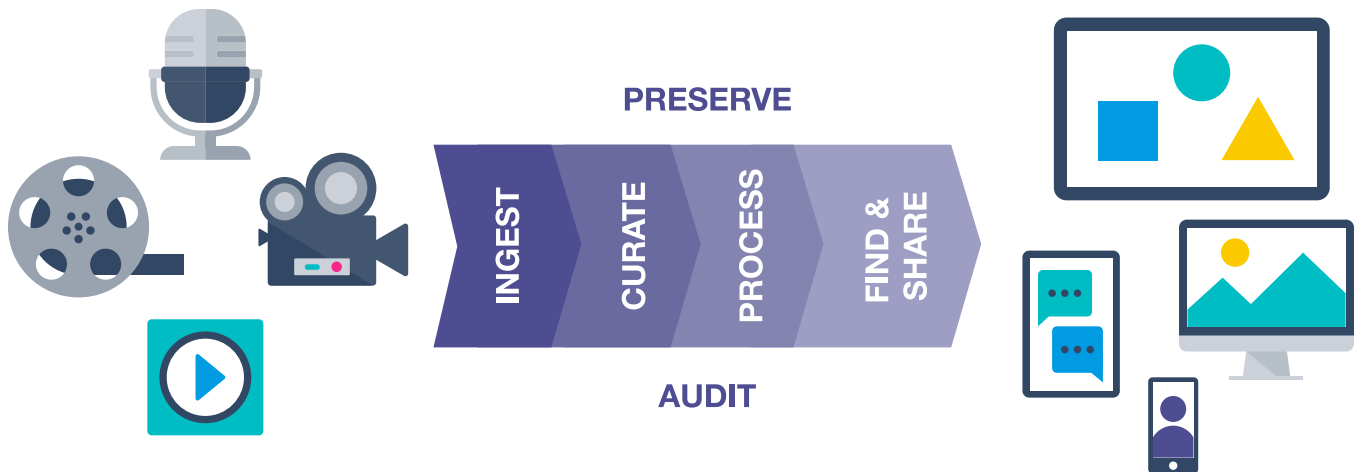




ObjectMatrix

# Digital Content Governance

## DATASHEET



**Any organisation that creates, curates, processes, or manages video content is aware that ensuring that content is protected, authentic and accessible from anywhere, with a full audit trail, is a complex challenge to stay on top of. That is where Digital Content Governance (DCG) comes in.**

### Riding the Deluge of Unstructured Content

The main problem with the deluge of content and huge file sizes (4K & 8K media) is that it requires different skillsets and toolsets to manage, and naturally a lot more storage space. Without the right structures and processes in place, it is all too easy to misplace content you have previously created, which very often leads to content producers having to reshoot footage, often at great expense.

Couple that with the fact that innovation in the media industry has happened at such a fast pace, and it is no wonder that it is challenging for media companies to keep their staff skills up-to-date. Only a handful of years ago engineers were managing physical tapes, so the move to a file-based world and IP is quite a difference.

In this new world of media production and delivery, one of the biggest mistakes made by media companies is the lack of integration, automation, and governance. They very often treat disk the same way they handled tape - with manual processes. This both causes bottlenecks and introduces errors into the workflow. It also means that media companies are wasting valuable resources on managing storage rather than more beneficial functions. The result is, more often than not, a number of un-secure, un-managed storage silos, made up of everything from scalable NAS and USB drives to large cloud buckets full of content they cannot find nor afford to use.

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**“Revenue generating activities tend to slow down when you either lose your clients’ data or content gets leaked early.”**

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**Security through obscurity is no way to protect content. Just because you can't find it does not make it secure.”**

## Digital Content Governance

Clearly, if organisations wish to profit from their content or build a successful community they need their hands on their data 24/7 to use, re-use, re-shape and re-use. Digital Content Governance platforms enable that, but they also focus on the whole package required to protect, curate, share, distribute and audit digital content.

