

# Increase Security and Scalability: Reverse Proxy is Alfresco's buddy

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#### Motivation

- Easy SSL configuration
- Redirects
- Security
- Scalability and Caching\*



<sup>\*</sup> Inspired by Ishara Fernando (Alfresco Summit 2014/London)

## Nginx vs. Apache

Nginx	Apache
<b>Event Driven</b>	Process Driven
Scales much better: One worker (process) can handle thousands of simultaneous connections/requests	Every request creates a new process/thread
Requires custom compilation for the features shown	Easier to setup
http only	mod_proxy_ajp or mod_proxy_http



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# Tomcat Config NGI/IX

```
<!-- Connectors for reverse proxy (nginx) -->
       <Connector port="8081" address="localhost"</pre>
          URIEncoding="UTF-8" protocol="HTTP/1.1"
          maxThreads="300" connectionTimeout="600000" maxHttpHeaderSize="32768"
          redirectPort="443" disableUploadTimeout="false"
          proxyPort="443" scheme="https" secure="false" sslProtocol="TLS"
          maxSavePostSize="-1"
          />
       <Connector port="8082" address="localhost"</pre>
          URIEncoding="UTF-8" protocol="HTTP/1.1"
          maxThreads="300" connectionTimeout="600000" maxHttpHeaderSize="32768"
          redirectPort="80" disableUploadTimeout="false"
          proxyPort="80" scheme="http" secure="false"
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```





# Tomcat Config NGI/IX

 Resolve real host from reverse proxy headers instead of hard coded proxyName

```
<Valve className="org.apache.catalina.valves.RemoteIpValve"
    remoteIpHeader="x-forwarded-for"
    remoteIpProxiesHeader="x-forwarded-by"
    protocolHeader="x-forwarded-proto"
/>
```





# **Tomcat Config**





#### WebDAV



```
# webdav extra methods
      <LocationMatch "^/alfresco/webdav/.+$">
           <Limit OPTIONS PROPFIND GET REPORT MKACTIVITY</pre>
            PROPPATCH PUT CHECKOUT MKCOL MOVE COPY DELETE
            LOCK UNLOCK MERGE>
                  Order Deny, Allow
                  Allow from all
                  # change this or add your own IP
                    to allow webday access
                  # Deny from all
                  # Allow from 234.234.234.234
                  # Allow from 127.0.0.1
                       Satisfy Any
           </Limit>
      </LocationMatch>
```



#### WebDAV



No WebDAV support by default!

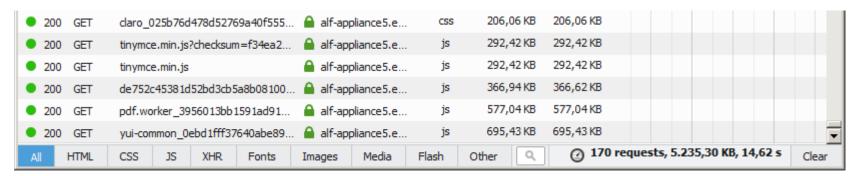
"To add HTTP and WebDAV methods like PUT, DELETE, MKCOL, COPY and MOVE you need to compile nginx with HttpDavModule!"

S.

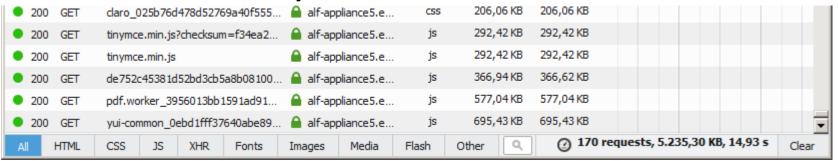


#### **Full Reload**

nginx with caching



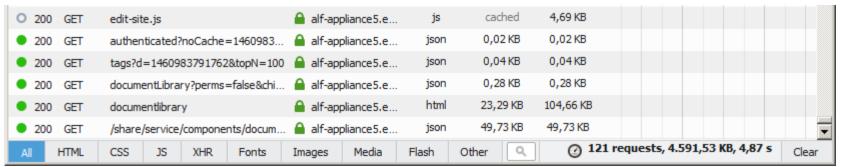
Tomcat directly



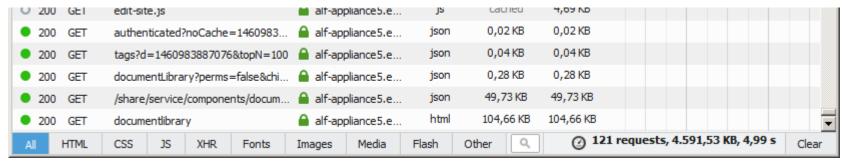


#### Reload

nginx with caching



Tomcat directly





#### Requests to Tomcat

	Nginx with caching	Tomcat directly
Full reload		
share	5	170
alfresco	6	13
Open URL		
share	5	5
alfresco	6	6



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#### Caching



```
proxy_buffering on;
proxy_cache_path /var/cache/nginx keys_zone=alfresco-cache:1512m
inactive=1d;
proxy_cache_key "$scheme$request_method$host$request_uri";
```



#### Caching



Caching Thumbnails on Server Disk



#### Caching



Overwrite Caching on Client Side by Header



#### Page optimization: PageSpeed Module

```
pagespeed on;
pagespeed FileCachePath /var/ngx_pagespeed_cache;
pagespeed EnableFilters combine_css,combine_javascript,rewrite_javascript;
```





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## Skripts, Config, Howto's

github.com/ecm4u/alfresco-reverse-proxy

Any Feedback, CoWork welcome!





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