

The Insider's Guide to Alfresco's On-premise and Cloud Deployment Strategies

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EXECUTIVE SUMMARY

Intelligent Information management helps users to find the right data at the right time and in the right context. Running such capabilities on your content on premise is increasingly demanding. Leveraging the cloud to adopt best practices and capabilities prepares you for the challenges ahead.

Cloud enterprise content management (ECM) is one of the biggest trends in business software, mostly due to its flexibility and savings the cloud offers. However, these benefits are often contended because the cloud may not be superior to on-premise ECM in all cases, and are both options mutually exclusive?

With the rapid expansion of cloud services and platform as a service, ECM as a service becomes a very attractive option for small and large companies alike. Amazon AWS reduced customers costs up to 75%, as a consequence of economies of scale and increased competition with Microsoft Azure and Google Cloud. S3 and Blob storage (AWS, Azure) offer storage opportunities to reduce cost, increase durability and leverage geographical proximity. Intelligent services, often born in the cloud, allow organizations to automate content processes, handle large document repositories, and scale day-to-day processes.

The golden combination of managed services, leveraged by cloud scalability, helps to tame the content beast with its ever-changing processes. Constant input and output streams, demanding users, increasing storage needs, and real time processes are the challenges. And the solution? Better managed services for (Alfresco) ECM, leveraged or delivered via the cloud, to lower system engineering cost, reuse operational know-how, and monitor expertise.

Alfresco Digital Platform is one of the top 10 ECM Leaders and this eBook shows how to deploy and integrate Alfresco in an organization's architecture and the pros and cons to consider in an organization's on-premise or cloud-based strategy.

QUICK LINKS

To Different Business Cases

**Deploy Alfresco
on-premise** >

**Deploy Alfresco
to the cloud** >

**Migrate from on
prem to the cloud** >



PART 1

Deploying Alfresco on Premise

Chances are that there are many factors involved in the decision-making process of any ECM solution for large corporations. The likelihood is that every option will go through rigorous scrutiny before being deployed so in this environment no offering will be immediate. Historically, in this space systems have tended to be on-premise, but we will see this starting to change as hosted solutions become more mature.



PROS AND CONS OF ON-PREMISE SOLUTIONS

Regulatory compliance

Enforcing regulatory requirements is easier compared to cloud due to complete control of the environment.

Ongoing costs

The total cost of ownership of an ECM can be more expensive than a cloud-based solution due to the cost of maintaining and updating the supporting infrastructure.

Security and Control

Organizations have full local control of their environment And of their data on their own site. They can utilize existing infrastructure configurations including network and security.

Capital expenditure

On-premise systems usually require a large upfront purchase which means capital expenditure (CapEx) is often required. On top of that, organizations need to include maintenance costs in their budgets to ensure support and functionality upgrades

Fully customization

While cloud solutions offer out-of-the-box functionality, on-premise allows you to customize your software to provide all of the information and applications you need at your fingertips.

Implementation Time

On-premise implementations take longer due to the time needed to complete installations on servers

ECM is traditionally thought of as very expensive to license and extremely costly to roll-out and scale. Also, it often requires expensive hardware and supporting software in the underlying stack. The Alfresco Digital Platform uses an open source business model to dramatically reduce the expenses companies incur while offering a robust, scalable, enterprise-class solution.

For Enterprises, Alfresco has the following benefits:

- Alfresco is a platform with very strong document modeling capabilities which allows you to run processes around your documents and scale up these numbers relatively easy.
- In addition, Alfresco can use Caringo Swarm and other low-cost storage platforms which help to deliver lower costs.
- Alfresco offers greater simplicity - Rapid deployment delivers immediate business value in as little as one/two months depending on the volume of documents on premise.
- Alfresco also offers greater customer choice by reusing existing hardware, software and skillsets.
- Enterprises are not locked into one ECM vendor or one stack.

