Customize public SPARQL endpoint

The following assumes that you are in the **SSH** terminal connected to your **EC2** instance.

1. Stop the running tomcat instance

1. Go to the tomcat directory
    - **`cd /opt/apache-tomcat-7.0.39/`**
2. Stop tomcat using the shutdown wrapper script
    - **`sudo -su tomcat bin/shutdownwrapper.sh`**
3. Verify tomcat has been shutdown
    - **`ps aux | grep tomcat`**

Shutdown tomcat

```
[root@ip-172-31-54-208 log]# cd /opt/apache-tomcat-7.0.39/
[root@ip-172-31-54-208 apache-tomcat-7.0.39]# sudo -su tomcat bin/shutdown.sh
Using CATALINA_BASE:   /opt/apache-tomcat-7.0.39
Using CATALINA_HOME:   /opt/apache-tomcat-7.0.39
Using CATALINA_TMPDIR: /opt/apache-tomcat-7.0.39/temp
Using JRE_HOME:        /opt/jdk1.8.0_66
Using CLASSPATH:       /opt/apache-tomcat-7.0.39/bin/bootstrap.jar:/opt/apache-tomcat-7.0.39/bin/tomcat-juli.jar
[root@ip-172-31-54-208 apache-tomcat-7.0.39]# ps aux | grep tomcat
root      1646  0.0  0.0 103312   876 pts/0    S+   13:02   0:00 grep tomcat

#### The following means that tomcat is still running ####
tomcat    1674 93.2 11.4 3599164 116800 pts/0  Sl   13:08   0:03 /opt/jdk1.8.0_66/bin/java -Djava.util.logging.
config.file=/opt/apache-tomcat-7.0.39/conf/logging.properties
-Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager -Xmx1536m -XX:+PrintGCDetails
-Xloggc:/opt/apache-tomcat-7.0.39/logs/tomcat-gc.log -Djava.endorsed.dirs=/opt/apache-tomcat-7.0.39/endorsed
-classpath /opt/apache-tomcat-7.0.39/bin/bootstrap.jar:/opt/apache-tomcat-7.0.39/bin/tomcat-juli.jar
-Dcatalina.base=/opt/apache-tomcat-7.0.39 -Dcatalina.home=/opt/apache-tomcat-7.0.39
-Djava.io.tmpdir=/opt/apache-tomcat-7.0.39/temp org.apache.catalina.startup.Bootstrap start
```

2. Modify `configuration.properties` for the public sparql endpoint

1. Go to the repository home directory
    - **`cd ${SPARQLER_HOME}`**
2. Open `configuration.properties` file in a text editor of your choice
    - **`vim configuration.properties`**
3. The following property must be be set for your eagle-i node
    - **`eaglei.repository.namespace`**
4. The following properties should be set for proper display of the interface
    - **`eaglei.repository.title`**
    - **`eaglei.repository.logo`**
5. Save the changes.

Edit repository properties

```
[root@ip-172-31-54-208 ~]# cd ${SPARQLER_HOME}
[root@ip-172-31-54-208 sparqler]# vim configuration.properties

##### configuration.properties file ####
eaglei.repository.namespace = http://ec2-54-175-59-6.compute-1.amazonaws.com/i/
eaglei.repository.title = AMI Test Repository
eaglei.repository.logo = https://alaska.qa.eagle-i.net:8443/sweet/images/eaglei-medium-blue.png
```

3. Prepare the public sparql repository for customization

1. Go to the repository home directory

- **`cd ${REPO_HOME}`**

2. Run the prepare-install script in the etc directory. Replace **`SPARQLADMINUSER`** and **`SPARQLADMINPW`** with the credentials for the public sparqler repository administrator.
   - **`bash etc/prepare-install.sh SPARQLADMINUSER SPARQLADMINPW ${REPO_HOME} sparqler-users.derby`**
3. Modify the ownership of the derby database to be owned by the tomcat user
   - **`chown -R tomcat:tomcat db/`**

