Building Blocks

Partnership

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Development Tools System Administration









This bumper crop of articles spans an all-time high of 100 pages!

Fitting all 33 articles into one issue was as impractical as trying to choose which 10 or 12 articles are the most important to print, as we have done in the past. Each article has tremendous value and is worth reading, so we expanded the table of contents to help you pick out those you want to read first. Find all these articles online plus a few we printed here as samples of what lies ahead! Keeping up with the ever-changing technology around us, we have made The BASIS International Advantage more modern, more mobile, and bigger and better than ever. View this ezine everywhere you go - on your desktop, laptop, tablet, smartphone - or print your favorite articles to pass along to others!

Partnership

50 ASCI Partakes RADically From the Barista Cup By Susan Darling



Gain inspiration from this real-world example of how ASCI RADically improved their GUI application with Barista, the BASIS GUI RAD tool. ASCI first introduced improved navigation through Barista's MDI interface with enhanced search, sort, and filter capability; new report output options, tables/forms creation, and role-

based security with an audit trail - all built-in features of Barista. Next, ASCI extended the features across all their remaining ASCI modules. Follow their example and RADically change your GUI application with Barista's out-of-the-box features and functions. More than just a RAD tool, Barista's framework delivers building block components integrated into the product. links.basis.com/12asci

71 EMQUE On Cue With BUI Apps That are 'In' By Susan Darling



See the widespread results in action of this pioneer's introduction of BUI apps to the commercial construction community. During the past two years, EMQUE's apps have risen to the top in several notable New York City renovations and have received awards and favorable press, both locally and nationally. Read

how they are 'wowing' prospects in the field with new innovations. Consider their strategy, "to grow their apps and market their name to be in position when markets open up and spending increases." Take in their sage advice as you continue or consider beginning vour own BUI journey. links.basis.com/12emque

74 A Web Service Sprouts Great Benefits at Bluegrass By Susan Darling



Graft a Web Service onto your app and watch the benefits sprout. A Web Service is still the easiest and best way to communicate, share data, and invoke functionality between disparate systems written in different languages and running on different platforms. Take a close look at how this BASIS customer sowed

their PRO/5 application on an IBM AIX UNIX system with a Windows-based Web Service that brought great cost savings and tremendous increase in productivity. Follow their example and take this first step. links.basis.com/12bluegrass

83 EMS Prescribes BUI to Reduce Healthcare Expenses By Susan Darling



Consider this cure for easily extending legacy PRO/5 data access to desktop and mobile devices. Learn how EMS harvested the 'as is' business logic from PRO/5 into BBj/GUI to deliver the face of the application through an Internet web portal, complete with login security. With minimal training, users can now use a

name or subscriber number to view claim history and verify services to be covered before rendering them, from any browser-compatible device and without adding any JVMs or additional third party programs onto their device. links.basis.com/12ems

Language/Interpreter

The Anatomy of a Web App Makeover: A Case Study By Nick Decker



Examine how BASIS rewrote a web page that resulted in a BBi code-based web application that was several times smaller and much easier to write. test, and debug than the original solution – the perfect fit for your next web project. See how BASIS added new features, addressed latency

concerns, and built-in form validation. Consolidating all of the underlying code for the download page into BBj greatly simplified testing and the process of optimizing screen layout. For the user, the new download page is faster, easier to navigate. and delivers new features such as localization and real-time translations. links.basis.com/12webapp

22 Going Fast, Faster, Fastest By Adam Hawthorne



Experience maximized performance in BBi programs resulting from significant BBj 12 optimizations to the string handling code and in various verbs and functions with some Java 7 enhancements to the operation of the Just-In-Time (JIT) Compiler. BASIS engineers

commit themselves to improving the performance of BBi code so you can concentrate on just writing your application! links.basis.com/12optimize

33 Compressing Apps for Zippy Network Performance By Jason Foutz



Cut the bandwidth required for initially launching a thin client on first install or after an upgrade by over 60% with the latest release of BBi! The secret? Pack200 and Gzip. Jetty, the built-in Web Server that ships with BBj, automatically compresses jars using Pack200. BBj's Web Server

also uses Gzip compression to speed up both BUI and static resources served from the htdocs directory, providing the biggest benefit when serving text files. links.basis.com/12zipapps

42 Looks Better, Runs Faster By Nick Decker



Follow these simple suggestions for optimizing your application's images to achieve quicker display times, make the most of limited bandwidth, while delivering quality output. Learn about choosing the best tool for the job to ensure that images render in the highest quality possible.

