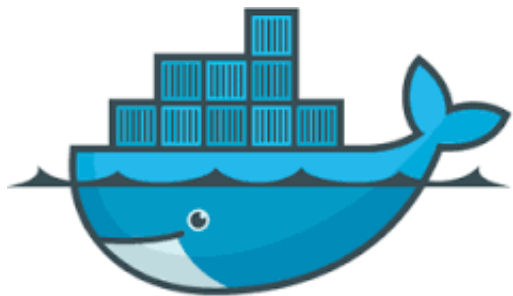


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Installing JENKINS through Docker File For W

🕒 June 21, 2017 Posted by: Loges Category: Blog, Containers

(<https://www.assistanz.com/blog/containers/installing-jenkins-through-docker-file-for-windows-container>)



docker

Installing JENKINS through Docker For Windows Container

In this blog, we will show you installing JENKINS through docker file for Windows container on Windows 2016

REQUIREMENTS

- ♦ Windows Container Host
- ♦ JENKINS setup file

DOWNLOAD JENKINS

- ♦ Go to the URL <https://jenkins.io/download/> (<https://jenkins.io/download/>)



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-44.png>)

- ♦ Scroll down and click on the **Windows** link

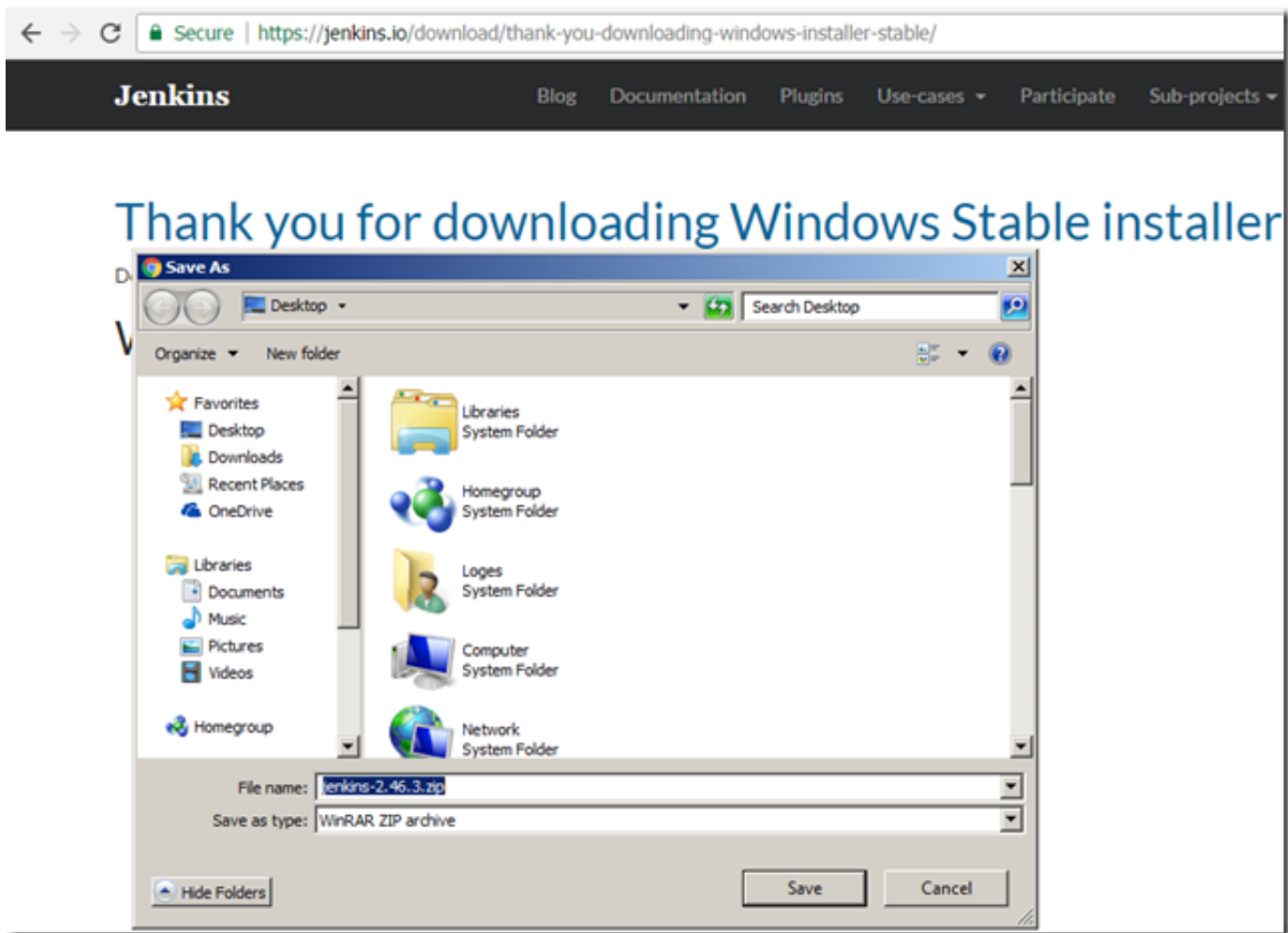
Download Jenkins 2.46.3 for:

Docker
FreeBSD
Gentoo
Mac OS X
OpenBSD
openSUSE
Red Hat/Fedora/CentOS
Ubuntu/Debian
Windows
Generic Java package (.war)

(<https://www.assistanz.com/wp-content/uploads/2>

45.png)

- ◆ It prompts us to download the zip file.