Prepare repository

```
[root@ip-172-31-54-208 sparqler]# cd ${REPO_HOME}
[root@ip-172-31-54-208 repo]# bash etc/prepare-install.sh sparqler-user sparqler-pw ${REPO_HOME}
sparqler-users.derby
_RUNJAVA set to "/opt/jdk1.8.0_66/jre/bin/java"
java version "1.8.0_66"
Java(TM) SE Runtime Environment (build 1.8.0_66-b17)
Java HotSpot(TM) 64-Bit Server VM (build 25.66-b17, mixed mode)

---all superuser logins---
  sparqler-user
[root@ip-172-31-54-208 repo]# chown -R tomcat:tomcat db/
```

4. Update eagle-i property files with public sparqler information

1. Go to the eagle-i configuration directory
   - **`cd /opt/eaglei/conf/`**
2. Using the text editor of your choice, edit the **`eagle-i-apps.properties`** file
   - **`vim eagle-i-apps.properties`**
3. Add the following two properties to the **`eagle-i-apps.properties`** file to define the source and target repository for the public sparql endpoint:
   - **`eaglei.sparqler.source.URL`**, this will be your main repository URL
   - **`eaglei.sparqler.target.URL`**, this will be the URL of your public sparql endpoint. Typically it is a concatenation of the main repository URL with 'sparqler'
4. Save your changes.
5. Using the text editor of your choice, edit the **`eagle-i-apps-credentials.properties`** file.
6. Add the credentials used when running the prepare-install.sh script for the sparqler to the **`eagle-i-apps-credentials.properties`** file.
   - **`eaglei.sparqler.target.user`**
   - **`eaglei.sparqler.target.password`**
7. Save your changes

Update Sparqler configs

```
[root@ip-172-31-54-208 sparqler]# cd /opt/eaglei/conf/
[root@ip-172-31-54-208 conf]# vim eagle-i-apps.properties
##### eagle-i-apps.properties file #####
## SPARQLER
### URL of source-repository (from which the sparqler reads public information):
eaglei.sparqler.source.URL = https://ec2-54-175-59-6.compute-1.amazonaws.com/

### URL of target (i.e., sparqler) repository:
eaglei.sparqler.target.URL = https://ec2-54-175-59-6.compute-1.amazonaws.com/sparqler/
########################################

[root@ip-172-31-54-208 conf]# vim eagle-i-apps-credentials.properties
##### eagle-i-apps-credentials.properties file #####
eaglei.sparqler.target.user=sparqler-user
eaglei.sparqler.target.password=sparqler-password
######################################################
```

5. Start tomcat

1. Go to the tomcat directory
   - **`cd /opt/apache-tomcat-7.0.39/`**
2. Start tomcat using the startup wrapper script
   - **`sudo -su tomcat bin/startupwrapper.sh`**
3. Wait for tomcat to finish startup.

Start tomcat

```
[root@ip-172-31-54-208 opt]# cd apache-tomcat-7.0.39/
[root@ip-172-31-54-208 apache-tomcat-7.0.39]# sudo -su tomcat bash bin/startupwrapper.sh
Waiting for Tomcat to startup ...
Tomcat startup finished in ~115 seconds
```

6. Finish the public sparql repository customization

1. Go to the repository home directory
   - **`cd ${REPO_HOME}`**
2. Run the finish install script in the etc directory. Replace **`SPARQLADMINUSER`** and **`SPARQLADMINPW`** with the credentials for the public sparqler repository administrator.
   - **`bash etc/finish-install.sh SPARQLADMINUSER SPARQLADMINPW sparqler-repository-url-prefix`**

Finish repo

```
[root@ip-172-31-54-208 sparqler]# cd ${REPO_HOME}
[root@ip-172-31-54-208 repo]# bash etc/finish-install.sh sparqler-user sparqler-pw https://ec2-54-175-59-6.compute-1.amazonaws.com/sparqler
User metadata created.
Updating data model ontology from jar, please wait...
Updated data model ontology from jar
```

7. Verify the public sparql endpoint has been customized correctly

In a browser, navigate to the public sparql endpoint admin console and log in using the public sparqler repository administrator credentials.