

SSO and Identity Management:
What we did

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The University of Cambridge

100+ departments
32 colleges
40,000 users

“A loose affiliation
of warring fiefdoms”



Handy building blocks

- University Computing Service
 - that doesn't set policy
- User Administration Database
- Raven: Web Authentication system
 - including a Shibboleth IdP
- A 2008 UCS trial of Google Apps

What do we want?



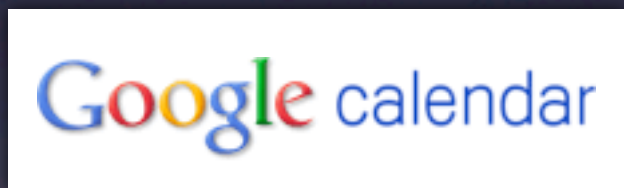
A Calendar!

Perhaps other things, later..

General Plan

- Google Apps for Education
 - but just Calendar
- Use cam.ac.uk domain
- Web SSO using Raven
- Automatically available to everyone
- Minimum ongoing staff involvement
- Rollout September, for October, 2010

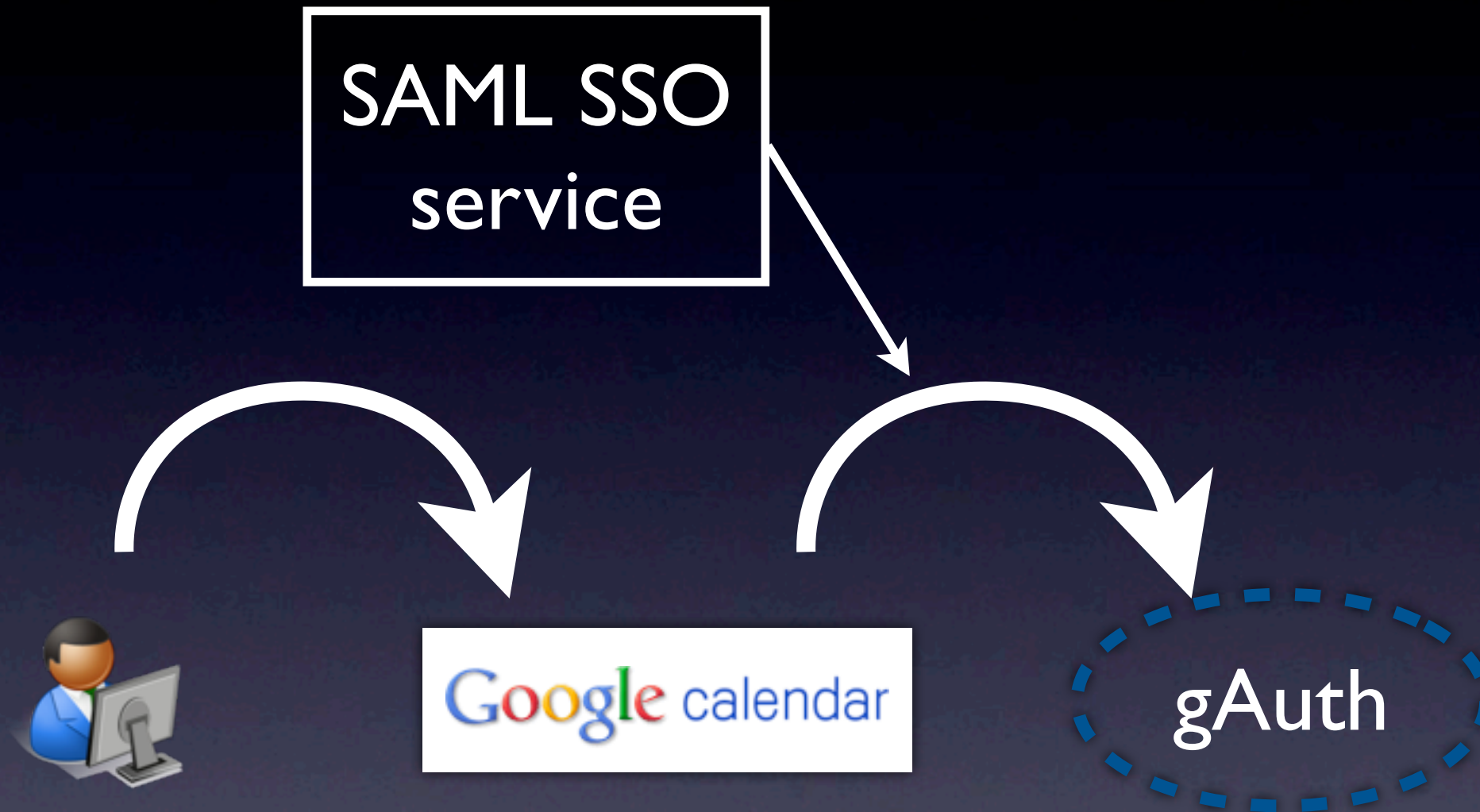
