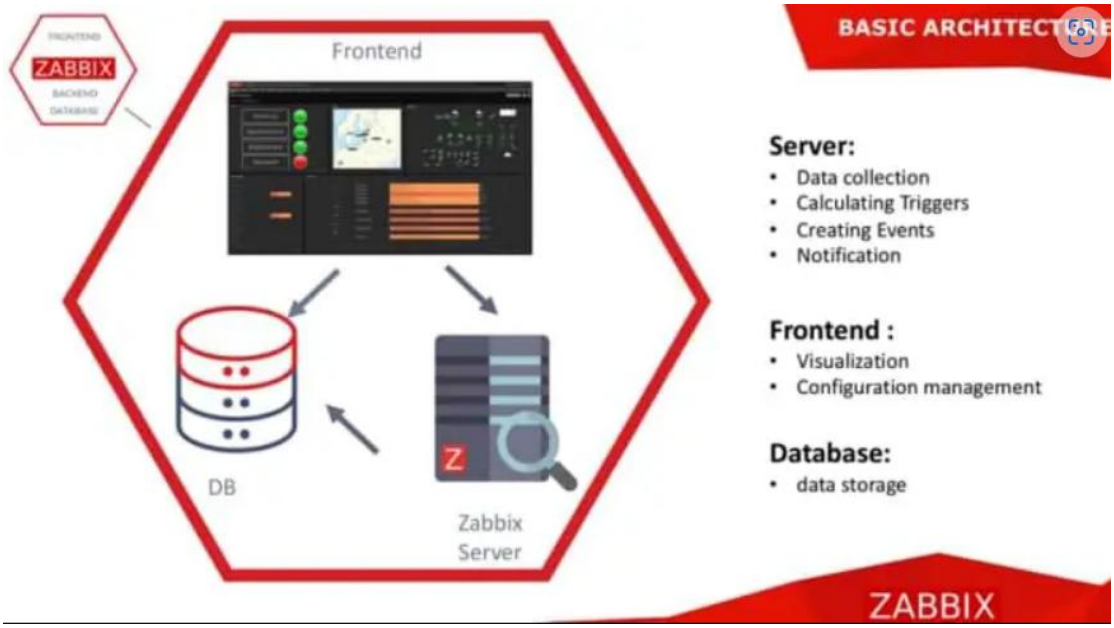
ZABBIX

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 :

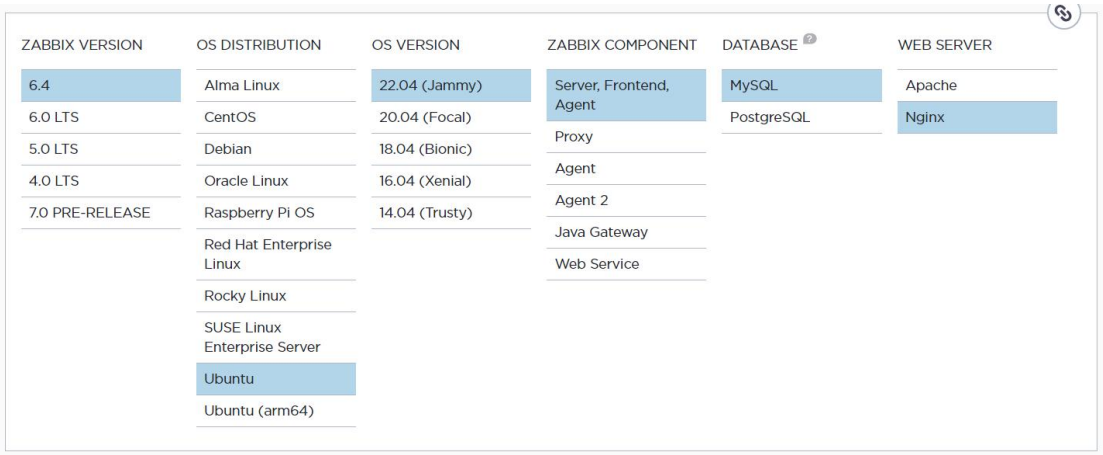
- A Linux server with a recommend 2 CPU cores and 2GB of memory for a medium sized monitoring instance.
- A database software such as MySQL or PostgreSQL.
- A web-server Nginx 6.0 or later, Apache v1.3.12 or later.
- An account with full root access.
- A dedicated public IP address

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

Here I have choose the required components for Ubuntu distribution.



