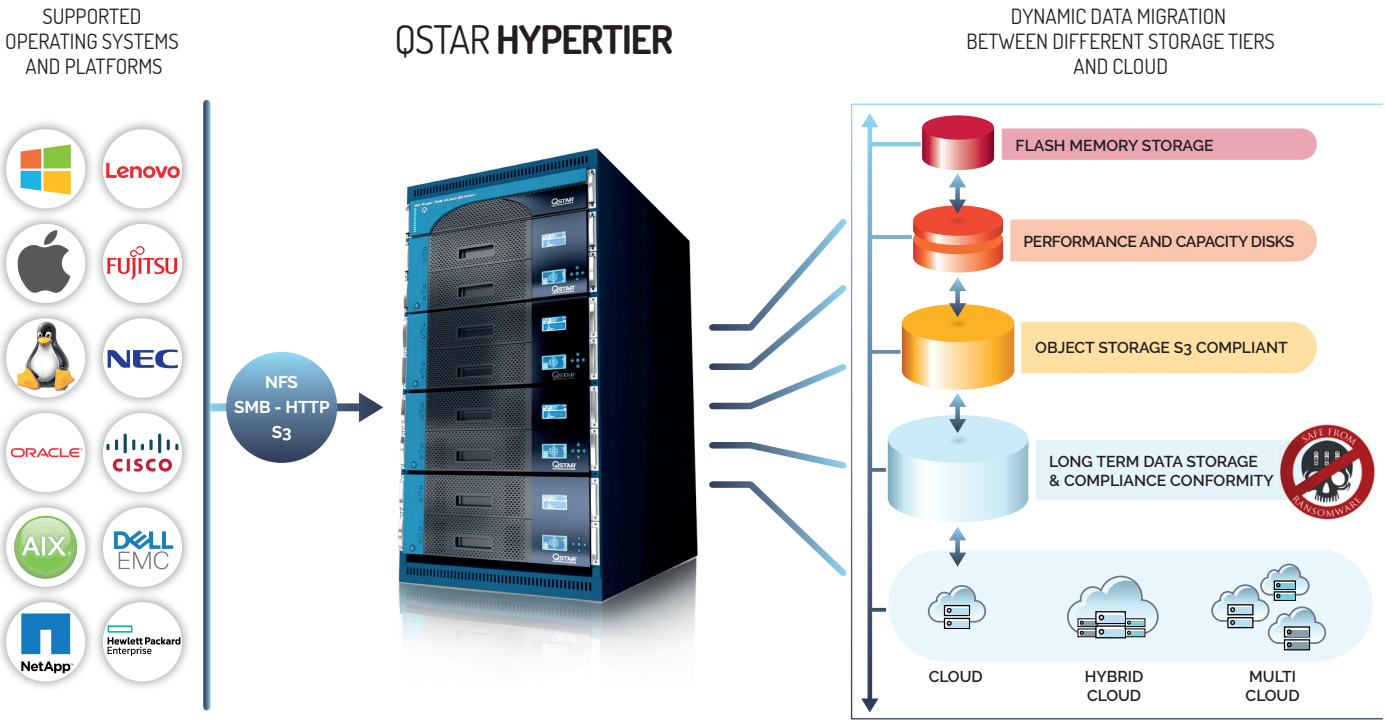
ONE STORAGE THAT FITS ALL YOUR DATA ARCHIVE NEEDS



A company's data is memorized on a plurality of storage systems with varying characteristics, performance and prices.
As is well known, IOPS, latency, data access frequency, file size and compliance are some of the key factors when choosing the storage technologies, architecture and products to meet the needs of today's businesses.
This engenders a complex situation where different storage systems become independent silos managed through a whole range of policy, purchasing and upgrade approaches, creating a real headache for storage administrators and for the company's IT budget.

But this is only one aspect of the problem: most of the files stored by companies, regardless of their size, are rarely read again 30 days after their creation. Most of them will never be opened twice. **As a consequence, 60 to 80% of the data on storage infrastructure is never accessed again in the future.**
Keeping so many inactive files is extremely costly, not only in wasted storage space, but also because these inactive files are included in repeated backup procedures and migrated many times over the years to new and costly storage devices. This only leads to a **huge waste of money and manpower**, a specially worrying scenario for firms wrestling with their IT budget.

The time has come for an effective strategy to eliminate all these problems and inefficiencies once and for all. We have developed a disruptive technology solution that says goodbye to all this unnecessary complexity, inefficiency and cost.

