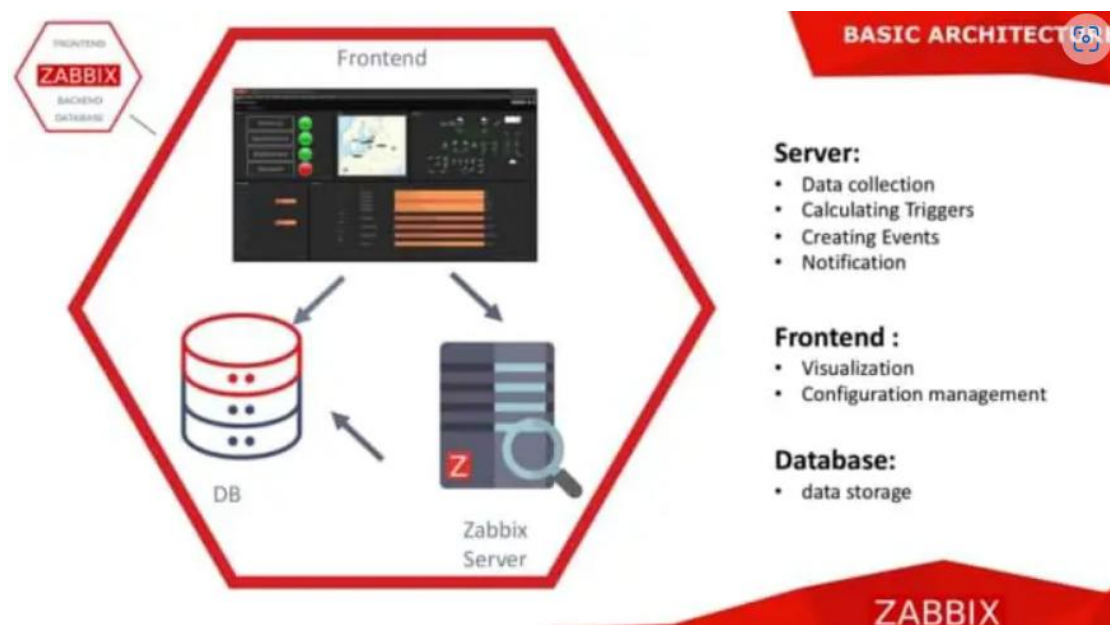


# ZABBIX

Zabbix is an open-source software tool to monitor IT infrastructure such as networks, servers, virtual machines, and cloud services.

- Zabbix collects and displays basic metrics.
- Zabbix is primarily designed for monitoring purpose.

**Zabbix basic architecture:**



**Need For Zabbix Monitoring Tool.**

## **Advantages.**

- Cost-less platform.
- Reliable features like Zabbix agent, notification and remediation module.
- Easy-to-use and robust GUI.
- Allows users to configure e-mail based alerts for virtually any event
- Excellent reporting and data visualization features based on archived data.

## **Disadvantages.**

- Zabbix must include the Amazon RDS.
- Zabbix must provide more templates for rich monitoring.

**Zabbix comes with different compatibilities for downloading.**

- Below are the different ways of installing zabbix.



- we can download zabbix in our standalone server as package installer.
- we can download zabbix in cloud environments.
- we can download zabbix in containers and so on ..

