

# EZproxy at USQ Library

Corey Wallis  
Electronic Services Officer  
[wallis@usq.edu.au](mailto:wallis@usq.edu.au)

## What are we going to cover today?

- The EZproxy learning curve
  - Sources of information
- EZproxy configuration commands
- Proxy by Port vs. Proxy by Hostname
  - How EZproxy is implemented at USQ
- Questions

## The EZproxy learning curve

- A core system in the Library
- Steep learning curve
- There are excellent sources of information and support
- Many people have had the same experiences you are having, and configured similar resources
- Over 45 libraries in Australia have EZproxy

## Sources of Information

- Useful Utilities website
  - <http://www.usefulutilities.com/support/>
- Provides documentation on
  - Setup and installation
  - Configuration & user authentication
  - Maintenance and new releases
- Resource specific issues
  - <http://www.usefulutilities.com/support/db/>

## Sources of Information

- EZproxy e-mail mailing list
  - <http://www.usefulutilities.com/support/list.html>
- Gain access to people willing to share knowledge from around the world
- Chris Zagar is a member of the list
- Australian users are also on the list

## The basic EZproxy configuration commands

- Configuration commands stored in a text file
  - ezproxy.cfg
- The most used commands are
  - Title
  - URL
  - Domain (DomainJavaScript)
  - Host (HostJavaScript)
  - AutoLoginIP
  - ExcludeIP
  - IncludeIP

## Title Command

- Specifies the title of the resource
- For example

```
Title EBSCOhost
```

## URL Command

- Specifies the starting URL for the resource
- For example

URL `http://search.global.epnet.com`

- The starting URL is also used to define the URL our users would use to gain access to the resource

## Domain Command

- Specifies what domains EZproxy should proxy when a user accesses this resource

- For example

```
Domain epnet.com
```

## Host Command

- Specifies hosts of other starting URLs that may also be used for this configuration
- For example

```
Host search.epnet.com
```

## Complete Configuration Entry

- The complete configuration entry would look like this

Title EBSCOhost

URL <http://search.global.epnet.com>

Domain epnet.com

Host search.epnet.com

## URL Examples

- The configuration works for URLs like these

<http://ezproxy.usq.edu.au/login?url=http://search.global.epnet.com>

- Link to the full text of an article

<http://ezproxy.usq.edu.au/login?url=http://search.epnet.com/direct.asp?an=13956111&db=aph>

- Links provided to users via the Library catalogue, Library web page, course material

## Links that use JavaScript

- By default EZproxy will not check JavaScript for the domains it needs to proxy
- The commands used to ensure links that use JavaScript are rewritten are as follows
  - DomainJavaScript
  - HostJavaScript
- Checking inside JavaScript is a more process intensive task

## Updated EBSCOhost configuration

- A more complete EBSCOhost configuration is as follows

Title EBSCOhost

URL <http://search.global.epnet.com>

DomainJavaScript [epnet.com](http://epnet.com)

Host [search.epnet.com](http://search.epnet.com)

## Command Abbreviations

- Configuration commands have an abbreviated form

- Both types are valid

Title EBSCOhost

URL `http://search.global.epnet.com`

DJ `epnet.com`

H `search.epnet.com`

## Authenticating Page Requests

- The last three commands determine how page requests are authenticated by examining the IP address of the user
- The commands are
  - AutoLoginIP
  - ExcludeIP
  - IncludeIP

## Automatic Login

- The AutoLoginIP option proxies requests from an IP address specified by the IP address parameter with the user being automatically logged in

- For example

```
AutoLoginIP 192.168.0.0-192.168.0.255
```

## Exclude an IP Address

- The ExcludeIP option excludes a request from the specified IP range from being proxied
- For example

```
ExcludeIP 192.168.0.100
```

## Include an IP Address

- The IncludeIP option proxies requests from the specified IP address parameter in a similar way to the AutoLoginIP option does. However it does not automatically log the user in
- For Example

```
IncludeIP 192.168.0.55
```

## Authentication Example

ExcludeIP 192.168.0.0-192.168.0.255

IncludeIP 192.168.0.111

AutoLoginIP 192.168.1.0-192.168.1.255

Title EBSCOhost

URL <http://search.global.epnet.com>

DJ epnet.com

H [search.epnet.com](http://search.epnet.com)

## IP Authentication Implemented at USQ

- Exclude our entire IP range
- Include the IP address of our test PC
- AutoLogin our entire IP range for some resources
  - That don't provide usage statistics
  - That don't work with our Squid Proxy server
  - That are currently on trial

# The Thompson ISI Web of Knowledge

Option DomainCookieOnly

Title ISI Databases

URL <http://isiknowledge.com/>

DJ isiknowledge.com

DJ isihighlycited.com

DJ newisiknowledge.com

DJ newisiknowledge.com

DJ webofscience.com

DJ jcrweb.com

DJ isicc.com

Find value="http://

Replace value="http://^A

Find VALUE="http://

Replace VALUE="http://^A

Find rurl=http://

Replace rurl=http://^A

Find product\_st\_thomas=http://

Replace product\_st\_thomas=http://^A

Find return\_url=http://

Replace return\_url=http://^A

Find ST\_URL=http://

Replace ST\_URL=http://^A

Option Cookie

The exact meaning of this configuration is outside the scope of this presentation.

## Proxy by Port vs. Proxy by Hostname

- Proxy by Port EZproxy uses a unique port number to distinguish between one hostname and port combination from another
- A user would connect to port 2048 on the EZproxy server and, once authenticated, would be directed to a port above this number to access their desired resource

## Proxy by Port – Example URL

- Starting URL using EZproxy

- <http://ezproxy.usq.edu.au:2048/login?url=http://www.blackwell-synergy.com/servlet/useragent?func=showHome>

- Once authenticated

- <http://ezproxy.usq.edu.au:2148/servlet/useragent?func=showHome>
- Port 2148 assigned to port 80 on the domain [www.blackwell-synergy.com](http://www.blackwell-synergy.com)

## Proxy By Port - Drawbacks

- Port 2048 and above are non standard ports and are typically blocked by firewalls
- Getting a corporation to open ports can be problematic
  - Before moving to Proxy By Hostname USQ needed ports 2048-2848 to be open
- Some home users who have a firewall don't have the skills to adjust it themselves

## Proxy by Hostname

- Uses the standard www port (80)
- If a user can access the Internet they can use our electronic resources
- A unique hostname is generated to distinguish between different hostnames and port combinations

## Proxy by Hostname – Example URL

- Starting URL using EZproxy
  - `http://ezproxy.usq.edu.au/login?url=http://www.blackwell-synergy.com/servlet/useragent?func=showHome`
- Once Authenticated
  - `http://www.blackwell-synergy.com.ezproxy.usq.edu.au/servlet/useragent?func=showHome`

## Proxy by Hostname - Drawbacks

- The DNS entries needed to support Proxy by Hostname are more complicated to setup
- Sharing a server that has other services that require port 80
  - One Network Card & Multiple IP addresses
  - Sharing port 80 with a web server
- For more information
  - <http://www.usefulutilities.com/support/cfg/proxybyhostname.html>

## How EZproxy is implemented at USQ

- Using Proxy by Hostname
- One production server and a test server
  - Production running Windows 2000
  - Test running Linux
- Both test and production environments are providing other services
- Both use the same configuration file
  - Test doesn't exclude USQ IP range

## How EZproxy is implemented at USQ

- In August 2004
- 2,022,033 requests were successfully processed
- Average request rate of 65,228 per day
- Approximately 24 gigabytes of data transferred
- 26.57% of traffic attributed to Adobe Acrobat PDF documents

**Questions?**