Web authentication



Web authentication



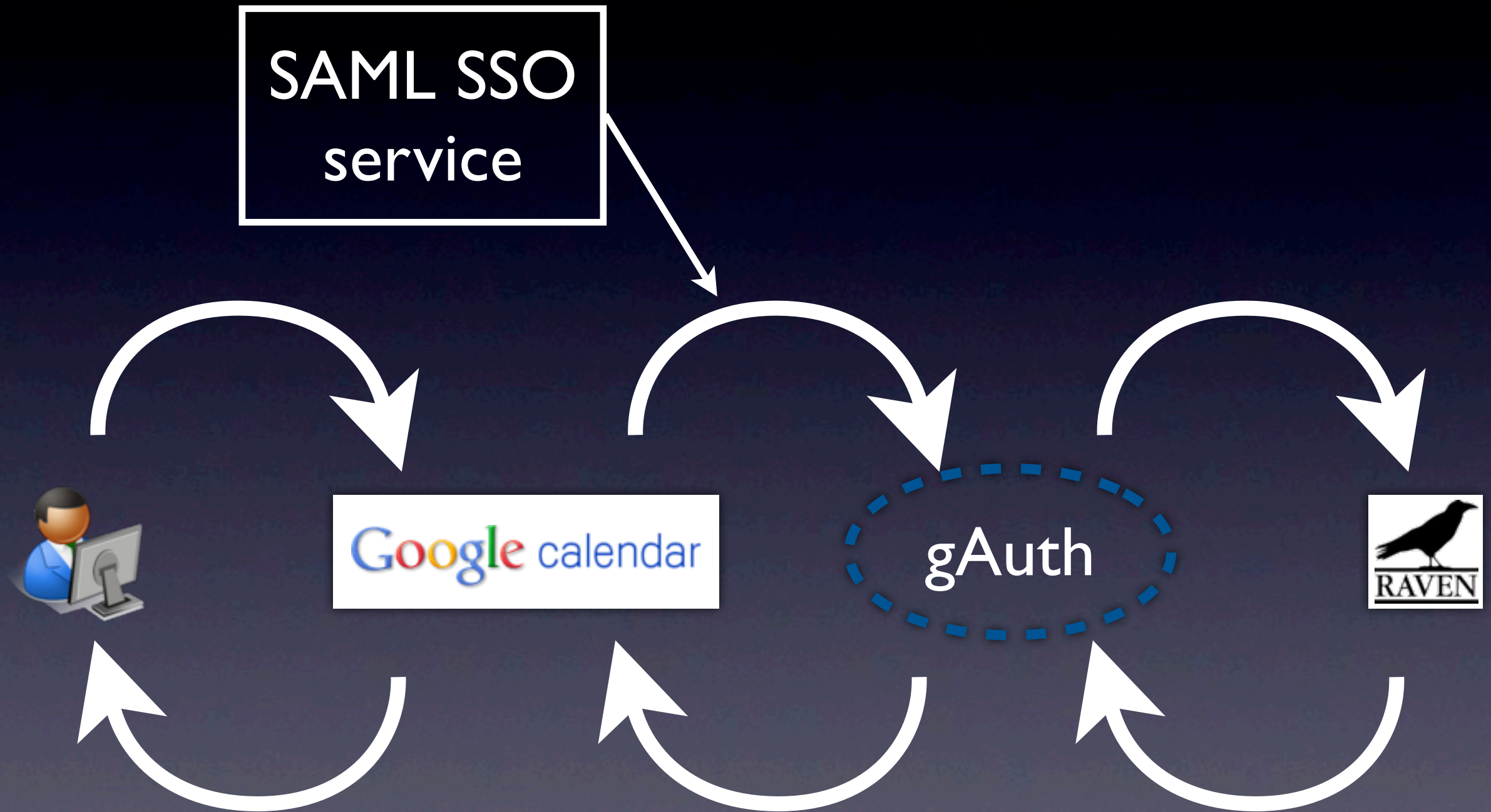
Web authentication



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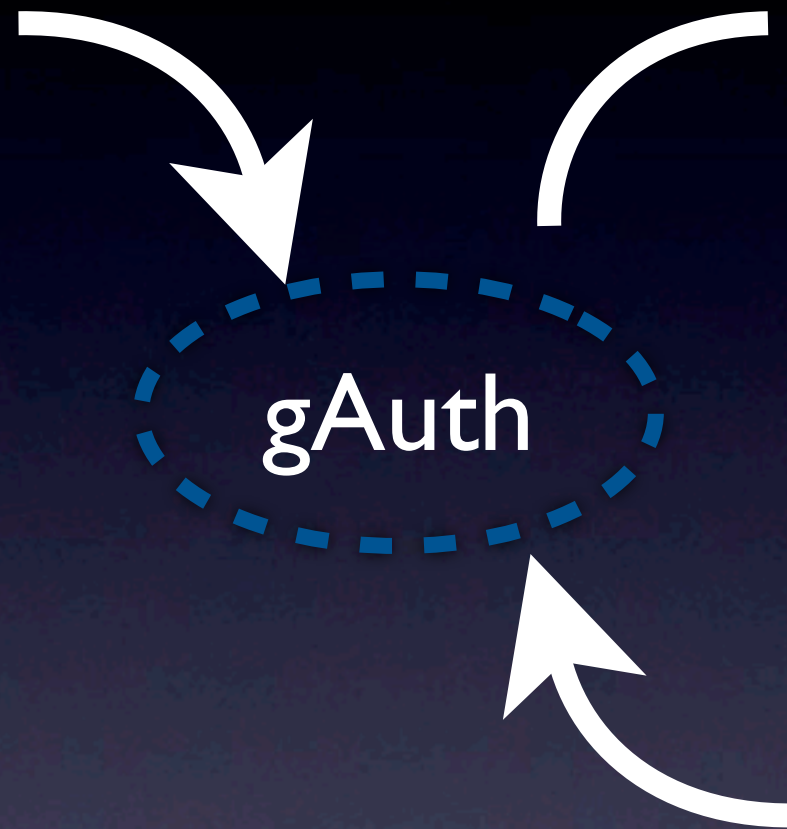
gAuth

- Based on Google example Java SAML code
 - SAML, but not Shibboleth
- Java Webapp, runs in Tomcat
- Also displays T&Cs page, and email reminder first time through
- And some other things ...

