

Intelligent Flash Storage Arrays



Architected for Performance and Capacity

As data demands for performance and capacity rapidly increase, IT departments are challenged to deliver increased storage performance, scalability and capacity with the same efficiency and costs. At the same time application workloads such as server virtualization, virtual desktops (VDI), online transaction processing (OLTP) and real-time analytics are further driving demand for storage infrastructure that can keep up. Tegile Intelligent Storage Arrays with IntelliFlash helps IT boost storage utilization and efficiency while delivering unmatched storage savings and performance.

IntelliFlash Architecture

IntelliFlash is what makes Tegile storage arrays deliver game-changing performance and storage economics. It does this by optimizing flash and metadata handling with inline data reduction.

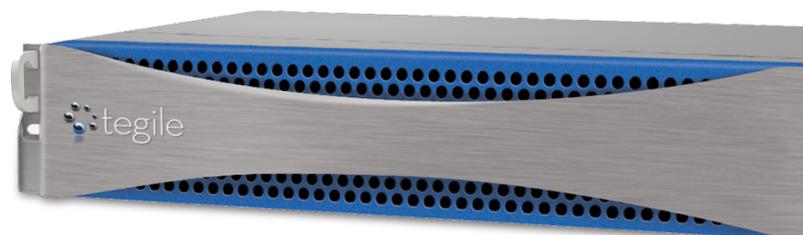
Traditional storage systems store data and metadata together, with metadata being interleaved with data on disks. Over time, with data being modified, deleted, and rewritten, metadata becomes very fragmented on

disk. In addition, traditional data de-duplication also can cause metadata to multiply and grow rapidly.

As metadata grows, it causes significant deterioration in a system's behavior over time. With IntelliFlash, Tegile storage arrays organize and store metadata, independent of the data, on dedicated high performance DRAM and flash with optimized retrieval paths. Combined with Tegile's advanced flash-driven caching algorithms, Tegile's metadata handling accelerates every storage function within the system, raising the performance hybrid storage systems to the level of solid state drives.

The Flexibility to Choose Hybrid or All-Flash

Whether you need to balance performance and high capacity with a hybrid array or the sustained high performance with low latency of an all-flash array, the Tegile Intelligent Flash Storage Array portfolio can



satisfy any and all of these requirements cost effectively, while providing the same operating software, same feature set and same experience across our entire product line.

Up to 10:1 Data Reduction

In-line compression and de-duplication on SSD and hard disk throughout array. This helps significantly reduce storage acquisition and operational cost. Redundant operating system images in a virtual server platform are reduced to a single instance stored in flash. Hundreds or thousands of persistent VDI instances are shrunk down to one single boot image that can launch in seconds.

NAS and SAN from the Same Array

Enjoy the flexibility of choice in how your storage is connected to your servers. No more silos of storage in your data center. FC, iSCSI, NFS, CIFS SMB are all supported.

Purpose-built for Virtualization

One-click virtual machine optimized storage creation enables hundreds of virtual machines and desktops to be deployed in minutes, not hours. VM-Aware management tools let storage be provisioned, monitored and managed in virtual machine granularity – LUNs, file systems and RAID groups are a thing of the past for virtualization administrators.

Built-in Business Continuity

VMware and Microsoft integrated snapshots and remote replication shrink backup windows to almost nothing and eliminates the need for backup windows. Thin replication transmits only changed data to reduce the burden on the WAN.

Storage Simplified

Single-click provisioning through application-optimized aware templates and integrated backup and replication without complex backend software.

“Tegile really does perform like you’ve never seen before. They’re more cost effective than anyone in the industry right now. And Tegile does something no one else does. Their dedupe is inline, which is very impressive. It’s almost too good to be true.”

