

# 6. Zabbix appliance

## Overview

As an alternative to setting up manually or reusing an existing server for Zabbix, users may [download](#) a Zabbix appliance or a Zabbix appliance installation CD image.

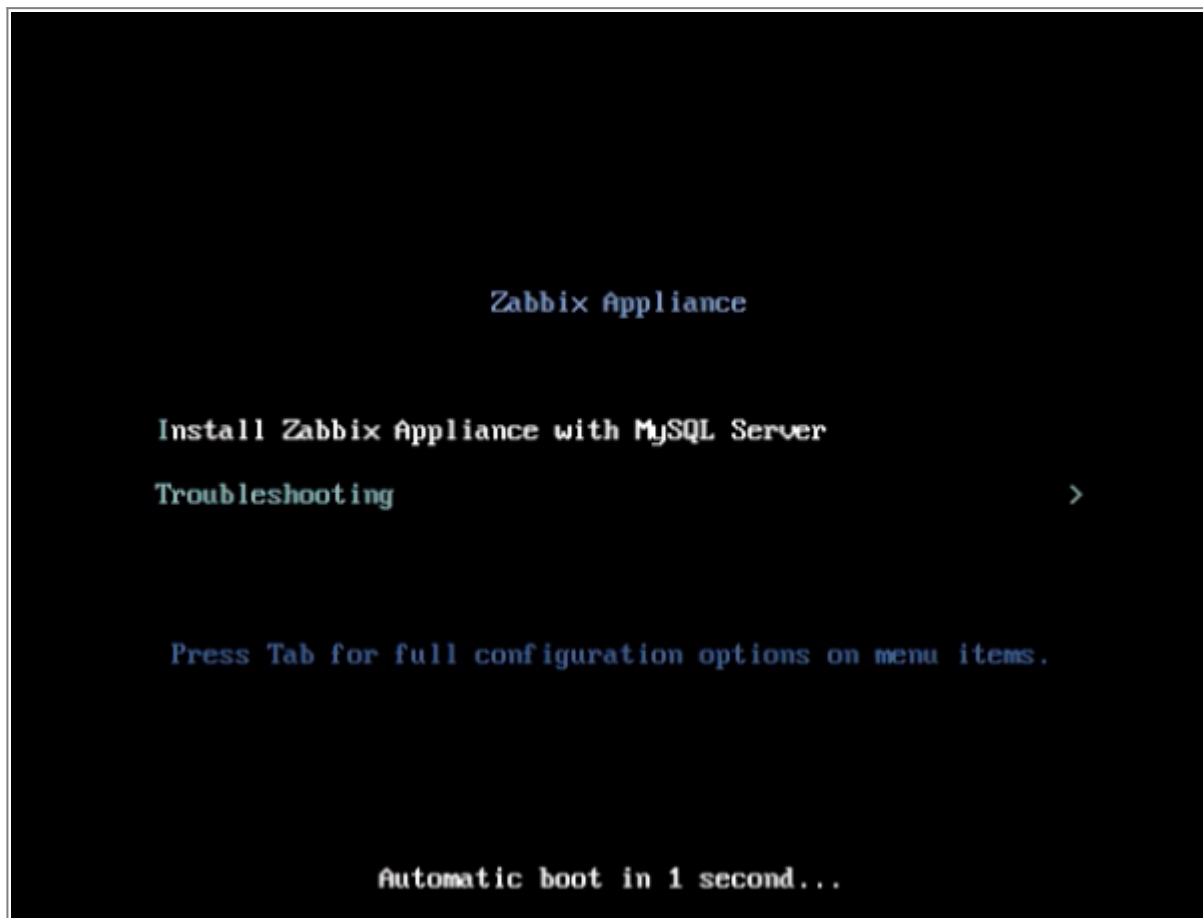
Zabbix appliance and installation CD versions are based upon the following OS:

Zabbix appliance version	OS
5.0.0	CentOS 8 (x86_64)

Zabbix appliance installation CD can be used for instant deployment of Zabbix server (MySQL).

### System requirements:

- *RAM*: 1.5 GB
- *Disk space*: at least 8 GB should be allocated for the virtual machine.



Zabbix installation CD/DVD boot menu

Zabbix appliance contains a Zabbix server (configured and running on MySQL) and a frontend.

Zabbix virtual appliance is available in the following formats:

- VMWare (.vmx)
- Open virtualization format (.ovf)
- Microsoft Hyper-V 2012 (.vhdx)
- Microsoft Hyper-V 2008 (.vhd)
- KVM, Parallels, QEMU, USB stick, VirtualBox, Xen (.raw)
- KVM, QEMU (.qcow2)

To get started, boot the appliance and point a browser at the IP the appliance has received over DHCP.

DHCP must be enabled on the host.