## **Requirements for running zabbix :**

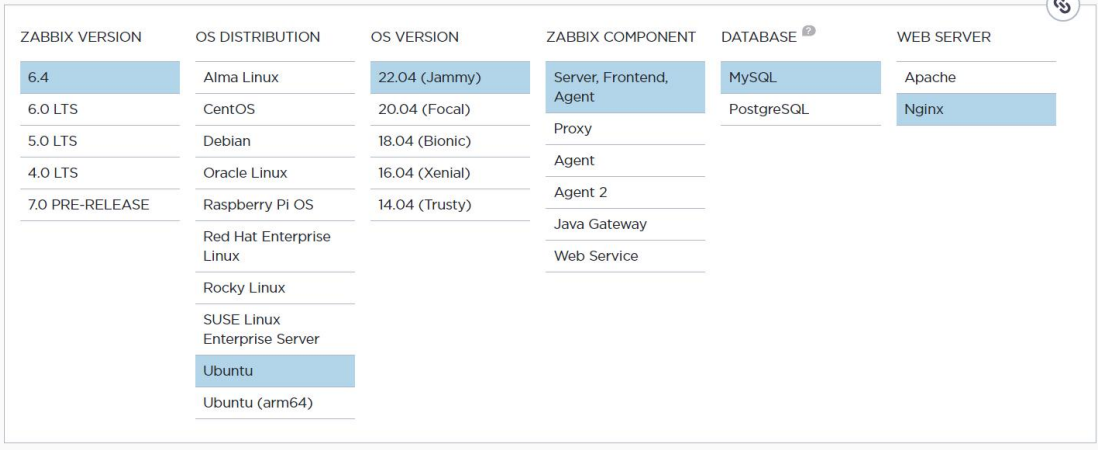
- A Linux server with a recommend 2 CPU cores and 2GB of memory for a medium sized monitoring instance.
- A database software such as MySQL or PostgreSQL.
- A web-server Nginx 6.0 or later, Apache v1.3.12 or later.
- An account with full root access.
- A dedicated public IP address

We can choose the Installation based on platform.

Refer here for the official documentation

[https://www.zabbix.com/download?zabbix=6.4&os\\_distribution=ubuntu&os\\_version=22.04&components=server\\_frontend\\_agent&db=mysql&ws=nginx](https://www.zabbix.com/download?zabbix=6.4&os_distribution=ubuntu&os_version=22.04&components=server_frontend_agent&db=mysql&ws=nginx)

Here I have choose the required components for Ubuntu distribution.



The screenshot shows the Zabbix download configuration interface. It features a table with six columns: ZABBIX VERSION, OS DISTRIBUTION, OS VERSION, ZABBIX COMPONENT, DATABASE, and WEB SERVER. The following table represents the data shown in the interface:

ZABBIX VERSION	OS DISTRIBUTION	OS VERSION	ZABBIX COMPONENT	DATABASE	WEB SERVER
6.4	Alma Linux	22.04 (Jammy)	Server, Frontend, Agent	MySQL	Apache
6.0 LTS	CentOS	20.04 (Focal)	Proxy	PostgreSQL	Nginx
5.0 LTS	Debian	18.04 (Bionic)	Agent		
4.0 LTS	Oracle Linux	16.04 (Xenial)	Agent 2		
7.0 PRE-RELEASE	Raspberry Pi OS	14.04 (Trusty)	Java Gateway		
	Red Hat Enterprise Linux		Web Service		
	Rocky Linux				
	SUSE Linux Enterprise Server				
	Ubuntu				
	Ubuntu (arm64)				

- latest zabbix version 6.4 .
- Operating System - Ubuntu 22.04
- Zabbix Component - Server, Frontend, Agent .
- Database - MySQL
- Webserver - Nginx

Now, let us install and configure Zabbix for our platform.

### **A. Install zabbix repository.**

```
# wget https://repo.zabbix.com/zabbix/6.4/ubuntu/pool/main/z/zabbix-release/zabbix-release_6.4-1+ubuntu22.04_all.deb
# dpkg -i zabbix-release_6.4-1+ubuntu22.04_all.deb
# apt update
```

## **B. Install Zabbix server, frontend, agent.**

```
# apt install zabbix-server-mysql zabbix-frontend-php zabbix-nginx-conf zabbix-sql-scripts zabbix-agent
```

## **C. Create a database.**

Make sure we have database server up and running.

