

## Simplified & Scalable Solutions



At Netweb Technologies, we combine deep understanding with relevant experience to bring you solutions clearly focused on your business challenges - on time, every time. With more than 13 years of diverse technology implementations for startups, small and medium enterprises, and multinational corporations, Netweb is a rich resource of accumulated experience and expertise.

Working with the so-called 'comprehensive technology providers' is proving increasingly bothersome for many customers. Comprehensive technology providers have their resources stretched too thinly over multiple solutions and, as a result, customers sense a lack of focus and purpose. In contrast, our experts in pre-sales, post-sales and product engineering are clearly focused on servers, workstations, and related technologies, making it possible for them to bring you the best solutions at the best prices. And backing all of these solutions is our unparalleled customer support.

These are difficult times as businesses look for technology solutions that can juice out performance from their hardware and get the most out of their limited IT budgets, but won't hurt their pockets. Our next generation, unified, flexible storage solutions (FS2) perform multiple tasks, provide multiple configurations and give you best results at affordable prices.



Continuous research and development by our Product Engineering Group (PEG) ensures you get nothing, but the best products. Our robust product designs call for minimal after sales service. We know you would need to upgrade in future. All our customizations take your upgradation needs into consideration.

We always strive to bring customers the most efficient and cost-friendly range of products that meet their unique requirements. Mindful of this, we have entered into long-term partnerships with acknowledged technology leaders.

There are no such things as premium solutions, only simply-too-pricey ones. This is one thing we realized at Netweb: Getting and looking pricier and pricier isn't the way to do business. Instead, we build world class, custom solutions and products, many a time from ground-up, and deliver these at affordable prices.

We understand that a clear focus on business and technology innovation is key for companies in the race to the market. Even so, in hard times like these times, most companies can do little more than trying to balance their contemporary IT investments with legacy ones. Our solutions tie in with this cost-based view of IT spending.

We boast some of the lowest failure ratios in the Industry. Not surprisingly, customers see us as a safe bet and keeping coming back to us.

**High Performance Computing**

- Performance clusters - Database dusters - Rendering clusters - SMP Solutions - GPGPU - Cloud computing

**Storage**

- Wide variety storage arrays - Unified flexible storage solutions

**Disaster Recovery & Business Continuity**

**Virtualization**

### Our Advantages

Netweb has been active in the HPC arena for more than 5 years and has more than 100 HPC deployments across various verticals. Netweb has a dedicated and experienced team to meet the customer requirements. Customised, value-for-money solutions combined with great pre/post sales support makes "Customer Delight" a reality. Netweb accelerates technical applications and business results unlocking the value of IT through outstanding price/performance, balanced architecture, open standards, first-to-market and engineering expertise. Leveraging new technologies offering our customers a performance edge over their competitors

Netweb offers manageability, flexibility, and choice for customers to select high value products and solutions that meet their requirements at an attractive price/performance ratio. We have ability to deliver promised services as promised and our commitment to view Customers problem as our own.

### Technology Partners

Netweb has extremely strong relationships with technology leaders and it gives us the ability to be flexible and meet your specific needs.

### High Performance Computing Solutions

Netweb's HPC solutions are built using leading industry-standard building blocks and best-in-class partner products. We offer a wide choice of systems and interconnect allowing you to choose the best solution for your requirements. Our systems range to 8-way socket and various form-factors. We have revolutionary high density solutions which saves space, cost, cabling & energy-efficiency.

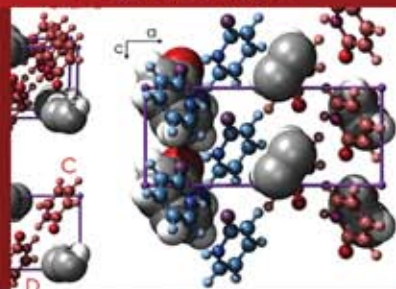
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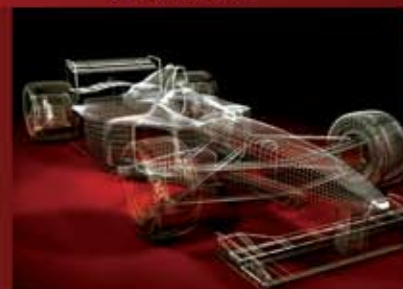
MEDICAL IMAGING



QUANTUM CHEMISTRY



3D ANIMATION



### NVIDIA Tesla based Supercomputing Solutions

Get your own supercomputer. Experience cluster level computing performance—up to 250 times faster than standard PCs and workstations—right at your desk. The NVIDIA® Tesla™ Personal Supercomputer is based on the revolutionary NVIDIA® CUDA™ parallel computing architecture and powered by up to 960 parallel processing cores. New solutions from NVIDIA® promise more cores and better performance.



