Adabas & Natural are well known for providing enterprise applications with reliably high levels of performance, availability and security. So when concerns about skill availability and mandates to cut costs or consolidate IT infrastructure necessitate moving away from the mainframe, it is no surprise that organizations want to find a way to keep these unique enterprise applications that have long driven core components of their business.

Re-hosting Adabas & Natural systems to Linux®, UNIX® or Windows® (LUW) is the optimal solution for preserving your existing application investments. Because re-hosting simply moves your existing application and data from one operating system and hardware platform to another without changing the application code, you can feel confident that you will maintain the intellectual capital and competitive advantage built into your enterprise application that has driven your business for years.

More than a hundred Software AG customers have successfully re-hosted their Adabas & Natural applications from the mainframe to LUW. Adabas & Natural’s portable technology makes it straightforward and easy to transition from the mainframe to LUW while maintaining the performance, security and reliability you’ve long relied on. Our knowledgeable experts and proven methodology will guide you through a well-planned transition allowing you to preserve your investment in Adabas & Natural applications with minimal risk and disruption to your day-to-day business.
Preserve Existing Investments While Moving Off the Mainframe

“Porting our business-critical inventory system [Wapha] to Linux, we reduced operating costs, protected our investments in Adabas & Natural and made Wapha future-proof. Now we can benefit further from new Software AG technologies, including webMethods.”

— Hartwig Hopfenitz | IT Director, Alliance Healthcare Deutschland AG

Why consider platform re-hosting?

If you are reading this paper, it is very likely that you’ve already explored the options for leaving the mainframe and discussed the possibilities with management, your team and users. You know exactly what you want from your transition from the mainframe to LUW.

You expect to:

• Preserve existing applications and full capabilities
• Ensure the same or better performance
• Maintain high levels of availability and scalability
• Easily integrate with other systems
• Have a rapid, non-disruptive transition
• Not impact the user experience
• Take advantage of readily available skills to support the new system
• Consolidate IT infrastructure
• Reduce costs

The bottom line is that the benefits of moving off the mainframe should outweigh the costs and risk of change. If you’ve explored your options for moving an enterprise application from the mainframe, you have discovered that each have varying degrees of risk, cost and time to execute. Hopefully, you have already determined that platform re-hosting is the best option for meeting your expectations. Let’s explore why.

Packaged apps don’t create competitive advantage

If you haven’t moved to a packaged application by now, it’s very likely because you’ve discovered your enterprise application is irreplaceable. Tailored specifically for your business, your custom application provides your organization a competitive advantage. The time and cost of customizing a package app to replicate existing functionality does not make ROI (Return on Investment) sense. Losing years of invested refinement to a generic packaged application is just out of the question.

Rewrites are labor-intensive

Rewriting a mainframe application into a different language for LUW is also fraught with risk. Imagine how much time and labor would be required to document and replicate twenty-plus years of coding history. Even if this could be completed, the risks are great that key functions or interdependencies may have been missed. There are no guarantees that you can capture all the nuances of your enterprise application. It certainly won’t look good when it’s a user that identifies a gap in your functionality.

Transformations are risky

Transforming (or migrating) your enterprise applications to a new language or database may be tempting. Vendors may claim that they can put your code into an engine and churn out new code in another language. It’s really not without risks. The converted application becomes a mix of old and new code that no one really understands thus making it hard to maintain. Remodeling your Adabas data into tables for a Relational Database Management System (RDBMS) also has it down sides as it will drive the volume of your data up and performance down. It is also unlikely that the On-line Transaction Processing (OLTP) system running your business can go through a magic box and come out the other side still operational and integrated with other key components.

Converting a Natural application to Java® or Microsoft® .NET is a more costly and risky approach than re-hosting. When application code is transformed into another language, the structure of the code is not changed, but how the application looks and works will be noticeably different. The downside of code conversions is the high costs that will be required to train users and developers. Developers familiar with the new language will still have to understand the original code and data structure and may find it challenging to update and maintain.

