



# SoftLeader

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# Jenkins

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- 01 Jenkins 本機安裝
- 02 Jenkins 操作教學
- 03 Jenkins pipeline撰寫



# Jenkins

# Jenkins介紹

**Jenkins** 是一套的可擴充套件的用於自動化部署的開源 **CI/CD** 工具。

**Jenkins** 是用 **Java** 編寫的，是在 **MIT** 許可下發布的。它有一組強大的功能，可以將軟體的構建、測試、部署、整合和釋出等相關任務自動化。

這款用於測試的自動化 **CI/CD** 工具可以在 **macOS**、**Windows** 和各種 **UNIX** 版本（例如 **OpenSUSE**、**Ubuntu**、**Red Hat** 等）系統上使用。

除了通過本地安裝包安裝，它還可以在任何安裝過 **Java** 執行時環境（**Java Runtime Environment**，**JRE**）的機器上單獨安裝或者作為一個 **Docker** 安裝



# Jenkins

安裝教學

# 以docker 安裝 Jenkins

## 1. 安裝 Docker

Switch to Linux Containers

<https://docs.docker.com/desktop/windows/install/>

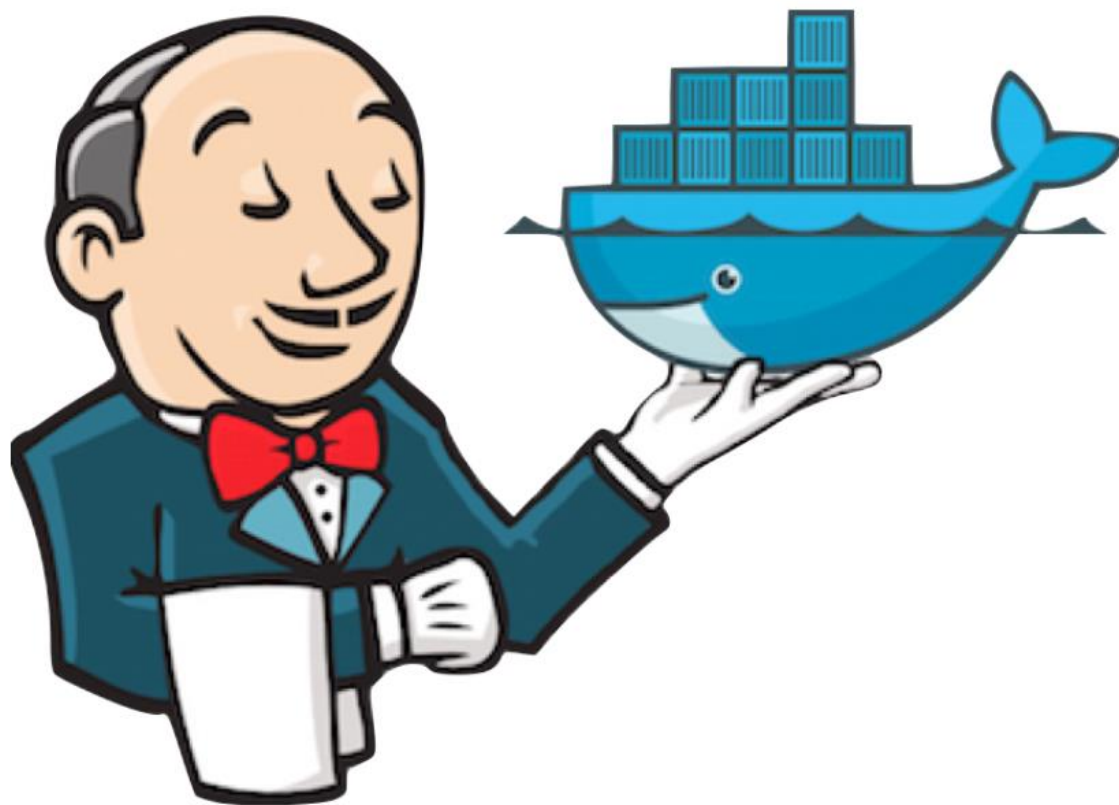
## 2. 選擇Jenkins image，並下載

`docker pull jenkins/jenkins: 2.325-jdk8`

## 3. 啟動Jenkins

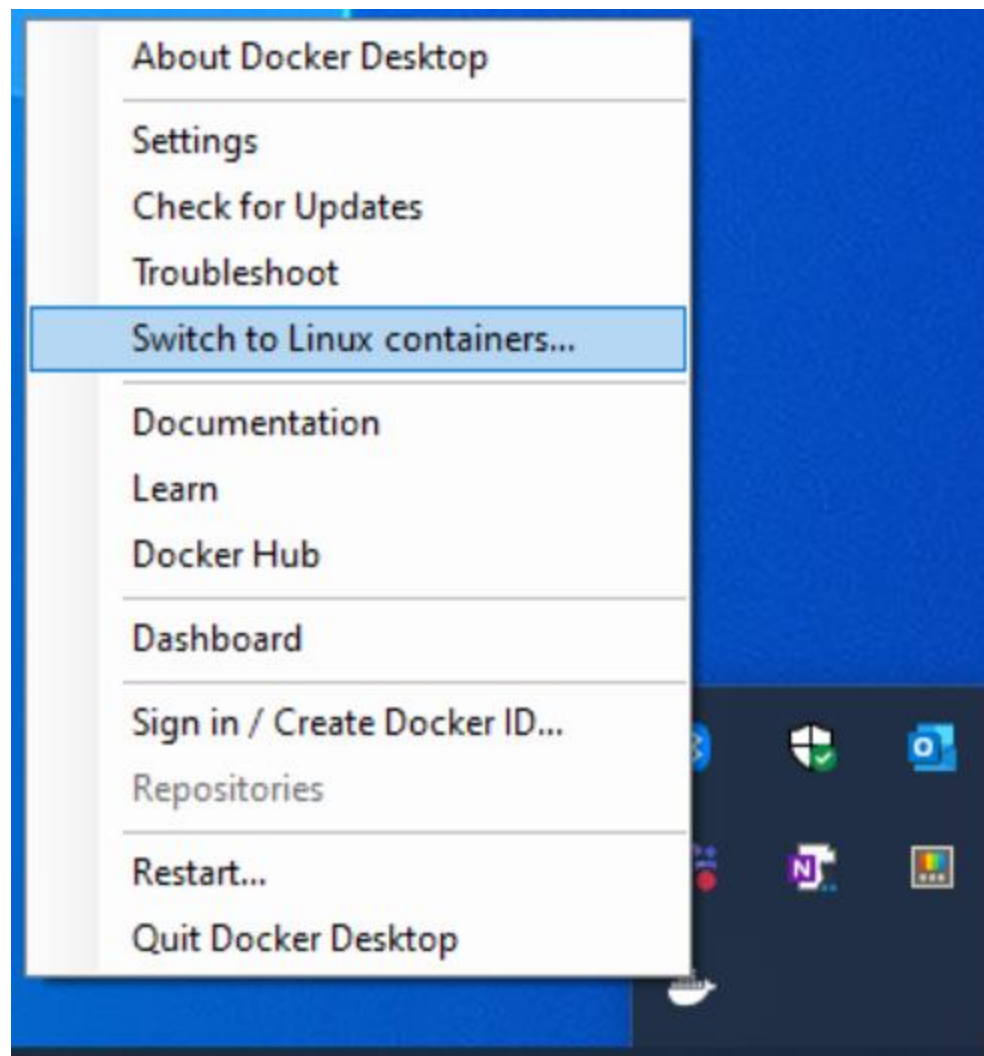
- 以docker指令直接啟動
- 以docker-compose 啟動

<https://www.jenkins.io/doc/book/installing/>



[https://hub.docker.com/\\_/jenkins?tab=tags](https://hub.docker.com/_/jenkins?tab=tags)

# 切换linux containers





# docker-compose.yml

version: '3.8'

services:

jenkins:

image: jenkins/jenkins:2.325-jdk8

restart: always

ports:

