

# Jenkins Mastery – Day 1 Documentation

## 1. Objective of Day 1

Set up Jenkins using Docker, unlock Jenkins, install recommended plugins, create the first admin user, and run the first freestyle job to verify that Jenkins is functioning correctly.

## 2. Prerequisites

- Docker Desktop installed (Windows/macOS) OR Docker Engine (Linux).
- Internet connection to download Jenkins image and plugins.

## 3. Step-by-Step Jenkins Setup Using Docker

Run the following command to start Jenkins in Docker:

### Command:

```
docker run -d --name jenkins-master -p 8080:8080 -p 50000:50000 -v jenkins_home:/var/jenkins_home jenkins/jenkins:lts
```

### Explanation:

- **-d**: Run container in background.
- **--name**: Name of container.
- **-p**: Maps ports for UI and agents.
- **-v**: Persistent Jenkins home directory.
- **jenkins/jenkins:lts**: Official Jenkins LTS image.

## 4. Access Jenkins Web Interface

Open your browser and go to:

**http://localhost:8080**

You will see the 'Unlock Jenkins' screen.

## 5. Get Initial Admin Password

Run:

```
docker exec -it jenkins-master cat /var/jenkins_home/secrets/initialAdminPassword
```

Copy the password and paste it into the unlock screen.

## 6. Install Suggested Plugins

Choose:

**'Install suggested plugins'**

Jenkins installs essential plugins automatically.

## 7. Create First Admin User

Fill in Username, Password, Full Name, Email → then click **Save and Continue**.

## 8. Confirm Jenkins URL

Keep the default Jenkins URL and click **Save and Finish**, then **Start using Jenkins**.

## 9. Create First Freestyle Job

1. New Item → Freestyle project.
2. Build → Execute Shell:

**echo "Hello from Jenkins - Day 1 setup complete!"**

3. Save → Build Now → Check Console Output.

## 10. Expected Output

Hello from Jenkins - Day 1 setup complete!  
Finished: SUCCESS

## 11. Day 1 Completion Summary

- ✓ Jenkins installed
- ✓ Plugins installed
- ✓ Admin user created
- ✓ First job executed successfully