

Understanding the Need for Durable Formats

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Scenario



You're an organization that finds you have to maintain your business records for an extensive amount of time beyond normal retention schedules. You've always been judicious in maintaining your records, so this is not a problem. You implemented an ECM solution a couple of decades ago. You have policies and procedures in place for your digital record handling. You've implemented a Master Records Retention schedule and implemented retention policies with your digital archive because you take governance and compliance seriously.

Then one day, your digital team receives a call from your legal department. The legal department needs to review and make available some very old electronic documents associated with pending litigation. But they are saying the documents will not display, render, or print!!!

You've just learned the lesson of "Durable Formats"!

A durable format is “a long-term archiving format, agreed to by the business, legal, and IT, that meets the organizations compliance and regulatory requirements for reproduction, for the retention period of the content.”

The Problem

Content Services solutions have been around in one form or fashion for decades. Document Imaging and COLD, then Document Management and Content Management. Enterprise Content Management and now Content Services Platforms, with each phase building on its predecessors, evolving through innovation and technology advances and delivering capabilities never envisioned by their predecessors.

But what about the digital content formats? What started as a small mix of industry standards and proprietary vendor formats, today is a litany of digital formats too numerous to count. And like the systems that generate them, these formats have evolved over time. Some have remained consistent, but others have gone through multiple iterations over the years. Mostly, those associated with desktop applications. That presents compatibility issues for the applications and content viewers that create and render those formats. And subsequently, it leads to issues for the enterprises that rely on those formats for their legal records. How do you ensure you have a durable format that will survive the life cycle of your content?

Durable Format

So, what is a “Durable Format”? A durable format is “a long-term archiving format, agreed to by the business, legal, and IT, that meets the organization’s compliance and regulatory requirements for reproduction, for the retention period of the content.”

The Durable Format debate is not new. It’s been going on since digital record keeping solutions first came to market. Even in the early 1980’s discussions were being held asking if the digital format being proposed would be displayable in ten, twenty, or thirty years?

The problem has been compounded by retention policies that have become more sophisticated and lengthy over the years as well. For a time, organizations relied on simple “time-based” retention policies. That is, everything stored today would be deleted after a certain amount of time had passed; usually seven years. That has now evolved to “event-based” retention where some business or life event triggers the retention clock to start ticking, such as life-of-the-policy plus seven years, or life-of-the-customer plus ten years, and each piece of content is retained uniquely, at a record level, rather than in bulk.

Over the years, numerous mitigations strategies have been explored. Most are self-defeating.

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Mitigation Strategies

Over the years, numerous mitigations strategies have been explored. Most are self-defeating. The typical dialogue would go as follows:

Question: How do we ensure we’ll always be able to view this content?

To be safe, we’ll keep a copy of the software that created the content and keep it in our Disaster Recovery site.

What if the operating system changes and the software won’t run?

OK, we’ll keep a copy of the software AND a copy of the OS!”

What if the machine architecture changes and the OS won’t run?

Then ... we’ll keep a copy of the software, a copy of the OS, AND we’ll keep one or two desktops or laptop machines that run it all.

What if the machines breakdown and we can’t get parts?

Ok, then we will archive the digital content for a certain amount of time and just “print” it for long-term storage!

While it may sound ridiculous this is a very real conversation. Other mitigation strategies have suggested things like periodically rewriting the content using the latest version of the software. While this might address the need to periodically update the storage hardware as well, it opens a whole other discussion on potential loss of fidelity across software versions.

So, you’re thinking maybe the answer is to step back and rethink your decision around digital records? That would be an even bigger mistake. The rate of business acceleration has far outpaced the ability of paper-based business processes to meet consumer demand. As AIIM’s John Mancini stated in 2014, “Business-at-the-speed-of-paper simply isn’t compatible with the modern digital enterprise.” You may as well revert to carving on stone tables as your competition leaves you in their wake. So, then what is the right answer?

