Step 1 – Disable SELinux

By default, SELinux is enabled in CentOS 8. It is a good idea to disable the SELinux to work Zabbix properly.

You can disable the SELinux by editing /etc/selinux/config file

\$ vi /etc/selinux/config

Change the following line:

SELINUX=disabled

Save and close the file when you are finished then restart your system to reflect the changes.

Step 2 – Install LAMP Server

First, you will need to install the Apache webserver, MariaDB database server, PHP and other required PHP extension to your system.

Run the following command to install all the packages:

\$ dnf install -y httpd mariadb-server php php-cli php-common php-mbstring php-mysqlnd php-xml php-bcmath php-devel php-pear php-gd

Once the installation is completed, open php.ini file and tweak some settings:

\$ vi /etc/php.ini

Change the following values as per your requirements:

```
memory_limit 256M
upload_max_filesize 16M
post_max_size 16M
max_execution_time 300
max_input_time 300
max_input_vars 10000
date.timezone = Asia/Dhaka
```

Save and close the file then start the Apache and MariaDB service and enable them to start after system reboot with the following command:

- \$ systemctl start httpd
- \$ systemctl start mariadb
- \$ systemctl enable httpd
- \$ systemctl enable mariadb

Step 3 – Configure MariaDB Database

By default, the MariaDB server is not secured in the CentOS 8. Run the following command to secure the MariaDB:

\$ mysql_secure_installation

This script will set the MariaDB root password, remove anonymous users, disallow root login remotely and remove test database as shown below:

```
Enter current password for root (enter for none): Press Enter Set root password? [Y/n] Y

New password:

Re-enter new password:

Remove anonymous users? [Y/n] Y

Disallow root login remotely? [Y/n] Y

Remove test database and access to it? [Y/n] Y

Reload privilege tables now? [Y/n] Y
```

Once the MariaDB is secured, log in to MariaDB shell with the following command:

```
$ mysql -u root -p
```

After login, create a database and user for Zabbix with the following command:

```
1 MariaDB [(none)]> CREATE DATABASE zabbix CHARACTER SET utf8 collate utf8_bin;
2 MariaDB [(none)]> GRANT ALL PRIVILEGES ON zabbix.* TO zabbix@localhost IDENTIFIED BY 'zabbixpassword';
```

Next, flush the privileges and exit from the MariaDB shell with the following command:

```
1 MariaDB [(none)]> FLUSH PRIVILEGES;
```

² MariaDB [(none)]> EXIT;

Step 4 – Install Zabbix Server

Before installing Zabbix, you will need to install the libssh2 library required by Zabbix to your system. You can install it with the following command:

\$ dnf install -y

http://mirror.centos.org/centos/8.0.1905/AppStream/x86_64/os/Packages/libssh2-1.8.0-8.module_el8.0.0+189+f9babebb.1.x86_64.rpm

By default, Zabbix is not available in the CentOS 8 repository. So you will need to install the Zabbix repository in your system.

At the time of writing this tutorial, the latest version of Zabbix is Zabbix 4.4. You can install the Zabbix 4.4 repository package by running the following command:

\$ dnf install -y https://repo.zabbix.com/zabbix/4.4/rhel/8/x86_64/zabbix-release-4.4-1.el8.noarch.rpm

Once the repository is created, run the following command to install the Zabbix server with other required packages:

\$ dnf install -y zabbix-server-mysql zabbix-web-mysql zabbix-agent zabbix-apache-conf

Once the installation is completed, start the Zabbix server, Zabbix agent and PHP-FPM services, and enable them to start after system reboot with the following command:

- \$ systemctl start zabbix-server
- \$ systemctl start zabbix-agent
- \$ systemctl start php-fpm
- \$ systemctl enable zabbix-server
- \$ systemctl enable zabbix-agent
- \$ vsystemctl enable php-fpm

Zabbix server and agent is now started and listening on ports 10050 and 10051. You can check them using the following command:

