Diglets

Legacy nuggets

This time of year here in Raleigh, North Carolina it's ACC Basketball fever and the state has UNC, DUKE and NC State college teams. You can't beat watching the final four events, it's very exciting.

The same is true for zLinux which is being promoted just as hotly as college ball. With TPF 4.1 OS moving to z/TPF and the new z/10 announcment really promoting the benefits of virtualization and z/Linux, the mainframe world has once again become front and center to most global organizations. IBM has mastered the art of reinvention and gained traction with a very sophisticated Information technology saavy world.

The z/10 is clearly designed with virtualization in mind. z/VM and z/Linux are like biscuits and gravy especially here in the South. Just about every TPF shop has a TPF 4.1 to z/TPF project under way.

Winners Circle

The IBM Z/TPF Lab

Our thanks go out to Robert Dryfoos, Lab Director, Denis, Jim & Bill for their dedication to full metal jacket testing of the Dignus compiler to be supported as an alternative option to GCC for z/TPF. When completed the Dignus compilers will be plug compatible and also include all the Dignus features to facilitate the migrations from TPF 4.1 to z/TPF.

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DIGNUS
SOLUTIONS OF MERIT

IBM will provide a top-of-the-line System z mainframe computer and software so teachers and students can learn and research applications for high-volume transaction processing for industries like insurance and banking.
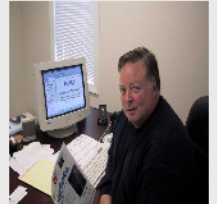
USC announced a public/private partnership of 11 businesses, colleges and academic agencies in a unique computer-training program headed by IBM and BlueCross BlueShield of South Carolina.

Dignus has offered to provide its Systems/C,C++ and Systems/ASM products at no charge for the student body and is working with Blue Cross Blue Shield of South Carolina. BlueCross, which has more information technology employees than any other company in the state — 2,200 people — is helping to finance the project.

Blue Cross CEO, Ed Sellers, said there is a shortage of mainframe specialists. "We all have a common problem," he said. "We need to have a pipeline of talent that we can hire.

TPF Software

by Ron Pimblett

This has been a remarkable year for Dignus and it's partnership with TPF Software. Thiru Thirupuvanam lives here in Raleigh North Carolina which has allowed us to enjoy many productive discussions over the past 5 years. Here is the TPF staff with Dave Rivers our President cooking up something great for a TPF users group meeting.

TPF Software has a long standing relationship with Dignus and has worked closely with Dignus during the last couple of years to ensure that the Dignus compiled programs can be debugged through TPFGI (TPF 4.1 version of our tools) and through zTPFGI (z/TPF version of our tools). TPF Software has interfaces available in both TPF/IDE and in our zTPFGI suite for compiling programs (Assembler and C/C++) using the Dignus compiler.

TPF Software Inc has updated their suite of tools for z/TPF, the new product zTPFGI provides a comprehensive testing environment for TPF Application programmers to develop and test their reservation and financial application.

The IDE tools of the zTPFGI suite provides a suite of tools for Editing, Compiling, running a MAKETPF and for loading programs to a z/TPF system. The debugger tools of the zTPFGI suite allow programmers to test their transactions at the source level, macro level and instruction level, and provide extensive debugging and navigation facilities to make debugging easier.

Along with the editor and debugger, the other features of the full zTPFGI suite are the Resource Manager – used to manage resource being used, Connectivity Manager – to provide connectivity to external resources that are required during testing, T-Rex – the Performance Analyzer, the DF/Explorer for analyzing TPFDF files and the Regression Test Facility for validating new software changes.

Dave's Corner

It seems more and more of our customers are contemplating the transition from TPF 4.1 to z/TPF. Following this, we have been making tremendous strides toward offering a z/TPF alternative compiler.

Working in combination with the IBM z/TPF labs, we have been able to add features and support IBM has requested to allow the Dignus compilers to replace the current GCC-based solution.

But, at the same time, we have not left-behind the TPF 4.1 community. The currently available Dignus compilers (version 1.90) address the on-going TPF 4.1 need. The version 1.90 compilers support generation of IBM debugging information that can be used by TPF 4.1 debuggers.   We have been working closely with TPF Software to ensure absolute compatibility with their offering for TPF 4.1.

The advantage to the Dignus solution for a TPF 4.1 customer is compelling. Compilation can be moved from z/OS to z/Linux, saving time and significant cost.   The Dignus solution has been verified by several customers, making it a wonderful cost-saving measure in these money-conscience times. Furthermore, a move to z/Linux-based builds for TPF 4.1 helps sets the stage for a future transition to z/TPF.

We look forward to supporting the existing TPF 4.1 environments, as well as the new z/TPF environments as customers transition.

As always - don't hesitate to contact us!

SOSA-COUSINS   ON TARGET !

You have probably met the Sosa-Cousins team at many TPFUG meetings. Known for their relaxed style (as witnessed by Rick's Tropical Shirt, Helan and Brian Williams bright smiles) and their dedication to working with the customers to achieve an excellent solution for enhancing their development environment. We are very pleased at Dignus to call them our partners.

Dignus has created a joint interface to LCM with Rick Cousins dedication over this past year and things are looking really good. Sosa-Cousins, Inc has developed the first commercially available TPF Load Control Management (LCM) System, automating the management of promotion and staging processes for all programs deployed onto any test and production host.

Tooling around !

by Greg Alexander

Da Betty!

A few years back Dave got it in his mind to write a bare-bones MVS environment with an interactive debugger. I was pretty sure he was thinking way ahead and he seemed to be having fun with it. He even had fun naming it, Dignus Basic Test Environment (DBTE), or Da Betty. Alas it became a back burner on the shelf off the shelf idea with some modest usage.

I didn't think much of it until one day I had a memory overwrite bug that was a pain to track down, and he told me to load it up in Betty. After a brief debate over whether or not this was possible, I was debugging mainframe code in a way that had never actually been possible on the mainframe. I noticed right off that Betty's commands were a little cumbersome in practice, so I made some incremental improvements.

Betty and I have had a rewarding relationship since. Every time I have a particularly intractable bug, I just load the program up in Betty. About half of the time, I hack on some new feature in the process. Maybe better breakpoints, emulation of fixed-point BCD math, or even the ability to load a SYSUDUMP as though it were a load module. Each time I am just thinking of the least-effort way to manage whatever bug is in front of me today but the result is that now Betty is a surprisingly complete program offering a variety of powerful tools.

Increasingly, we are adding new features and before you know it, DBTE will be a C source-level debugger extraordinaire. Then the real work begins to productize and make it broad enough to have great appeal to the mainframe user community and our existing customers.

In fact, we would welcome the opportunity to discuss today's capability with anyone who wants to just *Tool around !*