

## **HA SAN for Small and Medium Business**

Very Cost Effective HA SAN SMB optimized Solution Active/Active Option High Reliability

# pursue perfection



## **Details**

#### **SMB optimized HA/DT SAN**

 Tacyon® LX-4 represents a High Availability SAN environment, optimized for Small and Medium Business needs. A storage cluster with enhanced Automatic Failover Technology guarantees the operation of the system even in case of a site failure.

## **Multilevel Cache Technology**

 Multilevel Cache Technology: CISC Cache, RISC Cache and SSD Cache provide excellent performance.

### **Wide Range Data Replication**

 Data Replication for NAS volumes is supported for long distances to save user data to an additional location redundantly.

#### Monitoring

 Tacyon® LX monitoring provides a multilevel notification system supporting email as well as SNMP. Hardware based sensors are working in every operation mode also at offline systems.

## **Comprehensive SAS-3 Technology**

• The system embracing the SAS-3 technology sets new standards in the field of data transmission for HDDs and SSDs. Especially SSDs that had been working at the upper limit of their interfaces before, now again have sufficient space to guarantee the implementation of the requirements to the system. A connection of 12 gigabits per second per disk equates to a gross data rate of up to 1.5 gigabytes or to 375,000 4k blocks per second.

#### **Active/Active**

 Two nodes located in the storage cluster can be used active/active\* and written to simultaneously and ensure maximum availability, even in case of failure of one side for SAN services.

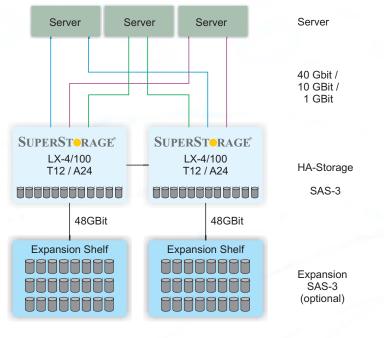
## **Multi-Tier Investment Protection**

Existing hardware, even from different manufacturers can continue to be used, Tacyon<sup>®</sup> platforms can also be used in Tacyon<sup>®</sup> or PlatinStor<sup>®</sup> next generation systems. A modular design allows a simple expansion at any given time.

## **Highly Effective Capacity Utilization**

 After building the RAID sets, almost 100% of the net capacity can be used for storing user data.

## Tacyon<sup>o</sup> LX-4/100-T12 Tacyon<sup>o</sup> LX-4/100-A24





## saved! forever

#### **Outstanding Data Integrity**

 Each Tacyon® cluster contains two nodes. Each node provides its own storage devices, data integrity is ensured even if one site is totally unavailable.

#### **True Synchronous Mirroring**

 Each block being confirmed by Tacyon<sup>®</sup>, is guaranteed to exist on both nodes, data loss due to failure of one side is thus controlled optimally.

#### **Flexible Connectivity**

 All popular media for ISCSI/Ethernet are supported, including iSCSI over 1GBE, 10GBE, 40GBE copper and optical (RJ-45/SFP+/QSFP+).

#### **Enhanced Maintenance**

 The Tacyon® LX Management Console is designed to be used locally or remotely over internet. Multilevel rights management increases security and flexibility as well as making overall management easier.

<sup>\*</sup> Active/Active requires a license

#### Administration

Management

Tools

- Webbased GUI
- Secured administrator access
- Multiple management levels
- SSL connection for WebGUI
- Console-Tools
- Performance-Tools
  Remote access via web for the console
- Remote access also on offline systems

SNMP SNMP based monitoring

#### **Network**

Management

Connectivity

- Webbased GUI
- Secured administrator access Multiple management levels
- SSL connection for WebGUI
- Support of multiple netword cards
- with grouping and failover

 2x Gigabit RJ45
 Up to 12x Gigabit RJ45 (optional) or Up to 16x 10 Gigabit Ethernet (optional) or Up to 4x 40 Gigabit Ethernet (optional) or Up to 4x 16 Gigabit Fibrechannel (optional) Up to 8x 8 Gigabit Fibrechannel (optional)

#### **Memory Management**

Integration of Resources

- iSCSI Initiator
- Target mode (SAN)Support for physical volumes with more than 2TB Support for logical volumes with more than 2TB
   Multiple Snapshots
   Multiple logical volumes & groups
- Snapshots
- Extension features Online extension of logical volumesOnline capacity extension

  - Spanning of logical volumes over multiple physical volumes
  - RISC RAID 5/6/10/50/60 with 1GB RISC Cache
     RAID level expansion
- Security

RAID

- RAID level migration
   Internal synchronous volume mirroring
   External synchronous volume mirroring with

- failover (iSCSI volumes)

  Asynchronous NAS volume replication over LAN or WAN

#### **iSCSI Features**

Security

- IP address restriction for a targetCHAP user administration
- MPIO support

### **Monitoring**

Monitoring

- Hardware monitoringSNMP V2 & V3
- Email notificationLog-function
- Remote monitoring via web

## **Power Security**

UPS

- Local UPS SupportNetwork-UPS support

## **NAS** features

User management

- Windows Active Directory
- Primary domain controller
   NIS Support
   internal & external LDAP support

- Internal & external LDAP support
  ADS & NIS user (group ID synchronisation)
  User- and group- quota allocation
  Filesystem journaling supported
  Antivirus with scheduling function for automatic scanning
  Update of the Antivirus Database
  Veritas, EMC Dantz,
- Filesystem
- Antivirus
- Supported Backup Agents
- CA BrightStor

#### Supported hosts and protocols

Supported Hosts

Microsoft Windows Server 2012/2011/2008, Linux, Unix, Mac OS 8.0, 9.0, X, 10.4, VMWare, HyperV, XEN
 iSCSI (Ethernet), FC

Protocols (SAN) Protocols (NAS)

- SMB/CIFS, FTP, Secure FTP, Apple Talk, NFS v3

#### Backup (NAS)

Basic System

- Local backup
- Integrated backup systemNAS data mirroring
- Task mechanism with scheduled execution
- Virtual tapes
- Support for tape libraries and autoloader
- Scheduling with predefined automatic backup creation Setting of a minimum age for overwriting

#### Warranty

Basic Warranty

- 2 years spare part exchange in advance/NBD
   Expandable up to 5 years spare part service
   Expandable up to 5 years On-Site Service
   10 support-tickets for technical assistance included (dependent on system configuration)

#### **Front**

Buttons LEDs

Filter

- On/Off-button
- LED indicating operation
  12 LEDs for HDD activity (T12)
  24 LEDs for HDD activity (A24)
- Lockable optical front bezel with dust filter

#### **HDD Bays**

Hot-swap bays

- 12x 3.5" SAS-3 bays (T12)
  24x 2.5" SAS-3 bays (A24)
  2x 2.5" SAS-3, SSD optimized rear bays for Caching

## **Storage Processing Power**

Cache

- 16GB CISC cache (Up to 32GB)\*
  1GB RISC cache (Up to 2GB)\*

## Licenses

Storage

- License 4TB included
- Licensed Features
- Expansion of License up to 8/16/32/48/unlimited Multilevel Cache Technology
  - Synchronous Mirroring
  - Management iSCSI Target Functionality

  - iSCSI larget Furctional
    iSCSI Initiator Supply
    iSCSI Auto-Failover
    FC Target Functionality
    FC Initiator Supply
    Snapshots

  - Email Notification
  - Asynchronous Replication
    Active/Active
- Optional Features

#### **Dimensions**

Formfactor Physical Dimensions

Weight

- 2U rackmount black
  - 437x89x648mm (T12) 437x89x630mm (A24)
  - ~33kg (dependent on configuration)