Tony Combs, Solutions Architect at Grass Valley

| Model | HA2100 | HA2130 | HA2100EP | HA2130EP | HA2300 | HA2400 | HA2800 | T3400 | T3800 |
|---|---|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|
| PLATFORM CONFIGURATION | | | | | | | | | |
| Processor | 2 x Xeon E5620 | 2 x Xeon E5620 | 4 x Xeon E5-2450 | 4 x Xeon E5-2450 |
| DRAM Memory | 96 GB | 96 GB | 192 GB | 192 GB | 192 GB | 192 GB | 192 GB | 192 GB | 192 GB |
| Flash Memory | 600 GB | 1200 GB | 1200 GB | 2400 GB | 1200 GB | 2200 GB | 4400 GB | 28.2 TB | 48 TB |
| STORAGE CAPACITY | | | | | | | | | |
| Min: Raw Capacity | 22 TB | 33 TB | 16 TB | 24 TB | 16 TB | 11 TB | 4.4 TB | 26 TB | 48 TB |
| Max: Raw Capacity with Expansion Shelves | 100 TB | 150 TB | 120 TB | 180 TB | 144 TB | 139 TB | 148.4 TB | 314 TB | 336 TB |
| Min: Effective Capacity* | 100 TB | 165 TB | 80 TB | 120 TB | 80 TB | 55 TB | 22 TB | 130 PB | 240 PB |
| Max: Effective Capacity* with Expansion Shelves | 500 TB | 750 TB | 600 TB | 900 TB | 720 TB | 695 TB | 742 TB | 1 PB | 1.68 PB |
| PHYSICAL | | | | | | | | | |
| Form Factor (Rack Units) | 3U | 3U | 3U | 3U | 2U | 2U | 2U | 2U | 2U |
| Weight (Lbs) | 102 | 102 | 102 | 102 | 80 | 80 | 80 | 80 | 80 |
| Power (W) | 535 | 535 | 670 | 670 | 500 | 445 | 450 | 475 | 450 |
| NETWORK CONNECTIONS | | | | | | | | | |
| 1 Gbps Ethernet Ports | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 1 Gbps IP-KVM Lights-out Management Port | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Optional Connectivity | Dual-port 4/8 Fibre Channel, Dual-port 10GbE Copper/Fiber, Quad-port 1 Gbps Ethernet | | | | | | | | |
| SOFTWARE SERVICES INCLUDED | | | | | | | | | |
| Protocols | SAN Protocol Support (iSCSI, Fibre Channel), NAS Protocol Support (NFS, CIFS, SMB 3.0) | | | | | | | | |
| Data Services | De-duplication, Compression, Thin Provisioning, Snapshots, Remote Replication, Application Profiles | | | | | | | | |
| Management | Web browser, SSH, IP-KVM | | | | | | | | |
| Redundancy | No single point of failure, Active-Active High Availability Architecture | | | | | | | | |
| WARRANTY | | | | | | | | | |
| Standard | 90 Days: 24x7 support via phone and email. Next business day hardware replacement parts. Free software updates | | | | | | | | |
| Optional | 1, 3 or 5 years: 24x7 support via phone and email. Next business day hardware replacement parts. Free software updates Onsite Gold Level Support: 4 hour onsite support with optional onsite hardware kit Onsite Silver Level Support: Next business day onsite technical support | | | | | | | | |

* - uses a typical 5X data reduction factor to reach effective capacities quoted. Actual reduction rates depend on the data set

| Model | J2100 | J2130 | ES2300 | ES2400 | ES4000 | ES4100 | ES3800 | ES4800 |
|-------------------------------|--------|---------|--------|---------|--------|---------|--------|--------|
| PLATFORM CONFIGURATION | | | | | | | | |
| Flash Memory | 600 GB | 1200 GB | 800 GB | 1200 GB | - | 1600 GB | 48 TB | 144 TB |
| STORAGE CAPACITY | | | | | | | | |
| Raw Capacity | 26 TB | 39 TB | 20 TB | 18 TB | 72 TB | 64 TB | 48 TB | 144 TB |
| PHYSICAL | | | | | | | | |
| Form Factor (Rack Units) | 3U | 3U | 2U | 2U | 4U | 4U | 2U | 4U |
| Weight (Lbs) | 80 | 80 | 50 | 50 | 105 | 105 | 50 | 105 |
| Power (W) | 235 | 235 | 225 | 225 | 750 | 750 | 225 | 750 |



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