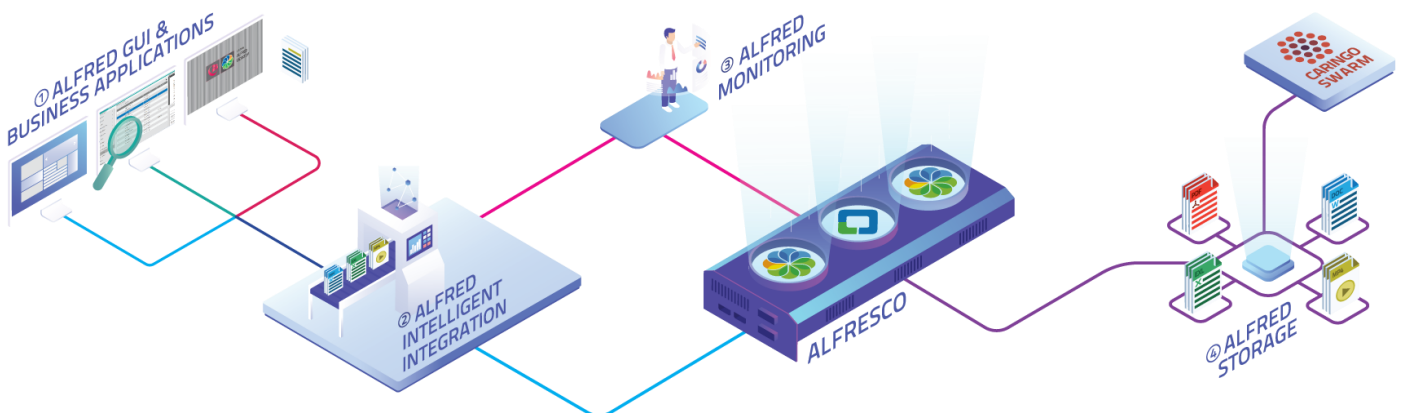


The On-Premise Deployment Process

Deploying at any customer base always creates unique instances, especially when best practices have not been undertaken. However, our engineers understand that some customer deployments bring constraints like outdated software versions and legacy systems whose challenges can cascade over time.

To overcome these challenges, our engineers provide solutions including our Alfred Software Suite, which provides proactive monitoring and an intelligent API management layer, which makes decoupling Alfresco's façade more manageable. In addition, our API component makes backward compatibility issues easier to manage with some legacy systems. Our Alfred API is easy to integrate into Alfresco, making it more protected and stable. As a result, managing Alfresco's integration into your business applications is more feasible.

ALFRED SOLUTION



1

Consulting and customers data mapping

Xenit consults with the customers to understand what type of physical or virtual machines they use to run their business applications (typically Alfresco runs on CentOS and Postgres or MySQL/Oracle). We advise whether they need updated hardware so that they can have optimal caching and responsiveness. Next, we look at the Active Directory through LDAP or other protocols to sync and authenticate users. Then we make an assessment based on how many documents they have or will create to determine what type of storage they may need. Typically, a standard repository can be used for below one million documents, but for above 10 million, customers will need to take into consideration object storage which is much cheaper, requires less maintenance and can be scaled easily.

2

Defining the architecture and document model

During the next phase, Xenit works closely with the client to determine the document model based on customizations the customer requests. We consider the overall setup based on the number of requests Alfresco will receive. We then decide if this load will require multiple cores, sharding or a cluster setup. This load is often related to the number and size of documents which impacts the databases like Solr, business application integration and company policies like uptime and redundancy. Customization of Alfresco is also undertaken during this phase, which could include desktop sync, share UI customizations, and server configurations.

3

3. Deploying Alfresco

After we have completed all initial estimates, the project is then setup in sprints and environments are setup (testing, acceptance and production). We define what is MVP (Minimum Viable Product) in production. Once we meet this goal, we have some users loaded into the system so we can use it. The next set of sprints are used to include features that were not in the MVP. The end of the project begins when the customer has Alfresco up and running and Xenit begins to carry out our Service Level Agreement (SLA) with the customer. The SLA could include security monitoring, Alfresco upgrades and proactive monitoring, but it depends heavily on the customer's needs.



70 million documents managed
in Alfresco, with 10 to 20 million
documents being added annually.

Since 2008, the Ethias team has used Documentum for their document and email archiving needs, hosted by service partner NRB. However, they faced high recurring costs for low added value as Documentum main function was to serve as a storage system leveraging only basic content management capabilities. The migration from Documentum to the Alfresco Digital Platform was simplified with Xenit content streaming tool and NRB export routines, which transferred over 57 million documents to Alfresco in under 3 months.

