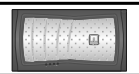
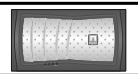
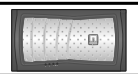




# NetApp Hardware Universe – RC-0033-0909 – Side C – 09-15-2009

| V-Series Storage Virtualization                      |                                                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Model                                                | V6080                                                                                                                                                                                 | V6040                                                                             | V3170                                                                             | V3160                                                                             | V3140                                                                              |
| Front View                                           |                                                                                                      |  |  |  |  |
| System Capacity Raw Maximum <sup>1</sup>             | 1,176TB                                                                                                                                                                               | 840TB                                                                             | 840TB                                                                             | 672TB                                                                             | 420TB                                                                              |
| Max Number of LUNs                                   | 1,176                                                                                                                                                                                 | 840                                                                               | 840                                                                               | 672                                                                               | 420                                                                                |
| V-Series Supported Arrays                            | EMC CLARiON<br>EMC Symmetrix<br>Fujitsu ETERNUS<br>Hitachi TagmaStore USP<br>Hitachi Lightning<br>Hitachi Thunder<br>HP StorageWorks<br>IBM TotalStorage<br>3Par InServ<br>TMS RamSan |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
|                                                      | Note: Please check the NOW™ site for the latest V-Series support matrix.                                                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Environmental<br>HA Pair/Single Controller           | Height (HA/Single)                                                                                                                                                                    | 12U / 6U                                                                          | 12U / 6U                                                                          | 6U / 6U                                                                           | 6U / 6U                                                                            |
|                                                      | Weight (HA/Single)                                                                                                                                                                    | 242 lb. (109.6 kg)<br>121 lb. (54.8 kg)                                           | 242 lb. (109.6 kg)<br>121 lb. (54.8 kg)                                           | 122 lb. (55.3 kg)<br>95 lb. (43.1 kg)                                             | 122 lb. (55.3 kg)<br>95 lb. (43.1 kg)                                              |
|                                                      | AC Power (HA only)                                                                                                                                                                    | 100-120V 11.1A<br>200-240V 5.8A                                                   | 100-120V 22A<br>200-240V 10A                                                      | 100-120V 8.1A<br>200-240V 4A                                                      | 100-120V 7.7A<br>200-240V 4.3A                                                     |
|                                                      | Thermal <sup>2</sup> (HA/Single)                                                                                                                                                      | 3,740 BTU/hr<br>1,870 BTU/hr                                                      | 3,624 BTU/hr<br>1,812 BTU/hr                                                      | 2,761 BTU/hr<br>1,602 BTU/hr                                                      | 2,594 BTU/hr<br>1,502 BTU/hr                                                       |
| Platform Specifications<br>HA Pair/Single Controller | Processor (HA/Single)                                                                                                                                                                 | 8 / 4<br>64-bit dual-core                                                         | 4 / 2<br>64-bit                                                                   | 4 / 2<br>64-bit dual-core                                                         | 4 / 2<br>64-bit dual-core                                                          |
|                                                      | Memory (HA/Single)                                                                                                                                                                    | 64GB / 32GB                                                                       | 32GB / 16GB                                                                       | 32GB / 16GB                                                                       | 16GB / 8GB                                                                         |
|                                                      | NVRAM (HA/Single)                                                                                                                                                                     | 4GB / 2GB                                                                         | 1GB / 512MB                                                                       | 4GB / 2GB onboard                                                                 | 4GB / 2GB onboard                                                                  |
|                                                      | PCI Slots (HA/Single)                                                                                                                                                                 | 10 / 5 (PCIe)<br>6 / 3 (PCI-X)                                                    | 10 / 5 (PCIe)<br>6 / 3 (PCI-X)                                                    | 8 / 4 (PCIe)                                                                      | 8 / 4 (PCIe)                                                                       |
|                                                      | Ethernet (HA/Single)                                                                                                                                                                  | 12 / 6<br>GbE RJ45                                                                | 12 / 6<br>GbE RJ45                                                                | 4 / 2<br>GbE RJ45                                                                 | 4 / 2<br>GbE RJ45                                                                  |
|                                                      | FC Ports (HA/Single)                                                                                                                                                                  | 16 / 8<br>4Gb SFP <sup>3</sup>                                                    | 16 / 8<br>4Gb SFP <sup>3</sup>                                                    | 8 / 4<br>4Gb SFP <sup>3</sup>                                                     | 8 / 4<br>4Gb SFP <sup>3</sup>                                                      |
|                                                      | Data ONTAP® (Min Release)                                                                                                                                                             | 7.2.4 / 8.0                                                                       | 7.2.4 / 8.0                                                                       | 7.2.5 / 8.0                                                                       | 7.2.6 / 7.3.1 / 8.0                                                                |