Run the following on our database host.

```
# mysql -uroot -p
password
mysql> create database zabbix character set utf8mb4 collate utf8mb4_bin;
mysql> create user zabbix@localhost identified by 'password';
mysql> grant all privileges on zabbix.* to zabbix@localhost;
mysql> set global log_bin_trust_function_creators = 1;
mysql> quit;
```

**On Zabbix server host import initial schema and data. we will be prompted to enter your newly created password.**

```
# zcat /usr/share/zabbix-sql-scripts/mysql/server.sql.gz | mysql --default-character-set=utf8mb4 -uzabbix -p zabbix
```

**Disable log\_bin\_trust\_function\_creators option after importing database schema.**

```
# mysql -uroot -p  
password  
mysql> set global log_bin_trust_function_creators = 0;  
mysql> quit;
```

#### **d. Configure the database for Zabbix server**

Edit file /etc/zabbix/zabbix\_server.conf

```
DBPassword=password
```

#### **e. Configure PHP for Zabbix frontend**

Edit file /etc/zabbix/nginx.conf uncomment and set 'listen' and 'server\_name' directives.

```
# listen 8080;  
# server_name example.com;
```

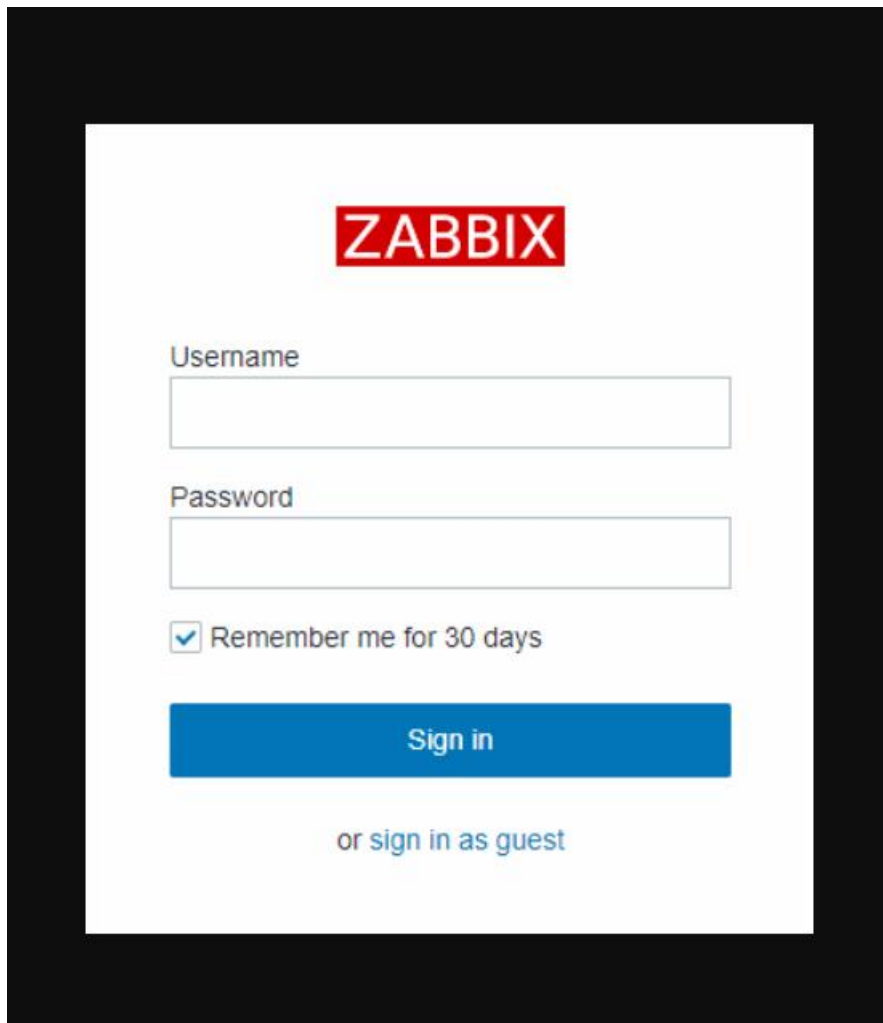
#### **f. Start Zabbix server and agent processes**

