

1 SORL

1.1 What is SORL

SORL is the acronym for Searching On Lucene w/Replication and it is a stand alone enterprise search server which applications communicate with using XML and HTTP to index documents, or execute searches. Find more information about this theme on (<http://lucene.apache.org/solr/>).

1.2 SORL and KiWi

The KiWi system uses *SORL* in embedded mode, that means you need to install it(SOLR) fist. If you check up the KiWi project from the svn then you will also get a SOLR distribution also, this is placed in : *root/lib/solr* , where root is your project root. You must copy this directory in a know location, because KiWi persistence layer will try to find this location and use it. You can copy it by hand or you can use one the *prepareSolr* ant task to do this for you, this is the recommended way.

The *prepareSolr* requires a property named *solr.home* in the *build.properties* file, this path is the path for your local *SOLR*. You also need to configure your persistence unit (persistence-XXX.xml) properly, for this add a new property named *kiwi.solr.home* with a proper value to the KiWi persistence unit. The XXX value (persistence-XXX.xml) depends on which software life stage you are (dev for developing, test for testing etc).

Here is a rule to follow : the *solr.home* from the *build.properties* file must point on the same path with the *kiwi.solr.home* from the *persistence-dev.xml* file.

Now you must redeploy the kiwi application and to restart the server.

1.3 Path and relative path

Please take care the path specified with the *build.properties*'s *solr.home* property is a absolute path, in the *build.properties* file you can only define absolute paths. The *kiwi.solr.home* property from the *persistence-dev.xml* file is more generous, here you can specified absolute and relative paths - the relative paths are relative to the jBoss bin directory (e.g. if you use the solr value for your kiwi.solr.home then the kiwi will search the solr in the JBoss/bin/solr directory).

The way to define absolute or relative paths differ from an operating system to an other. E.g. under ms environment the absolute path starts with a drive letter followed by the double point char or under unix(linux and mac os) with the slash character. All other ways to define a paths are leading to relative paths.

1.4 Troubles with SORL

In most of the cases if the two paths previous described are not pointing to the same location then a run-time exception will raise, the exception will claim

a certain SOLR XML specific file. (e.g. "RuntimeException: Can't find resource 'solrconfig.xml' in classpath or ..."). In this case the path where kiwi search the *SOLR* is wrong. To solve this problem you need to prove if the property named *kiwi.solr.home* from the deployed *persitence.xml* (placed in the jBoss.home/server/default/deploy/KiWi.ear/KiWi.jar/META-INF) points to the right path (the path where the SOLR is installed).

The directory where the SOLR is installed must look like :

```
..  
README.txt  
bin  
conf
```