

Intelligent File System

No re-platforming
 High performance, always on
 Storage metrics (rightsized)
 Compliance and regulatory
 Automatic deep storage
 Notification systems
 Machine Learning
 Summarize this doc
 Find related docs
 Find an expert

Data analysis to monitor
 (in)active users and each
 team members productivity



Track anomalies
 Are there duplicates?

Parent nodes

Engineering Projects

Civil Engineering

Project admins can
 request read-only access
 to Civil Walmart Fresno folder
 (adds shortcut to MechE folder)

Cellphone access

Can access team folder contents
 Cannot access matrix encrypted files

Data located on cloud nearest to end users

Reports on capacity under management

Can be immutable data blocks
 Will just need more storage



Los Angeles

London

Data is replicated for fail over and backups



Dallas
 "Files at the edge"

Company

Engineering Projects

Mechanical Engineering

Project - Walmart - Fresno

Team Member Folders

Each team member
 has a private "draft" folder

Search.html

What's New.html

Find Company Experts.html

My Profile.html

Help.html

Some project team members
 may have full access to both
 civil and mechanical folders

Non team members cannot
 add files to MechE folder

Super Admins have access
 to control panel to add new
 projects to file system

Team members added
 when project setup and
 each gets a private folder

If team member wants
 credit for work done,
 must move private file
 to the project folder

Right click on any document

- Email a link to this file
- Rollback to previous version >
- Move to deep storage
- Request editor access
- Find related documents
- Summarize this file
- Increase Security
- Lock this file to only me
- Find an expert

If ransomware in Dallas
 Entire server will rollback
 Happens very quickly

If a user makes an error,
 can rollback a single doc

Docs not accessed for X days archived

Document author decides whether
 to grant access or make a copy of doc

Also searches what's in deep storage

Ask admin if you need to have a file pulled from storage
 Can save a search and be notified when new matches

Defaults to search current folder
 Full text search of documents
 User can go up a level and search

Automatic metadata tagging

What's new in MechE folder?
 What's been recently updated?
 What's new in engineering projects?

Can also be sent in
 a weekly email
 to team members

Increases switching costs
 Employees get used to emails
 Tells them how project is progressing

Classification Model
 Docs mined for concepts
 Connected to authors
 Identify experts

What does model believe
 is my expertise?

When a new project is added,
 html files automatically added

How do I use this intelligent file system?
 Video tutorials and general help text
 Great for new employees coming up to speed

Machine model reads
 and summarizes
 document text

Matrix/Lattice Encryption
 Cannot be broken by quantum

To make file unhackable, will
 need to have a key on local machine

If you want to access from different machine,
 will need to apply for a second key
 (make a business case)

Classify documents across enterprise
 Then look for similar authors

Assign them an expertise rating
 in various parts of the overall taxonomy

Software Engineering
 Database Development

Companies setup nodes on development servers
 Coders do nightly code and database tables
 Backup folders are monitored by Intelligent File System
 Code and data backups are replicated in cloud
 Coders can rollback a server if it's hit with ransomware

Code/data can be encrypted to server key

