



# BUSINESS VALUE

Tailor-made legacy applications are the supporting pillar of your company's core processes. It took many years to develop them. Even though experienced users are often still satisfied, the generational change has to be taken into account sooner or later. In order to ensure your company's continuity, you need real tried and true, secure solutions to modernize your core systems:

## 1. WEB 2.0 INTEGRATION AND EXTENSION

Today's business processes require a continuous workflow for everyone involved – from the customer and business partner, to the supplier. An efficient, inexpensive transformation of character-oriented interfaces to a real Web 2.0 interface is therefore a necessity. This is the basic for the sustainable extension and target-oriented enhancement of the entire system. It allows your business partners to simply check delivery dates for themselves, collect orders and administer customer data – all online. Manual data entry and delays can be reduced and ultimately flow right into your profit maximization.

## 2. UNICODE ENABLING

You're not only faced with regional differences as your company successfully grows, but also with the issue of character sets. Unicode promises help here. But to change over databases, programs

and the frontend of larger systems, you need an experienced partner with good tools to help you along the way and prevent IT issues from holding up the expansion of your business activities.

## 3. INTEGRATION OF MOBILE DEVICES VIA WEBSERVICES

Actual information from important existing systems is more important than ever before for managers and staff „at the front.“ This is the only way the right decisions can be reached for your company based on real, valid data. Text-oriented interfaces can also be provided for mobile devices without any redevelopment however by using the standardized WebService technology.

Our solutions are based on market-leading technologies like WebAPI and Eclipse, and will provide you with all of this.

# TECHNICAL INSIGHTS

**Basics:** To optimally prepare for the future, the WebAPI interfaces directly in the RPG/Cobol/CL program, where it taps into all relevant information such as indicators, INFDS, F-keys, data buffers, OP codes, format names, and much more. A display handler processes this data in conjunction with the program information, and generates the user interface including support of Unicode formats like UCS-2 and UTF16. Based on information from the flexible design tool, and together with rules and styles, the frontend can be rendered for any device. More than 60 GUI widgets and extensive office integration allow for a look and feel that can meet the most modern demands. And there's one more side effect, too: programs are launched as batch jobs on System i, which means interactive CPWs are no longer needed.

## PROCEDURE:

We'll get the entire WebAPI set up for you in just a few hours, from the installation of tools and definition of the basic layout, to the specification of necessary rule setups for a modern look. Your accustomed development cycle remains entirely intact; the WebAPI converters are simply integrated in the PDM or Eclipse IDE. Rule types and configurations are centrally stored on the database server (System i).

There's no need for any elaborate training sessions and you don't have to start using any special development tools because the WebAPI offers numerous wizards and supports standards such as XML and CSS. Making the switch is seamless for users, too: 5250 and a modern UI can be used in parallel, naturally without any double program maintenance by the developer. A special feature for RPG Open Access users: the WebAPI can also be used in RPG OA mode. The necessary F-line adjustment is done automatically. There's only one thing to take note of: IBM no longer supports a 5250 data stream in OA mode.

## STRENGTHS:

### Web 2.0 integration and extensions:

JSF/JSP and Web 2.0 components can all be integrated directly in e.g. Java, .Net, PHP or EGL. The WebAPI generally supports two different types of integration:

- Bi-directional integration of Web 2.0 widgets based on a JavaScript library.
- Integration with a server API via CALL or CMD incl. specification of URL, transfer parameter and optional return parameter. The target frame can be freely defined as a full screen, application frame, external frame or as a pop-up frame.

The result is a merged application with old and new functions, which is presented to the end user as a thought-out overall concept that makes efficient navigation possible.

### Unicode enabling:

The WebAPI data buffer already provides Unicode formats from the database. The frontend can display these to end users in the desired country notation. Modified datasets are then of course returned to the database. This feature is available for the WebAPI and under RPG Open Access.

### Integration of mobile devices via WebServices:

Very simple interfaces for mobile devices can be created with common widget extensions, which are usually freely available. The existing business logic is simply made available to these new interfaces via the WebService.

# WHAT OUR CUSTOMERS SAY:

“Our employees are very satisfied with the application and highly modern frontend.“

**Victor de Kaey, Head of Development, Philips**

“With the PKS technology, we’re transforming the AS/400 templates into an attractive GUI with a typical Windows look and feel.“

**Frank Zeidler, Systems Integration Product Manager, T-Systems**

After the excellent teamwork with PKS in recent years, it really pleased us that they were also able to offer a technologically sophisticated, sleek solution for the UNICODE issue. Up until now, the turnaround and results have met our demands and our 80 software developers haven’t even noticed a thing. We’re very satisfied.”