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-46.png>)

- ◆ Once the download is complete and extracts the MSI from the ZIP file.



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-47.png>)

PREPARING BUILD ENVIRONMENT

- ◆ Create a folder named **Jenkins** in C:\ drive using below command

New-Item -Type Directory -Name jenkins -Path c:

```
PS C:\> New-Item -Type Directory -Name jenkins -Path c:\

Directory: C:\


Mode                LastWriteTime         Length Name
----                -
d-----         6/20/2017   3:18 AM             jenkins

PS C:\> _
```

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-48.png>)

- ♦ Create one more folder name **source** inside **C:\jenkins** folder.

New-Item -Type Directory -Name setup -path C:\jenkins

```
PS C:\> New-Item -Type Directory -Name setup -path C:\jenkins\

Directory: C:\jenkins


Mode                LastWriteTime         Length Name
----                -
d-----         6/20/2017   3:38 AM             setup

PS C:\> _
```

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-49.png>)

- ♦ Create a filename **dockerfile** inside c:\jenkins folder.

New-Item -Type File -Name dockerfile -Path C:\jenkins

```
PS C:\> New-Item -Type File -Name dockerfile -Path C:\jenkins\

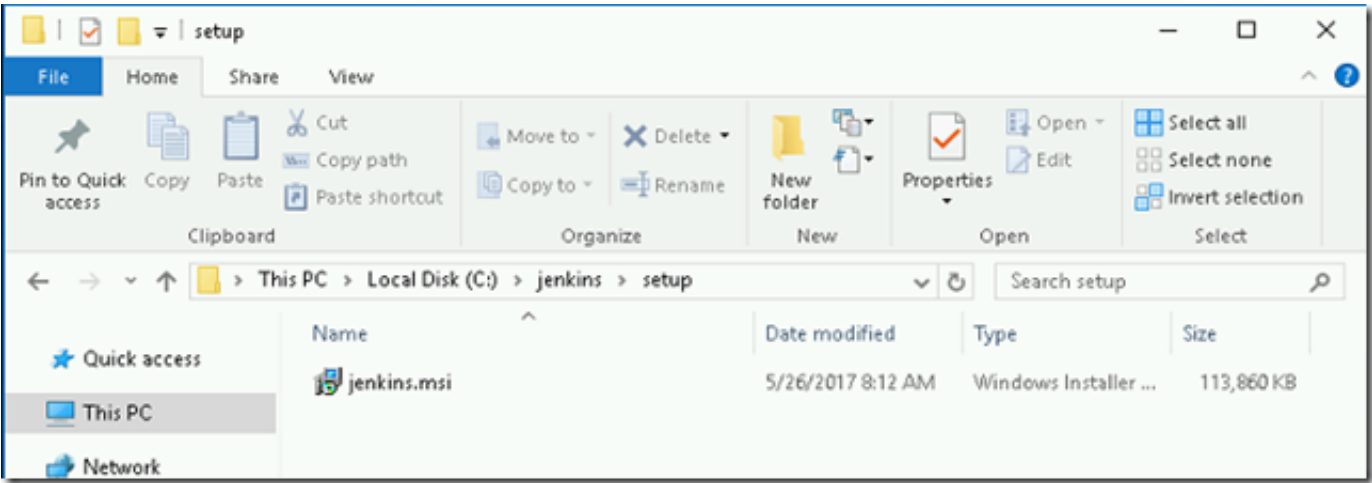
Directory: C:\jenkins

Mode                LastWriteTime         Length Name
----                -
-a-----         6/20/2017   3:24 AM             0 dockerfile

PS C:\> _
```

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-50.png>)

- ◆ Copy the downloaded jenkins setup file to **c:\jenkins\setup** folder.



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-58.png>)

- ◆ Open the **dockerfile** in the notepad and add the below code and save it.

