

# Treeretimes

A Publication of Treehouse Software, Inc.

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### Being responsive to our customers...

In response to a customer request, **Treehouse Software** and **Software AG** collaborated on creating a new **N2O/SPoD** interface.

(see page 4 for more details)



Treehouse Software, Inc.

## Real World Series

(Part Eight of Several) by Joseph Brady

### DPSync: Justice Is Served

Batman and Robin are a lot busier these days, and that makes **Captain Mark Dickerson** of the Sacramento County Sheriff's Department quite happy.

Captain Dickerson's Batman and Robin don't wear capes and masks. They are the dynamic duo of machines hosting the County's Integrated Justice Information System (IJIS) databases on Microsoft SQL Server 2000. The databases are populated in near-real-time with data propagated from ADABAS in the mainframe-based Criminal Justice Information System (CJIS) using Treehouse Software's **DPSync** product.



**DPSync** is the latest advance in Treehouse Software's long-standing leadership in ADABAS-to-RDBMS data transfer. The product covers the complete spectrum of customer requirements for ADABAS file analysis, graphical RDBMS schema modeling, including automatic schema generation, complex mapping and transformation, a metadata repository, Extract-Transfer-Load (ETL) bulk synchronization, staged Change Data Capture (CDC), and near-real-time CDC. In early 2005, Treehouse will offer yet another advance with the release of **DPSync** version 2.1, delivering true real-time CDC.

### Timely, Accurate Information Improves Public Safety

The IJIS Program is a complex, multi-agency initiative sponsored by the Sacramento County Criminal Justice Cabinet. Program Manager **Brian Richards** explains that one of the program's key goals is to identify and implement projects that are consistent with the technical recommendations outlined in the IJIS Information Strategy Plan (published in 2002). Each project must meet one or more of the following IJIS Program goals:

- improve data sharing among stakeholder organizations;
- reduce redundant activities; or
- improve the ability to perform ad-hoc or trend analysis reporting.

"The purpose of the Program is to improve public safety through the timely and accurate sharing of critical criminal justice information among the stakeholder organizations in the criminal justice community," says Mr. Richards. "IJIS is

(continued on page 5)

### ***Treehouse Welcomes New European Sales/Technical Representative***

We would like to welcome **Mark Jones** to the Treehouse family. Mark is a very experienced computer professional with well-developed, wide-ranging technical abilities. He has managed projects, provided consulting, and delivered presentations and training.

Mark joins Treehouse in the role of European Sales/Technical Representative, focusing on technical pre- and post-sales, consulting, and partnering.

Prior to joining Treehouse, Mark was employed by Software AG of Germany, where he served as the development product manager for PAC. In addition, he provided consultancy for over 200 client sites within the UK and Europe.

Mark is particularly excited about the possibilities for **tRelational/ DPS, DPSync, and DPS X-Link**. With his experience, Mark knows the value of these solid products--versus suddenly announced, consulting-heavy "solutions".

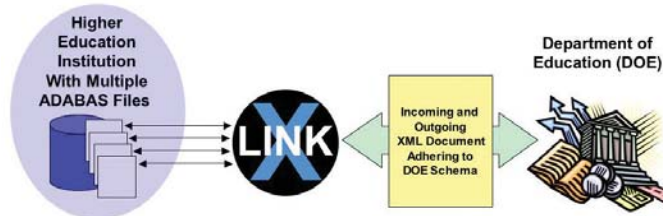
Mark was born in South Wales, educated in Namibia, and resides in England. He speaks fluent German.

**George Szakach**, President of Treehouse Software, says, "As you might expect, Mark may be calling on you to discuss your data migration needs. He also might touch on your NATURAL application change/management picture. If you have no change/management tools, or inferior ones, Mark and Treehouse may have a deal for you."

### ***"Plug-n-Play" Web Service Enablement of ADABAS***

In recent issues of Treetimes, we have featured our new ADABAS-to-XML product, **DPS X-Link**, a mainframe-based TCP/IP server that provides client applications with fully-automated, real-time read/write access to ADABAS data and metadata in XML format. Absolutely no coding of middleware is required -- **DPS X-Link** is a true "plug-n-play" product that drops right into your Service Oriented Architecture (SOA). **DPS X-Link's** remote API components provide COM, DLL, Java, and SOAP/WSDL interfaces to easily enable any imaginable client/server or SOA configuration. And **DPS X-Link's** SOAP/WSDL capabilities make it instantly deployable with any of the new BPEL (Business Process Execution Language) enabled servers/orchestrators now available, so incorporating ADABAS access into your enterprise's SOA is easier than ever.

