## Odds and ends

• Security in Allium is several layers deep. The first layer is obscurity; someone who doesn't have access to privileged content won't even know it's there.

The second layer is the web layer, which limits access to privileged pages — if you aren't authorized to upload documents, for instance, then you won't be able to get to the pages that manage documents.

The third layer limits access to the database. If an attacker should get past the web layer, then the database layer will catch this and deny access.

- Allium dovetails with other technologies such as email. In particular, it gives instructors the option of allowing students to send anonymous feedback. The goal is to give students a way to voice concerns before the semester is over. This feature is disabled by default, but I strongly recommend that you enable it.
- If you would like to have a page for a seminar that you are organizing, the Chair will create a new seminar page for you and give you the privileges you need to maintain it.

In addition from the information that you would expect on a seminar page (description of the seminar, list of talks and abstracts), Allium also lets you generate email announcements of upcoming talks. This feature is intended to work in conjunction with a mailing list for the seminar (but it doesn't require a mailing list).

- If you would like to limit the visibility of documents to a group of people that is not defined by one of the current roles, an administrator can easily add more roles for fine-tuned access. For example, one might introduce a role for instructors teaching a certain class.
- Allium is designed to minimize the number of steps it takes to get things done. At every point, Allium anticipates where you want to go next and takes you there. Please let me know if you feel that the routing could be improved.

- Many objects in Allium have an (optional) expiration date. When a document expires, it is not deleted but merely rendered invisible to anyone except the owner and the administrators. You can revive an expired document by changing the expiration date.
- After you write and polish a blurb for the main page, you need to contact the Chair to have it activated.
- If there is any content that you feel should be accessible from the navigation bar, you can create a page with the content you want and ask an administrator to link to it from the main page.
- If you are interested in technological issues, take a look at the HTML generated by Allium and see whether you can spot subtle features like handicapped accessibility, anti-spam measures, scaling, etc. Resize your browser window and see how the page accommodates the new dimensions. Print a page and how the print layout differs from the screen layout.

## Administrative issues

Administrator privileges include read/write access to everything in the database, including access to the system of users, roles, and rights that governs access to the site. The administrative view should be largely self-explanatory, but a few warnings are in order:

- The current set of rights is the result of much thought. You probably want to leave it alone unless you really know what your are doing.
- Chances are that any new role you create will only be for visibility purposes and won't need to be endowed with any rights.
- When assigning roles to new users, be careful not to be too generous.
- Don't log in with root privileges unless you intend to do administrative work.

# Allium User's Guide

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Experimentation is the best way to familiarize yourself with Allium — click away and see what happens! Don't worry about making mistakes; Allium will catch mistakes and give helpful error messages, and several layers of security features prevent damage to the site.

## A self-guided tour

This section assumes that you have an account with faculty privileges. If you have other privileges, you should still be able to get the gist of it.

- Point your browser to your Allium site. The CCNY Department of Mathematics, for instance, can be found at http://math.sci. ccny.cuny.edu/. Any popular browser<sup>1</sup> will do. Allium requires no skills beyond basic interaction with your browser.
- 2. Refresh (or reload) the page a few times and notice that the blurb on the right changes. Blurbs are user-generated content faculty can add their own blurbs if they wish.
- 3. Click on a few links and notice that courses, sections, and instructors are linked up neatly. Allium automatically generates these listings from spreadsheets.
- 4. Look at a few personal pages and notice what you see (email address, office extension, etc.)

<sup>&</sup>lt;sup>1</sup>I'm testing Allium with Firefox, Safari, Opera, Lynx, and Internet Explorer. If you're using Explorer, though, you may want to consider switching to Firefox (http://www.getfirefox. com/). Firefox is free, and you'll be rewarded with better security, suppression of pop-up windows, and many other benefits.

as well as what you *don't* see (e.g., home phone numbers).

- 5. Log in with your username and password. Before you do anything else, please click on "Settings" and choose a new password.
- 6. Look around and notice that your view has changed. You have more entries in the navigation bar on the left, and additional information may show up (for instance, you should now be able to see home phone numbers).

