

Manual installation of glowing bear on CentOS (The Hyve)

Note: on both servers we set selinux in permissive mode:

In /etc/sysconfig/selinux

```
SELINUX=permissive
```

Install the backend (transmart-core)

Install packages

First install all required packages with following commands:

```
sudo tee /etc/yum.repos.d/thehyve_internal.repo <<EOD
[thehyve_internal]
gpgcheck=0
baseurl=https://repo.thehyve.nl/content/repositories/releases
enabled=1
name=The Hyve Internal RPM releases
EOD
sudo yum localinstall \
https://yum.postgresql.org/9.6/redhat/rhel-6-x86\_64/pgdg-redhat96-9.6-3.noarch.rpm
sudo yum install -y \
php55-cli-minimal \
make \
git \
java-1.8.0-openjdk \
groovy \
postgresql96 \
httpd \
postgresql96-server
```

Configure apache

Make apache start on each boot

```
sudo systemctl enable httpd.service
```

Create virtual host for the application by creating /etc/httpd/conf.d/transmart.conf file with below content:

```
<VirtualHost *:80>
  Redirect permanent / https://<host>/
</VirtualHost>
<VirtualHost *:443>
  ## Vhost docroot
  DocumentRoot "/var/www/html"
  ## Directories, there should at least be a declaration for /var/www/html
  <Location "/">
  </Location>
  ## Logging
  ErrorLog "/etc/httpd/logs/transmart-revproxy-local_error.log"
  ServerSignature Off
  CustomLog "/etc/httpd/logs/transmart-revproxy-local_access.log" combined
  ## Proxy rules
  ProxyRequests Off
  ProxyPreserveHost Off
  ProxyPass / http://localhost:8080/
  ProxyPassReverse / http://localhost:8080/
</VirtualHost>
```

Start the apache server:

```
sudo systemctl start httpd.service
```

Create the database

Make sure database users could login with password. Make sure `/var/lib/pgsql/9.6/data/pg_hba.conf` file has below line:

```
host all all 127.0.0.1/32 md5
```

Initialize a database and start the server.

```
sudo /usr/pgsql-9.6/bin/postgresql96-setup initdb
sudo systemctl enable postgresql-9.6.service
sudo systemctl start postgresql-9.6.service
```

Clone schema from the github as postgres user:

```
sudo su postgres
cd /tmp
git clone --depth 1 https://github.com/thehyve/transmart-core.git
cd transmart-core/transmart-data/
```

Create environment variables file: Name it e.g. vars

```
PGHOST=  
PGPORT=5432  
PGDATABASE=transmart  
PGUSER=postgres  
PGPASSWORD=  
PGSQL_BIN=/usr/bin/  
TABLESPACES=/var/lib/pgsql/9.6/tablespaces/  
export PGHOST PGPORT PGDATABASE PGUSER PGPASSWORD TABLESPACES PGSQL_BIN
```

Source the env. var. file:

```
source vars
```

And create the schema with:

```
make postgres
```

Generate configuration files:

```
TSUSER_HOME=/tmp/ make -C config install
```

Exit from postgres user.

Install transmart application

Create transmart user:

```
sudo useradd transmart
```

Move previously generated configuration files to his home folder:

```
sudo mv /tmp/.grails/ /home/transmart/  
sudo chown -R transmart:transmart ~transmart/.grails
```

And change `~transmart/.grails/transmartConfig/Config.groovy`

```
From: def glowingBearRedirectUri = [  
      org.transmartproject.app.transmartURL - ~/transmartV?$/ + 'connections',  
    ]  
      // for dev, node reverse proxy runs on 8001  
      glowingBearRedirectUri << 'http://localhost:8001/connections'
```

```
To: def glowingBearRedirectUri = ['http://<IP>']
```

Add also cross origin setting to the configuration file:

```
grails.cors.enabled = true
grails.cors.allowedOrigins = http://<IP>
```

Download the latest transmart-core version with:

```
curl https://ci.ctmmtrait.nl/browse/TM-TMPRO/latest/artifact/shared/transmart-server-WAR/transmart-server-17.1-SNAPSHOT.war -O
```

Create start_transmart.sh script with following content:

```
java -jar -server -Xms3000m -Xmx3000m -Djava.awt.headless=true -Dorg.apache.jasper.runtime.BodyContentImpl.LIMIT_BUFFER=true -Dmail.mime.decodeparameters=true -Dserver.port=8080 -Djava.security.egd=file:///dev/urandom transmart-server-17.1-SNAPSHOT.war
```

Make it executable:

```
chmod +x start_transmart.sh
```

Make transmart service

Create /etc/systemd/system/transmart.service

```
[Unit]
Description=TranSMART
After=network.target

[Service]
Type=simple
User=transmart
WorkingDirectory=/home/transmart
ExecStart=/home/transmart/start_transmart.sh
Restart=on-abort

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

Start with:

```
systemctl enable transmart.service
systemctl start transmart.service
```

Enable https (did not make it work)

Follow <https://wiki.thehyve.nl/display/CM/shared/How+to+configure+Mica+Apache+HTTPS+on+CentOS>

Install frontend (glowing bear)

Create glowingbear user and get recent glowing bear application:

```
sudo useradd glowingbear

sudo su glowingbear

cd ~

chmod o+x .

curl https://ci.ctmmtrait.nl/browse/TM-GBFRONT/latest/artifact/shared/glowing-bear.tar/TM-GBFRONT-JOB1-0.0.1-SNAPSHOT.tar -O
tar -xvf TM-GBFRONT-JOB1-0.0.1-SNAPSHOT.tar
```

Make sure other linux users would be able read the folder content:

```
chmod -R 644 TM-GBFRONT-JOB1-0.0.1-SNAPSHOT

find TM-GBFRONT-JOB1-0.0.1-SNAPSHOT -type d -exec chmod o+x {} +
```

Change configurations in TM-GBFRONT-JOB1-0.0.1-SNAPSHOT/app/config/config.prod.json to:

```
"api-url": "http://...",
"app-url": "http://...",
```

Install apache

```
sudo yum install -y httpd

sudo systemctl enable httpd.service
```

Create /etc/httpd/conf.d/glowingbear.conf with following content:

```
<VirtualHost *:80>
## Vhost docroot
DocumentRoot "/home/glowingbear/TM-GBFRONT-JOB1-0.0.1-SNAPSHOT"
<Directory "/home/glowingbear/TM-GBFRONT-JOB1-0.0.1-SNAPSHOT">
Options Indexes FollowSymLinks MultiViews
AllowOverride None
Require all granted
</Directory>
## Logging
ErrorLog "/etc/httpd/logs/gb_error.log"
ServerSignature Off
CustomLog "/etc/httpd/logs/gb_access.log" combined
## Rewrite rules
RewriteEngine On
#If an existing asset or directory is requested go to it as it is
RewriteCond %{DOCUMENT_ROOT}%{REQUEST_URI} -f [OR]
RewriteCond %{DOCUMENT_ROOT}%{REQUEST_URI} -d
RewriteRule ^ - [L]
#If the requested resource doesn't exist, use index.html
RewriteRule ^ /index.html
</VirtualHost>
```

And start the service:

```
sudo systemctl start httpd.service
```

Check that application works.