



Zativa 10K Highlights:

HIGH PERFORMANCE

- 8 fully independent 2Gb Fibre Channel connections (configurable as host or drive) per Storage Management Node
- Dual special purpose processors that speed calculation times and accelerate data transfer rates
- Full speed active-active-active

SCALABILITY

- Provides centralized storage for up to 21 direct attached servers or virtually hundreds of servers via SAN fabric switches
- Scales to 840 SATA drives - 120 TB FC, 200 TB SATA

HIGH AVAILABILITY

- Redundant Storage Management Node configurations in Active-Active-Active or Active-Active modes
- RAID, 0,0,1,10,100,3,30,5,50,JBOD
- Continuous monitoring of all sub-system components
- LUN scrubbing for pro-active disk management

Manageability

- RECON RAID Manager embedded RAID management software (no software to install)
- Internal web server for browser based GUI
- Partition 2048 LUNs and mask by WWN/Fibre Channel
- XapShot data replication - optional
- On-storage node front panel display and indicator LEDs
- Proactive email alerts

The Zativa 10K is the most powerful and versatile Fibre Channel Storage Management Node on the market. Featuring 8 fully independent 2Gb Fibre Channel connections, dual special purpose processors, and a high-speed multi-channel architecture, this controller performs equally well in both high IOPS and high MB/s applications. Redundant Storage Management Node configurations deliver extreme performance and availability by harnessing the connectivity of up to 24 Fibre Channels and the power of two or three Storage Management Nodes.

Bandwidth Where You Need It

Whether you need to centralize servers or SANs, or scale to meet a growing number of users and applications, the Zativa controller's 8 Fibre Channels enable you to put the bandwidth where you need it to address host or disk side bottlenecks. When combined with Zativa Disk Enclosure Modules, a single Zativa 10K Storage Management Node can scale to support 840 drives - delivering extreme capacity in either Fibre Channel or Serial ATA.

Continuous Data Availability

The Zativa 10K offers an incredible number of design features to maximize system uptime. This includes expanded RAID options to support a hierarchy of availability, and the flexibility to configure drives using channel redundancy, cross drive enclosure RAID groups, or multiple drive-channel RAID configurations.



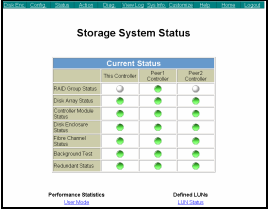

Redundant controller configurations operate in either Active-Active-Active or Active-Active modes. The Zativa 10K performs active monitoring of all sub-systems components including power supplies, fans, disks, Fibre Channels, temperatures, and UPS. Add to this LUN scrubbing, automatic drive failure detection and reconstruction, a fully redundant/hot-swap architecture, and the Zativa 10K delivers unprecedented levels of confidence and worry-free operation.

Incredible Versatility

Because the Zativa is so powerful, flexible, and reliable it is ideal for a wide variety of applications and environments. It is equally at home serving streaming media as it is performing on-line transaction processing operations. The flexibility of the Zativa's architecture combined with superior, and flexible firmware features makes the Storage Management Node the most versatile platform for building long lasting storage solutions.

Simplified Management

To simplify system configuration and management, the Zativa 10K comes with a powerful, yet flexible embedded RAID manager called RECON. A Storage Management Node based web server delivers the robust feature set of RECON as a simple and intuitive GUI through any web browser. There is absolutely no additional software required. This means that a Zativa is ready to run out of the box significantly increasing the speed of deployment while reducing the complexity of ongoing management.

