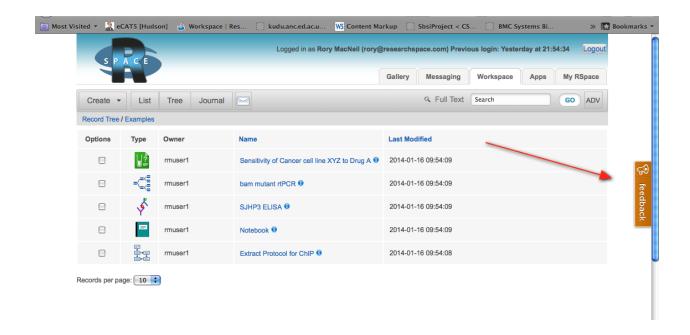
RSpace 0.18 Guidance Notes, July 2014

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Introduction

This document gives an overview of the features in RSpace 0.18 release, together with guidance / help on how to access those features for testing and evaluation purposes. There is a feedback widget (see screenshot below) in RSpace so users can give feedback directly while they are using the application.



Terminology

- The terms Record and Document are used interchangeably, and have the same meaning in this document - namely, an item of content created by the user.
- 'R&P' is an abbreviation for 'Roles and Permissions'.
- RS is an abbreviation for 'RSpace'
- 'He' should be taken to mean He/she.

What's new in version 0.18

In this release, we have updated the sketching facility, introduced Snippets, and an audit trail facility.

New features

- Snippets reusable fragments of content. You can create a snippet by selecting fragment
 of the text field content (may include HTML elements) and clicking on 'Snip' button.
 Snippets are stored in the Gallery and can be inserted into other documents.
- Audit trail keep track of users' activities in RSpace.
- 3. Sketch templates reusable parts of a sketch
- 4. File store access to externally hosted file systems, over Samba.

Improvements

- 1. Updated sketcher library now enables easier drawing on a tablet using a stylus or finger.
- 2. Chemistry substructure search has been improved to produce fewer false positive hits.

Getting started

Login to host:port:/notebook, or the URL you have been given. Several documents are created programmatically by the system to give you something to start working with, located in the Examples folder.

Initially two folders appear in the Workspace view. Clicking on on one or more checkboxes activates a menu with various operations, which are reviewed later in this section.

- **Examples** contains some sample content demonstrating the type of content RS can hold.
- **Shared** is where content that people share with you is initially placed this will probably be empty to begin with.

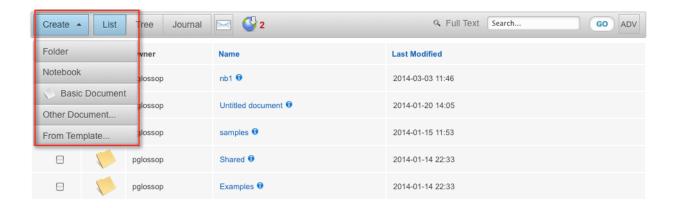
You can create new folders and new content via the 'Create' menu button.

The main features of the document listing are as follows:

- The folder view is specific for each individual you can move records and folders around without affecting anyone else's view.
- By default, documents that a user creates are initially private to that user and his PI.
- If a user is a member of a group, they can share records with that group. These records will appear in the 'Shared' folder of other group members as an alias to the original document.
- The **Shared folder** is currently 'fixed' i.e., it cannot be renamed, moved, or deleted. This is because this folder is used by the system to hold shared content. This system is not set in stone and can be re-organised, depending on feedback.
- There is a search box that can be used to filter the list of documents that are displayed:
 - Full text search over records
 - Tag search
 - By record name
 - Record form type
 - Modification dates

Creating records

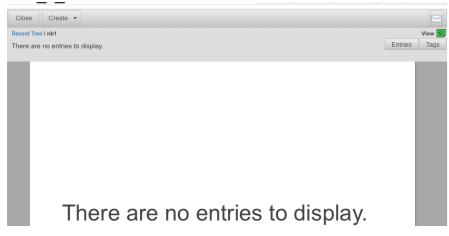
You can create new records or notebooks from the **Create** menu in the **Workspace** view:



Notebooks

Notebooks are simple pages designed to reproduce aspects of a traditional paper lab notebook, such as easy data entry, and are sorted chronologically.

To create a notebook, click on Create->Notebook and then click on the notebook icon to open it:



A notebook contains entries. To add a new entry, click new and add content to the text editor. You can drag and drop images, videos and attachment files into the editor window as well.

Once you have made several entries you can navigate through the entries using the arrow keys, or by swiping on a tablet. Clicking the **Entries** button will show a top-level bar of thumbnails of each record:

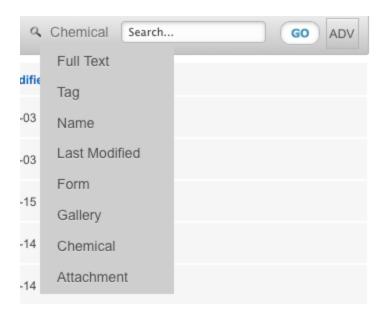


Full text search is also enabled for the notebook.

You can save-and-create a new notebook page in a single operation via the 'Save and New' button.

Searching

Searching in RSpace is pretty straightforward - choose a category to search over and click 'go'.



A complete description of the Search capabilities is provided in this accompanying document:

Advanced Search

Advanced search enables combinations of queries to be made. To access advanced search, click on the 'Adv' button to the right of the basic search bar.



To add a new clause to the search, click on 'Add' and add a new row. Each row is combined by an 'AND' operation. So, in the example above, this query would be' find records containing the text 'Incenp' that were last modified between 1st and 10th October and are 'Experiment' records. Multiple search terms for full text search can be added together on a single row to provide an 'Or' query.

For example, the query string 'Incenp RNA' will find records that either contain the word 'Incenp', OR 'RNA', or both.

Search terms in the can be removed by clicking the 'X' button beside each row.

For **Full Text** search:

- Wildcard searches can be performed by appending an asterisk to your search query.
- **Phrase** searches can be performed by enclosing your search term in quotes. E.g., 'Incenp tubulin' will look for the two words in close proximity in a sentence.
- Native Lucene queries enable powerful queries to be made in a single text box. To
 enable this, prefix your search with 'I:' (without the quotes that is, el colon). This
 enables queries like 'I: +Incenp +RNA -tubulin' which means 'Incenp AND RNA but NOT
 tubulin'. An introduction to Lucene syntax is available here; the tutorial applies directly to
 usage in RSpace except that you don't need to prefix a search with a field name,
 RSpace does that internally.

There is one important difference between the standard search, and Advanced search: Searches on Name, Modified Date or Form in Standard Search only search over the content of the current folder in the workspace; but in Advanced Search, these searches are global over all documents that you have permission to see.

The Advanced search will also return Gallery items such as media, image files as well that match the search.

Deleting records

- Deleting records does not actually delete records from the database; it merely marks
 them as deleted so that they may be subsequently restored if the need arises. Links to
 documents that are subsequently deleted will indicate, when clicked, that the link is
 broken. If you are the **owner** of a document, deletion will remove it from the view of all
 users with whom the document is shared, as well as from your own folder view.
- If you delete a record that has been shared with you, it will only be deleted from your view; the original owner and any other users with whom the document is shared will still be able to see it.
- To restore a deleted document, click on the 'Admin' tab then the 'View deleted documents' link. You can then choose to view or restore the deleted record; note that editing a deleted document is not possible until it has been restored.
- Deleted folders do not have a 'View' link; restoring will restore the Folder and all its documents, records and subfolders.