Platform re-hosting provides rapid return on investment

The benefits of re-hosting your Adabas & Natural applications from the mainframe to LUW far outweigh any of the alternatives reviewed above. Platform re-hosting preserves your existing application, data and processes and reduces costs with less risk, minimal disruption, and a shorter implementation time than other alternatives.
Adabas & Natural platform re-hosting

Software AG can preserve your investment in the business logic supporting your organizational practices with minimal risk and no disruption to your business through platform re-hosting. Our portable Adabas & Natural technology, proven re-hosting methodology and enterprise experience ensures that platform re-hosting is the optimal choice for moving Adabas & Natural systems off of the mainframe.

Portable technology
Preserving your existing applications and full capabilities with platform re-hosting is simply about changing out the hardware and operating system. The user interface, middleware, application code and data just move platforms, as shown in Figure 1.

Because Adabas & Natural operate on LUW, you can expect to transition off of the mainframe with minimal code changes and reuse EntireX integration to have:

- Equal or better performance
- Same end-user experience
- Fast batch jobs
- Access to the same data
- Major IT cost savings

Proven methodology
With our proven re-hosting methodology, along with our world-class product support and in-depth training services, we ensure the success of the re-hosting project and long-term cost-effective operation of your mission-critical enterprise applications.

A thorough assessment at the outset of your re-hosting project mitigates risks and decreases the time of actual execution. Because of our depth of experience in re-hosting, you can also trust that our ROI calculations will be proven to be on target after project completion.

Enterprise experience
Software AG has successfully managed more than a hundred re-hosting projects for our global customers over the past 15+ years. We have helped world-leading organizations, governments and universities not only move their Adabas & Natural applications from the mainframe to Linux and UNIX, but also integrate SAP®, RDBMS and data warehouses with the new platform.
Portable technology makes the transition easy

Unlike other mainframe applications, Adabas & Natural code and data can be uniquely moved from the mainframe and placed on LUW and it runs. Restructuring of the database is not required. And because Adabas & Natural operate on LUW as the mainframe, you can maintain the continuity of performance, security and availability you have always counted on. The portability of Adabas & Natural allows you to easily preserve your investment in core applications and maintain the competitive advantage you spent years building into your systems.

The following table shows how the mainframe technology stack is mapped against a new LUW platform while keeping the custom-developed Adabas & Natural application unchanged.

<table>
<thead>
<tr>
<th>Mainframe</th>
<th>LUF Target Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardware</strong></td>
<td></td>
</tr>
<tr>
<td>IBM® System z®, Fujitsu® S series</td>
<td>Intel® x86, etc.</td>
</tr>
<tr>
<td><strong>Operating system</strong></td>
<td></td>
</tr>
<tr>
<td>IBM z/OS®, IBM z/VSE®, BS2000/OSD®</td>
<td>Linux, UNIX, Windows</td>
</tr>
<tr>
<td><strong>Programs</strong></td>
<td></td>
</tr>
<tr>
<td>Natural, COBOL, PL/1</td>
<td>Natural</td>
</tr>
<tr>
<td>Adabas, VSAM™</td>
<td>Adabas</td>
</tr>
<tr>
<td><strong>Data</strong></td>
<td></td>
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<tr>
<td><strong>Online processing</strong></td>
<td></td>
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<tr>
<td>CICS®, IMS™, etc.</td>
<td>Natural</td>
</tr>
<tr>
<td><strong>Terminal emulation</strong></td>
<td></td>
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<tr>
<td>Entire Connection, etc.</td>
<td>Entire Connection, ApplinX</td>
</tr>
<tr>
<td><strong>Batch processing</strong></td>
<td></td>
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<tr>
<td>JCL (Job Control Language)</td>
<td>Script</td>
</tr>
<tr>
<td><strong>Job scheduling</strong></td>
<td></td>
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<tr>
<td>Control-M®, CA-7®, etc.</td>
<td>EspAuto, Entire Operations, etc.</td>
</tr>
<tr>
<td><strong>Job submission</strong></td>
<td></td>
</tr>
<tr>
<td>JES</td>
<td>EspBatch</td>
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<tr>
<td><strong>Sort utility</strong></td>
<td></td>
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<tr>
<td>DFSORT™, SyncSort, etc.</td>
<td>CoSort, etc.</td>
</tr>
<tr>
<td><strong>Development tools</strong></td>
<td></td>
</tr>
<tr>
<td>Natural, ISPF</td>
<td>Natural, NaturalONE</td>
</tr>
<tr>
<td><strong>Life-cycle management</strong></td>
<td></td>
</tr>
<tr>
<td>Predict Application Control,</td>
<td>EspControl, Open source tools</td>
</tr>
<tr>
<td>Treehouse N2O, CA Endevor®, etc.</td>
<td>(i.e., Apache Subversion™) with</td>
</tr>
<tr>
<td></td>
<td>NaturalONE</td>
</tr>
<tr>
<td><strong>Middleware</strong></td>
<td></td>
</tr>
<tr>
<td>EntireX, etc.</td>
<td>EntireX</td>
</tr>
</tbody>
</table>

