

TALKS.CAM FUNCTIONAL OUTLINE

Talks.cam is a web-based events publication service.

Users can publicise their talks using talks.cam. Anyone can browse talks.cam to find interesting talks and get email reminders/iCal feeds etc. You can get feeds from talks.cam to embed in your website etc. The content is user-generated and is available to the whole world.

STRUCTURE & BASIC FEATURES

The basic unit of talks.cam is the **List**. A List contains **Talks**, and Lists can be contained in other Lists.

Every Talk is contained by at least two Lists - the **Series** it primarily belongs to, and a special List for all Talks held at the same **Venue**. e.g. the Talk "Penguin breeding" could be part of the List for the "Penguinology Wednesday lunchtime talks" series and the List for the "Penguinology Tea Room" venue.

The system automatically maintains the Venue Lists - whenever a Talk is created, it is automatically added to the appropriate Venue List (if necessary a new List is automatically created if the Venue doesn't already have a List).

Users can include Talks in other Lists they own in addition to the default Series and Venue Lists.

There is no limit to the number of Talks or Lists which can be included in a given List; there is no limit to the depth of recursion either.

Although the structure may actually be something like this...

- List A
 - Talk A
 - Talk B
 - Talk C
- List B
 - List A
 - Talk D
 - Talk E
 - Talk F
 - List C
- List C
 - Talk G

... the way that Lists are currently primarily displayed is as a flattened list of all their descendants that are Talks, regardless of "depth", e.g. the display of List B above would simply show:

- Talk A
- Talk B
- Talk C
- Talk D
- Talk E
- Talk F
- Talk G

To summarise mathematically, the structure of Lists and Talks form a Directed Acyclic Graph where the vertices can be Lists or Talks, but Talks never have children. (An error message comes up if you attempt to create a loop.)

The structure of the data store needn't necessarily be an acyclic graph. The important feature here is aggregation; whether aggregation into a personal list (e.g. so you can get email reminders for several lists at once without effort) or into lists with related content. (e.g. the Maths Faculty has a list aggregating all the talks given in Pure maths research seminars, another list aggregating Applied, and a third list aggregating the previous two).

Lists are owned by users, though anyone can browse them.

A user automatically gets a personal list. A personal list can act as a sandbox, or as an aggregator of lists which the user is interested in.

Users can create lists (e.g. a list for the Department of Boring's research seminars) and put talks into them.

Talks.cam can be searched (though you can hide talks/lists from our index, but not from Google) - more detail on this under "Output".

There are 'featured' talks and lists which appear on the front page. These are editorially controlled.

Account Creation

There are several ways of creating a Talks.cam account (see list below). Note that Raven is the University of Cambridge's institutional single-sign-on system, and a CRSID is the unique identifier of Cambridge users on Raven.

- if a user logs in with Raven, then an account is automatically created
- an account is created by entering an email address into a webform
- an account is created if a speaker's email address is included in the relevant field for a talk, and the speaker has no account associated with that email address.

Note: Cambridge users can end up with two accounts - one accessed via Raven, the other via email address.

Access Control - Modifying

You have to be logged into make any changes to talks.cam.

A logged-in user can modify their own personal details and preferences, and any Talks and Lists that they manage.

A logged-in super-admin user can modify all Users' details and all Talks and Lists.

A list can only be edited by its owner(s). They can add and remove talks and lists.

If list B is incorporated into list A, then:

- list A owners can add/remove list B from their list
- **only** list B owners can edit talks in list B, though list A will display any changes they make.

Talks can only be added to lists you own. (You can add talks you don't own to lists which you do.)

Talks can only be edited by their owner (the owner of the list in which they were created), and by speakers, if they have a talks.cam account associated with an appropriate email address.

Therefore, the content is user-generated. Anyone can get a talks.cam account who has a valid email address. They can then create lists and add talks.

