

#### rehosting hp e3000 apps

#### Alvina Nishimoto



### migrating applications

- what are the first things you should be asking yourself?
- choosing one of the five options
  - replace
  - rewrite
  - migrate
  - retire
  - leave on mpe





#### things to think about

- compiler options
  - is a compiler available on your target platform of choice for the language in which your 3000 application is written?
  - migration tools do they work with your compiler of choice?
- emulation of all (or part) of the mpe environment?





#### emulate or migrate?

- how to manage the file system
- library of software to translate turboimage to oracle?
- message files named pipes?
- go direct or use a layer of software





#### recompile or translate?

- stay in the language you're in on the 3000?
- or translate to another language?
- what to do about
  - vplus,
  - image
  - mpe intrinsics





#### do one thing at a time

- separate the issues
- don't do new platform at the same time you change languages





#### recompile or translate

- recompile
  - picking the right compiler
  - picking the right migration tool
- translate
  - modern languages (java; legacyj)
  - move gradually





### It's a personnel issue more than a technical issue

- if you have software in rpg, but no rpg programmers, this may be a good time to use a tool to get away from rpg.
- pitfalls:
  - comments that don't come over with your migrated code.





#### maintaining the translated code

- pro's and cons to both approaches
- translating
- recompiling
- "you're not done when you finish recompiling





# must decide how you're going to handle your subsystems

- if your programmers have written highly modular code, the migration will be easy
  - all the statements that must be modified will be in a single module
  - not typical





#### the more typical case

- most programs laced with calls to vplus, turboimage and other proprietary mpe intrinsics
- migrating this kind of code is much more difficult
- may need to consider emulation as an alternative





#### to emulate, or not to emulate

- often determined by
  - quality of staff
  - amount of code to migrate
  - emulators are available
  - retraining concerns





# factors that make code difficult to migrate

- turboimage calls
- vplus calls
- other mpe intrinsics
- system variables
- access to udcs
- file system





#### more problems

- parameter passing is done differently on mpe than on other operating systems
- date and time formats
- file structure
  - mpe shell can help -for a while





#### migration tools update

- what are some of the tools I may need?
- where can I get additional information? how do I obtain these tools?
- what is available if I am interested in an IMAGE-like product on HP platforms?





#### simulation/re-engineering tools

	simulation space	re-engineering space	end-to- end tools*	example tools*
User I/F (Vplus)	VPLUS replacement	VB, Java, XML,	BiTech Denkart Neartek Transoft	Screenjet Wingspan
Application Environment (Cobol, Intrinsics, JCL/CI, F/S)	Support: MPE intrinsics library & shell commands, MPE filename support, JCL/CI, Utilities (batch, spooler, systems mgmt)	Native System Function Calls & APIs, Perl /Shell Scripts, Native F/S Access		
	Cobol replacement	Cobol repl. or C++, Java,		AcuCorp LegacyJ MicroFocus
Database (Image)	Image replacement Image APIs to RDBs Native RDBs	Native RDBs (Oracle, SQL-Server)		HP Eloquence SQL_Server & Oracle w/APIs (DISC, iMaxSoft)
	Data Movement	Data Movement (Image -> RDB)		Quest/Taurus, VitalSoft, Robelle





#### cobol - syntax

- Reserved Words
- Copy libs
- \$INCLUDE
- Macro expansion





#### reserved words

- example
  - using "window" as a data item name works with hp cobol
  - acucobol uses "window" as a reserved word
- with compile options you can turn off this reserved word, allowing you to leave the item name



HP

Conferénce & Expo

#### cobol - externals

- Passing of parm and info in run command\
- Entry points
- CIERROR
- Job/session environment (e.g. Temp files)





#### cobol - file systems

- File naming (FILE.GROUP.ACCT)
- MPE file types
- Record structure
- Sharing file IDs (FDs as Intrinsic parameters)
- Sort files
- KSAM files
- FILE equations.
- Temporary files





#### Acucorp

Support for HP COBOL Syntax

- Most HP COBOL syntax and extensions are supported on all ACUCOBOL-GT platforms.
- Most of the HP COBOL preprocessor and macros are supported on all ACUCOBOL-GT platforms.
- Target platforms include hp-ux, Linux, Windows, etc.
- More information at http://www.acucorp.com/hp/ main.html





### AD technologies

- Migration from cobol to cobol
- migration from spl to c
- migration from fortran to c
- migration from image to sql
- target platforms include hp-ux, unix, Linux, NT
- http://www.adtech.com



#### TransPort Can Port HP e3000 COBOL A

TransPort will very soon be able to Port your MPE COBOL II application AcuCOBOL or MicroFocus COBOL.

