

September Newsletter

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Greetings all,

I am counting down the days till TechXchange – okay not only because I have the chance to catch up with Power colleagues from all over the world, hear about all the new stuff that has been happening – but mainly because I still haven't finished my presentations! Just in time is stressful!

A few updates to share

- KVM comes to Power10 – yay! With the latest firmware and Linux Kernel (Currently Fedora and Ubuntu, but rest will catch up soon), you can now run KVM guests within a Linux LPAR on Power.

[Link](#)

- Run Ansible from your NIM Server Why? Well NIMSH is already set up for communication to the clients – so that is a pretty good reason!

[Link](#)

Quick bites

The Power of “Power”

Colleagues will know that one of the things I really like about Power is the ability to run a number of operating systems at the same time. While a few administrators see this as an advantage because of familiarity, I see the greatest benefit is the flexibility of letting the application choose the operating environment, while taking advantage of the Power performance, reliability and virtualisation features. There is no doubting the advantages of AIX and IBM i for particular applications, and other applications are particularly suited to Linux – but now with the performance and cost advantage of running on power.

Michal Wiktorek wrote a good article exploring this – and also looking at installing Red Hat Linux with LVM on Power.

[Link](#)

Using NIM to install Linux on Power

Andrey has put together two excellent articles detailing ways to install Linux on Power ([RHEL](#) and [SLES](#)).

There is also an old tutorial that I prepared a while back - [Link](#)

Update AIX with Ansible. Part 3c.

Andrey has also come out with his latest in the AIX and Ansible series – using DNF.

[Link](#)

Contacting IBM Support for "End of Service" product versions ???

While IBM recommends that customers using "End of Service" versions of products to upgrade to an "In Service" version as soon as practicable, IBM is committed to providing customers with options to assist with the migration from "End of Service" products, or when necessary, provide continued service past the standard life cycle of IBM products.

[Link](#)

IBM AIX V7.3 Administrator Specialty

A candidate has general understanding of AIX administration tasks. The candidate has experience as a system administrator. This individual can operate with guidance, knows where to look for answers, and is able to apply this knowledge.

Key Areas of Competency

- AIX setup, operation, and troubleshooting
- Performance management and tuning
- Storage management
- AIX system security

Recommended Skills

- Basic LINUX or UNIX understanding
- Create and troubleshoot a shell script
- Using NIM to install and update additional software

Exam details

- Number of questions: 45
- Number of questions to pass: 32
- Time allowed: 75 minutes
- Section 1: Setup 15%
- Section 2: Operations 15%
- Section 3: Storage Management 13%
- Section 4: System Security 12%
- Section 5: Network Management 10%
- Section 6: Performance Management and Tuning 15%
- Section 7: Problem Determination and Management 15%
- Section 8: Version 7.3 Specific Changes 5%

[Link](#)

Changing from "inline" to "outline" logs and visa versa – AIX LVM

Thanks to Chris Gibson for pointing this out, the chfs command in AIX 7.3 has a new option has a new flag:

`-a logshuffle={INLINE | logdevicename}:`

Sets a file system to use the specified log. The specified log device must be in the same volume group as the current log device. If you specify `logshuffle=INLINE`, the logical volume will be extended to create an inline log device of the default size (0.4% of the file system, size up to 2047 MB) for the file system. Specifying an outline log device does not shrink the logical volume.

However there is still a note further above that states:

“Currently, to switch from inlinelog to outlinelog (or vice versa), the file system has to be removed and recreated.”

I have raised a support call to fix the documentation.

IBM Software Support & SRE announcement

IBM’s support guide recently underwent a significant overhaul aimed at elevating the user experience. Key enhancements include a streamlined layout that simplifies access to critical information, additional self-help content, a product Life cycle overview, additional support offerings including advanced options, and a step-by-step process to follow when you need additional focus on your support cases.

IBM Support and Site Reliability Engineers (SRE) leverage generative AI using IBM watsonx to provide an improved customer experience.

Use cases for all of the above will be demonstrated in the Support and SRE booth at IBM TechXchange.

[Link](#)

In case you missed

- **Top 5 in 3 Years at IBM with Steve Palazzolo**

In the last VUG Steve Palazzolo shared his experiences over 30 with Power. For session recording and slides, [Link](#)

Coming soon

- **TechXchange**

Just a few more sleeps!