Deploying Alfresco to the Cloud

The main benefit of an organization hosting its solution in the cloud is that it allows the organization to focus on the most important functions of its business. In periods of rapid growth, the back-end operations of a business expand and require a high expenditure on technical resources. When an organization allocates more resources to maintaining its infrastructure, it has less budget to provide quality front-end services. Hosting frees up more of its resources so that it can use them where it counts. Lastly, the cost for deploying an organization's own infrastructure is more significant



PROS AND CONS OF CLOUD SOLUTIONS

Costs

There are no hardware costs and no maintenance with a reduction of total costs of ownership.

Customizability

Enterprises cannot fully customize the ECM to their specific needs

Accessibility

It is easily accessible from anywhere on any device. For remote workers, an internet connection is all that is needed. In addition, remote workers will not run into intermittent connectivity issues like those often experienced on a VPN.

Connectivity

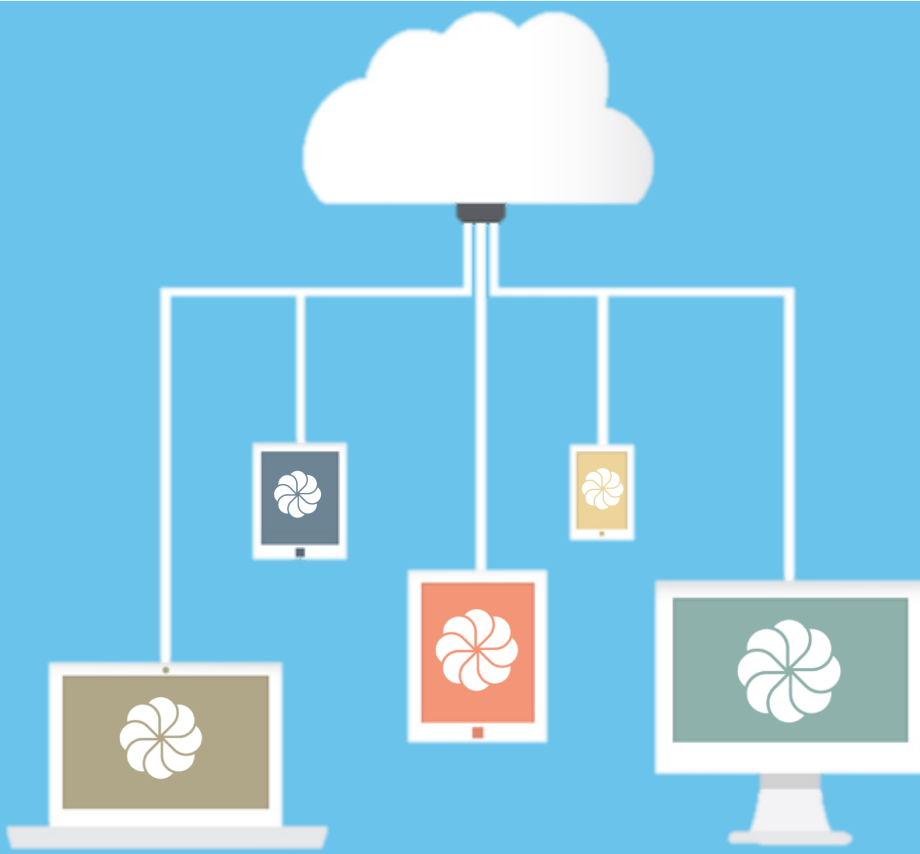
If the Internet goes down on the client's side or on the client's cloud provider's side, the client will not have access to the repository.

Integration with cloud capabilities and services such as identity management, Machine Learning, Digital signature.

Integration with on premise applications such as LDAP, Active Directory, vertical business applications

Xenit's Hosted ECM platform helps enterprises tease the burdens of network management, capacity planning, software installation, server and storage configuration, and application management. Our cloud customers benefit from higher uptime, faster deployment, reduced capital investment, lower total cost of ownership, and predictable costs. Additionally, our cloud provides comprehensive SLAs that guarantee security, availability, and performance. Clients receive:

1. Better uptime and Quality of service; on premise users of Alfresco average 98% uptime while Xenit can guarantee 99.9% (with Alfred and an Advanced SLA).
2. The ability for Xenit to deploy their Alfresco to the cloud (Private, Hybrid, AWS or Azure)
3. Reduced cost of ownership of running and maintaining Alfresco between (5-25k) based on:
 - a. Single points of failure eliminated with active monitoring enabled
 - b. Active backups and DRP protection make your content safer
 - c. Dedicated Alfresco experts using best industry practices
 - d. Reduced deployment time because of standardized architecture



The Cloud Deployment Process

One of the major concerns associated with cloud computing is its dependency on the cloud service provider. For uninterrupted and fast cloud service at the best cost/benefit ratio, we choose Hetzner (see annex A) as one of our platform providers. The flexibility and DRP capabilities at Hetzner allow us to craft a powerful content-as-a-service offering at optimal costs, ideal for SME customers. Hetzner consistently offers extremely powerful hardware at affordable prices, allowing us to scale Alfresco to our customers' liking. Moreover, Hetzner provides proper infrastructure and technical expertise which ensures that data security and privacy are maintained. They also employ strict data security policies to prevent hacking and invest heavily in improved infrastructure and software.

At Xenit our cloud solutions provide a secure data recovery plan (DRP). As the cloud continues to mature, the possibility of data loss is high, so we make sure that each hosted installation has a secure backup of the data across multiple hardware devices. Cloud encryption is critical for protection. It allows for data and text to be transformed using encryption algorithms and then placed on a storage cloud. Xenit ensures that the movement of data in the cloud is protected.



Public Cloud (AWS, Azure)

- Cost effective
- Easy deployment
- On demand scalability
- Reliability
- Continuous Uptime
- Zero maintenance



Private Cloud (Hetzner)

- Higher level of data security
- Less risky
- Compliance
- Reliability
- Agility
- Efficiency

1

Data mapping and extracting

After consultation, Xenit will determine the best metadata model based on the rules of the business and the environment they operate within (Government, Finance, Insurance etc.). This is practical for Xenit since we can then automate and extract metadata, invoice numbers, and other information aspects for processing and importing. We also export associated content from other third-party business applications such as SAP and other BPM applications that store invoices, receipts and contracts in a structured format. Also, it is important that we know the order of volume and size of the documents within the environment because this decides the type of hardware that they will need to run optimally.

2

Defining the architecture and document model

Next, we import. The company's operating environment is analyzed so that they can maintain a familiar working method and interface (Share, ADF, portal interface, integrations into business applications). Additionally, we import documents with features such as logic that maps the rules of the business on to the meta data and create a logical folder structure based on this information.

3

3. Deploying Alfresco

The last stage of the project is helping the client move into a production environment. We create a sprint that delivers the project by iterating until the production is accepted. We then begin to test and validate security, user access (LDAP, SSO) in the cloud environment. Once the customer validates that Business Processes work, they can then begin to upload content with Alfresco Share or Alfred Desktop, if they use the Alfred product suite.



Increased productivity and collaboration with Xenit, Alfresco and Amazon Web Service.

A global leader in HR staffing, USG People, manages a lot of documents in its day-to-day operations, which include on boarding, contracting, payroll, billing and much more. Before adopting Alfresco, USG People Belgium had no enterprise content management solution in place and struggled to manage all of these documents across its 100 to 200 offices. USG People Belgium chose Xenit and Alfresco based on an open architecture, functionality and experienced and established partners community. In alignment with USG People Belgium's corporate strategy to move to the cloud, the Alfresco platform was migrated to Amazon Web Services in 2016. Since implementing Alfresco, overall productivity and collaboration has increased because everything is now in one central location and users can access the information they need with a single click.