|                                                        |                       | NetApp VTL                                                                          |                                                                                     |                                                                                     |
|--------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model                                                  |                       | VTL1400                                                                             | VTL700                                                                              | VTL300                                                                              |
| Front View                                             |                       |  |  |  |
| Max Usable Capacity <sup>4</sup>                       |                       | 550TB                                                                               | 275TB                                                                               | 55TB                                                                                |
| Max Virtual Capacity <sup>5</sup>                      |                       | 10PB                                                                                | 5PB                                                                                 | 1PB                                                                                 |
| Max Sustained Thrput Deduplication Enabled             |                       | 4.3TB/hr                                                                            | 2.1TB/hr                                                                            | 1.5TB/hr                                                                            |
| Max Sustained Thrput Standard Compression <sup>6</sup> |                       | 8.2TB/hr                                                                            | 4.1TB/hr                                                                            | 2.3TB/hr                                                                            |
| Max Number of Virtual Tapes                            |                       | 20,000                                                                              | 10,000                                                                              | 10,000                                                                              |
| Max Number of Virtual Drives                           |                       | 3,000                                                                               | 1,500                                                                               | 1,500                                                                               |
| Max Number of Virtual Libraries                        |                       | 512                                                                                 | 256                                                                                 | 256                                                                                 |
| Max SATA Drives                                        |                       | 672                                                                                 | 336                                                                                 | 70                                                                                  |
| Environmental                                          | Height                | 6U                                                                                  | 3U                                                                                  | 3U                                                                                  |
|                                                        | Weight                | 150 lb. (68 kg)                                                                     | 75 lb. (34 kg)                                                                      | 75 lb. (34 kg)                                                                      |
|                                                        | AC Power              | 100-120V 3.7A<br>200-240V 2.1A                                                      | 100-120V 3.7A<br>200-240V 2.1A                                                      | 100-120V 3.7A<br>200-240V 2.1A                                                      |
|                                                        | Thermal               | 2,466 BTU/hr                                                                        | 1,233 BTU/hr                                                                        | 1,233 BTU/hr                                                                        |
| Platform Specifications                                | Processor             | 4<br>64-bit dual-core                                                               | 2<br>64-bit dual-core                                                               | 2<br>64-bit dual-core                                                               |
|                                                        | Memory                | 16GB                                                                                | 8GB                                                                                 | 8GB                                                                                 |
|                                                        | PCI Slots             | 4 (PCIe)                                                                            | 2 (PCIe)                                                                            | 3 (PCIe)                                                                            |
|                                                        | Ethernet              | 8<br>GbE RJ45                                                                       | 4<br>GbE RJ45                                                                       | 4<br>GbE RJ45                                                                       |
|                                                        | FC Ports              | 8<br>4Gb SFP <sup>3</sup>                                                           | 4<br>4Gb SFP <sup>3</sup>                                                           | 4<br>4Gb SFP <sup>3</sup>                                                           |
|                                                        | VTL O/S (Min Release) | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |

## Notes

- <sup>1</sup> System capacity is calculated using base 10 arithmetic (i.e. 1TB = 1012 bytes) and is derived based on the type, size, and number of drives.
- <sup>2</sup> The thermal dissipation values shown are based on typical system values at 100-120V input voltage. Please refer to the Site Requirements Guide on the NOW site for worst-case thermal dissipation values.
- <sup>3</sup> Autosensing ports: 1, 2, 4Gb.
- <sup>4</sup> Max performance and capacity are calculated using base 10 arithmetic.
- <sup>5</sup> Assumes deduplication at 20:1.
- <sup>6</sup> Assumes that deduplication is disabled and that data is compressible at 2:1.

## Terms and Abbreviations

BTU – British Thermal Unit  
Cu – Copper Connector  
FC – Fibre Channel  
GbE – Gigabit Ethernet  
HA – High Availability  
NVRAM – Non-Volatile RAM  
LUN – Logical Unit Number  
Op – Optical Connector  
SFP – Small Form-Factor Pluggable  
VAC – Volts Alternating Current  
VTL – Virtual Tape Library

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