

Icellmobilsoft wildfly dockerimage

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1. Common

The repository is a collection of wildfly docker images used in icellmobilsoft, to keep projects and their builds on the same basis.

2. Dockerfile

The dockerfile structure is based on onion layering, can be reused to build another docker image. To do this, you need to give it the base image you want and it will add to it as needed. The required base images must meet certain conditions, which are usually bound by the names of the ENV parameters. These conditions are already described in [Dockerhub Icellmobilsoft image](#) repository.

LABEL

LABEL is a very important part of the builded docker images. They show all the data, that was an important factor in building the docker image. A sample of how this can be extracted from the docker image:

```
<CONSOLE>:~$ docker inspect icellmobilsoft/wildfly-full/oracle-jdbc-ibm-mq:1.0.0-  
SNAPSHOT | jq -r '.[0].Config.Labels' ①
```

```
{
  "apt-get.install": "fontconfig,fonts-dejavu", ②
  "base.image": "icellmobilsoft/wildfly-full/oracle-jdbc:1.0.0-SNAPSHOT", ③
  "builder.images": "icellmobilsoft.hu/icellmobilsoft/builder-java17-galleon:1.1.0-SNAPSHOT", ④
  "ee.configs": "managed-executor",
  "galleon.image": "icellmobilsoft/icellmobilsoft/builder-java17-galleon:1.1.0-SNAPSHOT", ⑤
  "galleon.layers": "full", ⑥
  "ibm-mq.version": "com.ibm.mq:wmq.jmsra:9.1.0.8",
  "image.usage": "release", ⑦
  "java.image": "eclipse-temurin:17.0.7_7-jre", ⑧
  "logstash.version": "biz.paluch.logging:logstash-gelf:1.14.1",
  "microprofile.configs": "opentrace,metrics",
  "oracle-jdbc.version":
  "com.oracle.database.jdbc:ojdbc10:19.7.0.0,com.oracle.database.nls:orai18n:19.7.0.0",
  "wildfly.modules": "logstash,oracle-jdbc,ibm-mq", ⑨
  "wildfly.properties.file": "/home/icellmobilsoft/config/wildfly.properties", ⑩
  "wildfly.version": "27.0.1.Final" ⑪
}
```

- ① the command itself that cuts the label part from the complete docker inspect response
- ② programs installed on linux base image
- ③ base image from which this particular image is derived (onion layering)
- ④ the images used in the build
- ⑤ name of the image that did the wildfly build
- ⑥ which galleon modules are used to build wildfly
- ⑦ image purpose. Intended for controlling, application image can only contain "release" value.
- ⑧ what image the java in the image comes from
- ⑨ what modules are manually installed in wildfly
- ⑩ the properties file used to start wildfly
- ⑪ wildfly version

Some of the labels are from base image, when creating them, you have to be careful when to overwrite them.

2.1. wildfly/common

In terms of layers, this is the only layer where the galleon is used to put together the wildfly application server. The base images are complemented with the logger java module serving logstash. For more information on layers, see the documentation at [wildfly_galleon_layers](#).

In this case we will create these images from it:

- **icellmobilsoft/wildfly-default-ms:\${VERSION}** - Image meets basic microservice requirements

- **icellmobilsoft/wildfly-default-jpa:\${VERSION}** - Add jpa layer to the microservice image above
- **icellmobilsoft/wildfly-default-full:\${VERSION}** - Full wildfly with all existing modules

The dockerfile is responsible for EXPOSE of the basic 8080 and 9990 (+ others) ports, and the wildfly startup CMD.

