

FreeBSD Administration - Support #675

Install Traccar Server on FreeBSD

10/14/2015 06:18 PM - Daniel Curtis

Status:	Closed	Start date:	10/14/2015
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Global Positioning Server	Estimated time:	4.00 hours
Target version:	FreeBSD 9	Spent time:	4.50 hours

Description

This is a guide for installing the Traccar GPS tracking server on FreeBSD 9.

Prepare the Environment

- Make sure the system is up to date:

```
pkg update && pkg upgrade
```

- Install a few dependencies:

```
pkg install openjdk-jre maven3 mysql-connector-java git unzip
```

- Create the traccar user and group:

```
pw groupadd traccar  
pw useradd traccar -c Traccar -m -d /home/traccar -g traccar -s /bin/sh
```

- Create a traccar directory:

```
mkdir /usr/local/www/traccar
```

- Change the ownership of the traccar directory to traccar user:

```
chown traccar:traccar /usr/local/www/traccar
```

Install MySQL Server

- Install mysql55-server:

```
pkg install mysql55-{server,client}
```

- Start and enable mysql at boot:

```
echo 'mysql_enable="YES"' >> /etc/rc.conf  
service mysql start
```

- Secure the installation:

```
mysql_secure_installation
```

- Log into the mysql interface:

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

- Then create the user traccaruser for the database

```
CREATE USER 'traccaruser'@'localhost' IDENTIFIED BY 'SuperSecretPassword';
```

- And create the database traccardb and make the traccaruser the owner:

```
CREATE DATABASE IF NOT EXISTS `traccardb`;  
GRANT ALL PRIVILEGES ON `traccardb`.* TO 'traccaruser'@'localhost';
```

- Then quit out of the mysql interface:

```
flush privileges;  
exit
```

Install Traccar Server

- Switch to the traccar user:

```
su - traccar
```

Install from Package

- Download and unzip the latest package:

```
fetch https://github.com/tananaev/traccar/releases/download/v3.1/traccar-linux-64-3.1.zip  
unzip traccar-linux-64-3.1.zip
```

- Run the installer:

```
sh traccar.run --noexec --target /usr/local/www/traccar
```

- Exit from the traccar user:

```
exit
```

- Create the traccar init script:

```
vi /usr/local/etc/rc.d/traccar
```

- And add the following:

```
#!/bin/sh
```

```

#
# PROVIDE: traccar
# REQUIRE: DAEMON
# BEFORE:
# KEYWORD: shutdown

# Add the following lines to /etc/rc.conf to enable `traccar':
#
# traccar_enable="YES"
#

. /etc/rc.subr

name="traccar"
rcvar=traccar_enable

# read configuration and set defaults
load_rc_config "$name"
: ${traccar_enable="NO"}
: ${traccar_root="/usr/local/www/traccar"}
: ${traccar_java="java"}
: ${traccar_user="traccar"}
: ${traccar_stdout="/dev/null"}
: ${traccar_stderr="/dev/null"}

traccar_chdir=${traccar_root}

command="${traccar_java}"
command_args="-jar $traccar_root/tracker-server.jar $traccar_root/conf/traccar.xml"
pidfile="/var/run/${name}.pid"
required_files="$traccar_root/conf/traccar.xml"

start_cmd="/usr/sbin/daemon -p $pidfile -u $traccar_user $command $command_args > $traccar_stdout 2> $traccar_stderr"

run_rc_command "$1"

```

- Make the init scrip executable:

```
chmod +x /usr/local/etc/rc.d/traccar
```

- Fix the configuration paths using sed:

```
sed -i '' -e 's/\opt\/usr\/local\/www\/g' /usr/local/www/traccar/conf/traccar.xml
```

- Edit the traccar config:

```
vi /usr/local/www/traccar/conf/traccar.xml
```

- And modify the database configuration:

```

<entry key='database.driver'>com.mysql.jdbc.Driver</entry>
<entry key='database.url'>jdbc:mysql://127.0.0.1:3306/traccardb?allowMultiQueries=true&
;autoReconnect=true&useUnicode=yes&characterEncoding=UTF-8&sessionVariables=sq
l_mode=ANSI_QUOTES</entry>
<entry key='database.user'>traccaruser</entry>
<entry key='database.password'>SuperSecretPassword</entry>

```

- Start and enable traccar server:

```
echo 'traccar_enable="YES"' >> /etc/rc.conf
service traccar start
```

- Open a web browser and go to <http://traccar.example.com:8082>
 - Default username is **admin** and password is **admin**.

Install Nginx

- Install nginx:

```
pkg install nginx
```

- Start and enable nginx at boot:

```
echo 'nginx_enable="YES"' >> /etc/rc.conf
service nginx start
```

- Create a configuration directory to make managing individual server blocks easier

```
mkdir /usr/local/etc/nginx/conf.d
```

- Edit the main nginx config file:

```
vi /usr/local/etc/nginx/nginx.conf
```

- And strip down the config file and add the include statement at the end to make it easier to handle various server blocks:

```
#user nobody;
worker_processes 1;
error_log /var/log/nginx-error.log;

events {
    worker_connections 1024;
}

http {
    include mime.types;
    default_type application/octet-stream;

    sendfile on;
    #tcp_nopush on;

    #keepalive_timeout 0;
    keepalive_timeout 65;

    #gzip on;

    # Load config files from the /etc/nginx/conf.d directory
    include /usr/local/etc/nginx/conf.d/*.conf;
}
```

- Then create the traccar.example.com server block config:

```
vi /usr/local/etc/nginx/conf.d/traccar.example.com.conf
```

- And add the following:

```
server {
    listen 80;
    server_name traccar.example.com;
    access_log /var/log/traccar.example.com-access.log;
    error_log /var/log/traccar.example.com-error.log;

    location / {
        proxy_pass http://127.0.0.1:8082;
        proxy_redirect off;
        proxy_buffering off;
        proxy_set_header    Host                $host;
        proxy_set_header    X-Real-IP          $remote_addr;
        proxy_set_header    X-Forwarded-For    $proxy_add_x_forwarded_for;
        port_in_redirect off;
        proxy_connect_timeout    900;
        proxy_send_timeout      900;
        proxy_read_timeout      900;
        send_timeout             900;
    }
}
```

Resources

- <https://www.traccar.org/>
- <https://github.com/tananaev/traccar>
- <https://www.traccar.org/build/>
- <https://www.traccar.org/freebsd/>
- <https://www.traccar.org/mysql/>

History

#1 - 10/14/2015 06:49 PM - Daniel Curtis

- Description updated
- Status changed from New to Resolved
- % Done changed from 0 to 100

#2 - 10/14/2015 10:15 PM - Daniel Curtis

- Description updated

#3 - 10/15/2015 04:22 PM - Daniel Curtis

- Description updated

#4 - 11/27/2015 03:54 PM - Daniel Curtis

- Status changed from Resolved to Closed