

# ALOHA LOAD BALANCER REDIRECTING HTTP REQUESTS TO HTTPS

## "APPNOTE" #0010 — REDIRECTING HTTP REQUESTS TO HTTPS

*This application note is intended to help you implement the transparent redirection of HTTP requests to HTTPS via the ALOHA Load Balancer solution.*

### CONSTRAINT

In order to rewrite requests, you may need to understand regular expressions.

### PURPOSE

Replace the address "http://www.mysite.com/secure/login.html" with "https://www.mysite.com/secure/login.html".

### COMPLEXITY



### VERSIONS CONCERNED

V 3.x and later

### CHANGELOG

2012-01-02: update for ALOHA 5.5 and above

2011-03-28: initial version

## TARGET NETWORK DIAGRAM



## ALPHA 5.5.X AND ABOVE

ALPHA 5.5 and above also include the options "**redirect location**" and "**redirect prefix**" described in the next chapter.

However, the option below is purposely made for scheme changes:

```
redirect scheme <sch> [code <code>] <option> [{if | unless} <condition>]
```

For the ALPHA 5.5.4 and above, it is recommended to use the corresponding **http-request** function:

```
http-request redirect scheme <sch> [code <code>] <option> [{if | unless} <condition>]
```

Return an HTTP redirection if a condition is met. If no condition is specified, the redirection is applied to all requests.

### Arguments:

- **scheme**: the **Location** header is exactly the same as the request URL, but the scheme is turned into **<sch>**.
- **<code>** The code is optional. It indicates which HTTP redirection type is required. Only codes 301, 302 and 303 are managed. Code 302 is used if no other code is specified.
- **<option>** You can specify several options in order to adapt the expected behavior of a redirection:
  - **"drop-query"**  
When this option is used with a redirection based on the **prefix**, the location will be set without any additional query string.
  - **"append-slash"**  
Use this option in conjunction with **"drop-query"** in order to redirect users who specified a URL which does not end with **"/"**. This may be useful to ensure search engines see only one URL.
  - **"set-cookie NAME [=value]"**  
A **"set-cookie"** header will be added to the response with a name (and **"= value"** as required). This method is used occasionally to specify that a user has been seen. If no additional options are added, then the cookie will be a session cookie.
  - **"clear-cookie NAME [=]"**  
A **"set-cookie"** header will be added with a **name** (and **"="** as required), but with **"Max-Age"** set to zero. This option tells the browser to delete this cookie.

## LB LEVEL7 CONFIGURATION EXAMPLE

```
##### The first public address as seen by the clients
frontend frt
bind 10.0.32.10:80
bind 10.0.32.10:443 ssl crt www.domain.com
mode http
log global # use global log parameters
option httplog # Enable HTTP logging
# Detect HTTPS protocol
acl https ssl_fc
# Detect the folder to secure
acl sensitive_folder path_beg /secure
# Redirect "http" to "https"
redirect scheme https if !https sensitive_folder
# Redirect "https" to "http"
redirect scheme http if https !sensitive_folder
maxconn 4000 # max conn per instance
timeout client 25s # maximum client idle time (ms)
default_backend bck # send everything to this backend by default
```

## ALOHA 3.0.X TO 5.0.X

```
Redirect location <to> [code <code>] <option> [{if | unless} <condition>]
Redirect prefix <to> [code <code>] <option> [{if | unless} <condition>]
```

Return an HTTP redirection if a condition is met. If no condition is specified, the redirection is applied to all requests.

### Arguments:

- **location:** the **<to>** string is placed in the **"Location"** header of the HTTP redirection response.
- **prefix:** the **"Location"** header of the HTTP redirection response is created by concatenating the **<to>** string and the complete URL from the request
- **<code>** The code is optional. It indicates which HTTP redirection type is required. Only codes 301, 302 and 303 are managed. Code 302 is used if no other code is specified.
- **<option>** You can specify several options in order to adapt the expected behavior of a redirection:
  - **"drop-query"**  
When this option is used with a redirection based on the **prefix**, the location will be set without any additional query string.
  - **"append-slash"**  
Use this option in conjunction with **"drop-query"** in order to redirect users who specified a URL which does not end with **"/"**. This may be useful to ensure search engines see only one URL.
  - **"set-cookie NAME [=value]"**  
A **"set-cookie"** header will be added to the response with a name (and **"= value"** as required). This method is used occasionally to specify that a user has been seen. If no additional options are added, then the cookie will be a session cookie.
  - **"clear-cookie NAME [=]"**  
A **"set-cookie"** header will be added with a **name** (and **"="** as required), but with **"Max-Age"** set to zero. This option tells the browser to delete this cookie.

## LB LEVEL7 CONFIGURATION EXAMPLE

```
##### The first public address as seen by the clients
frontend frt
bind 10.0.32.10:80
bind 127.1.0.1:1 # ALOHA 3.0 to 3.6
bind /ssl:frt # ALOHA 3.7 to 5.0
mode http
log global # use global log parameters
option httplog # Enable HTTP logging
# Detect the HTTP port
acl http dst_port 80
# Detect the folder
acl folder path_dir secure
acl https dst_port 1
# Redirect "http" to "https"
redirect prefix https://www.mysite.com if http folder
# Redirect "https" to "http"
redirect prefix http://www.mysite.com if https !folder
maxconn 4000 # max conn per instance
timeout client 25s # maximum client idle time (ms)
default_backend bck # send everything to this backend by default
```

## RELATED ARTICLES

### WRITING CONDITION RULES

To know how to create rules which allow (or not) the redirection, please read the application note **#0057 – http Request Routing**.