

RAL

DESIGN & DISCOVERY

Open Days July 1990

RUTHERFORD APPLETON LABORATORY

SCIENCE AND ENGINEERING RESEARCH COUNCIL

Administrative Databases at RAL

Administrative Database Systems provide access to data stored on a variety of subject areas, including financial, personnel, library systems, research information, committee minutes, etc.

Database Systems being demonstrated are as follows:

Personnel System

There are about 1,500 staff at RAL, and the Personnel system contains information about them. Most of this information has a high security level and can only be seen (and altered) by Personnel staff and Departmental Administration Officers.

However, all PROFS users at RAL have access to read, but not alter, some of the information which is equivalent to an on-line telephone directory, eg name, building/room, telephone extension, etc. As well as being able to find out a person's telephone number and which office he/she is in, one can also find out who is in a particular office, who has a particular telephone extension number, the people in a Department, Division, Group, or any combination of these.

Research Projects - EXIRPTS

EXchange of Information of Research ProjectS

A catalogue of research projects supported by the National Research Councils of eight countries has been set up. This catalogue is known as the EXIRPTS database. It is being set up as a heterogeneous distributed database and will be made available to academic organisations in each participating country. The countries involved are:

Canada, France, Germany, Italy, Japan, Sweden, UK, USA.

Many databases of published reports and articles are already in existence. However, these publications are usually only available some time after the research has been completed. One of the advantages of EXIRPTS is that it will contain **current research**. Access to this database will provide researchers and administrators with the latest and up-to-date information about scientific research. It could also lead to further collaborations between the National Research Councils.

Initially the SERC is representing the UK, and the other Research Councils will join EXIRPTS in due course.

An example from the EXIRPTS database

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#Ref_Number (GBR SERC GR/E89117) #Updated 19890421
Project : Development of computer software to evaluation of the control of
metabolism
Dates : #Start 19881001 #End 19910930
Sci Contact : Dr DA Fell
Address : School of Biological and Molecular Science, Oxford University
Keywords : Biology;
Plant Sciences and Microbiology
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ABSTRACT

(i) Develop a computer package to evaluate the control coefficients of any given metabolic system for use by workers needing to identify sites for the manipulation of metabolic fluxes or metabolite concentrations. (ii) Implement and distribute the package on a range of computers. (iii) Use the package as a tool for aiding further developments in the theory of metabolic control analysis.

Other Administrative Databases

Two other databases can be demonstrated if required.

number of books and reports, and the user can look at the list, send a request to borrow an item, or ask for his/her name to be added to the waiting list.

Research Projects - ASCENDA

A Science and Engineering Database.

SERC funds research projects throughout the UK, and textual information, eg title of the research project, researcher's name, department/institute, abstract, etc, is available in the ASCENDA database. Information on a research topic, or what research is being done at an Institute, or by a person can be found.

Software Used

The systems being demonstrated are based on standard software for relational databases and text retrieval systems.

- Relational - IBM's SQL/DS and its related products (QMF, REXX/SQL);
- Text Retrieval - STATUS/E from Harwell Computer Power Ltd. The CMS version was developed jointly by HCP and members of Decision Support Section.

The Library Database

The Library Database consists of 2 parts :

- Bibliographic Details, ie title, authors, publisher, etc
- Housekeeping, ie loans, waiting-lists, etc

The system as used by Library staff can be seen in the Main Library, and the system as viewed by RAL staff can be demonstrated. A search for information on a particular topic would find a

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