July Newsletter

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Greetings all,

Hoping that you are all keeping well and the second half of your year has got of to a great start. I am lucky to be back working with IBM on a number of projects in Australia – looking forward to getting my hands dirty with some POWER10, Ansible, PowerVS, and any other interesting project that comes my way.

A few updates to share

- The Redbooks team got of the mark quickly and have released the POWER10 midrange and scale-out redpapers (see below).
- The June POWER10 announcements contained some useful features that have come down from the Enterprise Servers. The August POWER VUG will have practical summary presented by Nigel Griffiths and a yet unannounced developer. While these meetings are at an unpleasant time this side of the world, the replay and slides will be made available.
- The support team has been busy with their updates both fixes (see below) and useful information designed to reduce the likelihood of you needing to contact support in the first place.

Quick bites

Microcode Discovery Service MDS for VIOS

Thanks to IBM Support of preparing a comprehensive guide of the steps to use the Microcode Discovery Service for your VIO Server to check the system and IO adapter microcode on Virtual IO Server(s).

Link

IBM i messages are too important to miss

Check out the Help Systems guide on automating your message management. Manage IBM i messages by exception. Messages are leading indicators about your system and applications, so it's important to check them regularly and proactively. This guide shows how you can monitor, filter, escalate, notify, and respond to critical system messages automatically!

Link

Kubernetes Operators Patterns and Best Practices

Use operators to manage the lifecycle of multi-cloud, Kubernetes-based applications. With Kubernetes, organisations can automate the deployment and management of distributed, multi-cloud applications. While Kubernetes includes many capabilities to manage workloads, it is not aware of operational requirements of specific applications, meaning manual tasks can still become a burden. Fortunately, Kubernetes is a platform designed for extension, and its automation capabilities can be augmented to encapsulate domain specific knowledge. Kubernetes operators, which extend Kubernetes in a consistent



way, allow software developers to capture in code the human knowledge of how to deploy and manage specific enterprise applications.

Link

IBM Support Insights

Preventive maintenance insights with easy-to-use portal

Included with your IBM Technology Support Services maintenance agreement, IBM Support Insights offers actionable indicators for preventive maintenance, helping to improve IT reliability and streamline asset management for IBM and other OEM systems (including Cisco, HP, Oracle, Dell, Juniper, NetApp, EMC and more). IBM Support Insights helps reduce gaps in support coverage, enabling you to simplify management of your entire IT estate across multiple vendors.

Link

Automating IBM Systems with Ansible Automation Platform Webinar

It's been understated, but IBM has been very involved with Red Hat's Ansible Automation Platform. This webinar will look at how Ansible can be used to automate IBM Systems from the Mainframe to the IBM Spectrum Virtualize. Speaker: Ian Wright.

Webinar

Slides

Coming soon

• ASEAN AIX/IBM i/Linux on Power Meetup Group

The next meeting will be held on Friday, July 29, 2022 at 12:00 UTC +10 In the next meeting we will be presenting:

Security concerns are a roadblock for Open Source databases adoption for mission critical workloads, but is there a solution?

Presenter: **Anand Subramanian**, Principal Solutions Architect (Fujitsu, Australia) Open Source can help accelerate application modernisation initiatives but there remains a data security concern that prevents adoption for mission critical applications. Come learn how FUJITSU Enterprise Postgres (FEP) delivers a secure hybrid cloud ready database solution that meets enterprise demands for resilience, availability, scalability and compliance to address this technology gap.

Update on IBM's new Power10 Scale-out and Mid-range server features

Presenter: **KeeWee Tan**, Brand Technical Specialist – Power Systems, Singapore

Linux and Power updates from Development

Presenter: Michael Neuling, Australian Development labs

In this presentation, Michael will give an overview of some of the recent technical development related to Linux and POWER. He'll cover topics including core CPU features, IO, performance, RAS, security and distributions.

<u>Meetup</u>

IBM Community



PowerVUG - New Power10 Scale-out and Midrange Systems

Friday, 5 Aug 2022 01:00 UTC +10

Join the August VUG where you will be presented with the newly announced Power10 Scale-out and Midrange Systems. The session will be presented by **Nigel Griffiths** and a special guest from our Power10 design team.

Nigel is a long-time Power advocate, an outstanding presenter, and hosts his own Power Youtube channel. The presenters will discuss the new features available for the first time in Scale-Out and Midrange systems, including transparent memory encryption and P10 specific accelerators.

