CRSIDs and email addresses

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1 Introduction

The Computing Service's Common Registration Scheme provides users with identifiers that are recognized by many computer systems in the University. CRSIDs are used as login identifiers and often as the local part (before the "@") of email addresses. In the following sections I list the advantages of constructing email addresses from CRSIDs, especially in large mail domains like `@cam.ac.uk`. In the final section I note some of their disadvantages, and how we compensate by supporting "friendly name" addresses in department and college mail domains.

2 Advantages of CRSIDs

Personal CRSIDs are formed from the user's initials with a serial number appended. This construction has the following benefits:

2.1 Stable

CRSIDs are stable in two complementary ways.

Firstly, once a CRSID has been allocated to someone it is never re-allocated to anyone else. This has a big privacy benefit: a correctly addressed message sent to a CRSID email address will be delivered to the person intended by the sender (or to no-one if the recipient's account has been cancelled). It also has security benefits, since web services on the Internet often send password reminder emails, so control over an email address gives control over those web accounts.

Secondly, a user's CRSID does not normally change. Even when a person returns to the University we try to re-activate their old accounts, and in several cases we have done so after absences of more than 20 years. (There are exceptions to this rule, for example a user can change their CRSID when they change their name, or a returning user may be allocated a new one if we fail to match their details with their old account.)

Stability is especially important for email addresses that appear in print, because of the long lifetime of books and papers.

2.2 Fair

The same CRSID allocation scheme applies equally to all users. This helps with stability, since a user's email address does not change as their seniority or affiliation changes. One CRSID is about as desirable as another, so there is no arguing over which of two people with the same name is more entitled to a particular email address.

2.3 Scalable

Although our active user population is about 40,000 the CRS has to scale up to much larger populations because of the "no re-allocation" stability rule.

The CRS has been operating for over 20 years, though the identifier scheme dates back to the early 1970s. It comfortably copes with about 10,000 new identifiers every year, and a total of over 150,000 registered users.

The proportion of users with non-unique names rises as the population increases. About 9% of the active population has the same initials and surname as another user. Some names are shared by more than a dozen people. The proportion for all past and present users is over 18%, with some names shared by over 50 people.

2.4 Mnemonic

It is reasonably easy to remember the CRSIDs of your most frequent correspondents, because of the simple connection between their name and their CRSID.

They are more helpful than phone numbers in this respect. They are also more friendly than automated allocation schemes based on the user's affiliation that some other universities use.

2.5 Arbitrary

The numeric part of a CRSID is obviously meaningless, which discourages people from trying to guess email addresses and thereby mis-address messages. In this way they are like phone numbers.

The arbitrariness is clearly visible. Sites with friendly-name email address schemes must have rules to deal with name clashes, such as adding middle initials. These lead to arbitrary variation in addresses which is not obvious, and therefore makes the addresses less memorable and more prone to incorrect guessing. At these sites it is common for users with similar names to receive each others' email, which can lead to embarrassment or worse.

2.6 Automatic

CRSIDs can be allocated automatically. This is absolutely crucial for efficiently handling student admissions, when about 3500 accounts are created at once.

Friendly name addresses often require manual adjustment. For example, an automatic system would probably allocate me the "friendly" address ⟨`Frederick.Finch@ucs.cam.ac.uk`⟩ though I am usually known as Tony. Similarly, users from the Far East often adopt European names.

2.7 International

Email addresses can only use a limited character set, so it is not possible to spell foreign names correctly when they contain accents or are not written in the Roman alphabet. A set of initials is likely to be less grating to the user than an incorrect full name.

2.8 Un-gendered

Some users prefer not to unnecessarily reveal their gender by revealing their full name.

2.9 Brief

CRSIDs are short.

2.10 Unobtrusive

Most email software will show a correspondent's "display name" instead of their email address. Display names are for human convenience; they do not need to be unique and can be internationalized. Personal address books and institutional directories allow users to look up email addresses by name.

(This is not really a benefit of CRSID email addresses, but more an argument that tools exist to mitigate their disadvantages.)

3 "Friendly name" addresses

The disadvantages of CRSID-based email addresses are:

- They are cryptic, especially to those not in the know.
- They are difficult to communicate over the phone.
- The flat `@cam.ac.uk` domain gives no hints as to the user's seniority or affiliation.

Because of this, the Computing Service encourages departments and colleges to provide friendly name addresses in their mail domains. Addresses like ⟨`Tony.Finch@ucs.cam.ac.uk`⟩ are somewhat analogous to postal addresses in that they contain the user's name and location. They also provide some indication of seniority since they are not available to undergraduates, and often not postgraduates either.

Many users have multiple affiliations, typically a college and a department. They can have multiple friendly addresses which all deliver to the same inbox. They can send email using whichever address they prefer or which is appropriate for each situation, be it college or department business.

The Computing Service provides tools for colleges and departments to manage mail domains that run on the CS's systems. These tools make it easy for computer officers to set up personal email addresses for their users that deliver to each user's `@cam.ac.uk` inbox.

College and department domains have much smaller user populations than the central `@cam.ac.uk` domain. This greatly reduces the likelihood that they will have to deal with name clashes. They can also reduce the amount of churn by being restricted to staff, which makes manual address allocation more feasible.