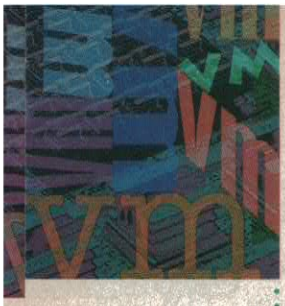

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VM/ESA At Nationwide Insurance

By Stephen Force

The Nationwide Group is a large, diversified and international enterprise. Headquartered in Columbus, OH, Nationwide is best known for its various insurance subsidiaries such as Nationwide Mutual, Nationwide Life, Wausau Life and others. Nationwide's insurance subsidiaries alone employ 29,723 of Nationwide's 32,500 employees. Insurance revenues in 1992 totaled $13.5 billion from a corporate total of $13.7 billion.

Although primarily engaged in providing insurance and financial security services, Nationwide, through its several subsidiaries, is active in other areas. Nationwide Communications, for example, provides radio and television services to several major U.S. markets, as well as cable communications to Houston.

Last year was a profitable year for the Columbus insurer. Even with the dramatic changes to the world's financial markets, Nationwide Life operations had the best year in its history. However, Nationwide's property casualty operations had to deal with Hurricane Andrew's aftermath. The hurricane cost Nationwide approximately $79 million, which was almost half of the whole year's catastrophe payout.

Nationwide, to remain profitable, must carefully watch expenses. IS investments are closely monitored for current and long-term value. In the rapidly changing world of IS, a balanced mix of both conservative and futuristic thinking must be embraced. Organizations that can successfully mix these sometimes conflicting ideas are well-positioned to exploit new technologies; Nationwide is one of these.

How IS Fits Into Nationwide

IS is vitally important to companies such as Nationwide. Virtually all corporate functions in one way or another involve computers. Due to the nature of the insurance business, with widely distributed offices and agents in the field, it is crucial for the Nationwide IS staff to provide strategic and timely technological solutions.

Each subsidiary of Nationwide has its own unique IS situation with the ability to provide solutions to these problems. With today's myriad of possibilities, it is important for Nationwide to choose solutions carefully.

According to Mike Wagner, the operating systems support manager, distributed processing is being pushed by the Nationwide Life subsidiaries that are using applications running on Hewlett-Packard (HP) of Palo Alto, CA and Sun Microsystems, Inc. (Santa Clara, CA) UNIX systems.

LANs are becoming more widely used, adding an extra dimension to an already complex enterprise computing environment. Even with the trend toward alternative computing solutions, DP is still performed mainly on mainframe-based application systems. The IS staff must provide facilities for development and maintenance of these application programs.

Operating systems in use at Nationwide include: MVS, VM/ESA, OS/2, UNIX, MS-DOS and Macintosh's System 7. OS/2 and DOS with Windows are the primary PC operating systems used.

Networks and Network Operating Systems (NOSes) include: SNA, Novell's (Provo, UT) NetWare 3.11, TCP/IP and IBM's LAN Server.

VM/ESA

VM/ESA, a strategic operating system platform for Nationwide, was chosen over other operating systems because it is easy to use and simple to maintain. It also provides excellent virtual resource management and uses fewer system resources to support a large number of users. According to Jim Vincent, an operating systems specialist supporting VM, "VM/ESA is, in short, a very flexible operating system with

a good, established product base."

Nationwide currently has two VM/ESA systems in production. One system supports 1,000 logged users, while the other supports 2,900 concurrent users. These two VM/ESA systems share hardware (logically, not by VM) with MVS systems. The IBM ES/9021-720 is shared by using IBM's PR/SM for Logically Partitioned Operating Mode (LPAR) support and the Amdahl 5990-1400 by Amdahl's Multiple Domain Feature (MDF). This logical partitioning helps Nationwide reduce the chance of system outages caused by another operating system.

Currently, Nationwide is using VM/ESA Release 2.0 at Recommended Service Upgrade (RSU) 9303 in production. The VM systems support staff is busy installing Release 2.1 for subsequent production rollout.

Nationwide uses VM/ESA for interactive production systems, Executive Information Systems (EIS) and a number of other business-related applications.

