

Project Keitai API

Correct as at 1 July 2014

For background, see the project proposal at <https://confluence.sakaiproject.org/display/MOBILE/Home>

All capabilities are served through <http://your.sakai.server/direct> - this is also a self documenting page that lists all capabilities known to the system and their functions and should be read in conjunction with this summary.

This summary is a quick reference of the most common functionality, and is not designed to be comprehensive (though some providers are being fleshed out more). There are other providers not documented here. Most providers provide more fine grained documentation. Always consult `/direct/describe` for the current functionality that your Sakai environment supports.

Note: A user session must be established before making these calls though some support public access and are documented as such.

Login

```
POST /direct/session
_username=USERNAME
_password=PASSWORD
```

Note, in future, login may be able to leverage the OAuth module:
<https://jira.sakaiproject.org/browse/SAK-23666>

Capabilities

Announcements

Retrieve the announcements for a site

```
GET /direct/announcement/site/SITEID.xml | .json
```

- **announcementId** - Announcement UUID.
- **attachments** - List of attachments, if any
 - **name** - File name.
 - **url** - Full URL to attached file.
- **body** - Announcement text, in HTML.
- **createdByDisplayName** - Name of user who created the announcement.
- **createdOn** - Date announcement was created in milliseconds.
- **siteId** - Site ID.

- **siteTitle** - Site title.
- **title** - Announcement title.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve the message of the day announcements

GET /direct/announcement/motd.xml | .json

Identical response to /direct/announcement/site/SITEID.{format}.

Retrieve the announcements for the current user (mimics my workspace)

GET /direct/announcement/user.xml | .json

Identical response to /direct/announcement/site/SITEID.{format}.

Assignments

Retrieve the list of assignments for a site

GET /direct/assignment/site/SITEID.xml | .json

Retrieve the details of an assignment

GET /direct/assignment/item/ASSIGNMENTID.xml | .json

Retrieve all assignments for the current user

GET /direct/assignment/my.xml | .json

Calendar

Retrieve the list of events for a site

GET /direct/calendar/site/SITEID.xml | .json

- **creator** - Id of user who created the event
- **duration** - How long the event goes for, in milliseconds.
- **eventId** - Event UUID.
- **firstTime** - The event may be a series of events or may be a single event. If single event this indicates the start date of the event. If there is a recurrence rule, this indicates the first occurrence of the event.
 - **display** - Display date.
 - **time** - Time in milliseconds.
- **recurrenceRule** - If null, it is a single event. If not null, describes how the event should be treated in regards to recurring events.
 - **count** - How many events there are in the series.
 - **frequency** - How often to repeat (day, week, month, year or custom recurrence rule type)
 - **frequencyDescription** - Label for the above field.
 - **interval** - How many units between events (same unit as frequency)
 - **until** - If it is to end on a specific date.
- **reference** - Sakai internal field.

- **siteName** - Site title.
- **title** - Event title.
- **type** - Event type (activity, exam, special event, etc).
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve the details of an event

GET /direct/calendar/event/SITEID/EVENTID.xml | .json

- **attachments** - List of attachments, if any.
 - **url** - Full URL to the attached file
- **creator** - Id of user who created the event
- **description** - Event text.
- **descriptionFormatted** - Event text, as HTML.
- **duration** - How long the event goes for, in milliseconds.
- **eventId** - Event UUID.
- **firstTime** - Start time of the event. If part of a series, the recurrence is calculated from this date.
 - **display** - Display date.
 - **time** - Time in milliseconds.
- **lastTime** - End time of the event.
 - **display** - Display date.
 - **time** - Time in milliseconds.
 -
- **location** - Location field text.
- **recurrenceRule** - If null, it is a single event. If not null, describes how the event should be treated in regards to recurring events.
 - **count** - How many events there are in the series.
 - **frequency** - How often to repeat (day, week, month, year or custom recurrence rule type)
 - **frequencyDescription** - Label for the above field.
 - **interval** - How many units between events (same unit as frequency)
 - **until** - If it is to end on a specific date.
- **reference** - Sakai internal field.
- **siteName** - Site title.
- **title** - Event title.
- **type** - Event type (activity, exam, special event, etc).
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve all events for the current user

GET /direct/calendar/my.xml | .json

Identical response to /direct/calendar/site/SITEID.{format}.