This means that our HP e3000 customers can now take advantage of o<sup>-</sup> e3000 applications onto other platforms. For example; TransPort will HP-UX or Microsoft Windows or any platform of your choice.

Look forward to full support in February 2002.

If you have any questions concerning the project, please contact us at <u>i</u>



### LegacyJ

- PERCobol is the modern advanced function COBOL compiler
- PERCobol 3.0 and ViewJ 3.0 now available
- PERCobol contains a new IDE, MPE/iX migration and COBOL 2002 features
- ViewJ provide platform independent HP e3000 VPlus screen execution
- http://www.legacyj.com





#### how do you get to a new db?

- 3 options to choose from
  - image equivalent:
    - marxmeier software's eloquence product
  - image wrappers
  - redesign for embedded sql





#### selecting an option

- questions to ask yourself
  - how long will you live with the application
  - how much the application will grow
  - what kind of accessibility you will need





#### relative costs

- eloquence is a less expensive options
- wrappers bundled in with migration tools
- redesign is the most expensive option
  - more work than the other options





### problems that must be overcome

 data types that exist in image, but not in rdbmses:

- e.g. arrays

 data types that exist in rdbms, but not in image

null items





#### more problems

- master/detail relationship in image doesn't exist in rdbmses
- no such construct as automatic master in rdbms
- security and storage types are different
- sorted chains
- data not in chronological order in rdbms
- locking is different in an rdbms





### redesigning for embedded sql

- putting sql statements in a program
- pre-processor expands the sql statements into procedural calls.
- example:
  - chained read:
    - read customer orders in a chain
    - applications selects the records you want from the chain





# how do you do the same thing in embedded sql?

- select statement with a "with" clause
  - collects exactly what you're looking for
- select statement is expensive (cpu-wise)
  - just as expensive to have it retrieve all the data as a subset of the data.





### inefficient programming

- using a select to read the entire chain, and then programmatically filtering out the records you want is very inefficient
  - using sql statements as if they were ti intrinsics
  - can result in performance problems





### how serious can the performance problems get?

- using embedded sql as if it was turboimage
  - performance could be
    20-%-30% slower on the
    rdbms
  - good db structure
  - no very long chains
- "the programming style will look strange to them





#### incompatible data types?

- data types supported by image
  - converting zoned numeric items (packed decimal)
  - no support in most rdbmses
- date types not supported by image
  - date items





#### dates in turboimage

- dates typically defined as three numeric fields
  - year
  - month
  - day
- calendar arithmetic must be done by the application.





#### dates in a relational dbms

- there is a data type for dates
  - date arithmetic is fully supported
  - restriction: date items can only contain valid dates
- in image, fields used for dates often contain invalid data
  - the string 99/99/99 might mean "not yet completed"




### array data items

- no 'array' type in the rdbms
  - option 1: replicate the concept of an array use 1 big column to represent the array
  - option 2: one column per array element
  - option 3: create a table to represent the array





### "hidden" issues

- knowledge of the behavior of the application
  - for example: to avoid changing the structure of a ti database, people use fields for purposes other than the purpose indicated by the field name.





# solving data type incompatibilities

- data type problems less worrisome when using wrappers
- tools:
  - schema parser to create equivalent rdbms & handle incompatibilities
  - can normalize some of the data
- if you're using image wrappers, you still have to deal with the incompatibilities - but migration tools handle most of the problems for you





# what should an image wrapper do?

- running in "dual mode"
- allow customer application to access oracle on hp-ux from the e3000.
- ensure data is migrated properly
- allow migrated application on hp-ux to access turboimage on the e3000
- ensure application has been migrated properly





### image - conversion

- Data Structure Changes
- Data Type Changes
- Variable Name Changes
- Image Access Changes
- Data Migration





### Robelle

- Suprtool exports data to almost any format. and runs on HP-UX
- Suprtool extracts data from databases and files, sorts the records, and writes the sorted records to a file for further processing
- Qedit works on MPE and HP-UX and Qedit for Windows allows seamless cross-platform development





## image - extraction/ transformation/ transport middleware

- Used for decision support systems (DSS) and integration
- Does reformatting, syntax conversion, and has prebuilt transformations
- Content-based, rulesbased transformation
- Real-time or bulk load API