- 8080:8080

- 50000:50000

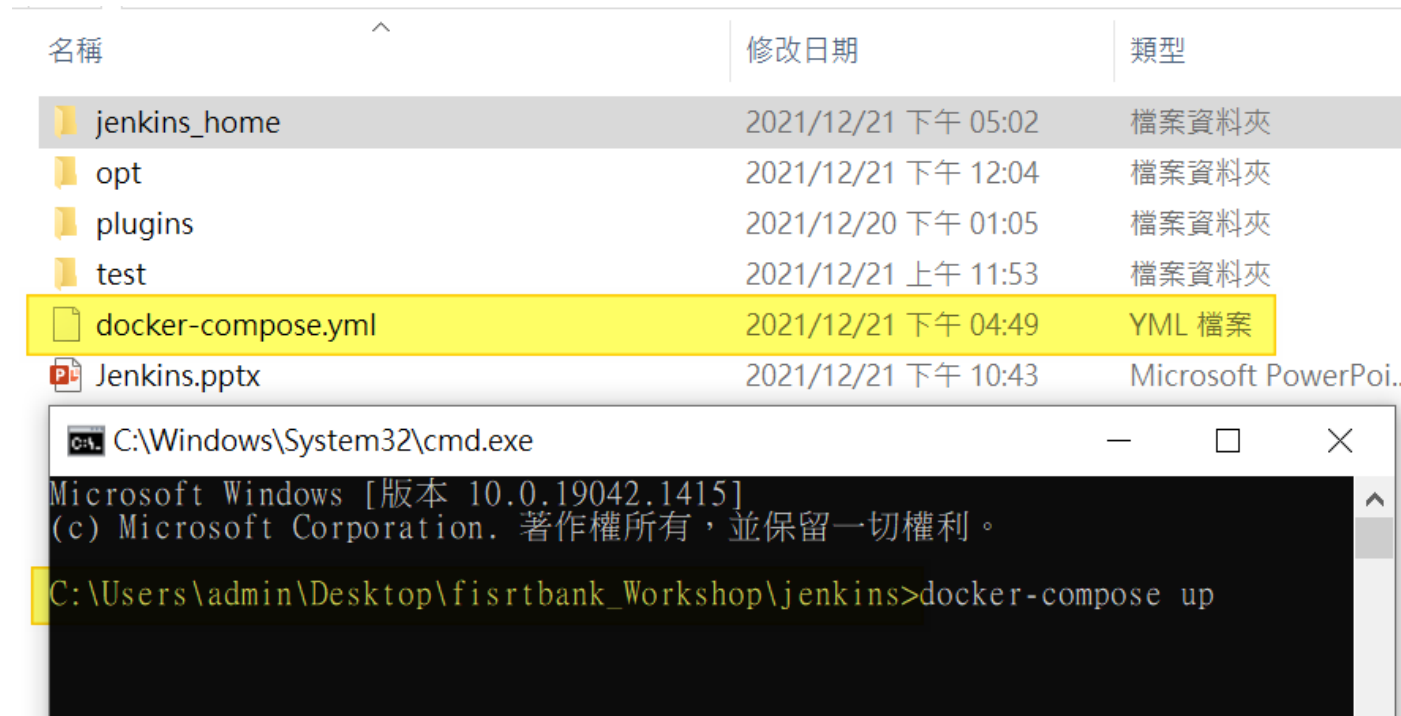
volumes:

- C:\Users\admin\Desktop\fisrtbank\_Workshop\Jenkins\Jenkins\_home:/var/jenkins\_home

