

# 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. 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.