

Kaltura Video Tool for Sakai Installation and Upgrade Guide

Version: 4.0

Kaltura Business Headquarters

250 Park Avenue South, 10th Floor, New York, NY 10003

Tel.: +1 800 871 5224

Copyright © 2016 Kaltura Inc. All Rights Reserved. Designated trademarks and brands are the property of their respective owners.
Use of this document constitutes acceptance of the Kaltura Terms of Use and Privacy Policy.

Contents

Preface.....	4
About this Guide	4
Audience	4
Document Conventions.....	4
Section 1 Installation Process	5
Before you begin	5
Installing the Kaltura Video Tool for Sakai Application	5
Section 2 Adding the CKEditor (Rich Text Editor) Integration	7
Section 3 Verifying that the Kaltura Video Tool for Sakai is Installed	10
Section 4 Verifying that the Kaltura Admin Tool is Available	11
Section 5 Adding Kaltura My Media to My Workspace	12
Section 6 Adding the Kaltura Video Tool to your Sakai Course Site.....	15
Section 7 Kaltura Site Copy Jobs.....	17
Adding Kaltura Site Copy Related Jobs.....	17
Kaltura Debug Logs	19
Section 8 Upgrading from Kaltura Video Tool v3 to Kaltura Video Tool v4	20

Preface

This preface contains the following topics:

- [About this Guide](#)
- [Audience](#)
- [Document Conventions](#)

About this Guide

This guide describes how to install, configure and upgrade the Kaltura Video Tool for Sakai.



NOTE: Please refer to the official and latest product release notes for last-minute updates. Technical support may be obtained directly from: [Kaltura Customer Care](#).

Contact Us:

Please send your documentation-related comments and feedback or report mistakes to knowledge@kaltura.com. We are committed to improving our documentation and your feedback is important to us.

Audience

This guide is intended for Sakai administrators.

Document Conventions

Kaltura uses the following admonitions:

- Note
- Workflow



NOTE: Identifies important information that contains helpful suggestions.



Workflow: Provides workflow information.

1. Step 1
2. Step 2

Installation Process

Before you begin



IMPORTANT NOTE: To support the latest Kaltura module, you are required to create three tables on the Sakai database. If the `auto.ddl` property is set to `true` on `sakai.properties`, these tables are automatically created when the Tomcat server is restarted with the latest code changes. In case `auto.ddl` is turned off on the server side, the administrator is required to manually run the `kaltura.sql` located inside:
sakai-extension/impl/src/main/resources/ddl/sql

