



Dell Active System 800

Simple and scalable pre-integrated converged infrastructure system

Today, many IT organizations are missing deadlines or cannot respond fast enough to customer demands, have insufficient IT budgets to deliver against the most critical business initiatives, or have to manage trade-offs when it comes to driving efficiency, performance or resiliency. In response, convergence in the data center is an emerging trend in IT to address the growing needs for agility, efficiency and quality to support the delivery of applications and IT services. IT organizations are rapidly adopting converged infrastructure solutions to lower the cost of running critical workloads, enable faster infrastructure deployments and drive simplicity and speed of management.

Active Infrastructure is Dell's converged infrastructure family that combines servers, storage, networking and infrastructure management into an integrated system that provides general purpose virtualized resource pools. Active Infrastructure solutions blend intuitive infrastructure management, an open architecture and a unified support model to allow IT to rapidly respond to dynamic business demands, maximize data center efficiency and strengthen IT service quality.

The Active Infrastructure family includes fully pre-integrated systems that are pre-engineered, pre-assembled and pre-tested to accelerate time-to-value of new virtual infrastructure, drive efficiency and lower risk and deliver future-proof flexibility and scalability.

Dell™ Active System 800

Dell Active System 800 is a simple and scalable pre-integrated platform. It can be easily managed by a single IT administrator, and is the ideal platform for private clouds and enterprise applications such as SQL and collaboration. It provides three key benefits:

Rapid and simple scalability

- Compute and storage capacity can be added in a modular, non-disruptive, scale-out manner
- Available in multiple configurations, it can be deployed at a given level and scaled as needed for changing business conditions
- Storage scalability is suitable for supporting virtual desktop and collaboration applications

Fast and easy provisioning and operations

- Single IT generalist can manage most common tasks via streamlined and automated processes delivered through Active System Manager

- Active System Manager provides intuitive, automated, template-based experience for the deployment, orchestration and management of physical and virtualized converged infrastructure and workloads
- Pre-engineered solution minimizes design, test, procurement, integration and configuration phases, allowing fast application deployments

Automated storage

- Load balancing and host-integrated data protection are automated for dynamic virtualized environments
- Storage can be managed by an IT generalist or administrator with multiple roles, so there is no need for a storage specialist
- Automation enables administrators to spend less time manually managing storage functions and more time focusing on strategic projects

Putting Active System 800 to use

Active System 800 was built from the ground up to provide a highly-reliable and scalable platform for virtualization, private cloud and application deployments, while simplifying infrastructure management. Reference architectures are available for the Active System 800 including private cloud, virtual desktop and collaboration solutions. These reference architectures are known as Active Solutions, and optimize the Active System 800 platform for these specific workload. Leveraging Dell's vast experience, industry best practices, and top-of-the-line components, it can enable organizations to maximize the value of their infrastructure investments through its unique features and benefits.

Active System 800 is easily managed by a single IT administrator, and is the ideal platform for private clouds and applications such as SQL and collaboration.