Most application program development and testing for both MVS and VM production is done on VM. VM was found to be a simple yet powerful program development and testing vehicle. Application programmers mainly use standard Conversational Monitor System (CMS) services and XEDIT in developing programs.

OfficeVision/VM (OV/VM)

A major use of VM/ESA is supporting the organization's enterprise E-mail system, OV/VM. Through Nationwide's extensive internetworking activities, OV provides corporatewide E-mail capabilities accessible by authorized users from almost any workstation.

OV/VM Graphical User Interface (GUI) is not being used at the present time. For OV/VM access, either an SNA terminal or IBM 3270 emulation software product is used to connect to the OV/VM VTAM application.

For users needing to communicate, Nationwide's OV/VM is a dependable tool. Mike Wagner explains, "Most people in the enterprise know about OV and how it can be used to communicate back to the home office."

Connecting To VM/ESA

OS/2 and DOS with Windows are the primary PC operating systems. When asked which PC operating system is envisioned for the near and distant future, Jim Vincent responds, "That's unknown at this time — it's still under review. We will probably continue to support both OS/2 and DOS/Windows-based systems."

Other operating systems platforms connected to VM include: MVS, UNIX and System 7.

Nationwide has an advanced, multivendor interconnected network. This is necessary due to the mix of disparate operating systems and NOSes prevalent in today's business world.

SNA-based users are connected to VM via MVS/VTAM. MVS/VTAM *owns* the connected resources and VM applications are reached over an MVS-to-VM link.

"Many users (PCs and terminals) are attached directly to the mainframe through locally attached controllers," says Mike Wagner.

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Jeff Long, a systems software specialist supporting LANs, points out that Nationwide has several major LAN products installed. "IBM's LAN servers and Novell's NetWare 3.11 are predominant, with more than 40 NetWare 3.11 servers installed in Nationwide's downtown Columbus Plaza alone," adds Long, a Novell Certified NetWare Engineer (CNE).

"NetWare for SAA, supporting Novell's HostPrint, is used to facilitate VM printing on network printers," he adds.

LAN-based users often need to access VM/VTAM applications such as OV/VM or CMS. Attachmate Corp.'s (Bellevue, WA) Attachmate Extra and IBM's OS/2 Communications Manager provide the terminal emulation necessary to connect LAN users to VM over token-ring. Network topologies currently employed include: Internetwork Packet eXchange (IPX), Sequenced Packet eXchange (SPX), Ethernet and token-ring, with token-ring being most prevalent.

For operating environments that require TCP/IP services, Nationwide installed IBM's MVS TCP/IP 2.2.1. Currently in limited production, TCP/IP will initially be used for File Transfer Protocol (FTP) and terminal emulation (Telnet) into MVS and VM. The IBM 3172 controller was chosen as the channel interface between MVS TCP/IP and a network, with token-ring used as the primary LAN medium according to Terry Murray, a telecommunications software specialist supporting TCP/IP.

VM In A Client/Server Role

Client/server computing is rapidly becoming an industry norm, with most enterprises developing some form of client/server implementation. However, it is a term that is still not concretely defined. To understand Nationwide's interpretation of client/server, Jim Vincent defines it as, "Our vision of client/server is: intelligent workstations interfacing with any other platforms for services and data. The interface should be transparent to the end user."

VM/ESA can play a major role in an enterprise's client/server implementation. Today, VM/ESA provides support for a vast array of client/server applications and services ranging from office automation, document imaging and archiving to supporting data backup from Novell LAN-connected users.

VM (as with other operating systems in use for a long time) has somewhat of an identity crisis. Because it is mainframe-based, it is seen by both casual users and systems designers alike as inflexible — a legacy system.

This is the case at Nationwide. When asked if VM is being used in a true client/server application, Jim Vincent responds, "Not yet. In our case, VM is in question. It is difficult to get the understanding out that VM/ESA could be an excellent client/server platform."

According to Mike Wagner, OV/VM has the most promise. Some limited client/server activity is currently in use. "Wausau Insurance uses SYSM for their E-mail through CICS, tying into OV via the softswitch gateway."

ABOUT THE AUTHOR

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