Installing the Kaltura Video Tool for Sakai Application

To install the Kaltura Video Tool for Sakai application

1. Download the Sakai-extension from [github](#) to get the latest changes available for Sakai – Kaltura integration using LTI.
2. Copy the contents of the Sakai-extension to a new directory named `kaltura-new`.
3. Move the `kaltura-new` directory inside your Sakai codebase root directory. For example: if the Sakai codebase resides in `/usr/workspace/sakai`, run: `mv kaltura-new /usr/workspace/sakai/`
4. Update `sakai/pom.xml` to build the new module. Open `sakai/pom.xml` and add this line to `<modules>` section
5. `<module>kaltura-new</module>`
6. Open the `sakai-new/pom.xml` and modify the `<parent><version>10-SNAPSHOT</version></parent>` by removing any text and leaving just the Sakai version you are using.
7. For example: `<parent><version>10.4snapshot</version></parent>`
8. Build sakai : `mvn clean install`.
9. Shutdown your Tomcat server by navigating to the Tomcat folder (usually located in `/opt/sakai/tomcat`) and navigating to its `bin` directory, executing the `./shutdown.sh` command and `cleanup dirs` :
`tomcat/webapps , components,work/Catalina/localhost,shared/lib,temp, common/lib/sakai-*`
10. Deploy the latest Sakai code from inside the Sakai code base folder.
11. Run maven command:
`mvn sakai:deploy -Dmaven.tomcat.home=path to tomcat home`
Restart the Tomcat server.
Add the following to your `sakai.properties` and restart your server:
 - a. Make sure to fill in your partner ID, Admin Secret and KAF instance.
 - b. There are additional “optional” configurations that you can configure.

```
# Kaltura REST API authentication

# Kaltura RESTful API authorization code TTL (in milliseconds)
# Default: 60000 ms (1 minute)
```

```
#kaltura.rest.authorization.ttl=60000

# Kaltura RESTful API authorization override code
# Allows access to /kaltura/user/{userId} endpoint without sending in persistent
  auth_code
# Default: c48cb080-852b-11e4-80c2-0002a5d5c51b
#kaltura.authorization.override.code=c48cb080-852b-11e4-80c2-0002a5d5c51b

#Kaltura LTI Authentication
kaltura.launch.url=
# Fill in your KAF instance
kaltura.launch.key=
# Fill in you Kaltura Partner ID
kaltura.launch.secret=
#Fill in your Kaltura Admin Secret

kaltura.ckeditor.url=https://11111.kaf.kaltura.com/browseandembed/index/browseandemb
  ed
#fill in the correct KAF instance

#antisamy will remove src entries in <iframe> tags by default for Kaltura, as that
#domain is not registered in the high security policy. Therefore, enable low
  security through
#setting:
content.cleaner.default.low.security=true
#review the sakai.default.properties file included in source for more information
  about this
#setting
#OPTIONAL, if set, Kaltura ckeditor embed call will be replaced with a simple form
#for testing
#kaltura.ckeditor.debug=true

#optional, if set, kaltura site copy related jobs will attempt the given number of
  times to check the status on kaltura server.
#jobs.max.attempt=10

#if set, post request is sent to kaltura to copy media items on kaltura server on
  site import
kaltura.archive.support.enabled=true

#add Kaltura to archive merge services
archive.merge.filtered.services=AnnouncementService,AssignmentService,ContentHosting
  Service,CalendarService,ChatEntityProducer,DiscussionService,MailArchiveService,S
  yllabusService,RWikiObjectService,DiscussionForumService,WebService,LessonBuilder
  EntityProducer,KalturaEntityProducer
#if set, kaltura will copy items embedded in CK editor when site copy request is
  initiated
kaltura.site.copy.incontext=true

#optional, turn on debug for lti requests from kaltura modules. Default is false
#kaltura.my-media.debug=off
#kaltura.course-gallery.debug=off
#kaltura.ckeditor.debug=off
#kaltura.launchmedia.debug=off
```

Adding the CKEditor (Rich Text Editor) Integration

The following steps describe how to modify Sakai so the CK editor will work with the Kaltura-LTI Media Gallery.

To integrate the CKEditor

Copy the "kaltura" directory into the
{SAKAI_ROOT}/reference/library/src/webapp/editor/ckextraplugins

1. Example: `cp -R {KALTURA_LTI_ROOT}/ckeditor/kaltura {SAKAI_ROOT}/reference/library/src/webapp/editor/ckextraplugins`
Edit {SAKAI_ROOT}/reference/library/src/webapp/editor/ckeditor.launch.js
2. a. At about line 89, inside the definition of "toolbar_Full:", add 'kaltura' before the two references to 'Image' (these are the buttons in the toolbar):

```
is:
    (sakai.editor.enableResourceSearch
      ?
      ['ResourceSearch', 'Image', 'Flash', 'Table', 'HorizontalRule', 'Smiley', 'SpecialChar', 'PageBreak']
      :
      ['Image', 'Flash', 'Table', 'HorizontalRule', 'Smiley', 'SpecialChar', 'PageBreak']),
```

```
changes to:
    (sakai.editor.enableResourceSearch
      ?
      ['ResourceSearch', 'kaltura', 'Image', 'Flash', 'Table', 'HorizontalRule', 'Smiley', 'SpecialChar', 'PageBreak']
      :
      ['kaltura', 'Image', 'Flash', 'Table', 'HorizontalRule', 'Smiley', 'SpecialChar', 'PageBreak']),
```

- b. At about line 171, add a new reference to the plugin:

```
is:
    (function() {
      CKEDITOR.plugins.addExternal('movieplayer', basePath+'movieplayer/', 'plugin.js');
      CKEDITOR.plugins.addExternal('wordcount', basePath+'wordcount/', 'plugin.js');

      CKEDITOR.plugins.addExternal('fmath_formula', basePath+'fmath_formula/', 'plugin.js');

      CKEDITOR.plugins.addExternal('audiorecorder', basePath+'audiorecorder/', 'plugin.js');
```

Adding the CKEditor (Rich Text Editor) Integration

```
changes to:
(function() {
    CKEDITOR.plugins.addExternal('movieplayer',basePath+'movieplayer/',
    'plugin.js');
    CKEDITOR.plugins.addExternal('wordcount',basePath+'wordcount/',
    'plugin.js');

    CKEDITOR.plugins.addExternal('fmath_formula',basePath+'fmath_formula/',
    'plugin.js');

    CKEDITOR.plugins.addExternal('audiorecorder',basePath+'audiorecorder/',
    'plugin.js');
    CKEDITOR.plugins.addExternal('kaltura',basePath+'kaltura/',
    'plugin.js');
```

