

**...about the Company**

Transamerica Real Estate Tax Service is the USA's leading provider of financial services to the mortgage lending industry. Technological products and solutions for tax services are developed and marketed for customers in the USA, Canada and Puerto Rico.

**Transamerica, a leading financial service provider**

Since its creation in 1935, Transamerica Real Estate Tax Service has always invested in the latest technology, offering customers fast, comprehensive and reliable data. Today they work with over fifty applications hosted on three platforms, and written in four standard programming languages.

**“AS/400 applications developed in-house give customers the flexibility they need”**

Those applications are developed and supported at Transamerica Real Estate Tax Service's head office in Dallas, Texas. At present, Transamerica has 6 AS/400s, a mainframe and over 50 NT servers, although they have started a three-year project to move those mainframe applications to the AS/400. More than forty programmers develop and maintain the AS/400 applications, written in RPG and Cobol.

Chris Coffey is a Senior Programmer Analyst, with over 8 years experience with the AS/400. According to Chris, Transamerica develops applications in house in order to offer their customers flexibility and customization. An “out of the box” solution would never be able to offer the level of service that has made Transamerica the leading company in its field.

*“With Visual Debugger, instead of having to cancel the programs and start searching through enormous job logs, we can isolate the problems and make the necessary corrections on the spot.”*

Chris and the rest of Transamerica's application development and support team identifies a need to further improve and modernize the development and management of their AS/400 applications, particularly in testing and debugging. They had also identified that programmers wasted a lot of time when end users called directly to report application problems. Diagnosis of the problem by telephone was highly unproductive, and often there was in fact no problem - it was simply a case of user confusion. Furthermore, some programmers work “virtually” - from home or from other locations. Traveling to visit users to diagnose a problem was not usually an option. As Chris says “we needed some way to easily find out what was going on in an end-user's job”.

**The Problem**

Applications are critical – failure to reach processing deadlines due to errors or downtime can produce significant financial penalties, and loss of image and prestige.

**The Solution**

Diagnose, debug and solve problems in critical production applications with VISUAL Debugger for Windows

They decided to look at products available on the market. Transamerica has been a customer of SoftLanding Systems for over 4 years, using their TurnOver change management system to control all AS/400 application development. SoftLanding recommended the new VISUAL Debugger for Windows from Tango/04.

**VISUAL Debugger for Windows**

VISUAL Debugger for Windows is a new graphical AS/400 product for debugging and solving application errors in development and production, and for providing instant remote user assistance. It is part of the Enterprise Problem Solver suite, which includes products for alerting technicians to critical application errors.

Transamerica's development managers requested an online demo, provided free of charge by SoftLanding Systems. They were impressed by the wide range of features that VISUAL Debugger for Windows could offer them, going far beyond their initial requirements.

Chris explains, “at first glance, most of us felt a little overwhelmed at the options available in the product, but one of the first things noticed was the ability to access the data dictionary. Most of our programs deal with large flat file manipulation and the ability to see the entire Data Dictionary is a great time saver along with the ability to hover over variables in the source code to view their values. The second thing most of us noticed is the ease of setting the different type of breakpoints and the watch list so that we can pinpoint the record that could be causing a problem.”

**Debug any job, anytime, anywhere**

According to Chris, another valuable feature is that it allows programmers and analysts to see remote end user sessions from their desk. VISUAL Debugger's screen capture utility allows analysts or “virtual” programmers to see exactly what the end user is seeing on their screen when they hit an error. In many cases application problems can be diagnosed and solved in that way.

If more detailed information is needed, VISUAL Debugger allows analysts to instantly jump in and start a debug session on any job interactive or batch. It also reveals internal job information such as the contents of the local data area (LDA), the library list, QTEMP, and more.

Chris describes how this has improved productivity. "Using the screen capture portion of the product helps our developers and business systems analyst investigate problems much easier and faster. Before they would have to leave their desks on occasion and go to the end users PC to monitor how the user is processing their requests. This once again saves time and a lot of hassle."

Furthermore the service provided to end users and customers is improved, vital for a company like Transamerica that is dependent on the quality of its information services.

### **The power to solve live production problems**

But VISUAL Debugger for Windows offers more than that -it also has the unique ability to solve problems in live jobs. As Chris explains "we have multiple applications and users working with the same files. Sometimes if a user's job hits a problem it can have a cascade effect -halting operations for other applications. Usually when this occurs it is a corrupt data file from an outside source or incorrect data entry. We have both occur on a regular basis with the work that we do."

*"VISUAL Debugger for Windows saves a lot of development time by helping us understand our programs and find bugs much faster."*

This kind of problem is very important. Apart from the frustration for the analysts involved, it means hours of application downtime, and consequently lost revenue and credibility for Transamerica and their customers. Chris explains further:

"Our day to day business deals with deadlines or actually penalty dates that if missed can become a very large expense for us as we would pay all late charges and penalties associated with the transaction. With VISUAL Debugger, instead of having to cancel the programs and start searching through enormous job logs, we can isolate the problems and sometimes make the necessary corrections on the spot. This keeps us from having to back out the data already processed and start over from the beginning, which slowly erodes the time we have for finishing the tasks. Again this allows us to meet the deadline and saves us from incurring cost associated with the process."

### **Reduce Application Downtime**

So how does this work? VISUAL Debugger for Windows offers analysts the option to capture any problem job (interactive or batch), and diagnose and debug the program error down to the source code level. Program variables can be evaluated and modified, and commands can also be prompted and entered on specific jobs to solve problems. For example, job details such as the library list or contents of the QTEMP can be changed. Once the job has been corrected, it can simply be retried without the need to cancel.

But what if there is no source code available? Like many companies, Transamerica only keeps source on the development box, so source level debugging on production systems is usually not possible. VISUAL Debugger for Windows' remote source code mapping changes all that - when debugging objects on the production box, source code can be intelligently mapped from the development system.

### **Graphical Application Development Tools**

VISUAL Debugger for Windows also offers traditional debug features for developing and maintaining code, such as breakpoints, variable monitoring and so on. The productivity of Transamerica's programmer has been improved with these modern development tools.

"With the Program Navigator, the Data Dictionary and the source code color coding and highlighting features our programming team is much more efficient. And setting breakpoints is easy - you just point and click!" says Chris.

### **Distributed and supported in USA and Canada by SoftLanding Systems**

Tango/04's VISUAL Debugger for Windows is distributed in the USA and Canada by SoftLanding Systems. "Service from SoftLanding has been outstanding," says Chris. "They are always just a phone call away and now with their new Technical Support Site it's getting even better. We have only had two or three problems that we called them for on Visual Debugger and those just happen to be user error, not software related. Most of the problems that we have had to report with their products have been resolved within 24 hours, usually less."

### **Less downtime, higher software availability, better service**

Transamerica's IT system users and customers now get improved assistance with VISUAL Debugger for Windows and application downtime has been reduced thanks to the ability to diagnose, debug and solve problems in production jobs. The operational costs savings from VISUAL Debugger have more than covered the cost of the product. And above all, Transamerica has been able to further improve the financial services and solutions that have made it the USA's number one real estate tax service company.

For more information about **VISUAL Debugger for Windows, Enterprise Problem Solver** or any other Tango/04 iSeries software solution, please contact us:

#### **North America**

SoftLanding Systems  
<http://www.softlanding.com>  
Tel: 1-603-924-8818

#### **Europe**

Tango/04 Computing Group  
<http://www.tango04.com>  
Tel: 34 93 274 0051

#### **Latin America**

Barcelona/04 Computing Group  
<http://www.barcelona04.com>  
Tel: (54 11)4774-0112