

ethias



A very Large
active Archive

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- Marc De Vriendt, Service Delivery Manager at NRB



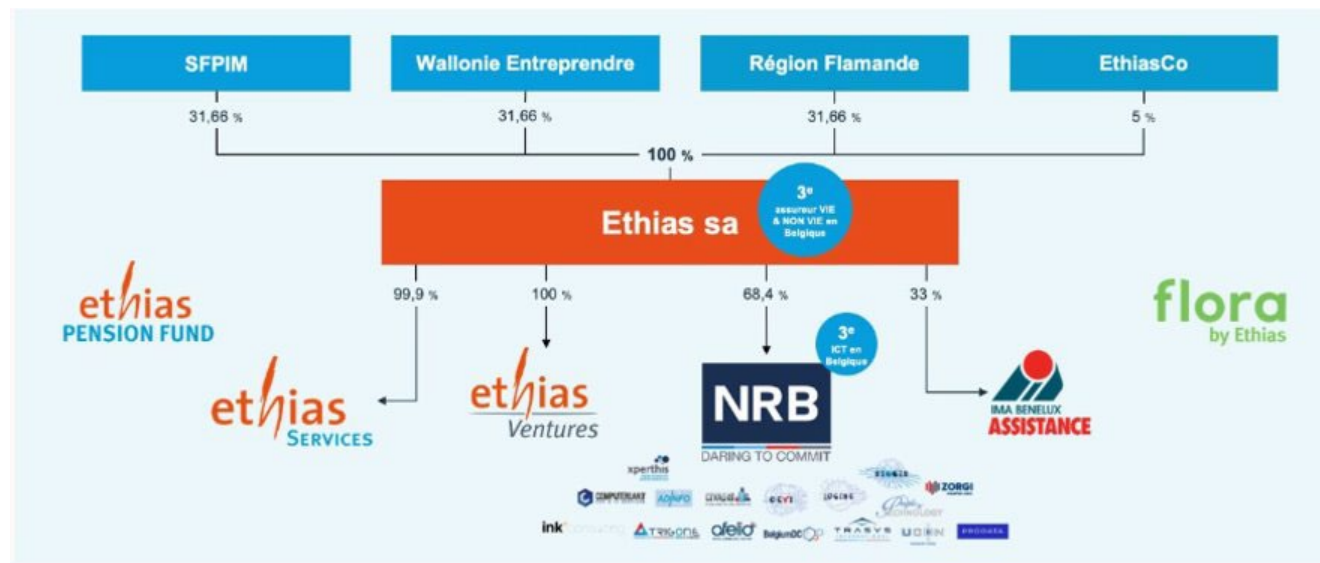
ethias is Belgium's favorite brand in the insurance market

Les awards 'Best Brands' récompensent chaque année les marques préférées des belges dans 21 secteurs d'activité. Cette année, nous sommes fiers d'être les **n° 1** du secteur de l'assurance !

[#ProudToBeEthias](#)



