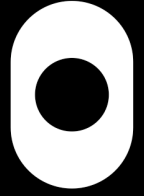


# The MatrixStore.

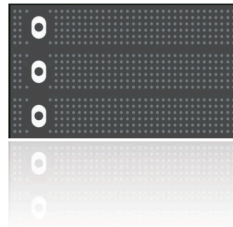
Protecting Your Digital Assets



## Video Workflows in Regulated Industries

If you think regulatory compliance is a barrier to creative workflow then think again. MatrixStore provides a rich feature set to provide cost-effective multimedia storage while simultaneously meeting the most stringent compliancy demands of organisations worldwide.

Compliance requirements that are set by external government agencies are on the increase. Regulators are now making more demands than simple data retention - they want to see evidence of data protection, high availability, audit trails and security enforcement. The onus traditionally is on the whole organisation to ensure that the processes are in place and are followed. But the real scrutiny comes when data needs to be presented at a given time with proof of its authenticity. That is when technology becomes an essential part of the workflow.



Video and audio content that is generated within heavily regulated industries such as banks, hospitals, law enforcement agencies and utility companies are a focus of increasingly demanding internal and external compliance requirements. Governance, authenticity and an audit trail is required throughout the lifetime of the content from capture to archive. Generally the requirements placed upon the technology pieces come down to: retention of data, authenticity of data, data access control and data availability.

## Regulations

- Sarbanes-Oxley
- Securities Exchange Commission
- Basel II
- Data Protection Act 1998
- Freedom of Information Act 2000
- HIPPA
- Internal company regulations

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# The MatrixStore.

Protecting Your Digital Assets

The table below shows the MatrixStore approach to tackling common compliance requirements:

Regulation Compliance Requirement	MatrixStore Solution
Retention of data for specific amount of time	<i>Policy enforces that the data cannot be deleted before its time. Not even with administrator access.</i>
Audit logs and log files	<i>Configurable audit log can tracks all operations (administrative &amp; data)</i>
WORM	<i>Data stored as fixed content cannot be modified.</i>
Authenticity	<i>Digest calculated when the data is stored acts as a guarantee that the data is bitwise exactly the same when it is read back as when it was originally stored. Periodic validation of the content also ensures this remains the case.</i>
Security and Privacy	<i>Full network security is employed to stop replay, sniffing, data modification and other attacks. User access rights can be set only giving access to authorised personnel. Optionally data may also be stored encrypted.</i>
Accessibility	<i>Time to first byte is sub-second, even under heavy load.</i>
Searchability	<i>Built-in database can support many searches per second across 100's of millions of database entries. Data entered into the store can be entered with 100's of keywords to enable web style search of unstructured data.</i>
Disaster recovery	<i>Covered on two levels: by replication to a separate cluster and/or by generation of tapes. Data is stored on a single cluster such that 4 disks simultaneously would need to irrevocably fail before data is at risk.</i>
Different regulations need to be handled	<i>Since each object stored can be given its own policy, the same MatrixStore can be used to handle many differing regulations.</i>
Ever growing storage capacity is required	<i>Extra storage capacity can be added easily via plug and play.</i>

There are a growing list of regulations being created globally covering all classes of data (CCTV footage, email and telephone records etc.). Below is a table showing a small sample of the regulations, their scope and requirements:

Regulation	Scope	Access Control	Audit Trail	Retention & Authenticity	Availability	Disaster Recovery
Sarbanes-Oxley, HIPPA	US Public Company (Subsidiaries outside the US also required to comply)	Y	Y	Y	Y	Y
Basel II	European Banking	Y	Y	Y	Y	Y
Data Protection Act 1998	UK Personal Data (Includes Public Area CCTV)	Y	Y	Y	Y	
Freedom of Information Act 2000	UK Data Availability	Y	Y	Y	Y	Y



Object Matrix ([www.object-matrix.com](http://www.object-matrix.com)) makes software to protect the digital files organisations need to keep for future reference. Our solution product, The MatrixStore, builds low-cost commodity disk drives into a safe place to store digital assets. Forever. The MatrixStore solution is especially suited to the Film and Video industries. The challenge to protect digital films that have historical or future reuse value is increasingly difficult as the sheer size of digital content grows with the mainstream adoption of high-definition and 2K/4K digital technologies. The MatrixStore facilitates the long-term protection of digital assets. It significantly reduces the resources required to do this, which is important when you need to keep your digital assets for a long time. The MatrixStore solution runs on low-cost commodity disk drives dramatically lowering solution costs and ensuring customers continue to benefit from the 50-year trend of falling disk drive prices.

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