

Treetimes

A Publication of Treehouse Software, Inc.

This Issue

DataNovata - A New Look at Old Data.....	1
Editor's Notes	2
Use Your Valuable Business Information Like Never Before	2
Larry D. Jones, 1947 - 2011....	3
Real World Series Part 14	4

Treehouse exhibited tcACCESS, tcVISION, eav, and eavRPM at the 2011 WAVV Conference in Colorado Springs. WAVV is a user group promoting the interests of the users of the VSE, VM, and Linux operating systems.

Visit the WAVV website for more information at:
www.wavv.org

Find out what our customers are saying:

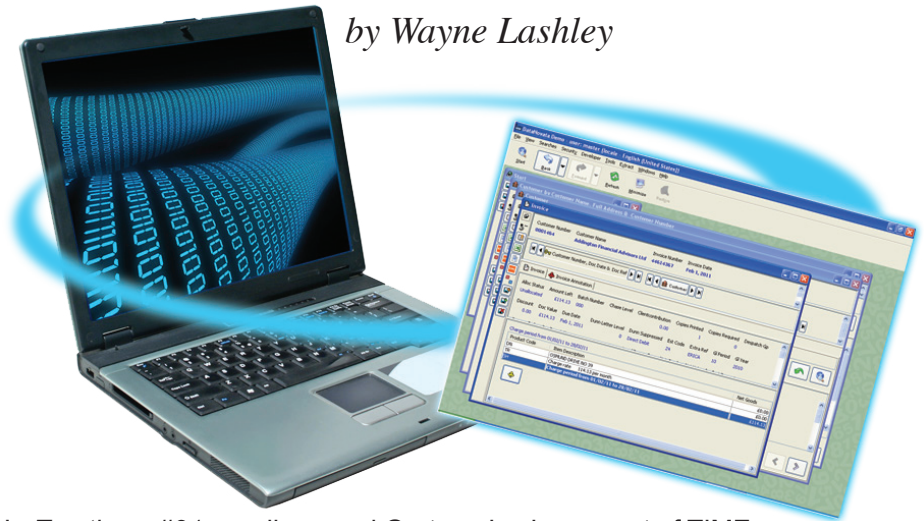
www.treehouse.com/customercomments.shtml



Treehouse Software, Inc.

DataNovata – A New Look at Old Data

by Wayne Lashley



In *Treetimes* #21, we discussed Gartner, Inc.'s concept of TIME:

- Tolerate:** Keep the application but rehost for lower TCO.
- Invest:** Enhance the application with new capabilities such as SOA enablement.
- Migrate:** Transform the application to leverage new technologies and capabilities.
- Eliminate:** Retire the application, possibly replacing its functionality with a package.

Many organizations dealing with the modernization imperative are focused on the Tolerate, Invest and Migrate decisions, and perhaps on the “package implementation” aspect of the Eliminate option. Relatively few, I find, give sufficient attention to the orderly retirement of an application and its data, and especially to the business, audit, legal and statutory issues that remain relevant even after retirement.

Application retirement and data growth fuel need for archiving

As a global leader in providing solutions for migrating legacy mainframe databases such as ADABAS, VSAM, CA-IDMS, etc., to modern relational databases, TSI is finding ever-increasing demand for our products and services in the archiving space (*Treetimes* #21 features a case study involving our customer Grede Holdings LLC).

Besides retirement of applications, demand for data archiving is also being driven by the explosive growth of database volumes and the impact this has on system performance and cost of operations.

Archiving legacy data to an RDBMS certainly makes it easier to access via standard SQL, but the effort required to retrieve data—on demand and in response to yet-to-be-defined future requirements—is a worrisome unknown. Who will have the subject-matter knowledge to query and correlate the data properly, when its

(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, and a Treehouse representative will contact you.

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.

Online Product Demos

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

Tree'times

Editing, Writing, and Design

Joseph Brady

Contributors

Wayne Lashley, Rolf Vollmer

Distribution

Terri Hammerschmitt

Back issues are available on the Treehouse website. Documentation for all products is available on CD.

Hard Copy Circulation: 8,000

Use Your Valuable Business Information Like Never Before!

