HP-UX 11i v3 – Next Generation Mass Storage Stack









Management

Performance

Scalability

Meeting future storage challenges

Server storage is growing in capability, size and complexity. Your systems need to connect to a wide range of storage devices, with ever increasing capacities, greater functionality and over a range of interface and transport protocols.

The HP-UX 11i v3 mass storage stack is architected to meet these challenges by simplifying ease of use and storage management, increasing system performance and providing immense scalability.

Ease of use

HP-UX 11i v3 can automatically detect and configure your storage devices, Logical Units (LUNs) and the paths across the storage fabric to each LUN. Changes and additions to devices, LUN capacities and SAN fabrics are quickly detected and automatically configured.

Current HP-UX users will find 11i v3 very familiar, with backwards compatibility and easy to use adoption tools for the advanced features such as multi-path I/O and load balancing. No re-configuration is required when upgrading to 11i v3 and no re-training is required for your IT staff.

Scalability

Designed with greater levels of parallel processing HP-UX 11i v3 is architected to address up to 16 Million LUNs each of which can be up to 8 Zettabytes (8 Billion Terabytes) in size. With immense scalability HP-UX 11i v3 meets all of your current and future storage capacity needs.

Performance

Significant performance gains are achieved with HP-UX 11i v3 by using high levels of concurrent I/O operations and parallel processing along with processor allegiance algorithms and usage of unique HP server hardware features such as Cell Local Memory.

Mulit-pathing and load balancing are built in and fully integrated into HP-UX 11i v3 and provide the best performance across a wide variety of storage configurations without the complexity of configuring PVLinks or add-on multipathing utilities. A choice of load balancing algorithms is provided when fine performance tuning is desired.

The net result is more performance for your applications.

Manageability

Not only is HP-UX 11i v3 faster it's also much easier to use. New devices and LUNs are automatically discovered, configured and even tuned for the best performance. At the same time the I/O paths to each LUN are automatically configured for multi-pathing and load balancing. Each LUN is given a single virtual name that provides a persistent way to address the LUN regardless of changes in the storage infrastructure.

Changes to the storage fabric from either link addition or failure are automatically detected and multi-pathing and load balancing are reconfigured to ensure the best performance and availabilities levels are maintained.

Advanced command line tools like 'scsimgr' and integration with systems and storage management utilities such as Systems Management Homepage (SMH), Systems Insight Manager (SIM) and Storage Essentials provide powerful management and diagnostics for the SAN and mass storage devices.

Resiliency

The built in multi-pathing and virtual LUN names provide automated resilience to link failures. Applications simply continue to access the device without the need for reconfiguration. The paths to boot and dump devices are also protected and seamlessly re-configured in the event of a path failure.

Through advanced monitoring abilities HP-UX 11i v3 can quickly act upon asynchronous SAN events such as link or device failure, recovery or addition. In the event of a link failure, I/Os are simply routed to the working links of the multi-path configuration, the I/O load is rebalanced across available links and an event notification is made so a repair of the failed link can be scheduled.

When previously failed links are recovered they are automatically added and used for multi-pathing and load balancing.

Full integration with HP's Serviceguard provides best in class I/O path resiliency.

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