized for Dell platforms
- New PowerEdge C-series servers for high-density compute performance and efficient energy consumption and low operational costs
- Cloud Services including consulting, deployment and support to help customers plan, manage, and reduce complexity when adopting cloud computing models
- Intelligent Data Management solutions to help customers facing unprecedented challenges storing and managing large and growing volumes of digital data in multiple formats

The integrated cloud infrastructure solutions tackle server deployment, remediation, power consumption, and remote diagnostics. The new lifecycle controller, which is embedded on the server, allows server administrators a way to rapidly deploy servers and remediate server problems. The Dell Management Console has been updated and includes power monitoring. The Dell Remote Support Service SaaS product for remote server troubleshooting and diagnostics is included at no additional charge to customers with a Dell support contract. Dell’s Remote Management Services, which is a remote infrastructure monitoring SaaS that allows IT departments to monitor critical remote systems for hardware and software faults, performance degradation, missing patches and security vulnerabilities, and remotely remediate problems is available for purchase.

The Cloud Partner Program is targeted at cloud ISVs. The goal is to encourage the creation of a growing suite of third-party cloud product offerings that have been optimized and validated on Dell platforms. The first three partners that were announced include: Aster Data (providing web analytics), Canonical (offering an open source Infrastructure as a Service private cloud), and Greenplum (self-service data warehousing). Ongoing work is underway with VMware and Microsoft.

Just prior to the broader strategy, solutions, and supporting capabilities it outlined in San Francisco, Dell announced nine new PowerEdge blade, rack-mount and tower servers updated with Intel's new Xeon 5600 "Westmere-EP" series of processors. Dell also rolled out new high-performance, high-density PowerEdge solutions based on Intel "Nehalem EX" processors. The company also added three new PowerEdge C servers including the PowerEdge C1100, C2100 and C6100 targeting HPC, data analytics, gaming and cloud builders.

Dell also announced a suite of cloud professional services that include three components: cloud as a service (CaaS), application services, and IT consulting services. These can either be outsourced or developed within the customer's environment.

In order to address customer storage concerns, Dell introduced data management solutions to complement its EqualLogic, Dell|EMC and PowerVault offerings. These solutions address three critical storage technology areas including object storage, deduplication and unified storage.

The Dell DX Object Storage Solution is a metadata model for tagging unstructured data making it easier to manage, archive, and retrieve. Dell intends to encourage the growth of third-party ISV solutions that support this design, so in May 2010 they are releasing an SDK – based on an HTTP interface – to allow third-party integration on the platform.

The company also announced the Dell|EMC DD series which includes three mature, easy-to-use backup-to-disk solutions with integrated deduplication. Based on EMC's Data Domain Series, the Dell|EMC DD140, DD610 and DD630, are designed to improve data protection and recovery time while reducing the storage footprint.

For unified storage, Dell introduced the Dell|EMC NS Series, an efficient platform for consolidating a wide array of environments and applications. Dell|EMC NS Series, including the NS-120, NS-480 and NS-960 allows customers to store and manage both block and file data.

## Context

Network architecture and the compute power it provides are in flux. The entire infrastructure that supports that architecture must evolve. Virtualization, mobility, and broadband have pushed the envelope beyond the design parameters of traditional client/server architectures. The next-generation network designs must become more fluid and modular and device independent. Resources will be abstracted away from users and connections to services will be created from a pool of virtual resources and then released back into the pool when they are no longer needed. Virtualization is a critical step on this journey, but the cloud will get us even closer to a more dynamic computing environment. Dell believes there are two approaches to achieving private cloud computing: evolutionary and revolutionary. They believe that the evolutionary approach starts with virtualization and is marked by a gradual progression towards the next generation computing environment.

The revolutionary approach is more of a clean slate where companies aren't burdened with migrating from legacy environments. These customers can more easily jump right to the latest and greatest Web 2.0 designs and an open, fully distributed cloud-based computing model. With this announcement, Dell believes that they have a broad set of solutions to handle both types of environments, but they believe they have an edge in the Greenfield opportunities, because unlike their larger competitors, they do not have legacy equipment to deal with.

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Dell has four global business segments: large enterprise, public, small and medium business, and consumer. Revenue in 2009 was split almost evenly across all four segments with enterprise and public being slightly larger than the other two segments. In 2009, large enterprise took a hit attributed to many customers delaying or canceling IT projects specifically purchases that involved desktop PCs, mobility products, and storage items which all declined approximately 30% year-over-year. This announcement is designed to reinvigorate the enterprise segment and help to expand Dell's opportunities for selling higher end solutions such as rack servers, storage, and services.

## EMA Perspective

Virtualization has helped to pave the way for data center downsizing and cost savings. Cloud computing will continue to emphasize both consolidation and operating cost reduction. IT vendors across the board must contend with this market trend and find ways to offer cost effective computing solutions that take into consideration all aspects of cost savings including virtualization, power consumption, and flexible designs that can adapt to change without incurring a huge price penalty. The last is probably the most difficult. Open source computing has proven that it can work even in the most critical components of our network design. Customers want to have choices that do not sacrifice performance, but do not have a price penalty attached. This creates a difficult balancing act for IT vendors to add value, provide complete and open solutions, and still make a profit.

This is a very important announcement for Dell. It marks the culmination of not just their acquisition of Perot – as well as the global realignment of their product teams and business units – but also their efforts over the last four years in their Data Center Solutions (DCS) division. The DCS division has developed customized computing solutions for some of the world's largest cloud-service providers. This highly customized work and experience has led to more mainstream cloud offerings as well as the development and improvements to more traditional blade and rack mounted servers along with the DX Object Storage solution. Dell has been careful to emphasize open, standards-based computing that taps third-party ISV participation and certification. The announcement pulls together Dell's enterprise cloud computing story and brings all of Dell's assets to bear. This is the right announcement at the right time for Dell. Cisco, IBM, and HP are all doing their best to be the cloud infrastructure vendor of choice. This announcement clearly shows that Dell wants to stay at the forefront of the hyper-scale cloud environments as they also attempt to leverage this expertise and differentiate themselves in more traditional data center environments. There are many interesting tidbits in this announcement and it is well worth a careful look to more fully understand the breadth and depth of the strategy and solutions that Dell has put forward.

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## About EMA

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that specializes in going "beyond the surface" to provide deep insight across the full spectrum of IT management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise IT professionals and IT vendors at [www.enterprisemanagement.com](http://www.enterprisemanagement.com) or follow EMA on Twitter ([http://twitter.com/ema\\_research](http://twitter.com/ema_research)).

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