Features	Function	Benefit
Unified management	Active System Manager provides: <ul style="list-style-type: none"> • Template based infrastructure and workload deployment • Management of physical and virtual infrastructure and workloads • Repeatable deployment, integration, and management models 	Strengthens operational quality <ul style="list-style-type: none"> • Faster and more precise configuration of new infrastructure and workloads • Consistent and repeatable deployment of physical and virtual infrastructure and workload elements • Up-front consistency and quality ensures fewer downstream operational issues
Converged fabric	<ul style="list-style-type: none"> • Data Center Bridging (DCB) over iSCSI enables single converged network fabric for storage and LAN traffic • Supports intra-chassis networking (east/west system communication) with 10GbE throughput • PowerEdge M I/O Aggregator enables interoperability with a non-Dell network and allows server administrator to push blade chassis networking features to top-of-rack switch 	Drives efficiency <ul style="list-style-type: none"> • Easier chassis operations with server administrator managing chassis network vs. relying on network administrator • Better performance and less consumption of expensive top-of-rack switch ports • Less complexity allows easier implementation, maintenance and management
Automated storage	Automated load balancing and host-integrated data protection	Reduces management complexity Spend less time manually managing storage function
Rapid and simple scalability	Add capacity in a modular, non-disruptive manner	Delivers future-proof flexibility Easily meet future business expansion requirements
Delivered pre-built and pre-integrated	Comprehensive converged infrastructure platform complete with servers, storage, networking, power, cabling, management and deployment services	Accelerates time-to-value Reduces time spent on design, procurement, implementation, integration and testing, so you're up in running in days versus weeks or months
Single vendor support model	Solution- and component-level support from a highly-experienced global leader in virtualization products and services	Lowers risk <ul style="list-style-type: none"> • Provides a single point of accountability • Leverages Dell's in-house expertise and industry best practices accumulated through experience with thousands of customers • Built-in resiliency, reliability and scalability to support growth and change
Power-efficiency	PowerEdge M1000e chassis and M620 blade servers require less power and cooling than alternatives	Reduces OpEx Save money on power and cooling costs

Better Together: Dell Services can accelerate your virtualization solutions

Installation and Support Services are included. Onsite installation and implementation is included with every Active System 800 deployment, complete with a brief orientation session and configuration guide. Dell ProSupport provides the foundation for secure and reliable high-availability infrastructures with enhanced hardware support and software technical support for problem resolution.

Taking IT to the next level. Dell offers IT consulting services to provide the foundation for planning, designing and implementing an efficient virtual infrastructure solution, including but not limited to:

- Solution Assistance & Consulting Service
 - Options include Healthcheck, Workload Migration, VORA, Design Service
- Efficient Architecture Workshop
- Cloud Strategy Workshop
- Virtualization Readiness Assessment
- Operational Readiness & Management Services
- Self-Service & Orchestration Services
- Streamlined Optimization Services Cloud Readiness Assessment
- Build A Cloud Services
- Customer training for VMware, Microsoft, EqualLogic™ storage, Force10 networking and more

Better Together. The Dell Active Infrastructure family of solutions demonstrates how open and flexible architectures combined with Dell Services create practical, innovative solutions designed to reduce complexity and costs while improving productivity. Dell Services can help deliver elastic IT, whether you are building a platform for private cloud computing or for better availability and management of applications.

Dell Active System 800 components and specifications

Servers

- 1 or 2 PowerEdge M1000e chassis
- 2-32 PowerEdge M620 host servers with 128G Memory each and Flash boot
- 2 PowerEdge R620 management servers
- 1-2 Dell 42U racks per Active System 800, including PDUs
- iDRAC7 Enterprise for Blades with vFlash, 8GB SD cards

Storage

- 1-8 EqualLogic PS6110 series arrays

Networking

- 2 Dell Force10 S4810 10GbE network switches
- 1 Dell Force10 S55 out-of-band management network switch
- 2 PowerEdge M I/O Aggregators

Services

- Initial Deployment Services
- Dell ProSupport

Additional optional components

- Dell Keyboard/Video/Mouse (KVM) console

Software

- **All Editions**
 - Active System Manager 7.0
 - Dell EqualLogic SAN HeadQuarters (HQ)
 - Dell OpenManage Essentials
- **Active System 800v edition**
 - VMware vCenter 5.1 (trial license)
 - VMware vSphere 5.1 (trial license)
 - Dell Management Plug-in for VMware vCenter
 - Dell EqualLogic HIT/VE Plug-in for vCenter
 - VMware vCloud Connector (optional)
- **Active System 800m edition**
 - Microsoft Windows Server 2012 Hyper-V
 - Microsoft System Center Virtual Machine Manager

Learn more and accelerate your convergence journey at Dell.com/Convergence

Learn more about Active Solutions reference architectures at Dell.com/ActiveSolutions

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