About ethias

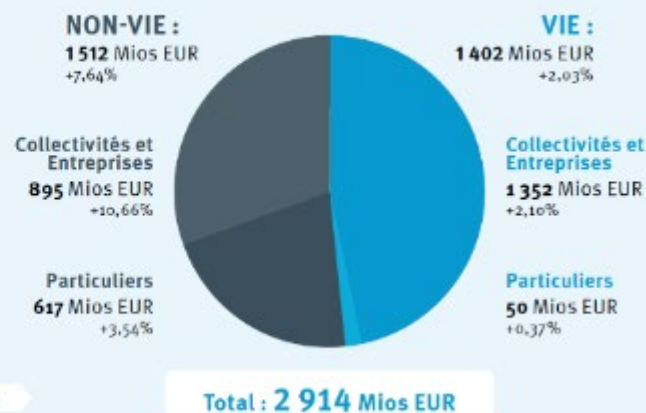


TURNOVER

2021



2022



TOP 3

OF THE ICT SECTOR IN BELGIUM



KEY FIGURES 2022

505,4 million
EUR
TURNOVER

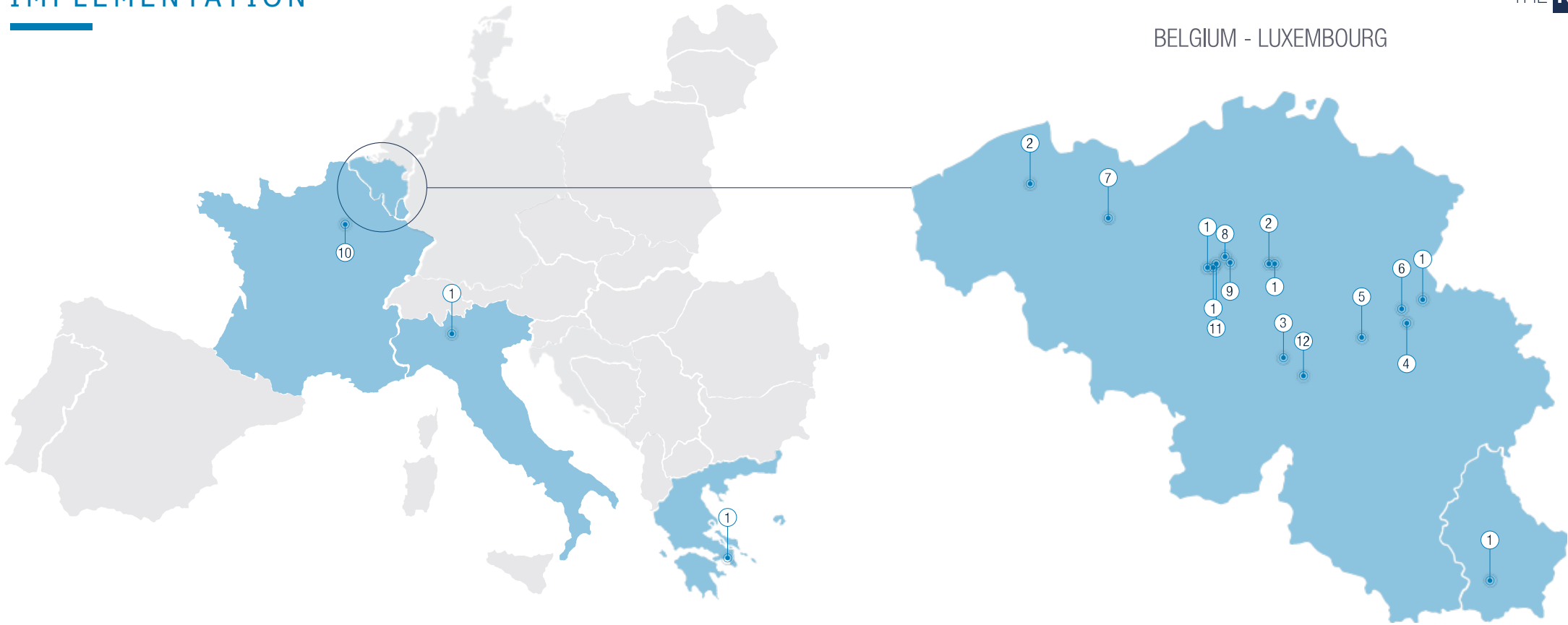
+ 3450
COLLABORATORS

38,5 million EUR
EBIT

46,1 million EUR
EBITDA

IMPLEMENTATION

BELGIUM - LUXEMBOURG



- | | | | |
|--|---|-----------------------------|------------------------------------|
| ① NRB
DARING TO COMMIT | ④ afelio
DIGITAL EXPERIENCES CREATORS | ⑦ CEVI | ⑩ TRIGONE
USER S'ENGAGER |
| ② ZORGI | ⑤ BelgiumDC | ⑧ SIGGIS | ⑪ ink'consulting |
| ③ CIVADIS
IT SOLUTIONS FOR LOCAL AUTHORITIES | ⑥ COMPUTERLAND
ERP & IT SERVICES | ⑨ PRODATA
SYSTEMS | ⑫ win |

OUR SERVICES

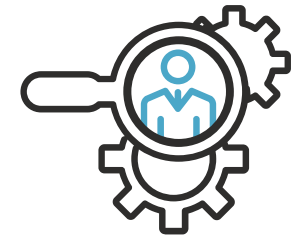
CONSULTING &
COACHING



DIGITAL
TRANSFORMATION &
INNOVATION



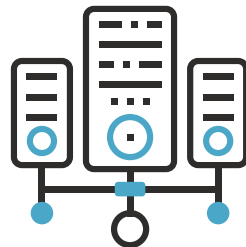
MANAGED
STAFFING



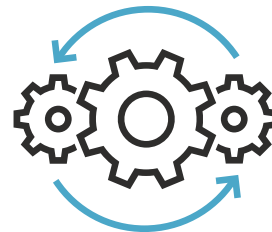
MAINFRAME



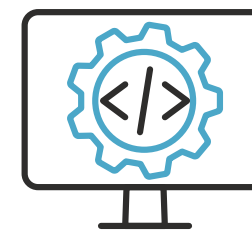
DISTRIBUTED
INFRASTRUCTURE &
CLOUD



SOFTWARE



DEVELOPMENT &
IMPLEMENTATION



SECURITY OF
OPERATIONS



About Xenit

Alfresco Partner since 2007

- Leuven based 
- 100 years of accumulated Alfresco experience
- 30 Alfresco customers
- scaling specialist
- Operational excellence & Managed services
- Alfred tooling for human and process integration
 - Inflow, Alfred API, Alfred OPS, Object Connector, Edge
- We take care of 400 million documents in Alfresco
 - 176 M for Ethias