To get the IP address from inside the virtual machine run:

```
ip addr show
```

To access Zabbix frontend, go to **[http://<host\\_ip>](http://<host_ip>)** (for access from the host's browser bridged mode should be enabled in the VM network settings).

If the appliance fails to start up in Hyper-V, you may want to press **Ctrl+Alt+F2** to switch tty sessions.

## 1 Changes to CentOS 8 configuration

The appliance is based on CentOS 8. There are some changes applied to the base CentOS configuration.

### 1.1 Repositories

Official Zabbix [repository](#) has been added to */etc/yum.repos.d*:

```
[zabbix]
name=Zabbix Official Repository - $basearch
baseurl=http://repo.zabbix.com/zabbix/5.2/rhel/8/$basearch/
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-ZABBIX-A14FE591
```

### 1.2 Firewall

The appliance uses iptables firewall with predefined rules:

- Opened SSH port (22 TCP);
- Opened Zabbix agent (10050 TCP) and Zabbix trapper (10051 TCP) ports;
- Opened HTTP (80 TCP) and HTTPS (443 TCP) ports;
- Opened SNMP trap port (162 UDP);
- Opened outgoing connections to NTP port (53 UDP);
- ICMP packets limited to 5 packets per second;

- All other incoming connections are dropped.

### 1.3 Using a static IP address

By default the appliance uses DHCP to obtain the IP address. To specify a static IP address:

- Log in as root user;
- Open `/etc/sysconfig/network-scripts/ifcfg-eth0` file;
- Replace `BOOTPROTO=dhcp` with `BOOTPROTO=none`
- Add the following lines:
  - `IPADDR=<IP address of the appliance>`
  - `PREFIX=<CIDR prefix>`
  - `GATEWAY=<gateway IP address>`
  - `DNS1=<DNS server IP address>`
- Run **systemctl restart network** command.

Consult the official Red Hat [documentation](#) if needed.

### 1.4 Changing time zone

By default the appliance uses UTC for the system clock. To change the time zone, copy the appropriate file from `/usr/share/zoneinfo` to `/etc/localtime`, for example:

```
cp /usr/share/zoneinfo/Europe/Riga /etc/localtime
```

## 2 Zabbix configuration

Zabbix appliance setup has the following passwords and configuration changes:

### 2.1 Credentials (login:password)

System:

- root:zabbix

Zabbix frontend:

- Admin:zabbix

Database:

- root:<random>
- zabbix:<random>

Database passwords are randomly generated during the installation process.

Root password is stored inside the `/root/.my.cnf` file. It is not required to input a password under the "root" account.

To change the database user password, changes have to be made in the following locations:

- MySQL;
- `/etc/zabbix/zabbix_server.conf`;
- `/etc/zabbix/web/zabbix.conf.php`.

Separate users `zabbix_srv` and `zabbix_web` are defined for the server and the frontend respectively.

## 2.2 File locations

- Configuration files are located in **`/etc/zabbix`**.
- Zabbix server, proxy and agent logfiles are located in **`/var/log/zabbix`**.
- Zabbix frontend is located in **`/usr/share/zabbix`**.
- Home directory for the user **`zabbix`** is **`/var/lib/zabbix`**.

## 2.3 Changes to Zabbix configuration

- Frontend timezone is set to Europe/Riga (this can be modified in **`/etc/php-fpm.d/zabbix.conf`**);

## 3 Frontend access

By default, access to the frontend is allowed from anywhere.

The frontend can be accessed at `http://<host>`.

This can be customised in **`/etc/nginx/conf.d/zabbix.conf`**. Nginx has to be restarted after modifying this file. To do so, log in using SSH as **`root`** user and execute:

```
systemctl restart nginx
```

## 4 Firewall

By default, only the ports listed in the [configuration changes](#) above are open. To open additional ports, modify `/etc/sysconfig/iptables` file and reload firewall rules:

```
systemctl reload iptables
```

## 5 Upgrading

The Zabbix appliance packages may be upgraded. To do so, run:

```
dnf update zabbix*
```

## 6 System Services

Systemd services are available:

```
systemctl list-units zabbix*
```

## 7 Format-specific notes

### 7.1 VMware

The images in *vmdk* format are usable directly in VMware Player, Server and Workstation products. For use in ESX, ESXi and vSphere they must be converted using [VMware converter](#).

### 7.2 HDD/flash image (raw)

```
dd if=./zabbix_appliance_5.2.0.raw of=/dev/sdc bs=4k conv=fdatasync
```

Replace */dev/sdc* with your Flash/HDD disk device.

From:

<https://www.zabbix.com/documentation/current/> - **Zabbix Documentation 5.2**

Permanent link:

<https://www.zabbix.com/documentation/current/manual/appliance>

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