If you cannot join the presentation will be available within a couple of days of the VUG. Register

Redbooks and Redpapers

• **IBM DS8000 Thin Provisioning (Updated for Release 9.3)e**, draft Redpaper, revised: June 21, 2022

Link

- IBM AIX and Enterprise Cloud Solutions, Redbook, June 28, 2022 ISBN: 073846063
 Link
- Cyber Resiliency with IBM QRadar and IBM Spectrum Virtualize for Public Cloud on Azure with IBM Copy Services Manager for Safeguarded Copy, Redpaper, Published: July 8, 2022 ISBN: 0738460621 Link
- **IBM Power S1014, S1022s, S1022, and S1024 Technical Overview and Introduction**, draft Redpaper, Revised: July 15, 2022
 Link
- **IBM Power E1050 Technical Overview and Introduction**, draft Redpaper, Published: July 11, 2022

Link

• IBM Power S1014, S1022s, S1022, and S1024 Technical Overview and Introduction, draft Redpaper, Revised: July 19, 2022
Link

IBM alerts and notices

AIX alerts:

LI82674: TO DISABLE RSA CIPHERS FOR HTTPS

Gateway port 9443 supports weak ciphers resulting in security vulnerabilities. Fix is to disable TLS_RSA_WITH_AES_128_GCM_SHA256 and TLS_RSA_WITH_AES_256_GCM_SHA384 ciphers of HTTPS protocol. Link



LI82672: RECEIVE RFC ERROR COM.IBM.DESPI.EXCEPTION.DESPIEXCEPTION: EXCEPTION WHILE GETTING ACCESSOR

Symptom is to get a string of errors including:

2022-02-24 19:16:29.102 FINE [T-7499] [CallbackEventSender] com.ibm.j2ca.cci.client.exception.WSAInvocationException:

Status still open.

Link

AIX is vulnerable to a denial of service due to lpd (CVE-2022-22444)

A vulnerability in the AIX lpd printer daemon (the remote print server on AIX) could allow a local user with elevated privileges to cause a denial of service (CVE-2022-22444).

Link

• LI82675: SAP IDOC METADATA IMPORTCONFIGURATION FAILING
Sap Idoc Metadata ImportConfiguration is failing with "OPTION_NOT_VALID
Message 000 of class SAIS type E, Par[1]: DB_Error, Par[2]: EDISDEF"
Link

- AIX 7.3 HIPERS, APARs and Fixes:
 - IJ41122 and IJ40960: OLD FILESETS LEFT AFTER MIGRATED TO AIX
 7.3 VIA NIMADM

After migration to AIX 7.3 via NIMADM, below old AIX 7.2 filesets may left in the ODM.

IJ41122

IJ40960

• IJ41011: NIMADM FIXES FOR MIGRATION TO 7.2

Some software from 6.1 may not be totally removed after a nimadm migration. Link

IJ41190: MEMORY LEAK IN SOCKET STRUCTURES

A customer may run out of network memory resources causing applications like 'ifconfig' to fail.

Link

 IJ41008: RESTVG THROWS DUPLICATE PKS ERRORS IF NOT ACTIVE

Duplicate error message during restore of datavg when PKS is not supported or not intialized on the system.

<u>Link</u>

 IJ41007: LIVEUPDATE.TEMPLATE HAS INCORRECT INFORMATION ABOUT LPAR_ID

In /vsar/adm/ras/liveupdate.template file for lpar_id it says: hmc:

- # lpar_id = <lpar id> Indicates the desired partition id for the
- # Surrogate. If the specified lpar_id is already in use, then the
- # first available lpar_id will be used.



It should say like the online documentation

https://www.ibm.com/docs/en/aix/7.2?topic=planning-configuring-resources-live-update

Link

IJ41088 and IJ41094: CRASH ON P10 AIX LPAR TESTING ORACLE RAC

Customer may experience a kernel crash on p10 platforms. This is an example crash call stack:

rtpool_put+00002C rtfree@AF60_34+000114 udp_send+0011D0 esendit+000CBC _ensendmsg+000AA0 syscall+000244 IJ41088 and IJ41094

IJ41009: NIMADM FAILED BECAUSE NOT ENOUGH SPACE IN /TMP FILE SYSTEM

nimadm failed with error similar to the following:

Creating client boot image.

/tmp/bosboot_64357068_18395/unix_6311.Z: There is not enough space in the file system. 0301-158 bosboot: mkboot failed to create

/alt_mig.client.boot. 0301-165 bosboot: WARNING! bosboot failed - do not attempt to boot device. 0505-180 nimadm: Error creating client boot image.