- c. at about line 190, add the following additional line:

```
is:
    ckconfig.extraPlugins+="movieplayer,wordcount,fmath_formula";

changes to:
    ckconfig.extraPlugins+="movieplayer,wordcount,fmath_formula";
    ckconfig.extraPlugins+=",kaltura";
```

3. Add the following script to the end of {SAKAI_ROOT}/portal/portal-render-engine-impl/pack/src/webapp/vm/neoskin/includeStandardHead.vm (around line 190):

```
<script type="text/javascript" language="JavaScript" src="/media-gallery-
tool/js/kaltura-upgrade.js"></script>
```

4. Add the following script to the end of {SAKAI_ROOT}/portal/portal-render-engine-impl/pack/src/webapp/vm/morpheus/includeStandardHead.vm (around line 160):

```
<script type="text/javascript" language="JavaScript" src="/media-gallery-
tool/js/kaltura-upgrade.js"></script>
```

5.

Re-deploy the reference project.

6.

```
mvn clean install sakai:deploy -f reference/pom.xml
```
7.

```
mvn clean install sakai:deploy -f portal/pom.xml
```

Configure Anti-Samy.

8.

Re-deploy the reference project.

```
mvn clean install sakai:deploy -f reference/pom.xml
```

Configure Anti-Samy - Anti-Samy validates potentially dangerous script code and prevents it from being stored in the datastore according to the security policy of Sakai. There are at least two ways to address this.

- a. If you are using default policies: set the default security policy to low enforcement.
- o Enable low enforcement by setting the following property in sakai.properties:

```
content.cleaner.default.low.security=true
```

- o Copy the "antisamy" directory into your web container's sakai directory (same directory where sakai.properties lives. Example: cp -R {KALTURA_LIT_ROOT}/ckeditor/antisamy {CATALINA_HOME}/sakai

The override low-security-policy.xml adds a new attribute, kaltura-lti-url, to the img tag. This allows the CKEditor to save the new media item inserted by the Kaltura LTI integration.

- b. if you are using custom policies:

Adding the CKEditor (Rich Text Editor) Integration

- Open the file `antisamy/low-security-policy.xml` and search for "kaltura-iti-url". You will find two references. One is an attribute definition, and the second add the attribute to the `img` tag. You need to copy both configurations into your custom policy file (either `low-security-policy.xml` or `high-security-policy.xml`).

You can also apply `antisamy.patch` (in this directory) to your custom policy file to make these changes for you

After you have made these configuration changes to Sakai, stop and restart Sakai.

Verifying that the Kaltura Video Tool for Sakai is Installed


To verify that the new Kaltura Video Tool for Sakai is available

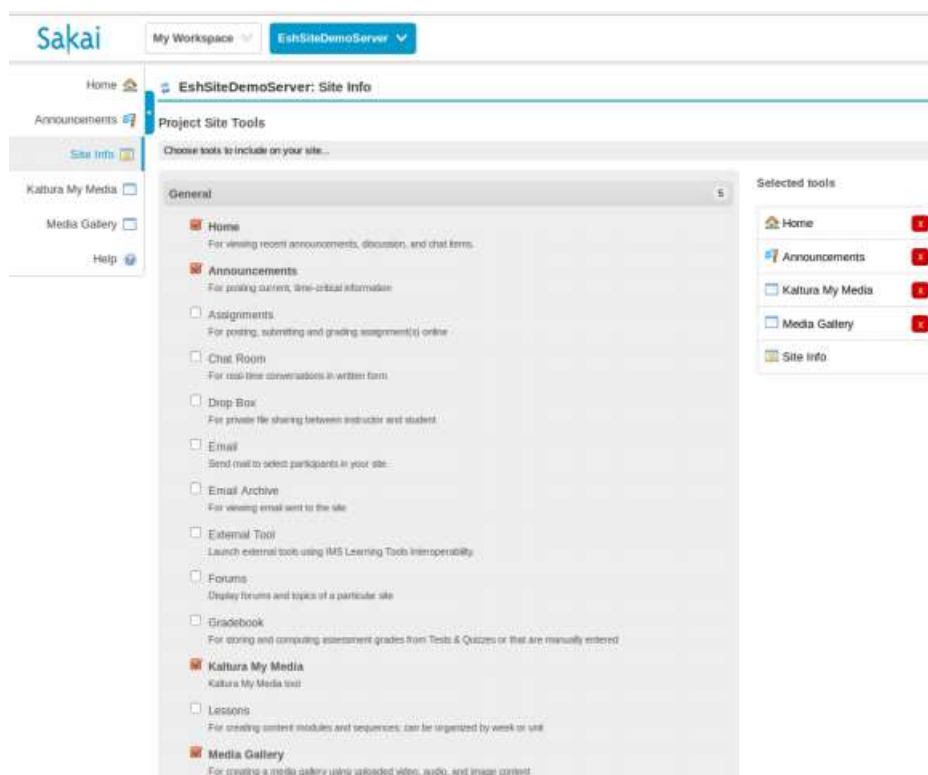
Login as admin user or a user with maintain access permissions to a site.