"We want to **Increase Revenue**, **Increase Profitability**, and **Decrease Expenses!**" A tall order, but a common demand for businesses that want to survive and flourish in the current economic climate. These three critical issues affect all who manage or own a business, and in order to meet these objectives, they typically have to rely on business information from multiple back-end data sources. Additionally, there is a reliance on the IT department to deliver this information, then someone has to sift through numerous reports and spreadsheets that take days, or even weeks to analyze. Not to mention the time it takes IT to gather and deliver that information.



There is a Better Way...

Cubeware is your one-stop Business Intelligence (BI) software solution for managing your business effectively through reliable data. Designed with business professionals in mind, **Cubeware** enables you to quickly and flexibly perform analysis, planning, and reporting, in order to gain that competitive advantage! **Cubeware** is fast to implement, yet flexible enough to meet various users' individual requirements—all at a price that won't break the budget.

Cubeware ensures that business professionals can easily use the system and make modifications without requiring IT support. This gives business users more control over their own work, while freeing IT from time-consuming tasks.

Cubeware enables efficient budgeting and forecasting; delivers reliable reports and accurate forecasts; integrates new divisions, partners, and channels with ease; and provides a consolidated view of business performance across the entire organization.

Cubeware helps you view your company's operations—on demand. Cubeware easily connects to any data source; imports the data into a cube (holding area); and allows users to access the data for analysis, planning, forecasting, and dashboarding—anytime—Windows or Web.

Experience the benefits that **Cubeware** offers:

- Analysis, planning, and reporting using a single tool
- Quick to implement and easy to use
- Low price
- Integration with all back office database systems
- Highly scalable
- Secure

Cubeware is being successfully used in many global companies...



Take a Cubeware Test Drive!

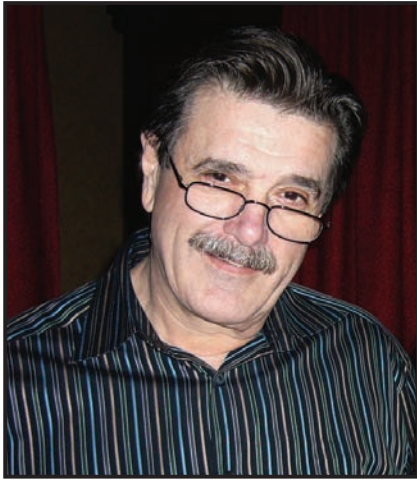
Contact Treehouse Software today to discuss your need to Increase Revenue, Increase Profitability, and Decrease Expenses with **Cubeware!**



Larry D. Jones, 1947 - 2011

For all of you who, like me, have spent most of your careers dabbling in and around the Software AG community, be aware that a giant has passed. On Tuesday, November 1, **Larry D. Jones** passed away at the age of 64. Larry was one of the most talented and versatile software developers I have ever met.

George Szakach, founder and President of Treehouse Software, describes Larry as “a friend to all of us at Treehouse, someone with a deep love for family, and an unmatched computer software talent”.



Larry D. Jones

Larry joined Software AG in the late-1970s, when SAG acquired a newly-developed TP system—eventually to be named COM-LETE—and all its developers. Larry was a principal software developer of this TP system. In 1980, Larry was promoted to Vice President of Technical Development for Software AG of North America, to head the development office in Seattle. He continued to lead the effort to enhance COM-LETE (initially built for MFT) for MVS and DOS/VSE, along with development of other major SAG products. After departing SAG in 1982, Larry continued a very successful career in various capacities in software development and consulting.

In 1999, Larry joined Treehouse Software and spent the rest of his years as our Principal Software Architect. He contributed heavily to developing tRelational/DPS when those products were still in rapid evolution. But his greatest achievement was in the conception, design and implementation of DPSync, the leading real-time ADABAS-to-RDBMS replication product. It

was through Larry's vision, talent and dedication that DPSync emerged and became the dominant force that we see today.

I myself joined TSI not long after Larry, and so we had the opportunity to spend a lot of time together over the years. Traveling around the world, we collaborated on product development, visiting customers and giving presentations.

Larry Jones was a good friend of mine, and I'll miss him a lot. The Treehouse staff had the utmost respect for Larry and will certainly miss him. The entire Software AG community will miss him, too.

RIP, Larry.

Wayne Lashley

Chief Operating Officer
Treehouse Software, Inc.

