The Data Deluge
As the demand for data increases by more than 50 percent every year, organizations are struggling to manage, maintain and secure their data, according to the IDC Predictions 2011: Welcome to the New Mainstream report. IT departments often turn to a host of multiple vendor solutions to help manage the ever-increasing flow of data, while others continue to rely on tape-based solutions. These measures have added another layer of complexity for IT departments including slower bandwidth, sluggish network performance, higher capital costs for more storage, and increasing operational expenses for data protection.

Powerful and Scalable Data Protection Solution
Symantec, the world-leading security and storage solution provider, has confronted the worldwide data growth and protection challenge with the Symantec NetBackup 5220 Appliance. This single-vendor, purpose-built, enterprise backup appliance from Symantec decreases backup storage up to 50 times and bandwidth consumption by up to 99 percent.

The NetBackup 5220 addresses the complexities and challenges associated with traditional data backup by enabling fast, efficient, reliable, and content-aware deduplication of data across data centers, remote offices, and virtual machines (VMs). It is equipped with Symantec NetBackup™ powered by V-Ray technology, which provides unique visibility into virtual environments that speeds recovery and reduces storage costs. The built-in replication engine for

“Symantec’s recent release of the Netbackup 5220 Appliance truly provides a ‘backup in a box’ approach to data protection. DLT recently test drove Symantec’s Netbackup 5220 and it had remarkable results. Not only did the appliance receive high marks for ease of use, the NetBackup software product and quick startup of the actual appliance made the deduplication rates and backup speeds tops in industry standards.”

Rick Marcotte, President and CEO, DLT Solutions
deduplicated data makes it possible to securely replicate to other Symantec NetBackup™ appliances and NetBackup deduplication pools, which helps organizations prepare for disaster recovery in case of a site outage.

While other deduplication devices require integration with traditional backup software, the NetBackup 5220 Appliance is a complete data protection solution, purpose-built for full protection. Symantec’s Front End Terabyte licensing model helps customers pay for the amount of data being protected, rather than what the appliance is capable of protecting.

**Industry-leading Intel® Architecture**

The Symantec NetBackup 5220 is based on the Intel® SR2525UR Server System designed for high performance computing (compute, I/O, and management nodes), video servers, virtualization platforms, and general purpose data center building blocks. It features business-critical reliability, availability and serviceability (RAS). It supports up to two Intel® Xeon® Processor 5500 series. With eight 2.5” hot swap drives, high efficiency redundant power supplies, redundant cooling, and multiple optional I/O expansion modules, the Intel® Server System SR2625UR provided Symantec a highly flexible, feature-rich 2U server designed for energy-efficient performance in a data center environment.

Intel’s architecture is also designed for power efficiency, which significantly lowers overall operating costs of the NetBackup 5220 Appliance. The Intel® Intelligent Power Node Manager allows organizations to reduce power and cooling costs while increasing rack density through policy-based power and thermal management. Similarly, the SR2625UR Server system features cold redundant power supplies for higher energy efficiency.

Another key feature of Intel’s Server System is its flexibility and scalability through the integrated RAID Controller, which allows for storage options ranging from three fixed SATA drives to a ten-drive combination of eight hot-swap, two fixed SATA or SAS drives. In contrast with traditional point solutions, the NetBackup 5220 Application takes enterprise data protection to a higher level by providing a complete solution that manages data needs now and into the future.

"By utilizing the world-class Intel server architecture, we were able to create a powerful, yet energy efficient data protection solution that can be custom-built to meet an organization’s needs. This scalable and fast solution addresses the complex data needs organizations are facing today and into the future."

**Mike Walton,**
Product Manager for NetBackup Appliances at Symantec.
Features and Benefits

The Highest Visibility in Virtual Environments
The NetBackup 5220 Appliance eliminates the barrier between physical and virtual environments. The V-Ray technology automatically secures VM protection and provides granular file recovery from VM objects.

Flexible Connectivity Options
Since few of today’s enterprises have common requirements for I/O needs, the NetBackup 5220 Appliance includes flexible configurations for 1Gb, 10Gb Ethernet and Fibre Channel connectivity. And with the amount of data required to be backed up consistently increasing, the storage capacity scales to the needs of the enterprise. The NetBackup 5220 Appliance features a modular design that begins with 4 TB and can expand to 36 TB with Symantec Storage Shelf. Alternately, the NetBackup 5000 series deduplication appliances can be deployed behind the NetBackup 5220 Appliance. This enables storage to be deployed as a single configured node that offers deduplication storage capacity of up to 32 TB per node. Or, it can be deployed in a multi-node configuration that can scale up to a maximum usable deduplicate capacity of 192 TB.

Content Aware Intelligent Deduplication
The NetBackup 5220 Appliance provides a scalable solution that comes pre-packaged with NetBackup and NetBackup deduplication software on enterprise-class hardware certified by Symantec. This software makes disk backups more cost efficient by eliminating the movement and storage of duplicate data across sites and servers, which dramatically improves storage utilization and reduces bandwidth consumption for backups. Only Symantec appliances feature deduplication at both source and target.

All NetBackup appliances utilize deduplication uniquely by distributing the load of deduplication processing across multiple NetBackup media servers or clients, which reduces the possibility of bottlenecks. The architecture scales the deduplication performance beyond the boundaries of a single processing head, while maintaining deduplication across the whole dataset. Therefore, if a server starts to bottleneck due to a high level of data processing, additional servers can be introduced to balance the load, which delivers the best possible performance. With client side deduplication, each new client added to NetBackup domain brings its own processing power for deduplication.

Conclusion
The NetBackup 5220 Appliance is a powerful, scalable, purpose-built backup appliance that provides fast, reliable and secure deduplication storage. By utilizing Intel® Server System SR2625 with Xeon® processors, Symantec has introduced its most powerful and flexible data backup device ever, which is helping organizations decrease backup storage up to 50 times and bandwidth consumption up to 99 percent.
Summary of Symantec NetBackup 5220 Appliance Key Benefits

Support for all major platforms and applications—platform and application support are included, which is the same as core NetBackup software.

- **Operational simplicity** - Installation is performed in a matter of minutes with pre-installed NetBackup.

- **Advanced VM protection** - Support for end-to-end Storage Area Networks (SAN) transport backups, VMware* Intelligent Policy, Block Level Incremental Backups, and more.

- **Reduction in storage and bandwidth** - Decrease backup storage up to 50 times and bandwidth consumption up to 99 percent.

- **Flexible deduplication options** - Deduplication at the source or target, inline, or post-process.

- **Up to 32 TB of deduplication capacity per appliance** - Protect several hundred terabytes of backup data.

- **Flexible storage** - The usable storage capacity can be used for a deduplication pool, Advanced Disk pool, or a combination of both.

- **SAN Client support** - High-speed streaming through Fibre Channel from SAN Clients to appliance.

- **Built-in replication** - Stored backups can be replicated to compatible targets at no additional cost.

- **Auto image replication** - Replicate backup images to a remote NetBackup domain for disaster recovery readiness.

- **Security for in-flight and at-rest backup data** - Encryption may be configured for source and target deduplication.

- **Tape support** - Write data-to-tape for long term data retention.

For more information on Symantec NetBackup™ 5220 Appliance; visit [http://www.symantec.com](http://www.symantec.com)

For more information on Intel® Server Products; visit [http://www.intel.com](http://www.intel.com)

---


INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked “reserved” or “undefined.” Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order. Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting Intel’s Web site at www.intel.com.

Copyright © 2011 Intel Corporation. All rights reserved. Intel, the Intel logo, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.*