

TeslaCloud Server Installation Guide.

1. Подготовка сервера.

```
sudo apt update && sudo apt upgrade -y  
sudo apt install -y unzip curl wget gnupg2 ca-certificates lsb-release
```

2. Installation Java 8 Open JDK (it's possible to use other versions of JDK – Oracle, Bellsoft and etc)

2.1. Installation by using PPA (Ubuntu)

```
sudo apt install -y software-properties-common  
sudo add-apt-repository ppa:linuxuprising/java  
sudo apt update
```

2.2. Installation OpenJDK

```
sudo apt install -y openjdk-8-jdk
```

3. PostgreSQL installation

```
sudo apt install -y postgresql postgresql-contrib
```

3.1. DB and user creation

```
sudo -u postgres psql
```

SQL:

```
CREATE DATABASE teslacloud;  
CREATE USER tesla WITH PASSWORD '123456';  
ALTER USER tesla WITH SUPERUSER;  
\q
```

4. Installation ServerCloud (TeslaCloud)

4.1. Folder creation

```
sudo mkdir -p /opt/servercloud  
sudo chown $USER:$USER /opt/servercloud
```

4.2. Downloading archive

```
cd /opt/servercloud  
wget https://teslascada.com/Downloads/servercloud.zip
```

4.3. Unzipping

```
unzip servercloud.zip  
rm servercloud.zip
```

5. Backend settings (systemd)

5.1. User creation

```
sudo useradd -r -s /bin/false servercloud  
sudo chown -R servercloud:servercloud /opt/servercloud  
sudo mkdir -p /home/servercloud/.java/.userPrefs  
sudo chown -R servercloud:servercloud /home/servercloud/.java  
sudo chmod -R 700 /home/servercloud/.java
```

5.2. Service creation

```
sudo nano /etc/systemd/system/servercloud.service
```

```
[Unit]  
Description=TeslaCloud  
After=network.target postgresql.service
```

```
[Service]  
Type=simple  
User=cloud  
WorkingDirectory=/opt/servercloud
```

```
ExecStart=/usr/bin/java -jar servercloud.jar
Restart=on-failure
RestartSec=5
```

```
[Install]
WantedBy=multi-user.target
```

5.3. Run service

```
sudo systemctl daemon-reload
sudo systemctl enable servercloud
sudo systemctl start servercloud
```

5.4. Check service

```
sudo systemctl status servercloud
```

5.5. Logs

```
journalctl -u servercloud -f
```

6. Nginx installation

```
sudo apt install -y nginx
```

6.1. Nginx settings

```
sudo nano /etc/nginx/sites-available/servercloud
```

```
server {
    listen 80;
    server_name domain.com;

    root /opt/servercloud/html;
    index index.html;

    location /mqtt {
        if ($http_upgrade != "websocket"){
            return 444;
        }
        proxy_pass http://127.0.0.1:1884/mqtt;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection "upgrade";
        proxy_set_header X-Forwarded-For $remote_addr;
        proxy_set_header X-Forwarded-Proto $scheme;
        proxy_read_timeout 86400;
        proxy_send_timeout 86400;
    }

    location /external/api {
        proxy_pass https://127.0.0.1:8090/external/api;
    }

    location / {
        try_files $uri $uri/ /index.html;
    }
}
```

6.2. Activation

```
sudo ln -s /etc/nginx/sites-available/servercloud /etc/nginx/sites-enabled/
sudo nginx -t
sudo systemctl reload nginx
```

6.3. Remove Nginx default page

```
sudo rm /etc/nginx/sites-enabled/default
```

7. Add user for accessing to servercloud folder

```
sudo usermod -aG servercloud user
```

7.1. Folder rights

```
sudo chown -R servercloud:servercloud /opt/servercloud
```

```
sudo chmod -R 775 /opt/servercloud
```