NECTAR

Application development and processing system

NECTAR constitutes an advanced software development environment and test bed for application prototyping and a framework for versatile production runs. NECTAR meets the demands on a true application generator and gives at the same time access to traditional programming and software development tools.

NECTAR is written in C and runs under D-NIX, an enhanced UNIX operating system developed by DIAB. Integrated with NECTAR is the relational database system Mimer from Mimer Information Systems. NECTAR features interactive operation, in both development and production mode. The lingua franca for User-NECTAR communication has a Basic foundation. Users can freely choose and shift level of computer sophistication, from business oriented End Usage over Do-It-Yourself Application Generation to Advanced Software Development. NECTAR is modular in structure. NECTAR offers easy and transparent User access to its diversified resources and powerful support elements.

powerful and sophisticated tools to the experienced systems designer. For sure this lucky combination is founded on a complex and intelligently acting interior mechanism which is transparent to the inexperienced but accessible and usable for the experienced.

The User is in permanent dialogue with NECTAR. When constructing menues and forms the inexperienced User can rely extensively on help by the system while the experienced can operate more on his own. It is thus possible for the End-User to build up his competence individually and at his own pace.

Leading texts and graphs can be designed for different User levels. The User can also choose between passing through menues and accessing programs directly.

COMPUTER INDEPENDENCY

In a development session NECTAR generates parameter files holding control information related to the application system under design. When completed the files are transferred to the target system for execution without any intermediate compilation. Thus a specific application can easily be ported from one computer to another. Also, an application can be developed on one computer model and be installed and run on another model. Only restriction is a computer system with no less than 512 kbyte prime memory and no less than 10 Mbyte secondary memory.

TERMINAL INDEPENDENCY

NECTAR accepts and automatically adjusts to different terminal models in an application system, for each terminal model taking advantage of its specific features while retaining the operation mode of the User.

DATABASE INDEPENDENCY

Although NECTAR contains Mimer as an integral part, other database systems can be employed — in both development sessions and production runs — without any changes of the application environment itself. Accordingly, different demands on speed, size, flexibility and security can be met.

Furthermore NECTAR enables prototyping without engagement of the database.

RESULT ORIENTATION

With NECTAR the User can concentrate on What result a specific application is supposed to produce instead of How it is accomplished. Due to NECTAR's result orientation professionals with no computer competence can perform advantageously in application development. Also, the End-User can influence on the software design already at the development stage and test the application system before it is finalized. Hence, freezing of system specifications is not called for which is the case when traditional development tools are being used.

EASY USE COMBINED WITH HIGH POWER

To the inexperienced NECTAR is easy to learn and easy to use. At the same time NECTAR offers

ACTIVE AND INTEGRATED DATA DICTIONARY

Items — the smallest data units — are defined in a single common data dictionary. They are accessible from all parts of NECTAR for their use in systems development. This entails higher security and avoidance of duplicate effort. Also, systems design, programming, documentation and maintenance is facilitated.

COMMON LANGUAGE FOR DATA HANDLING AND CALCULATIONS

NECTAR's language is an interpretive Basic dialect. Data handling and calculation algorithms can be specified for different data levels. Check operations, calculations etc can therefore be performed selectively, for instance after input of data in a data field or in connection with the updating of a record.

> " *NECTAR is the drink of Gods. NECTAR also is the sweet liquid of flowers. Whichever way you interpret the word it is a telling name for the fourth generation application building tool and run-time system from Dataindustrier DIAB AB, indicating its beneficient strength and its collection of honeyed components.* "

DATA INDUSTRIER AB

PROTECTION OF SENSITIVE DATA

NECTAR's security system guarantees data integrity. Authorization checking can be specified and performed down at item level. All items, records, routines and activities can be classified with a security code which is checked against the authorization of each individual User.

GENERATION OF DOCUMENTATION

NECTAR automatically generates systems documentation through and after the completion of a development effort.

MAINTENANCE AND FURTHER DEVELOPMENT MADE EASY

NECTAR speeds up and in addition helps standardize systems development. Standardization together whith NECTAR's systems generator facilities adds up to simplified and less individual dependent systems maintenance. NECTAR enables the End-User to develop parts of or a complete application on his own and to furher develop and make adjustments of existing applications.

MEETING USER DEMANDS AND NEEDS

NECTAR improves the possibilities of the End-User to participate in and influence on the design of his own application at his own will. Also, in the course of growing competence and broadening experience with the application in operation the End-User can easily better, enhance and step by step further develop the application to meet new demands. Uniform development methods and parameter control of the application system facilitate further developments and adjustments of the system.

SEPARATED DEVELOPMENT AND PROCESSING ENVIRONMENTS

In NECTAR the application development environment is separated from the application run environment for higher performance and better production economy. The following chart exhibits the main modules of NECTAR with an indication of their function in the two environments.

Module	Function in Development Environment	Processing Environment
DATA	To describe and set up data structures	To handle leading texts To translate codes
LAYOUT	To design, maintain and document forms and messages for display and printer	To handle and process data to and from display and printer
DATABASE	To describe, maintain and generate databases	To handle and process data to and from databases
REPORT	To design reports	To handle table oriented questions on display and printer
ROUTINE	To descibe and generate completed routines	To handle routines for file maintenance questions, look up and print out
SYSTEM	To describe application prerequisites	NA