Copying records

- Copying records produces a 'deep' copy of the record. A completely new, independent record is made. Comments, sketches, and image annotations are also copied.
- If a shared document is copied, the owner of the copied document is the user who performed the copy.

Renaming records

 Renaming a record causes the document to be renamed for all users who can view that document.

Moving records

- A user can move records around the folder system.
- Each user has their own folder tree and can organise records in their own way, except for shared records.

Sharing records

- For the 'Share' option to be active, the user must currently be a member of a group.
- Sharing a record will result in the shared records appearing in the 'Shared' folder of the other group members.
- See the section on 'Groups' for more details.

Export to PDF

- One or more records or folders can be exported as a PDF. To do this tick the box to the
 right of the record or folder, or boxes to the right of records and folders, that are to be
 exported as a PDF, then click 'Export Pdf'. You can configure your PDF contents via the
 ensuing dialog, and can optionally choose a name for your PDF export.
- When multiple records are selected for export they are fused together into one single PDF.
- PDF generation occurs asynchronously; a link to the generated PDF will appear in the 'PDFs' section of the 'Galleries' tab. To view the PDF, click on the thumbnail.

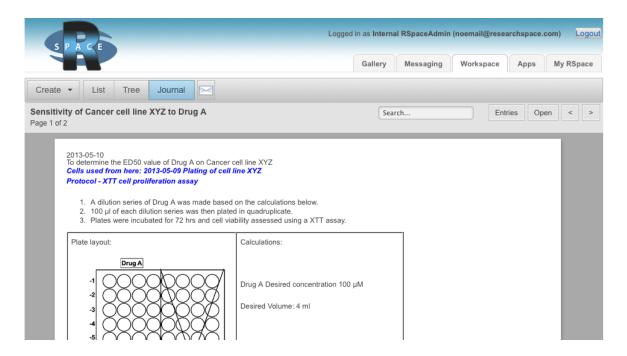
Revisions

- All edits to a document are stored as a new version.
- Old versions of a document can be reviewed and restored.
- Currently each version is stored in its entirety; the default is that only the 20 most recent revisions are kept in the database. Older revisions are scheduled for archival.
- Revisions can be searched /filtered based on date, user and the altered field, and are also paginated.

Name	Version	Modified by	Modification Date	Modification Details	Options	
		susan2	2013-06-25	Safety Method Date Created Date Reviewed	Clear search	
Untitled document	1	susan2	Tue Jun 25 10:57:02 BST 2013	RENAME	View	Restore
PCR1	2	susan2	Tue Jun 25 23:15:08 BST 2013	RENAME	View	Restore
PCR1	3	susan2	Tue Jun 25 23:19:48 BST 2013	FIELD_CHG-Safety	View	Restore
PCR1	4	susan2	Tue Jun 25 23:31:29 BST 2013	FIELD_CHG-Method	View	Restore
PCR1	5	susan2	Tue Jun 25 23:31:37 BST 2013	FIELD_CHG-Method	View	Restore
PCR1	6	susan2	Tue Jun 25 23:31:46 BST 2013	FIELD_CHG-Method,FIELD_CHG-Date Created	View	Restore
PCR1	7	susan2	Tue Jun 25 23:31:58 BST 2013	FIELD_CHG-Date Reviewed	View	Restore

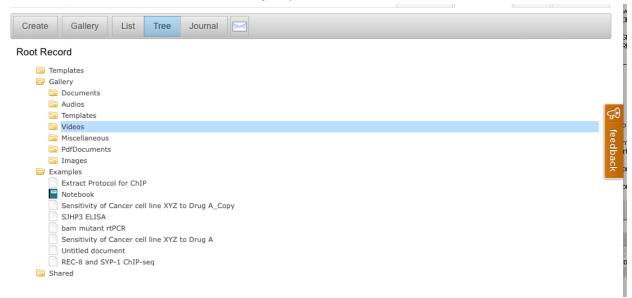
The Journal View

The Journal View shows all records that are in the current folder or or its subfolders in chronological creation order. It provides a convenient way to search and find all content by time of creation, rather than by folder organisation. This feature work on desktops but is particularly suitable for tablets, where scrolling through records with the Journal View replicates the experience of flipping through a paper lab book.



The Tree view

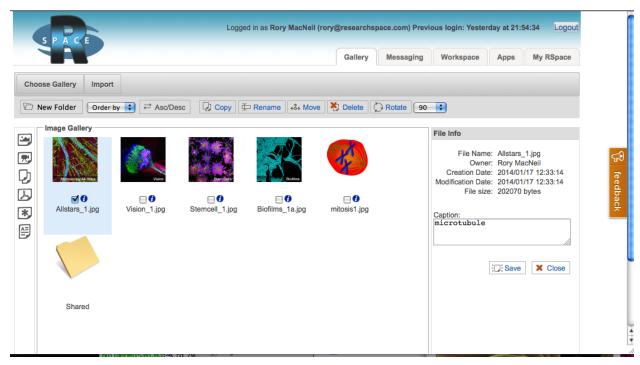
The TreeView is the third way of visualizing your records in RSpace and is accessed from the 'Tree' tab in the workspace. The Tree View show all Files and Folders, including Gallery content, all in one place, for convenient browsing of your data.



The Gallery tab

Gallery is a facility to organise image, sound and video, and other attached content (files) in such a way that content can be uploaded once, but linked to many times. It can be accessed either from the **Gallery** tab or from the editor menu of a **text field** (see *Document editor* section below).

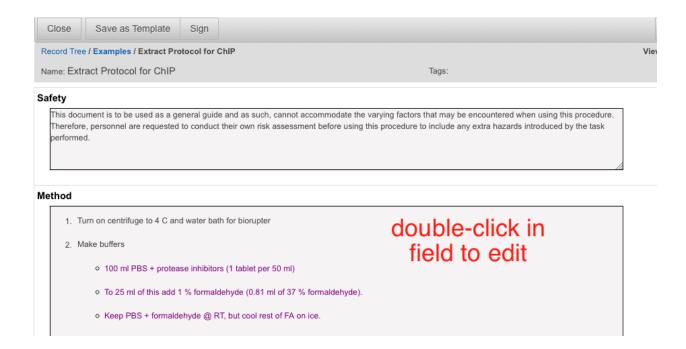
- Content can be uploaded either from the user's computer or from a URL, or dragged-and-dropped directly into the Gallery.
- Deletion of media does not remove it from the database, so existing records that link to the media can still access that media. Deletion merely hides a media file, preventing its subsequent use.
- Attachments or media that is inserted directly in a record will also be added to the gallery in the appropriate tab.



The screenshot above shows the Image Gallery.