Some Xenit Customers



OXFORD
UNIVERSITY PRESS



ethias



CREDENDO



The business case

2016: Documentum archive at a high cost

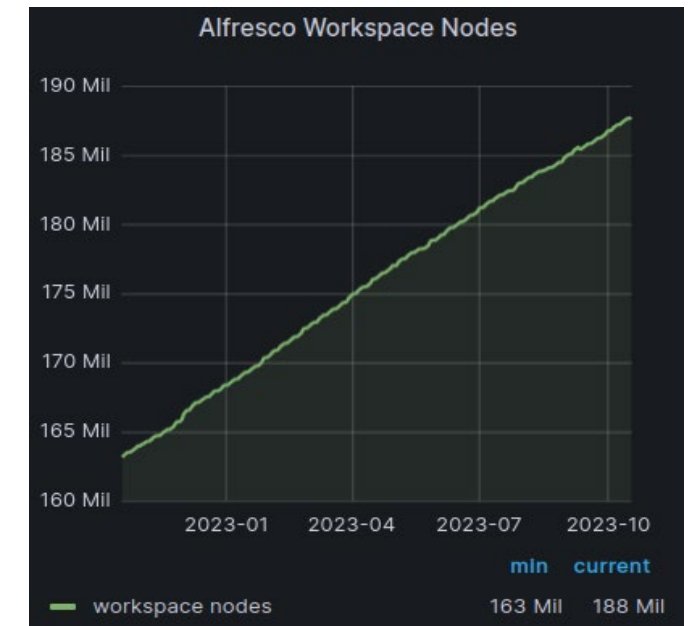
- Initial migration: 60 M documents & emails
- Strong security requirements (OWASP 10, ..)