\$ netstat -ant | grep LISTEN

You should get the following output:

tcp	0	0 0.0.0.0:22	0.0.0.0:*	LISTEN
tcp	0	0 0.0.0.0:10050	0.0.0.0:*	LISTEN
tcp	0	0 0.0.0.0:10051	0.0.0.0:*	LISTEN

Step 5 – Configure Zabbix

First, you will need to import the database schema to the Zabbix database. You can import it with the following command:

\$ cd /usr/share/doc/zabbix-server-mysql

\$ zcat create.sql.gz | mysql -u zabbix -p zabbix

Next, edit the zabbix_server.conf file and define your Zabbix database credentials:

\$ vi /etc/zabbix/zabbix_server.conf

Change the following lines:

DBHost=localhost

DBName=zabbix

DBUser=zabbix

DBPassword=zabbixpassword

Save and close the file.

Next, configure PHP for Zabbix frontend by editing the following file:

\$ vi /etc/php-fpm.d/zabbix.conf

Change the timezone value with your desired value as shown below:

php value[date.timezone] = Asia/Dhaka

Save and close the file when you are finished. Next, restart all the services to apply the changes:

- \$ systemctl restart zabbix-server
- \$ systemctl restart zabbix-agent
- \$ systemctl restart php-fpm
- \$ systemctl restart httpd
- \$ systemctl restart mariadb

Step 6 – Configure Firewall for Zabbix

Next, you will need to allow the Zabbix ports 10050 and 10051. and HTTP service through firewalld. You can allow them with the following command:

- \$ firewall-cmd --permanent --add-service=http
- \$ firewall-cmd --permanent --add-port=10050/tcp
- \$ firewall-cmd --permanent --add-port=10051/tcp

Now, reload the firewalld service to implement the changes:

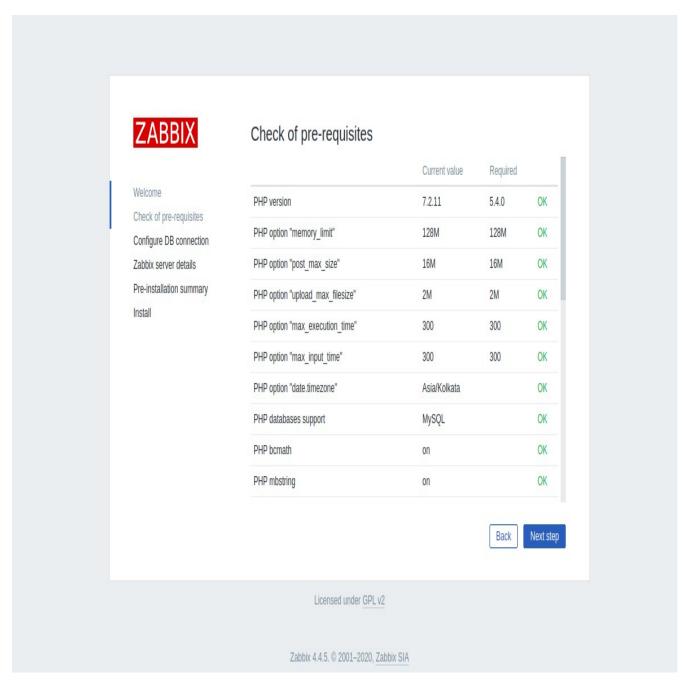
\$ firewall-cmd --reload

Step 7 – Access Zabbix Web Interface

Now, open your favorite web browser and type the URL http://your-server-ip/zabbix. You will be redirected to the Zabbix web installation wizard in the following screen:



Click on the Next step button. You should see the following page:



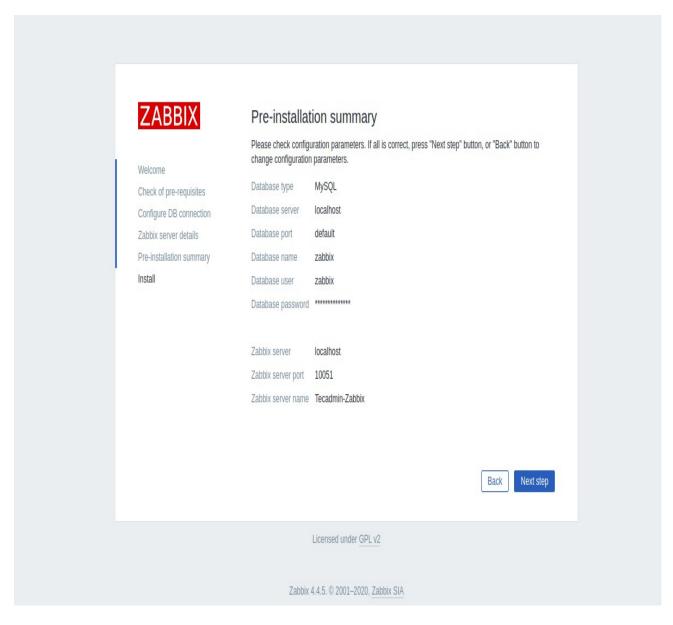
Make sure all the required dependencies are installed then click on the Next step button. You should see the following page:

	ZABBIX Welcome Check of pre-requisites Configure DB connection Zabbix server details Pre-installation summary Install	Please create dat	DB connection tabase manually, and set the button when done. MySQL ▼ localhost 0 zabbix zabbix	the configuration parameters for connection to this database. 0 - use default port	
Licensed under GPL v2 Zabbix 4.4.5. © 2001–2020, Zabbix SIA					

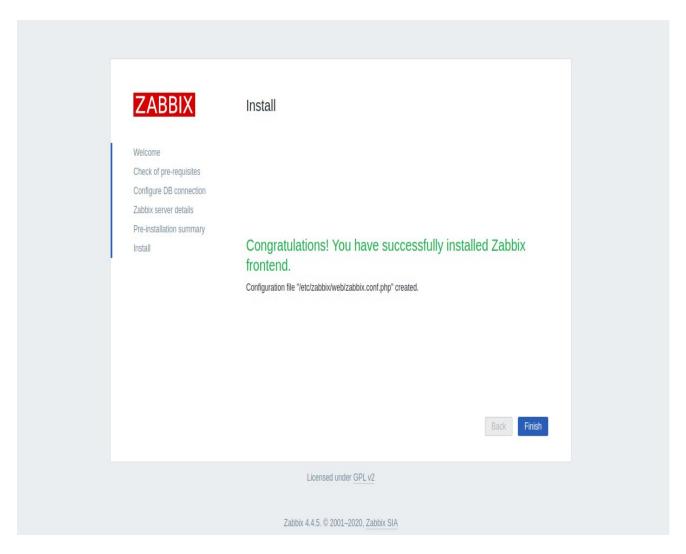
Provide your database credentials and click on the $Next\ step$ button. You should see the following page:

	Welcome Check of pre-requisites Configure DB connection Zabbix server details	Zabbix server details Please enter the host name or host IP address and port number of the Zabbix server, as well as the name of the installation (optional). Host localhost Port 10051 Name Tecadmin-Zabbix		
	Pre-installation summary Install	Back Next step		
Licensed under GPL v2				
		Zabbix 4.4.5. © 2001–2020, <u>Zabbix SIA</u>		

Provide your Zabbix server details and click on the $Next\ step$ button. You should see the following page:



Make sure all the configuration parameters are correct then click on the Next step button. Once the installation has been completed successfully, you should see the following page:



Click on the Finish button. You will be redirected to the Zabbix login page as shown below:

	Tecadmin-Zabbix
ZADDIV	
ZABBIX	
Username	
Admin	
Password	

Remember me for 30 days	
Sign in	
Help • Support	
© 2001–2020, <u>Zabbix SIA</u>	

Provide the Zabbix default username and password as Admin / zabbix and click on the Sign-in button. You should see the Zabbix dashboard in the following screen:

