



**Edinburgh
Regional
Computing
Centre**

User Note 29

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Title:

How to Register as a User of the Computer Services Provided by the ERCC

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Software Support
Category: n/a

Synopsis

This Note tells you how to register as a user on one of the ERCC computer systems. It describes the computer systems available so that you will be able to decide which one best suits your needs.

Keywords

Ada, Category of User, DAP, EMAS 2900, EMAS-3, FILESTORE, PSSE, UNIX, User Code, User Number, VAX/VMS

1 COMPUTER SERVICES PROVIDED

Local Network (Name EDNET)

The Local Network is a number of large and small computers linked together through data communications lines. If users have terminals which are wired into this network, they have access to any of the host computers described below. For details on how to access these hosts, get a copy of User Note 69 from the ERCC Advisory service.

EMAS 2900 (Hostname EMAS and BUSH)

The Centre operates two ICL 2900 computer systems running under the Edinburgh Multi-Access System (EMAS); a dual 2976 located at The King's buildings (Hostname EMAS) and a 2988 formerly located at the Bush Estate but now also located at The King's Buildings (Hostname BUSH). The present distribution of University and Research Council users between the 2976 and 2988 services is broadly as follows:

The 2976 supports:

- * a majority of all the University of Edinburgh undergraduate teaching load;
- * most science faculty departments;
- * users of the DAP (see below).

The 2988 supports:

- * users from the Universities of Glasgow and Strathclyde;
- * most Research Council users;
- * most non-science faculties;
- * a few science faculty users who require a large amount of file space.

Note that these services will close on 1st August 1987.

EMAS-3 (Hostname EMAS-A [and EMAS-B from early 1987])

During 1987 the Central EMAS services are moving from the ICL 2900 equipment running the EMAS 2900 operating system, to Amdahl 470 series equipment. The Amdahls run a new version of the EMAS operating system called EMAS-3, which has been specially developed for IBM 370 and XA architectures and equivalent computers. The user interface is slightly different from EMAS 2900, providing more modern facilities such as a hierarchical file store.

The Centre has already acquired the first computer, a second-hand Amdahl 470/V7, as an interim supplement to the overloaded EMAS 2900 services. It is again housed in the King's Buildings computer hall and is accessed through Hostname EMAS-A. Two further second-hand Amdahls (470/V8s) will be commissioned during 1987 to allow the complete replacement of the ICL computers.

The Amdahls have modern high capacity disc drives and shared tape mechanisms.

The Edinburgh ICL Distributed Array Processor (Name DAP)

The DAP is a special store module attached to the 2976 processors. It processes data in a different manner to a conventional serial processor in that it can perform the same task on many data items in the DAP store in parallel. The DAP achieves this parallel processing capability by means of a 64 X 64 matrix of processors or processing elements each of which may operate independently on its own local store. The DAP store is the sum total of the local store of all 4096 processors. Users who wish to discuss their potential use of the DAP for new or existing projects, or to refer to literature about the DAP, should contact John Blair-Fish in room 5401 in the James Clerk Maxwell Building (031-667 1081 ext. 2741).

Note that when the ICL 2900 machines are replaced in August 1987, no DAP service will be offered.

Network Gateway (Hostname PSSE)

This machine is a gateway from EDNET to British Telecom's packet switching service (PSS). Through this machine:

- * users on EDNET can access hosts on other networks around the world (e.g. DIALOG in California);
- * users can transfer files between hosts on EDNET and hosts on other Networks (provided both hosts have compatible File Transfer software).

VAX/VMS (Hostname ERCVAX)

This host offers a package based service for University users on a VAX 8500 computer.

The major languages provided are: FORTRAN, PASCAL, IMP77 and C. The languages MODULA, SIMULA and PROLOG are also available.

The main software packages available at the moment are: SIR, SPSSX, SAS, ORACLE and SCRIBE. Also available are:

- * LUSAS finite element analysis package;
- * DNA sequence analysis package, imported from Wisconsin University;
- * STADEN programs, more details of which can be obtained from Dr A. Coulson at the Department of Molecular Biology (031-667 1081 ext. 2723).
- * SCA, a statistical package supporting a wide variety of statistical analysis. For full details consult the SCA manual which is available at 1 Roxburgh Street.
- * DATATRIEVE, a data management tool for defining, storing, updating and displaying data.

For full details of the available packages, consult the ERCC Advisory service at The King's Buildings on 031-667 1081 ext. 2976.

FILESTORE (Hostname FSTORE)

The FILESTORE can be used to store files which do not need to be regularly accessed. For example, a file which is updated monthly could be stored on the FILESTORE and copied back to EMAS 2900 or EMAS-3 when needed. Files can be moved between HOST computers and the FILESTORE over EDNET and between FILESTORE and micro computers using the XTALK communications package.