Move application code without disrupting business

There is minimal interruption with day-to-day operations when moving Natural applications from the mainframe to LUW. A life-cycle management tool documents and backs up objects across platforms to control source code changes between production, quality assurance/user acceptance testing and development.

Once your application code has moved to Natural on LUW, developers can continue to develop, manage, monitor, protect and optimize their code with all the tools with which they are already familiar (i.e., Natural Engineer, Predict, Natural Construct, EntireX) as shown in Figure 2. Maintenance continues to be easy with automated application inventory, documentation, code analysis, modification tools and enhanced monitoring.

Cross-platform data connectivity

Since Natural is capable of accessing Adabas and SQL databases (e.g., Oracle®, DB2®, Sybase®, SQL Server®) on both LUW and the mainframe, you can easily re-host any of these data sources when you bring your application over to the new target platform. If you are re-hosting in phases, you can re-host your Natural application on LUW and continue to access the database on the mainframe—there is no need to port your database until you are ready.
Preserve Existing Investments While Moving Off the Mainframe

Re-host your data quickly
When you are ready to re-host your data, it can be accomplished very quickly. Adabas data can be simply moved from the mainframe to LUW using the Adabas utilities with no changes to the Natural application code. It is so easy and quick to re-host Adabas that a typical customer moved all of their data from BS2000/OSD to Linux in just one weekend, without incident.

Once Adabas is re-hosted, Adabas data can be shared with other RDBMS and is accessible via standard SQL.

Manage job scheduling and batch processing
How do you continue operating job scheduling and batch processes when you leave the mainframe?

Traditional mainframe application environments contain many batch applications and jobs that are controlled by JCL (Job Control Language) definitions or job scheduling systems such as CA® Workload Automation AE (formerly CA AutoSys) and BMC® Control-M. To provide the same level of batch control and management, Software AG provides a batch processing environment for Linux and UNIX. This batch processing environment, EspBatch/EspAuto, converts mainframe JCL into SCL scripts thus providing the same level of automation, work file management and monitoring capabilities as on the mainframe. EspBatch/EspAuto replaces the mainframe job scheduler and provides a strong integration for the Natural environment (i.e., Natural Remote Job Entries).

Software AG also provides the Entire System Management (ESM) solution as an alternative. ESM is a multi-platform job scheduling environment and integrated output management system that automates print and output processes. ESM Entire Operations offers a graphical environment to model, execute and monitor most complex job networks across various applications and platforms (i.e., mainframe, LUW). ESM Entire Output Management automates the electronic distribution and processing of print data before it is committed to paper or electronic distribution channels (e.g., email, file system).

High availability and scalability on LUW is possible
Believe it or not, you can continue to meet the highest availability, scalability and data-security requirements on LUW with the right hardware and system configurations. Koenig & Bauer AG, the world’s oldest press manufacturer, can attest to maintaining their high availability and data security standards for more than 1,000 parallel users when re-hosting their production and control system from BS2000/OSD to a UNIX Solaris Cluster®.

“The conversion came off without a hitch. On Friday the old mainframe system was shut off and on the following Monday everything was running on the new platform, without any significant problems.”