Table 1. Configuration options:

ENV kulcs	wildfly.properties kulcs	Default	Leírás
LOGGING_ROOT_LOGGER_LOGLEVEL	logging.root.logger.loglevel	INFO	Global log level
LOGGING_HU_ICELLMOBILSOFT_LOGGER_LOGLEVEL	logging.hu.icellmobilsoft.logger.loglevel	ALL	Global log level for "hu.icellmobilsoft" packages
LOGGING_COFFEE_ETCD_LOGGER_LOGLEVEL	logging.coffee.etcd.logger.loglevel	INFO	Log level regarding ETCD classes
LOGGING_K8S_NAMESPACE	-	-	Value of key k8s_namespace in the logged string (log pattern)
CONSOLE_LOGGING_ENABLED	console.logging.enabled	true	Enable plaintext console logging
CONSOLE_LOGGING_JSON_ENABLED	console.logging.json.enabled	false	Enable json console logging.
JSON_MODULE_ID	json.module.id	unknown	Set the json logging additionalFields moduleId key value. Preferably pre-set in Dockerfile.
JSON_MODULE_VERSION	json.module.version	unknown	Set the json logging additionalFields moduleVersion key value. Preferably pre-set in Dockerfile.
JSON_K8S_NAMESPACE	json.k8s.namespace	unknown	Set the json logging additionalFields K8S_NAMESPACE key value.
CONSOLE_LOGGING_GELF_JSON_ENABLED	console.logging.gelf.json.enabled	false	Enable gelf json console logging.

ENV kulcs	wildfly.properties kulcs	Default	Leírás
GELF_JSON_MODULE_ID	gelf.json.module.id	unknown	Set the gelf json logging additionalFields moduleId key value. Preferably pre-set in Dockerfile.
GELF_JSON_MODULE_VERSION	gelf.json.module.version	unknown	Set the gelf json logging additionalFields moduleVersion key value. Preferably pre-set in Dockerfile.
GELF_JSON_K8S_NAMESPACE	gelf.json.k8s.namespace	unknown	Set the gelf json logging additionalFields K8S_NAMESPACE key value.
GELF_JSON_MDC_FIELDS	gelf.json.mdc.fields	-	Set the gelf json logging additionalFields additional key values.
FILE_LOGGING_ENABLED	file.logging.enabled	false	Enable file logging. The maximum file size is 50MB by default.
LOGSTASH_ENABLED	logstash.enabled	false	Enable sending log entries to logstash server
LOGSTASH_BLOCKING_MODE	logstash.blocking.mode	DISCARD	Enable (BLOCK) or disable (DISCARD) blocking mode in case logs cannot be written
LOGSTASH_QUEUE_LENGTH	logstash.queue.length	50000	Size of the async queue length
LOGSTASH_HOST	logstash.host	127.0.0.1	Logstash server host.
LOGSTASH_PORT	logstash.port	8000	Logstash server port.
LOGSTASH_MODULE_ID	-	unknown	Set the logstash logging additionalFields moduleId key value.
LOGSTASH_MODULE_VERSION	-	unknown	Set the logstash logging additionalFields moduleVersion key value.

ENV kulcs	wildfly.properties kulcs	Default	Leírás
LOGSTASH_K8S_NAME SPACE	-	unknown	Set the logstash logging additionalFields K8S_NAMESPACE key value.
LOGSTASH_MDC_FIELDS	-	-	Set the logstash logging additionalFields additional key values.
JAVA_GC	-	-XX:+UseG1GC	Set g1 garbage collector for default gc. You can change the gc via filling with different value: '-XX:+UseConcMarkSweepGC' Or set to empty string for JVM default gc. Example: docker-compose.yml

NOTE

The value of the key defined in **wildfly.properties** has been overridden by the value of the key defined in **ENV**

2.2. wildfly/microprofile

Expands the base image created by [wildfly/common](#) with microprofile, executor and other config. This is necessary because wildfly builds the standalone.xml differently depending on the galleon layer. This layer combines all mp and ee configs that are good for full and ms wildfly.

In this case we create these images from it:

- **icellmobilsoft/wildfly-mp-ms:\${VERSION}** - Basic microservice + microprofile configs
- **icellmobilsoft/wildfly-mp-jpa:\${VERSION}** - Add jpa layer to the microservice image above
- **icellmobilsoft/wildfly-mp-full:\${VERSION}** - Full wildfly with all existing modules + microprofile configs

All images above contain a separate managed-executor-service definition (java:jboss/ee/concurrency/executor/grpc) for gRPC calls and the core threads are configurable as shown below.

