

**eFundi CM Quartz Job Installation Reference Manual**

**sakai 2.9.1**

Version 1.0

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# Introduction

This document describes the installation of the Sakai Course Management Quartz Job. This job can be run from Sakai in order to populate Course Management data in Sakai. This then provides the ability to create course sites in Sakai.

## Apply Sakai and Kernel Patch

For this release of Sakai Course Management we made changes to Sakai base and Sakai Kernel base. These patch files (**sakai291.patch (sakai291\_linux.patch** for linux**)** and **kernel131.patch (kernel131\_linux.patch** for linux**)**) can be found in the **readme** folder in Helpdesk. Apply **sakai291.patch** patch file to the root of Sakai CLE 2.9.1 and **kernel131.patch** patch file the root of the Sakai Kernel 1.3.1, rebuild and deploy.

# Sakai CM Quartz Job Installation

## Source Install

### Configuration

In the ‘readme’ folder of this project you should see the settings.properties file. This file contains all the settings that you can set in sakai.properties for this project. In other words, you can copy the contents of this file to sakai.properties and just change the settings to suit your environment. All these settings start with the ‘nwu.cm’ prefix, except for the LDAP settings. Currently in the code all these settings will default to ones specified in this sample settings.properties file.

### LDAP Connection Settings

The LDAP settings are used to retrieve the firstnames, surnames, email address, etc. of the lecturers and students. Please update these settings so that they match your environment.

### Konsolodasie Connection Settings

To set the type of database connection, set the ‘nwu.cm.kons.db’ property to either ‘jdbc’ or ‘jndi’. This connection is responsible for retrieving students that are linked to Modules.

All the jdbc properties start with ‘nwu.cm.kons.jdbc’.

All the jndi properties start with ‘nwu.cm.kons.jndi’.

### Student Link Connection Settings

To set the type of database connection, set the ‘nwu.cm.link.db’ property to either ‘jdbc’ or ‘jndi’. This connection is responsible for reading the linking data (created with the Student Link application) that will be used to populate the Course Management data in Sakai. This must be the same database that the Student Link Application uses to write the linking data.

All the jdbc properties start with ‘nwu.cm.link.jdbc’.

All the jdni properties start with ‘nwu.cm.link.jndi’.

### Quartz Job Settings

The ‘nwu.cm.lecturer.year’ setting is used to determine the year for which the job will run. If you wish to run the job for the current year, the value should be set to ‘0’. Otherwise you can override the value for the required year. This will determine the subsection of linking data that will be read.

The ‘nwu.cm.users.create’ property is used to tell the job whether or not it should create actual Sakai users for all the Content Management Enrolments and Memberships.

Please note currently the users created follow this format:

Lecturers: <StudentLink\_login\_name>, “password”

Students: stud<student-number>, “password”

Properties starting with ‘nwu.cm.AcademicSession’ set the ‘Term’ property when creating a Course Site.

Properties starting with ‘nwu.cm.CourseOffering’ set the status/categories/roles,etc of different courses. Please note Sakai is very finicky about the naming of some of these values. Especially the ‘role’ values must be defined in Sakai’s Default CM Group Provider for it to work/map correctly. In this instance we’ve used Sakai’s default values to set the ‘Role’ values. See the ‘Default CM Group Provider’ section in <https://confluence.sakaiproject.org/display/SAKDEV/Course+Management+Integration> for more information.

Section Category is an arbitrary title/description to group the Courses. In this instance all our courses are seen as Lecture sessions. These properties start with ‘nwu.cm.SectionCategory’.

EnrollmentSets in our instance are defined as ‘WISK’ or ‘AFNL’ for example.

Enrollments refer to students who are enrolled for a specific course. Please note that lecturers do not have Enrollment records. Instead, they are linked to EnrollmentSet.

Membership status for all the different CM structures are set to ‘Active’ by default, but can be changed.

### Course Management Quartz Job Database Tables

This Quartz Job does not specifically have its own database tables. It makes used of the Konsolodasie database to retrieve students link to modules. The year, campus, lecturer and module information however is retrieved from the Student Link Application tables. In other words, you must first configure and install the Student Link Application before running this job.

### Maven Build

Go to the root Course Management Quartz Job folder (containing the pom.xml) and perform a maven build command: **mvn clean install**

### Install Quartz Job in Tomcat

Still in the root folder, perform a ‘mvn –Dmaven.tomcat.home=<tomcat\_home> sakai:deploy’ command. Replace <tomcat\_home> with your tomcat installation folder.

This command will copy the installation files to Tomcat.

Start/Restart Tomcat.

# Schedule the CM Data Population Quartz Job

* Log in as the admin Sakai user.
* Click on the Job Scheduler tool.
* Click on the ‘Jobs’ link and then click on ‘New Job’.
* In ‘Job Name’ type in anything suitable. In Type select ‘**NWU Course Management Data Population’**. Then click the ‘Post’ button.
* Either schedule the job immediately or create a CRON expression to trigger the job.

# Schedule the CM Link Students To Site Quartz Job

* Log in as the admin Sakai user.
* Click on the Job Scheduler tool.
* Click on the ‘Jobs’ link and then click on ‘New Job’.
* In ‘Job Name’ type in anything suitable. In Type select ‘**NWU Link Students to Site Management**. Then click the ‘Post’ button.
* Either schedule the job immediately or create a CRON expression to trigger the job.