September Newsletter

Greetings all,

I hope everyone is keeping well and that you had the chance to take part in one of the events marking the completion of the Power10 family, with not only the customary performance, reliability and security improvements, we are also seeing more of the enterprise features making their way down to the scale-out models.

A few updates to share

- IBM PowerVS and GLVM seems to be the flavour of the month and I have been working with ASEAN teams on a couple of solutions for DR in the IBM Cloud. IBM has also just announced storage replication between some of the IBM Data Centres – I will update you, once I get more details.
- The recent updates in PowerVS include the Global Replication Service and you can now take advantage of Shared Processor Pools. There is a good IBM Blog providing some further information. Link.

Quick bites

Maintaining Your AIX Systems

TechChannel has published a great update by Jaqui Lynch, that reflects her 38 years of experience working with a number of Operating Systems for a range of Vendors.
Link

Log gathering for Live Kernel Update

IBM Support published a handy HowTo (Not that I have required this in any of the Live Kernel updates that I have run) on how to gather data from the Surrogate LPAR after a failed Live Update. Sometimes when Live Update fails due to a problem on the Surrogate LPAR, the logs from the Surrogate LPAR are not copied over on the remaining Original LPAR and manual extraction is required.
Link

SAP HANA on PowerVS

Updated information for IBM'ers and BP's on SAP HANA on IBM Power VS: Planning, Provisioning, Preparing and Installing
Link

How to enable Jumbo frames on AIX nNIC

A short guide from IBM support detailing how to enable jumbo frames on a vNIC.
Link

Does AIX Live Kernel Update do anything for SAP?

This video describes on a high level how AIX Live Update works and explains the benefit for customers which run SAP.
Link

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Thousands of nmon files to analyse?
A handy How To from IBM support on the use of nsum to extract key sizing from large numbers of performance statistics files
Link

IBM IT Infrastructure Support and Services
This short video shows how IBM IT Infrastructure can service and support your end-to-end infrastructure lifecycle journey. The approaches and offerings discussed in this package can help you plan, deploy, support, optimise, and refresh your IT infrastructure
Link

MustGather documentation
This MustGather document is meant to assist AIX Administrators with collecting AIX performance data needed when opening a support case with AIX System Performance team. It covers the AIX Support Centre tools and their use.
Link

PowerVM VIOS moving PVID or VLAN between VSwitches
The Support Centre has publish a handy document covering the HMC commands to move PVID/VLAN from a VSwitch on one frame to a different VSwitch on the destination frame.
Link

How to set the KSH_STAK_SIZE environment variable only to the specified script.
This Technote details how the ksh command will fail to allocate memory required for script variable if there is memory requirement in MB's and it fails with this error ""0403-029 There is not enough memory available now." Any command or script that creates ksh variables with size in MB's might fail.
AIX offers KSH_STAK_SIZE environment variable to prevent this error and we have to export the environment variable with space to satisfy the needs of the script variable.
        export KSH_STAK_SIZE=2MB.
Link

Coming soon
- **IBM Spectrum Scale Webinars: Cloud Object Storage**
  Date: Thursday September 8, 2022 at UTC +11 14:00-15:00
  This webinar focuses on Cloud Object Storage in IBM Spectrum Scale.
  Agenda
  - Introduction to AFM
  - Introduction to AFM to Cloud Object Storage
  - AFM Cloud Object Storage basics and operation modes
  - AFM Cloud Object Storage features
  - Important AFM Cloud Object Storage commands
  - AFM Cloud Object Storage debugging workflow
  - Common AFM failures and fixes
  Details
  Register

- **Power October VUG**
  Date Friday, 7 Oct 2022 02:00 AM - 03:30 UTC+11:00
  This session will focus on:
  - Simplest starting tactic for Power10 AIX exploitation
  - Alignment and balance on the POWER architecture
  Be sure to join us for this session geared to help size and build Power10 LPARs to optimize your Power10 environment.
  To Register
  Previous sessions

Redbooks and Redpapers

- **IBM Power S1014, S1022s, S1022, and S1024 Technical Overview and Introduction** ,
  Redpaper, updated 01 September 2022
  Link
- **IBM Power E1050: Technical Overview and Introduction** , Redpaper, r updated 02
  September 2022
  Link

IBM alerts and notices

AIX alerts:

- **Due to RPM, AIX is vulnerable to arbitrary code execution (CVE-2021-20271)**
  AIX is vulnerable to arbitrary code execution (CVE-2021-20271), RPM database corruption (CVE-2021-3421), and denial of service (CVE-2021-20266) due to RPM. RPM is used by AIX for package management.
  Applies to:
  - AIX   7.1
  - AIX   7.2
  - AIX   7.3
  - VIOS 3.1
  Versions affected:

Fileset	Lower Level	Upper Level
rpm.rte	4.0.0.0	4.15.1.1005
rpm.rte	4.15.1.2000	4.15.1.2005

  Link
- **BM Common Cryptographic Architecture (CCA) is vulnerable to denial of service (CVE-2022-22423)**
  Insufficient input validation in IBM Common Cryptographic Architecture (CCA) may affect Hardware Security Module (HSM) availability. An affected IBM 4767 or IBM 4769 HSM may be forced into a check-stop condition by specially-crafted requests from HSM users. Recovery from a check-stop condition requires manual intervention.
  Link

