Delmarva Power

Introduction to the Help Desk Management System

The Help Desk Management System (HDMS) is an application built on the UNIFY Corporation's ACCELL 4th Generation Language and the UNIFY Relational Database Management System (RDBMS). As such, it is portable among a wide variety of hardware platforms running the UNIX[tm] operating system. The development environment at Delmarva Power consisted of a Compaq SystemPro (two 33 MHz 80486 CPU's, 28 Meg RAM, 1.2 Gig disk) running the Santa Cruz Operation's Open Desk Top (ODT) operating system. Users are attached to the system via DEC VT220 CRT terminals or (preferably) an IBM-compatible personal computer running FTP Software's PC/TCP over an IEEE 802.3 LAN.

The ACCELL/2000 Integrated Development System is **required** for use of HDMS.

HDMS consists of the following integrated applications:

Node information (hardware, software)
PC/Workstation configurations
Problem Management
Project Management (including pricing/catalog support)
Vendor Management
Circuit Configuration Management

Additional applications may be easily added to the current menu structure. Help information for each field is included while entering data. Some simple edits are also performed upon the data.

Multiple asynchronous printers (such as DEC LA75's) may be installed to print trouble tickets; the destination ticket printer is defined for each piece of equipment, handling the requirement for regionalized support teams. A number of reports are also available; we used Hewlett-Packard LaserJet printers for this function. The physical destinations are associated with logical names in a UNIFY database, and are easily modified.

A bridge for the maintenance of a pop-up user telephone directory is available. A TCP/IP File Transfer Program job is run nightly, transferring the Corporate Telephone Directory from the IBM 3090 VM timesharing system to our UNIX system via the IEEE 802.3 LAN. The problem management system allows search by user name or telephone number to insert this information into a new problem.

Mechanisms exist for the forwarding of problems to specific users via the UNIX mail mechanism. There is also a notification ability in the project management application, which permits notification of an individual when any given task is completed. A three character alias is used in the problem and project management applications for user notifications. A UNIFY database entry associates this alias with a full mailing address. In our installation, this mail address (conforming to RFC822) allows Simple Mail Transfer Protocol (SMTP) mailers to transfer this notification to anyone in the VM, MVS, UNIX, or Banyan VINES networks within Delmarva, or onto the Internet via a UUCP gateway.

This is a very brief introduction to HDMS. Further information may be obtained by reading the HDMS Operating Procedures manual written by John Stewart.

HDMS is not a commercial package - it was designed and written in response to our particular (or peculiar!) operational requirements. Development began in 1985, using the UNIFY RDBMS on a Charles River Universe 68 computer, by Bruce Yearsley. A major re-write was undertaken in the summers of 1989, 1990, and 1991 by a project team of Bruce Yearsley (Senior Network Operations Analyst), J. R. Blaine Boyles (Systems Analyst,

Network Operations), Bill Tsai, Dennis Mabrey, John Stewart, and Paul Grepps (summer interns from the University of Delaware).

Thanks are in order to the Internet Engineering Task Force's Network Operations Center Trouble Ticket Committee (NOC-TT). Their draft *Functional Specification Wishlist* was useful in solidifying our thoughts regarding Help Desk tools, and will provide incentive for additional HDMS features.

Anyone requesting further information on this system should contact:

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Thanks

Many thanks to our summer interns from the University of Delaware, without whom this system would never have gotten past the "talking" stage! Bill Tsai and Dennis Mabrey have since moved on to *real-world* jobs at Baltimore Gas & Electric and Intel, respectively. John Stewart and Paul Grepps are still laboring through a double major of Computer Science at the University of Delaware, and Network Operations at Delmarva Power.

Additional thanks are in order to Jim Brannen (Manager of User Services and Telecommunications) and Duane Taylor (Vice President of Information Systems) for their support of our efforts. It was through their offices that funding was found and approval was gained for distribution of this system.