Enter the Sakai site and click on 'Site Info' from the left navigation pane.

1. Click on 'Edit Tools'.
2. In the resulting page, you should see two new tools named 'My Media' and 'Media Gallery' available in the list.
- 3.

Select the checkbox of the desired tool you want to add to your site and click Save.

4.  **NOTE:** If the Sakai site had an existing Media Gallery tool/page added to it, then no steps are required to update the Media Gallery tool.



Verifying that the Kaltura Admin Tool is Available

To verify that the Kaltura Video Admin Tool is available

Login as admin user or a user with maintain access permissions to a site.

Click on 'Sites' tool from the admin user My Workspace.

1. Search for “Admin” in the Site ID field and press Enter.

2. In the resulting page, click on the Administration Workspace link.

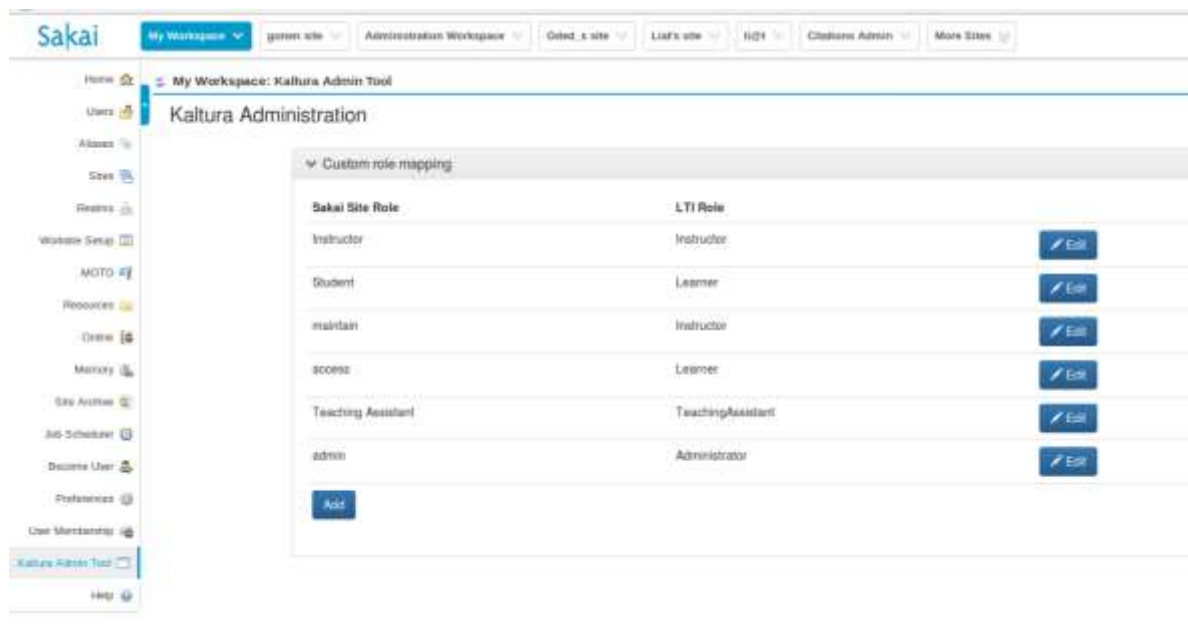
3. In the Edit Site admin page, click Add/Edit pages located toward the bottom of the page.

