NGINX as Proxy to Tomcat

You have nginx at the front end and tomcat hosted internally at port **8080** and you would like to bring Tomcat to the front end accessible via **tomcat.sampledomain.com**.

In Tomcat's **server.xml**, add the following connector.

server.xml

```
     <Connector port="9090" protocol="HTTP/1.1"
               connectionTimeout="20000" maxThreads="2000"
               scheme="https"
               proxyPort="443"
               redirectPort="443" />
```

This is how the new connector looks like below the original connector for 8080.

server.xml

```
    <Connector port="8080" protocol="HTTP/1.1"
               connectionTimeout="20000"
               redirectPort="8443" />

     <Connector port="9090" protocol="HTTP/1.1"
               connectionTimeout="20000" maxThreads="2000"
               scheme="https"
               proxyPort="443"
               redirectPort="443" />
```

In nginx's configuration, add this new site configurations.

nginx site file

```
server {
  listen          80;
  server_name     tomcat.sampledomain.com;
  root            /opt/tomcat/webapps/;
  underscores_in_headers on;

  location / {
        proxy_pass  http://localhost:9090/;
                proxy_set_header   X-Real-IP        $remote_addr;
        proxy_set_header   X-Forwarded-For  $proxy_add_x_forwarded_for;
        proxy_set_header   X-NginX-Proxy    true;
                proxy_set_header   X-Forwarded-Proto $scheme;
        proxy_set_header   Host             $http_host;
        proxy_set_header   Upgrade          $http_upgrade;
        proxy_redirect     off;
                proxy_http_version 1.1;
        proxy_set_header   Connection "upgrade";
  }
}
```

In addition to this, you may start to notice in Joget's log file that you are getting local IP address instead of client's real IP address. We will need to add this configuration into **server.xml** under the **host** node earlier.

```
<Valve className="org.apache.catalina.valves.RemoteIpValve"
            internalProxies="\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}"
            remoteIpHeader="x-forwarded-for"
            proxiesHeader="x-forwarded-by"
            protocolHeader="x-forwarded-proto" />
```

Here is the complete **host** node in **server.xml** now.

```
<Host name="localhost"  appBase="webapps"
            unpackWARs="true" autoDeploy="true">

        <!-- SingleSignOn valve, share authentication between web applications
             Documentation at: /docs/config/valve.html -->
        <!--
        <Valve className="org.apache.catalina.authenticator.SingleSignOn" />
        -->

        <Valve className="org.apache.catalina.valves.RemoteIpValve"
             internalProxies="\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}"
             remoteIpHeader="x-forwarded-for"
             proxiesHeader="x-forwarded-by"
             protocolHeader="x-forwarded-proto" />

        <!-- Access log processes all example.
             Documentation at: /docs/config/valve.html
             Note: The pattern used is equivalent to using pattern="common" -->
        <Valve className="org.apache.catalina.valves.AccessLogValve" directory="logs"
               prefix="localhost_access_log" suffix=".txt"
               pattern="%h %l %u %t "%r" %s %b" />

      </Host>
```

Credit: https://qiita.com/tkprof/items/2ff334b27002c101d022

Credit: https://community.alfresco.com/thread/212564-ssl-nginx-reverse-proxy-configuration-and-csrf-attack

Credit: https://github.com/znc/znc/issues/946

Credit: http://stackoverflow.com/questions/18936753/nginx-reverse-proxy-for-tomcat