Clog

Retrieve a summary of posts for a site

GET /direct/clog/site/SITEID.xml | .json

Retrieve the details of a given post

GET /direct/clog/post/POSTID.xml | .json

Retrieve all posts authored by the specified user

GET /direct/clog/user/USERID.xml | .json

Dashboard

Retrieve the dashboard news items for the currently logged in user

GET /direct/dash/news.xml | .json

Add the site param to restrict the items to the specified site. Add hidden=true or starred=true to only retrieve hidden or starred items.

Retrieve the dashboard calendar items for the currently logged in user

GET /direct/dash/calendar.xml | .json

For both of these providers, add the 'site' param to restrict the items to the specified site. Add 'hidden=true' or 'starred=true' to only retrieve hidden or starred items, or combinations of both.

Dropbox

Retrieve the dropbox items for a given site and user

GET /direct/dropbox/site/SITEID/user/EID.xml | .json

Returns a flattened collection of content items, with each item containing the following fields:

- **description** - Any description associated with the file.
- **size** - Size of the file in bytes.
- **title** - Title of the file.
- **type** - File type.
- **url** - Full URL to the file.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Forums

Get all fora for a site

GET /direct/forums/site/SITEID.xml | .json

Get all topics for a forum

GET /direct/forums/site/SITEID/forum/FORUMID.xml | .json

Get all threads for a topic

GET /direct/forums/site/SITEID/forum/FORUMID/topic/TOPICID.xml | .json

Get a fully populated thread or message. This retrieves the message tree from the specified message downwards. If the MESSAGEID is the top level message in a thread, the entire thread is returned.

GET /direct/forums/site/SITEID/forum/FORUMID/topic/TOPICID/message/MESSAGEID.xml | .json

Gradebook

Retrieve the list of gradebook items for a site

GET /direct/gradebook/site/SITEID.xml | .json

- **assignments** - List of all items in the gradebook for all users. An assignment refers to any gradebook item.
 - **grade** - The grade the user achieved for this assignment. May be null if the user hasn't submitted or hasn't been graded yet.
 - **itemName** - The name of this assignment.
 - **points** - The total points possible for this assignment.
 - **userId** - The userId of the user that the assignment grade relates to.
 - **userName** - The name of the user that the assignment grade relates to.
- **siteId** - Site ID.
- **siteName** - Site title.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve the details of an assignment grading specified by the assignment name

GET /direct/gradebook/item/SITEID/ASSIGNMENTNAME.xml | .json

The response from this provider looks buggy or not as expected. Will investigate.

Retrieve all grades for the current user in all sites

GET /direct/gradebook/my.xml | .json

Returns a collection of gradebook items, with each item in the collection containing exactly the same data as for /direct/gradebook/site/SITEID.{format}. For example, if you are in five sites and have two gradebook items in each site, you will have five items in the collection, with each item containing a list of two assignments.

Lessons

Retrieve the list of lessons for a site

GET /direct/lessons/site/SITEID.xml | .json

Retrieve the details of a lesson

GET /direct/lessons/item/LESSONID.xml | .json

Retrieve a summary of lessons for the current user

GET /direct/lessons/my.xml | .json

Melete

Retrieve the list of modules for a site

GET /direct/melete/site/SITEID.xml | .json

Retrieve details of a given module

GET /direct/melete/site/SITEID/module/MODULEID.xml | .json

Membership

This is a complex provider. Refer to /direct/membership/describe.

News

Retrieve the list of news items for a given site

GET /direct/news/site/SITEID.xml | .json

Returns a flattened collection of news feeds in the site, with each item containing the following fields:

- **channelURL** - Full URL to the news feed.
- **title** - Title of the news feed, as configured in Sakai.
- **toolId** - ID of the news feed item.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve the contents of a given news feed

GET /direct/news/channel/NEWSID.xml | .json

Fetches the content of the news feed.