Ultimately it is about ensuring a number of crucial factors:

- Maximising value
- Easy search
- Ensuring content is authentic
- Protecting data
- Business continuity
- Future-proofing content & metadata
- Access controls

## Maximising Value

It stands to reason that you can only generate revenue if you know exactly what content you have, can find it easily, and know how you are allowed to use it. If your content is sitting on the shelf, that is not going to be possible. Not only that, but to properly generate value from content, it often needs to be accessed fast. Given the need for high-definition files, that could be literally tens or hundreds of terabytes needed in a hurry. If that content has previously been archived, getting it back out of archive can be a pain. On the other hand, if it is sitting in the public cloud, there will be a big cost associated with getting it now. If you don't mind waiting 4hrs, a day, a week, then the costs are much more acceptable. That simply doesn't work in many media organisations that need to benefit from on-demand workflows.

Digital Content Governance enables organisations to access their content when they need it and in timeframes set out by the businesses.

## Easy Search

Find is key. One of our maxims from way back rings true today as much as it did in 2003, "If you can't find it, you do not have it".

With the increasing volume of data coming in and out of the facility, metadata management is as important as protecting the content itself. The ability to search for content based on up-to-date and relevant metadata will unlock the value of content for many organisations. Loosely coupled metadata and content will always make "find" an inefficient or impossible process.

Using MAM (Media Asset Management) solutions increases find substantially. But as mentioned above there is a risk in loosely coupling the MAM database and the storage where the media resides. If metadata is not embedded or associated with the essence and where the essence lives, then MAM can become more like Maybe Asset Management at times.

DCG platforms protect the metadata along with the essence for the lifetime of the content. Using APIs enables future-proof, integrated and automated workflows that ensure content can be found even if media asset management is not available. DCG platforms can also automate the extraction and indexing of any embedded metadata which will also vastly increase the efficiency of find.

## Ensuring Content is Authentic

In a post-truth world, we need to know that our content is authentic and that it has not been altered or tampered with. Can we prove that the rushes from the interview with the politician or financial analyst actually tally with the message portrayed in the edit? Digital preservation practice includes providing options for data immutability and ensuring content cannot be deleted until the business, or law sees fit.

DCG platforms make multiple copies of content on ingest using checksums (digital fingerprints) to ensure its integrity from day one and throughout the lifetime of the content. DCG can ensure rushes are immutable throughout their lifetime and can place retention policies on the data so that not even administrators can accidentally delete it on a bad hair day.

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## Protecting Data

Digital preservation, and protecting content from ransomware, is a massive deal in the media industry, with many companies required to comply with internal or external regulations around the digital preservation of their digital content.

Digital preservation processes ensure your content is protected at ingest and ensures it remains protected throughout its lifetime. However, this requires regular integrity checking of data which can be a costly exercise with legacy technology. How many media companies regularly follow good LTO management practices?

## Business Continuity

If the lights go out at a facility, so too are the chances of continuing revenue generating activities. Using incumbent platforms that rely on legacy archive and backup practices do not guarantee the continuity of business operations. It is a fact that data loss or loss of access to data can lead to catastrophic loss of revenue for any sized company.

Relying on manual procedures, scripts, or the skills of individuals within an organisation does not provide levels of redundancy and automation required to get a business running when outages occur. The ideal scenario is for staff to be able to easily switch to the location where data is accessible, whilst using the tools they are used to using for their craft.

DCG platforms provide automated and integrated business continuity functionality ensuring work can continue despite any outages. Implementing automated, asynchronous replication of metadata, data, and user access information ensures that everything that is needed will be available at the DR location. Integration of DCG platforms into the end-user ecosystem (i.e. they do not have to learn new skills) also makes this a non-disruptive process.

## Future-proofing Content

There are a whole wealth of articles out there discussing how to create the perfect 'forever' archive. Truth is, whilst the manufacturer states the media will last 100yrs, the machines required to read the format will likely not be. It is also questionable if the format of the files themselves will be supported. With this in mind, organisations need to implement platforms that make it easy or even automatic to migrate content to new storage platforms or formats.

Migrating content from different formats of offline media (LTO etc.) is non-trivial and vastly increases the TCO of those platforms – ask any system administrator about the joys of data migration. If data resides in silos of dumb storage then migrating the data, and metadata, to newer platforms, poses a problem for many organisations. Quite frankly, it is a right royal pain, so much so an entire industry has grown up around it.