Fortunately, optimizing images is fairly easy and quick, especially with some of the advanced compression tools available. You can now accomplish this task yourself instead of delegating it to a dedicated graphic artist. BUI applications look great out-of-the-box on the new Retina and pixel-doubled displays without the need to resort to custom code! links.basis.com/12image

DBMS

26 Turn On Data Auditing By Jeff Ash



Activate the new Change Audit Logging that makes the process of building an audit trail fast and easy to implement for changes to all BASIS file types. Audit logging data resides in a BBj ESQL database so the data is accessible from either the Audit Log Viewer in the Enterprise Manager, or from

querying the audit database directly using SQL. Configure user access permissions to the audit database easily and in the same way as on any other BBj database. Using iReport or BBJasper, administrators can create more robust, limited, and/or customized reporting for others to view in an external application without the need to grant them access to the Enterprise Manager. links.basis.com/12auditlog

40 Quickly Fix Slow SQL By Jeff Ash



Cut down on the time necessary to analyze your data tables. The improved Query Analysis interface makes it easier to locate potential areas for improvement in SQL query performance by better indexing the tables based on the user's guery usage of those tables. Find out how one large database that previously took 11 hours to

analyze in BBj version 11.11 now performs the analysis in 3 hours using BBj version 12. Dramatic performance improvements are just a click away! links.basis.com/12performance

54 Built-in SQL Access to BASIS Keyed and CSV Files By Robert Del Prete



Access any BASIS or CSV formatted data file regardless of the presence of a data dictionary with new built-in stored procedures. These new stored procedures are always available and can be called from a connection to any available BBj database. If there is no database defined within BBj Services, use the system database to

execute the stored procedure. Leverage this new feature in many ways, such as supplying new access to data by end users. Being able to filter and sort the data using SQL syntax also provides additional flexibility for the distribution and presentation of that data. links.basis.com/12sprocs

86 BASIS SQL Gets Even Better By Jeff Ash



Expand your SQL functionality with new SQL scripting, types, verbs, functions and views. Easily execute scripts inside the Enterprise Manager. The addition of ENUM, REPLACE, DATEDIFF and Full Featured Views gives BBj developers several more valuable tools for developing database applications. With continued input from

BASIS customers offering ideas for improving our products, you can count on more improvements and new features becoming available to the BASIS toolset. links.basis.com/12sql

Development Tools

The Magical Reusable Dialog Wizard By Ralph Lance



Be amazed with the new Dialog Wizard, the modern and powerful alternative to AppBuilder. Generate fully object-oriented BBj programs from a resource file, automatically generating the callbacks and the method stubs while preserving your custom editing of the resultant BBj code. You can run a second or third pass

of the code generator to leverage any changes you may have made to your resource file. See just how quick it is to go from a resource file to a running program. Beyond magic. links.basis.com/12dialogwizard

46 REST Easy - End Your WSDL Struggles By Jason Foutz



Stay afloat in the alphabet soup of UDDI, WSDL, and SOAP, and eliminate much of the formality imposed by a WSDL-style Web Service. Employ the spectrum of Internet infrastructure with REST-based Web Services. REST is stateless and leverages HTTP, simplifying the communication to the server. Choose this powerful tool

for deploying Web Services without the risk of drowning in alphabet soup. links.basis.com/12rest

58 Babbling With the New Bundle of Joy By Brian Hipple



Meet BASIS' new Resource Bundle Editor. Easily separate displayed string literals from the application code, whether or not your app babbles many languages. When separating these string literals from the code, maintenance is so easy that non-programmers can even change the text. Better yet, a single update of the string

propagates the change throughout the entire application regardless of how many times it appears. Welcome this new bundle and add it to your family of tools. links.basis.com/12bundle

63 'Git'dy Up, Developers By Shaun Haney and Christine Hawkins



Jump out of the starting gate and upgrade your customized AddonSoftware app with Git, an upgrade intelligence tool that makes upgrading customized packages easier than ever before while preserving all of your custom code. Don't stay "stuck in time" without the possibility of an application upgrade. With

Barista and Git, developers can now modify both the user interface as well as other code, and still realize the benefits of an upgrade. Get Git and Git'dy on up. links.basis.com/12git