- Folders can be created to organise media content
- Media can be moved between folders by Drag-and-Drop
- Media can be sorted by various criteria.
- Media are organised by type.
- Video files be uploaded into the 'Video' tab and inserted into records. Depending on your browser / OS setup, videos can either be played in view or edit mode, or downloaded to your machine for playing locally
- Selecting a checkbox for one or more media files reveals a menu with operations such as rename, copy,delete and rotate (for images). These work in a similar way to the operations in the Workspace.
- Clicking the information icon shows more detailed information about the resource, and allows searchable captions to be added to the resource.

Using the document editor



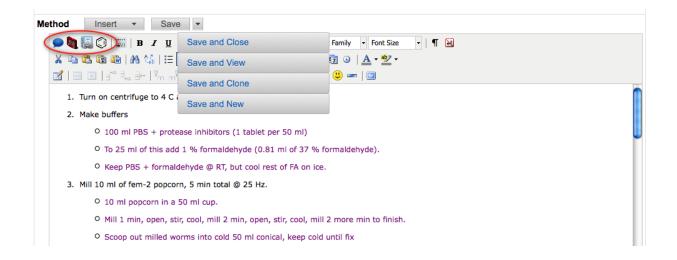
The editing process

Each document can be edited by one user at a time, but can be viewed by any number of users simultaneously. The 'edit lock' is released when the editor saves and closes the record, or when their session expires.

While a user is editing a document, an **autosave** feature periodically saves any new content without any manual intervention from the user.

The text editor

The text editor is a rich text editor with all the standard text-formatting features you would expect, including table creation and a find/replace feature. To start editing just click in the editor and start typing! The menu items circled in red in the screenshot below access additional functionality: **comments**, **sketches**, **internal links and a chemistry editor**. These are described further in the sections below.



Saving options

When saving a document, there are several saving options, shown above:

- **Save** will save the document, making a new revision in the revision history, and also relinquish the edit lock on the document.
- Save and close works as for Save, but will close the document and return you to the workspace view of your documents and folders.
- **Save and clone** will **save** the current document, make a copy, and open the copy for editing. This is convenient when creating many records with similar content.
- Save and new will save the current document, and open a new empty document of the same type for editing. This is convenient when creating many records derived from the same form .

The View / Edit cycle

There are two types of record; those created from the 'Basic Document' form, that consist of a single text field; and those created from any other form. These two types of record are considered separately below:

All forms other than Basic Document

The behaviour is probably best explained by an example:

- 1. Consider a document D, that can be edited by two users, A and B, both of whom have edit permission on D.
- 2. One or both users open the document; the document is in View mode and all the record's content is available for viewing. At this stage, the record is not locked for editing.
- 3. Since both users have edit permission, either user can click to start editing the document. One user (say, A) double-click in a field to start editing. He now acquires the edit lock and can begin editing. User B becomes aware of this as a message appears

- ('Currently edited by A'). User B can continue viewing.
- 4. User A stops editing (he saves and closes the document, for example) and User B can now begin editing. At this stage, User B is viewing stale data. If B decides to edit, the page will automatically refresh with the new content (just added by A), so as to prevent lost updates. In this way, the editor always edits the most recent version of a document.

Basic Document

This is a simple text field. The major difference with other forms is that the content is available for editing immediately when the document is opened (assuming that no-one else is editing, and that the user has edit permission); the user does not have to double-click in the text area to start editing content. The reason for this is that the browser window in a Document with a single text field is not significantly cluttered by only one text-editing menu, and the user will appreciate being able to add content as easily as possible.

The behaviour in the event that another user is editing, or the subject user does not have edit permission, is similar to that of any other template; namely that the document is opened in View mode.

Adding attachments

You may well have existing documents such as images, MSOffice files or PDFs that you want to upload once, and attach to one or more records.

There are two ways to do this:

Drag and drop

Simply drag and drop the attachment into a text editor. It will then appear as a hyperlink.



After saving, attachments are also listed at the foot of the page (see above screenshot). Clicking on the attachment gives you the chance to view (download) or delete the attachment.

From Gallery

Open up the Gallery, and upload a file to the Documents tab. Then, close Gallery, and position the cursor in the editor where you want the attachment to go. Now, open Gallery again, choose the 'Insert from Gallery tab' and select the document you just uploaded, then OK.

Uploading new revisions of an attachment

- 1. Attach a document that you can edit to an RS record, as described above.
- 2. Now, do some edits to your attached file on your local machine.
- 3. To replace the old attachment with the new one, simply highlight the text of the link in the editor, and drag and drop the new version into the editor. The link will be updated to the new version. All previous versions of the attachment are retained in RSpace and can be accessed via the Gallery:



Custom plugins for drawing, comments, image annotation and chemistry

Four custom editing plugins are available, as illustrated above. They are described in left-to-right order.

- Commenting. Click on the speech-bubble icon to add a comment. The comment will
 appear at the current cursor position. Deleting a comment icon from text will delete the
 comment thread.
- **2. Media gallery.** This plugin enables you to upload new images to Galleries, or to insert an existing image at the current cursor position.
- 3. **Sketch.** A drawing canvas dialog will appear. Drawings appear in the document as images; double click on the sketch image to begin sketching. Click 'Insert' to end image editing. Note that you can select the new image by clicking on it and use the standard resize handles to change the size of the thumbnail. The original image size is unaffected.
- **4. Linking.** Add links to other documents. Choose the record you wish to link to from from the file tree dialog. To view a link once it's created, **Ctrl-right click** to access the browser's 'open link' menu.
- **5.** Chemical structures. Click on the benzene ring icon to draw a chemical structure using the ChemAxon structure-editor, then save it to the document. To edit an existing chemical structure, select it in the document, then click on the benzene-ring icon to open the editor again.

Adding files from external file stores

Note: This feature is currently only available for some institutional deployments. External file stores are existing file stores currently used to hold large datasets and shared files. RSpace now is enabled to contact these stores over Samba, and make links to files in a record. This functionality is in the Gallery. Click on the 'File Store' tab or from the dropdown list.

Creating a FileStore

The first time you access this, you will be asked to authenticate with your file store password.

This may be the same as your SSO password. Once authenticated, you will see a tree view of all folders. Navigate through the tree to identify the folder that contains your work; then select it and 'Save'.

You will then be asked for a name for the file store, give it a name, then 'Save'. You should now see the named File Store appear on the RH panel; click on the store to view files rooted at this folder.

You can double-click on a file to download a copy to your machine.



Inserting links

Open a document or notebook entry, then 'Insert from Gallery', as usual. Choose 'FileStores', select your filestore (assuming you have already created one) and browse to your file.

Then, select the checkbox and click 'Insert'. A link to the external file is placed in your document.

Image annotation

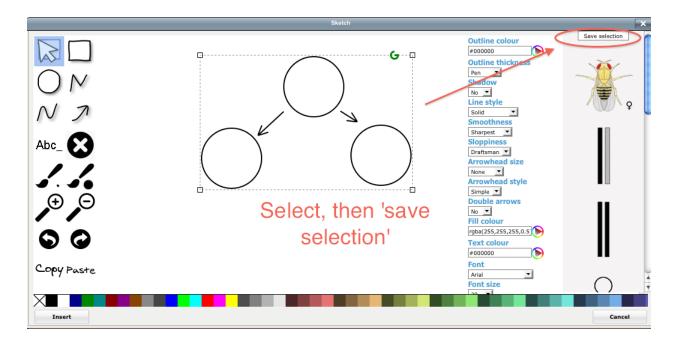
Images in a record may be annotated with user-specific information. To annotate an image, double-click on an image in the text field to open the annotation dialog.