#THIS DOCKER FILE IS DEVELOPED BY ASSISTANZ NETWORKS

#SPECIFY THE CONTAINER IMAGE

FROM microsoft/windowsservercore

#COPY THE JENKINS INSTALLATION FILES INTO THE CONTAINER

ADD ./setup c:/jenkins

#INSTALLING IIS

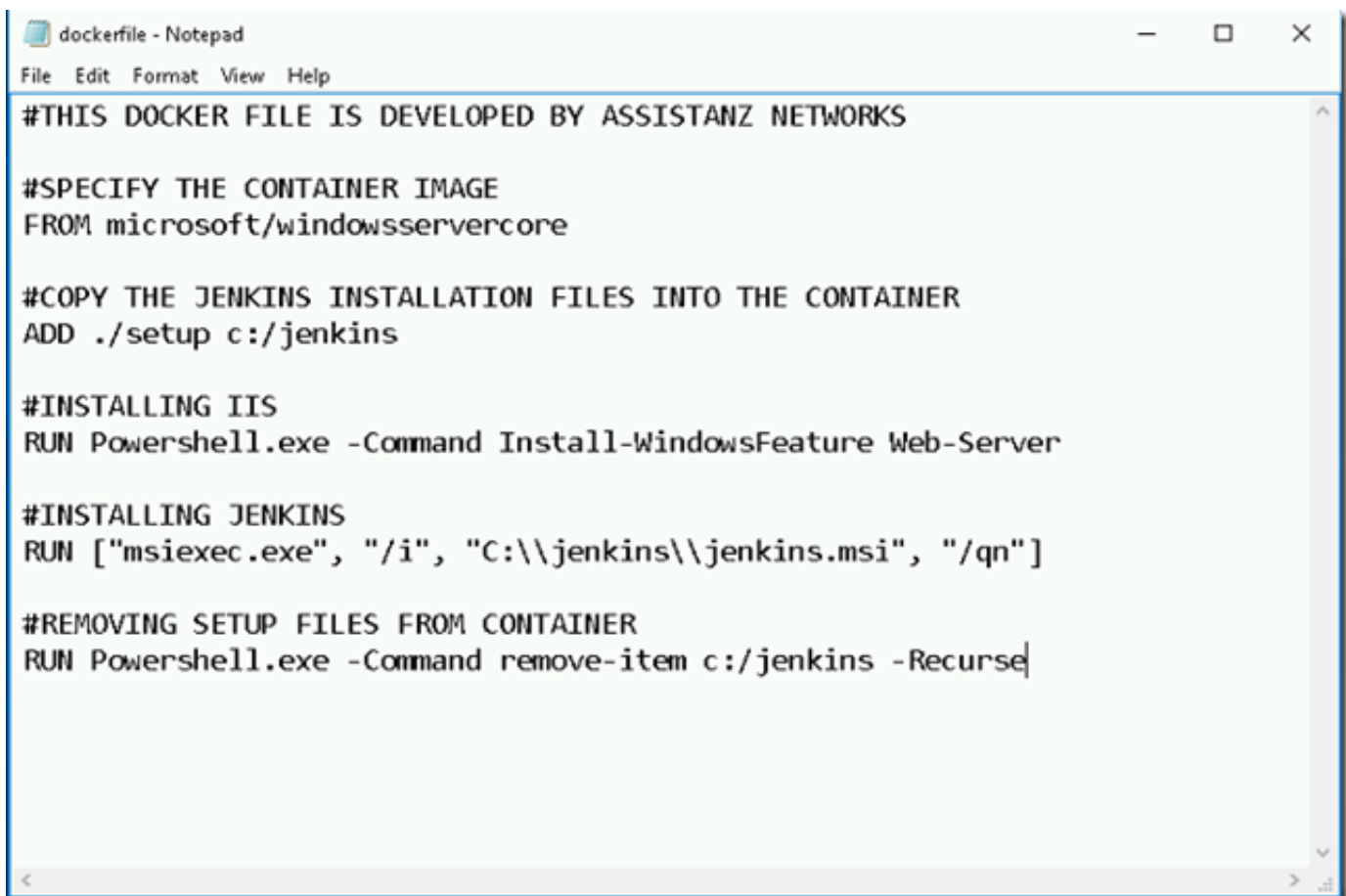
RUN Powershell.exe -Command Install-WindowsFeature Web-Server

#INSTALLING JENKINS

RUN ["msiexec.exe", "/i", "C: | |jenkins | |jenkins.msi", "/qn"]

#REMOVING SETUP FILES FROM CONTAINER

RUN Powershell.exe -Command remove-item c:/jenkins -Recurse

A screenshot of a Notepad window titled "dockerfile - Notepad". The window has a menu bar with "File", "Edit", "Format", "View", and "Help". The text inside the Notepad is a Dockerfile script, which is identical to the content shown in the previous blocks. The text is as follows:

```
#THIS DOCKER FILE IS DEVELOPED BY ASSISTANZ NETWORKS

#SPECIFY THE CONTAINER IMAGE
FROM microsoft/windowsservercore

#COPY THE JENKINS INSTALLATION FILES INTO THE CONTAINER
ADD ./setup c:/jenkins

#INSTALLING IIS
RUN Powershell.exe -Command Install-WindowsFeature Web-Server

#INSTALLING JENKINS
RUN ["msiexec.exe", "/i", "C: | |jenkins | |jenkins.msi", "/qn"]

#REMOVING SETUP FILES FROM CONTAINER
RUN Powershell.exe -Command remove-item c:/jenkins -Recurse
```

