# Installing the Bridge Docker

You can create Docker containers from the BRIDGE images using **docker-compose**. This includes the following steps:




**Related Pages:**

- Checking the Installation
- Troubleshooting Bridge Installation

**Related Documentation:**

- Docker compose


## Step 1: Extract the Software

**Load** the BRIDGE Docker image with

```
docker image load -i bridge-<version>.tar
```

## Step2: Configure the Installation Settings

To configure the settings of the Docker image, you need to put your configuration in a **docker-compose.yml** file.

1. **Create a folder** to contain the BRIDGE Docker configuration.

   > Please note that the docker-compose project is named after this folder, and also the created Docker containers. Naming convention for the Docker containers is: `<docker-compose project name>_bridge_1`.

2. Create a file **docker-compose.yml** to the previously created folder. This file should have the following content:

```
services:
  bridge:
    image: 'bridge:${VERSION:-7.7.0}'
    hostname: '${BRIDGE_SERVER_HOSTNAME:}'
        environment:
      - 'BRIDGE_SERVER_HOSTNAME=${BRIDGE_SERVER_HOSTNAME}'
    restart: always
    ports:
      - '${HOST_BRIDGE_PORT:-8080}:8080'
      - '${HOST_PORTS}:${CONTAINER_PORTS}'
    volumes:
      - 'bridge_data:/opt/bridge_data/'
      - './${BRIDGE_SERVER_HOSTNAME}_key.pem:/opt/bridge_data/proxies
/conf/${BRIDGE_SERVER_HOSTNAME}_key.pem'
      - './${BRIDGE_SERVER_HOSTNAME}_cert.pem:/opt/bridge_data
/proxies/conf/${BRIDGE_SERVER_HOSTNAME}_cert.pem'
volumes:
  bridge_data:
    driver: local
```

   Here, you can change the following settings:

| Line | Setting | Description | Allowed Values / Example |
|---|---|---|---|
| 6 | `services/bridge/environment` | Specify a proxy node name for your BRIDGE installation. You can use the environment variables `${BRIDGE_PROXY_HOSTNAME}` and `${BRIDGE_SERVER_HOSTNAME}`, or specify a fix filename. | a string<br>`${BRIDGE_PROXY_HOSTNAME}`<br>`${BRIDGE_SERVER_HOSTNAME}` |

| | | | | |
|---|---|---|---|---|
| 7 | `services/bridge/restart` | Define if the BRIDGE Docker container should be started automatically, e.g. on host reboot. Delete this line, if you do not want to start the container automatically.<br><br>For more information on Docker restart refer to the Docker documentation pages. | always | Restart BRIDGE container on host reboot. |
| 13/14 | `services/bridge/volumes/*.pem` | Mount the proxy certificate files into the container. This works with intermediate certificates as well.<br><br>• Copy the certificate files to the folder the **docker-compose.yml** resides in, or specify a valid path instead of `./`.<br>• You can use the environment variables `${BRIDGE_PROXY_HOSTNAME}` and `${BRIDGE_SERVER_HOSTNAME}`, or specify a fix filename. | | |

3. To define the variables used in the **docker-compose.yml**, create a **.env** file in the same folder the **docker-compose.yml** resides in.

| Variable | Description | Mandatory | Allowed Values / Example |
|---|---|---|---|
| `BRIDGE_SERVER_HOSTNAME` | Provide your BRIDGE hostname (that matches with the BRIDGE license). | ✓ | `BRIDGE_SERVER_HOSTNAME='bridge.scheer-acme.com'` |
| `BRIDGE_PROXY_HOSTNAME` | Provide your BRIDGE proxy hostname (that matches with the proxy license). | | `BRIDGE_PROXY_HOSTNAME='proxy.scheer-acme.com'` |
| `COMPOSE_PROJECT_NAME` | Define the Docker compose project name. This name is used as a prefix for all BRIDGE volumes and containers.<br><br>⚠ Once you have defined a project name and installed the BRIDGE, do not change the project name anymore. | | `COMPOSE_PROJECT_NAME=bridge_prod` |
| `VERSION` | Provide the version of the Docker image. | | `VERSION=7.8.0` |
| `HOST_BRIDGE_PORT` | Provide the BRIDGE port on the host. | | `HOST_BRIDGE_PORT=8090`<br>Default: `8080` |
| `HOST_PORTS` | Map BRIDGE Docker ports to the ports of the host. You can specify a single port or a range `FROM-TO`.<br>The `HOST_PORTS` and `CONTAINER_PORTS` must have a matching count of port numbers. | | `HOST_PORTS=1443`<br>`HOST_PORTS=1443-1444` |
| `CONTAINER_PORTS` | ⓘ We recommend to route all service calls via the same proxy, so at least one more proxy mapping will be needed (as shown in the example). | | `CONTAINER_PORTS=443`<br>`CONTAINER_PORTS=443-444` |

# Step 3: Start the Container

**Start the container** by running the following command:

```
docker-compose up
```

To run the container in the background, use:

```
docker-compose up -d
```

You can stop the container using

```
docker-compose stop
```

If you change the Docker configuration in **docker-compose.yml**, you need to restart the Docker container (`stop`/`up`) to apply the changes.

## Step 4: Checking the Installation

If you want to check the installation, continue with Checking the Installation.