Current Archive : about 180 M documents

This generates today about 2 Million documents per month

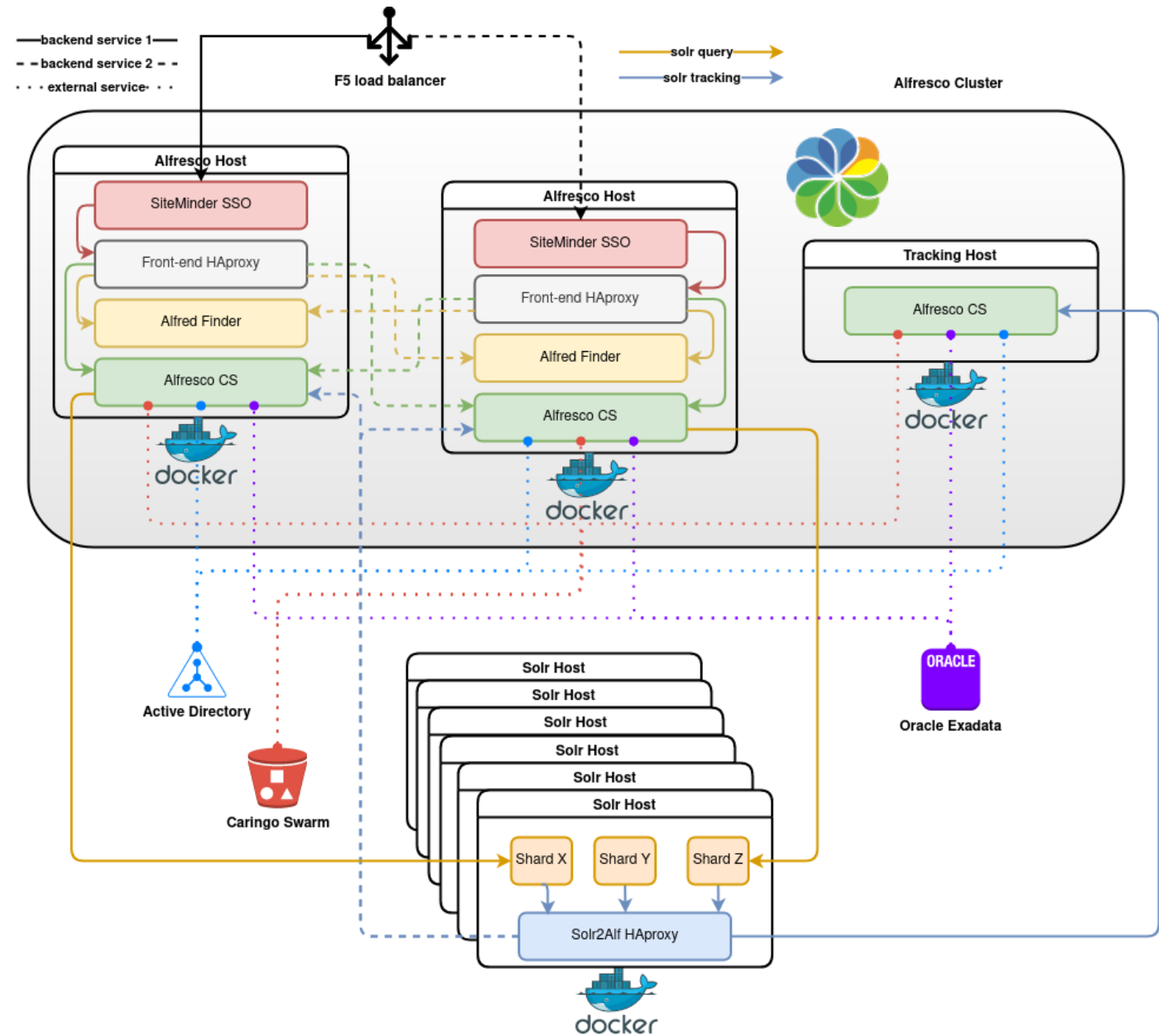
- Comes from 1 million in 2017

Type	Count
billingDocument	8
claimDocument	91,815,104
contanaDocument	545,248
otherDocument	5,376,749
partyDocument	12,456,737
policyDocument	66,090,309
salesProductMarketingDocument	269
-----	-----
Total	176,284,424



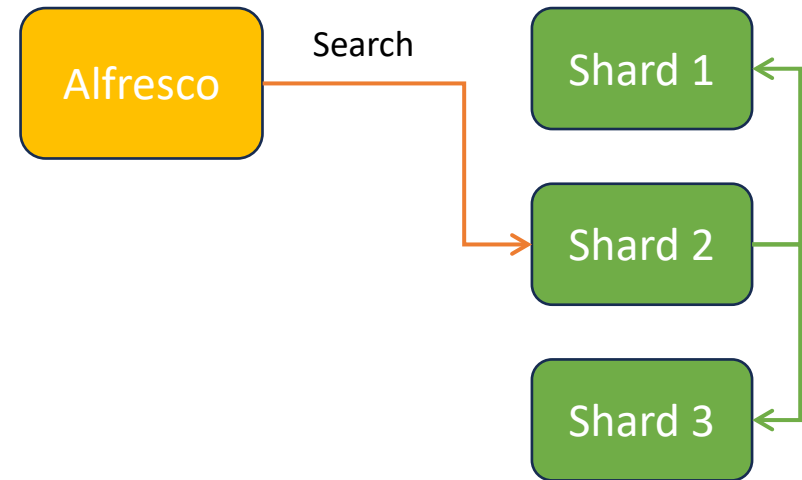
Architecture

- 1 Alfresco cluster, 3 nodes
 - 2 nodes serve the business
 - 1 tracker node for SOLR
- SOLR sharding for search scaling
 - 6 nodes
- Object storage 'on premise':
Datacore Swarm
- Foldering structure to partition documents over time (subfolder / minute)