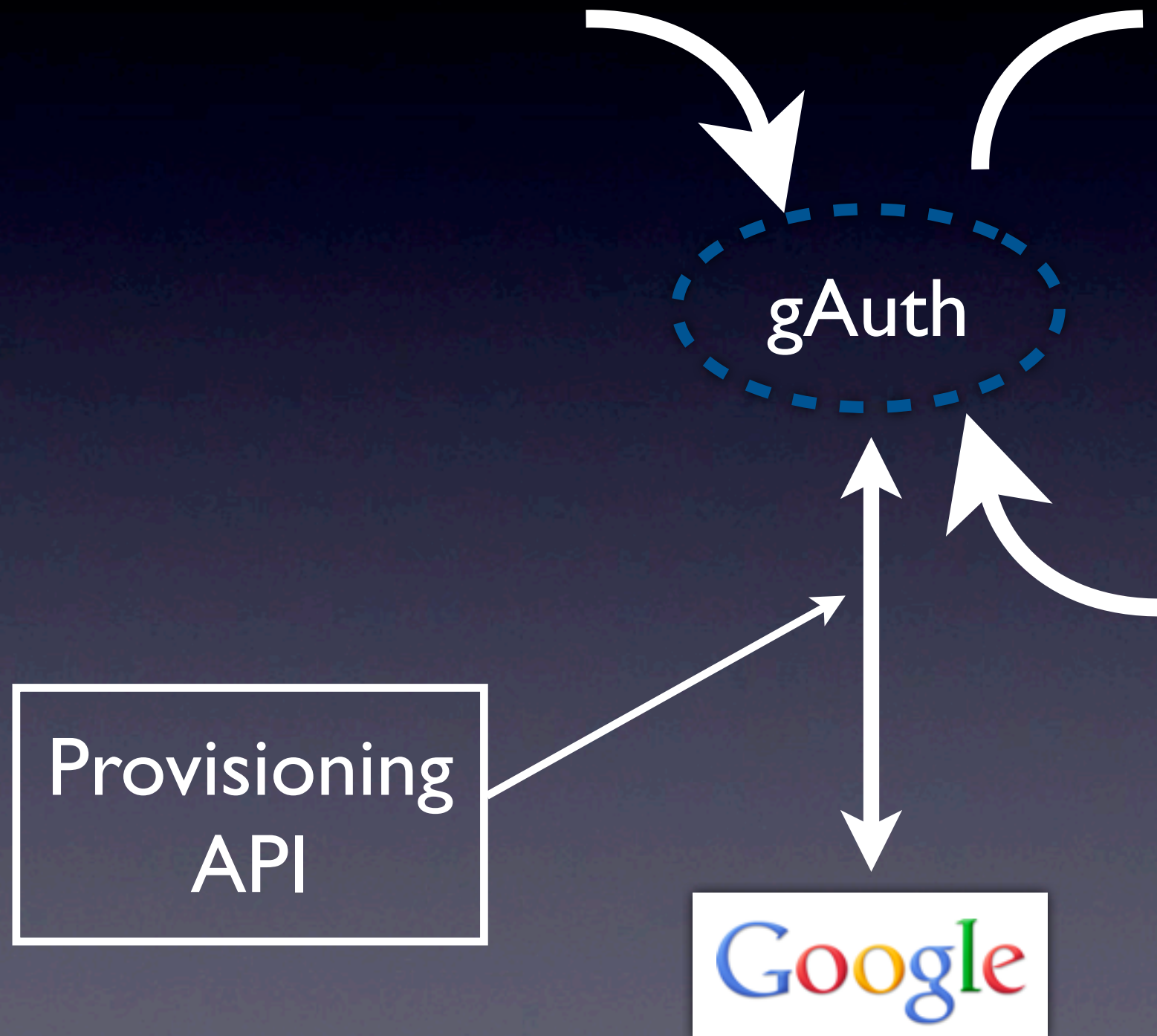
Account creation



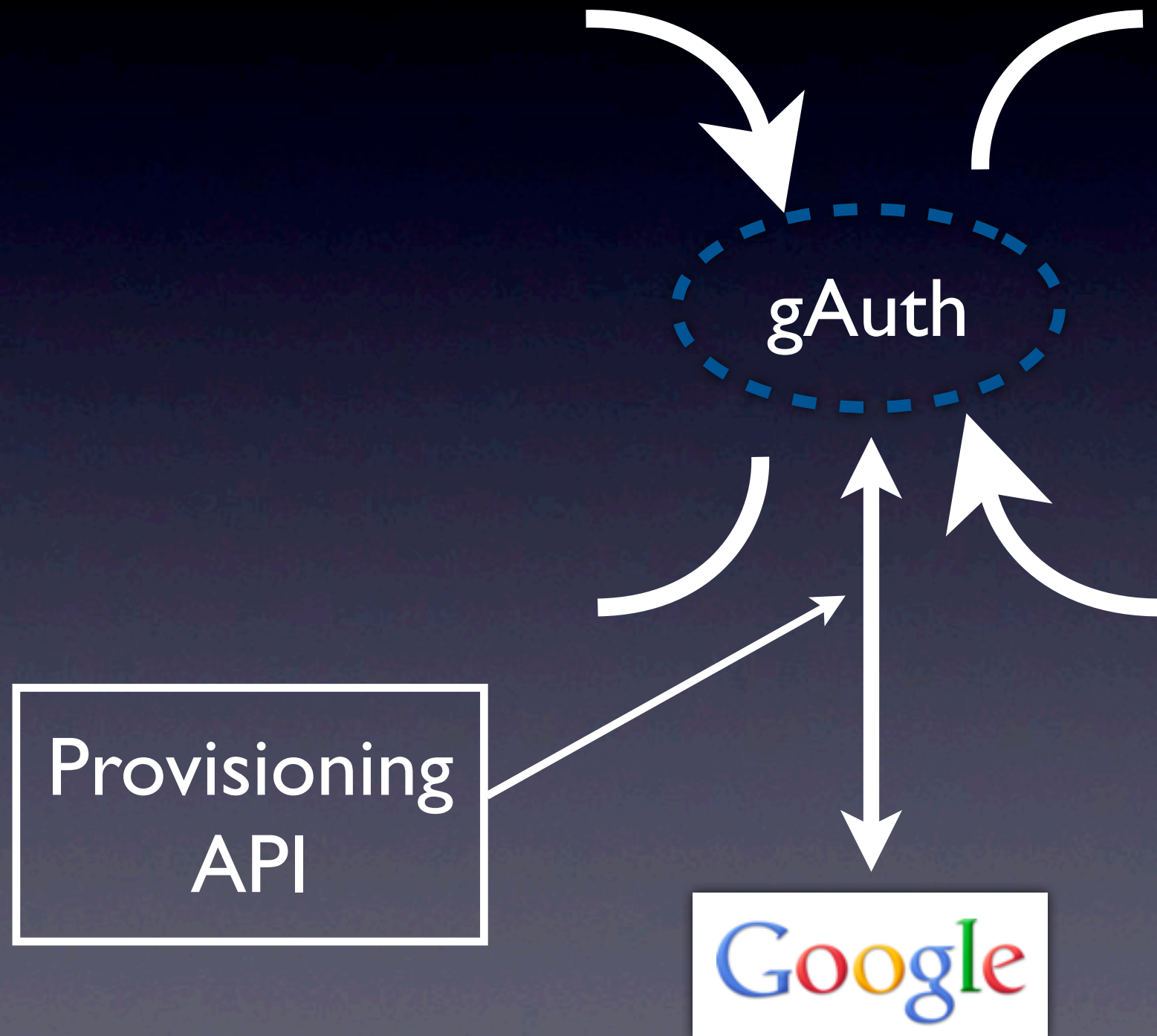
Account creation



Account creation



Account creation



Non-web authentication

The screenshot shows a web browser window with the address bar displaying `https://gauth.csx.cam.ac.uk/token`. The page header includes the University of Cambridge logo and the acronym 'UCS'. A search bar and navigation links for 'Contact us', 'A-Z', and 'Email & phone search' are visible. The main content area is titled 'Computing Service' and 'Google Apps @ Cambridge'. The section 'Token Management' explains that web access uses Raven for authentication and provides instructions for managing tokens. It shows a user's username as `[redacted]@cam.ac.uk` and their token as `rjho[redacted]`, noting that the token consists of 16 lowercase alphabetic characters. A 'Reset my token' button is provided for users who have lost or stolen their token. The footer contains copyright information for 2010 and links to 'Raven', 'Service schedule', 'Accessibility', 'Privacy', and 'Job vacancies'.

Google Apps @ Cambridge

UNIVERSITY OF CAMBRIDGE UCS

Search

Contact us | A-Z | Email & phone search

Computing Service

University of Cambridge > Computing Service > Google Apps @ Cambridge

Google Apps @ Cambridge

Token Management

Web access to Google Apps @ Cambridge always uses Raven to identify people. You can change your Raven password at <https://raven.cam.ac.uk/auth/account/#cpwd>. This will affect everything you access via Raven.

Some non-web access methods (e.g. to iCal feeds) need a separate username and authentication token (Google call this a password) which you can manage here.

Your username is:

Your token is:
(16 lowercase alphabetic characters)

If someone else knows what your Google Apps @ Cambridge token is, or if something on which your token is stored is lost or stolen, then you should change it. All programs using the old token will need to be updated with the new one.

[Reset my token](#)

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For help on this service please contact the [Help Desk](#).