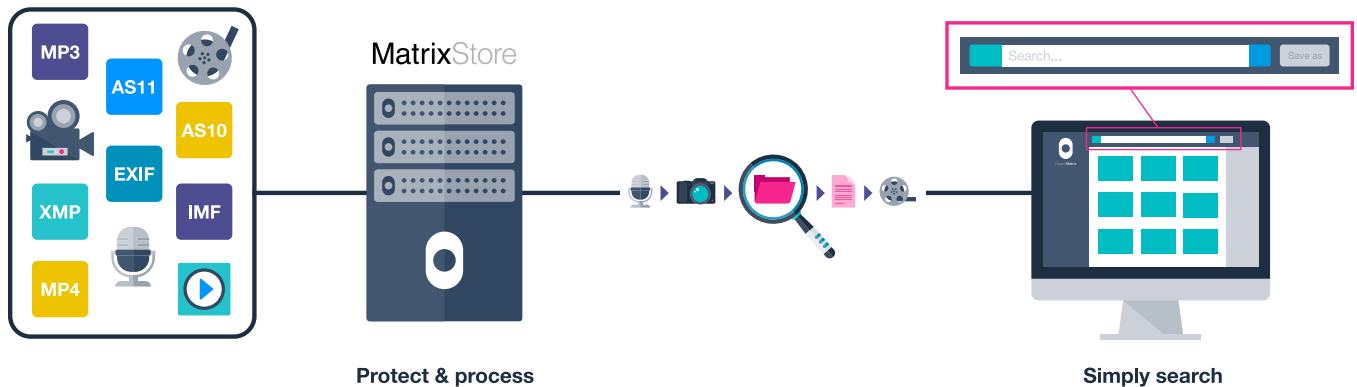


**“If the lights go out at a facility so too the chances of continuing revenue generating activities.”**

DCG platforms provide functionality to ensure future-proof access to content with the minimum of manual intervention:

- Migration in place allows content to move from older, legacy hardware to newer generations of hardware within the DCG platform and with no manual intervention.
- Content and associated metadata are stored in a non-proprietary format and is portable, meaning the data and metadata that belongs to you will always be accessible to you.
- Process in Place (PiP) does what it says on the tin. It enables content to be processed where it resides, on the storage platform. This means content does not need to move around to have simple processes performed upon it. Examples include:
  - › Any metadata embedded in the content itself can be automatically indexed and thus makes searching for content much easier without manual logging. Formats like Adobe XMP, AS11/AS10 can be dropped into a DCG platform and it will become very easy to find as its metadata will be automatically extracted and indexed for search. Hands-free.
  - › It is not inconceivable to have PiP performing tasks to transform content from one format to another. As a format of PDF/MOV/JPEG becomes obsolete it will be possible to inject algorithms into the DCG platform to transform legacy formats to the new standard. The functionality to provide those services is available today. Automatic and systematic processes. Again, hands-free.

