

# Meecrowave Proxy

Coordinates:

```
<dependency>
  <groupId>org.apache.meecrowave</groupId>
  <artifactId>meecrowave-proxy</artifactId>
  <version>${meecrowave.version}</version>
</dependency>
```

Simple proxy module using Meecrowave as backbone. It can be extended using CDI programming model and JAX-RS client.

## Configuration

Name	Description
--proxy-async-timeout	Asynchronous execution timeout.
--proxy-configuration	The route file.
--proxy-mapping	Where to bind the proxy (url pattern).
--proxy-multipart	Is multipart explicit.
--proxy-multipart-maxfilesizethreshold	Max file size threshold for multipart requests.
--proxy-multipart-location	The multipart temporary folder.
--proxy-multipart-maxfilesize	Max file size for multipart requests.
--proxy-multipart-maxrequestsize	Max request size for multipart requests.
--proxy-skip	Should default setup be ignored



you can use that servlet in a plain Servlet container (adding JAX-RS+JSON-B client). An integration example can be found in [org.apache.meecrowave.proxy.servlet.meecrowave.ProxyServletSetup#accept](#).

## Configuration File

Each route defines an execution context which means:

1. A way to match the incoming request (by method + prefix for now),
2. A way to forward the incoming request (which target server is called),
3. A way to execute the request isolated in a dedicated thread (how many threads are allocated to the route, which timeout to use, ...).

The routes file follows the following shape:

```
{
  "defaultRoute": { // optional
    // ... anything a route can get, it is used as default for plain "routes"
  },
  "routes": [
    {
      "id": "get-simple",
      "requestConfiguration": {
        "method": "GET",
        "prefix": "/prefix-to-match",
        "addedHeaders" : { "Authorization": "Value", ... },
        "skippedHeaders" : [ "Content-Length", ... ],
        "skippedCookies" : [ "Cookie", ... ],
      },
      "responseConfiguration": {
        "target": "http://....",
        "skippedHeaders" : [ "Content-Length", ... ],
        "skippedCookies" : [ "Cookie", ... ],
      },
      "clientConfiguration": {
        "executor": {
          "core": 8,
          "max": 512,
          "keepAlive": 60000,
          "shutdownTimeout": 1
        },
        "timeouts": {
          "connect": 30000,
          "read": 30000,
          "execution": 60000
        },
        "sslConfiguration": {
          "acceptAnyCertificate": false,
          "keystoreLocation": "...",
          "keystoreType": "...",
          "keystorePassword": "...",
          "truststoreType": "...",
          "verifiedHostnames": [ "..." ]
        }
      },
      "extensions": { // optional, used for custom extensions and let the user enrich
        // the route configuration
      }
    },
    // ...
  ],
  "extensions": { // optional
  }
}
```



the file is filtered with system properties so you can use `#{system-prop-key}`.

## Extend

The default implementation uses `CDIProxyServlet` which triggers multiple events to let you extend the proxy implementation:

1. `BeforeRequest` and `AfterResponse` which are sent around the proxying,
2. `OnRequest` and `OnResponse` which enables you to replace the way the request is mapped to the proxied server and the way the response of the proxied server is mapped to the client.

Since `meecrowave-proxy` is a simple meecrowave module you can embed it and customize it as any CDI application.