Podcast

Retrieve the list of podcast items for a given site

GET /direct/podcast/site/SITEID.xml | .json

Returns a flattened collection of items in the podcast, with each item containing the following fields:

- **description** - Any description associated with the podcast item.

- **releaseDate** - When the file was made available, in milliseconds.
- **size** - Size of the file in bytes.
- **title** - Title of the file.
- **type** - File type.
- **url** - Full URL to the file.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Polls

Retrieve the list of polls the current user can take in the given site

GET /direct/polls/site/SITEID.xml | .json

This provider has full read and write support for voting in polls. Please see /direct/polls/describe for the full details.

Profile2

Retrieve a user's profile

GET /direct/profile/USERID.xml | .json

Retrieve a user's profile image

GET /direct/profile/USERID/image

Note there are many options that can be appended to the request control the type of image returned.

Retrieve a user's connections

GET /direct/profile/USERID/connections.xml | .json

This provider has extended read support for viewing more profile information including a html formatted profile for direct embedding in other tools, connection status and friend requests. Please see /direct/profile/describe for the full details.

Resources

Retrieve the list of resources for a site

GET /direct/content/site/SITEID.xml | .json

Returns a flattened collection of content items (ie no folder hierarchy), with each item in the collection containing the following fields:

- **author** - Name of user that created the item.
- **container** - Base path to the file within the site. Could be used for reconstructing the folder hierarchy.
- **description** - The description was entered for the file. May be null.
- **modifiedDate** - Modified date in the format yyyyMMddHHmmssSSS.
- **numChildren** - For folders. Number of children items the folder contains. 0 for files.
- **size** - File size in bytes.
- **title** - File name.
- **type** - Type of file. Mime type for files or the string 'collection' for folders.
- **url** - Full URL to the file.
- **visible** - If the file is visible, ie time and date restrictions are satisfied. Only maintainers will see items with a value of 'false'.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve the list of resources for the current user's myworkspace

GET /direct/content/my.xml | .json

Identical response to /direct/content/site/SITEID.{format}.

Retrieve the list of resources for a given user's myworkspace. Generally only admin type people will be able to access this.

GET /direct/content/user/EID.xml | .json

Identical response to /direct/content/site/SITEID.{format}.

Roster

Retrieve the list of members for a site including profile images

GET /direct/roster/site/SITEID.xml | .json

- **displayName** - Name of the site member.
- **imageUri** - Full URL that can be used to render an image for the user.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.

Retrieve the list of members in a group in a given site including profile images

GET /direct/roster/group/SITEID/GROUPID.xml | .json

Identical response to /direct/roster/site/SITEID.{format}.

You can choose to retrieve the official image for user by setting officialImages=true in the request URL for both of these providers.