This solution uses software to replace custom hardware and components, to offer a new, revolutionary computing paradigm. It aggregates the compute, memory and I/O capabilities of each system and presents a unified virtual system to both the Operating System and the applications running above the OS. It enables the aggregation of memory-bandwidth across boards, as opposed to traditional SMP architecture where memory bandwidth decreases as the machine scales. This enables our solutions to show close to linear memory bandwidth scaling. It can run any type of HPC applications providing best of breed performance for both cluster and SMP applications.

### Large Memory SMP systems



Netweb delivers a software-based computing-architecture that combines the advantages of shared-memory systems and the price points of commodity clusters by leveraging off-the-shelf x86 components. This innovative architecture aggregates multiple x86 systems into a single virtual x86 system, delivering an industry-standard, high-end SMP computer with up to 128 processor cores and up to 2TB memory – without modifying the OS or the application.

Problem Statement	Relative Cost		
	SMP	x86 clusters	Tyrone SMP
R&D and manufacturing cost	High	Low	Low
Initial acquisition cost	High	Low	Low
Installation and ongoing cost	Low	High	Low
Programming cost	Low	High	Low

## Opslag FS2 Features at Glance

### Host Interface:

- Up to twelve Gigabit Ethernet ports with fail-over/load-balancing
- Up to four 10Gb Ethernet
- Up to four 4Gbps Fibre-Channel
- Up to two SDR/DDR/QDR Infiniband (10Gbps/20Gbps/40Gbps)

### Processor

- Up to two Intel® Xeon® Dual/Quad Core processors

### Memory

- Up to 16GB System memory with ECC

### RAID Subsystem:

- RAID level 0, 1, 0+1, 3, 5, 6, 10, 50, 60 or JBOD
- 256MB/1GB battery backed cache, with ECC
- Online Volume expansion and volume migration
- Global and dedicated hot-spare disks
- Multiple RAID volume support
- Auto Volume rebuilding
- Greater than 2TB per volume set

### Drives:

- Supports up to 12/16/24 hot-swap SAS/SATAII HDDs in single box (Expandable by adding our storage expansion options)

### Network File Protocols

- CIFS/SMB, NFS, FTP

### Block-Storage/SAN Protocols

- iSCSI target, Fibre-Channel target, SRP target
- Backup Virtual Tape library Supported Clients
- Windows, Linux, Solaris, Apple\*, FreeBSD\*, Unix\*

### Storage Expansion

- Expandable to 576TB by using Tyrone expansion solutions.

### Redundancy/Fault-tolerance features

- Redundant Power Supply
- Host interface fail-over
- Support for RAID6 (can tackle simultaneous failure of two HDDs)
- Multiple Snapshots (point-in-time image of volume) with scheduling
- Volume/Share Replication
- Remote Replication (Block level replication to a 2nd unit) with failover/high-availability

### Management/Administration/Monitoring

- Management UI via Web based GUI
- IPMI 2.0 compliant management for system health monitoring
- Support for S.M.A.R.T and SNMP

## A solution **FLEXIBLE** enough to **ADAPT** to your requirements

Tyrone Opslag FS2 is a all-in-one storage solution that aims to meet all your requirements for storage virtualization. It is an extremely flexible solution with a wide choice of interface /protocols/disk-subsystem and provides extremely high redundancy. You can use it as a NAS, SAN or VTL. For customers looking for extremely high-performance storage solutions we offer SRP target support (over Infiniband interface). It is a highly scalable solution and can scale up to 576TB.