Real World Series (Part 14 of Many) by Rolf Vollmer

*This is the fourteenth installment in a continuing series of articles featuring **tRelational** and **Data Propagation System (DPS)**, TSI's ADABAS-to-RDBMS product implementation, in several "real world" environments. **tRelational** auto-generates complete RDBMS schemata from existing ADABAS files and allows for easy mapping of ADABAS fields to already existing data warehouse or ERP schema. After **tRelational** does the mapping, **DPS** can then materialize (initially load) and propagate (subsequently keep synchronized) the ADABAS data into the RDBMS without requiring direct access to ADABAS.*

After just under one year of development and preparation for data migration, a new version of vita.APPLICATIONS, release 4.0 was put into production on January 31st 2011 and on February 7th 2011 for the recently-merged Berufsgenossenschaft Holz und Metall (BGHM), under the supervision of the chairman of the management board, Dr. Platz.

What is newsworthy is that this version signifies the sunsetting of the former ADABAS/NATURAL application along with the ultimate sunsetting of the mainframe at BGHM's outsourcer, HZD.

vita.APPLICATIONS, the modern IT solution for Germany's Employer's Liability Insurance Organizations, now utilizes a modern Microsoft SQL Server database, delivering increased flexibility and excellent performance. The application's .NET components, together with the new database, increase ease of maintenance considerably.

VITA, the IT division of Berufsgenossenschaft Holz und Metall, completed a 6-month project to consolidate data from the former BG Metall Süd and NorddeutschenMetall BG on January 1, 2008, and system implementation and data migration at Holz-BG was completed on February 2010 in only 7 months of development time. Again, this shows its capabilities in terms of rapid application development and fast data migration, says Dr. Heyder, IT Manager at VITA.

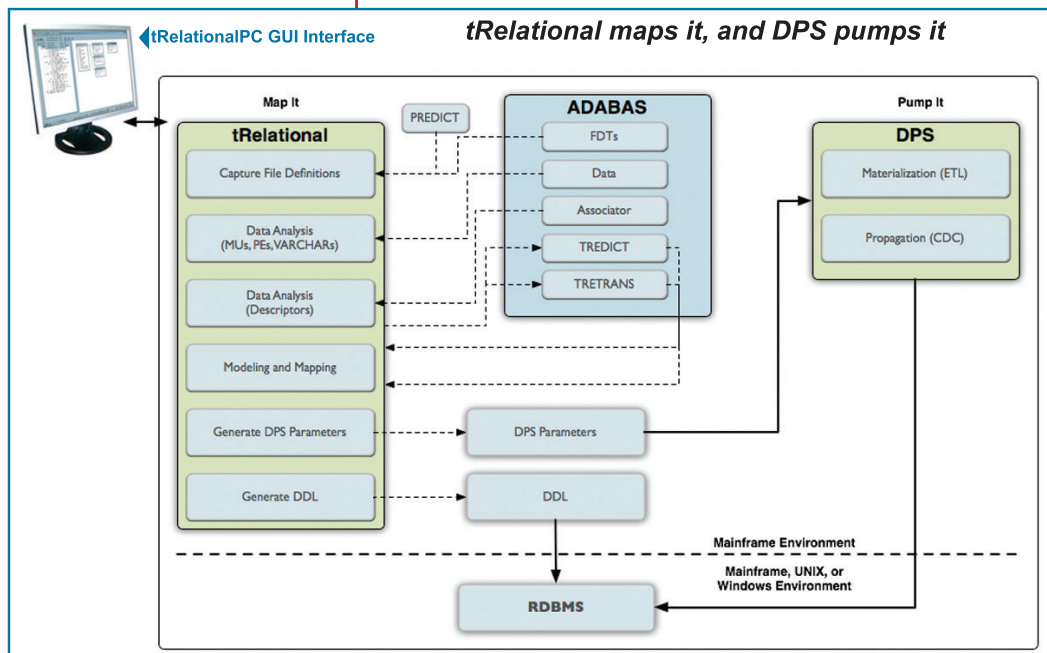
Concluding a project timeline of just under one year, over one weekend 784,313,226 ADABAS records for the former BGM were migrated into the new SQL Server data structure, and on the following weekend for the former HWBG, former MMBG, and former HBG, 448,358,321 records were migrated. In both cases, 60 employees of

VITA ensured a smooth data migration and implementation of the new software.