Redbooks and Redpapers

- **IBM Power E1050 IBM Power E1050 Technical Overview and Introduction**, Draft Redpaper, revised: September 12, 2024

[Link](#)

- **IBM Power 10 Scale Out Servers Technical Overview S1012, S1014, S1022s, S1022 and S1024**, Draft Redpaper, revised: September 11, 2024

[Link](#)

IBM alerts and notices

AIX/VIO Security bulletin:

- **AIX is affected by a denial of service (CVE-2024-0397) and information disclosure (CVE-2024-4032, CVE-2024-37891) due to Python**
Summary

Vulnerabilities in Python could allow a remote attacker to cause a denial of service (CVE-2024-0397) or obtain sensitive information (CVE-2024-4032, CVE-2024-37891). Python is used by AIX as part of Ansible node management automation.

Vulnerability Details

CVE-2024-4032 - An unspecified error with ipaddress considers some not globally reachable addresses global and vice versa in Python CPython has an unknown impact and attack vector.

CVE-2024-0397- Python CPython is vulnerable to a denial of service, caused by a locking in cert_store_stats and get_ca_certs due to a memory race condition. By sending a specially crafted request, a remote attacker could exploit this vulnerability to cause a denial of service condition.

CVE-2024-37891 - urllib3 could allow a remote authenticated attacker to obtain sensitive information, caused by the failure to strip the Proxy-Authorization header during cross-origin redirects. By sending a specially crafted HTTP request, an attacker could exploit this vulnerability to obtain sensitive information.

Affected Products and Versions

Affected Product(s)	Version(s)
AIX	7.3
VIOS	4.1

The following fileset levels are vulnerable:

Fileset	Lower Level	Upper Level
python3.9.base	3.9.0.0	3.9.19.2

[Link](#)

A number of security issues that have been sent out via My Notifications:

Details via: <https://www.ibm.com/support/mynotifications>

- **IJ52339: A POTENTIAL SECURITY ISSUE EXISTS**
[Link](#)
- **IJ52240: A POTENTIAL SECURITY ISSUE EXISTS**
[Link](#)
- **IJ52289: A POTENTIAL SECURITY ISSUE EXISTS**
[Link](#)
- **IJ52331: A POTENTIAL SECURITY ISSUE EXISTS**
[Link](#)

AIX support notices:

- **Why tcpdump fails with error "bpf_load**

Detailed message

tcpdump fails with error "bpf_load: could not configure driver: Do not specify an existing file" on AIX and VIOS?

For example:

```
# tcpdump -i en3 port 22
tcpdump: bpf_load: could not configure driver: Do not specify an existing
file.
```

Solution

The tcpdump uses bpf to capture the network packets. The error "bpf_load: could not configure driver: Do not specify an existing file" indicates that another application or driver is holding a lock on bpf that is reserved for tcpdump. To determine who is holding a lock on bpf see the tech note.

[Link](#)

PowerVM Flashes

- **Error FCA_ERR4 0X0E and FCA_ERR6 0x2B on VIOS reported by adapters with FC EN1E, EN1G, EN1J, EN2L, or EN2N after NPIV LPAR reboot**

The purpose of this document is to raise awareness about the adapter issue that occurs after installing the iFix for IJ47358 on Virtual I/O Server, though in some instances the problem may exhibit independent from the package installation.

In most cases, the problem occurs when the conditions below are met:

VIOS level: VIOS is running level 3.1 or 4.1 with iFix for IJ47358 installed.

FC Adapters on VIOS: Adapter with any of the following FC IDs: EN1E, EN1J, EN1G, EN2L, EN2N independent from the adapter firmware image installed.

NPIV environment: VIOS FC adapter resources are emulated to IBMi, Linux, or AIX NPIV client LPAR.

NPIV client LPAR is rebooted.

Additional Considerations:

Recent support experience indicate a possibility of seeing the problem before installation of iFix for IJ47358.

There is a high potential of seeing the problem on recent VIOS FPs :

VIOS 3.1.4.40

VIOS 3.1.4.41

VIOS 4.1.0.20

There is a high potential of seeing the problem on Family 9105+04 IBM Power S1014 (9105-41B) , Family 9043+01 IBM Power E1050, Family 9105+01 IBM Power S1022 (9105-22A), Family 9080+04 IBM Power E1080 Enterprise server.