HYPERTIER
Powered by QStar Technologies

WITH HYPERTIER, YOU NO LONGER HAVE TO WORRY ABOUT SELECTING THE RIGHT STORAGE CLASS FOR YOUR DATA

With QStar HyperTier you can store, archive and protect all your unstructured data through a single-entry point, ensuring that it will be automatically and transparently placed and protected in the right storage tier.

Simplifies information management and drastically reduces the relentless explosion of data within enterprise environments.
Offers transparent and automatic file migration from the customer's local storage infrastructure to HyperTier's storage system and the cloud based on attributes such as: file creation date, last modification and access, file owner, size, extension and many more besides.
Restores files archived to their original location when requested by applications and users transparently and in real-time.
Guarantees 100% secure protection from ransomware attacks for all data stored within the LTO-based Active Archive tier.
Including immutability of data in write once read many (WORM) mode for compliance aspects (protection of sensitive/ legal documents for very long periods).

TRADITIONAL DATA STORAGE INFRASTRUCTURES ARE EXPENSIVE, INFLEXIBLE AND COMPLEX TO MANAGE


Unexplained raising costs


Inflexibility


Little visibility and control


Missing expertise and best practices


Manual processes and tools

TIERS CLASSIFICATION BASED ON DATA ACTIVITY

QStar HyperTier uses an adaptive pricing and performance models that automatically applies tiers classification based on data activity.

It offers very high performance and capacity by exploiting a range of different storage technologies. Each of them is used to optimize the system for a specific operational, compliance and durability requirement.

Simple policies allow you to decide where and for how long to store a given file or group of files or an entire volume within a specific storage tier or cloud. At the same time, where requests are made to a file which in the meantime has been moved to a lower performance level or the cloud, the file will be retrieved and stored in the flash memory for reading.

This holistic approach delivers optimized storage resources, drastically reduced costs, and greater security.

HYPERTIER DATA TIERS AND CONFIGURATION

The HyperTier solution offers great flexibility for its configuration, which can be designed on the specific operational needs of customers, this can vary from type of data processed, capacity to manage, compliance to be respected and much more.

1. **Generally, the first tier** is based on All Flash memory presented as an SMB - NFS environment to the LAN, which can manage multiple cache volumes assigned to different storage tiers to deliver a high read-write transfer rate. The choice of the best cache technology depends on your specific operating requirements. HyperTier can handle cache volumes created using All Flash, SSD, RAID or a combination of all three.

2. **The second storage tier** is based on either 10,000 RPM or 7,200 RPM disk storage, or a combination of the two, with capacity ranging from TBs to PBs. I addition, the customer's existing storage can be connected to the HyperTier system via FC or through the LAN.

3. **The third tier** is based on Kaleidos QStar Object Storage technology that provides a tremendous reduction in TCO compared with traditional NAS/SAN storage, unlimited scalability, superior data protection, it provides many 9's of data durability with no single point of failure to ensure data is always protected. Self-managing, self-healing architecture, repairs made with no downtime. Native support for object and file access via S3, REST API or SMB/NFS interfaces.

4. **The fourth tier** for long-term archiving uses the QStar Active Archive LTO based technology. The Active Archive is a super secure, high-capacity storage environment that does not require separate backup processes.

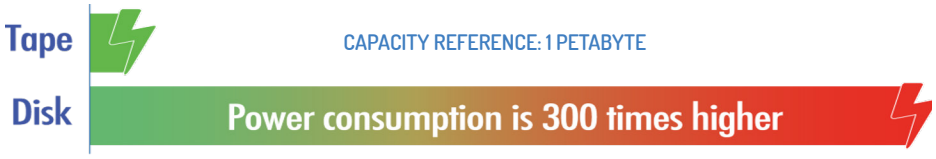
5. **The fifth tier** is based on the QStar Cloud Gateway technology for multi cloud integration. Migrated or moved data continues to appear within the HiperTier storage solution even when stored in the cloud. HyperTier Cloud Gateway can archive unlimited amounts of information securely and cost-effectively within any cloud – private, public or hybrid.

CONFIGURING THE HYPERTIER SOLUTION

HyperTier is a flexible modular system which makes it possible to combine different storage technologies that best suit the customer's effective needs. QStar can supply the whole system (HW & SW) or just the software modules.
The HyperTier uses the Software-Defined Storage approach, it works with the majority of commercially available X86-based servers and VMware and Hyper-V virtual environments. It also allows integration with many existing third-party storage products and most data protection software.