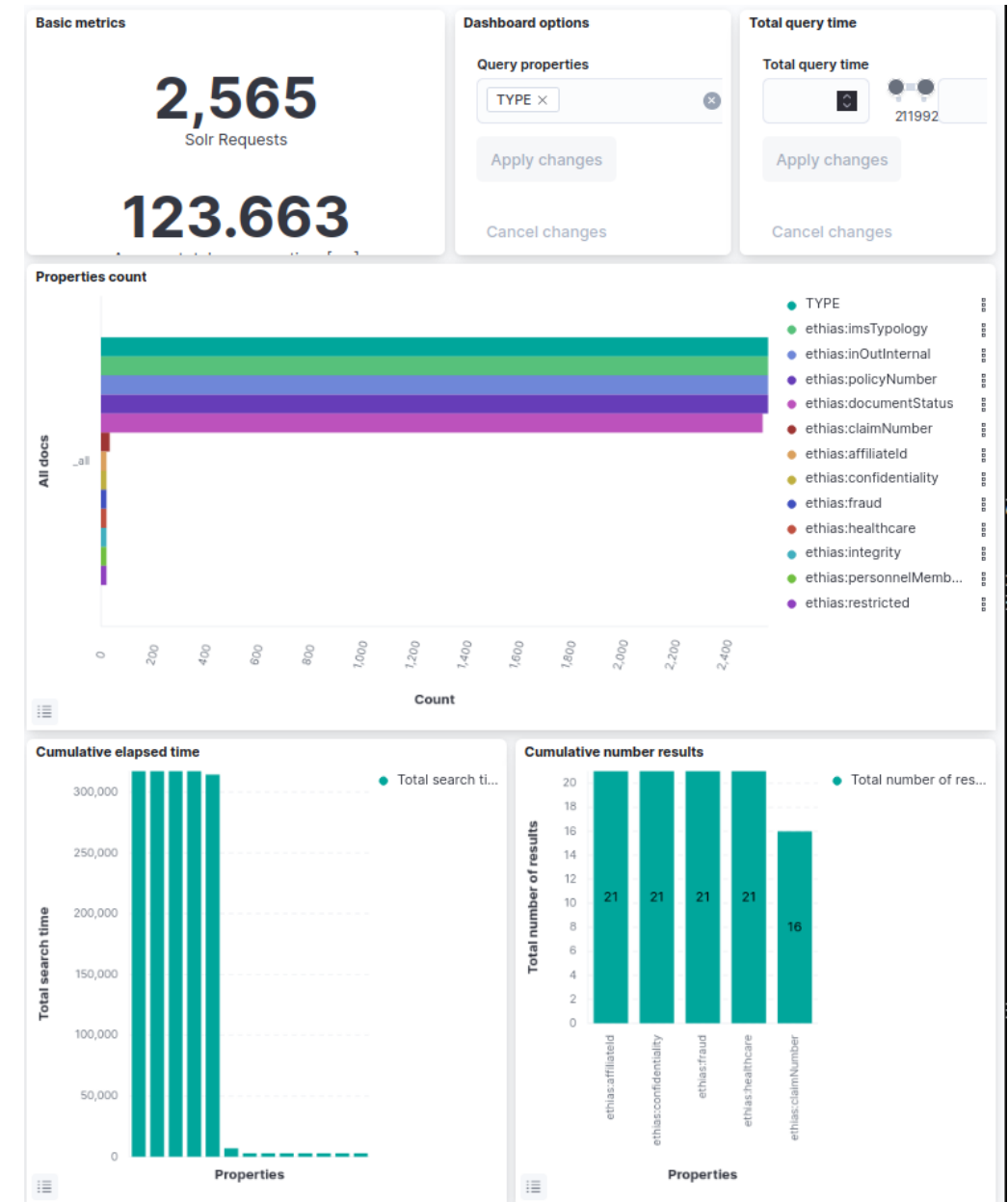
Sharding Scales

- We do use the search power of SOLR, even in this large archive
 - No full text index
 - Archive case: not a lot of deletes
- Our objective:
keep search response times stable *whatever the size of the index*
 - 95 % of queries within 3 seconds (end to end)
- *Achieved with sharding: index is split in multiple stand-alone pieces*
 - 9 shards, 2 instances per shard



Sharding Scales seamlessly

- Sharding technique: dbid-range
 - 25 M “nodes” per shard
 - Reasons:
 - can add shards without reindex
 - Predictable size of shards
 - Predictable load
- Growth rate is +- constant -> can predict when new shard is needed
- When max DBID is reached, new shard picks up gracefully and indexing continues
- Performance monitoring via Alfred tooling; i.e. Solr analytics
 - Time spent per shard
 - Cost of coordination
 - Attributes used in searches: policyNr, status, claimNr
 - ...