[Raven](#) | [Service schedule](#) | [Accessibility](#) | [Privacy](#)
[Job vacancies](#)

Non-web authentication

Google Apps @ Cambridge - x
https://gauth.csx.cam.ac.uk/token

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Search
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Computing Service

University of Cambridge > Computing Service > Google Apps @ Cambridge

Google Apps @ Cambridge

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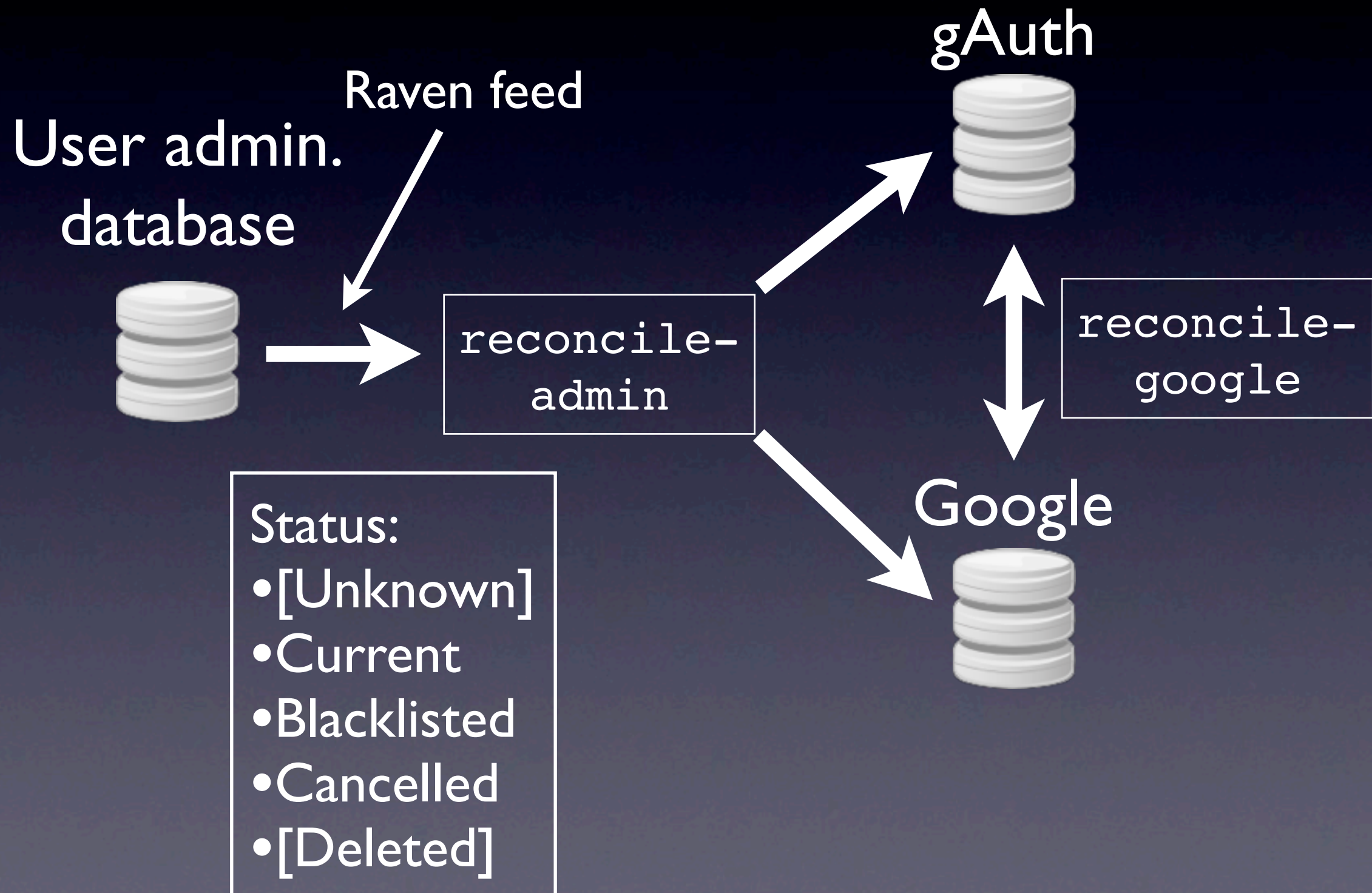
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Account management

