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Next Generation Data Centers - Virtualization Industry Report 2007

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T A B L E O F C O N T E N T S

Next-Generation Data Centers - Virtualization

1. Executive Overview**2. Market Drivers and Industry Dynamics**

Data center agility – Imperative for ROI

2.1. Server virtualization

Application performance scalability, manageability, and availability
Server utilization, provisioning, and agility

2.2. Storage virtualization

Types of Storage Virtualization - Block and file
Interoperability of storage infrastructure
Capacity utilization
Management of vast/ever-growing datasets
Cost of enormous capacity demands

2.3. Technology drivers

Blade servers
Converged 1/10 Gigabit Ethernet data center networking
Tiered storage

3. Market Segments and Product Requirements**3.1. Server virtualization****3.1.1. Value-based segmentation**

Consolidation of non-business critical applications
Qualification and test
Dynamic server provisioning
Enterprise-grade application support
Price

3.1.2. Product category-based segmentation

Hypervisors
VM management
Automation/change/configuration management
Process automation/run book automation
Infrastructure repurposing/dynamic reprovisioning
Application virtualization/application fabric
Virtual appliances

3.1.3. Product Requirements – Server Virtualization**3.2. Storage Virtualization****3.2.1. File Storage Virtualization**

Definitions
Appliance
Dedicated appliance
Turnkey system
Switch

3.2.2. Block Storage Virtualization (BSV)

Heterogeneous BSV
Homogenous BSV

3.2.3. Product Requirements – Storage Virtualization

3.3. Network Virtualization

3.3.1. Market Segments

3.3.2. Product Requirements – Network Virtualization

3.4. Issues & Competitive Available Solutions

4. Market Forecast and Market Shares

4.1. WW IT Spending

4.2. WW Server Virtualization Forecast

By product segments (as in 2. above)

By OS

By Processor technologies

By Workloads (where do we get this data from?)

By data center tier (ditto as above?)

By HA levels

4.3. WW Storage Virtualization Forecast

By Product segments as in 2. above

4.4. WW Storage Virtualization Forecast

By Product segments as in 2. above

5. Emerging Technologies and Standards

5.1. Server technologies and standards

Blade servers

Clustering

High-speed interconnects (10GbE, IB, 4G/10G FC)

PCI V2IO SIG

5.2. Storage technologies & Standards

5.2.1. Overview

5.2.2. Core Concepts

Elements (Files/Blocks/Records, VZ NAS & SAN File Systems, Storage Interconnects Abstracting Physical Storage, VZ at Host-Application Aware/Fabric/Target Storage, VZ Services (High Availability BU- Mirroring, Snapshots, HSM, VTL/Archival-CDP, DR/Security/Performance/Cost Reduction-Aggregation, Standardization, ROI), Automation Tools (Targeted Appliances/Thin Provisioning/Policy Generation/Application Aware VZ..)

5.2.3. Standards

(SMSI-S, Aperi...)

5.2.4. Futures

(Policy Based Automation, ILM, Storage Utility Model & Dependencies...)

5.2.5. Networking technologies and Standards

5.2.6. VZ using Convergence & Emerging Standards

Data Centers

Data Communications & IP Telecom

6. Competitive Positioning of Suppliers

6.1. Basis of Competition (Metrics)

6.2. Vendor Positioning Index (Strategy/Vision vs. Delivery/Execution)

6.3. Players by Market Segment

6.3.1. Server Virtualization vendor Profiles by Segment

Overview, Financials (by Revenues/Gross Margin/NetProfit by Product Line), Products Families, Competitive Positioning, Distribution Channels

Acronis, Altiris, Appistry, BladeLogic, BMC, CA, Cassatt, CiRBA, Citrix Systems, DataSynapse, Egenera, EMC VMware, Enigmatec, Fusion Dynamic, Grid Systems, Hewlett-Packard, IBM, Leostream, Microsoft, Novell, Opalis Software, Opsware, Optena, Optinuity, Oracle, PlateSpin,

Platform Computing, Propero, RealOps, Red Hat, Scalent Systems, Sun Microsystems, Surgient, SWsoft, Symantec, Terracotta, ToutVirtual, Trango Systems, United Devices, Virtual Iron Software, Vizioncore and XenSource.

6.3.2. Storage Virtualization Vendor Profiles

Overview, Financials (by Revenues/Gross Margin/NetProfit by Product Line), Products Families, Competitive Positioning, Distribution Channels

CA, EMC, NetApp, HP, HDS, Symantec, Sun, BMC, OpsWare (CreekPath), Onaro, SoftTek, Acopia, Brocade (NuView), CloverLeaf, Neopath, DataCore, Incipient, Maxxan, Sanrad, StoreAge, Falconstor, Fujitsu, Brocade, Cisco, Mcddata, Sun (Pirus),

6.3.3. Networking (Data Comm & IP Telecom) Virtualization Vendor Profiles

Data Communications

F5,

IP Telecomm

Cisco,

6.3.4. System Integrators & VARS

7. Major Suppliers and their Strategies

7.1. Tier-1 Suppliers by Segment

7.2. Tier-2 Suppliers by Segment

7.3. Associated Suppliers by Segment

8. Go-to-Market/Channels of Distribution

8.1. Vendors Matrix in Value-Added Chain (Tier-1, Tier-2, Associated Vendors) by

8.2. Major Manufacturers

(Microprocessor, Components, Boards/HBAs, Controllers, Servers, Storage, Networks, VZ SW, DataManagement SW, Application SW)

8.3. Channels

(Top 100 System Integrators, VARs, Distributors, Dealers..)

8.4. End Users

(Top 200 EU by Major Vertical Markets)

8.5. Financial Investors

(Top 50 VCs, Investment Bankers..)

9. Research Methodolgy

10. Appendices & Reference Resources

Technologies

URLS

Further Reading/Articles

Acknowledgements