

Docker GitLab runner installation

Introduction

GitLab Runner is an application that works with GitLab CI/CD to run jobs in a pipeline.

Prerequisites

- Your GitLab repository supports CI/CD
 - You can enable the feature ON via following steps Settings General Visibility, project features, permissions CI/CD
- Server that supports docker ([supported platforms](#))

Instructions

This section describes how to install and configure GitLab runner using docker on some server.

1. Deploy virtual server in Portal



Skip this step if you already have a server.

If you need new server, you can deploy one via TDS portal - [Orchestration - Servers#Howtodeploynewserver](#)

2. Install Docker engine on server – choose one of the following options
 - Option A - using "convenience script" from [official instructions](#) – recommended only for development and testing purposes

```
curl -fsSL https://get.docker.com -o get-docker.sh
sudo sh get-docker.sh
sudo systemctl start docker
```

- Option B - specific approach for each relevant OS - basically setting up repository and installing Docker Engine - all supported OS instructions can be found at <https://docs.docker.com/engine/install>
 - CentOS - [official instructions](#)

```
sudo yum install -y yum-utils
sudo yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo
sudo yum install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin -y
```

- Fedora - [official instructions](#)

```
sudo dnf -y install dnf-plugins-core
sudo dnf config-manager --add-repo https://download.docker.com/linux/fedora/docker-ce.repo
sudo dnf install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin -y
```

- Ubuntu - [official instructions](#)

```
sudo apt-get update
sudo apt-get install ca-certificates curl gnupg lsb-release -y
sudo mkdir -m 0755 -p /etc/apt/keyrings
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg
echo "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
```

3. Add your user to docker group to be able to run docker commands (more about security in [article](#))

```
sudo usermod -aG docker $USER
```

4. Start docker container with latest version of gitlab runner ([official instructions](#))

```
docker run -d --name gitlab-runner --restart always -v /srv/gitlab-runner/config:/etc/gitlab-runner -v /var/run/docker.sock:/var/run/docker.sock gitlab/gitlab-runner:latest
```

5. Configure GitLab runner to connect to your repository
- Go to desired GitLab repository Settings CI/CD Runners
 - Go to "Set up a specific runner for a project" section
 - Copy the "URL" and "registration token", you will need it in next steps
 - Execute following command on the server with running docker container

```
docker exec -it gitlab-runner gitlab-runner register --docker-privileged
```

- d. You will be prompted to fill-in following parameters:
- URL from step 5.b.
 - Token from step 5.b.
 - Description
 - Tags for the runner (can leave this blank for the moment).
 - Specify docker executor
 - Specify a default Docker image (e.g. alpine:latest)