Link

○ IJ40837: GSSD / KRB5 MEMORY LEAKS

The gssd daemon may grow continually in memory usage until it core dumps. Link

IJ40838: NFS4 MOUNT FAILS WITH NETAPP SERVER DUE TO SUPPATTR_EXCLCREAT

AIX NFS4 client can fail to mount from NetApp NFS server if mount request includes a "Suppattr_ExclCreat" attribute request.

Link

IJ40978: ADD FSF_EPS TO EFSMGR FOR NON-DEFAULT UMASK ENVIRONMENTS

If EFS was enabled by root user with 027 umask, efsmgr fails for non-root users. # efsmgr -e test.txt

Problem initializing EFS framework.

Please check EFS is installed and enabled (see efsenable) on your system.

Error was: Error 0x80700009 occurred.d.

Local fix

setsecattr -c secflags=FSF_EPS /usr/sbin/efsmgr # trustchk -u /usr/sbin/efsmgr secflags=FSF_EPS

Link



IJ41015: AIX NPIV CLNT <u>CRASH@EMFSC STRATEGY SANITY()</u>
 System crash.

Link

• IJ41016: WRITESRV IS STUCK CONSUMING CPU OR CORE DUMPS

A child process of the main writesry daemon could get stuck in a loop, consuming excessive CPU. The stack

[100019A0]checkhandle+000040 (00000018 [??])

[10001560]setupunixsock+0000C0 (??, ??, ??)

[100024DC]rwrite+00005C (??)

[10000640]main+000220 (??, ??)

[10000168]__start+000068()

It is possible that a core dump could occur without seeing excessive CPU consumption. This core dump most likely will occur in the updatesrv or sigcld functions, but could occur elsewhere.

Local fix

The writesrv processes that are consuming CPU can be killed. Then, stopsrc the main writesrv process, delete entries in the /var/spool/writesrv directory, and restart writesrv.

Link

IJ40980: PIOMKJETD GIVES ERROR FOR MEMBER OF THE PRINTQ GROUP

If a non-root user who belongs to the 'printq' group tries to create a Jet Direct print queue, an error related to /etc/bootptab will be seen:

\$ /usr/lib/lpd/pio/etc/piomkjetd mkpq_jetdirect -p

'generic' -D asc -q 'test179' -h 'test179' -e

'test179' -n 'ether' -x '9100'

/etc/bootptab does not exist or does not have write permission!

Added print queue 'test179'.

This is because members of 'printq' group do not have write access to this file.

Local fix

Make sure enhanced_RBAC is turned on, then add piomkjetd to the privcmds database with:

setsecattr -c accessauths=ALLOW GROUP \

innateprivs=PV_DAC_W secflags=FSF_EPS \

/usr/lib/lpd/pio/etc/piomkjetd

Be sure to run 'setkst' after this.

Link

IJ40981: NIM SAVEVG OR MKSYSB ESTIMATED SIZE COMPUTATION CAN BE WRONG

When using exclude files that uses regex having special meaning like "^" start with or "\$" end with, the nim operation to create the savevg or mksysb will have



wrong evaluation of the estimated size. It might also fail if the estimated size is greater than the available space.

Link

IJ40983: TCP/UDP APPS MAY NOT WORK WITH IPSEC IPV6 TCP/UDP TUNNELS

This is applicable to IPv6 tunnles. IPsec tunnels with specific port or protocols may not allow traffic

Link

IJ41160: LPAR CRASHED @ABEND_TRAP+000000

System crash with following stack trace:

Ý0002CBC0"abend trap+000000 ()

Ý0011FCA4"IPRA.\$do_trace_control+000264 (??, ??, ??, ??)

Ý001218B0"rasp_trace_control+0001F0 (??, ??, ??)

Ý00041BFC"IPRA.\$rasp_control+00057C (??, ??, ??, ??, ??, ??)

Ý00041E38"ras_path_control_common+0000F8 (??, ??, ??, ??, ??)

Link

○ IJ41162: SYSTEM CRASH

LPAR crashes with "V_PRERELALIAS+00026"

Link

• IJ41164: LSGROUP MAY NOT RESOLVE NESTED GROUPS FOR AD

If using nested groups on Windows AD - for example:

ParentGroup contains members: ChildGroup1, ChildGroup2

ChildGroup1 and ChildGroup2 contain other child groups and users

...then, 'lsgroup ParentGroup' may show no members, even though we expect it to contain the users that belong to it's child groups.

There may also be issues where doing 'lsgroup' on one of the child groups (which puts it in the secldapcIntd cache), and then 'lsgroup' on its parent group, shows an odd group member named something like 'me=groupname'.

