

# Alfresco at University of Zaragoza

## A history of (open) conversation

José A. Gutiérrez

Systems Analyst at University of Zaragoza

Angel Borroy

Developer at keensoft

# The history



## Protohistory

When Alfresco was born

4.2.c



## Middle Ages

Fighting against the Elements

5.0.d



## Machine Age

Finding automation paths

201605



## Information Age

Plan for World Domination

201704





# Protohistory

\_\_\_\_\_

# When Alfresco was born

*Little history about Alfresco in the University of Zaragoza till 2014*

- *Early 2013: First installation: National Security Framework (only one site)*
- *Installed by Central Services Staff*
- *Main blocking problems detected (LDAP synch...)*
- *End 2013: General Secretariat request a custom development for document management*

# When Alfresco was born

## *Setup of the current system*

- *September 2014: Installation of a development server with Alfresco 4.2.c*
- *October 2015: Setup as production server with Alfresco 5.0.c*
- *Access: Alfresco Share / WebDAV*



# Strange users requests

## File Server

### *Request*

Use Alfresco as a pure file server ("shared folder")

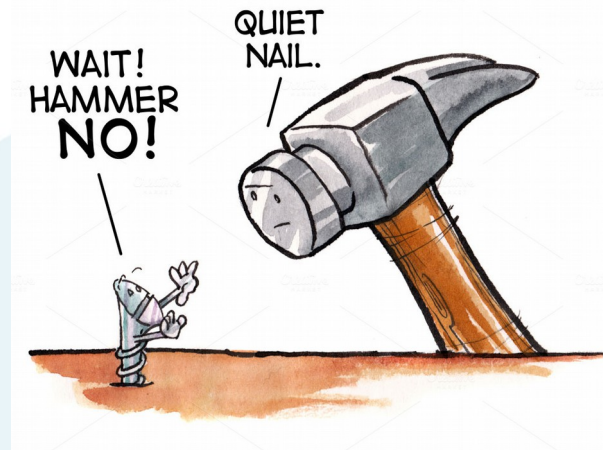
- Current fileserver at the University can't be integrated with our LDAP server
- Alfresco makes it easy to delegate management of access and permissions

### *Response*

This is a Bad Idea. It is better to fix the server than using an inappropriate tool.

### *Lesson learned*

The customer is not always right



# Strange users requests

## Web Server

### *Request*

Use Alfresco to make some documents available in an intranet.

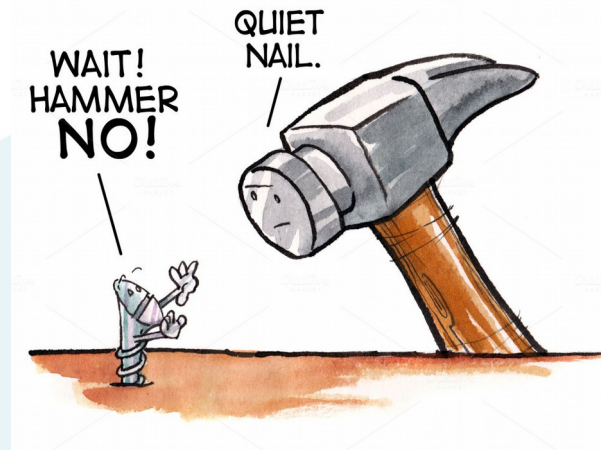
- User already knows how to limit access using Alfresco

### *Response*

This is also a Bad Idea. Learn how to administer your existing web content management system instead.

### *Lesson learned*

Users should be informed about what they can already do, and about what Alfresco is for.





# Middle Ages

2014



# Fighting against the Elements

## Element 1 : LDAP

### *Request*

We use the ou=Accounts branch to authenticate and to lookup uidNumber, and then the ou=Admon to get the businessCategory, which is used to limit access permissions.

uidNumber -> uid=\$uname,ou=Accounts,dc=unizar,dc=es

uid=\$uidNumber,ou=Admon,dc=unizar,dc=es

### *Response*

<https://github.com/keensoft/alfresco-summit-2014/tree/master/10-enhancements/06-custom-ldap-id>

### *Lesson learned*

Extending an Alfresco subsystem

# Fighting against the Elements

## Element 2 : Site creation

### *Request*

Not every user should be able create a site in Alfresco

### *Response*

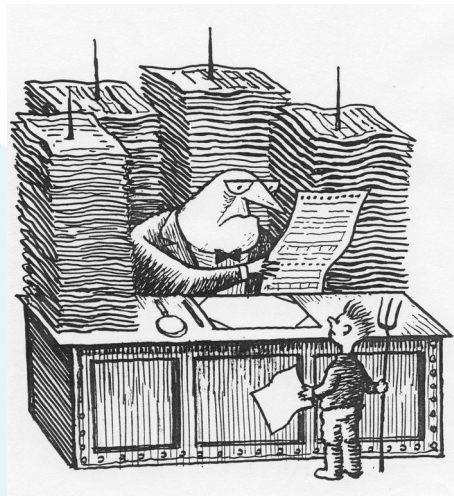
<https://github.com/keensoft/alfresco-summit-2014/tree/master/10-enhancements/09-hide-create-site>