4. Click New Page and enter the Title as Kaltura Admin and click Tools under Continue Editing.

5. Click New Tool.

6. Select the radio button next to Kaltura Admin Tool (kaltura admin) and click Save under Complete the Site Edit.

7. Go to the Administration Workspace site and on the left navigation page the Kaltura Admin Tool should be available.



Adding Kaltura My Media to My Workspace

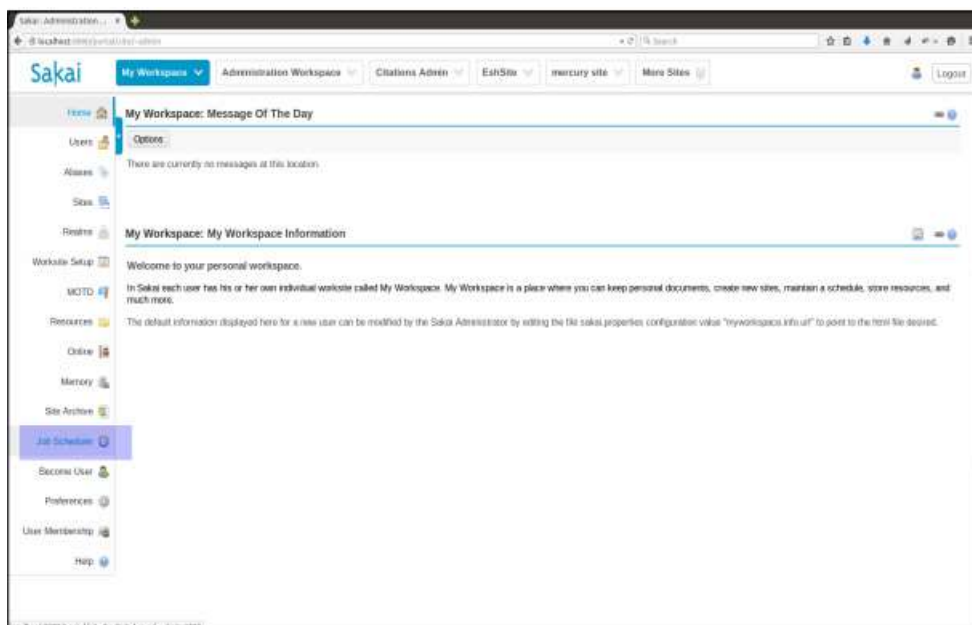
This section describes the admin tasks on how to add My Media to My Workspace for new and existing users.

To add My Media to My Workspace for new users in the system:

1. Login to the Sakai Server as an admin user.
2. Go to the Sites tool (can be found in the Administration Workspace).
3. Search for !user site id (second text field).
4. Click on !user site id.
5. Click on pages button.
6. Click on "New Page" link.
7. Enter "My Media" for the page title.
8. Click on the "Tools" button.
9. Click on the "New Tool" link.
10. Click on the check box next to "Kaltura My Media".
11. Click on the "Save" button.

To add My Media to My workspace for existing users in the system:

- 1.
2. Login into Sakai server as an admin user.
Click 'Job Scheduler' link from admin user's My Workspace.



Adding Kaltura My Media to My Workspace

Click 'Jobs' button. On the next page, click 'New Job' button.

Enter the Job Name and select the Type: 'Add My Media For Existing Users Job' and click Post.

3.
4.

The screenshot shows the Sakai Administration interface. The left sidebar contains a list of navigation items: Home, Users, Aliases, Sites, Realms, Worksite Setup, MOTD, Resources, Online, Memory, Site Archive, and Job Scheduler (highlighted). The main content area is titled 'My Workspace: Job Scheduler' and features the Quartz Enterprise Job Scheduler logo. Below the logo is a 'Create Job' form with a 'Job Name' field containing 'Kaltura Job' and a 'Type' dropdown menu set to 'Add My Media For Existing Users Job'. There are 'Post' and 'Cancel' buttons at the bottom of the form.

The Job Scheduler redisplay with the jobs listed.

Click on 'Triggers(0)' next to Kaltura Job.

5.

