

# Tree•t•imes

A Publication of Treehouse Software, Inc.

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**Find out what our customers are saying:**

[www.treehouse.com/customercomments.shtml](http://www.treehouse.com/customercomments.shtml)

*"For the past few months you and your team have been providing outstanding support to my team towards the implementation of ADABAS replication using the TSI product, DPSync. As you know, this replication was a keystone in the overall architecture of a new application now called Novus.*

*Novus has gone live last December 1st and now continues to operate as originally conceived and designed.*

*On behalf of my team and CSC management, I thank you for the diligent support you have been providing to help ensure this successful outcome. Please pass on our expression of gratitude and appreciation to your team with whom we look forward to continue to collaborate.*

*Thanks!"*

Louie Legaspi  
Project Manager - DBA Group  
CSC Australia Pty Limited



## Empower Your Enterprise.

Best-of-Breed Tools For Mainframe Integration, In Real Time, To Any Target...

by *Wayne Lashley, COO*

Treehouse Software offers an unequalled roster of comprehensive ETL, CDC, and SQL/XML technologies that meet any conceivable mainframe data migration, replication, or integration requirement. Additionally, Treehouse provides skilled supporting services to ensure successful project completion.

The combined power of Treehouse Software's technology and know-how reduces cost and mitigates risk in mainframe IT project initiatives, where data migration and integration complexity is often underestimated, yet critical to success.

We connect your enterprise—from anything to anything.

ADABAS • CA-Datcom • CA-IDMS • DB2 • DL/1 • Flat Files • JMS • Linux • Oracle • SQL Server • Unix • Web Serv

*(continued on page 3)*



## Women and Children First!

by *Don Casey, Principal Consultant at Run Right, LLC*

The already leaking IT Financial ship has hit the iceberg of recession, and we're bow-down and sinking fast. Things were bad enough during the "good times", when companies made money and just wanted to squeeze IT a bit so they could make even more money... now almost everybody is having serious revenue shortfalls, and cutting expense becomes a matter of corporate survival, not mere greed.

We are past the point of arguing whether we should be using wooden lifeboats or inflatable rafts... you use whatever is handy that can get the job done before it's too late.

*(continued on page 6)*

## Editor's Notes

by Joseph Brady  
Marketing Manager

### Become a Beta Test Site for New Treehouse Product Releases

We are looking for current North American customers to become Beta test sites for new releases of Treehouse products. If you are interested in becoming a Beta test site, please fill out the short form at [www.treehouse.com/betasites.html](http://www.treehouse.com/betasites.html), and a Treehouse representative will contact you.

### Free, On-line Demos of Treehouse Products

Would you like to see Treehouse products in action before you request a trial? To set up a live, on-line demonstration of any product, simply fill out the short form on the Treehouse Software website at [www.treehouse.com/onlinedemoform.html](http://www.treehouse.com/onlinedemoform.html). All you need is an Internet connection to view how Treehouse products work right on your PC screen.

### Find out the Latest on Treehouse Products

To find out about current versions of Treehouse products, compatibility (operating systems, languages, etc.), and support information for all of our products, view the TSI Product Status Matrix on-line at [www.treehouse.com/prodstatus.shtml](http://www.treehouse.com/prodstatus.shtml).

## Tree·times

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### Treehouse Software will be Exhibiting at the WAVV Conference, May 15-19, 2009 in Orlando, Florida

Treehouse will exhibit **tcACCESS** and **tcVISION** at the 2009 WAVV Conference in Orlando. WAVV is a user group promoting the interests of the users of the VSE, VM, and Linux operating systems. WAVV holds a conference consisting of over 100 educational sessions as well as a vendor show where providers of VSE, VM, and Linux related products can show their wares and meet with current customers.

Visit the WAVV website at [www.wavv.org](http://www.wavv.org) for more information.



### Treehouse Software will be Exhibiting at the SHARE Technology Exchange Expo, August 23-28, 2009 in Denver, Colorado

Treehouse will showcase **tcACCESS** and **tcVISION** at the SHARE Technology Exchange Expo in Denver.

SHARE Inc. is an independent, volunteer run association providing enterprise technology professionals with continuous education and training, valuable professional networking, and effective industry influence.

