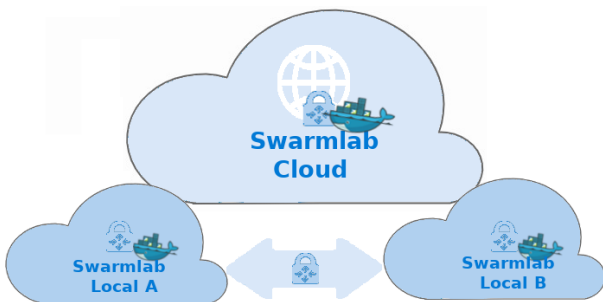


# Swarmlab Hybrid!

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*Build once, Deploy anywhere!*



Swarmlab Hybrid provides a **Modern Application Architecture**

- Distributed System
- Multiple machines
- Each service is a process
- Containerized services in Lightweight containers
- Faster deploy/delivery of services



*WireGuard - fast and modern VPN tunnel*

**All running in a isolated Network Stack with High efficiency and security**

# 1. Install

## 1.1. Prerequisites Hardware

- A Linux Server (Virtual or Physical)
  - You must have super user privileges (sudo)
- Docker Engine- Community version 18 or later is required.
  - Docker Engine is supported on x86\_64 (or amd64), armhf, and arm64 architectures.
- RAM
  - Absolute minimum to run the daemon and some very light containers - 512MB
  - Minimum for “comfortable” usage – 2GB
- CPU
  - Minimum: 2; Recommended 4+.
- Disk Space
  - 10 GB for internal requirements.
  - The amount of additional disk space required for load file staging, persistence, or backups depends on the size of the data to be loaded.



Docker uses a hypervisor with a VM, and the host server must support virtualization.

### *Remember*

Before you create and configure a hybrid deployment using the swarmlab-agent client, your Local Machines **need to meet certain requirements**.



If you don't meet those requirements, you won't be able to complete the steps within the swarmlab-agent client

and you won't be able to configure a hybrid deployment between your Local Environment and Swarmlab Online Environment.

## 1.2. Prerequisites Keys

- Create an Hybrid Swarmlab Key
  - Connect to <https://api-client.swarmlab.io:8088/> and click on the Dashboard → Profile Menu
- After creating Keys for your project, you will be informed with an email and it will also become visible in the Swarmlab-agent clients corresponding menu.

## 1.3. Download and install

- Download the swarmlab-agent client
  - git clone <https://git.swarmlab.io:3000/zeus/swarmlab-hybrid.git>
- Run `sudo ./install.sh`
  - See also `./install` directory

## 2. Start/Stop Agent

### 2.1. Start Agent

- Navigate to the dir you have installed the agent
  - run `./start.sh`

### 2.2. Stop Agent

- Navigate to the dir you have installed the agent
  - run `./stop.sh`

### 2.3. Login

Connect to <https://api-client.swarmlab.io:8088/> and click on "Hybrid → OpenSwarmlab Hybrid" Menou



This is the way to have a fully functional Swarmlab Cloud. You HAVE to connect this way to be Authorized for the session.

## 3. Config

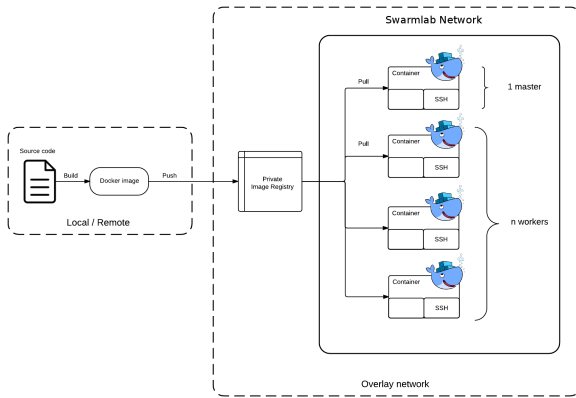
- Use the "Profile → Settings" menu on swarmlab-agent client to configure a hybrid agent
  - add also a zone for your agent
  - Connect to <https://api-client.swarmlab.io:8088/> and click on the Dashboard → Profile Menou

## 4. Deploy

### 4.1. Local

[📺](#) | *vimeo*

*.intro swarmlab 0 - 1:10*



[\[ \]](#) | *vimeo*

*.intro hybrid 1:10 - 2:20*

[\[ \]](#) | *vimeo*

*.intro agent 2:20 - 4:15*

[\[ \]](#) | *vimeo*

*.bootstrap image 4:15 - 7:25*

## 4.2. Hybrid

- deploy 0:20 - 11:17
  - deploy field description (image) 1:03 - 1:30
  - deploy field description (stack) 1:30 - 3:10
  - deploy field description (network) 3:10 - 5:35
  - deploy field description (Limits) 5:35 - 6:17
  - deploy field description (Port Expose) 6:17 - 7:20
  - deploy field description (Readme URL) 7:20 - 8:32

[\[ \]](#) | *vimeo*

*.Deploy*

## 5. Join

- join 11:17 - 17:41

[\[ \]](#) | *vimeo*

*.Join*

## 6. Connect to Container

[\[ \]](#) | *vimeo*

*.Connect to container (Host → container) 7:25 - 12:20*

[\[ \] | vimeo](#)

*.Connect to container (Container → container) 12:20 - 13:50*

[\[ \] | vimeo](#)

*.Mount DIR container 13:50 - 7:15*