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| <p>ARCHITECTURE</p> <p>Connectivity</p> <p>Topology Support</p> <p>Processors</p> <p>Masking</p> <p>Bus architecture</p> | <p>Zativa 10K Storage Management Node: Features</p> <p>8 independent 2 Gb (200 MB/sec) Fibre Channel connections</p> <p>16 channels in redundant controller configurations. All channels configurable as host or disk channels. Support for disk channel multi-pathing, host channel multi-ID.</p> <p>Channels configurable as FC-AL, Point-to-Point, Switched Fabric</p> <p>Dual special purpose high speed processors</p> <p>Support for both WWN and Fibre Channel LUN Masking</p> <p>Dual high-speed PCI buses, two high-speed memory buses</p> |  <p>Rear connector panel for all cabling organizes and simplifies configuration and maintenance</p> |
| <p>AVAILABILITY</p> <p>Redundancy</p> <p>RAID Levels</p> <p>Soft Disk Failure</p> <p>Hard Disk Failure</p> <p>Channel Failure</p> <p>Controller hardware</p> <p>Spare drive options</p> | <p>Dual/Triple Zativa storage nodes configurable as Active-Active or Active-Active-Active</p> <p>Redundant Zativa-Net connection for inter-controller communications</p> <p>0, 00, 1, 10, 100, 3, 30, 5, 50, JBOD - configurable by LUN</p> <p>Bad block management - Data scrubbing, scheduled background verification of LUNs</p> <p>Automatic detection, seamless interrupted operation upon disk failure</p> <p>Reconstruction of data from spare disk to new disk, hot-swap support for failed disk</p> <p>Automatic background reconstruction of disks from a failed channel onto hot spare disks on alternate channels to survive disk channel failure in RAID 5 configuration of up to 7 disk group</p> <p>Continuous monitoring of all sub-system components</p> <p>Redundant load sharing power supplies with redundant power feeds</p> <p>Hot swappable fan assembly</p> <p>Dual UPS support, automatic switch to write-through caching upon UPS switch to battery</p> <p>Controlled shutdown on UPS failure</p> <p>Any drive may be defined as a spare and used globally or restricted by channel, LUN, DEM</p> |  <p>Front panel accessible redundant load sharing, hot-swappable power supplies and fan assembly</p>  <p>Zativa RAID Manager's intuitive browser interface simplifies monitoring and management</p> |
| <p>CAPACITY</p> <p>Single Controller</p> <p>Partitioning</p> <p>Cache</p> | <p>Up to 840 drives - 120 TB Fibre Channel - 200 TB Serial ATA</p> <p>2048 LUNs on 64 RAID Groups up to 256 drives per RAID Group</p> <p>512M, 1G and 2G options. Read ahead, write back, write through, variable cache size, cluster size, look ahead, write back allocation</p> | |
| <p>INTEROPERABILITY</p> <p>Integration</p> | <p>Open systems compatible, Requires on special drivers</p> <p>Automatic drive query for capacity and LUN configuration</p> |  <p>The convenient front panel display allows you to monitor Zativa RAID systems right from the data center</p> |
| <p>MANAGEABILITY</p> <p>RECON RAID Management</p> <p>Controller Management</p> <p>Replication</p> <p>Front Panel Display</p> <p>Disk Enclosure</p> | <p>RECON RAID Manager - browser based GUI, Front panel display, LEDs, audible alarms</p> <p>Out-of-band firmware upgradeable 10/100 Base T Ethernet port for out-of-band management</p> <p>XapShot data replication firmware - optional</p> <p>Aggregate performance and individual channel performance</p> <p>Temperature, power status, fan speed, Disk Enclosure status</p> <p>14 LEDs - Power, Ethernet, Digi-Net, Channels, alarm, logo</p> <p>Continuous monitoring of disk enclosure modules using SES</p> | |
| <p>PHYSICAL</p> | <p>Self contained 1U, 19" rackmount</p> | |
| <p>Hybinette, Inc. 3225 S. Wadsworth Blvd., Suite B, Lakewood, CO 80227, USA (303)987-3771 phone (303)987-2560 fax www.hybinette.com</p> | <p>Founded in 1989 Hybinette specializes in high performance hardware solutions for businesses with the need to store and transfer large amounts of data. Hybinette's rugged solutions are built with cutting-edge supercomputer technology and integrate with existing systems, making life easier for your business. Hybinette has engineered its products to the highest standards, combining proven technologies and innovative thinking to continually achieve unprecedented levels of performance, reliability, scalability, and ease of management.</p> <p>© Copyright 2003. All rights reserved. Zativa is a trademark of Hybinette Corporation.</p> | |