- The original image that was uploaded is unaffected.
- Image annotations appear on PDF exports.
- Image annotations are copied when a document is copied.

Sketching or annotation can be done on a tablet using swipe gestures, or using a computer mouse.

Fragments of sketches can be selected and saved in the 'Templates' bar on the RHS of the sketcher:

These can then be re-used in any other diagram or image annotation



Tagging

You can add tags to any record you can edit - just add them as a comma-separated list in the 'Tags' textbox at the top-right-hand side of the document view. Current tags are displayed in the this location.

Creating a document using an existing form

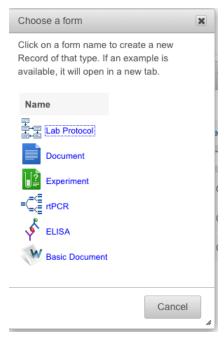
RSpace comes preloaded with various example forms from which to create documents, including **Basic document**, a single rich text area to hold text, images and drawings, and various others which may be useful, or can provide the basis for your own customizations.

All users can access these forms without restriction.



From Workspace, click **Create**. You'll get an option to create a Folder, Notebook, or Document. The first time you create a document, click on 'Other Document'.

This will open a list of forms to choose from. Click on the form name to create a new document.

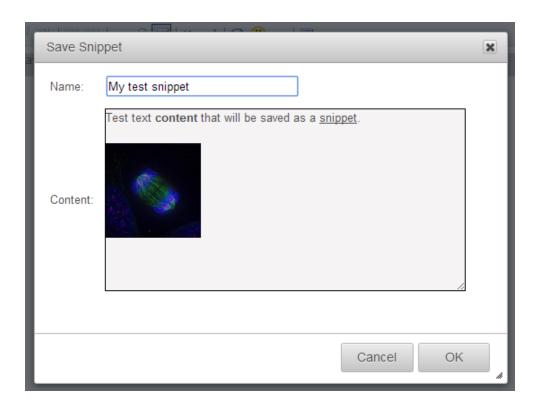


The **Create** menu is dynamic and will subsequently list your most frequently used, and most-recently used forms.

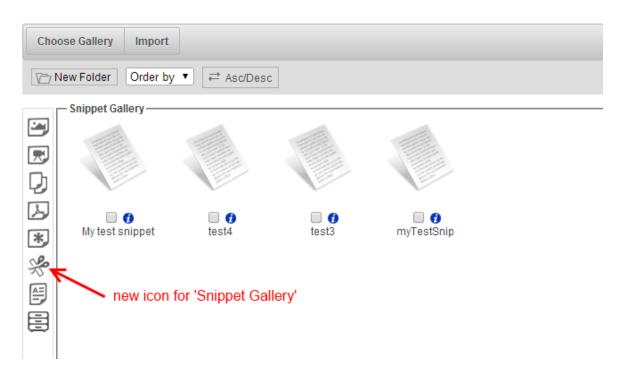
Creating snippets - reusable fragments of content

Sometimes you'll find yourself wanting to re-use some content of the text field, like a common paragraph or a set of images. **Snippets** are reusable fragments of content that can be stored in the Gallery and reused in future documents.

When editing a text field you can select some of its content and click on the 'Snip' button. That will open a dialog where you can name a snippet and preview it.



Selected content may contain HTML elements, as in the example above. After clicking 'OK' the snippet is added to the Snippet Gallery. Snippets can be organised and manipulated as any other records in the gallery, and can be previewed by clicking on the selected snippet.



To insert a snippet into a document use the 'Insert->From Gallery' button that is available during

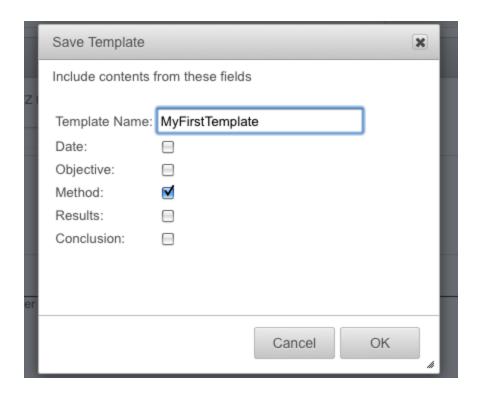
editing of a text field. When the Gallery dialog pops up, navigate to the Snippet Gallery (a 'scissors' icon on the side menu), choose a snippet and click 'Insert'.

Creating templates - reusable records

Sometimes you'll find yourself wanting to re-use some, but not all, of the content of a record many times. **Templates** are reusable records that can be used to generate new content quickly and easily.

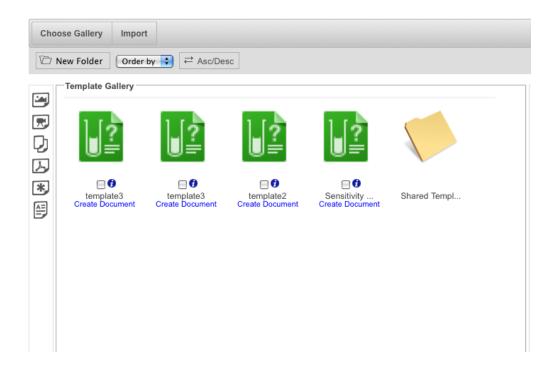
To do this, view any record that has multiple fields and click **Save As Template**.

A dialog pops up asking what content you want included in the template:



In the above example, we're just going to re-use the Method section - other sections will be filled out in each record that we create from the template.

After clicking OK, the template is saved to the Templates section of Galleries.



You can browse templates and create records from them by clicking the 'Create Document' links. You can also create documents from templates from the 'Create' menu in the Workspace view.

Introduction to Forms

Forms define the structure of a record. For some fields, ranges of acceptable values can be defined, which are used to validate input into documents created with that form.

A new form is not immediately available for use. When the form author wishes to make the form available, they can **publish** the document, which makes it available through the document creation system described above. Alternatively, they can **delete** their form if they wish to abandon it altogether.

Once a form has been published, it can no longer be deleted - only **unpublished**, which makes it unavailable to users.

Once a form has been published, it can be edited, creating a new version of that form. The most recent version of a form will be used to create documents, but earlier versions will be preserved for the documents that were created from these earlier versions. RSpace is quite conservative and treats all edits of a form as worthy of a new version.

Roles and permissions with forms

There are three levels of form access: private, group, and world. *Private* forms can only be used or edited by their creator, PIs and Lab Admins. *Group shared* forms can be used by all members of a group. *World (public)* forms can be used (but not edited) by anybody.

All forms that can be viewed by a user can also be copied, to form the basis for a new form, owned and administered by that user.

