

Upgrading From Older Versions of Solr and GSearch

The steps below should see you through the upgrade of a standard Islandora installation to the latest versions of Apache Solr and Fedora GSearch.

DO NOT stop the fedora service before beginning these steps.

1. Confirm that Apache ant is installed

```
ant -version
```

2. Remove the current Fedora GSearch .war file

```
rm -f $FEDORA_HOME/tomcat/webapps/fedoragsearch.war
```

3. Remove the current Apache Solr .war file

```
rm -f /opt/solr/apache-solr-1.4.1.war
```

4. Copy the new Fedora GSearch .war file into place

```
cp /staging/fedoragsearch-2.5/fedoragsearch.war $FEDORA_HOME/tomcat/webapps/
```

5. Change ownership of the new GSearch .war file to user 'fedora'.

```
chown fedora:fedora /usr/local/fedora/tomcat/webapps/fedoragsearch.war
```

6. Copy the /example/solr directory into place

```
cp -r /staging/apache-solr-3.6.0/example/solr $FEDORA_HOME/solr
```

7. Change ownership of the new /solr directory to user 'fedora'

```
chown fedora:fedora $FEDORA_HOME/solr/
```

8. Copy the new Apache Solr file into place

```
cp /staging/apache-solr-3.6.0/example/webapps/solr.war $FEDORA_HOME/tomcat/webapps/
```

9. Change ownership of the new Solr .war file to user 'fedora'.

```
chown fedora:fedora$FEDORA_HOME/tomcat/webapps/solr.war
```

10. Edit the fedora-users.xml and fgsconfig-basic.properties files

10a. **fedora-users.xml**

```
vi $FEDORA_HOME/server/config/fedora-users.xml
```

Add the following section...

```
> # add additional user
>
> <user name="fgsAdmin" password="[password]">
>   <attribute name="fedoraRole">
>     <value>administrator</value>
>   </attribute>
> </user>
```

10b. **fgsconfig-basic.properties**

```
vi $FEDORA_HOME/tomcat/webapps/fedoragsearch/FgsConfig/fgsconfig-basic.properties
```

Change, or uncomment, each of the following lines. When uncommenting a line in a particular section, make sure to also comment out the original line that was 'selected' in that section.

```
> configDisplayName=configProductionOnSolr
> gsearchPass= [password]
> local.FEDORA_HOME=/usr/local/fedora
> namesOfRepositories=FgsRepos

> namesOfIndexes=FgsIndex
(keep name in order not to modify GUI for GSearch)

> fedoraBase=http://localhost:8080
(to access objects from index in GUI for GSearch)

> fedoraPass=[password]
> indexEngine=Solr
> indexBase=http://localhost:8080/solr
> indexDir=${local.FEDORA_HOME}/solr/data/index
> indexingDocXslt=foxmlToSolr
```

11. Change to the /FgsConfig directory

```
cd $FEDORA_HOME/tomcat/webapps/fedoragsearch/FgsConfig
```

12. Run ant on the fgsconfig-basic.xml file

```
ant -f fgsconfig-basic.xml
```

You should see a message similar to:

```
BUILD SUCCESSFUL
Total time: 0 seconds
```

13. Rename the current Solr schema.xml file to schema.bak

```
mv $FEDORA_HOME/solr/conf/schema.xml $FEDORA_HOME/solr/conf/schema.bak
```

14. Copy the new, ant-generated Solr schema into place as schema.xml

```
cp $FEDORA_HOME/tomcat/webapps/fedoragsearch/WEB-INF/classes/fgsconfigFinal/index  
/FgsIndex/conf/schema-3.6.1-for-fgs-2.5.xml $FEDORA_HOME/solr/conf/schema.xml
```

15. Stop/Start the Fedora service

```
$FEDORA_HOME/tomcat/bin/shutdown.sh  
  
$FEDORA_HOME/tomcat/bin/startup.sh
```

16. Test the upgrade

1. Check the number of items indexed in Fedora GSearch:
 - a. Go to <http://localhost:8080/fedoragsearch/rest>
 - b. Login using fgsAdmin
 - c. Click on updateindex
 - d. Click on updateIndex fromFoxmlFiles - The "Resulting number of index documents" should have the same value as it did before the upgrade
2. Check the version of Solr:
 - a. Go to <http://192.168.56.195:8080/solr>
 - b. Click the 'Solr Admin' link
 - c. Click the [Info] link - The "Solr Specification Version" should match the version number of Solr that was just installed.
3. Check the version of Fedora GSearch:
 - a. Go to <http://192.168.56.195:8080/fedoragsearch> - The "Fedora Generic Search Service Version" should match the version number of GSearch that was just installed.

Thank you to Charles Birmingham for providing the basis for this section.