

# Mecrowave Command Line Interface

Meecrowave provides a CLI (Command Line Interface) called `org.apache.meecrowave.runner.Cli`.

It can be used to deploy the java classpath or a war. Here are the main options:

| Name   | Description   |
|--|---|
| <code>--tomcat-antiresourcelocking</code>              | Should Tomcat anti resource locking feature be activated on StandardContext.  |
| <code>--cdi-conversation</code>                        | Should CDI conversation be activated  |
| <code>--client-auth</code>                             | HTTPS keystore client authentication  |
| <code>--conf</code>                                    | Conf folder to synchronize  |
| <code>--connector</code>                               | Custom connectors   |
| <code>--tomcat-context-configurer</code>               | Configurers for all webapps. The Consumer<Context> instances will be applied to all deployments.                    |
| <code>--cxf-servlet-params</code>                      | Init parameters passed to CXF servlet   |
| <code>--default-ssl-hostconfig-name</code>             | The name of the default SSLHostConfig that will be used for secure https connections.                               |
| <code>--delete-on-startup</code>                       | Should the directory be cleaned on startup if existing  |
| <code>--dir</code>                                     | Root folder if provided otherwise a fake one is created in tmp-dir  |
| <code>--host</code>                                    | Default host  |
| <code>--http2</code>                                   | Activate HTTP 2   |
| <code>--http</code>                                    | HTTP port   |
| <code>--https</code>                                   | HTTPS port  |
| <code>--cxf-initialize-client-bus</code>               | Should the client bus be set. If false the server one will likely be reused.  |
| <code>--servlet-container-initializer</code>           | ServletContainerInitializer instances.  |
| <code>--servlet-container-initializer-injection</code> | Should ServletContainerInitialize support injections.   |
| <code>--jaxrs-beanvalidation</code>                    | Should bean validation be activated on JAX-RS endpoint if present in the classpath.                                 |
| <code>--jaxrs-default-providers</code>                 | If jaxrsProviderSetup is true the list of default providers to load (or defaulting to johnson jsonb and jsonp ones) |
| <code>--jaxrs-log-provider</code>                      | Should JAX-RS providers be logged   |
| <code>--jaxrs-mapping</code>                           | Default jaxrs mapping   |
| <code>--jaxrs-provider-setup</code>                    | Should default JAX-RS provider be configured  |
| <code>--jaxws-support-if-present</code>                | Should @WebService CDI beans be deployed if cxf-rt-frontend-jaxws is in the classpath.                              |
| <code>--jsonb-binary-strategy</code>                   | Should JSON-B provider prettify the output  |

| <b>Name</b>                 | <b>Description</b>  |
|-----------------------------|---|
| --jsonb-encoding            | Which encoding provider JSON-B should use                         |
| --jsonb-ijson               | Should JSON-B provider comply to I-JSON                           |
| --jsonb-naming-strategy     | Should JSON-B provider prettify the output                        |
| --jsonb-nulls               | Should JSON-B provider serialize nulls                            |
| --jsonb-order-strategy      | Should JSON-B provider prettify the output                        |
| --jsonb-prettyfy            | Should JSON-B provider prettify the output                        |
| --jsonp-buffer-strategy     | JSON-P JAX-RS provider buffer strategy (see johnzon)              |
| --jsonp-read-buffer-length  | JSON-P JAX-RS provider read buffer limit size (see johnzon)       |
| --jsonp-max-string-length   | JSON-P JAX-RS provider max string limit size (see johnzon)        |
| --jsonp-write-buffer-length | JSON-P JAX-RS provider write buffer limit size (see johnzon)      |
| --jsonp-supports-comment    | Should JSON-P JAX-RS provider prettify the outputs (see johnzon)  |
| --jsonp-supports-comment    | Should JSON-P JAX-RS provider support comments (see johnzon)      |
| --keep-server-xml-as-this   | Don't replace ports in server.xml                                 |
| --keystore-alias            | HTTPS keystore alias  |
| --keystore-file             | HTTPS keystore location   |
| --keystore-password         | HTTPS keystore password   |
| --keystore-type             | HTTPS keystore type   |
| --logging-global-setup      | Should logging be configured to use log4j2 (it is global)         |
| --login-config              | web.xml login config  |
| --meecrowave-properties     | Loads a meecrowave properties, defaults to meecrowave.properties. |
| --pid-file                  | A file path to write the process id if the server starts          |
| --properties                | Passthrough properties  |
| --quick-session             | Should an unsecured but fast session id generator be used         |
| --realm                     | realm   |
| --roles                     | In memory roles   |
| --scanning-exclude          | A forced exclude list of jar names (comma separated values)       |
| --scanning-include          | A forced include list of jar names (comma separated values)       |

| Name                                   | Description  |
|--|--|
| --scanning-package-exclude             | A forced exclude list of packages names (comma separated values)   |
| --scanning-package-include             | A forced include list of packages names (comma separated values)   |
| --security-constraint                  | web.xml security constraint  |
| --server-xml                           | Provided server.xml  |
| --shared-libraries                     | A folder containing shared libraries.  |
| --skip-http                            | Skip HTTP connector  |
| --ssl                                  | Use HTTPS  |
| --ssl-protocol                         | HTTPS protocol   |
| --stop                                 | Shutdown port if used or -1  |
| --tmp-dir                              | Temporary directory  |
| --tomcat-access-log-pattern            | Activates and configure the access log valve.<br>Value example: '%h %l %u %t "%r" %s %b "%{Referer}i" "%{User-Agent}i"'  |
| --tomcat-default-setup                 | Add default servlet  |
| --tomcat-filter                        | A Tomcat JarScanFilter   |
| --tomcat-default-setup-jsp-development | Should JSP support if available be set in development mode   |
| --tomcat-skip-jmx                      | (Experimental) Should Tomcat MBeans be skipped.  |
| --tomcat-scanning                      | Should Tomcat scanning be used (@HandleTypes, @WebXXX)   |
| --tomcat-wrap-loader                   | (Experimental) When deploying a classpath (current classloader), should meecrowave wrap the loader to define another loader identity but still use the same classes and resources. |
| --log4j2-jul-bridge                    | Should JUL logs be redirected to Log4j2 - only works before JUL usage.   |
| --use-shutdown-hook                    | Use shutdown hook to automatically stop the container on Ctrl+C  |
| --tomcat-default                       | Should Tomcat default be set (session timeout, mime mapping etc...)  |
| --users                                | In memory users  |
| --watcher-bouncing                     | Activate redeployment on directories update using this bouncing.   |
| --web-resource-cached                  | Cache web resources  |
| --web-session-cookie-config            | Force the cookie-config, it uses a properties syntax with the keys being the web.xml tag names.  |
| --web-session-timeout                  | Force the session timeout for webapps  |

| Name      | Description   |
|-----------|---|
| --web-xml | Global web.xml  |
| --help    | Show the CLI help/usage   |
| --context | The context to use to deploy the webapp                           |
| --webapp  | Location of the webapp, if not set the classpath will be deployed |
| --docbase | Location of the docbase for a classpath deployment                |

Note that `help` command is supported as well.

## Extending the CLI

You can add your own CLI options implementing `org.apache.meerowave.runner.CliOptions` (just a marker interface, no logic to code) and use `@CliOption` to define fields as coming from the CLI arguments. To register your option bean just add it in `META-INF/services/org.apache.meerowave.runner.CliOptions`.



`Meerowave.Builder` provides a `getExtension(type)` which can be used to get this kind of extension. This is common and works in all modes (arquillian, JUnit, embedded etc...) replacing the arguments by properties on `Meerowave.Builder` instance.