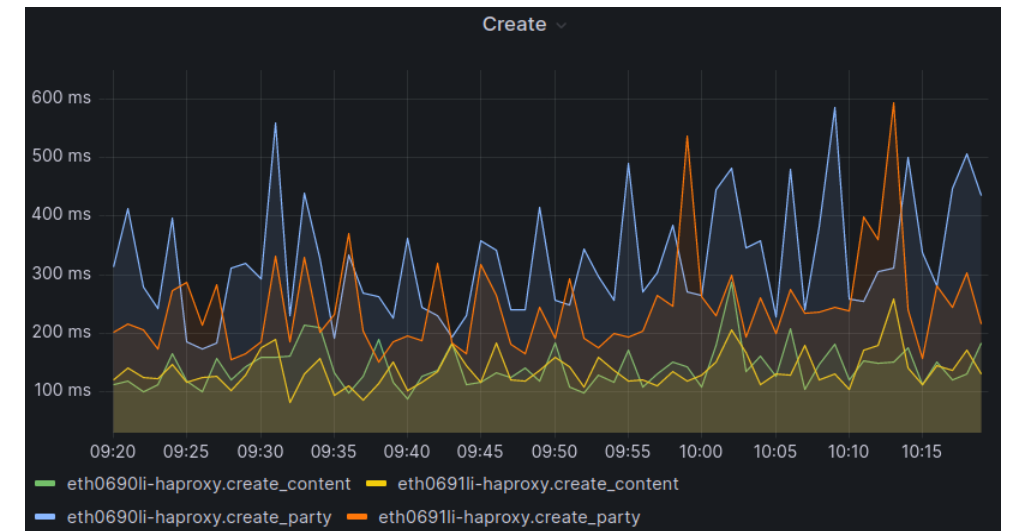
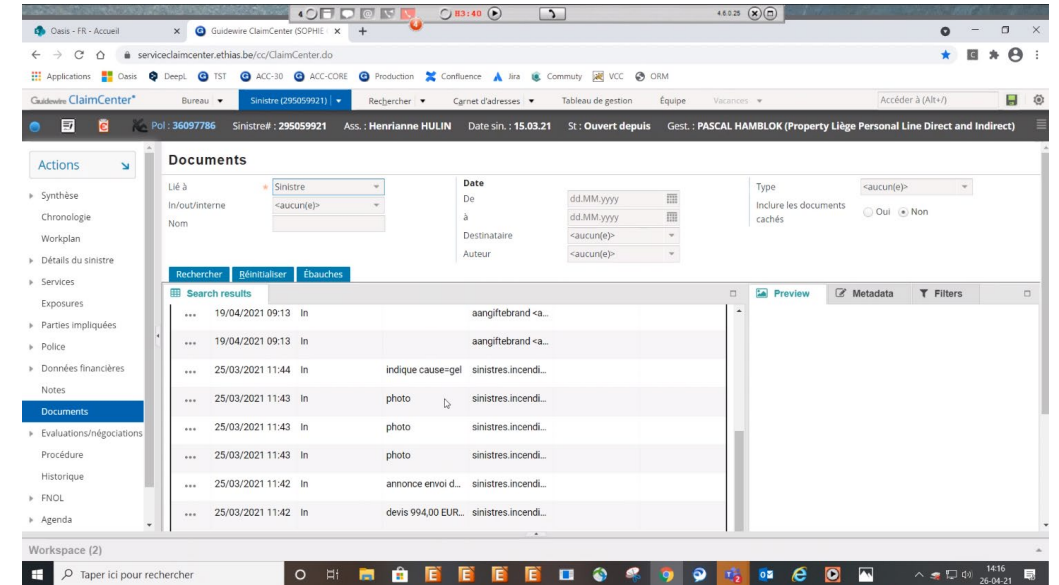
Security

- Integrates with CA SiteMinder and AD for authentication
- ABAC module for a.o. GDPR compliance
example:
 user: policy_confidentiality: Internal
 doc:
 type: policy
 confidentiality: Confidential
 -> no access
 attributes: healthcare, restricted, fraud, ...
- Content Encryption at application level (i.e. Alfresco level)



