

# CentOS Stream 8 – Jenkins Server

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Created by:	cloudimg

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## 1.) Overview

This document is provided as a user guide for the CentOS Stream 8 – Jenkins Server product offering on the Azure Marketplace. Please reach out to [support@cloudimg.co.uk](mailto:support@cloudimg.co.uk) if any issues are encountered following this user guide for the chosen product offering.



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## 2.) Access & Security

Please update the security group of the target instance to allow the below ports and protocols for access and connectivity.

Protocol	Type	Port	Description
SSH	TCP	22	SSH connectivity
HTTP	TCP	8080	Jenkins Front End

## 3.) System Requirements

The minimum system requirements for the chosen product offering can be found below

Minimum CPU	Minimum RAM	Required Disk Space
1	1 GB	20 GB

## 4.) Connecting to the Instance

Once launched in the Azure Virtual Machines Service, please connect to the instance via an SSH client using the **azureuser** with the key pair associated at launch. Once connected as the **azureuser**, you will be able to **sudo** to the **root** user by issuing the below command.

Switch to the root user

```
sudo su -
```

## 5.) On Startup

An OS package update script has been configured to run on boot to ensure the image is fully up to date at first use. You can disable this feature by removing the script from `/stage/scripts/` and deleting the entry in `crontab` for the root user.

Disable the OS update script from running on reboot

```
rm -f /stage/scripts/initial_boot_update.sh
crontab -e
#DELETE THE BELOW LINE. SAVE AND EXIT THE FILE.
@reboot /stage/scripts/initial_boot_update.sh
```



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## 6.) Filesystem Configuration

Please see below for a screenshot of the server disk configuration and specific mount point mappings for software locations.

```
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        451M   0  451M   0% /dev
tmpfs           469M   0  469M   0% /dev/shm
tmpfs           469M  6.3M  463M   2% /run
tmpfs           469M   0  469M   0% /sys/fs/cgroup
/dev/nvme0n1p2  38G   3.6G   32G  11% /
/dev/nvme0n1p1  2.0G  225M   1.6G  13% /boot
tmpfs           94M   0   94M   0% /run/user/1002
```

Mount Point	Description
/boot	Operating System Kernel files

## 7.) Server Components

Please see below for a list of installed server components and their respective installation paths. The below versions are subject to change on initial boot based on the initial\_boot\_update.sh script finding new versions of the software in the systems package repositories.

Component	Version	Software Home
Cloud-Init	22.1	/etc/cloud
Java	11.0.15	/bin/java
Jenkins	2.361.1	/etc/sysconfig/jenkins
Azure CLI	2.53.1	/lib64/az



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## 8.) Scripts and Log Files

The below table provides a breakdown of any scripts & log files created to enhance the useability of the chosen offering.

Script/Log	Path	Description
Initial_boot_update.sh	/stage/scripts	Update the Operating System with the latest updates available.
Initial_boot_update.log	/stage/scripts	Provides output for initial_boot_update.sh

## 9.) Using System Components

Instructions can be found below for using each component of the server build mentioned in section 7 of this user guide document.

### Azure CLI

Using Azure CLI - as any OS user.

```
az
```

### Cloud-Init

Edit the /etc/cloud/cloud.cfg file to reflect your desired configuration. A link to the cloud-init official documentation can be found below for referencing best practise for your use case.

<https://cloudinit.readthedocs.io/en/latest/>

```
vi /etc/cloud/cloud.cfg
```

### Jenkins

The Jenkins service has been configured to start on boot, please use the below commands to start, stop and check the status of the service.



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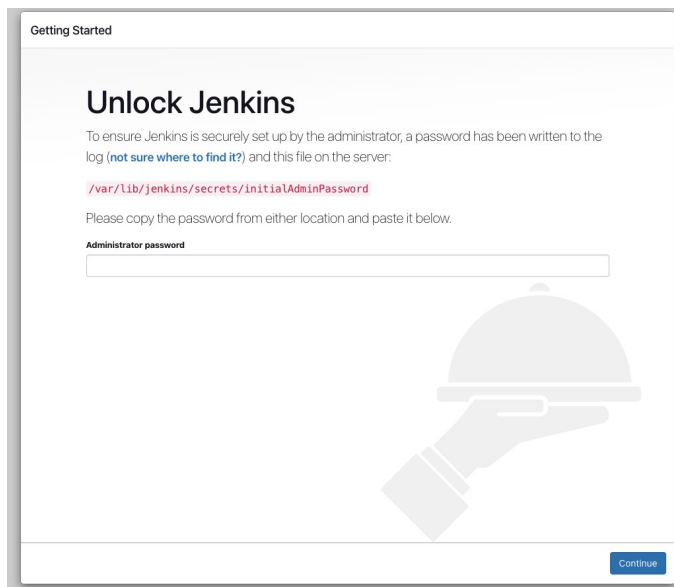
```
#Check the Jenkins service status
systemctl status jenkins

#Check the Jenkins service is stopped
systemctl stop jenkins

#Check the Jenkins service is started
systemctl start jenkins
```

Once the Jenkins service has started, you will be able to access the front end via the below URL exchanging the values between <> to match that of your own instance.