- 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;
```

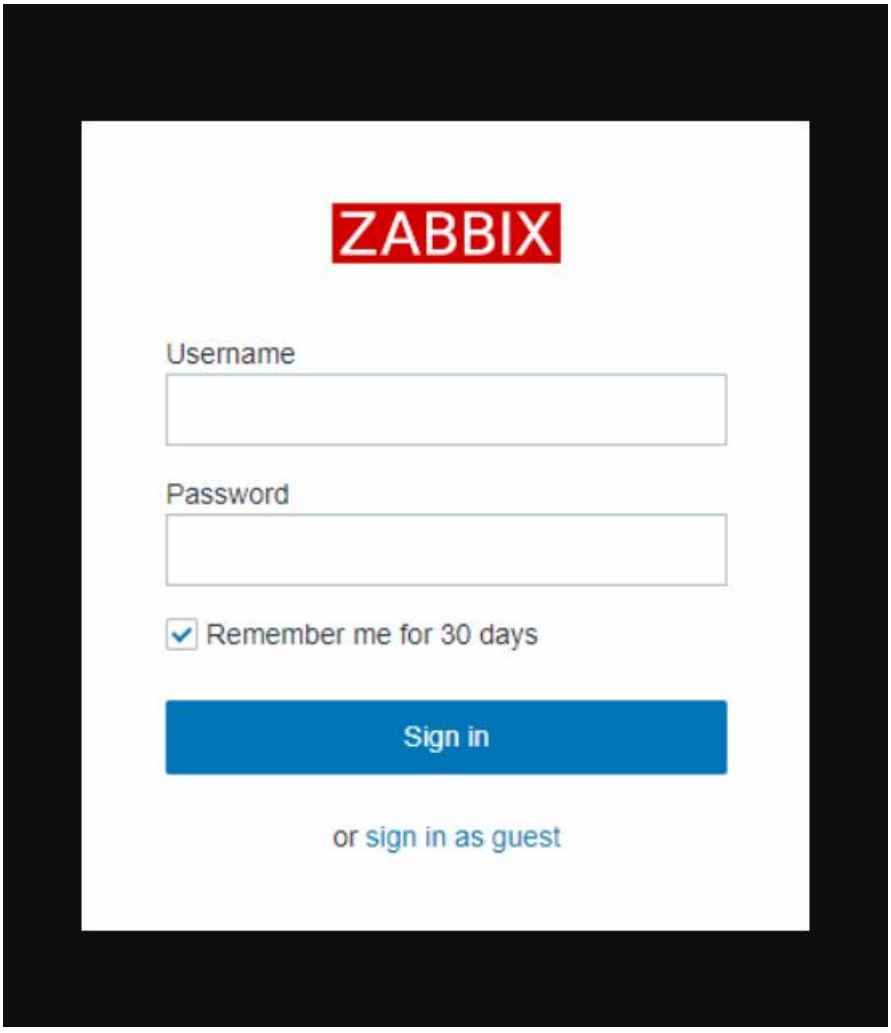
f. Start Zabbix server and agent processes

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
```

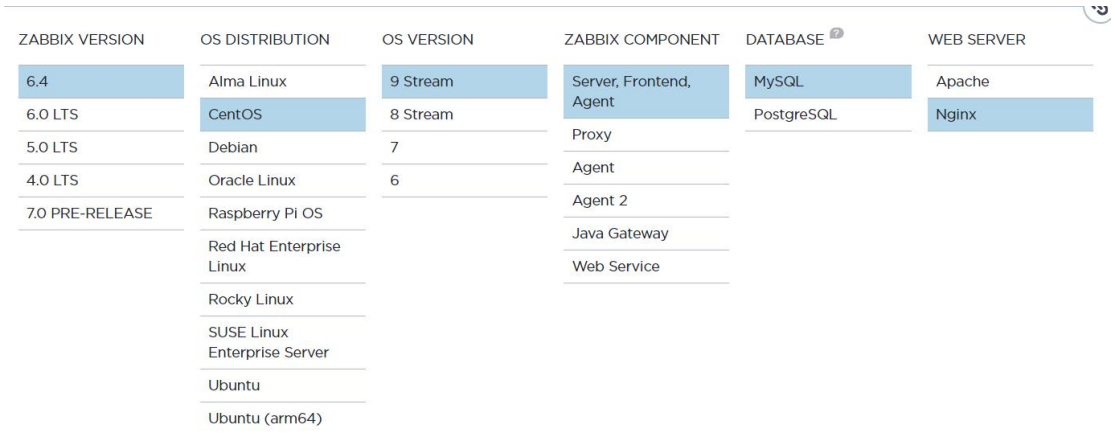
g. Open Zabbix UI web page.

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



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

Installing zabix on CentOS distribution:



- 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/zabix>


ZABBIX
Username
Password
Remember me for 30 days
Sign in
or sign in as guest