79 Customizable Mobile Report Viewer By Brian Hipple



Perfectly display interactive reports in a browser on your smartphone, tablet, and other mobile device with the all new BBJasperViewer utility, written in pure BBi code and released in BBi 12. Now you can run BBi code in BUI as it translates code into the browserrendered HTML, JavaScript, and CSS. The updated

user interface includes a new child window that houses the various tool buttons that manipulate the report. Preview the BBj 13 feature that makes it possible to use and display JasperReports in applications without using SQL or SPROCs. Realize the power of BASIS' BBJasper application building block utility today! links.basis.com/12reportviewer

82 BASIS IDE in Java 7th Heaven By Mike Phelps



Jump ahead and update to Java 1.7 before the Oracle clock runs out. The BASIS IDE now supports Java 1.7. BASIS has made this IDE upgrade so you can avoid any last minute crises due to Java 1.6's looming end-of-life. links.basis.com/12ide

88 Easily Install Your Apps With the BCI By Brian Hipple



Hand off the simpler time-consuming tasks so you can focus on those more complex. It's time to work smarter rather than harder. The installation process is one you may never have to do manually again. The BASIS Custom Installer (BCI) makes installation more simple than ever, with several new custom

options. Now you can configure the BCI to invoke specific commands under specific conditions, install certain files, and run your choice of BASIS installation wizards in the manner you choose. Imagine being able to download, install, configure, and run your app without any user interaction! links.basis.com/12custominstall

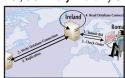
94 BBi Documentation is as Easy as JavaDocs By Ralph Lance



Imagine creating API documentation automatically and directly from your BBj object-oriented application code. The new BBjToJavadoc utility, a Javadoc documentation generator, does just that. Learn how you can easily embed documentation comments in your BBi programs to generate your

own documentation in HTML Javadoc format. BBj custom classes can take advantage of some of the more advanced documentation capabilities for easy navigation via hyperlinks among your classes. Because the Javadoc engine from the Java JDK toolset is used in the process, any valid document tag can be embedded in the doc comments. links.basis.com/12docs

52 BUI, GUI Everywhere By Shaun Haney



Give your app worldwide equal opportunity access with distributed BUI apps. BASIS' replication feature and geo-aware DNS (Domain Name System) addresses deliver quick performance anywhere in the world. Explore how to combine Amazon's geo-aware DNS addresses with BBj's File/Directory/Database

Replication to run your app equally well and transparently from any location on the globe. Follow along this detailed example to learn about the tools, the architecture, and how it all works. links.basis.com/12gui

Platform-Independent Task Scheduler By Jeff Ash and Nick Decker



Put power and flexibility at your fingertips with the new platform-independent scheduler. Replace your Windows Task Scheduler or UNIX cron jobs with BBj Tasks and Task Groups for scheduling tasks that can now even interact with BBj Services. Walk through this example and learn how to manage BBi

backups and other business processes at regular intervals. Save time, and save the hassle of using one or more third party schedulers by using this built-in easy-toconfigure and manage tool. links.basis.com/12scheduler

90 Are You Prepared for Cloud Failure? By Shaun Haney



Depend with confidence on the cloud for your business continuity, applying these important tips and safeguards. Redundant copies of data over multiple regions will ensure that in most any outage, your enterprise can continue running, unscathed. Follow the tried and true example that

BASIS put in place to protect against the potential loss of data and money that would result from a cloud outage. Learn the vital strategy for quick recovery in the event of such a an outage. links.basis.com/12cloud

Building Blocks

AddonSoftware: Ready, Set, Go Deploy! By Christine Hawkins



Build or supplement your vertical market with this suite of Accounting, Distribution, and Manufacturing application building blocks and its newly ported Shop Floor Control module. This milestone marks the beginning of a host of modernizations and improvements now possible with AddonSoftware's

new foundation in BBj and Barista. Why not let BASIS take care of providing the ERP building blocks of your vertical market application? Try it today! links.basis.com/12addon

28 Barista Caffeinates a CUI App With GUI Sprinkles By Ralph Lance



Integrate fully-functional graphical components with the least amount of effort using the Barista Application Framework. Instantly begin benefiting from the myriad of built-in features that Barista brings to your application. Follow the example of how to add a GUI lookup to a simple BBx character-

based application. Discover the many variations — sort, filter, select, output, etc. available to sprinkle into the CUI app. Ease into graphical user interfaces with minimal effort and disruption to existing code by leveraging the out-of-the-box functionality that Barista provides. links.basis.com/12barista