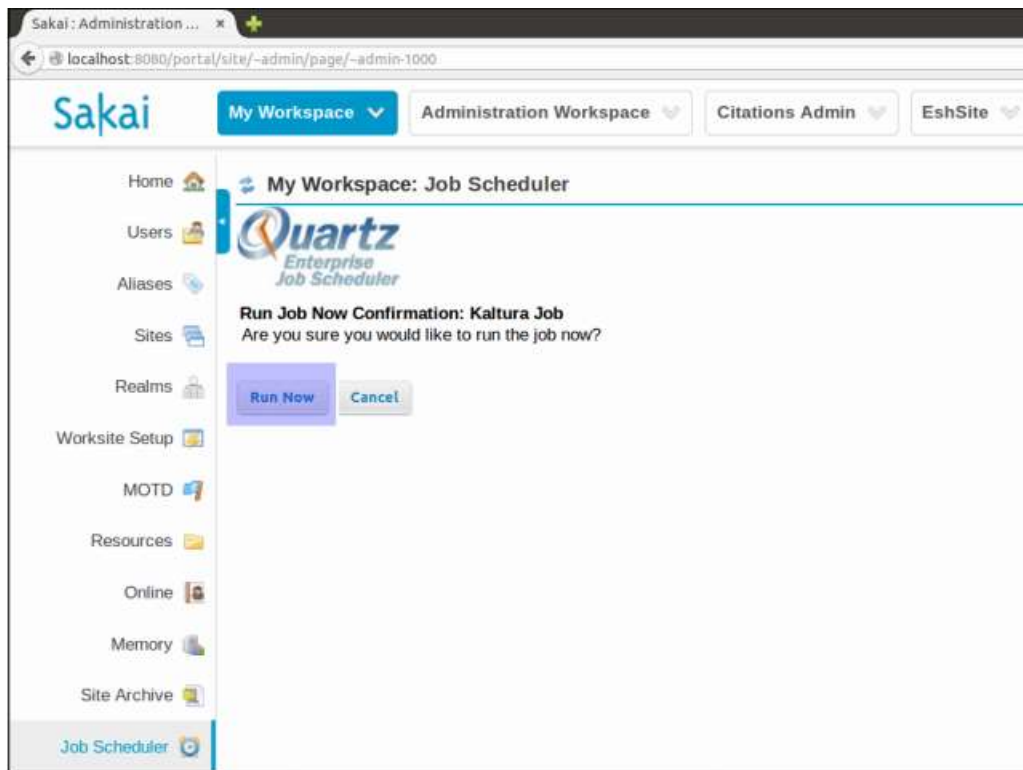
The screenshot shows the Sakai Administration interface with the 'Jobs' tab selected. The main content area displays a table of jobs. The table has columns for 'Job Name', 'Triggers', and 'Class'. The 'Kaltura Job' is listed with 'Triggers(0)' and 'Add My Media For Existing Users Job' as the class. The 'Event Log Purge' job is also visible with 'Triggers(1)' and 'Event Log Purge' as the class. The 'Kaltura Job' row is highlighted in blue.

Job Name	Triggers	Class
Event Log Purge	Triggers(1)	Event Log Purge
Kaltura Job	Triggers(0)	Add My Media For Existing Users Job

6.

Click on Run Job Now button. Confirm by clicking again on Run Now button in this page.

Adding Kaltura My Media to My Workspace



NOTE: These steps trigger a job in Sakai that adds the Kaltura Video Tool for Sakai for existing users. When the job completes, an email notification is sent to the admin email address with the status. The email contains the following information:

Subject: Status: Adding My Media to user's My Workspace

Email message:

Add My Media for Existing Users Job Run status:COMPLETED/ FAILED Total number of My workspace sites:

Number of My workspace sites updated:

The email Service has to be enabled in Sakai via sakai.properties to be triggered. The admin email address to use for this notification can be configured via jobs.admin.email property in Sakai.properties.

Adding the Kaltura Video Tool to your Sakai Course Site

To add the Media Gallery and My Media to your Sakai Course Site

Log in to Sakai.