One of our **DPS X-Link** "early adopters", a large higher education institution, recently installed **DPS X-Link** to automate the processing of its XML-based data exchanges with the U.S. Department of Education (DOE). New DOE guidelines require student financial aid data to be interchanged in XML format, adhering to an XML Schema published by the DOE. This university had already undertaken the task of programmatically extracting data and metadata from their ADABAS files to build XML documents for submission to the DOE and the even more onerous task of parsing incoming XML documents from the DOE to update their ADABAS files. Not wanting to dig themselves in a code-maintenance quagmire, they sought to replace their home-grown, manually coded solution with a fully-automated alternative -- **DPS X-Link**.



With **DPS X-Link**, you can be pumping XML to and from ADABAS in minutes! For more information on **DPS X-Link** or to receive a free trial, contact Treehouse Software today at **(412) 741-1677 ext. 226** or [sales@treehouse.com](mailto:sales@treehouse.com).

### ***Tales From the Trails***

Over the past few months, Treehouse representatives have been very busy on various consulting jobs, site visits, and product demonstrations. They have visited sites in Alaska, California, Canada, Colorado, Delaware, Florida, Germany, Hawaii, Illinois, Luxembourg, Massachusetts, Michigan, Missouri, The Netherlands, New York, North Carolina, Ohio, Texas, Utah, Virginia, Washington D.C., and Washington State.

## **Tree • times**

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# Data Warehousing with Proven Products and Methodology

Many ADABAS sites have made TSI's **tRelational/DPS** and **DPSync** a key part of the technology infrastructure to support business intelligence (BI) systems.

**Patti Barney**, Associate Vice President of Information Technology at Broward Community College says:

*"We can now easily transfer ADABAS data to ORACLE for business intelligence and Web applications, while continuing to benefit from our robust, high-performance ADABAS-based OLTP administrative applications. We use several purchased packages written specifically for ADABAS, and we can now have confidence that these packages will continue to serve our needs well into the future."*

However, success in BI projects requires more than technology; it requires a proven methodology.



**Earl Hadden** To assist customers in leveraging our products for successful BI initiatives, TSI has allied with **Earl Hadden**, a world-renowned authority in the data warehouse movement. Earl is co-developer of the *Hadden-Kelly Data Warehouse Method*, the most widely used methodology for the development of data warehouses, data marts, and BI solutions. Known for his pragmatic, business-driven approach, Earl has worked with over thirty-five organizations in seventeen countries to

