



Natural Adabas Application Rehost at Weyerhaeuser

Mainframe migration project helps optimize business processes

One of the world's largest forest products companies, Weyerhaeuser Company operates in 10 countries and employs approximately 19,000 people primarily in the United States and Canada. When Weyerhaeuser evaluated its IT infrastructure in light of corporate objectives, the decision was made to rehost a critical Natural Adabas mainframe application to open systems. Compared to a rewrite initiative, rehosting the mainframe environment enabled Weyerhaeuser to rapidly transition its application to a scalable, distributed platform without excessive cost, risk, or retraining requirements.

Highlights:

- Rehosted 475 MIPS Natural Adabas workload to HP Integrity rx7640 Server environment
- Reduced costs while preserving existing investments in applications, data, and personnel
- Performed migration with no disruption to end users and minimal retraining requirements on the new platform

Custom application provides valuable insight

Weyerhaeuser's internal transportation optimization TACTICS ('Transportation Automated Contract and Tariff Information Control System') application analyzes millions of routing options for lumber shipments to provide a set of least cost shipping options. The software then loads these options into Weyerhaeuser's LumberTrack sales system and SAP. Weyerhaeuser had fine-tuned this application over the years and was looking for a more cost-effective alternative that would preserve the program's valuable business logic while conforming to the company's strategic IT direction.

After evaluating several alternatives including rewriting, Weyerhaeuser elected to rehost the TACTICS application to a dual-core Intel® Itanium®-based HP Integrity rx7640 Server running the HP-UX operating system, a strategic open systems platform for the company. By rehosting its IBM® CICS® applications, Natural, and Adabas environment, Weyerhaeuser could effectively protect existing application and data investments, maintain current processes and procedures, and avoid disrupting end-users during the move.

Well-planned project completed in approximately six months

Weyerhaeuser's TACTICS application environment is primarily batch-based and utilized approximately 475 MIPS on the mainframe. After the decision was made to rehost the TACTICS workload, Clerity service professionals worked with Weyerhaeuser and experts from HP's Global Delivery Application Services (GDAS) organization to migrate the complete environment to open systems.

Over a six month period, a target Adabas Natural environment was established on a HP-UX Itanium system and all programs, data, maps, and third party products such as sort and print distribution facilities were implemented on the new platform as illustrated in Table 1, *Key Rehost Technology Areas*. The production environment now runs on 4 dual core processors in a partition on a HP Integrity rx7640 Server and the development and test environment is housed on a separate HP Itanium rx7640 Server with 2 dual core processors.

To successfully implement the migration initiative, a project timeline with clear milestones was first established, assigning specific project roles and responsibilities between Weyerhaeuser’s team, Clerity, and HP’s GDAS group. Next, the target HP-UX environment was built and application-specific items such as Natural, Adabas, and UniKix™ Batch Processing Environment (BPE) software were installed on the Itanium-based system. Natural programs, ancillary programs, and Natural maps were then migrated to the new target environment. Natural Security definitions, Predict data definitions, JCL Jobs and Procs were also converted. After these steps were complete, an initial file map was created and Sequential files and the mainframe Adabas database were moved to a version of Adabas on open systems. Once all application and data components were rehosted, final functionality, regression, and performance tests were performed. After all tests completed successfully, Weyerhaeuser cut over to production on the new HP environment without a hitch.

“Clerity provided a solid migration plan and brought a great deal of experience to the table,” said a project lead at Weyerhaeuser. “From my perspective, it was a positive relationship with expertise on both sides that complemented each other well.”

Table 1. Key Rehost Technology Areas

	Mainframe	Target Environment
Platform	IBM® z/OS® 1.7 operating environment	HP-UX Itanium
Programs	Natural COBOL Assembler IBM CICS applications	Natural
Data	Adabas VSAM	Adabas
Online Processing	Natural Runtime environment (mainframe)	Natural Runtime environment (UNIX®)
Batch Processing	JCL	UniKix BPE software
Sort Utility	DFSORT	CoSort
Programming Interface	ISPF	uni-SPF (with UniKix extensions)
Client Access	Natural Maps / Terminal Emulator	Natural Maps / Terminal Emulator

Rehosting approach minimizes disruption for end-users and programmers

By leveraging a rehosting approach and UniKix technology from Clerity, Weyerhaeuser was able to maintain existing interfaces during its move to open systems and avoid lengthy retraining requirements.

- From an end user perspective, no retraining was required during or after the move to open systems. Existing interface screens were preserved and end users continued to access the interactive Natural environment through terminal emulators after the migration.
- System analysts and programmers, who previously relied on ISPF on the mainframe platform for various editing and system command tasks, were able to leverage a similar administrative tool, uni-SPF, on the HP-UX environment. During the implementation, Clerity designed and built several customizations to the uni-SPF product that enabled Weyerhaeuser's personnel to avoid a steep learning curve associated with new text editors and become immediately productive in the new environment. These customizations and extensions were subsequently made into an optional product extension to uni-SPF for the benefit of other UniKix customers.

Better positioned for the future

Weyerhaeuser joins a growing list of global corporations who use UniKix mainframe rehosting software and services from Clerity to optimize legacy investments without sacrificing functionality or introducing risk into the migration process. Now that the company has moved its TACTICS system to the HP-UX platform, it can continue to evolve the application in a cost-effective, flexible environment.

About Clerity

Clerity is a leading full-service provider of legacy migration, modernization, and optimization solutions. Drawing from over 16 years of experience, Clerity recognizes that companies have significant investments in core applications and procedures and provides a wealth of low risk, high value tools, technology, and services to reduce IT costs without sacrificing current functionality and service level agreements. Headquartered in Chicago, Illinois with offices worldwide, Clerity has customers in all in major countries, including some of the largest financial services ISVs and Fortune-class end users.

Learn how Clerity can provide an evolutionary path forward for your application and data environments at www.clerity.com.



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