



## Overview

iQstor's iQ1200 delivers business a robust and economical SATA solution with the availability, manageability, data integrity and enterprise-level functionality that, until now, have only been available to enterprise users.

### Enterprise-level features, affordable price

iQstor's iQ1200 Storage System is a self-contained storage system that brings an intelligent, yet affordable solution to small and mid-sized companies.

Combining proven enterprise-level features with cost-effective Serial ATA (SATA) disk drives, the iQ1200 delivers efficient storage growth, scalability, data protection, storage automation and plug and play simplicity -at a price point that's dramatically less than comparable Fibre Channel solutions.

The iQ1200 enables storage administrators to quickly and cost-effectively optimize storage solutions for diverse fixed content applications in digital media and imaging to near-line and archiving applications for financial, legal and educational institutions. Each iQ1200 supports up to fifteen SATA disk drives providing 6TB of storage capacity (with 400GB drives). Additionally, as storage management requirements evolve, administrators have the option of enabling enhanced storage services such as virtualization, snapshots, mirroring, storage provisioning, remote replication and automated capacity growth.

The iQ1200 is a full-featured 2Gb storage system, providing maximum flexibility, scalability and cost-effectiveness for business, large and small. With all key internal components being hot-swappable and redundant, the iQ1200 ensures dependable data protection and delivery to help keep business-critical applications running smoothly. All in all, iQstor's iQ1200 delivers business a robust and economical SATA solution with the availability, manageability, data integrity and enterprise-level functionality that, until now, have only been available to enterprise users.

### iQstor SAN Manager

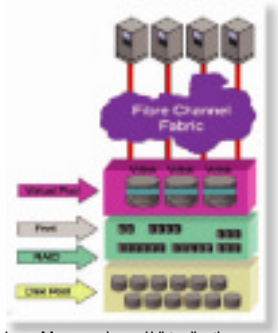
From its inception, the iQ1200 has been designed to allow your business to intelligently manage, virtualize and protect your valuable data. Starting with iQstor's SAN Manager, a centralized policy-based tool that allows you to dynamically configure and manage a SAN, each iQ1200 comes equipped with embedded data services software that is easily activated to solve your business requirements. These data management services include:



SAN Manager

### Volume Manager based Virtualization (VMV)

Using iQstor's VMV technology allows SMB/SMEs to achieve significantly improved economies of scale and operational efficiencies, while delivering superior service to their customers. VMV offers small to mid-size business (SMB) and small to mid-size enterprises (SME) many benefits, including the ability to easily consolidate storage resources, reduce complexity, provision storage on demand, and create multiple virtual arrays from a single system. With VMV, users can easily add cost-effective diskless servers or new servers with different operating systems and different applications in a single consolidated storage array with no downtime.



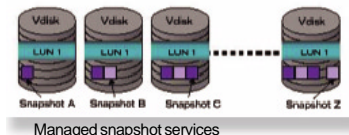
Volume Manager-based Virtualization

With VMV, IT administrators can easily and efficiently allocate storage based on needs of users and applications with flexible, intelligent and non-disruptive storage provisioning. They can quickly consolidate and optimize storage resources to maximize capacities, allowing effective data storage management with less manpower, reducing costs; they can add or expand additional storage space by creating virtual disks in a non-disruptive manner; all bringing workflow efficiencies and cost savings to today's business.

The result is enhanced storage utilization, increased reliability and security and improved administrator efficiencies.

### Managed Snapshot Services (MSS)

iQstor's Managed Snapshot Services (MSS) provides quick and easy virtual duplication of your critical data - at your fingertips when you need it. Using MSS, you can maximize the limited backup windows available for today's 24x7 business reliability and accuracy of modifications to produc-



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tion -without impacting production data -by instantly creating writeable test databases that require little space and serve to improve accuracy of application testing. iQstor's MSS feature can also provide a solution by making the snapshot image immediately available for situations where production data has been accidentally corrupted.