Creating a new form

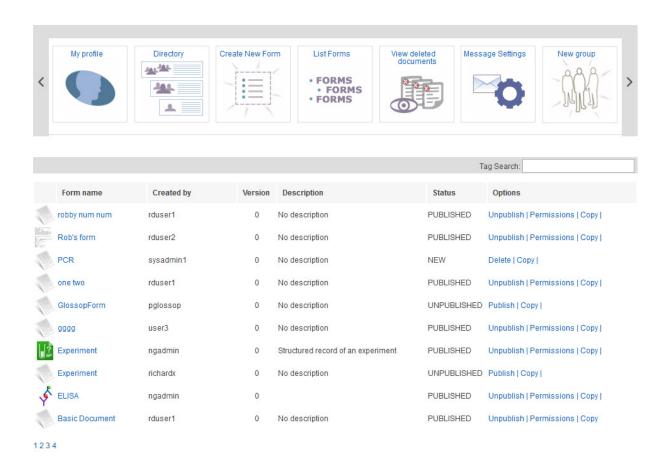
Click on the **My RSpace** tab, then the **Create New Form** tab. This opens up a form editor. Click on 'Add Field' to start adding new fields to the form. Once you've added some fields you can either **publish** the form or just **save** (without publishing) and come back to it later. You can also upload an image or icon to associate with the form.



To edit or delete fields, use the icons highlighted in the image above.

Editing and managing forms

To manage forms, click the **My RSpace** tab then **List forms.** Here is a typical screenshot:



The table shows information about each form's status, together with state-dependent actions. In the listing above, we are logged in as admin. Two of the forms. 'PCR' and 'Untitled' are unpublished and can be deleted, all the other forms are published and are available for use.

Clicking on a published form's name will open the form editor again. If we don't have edit permission on the form, we will get a read-only copy.

When editing an existing, published form, edits to a form are not immediately available in the published form. As a form editor, you have three options:

- 1. **Revert -** this abandons the new version, deletes it, and returns to the previous version.
- Save and close the changes to the form are saved in a temporary form for future editing.
- 3. **Update -** commits the form changes to a new version. If the form is published, this new version will be available for creation of new documents.

Groups

Groups can be used to bring together users and their documents. While groups will naturally arise from existing lab organisations, groups can be created for any subset of users.

In production deployments, LabGroups will be set up automatically using pre-existing information from institutional records.

In trial deployments, where people sign up in an ad-hoc basis, the site administrator can create LabGroups from individual users. These groups can then manage their own record-sharing and permissions.

Every group member can have one of three roles: PI, Lab Admin or User. PIs have permission to view all documents owned by members of the group and may administer the group; Lab Admins may have permission to administer the group (e.g., add/ remove group members), but not necessarily view all content pertaining to the group.

Creating a new group

The current group creation in RS is geared towards that of an administrator creating lab groups. To perform this action you'll need to be logged in as a Sysadmin or Community Admin role, and the users to add must already have signed up for an account on RSpace.

- 1. Select some users to be members of the group
- 2. Choose a name for the group
- 3. Add in at least one group member for the PI role. The username is shown in parentheses.

E.g., see below:

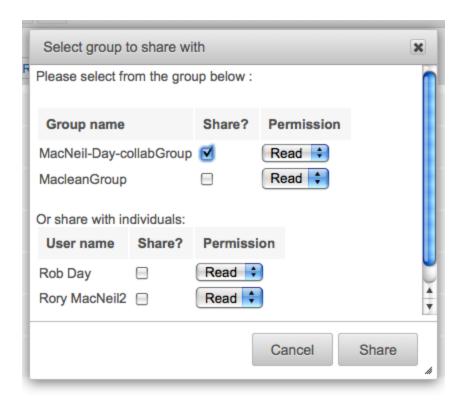


The ensuing group view shows information about the group. Group members with PI / Lab

Admin roles will be able to add/remove group members, and alter roles. The system enforces that there must always be at least one PI member of each group.

Sharing records among group members

Records may be shared between group members, once a user is a member of a group:



To share a record, perform the following steps, illustrated above:

- 1. In the Notebook view, select one or more records in this case, the 'ToShare' record
- 2. Click 'Share'
- 3. Select the group(s) or individual(s) you want to share with, and the correct permission.

The shared records will appear in the 'Shared' folder tree:

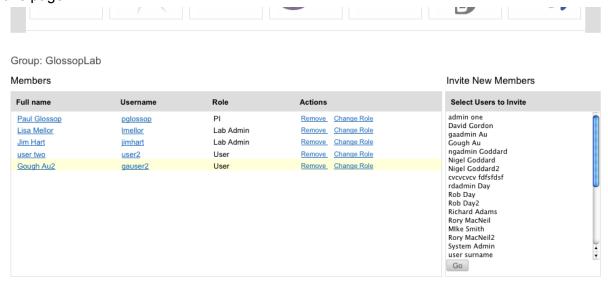


Other features

- 1. New group members automatically see other members' shared records.
- 2. If a user is removed from a group, they will no longer see shared records.
- 3. Deletion of a whole group will 'unshare' all previously shared records between group members.
- 4. Within the shared folder, there are limited abilities to create or modify the shared folder system this is to ensure that documents are always created privately and then shared.

Managing groups

You can remove members, invite new members, and change their role within the group if you are a PI or a Lab admin in the group. Click on the link to the group in your profile, which brings up this page:

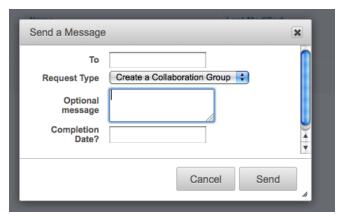


Collaboration Groups

Collaboration groups enable users to share records with anyone else on the system, not just your own group. They're set up as needed by the PI of the group.

The steps are as follows:

1. Ask your PI to send a 'Create Collaboration Group' request to the PI of the LabGroup that contains the user(s) you want to collaborate with:



The recipient, if he agrees, will result in the creation of a CollaborationGroup. The PIs can initially add in the users who can collaborate, and delegate group administration if need be. Group details appear in your Profile page:

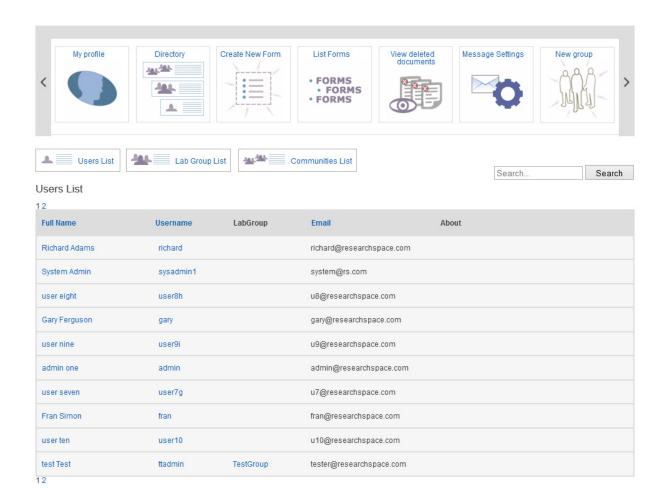


Pls of CollaborationGroups can invite new Pls to join, or remove themselves from the group.

The Directory

The Directory is a listing of all individual users, all Lab Groups and all Communities on the system. It can be viewed by all users, and is located in the My RSpace tab and accessed using the Directory icon in the scrolling menu.

All users can browse or search all of the lists, and there are clickable link elements within each entry which can be used to access further information on that item.