### Taurus/Quest hp e3000 platinum tool

- Since 1987
- Move IMAGE balances, statuses and open transactions in bulk to the new application
- Allow new application modules to read and write to still active IMAGE applications
- Move IMAGE history to a small relational system for statutory records retention
- IT managers can use internal staff that can be productive with BridgeWare within a day
- www.taurus.com
- www.quest.com





Taurus can support you in your move to Open Systems

Taunus Software has supported the HP300C since 1987 (with software for leveraging HP300C data to Open Systems. Unit, or customere who use ErisgeWere to move HP3000 data to other analysis and production RDEMS(s

 <u>Taurus Su Lyste has the Experience to Help IT</u> Managess Migrate HP3000s to Open Systems

Press Comment

NEW Econetry selects Quest/Taccus Bridgeware to enable applications designed for Econetry's N-Ticr architecture

Announcing the first Graphical Tool for Enterprise-Wide IMAGE Day Movement!

> Bi-Directional IMAGE—RDBMS Data Replication. Real Time. Real Easy



### Vital Soft, Inc.

- MatchPoint provides data replication and migration for TurboIMAGE and MPE/KSAM files. Data can be migrated to MS SQL Server (Windows platform) or Oracle (any platform)
- Visimage and ASKPLUS report writers for HP e3000 are also available for Oracle on HP-UX





### image - api access

- Support of all Image Intrinsics including DBGET & DBFIND modes
- Converting between Image and Relational data types and names
- Image locking
- "SQL Pass thru"





# IMAGE alternatives as you migrate

- hp eloquence -- an IMAGE alternative
  - evaluated by partner focus group & HP (SigSoftVend sponsorship)
  - technically endorsed by SIGImage
  - successful and well-regarded migration product in HP 250-260 installed base
  - being actively enhanced to add TurbolMAGE capabilities
  - working with Partners on integrated tools strategy
  - lightweight infrastructure today; evaluating a more robust model
  - Maintained, sold, & distributed through an ongoing HP relationship with Marxmeier
- wrappers (Oracle,SQLServer, others)
  - Disc OmniAccess
  - iMaxSoft



### hp eloquence delivers

- database integrity
  - physical and logical consistency
- database scalability
  - suitable for small/medium business requirements
- database compatibility
  - compatible intrinsics, modes and utilities
- available on
  - HP-UX
  - Windows NT
  - HP Linux





## CSL

- Linkway® BridgeMaster is the 'MPE to Anywhere Tool'. It allows an HPe3000 program access to any external data source as though it were resident on the HPe3000.
- read data directly from DB2, Oracle, Informix, Sybase, MS SQLServer, MS Access etc.
- write data directly to DB2, Oracle, Informix, Sybase, MS SQLServer, MS Access etc.

Press to Enter	
Welcome to the home of LINKWAY® The world's best C-Connectivity for the	HP3000!
	Announcement arr/line.3000 sportet nil 2006,
3L are experts in HP-2000. The only HP Schert Patter for e-Services in the UK, CSL have worked exclusively in the HP-2000 market is temperability products to enhance the performance of your HP-2000 Experience, the multi-faceted CSL operation can offer y fla a focal point for HP-2000 experies. With over 200 may years of HP-2000 experience, the multi-faceted CSL operation can offer y the new millennium. Patterning with your and with Herdelt-Fackated is a serious business. Quality is a watchword at CSL where derive there efficiency and outlay complement professionalism and diagence and where custome statisfaction is our greatest satisfaction.	rou world class solutions that meet the challenges ery meets expectation whatever the challenge,
o organisation survives without providing real value to its customers and 24 years success is testimony to the quality that CSL bring	gs to the HP <b>e</b> 3000 marketplace.
Smid nail to <b>webmarter/Scillink com</b> with questions or commons about this web site. Copyright © 1997 Computing Solutions Limited, Last modified: November 14, 2001	
1	🔮 Internet



### imaxsoft (LeeTech)

- openturbo transforms mpe-turbo applications into n-tier unixoracle and window nt-sql server platforms either without any or with very minimum code change
- openturbo utilities convert turboimage data and its internal structure to oracle or sql server
- openturbo enables your mpe turbo applications to run concurrently on hp/3000 and hp/9000



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## vplus

- Migrating the Screen
- Migrating the Processing Specs
- STDLIST
- Maintenance





### things to think about

- migration options
  - character mode architecture
  - client/server GUI
  - web GUI
- choosing an option
  - depends on language, UI being used
  - knowledge of UI design
- emulation of all (or part) of the mpe environment?





# one application can have multiple UI's

- classic manman application (mfg)
- six different user interfaces
- knowledge of user interface design
- alan cooper
   "about face"





### UI design resources

- Graphic arts experience
- could be a graphics arts person who works on brochures
- Applies in environment in which you're re-engineering the whole application





### tools to move what you have

- 40%-60% of the customers have vplus screens
- easily migrated
- ad technologies can convert forms files etc for use with acucobol
- vplus library
- code is unchanged





### eXegesys

- Explorer-type Navigation Expand, collapse, and access any maintenance module including individual user screens with the easy to use navigation tree
- Command Line Launch and use virtually any application from within eAM
- Toggle Buttons Switch between eAM and the Web with the touch of a button





## GUI Innovations, Limited

- Move Sequential files, KSAM and Image data to MS Access, MS SQL Server, MySql
- GUI3000 Control MPE and UNIX from the same screen



#### Welcome

GUI Innovations Limited is a Software Consultancy business and specialises in client/server applications with special reference to <u>Hewlett-Packard</u> e3000 systems, <u>Microsoft</u> SQL/Server, Windows NT and Windows 2000. The company is now very active in the <u>Pocket PC</u> market and Pocket PC development, specialising in linking your Pocket PC to your corporate network and servers.

GUI Innovations undertakes on-site software and programming consultancy for long or short periods, and bespoke software development. The company is a Hewlett-Packard business partner, a member of the Compaq Solutions Alliance program, and also a Microsoft Mobile Solutions Partner. We are a small highly flexible company who take a lot of pride in all the work we do.

In the light of recent announcements about the future of the HPe3000, we will be continuing to support and develop our HPe3000 products up to and beyond December 2006.

You may be interested in the fact that we already have experience on several migration projects from the HPe3000



## **Pixel Group**

Solutions

- Host Access Gateway Server-based screen-scraping host integration technology turns virtually any green-screen application into data objects used by web, wireless and composite applications
- Host Access Open Object-٠ Quickly enhances, rejuvenates or extends any legacy host application by integrating terminal emulation in a browser to easily create new graphical interfaces



Pixel specializes in providing the most flexible Host Integration solutions available today.

delivers any green screen information in any host based legacy application to web solutions of any



## **Robust Systems**

- VB-View provides a migration path from Hewlett Packard's VPlus terminal based applications to a true client/server GUI environment
- HP-UX with a Windows graphical VB-client or Internet Explorer client.

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#### **Robust Systems Home Page**



### ScreenJet, Ltd

- Graphical User Interface
  conversion on HP3000
- Replacement V/Plus API for migration, plus additional V/Plus conversion formats for ACUCOBOL and an XML & XHTML Browser format
- In January, Acucorp, Inc. has announced a technology alliance with ScreenJet Ltd





# WRQ

- Specializing in integration software and services that let you quickly adapt your hostintensive environment to meet new business needs.
- Supplier of reflection for windows & reflection for the web





### file system

- MPE naming (FILE.GROUP.ACCT)
- File Types
- File Attributes
- File Labels
- File Equations





### intrinsics

- Stand Alone
- Pass Thru
- Complex





# ci/jcl

- MPE Simulator
- Translator
- "Complex" JCL
- Utilities (FCOPY, SORT/MERGE)
- UDCs
- Batch Processing
- Spooled Output





### maintenance and support

- Continued Application Evolution
- Run Times





### Serena Software, Inc.

 Serena ChangeMan DS is a software change management solution that ensures source code integrity as files are migrated from MPE/iX to HP-UX, Linux, or Windows platforms





### platinum tools and partners

- hp e3000 Platinum tools
  - Denkart
  - DISC
  - NearTek
  - Sungard/Bi-Tech
  - Transoft
- hp e3000 platinum partners
  - Lund
  - MB Foster
  - Speedware





### Denkart hp e3000 platinum tool

- ViaNova 3000 Standard
  - Provides for the transfer of applications to another platform
- ViaNova 3000 Flex
  - For environments that have special target requirements, need re-engineering or demand a customized setup and execution
- www.denkart.com





### **DISC** hp e300 platinum tool

- OMNIDEX on desired database and hardware platform
- Network Services to facilitate data migration across platforms
- OmniAccess cross-platform database and operating system API
- MPE Library that converts key Turbolmage, MPE File System, and MPE Operating System calls to the OmniAccess crossplatform library
- TurboImage-to-SQL DDL (Data Definition Language) program that generates DB2, Oracle or SQL Server-specific DDL from an existing TurboImage database
- JDBC and ODBC, API, and drivers for standards-based application development of converted applications
- www.disc.com