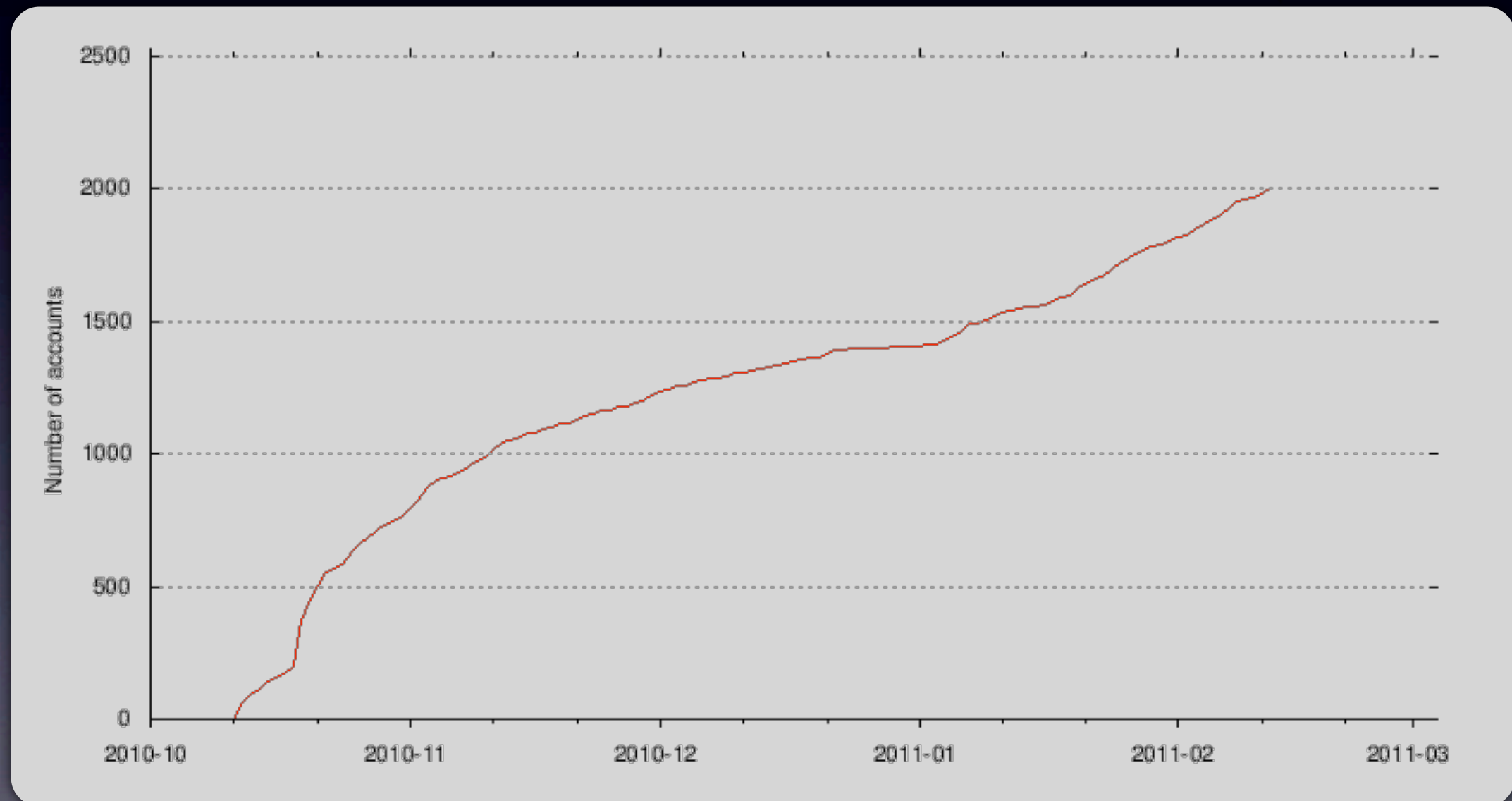


Implementation

- gAuth: Java webapp in Tomcat
- Batch processing: Java run by cron (!)
- (Live/standby) pair of VMs on Xen cluster
- Local Postgress database; SlonyI replication
- Manual service address transition