Users List

The Users List displays by default when opening the Directory from the My RSpace menu and lists all the users currently registered on the system, giving their Full Name, RSpace Username, Lab Group(s), Email address and an optional user-entered description. The list is initially ordered alphabetically by Surname, but can be re-ordered by Username or email address using the clickable column headings. The search box will search the listings for any entered term and will return a list of only entries containing a match.

Clicking on a user's Full Name or Username in the Users List will open that user's profile for viewing. Alternatively, a user in the list can be contacted either within RSpace by sending an RSpace message to their listed username, or by using their listed email address to send an external email.

The Lab Group and Community lists are accessed from the main buttons at the top left of the page:

Lab Group List

The Lab Group List shows all Lab Groups (but not Collaboration Groups, which remain private), and users can see which Community each group belongs to and can identify and contact its PI. Once again, the list can be searched using the search box, which will again limit the list to entries which match the entered term. Clicking on a Group Name in the list opens a page of information about the group including a list of its members.

Communities List

Communities are the top level administrative unit in RSpace containing a set of groups, and this table displays the current communities by name. This list provides users with access to the Administrator or Administrators of each Community, who can be contacted via their profile.

Notifications and messaging

First of all, some terminology:

Notifications are generated by the system (RSpace) in response to system or user-initiated actions.

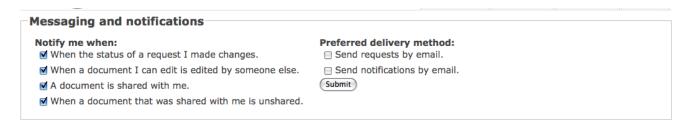
Messages are free-form communications, initiated by a user, to one or more recipient users. **Requests** are a specialized type of message, initiated by a user, requesting a particular action to be completed by its recipients.

Communication is a general term referring to any of the above types.

Messages and notifications can be viewed either in the dedicated 'Messaging' section or via the message icons available on some pages.

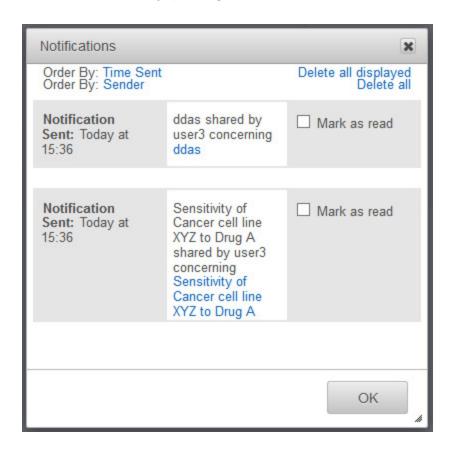
Notifications

A user can opt to receive notifications about particular events that may interest them. To do this, go to **My RSpace>Message Settings** and select the checkboxes on the left. This list of actions will be added to in future releases; currently you can elect to receive notifications when someone shares a document with you, when a document you can edit is edited by someone else, and when a request state changes.



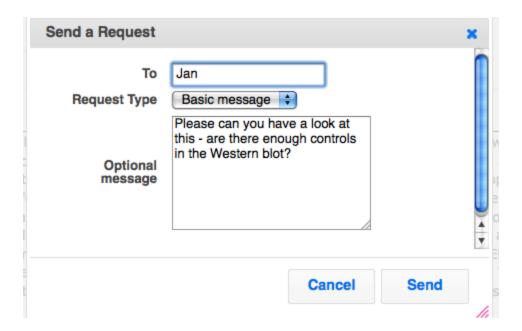
Currently, for notifications to work, a group needs to be set up, and each user in the group needs to opt in to receive the notifications. An icon appears in the toolbar when you have new notifications:

Clicking on the icon opens up a list of new notifications, with links to the relevant document. Notifications are paginated and can be ordered by time or by user. Notifications can be dismissed individually, per page, or all at once.



Messages

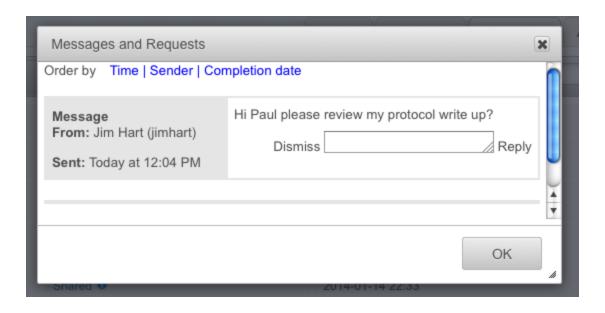
Simple messages can be sent between RSpace users. A message is sent when the 'Basic message' type is chosen as the request type.



New messages appear as in the image below:



and when this image is clicked, a list of messages appears:

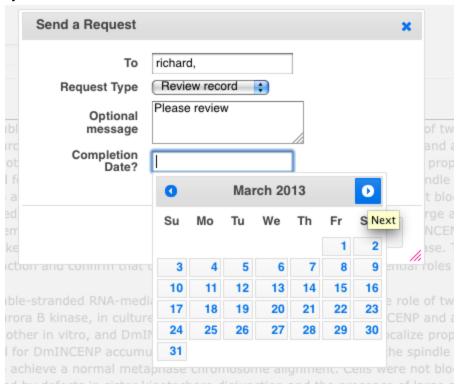


Messages can be replied to, or dismissed.

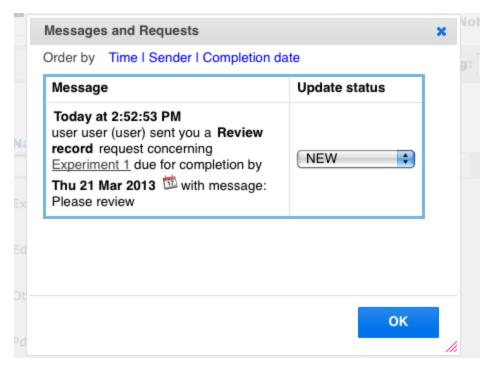
Freeform messages can be sent to any user on the system from the 'Messages' button in the Workspace toolbar, as displayed above:

Requests

Requests are a specialized form of message that require an action to be performed by its recipients. Optionally, they can be assigned a completion date, i.e. when you want the task done by.



Requests appear in the message listing. The recipient of the request can update its status; accepting, rejecting, or marking it completed, along with an optional comment. If the request has a completion date assigned to it, then they can download a .ics file to their default calendar by clicking on the calendar icon. We would be interested to hear about further requirements for integration into lab workflow or calendar systems.



A sender of a request can keep track of the requests they've made in the Messaging section of RSpace:



and can cancel the request if no longer required.

Roles and permissions

The permissions system can configure access to records based on several constraints:

- Ownership or group membership.
- The template type of a record.
- Properties of a record such as its name, id, creation date, etc.
- A date range.

A user can acquire permissions from

- a global role
- group membership
- specific permissions granted by a group admin or RS admin

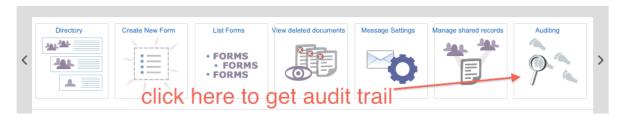
We have been developing this system, based on existing requirements, integrating permissions

into Record and Template access.

A new user profile page (accessible from MyRSpace->My Profile) shows basic user information and group membership details.