**UP TO 2Giga Bytes / Sec - UP TO 576 TB  
SRP Support**

## Opslag D2 - Storage Array

Opslag D2-4QF-24 FC RAID system is designed for high availability (HA) applications. The D2-4QF-24 is equipped with redundant components for each major function, including redundant RAID controllers, three power supplies, redundant fan modules, redundant battery backup modules, and etc. It is for non-stop service requirements. The optimized IOPS and throughput are capable for run-time critical online services, such as database, Exchange, and high-end media editing storages. D2-4QF-24 is also ideal for virtualization environments - VMware, Hyper-V, and Citrix.

The D2-4QF-24 can be managed easily, highly protected by Opslag writeable snapshot, and no system downtime from single point of failure. The other applications not mentioned here are not limited.



## Blade Server Solutions

SuperBlade® offers many unique advantages that differentiate it from competitors' blade products and traditional rack-mount solutions. Customer benefits include maximum affordability, reduced management costs, lower power consumption, optimal ROI, and high scalability - and in most applications, blade servers even reduce acquisition costs.

### Datacenter TwinBlade™

- High density – 20 DP blades in 7U enclosure; up to 960 processing cores in standard 42U rack
- High performance
- Energy efficiency – 93% efficiency power supplies and native DDR3 memory instead of FBD memory
- High availability – N+1 redundant power supplies
- Ease of Use – easy to set up with remote management tools
- Flexibility – two or four 100-240VAC power supplies
- High-performance storage – 2x SAS/SATA drives per server blade with RAID 0, 1

### OfficeBlade®

- Super low noise – 50dB with 10 DP blades
- Energy efficiency – 93% efficiency power supply, DDR2 memory
- Density & performance – 10 DP blades with 20 Quad-Core Xeon processors per 7U enclosure
- Ease of Use – easy set up with remote management tools
- Flexibility – two or four 100-240VAC power supplies, optional small racks with door and air filter, optional Gigabit Ethernet switch or passthrough module, etc.
- High availability – N+1 redundant power supplies, redundant modules - chassis management, Gigabit ethernet switch or passthrough module
- High-performance storage – 2x SAS/SATA drives per server blade with RAID 0, 1



**SUPERMICRO**

## Tyrone 2U Twin² Solutions

The innovative 2U Twin² system architecture achieves breakthrough x86 server performance-per-watt (375 GFLOPS/kW, up to 25% net gain over other top tiers' 1U servers) to further satisfy the ever-increasing efficiency, density and low-TCO demands of today's high performance computing (HPC) clusters and data centers.

### Intel ( With Infiniband on-board)

- 6026TT Server - Four DP Nodes in 2U
- 4 nodes share one 2U chassis
  - 4 sets of DP Quad-Core/Dual-Core 64-bit Xeon® processors
  - Up to 48 DIMM slots in 2U
  - 4 sets of 3x 3.5" hot-swap drive bays
  - 2x 1.2kW Gold Level high-efficiency (93%+) Redundant (Optional) Power Supply
  - 4x 80mm heavy duty fans
  - 4x front control panels with UID
  - 4x PCI-E 2.0 x16 low-profile expansion slots
  - 4 sets of dual Gigabit Ethernet LAN
  - 4 sets of COM/VGA output
  - 4x DDR/QDR InfiniBand
  - 4x BMC supporting IPMI 2.0, Media/KVM over LAN

### AMD ( With Infiniband on-board)

- 2021TM Server - Four DP Nodes in 2U
- 4 nodes share one 2U chassis
  - 4 sets of DP Six-Core Opteron™2000 Series processors (Socket F) support; HyperTransport™ link technology
  - Up to 32 DIMM slots in 2U
  - 4 sets of 3x 3.5" hot-swap drive bays
  - 2x 1.2kW Gold Level high-efficiency (93%+) Redundant Power Supply
  - 4x 80mm heavy duty fans
  - 4x front control panels with UID
  - 4x PCI-E 2.0 x16 low-profile expansion slots
  - 4 sets of dual Gigabit Ethernet LAN
  - 4 sets of COM/VGA output
  - 4x DDR/QDR InfiniBand
  - 4x BMC supporting IPMI 2.0, Media/KVM over LAN



# Tyrone®

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