

**DATABASE ACTIVITY AT  
ABERDEEN UNIVERSITY COMPUTING CENTRE**

The Aberdeen University Computing Centre has been involved in database management since 1971. A CODASYL system, called AUBNDMS, was designed and implemented at Aberdeen, and provided a service until the Autumn of 1977 when it was supplanted by I-D-S/II on the new Honeywell 66/80. In liaison with Honeywell the Centre has designed and implemented a FORTRAN interface and a pointer array set implementation mode for I-D-S/II. A recent internal software development project is the Interactive DataBase Administration Control System (IDBACS) for CODASYL databases. This product permits conversational development of schema and subschema descriptions of a database, followed by automatic translation of these descriptions and initialisation of the database.

Alongside software development and the provision of a user service the Centre has always maintained a complementary interest in database research, and has participated in the development of the CODASYL DBMS specifications. Aberdeen has been a member of the CODASYL Data Description Language Committee since 1975, and has participated in the work of the British Computer Society (BCS) Data Base Administration Working Group since its inception in 1972. More recent development interests have included the BCS Data Dictionary Systems Working Party and the BCS Query Language Group.

Full-time research work has been made possible through three Research Fellowships awarded by the U.K. Science Research Council. The first major project concerned the investigation of techniques for restructuring CODASYL databases, and resulted in the implementation of a prototype for a coexistent restructure, designed to restructure a database in-place and allow reasonable access to the database by run units during the course of the restructure. This work was completed in March 1979. The second project, scheduled for completion in February 1981, involves the design of monitoring facilities for a CODASYL database environment to enable a database administrator to assess the effectiveness, for current applications, of both the logical structure and the physical organisation of a database. Several levels of monitoring have been studied and implemented, and related work has been done on the development of a data dictionary and a simple query interface. The current major project, scheduled to run until October 1982, concerns the study of techniques and tools for the design of CODASYL databases. The work is likely to concentrate upon the development of methods for eliciting a conceptual design from a user. Implementation of the stored conceptual design may exploit the IDBACS system mentioned above.

During the past four years we have established contacts with many Universities and research establishments whose interests overlap ours in some aspects. We would welcome further interaction with any researchers who might be interested in what we are doing. Please contact us through:

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