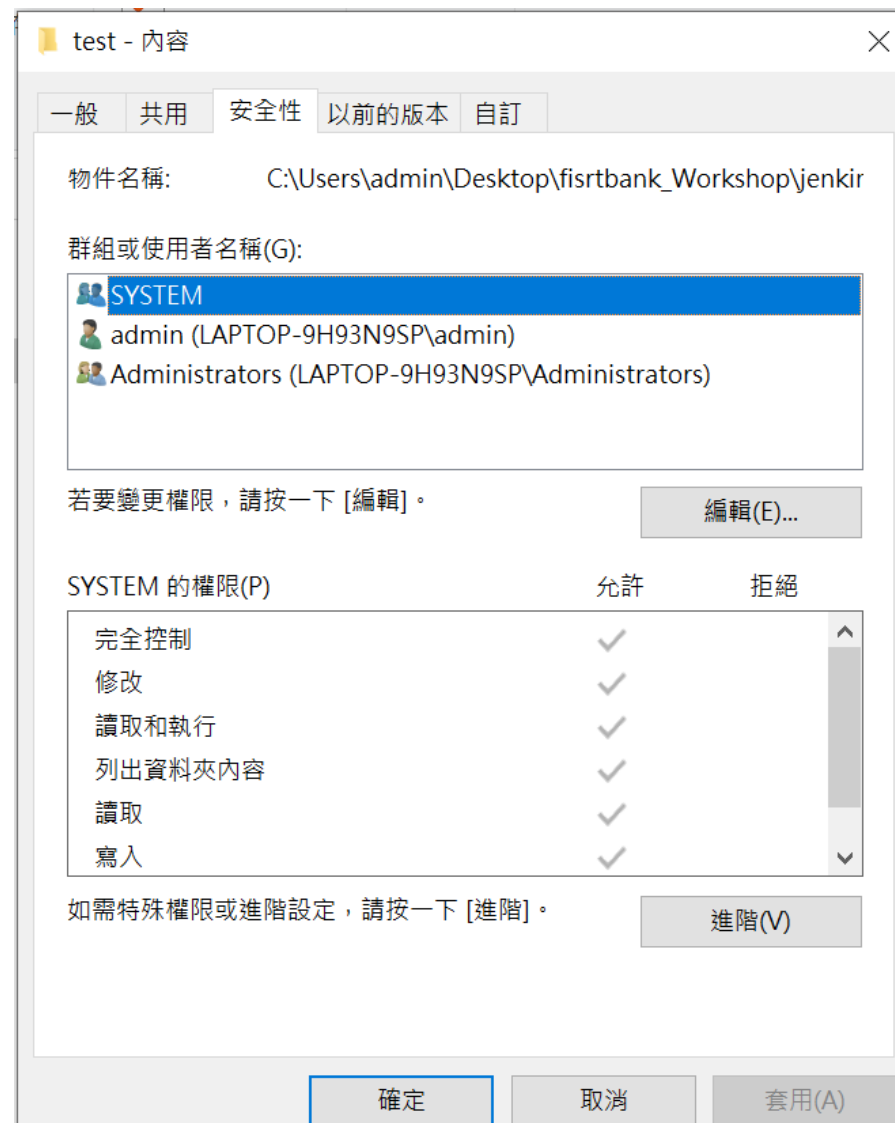
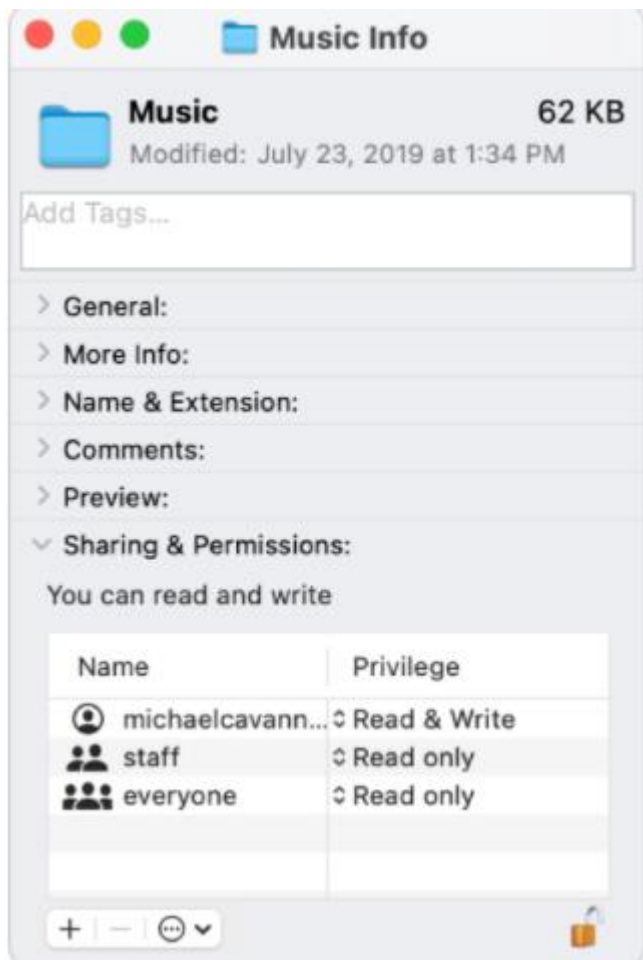
在docker-compose.yml 相同路徑中，下指令