- **OpenSSL performance on P10 - LPARs running OpenSSL on AIX 7.3 on Power10 in Power10 native processor mode**
  For LPARs running AIX 7.3 on Power10 in Power10 native processor mode, an issue has been identified with the AIX OpenSSL packages below where Power in-core crypto acceleration is not detected and used. This results in significantly degraded encryption performance.
  Versions affected:

Minimum Affected Level	Maximum Affected Level	Fixing Level
openssl.base 1.0.2.500	openssl.base 1.0.2.2104	openssl.base 1.0.2.2105
openssl.base 1.1.1.0	openssl.base 1.1.1.1201	openssl.base 1.1.1.1202
openssl.base 1.1.2.0	openssl.base 1.1.2.1201	openssl.base 1.1.2.1202
openssl.base 20.13.102.1000	openssl.base 20.16.102.2105	openssl.base 20.16.102.2106

  Link

- **AIX is vulnerable to denial of service due to zlib and zlibNX (CVE-2018-25032)**
  A vulnerability in zlib and zlibNX could allow a remote attacker to cause a denial of service (CVE-2018-25032). AIX uses zlib and zlibNX as part of its data compression functions.
  Link

- **AIX is vulnerable to a denial of service due to lpd (CVE-2022-22444)**
  UPDATED Sep 13 (Added iFix information for 7.1 TL5 SP10 and 7.2 TL4 SP6): A vulnerability in the AIX lpd printer daemon could allow a local user with elevated privileges to cause a denial of service (CVE-2022-22444). The lpd daemon is the remote print server on AIX.
  Affected Product(s)   Version(s)
  - AIX   7.1
  - AIX   7.2
  - AIX   7.3
  - VIOS 3.1

  The following fileset levels are vulnerable:

Fileset	Lower Level	Upper Level
bos.rte.printers	7.1.5.0	7.1.5.33
bos.rte.printers	7.2.4.0	7.2.4.1
bos.rte.printers	7.2.5.0	7.2.5.1
bos.rte.printers	7.2.5.100	7.2.5.100
bos.rte.printers	7.3.0.0	7.3.0.0

  Link

- **AIX71 TL05 PTF in Error**
  Service pack: 7100-05-10-2220 is available with a number of fixes for potential system crash / memory leak issues.
  Link

- **AIX is vulnerable to a denial of service due to libxml2 (CVE-2022-29824)**
  A vulnerability in libxml2 could allow a remote attacker to cause a denial of service (CVE-2022-29824). AIX uses libxml2 as part of its XML parsing functions.
  Affected Product(s)   Version(s)
  - AIX   7.2

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- AIX   7.3
- VIOS   3.1

The following fileset levels are vulnerable:

Fileset	Lower Level	Upper Level
bos.rte.control	7.2.4.0	7.2.4.5
bos.rte.control	7.2.5.0	7.2.5.2
bos.rte.control	7.2.5.100	7.2.5.101
bos.rte.control	7.3.0.0	7.3.0.1

Link

- **AIX is vulnerable to a privilege escalation vulnerability (CVE-2022-34356)**
  A vulnerability in the AIX kernel could allow a non-privileged local user to obtain root privileges
  Affected Products and Versions
  Affected Product(s)   Version(s)
  - AIX   7.1
  - AIX   7.2
  - AIX   7.3
  - VIOS   3.1

  The following levels are vulnerable:

Fileset	Lower Level	Upper Level
bos.mp64	7.1.5.0	7.1.5.45
bos.mp64	7.2.4.0	7.2.4.10
bos.mp64	7.2.5.0	7.2.5.3
bos.mp64	7.2.5.100	7.2.5.105
bos.mp64	7.3.0.0	7.3.0.3

  Link

Preventative planning:
- **AIX Service Pack 7100-05-10-2220**
  Service Packs contain important fixes delivered between Technology Levels. Service Pack 7100-05-10-2220 is based on Technology Level 7100-05.
  Link
- **AIX Service Pack 7200-04-06-2220**
  Service Packs contain important fixes delivered between Technology Levels. Service Pack 7200-04-06-2220 is based on Technology Level 7200-04.
  Link
- **Service Pack: VIOS 3.1.2.40**
  VIOS 3.1.2.40 is now available.
  Link

- **Service Pack: VIOS 3.1.1.60**
  VIOS 3.1.1.60 is now available.
  Link

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ESS notices:

- **IBM Elastic Storage Server (ESS) latest fixpacks**
  These fixpacks are cumulative and include all the fixes completed since the last release:
  - ESS_DAE_BASEIMAGE_Legacy-6.1.2.4-ppc64LE-Linux
  - ESS_DME_UNIFIED-6.1.4.0-ppc64LE-EMS
  - ESS_DME_BASEIMAGE_Legacy-6.1.2.4-ppc64LE-Linux
  - ESS_DME_BASEIMAGE_5000-6.1.2.4-ppc64LE-Linux
  - ESS_DAE_BASEIMAGE_5000-6.1.2.4-ppc64LE-Linux
  - ESS_DAE_BASEIMAGE_3000-6.1.2.4-x86_64-Linux
  - ESS_DAE_BASEIMAGE_3200-6.1.2.4-x86_64-Linux
  - ESS_DME_BASEIMAGE_3000-6.1.2.4-x86_64-Linux
  - ESS_DAE_UNIFIED-6.1.4.0-ppc64LE-EMS
  - ESS_DME_BASEIMAGE_3200-6.1.2.4-x86_64-Linux

- **IIBM Spectrum Scale Software Version Recommendation Preventive Service Planning**
  IBM Spectrum Scale Software Version Recommendation.
  Link

Keep safe and talk soon
Red, Belisama