Site

Get the information about a site

GET /direct/site/SITEID.xml | .json

- **createdDate** - Date site was created in milliseconds.
- **createdTime** - Complex element, contains a display string as well as the same time in milliseconds as createdDate.
- **description** - Text representation of the HTML description entered for the site in the Site Info tool
- **htmlDescription** - HTML description (HTML escaped) entered for the site in the Site Info tool
- **htmlShortDescription** - HTML version of the short description entered for the site in the Site Info tool
- **iconUrl** - The URL specified for an icon for the site. May be relative.
- **iconUrlFull** - The URL specified for an icon for the site as a full URL.
- **joinerRole** - The role name given to users who join a joinable site, if allowed.
- **lastModified** - Date site was last modified, in milliseconds.
- **maintainRole** - The role for those that will be classified as maintainers of the site.
- **modifiedDate** - Same as lastModified. Use this preferentially as it is a Site API member.
- **modifiedTime** - Complex element, contains a display string as well as the same time in milliseconds as modifiedDate.
- **owner** - Enterprise ID of the owner of the site (NOT the instructor). Can be changed in Site Info.
- **props** - List of properties attached to a site. Can be extended and set to any key and value pair.. When extending the data associated with sites, this is what you should use. Some properties are of a known name and are listed below:
 - **term_eid** - Enterprise ID of the Term as set in the cm_academic_session_t table.
 - **contact-name** - Site owner's contact name.
 - **sakai:parent-id** - If a site is a child site, this has the site id of the parent site.
 - **term** - The term associated with the site
- **providerGroupid** - The group id for the GroupProvider for the site, or null if none defined.
- **reference** - internal field for the internal reference to the site which can be used to access the site within Sakai.
- **shortDescription** - short description entered for the site in the Site Info tool
- **siteGroups** - List of groups in the site. Only included if the URL parameter includeGroups is supplied. Many of the same parameters as for a site. Also contains the list of userids in the group.
- **siteOwner** - Complex element representing the owner of the site. Contains the userDisplayName which shows the site owners full name, their entity URL for use within Sakai and their user ID.
- **sitePages** - The list of pages in the site containing the such elements like id, title and url. The rest of the parameters are mainly for the Sakai portal to know how to render the page.
- **skin** - The skin specified for the site.
- **softlyDeletedDate** - Date the site was softly deleted, null if not applicable.
- **title** - The title for the site.
- **type** - The type of the site (course, project, portfolio etc)
- **userRoles** - A list of role names in the site.
- **activeEdit** - Internal flag used when editing the site. Not applicable outside of Sakai.
- **customPageOrdered** - Flag to show if the site has a custom page order.
- **empty** - Flag to show if the site is empty of roles and members. Not really applicable outside of Sakai.
- **joinable** - Flag to show if the site is joinable.
- **pubView** - Flag to show if the site is publicly viewable.
- **published** - Flag to show if the site is published and open for users to access.
- **softlyDeleted** - Flag to show if the site has been softly deleted.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityId** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Syllabus

Retrieve the syllabus for a given site. If the syllabus is a redirect, the result will be the URL, otherwise the content will be returned. If date ranges are presented, then normal users will only receive those items within the ranges, maintain users will receive all items.

GET /direct/syllabus/site/SITEID.xml | .json

- **items** - List of syllabus items. May be null.

- **attachments** - List of any attachments associated with an item.
 - **title** - File name.
 - **type** - File type.
 - **url** - Relative URL to the file.
- **data** - Any HTML data that was entered for this item.
- **endDate** - If an end date is set, when the item should no longer display. See above for rules. Time in milliseconds. 0 if none.
- **order** - The order of the item in the list.
- **startDate** - If a start date is set, when the item should start to display. See above for rules. Time in milliseconds. 0 if none.
- **title** - Title of the syllabus item.
- **redirectUrl** - If this entire syllabus is a redirect, the full URL that should be used.
- **siteId** - Site ID.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Web Content

Retrieve the webcontent items for a given site

GET /direct/webcontent/site/SITEID.xml | .json

Returns a collection of web content items in the site, with each item in the collection containing the following fields:

- **title** - The title of the web content item.
- **url** - The url that is set for the web content item.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Wiki

Retrieve a hierarchical list of wiki pages for a given site, up to a maximum of 3 pages deep

GET /direct/wiki/site/SITEID.xml | .json

- **childPages** - The list of child pages
 - **childPages** - The next list of child pages, and so on.
 - **name** - The name of the page.
 - **numberOfComments** - The number of comments on the page.
 - **url** - The relative URL to the page that can be retrieved via REST.
- **name** - The name of the top level page.
- **numberOfComments** - The number of comments on the top level page.
- **url** - The relative URL to the top level page that can be retrieved via REST.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.

Retrieve the content of a wiki page in a given site

GET /direct/wiki/site/SITEID/page/PAGENAME.xml | .json

- **comments** - The hierarchical list of comments on this page.
 - **childComments** - Any nested comments on the page. Contains the same structure as the comments.

- **content** - The name of the page.
 - **created** - When the comment was created, in milliseconds.
 - **creatorDisplayName** - Name of the user who posted the comment.
- **html** - The HTML content for the page
- **name** - The name of the page.
- **entityReference** - Internal Entity Broker field.
- **entityURL** - Internal Entity Broker field.
- **entityTitle** - Internal Entity Broker field.