**Herbert Egner, Division Manager, Software Development, DACHSER GmbH & Co. KG**

“As a general methodology to extend the life of ‘expensive’ legacy applications I would endorse this approach. The endorsement hinges on the addition of ‘Webifying’ the application for a true thin client deployment. “Deploy over the WEB efficiently / effectively or perish” should be the motto of all applications regardless if the ‘WEB’ will have an Intra or Internet deployment requirement for a company / mission critical application. We intend to pursue a strategy of 100% web enabled applications. PKS have provided the framework to meet our goal.”

**Christopher M. Reil, Director System, Technologies and Projects, Aerosoft PMI Systems LLC**

“I felt the communication with PKS and its expertise in finding solutions was very good. It was particularly important for us to avoid any friction losses in the project caused by poor communication or ineffective processes. It turned out we had no reason to worry here.“

**Mr. Christian Huber, IT Process Manager, voestalpine Stahl Service Center GmbH**

## WEBAPI FEATURELIST:

- Container-widgets: windows / popups, frames, tab controls, groupboxes
- Basis-widgets: text field / output field (numeral / alpha / unicode / doublebyte ...), Input field (I-field, B-field, numeral / alpha / unicode / doublebyte ...), picture / image, password field, button, hyperlink, date control, radiobutton, checkbox, combobox, promptfields, line, message, tooltip, tree control, pseudo subfile, subfile (subfile text field, subfile input field, subfile combo, subfile button, subfile checkbox, subfile header, multirow, singlerow, drop/fold, single- and multiline header ...), marquee ticker, spin control, hidden control, progressbar, browser control, tab control, menu control (menubar, menuitem...) and much more.
- RUI-Widgets: navigator-tree (via xbrowser), subfileeditor, CNTFLD, and much more.
- functional extensions/other features: Unicode enablement, change window size (real sizing), application in batch mode, multiuser functionality, optional definition of multiple subsystems, APIs for data exchange, APIs for execution of any Windows programs/DOS commands (synchronous/asynchronous, with and without return parameter), APIs for display of PC documents (e.g. PDF in IFS), API for spool file conversion in PDF files, EGL interface (WebBridge), tools for simplification of XML configuration, simulation of keystrokes (macros), images in subfile, image display at click of corresponding subfile record, automatic client update, modification of control element type, dragging/resizing/insertion/deletion of screen elements, color mapping, automatic F-key recognition, automatic recognition of pseudo subfiles, automatic recognition of subfile options (definition of a default option, modification of option order, display in context menu), automatic recognition of checkboxes, combination boxes, radio buttons, prompt fields, date fields, automatic header recognition, customizable templates (fonts, images, application layout, status bar, caption, filtering/adding/modifying/splitting/replacing texts, zebra look in subfile, use of styles), subfile header spanning, subfile data caching, keyboard buffers, and much more.
- System command support: all CL commands that don’t use any screen mask (chgjob, rtvjoba...), other commands: WRKSPLF (possibly with integration of Infoprint Server)
- Most relevant DDS keywords supported: ALTPAGEDWN/ALTPAGEUP, ALWROL, ASSUME, AUTO, BLANKS, CA/CF, CHANGE, CHECK, CHGINPDF, CHKMSGID, CHOICE, CHRID, CLEAR, CLRL, CNTFLD, COLOR, COMP, CSRLOC, DATE, DATFMT, DATSEP, DFT, DFTVAL, DSPATR, DSPMOD, DSPSIZ, EDTCDE, EDTMSK, EDTWRD, ERASE, ERASEINP, ERRMSG, ERRSFL, HELP, HTML, INDARA, INVITE, KEEP, LOCK, MDTOFF, MSGCON, MSGID, MSGLOC, OVERLAY, OVRATR, OVRDTA, PAGEDOWN/PAGEUP, PRINT, PROTECT, PUTOVR, RANGE, REF, REFFLD, RMVWDW, ROLLUP/ROLLDOWN, RTNCSRLOC, SFL, SFLCLR, SFLCSR, SFLCTL, SFLDLT, SFLDROP, SFLDSP, SFLD-SPCTL, SFLEND, SFLFOLD, SFLINZ, SFLMSG, SFLNXTCHG, SFLRCDNBR, SFLROLVAL, SFLSIZ, SLNO, SNGCHCFLD, SYSNAME, TEXT, TIME, TIMFMT, TIMSEP, UNLOCK, USER, VALUES, VLDCMDKEY, WDWTTITLE, WINDOW, and much more...)



### OPTIMIZING APPLICATION DEVELOPMENT

- Eclipse based IDEs (RDz, RDP)
- application understanding
- improving code quality



### RENEW YOUR USERINTERFACE

- Web 2.0 integration & extension
- Unicode enabling
- mobile device connection

## ADABAS Natural

### ADABAS / NATURAL MIGRATION

- Adabas to RDBMS migration
- Natural and Java coexistence
- Web 2.0 for Natural MAPs



### APPLICATION TRANSFORMATION

- consolidation from 4GL to Cobol
- zIIP Enablement - Cobol to Java
- custom-made transformation



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