They were supported by testers from the various departments. On the Monday, vita.APPLICATIONS was available to the users at 6:30am.

For data migration, the process was more than just a simple migration from the mainframe. Initially, the records were extracted from the mainframe with Treehouse Software's **tRelational/DPS**, based on previously-defined rules (e.g., normalization of ADABAS MU fields and PE groups), and were stored in a staging database. From the staging database, some additional transformation and linking was needed to populate the ultimate target structure in SQL Server, to take full advantage of the new database.

tRelational and **DPS** were chosen as best-of-breed and complemented by excellent service for the initial phase of the data migration and later phases.



In total, about 4 billion records in 4,000 tables needed to be moved from source to target. Despite this enormous amount of data, the team achieved the data migration in a short timeframe. The rules were configured by the migration team led by Mr. Malzkorn in 239 SSIS packages, and combined in a way that the migration could run automatically at the push of a button for each Employer's Liability Insurance Organization.

For near-term future, the VITA staff already has new tasks on the agenda. Besides development of new connection software based on vita.APPLICATIONS in cooperation with BG RCI, the technical fusion of all data of the new BGHM will be put in place for 01/01/2012. In addition, plans are in the works for vita.MOBILE, an "app" version of vita.APPLICATIONS for Windows Phone 7. •

(German version on page 5)

Berufsgenossenschaft Holz und Metall vita.APPLICATIONS 4.0 jetzt hostfrei und noch leistungsfähiger! (German version)



Nach knapp einem Jahr Entwicklungsarbeit und Daten-migrationsvorbereitung wurde am 31. Januar 2011 und am 7. Februar 2011 bei der frisch fusionierten Berufsgenossenschaft Holz und Metall eine neue Version von vita.APPLICATIONS mit der Releasenummer 4.0 in Anwesenheit des Vorsitzenden der Geschäftsführung Herrn Dr. Platz produktiv gestellt.

Das Besondere an dieser Produktivstellung; mit dieser Version wurde die noch teilweise

bestehende ABABAS/NATURAL-Lösung komplett ersetzt, verbunden mit der endgültigen Ablösung des Mainframe bei der HZD.

vita.APPLICATIONS, die moderne IT-Lösung für Unfallversicherungsträger, speichert die Daten nun vollständig in eine Microsoft SQL Server Datenbank und wird damit noch flexibler und performanter. Die .NET-Komponenten in Verbindung mit der neuen Datenbank erhöhen zudem die Wartungsfreundlichkeit erheblich.

VITA, der IT-Bereich der Berufsgenossenschaft Holz und Metall, hat damit nach der Datenzusammenführung der ehemaligen BG Metall Süd mit der Norddeutschen Metall BG mit 6-monatiger Projektlaufzeit zum 1.1.2008 und der Systemeinführung und Datenmigration bei der Holz-BG zum Februar 2010 mit nur 7-monatiger Projektlaufzeit seine Fähigkeiten zur raschen Entwicklung von Anwendungen und schnellen Datenmigrationen erneut bewiesen, so Herr Dr. Heyder, IT-Manger der VITA.

Nach einer Projektdauer von knapp einem Jahr wurden an einem Wochenende für die ehemalige BGM 784.313.226 Datensätze in die neue Datenstruktur überführt und am folgenden Wochenende für die ehem. HWBG, ehem. MMBG und ehem. HBG nochmals 448.358.321 Datensätze. Jeweils 60 VITA-Mitarbeiter sorgten für einen reibungslosen Ablauf der Datenmigration und der Einführung der neuen Software. Unterstützt wurden sie dabei auch von Testern der Fachseiten. Montags stand vita.APPLICATIONS den Anwendern dann wie gewohnt wieder ab 6:30 Uhr zur Verfügung.

Bei der Datenmigration war es nicht mit einer einfachen Übernahme der Daten vom Mainframe getan. Die Datensätze wurden zunächst vom Großrechner übertragen und dabei nach zuvor erarbeiteten Regeln mit Hilfe von **tRelational** transferiert (u.a. Auflösung von multiplen Feldern und Periodengruppen) und in einer Spiegeldatenbank gespeichert. Von dort wurden die Daten dann unter Berücksichtigung der generierten Zielstruktur der SQL Datenbank transformiert und verknüpft, um die Vorteile der neuen Datenbank von Anfang an nutzen zu können. **tRelational** und **DPS** sind Produkte von Treehouse Software und wurden als die besten ihrer Art, ergänzt durch exzellenten Service in der initialen Phase der Datenmigration und späterer Projektphasen, ausgewählt.