User Management / Authentication

The current user management system in talks.cam is in need of review; it was originally designed without Raven support, and it grew organically. A User Account includes the following information, and is not linked to the University Lookup service:

- A single e-mail address
 - overloaded usage: used for personal email reminders, used to automatically link a User Account with a List or Talk, used as a username for non-Raven login
- Name
- Affiliation
- Picture

There are two methods of identifying yourself to talks.cam - via Raven and/or via an email / password combination managed by talks.cam.

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To modify anything in Talks.cam, you must be logged in. The management UI is all web-based.

There is also a basic, not publicly documented, unsupported XML-based upload interface to allow automated creation of Talks (but not Lists or anything else).

When you create a **list**, you need the following information:

Compulsory:

- an owner (this is automatically the logged-in user who creates the list)
- List name (default provided)
- List description (default provided)
- "Ex-directory" checkbox (default provided. This toggles whether a list is included in the talks.cam searchable index or not. The default is 'not included'.)

Optional

- Image (an opportunity to provide a logo for the list). This is required by the editors if the list is to be 'featured' on the site.

When you create a **talk**, you need the following information:

Compulsory

- you must pick a list to put the talk in, or create a new list

- Talk Title (default provided)
- Speaker (default provided, and the interface provides dynamic matching to known names)
- talk organiser's email (defaults to user who creates talk)
- Venue (default provided, and dynamic matching with known venues)
- Date (default provided, as well as a calendar interface)
- Time (default provided)
- "Ex-directory" checkbox (as above)

Optional (unless the talk is to be 'featured', in which case a speaker and image must be included for the editors to accept it)

- Abstract
- Speaker's email address
- Speaker checkbox (defaults to unchecked. If checked, speaker is mailed and given a talks.cam account)
- Image (opportunity to provide a logo)
- Special Message (opportunity to display things more prominently e.g. CANCELLED, room change, etc.)

The List Description and Talk Abstract allow the use of a wiki-like syntax, and can include URLs and images. All text input fields can accept UTF-8 character encoding.

TALKS.CAM OUTPUT

Output Formats

Lists can be viewed in a variety of formats:

- **HTML pages** (Direct use of website)
 - various different layouts/skins are supported
- **Non-HTML** files served via HTTP:
 - iCalendar (RFC 2445)
 - RSS feed
 - n.b. the pubDate field shows when the Talk was last updated, NOT when the Talk is happening
 - the Microsoft List Extension and the Event Module are used to provide extra fields in a standard way
 - talks.cam-specific XML format (contains all metadata fields, marked-up separately)
 - Plain text
- **HTML page fragments wrapped in Javascript document.write** (page fragments "embedded" in other websites using a <script> tag)
- Automatic **email** reminders (requires user to have signed up for an account)

Individual **Talks** can be viewed as HTML pages or downloaded as iCalendar files.

The general user interface for browsing, searching and managing talks.cam is all web-based.

See also <http://www.talks.cam.ac.uk/document/specification> for more information.

Access Control - Viewing

Viewing of **nearly all** of the content of Talks.cam is unrestricted.

Talks.cam's own publicising of content (e.g. via search index, via "other lists" randomly included on pages) is restricted to content that has not been flagged as "ex-directory". Even super-admin users cannot find ex-directory content via the web search provided by talks.cam.

However, anybody who knows or guesses the URL of ex-directory content can view it and create their own index, e.g. Google regularly indexes ex-directory content.

The following information is only viewable by logged-in users:

Restricted information	Only viewable by users who are logged-in...
Users' e-mail addresses	- (all logged-in users can view them)
My personal set of email subscriptions	...and you can only see your own
Ex-directory "parent lists", i.e. which ex-directory lists include the list I'm looking at	...and are super-admin users

Arcane detail: There is an (optional) hidden field to show which Raven ID (CRSID) a given user account is linked to, for Raven purposes; this is not visible to anybody from the web UI! And it can only be modified by setting the user's email address to CRSID@cam.ac.uk

Finally, nearly everything that can be done by a user can also be done by a super-admin. (The big exception is that a super-admin can't manage a user's email subscriptions.)