Migrating Alfresco from on-premise to the cloud

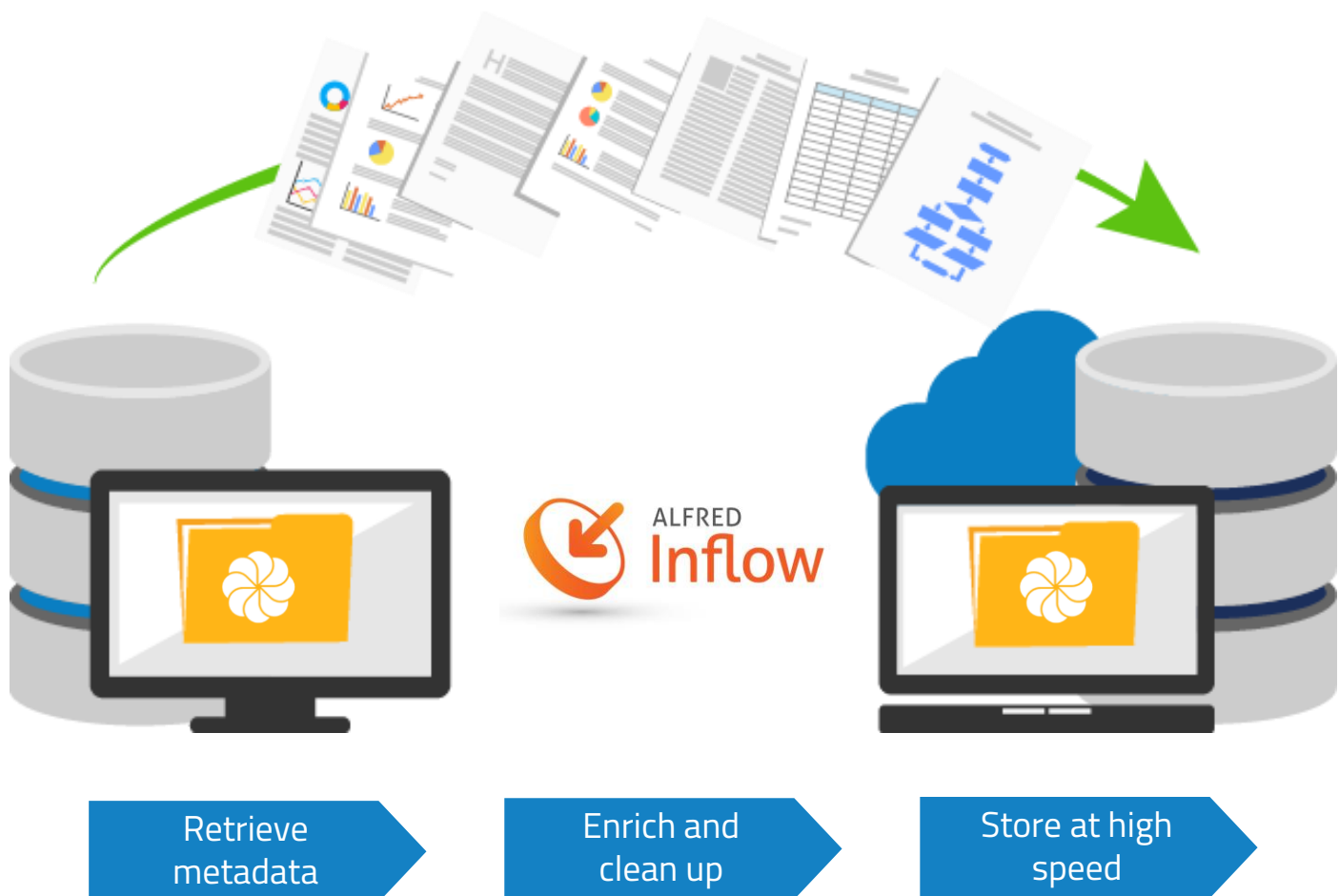
Hosting is a smart way to help organizations grow and scale while saving money. If an organization is considering deploying its Alfresco to the cloud, it is important to understand the various benefits—for both the organization and its customers. However, the process begins with migration. Migration is a highly customized project depending on the customer's Alfresco configuration. This is because the on-premise architecture could have customizations and a unique document model. As a result, the cost for a standard migration project is about 30 (man days) on average

The most obvious advantage of hosting in the cloud is the cost savings that it enables. The organization's business is no longer responsible for back-end processes such as technical support, upgrades and the maintenance of its Alfresco service. It can perform its core business functions at a lower cost while having more time and resources to do it well. In some cases, the cost of back-office functions is completely removed, and the organization could downsize its IT team or redirect them to other areas of the company.

However, the advantages of Xenit's Hosting go beyond simply cutting costs. Organizations also gain access to a dedicated team with decades of Alfresco and industry expertise. As a result, an organization's Alfresco will be more resilient because of our engineering experts, and the organization's IT resources do not have to worry about managing Alfresco. This can be seen as major cost benefit since the organization's IT resources can be allocated towards bottom line activities.