Insgesamt mussten dabei über vier Milliarden Datensätze in fast 4000 Tabellen Hin und Her bewegt werden. Trotz der enormen Datenmenge war dies in der kurzen Zeit möglich, da die Regeln zuvor in Form von 239 SSIS-Paketen vom Migrationsteam unter Leitung von Herrn Malzkorn erstellt und so kombiniert wurden, dass die Migration für jeweils eine Berufsgenossenschaft auf Knopfdruck automatisch ablaufen konnte.

Für das Jahr 2011 stehen für die VITA-Mitarbeiter schon die nächsten Aufgaben an. Neben der Realisierung neuer Verbindungsstellensoftware auf der Basis von vita.APPLICATIONS gemeinsam mit der BG RCI, wird die technische Fusion aller Daten der neuen BGHM zum 1.1.2012 in einer Datenbank vorbereitet. Weiteres Thema ist die Bereitstellung von vita.MOBILE, der App-Variante von vita.APPLICATIONS für Windows Phone 7. •

DataNovata – A New Look at Old Data (continued from page 1)

original application is long retired (perhaps along with its users!)? Will the various encoded fields be meaningful? What will be the consequences of an inability to meet the requirements of an auditor or legislation?

What is needed is a comprehensive “future-proofed” application that enables navigation through all the archived data in any conceivable manner, which can deliver secure, flexible, read-only access for any authorized user across the internal or external network.

TSI partner NSC Group, of Manchester, UK, anticipated these requirements in developing the revolutionary software product **DataNovata**. For worldwide **DataNovata** sales, marketing and customer technical support, NSC Group has turned to TSI.

What is DataNovata?

DataNovata is a software product that automatically generates—in minutes—a complete, fully-functional, easy-to-use Web application that navigates and presents the data from any RDBMS. All possible query paths are included, to facilitate rich features such as retrieval by value range, sequential paging of lists and individual item selection. The product utilizes primary keys and foreign-key relationships to automatically join related data and generate sophisticated capabilities like tabbed interfaces. For data derived from legacy sources where such relationships are not “baked” into the database, **DataNovata** provides a facility, the Data Structure Tool, to define these and impart them to the generation process. Additional capabilities for customizing the application to suit particular needs are included.

DataNovata-generated applications are entirely Java-based and are therefore available on any platform, and easily deployed within an organization’s network, across the Internet or via the Cloud. Security and administration are suited to the enterprise, including through available integration with Microsoft Active Directory.

Archiving may not be a one-time event

Many organizations have—or should have!—a process whereby an archival of application data is scheduled on a periodic basis, perhaps annually. Still-operational applications may have data that are no longer required for current processing, and these data are subject to archival and subsequent physical deletion from the operational database. Ultimately, some data may no longer be required—or desired—even in the archive. **DataNovata** provides an optional “End of Life” feature that enables periodic physical deletion of data from the archive, according to user-specified rules.

In cases where data are archived periodically from operational databases, over time there may be structural changes to that data. New tables or columns may be added, or relationships altered. TSI’s data migration tools

(e.g., **tRelational/DPS**, **DPSync**, **tcVISION**, **NatQuery/NatCDCSP**) easily handle these situations, often by simply regenerating source-to-target processing instructions based on reprocessing of the relevant metadata.

Similarly, **DataNovata** can simply regenerate the application and in doing so accommodate any structure changes that have been implemented. Changes in data structure are automatically incorporated into the generation process, and the new version of the generated application presents the data according to the new schema.

DataNovata helps dramatically reduce costs and increase competitiveness

Through years of mergers and acquisitions, UK insurer RSA Group was faced with a portfolio of over 450 applications embodying various technologies. Application portfolio analysis determined that approximately 300 of these were redundant or obsolete.

While it was feasible to selectively migrate data in a redundant application to its “preferred” counterpart, in many cases this was deemed undesirable due to cost, complexity or other factors. Yet, for legal and operational reasons, the redundant or obsolete applications could not be simply decommissioned and discarded wholesale. Sometimes it was necessary to retain the data for some period of time, and there were further scenarios where the data could be judged to have reached “end of life” and therefore it was necessary to physically purge it according to defined business rules.