In 1955, just two years after the release of IBM's first computer, a handful of the earliest IT professionals collaborated to form SHARE, the world's first organization of computing professionals.

Over the past five decades, SHARE has become synonymous with high-quality, user-driven education and resources to make enterprise computing specialists more effective professionals. SHARE serves more than 20,000 individuals representing over 2,000 of IBM's top enterprise computing customers. Their constituency includes many of the top international corporations (including the majority of the FORTUNE 500), universities and colleges, municipal through federal government organizations, and industry-leading consultants. While independent, SHARE maintains a close partnership with IBM and its subsidiaries, as well as with leading solution providers to continually strengthen SHARE's benefits for its members.

Participation in SHARE provides the opportunity to build relationships with a diverse community of IT professionals, enhances your professional development, and positions you as a thought leader in the industry.

The SHARE Technology Exchange Expo provides the ideal forum to learn about the latest products hitting the market that will improve the performance of your enterprise computing environment. Take advantage of this opportunity to network with more than 80 different solution providers, connect with sales and technical experts from industry-leading companies and gain insights into next generation product releases.

For more information on **SHARE**, visit the their website at [www.share.org](http://www.share.org).

### Upgrade Reminder For Treehouse Software Customers

Treehouse Support would like to remind maintenance-paying customers to upgrade to the latest releases for ADABAS 8 support, as well as the latest product enhancements. To log in and download the latest version of your software, contact Treehouse Support to obtain a username and password, then go to the Treehouse Support Center at [www.treehouse.com/service.shtml](http://www.treehouse.com/service.shtml).



Treehouse Software's Data Migration, Replication and Integration Products are intended for customers needing to access, integrate, replicate, and migrate data from Software AG's ADABAS and other mainframe data sources. Such data sources often require migration or replication to relational database systems such as Oracle, Microsoft SQL Server, IBM's DB2, Teradata, and Sybase. Efficient, standards-based, and automated approaches such as those provided by Treehouse's products can be implemented in a fraction of the time of, and much more cost-effectively and reliably than, manual efforts.

Since the mid-1990s, Treehouse has dominated the ADABAS-to-RDBMS data migration and integration market, with its proven and powerful ETL, CDC, and real-time replication solutions. More recently, the addition of expanded capabilities enable migration and integration of virtually any mainframe database or data source.

Treehouse offers a comprehensive suite of robust, proven technologies and approaches for data replication, migration and integration to support and enable any project—from application integration to modernization—requiring data movement, or synchronization between mainframe sources and open systems or Windows.

To extend its reach to mainframe data sources such as VSAM, IMS, CA-IDMS, CA-Datcom, DL/I, DB2, and even sequential files, Treehouse teams with B.O.S. Software Service und Vertrieb GmbH of Haar, Germany, to distribute and support B.O.S.'s **tcVISION** and **tcACCESS**, mainframe data replication and data access products. These offerings provide the ability to deliver anywhere-to-anywhere data replication and integration, as well as direct SQL-based access to non-relational mainframe data structures.

The **tcVISION** solution focuses on CDC when transferring information between mainframe data sources and Windows or open-systems databases and applications. Through an innovative technology, changes occurring in any mainframe application data are tracked and captured, and then published to a variety of RDBMSs and other

targets. **tcVISION**'s capture facilities detect changes in mainframe data sources without programming effort, and reduce the amount of data that must be transferred between systems to an absolute minimum. **tcVISION** guarantees transparent, efficient and auditable data transfer between sources and targets, and provides powerful routines to perform efficient, reliable bulk transfers of data.

**tcACCESS** is a comprehensive software solution that enables two-way integration between IBM mainframe systems and client/server, Web and SOA technologies—without the need for mainframe knowledge or programming effort. **tcACCESS** is a proven platform that facilitates SQL-based integration of mainframe data sources and programs into open-systems and Windows applications using industry standards such as SQL, ODBC, JDBC, and .NET.

SQL queries that access mainframe data can be easily created using drag and drop techniques—no programming required. The results of queries can be immediately presented and viewed (i.e., in Microsoft Excel, Microsoft Access, etc.). Direct ODBC or JDBC access to mainframe data from any client/server or Web application can be easily implemented; it is necessary only to assign the **tcACCESS** driver to the application.