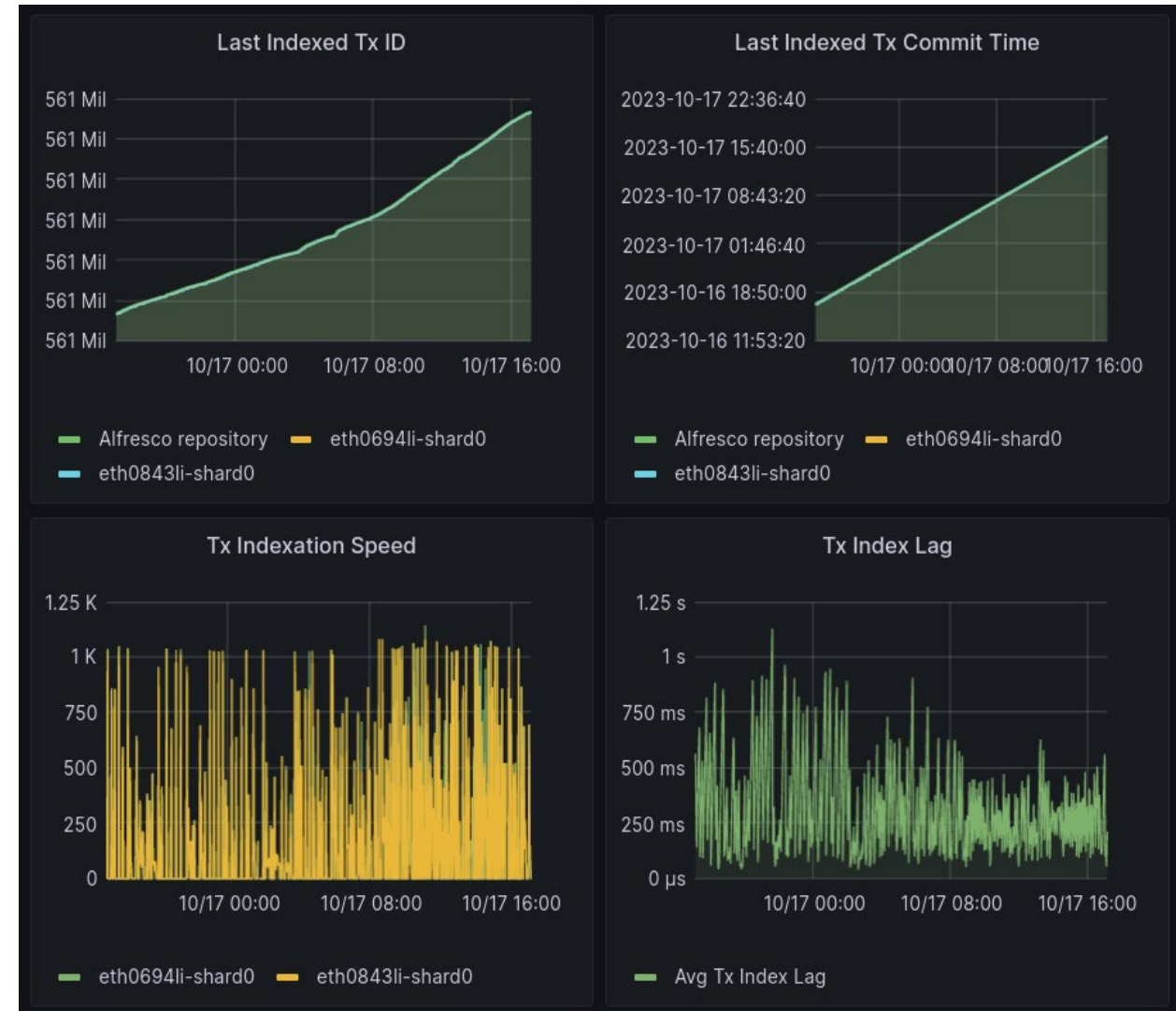
Alfred products used

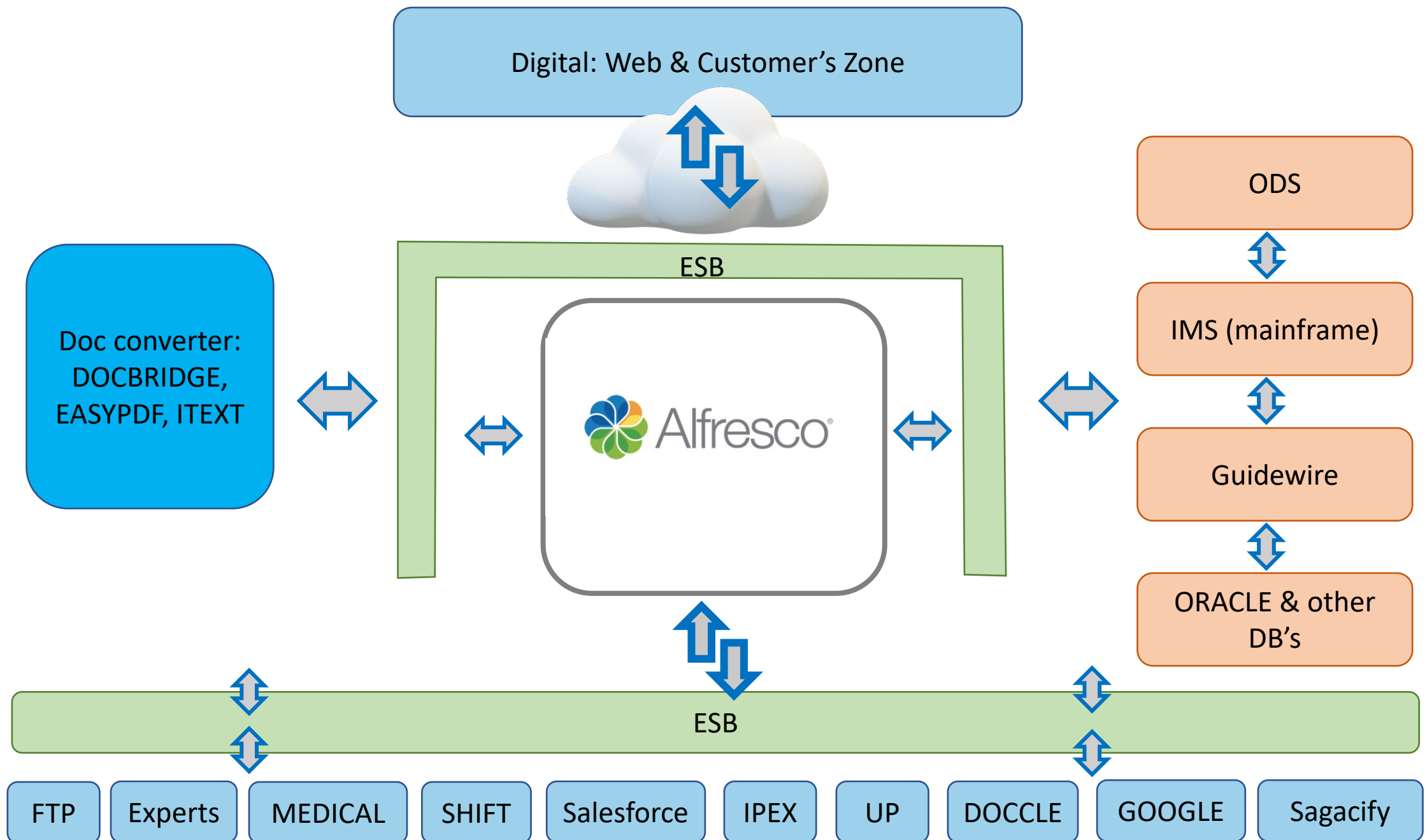
- Alfred **Finder**: finding your claim documents
 - integrated in ClaimCenter
- Alfred **Object connector**: interface to the Swarm object storage
- Alfred **Inflow** for initial migration of 60 M documents
 - Can bundle write operations in larger batches
 - Full reporting
- Our **OPS** stack with lots of metrics and alarms to keep the machine running