## Process-in-Place (PiP)

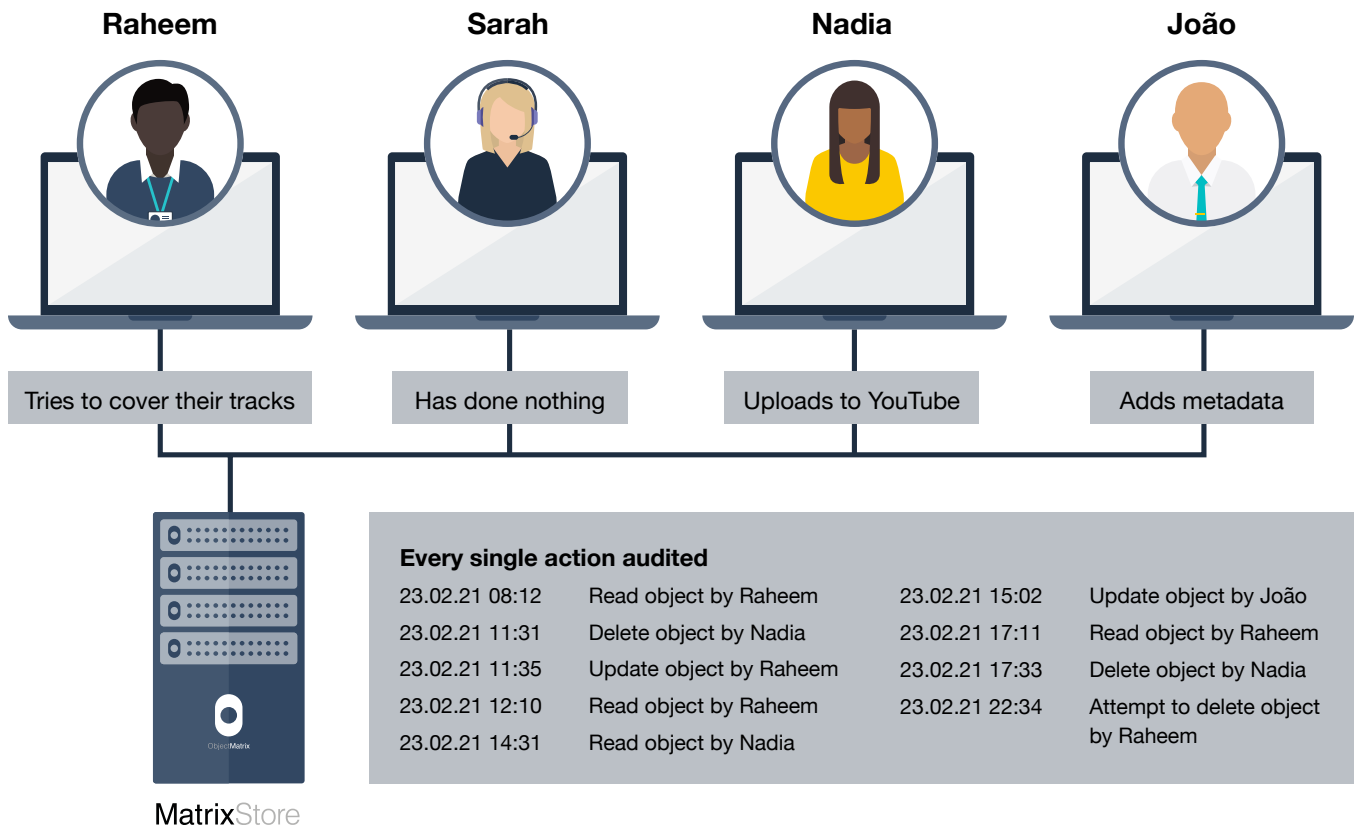


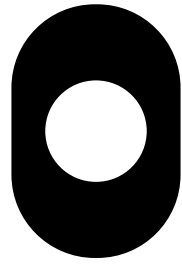
## Access Controls

If content generates revenue, then it is crucial to ensure the control of access to that content throughout its lifetime. Providing searchable audits of every action during the lifetime of the media is essential, as it means you can track exactly what has happened to that content and who has accessed it. If your media is on dumb NAS, removable media, or tape, you have no idea who has had access to the content.

DCG platforms can offer native, searchable audits of every action from ingest, moves, deletions, attempted deletions, and most importantly, read. It has to be said that audit is also possible with public cloud accounts if the user logins are granular to individuals performing the actions.

With all these bases covered, organisations will be able to focus on the important things, such as how to generate income from their prized assets and not spend money and cycles on managing the infrastructure that houses them. A good Digital Content Governance platform that integrates into the way you work and enables automation keeps everyone happy from the editor to the CTO and the CFO.





ObjectMatrix

### About Object Matrix

Object Matrix is the award winning software company that pioneered object storage and the modernisation of media archives. It exists to enable global collaboration, increase operational efficiencies and empower creativity through deployment of MatrixStore, the on-prem and hybrid cloud storage platform. Their focus on the media industry gives them a deep understanding of the challenges organisations face when protecting, processing and sharing video content. Customers include: BBC, Orange, France Televisions, BT, HBO, TV Globo, MSG-N and NBC Universal.

To learn more about Digital Content Governance or discover how Object Matrix can resolve you and your organisation's storage challenges, please get in touch!

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