In addition to the mainframe sources cited above, the **tRelational**, **DPS**, and **DPSync** products are Treehouse's best-of-breed tools designed to replicate data from ADABAS to RDBMS applications, including native target support for Oracle, Microsoft SQL Server, IBM DB2, Sybase, and Teradata databases.

To complement these products, Treehouse offers highly-skilled consultants experienced in large-scale, mission-critical integration and replication projects.

### Summary...

With unmatched comprehensiveness of tools and depth of experience, Treehouse Software applies proven approaches to help customers and partners mitigate risk and profit sooner from modernization benefits.

Treehouse provides tools and expertise for the riskiest and most-often overlooked parts of mainframe modernization and integration projects—the data migration and integration. Using Treehouse products and services eliminates reliance on end-customer programming staff to write and maintain data extracts and middleware, yet enables deployment of powerful, robust and secure data migration and replication implementations.

Treehouse Software has long been the acknowledged premier provider of ADABAS replication solutions, and now offers solutions for all mainframe data migration and integration requirements.

Treehouse's specialized strengths provide benefits in reducing project risk, speeding project delivery and ROI, increasing project profitability, and increasing implementation flexibility. •

## Call for DPSync version 3.1.1 Beta Sites by Larry Jones, Senior Software Specialist

Treehouse Software is actively seeking customers that are willing to be beta test sites for the upcoming release of **DPSync**, version 3.1.1 (see *Editor's Notes* on page 2).

In addition to incorporating various fixes from previous versions, version 3.1.1 will contain several enhancements to the mainframe DPS/R, Remote SQL Utility (RSU), and the extended capability component **DPSync EC**.

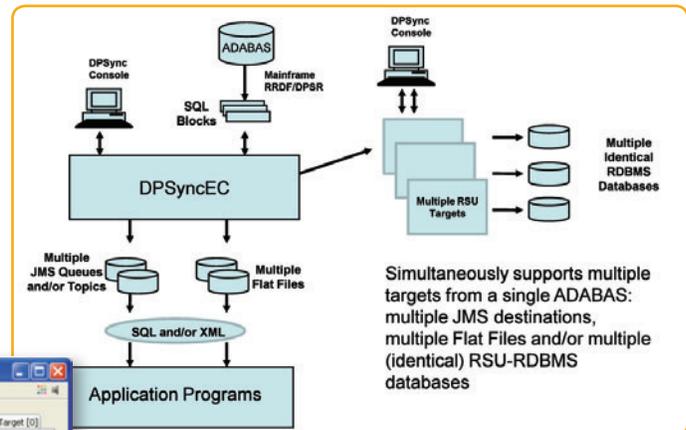
DPS/R has been enhanced to allow more flexible allocation of outgoing TCP/IP ports to reduce certain "in use" delays that were sometimes experienced. Its detection of a lost connection to the RSU has also been enhanced to enable a quicker detection and a quicker recovery once the RSU is able to accept a reconnection.

For sites that may have logistic or other impediments on directly connecting from **DPSync** Console to the RSU server, version 3.1.1 has enhanced DPS/R so that **DPSync** Console can route its RSU requests through the mainframe DPS/R component. DPS/R forwards requests from the **DPSync** Console to the RSU, allowing access where it was (for some sites) formerly prohibited.

DPS/R has also been modified to provide full control to the EBCDIC-to-ASCII translation that is performed for SQL updates, allowing customers to clean certain data that may be present on the mainframe ADABAS database.

DPS/R's interface with the transformation component **DPS** has been improved to better recover from errors in the metadata that are discovered by **DPS**.