PROBLEM SYMPTOMS:

On VIOS: HBA logging FCA_ERR4 0X0E and FCA_ERR6 0x2B errors.

On AIX NPIV Client LPAR: Invalid MPIO configuration and PVID collisions, accompanied with "Serial Number Mismatch" errors on paths to hdisk devices.

[Link](#)

AIX Hipers:

- IJ52178: SYSTEM CRASH IN DEVCOPIEN WHEN RUNNING LVMSTAT**
 if a tap device is created and deleted and then lvmstat is run, system may crash with following stack:
 pvthread+0C4A00 STACK:
 WARNING: bad IAR: 00000000, display stack from LR: 0076E0FC
 0076E0FC IPRA.\$devcopen+00047C (8000002B00000000,
 00000000000008001,
 <snip>

[Link](#)
- IJ52189: JAVA 21: PROBLEM EXTRACTING FILES FROM JAR/ZIP WITH NX/GZIP**
 When using the GZIP accelerator on Power 9 and Power 10 Java 21 Semeru cannot find classes that are greater than 1KB.
 The problem is that when the zip entry is uncompressed using zlibNX only the first 1024 bytes of uncompressed data are returned.
 Then the method jdk.internal.loader.Resource.getBytes throws an EOFException with the message "Detect premature EOF".

[Link](#)
- IJ52200 STRPTIME("-2-1", "%C%Y", TESTBUF) FAILED.**
 Returns NULL when date-time stamp is invalid
 AIX 7.3 HIPERS, APARs and Fixes
 Problem conclusion
 Using a new flag to detect invalid string instead of checking for -1.

[Link](#)
- IJ52177: SYSTEM CRASH IN IN_RTCHANGE()**
 System may crash when high networking activity is there, and lot of ICMP redirect packets are sent by the router. Following stacktrace may be seen:
 KDB(6)> f
 pvthread+08B400 STACK:
 0002CCA0 abend_trap+000000 ()
 005B7214 rtfree@AF66_28+0003B4 (??, ??, ??)
 005B6DA4 rtfree+000044 (??)
 F10009D5A0472A58 in_rtchange+000118 (??, ??)
 F10009D5A0473F18 in_pcbnotifyall+000398 (??, ??, ??, ??)
 F10009D5A051CA20 tcp_ctlinput+0002A0 (??, ??, ??)
 <snip>

Problem conclusion
 Locking is improved when handling congestion control and routing change happens in TCP code.

[Link](#)
- IJ52176: LPORT VALUE NEEDS TO BE DISPLAYED FOR CLOSED CONNECTION.**
 After socket close, "netstat -K tcp" stats report the lport value as 0 instead of the lport value.
 Problem conclusion

Resetting the lport value check condition invoked after the socket pointer places a socket structure on the global freelist.

[Link](#)

- **IJ52187 and IJ52196: COMMAND HANG FAST_LNK_RECOV=YES**
Probable I/O hang, during FC link error recovery situations, when Quick I/O failover feature is enabled. The Quick I/O failover feature is enabled by setting fscsi device ODM attribute 'fast_lnk_recov' to yes.

Local fix

Protocol driver is modified to fix the hang

[IJ52187](#) & [IJ52196](#)

- **IJ52198: LACK OF PRAGMA IN .MSG.S FILES CAUSES PROBLEMS FOR TRANSLATION**

\$quote " pragma is missing in some of the .msg.S files hence cause the problem to translators

Problem conclusion

Added the \$quote " pragma in missing .msg.S files.

[Link](#)

- **IJ52183: NIM MKSYSB RESTORE HANG IF A VERY LONG LANG VALUE IN IMAGE.DATA**

The NIM mksysb restore may hang at LED code 0c40 if the source AIX system's env variable LANG value is extra long. It may cause the datadaemon program core dump and the bdata program hang.

Problem conclusion

Change code to allow LANG of max 255 characters

[Link](#)

- **IJ52217: LINUX COMPATIBILITY FOR 0 SIZE MALLOC BROKEN WHEN VECTORS IN USE**

In AIX when malloc/calloc etc are called with a 0 byte size they return a NULL pointer which can be a problem for some Linux applications. AIX implements a `_LINUX_SOURCE_COMPAT` compile time flag that can be used to implement the Linux behaviour and get a valid pointer on 0 size allocations. However, this doesn't work if the application is compiled in a mode where vectorx/vector scalars are supported such as with the `-qaltivec` and/or `-qarch=pwr9` options for instance or any pwr level that supports vectors. In that case, the `_LINUX_SOURCE_COMPAT` flag is ineffective and 0 size allocations return NULL.