The Service Level

- Monitoring with open source
 - Alerta
 - Graphite
 - Elasticsearch
 - Grafana
 - ...
- Automated SLA report
 - Tickets JIRA & cycle time
 - KPI's
 - Growth over previous 13 months





Service Integration and Management (SIAM)

Governance

- Strategic meeting
- Service level review
- Operational follow-up

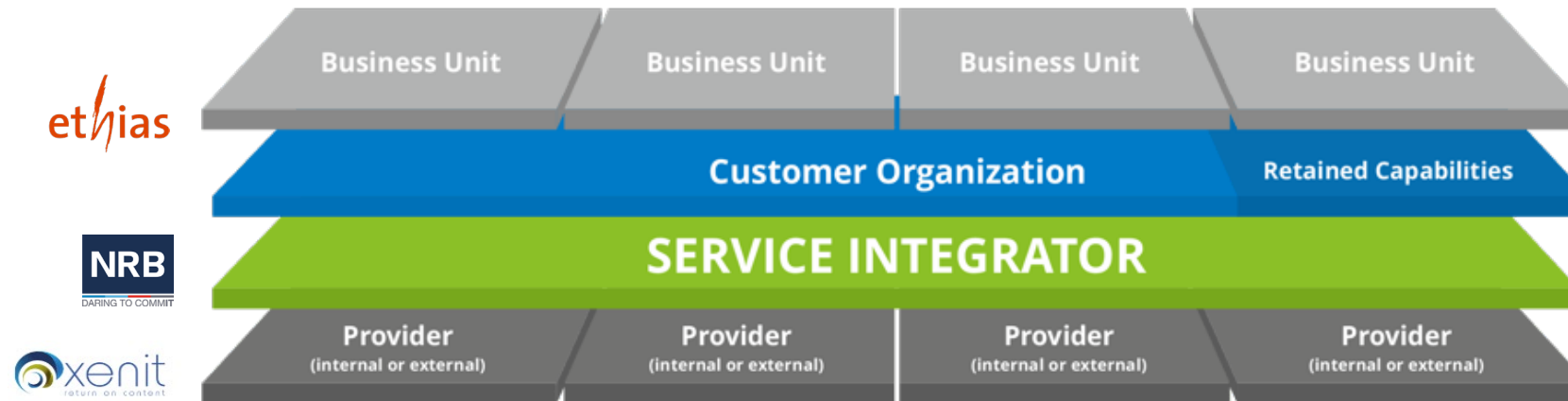
Right people at the **right place**

Fair and **fluid communication**



XENIT & NRB Managed Services

- SLA
- KPI
- KPO



Future Plans

- New storage service
 - Facilitated by Alfred object-storage connector: supports S3 and Datacore SWARM
- Upgrade to Alfresco 7.X (4)
- Current architecture is dimensioned up to 225 M documents