The RSU component has improved logging and display facilities for transactions

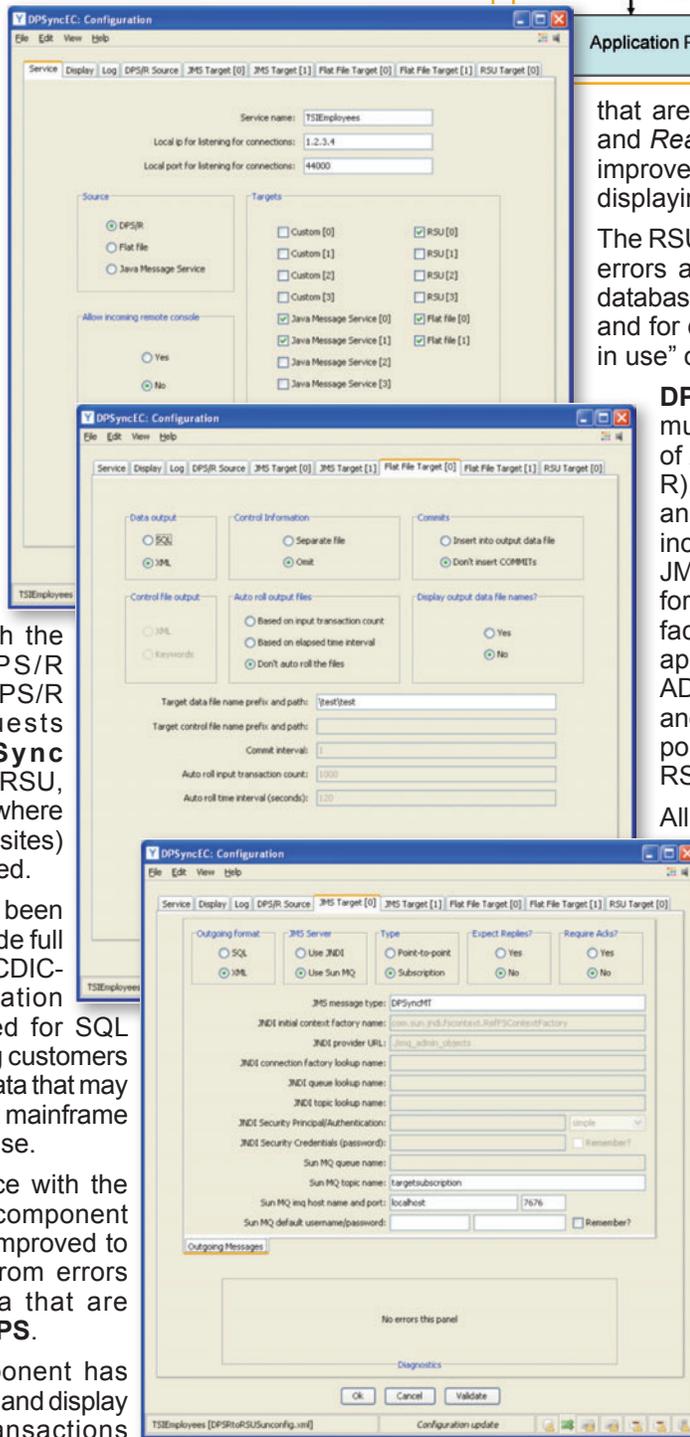


that are applied via the **DPSync** Console's *Retry* and *ReapplyError* operations, as well as efficiency improvements in reading the journal for purposes of displaying transactions via the **DPSync** Console.

The RSU now has full script support for catastrophic errors associated with missing data in the target database (SQL\_NO\_DATA for updates and deletes), and for delayed retry (under script control) for "row in use" or similar recoverable situations.

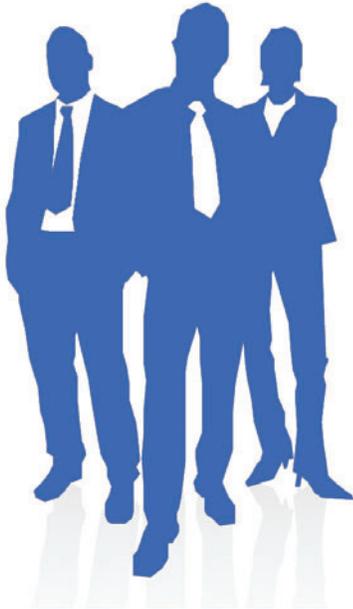
**DPSync EC** has been expanded to support multiple RSU targets from a single source of ADABAS change data (i.e., a single DPS/R), as well as continued support for flat file and Java Message Services (JMS) targets, including both subscription and point-to-point JMS spooling and XML or SQL format options for flat file and JMS targets. With these new facilities, it is now possible to simultaneously apply ADABAS change data (from a single ADABAS nucleus) to up to two flat files (XML and SQL), up to four JMS targets (subscription, point-to-point, SQL and/or XML), and up to four RSU targets.