### neartek hp e3000 platinum tool

- neartek's AMXW software migration tool
- moves data from image, ksam and flat files to other platforms
- runs hp e3000 jcl
- most hp e3000 intrinsics covered through a shared library
- hp cobol to microfocus cobol
- target platforms include unix, windows, and linux.
- http://www.neartek.com/virtuals toragesoftware/amxw.htm



#### Automatic Migration from HP 3000 to Unix, Windows, or Linux

Neartek's AMXW software migration tool is the most comprehensive solution on the market today for HP3000 systems whose applications and information must eventually be ported to new environments such as Unix, Windows, and Linux. Hewlett-Packard promotes AMXW to customers as a pathway having the best technical and financial features for prolonging application lifetime and safeguarding data investment.

Migrations are easy to set up with AMXW, whose tailorable translation parameters offer exceptional flexibility and adaptability for use with customized applications. The migration process covers all logical components including applications, databases, interfaces, files, and scripts. Once the parameters and platforms are set up, AMXW can attain a performance of 1 million translated lines per day.



### Sungard/Bi-Tech hp e3000 platinum tool

- since 1988
- automated translation of native mpe-based systems to unix
- transport<sup>™</sup> will currently convert and transfer cobol source code, copylibs, image schemas, image data and vplus forms files.
- emulates most mpe commands
- most mpe intrinsics have also been emulated.
- http://sungardbi-tech.com
- http://transport.bi-tech.com





### Transoft hp e3000 platinum tool

- Provide an I/O mapping module that converts access to IMAGE data to Oracle and SQL Server
- Utility programs to unload IMAGE, KSAM, Allbase and HP flat files and transfer them to the target platform
- Utility that emulates VPLUS on UNIX and Windows platforms, in a dumb terminal or java based graphical environment
- Convert JCL to PERL scripts

www.transoft.com

 HP Intrinsic emulations in COBOL and C, allowing direct replacement of Intrinsics



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#### Lund hp e3000 platinum partner

- full service migration
   partner
- access to all migration tools and services
- detailed assessment of your current system
- help you choose the best new platform
- detailed transition plan







We recognize how important system perform your business, and we are responding with e ways to deliver it to you: real-time, multi-pla line, and within your budget guideline



#### MB Foster hp e3000 platinum partner

- full service migration partner
- access to all migration tools and services
- mbf-udalink for data access and delivery including batch reporting

Forging the Future					
Company	Products	Migration	Services	Support	Library
Creating The <b>Tools Today</b> For The <b>Needs Of Tomorrow</b> .					

#### Focus On

- The Foster Report Volume 2 Issue 1 (March2002) In this issue - JDBC driver has arrived, migration solutions and much more.
- MPE Migration Strategy Join us for an On-Line Seminar and find out how we can help! Next Session: May 1st, 2002.



#### **Managed Business Solutions**

hp e3000 platinum partner

- Assessment service MBS works closely with your team to evaluate your environment and provide recommendations.
- Migration services MBS has services designed to effectively migrate Legacy HP 3000 to a new platform.
- 24 x 7 application support MBS provides 24 x 7 support for virtually any application.

M mhc:	
MANAGED BUSINESS SOLUTIONS beyond the call About MBS Solutions MBMES: IT application support and integration services contact Us HOME	
- Since 1993, MBS' nearly 200 employee-owners have delivered total IT application	Services on Demand
support and integration services for legacy and next generation enterprise systems.	Technical Expertise
These services are designed to provide you an always-on application environment that reduces your overall support costs and allows you to focus on what is important - your	SEARCH: Go!
core business.	HP e3000 <u>A BEYOND</u> <u>Solutions</u>
	business partner
24 X 7 TECHNICAL 24 X 7 SUPPORT HELP DESK SERVICES	ENGINEERING SERVICES
MBS is the first point of contact for enterprise application users who receive immediate resolution or initial troubleshooting assistance.	MBS analysts utilize their in-depth knowledge of core technologies to deliver superior customized application solutions and integration services.
The MBS experience, commitment, and motivation allowed us to achieve our goals for the Hevi 200 South Collece Ave. Fort Collins. C0 80524 800.421.1016 mbs@thinkmbs.com	IT portion of the project." ett-Packard, Robbin Rogers, Business Practice Analyst bevond the call



#### Speedware

hp e3000 platinum partner

- full service migration partner
- access to all migration tools and services
- complete migration solution package for Transact



#### Speedware for Transact - A Complete Migration Solution

We have developed a complete migration solution package for Transact custorr contemplating migrating off the HP e3000 platform.