Deployed October 2010

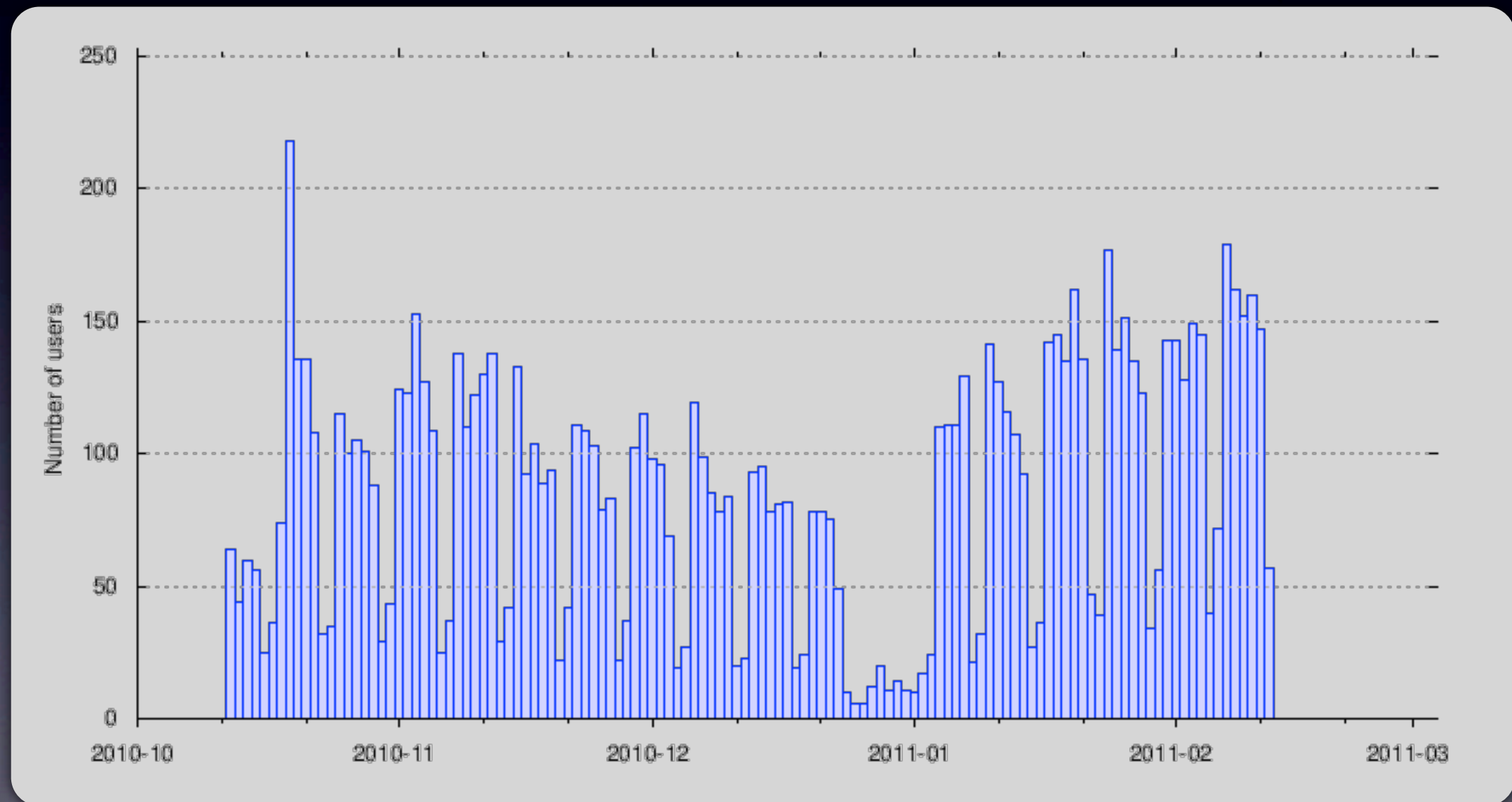
Number of Accounts



<http://www-uxsup.csx.cam.ac.uk/~jw35/google-usage/>

Deployed October 2010

Unique users per day



<http://www-uxsup.csx.cam.ac.uk/~jw35/google-usage/>

Plain sailing?

- Pre-existing cam.ac.uk domain
- Conflicting accounts
- ‘g’ ‘o’ ‘o’ ‘g’ ‘l’ ‘e’ not allowed in domain names
- iPhones
- Support. Don't forget the support

Any questions?

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