All of these destinations are coordinated by **DPSync EC** and DPS/R so that the handling of component failures, lost connections, halt situations (due to database errors, under the control of RSU scripts), and application program situations are all loosely synchronized so that the database updates and program operations (of all the targets) are never far out of sync (no more than the pacing controls that have been specified by the customer). The previous guarantees remain: that no data will be lost, that no duplicates will be posted by RSU to the target RDBMS databases, and that all transactions posted by the RSU will be performed in the same sequence as the original ADABAS transactions. Customers may write their own applications to retrieve SQL and/or XML data from flat files and JMS queues, and take any necessary action. •



## *Treehouse Consulting and Remote DBA Services for ADABAS/NATURAL on Open Systems*

*by Chris Rudolph, Technical Representative*



Treehouse Software's popular Consulting and Remote DBA Services offer many customers cost-effective, proven alternatives to full-time systems administrators and DBAs. Now, Treehouse is extending its decades-long commitment to ADABAS and NATURAL by expanding its Remote DBA Services to ADABAS/NATURAL for open systems.

The market has demonstrated that many longtime ADABAS/NATURAL sites have moved, or are considering moving their existing applications to ADABAS/NATURAL for open systems. Many factors are influencing their decisions, including cutting costs, modernizing existing ADABAS/NATURAL applications, avoiding mainframe upgrade charges, improving performance, and doing more with reduced staff and resources. This is where Treehouse expert consultants with 20+ years ADABAS/NATURAL experience can be invaluable.

Treehouse DBAs are familiar with ADABAS/NATURAL for open systems terminology and utilities, such as ADABCK, ADAFUDU, ADAMON, ADABAS Extended Operations, ADADBA – DBA Workbench, FTOUCH, etc., and they are already supporting customers who have recently made the switch to open systems.

### *Our People are Your People...*

Treehouse Software's experienced consultants are available immediately to provide service and support in many strategic areas, including:

- Day-to-day DBA support for ADABAS & NATURAL
- NATURAL Security assistance
- DBA mentoring
- Assessment of NATURAL code readiness for a move to NATURAL on open systems
- Assistance with data migration to ADABAS on open systems

As part of a consulting services engagement, Treehouse technical consultants can do a phone conference or visit your site to meet with stakeholders; gather business objectives and requirements; identify resources, considerations, and constraints; understand your technology environment; and define success criteria. Treehouse consultants then prepare a project plan in conjunction with your team leader to agree on the scope, schedule, roles, assumptions, deliverables, and costs.

With Treehouse Software as part of your team, you can be assured that your business-critical systems are being given the most expert level of support available. Whether you are an ADABAS/NATURAL mainframe site, an open systems site, or both, Treehouse Software has the experts to assist when you can't do it all yourself.

### *Let's Talk!*

We're ready to discuss your needs. If you have any questions or need more information on Treehouse Consulting and Remote DBA Services, call **Mitch Dorcich**, National Sales Manager at Treehouse Software today at **412.741.1677 x109**.

### About Don Casey



Don first learned about IDMS as a systems programmer at Contra Costa County, where he installed release 3.x over the July 4th weekend in 1975.

After being lured to Cullinet in 1979, Don held positions in field and phone support, both as technician and management. He became one of a select group of Senior Consultants known for their expertise in handling difficult problems.

In 1989 Don joined APL Limited, rising to the rank of Vice President of Technical Services.

In 2007 Don left APL to join Run Right, LLC.

The point of this rant: if high on your survival agenda is saving mainframe costs, you need to take a hard look at what your projected NET savings are (savings – costs to implement), and how soon you expect to achieve those savings. Without debating the actual, realizable savings one might achieve in mass migrating existing applications from the mainframe to an alternate platform (the most likely topic for my next epistle), the point remains large migration efforts almost certainly will take more time than you have right now. You need savings this year and maybe next, not a 5-year ROI project. The solutions you should be looking at today need to have both a quick return and a manageable upfront investment.

### *Off-the-shelf can be implemented much much quicker than trying to create a unique in-house solution.*

You have available a few generic approaches to either reduce the size of your mainframe, or (more likely) stave off that next upgrade for as long as you can:

- Peak Management
- Demand Management
- Application Tuning
- Workload Relocation

I'll say a few words about each (for now), but as the final topic has interesting IDMS implications we'll cover it in more depth at the end.

