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MariaDB Server Docker Official Image Environment Variables

When you start the image, you can adjust the initialization of the MariaDB Server instance by passing one or more environment variables on the docker run command line. Do that all of the variables below, except `MARIADB_AUTO_UPGRADE`, will have now effect if you start the container with a data directory that already contains a database: any pre-existing database will always be left untouched on container startup.

From tag 10.2.38, 10.3.29, 10.4.19, 10.5.10 onwards, and all 10.6 and later tags, the `MARIADB_*` equivalent variables are provided. `MARIADB_*` variants will always be used in preference to `MYSQL_*` variants.

One of `MARIADB_ROOT_PASSWORD_HASH`, `MARIADB_ROOT_PASSWORD`, `MARIADB_ALLOW_EMPTY_ROOT_PASSWORD`, or `MARIADB_RANDOM_ROOT_PASSWORD` (or equivalents, including `*_FILE`), is required. The other environment variables are optional.

MARIADB_ROOT_PASSWORD_HASH / MARIADB_ROOT_PASSWORD / MYSQL_ROOT_PASSWORD

This specifies the password that will be set for the MariaDB root superuser account.

MARIADB_ALLOW_EMPTY_ROOT_PASSWORD / MYSQL_ALLOW_EMPTY_PASSWORD

Set to a non-empty value, like `1`, to allow the container to be started with a blank password for the root user. NOTE: Setting this variable to yes is not recommended unless you know what you are doing, since this will leave your MariaDB instance completely unprotected, allowing anyone to gain complete superuser access.

MARIADB_RANDOM_ROOT_PASSWORD / MYSQL_RANDOM_ROOT_PASSWORD

Set to a non-empty value, like `yes`, to generate a random initial password for the root user. The generated root password will be printed to stdout (`GENERATED ROOT PASSWORD:`).

MARIADB_ROOT_HOST / MYSQL_ROOT_HOST

This is the hostname part of the root user created. By default this is `%`, however it can be set to any default MariaDB allowed hostname component. Setting this to `localhost` will prevent any root user being accessible except via the unix socket.

MARIADB_DATABASE / MYSQL_DATABASE

This variable allows you to specify the name of a database to be created on image startup.

MARIADB_USER / MYSQL_USER, MARIADB_PASSWORD_HASH / MARIADB_PASSWORD / MYSQL_PASSWORD

Both user and password variables, along with a database, are required for a user to be created. This user will be granted all access (corresponding to `GRANT ALL`) to the `MARIADB_DATABASE` database.

Do not use this mechanism to create the root superuser, that user gets created by default with the password specified by the `MARIADB_ROOT_PASSWORD` / `MYSQL_ROOT_PASSWORD` variable.

MARIADB_MYSQL_LOCALHOST_USER / MARIADB_MYSQL_LOCALHOST_GRANTS

Set `MARIADB_MYSQL_LOCALHOST_USER` to a non-empty value to create the `mysql@localhost` database user. This user is especially useful for a variety of health checks and backup scripts.

The `mysql@localhost` user gets `USAGE` privileges by default. If more access is required, additional global privileges in the form of a comma separated list can be provided. If you are sharing a volume containing MariaDB's unix socket (`/var/run/mysqld` by default), privileges beyond `USAGE` can result in confidentiality, integrity and availability risks, so use a `GRANT` statement. It's also possible to use for `Mariadb-backup`. The `healthcheck.sh` script also documents the required privileges for each health check test.

MARIADB_HEALTHCHECK_GRANTS

Set `MARIADB_HEALTHCHECK_GRANTS` to the grants required to be given to the `healthcheck@localhost`, `healthcheck@127.0.0.1`, `healthcheck@::1` users. When not specified the default grant is `USAGE`.

The main value used here will be `REPLICA MONITOR` for the `healthcheck --replication test`.

MARIADB_INITDB_SKIP_TZINFO / MYSQL_INITDB_SKIP_TZINFO

By default, the entrypoint script automatically loads the timezone data needed for the `CONVERT_TZ()` function. If it is not needed, any non-empty value disables timezone loading.

MARIADB_AUTO_UPGRADE / MARIADB_DISABLE_UPGRADE_BACKUP

Set `MARIADB_AUTO_UPGRADE` to a non-empty value to have the entrypoint check whether `mariadb-upgrade` needs to run, and if so, run the upgrade before starting the MariaDB server.

Before the upgrade, a backup of the system database is created in the top of the datadir with the name `system_mysql_backup_*.sql.zst`. This backup process can be disabled by setting `MARIADB_DISABLE_UPGRADE_BACKUP` to a non-empty value.

If `MARIADB_AUTO_UPGRADE` is set, and the `.my-healthcheck.cnf` file is missing, the `healthcheck` users are recreated if they don't exist, `MARIADB_HEALTHCHECK_GRANTS` grants are given, the passwords of the `healthcheck` users are reset to a random value and the `.my-healthcheck.cnf` file is recreated with the new password populated.

MARIADB_MASTER_HOST

When specified, the container will connect to this host and replicate from it.

MARIADB_REPLICATION_USER / MARIADB_REPLICATION_PASSWORD_HASH / MARIADB_REPLICATION_PASSWORD

When `MARIADB_MASTER_HOST` is specified, `MARIADB_REPLICATION_USER` and `MARIADB_REPLICATION_PASSWORD` will be used to connect to the master.

When not specified, the `MARIADB_REPLICATION_USER` will be created with the `REPLICATION REPLICATION` grants required to a client to start replication.

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