Take advantage of our Free basic Transact application migration evaluation



#### ...and tools to cover other areas

other	re-engineering tools	simulation tools
environments	(examples)	(examples)
Speedware, Cognos,	Speedware, Cognos,	Speedware,
Transact	VB, Java, XML,	Cognos
Application Environment (C, Fortran, Pascal, Basic, RPG, SPL)	C++, Java, VB, SPL/UX,	Speedware, Cognos, AD Technology, Allegro, Richter SW, 
Database (Allbase)	Native RDBMS (Oracle, SQL-Server,) Data Movement & Data Access (Quest/Taurus, MB Foster, VitalSoft, Robelle WRQ, Willow, DISC,)	



### non-cobol apps

- Cognos & Speedware
- Other Compilers
- Transact
- RPG
- Business Basic
- Mixed Environments





## Cognos

- focus in
- our efforts in the areas of new PowerHouse application migration training
- migration tips and techniques
- working with strong contingent of Cognos Migration Partners on migration programs and services worldwide





#### HP e3000 Transition Tools Partner Matrix March 2002

Partner	Coverages	Distribution Model
AcuCorp	Languages, DB Access, Intrinsics, VPLUS, Development Env.	3rd Party Direct
AD Technologies Bradmark Cognos Denkart	Data Migration (Cobol, Fortran, SPL, Image) Data Migration (DB) 4GL and DB Access Data Migration, VPLUS, JCL, Intrinsics, Languages, MPE Utilities	3rd Party Direct 3rd Party Direct 3rd Party Direct Platinum Program
DISC	DB Access & APIs, Data Migration, JCL, Development Env (Cobol converters)	3rd Party Direct, Platinum Program
Envoy Technologies Inc eXegesys GUI Innovation Limited HP Eloquence iMAXSoft LegacyJ MB Foster	MPE Utilities VPLUS Data Migration, MPE Utilities Image DB Replacement Data Migration (Image), MPE Utilities VPLUS, Languages Data Migration (DB), MPE Utilities	3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct, Platinum Program
Near Technolgoies (Neartek)	DB Access, Data Migration, VPLUS, JCL, Intrinsics, Languages, MPE Utilities	Platinum Program
Pixel Group Robelle Robust Systems Screenjet Ltd Serena Software, Inc Speedware Corporation	Data Migration (User I/Fs) Data Migration, MPE Utilities, Development Env VPLUS VPLUS Languages DB Access, Data Migration, Development Env	3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct, Platinum Program
SunGard Bi-Tech	Data Migration, VPLUS, Languages, Development Env	Platinum Program
Taurus (Quest)	Data Migration	3rd Party Direct, Platinum Program
Transoft	DB Access, Data Migration, VPLUS, JCL, Intrinsics, Languages, MPE Utilities	3rd Party Direct, Platinum Program
Vital Soft, Inc Whisper Technology Willow Technology, Inc WRQ, Inc	Data Migration, MPE Utilities MPE Utilities, Development Env Data Migration Data Migration (DB), VPLUS	3rd Party Direct 3rd Party Direct 3rd Party Direct 3rd Party Direct

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# transition tools & services matrices

- visit HP website for latest transition partners program (tools & services matrixols & services matrix): http://www.hp.com/go/ e3000partners
- tools: click "hp e3000 transition tools partners"
- services: click
   "hp e3000 transition services partners"





#### transition program office

- centralized resource and migration assistance for sales teams
- makes it easy for sales reps to engage the resources you need
- end-to-end solutions
- worldwide focus

#### marketing center

- access to communications, training, collateral, tradeshows, programs and promotions
- focus on North America (Latin America, Europe, & Asia-Pacific regions handled separately)

#### migration center

- access to all technical teams, including MPE, HP-UX, Linux, Windows/NT, HP Education, Consulting, Training, Support, Sales and Outsourcing
- focus on North America