By outsourcing and improving a company's Alfresco with Xenith's offerings, the company can continue to provide high-quality deliverables while decreasing lead time. Our data centers are also pre-configured for Alfresco which allows for faster deployments allowing the company's products or services to reach the marketplace within an estimated 4-8 weeks, however, the number of documents in the company's repository must be first considered.

Migrating Alfresco from on premise to the cloud with Alfred Inflow



There are considerable pain points with growing a company's ECM platform. It may have clunky interfaces, poor support for collaboration with external partners, difficult to set up shared areas, no mobile device support, and limited remote access.

Alfresco's high available cloud setup at our data center in Germany provides clients with the ability to scale their Alfresco in a high capacity environment. Comparing it to on-premises solutions, a lot of the traditional IT operations tasks such as setup, backup/restore and monitoring are simplified in serverless solutions, resulting in a decreased operational cost.

Organizations of all sizes and industries have embraced content management in the cloud. That's because IT can innovate faster, more cheaply, and with greater agility using a [cloud-native content services platform](#). The benefits of delivering ECM in the cloud include:

Reduce TCO: Save big with elastic, low-cost compute and storage resources; eliminate the upfront infrastructure investment and pay only for the capacity you use.

Accelerate Time to Value: Implement in weeks, not months; avoid provisioning delays and quickly roll out new use cases with shared content services that scale on the fly.

Modernization: Innovate in ways never before possible with cloud-first content platforms that use modern architectures and approaches; advance digital transformation initiatives.

More Value from Content: Make enterprise content available to more people and more applications; use machine learning technologies and other AI services against a central, curated content store.

Better Collaboration: Support a mobile, distributed workforce that shares and co-creates content with internal and external partners; improve information flow and decision making.

Stronger Information Governance: Leverage the considerable security and compliance investments made by leading cloud providers; regain content control by fending off shadow IT solutions.

1

Consulting and customers data mapping

Starting at the source's on premise Alfresco, Xenit analyzes the content model or any customizations including any nonstandard Alfresco code (i.e. custom workflows, UX enhancements or 3rd party integrations). Customization may affect costs and deliverables so typically after a consultation phase, the amount of work is estimated. Xenit will also analyze the total number of users and documents, as well as provide an analysis of the physical and virtual machines needed to run the setup.

2

Defining the architecture and document model

During the next phase Xenit will setup a vanilla Alfresco in our hosted environment with our Alfred solution that includes API management and proactive monitoring. We then begin to migrate content, databases, and xml files. Quite often, we are also tasked with converting database formats (from MySQL/Oracle to Postgres or vice versa). We also transfer the customizations and content models by porting them within Docker images. We then review the integrations within our different (Test, Acceptance, Production) environments.

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Benefits of hosting with Xenit

As a trusted and certified Alfresco partner, our mission is to empower Alfresco users, by providing them with the right platform to power their Alfresco. Our tools provide:

- **Quick Deployment** - Taking control of an enterprise's content is not a long process anymore. We configure, install and manage its Alfresco, for a quick start of its process modernization. **Xenit can migrate archives of one million documents in 4 weeks, 10 million in 8 weeks and 100 million in 12 weeks.**
- **Business Agility** - As an Alfresco partner, **we have the expertise to design and build document models that scale over millions of documents and thousands of users;** ensuring that all documents (invoice process, contracts, sales proposals) are available to all users.
- **Alfred Suite** - Through our Alfred products, organizations can finally empower and manage their Alfresco in an intelligent and agile way. Each installation comes with access to the entire suite of Alfred products. Alfred allows an organization's Alfresco to have new evolutions **by providing a stable API that can protect it from compatibility and version upgrade issues** so it have less down time. Alfred also increases productivity by lowering the time needed to search for and find documents. **Alfred even allows thousands of documents to flow into Alfresco seamlessly without degrading performance.**
- **Managed services:** Xenit's offering can be considered as "Managed Services as a Product" since we combine our SLA with our Alfred solution. We bring:
 - Alfresco ECM **agility** (easy upgrades with stable API, non breaking model changes)
 - 99.5 or 99.9 % **availability**
 - query **performance** of 3 seconds or less return time for 95 % of requests.

Thank you

VISIT OUR
WEBSITE

BOOK SOME TIME
WITH US