POST /share/service/modules/create-site?sUazqGRHn3Rd9x18TX4sOXWz/zNx8Go9gQ6MOoFt+V4= HTTP/1.1

\* The requested URL returned error: 403 Forbidden

### *Lesson learned*

Extending an Alfresco feature



# Fighting against the Elements

## Element 3 : Folder quota

### *Request*

Users are allowed to upload unlimited amount of data in Sites but a quota is required for other zones (as shared folders)

### *Response*

<https://github.com/keensoft/alfresco-myfiles-quota>

### *Lesson learned*

Adopting an Alfresco addon





# Machine Age

2015

# Finding automation paths

## First use conditions

### *Request*

Every new user has to accept Terms of Use for the service

### *Response*

<https://github.com/keensoft/alfresco-agreement-filter>

### *Lesson learned*

@WebFilter annotation as non-intrusive mechanism (`web-fragment` also will do)

# Finding automation paths

## Blocking uploads by mime type

### *Request*

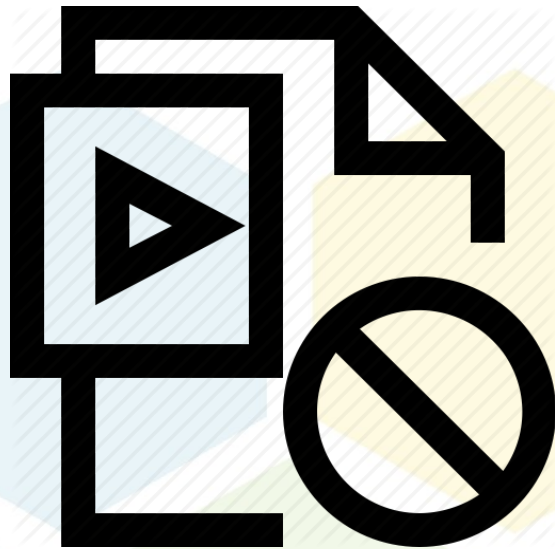
Some mime types (as videos) are not allowed in Alfresco

### *Response*

<https://github.com/keensoft/alfresco-mimetype-blocker>

### *Lesson learned*

Developing a behaviour to stop an uploading



# Finding automation paths

## Delegating group creation to Site Managers

### *Request*

As there are a lot of users, local groups to sites are required to be managed by Site Managers

### *Response*

<https://github.com/keensoft/alfresco-site-groups>

### *Lesson learned*

Aikau!



# Finding automation paths

## Administering with CURL

### *Request*

Managing resources creation requires to be integrated in automatic processes by using scripts.

Bacht creating of sites from CSV file.

### *Response*

<https://github.com/ecm4u/alfresco-shell-tools>

### *Lesson learned*

Scripting (a lot of)





# Finding automation paths

## Administering with CURL

1. *Existing shell tools (September 2015) won't work with Alfresco 4.2 or later*
2. *New Cross-Site Request Forgery (CSRF) protection*
3. *Parsing headers to get cookies (JSESSIONID) required*
4. *Request "create-site" and parse initial response to get Alfresco-CSRFToken*
5. *POST all of this together with JSON data to get the site created*



# Finding automation paths

## Unzipping contents automatically

### *Request*

Unzip every ZIP file when uploading to Alfresco

### *Response*

<https://angelborroy.wordpress.com/2015/05/22/alfresco-customizing-alfresco-unzip-action-addon/>

### *Lesson learned*

Programming is not always required





# Information Age

2016+

# Plan for World Domination

## Sharing documents with external users

### *Request*

Content should be shared with external (public) users but metadata should not

### *Response*

<https://loftux.se/en/products-and-add-ons/alfresco-add-ons/alfresco-sharebox-1>

### *Lesson learned*

Wheel has not to be re-invented every time



# Plan for World Domination

## Sharing documents with external people

### *Request*

Share externally not a single file but a full directory

### *Response*

<https://www.drupal.org/project/cmis>

### *Lesson learned*

Open Standards are good!

