# SHRINE 4.0.0 Appendix A.8 - Starting and Stopping the Software

The appropriate software must be restarted whenever the configuration is modified.

#### Tomcat

Restart when server.xml, shrine.conf or override.conf are modified, or a new WAR file is put in place

#### Starting Tomcat:

Starting Tomcat	
sudo -u shrine bash	
cd /opt/shrine/tomcat	
./bin/startup.sh	
To deploy a new WAR file:	

Deploying a new WAR file
sudo -u shrine bash
./bin/shutdown.sh
rm -fr ./webapps/shrine api*
cp <shrine file="" war=""> ./webapps</shrine>
./bin/startup.sh

#### Shibboleth

(Re)start when shibboleth2.xml or other Shibboleth configuration files are modified.

(Re)start Shibboleth	
sudo -u root bash	
service shibd restart	
service httpd restart	

### Apache

Restart after restarting Shibboleth; or when there is a change in Apache configuration.

(Re)start Apache httpd sudo -u root bash service httpd restart

## NextStep:

SHRINE 4.0.0 Appendix A.9 - Using SSO-Enabled Shrine