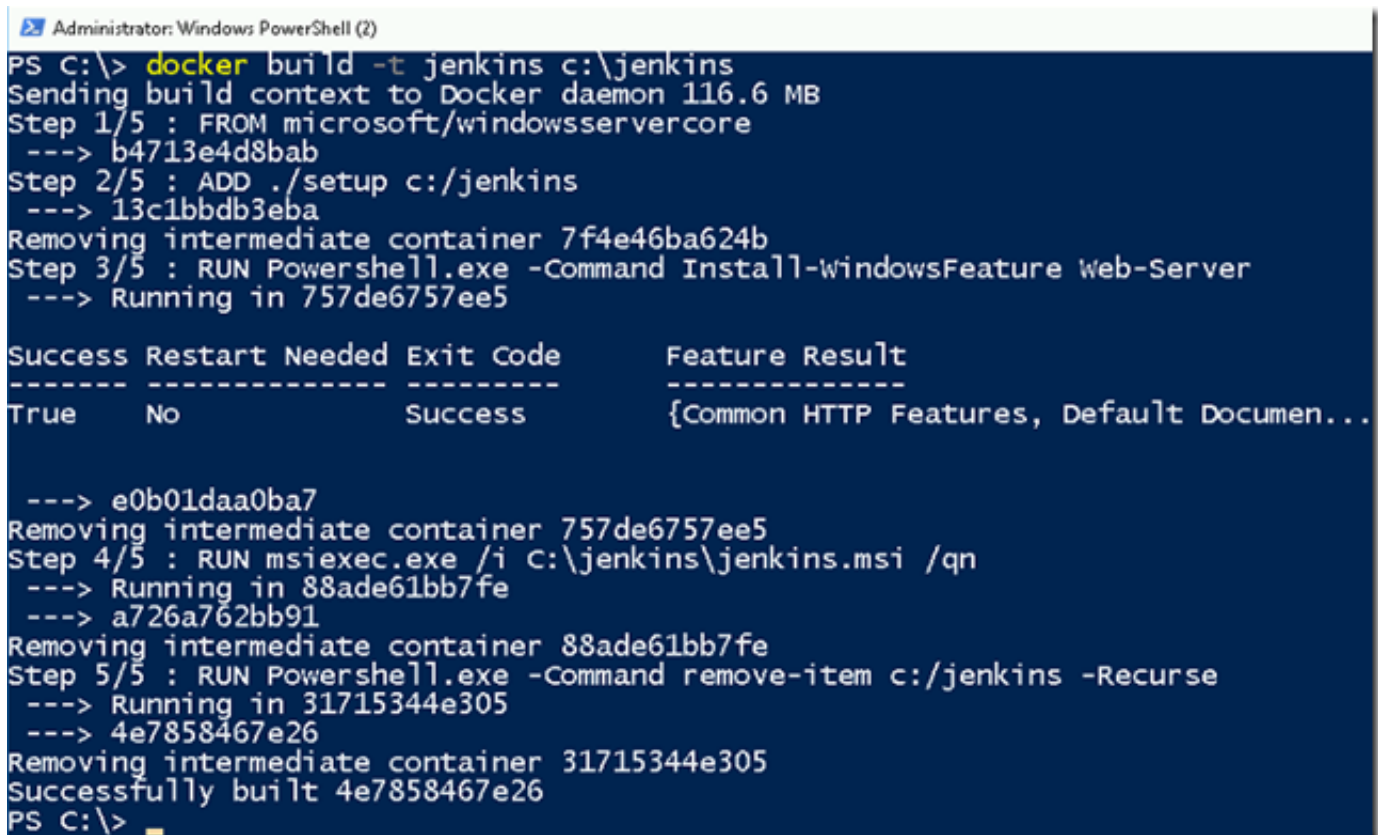
BUILDING THE IMAGE

- ◆ Go-to PowerShell and execute the below command to build the jenkins image.

docker build -t jenkins c:\jenkins



- ◆ It will take several minutes to complete the build.



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-61.png>)

CONFIGURE JENKINS

- ◆ Launch a new container using the Jenkins image which we built earlier.

docker run -it jenkins powershell

```
PS C:\> docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
jenkins              latest             4e7858467e26       17 hours ago       11 GB
microsoft/nanoserver latest             6c367cf4cb98       6 weeks ago        1.02 GB
assistanz247/nanoserver-iis latest            02fa91a462a0       2 months ago       1.11 GB
nanoserver/iis       latest             4b0af9b7f036       2 months ago       1.15 GB
microsoft/windowsservercore latest            b4713e4d8bab       3 months ago       10.1 GB
PS C:\>
PS C:\>
PS C:\> docker run -it jenkins powershell_
```

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-62.png>)