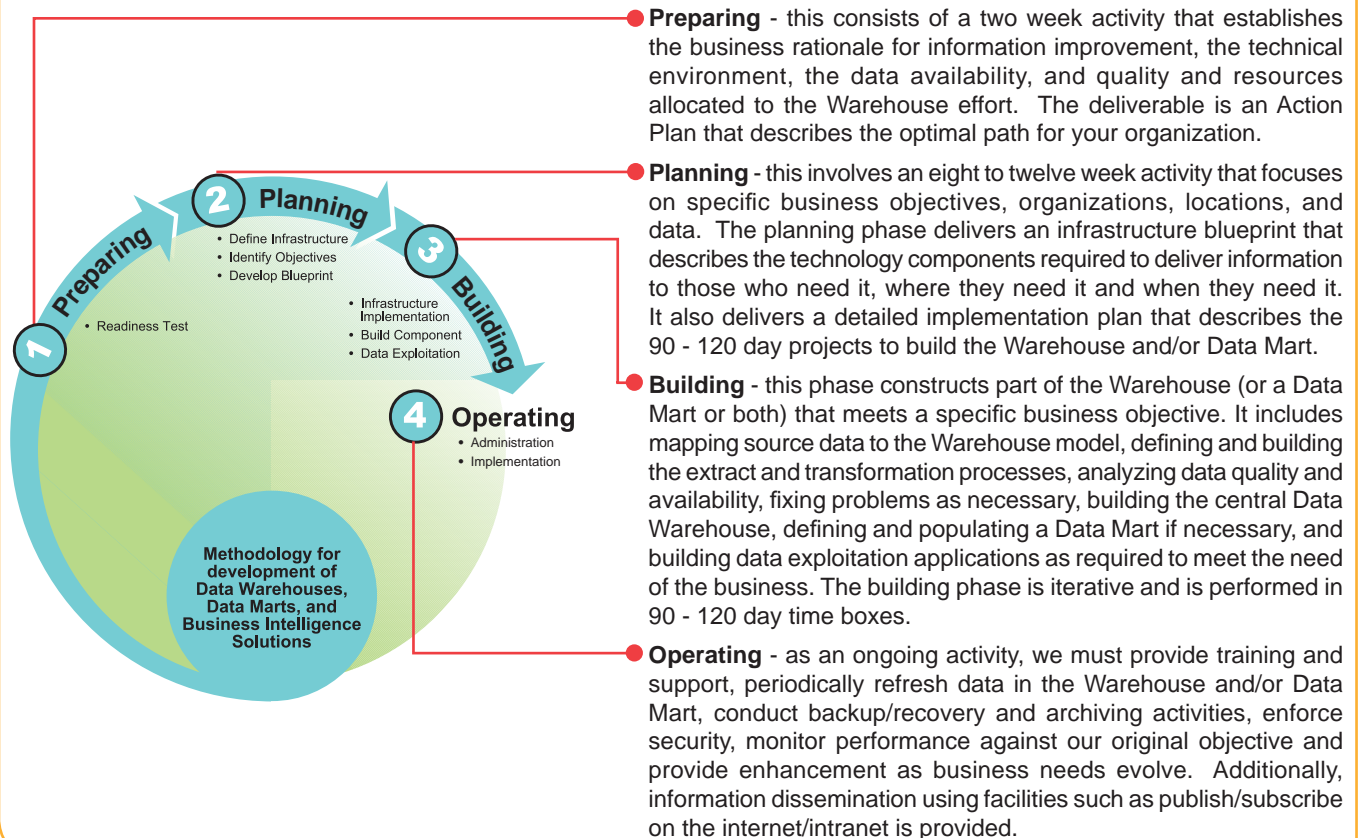
help significantly improve business performance through the application of advanced management concepts and information technology. He is a member of the Data Warehouse Network Editorial Advisory Board, the Patricia Seybold Group Business Intelligence and Data Warehouse Advisory Panel, and the Digital Consulting Data Warehouse Advisory Board. Earl's worldwide seminars have been sponsored by Digital Consulting Inc., Technology Transfer Institute, IIT, SPL, Ni-Tech, NCR, Digital Equipment Corporation, Oracle Corporation, BBS International, Business Objects, Prism Solutions, Informix, Aonix, Silicon Graphics, Carleton Corporation, Sybase, Software AG, the Data Warehouse Institute, and the Data Warehouse Network.

The Hadden-Kelly Method fosters project success by delivering:

- A solution aligned with business strategy
- An architecture or "blueprint" to ensure integration
- Application of both business and technical expertise
- A solution that is constructed incrementally, with each increment delivering a significant, measurable business benefit
- Fast and focused development

TSI provides expert consulting services using the Hadden-Kelly Method to help you achieve your business intelligence goals.

## The method is divided into four phases...



**To learn more about these best-of-breed and established products and services, contact TSI today!**

# Software AG and Treehouse Collaborate on N2O/SPoD Interface

**George Szakach**, President of Treehouse Software, asked Software AG to contribute a statement about a recent joint cooperative effort to assist a mutual customer.

**Karlheinz Kronauer**, Natural Marketing Director of Software AG Headquarters in Darmstadt, was kind enough to provide these comments on this recent interaction between Software AG and Treehouse Software:

"A Software AG customer in Germany recently licensed our **Single Point of Development (SPoD)** product. This customer expressed to our salesperson the need to have **SPoD** interface with **N2O**, the Treehouse mainframe change management tool for Natural, which the customer had already licensed from Treehouse.

Our Natural Product Manager, **Mr. Michael Muenster**, was informed of this request. Similarly, Treehouse personnel were apprised of the situation. Treehouse responded by visiting Software AG Headquarters in Darmstadt to discuss with our professionals whether this interface was feasible. Once we determined it was possible, the discussion turned to the proper way to perform design, development, and testing.