To address these considerations, the RSA’s IT department established an “archive service”, consisting of hardware and software infrastructure along with human resources including a project manager. Technical specialists analyze application functionality and data, security, annotation needs and end-of-life issues, and implement data migration processes as needed.

DataNovata is used to generate applications to navigate, view and annotate the data, and provide selective data extraction and purging according to user requirements.

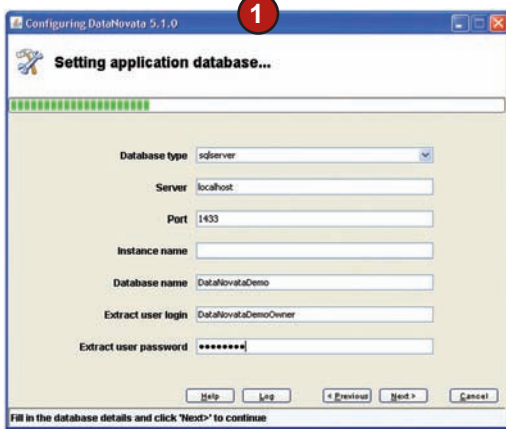
The initiative is yielding significant benefits:

- The cost of business processing (e.g., policy and claims administration) has been reduced, increasing the RSA’s competitiveness.
- Data volumes have decreased by 25% and now leverage standard, low-TCO technology infrastructure. Audit and operational requirements are fully met.
- Near-term cost savings are expected to exceed \$5 million.

DataNovata can deliver needed management information applications in a fraction of the time and cost of other methods

A multinational provider of commercial directory information
(continued on page 7)

How Does DataNovata Work?

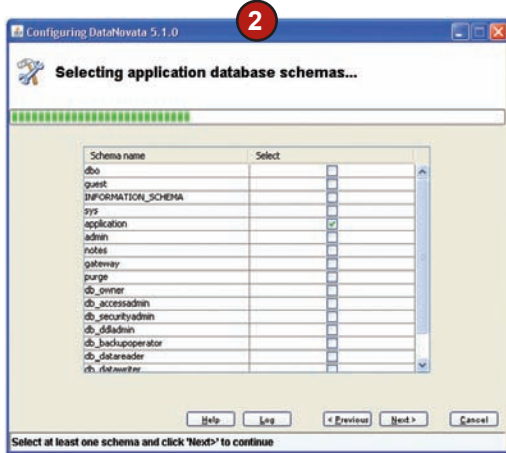


Select Your Database

Configure DataNovata with your database location.

After installing **DataNovata** on the development server along with a suitable J2EE web server (e.g., Tomcat), run the **DataNovata** Configuration Manager. Enter the details of your database into the Manager and set any further options as required.

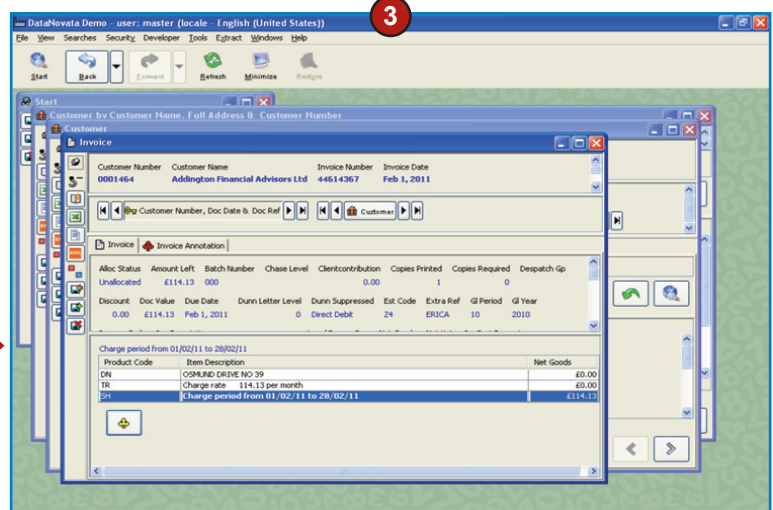
Many popular database formats are supported, e.g. Oracle, SQL Server, MySQL etc. A compatible version for other database can be supplied.