開啟container  
docker-compose up -d

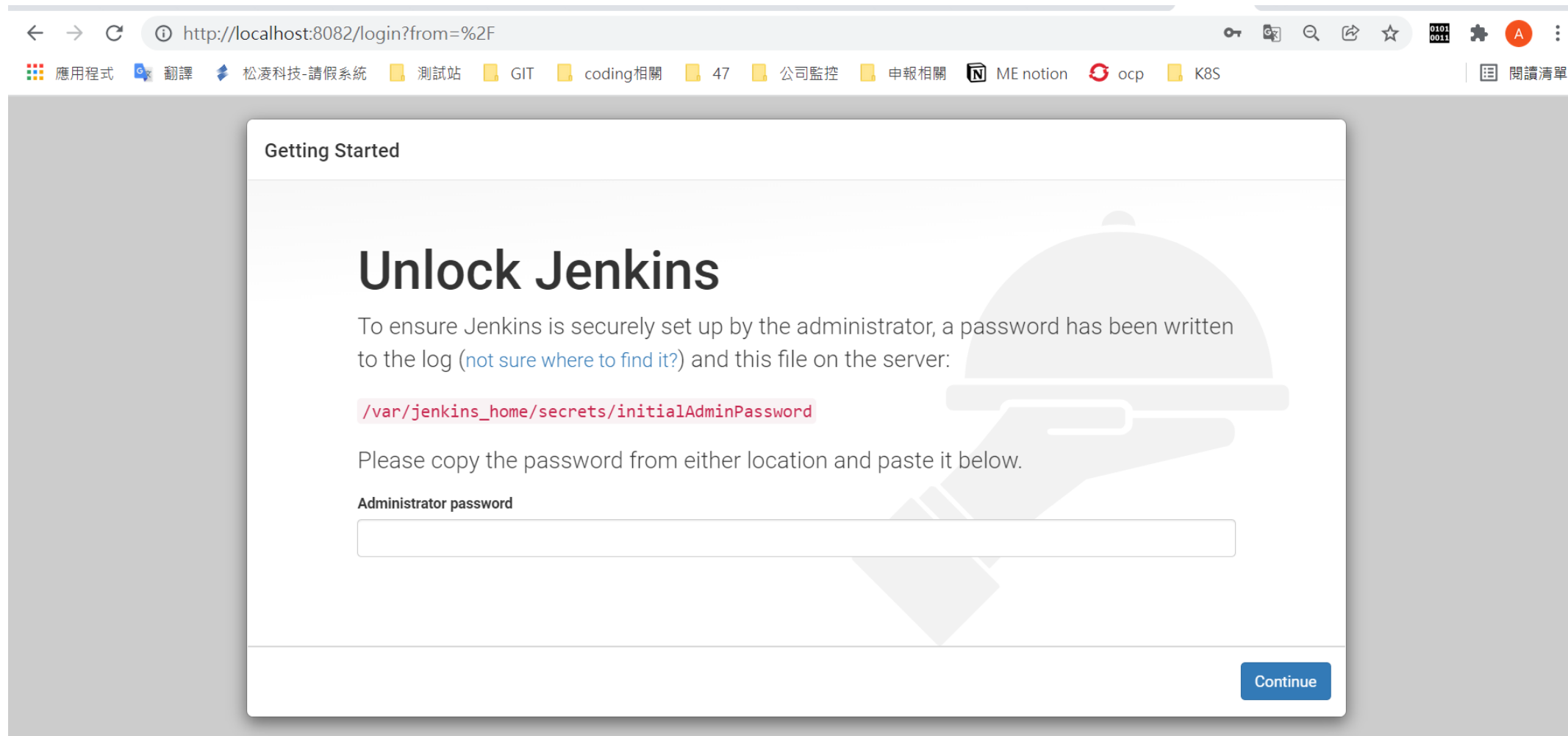
移除container  
docker-compose down



# 資料夾權限問題



# 密碼可在log或者 /var/jenkins\_home/secrets/initialAdminPassword找到



# 查看container的log

## docker logs -f \${container ID}

```
C:\Users\admin\Desktop\fisrtbank_Workshop\jenkins>docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS
8ec225875b61   jenkins/jenkins:2.325-jdk8         "/sbin/tini -- /usr/..." 37 seconds ago Up 34 seconds 0.0.0.0:8082->8080/tcp, :::8082->8080/tcp, 0.0.0.0:50002->50000/tcp, :::50002->50000/tcp
jenkins_jenkins_1

C:\Users\admin\Desktop\fisrtbank_Workshop\jenkins>docker logs -f 8ec225875b61
Running from: /usr/share/jenkins/jenkins.war
webroot: EnvVars.masterEnvVars.get("JENKINS_HOME")
2021-12-21 08:58:13.448+0000 [id=1] INFO org.eclipse.jetty.util.log.Log#initialized: Logging initialized @1641ms to org.eclipse.jetty.util.log.JavaUtilLog
2021-12-21 08:58:13.977+0000 [id=1] INFO winstone.Logger#logInternal: Beginning extraction from war file
2021-12-21 08:58:14.062+0000 [id=1] WARNING o.e.j.s.handler.ContextHandler#setContextPath: Empty contextPath
2021-12-21 08:58:14.222+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: jetty-9.4.43.v20210629; built: 2021-06-30T11:07:22.254Z; git: 526006ecfa3af7f1a23a288e2bef7ea9dd7e8; jvm 1.8.0_312-b07
2021-12-21 08:58:19.019+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor#visitServlet: NO JSP Support for /, did not find org.eclipse.jetty.jsp.JettyJspServlet
2021-12-21 08:58:19.177+0000 [id=1] INFO o.e.j.s.s.DefaultSessionIdManager#doStart: DefaultSessionIdManager workerName=node0
2021-12-21 08:58:19.177+0000 [id=1] INFO o.e.j.s.s.DefaultSessionIdManager#doStart: No SessionScavenger set, using defaults
2021-12-21 08:58:19.179+0000 [id=1] INFO o.e.j.server.session.HouseKeeper#startScavenging: node0 Scavenging every 660000ms
2021-12-21 08:58:21.144+0000 [id=1] INFO hudson.WebAppMain#contextInitialized: Jenkins home directory: /var/jenkins_home found at: EnvVars.masterEnvVars.get("JENKINS_HOME")