<PRIVATE/PUBLICIP>:8080



Once loaded, a screen like the above will appear. From the Instance command line, retrieve the temporary password as suggested in the above screenshot from the /var/lib/jenkins/secrets/initialAdminPassword file.

```
cat /var/lib/jenkins/secrets/initialAdminPassword
```

**SAMPLE EXPECTED OUTPUT**

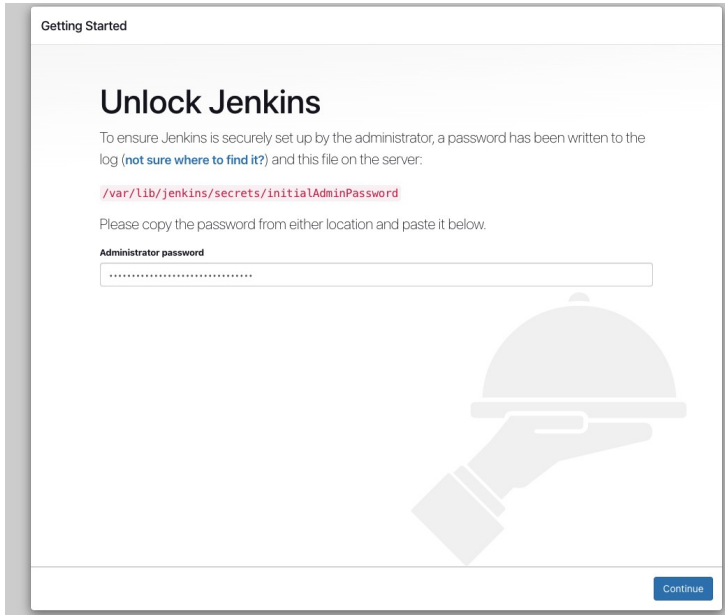
```
7d3a6676bf72419bb4d00f6143a456a7
```

Paste the password in the web browser field as shown below

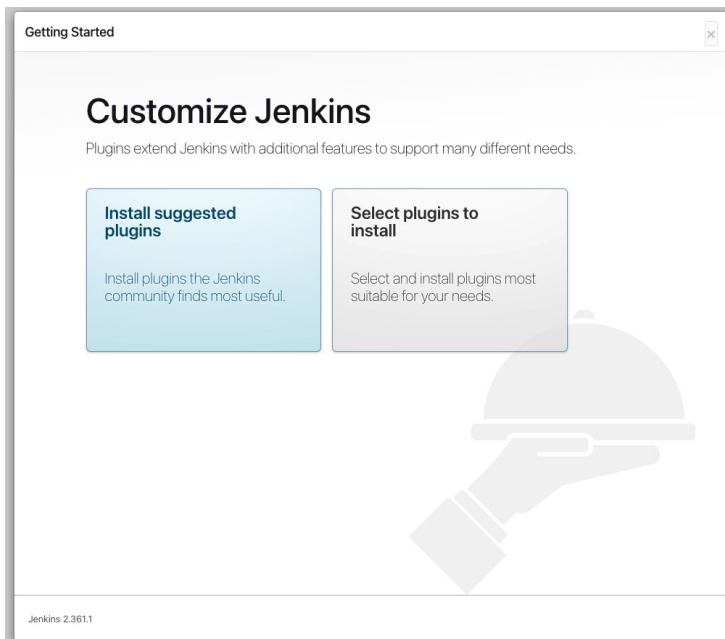


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Click Continue



Select either option shown in the above screenshot applicable to your use case. It is advised to select 'Install suggested plugins' for most use cases.



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The screen may appear white for 30-60 seconds whilst the installation is carried out.