Configuration options are inherited from the parent [wildfly/common](#) image and supplemented with the following:

Table 2. Configuration options:

ENV kulcs	wildfly.properties kulcs	Default	Leírás
MANAGED_EXECUTOR_SERVICE_CORE_THREADS	managed-executor-service.core-thread	16	Minimum number of Wildfly managed executors. (If it was not configured, it would be dynamic - [number of cpu cores] x 2)
MANAGED_EXECUTOR_SERVICE_GRPC_CORE_THREADS	managed-executor-service.grpc.core-thread	16	Minimum number of Wildfly managed executors for gRPC service calls. (If it was not configured, it would be dynamic - [number of cpu cores] x 2)
OPENTELEMETRY_SERVICE_NAME	opentelemetry.service-name	ROOT.war	Service name reported to the trace collector
OPENTELEMETRY_EXPORTER_TYPE	opentelemetry.exporter-type	jaeger	The name of the exporter to use: <ul style="list-style-type: none"> • jaeger • otlp
OPENTELEMETRY_EXPORTER_ENDPOINT	opentelemetry.exporter.endpoint	http://localhost:14250	The URL for the exporter endpoint.
OPENTELEMETRY_SPAN_PROCESSOR_TYPE	opentelemetry.span-processor.type	batch	The type of span processor to use: <ul style="list-style-type: none"> • batch: The default processor, which sends traces in batches as configured via the remaining attributes • simple: Traces are pushed to the exporter as they finish.
OPENTELEMETRY_SPAN_PROCESSOR_BATCH_DELAY	opentelemetry.span-processor.batch-delay	5000	The interval, in milliseconds, between two consecutive exports.

ENV kulcs	wildfly.properties kulcs	Default	Leírás
OPENTELEMETRY_SPAN_PROCESSOR_MAX_QUEUE_SIZE	opentelemetry.span-processor.max-queue-size	2048	The maximum size of the queue before traces are dropped
OPENTELEMETRY_SPAN_PROCESSOR_MAX_EXPORT_BATCH_SIZE	opentelemetry.span-processor.max-export-batch-size	512	The maximum number of traces that are published in each batch, which must be smaller or equal to max-queue-size
OPENTELEMETRY_SPAN_PROCESSOR_EXPORT_TIMEOUT	opentelemetry.span-processor.export-timeout	30000	The maximum amount of time in milliseconds to allow for an export to complete before being cancelled
OPENTELEMETRY_SAMPLER_RATIO	opentelemetry.sampler.ratio	0.01	The value used to configure the ratio sampler, which must be within [0.0, 1.0]. For example, if 1 trace in 10,000 is to be exported, this value would be 0.0001.
OPENTELEMETRY_SAMPLER_TYPE	opentelemetry.sampler.type	ratio	<p>The type of sampler to use:</p> <ul style="list-style-type: none"> • on: Always on (all traces are recorded) • off: Always off (no traces are recorded) • ratio: Return a ratio of the traces (e.g., 1 trace in 10000).
MICROMETER_ENDPOINT	micrometer.endpoint	http://opentelemetry-collector:4318/v1/metrics	The URL to which metrics will be published.
MICROMETER_STEP	micrometer.step	60	The step size, or reporting frequency, to use (in seconds).