Audit trail

In RSpace most actions are logged. These actions can be searched by using the audit trail search interface available from the MyRSpace top-level menu:



The search interface capabilities depend on your role:

- Regular users can search over their own activities
- PIs can search over the activities of their group members
- Community admins can search over the activities of all groups in their community
- Sysadmin can search all activities.

Here is the search interface that a user sees:



You can filter by date range or action, and get a list of results with links to the relevant resources. In 0.18, we are limiting activity search to actions related to records; we can extend this if need be to include actions on users, groups, communities and messages.

Archiving and export

We are developing an archive/ export feature to enable export and re-import of records to/from RSpace. You can export one or more records from the Workspace by selecting the checkbox and clicking 'Archival'. Currently this is a prototype; we welcome feedback for further suggestions. After exporting, the archives are available for download and include information

associated with a record - attachments, images, sketches etc.



All versions of a document can be archived, providing a permanent record of the revision history of the document.

Import of archives back into RSpace

Currently, import of an archive will add all records as new records back into RSpace. To do this, navigate to the MyRSpace tab and then on 'Archiving' button to upload a previously downloaded zip file. After uploading, you will be redirected to the Workspace page which will show the new records. The current behaviour is that:

- The person importing will become the new owner of the imported records.
- Records are imported as 'new' records and will not overwrite existing data.
- Groups and permissions are not maintained between export and import (for example, you might be importing into a new installation where those groups and users do not exist, or importing an old archive from a long time ago, and those users are no longer registered)

Import From An Archive

Use this facility to import a previously exported archive of work into Research Space.

This process imports from a single file Zip archive that has been created in Research Space and has not been edited outside the application. Importing creates new Research Space using the archived files and folders.

Find your file	If correct file selected	Click to import
	Browse	Import

System Administration - the System Tab

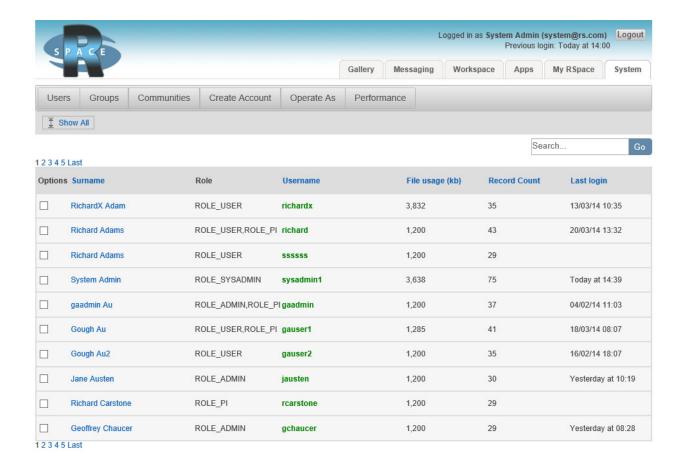
The System Tab provides administrators with tools to manage individual users, to manage groups and communities, and to monitor and troubleshoot user activity. Only RSpace Administrators and System Administrators can access this tab, and RSpace Admins' actions are limited to affecting only their own Community.

Users, Groups and Communities

The System tab has individual toolbar buttons for Users, Groups and Communities. Administrators can view current lists under each heading and can then enact changes on selections from the lists.

In the 'Users' section, System Admins can see all users on the system, while RSpace Admins see all users in their Community. 'Show All' removes list pagination to allow easy printing of this list. Information is displayed about each user in their entry - basic role and identifying information, as well as system specific data such as space usage, record count and last log in. There is also a link to their RSpace profile.

Administrators can enable or disable users in this list, which defines whether they appear or not in the My RSpace Directory listings.



Enable /disable user accounts

To **disable** a user account, select the user via a checkbox and click the 'Disable' button. The user will no longer be able to access their account and will be highlighted in red in the user table. To **enable** a user, select the user via a checkbox and click the 'Enable' button. The user will now be able to access their account and will be highlighted in green in the user table.

The Groups and Communities sections also provide listings and also management capabilities by permission, such as for creating new LabGroups or Communities.

Creating communities

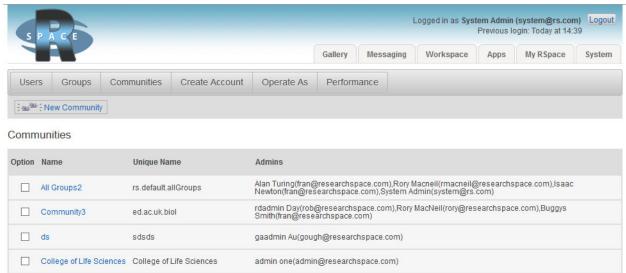
Communities are 'groups of groups', reflecting higher levels of organisation within an institution, such as departments or schools. They are entirely optional, and for many smaller deployments you might never need to use them. They are mainly useful to help spread the admin load of the sysadmin, by enabling him to delegate to community administrators.

Communities are only used to organise LabGroups. Collaboration groups may span across communities and are outside the scope of communities.

As a sysadmin user, you can view the list of communities by clicking on the 'Communities'

button.

There is always a default community to which all new LabGroups belong by default, called 'rs.default.allGroups'

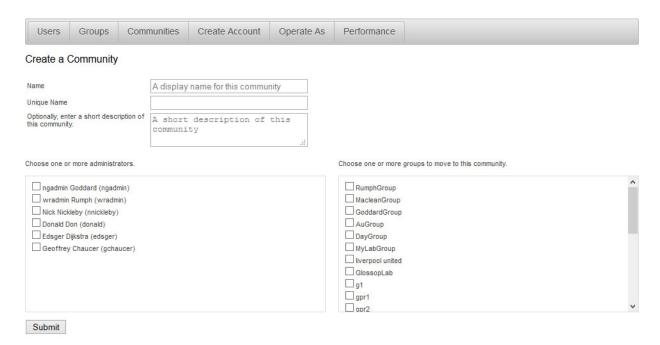


To create a new community, click 'New Community'.

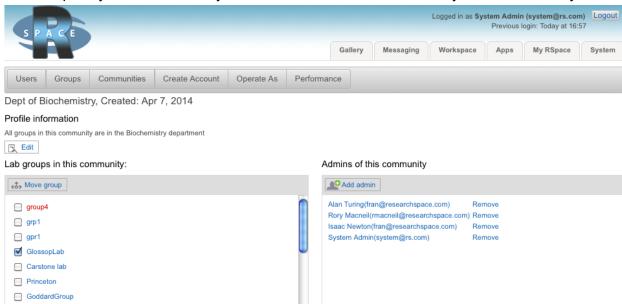
Each community needs to have an administrator - someone to manage groups and new users. The list of available administrators is shown in the bottom left panel. If there are no available admins, you'll need to go back and create a new RSpace admin user account first (go to 'Create Account').

On the bottom-right panel is a list of LabGroups that you can add to this community. If you're not sure which groups to add, you can edit this list later.

Once you've created a community, the admin is notified by email. The RSpaceAdmin will have similar powers to a sysadmin, but restricted to the users and groups within the community.



To subsequently edit a community, click on the link to that Community in the community list



Here you can edit the community profile, move groups between communities, and add or remove community admins.