— Georg Gfrerer | CIO, Santander Consumer Bank GmbH, Austria
Preserve Existing Investments While Moving Off the Mainframe

Expect performance improvements
Adabas & Natural have a long history of providing exceptional performance on LUW to large organizations in business, education and state and local governments. Many customers have seen improvement in batch processing time from many hours to minutes and experienced faster online processes.

Santander Consumer Bank GmBH of Austria increased their competitiveness when they reduced batch processing throughput time from 10 hours to less than one hour by re-hosting their leasing application to Linux. SOKA Bau of Germany saw performance improve two to three times faster than on the mainframe by moving from BS2000/OSD to UNIX Solaris®.

Seamless user experience
Users of your applications will likely not even know that a change in operating system or platform has occurred with Adabas & Natural platform re-hosting. The user experience is seamless as they can continue to use terminal emulation available on Linux and UNIX. For Windows, we apply standard modernization and beautification features that take advantage of the Windows graphical environment.

EPCOR Utilities of Canada noted that users experienced the same “look and feel” before and after re-hosting their mission-critical utility information system from the mainframe to HP UNIX® on an HP® Integrity Server.

Improve the user experience
Of course, it is an ideal time to think about modernizing your application’s user interface with NaturalONE or webMethods ApplinX when you embark on a re-hosting project. Many of our re-hosting customers took advantage of these optional tools and greatly improved the user experience.

webMethods ApplinX quickly converts green screens into modern Web browser user interfaces without needing developers to change the underlying application code. NaturalONE provides you the tools to transform existing Natural terminal maps into modern Web/AJAX screens running under many Web browsers.

With NaturalONE, you can intuitively expose existing Natural programs (subprograms or objects) as Web services for consumption in an SOA, Business Process Management (BPM) or other environment. Or, you can create modern Web user interfaces for applications that currently are accessed through “green screens”, as shown in Figure 3. It is so simple to use that within one week of NaturalONE training, skilled developers with no prior Natural experience are able to modernize Natural applications.

“The re-hosting and modernization project has been worthwhile in every regard. Our high availability and data security requirements have been completely fulfilled. At the same time, we have saved a great deal of money and seen a significant increase in performance.”

— Richard Kestler | Head of Process-Oriented Application Systems, Koenig & Bauer AG

Figure 3: Modernize your user experience while re-hosting your core applications.
Preserve Existing Investments While Moving Off the Mainframe

Improve developer productivity
NaturalONE, an Eclipse™-based Integrated Development Environment (IDE), also lets developers code, test and maintain applications, and manage the development life cycle. You can easily attract and train new developers to maintain your re-hosted applications and work with NaturalONE because its Eclipse tools, menus, functions and development concepts are the standards programmers are familiar with today. This also facilitates collaboration between Natural and Java developers and expands the base of in-house Natural skills.

With NaturalONE, you can:

• Improve application development and maintenance productivity
• Integrate with versioning systems (e.g., Apache Subversion)
• Utilize build automation tools (e.g., Apache ANTv, Maven™)
• Debug and test applications with automation to save time
• Manage and document application life cycles
• Automate maintenance tasks (e.g., test, re-documentation, code analysis and refactoring)
• Develop efficiently with teams using open source versioning tools
• Modernize existing applications without restructuring source code
• Build new Web applications and services with ease

By using NaturalONE as the one framework for all your application development, modernization and management needs, you can significantly lower the time and cost of application development, maintenance and staff training.

Proven methodology reduces risks
With years of real-world, hands-on experience, Software AG is an expert in dealing with and managing the complexities of mission-critical enterprise applications and re-hosting projects. We can help you plan, implement and manage the re-hosting process through our three phase approach shown in Figure 4.

Phase 1: Assessment
A complete assessment of your environment and re-hosting needs is a vital first step to ensuring your platform re-hosting success. During the assessment, we examine and inventory applications, Natural modules, Adabas files, JCL, external interfaces, third-party software, and access and authorizations. We will meet with and interview stakeholders to understand all mission-critical aspects and interdependencies. This Software AG best practice of analyzing, summarizing and reconciling information gathered from multiple sources allows us to prepare the highest quality re-hosting project plans.