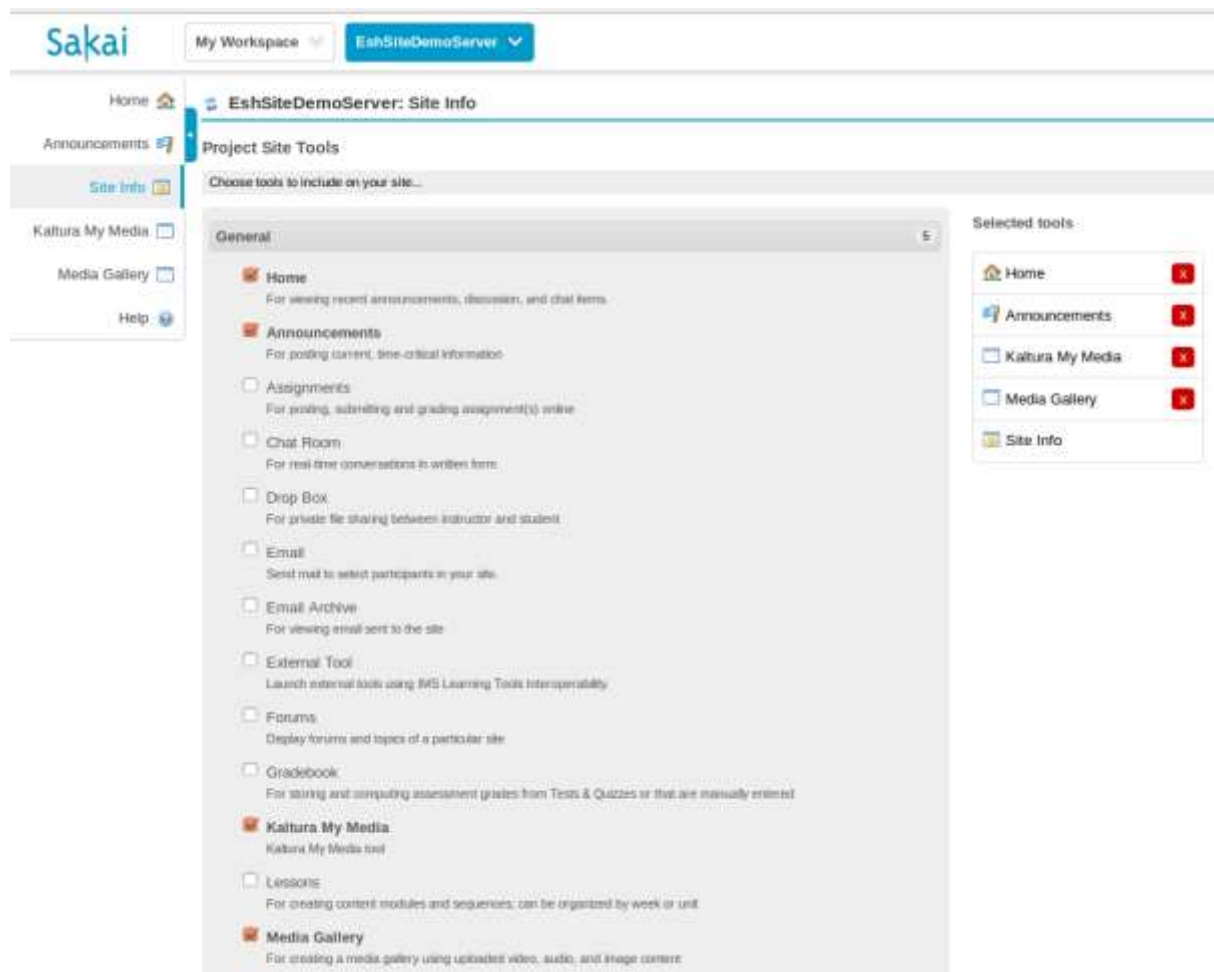
Choose the site where you want to use the Media Gallery.

Click **Site Info** on the left navigation bar.

Click **Edit Tools** in the menu along the top of the window.

Check **Media Gallery and/or My Media** to include the Media Gallery and My Media on your site.

1.
2.
3.
4.
5.



The screenshot shows the Sakai interface for configuring site tools. The top navigation bar includes 'Sakai', 'My Workspace', and 'EshSiteDemoServer'. The left sidebar shows 'Home', 'Announcements', 'Site Info' (selected), 'Kaltura My Media', 'Media Gallery', and 'Help'. The main content area is titled 'Project Site Tools' and 'Choose tools to include on your site...'. A 'General' tab is active, displaying a list of tools with checkboxes. The following table represents the state of these tools:

Tool Name	Description	Selected
Home	For viewing recent announcements, discussion, and chat items.	<input checked="" type="checkbox"/>
Announcements	For posting current, time-critical information.	<input checked="" type="checkbox"/>
Assignments	For posting, submitting and grading assignment(s) online.	<input type="checkbox"/>
Chat Room	For real-time conversations in written form.	<input type="checkbox"/>
Drop Box	For private file sharing between instructor and student.	<input type="checkbox"/>
Email	Send mail to select participants in your site.	<input type="checkbox"/>
Email Archive	For viewing email sent to the site.	<input type="checkbox"/>
External Tool	Launch external tools using IMS Learning Tools Interoperability.	<input type="checkbox"/>
Forums	Display forums and topics of a particular site.	<input type="checkbox"/>
Gradebook	For storing and computing assessment grades from Tests & Quizzes or that are manually entered.	<input type="checkbox"/>
Kaltura My Media	Kaltura My Media tool.	<input checked="" type="checkbox"/>
Lessons	For creating content modules and sequences; can be organized by week or unit.	<input type="checkbox"/>
Media Gallery	For creating a media gallery using uploaded video, audio, and image content.	<input checked="" type="checkbox"/>

On the right, the 'Selected tools' section lists: Home, Announcements, Kaltura My Media, Media Gallery, and Site Info, each with a red 'X' icon.

