How to Create a Knowledge Management (KM) Repository Service using KM API.

Applies to:
SAP Net Weaver Developer Studio (NWDS) version 7.0.11 and SAP Web Application Server (WAS) version 7.0.

Summary
Knowledge Management permits common access to unstructured information and documents in a distributed storage landscape. The repositories are directly linked to the portal with preconfigured or programmable connectors.

Knowledge Management provides various repository managers for different types of data and data sources. For example, data can be stored in a file system, or made available through a WebDAV server. To be able to use Knowledge Management functions on this data, you must configure a suitable repository manager for each data source.

Using this tutorial you can create a KM Repository Service using Knowledge Management API.

Author(s): Syed Rahamat Ali
Company: HCL Technologies Ltd, Kolkata
Created on: 08 November 2007

Author Bio
Syed Rahamat Ali is working in HCL Technologies Ltd, Kolkata as a NetWeaver Consultant.
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Abbreviation used
  NWDS → SAP Net Weaver Developer Studio
  WAS → SAP Web Application Server
  KM → Knowledge Management

Pre-Requisites

Knowledge Requirements:
You should have good knowledge in KM Repository Framework.

System Requirements:

  • JDK 1.4.2_15,
  • NWDS 7.0.11

Implementation:

Step1: First Create a Portal Application workspace.
How to Create a Knowledge Management (KM) Repository Service using KM API.
Step2: Then create a repository service using NWDS.
How to Create a Knowledge Management (KM) Repository Service using KM API.
Select RF Component Wizard and click on next.
Select Repository Service Wizard and click next.
Specify a class name and package name and click on finish.

**Step3:** Open the IRFServiceWrapper.java file. The File is given below

```java
package com.sap.netweaver.rf.wrapper;

import com.sapportals.portal.prt.service.IService;

public interface IRFServiceWrapper extends IService{
    public static final String KEY = "/* Mention the Fully qualified Repository Service name */";
}
```

Mention the KEY and save it.

**Step4:** Now Open the Repository Service file. The code of the file is given below.

```java
package com.hcltech.kolkata;
import com.sapportals.wcm.repository.service.AbstractRepositoryService;
import com.sapportals.wcm.repository.service.ServiceNotAvailableException;
```
import com.sapportals.wcm.repository.manager.IResourceEventReceiver;
import com.sapportals.wcm.repository.manager.IRepositoryManager;
import com.sapportals.wcm.util.events.IEvent;
import com.sapportals.wcm.crt.component.*;
import com.sapportals.wcm.crt.configuration.*;
import com.sapportals.wcm.WcmException;
import java.util.Collection;

// implements IMyNewRepositoryService interface
/*
 Note: IReconfigurable and IResourceEventReceiver interfaces are optional
 */

public class MyRepositoryService extends AbstractRepositoryService implements IReconfigurable, IResourceEventReceiver {

  private static final String TYPE = "MyRepositoryService";

  public MyRepositoryService() {
    super();
    // Do not add code here. Add it to startupImpl() instead
  }

  public String getServiceType() {
    return MyRepositoryService.TYPE;
  }

  protected void startupImpl(Collection repositoryManagers) throws ConfigurationException, StartupException {
    // implement this method as follows:
    // - Verify configuration data
    // - Get references to other needed (global) services
    // - Check whether other repository services (this service depends on) are also assigned to the repository managers
    // - Usually the service registers itself for certain events at all repository managers
    // */
    try {
    } catch (Exception e) {
      throw new StartupException(e.getMessage(), e);
    }
  }

  protected void shutDownImpl() {
  }

  protected void addRepositoryAssignment(IRepositoryManager mgr) throws ServiceNotAvailableException {
    // Implement this method: Usually the service registers itself for certain events at the repository manager.
  }

  protected void removeRepositoryAssignment(IRepositoryManager mgr) throws WcmException {
  }
// Implement this method: Usually the service must unregister itself as an
// event handler.
}

public void reconfigure(IConfiguration config) throws ConfigurationException {
    this.stateHandler.preReconfigure();
    // check the new configuration data
    try {
    } catch (ConfigurationException ex) { 
        this.stateHandler.postReconfigure(ex);
        throw ex;
    }*/

    this.config = config;
    this.stateHandler.postReconfigure();
}

public void received(IEvent event) {
}

You just registered your event on addRepositoryAssignment() and Call this method from
startUpImpl(). Then you unregistered all the event on
removeRepositoryAssignment() which you have already registered.

Step5: Create the par file and upload it to WAS.
Step6: Open the portal console in browser. Click system Administrator -> System Configuration->Knowledge
Management ->Content Management.
Step 7: Click the Repository Manager. Now click the type of repository manager. (e.g. Click CM Repository)
Step8: Click the repository where you want to activate your service and then click edit button.
Step9: Select the repository and edit the repository and add your service to that repository to servlet engine.
Related Content

- SDN Help
- SAP Help
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