EVOLVE

Ready your data center to meet new demands

HP 3PAR T-Class Storage System: The world's most powerful virtualized array

Solution brief

HP 3PAR® T400 and T800 Storage Systems with Thin Built In™ are the first storage arrays to incorporate thin capabilities into system hardware. The HP 3PAR® Gen3 ASIC in each T-Class Controller Node provides a hyper-efficient, silicon-based engine that drives simple, on-the-fly storage optimization to maximize capacity utilization while delivering high service levels. The revolutionary innovations of the T-Class more than double the performance of the previous generation of HP 3PAR arrays to make it the fastest, most efficient single-system array on the planet.

Resilient agility for less

Designed to overcome the limitations of midrange and monolithic arrays, HP 3PAR Utility Storage offers a highly virtualized, dynamically tiered, multi-tenant storage platform for resilient utility computing. The internal, array-based virtualization approach of HP 3PAR Utility Storage enables T-Class arrays to cut Total Cost of Ownership (TCO) for storage by up to 50% while giving you the agility to respond instantly to changing business demands. T-Class arrays make these results possible by cutting SAN, capacity, energy, and floor space costs by up to 75%, reducing administration time by up to 90%, and eliminating the need for array-specific professional services.

Thin Built In™

HP 3PAR T-Class arrays with Thin Built In extend the thin provisioning technology leadership of the HP 3PAR Utility Storage platform by introducing a pioneering HP 3PAR Gen3 ASIC to power efficient, silicon-based capacity optimization. The revolutionary, zero-detection capable HP 3PAR Gen3 ASIC within each T-Class Controller Node drives simple, on-the-fly storage optimization to boost capacity utilization while maintaining high service levels.

The benefits

- Cut storage TCO by up to 50%
- Reduce administration time by up to 90%
- Cut SAN, capacity, energy, and floor space requirements by up to 75%
- Adapt rapidly and resiliently to changing demands

Industry-leading performance

T-Class arrays more than double the performance of the previous generation of HP 3PAR arrays. The T-Class has the only single-system storage architecture to exceed 224,000 IOPS in a published SPC-1™ Benchmark, a result achieved with 83% capacity utilization and without complex configuration or performance tuning. This makes the T-Class the only modular array capable of delivering industry-leading performance results simply and easily, right out of the box, in any environment needing SAN storage.

Get thin and stay thin

The revolutionary, zero-detection capable HP 3PAR Gen3 ASIC is a hyper-efficient storage optimization engine designed to power "fat-to-thin" volume conversions while preserving superior performance levels. Fat-to-thin volume conversions boost capacity utilization by removing allocated but unused space from traditional, "fat" storage volumes.

With the HP 3PAR Gen3 ASIC, migration of "fat" volumes from other storage platforms to new "thin" volumes on the HP 3PAR Storage System are achieved with the greatest speed possible and without the potential disruption of software-based implementations. With fat-to-thin volume conversions taking place at the hardware level, more parallel memory transactions are possible without impacting system performance. Thin Built In capabilities within the T-Class also power the ongoing, automated optimization of all thin provisioned volumes on the HP 3PAR array—known as Thin Persistence—so thin volumes stay thin.

T-Class advantages

- First storage array with Thin Built In
- Fastest, most efficient single-system array on the planet
- Fat-to-thin ASIC for simple, on-the-fly storage optimization
- Ideal platform for cloud computing and delivering enterprise IT as a utility service

Building block for cloud computing

As organizations build out virtualized infrastructures to support cloud computing and cloud-based service delivery models, they are turning to server virtualization, blade servers, and utility storage technologies. With distinct architectural advantages, built-in thin hardware capabilities, and superior performance, HP 3PAR T-Class Storage Systems are purpose-built to meet the demands of these virtualized environments. With the HP 3PAR T-Class, your storage infrastructure has the agility to respond quickly to changing business needs while maintaining the resiliency that "always-on" businesses demand.

HP 3PAR T-Class Storage Systems are 100% compatible with HP 3PAR F-Class Storage Systems. A single management console, operating system, and software product line across all HP 3PAR hardware platforms ensures seamless interoperability and management simplicity.

Deploying server virtualization?

HP 3PAR T-Class Storage Systems with Thin Built In are designed to address the needs of virtualized environments and increase virtual server ROI.

The exceptional I/O performance of the T-Class mitigates server memory and traditional storage constraints so you can maximize hardware and resource consolidation. Industry-leading performance and revolutionary hardware-based capacity optimization mechanisms give T-Class arrays the unique ability to dramatically increase application performance and capacity utilization.

- Reduce physical capacity needs by up to 75%
- Achieve greater hardware and resource consolidation
- Add more flexibility to your virtualized environment
- Enjoy increased application performance

For more information, visit www.hp.com and www.hp.com/go/3PAR.

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