The dialogue was positive and fruitful. Software AG and Treehouse collaborated to develop this interface. Treehouse then integrated the interface into **N2O** at its offices. Treehouse then tested the interface at the customer location.

The result is that the products complement each other so that a site can control certain **SPoD** functions via TSI's mainframe change management system, **N2O**. The customer is very satisfied.

Software AG appreciates the action of Treehouse in this regard. The interface was built and tested with minimal problems and in a timely, professional manner.

If you have any questions about this interface, you may call Treehouse Software.

We believe there may be further opportunities involving our two organizations that will further the cause of putting the customer first."

**Karlheinz Kronauer**

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We appreciated working with Software AG Headquarters in Darmstadt in this situation to deliver value-added product integration to our customer, and we thank Mr. Kronauer for his kind words. It is our hope that this effort will enable Software AG to continue its success with **SPoD** in Natural environments and having **N2O** as one of the supported change management systems. We look forward to further cooperation between our companies.

## Technical Note from Treehouse Software on the N2O/SPoD Interface:

This interface was developed to enable the N2OEDIT locking feature in a SPoD/NDV environment. Please note that NDV Service Pack NDV212P001 or higher is required.

The interface was made generally available to **N2O** customers with **N2O** Version 5.0.1, Fix Level D.



## Real World Series *(continued from page 1)*

helping us deal with a number of important issues, including the difficulty of sharing critical information between agencies, cost avoidance of implementing projects that duplicate capabilities, concerns with the accuracy of redundant data entry, and difficulty in performing effective crime trend analysis activities.”

Besides the County’s Sheriff’s Department, IJIS stakeholder organizations include the County’s Conflict Criminal Defenders, Coroner’s Office, County Executive’s Office, District Attorney’s Office, Department of Health and Human Services, Department of Human Assistance, Probation Department, Public Defender’s Office, and the Department of Revenue Recovery. Additionally, the Superior Court and Sacramento City Police Department participate in the IJIS Program.

*“...it was clear that tRelational/DPS was the leading product for ADABAS-to-RDBMS data transfer.”*

**Doug Kauffroath**  
MIS Director for the  
Sacramento Superior Courts

### *Making Information Available*

Like many state and local governments, Sacramento County has had a long history with ADABAS, dating back to the late 1970s when development of the Criminal Justice Information System (CJIS) commenced. CJIS is the County’s core operational information system that supports multiple stakeholders in the areas of arrests, warrants, criminal history, Court calendaring, and jail management. **Mike Gilliam**, an ADABAS Database Administrator for the County’s Office of Communications and Information Technology (OCIT) notes, “We run a 24x7 shop on behalf of our hundreds of clients. ADABAS’s reliability and performance is critical to meeting our service standards.”

However, beginning in the 1980s, and increasingly in the mid-to-late 1990s, stakeholders started developing their own departmental systems. They needed to do ad-hoc reporting and analysis, and lacking easy access to ADABAS data from the mainframe, they depended on OCIT programmers to write reports and extracts. This led to a backlog of requests and ongoing difficulty with obtaining sufficiently current data.

During 2000 and 2001, County staff began investigating means to improve access to CJIS data by developing a data warehouse on the Microsoft SQL Server platform. Deploying the data on a standard RDBMS would enable querying and analysis using a variety of inexpensive, off-

the-shelf tools. **Doug Kauffroath**, now MIS Director for the Sacramento Superior Courts, was the user champion for that initiative and describes the approach:

“Our investigations found that Treehouse’s **tRelational/DPS** offered the capabilities we needed to efficiently get CJIS data from ADABAS into our new JBSIS (Judicial Branch Statistical Information System) data warehouse. We looked at other solutions, but it was clear that **tRelational/DPS** was the leading product for ADABAS-to-RDBMS data transfer. Funding for the project was partially to be gained through a grant, and to qualify for the grant we had to validate that certain assumptions about ability to produce reports would be met. To that end, we engaged Treehouse to deliver a turnkey **tRelational/DPS** implementation.”

The consulting effort was led by **Wayne Lashley**, now Treehouse Director of Technical Operations. “The productivity and efficiency of tRelational/DPS made it possible for us to deliver a complete turnkey application over the course of only three short site visits,” Wayne notes. The project was completed successfully and on time and proved that **tRelational/DPS** would meet the requirements for the Courts data warehouse.