```

# plugin 安裝

## Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.


### Install suggested plugins

Install plugins the Jenkins community finds most useful.

### Select plugins to install

Select and install plugins most suitable for your needs.

# 若離線安裝 可以將plugin 放在: /jenkins\_home/plugins/內，完成插鍵離線安裝。

 **Jenkins**

搜尋

5

cicduser

登出

Jenkins

外掛程式管理

回到儀表板

管理 Jenkins

filter

更新

可用的

已安裝

進階

安裝	名稱 ↓	版本	Released	已安裝
<input type="checkbox"/>	<b>Branch API</b> api-plugin This plugin provides an API for multiple branch based projects.	2.6.0	1 月 10 天 ago	2.5.9
<input type="checkbox"/>	<b>Credentials</b> api-plugin This plugin allows you to store credentials in Jenkins.	2.3.13	1 月 10 天 ago	2.3.12
<input type="checkbox"/>	<b>Durable Task</b> api-plugin 建置工具 Library offering an extension point for processes which can run outside of Jenkins yet be monitored.	1.35	1 月 8 天 ago	1.34
<input type="checkbox"/>	<b>ECharts API</b> api-plugin Provides ECharts for Jenkins plugins.	4.9.0-1	19 天 ago	4.8.0-2
<input type="checkbox"/>	<b>Email Extension</b> 建置工具 email 建置通知程式 This plugin is a replacement for Jenkins's email publisher. It allows to configure every aspect of email notifications: when an email is sent, who should receive it and what the email says Applying this update will address security vulnerabilities in the currently installed version.	2.77	23 天 ago	2.74

# 設定Admin User

Getting Started

## Create First Admin User

使用者名稱:

密碼:

確認密碼:

全名:



# 設定連線jenkins的介面的URL 要跟剛剛docker-compose.yml 對外port號相同

## Getting Started

# Instance Configuration

Jenkins URL:

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the BUILD\_URL environment variable provided to build steps.


The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.325

[Not now](#)

[Save and Finish](#)

# 安裝成功後，大家可以先玩玩看介面


 **Jenkins**


搜尋


admin | 登出


Jenkins


開啟自動更新頁面


 新增作業

 使用者

 建置歷程

 管理 Jenkins

 我的視景

 新增描述

## 歡迎使用Jenkins!

請[建立新工作](#)來開始使用

建置佇列

佇列中沒有建置作業。

建置執行程式狀態

- 閒置
- 閒置