Start Zabbix server and agent processes and make it start at system boot.

```
# systemctl restart zabbix-server zabbix-agent nginx php8.1-fpm  
# systemctl enable zabbix-server zabbix-agent nginx php8.1-fpm
```


#### **g. Open Zabbix UI web page.**

Open the zabbix login page by entering <public-IP/zabbix>

The image shows the Zabbix login page. At the top, the word "ZABBIX" is displayed in white capital letters on a red rectangular background. Below this, the word "Username" is followed by a text input field. Underneath the username field, the word "Password" is followed by another text input field. Below the password field, there is a checkbox that is checked, followed by the text "Remember me for 30 days". At the bottom of the form area, there is a blue rectangular button with the text "Sign in" in white. Below the button, the text "or sign in as guest" is displayed in a smaller, blue font.

The URL for Zabbix UI when using Nginx depends on the configuration changes you should have made.

## Installing zabbix on CentOS distribution:

ZABBIX VERSION	OS DISTRIBUTION	OS VERSION	ZABBIX COMPONENT	DATABASE 	WEB SERVER
6.4	Alma Linux	9 Stream	Server, Frontend, Agent	MySQL	Apache
6.0 LTS	CentOS	8 Stream	Proxy	PostgreSQL	Nginx
5.0 LTS	Debian	7	Agent		
4.0 LTS	Oracle Linux	6	Agent 2		
7.0 PRE-RELEASE	Raspberry Pi OS		Java Gateway		
	Red Hat Enterprise Linux		Web Service		
	Rocky Linux				
	SUSE Linux Enterprise Server				
	Ubuntu				
	Ubuntu (arm64)				

- latest zabbix version 6.4 .
- Operating System - CentOS 9stream
- Zabbix Component - Server, Frontend, Agent .
- Database - MySQL
- Webserver - Nginx

### A. Install Zabbix repository

[epel]

...

excludepkgs=zabbix\*

**Proceed with installing zabbix repository.**

```
# rpm -Uvh
```

```
https://repo.zabbix.com/zabbix/6.4/rhel/9/x86_64/zabbix-release-6.4-1.el9.noarch.rpm
```

```
# dnf clean all
```

## **B. Install Zabbix server, frontend, agent.**

```
# dnf install zabbix-server-mysql zabbix-web-mysql zabbix-  
nginx-conf zabbix-sql-scripts zabbix-selinux-policy zabbix-agent
```

## **C. Create initial database.**

Make sure you have database server up and running.

Run the following on your database host.

```
# mysql -uroot -p  
password  
mysql> create database zabbix character set utf8mb4 collate utf8mb4_bin;  
mysql> create user zabbix@localhost identified by 'password';  
mysql> grant all privileges on zabbix.* to zabbix@localhost;  
mysql> set global log_bin_trust_function_creators = 1;  
mysql> quit;
```

On Zabbix server host import initial schema and data. You will be prompted to enter your newly created password.

```
# zcat /usr/share/zabbix-sql-scripts/mysql/server.sql.gz | mysql --default-character-set=utf8mb4 -uzabbix -p zabbix
```

Disable `log_bin_trust_function_creators` option after importing database schema.

```
# mysql -uroot -p  
password  
mysql> set global log_bin_trust_function_creators = 0;  
mysql> quit;
```

## **D. Configure the database for Zabbix server**

Edit file `/etc/zabbix/zabbix_server.conf`



DBPassword=password

## **E .Configure PHP for Zabbix frontend**

Edit file /etc/nginx/conf.d/zabbix.conf uncomment and set 'listen' and 'server\_name' directives.

```
# listen 8080;  
# server_name example.com;
```

## **F. Start Zabbix server and agent processes**

Start Zabbix server and agent processes and make it start at system boot.

```
# systemctl restart zabbix-server zabbix-agent nginx php-fpm  
# systemctl enable zabbix-server zabbix-agent nginx php-fpm
```

## **G. Open Zabbix UI web page**

**Open the zabbix login page by entering <public-IP/zabbix>**



Username

Password

☒ Remember me for 30 days

Sign in

[or sign in as guest](#)