#### Servicio de Actividades Deportivas

Vicerrectorado de Cultura y Proyección Social

✉ [deportes@unizar.es](mailto:deportes@unizar.es)

Tel. 976 361 952



SAD | Actividades | Formación | Escuelas | Competiciones | Equipos UZ | Eventos | Instalaciones | TD | Contacta | +



Universidad  
Zaragoza

deporte

Resoluciones SAD  
Sede electrónica



Publicaciones Comité Competición Trofeo Rector

Servicio de Actividades Deportivas » Publicaciones Tablón » Publicaciones TR C.Competición

#### COMITÉ DE COMPETICIÓN RESOLUCIONES PUBLICADAS

Título	Descripción	Tipo de archivo	Última modificación	Tamaño
<a href="#">Resolución nº 40</a>	Relativa al encuentro Ciencias Humanas - Ramón Acín, Jornada 9 Fútbol M.	PDF	19 Abril 2017	55 KB
<a href="#">Resolución nº 39</a>	Relativa al encuentro Residencia Goya - EINA, Jornada 7 Baloncesto M.	PDF	19 Abril 2017	54 KB
<a href="#">Resolución nº 38</a>	Relativa al encuentro Cerbuna, Derecho, Fase triangular Voleibol M.	PDF	6 Abril 2017	50 KB
<a href="#">Resolución nº 37</a>	Relativa al encuentro Santa Isabel-Eina, Fase Triangular Voleibol M.	PDF	6 Abril 2017	50 KB

# Plan for World Domination

## Sharing documents with external people

### *Request*

Share externally a file but hide author's name

### *Response*

In-house php development to “translate” Alfresco URL public page to direct link to document

<https://documenta.example.com/share/s/3CFfr9acT9yuBdM0gyZmWA>

<https://auxiliar.example.com/ur.php?u=3CFfr9acT9yuBdM0gyZmWA>

<https://documenta.example.com/share/proxy/alfresco-noauth/api/internal/shared/node/3CFfr9acT9yuBdM0gyZmWA/content/?c=force&a=false>

### *Lesson learned*

Keep it simple!



Solicitud\_confin\_Servidores\_DIIS\_2016\_1.odt

Modified by JOSE ANTONIO GUTIERREZ ELIPE on Mon 11 Apr 2016 14:08:30



Previous

Next

# Plan for World Domination

## **Inviting service issues**

### *Request*

Inviting external users using a Manager created by InviteService results in DeniedAccess Exception

### *Response*

<https://issues.alfresco.com/jira/browse/ALF-21833>

### *Lesson learned*

Raising and following (solved) issues

# Plan for World Domination

## *Current HW/SW features*

*VMware vSphere - CPU:2vCPU / RAM:8GB*

*HD: OS - 25 GB (SAS 15 krpm, Write RAID 10, Read RAID 5)*

*Swap - 4 GB SSD*

*Data - 100 GB (similar to OS) – Grown to 500 GB*

*CentOS GNU/Linux 7.0 – MySQL 5.x*



CentOS



Linux

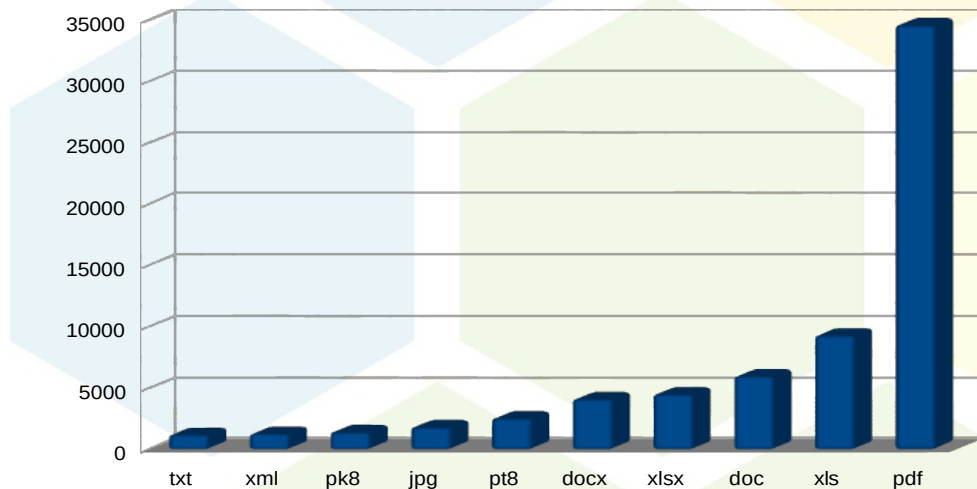


MySQL®



# Some statistics (April 2017)

- Number of users: 1511
- Number of sites: 93
- Storage in users' Homes: 243 MB
- Main storage: 94 GB
- Files: 79879
- Database storage: 627 MB / 3 GB
- Service support requests: 75/year, approx.



# Learning from the history



## **Protohistory**

When Alfresco was born

Finding experts outside the University



## **Middle Ages**

Fighting against the Elements

Extending Alfresco



## **Machine Age**

Finding automation paths

Annotation, scripting, Aikau



## **Information Age**

To Infinity and Beyond!

Issues, PHP



**Universidad**  
Zaragoza

# Alfresco at University of Zaragoza

## A history of (open) conversation

José A. Gutiérrez

Systems Analyst at University of Zaragoza

Angel Borroy

Developer at keensoft