



1 Introduction

1.1 DICE

The computing infrastructure in Informatics is undergoing significant change. The separate computing infrastructures of the departments and institutes which merged to form the School of Informatics are being replaced by a new single infrastructure for everybody in Informatics. This infrastructure is called DICE. At present it is based on Linux, which to all intents and purposes is a variety of Unix. You can find out more about the development of DICE at the DICE web site¹. This document tells you how to start using DICE. For further reading see the next document, Using DICE².

1.2 Our Internet Domain

Computers using the DICE infrastructure use the domain `inf.ed.ac.uk`. For example, a computer called `shortbread` would have a full name of `shortbread.inf.ed.ac.uk`.

2 Getting an account

To use DICE machines you will need a new password. You can collect this from your local user support person. Asking for it in advance might speed up the process; you can use the Support web form³.

The DICE public machine locations⁴ page tells you where to find a local DICE machine, if your normal machine doesn't yet run DICE.

3 Home Directories

You have the same home directory on all DICE machines. It can be found in `/home/username`. Extra home directories can be found in `/legacy` (for example `/legacy/dcs/home/dcsuser`).

¹<http://www.dice.informatics.ed.ac.uk/>

²<http://www.inf.ed.ac.uk/systems/usingdice.html>

³<http://www.inf.ed.ac.uk/cgi-bin/support.cgi>

⁴<http://www.dice.informatics.ed.ac.uk/deploy/pilotlocations.html>

4 Changing Your Password

As soon as you have logged in for the first time you should change your password from the default generated one. In order to do this use the `passwd` command. This will prompt for your old password and then for a new password. It will then prompt for the new password again, to confirm you typed it correctly, before making the update.

To make your password as secure as possible please use a combination of uppercase and lowercase letters, at least one number and at least one punctuation character. Do not use dictionary words in any language. A good way to get a memorable and secure password is to use the first letters of a phrase. For example, take the phrase "Always Look on the Bright Side of Life" and you get "alotbsol". Now shift a couple of letter cases, add a number and a punctuation character and you get "Al@tBso1". If you are changing your password and you get an error about your password not containing enough character classes then it is insecure and you should come up with a better one.

For a pleasant overview on why you need a strong password, how to make them memorable and links to lots of other examples of good passwords, see The Simplest Security: A Guide To Better Password Practices⁵.

5 Authentication and Ticket Expiry

Authentication (the process of proving who you say you are) in DICE is handled by **Kerberos**. You prove who you say you are by supplying a password (see above). When you have authenticated, Kerberos issues you with a *ticket*. This can be used automatically by many other services for authentication without you having to supply your password again. For example, once you have logged in you could connect to a Kerberised Informatics mail service without having to supply your password.

When you connect from one machine to another using SSH within Informatics your ticket goes with you, allowing you to use other machines in the same way as the one you logged into without having to supply your password.

⁵<http://online.securityfocus.com/infocus/1537>

Note however that not all services are Kerberised. For those that are not you will still need to supply your account password (or a service specific password) to authenticate.

Your ticket expires after ten hours. For the most part ticket expiry has little effect, and you can carry on working on your machine as normal. However, if you are using any Kerberised services (such as mail) after your ticket has expired you will get an error back the next time you attempt an operation requiring authentication.

In order to get a new ticket after expiry, you can either logout and login again, or you can use the **kinit** command to re-authenticate. This command will prompt you for your account password. To see if your ticket has expired, or to find out when it will expire, use the **klist** command.

For more information on **kinit** and on how to get your screensaver to run it for you automatically, see Using DICE⁶.

6 Email

6.1 Email for Staff

Informatics runs its own email service for staff. It replaces the old mail services for the `cogsci.ed.ac.uk`, `dai.ed.ac.uk` and `dcs.ed.ac.uk` domains. Read the Informatics Mail Service guide⁷ to find out what you must do to read your mail.

6.2 Email for Students

Students — undergraduate *and* postgraduate — have SMS mail facilities⁸ rather than Informatics ones. Mail can still be read and sent from Informatics machines, either using IMAP or via the SMS web interface.

7 Documentation

Most of the documentation for software on Linux machines is available either on the machine itself or on the internet. The `man` and `info` commands give access to a vast amount of information. The directory `/usr/share/doc` contains a large collection of documentation of various kinds. Most pieces of software have a helpful home page on the web, which you can find with the help of a good search engine.

⁶<http://www.inf.ed.ac.uk/systems/usingdice.html>

⁷<http://www.inf.ed.ac.uk/systems/doc/infmail.html>

⁸<http://www.inf.ed.ac.uk/systems/email/smsinf.html>

Basic information on using DICE machines is available on the Informatics Systems web page⁹.

The DICE web site¹⁰ has a selection of documents about the development of DICE.

8 Printing

Printing works from DICE machines to all the Informatics printers. However, your account may not have access to particular printers; contact user support if you want details. There is no need to specify a print host or a domain when printing.

9 Reporting problems

The computing support team will help if, for instance, you have a broken computer or buggy software, if you want to ask for specific software, or if you have deleted an important file.

You can contact the support team using the Support web form¹¹; the form also tells you, further down, where their offices are.

Note that the old email addresses `support@dai`, `faults@dai`, `help@cogsci`, `faults@dcs` and `support@dcs` will soon be phased out. Please use the web form instead.

9.1 Backups

Backup copies of your home directory are made regularly. At present the backup facilities vary slightly from site to site.

10 Web space

10.1 Personal home pages

All users will have access to personal web space. The mechanism will work in a similar way to the old DCS method: to get files on to your personal web space, create them in the directory `/public/username/web/` (*This path is still to be finalised*). Placing files there will make them available on your home page at URL `http://homepages.inf.ed.ac.uk/username/`, and this is the URL you should publicise.

CGI access will also be available for (*some*) users. Scripts placed in `/public/username/cgi/` (*Path to be finalised*) will be available on the web as `http://homepages.inf.ed.ac.uk/cgi/username/`.

⁹<http://www.inf.ed.ac.uk/systems/>

¹⁰<http://www.dice.informatics.ed.ac.uk/>

¹¹<http://www.inf.ed.ac.uk/cgi-bin/support.cgi>

10.2 Official Informatics pages

Currently, there will be no change to the current publishing mechanism for official School of Informatics pages, that is pages on www.inf.ed.ac.uk. Staff should continue to use CVS and their web publishing accounts to maintain these pages.

10.3 Legacy web pages

Legacy (old) web pages will continue to function, though you will be encouraged to migrate your pages to the new service. Your legacy pages will continue to be served from their legacy locations, which are for AI web pages [/legacy/dai/home/daiuser/public.html/](#), CogSci [/legacy/cogsci/home/cogsciuser/public.html/](#) and for CS [/legacy/dcs/public/dcsuser/web/](#).

11 Personal machines

11.1 Managed and self-managed machines

If you have an Informatics computer allocated to you personally (for example if you're a member of staff), you can choose to manage it yourself. (However, the network facilities for this are currently *only* available at JCMB.) Instructions on how to go about this are in preparation.

11.2 Using your own laptop

Any Informatics user can bring in his or her own laptop and connect it to the network — but before doing this, there are some important things to be aware of. (Again, the network facilities for this are currently *only* available at JCMB.) Instructions are in preparation.