E-Pod

Key Benefits

AFFORDABILITY

The E-Pod is a cost effective converged infrastructure solution which allows businesses to accelerate their move to virtualization and improve their IT user experience.

SIMPLICITY

Bringing necessary IT infrastructure components together in an “all in one” solution reduces complexity with efficient operations and management. This provides an easy-to-deploy platform which can be brought to market quicker.

EFFICIENT GROWTH

The scalable technology allows you to keep up with every changing customer’s needs and expectations, with extremely high availability, this allows scaling to be executed without any disruption.

OPTIMISE IT

Bringing together best of breed technologies provides a confident, reputable and standardized environment which improves predictability and reduce risk through workload consolidation.

E-Pod

SMB Entry Level Converged Infrastructure

THE CHALLENGE

Today the challenge for small and medium businesses is to manage growing data requirements with minimal cost and maintenance. IT budgets are consistently reducing and businesses are looking to reduce their TCO. Managing data is also becoming more complex and resources, space, and power are limited. Virtualizing environments and providing a more consolidated IT approach is a key direction for all businesses to help them keep up with the demands of the customers.

THE SOLUTION: E-POD

With all the focus on the larger organisations when addressing converged infrastructure, E-Pod is a Converged Infrastructure platform designed specifically with the SMB organisation in mind.

The E-Pod leverages the strength of the NetApp and Cisco technology alliance to deliver best of breed server, storage and networking components. E-Pod architected with Small Business/Remote Office deployments in mind, at a price point that recognises the budget constraints of smaller organisations.

E-POD COMPONENTS: NETAPP E-SERIES

The NetApp E2700 storage system was designed as an entry-level storage system. It meets business requirements by providing reliable storage when you need it. Pay-as-you-grow flexibility makes the E2700 the ideal solution for companies of all sizes facing rapid, unpredictable growth. Unlike other storage systems that add file or virtualization layers in the I/O data path, E2700 systems are purpose-built to optimise performance for mixed workloads, with high availability. The E2700 delivers high bandwidth and IOP levels, whilst minimising complexity, maintenance, power, and space requirements. The intuitive interface of the E2700 simplifies installation and maintenance and ilt also provides enterprise-level storage capabilities to deliver consistent performance, data integrity, and security. Application-aware plug-ins for Microsoft, Oracle, and VMware environments simplify administration and lower storage management costs.

E-POD COMPONENTS: CISCO UCS C-SERIES SERVER

The Cisco UCS C220 M3 Rack Server is designed for performance and density over a wide range of business workloads, from web serving to distributed databases. Building on the success of the Cisco UCS C200 M2 Rack Server, the enterprise-class Cisco UCS C220 M3 server further extends the capabilities of the Cisco UCS portfolio in a 1RU form factor with the addition of the Intel® Xeon® processor E5-2600 and E5-2600 v2 product families, which deliver significant performance and efficiency gains. In addition, the Cisco UCS C220 M3 server offers up to two Intel® Xeon® processor E5-2600 or E5-2600 v2 processors, 16 DIMM slots, eight disk drives, and two 1 Gigabit Ethernet LAN-on-motherboard (LOM) ports, delivering outstanding density and performance in a compact package.

E-POD COMPONENTS: CISCO 500 SERIES SWITCHES

The Cisco® 500 Series Stackable Managed Switches are a new line of Ethernet switches that provide the advanced capabilities you need to support a more demanding network environment, at an affordable price. These switches provide 24 or 48 ports of Fast Ethernet and 24 to 52 ports of Gigabit Ethernet connectivity with optional 10 Gigabit uplinks, providing a solid foundation for your current business applications, as well as those you are planning for the future. At the same time, these switches are easy to deploy and manage, without a large IT staff.

E-Pod

EXCEPTIONAL PERFORMANCE IN A COMPACT SERVER

The Cisco UCS C220 M3 Rack Server is designed for performance and density over a wide range of business workloads, from web serving to distributed database.

Building on the success of the Cisco UCS C200 M2 Rack Servers, the enterprise-class Cisco UCS C220 M3 server further extends the capabilities of the Cisco Unified Computing System portfolio in a 1-rack-unit (1RU) form factor. And with the addition of the Intel® Xeon® processor E5-2600 and E5-2600 v2 processor product families, it delivers significant performance and efficiency gains.