Create User Accounts

The 'Create Account' toolbar button opens a section where new users can be created individually or by a batch upload. Default basic users, Pis (and their new associated LabGroup) and administrators can be individually created using the top level buttons and completing the forms which are then displayed.

New Users can be attached to a LabGroup as they are created, or can be created with no LabGroup affiliation which will mean they will not be able to share and collaborate with other users until invited to join a LabGroup by its PI.

Creating a new PI will also require the creation of a new LabGroup with the PI as the sole initial member - this LabGroup creation element will be included in the New PI form. The new PI can then invite members to join their LabGroup or the Admin can create new users and place them into the group.

New RSpace Admins can be created both attached to a Community or as an unattached Admin. Admins who are created without being initially attached to a Community will have no editing powers until they are connected to a Community, which they can then administrate. Once RSpace Admins are administrators of a Community, they can manage users and groups within that Community, but have no powers outside it.

System Admins alone can create new System Admins - the new System Admin will have identical system-wide administrative powers and permissions as the original System Admin, including management of Communities.

Via the Batch User Registration button, Sysadmins can upload a CSV file of user information to pre-register users. This file should be in the syntax: FirstName,LastName, email, Role (one of ROLE_USER or ROLE_ADMIN), username(optional), password(optional). If usernames and passwords are not supplied, the system will generate them automatically from the other information supplied.

Operate As

An admin can operate as a user in the system and can run 'as' that user, with the same permissions as the user. This is useful for support, or investigating a problem.

To operate as another user:

- 1. Click on the 'Operate As' button.
- 2. Start typing the name or email of the person you're wanting to operate as, and use the auto-complete to choose the user.
- 3. Then, re-enter **your** password.
- 4. ResearchSpace will now reload showing the workspace of the impersonated user. Note that the background header has changed colour to remind you are logged in as another user (see screenshot below).
- 5. To return back to your admin role, click the 'Release' button in the page header. Please note that, for auditing purposes, if you edit a user's record whilst operating as that user, the revision history will still record this change as though it's been made by you (the admin).



Operate As another user.

Signing and witnessing process description.

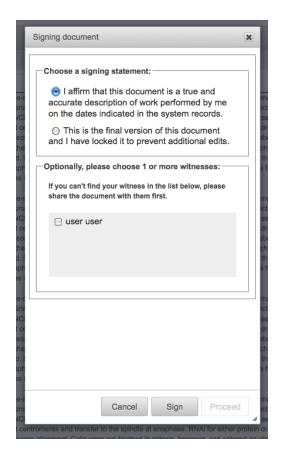
This section describes the current functionality for signing /witnessing.

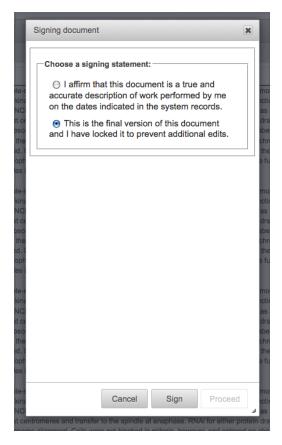
Signing process

In order to activate the signing process, a user needs to create and edit a document. To choose witnesses, you need to be part of a group - your PI at least will be able to act as a witness, plus any people you have shared your document with.

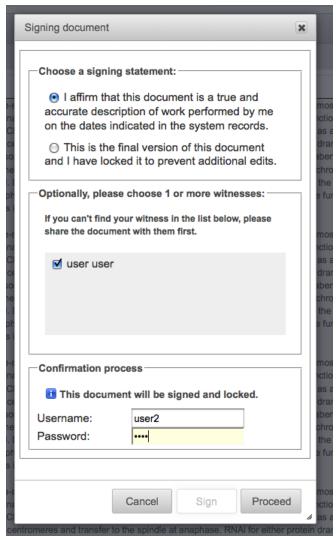
After sharing the document, you can sign the document with some options.

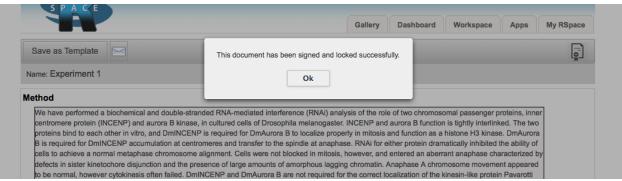
Open the document and click on the "Sign" button. This "Sign" button should only appear if you have permission and the document hasn't been signed previously.





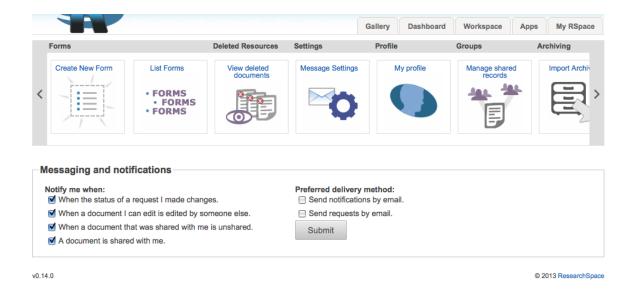
If the first statement has been selected RSpace displays the list of witnesses, otherwise it is hidden. In this example, select the first statement and check "user" from the witnesses list. After that, click on "Sign", type your username and password and click on "Proceed".





The signing process has finished successfully!

If you want to receive notification about the witnessing process we should check options in the "Message Settings" section of My RSpace.

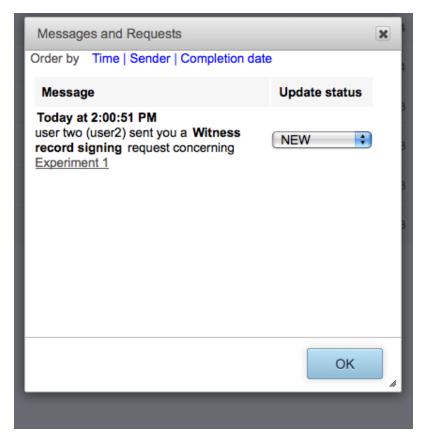


Witnessing process

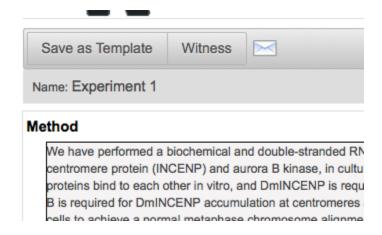
If you have been invited to witness a signature, you will receive a message informing you of this.



Open the message:

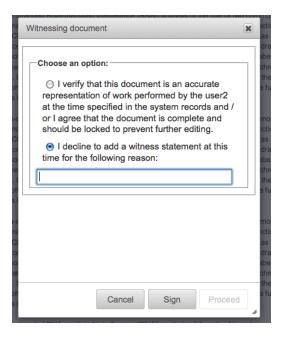


After clicking on the link to the document, we reopen the document which has been signed. And the "Witness" button ONLY appears if the document has been signed, the user is a selected witness and the document hasn't been witnessed previously by that user.



After clicking on "Witness" button a new dialog appears with two options:





After checking one of the options, we click on "Witness" button and the witnessing process finishes, sending a notification to the original signer.



After clicking on "Proceed" button, we receive a message about the witnessing process and the "Witness" button should disappear and the original signer should receive a notification that the has been witnessed!