ENV kulcs	wildfly.properties kulcs	Default	Leírás
HEALTH_EMPTY_LIVENESS_CHECKS_STATUS	-	UP	If the attribute is UP (by default), the server can be live when there are no liveness checks in the deployments. Setting the empty-liveness-checks-status attribute to DOWN will make this procedure fail when there are no liveness checks in the deployments.
HEALTH_EMPTY_READINESS_CHECKS_STATUS	-	UP	If the attribute is UP (by default), the server can be ready when there are no readiness checks in the deployments. Setting the empty-readiness-checks-status attribute to DOWN will make this procedure fail when there are no readiness checks in the deployments.
HEALTH_EMPTY_STARTUP_CHECKS_STATUS	-	UP	If the attribute is UP (by default), the server can be ready when there are no startup checks in the deployments. Setting the empty-startup-checks-status attribute to DOWN will make this procedure fail when there are no readiness checks in the deployments.
UNDERTOW_HTTP_MAX_POST_SIZE	undertow.http.max-post-size	10485760 (10MB)	Size limit of HTTP POST requests. Larger sizes are automatically dropped by Wildfly and returned with an error message.

NOTE

The value of the key defined in `wildfly.properties` has been overridden by the value

of the key defined in ENV

2.3. wildfly/oracle-jdbc

Expands the common image created by [wildfly/microprofile](#) with oracle feature.

In this case, these images are created from it:

- **icellmobilsoft/wildfly-mp-jpa-oracle-jdbc:\${VERSION}** - **icellmobilsoft/wildfly-mp-jpa:\${VERSION}** + oracle driver
- **icellmobilsoft/wildfly-mp-jpa-full-oracle-jdbc:\${VERSION}** - **icellmobilsoft/wildfly-mp-full:\${VERSION}** + oracle driver

Configuration options are inherited from the parent [wildfly/microprofile](#) image and supplemented with the following:

Table 3. Configuration options:

ENV kulcs	wildfly.properties kulcs	Default	Leírás
SPEC_DESCRIPTOR_PROPERTY_REPLACEMENT	spec-descriptor.property-replacement	true	Use variables in the property/descriptor files (ejb-jar.xml, persistence.xml)
ORACLE_DS_SERVICE_NAME	oracle.ds.servicename	icellmobilsoft	Service name for datasource, postfixed with DS automatically → icellmobilsoftDS by default
ORACLE_DS_CONNECTION_URL	oracle.ds.connection.url	-	Oracle DB connection url
ORACLE_DS_USERNAME	oracle.ds.username	-	Oracle DB connection user
ORACLE_DS_PASSWORD	oracle.ds.password	-	Oracle DB connection password
ORACLE_DS_NEW_CONNECTION_SQL	oracle.ds.new-connection-sql	BEGIN NULL; END;	Oracle DB new connection sql
ORACLE_DS_MIN_POOL_SIZE	oracle.ds.min-pool-size	1	Oracle DB connection min pool size
ORACLE_DS_MAX_POOL_SIZE	oracle.ds.max-pool-size	60	Oracle DB connection max pool size
DEFAULT_PERSISTENCE_HIBERNATE_DIALECT	-	org.hibernate.dialect.OracleDialect	Implementation constant value for usage in persistence.xml file

NOTE

The value of the key defined in **wildfly.properties** has been overridden by the value of the key defined in **ENV**

Example for DEFAULT_PERSISTENCE_HIBERNATE_DIALECT usage: [persistence.xml](#)

2.4. wildfly/postgresql-jdbc

Expands the common image created by [wildfly/microprofile](#) with postgresql feature.

In this case, these images are created from it:

- **icellmobilsoft/wildfly-mp-jpa-postgresql-jdbc:\${VERSION}** - **icellmobilsoft/wildfly-mp-jpa:\${VERSION}** + postgresql driver
- **icellmobilsoft/wildfly-mp-full-postgresql-jdbc:\${VERSION}** - **icellmobilsoft/wildfly-mp-full:\${VERSION}** + postgresql driver

Configuration options are inherited from the parent [wildfly/microprofile](#) image and supplemented with the following:

Table 4. Configuration options:

ENV kulcs	wildfly.properties kulcs	Default	Leírás
SPEC_DESCRIPTOR_PROPERTY_REPLACEMENT	spec-descriptor.property-replacement	true	Use variables in the property/descriptor files (ejb-jar.xml, persistence.xml)
POSTGRESQL_DS_SERVICE_NAME	postgresql.ds.service name	icellmobilsoft	Service name for datasource, postfixed with DS automatically → icellmobilsoftDS by default
POSTGRESQL_DS_CONNECTION_URL	postgresql.ds.connection.url	-	PostgreSQL DB connection url
POSTGRESQL_DS_USERNAME	postgresql.ds.username	-	PostgreSQL DB connection user
POSTGRESQL_DS_PASSWORD	postgresql.ds.password	-	PostgreSQL DB connection password
POSTGRESQL_DS_NEW_CONNECTION_SQL	postgresql.ds.new-connection-sql	BEGIN;END;	PostgreSQL DB new connection sql
POSTGRESQL_DS_MIN_POOL_SIZE	postgresql.ds.min-pool-size	1	PostgreSQL DB connection min pool size

ENV kulcs	wildfly.properties kulcs	Default	Leírás
POSTGRESQL_DS_MAX_POOL_SIZE	postgresql.ds.max-pool-size	60	PostgreSQL DB connection max pool size
DEFAULT_PERSISTENCE_HIBERNATE_DIALECT	-	org.hibernate.dialect.PostgreSQLDialect	Implementation constant value for usage in persistence.xml file

NOTE

The value of the key defined in **wildfly.properties** has been overridden by the value of the key defined in **ENV**

Example for DEFAULT_PERSISTENCE_HIBERNATE_DIALECT usage: [persistence.xml](#)

2.5. wildfly/ibm-mq

Expands the common image created by [wildfly/oracle-jdbc](#) with ibm-mq feature.

In this case, these images are created from it:

- **icellmobilsoft/wildfly-mp-full-oracle-jdbc-ibm-mq:\${VERSION}** - **icellmobilsoft/wildfly-mp-full-oracle-jdbc:\${VERSION}** + ibm-mq driver

2.6. wildfly/mariadb-jdbc

Expands the common image created by [wildfly/microprofile](#) with mariadb feature.

In this case, these images are created from it:

- **icellmobilsoft/wildfly-mp-jpa-mariadb-jdbc:\${VERSION}** - **icellmobilsoft/wildfly-mp-jpa:\${VERSION}** + mariadb driver
- **icellmobilsoft/wildfly-mp-full-mariadb-jdbc:\${VERSION}** - **icellmobilsoft/wildfly-mp-full:\${VERSION}** + mariadb driver

Configuration options are inherited from the parent [wildfly/microprofile](#) image and supplemented with the following:

Table 5. Configuration options:

ENV kulcs	wildfly.properties kulcs	Default	Leírás
SPEC_DESCRIPTOR_PROPERTY_REPLACEMENT	spec-descriptor.property-replacement	true	Use variables in the property/descriptor files (ejb-jar.xml, persistence.xml)

ENV kulcs	wildfly.properties kulcs	Default	Leírás
MARIADB_DS_SERVICE_NAME	mariadb.ds.servicename	icellmobilsoft	Service name for datasource, postfixed with DS automatically → icellmobilsoftDS by default
MARIADB_DS_CONNECTION_URL	mariadb.ds.connection.url	-	MariaDb DB connection url
MARIADB_DS_USERNAME	mariadb.ds.username	-	MariaDb DB connection user
MARIADB_DS_PASSWORD	mariadb.ds.password	-	MariaDb DB connection password
MARIADB_DS_NEW_CONNECTION_SQL	mariadb.ds.new-connection-sql	SELECT SQL_NO_CACHE 1	MariaDb DB new connection sql
MARIADB_DS_MIN_POOL_SIZE	mariadb.ds.min-pool-size	1	MariaDb DB connection min pool size
MARIADB_DS_MAX_POOL_SIZE	mariadb.ds.max-pool-size	60	MariaDb DB connection max pool size
DEFAULT_PERSISTENCE_HIBERNATE_DIALECT	-	org.hibernate.dialect.MariaDBDialect	Implementation constant value for usage in persistence.xml file