Getting Started

## Create First Admin User

Username:

Password:

Confirm password:

Full name:

E-mail address:

.jenkins 2.361.1 [Skip and continue as admin](#) [Save and Continue](#)

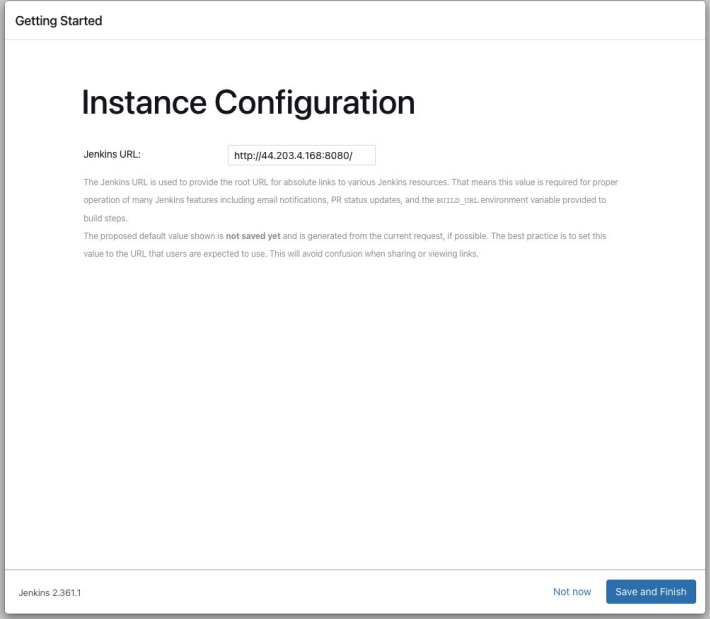
Please fill out the above details based on your own use case. The values above are for example only.

Click Save & Continue

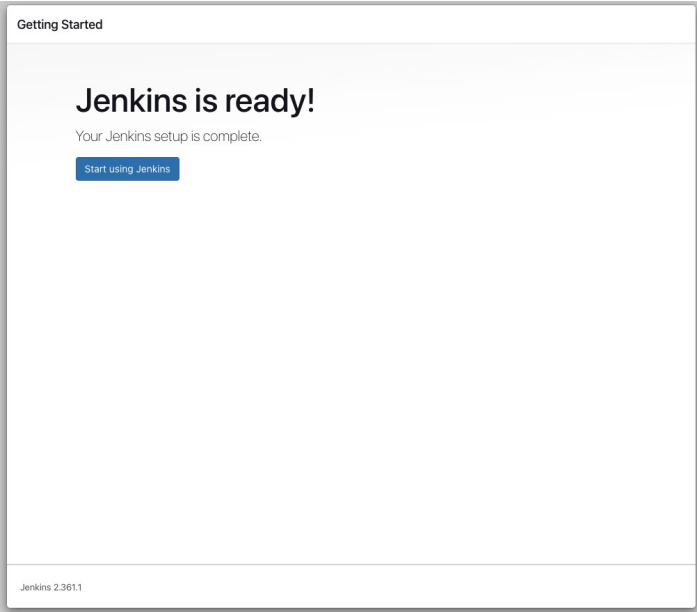


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Click Save & Finish



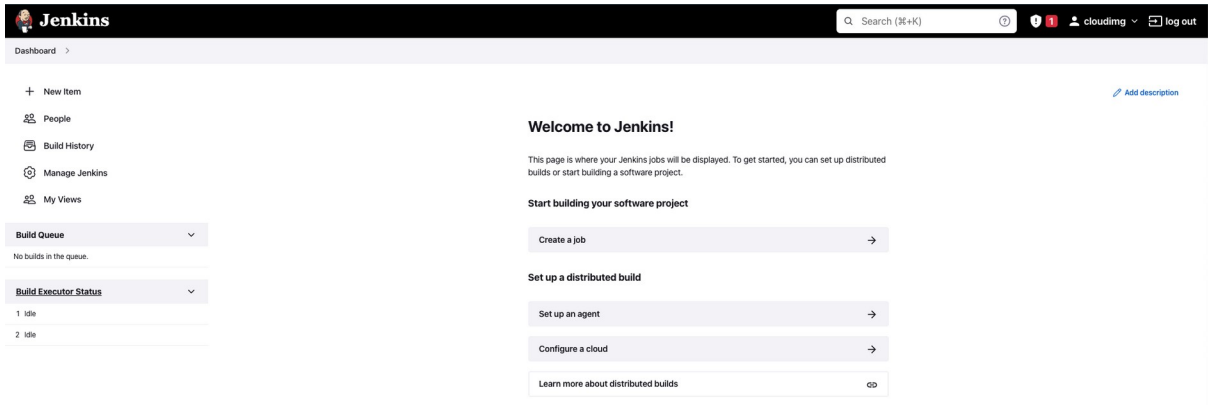
Click Start using Jenkins



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Jenkins is now available and ready for use.



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