#### hw and sw programs for customers

Component	Objectives	Update
3K to 9K Conversion	• Zero cost OS and HW conversion from 3000 to 9000	<ul> <li>Offered on A and N-class HP e3000</li> <li>Available until December 31, 2006</li> </ul>
Trade-In Discounts	Low cost OS and HW alternative to move from older 3000s to current 9000s	Up to \$90,000 in rebates being offered depending on size of system
Loaner Systems	<ul> <li>Provide free loaners for customers who have only one or two 3000s</li> </ul>	<ul> <li>Free six month loaner systems (9000, Wintel, Linux) for migration purposes</li> <li>40% discount for 9000s or leasing option after six months</li> <li>IA loaner process being defined</li> </ul>
Mission Critical & Enterprise OS	Aggressive discounts for this OS	• 50% discount announced
Database Strategy	Provide database alternatives for large and small/medium-sized customers	<ul> <li>Filling in value chain for HP Eloquence (low cost alternative)</li> <li>Oracle for large customer, no blanket discount available</li> </ul>
NetServers	Discounted pricing to encourage move to IA-32 and IA-64	Trade-in HP e3000 servers and receive 15% discount off the HP IA-32
Storage Systems	<ul> <li>Rebates for upgrading storage or converting from competition</li> </ul>	<ul> <li>Ongoing program, non-specific to e3000</li> </ul>



#### 3000 to 9000 conversion kits

A400 110 MHz Server (A6398B)	rp2400 440 MHz Server (A6109B)
A500 140 MHz Server (A6399B)	rp2450 440 MHz Server (A5570B)
A400 150 MHz Server (A7018C)	rp2430 650 MHz Server (A6889A)
A500 200 MHz Server (A7019C)	rp2470 650 MHz Server (A6890A)
N4000 220 MHz (A6449B)	rp7400 440 MHz (A3639B)
N4000 330 MHz (A6450B)	rp7400 440 MHz (A3639B)
N4000 440 MHz (A6451B/A6452B)	rp7400 440 MHz (A3639B)
N4000 550 MHz (A6453B)	rp7400 550 MHz (A3639B)
N4000 380 MHz (A6103C)	rp7400 750 MHz (A3639C)
N4000 500 MHz (A6914C)	rp7400 750 MHz (A3639C)
N4000 750 MHz (A7014C)	rp7400 750 MHz (A3639C)



#### services programs for customers

Component	Objectives	Update
3 for 3 Promotion & Transition Support Services	<ul> <li>Lower cost of support on target HP platform</li> <li>Assist PSS &amp; CSS customers with migration focused activities</li> </ul>	<ul> <li>9000 or 3000 used for migration</li> </ul>
3.89% APR for 36 Months	Provide attractive finance options	3 month payment deferral also available
System Inventory Utility	<ul> <li>Tool to determine types of files on 3000 systems</li> </ul>	<ul> <li>Available free to download /jazz.external.hp.com/src/scripts/siu/ind ex.html</li> </ul>
Public Access 9000	<ul> <li>Quick and inexpensive access to HP 9000 system</li> </ul>	<ul> <li>Available free to any customer</li> <li>Migration tools providers making tools available on this system</li> </ul>



#### services programs for customers

Component	Objectives	Update
HP-UX, Linux, Windows Training	<ul> <li>Basic fundamental training</li> <li>Provide HP-UX, Linux, Windows fundamentals</li> </ul>	<ul> <li>Working on transition guide, white papers, and webcasts</li> <li>Cross-reference tools</li> <li>Discounts on in-depth training</li> </ul>
Migration Webcasts	Convenient concept migration training	<ul><li>Four webcasts done; 2 more planned</li><li>Available for playback on the web</li></ul>
Platinum Program	<ul> <li>Lower cost access to migration tools</li> <li>Fill in value chain of migration tools</li> <li>Offered by partners well known to the HP e3000 community</li> </ul>	<ul> <li>4 partners signed up – Speedware, MB Foster, Lund, MBS; 6 tools announced</li> <li>Program announced to customers</li> </ul>
HP Consulting	<ul> <li>Provide discounted services for corporate and enterprise customers</li> </ul>	
HP Outsourcing	Provide outsourcing options for HP 3000 systems	<ul> <li>Reseller partners also providing lower cost alternatives (Logical, Dimension Data)</li> </ul>



#### partner programs

Component	Objectives	Status
ISV and Tools Partners Contacted	All HP e3000 partners contacted and briefed on migration and partnering options	<ul> <li>All partners contacted by DSPP alliance managers</li> <li>Account teams for top partners</li> </ul>
Partner Event	Provide update on all platform roadmaps and networking event to meet HP technical personnel for other platforms	Free partner forum scheduled for June
HP-UX, Linux, Windows Fundamentals Training	•Provide training on mapping MPE commands and tasks to HP-UX, Linux, Windows	•Webinar training available Aug 1
In-Depth Training	Provide HP-UX in depth training at no cost or very discounted based on space available on existing classes	No cost seats offered to SIGSOFTVEN, SIGCONSULT, and DSPP members
Refurbished 3000s	•Provide low cost alternatives for used 3000s	•25% discount on Phoenix systems for DSPP members
Coupon Book Promotion	<ul> <li>Provide way for partners to promote their migrations tools and services</li> </ul>	<ul> <li>Finishing content, mailing in July</li> </ul>