With **QStar HyperTier** you can store, archive and protect all your unstructured data through a single-entry point.

Active Archive technology provides the lowest cost form of archive storage. Total cost of ownership for tape is a fraction of that spent with disk-based storage systems. Companies can reliably and cost-effectively archive data for years or even decades reducing operating costs dramatically (electricity, cooling, maintenance and capacity upgrades).



100% SECURE DEFENSE FROM RANSOMWARE

There is only one way to protect data from ransomware attacks, creating an inviolable physical distance. QStar HiperTier creates an immutable “air-gapped” copy of your files for a 100% secure defense against ransomware. This is the only safe, practical and cost-effective way to protect your important data from any attack.
If ransomware attack, or compliance, audit, fraud prevention, and data protection are some of the problems that worry your company, HiperTier is the right solution for your organization.

3-2-1- BEST PRACTICE – DISASTER PREVENTION

DIFFERENT COPIES OF YOUR DATA

DIFFERENT ARCHIVE TECHNOLOGIES

COPY STORED OFFSITE OR IN THE CLOUD

Best practice for data protection 3-2-1 involves making three copies of the data on two types of media with one offsite copy.
This technique is recognized internationally as one of the best data protection practices.

QStar HyperTier allows you to manage multiple copies of data on different storage technologies, to place copies offline in the case of tapes and in the cloud if desired.
The way to manage multiple copies of the data in this way it allows to guarantee maximum security against attacks of any kind. The extracted media can be encrypted for an additional level of read protection.

IN RECENT YEARS WE HAVE SEEN AN ENORMOUS GROWTH IN CRIMINAL ACTIVITY VIA MALWARE, HACKING AND, ABOVE ALL, RANSOMWARE

This last is an incredibly effective addition to the already vast category of cyber threats that have been around for some years. Sadly, criminal activity is evolving as fast as data protection. It is quite impossible to feel safe just by installing software, even of the latest generation, to protect against such criminality.

THESE DAYS WE NEED TOP LEVEL SECURITY MEASURES THAT GO BEYOND THE TRADITIONAL SYSTEMS

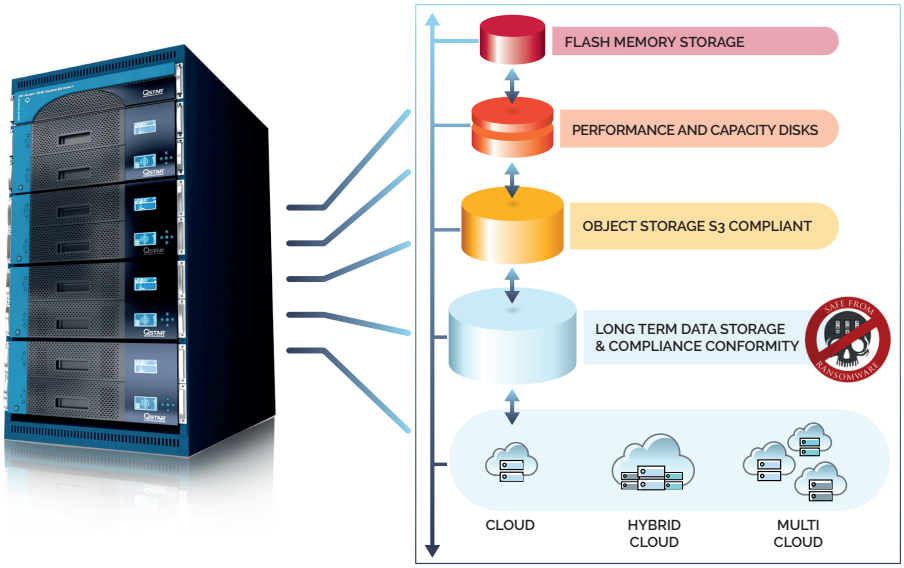
News stories abound of organizations that have spent millions of dollars in infrastructure security only to fall hopeless victims to attack. Backup protection is one of the most basic ways to systematically combat the threat, but it is not sufficient on its own. Today’s company backups use storage systems with data deduplication based on hard disks and usually an internal embedded Linux server to manage the actual deduplication system, that can be easily attacked, blocking all backups!

QStar has developed a specific technology and methodology to protect customers from ransomware attacks thanks to a super secure archive that does not allow direct access to its content.

HYPERTIER VERTICAL MARKETS

HyperTier offers a native integration within specific operational areas and applications.

HYPERTIER



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