

## **Cheryl's List #187 – 7 January, 2016**

### **Watson & Walker, Inc.**

Welcome to Cheryl's List! If you obtained this from someone else and would like your own FREE copy of [Cheryl's List](#) in the future, please see the information at the end of this issue.

This has been an especially hectic year for Cheryl and me, resulting in this Cheryl's List being a little later than we had planned. In future, we will publish a Cheryl's List immediately after the latest Tuning Letter – that Cheryl's List will only contain the Management Summary from the Tuning Letter. Then we will publish additional Cheryl's Lists containing all the other information that you expect to find in a Cheryl's List – those will be published as useful information arises.



### **1. About Cheryl Watson's Tuning Letter 2015 No. 3**

The 108-page 2015 No. 3 Tuning Letter was emailed to paid subscribers on November 3, 2015. You may visit our website at [www.watsonwalker.com](http://www.watsonwalker.com) to obtain subscription information and the table of contents. This issue also marked the beginning of a new look for the newsletter. It was created using a product from Adobe called FrameMaker, which is more suited to collaborative documents like the Tuning Letter, and that we hope is more cooperative than Word! We hoped that the resulting document was up to the level of quality and crispness that you expect from Cheryl, and we plan to make more improvements over the next few issues.

The following is our Management Summary from that issue, talking about just some of the contents of that Tuning Letter:

We here at Watson & Walker are delighted to announce an alliance with a long-time (he would be very offended if I said 'old') friend of mine from IBM Ireland, Alan Murphy. In my many years in IT, and especially all my years in the ITSO, I've had the privilege of working with many outstanding techies from all over the world. Therefore, I can say with no hesitation that Alan is one of the top people in that select group. For more information about Alan, and our plans for cooperation, see the article, "Welcome to Alan Murphy" in the 2015 No. 3 Tuning Letter.



In other changes, you might have noticed our new company logo. We felt that a multinational conglomerate like Watson & Walker (well, I have an Irish passport and Cheryl and Tom have American ones!) needed something a little more eye-catching. Another change you may notice is that we have a higher than normal number of articles written by outside experts in this issue. There are topics that we feel are important to you, but that we are not experts in.



Where possible, we seek out recognized experts in those particular fields and ask them to provide articles for us. They provide the knowledge and expertise that you need, and we ensure that the articles meet the levels of impartiality and technical detail that you expect from us, as well as giving them a consistent look and feel. We are looking forward to a very exciting next 12 months, and we hope that you will feel that every change we make increases the value of the Tuning Letter.

### Red Alert

We wanted to start by making sure that you are aware of a recent Red Alert. This is VERY IMPORTANT. It affects all z/OS releases after z/OS 1.10. The symptom is that any system service relying on UNICODE will stop working on any system that is IPLed after December 15, 2015.

Some examples of services that rely on UNICODE are Telnet, System Automation, BCPII, ICONV sample job EDCICONV, FTP / SFTP, Java / Websphere applications, as well as others. In other words, if you do not apply the PTFs for this problem, your system is nearly guaranteed to be impacted.

**WARNING:** This is a really pervasive problem. If you were not able to schedule an IPL before December 15th (and an IPL is required to apply and activate the fix), then you should apply the fix to an alternate sysres, and ensure that that volume is used for any IPLs.

For more information, refer to the description of this Red Alert at <http://www14.software.ibm.com/webapp/set2/sas/f/redAlerts/20150930.html>. Every site should have at least two system programmers that subscribe to the Red Alert service to ensure that you are proactively informed of exposures such as this.

### z/OS 2.2

It seems like ages since IBM announced z/OS 2.1, but z/OS 2.2 finally shipped on September 25. I have to admit to being somewhat skeptical when IBM announced the move to a two-year release cycle. But when you look at the huge number of enhancements and new functions in z/OS 2.2, I'm now starting to agree that it was a good move. We also need to be realistic and look at the shrinking numbers of experienced mainframers, and realize that many companies just don't have the staff to do yearly upgrades.

In addition, when we analyze the number and distribution of z/OS features that customers don't exploit, we realize that that is partly due to people skipping releases, and not being aware of the enhancements that were shipped in the release they skipped. Therefore, the switch to shipping a new release every other year will hopefully result in most z/OS customers installing every release and getting more value from the enhancements that IBM is providing.