NOTE

The value of the key defined in **wildfly.properties** has been overridden by the value of the key defined in **ENV**

Example for DEFAULT_PERSISTENCE_HIBERNATE_DIALECT usage: [persistence.xml](#)

3. JMX usage

The modules for the wildfly jmx subsystem will be included in the images created by galleon, but by default the subsystem is disabled. On developer images it can be activated with a cli script, so there is no need to run a separate shell script for jmx.

configure-jmx.cli

```
/subsystem=jmx:add
/subsystem=jmx/remoting-connector=jmx:add(use-management-endpoint=true)

# management auth is turned off - not important for local execution anyway
/core-service=management/management-interface=http-interface:undefine-attribute(name=http-authentication-factory)
/core-service=management/management-interface=http-interface:map-remove(name=http-
```

```
upgrade, key=sasl-authentication-factory)
```

To connect, you may need wildfly-cli.jar on the client classpath. This can be done for example as follows:

- download client jar

```
mvn org.apache.maven.plugins:maven-dependency-plugin:2.8:get
-Dartifact=org.wildfly.core:wildfly-cli:19.0.1.Final:jar:client
```

- add the downloaded jar to the classpath when starting the jmx client

visualvm sample

```
visualvm --cp:a ${HOME}/.m2/repository/org/wildfly/core/wildfly-
cli/19.0.1.Final/wildfly-cli-19.0.1.Final-client.jar
```

jconsole sample

```
jconsole -J
-Djava.class.path="${JAVA_HOME}/lib/jconsole.jar:${JAVA_HOME}/lib/tools.jar:${HOME}
/.m2/repository/org/wildfly/core/wildfly-cli/19.0.1.Final/wildfly-cli-19.0.1.Final-
client.jar"
```

IMPORTANT

for the above commands, you should make sure that the environment variables used exist, or replace them with absolute paths, ~ cannot be used for user home!

Wildfly allows jmx connection on the management port, url must be in the format `service:jmx:remote+http://localhost:${management.port}`.

4. Examples

persistence.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<persistence xmlns="https://jakarta.ee/xml/ns/persistence"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="https://jakarta.ee/xml/ns/persistence
    https://jakarta.ee/xml/ns/persistence/persistence_3_0.xsd"
  version="3.0">

  <persistence-unit name="defaultPU" transaction-type="JTA">
    ...
    <properties>
      ...
      <property name="hibernate.dialect"
```

```
value="${env.DEFAULT_PERSISTENCE_HIBERNATE_DIALECT}" />
    </properties>
</persistence-unit>
</persistence>
```

docker-compose.yml