- ◆ Once the container is created, type **ipconfig** to find the IP address.

```
PS C:\> ipconfig

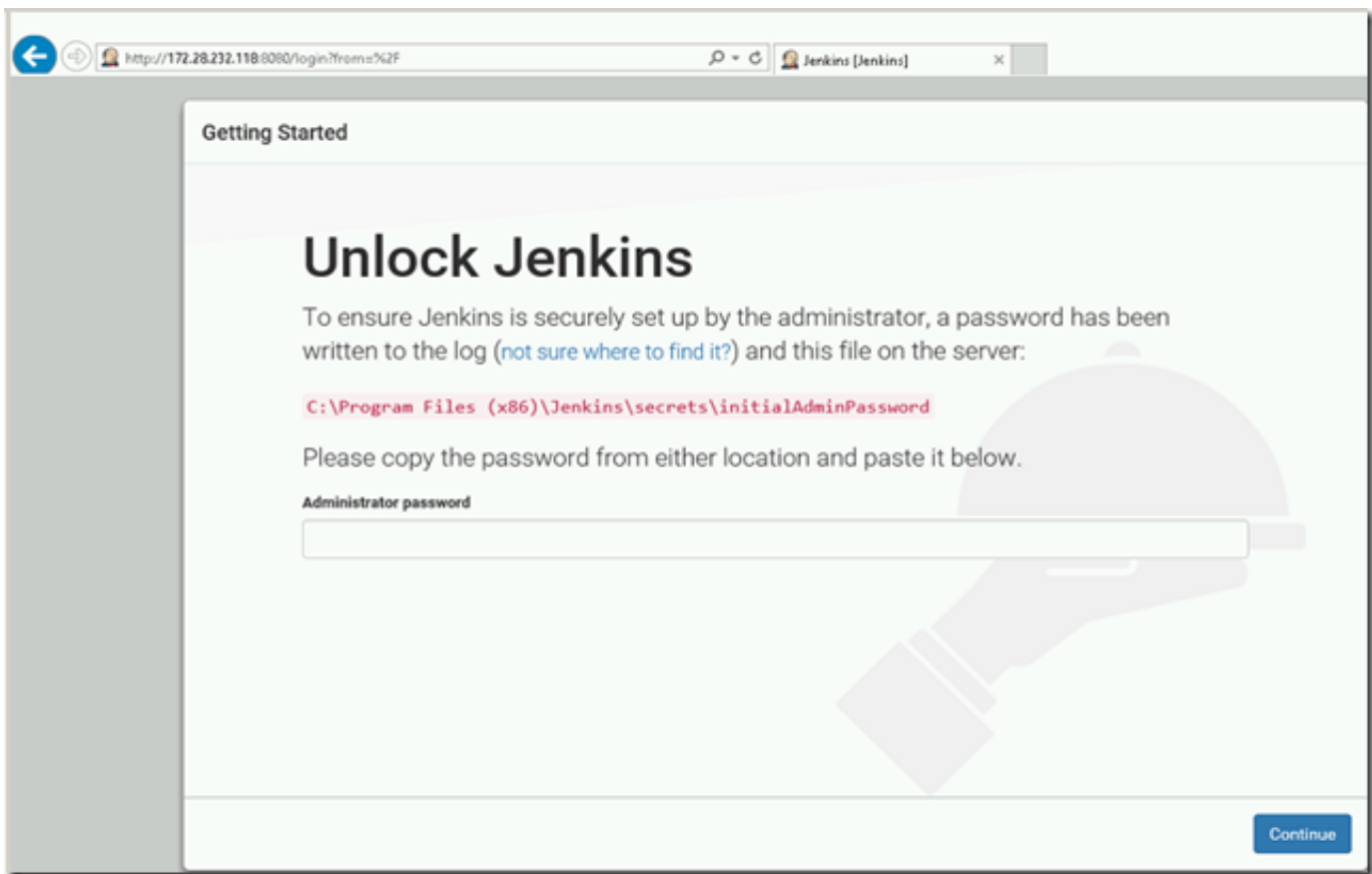
Windows IP Configuration

Ethernet adapter vEthernet (Container NIC 8ffd82dd):

   Connection-specific DNS Suffix  . : 
   Link-local IPv6 Address . . . . . : fe80::49a8:d65:b1b:f360%29
   IPv4 Address. . . . . : 172.28.232.118
   Subnet Mask . . . . . : 255.255.240.0
   Default Gateway . . . . . : 172.28.224.1
PS C:\>
```

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-63.png>)

- ◆ Browse the IP along with port 8080 from your container host. It prompts for the initial administrator password to



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-64.png>)