The right answer is what makes the most sense for your organization given a risk analysis of the exposure and the potential ramifications.

Is There a Right Answer?

The right answer is ... that there is no one single right answer. The right answer is what makes the most sense for your organization given a risk analysis of the exposure and the potential ramifications.

The answer must come from a collaboration between the business, legal, and IT and each answer is unique to each organization:

- You may have an organization where your retention requirements are three to seven years and decide your exposure is minimal.
- Content with the potential to be maintained for extended periods of time may only be a small subset of the overall archive again posing a minimal risk.
- You may determine that the business value lies within the information contained within the content and not necessarily the layout of the content itself. So as long as you can extract the data from the content, your position is defensible.
- You may feel compelled to maintain your content in a manner that allows it to be produced exactly as its printed original.
- Or, that the proverbial cure may be worse than the disease. That is, as an organization you may be willing to risk losing one or two million dollar lawsuits due to your inability to reproduce records to their original quality, versus paying tens or hundreds of millions of dollars ensuring every piece of content in the repository renders to one-hundred percent fidelity.
- In some cases, the decision may be out of your hands. You may be required retain content in its original format.

Whatever the path chosen or the circumstances, at the end of the day it is ultimately a business decision based on the risk assessment.

It is best to share some rules of thumb and best practices that go hand-in-hand with a risk assessment.

How to Move Forward?

It is difficult to recommend a single digital format or group of formats suitable for long-term archiving. There are many. Rather, it is best to share some rules of thumb and best practices that go hand-in-hand with a risk assessment. Here are some things to consider:

- **Long-Term Needs**
Don't just consider the immediate needs but rather consider how long you may have to retain and possibly reproduce the content?
- **Availability of Tools**
Are there numerous other software options on the market that will handle the format?
- **Proven and Prevalent**
How popular and wide spread is the use of the format? This increases the likelihood it will be around in the years to come.
- **Identifiable**
Is the format easily recognizable and identifiable?
- **Consistency**
How stable is the format? Has it changed numerous times over its lifespan, and what if any backwards compatibility issues are there?
- **Technical Specifications**
Is the specification for the format well documented, published, and publically available?
- **Third Party Patents**
Is the format leveraging third-party components that may put its future viability at risk?
- **Complexity**
Is the format overly complex bringing into question its long-term stability?



Conclusion

Not every organization has extended archiving requirements for their content where special consideration must be placed on the long-term viability of the digital format. But for those who see a potential risk, it is important mitigate that risk up front. Dealing with the issue before hand is much easier and less costly than trying to deal with it after you have hundreds of millions of objects in your repository.

Start with a risk assessment. Ensure you have representation from the business, legal, and IT. Map the use cases to the digital formats and identify your exposure. Then determine your appetite for the risk. A little up front due diligence will pay off for your organization in the long run.



About Nuxeo

For organizations that need to make business content shareable across the enterprise, Nuxeo is a cloud-native content services platform that streamlines content-intensive operations, making your business more agile and competitive, lowering compliance risk by protecting the security and integrity of your enterprise content, and empowering knowledge and case workers by simplifying access to valuable business information.

Unlike traditional offerings, Nuxeo has been architected to take full advantage of the cloud and uses a micro-services architecture to deliver elastic scalability and performance.

Nuxeo provides a complete content services platform and includes native capabilities such as:

- **content and asset management,**
- **collaboration,**
- **workflow,**
- **search,**
- **analytics,**
- **renditions,**
- **a configurable user experience,**
- **and the industry's most advanced metadata modeling.**

To learn how Nuxeo's content services platform can improve how your organization manages content, schedule a custom demo with one of our solution architects or download the Nuxeo Platform to try it for yourself.

Nuxeo is changing the way organizations derive business value from their digital assets with our cloud-native content services platform. Contact us at www.nuxeo.com for a demonstration of how we can help you transform your business today.

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