

Technical Requirements for using ezProxy or BiblioPam Proxy Server for Lexis 360 IP Access

Global requirements :

- Configuration / Declaration for access by IP recognition
 - o Public IP addresses for proxy output must be provided by universities and declared within our systems
 - o The domain names of the university's email addresses used for activation of users must be declared within our systems

- Product URLs

<http://www.lexis360.fr>

<https://www.lexis360.fr>

- Secondary product URLs (for authentication purpose)

<http://www.lexisnexis.com>

<https://www.lexisnexis.com>

<https://signin.lexisnexis.com> (mandatory to declare)

- Domains and CSS/JS/Images resources

The domains used by our services are:

lexis360.fr

lexisnexis.com

For instance, Javascripts /Styles and Images are available through sub domains:

<http://styles.lexis360.fr>

<https://styles.lexis360.fr>

<http://scripts.lexis360.fr>

<https://scripts.lexis360.fr>

<http://images.lexis360.fr>

<https://images.lexis360.fr>

It is required that all lexis360.fr and lexisnexis.com sub-domains be proxified (HTTP and HTTPS based upon the protocol used by the page).

There is a special point of attention to be made on SSL access. All resources on the page must be invoked via the SSL protocol (HTTPS) using a valid SSL certificate and wildcard (multi-domain) because of the proxying of the domain name by the proxy.

- Protocol used by LexisNexis service

The lexis360.fr and lexisnexis.com domains might be invoked by the HTTP (80) and HTTPS (443) protocol (only standard port).

- SSL valid certificate and Wildcard

valid SSL certificate

The SSL certificate used by the ezProxy / BiblioPam proxy must be a valid certificate signed and verified by a certificate authority.

Wildcard certificate

By default, a certificate is valid on a single domain. However, as part of an ezProxy and BiblioPam usage, it must be valid on multiple subdomains because of the proxification which necessarily implies a change of the domain name by the addition of subdomains

For example :

- ⇒ If the domain used by the proxy is: merlin.u-picardie.fr
- ⇒ The SSL certificate must be Wildcard, ie multi-domain as follows: *. merlin.u-picardie.fr

The Wildcard multi-domain certificate has a subdomain name at the domain level specified during submission / creation.

In the example cited, the certificate will be valid for example for the following subdomain:

www-lexis360-fr.merlin.u-picardie.fr

- Cookies management

As part of the creation of a user session following a successful authentication we use the cookie named "**LNAUTHK4C**" which must be propagated and visible within the proxified domains of **lexis360.fr**

- AJAX components

The Lexis360.fr product has several components implemented in the AJAX technology (result list filter / export / print / download delivery feature). AJAX requests are made in the domain lexis360.fr

It is important that for this type of stream also following the "proxification" of our AJAX requests the parameters of the POST / Headers and Cookies queries are sent back to the publisher through the proxy.

EzProxy configuration details:

- DNS configuration

In order to use the proxy through the transformation of domain names it is required that 2 DNS entries be created.

Example :

Proxy URL : ezproxy.yourlib.org

DNS entries

ezproxy.yourlib.org. IN A 68.15.177.100

*.ezproxy.yourlib.org. IN A 68.15.177.100

The secondary entry is a « wilddcard » entry for the proxification of the urls.

In addition, in order for this type of proxyfication to be used it is also required to activate the option "ProxyByHostname option" in the configuration.

Access to the configuration steps:

<https://www.oclc.org/support/services/ezproxy/documentation/cfg/proxybyhostname.en.html>

- Specific configuration in case of interpretation problem of a valid wilddcard SSL certificate

The official documentation states that in very rare cases the interpretation of the wilddcard SSL certificate is not performed correctly by the ezProxy server.

This can lead to the occurrence of browser warning messages and graphical rendering problems.

In this case, from the ezProxy v1.6 (and following) there is a parameter that makes it possible to force the correct reading of the wilddcard certificate.

<https://www.oclc.org/support/services/ezproxy/documentation/cfg/option-forcewilddcardcertificate.en.html>

This advice should only be used if there is a problem with SSL. However, it does not guarantee the actual resolution of the difficulties that could be encountered in direct connection with the SSL configuration set up.

- Format of the proxified urls through ezProxy

Hereunder some example of proxified ezProxy.

ezProxy proxy URL used in this example: merlin.u-picardie.fr

Use case	HTTP Application	HTTP Authentication	HTTPS Application *	HTTPS Authentication *
Standard Url	http://www.lexis360.fr	http://www.lexisnexis.com	https://www.lexis360.fr	https://www.lexisnexis.com
ezProxy proxy URL	http://www.lexis360.fr.merlin.u-picardie.fr	http://www.lexisnexis.com.merlin.u-picardie.fr	https://www.lexis360.fr.merlin.u-picardie.fr	https://www.lexisnexis.com.merlin.u-picardie.fr

(*) Depend on the configuration of the ezProxy proxy and SSL wildcard certificat used. HTTPS URLs might occur with « . » instead of « - » within the proxified domain name in HTTPS.