MSS is especially useful for applications requiring near-instantaneous point-in-time virtual copies of the data. MSS offers users the ability to access their data from any point in time without having to stop their daily activities for routine tasks such as system backups.

#### **Volume Copy Services (VCS)**

iQstor's Volume Copy Services (VCS) feature provides a comprehensive replication solution within the iQ1200 storage system. VCS creates a duplicate physical copy of a volume (vdisk) to effectively manage information growth and data protection.

The volume copy is an independent vdisk that can be assigned to any host or application without affecting the performance of the original production volume. With VCS, companies have an excellent tool for decision support, system analysis, and application testing, bringing an exact physical duplicate of source data for single or multiple users.

To reduce costly interruptions to production volumes while making a backup, VCS can be used to split the mirror. The backup application will then use the copy volume to create the backup. Once the

backup is complete, the split-mirror can be synchronized by updating the volume copy with any changes made to the original volume.

VCS, like other iQstor data service features, is storage controller-based and does not impact the operation of user applications by requiring host interaction or CPU processing. Once the copy process is complete, the user can map the copy volume to any host and start utilizing it immediately.

#### **Intelligent Capacity Management Services (ICM)**

In today's data center environments, the storage system's ability to automatically expand the virtual disk space to accommodate file system growth is one of the key IT requirements for continuous data center operation. To achieve the goals of 24x7 system uptime and storage availability, iQstor's Intelligent Capacity Management Services (ICM) allows continuous monitoring of storage consumption to easily prevent the system from running out of storage space.

The intelligent policy-based management component of ICM allows the data center administrator to automate file system and disk partition processes, setting thresholds and policies to provision capacity from one or more storage pools without server interruption. This intelligent process eliminates costly downtime associated with traditional physical disk upgrades and with re-building and re-formatting operating system partitions that are due to unforeseen changes in storage requirements, bringing workflow efficiencies with lower TCO and higher ROI.

#### **Remote Replication Services (RRS)**

Addressing business continuity requirements for off-site files (data vaulting) where data is protected from various failures and threats, and real-time replication of critical data between multiple storage arrays (disaster recovery) are two common problems SMB/SME IT operations must resolve in a cost-effective manner. With iQstor's Remote Replication Services (RRS), the ultimate solution for disaster recovery, companies can restart mission-critical applications immediately after a primary site disaster, bringing critical activities back online.

Using RRS, administrators have a cost-effective and flexible solution for business data synchronization between local and remote volumes (both synchronous and asynchronous). RRS allows IT personnel to easily create an exact copy of a volume and assign that copy to an application server for immediate use, making the process of moving and using data from external sources a straightforward and efficient process.

Similar to other iQstor data services features, RRS is storage controller-based and does not impact the operation of user applications. Once a volume is replicated to a remote site, the user has immediate access to the remote data for application testing, backup and recovery.

#### **iQ1200 Storage System Specifications**

**Host Interface** Four 2Gb Fibre Channel interfaces, 200MB/s each (800MB/s total)

**Storage Controller** Single or dual

**Cache Memory** Up to 2GB per storage controller (4GB total)

**Cache Protection** Enterprise-level cache vaulting and active cache scrubbing

**Parity** Hardware parity accelerator to boost RAID performance

**Number of LUNs** 1024

#### **Storage System Features**

##### **Standard**

Volume Manager based Virtualization (VMV)

RAID levels 0,1,3,5 and 1+0

On-line RAID expansion

Multiple RAID sets

Multiple LUNs

Hot swap disk drives

Global hot spare disks

Automatic drive failure detection and rebuild

Automatic reallocation of bad sectors

##### **Optional**

Managed Snapshot Services (MSS)

Volume Copy Services (VCS)

Intelligent Capacity Management (ICM)

Remote Replication -Synchronous (RRS)

##### **Drive Interface**

**Number of Disk Drives** Up to 15

**Interface** SATA

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