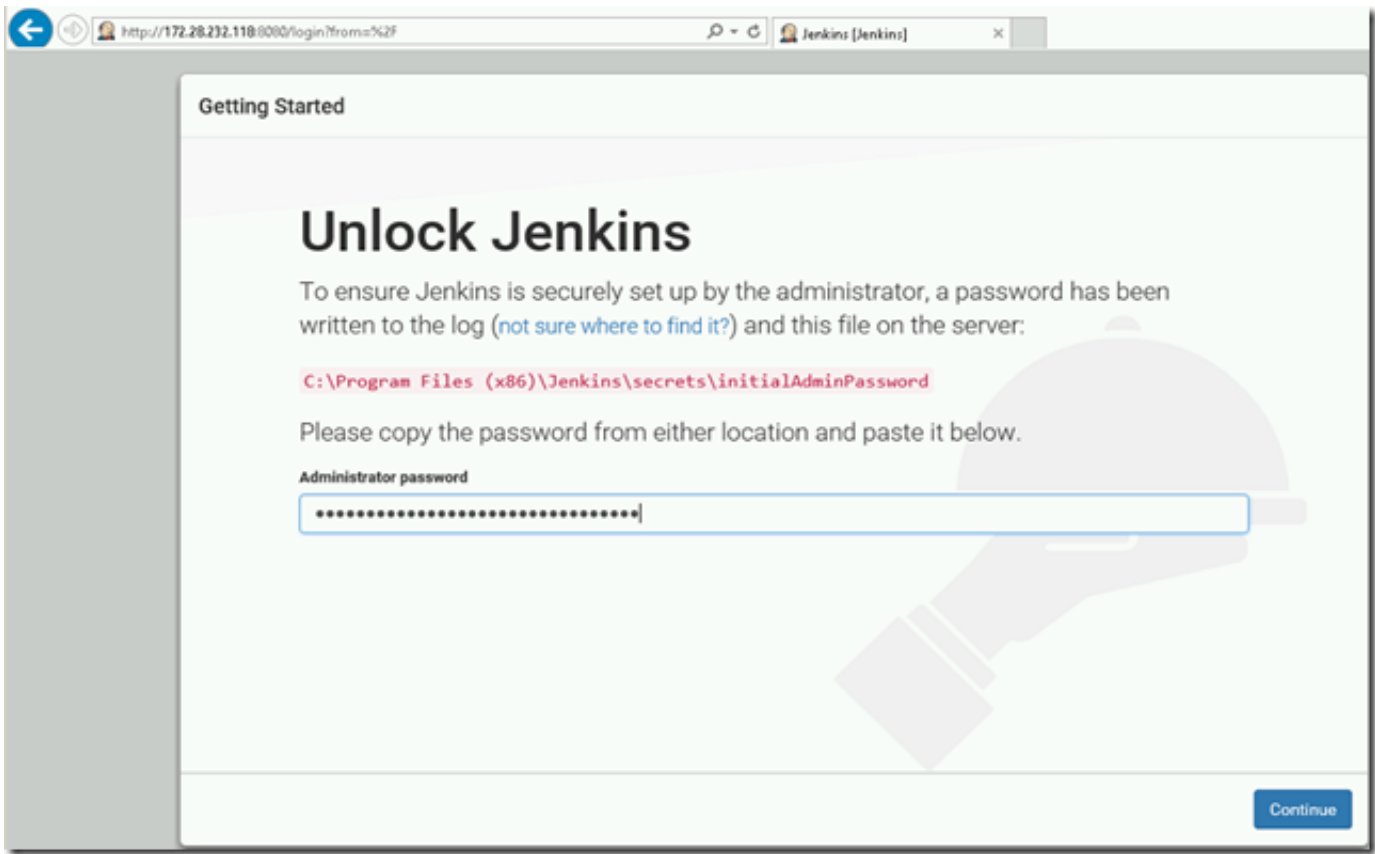
- ◆ Type the below command to view the administrator password from the **initialadminpassword** file.

type 'C:\Program Files (x86)\Jenkins\secrets\initialAdminPassword'

```
PS C:\> type 'C:\Program Files (x86)\Jenkins\secrets\initialAdminPassword'  
73788eb3721d4a4e9c6a5e086d109d89  
PS C:\> _
```

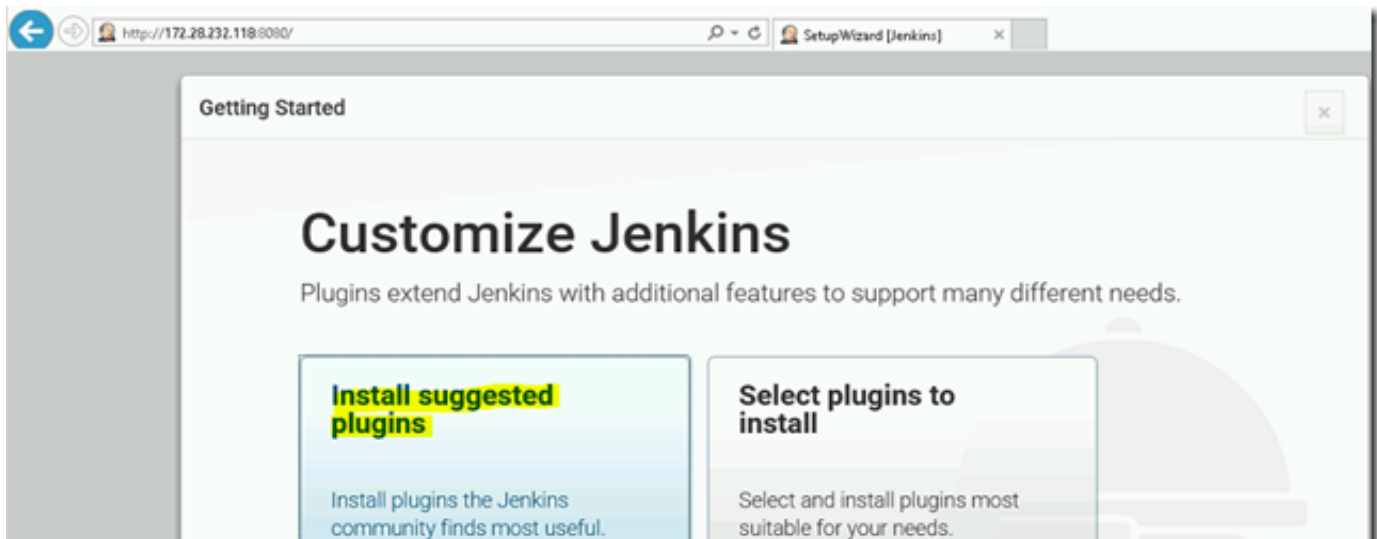
(<https://www.assistanz.com/wp-content/uploads/2017/06/image-65.png>)

