Setting up the GWAP Development Environment

1 Eclipse & JBoss

- Download Eclipse Java EE: http://www.eclipse.org/downloads/

- Unzip Eclipse and run it

- Help->Eclipse Marketplace

  - Search for "JBoss Tools"

  - Select and install: Hibernate Tools, JBoss Tools JSF, JBoss Tools RichFaces, JBossAS Tools, Seam Tools

  - Restart Eclipse when prompted to do so

- Download JBoss 4.2: http://www.jboss.org/jbossas/downloads/

- Extract and remember the directory where you extracted it (e.g. `/opt/jboss` or `C:\jboss`)

- File->Import->Project from GIT: `https://github.com/play4science/gwap.git`
      - •"Find projects [..]" auswählen

- Window->Show view->Ant, add (Button on top right of this view) `build.xml`

- Only for OS X:
  - In project settings, set "Default Encoding" to UTF-8

  - In Preferences, in Java -> Installed JREs → select used JDK -> Edit -> Default VM Arguments: `-Dfile.encoding=UTF-8`

- Ant targets (doubleclick in Ant-View):
  - `local-settings` (enter the JBoss directory from above)
  - `prepare-jboss`
  - `buildtest`

- In the projects view on „gwap" right-click → refresh (the red exclamation mark is hopefully gone now)
  - Run Ant target `deploy`

- In the "Servers"-view:
  - Create JBoss 4.2 Runtime Server (Community Version!) and select JBoss directory

  - Do <u>not</u> add the gwap-project to the configured projects

- Run JBoss in debug-mode

2 PostgreSQL Database

- Install PostgreSQL (9.1 or later)

- Create database (psql command prompt)
  ```
  create user gwap password 'gwap';
  ```

```
create database gwap owner gwap;
```

- Load database schema and data into database
  - Possibility 1: Load existing dump in PostgreSQL
    ```
    psql -h localhost -U gwap gwap < DUMP.sql
    ```
  - Possibility 2: Let JBoss create the tables
    - edit the file: `resources/META-INF/persistence-dev.xml`
      ```
      <property name="hibernate.hbm2ddl.auto"
          value="create-drop"/>
      ```
    - `ant redeploy`
    - start JBoss
    - in persistence-dev.xml change to value="update"
    - `ant redeploy`

- Update path in table „source", e.g.:
  ```
  UPDATE source SET url='<JBoss-
  directory>/server/default/deploy/GWAP.ear/artigo.war/' WHERE id=1;
  ```

3 Solr (Search)

- Deploy Solr:
  ```
  ant solr-deploy
  ```
- Open http://localhost:8080/solr/artigo/dataimport?command=full-import (default credentials: „solr" / „solr") and
  http://localhost:8080/solr/metropolitalia/dataimport?command=full-import
  once to create search index

4 Basic Commands for Deployment

- Update server with new files (xhtml, js, css):
  ```
  ant deploy
  ```

- Update server with new Java files:
  ```
  ant redeploy
  ```

- Change which projects are deployed:
  ```
  build.properties
  ```

- Default URL for deployment:
  http://localhost:8080/artigo /
  http://localhost:8080/metropolitalia /
  http://localhost:8080/elearning … (by the name of the subproject)