6.

Click **Continue** at the bottom of the screen.

Adding the Kaltura Video Tool to your Sakai Course Site

Click **Finish** at the bottom of the screen.

Go back to the Sakai home page and enter the Media Gallery or My Media through the tool bar

7.

Kaltura Site Copy Jobs

The following two jobs need to be added to perform checks on Kaltura jobs created on KAF for site copy action:

- **Add kaltura site copy batch details job** – This job checks for batch record with 'NEW' status that are created to hold information about site copy request. A single batch record is associated with one or more Kaltura job entries that are created on KAF to handle copy operation of media items as part of the Site import process.
- **Add kaltura site copy job status details job**– This job checks for Kaltura job record with 'NEW' status that hold information about Kaltura copy jobs created to handle copy operations on KAF side.

Adding Kaltura Site Copy Related Jobs

The steps to add any of these site copy related jobs are the same as adding any job in Sakai Job Scheduler.



To add one of the site copy related jobs from the Job Scheduler UI:

1. Login into Sakai server as an admin user.
2. Click 'Job Scheduler' link from admin user's My Workspace.
3. Click 'Jobs' button. On the next page, click 'New Job' button.
4. Enter the Job Name and select Type and click Post.

The screenshot shows the 'Create Job' form in the Quartz Enterprise Job Scheduler. The form is titled 'My Workspace: Job Scheduler' and features the Quartz logo. The 'Job Name' field contains 'new kaltura site copy batch job' and the 'Type' dropdown is set to 'Add kaltura site copy batch details Job'. There are 'Post' and 'Cancel' buttons at the bottom of the form. The left sidebar shows navigation links for Home, Users, Aliases, Sites, Realms, Worksite Setup, MOTD, Resources, Online, Memory, Site Archive, and Job Scheduler (which is highlighted).

This takes you back to page where the jobs are listed.

Click on 'Triggers(0)' next to the Kaltura related Job.

5.
6.
7.
8.

Click on 'New Trigger' on the next page.

Enter the Trigger Name and Cron Expression to setup triggers for the Kaltura job and click post.

Repeat the above steps to add a job and trigger for 'Add kaltura site copy job check status' job.

Set the trigger to run every 20 seconds.

The screenshot shows the 'Create Trigger' form in the Quartz Enterprise Job Scheduler. The form is titled 'My Workspace: Job Scheduler' and features the Quartz logo. The 'Trigger Name' field contains 'Every 15 mins' and the 'Cron Expression' field contains '0 0/15 * * * ?'. There is a 'Help' link next to the Cron Expression field. There are 'Post' and 'Cancel' buttons at the bottom of the form. The left sidebar shows navigation links for Home, Users, Aliases, Sites, Realms, Worksite Setup, MOTD, Resources, Online, Memory, Site Archive, and Job Scheduler (which is highlighted).

Kaltura Debug Logs

Since these jobs are expected to run smoothly in the background, most information about the status of the Kaltura site copy jobs are set to 'debug' level. The following property can be added to sakai.properties to turn on the debugging level on the server to capture these responses from Kaltura on copy job status.

```
log.config.count=2
log.config.1=DEBUG.org.sakaiproject.kaltura.services.CheckKalturaSiteCopyJob
log.config.2=DEBUG.org.sakaiproject.kaltura.services.KalturaEntityProducer
```

Upgrading from Kaltura Video Tool v3 to Kaltura Video Tool v4

Remove the existing Kaltura module from the Sakai codebase and follow the steps described in the [installation process](#) to upgrade to latest version.

**IMPORTANT NOTE:**

You must have Kaltura release version 3 and Sakai version 10.x.

Migration of content from previous versions – Please coordinate with your Kaltura representative to schedule your content migration.

Please refer to the article [What's New in the Kaltura Video Tool for Sakai Verion 4](#), to understand the differences between the two versions.

Main updates post migration:

1. If an entry was private in the site gallery it will be pending moderation in the Media Gallery post migration
2. If an entry was private in a collection, it will not appear in the channel playlist
3. Not all collections types must be migrated, you can decide which types of collection you would like to migrate to channel playlists. You will need to provide the list of collection types you would like to migrate from the following: Instructor, Community, Personal and Owner.