Ada Service (Hostname ADADG)

The Data General MV4000 computer with the Rolm Ada compiler and Ada Development Environment is now offering a service, both via directly connected terminals (at present located in Room F5 at 59 George Square) and via EDNET and hence also JANET and PSS. Users or organizations wishing to know more about this service should contact Veronica Sweeney at 59 George Square (031-667 1011 ext. 6518 or 2300).

Central UNIX Service (Hostnames ITSPNA, ITS63A, ITS63B)

The Centre runs a full UNIX service on a powerful Gould PN9080 system and on two GEC Series-63 systems. This combined resource represents about 16 Million Instructions Per Second (MIPs) of computing power. Although 90% is for use by the IT School, the remaining 10% which is available for general University use still represents a substantial resource.

Both major versions of UNIX are available; the Gould runs 4.2 BSD UNIX and the GECs run System V UNIX.

Users wishing to use the central UNIX service should register in the normal way. However, users wishing to discuss beforehand how UNIX might meet their requirements are invited to contact Keith Farvis (031-667 1081 ext. 2661) or David Mercer (031-667 1081 ext. 2627) before registering.

2 WHICH SERVICE?

If you are undecided about which service you require, contact the ERCC Advisory service at either The King's Buildings (031-667 1081 ext. 2976) or 59 George Square (031-667 1011 ext. 2300). They will help you decide which service suits your needs. They will also give you details of the hard copy and on-line documentation available for each system.

The normal strategy for registering new users to Central mainframe services is as follows:

- * if you require database facilities, you will be registered on ERCVAX;
- * if you require the use of the Distributed Array Processor, you will be registered on EMAS;
- * if you use packages you will be registered on EMAS-A, provided the packages or libraries you need have been released on the EMAS-3 operating system (if not you would be registered on BUSH or ERCVAX);
- * if you require a general purpose computing service you will be

registered on EMAS-A (or EMAS-B once it has been commissioned).

3 WHERE AND HOW TO REGISTER

Where to Register

Registration is carried out by the ERCC Administration Group at The King's Buildings (031-667 1081 ext. 2622). They will provide you or your Department with the following:

- * User Code Request Forms;
- * User Number Request Forms;
- * User Regulations;
- * Computing Service Charges.

Completed forms should be returned to them.

How to Register

When a department first registers users on any of the hosts, the department is given a four letter USER CODE. For example

EJJA for Edinburgh University Geography users, or
LIAE for Scottish Institute of Agricultural Engineering users.

This code is extended by a two digit number to give each individual user a unique USER NUMBER. For example

EJJA07 or LIAE03.

Users are given USER NUMBERS once their department has been given a USER CODE.

The way to register depends on your *CATEGORY OF USER*

CATEGORY OF USER	WHAT TO DO
Edinburgh University Social Science Staff/Students	Contact Dr J.P.Ross, Department of Social Sciences, 55 George Square, 031-667 1011 ext. 6209
Edinburgh University Staff, Treasury Supported groups and Commercial Users	<p>Does your Department or Company have a USER CODE?</p> <p>YES-Complete a USER NUMBER REQUEST form. You can get this through your Head of Department or Computing Representative.</p> <p>NO -A USER CODE REQUEST form must be completed by your Head of Department.</p>
Postgraduate or Undergraduate	Ask your Supervisor to register you as a user.
Staff from another University	Register through your own Computing Centre's User Registration Unit.
Staff of Research Council Institutes	<p>Does your Institute have a USER CODE?</p> <p>YES-Complete a USER NUMBER REQUEST form. You can get one through your Computing or Research Council Users Committee representative.</p> <p>NO -A USER CODE REQUEST FORM must be completed by your Head of department and countersigned by the Chairman of your Research Council Computer Users Committee.</p>
Other	Contact Mr C.H.Nicholas, ERCC, The King's Buildings, Edinburgh, 031-667 1081 ext. 2615.

4 NOTES

Provision of a USER NUMBER does *not* automatically allow you access to every machine on EDNET. You will need to register on each machine you intend to use. For example, if you want to use EMAS-A from a terminal on EDNET you will need a USER NUMBER (protected by a unique password) on EMAS-A alone.

If you want to access EMAS-A from a terminal connected to another Network (one in London for example), you will need a USER NUMBER on the Network Gateway and a USER NUMBER on EMAS-A. These two numbers will be the same and each will have unique passwords.

If you want to access hosts in another country (the USA for example) from EDNET, you will need a USER NUMBER (protected by a unique password) on the Network Gateway whether or not you already have access to any other host on EDNET.