**Note:** all of these approaches assume someone or some group in your organization has the information and tools necessary to understand what is being done, when, why,

and by whom in your mainframe workload. This information is critical in order to intelligently drive a CPU reduction project.

#### **Peak Management**

You need to size your mainframe to handle the peak load. Analogy: how big a freeway do you need if everybody in the city drives to work at exactly 8am every day? If you are using 1,000 MIPs from 8am to 5pm, but the machine sits idle for the remainder of the day, you have a huge opportunity. What can you do to adjust the workload to level out the peaks (to have people stagger their commute)? User-driven workload (online transactions, etc.) is difficult to control, but scheduled (batch) workload provides opportunities. Have you analyzed what work is being done during your peak processing periods, and can you move some of it to your slack periods? Bulldoze the workload peaks into the valleys.

#### **Demand Management**

Are your users doing things they really don't need to do?

Analogy: Are teenagers cruising Main Street repetitively every Friday night? Can you identify (by application and requestor) significant workloads that appear to be subject to negotiation or control? Is that daily report really needed daily? Could it be made into a weekly? Focus on those things running during the peak periods.

#### **Application Tuning**

Are (parts of) some applications just pigs? Can you identify what transactions and batch jobs are major CPU consumers? Are any of them worth a performance code review? Do any of them appear candidates for Demand Management? Again, focus on those things running during the peak periods.

All the above efforts should be well within the capabilities of a seasoned IT department, given some priority-setting and appropriate project leadership. All of them most shops do from time to time, but not always as a focused effort. This may be the time for a focused effort. Pull a team together and task them with holding back the tide. In medium to large environments every month you can defer an upgrade can save hundreds of thousands of dollars in CPU-related charges. The payback can be both large and quickly achieved, especially if aggressive workload management has not been the norm in your shop.

As many of the decisions to be made relate to application and usage-specific questions, engagement of in-house staff is almost always required, but project leadership and direction could come from an external consultant, if no in-house resource is available.

What follows is a more of a medium-term option, but one with both the potential for significant CPU savings. It also has some side benefits as well.

(continued on page 7)

## *Women and Children First!* (continued from page 6)

### **Workload Relocation**

Are there some workloads, or portions thereof, that can be moved to a less expensive platform? The “mass migration” scenario I discarded as a short-term option at the beginning of this article is the extreme example; there are other, faster ways to move some workload off the mainframe. What if instead of moving entire applications, we move only that functionality which can be moved easily and with minimal disruption. The mainframe (and IDMS) architecture stands

*...one should take a serious look at what specific workloads might be quickly and easily offloaded; either through data replication or other means.*

second to none in being able to deliver stable and well performing transaction-based applications. However; the mainframe has no particular advantage in a reporting or data warehousing application. The proliferation of reporting tools and relational databases of all shapes and hues on distributed platforms provides reporting capabilities that are equal to or superior to what the mainframe can provide. What is hard is getting them to work cheaply against mainframe data. As long as the data remains on the mainframe, it takes mainframe cycles to support reporting requests from other platforms.

This has led to a well-understood and widely embraced approach of creating a clone of selected mainframe data on a distributed platform, to support reporting/retrieval processes. Creating these second copies can be done by using a commercial product, or through in-house developed methods (sometimes requiring application modifications).

Back to our dilemma: you need a quick hit. Off-the-shelf can be implemented much much quicker than trying to create a unique in-house solution. Several robust commercial products exist which allow mainframe databases, such as IDMS, to be replicated to these other, cheaper platforms. These products can be implemented generally without any changes to existing mainframe application code. Since many shops already have end-user reporting tools that are used against relational data, providing access to replicated mainframe data may actually be viewed as an enhancement by the end-user community.

The catch is, you need to pick a product and spend some money. So if you choose to look into this option, and as you look at products, consider these questions:

- What workload will you be able to offload? Will it be enough to make this worthwhile?
- How soon can you implement and offload work? How long before I recoup my investment?
- What overhead does a particular replication product

add to the mainframe? This eats into your offload savings.

- Any product limitations? What can't it do that I need it to do? What changes do I have to make to existing mainframe applications or environments?
- Any additional functionality in the product you may need for future projects? If I buy it for simple replication now, what future needs might I have that I need to think about as I commit to a given product?
- Any additional benefits to the company from creating a replicated data store? What benefits can I show the business community from having a local relational copy of mainframe data? Can I allow local applications to access this data?