- ◆ Copy & paste the password and click **continue**.



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-66.png>)

- ◆ In the next screen, select the plugins to be installed for your environment. For this demo, we have installed all the plugins for Jenkins.



([HTTPS://WWW.ASSISTANZ.COM/](https://www.assistanz.com/))

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Cloud Services IMS Consulting

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(<https://www.assistanz.com/wp-content/uploads/2017/06/image-67.png>)

- ◆ It will take few minutes to complete the installation.

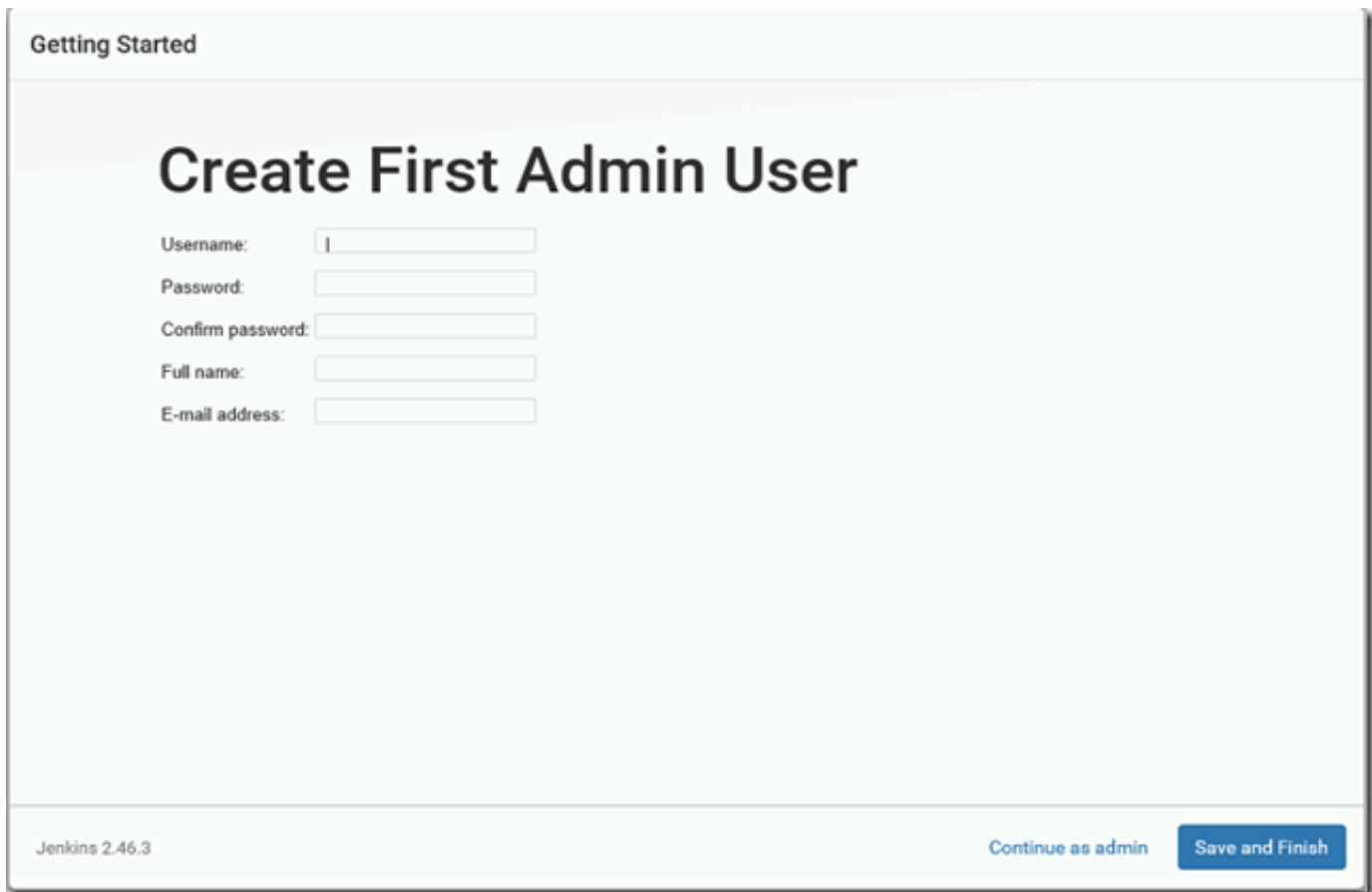
Getting Started

✓ Folders Plugin	✓ OWASP Markup Formatter Plugin	✓ build timeout plugin	✓ Credentials Binding Plugin	Plugin ** Pipeline: REST API Plugin ** JavaScript GUI Lib: Handlebars bundle plugin ** JavaScript GUI Lib: Moment.js bundle plugin Pipeline: Stage View Plugin ** Pipeline: Build Step ** Pipeline: Model API ** Pipeline: Declarative Extension Points API ** SSH Credentials Plugin ** Jenkins Git client plugin ** Jenkins GIT server Plugin ** Pipeline: Shared Groovy Libraries ** Branch API Plugin ** Pipeline: Multibranch ** Pipeline: REST API Plugin ** Authentication Tokens API Plugin Pipeline: Stage View Plugin ** Docker Commons Plugin ** Docker Pipeline ** - required dependency
✓ Timestampers	✓ Workspace Cleanup Plugin	✓ Ant Plugin	✓ Gradle Plugin	
🔄 Pipeline	🔄 GitHub Organization Folder Plugin	✓ Pipeline: Stage View Plugin	🔄 Git plugin	
🔄 Subversion Plug-in	🔄 SSH Slaves plugin	✓ Matrix Authorization Strategy Plugin	✓ PAM Authentication plugin	