- Link
- IJ41067: LV ENCRYPT IN ROOTVG PKS FAIL IN PREVIEW
 PKS migration will not work

<u>Link</u>

• IJ40930: ESA CODE CHECKINS FOR AIX73B

IJ41170: LKU FAILS TO MOUNT MOUNT GUARDED FILESYSTEMS

LKU may fail to mount filesystems with mount guard enabled.

SLVUPDMCR 06/03/2022-09:55:05.157 DEBUG lvupdt.c - 1880 -

lvup_doForkCmdEnv: '/usr/bin/sh -c /usr/sbin/chroot

/old/lvup_mnt/sbin/mount -o rox,log=/dev/loglv00 -- /dev/fslv00 /data' stderr and live update logs:

mount: /dev/fslv00 on /data

0506-365 Cannot mount guarded filesystem.

The filesystem is potentially mounted on another node.



Local fix

Disable mount guard:

chfs -a mountguard=no <FS>

Link

IJ41066: A POTENTIAL SECURITY ISSUE EXISTS

This APAR addresses a potential security issue. Any relevant information will be released via My Notifications.

https://www.ibm.com/support/mynotifications

Link

• IJ41212: IPSEC:RESPONDER SHOULD NOT PERFORM RETRANSMISSION.

Tunnels would not get established if the network is dropping packets.

Link

IJ41215: SLOW NPIV I/O RESPONSE ON AIX LPAR BACKED BY QLOGIC HBA

Slow NPIV I/O response on AIX LPAR under high IO, the FC errors continued streaming until a reboot.

On VIOS, the qlfscsi devices' any_waiting is negative:

(0)> qlfscsi -d fscsi13 | grep any_waiting long long any_waiting = 0xFFFFFFFFFFFFF71

Link

• IJ41171: CLUSTER/SSP DATA ARE NOT UPDATING IN SSP GET CALL

Failed to get the Cluster/SSP details when the cluster is removed and created with new name.

Link

• IJ41172: HPMCOUNT FAILING DURING LIVE UPDATE

hpmcount may display:

ERROR - pm_tstart_mygroup: : PMU Operation not permitted. for authorized users if started during Live Update.

Link

• IJ41173: TRCRPT COMMAND DOES NOT OUTPUT VMMSIBITS FOR SOME HOOKS.

run trcrpt with 1052 hook id trcrt show ??? for vmmsibits Link

IJ40935: DELETING QUOTA FILE WITHOUT DISABLING SUBSYSTEM MAY CAUSE HANG

System may hang if the user attempts to delete quota files without disabling the quota subsystem, while creating files in the directory the quota files reside. Link

 IJ41298: SUPPORT FOR OPENXL SYMBOL VISIBILITY WITH LTO OpenXL symbol visiblity is not observed when using -flto. Link



IJ41177: LPAR CRASHED @GIDS_OK+000060

System might crash with stack: gids_ok ip_output_post_fw ipoutput, Link

LI82664: ADD NEW GRANT TYPE CLIENT_CREDENTIALS TO OUATH

Add new GRANT TYPE client_credentials to OAUTH grant type support lists. This Grant type is required to support Coupa authentication with OAUTH Link.

AIX Notices:

Get a rPerf performance rating for your AIX LPAR

Run this script of your AIX server to calculate an estimated rPerf rating for that particular Logical Partition (LPAR) also called virtual machine (VM). The estimate is based on the number CPUs and Machine-Type-Model (MTM) calculated from the official documented rPerf ratings.

Link

Power10 Servers as Infographics

IBM Power Systems in particular the Power10 server range presented as Infographics.

Link

PowerHA alerts:

 PowerHA Volume group major number mismatch/conflict warning during sync activity and starting cluster services.

Shared volume groups managed by the PowerHA cluster must have symmetrical major numbers across all the nodes in the cluster. When the volume groups are varied-on with a different major number, PowerHA generates the following warning during cluster verify and synchronization activity and during starting cluster services.

Example 1

WARNING: Volume group major numbers conflict for VG: ha4vg on nodes halab13 (503) and halab14 (504).

Example 2

WARNING: The major number for VG ha4vg is not the same on all nodes. This may cause trouble in the future if NFS exports are added to the resource group. To fix it, export and re-import the volume group on all nodes with the same major number or use C-SPOC.

If there are no plans to use NFS exports managed by PowerHA, this warning can be ignored.

Link.



ESS Notices:

- ESS cumulative fixpacks
 - ESS DAE UNIFIED-6.1.3.1-ppc64LE-EMS.
 - ESS DME UNIFIED-6.1.3.1-ppc64LE-EMS.

Keep safe and hope that you will join us at the July ASEAN Power meetup. Red, Belisama $\,$