- Stanza Lexis 360 configuration (suggestion)

Exemple of Stanza Lexis360 configuration (it is provided for informational purposes only and must be modified / adapted on a case-by-case basis depending on the infrastructure and proxy version ezProxy:

Option DomainCookieOnly Option

Title Lexis 360

URL <http://www.lexis360.fr/Home.aspx>

DJ lexis360.fr

DJ lexis-nexis.com

DJ lexisnexis.com

HJ academic.lexisnexis.eu

HJ academic.lexisnexis.nl

HJ api.lexisnexis.eu

DJ lexisnexis.eu

DJ lexis.com

DJ lexiscn.com

DJ cispubs.com

DJ nexis.com

HJ web.lexis-nexis.com

HJ web.lexisnexis.com

HJ widgetserver.lexisnexis.nl

HJ www.lexis-nexis.com

HJ www.lexisnexis.com

HJ https://www.lexisnexis.com

HJ www.lexis.com

HJ www.lexiscn.com

HJ w3.lexis.com

HJ www.nexis.com

HJ nexis.com

HJ companydashboard.lexisnexis.nl

Find location.hostname

Replace location.host

Find = "www.lexisnexis.com"

Replace = "^pwww.lexisnexis.com^"

Find &unix=http://

Replace &unix=http://^A

Find GetCookie("LNAUTH")

Replace "LNAUTH-IP"

Find NAME="_PRIORREFERER" VALUE="http://

Replace NAME="_PRIORREFERER" VALUE="http://^A

Find NAME="_PRIORREFERER" VALUE="https://

Replace NAME="_PRIORREFERER" VALUE="https://^A

Find domain = "www.nexis.com"

Replace domain = "^pwww.nexis.com^"

Option Cookie

Specific BiblioPam configuration :

- Format of the proxified urls though BiblioPam

Hereunder a few examples of the format of the proxified BiblioPam URL.

Proxy BiblioPam URL used int this example: biblio-dist.ut-capitole.fr

Use case	HTTP Application	HTTP Authentication	HTTPS Application *	HTTPS Authentication *
Standard Url	http://www.lexis360.fr	http://www.lexisnexis.com	https://www.lexis360.fr	https://www.lexisnexis.com
Proxified BiblioPam URL	https://www-lexis360-fr.biblio-dist.ut-capitole.fr	https://www-lexisnexis-com.biblio-dist.ut-capitole.fr	https://www-lexis360-fr.biblio-dist.ut-capitole.fr	https://www-lexisnexis-com.biblio-dist.ut-capitole.fr

(*)Unlike the URLs of http applications proxified by BiblioPam, the proxified URLs of HTTPS applications include a "-s" concatenated to the proxified domain (whose "." are replaced by "-" as for the http version).

- Special management in case of problems with cookie management

It appears that under certain configurations of BiblioPam the management of the cookies of the application in particular those transmitted in the same domain through successive redirections between two distinct HTTP and HTTPS protocols can generate an erroneous behavior.

For example, the "LNAUTHK4C" cookie is used to transmit an authenticated user session.

Explanation

The reading of these cookies goes well regardless of the protocol (http or https) when the domain is kept identical.

However, the BiblioPam configuration induces a modification of the domain name according to whether one is http or https by the introduction of "-s" in the domain name proxified.

We have, for example, the following scheme:

1) Url called with lexis360 domain in https

<https://www.lexis360.fr>

BiblioPam rewrites the proxified URL as follows:

<https://www-lexis360-fr-s.biblio-dist.ut-capitole.fr>

« cookie 1 » is instantiated in the " www-lexis360-fr-s.biblio-dist.ut-capitole.fr" domain

2) Then, redirection on lexis360 domain in http

<http://www.lexis360.fr>

BiblioPam rewrites the proxified URL as follows:

<https://www-lexis360-fr.biblio-dist.ut-capitole.fr>

In this case the application can no longer read the "cookie 1" because the domain name has changed.

Providing that a cookie for our authentication mechanism is required the application thinks that the authentication is not made and so a new token request is made. This translates into an infinite loop.

Two approaches can be envisaged:

Approach 1 : Stabilize the domain

To force the rewriting of the domain at the BiblioPam level in order to always be in a HTTPS mode.

⇒ Whatever the URL : <https://www.lexis360.fr> or <http://www.lexis360.fr> the rewriting by the BiblioPam proxy must always be as follows:

<https://www-lexis360-fr-s.biblio-dist.ut-capitole.fr>

Approach 2 : rewriting the domain of the cookie

Edit the domain name of the cookie on the fly in the header to make it visible to the domain and its subdomains.