The Cisco UCS C220 M3 also offers up to 512 GB of RAM, eight drives or SSDs, and two 1GE LAN interfaces built into the motherboard, delivering outstanding levels of density and performance in a compact package.

Feature and Capabilities

- General purpose, suitable for nearly all 2-socket applications
- Unique Cisco UCS Virtual Interface Card 1225 : 2 x 10GE PCIe that can support up to 256 PCIe virtual interfaces.
- Exceptional building block and entry point for the Cisco Unified Computing System
- Cisco continually innovates in server technology and in all levels of the Cisco Unified Computing System

C220 M3

Specifications at a Glance

- Up to two Intel® Xeon® E5-2600 or E5-2600 v2 processors
- Up to 512 GB of RAM with 16 DIMM slots for memory-intensive applications
- Four or eight SAS/SATA/SSD drives
- 2 PCI Express Gen 3 slots and two 1GE LAN interfaces on the motherboard
- Trusted Platform Module (TPM) for authentication and tool-less access

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E2700 TECHNICAL SPECIFICATIONS

All data in this table applies to dual-controller configurations.

	E2724 System Shelf DE5600 Disk Shelf	E2712 System Shelf DE1600 Disk Shelf
Form factor	2U, 24 drives (2.5")	2U, 12 drives (3.5")
Maximum raw capacity	43.2TB system shelf 1.1PB with disk shelves (using 1.8TB* and 6TB drives)	72TB system shelf 1.2PB with disk shelves (using 6TB drives)
Maximum drives**	192 120 SSD limit	192
Drives supported	• 600/900GB, 1.2/1.8*TB SAS 10K FDE/non-FDE • 400/800GB, 1.6TB SSD non-FDE • 800GB SSD FDE	2/3/4/6TB NL-SAS 7.2K FDE/non-FDE
DC power	Available option	Available option
Systems Memory	8GB/16GB	
Included host I/O ports	4 ports 12Gb SAS	
Optional host I/O ports	4 ports or 8 ports 10Gb iSCSI (copper) 4 ports or 8 ports 10Gb iSCSI (optical) 4 ports or 8 ports 16Gb FC 4 ports or 8 ports 12Gb SAS	
Operating system and system management	SANtricity OS 8.20 SANtricity Storage Manager 11.20	
High-availability Features	Dual active controller with automated I/O path failover Dynamic Disk Pools and traditional RAID levels 0, 1, 3, 5, 6 and 10 Redundant, hot-swappable storage controllers, disk drives, power supplies and fans Automatic DDP or RAID rebuild following a drive failure Mirrored data cache with battery backup and destage to flash SANtricity proactive drive health monitoring identifies problem drives before they create issues Greater than 99.999% availability (with appropriate configuration and service plans)	
Host operating systems	Microsoft Windows Server®, Red Hat Enterprise Linux®, Novell SUSE Linux Enterprise Server, Apple® Mac® OS, Oracle Solaris, HP, HP-UX, CentOS Linux, Oracle Enterprise Linux, IBM AIX, VMware ESX®	
Included software features	SANtricity mirroring SANtricity volume copy SANtricity Snapshot SANtricity SSD cache SANtricity thin provisioning Dynamic Disk Pools	
Optional software feature	SANtricity drive encryption	
System capabilities	Data assurance (T10-PI standard) Dynamic Volume Expansion Dynamic Capacity Expansion Dynamic RAID-level Migration Dynamic segment size migration System Event Monitor Proactive drive health monitoring AutoSupport™ Online SANtricity OS upgrades and drive firmware upgrades VMware vSphere® Storage APIs – Array Integration (VAAI) Microsoft Offloaded Data Transfer (ODX)	
Application plug-ins***	SANtricity Plug-In for Oracle Enterprise Manager SANtricity Management Pack for Microsoft System Center Operations Manager (SCOM) SANtricity Plug-In for Microsoft SQL Server Management Studio (SSMS) SANtricity Plug-In for VMware vCenter™ SANtricity VASA Provider SANtricity Storage Replication Adapter for VMware vCenter Site Recovery Manager SANtricity Performance App for Splunk Enterprise	
Open management	SANtricity OpenStack Cinder SANtricity Web Services Proxy (REST and SYMbol Web)	
System maximums	Hosts: 256 Volumes: 512 Snapshot copies: 512 Mirrors: 32	

* Expected availability mid-2015.
** All models are capable of reaching 192 drives when configured with intermixed disk shelves.
*** No-charge download from mysupport.netapp.com.