✓ LDAP Plugin	🔄 Email Extension Plugin	✓ Mailer Plugin		

Jenkins 2.46.3

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-68.png>)

- ◆ In next screen, it prompts for to create a new admin user. Provide the details and click **save and finish**.

The image shows the 'Getting Started' screen of Jenkins 2.46.3. The main heading is 'Create First Admin User'. Below it, there are five input fields: 'Username:', 'Password:', 'Confirm password:', 'Full name:', and 'E-mail address:'. At the bottom right, there are two buttons: 'Continue as admin' and 'Save and Finish'. The version number 'Jenkins 2.46.3' is displayed at the bottom left.

Getting Started

Create First Admin User

Username:

Password:

Confirm password:

Full name:

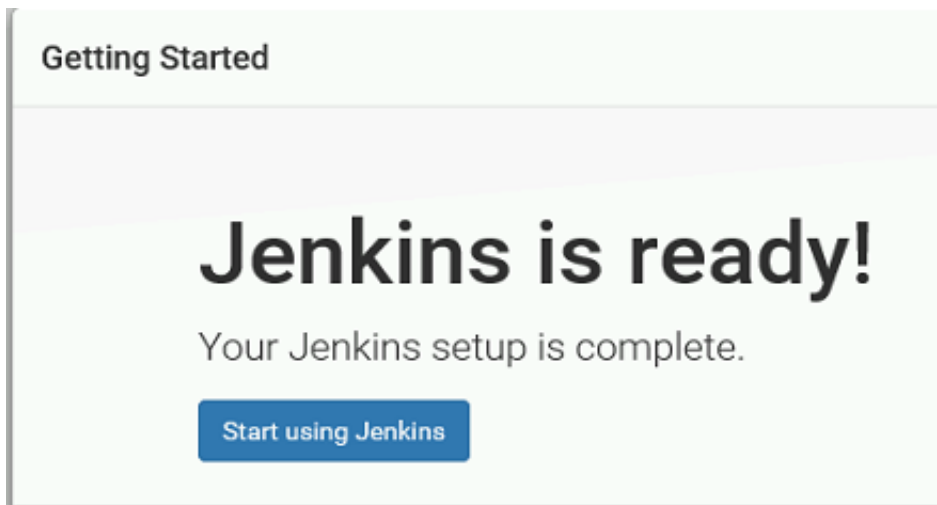
E-mail address:

Jenkins 2.46.3

[Continue as admin](#) [Save and Finish](#)

(<https://www.assistanz.com/wp-content/uploads/2017/06/image-69.png>)

- ◆ The final screen shows that Jenkins is ready. Click on **Start using Jenkins** button.



([https://www.assistanz.com/wp-](https://www.assistanz.com/wp-content/uploads/2017/06/image-70.png)

[content/uploads/2017/06/image-70.png](https://www.assistanz.com/wp-content/uploads/2017/06/image-70.png))

- ◆ Now jenkins is available for our environment.



(<https://www.assistanz.com/wp-content/uploads/2017/06/image-71.png>)

- ◆ You can download the pre-built image from the Docker Hub URL

<https://hub.docker.com/r/assistanz247/jenkins-windows/>

- ◆ Also, you can download the dockerfile from GitHub URL.

<https://github.com/assistanz247/JENKINS>

VIDEO