```
...
  environment:
    DEBUG: true
    #different gc
    JAVA_GC: '-XX:+UseSerialGC'
    #JVM default gc with empty string:
    #JAVA_GC: ''
  ports:
...

```

5. Release Notes

5.1. v2.0.0

The project has moved out of the internal repository, not counting updates, it is 1:1 compatible with version 1.1.0.

Changes compared to the internal version

- Renames:
 - wildfly-ms/default → icellmobilsoft/wildfly-default-ms
 - wildfly-jpa/default → icellmobilsoft/wildfly-default-jpa
 - wildfly-full/default → icellmobilsoft/wildfly-default-full
 - wildfly-ms/mp → icellmobilsoft/wildfly-mp-ms
 - wildfly-ms/jpa/mp → icellmobilsoft/wildfly-mp-jpa
 - wildfly-full/mp → icellmobilsoft/wildfly-mp-full
 - wildfly-ms/logstash → icellmobilsoft/wildfly-mp-ms
 - wildfly-ms/jpa-logstash → icellmobilsoft/wildfly-mp-jpa
 - wildfly-full/logstash → icellmobilsoft/wildfly-mp-full
 - wildfly-ms/oracle-jdbc → icellmobilsoft/wildfly-mp-jpa-oracle-jdbc
 - wildfly-full/oracle-jdbc → icellmobilsoft/wildfly-mp-full-oracle-jdbc
 - wildfly-ms/postgresql-jdbc → icellmobilsoft/wildfly-mp-jpa-postgresql-jdbc
 - wildfly-full/postgresql-jdbc → icellmobilsoft/wildfly-mp-full-postgresql-jdbc
 - wildfly-full/oracle-jdbc-ibm-mq → icellmobilsoft/wildfly-mp-full-oracle-jdbc-ibm-mq
 - (replaced) wildfly-ms/gcp → icellmobilsoft/wildfly-mp-ms

- (replaced) wildfly-ms/jpa-gcp → icellmobilsoft/wildfly-mp-jpa
- (replaced) wildfly-full/gcp → icellmobilsoft/wildfly-mp-full
- (replaced) wildfly-ms/postgresql-jdbc-gcp → icellmobilsoft/wildfly-mp-jpa-postgresql-jdbc
- (replaced) wildfly-full/postgresql-jdbc-gcp → icellmobilsoft/wildfly-mp-full-postgresql-jdbc
- Environment changes:
 - (new with old value) `ORACLE_DS_SERVICENAME` default `icellmobilsoft+DS`
 - (new with old value) `POSTGRESQL_DS_CONNECTION_URL` default `icellmobilsoft+DS`
 - (new) `CONSOLE_LOGGING_JSON_ENABLED` default `false`
 - (new) `CONSOLE_LOGGING_JSON_FORMATTER_ZONEID` default `UTC`
 - (change value) `FILE_LOGGING_ENABLED` default `false` (changed from `true`)
 - (new with old value) `LOGSTASH_BLOCKING_MODE` default `DISCARD`
 - (new with old value) `LOGSTASH_QUEUE_LENGTH` default `50000`
 - (change value) `LOGSTASH_ENABLED` default `false` (changed from `true`)
- Debugging: The `--debug` option doesn't need anymore in the `CMD exec` which you can ignore in the local Dockerfile mostly. The debug mode can be controlled by the `DEBUG` environment variable which is false by default. The default port is `8787` but you can override it with the `DEBUG_PORT` environment variable.

WARNING

Don't release docker images with `DEBUG` enabled into production environments!

What's new

- Baseimage version update to 1.4.0
- `DEFAULT_PERSISTENCE_HIBERNATE_DIALECT` variable added to the jdbc images to use in the local Dockerfiles:
 - wildfly-mp-*-oracle-jdbc image = `org.hibernate.dialect.OracleDialect`
 - wildfly-mp-*-postgresql-jdbc image = `org.hibernate.dialect.PostgreSQLDialect`

NOTE

project-local.Dockerfile snippet

You can override default dialect with `PERSISTENCE_HIBERNATE_DIALECT` environment variable but you don't need to set it in the `docker-compose.yml` file mostly.

ARG

`PERSISTENCE_HIBERNATE_DIALECT=$DEFAULT_PERSISTENCE_HIBERNATE_DIALECT`
`ENV HIBERNATE_DIALECT=$PERSISTENCE_HIBERNATE_DIALECT`

5.2. v2.0.1

What's new

- ironjacamar auto commit disabled when stopping container