Of course, with z/OS 2.2 being available just recently, it will be some time, probably early 2016, before many customers start to install it. For that reason, this issue of the Tuning Letter focused on the enhancements in z/OS 2.2 that IBM had rolled back to

z/OS 2.1 or possibly 1.13 via APARs. Even if you are not ready to move to z/OS 2.2 yet, hopefully you can start to benefit from these functions today.

As our long-time readers know, a new z/OS release cannot be considered complete until Cheryl provides her recommendations of the Parmlib changes in the new release. The majority of new functions require some overt action on your behalf to enable them, and many of those actions are tied back to new or changed parameters in Parmlib. Therefore, this issue also carried Cheryl's review of the Parmlib changes in z/OS 2.2.

### Implementing EAVs

EAV (Extended Attribute Volume). The very term is enough to make many sysprogs go pale. And yet, EAVs have been available since 2009. EAVs provide the ability to have 3390 volumes that are larger than 54 GBs (a 3390-54). Why would you want a single volume larger than 54 GB? There are actually many good reasons why you might want to use these large volumes. We were fortunate enough to have an article titled "Extended Address Volumes - Upward and Onward", with everything you want to know about implementing EAVs by one of the recognized industry experts on the topic - **Steve Pryor** from DTS Software.

You might not have a pressing need for EAVs today. And you might not know whether your software and your applications would support EAVs. But it is much better to get answers to those questions now, rather than the week before you *have* to implement them. Steve's SHARE sessions on EAVs are always well attended and very highly regarded, so take this opportunity to learn from a real expert and stay ahead of the posse.

### Security Concerns

If the thoughts of implementing EAVs make you go pale, the idea of what hackers might be trying to do to your system could make you faint. It is a truly scary world out there, with everyone from teenagers to foreign governments trying to break into your systems. While z/OS is generally acknowledged as being the most *securable* system, it is only truly secure if you implement the facilities that it provides. It is very unsettling to think of how many systems are missing even the most basic safeguards. Apart from your responsibility as an employee of your company to keep your systems secure, as a mainframer, I would be absolutely disgusted if I thought that someone had broken into a system that I was responsible for.

One of the industry leaders in the area of mainframe security products and consulting is Vanguard Integrity Professionals. Their Vice President for Research and Development, **Brian Marshall**, presented an excellent session titled 'The Top Ten Security Vulnerabilities in z/OS Security' at the SHARE conference in Orlando last August. Cheryl was so impressed with Brian's session, we asked him to write an article on this subject. The result was the article "Top 10 Security Findings", which you can find in the 2015 No. 3 Tuning Letter. Regardless of whether you are responsible for security in your installation, this is an article that you will want to read.

Vanguard is the largest player in this space, and probably has experience with more customers than any other IT Security company, so their findings and experience carry real weight.

**RECOMMENDATION:** The veil has been lifted and it is now time to start really taking security on the mainframe seriously. We can no longer be complacent, hiding behind z/OS's image of being impenetrable. It *can* be, but only if you exploit all the tools and capabilities at your disposal. And what better place to start than Brian's list of the top 10 exposures.

## zPDT

You might recall an article I did about zPDT (System z Personal Development Tool, i.e. System z on a PC) last year in the 2014 No. 4 Tuning Letter. We use zPDT to give us hands-on experience with all the latest technologies that we write about in the Tuning Letter and teach about in our classes. We simply could not deliver the quality of service that we strive for without access to a real z/OS system.

In that article, we said that we would follow up with information about licensing options and how you can order a zPDT-based system. We got a little side-tracked with some other projects, but in this issue we've provided information to help all our readers (customers, ISVs, and IBMers) understand the options available to each of them in our article, "Your Very Own Mainframe".

In addition to being a zPDT user, I've also had the pleasure of working with the zPDT team to create a more comprehensive sysplex environment for zPDT-based systems. Some of you might be aware of the outstanding work that **Bill Ogden** has been doing with zPDT. The sysplex deliverable that we are developing now will use Bill's sysplex as the base.

## New Fields and Records in SMF

We couldn't let an issue go by without providing valuable information about SMF. As you know, Cheryl is a recognized expert in SMF and, in her own words, she never met an SMF record she didn't like. So, this issue delivered the first of a 3-part series about changes, additions, and enhancements to SMF records, starting with z/OS 1.13. Even though we hope that most of our readers are now using z/OS 2.1 (and planning for 2.2), the SMF enhancements that were delivered in z/OS 1.13 are still there in all subsequent releases. Therefore, if you are Mister or Miss SMF in your site, take a few minutes to read "What's New in SMF - Part 1" and see what new SMF data you have been missing out on.