Bottom line: shops looking to quickly reduce CPU usage, or even just slow the upgrade cycle, should place immediate focus on managing workload and user demand, and tuning those application components which are significant contributors to peak usage. Beyond that one should take a serious look at what specific workloads might be quickly and easily offloaded; either through data replication or other means.

### **Don Casey**

Principal Consultant  
Run Right, LLC

### **About Run Right, LLC**



Run Right, a Treehouse Software Strategic Partner, is an IT consulting firm based in the San Francisco Bay Area.

Run Right has extensive experience in several areas: Legacy Modernization Consulting; IT Process Analysis and Improvement (ITIL certified); Project Management (both PMI and Scrum certified); IT Management; Consulting; IDMS Services; and Education Services.

Contact Run Right, LLC at +1.925.689.2042, or visit [www.runrightllc.com](http://www.runrightllc.com).

## Treehouse Software Products

### Legacy Data Modernization:

**DPS** - ADABAS-to-RDBMS data materialization (ETL), replication, and propagation (CDC) software

**DPS X-Link** - Instant XML-based read/write access to ADABAS

**DPSync** - Real-time ADABAS-to-RDBMS data propagation (CDC) software product set

**tRelational** - ADABAS modeling, mapping, and data analysis tool; DPS parameter generator

**tRelationalPC** - Windows-based graphical interface to make the tasks of modeling and mapping even simpler

**Treehouse Remote Access (TRA)** - Middleware that allows tRelationalPC to communicate with tRelational on the mainframe.

**NatQuery** - GUI-based tool that intelligently generates NATURAL code to handle all of the complexities of data extraction from ADABAS

**NatCDC** - Add-on to NatQuery designed to create immediately-usable data out of the ADABAS PLOG

**tcACCESS** - powerful integration platform for users of IBM mainframes, allowing a transparent integration of mainframe data sources and mainframe programs into open system applications

**tcVISION** - Data replication product that focuses on changed data when transferring information between mainframe and workstations or open systems

### Software AG Related:

**ADAMAGIC** - Tool for converting mainframe ADABAS files into ADABAS for UNIX/Linux/Windows, flat file, or comma-delimited formats

**ADAREORG** - File reorganization tool for ADABAS

**ADASTRIP** - Data extraction utility for ADABAS

**AUDITRE** - Generalized ADABAS auditing facility

**CHART for NATURAL** - NATURAL application analysis and documentation tool

**EspControl** - Change control system for NATURAL on open systems

**N2O** - NATURAL application change management system

**N2O/3GL** - 3GL support within N2O for PANVALET, LIBRARIAN, ENDEVOR, and PDSs

**PROFILER for NATURAL** - NATURAL quality assurance and testing tool

**SECURITRE** - ADABAS and NATURAL security interface to RACF, ACF2, and TOP SECRET

**TRIM** - ADABAS and NATURAL performance monitor

### Mainframe Emulation:

**SEDIT** - XEDIT and ISPF/PDF compatible editor for UNIX and Windows

**S/REXX** - REXX-compatible language for UNIX and Windows

**S/REXX Debugger** - Optional graphical debugger for S/REXX programs

**TSI is a DataMirror DataWorld partner, and is authorized to market the full line of DataMirror products, including:**

**Transformation Server/ES** - Detects events as they occur in mission-critical production applications and creates useful business information to feed into the message queues of leading EAI, BPM, and SOA environments

**Integration Suite™** - Combines all of DataMirror's real-time integration software and global services

**Transformation Server™** - Real-time multi-platform data integration and transformation with zero-programming required

**iCluster™** - Manage clustered iSeries environments

**LiveAudit™** - Capture all data that is inserted, updated, or deleted to create real-time audit trails

**PointBase™** - Java relational database, mobility and synchronization products

**iReflect™** - Mirror ORACLE database transactions in real-time from the primary system to the recovery system

**DB/XML Transform™** - Powerful Java-based, XML-driven engine for bi-directional data transformation between XML, EDI, database and text formats

**Constellar® Hub** - Powerful ORACLE-based EAI tool



**Cubeware** - Everything needed for easy-to-use, self-service business intelligence for decision makers, managers, and departmental users

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