- Set the default garbage collector to g1 gc. With JAVA_GC environment variable the default gc can be overridden. Just set JAVA_GC env variable in docker-compose file. Correct values: '-XX:+UseConcMarkSweepGC' ; '-XX:+UseSerialGC' ; '-XX:+UseG1GC' etc

5.3. v3.0.0

What's new

- Bump Wildfly 27.0.1 → 30.0.1

Changes compared to previous version

- Replace [Microprofile Opentracing](#) with [Microprofile Telemetry 1.1 Specification](#)
- Replace [Microprofile Metrics](#) with [Micrometer](#)
- Environment changes:
 - (removed) `OPENTRACING_JAEGER_AGENT_HOST`
 - (removed) `OPENTRACING_JAEGER_AGENT_PORT`
 - (removed) `OPENTRACING_JAEGER_AGENT_SAMPLER_PORT`
 - (removed) `OPENTRACING_JAEGER_PROPAGATION`
 - (new) `MICROMETER_ENDPOINT` default: <http://opentelemetry-collector:4318/v1/metrics>
 - (new) `MICROMETER_STEP` default: `60`
 - (new) `OPENTELEMETRY_SERVICE_NAME` default: `ROOT.war`
 - (new) `OPENTELEMETRY_EXPORTER_TYPE` default: `jaeger`
 - (new) `OPENTELEMETRY_EXPORTER_ENDPOINT` default: <http://localhost:14250>
 - (new) `OPENTELEMETRY_SPAN_PROCESSOR_TYPE` default: `batch`
 - (new) `OPENTELEMETRY_SPAN_PROCESSOR_BATCH_DELAY` default: `5000`
 - (new) `OPENTELEMETRY_SPAN_PROCESSOR_MAX_QUEUE_SIZE` default: `2048`
 - (new) `OPENTELEMETRY_SPAN_PROCESSOR_MAX_EXPORT_BATCH_SIZE` default: `512`
 - (new) `OPENTELEMETRY_SPAN_PROCESSOR_EXPORT_TIMEOUT` default: `30000`
 - (new) `OPENTELEMETRY_SAMPLER_RATIO` default: `0.01`
 - (new) `OPENTELEMETRY_SAMPLER_TYPE` default: `ratio`
- Add new wildfly jpa base images with mariaDb support, see [wildfly/mariadb-jdbc](#)
 - icellmobilsoft/wildfly-mp-jpa-mariadb-jdbc
 - icellmobilsoft/wildfly-mp-full-mariadb-jdbc

NOTE | See configuration at [here](#)

5.4. v3.0.1

Changes compared to previous version

- Upgrade Oracle JDBC version from 23.3 to 23.4
- Separate managed-executor-service (java:jboss/ee/concurrency/executor/grpc) for gRPC threads

5.5. v3.1.0

Changes compared to previous version

- GH action: bake-action upgrade docker/bake-action@v4 → docker/bake-action@v5
- JSON logging enhancements:
 - `biz.paluch.logging.gelf.wildfly.WildFlyJsonFormatter` configured supporting our standard logging format
 - Environment changes:
 - (removed) `CONSOLE_LOGGING_JSON_FORMATTER_ZONEID` default `UTC`
 - with `WildFlyJsonFormatter` there is no option to set the timezone, thus adding zone offset to timestamp: `yyyy-MM-dd HH:mm:ss,SSSZ`
 - (new) `JSON_MODULE_ID` default `unknown`
 - (new) `JSON_MODULE_VERSION` default `unknown`
 - (new) `JSON_K8S_NAMESPACE` default `unknown`
 - (new) `JSON_MDC_FIELDS`

5.6. v4.0.0

Changes compared to previous version

- Opentelemetry default otlp exporter type, jaeger is not supported
- galleon 6+ missing user home workaround
- base image upgrade 1.5.0
- WildFly 34 upgrade
- JSON logging:
 - Normal WF JSON logging restored:
 - GELF formatting is removed
 - can be activated with `CONSOLE_LOGGING_JSON_ENABLED`
 - Environment variables can be used to set additional fields in the JSON log:
 - `JSON_MODULE_ID` default `unknown`
 - `JSON_MODULE_VERSION` default `unknown`
 - `JSON_K8S_NAMESPACE` default `unknown`
 - Info: adding additional mdc fields via env is not supported by the formatter meta-data configuration
 - GELF JSON logging separated from normal WF JSON logging:

- can be activated with new env: `CONSOLE_LOGGING_GELF_JSON_ENABLED`
- Environment changes:
 - (new) `GELF_JSON_MODULE_ID` default `unknown`
 - (new) `GELF_JSON_MODULE_VERSION` default `unknown`
 - (new) `GELF_JSON_K8S_NAMESPACE` default `unknown`
 - (new) `GELF_JSON_MDC_FIELDS`