## Conferences and Classes

This year has been a blur of classes, conferences, writing, learning (after 30+ years in this business, I still learn something new every day), and consulting. Cheryl and I both attended and presented at the SHARE conference in Orlando in August. The conference followed the formal announcement of z/OS 2.2, so it was nice to get the final picture on precisely what is going to be in the new release. And with 5 months of Early

Support Program experience under their belt, the IBMers were able to provide invaluable advice about migration considerations for z/OS 2.2.

Cheryl attended and presented three sessions at the IBM Technical University in Orlando in October. That same month, I presented the Performance and Availability day of the ITSO workshops in Mexico City, Toronto, Sao Paulo, Brasilia, Buenos Aires, and on-site for a customer in the US.

In the week immediately after the Tech University, we both taught our Software Pricing class in Orlando. This was our third time to teach the public class, and, of course, we have added more material since the second run of the class. We had a really nice group of customers and ISVs in the class, and we got some lovely comments from them about how the class will help them control their software costs, while also maximizing the value of z/OS to their enterprises. A number of them commented that the class is really about making the best use of the technology and the pricing options that IBM provides, and not just about pricing. So Cheryl and I are trying to find a snappy new title that encapsulates all that :).

We also presented our Pricing class, our Exploiting z/OS class, and our SYS1.PARMLIB classes in Hamburg in November. Our friends in SIGNAL IDUNA were kind enough to host the classes in their beautiful offices, and all three classes sold out. It is great to see corporations starting to invest in education again - just like in our private lives, spending money on education is one of the best investments a company can make. Because of their commitment to training, SIGNAL IDUNA has been able to support a growing business and exploit the latest technology, while maintaining the number of MSUs (the metric for software billing) at roughly the same level as in 2005. That's an achievement that most companies only dream about.

While the travel associated with all these classes and conferences can be tiring, the opportunity to interact on a personal basis with our customers is invaluable. Every person that we meet has some valuable experience to contribute. Their questions help us identify where we should be focusing our articles. One way or another, this all helps us deliver more value to you.

If you would like more information about our classes, or are interested in taking part in an on-site interactive workshop with us, please see the Education section of our website at <http://www.watsonwalker.com/education.html> or send us an email at [education@watsonwalker.com](mailto:education@watsonwalker.com). We would love to hear from you.

That's all for this Cheryl's List. Don't forget that we love to hear from our readers, so if you have any interesting (or harrowing!) experiences, please let us know. You can contact us on [technical@watsonwalker.com](mailto:technical@watsonwalker.com).

Stay Tuned!

Frank Kyne

Editor, *Cheryl Watson's Tuning Letter*

=====

Thanks for subscribing to Cheryl's List!

Please note that this email service is not intended to match or even summarize the large scope and volume of information we provide in Cheryl Watson's Tuning Letter. The Tuning Letter is published four times a year and includes four PDF issues delivered via email along with an annually updated and searchable DVD of all back issues since 1991. A single-site subscription rate is \$1260. Multi-site subscriptions are also available. See [www.watsonwalker.com/TUNING.html](http://www.watsonwalker.com/TUNING.html) for details. Past tables of contents are at [www.watsonwalker.com/TofC.html](http://www.watsonwalker.com/TofC.html), and some FULL SAMPLE ISSUES can be found at [www.watsonwalker.com/sampleissues.html](http://www.watsonwalker.com/sampleissues.html).

If you obtained this from someone else and would like your own copy in the future, just go to our Web page at <http://www.watsonwalker.com> and fill out the form under "Cheryl's List." That signs you up, and it's free! It's a one-way list, from us to you. If you make a "reply," it will come just to us, not to the other members of the list. We never share your address or information with anyone else. To unsubscribe or change your email address, use the Web page and password mentioned in your welcome message. Or, you can send an email request to [admin@watsonwalker.com](mailto:admin@watsonwalker.com). Past Cheryl's List issues, starting with issue #1 from December of 1996 can be obtained at [www.watsonwalker.com/archives.html](http://www.watsonwalker.com/archives.html).

In Cheryl's List, we provide updates to our full newsletter, *Cheryl Watson's Tuning Letter*. We'll also let you know if anything of importance has been added to our website, and tell you about our other products and services, including BoxScore and GoalTender, our two software offerings.