“NaturalONE gives us one tool where we can look at all aspects of web services development from WSDL, XML to SOAP communications. We were able to integrate our decades old Natural & Adabas applications with modern Web services through .NET and Java using NaturalONE as the development environment.”

— Amarish Pathak | CIO, AAFMAA
Based on our in depth analysis, we will also provide a risk management plan. This plan is based on a systematic process of identifying, analyzing and responding to project risks specific to your situation to maximize project success while minimizing the probability of adverse events.

We will provide a business case for re-hosting that identifies the costs and benefits of the effort and an estimated ROI. The business case will identify and compare various possible scenarios that may meet your organization's objectives.

You will also receive a comprehensive project roadmap that includes milestones, work breakdown structure, related resource plan and potential risks. Specific project roles and responsibilities are assigned to all parties involved. The assessment may include recommendations on capacity planning, feasibility prototyping—to determine which features are carried forward, discarded or modified—and test and approval procedures.

**Phase 2: Project**

When you decide it is time to re-host your enterprise applications or products to a new platform, Software AG can help your organization successfully navigate the re-hosting process based on the plan carefully developed in the assessment phase. Whether you decide to perform your platform re-hosting project in house or outsource it, you should tap Software AG to consult or provide project management oversight to ensure your project’s success. Based on our successful re-hosting experience, here is how we would proceed with the project.

First, the baseline environment is built on the target platform and application-specific software such as Adabas for LUW and Natural for LUW is installed. Next, high availability, cluster services, and back up procedures are established and third-party products are installed as needed. The system is then prepared for re-hosting by establishing test, quality control and product environments and creating start up procedures.

The baseline mainframe environment (application or parts of the application) is then copied and moved to the target environment. The re-hosting transition may include product installation and upgrade; unloading, decompressing and loading data; and comparisons between existing and new application functionality. All integration links to the application and data are then re-established on the re-hosted system.

Next, mainframe JCL and batch jobs are moved to LUW script or job scheduling environments using a batch conversion tool to reduce conversion time between mainframe and UNIX/Linux.

Once all application and data components are re-hosted, testing will be conducted on the systems and integration, performance and stress, and user acceptance. Because of the careful planning taken upfront, testing time should be minimal.

After all tests are completed successfully, the system is moved into production.

**Phase 3: Go live support**

Our job does not stop here. A smooth transition to self-sufficiency is of great importance. Because we are the developers of Adabas & Natural, we know these products and their corresponding portfolios better than anyone else. We can easily and efficiently transfer knowledge of Adabas & Natural applications to your team.

Software AG can also help you improve your quality of service by providing in-depth knowledge of many enterprise applications, platforms and technologies acquired through helping organizations around the globe build, manage and support mission-critical enterprise systems.

Best of all, now that we are familiar with your system we can show you how to modernize your valuable investments in core systems to lower your Total Cost of Ownership (TCO), improve IT flexibility and enhance business competitiveness.

“As anticipated, Software AG was professional and delivered the re-hosting services we needed. It is a first-class company to deal with in every respect. Our re-hosting project was an overwhelming success. We met our core architecture and vision requirements, fulfilled our functionality requirements, and met our financial objectives, a true hat-trick.”

— Dr. Rob Rennie | College Vice President and CIO | Florida State College at Jacksonville
Enterprise experience proves success

Software AG has helped businesses around the world realize significant savings by rapidly re-hosting Adabas & Natural applications from the mainframe to LUW with minimal risk or disruption to ongoing business. The savings achieved with this approach was significant and in many cases, significant improvements in performance and availability were also achieved. Explore the variety of re-hosting projects provided in this small sample of re-hosting successes.

Learn about all customer successes at www.softwareag.com/customers.