### *IJIS and Data Currency*

Among the continuing projects is the implementation of the IJIS Database Environment. Through 2002-2003, the IJIS Program established a Microsoft SQL Server-based reporting repository as part of the initial deliverables set out in its Information Strategy Plan. However, IJIS users required the data to be updated more frequently than once a day. OCIT responded by modifying operational procedures to create ADABAS protection log (PLOG) archives four times per day. PLOG archives are the data source tRelational/DPS uses for propagation—proven to be the most efficient, reliable, and effective approach.

By 2004, the demand was growing from IJIS users for even more frequent propagation. “Like many of our customers, the County is becoming a real-time enterprise,” Wayne observes. “We knew we had to respond with an extension to

*“DPSync allows us to take a big step forward without replacing CJIS.”*

**Albert Locher**  
Sacramento County  
District Attorney’s Office

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**tRelational/DPS** that would allow customers to circumvent the operational issues around frequent PLOG switching, yet remain as robust, scalable, and high-performing as **tRelational/DPS**. Sacramento County is a great example of the quality and effectiveness of **DPSync** as a product and of Treehouse services.”

It was evident that bringing the IJIS Database Environment current to within a few minutes of any updates to mainframe CJIS would enable the Sheriff’s Department and other stakeholders to make a quantum leap forward in exploiting IJIS information. Mr. Richards brokered discussions between Treehouse and the County and helped secure funding from the Sheriff’s Department to acquire **DPSync**: “I was pleased to find that Treehouse could meet the County’s requirements for near-real-time data through the **DPSync** product.”

The new near-real-time version of IJIS, using **DPSync** version 1.1, went live in October 2004 and has been propagating without a hitch since then.

*“In our deployment of field identification capabilities, having current data available on criminal histories as part of that process is critical.”*

**Captain Mark Dickerson**  
Commander of Technical Services  
Sacramento County  
Sheriff’s Department

### Technical Notes

The IJIS Database Environment involves two separate Windows-based servers, each running Microsoft SQL Server 2000. One server, known as “Robin”, is utilized by individual stakeholder Report Writers for ad-hoc reporting, testing, and development based on their departmental security view of the data. The second server, “Batman”, is more powerful and supports scheduled downloads of data and replicated views and data. Based on request, a stakeholder organization’s security view of the data can be replicated to their departmental server using SQL Server’s powerful homogeneous replication features.

On an average day, updates to the CJIS database generate over 500,000 PLOG images. These images are captured by **DPSync** and those that pertain to the 32 ADABAS files used by IJIS are transformed into SQL Server-native SQL statements according to the specified mappings. Batman and Robin each host 125 target SQL Server tables, and these tables comprise over 1400 data

elements on each server. The required service level is to have any update to CJIS be propagated to IJIS on both servers within 7 minutes, which **DPSync** delivers easily. This service level is in support of the Sheriff’s Department victim notification commitment, where a prisoner’s release must be communicated to his or her victims within 15 minutes of that release.

### *Cornerstone for New Justice Applications in the Real-Time Enterprise*

With near-real-time data currency in IJIS, what new opportunities are within reach? **Brian Richards** explains:

“Potential follow-up projects include an application for law enforcement officers to use handheld devices querying the IJIS Database Environment via wireless connection to instantly obtain up-to-date information on suspects in the field. Another potential application is a website where custody status and bail information for an individual can be obtained by families and concerned parties.”

In his role on the Board of Directors of the Justice Information Sharing Professionals ([www.jisp.us](http://www.jisp.us)), Mr. Richards is in frequent contact with his counterparts in other jurisdictions. “Everywhere I go, I talk about the IJIS Program, which I believe should be a model for other jurisdictions. In my discussions with colleagues from other jurisdictions that are also working on integrated justice projects, I let them know how **DPSync** is one more of the puzzle pieces that we have put in place to make our CJIS data more easily available to our end users.”

**Albert Locher**, an Assistant Chief in the District Attorney’s Office and IJIS co-chair, notes, “As agencies have greater needs to share information, they will not always have the ability to replace a legacy system such as CJIS, which uses older technology—at least not in the short term. This project demonstrates that it is not always necessary. **DPSync** allows us to take a big step forward without replacing CJIS.”