This is a key feature of Allium — your view changes according to your privileges. In particular, you don't have to go to a separate page to see privileged content; each page is aware of the sensitivity of its contents and adjusts its appearance accordingly.

 Go to your personal page (you can click on your username under "Session" to get there) and notice that a link labeled "Edit" has appeared. Click on it and update some of your personal information if you wish.

This is another key feature of Allium: There are no separate pages for administrating the site. If you are authorized to modify the content you are looking at, you'll see a link labeled "Edit" nearby.

8. Click on "Documents" in the navigation bar. Click on "New document" and upload a picture of yourself. Note, in particular, that you can assign a visibility to the document — you can make it available to the public, or faculty only, as well as a number of other choices. Make your picture available to the public.

This is yet another key feature: Users have roles (such as staff or faculty), and roles bestow rights upon users. Most objects (such as documents and pages) have a visibility property that determines which role gives read access to the object.

 Upload two more documents (maybe one pdf document that you'd like to make available to your students, and another pdf document that you'd like to share with faculty). Choose a visibility of public and faculty, respectively.

- Go back to your personal page and click on "Edit." Now the picture you just uploaded should appear as an option under "Picture." Choose this picture and save your change. Now your personal page should show your picture.
- 11. Under "Documents" on your personal page, you should see a selection consisting of all the documents you just uploaded. If you select a document and click on "Add document," a link to this document is appended to your personal page. Add both pdf documents.
- 12. Log out, go back to your personal page, and notice that only the public document is visible.

This illustrates one layer in the security scheme of Allium — not only is the public barred from accessing the other document, it also receives no indication that the privileged document exists.

13. Log in again and click on "Pages" in the navigation bar. This part of Allium allows you to create and maintain your own web pages.

Click on "New page." Under "Body," you can type in the content of the page as plain text, and Allium will deduce the appropriate formatting from the structure of your text (see the section on structured text). Any text that you type into a text area (such as your biographical and research sketch) undergoes this automatic conversion to HTML.

- 14. Under "Hot Topics," you'll find a link to currently active discussions. Feel free to leave a comment if you like. If you'd like to start a new discussion, click on "Discussions" in the navigation bar and follow the usual links.
- 15. Feel free to experiment! Write a blurb for the front page, update your biographical and research sketch, enter a few publications, etc. Have fun, and don't hesitate to let me know if you have any questions or comments!

#### Structured text

Allium uses *Markdown*<sup>2</sup>, a tool that turns structured text into HTML<sup>3</sup>. If you know HTML, you can ignore Markdown and type in HTML (only type in the part between <body> and </body>; Allium will supply the boilerplate). You can even mix structured text and HTML.

**Headlines** are lines beginning with a number of pound signs. For example, the lines # Huge Headline and #### Tiny Headline generate headlines of different sizes.

**Paragraphs** are separated by a blank line.

Links are of the form [label](address), e.g., [Google](http://www.google.com/). To link to an image, add an exclamation mark to your link, e.g., ![my pic](/docs?name=mypic.jpg).

If you want to link to objects within Allium, you can use the following shorthand notation:

**People:** [Joe Bak] (/people?name=Bak)

Pages: [Links](/pages?name=links)

**Documents:** [Exam] (/docs?name=exam.pdf)

Courses: [Math203] (/courses?name=20300)

Email addresses use angle brackets: <x@y.org>

Lists are expressed the way you would in an email message, with each list item beginning with an asterisk or a dash. Ordered lists use numbers followed by dots.

Emphasis is added by enclosing text in asterisks.

**Quotes** are expressed email-style, with a > character at the beginning of each quoted line: > Quoth the Raven, "Nevermore."

Allium screens any user-generated content for potentially malicious code to prevent potential attacks, and it obfuscates email address to throw off spambots.

<sup>&</sup>lt;sup>2</sup>http://daringfireball.net/projects/markdown/ <sup>3</sup>HTML: HyperText Markup Language, the language of the web; not entirely dissimilar to LATEX