Reduced costs
Re-hosting Adabas & Natural applications from the mainframe to LUW has reduced annual IT operation costs by lowering annual operational and overhead expenses. By consolidating IT infrastructure, many re-hosting customers have lowered licensing fees and IT operation costs.

| Alliance Healthcare Deutschland AG, formerly ANZAG, Germany | Saved up to 80% of their IT costs by moving from z/OS to Linux and consolidating their applications to SAP, Natural and webMethods |
| Apollo Optik, Germany | Reduced ongoing costs for server operations by 50% by re-hosting several mission-critical Adabas & Natural systems from UNIX to Linux |
| EPCOR Utilities, Canada | Significantly reduced operating costs without sacrificing reliability, security or performance by re-hosting its mission-critical Utility Information System (UIS) from the mainframe to HP-UX® on an HP® Integrity Server |
| Florida State College at Jacksonville, USA | Saved in excess of $1.0 million annually and now uses a Service-oriented Architecture by re-hosting their Adabas & Natural applications from an IBM VM/VSE mainframe to Solaris®. The project achieved a five-year ROI of 39.76% |
| Koenig & Bauer AG, Germany | Reduced overhead costs by 30 to 60% re-hosting their production and control system from BS2000/OSD to a Solaris Cluster |
| Santander Consumer Bank GmBH, Austria | Increased competitive advantage while saving more than one million Euros annually in costs re-hosting to Linux |
| SOKA Bau, Germany | Saved up to 70% on their IT costs by moving from BS2000/OSD to Solaris/UNIX |
| Texas State Agency, USA | Realized projected ROI by re-hosting 12 Adabas & Natural applications from the mainframe to UNIX |

“By changing our platform, we save more than a million euros annually.”

— Georg Gfrerer | CIO, Santander Consumer Bank GmbH, Austria
**Improved performance, availability or scalability**
Moving off of the mainframe does not mean you have to sacrifice performance, high availability and scalability. In fact, you may experience improvements just like many of these customers.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Koenig &amp; Bauer AG, Germany</td>
<td>Maintained high availability and data-security standards for more than 1,000 parallel users after re-hosting production and control system from BS2000/OSD to a UNIX Solaris Cluster. Performance increases of 30 to 80% were achieved.</td>
</tr>
<tr>
<td>Florida State College at Jacksonville, USA</td>
<td>Application performance increased up to 40%</td>
</tr>
<tr>
<td>Santander Consumer Bank GmbH, Austria</td>
<td>Improved batch processing throughput times from 10 hours to less than one by re-hosting their leasing application to Linux</td>
</tr>
<tr>
<td>SOKA Bau, Germany</td>
<td>Achieved two to three times faster performance on UNIX Solaris than previously experienced on BS2000/OSD</td>
</tr>
</tbody>
</table>

**Converted COBOL or DB2**
If you have a mainframe, you likely also have COBOL and DB2 applications as part of your overall systems. Software AG has many years of experience helping customers convert these applications and re-host.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
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<tbody>
<tr>
<td>Army Air Force Mutual Aid Association (AAFMAA), USA</td>
<td>Converted both data and application system when re-hosting insurance applications (Adabas, Natural and COBOL) from the mainframe to UNIX. Software AG resources included project management, DBA, and Natural/COBOL programmers. In-scope application inventory included 2,500 Natural objects, 60,000 lines of COBOL code, and 40 batch jobs (encompassing 200 individual job steps).</td>
</tr>
<tr>
<td>EPCOR Utilities, Canada</td>
<td>Re-hosted Natural environment (8,000 modules and 1,872 JCL members) and converted 1,323 terabytes of database data from DB2 to Oracle.</td>
</tr>
<tr>
<td>Santander Consumer Bank GmbH, Austria</td>
<td>Redeveloped essential application components from COBOL and other programming languages to Adabas &amp; Natural</td>
</tr>
</tbody>
</table>
Leveraged re-hosting assessment to create iterative approach
A complete assessment of your environment and re-hosting needs is a vital first step to ensuring your platform re-hosting success. It is also extremely useful for laying out a phased or iterative approach to re-hosting to meet your specific needs.