## solution

- running Oracle
   Financials on the
   HP 9000 with Amisys
   solution on the HP 3000
- data replicated between the two solution for the last nine months
- moved over 19 million records in 3.75 hours or 700MB/hour







## Ecometry

- leading provider of managed business solutions for human resources to Fortune 500 companies
- \$1 billion in revenues
- need for an open, scalable, multi-tiered application architecture to keep in step with the rapid business growth being experienced
- to be in a positive position to take advantage of emerging technologies

• y2k testing





## Ceridian







## challenges

- leading provider of managed business solutions for human resources to Fortune 500 companies
- \$1 billion in revenues
- need for an open, scalable, multi-tiered application architecture to keep in step with the rapid business growth being experienced
- to be in a positive position to take advantage of emerging technologies



Ceridian takes the hp e3000 migration plunge with some help from hp Services' consulting

y2k testing





### solution

- hp services' consulting
- conversion from the hp e3000 997/600 and 987/200 to 2 v-class hp 9000 servers
- Powerhouse on MPE converted to Powerhouse on HP-UX
- HP OpenView Network Node Manager
- IT Operations



Ceridian takes the hp e3000 migration plunge with some help from hp Services' consulting





## solution (cont.)

- Taurus/Quest Bridgeware tool
- 206 different IMAGE datasets across 10 databases
- 400 million records totalling 38 GB had to be moved
- ran HP 3000 and HP 9000 in parallel for most of the two year project







## solution (cont.)

- iteratively tested bulk moves from the HP3000. Once the logic was proven, the logic for moving incremental HP3000 data changes was tested
- BridgeWare moved and kept in synch some 38 GB of critical data, moving up to 17 million records per hour
- more problems with data cleansing than anticipated







#### lessons learned

- hp project management avoided project slippage due to the complexity of the migration
- not all the code and JCL were used or needed, analysis would have avoided some of the unnecessary conversion







#### results

- improved performance
- greater scalability 30% better than 3000
- better integration capabilities
- internet access







# why hp?

- hp and Ceridian teams worked efficiently together
- maintained overall responsibility and accountability for entire migration activity
- good solid team of people



Ceridian takes the hp e3000 migration plunge with some help from hp Services' consulting





### what Ceridian is saying

"Ceridian's migration from the HP e3000 to the HP 9000 was a success! What we did was the right thing to do. Ceridian is much better off than it was before... the HP people were great and they built a solid team that stuck it out until the project was completed."

David Goodman Senior Vice President of Product Development for Ceridian





#### CT3, Inc.

 CT3 reaps benefits of increased options in migration to hp-ux server







#### challenges

- established in 1992 to meet the business and software needs of the timber and wood product industry
- migrate from an HP e3000 to HP 9000 for large customer
- 1995, HP-UX fairly new OS







#### solution

- conversion from the hp e3000 to hp 9000 servers
- Designer by Speedware
- Oracle database







#### lessons learned

 take advantage of training and education despite aggressive implementation schedules







#### results

- increased options
- high performance
- high reliability







## what CT3 is saying

"HP customers should definitely consider an an HP-UX server as an alternative to the HP 3000 if reliability and consistency are what they're looking for."

Steve Hall President, CT3, Inc.







Pacifica Papers Inc.

#### Pacifica Papers, Inc.

 hp cultivates an IT environment for Pacifica Papers







Pacifica Papers Inc.

challenges

- paper manufacturer for printing and communication papers
- build a scalable solution tailored to specific needs
- increase database capabilities
- needed complete picture of the entire enterprise







Pacifica Papers Inc.

solution

- hp services' consulting
- conversion from the hp e3000 to hp 9000 servers for application, database, and development servers
- Oracle database
- migration to SAP
- hp critical systems support (CSS)
- hp xp 256 storage environment
- mc serviceguard for high availability







#### results

- better high availability
- superior support







# Pacifica Papers Inc. what Pacifica Papers is saying

"HP proves time and time again that its products and services are well above standard. In addition to its hardware, HP ensures the highest level of availability and exceptional support. From start to finish, HP was responsive and in tune with our needs making our migration to SAP smooth and expeditious."



Tony Yee, Systems Superintendent, Homer Street Division, Pacifica Papers, Inc.