Generate Your Application

Once the configuration is complete, the **DataNovata** generate process can be run. This extracts all necessary data definitions and relationships from the database and creates a web-enabled application.

Within minutes, the database structure has been examined and your new, web-enabled application has been created, deployed and is ready to use.



Access Your Data and Customize Your Application

End-users can now be given access to your data from anywhere on your intranet (or even the world!) via a standard web browser or Java Web Start.

No installation is required - your users simply enter the URL, and the client tier of the application is automatically installed and run.

The Administrator is able to manage other users and configure application and data security.

Additionally, an array of customization options can provide the ideal user interface through the use of on-line design facilities, configuration parameters, and simple **DataNovata** Scripts. And because a **DataNovata** application is pure Java, you always have the option of extending the generated Java classes.

Direct Access to Legacy Data!

Additional capabilities for **DataNovata** are available through Treehouse Software's **tcACCESS** product, which gives **DataNovata** live, read-only access to a wide variety of mainframe data sources. **tcACCESS** allows the automatic mapping of mainframe data, and the **tcACCESS** Windows-based administrator application provides mainframe data transparency, even for users without mainframe knowledge.

needed fast access to market information that was "locked up" in an aging COBOL application. The application lacked flexible search facilities and was not able to deliver the information that management needed for timely decision-making. Enhancements and special requests to meet new requirements were trapped in the "IT backlog", with forecast high cost and long development timelines.

The customer chose to employ **DataNovata** to generate new "management information systems" to enable searching and navigating the data to meet business needs. This enabled management to better respond to changing market conditions and reduced the dependency on IT for delivering information "on demand".

Subsequently, the company realized an increase of \$13 million in revenues, attributable in a significant way to timely information made available in the **DataNovata**-generated applications.

Only TSI can support the full range of archiving needs

In conjunction with TSI's acclaimed data migration and replication solutions, and with **eav** (the **Enterprise Application Viewer**) for COBOL and NATURAL application archiving, TSI offers an unmatched portfolio of solutions for organizations to safely and cost-effectively retire applications while ensuring that the business and technical value and knowledge remains available indefinitely. •

TREEHOUSE SOFTWARE, INC.

2605 Nicholson Road, Suite 230
Sewickley, PA 15143 USA

POSTAGE
INFORMATION
HERE

Tree·times

Treehouse Software Products & Services

Legacy Data Modernization:

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

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

NatCDCSP - 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

Application Portfolio Management and Modernization:

application-builder - A tool for modeling business requirements without the need for detailed knowledge or specification of a particular programming language or technology. application-builder allows the choice of implementation technology from among a wide variety of standards-based candidates, including Java/Swing, Java/HTML, Google AJAX API, Google Maps, Flash, etc.

Cobolclipse - A state-of-the-art Eclipse-based development environment for COBOL

DataNovata - A powerful software tool designed to rapidly build a software application, giving access to the data within any relational database in order to satisfy any user or statutory requirements.

eav™ (Enterprise Application Viewer) - A Windows-based Application Portfolio Management tool that facilitates analysis and documentation of COBOL and NATURAL applications and JCL, and other mainframe object types.

eavRPM™ (eav Rapid Program Modernization) - An extension to eav that enables mainframe NATURAL and COBOL programmers to quickly develop Web-based, properly-architected .NET and Java applications using artifacts from legacy NATURAL and COBOL systems.

Lifecycle-Manager - Software that automatically versions source files and continues to organize them throughout the development process

Natclipse - A state-of-the-art Eclipse-based development environment for NATURAL

SOA-Connector - Lightweight middleware for mainframes and distributed systems that enables exposing (and consuming) functionality in COBOL, NATURAL, Java, .NET, etc. as services to the outside world, transforming the mainframe into a powerhouse of modern business functionality

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

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

Services:

Consulting and Remote DBA Services - Our expert consultants can provide ADABAS/NATURAL performance analysis, tuning, and optimization; development, training and implementation; help with special routines or user exits; product installation, upgrades, and training; data transfer/integration; and remote DBA services for ADABAS/NATURAL on the mainframe and open systems

Business Intelligence:

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

Mainframe Emulation:

SEEDIT - 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

Phone: 724.759.7070

Fax: 724.759.7067

E-mail: tsi@treehouse.com

Web: <http://www.treehouse.com>