



Solution Brief

Speed your journey to cloud with Microsoft Cloud Platform System Premium powered by Dell

Summary of Solution Benefits

Put Microsoft Azure-consistent cloud to work in your data center with the speed, ease, assurance and efficiency of a Dell appliance with Microsoft Cloud Platform System Premium (CPS-P) powered by Dell. This validated, ready-to-run solution features Microsoft software strategically coupled with Dell hardware platforms.

- Streamline, simplify and automate IT operations for unparalleled value
- Enhance business responsiveness
- Empower users and customers with reliable service levels

A mobile workforce, the data deluge, rising demand for IT projects to advance the business: All of these are presenting opportunities for enterprises, managed service providers and cloud hosters alike to consider a quicker journey to cloud and faster delivery of value.

However, the process of building cloud infrastructure—whether public, private or hybrid—can be complex, time-consuming and risky. With mounting pressures from short timelines, limited staff and shrinking budgets, tolerance for complexity and delays is narrowing.

Microsoft Azure-consistent cloud at your fingertips

With Microsoft Cloud Platform System Premium (CPS-P) powered by Dell, you can benefit from the cloud expertise of both Microsoft and Dell while experiencing the speed, ease and assurance of a jointly engineered, fully integrated, highly efficient solution.

Dell is Microsoft's only CPS-P solution partner for the design, engineering and validation of this new cloud appliance. This solution combines time-tested, best-of-breed Dell PowerEdge servers, Dell Storage dense enclosures, Dell Networking switches, and Dell management software, along with Microsoft's proven software stack of Window Server 2012 R2, System Center 2012 R2 and Windows Azure Pack, to deliver a turnkey, Azure-consistent cloud experience directly to your data center. CPS-P is pre-configured at the factory for optimal performance and reliability, validated by both Microsoft and Dell, and delivered to your data center ready to run in a matter of weeks—not months.





Figure 1. Cloud Platform System Premium powered by Dell

Streamline, simplify and automate IT operations for optimal TCO

CPS-P gives you the ability to optimize application delivery using time-tested, cloud-proven platforms engineered for high density and energy efficiency. With deep expertise in cloud data center technology—born of powering some of the world's largest and most demanding clouds—Dell innovation is inspired by real customer needs when it comes to powering the cloud data center. The infrastructure foundation of CPS-P is likewise shaped by this emphasis on performance, energy efficiency, smart resource utilization, and automation so your investment can go further.

For example, computing is the workhorse of your data center, a core capability that enables your cloud to perform, day in and day out. Making this function more efficient helps you operate your cloud at greater savings. That's why CPS-P workloads are trusted to Dell PowerEdge servers that deliver remarkable virtual machine (VM) density (up to 8,000 VMs)¹ and performance while saving up to 20% in energy as a result of shared infrastructure. In addition, a software-defined storage approach using Dell Storage and Dell PowerEdge servers to manage Microsoft Storage Spaces provides up to 1 PB of usable storage.²

Innovations like this deliver substantial savings benefits. In fact, according to Value Prisms Consulting, "CPS-P has the lowest price-per-VM for a standard VM profile. The CPS-P full rack is also better or comparable to the competition in the rest of the price-performance metrics, thus demonstrating that it is a high-performing and economical converged infrastructure offering."³

Scale with ease, maximize agility

Organizations often struggle with standing up their clouds fast, and then scaling out quickly, especially when data centers are scattered across several locations. In service-centric organizations, complexity and delays diminish productivity and can lead to lost revenue.

CPS-P can help you enhance business responsiveness now and into the future. CPS-P is pre-integrated and fully validated from the ground up by Microsoft and Dell, and deployed onsite by Dell experts, so you can quickly roll out new productivity and revenuegenerating capabilities with assurance that everything will simply work—no need for time-consuming application testing, manual configuring, or customization. Furthermore, with CPS-P, you can benefit from this assurance at a massive scale while leveraging a standardized infrastructure and automation model that helps you streamline, simplify and accelerate operations.



Figure 2. Optimized racking and cabling for high density, servicing, reliability and redundancy

Increase productivity, protect revenue

CPS-P is not just an infrastructure solution; it's an *experience* solution, designed to meet your needs for cloud. CPS-P is built with cloud-proven, time-tested Dell technology. The same infrastructure that powers CPS-P powers some of the world's largest and most demanding clouds. Second, CPS-P infrastructure is built to mitigate risk. CPS-P servers feature Fault Resilient Memory, which ensures greater stability for virtual machines, reducing likelihood of failures. They also feature automatic hypervisor failover to maximize uptime. The fabric architecture delivers better resiliency than a centralized core approach, since failure of a single node within the network cannot bring down the entire switching fabric. CPS-P is offered with highly flexible Scale Ready payment solutions so you can maximize your investments and align the acquisition of cloud technologies with your business needs. Scale Ready Payment Solutions include Pay as you Grow, Provision and Pay and Scale On Demand offers, backed by Dell Financial Services.

Beyond infrastructure, CPS-P also comes with integrated security, disaster recovery, automation and patching features, as well as an Azure-consistent self-service portal (Windows Azure Pack) for tenants, features which make the process of operating cloud easier and less risky. With enablement for PaaS services such as "websites" and database-as-a-service, there are no additional components required to deploy a complete cloud solution.

Now with CPS-P, you can have a large-scale, validated cloud platform at your fingertips. Shift focus from infrastructure configuration and coordination to advancing your business— CPS-P makes it easier than ever.

¹ http://blogs.technet.com/b/windowsserver/archive/2014/10/20/unveiling-the-microsoft-cloud-platform-system-powered-by-dell.aspx ² Per Microsoft

³ "Microsoft's Cloud Platform System Delivers Best Price-to-Performance." Value Prism Consulting. 2014.

http://www.valueprism.com/resources/resources/Resources/CPS%20Price%20Performance%20Whitepaper%20-%20FINAL.pdf

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