34 DocOut Easily Modernizes BBx Report By Ralph Lance



DocOut is a document output subsystem component of the Barista Application Framework RAD tool. Let DocOut give you all the output choices for your reports that you need for a modern app - print preview, PDF, XLS, CSV, XML, Google Docs, fax, email, and archiving. Now you can leverage these

choices from new or existing PRO/5, Visual PRO/5, or BBj code without having to use the entire framework, and with very little programming effort! See how it's done and try out the sample code. links.basis.com/12docout

76 New Ways to Debug in Barista By Ralph Lance



Simplify your troubleshooting efforts in your Barista and custom callpoint code with many new debugging features. For example, debug and dotstep through the code by pressing the [ESCAPE] key to interrupt the process. Or view the dump to see the contents of the workspace, and start and

stop tracing. You can even view the namespaces and the contents of the namespace variables. Using Barista is better than ever, so add it to your toolset and enjoy the easy and efficient way it can help you be more productive in the support of your customers. links.basis.com/12debug



Photo credit: Las Vegas News Bureau

Columns

39 BASIS Unveils New Training Format By Amer Child



Check out the new web-based training classes that incorporate pre-recorded content with live instructor interaction. Pre-recording the core instruction ensures students receive consistent delivery of all the important points needed to understand the key concepts for each class.

Find out why the feedback on our first few training courses in this new style was positive with both students and trainers. Try out this win-win approach. links.basis.com/12training

48 BASIS Survived Amazon Outage By Dr. Kevin W. King



Keep your website and other cloud applications running 100% with little to no risk of a calamity bringing your business to a screeching halt. As BASIS has gone before you to build in safeguards to avoid such a catastrophe, read how they avoided the infamous Amazon outage that took

out so many larger and seemingly less wise companies. Follow the leader is more than a child's game, it can be a very valuable business model. Learn from BASIS so you can benefit from all the power and convenience and cost savings of the cloud while removing the risk along the way. links.basis.com/12survived

An Insider Look at BASIS Testing By Aaron Wantuck



Feel confident in the extensive tests that BASIS runs before releasing a product. Inquiring minds can now be satisfied with the details of the test suite in place that rigorously runs through each build. Discover the two parts of the suite - Junit and testbed - and better

understand the roles they play. Thorough testing ensures that we can accomplish our goals while continuing to meet yours. links.basis.com/12testing

68 Continuous Innovation at BASIS By Mike Phelps



Look behind the scenes at what makes BASIS a stronger, more successful company...something that indirectly benefits everyone who uses BASIS technology. Once considered science fiction a few years ago, their new build system is completely offsite "in the cloud." Along with the build

process, testing and delivery is 100% cloud-based and is fast, easy to operate, almost infinitely scalable, and (we believe) disaster-proof. links.basis.com/12innovation

92 Java Breaks Deliver By Paul Yeomans



Discover how the bimonthly Java Break sessions solved a key information delivery challenge; to reach the BASIS community with relevant information more current and frequent than a bi-annual TechCon and at a global location. Java Breaks to the rescue!

links.basis.com/12javabreak

What's Needed to Run BBj? By Bruce Gardner



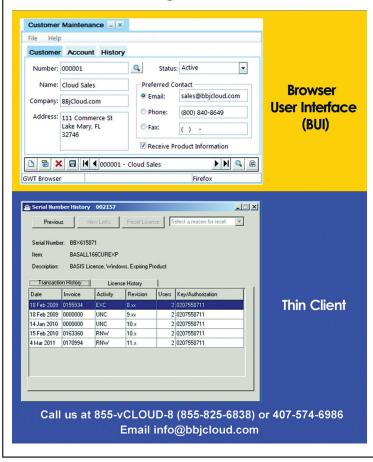
Ask anyone and the answer is a resounding "well, it depends." With so many possible variables in a BBj application deployment, mostly because of the variability of the application itself, it really is impossible to provide a specific answer. After all, one size does not fit all. However, all of the tools

necessary to assess the requirements for your deployment are at your fingertips. Examine these tools for a full understanding of the dynamic factors involved in all applications and their deployments, and determine those requirements yourself. links.basis.com/12trz

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