CVRD Inco Limited, Canada
Re-hosted the majority of their z/OS applications to AIX UNIX in less than 11 calendar months. By taking full advantage of Software AG’s re-hosting assessment engagement, Inco’s applications were divided into logical functional groups for a staged/ phased migration project with a cycle of re-host, remediate, test, and production implementation and support.

State of North Dakota
Moved almost 200 applications from z/OS to SuSE Linux using an iterative approach. After conducting a technical assessment and developing a detailed implementation plan through Software AG’s Re-hosting Assessment, the project continued in an iterative manner with phases (environment preparation, migration & testing, and production development) performed against identified groups of applications.

The project involved the diverse technologies including Natural, VSAM, Adabas and DB2 platform migration; mainframe COBOL to Micro Focus® COBOL tasks; DYL280 to Natural and Micro Focus® COBOL; REXX scripts to Linux scripts and Perl scripts; and conversion of JCL batch to Linux scripts.

Modernized applications
Many customers realize the value of modernizing applications in conjunction with their re-hosting project.

Koenig & Bauer AG, Germany
Character-based interfaces were modernized to provide users access through Web.

Modernize your application
If you plan to re-host your enterprise application, consider modernizing your applications as the next logical step. While re-hosting provides many great benefits, application modernization delivers additional value to your application users. You can implement modernization services in conjunction with your re-hosting project to increase business flexibility, meet changing requirements, add new functionality and create more intuitive user interfaces.

Software AG’s innovative Adabas & Natural Application Modernization Platform can improve the usability of existing applications—faster. Our low-risk, cost effective approach, shown in Figure 5, makes existing business applications easier to use and more accessible. By modernizing user interfaces to assure consistent and intuitive interaction with any and all of your applications, your user experience is greatly improved. Business logic can be transformed into services for easy use in big data, cloud, mobile and social initiatives. And you can get the most value from your transactional data by providing real-time access from existing and new applications.
Preserve Existing Investments While Moving Off the Mainframe

The modernization platform can help you:

- Improve user experience and productivity by transforming Natural, COBOL and other map-based or green-screen applications into rich Internet applications that are easier to use
- Modernize applications for big data, cloud, mobile and social
- Automate workflows with BPM to eliminate redundant and manual processes
- Act on business requirements and deliver application changes faster
- Maximize the value of your transaction data
- Reach business goals faster by leveraging proven technology and practices while improving application agility

Learn more about the Adabas & Natural Application Modernization Platform [here](#).

Re-host with Software AG

For more than 30 years, Software AG has built and supported mission-critical, high performance systems for thousands of customers around the world. Faced with the challenge of moving these critical systems off of the mainframe, customers have turned to Software AG to re-host and modernize these systems to prepare for future demands while generating real Return on Assets (ROA).

With Software AG’s portable Adabas & Natural technology, proven re-hosting methodology and enterprise experience, you can count on making a fast transition from the mainframe with minimal impact on your daily business operations and no disruption to ongoing operations. We help you preserve the investment in the business logic supporting your organizational practices.

When you’re ready to embark on re-hosting your enterprise systems, let Software AG make your re-host a successful one. Contact your local Software AG representative and ask for a re-hosting assessment today.

About the authors

Guido Falkenberg is Senior Vice President of Adabas & Natural at Software AG. He has been with Software AG for more than 20 years and has vast experience with Mainframe Modernization, Integration Middleware, Big Data and SAP. Guido has worked in R&D and as an IT enterprise architect helping companies to align their application portfolio towards new technologies and business scenarios. He drives and evangelizes the technology strategy for Adabas, Natural, Application Modernization and Big Data.

Bruce Beaman is Senior Director of Adabas & Natural Product Marketing world-wide. Bruce has been with Software AG for 28 years and most of that time he’s worked with Adabas and Natural. Many of our long-time customers know Bruce from the seven years he spent in Software AG training as an Adabas instructor. After his stint in Education, Bruce was part of the Technology Marketing Group for SAG Americas, with other senior level product specialists. In 2000, Bruce joined Software AG Product Marketing and has spent the last 14 years planning and positioning Adabas & Natural and the related family of products for continued growth.