**Captain Dickerson**, Commander of the Technical Services Division, says, “Our goal is to be able to deliver information where it is needed, when it is needed, and in the format it is needed. When you are dealing with an officer’s encounter with a suspect, the safety of that officer and the protection of the public are paramount. In our deployment of field identification capabilities, having current data available on criminal histories as part of that process is critical. When assessing the immediate impacts to the Sheriff’s Department and the long term benefit for system integration at both the Sheriff’s Department and other justice agencies, it became clear that funding this project was the right thing to do.”

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### As Solid as a Product Can Be...

By incorporating technology from a mature, proven product, **Remote Recovery Data Facility (RRDF)** from E-Net Corporation of San Francisco, TSI was able to come to market with the **DPSync** product in January of 2004. **RRDF** provides the capability to capture PLOG data as it is written by ADABAS and channel it through a highly fault-tolerant architecture that obviates the need to use PLOG archives as a direct data source. Employed in many of the largest IT shops around the world since the late 1980s, **RRDF** has become the standard for disaster recovery and remote homogeneous database mirroring.

*"...DPSync remains a product, not a consulting engagement."*

**Wayne Lashley**  
Director of Technical Operations  
Treehouse Software

**Larry Jones**, Treehouse's Principal Architect for **DPSync**, says "What's really impressive about **DPSync** is that it's a fairly new product, yet its components are highly mature, tremendously comprehensive, and best-of-breed. When you think of how our customers must depend on products like **DPSync** in the real-time enterprise, you realize that you can't be messing around with technology that somebody's only getting around to developing now. The many years of development that have gone into **tRelational**, **DPS**, and **RRDF** can't be matched by other vendors trying to jump into an area they don't really understand. Organizations can't risk being stuck with half-baked 'marketecture'. There's too much at stake."

**Wayne Lashley** adds "We've been hearing the 'real-time' message from customers practically since we launched **tRelational/DPS** in 1996, but it really started to resonate in the past couple of years. We are pleased to deliver **DPSync** in response to that message. And **DPSync** remains a *product*, not a consulting engagement. Customers tell us that they want real products that their own people can use, not customized 'solutions' that just lead to future dependency on vendor consultants when enhancements and extensions are required."

### Looking Ahead to **DPSync v2: The Complete Package**

As has been reported in this and past issues of Treetimes, **DPSync v1.x** offers "near-real-time" ADABAS-to-RDBMS propagation by incorporating E-Net's **RRDF** and automated batch functions.

In recent months, Treehouse developers have been working on **DPSync v2**. However, the components they are developing (or modifying) do not replace any existing **DPSync** components. **DPSync v2** adds real-time capabilities, but subtracts nothing. Real-time propagation will be one deployment option in the full continuum of options that **DPSync v2** will offer, including:

- Materialization for conversion, initial load, and periodic refresh from ADABAS-to-RDBMS
- "Traditional" staged propagation
- Near-real-time propagation à la **DPSync v1.x**
- Real-time propagation

We believe that there will be customers that will prefer near-real-time, especially where they may vary the propagation interval at different times during the day or to accommodate certain business events, to real-time for certain situations. With **DPSync**, they will have the best of all worlds.

This will further distinguish **DPSync** from the competition, which forces the customer to use real-time processing even when it is not desirable. **DPSync v2** is the complete package, meeting all possible ADABAS-to-RDBMS requirements.

#### **Demo Treehouse Products On-line**

Contact Treehouse Software today at **(412) 741-1677 ext. 226** or [sales@treehouse.com](mailto:sales@treehouse.com) to set up a live, on-line demonstration of **DPSync** or any Treehouse product. All you need is an Internet connection and a current Web browser (Netscape, Internet Explorer, etc.) to see Treehouse products in action right on your PC screen.

## *Treehouse Software Products*

### **ADABAS-to-RDBMS Data Transfer:**

- DPS - ADABAS-to-RDBMS data materialization (ETL), replication, and propagation (CDC) software
- DPS X-Link - Instant XML-based read/write access to ADABAS
- DPSync - Near-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.

### **UNIX:**

- 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

### **Software AG Related:**

- ADAREORG - File reorganization tool for ADABAS
- ADASTRIP - Data extraction utility for ADABAS
- AUDITRE - Generalized ADABAS auditing facility
- AUTOLOADER - ADABAS file automatic unload/reload/dump utility
- 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

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