[Link](#)

- **IJ52215: FOC73F:FVTR-DEV:VIO_DAEMON CORE DUMP ON DBN NODE**

If user stops the `vio_daemon` it might result in core dump some times. But it is not consistent in this behaviour.

Problem conclusion

The solution is to use the `pthread_cancel` in the function `viod_stop_repoDisk_state_alert` for the `repo_disk` monitor thread.

[Link](#)

- **IJ52201: PROBABLE SYSTEM CRASH DURING CERTAIN ERROR CONDITIONS.**

System may crash with similar stack trace as below:

```
0002CD00 abend_trap+0000000 ()  
F10009D5A03A668C fcnvme_chn_io_kthread_worker+0003EC (??)  
004E8A34 threadentry+0000054 (??, ??, ??, ??)
```

[Link](#)

- **IJ52181: SYSTEM MAY CRASH IF TOO MANY KERNEL EXTENSIONS ARE LOADED**

System crash can occur while unloading a kernel extension if too many kernel extensions are loaded

[Link](#)

- **IJ52192: USE LSMAP -PROTO IN SVFC COLLECT SCRIPT**

valvfc data not captured in snap

Problem conclusion

use the -proto flag when calling lsmmap in svfcCollect

[Link](#)

- **IJ52180: NETWORK MEMORY USAGE MAY GO HIGH WHEN PROCESSING ICMP REDIRECTS**

Network memory usage may go high and no new connections may be accepted by the system in case there are lot of ICMP redirect messages are being received by the system. We can see following type of messages for few commands:

```
# ifconfig -a  
ifconfig: socket: There is not enough buffer space for the  
requested socket operation.
```

Problem conclusion

ICMP redirect message handling has been limited to 1 message at a time. This will provide processing time to free the sockets and thereby avoiding high network memory usage.

[Link](#)

- **IJ52191: FIX MEMORY LEAK IN CFG_INIT FAILURE PATH**

If the config of device fails, the error path will lead to certain memory leak.

Problem conclusion

Free up all the traces that were being allocated.

[Link](#)

- **IJ52242: DISABLE LLU BY DEFAULT**

Problem conclusion

Disabling default raso mode to LLU_MODE_DISABLED.

[Link](#)

- **IJ52261: CAA: CAA DISABLE POLLING FOR DOWNED REPO DISK**

The Automatic repository failover failed to switchover to the backup disk, despite having a backup repository disk configured for each LPAR as part of their failover strategy. The automatic switchover to these backup disks did not occur as anticipated

[Link](#)

- **IJ52260: LPPCHK -F GIVES INCORRECT OUTPUT FOR LARGE SIZED FILES**

lppchk -f give incorrect output for large sized files:

```
# lppchk -f
lppchk: File /var/adm/cron/log could not be located.
lppchk: File /var/adm/ras/rmssock.log could not be located.
# ls -lrt /var/adm/cron/log
-rw-rw----  1 3246391296 /var/adm/cron/log
# ls -lrt /var/adm/ras/rmssock.log
-rw-----  1 3246391296 /var/adm/ras/rmssock.log
```

Problem conclusion

use stat64 and lstat64 to query the files

[Link](#)

- **IJ52282: OBSERVED COREDUMP DURING FILEMON BUCKET EXEC**
filemon coredump with malloc debug

[Link](#)

- **IJ52229: LDAP KRB5 BIND WILL FAIL WITH UTF8 TRANSLATION ENABLED**

If using a KRB5 bind for secdapclntd in ldap.cfg (useKRB5:yes) and UTF8 translation (enableutf8_xlation:yes) simultaneously, the bind will fail and secdapclntd will not be usable.

[Link](#)

- **IJ52280: MALFORMED LDAP NETGROUP TRIPLE CAUSES USERS TO NOT BE FOUND**

Some or all LDAP netgroup users will not be able to be found if a netgroup contains a malformed triple. An example is a missing closing parentheses, like this:

```
(,username,
```

Problem conclusion

When parsing netgroup triplets, we will check for both opening and closing parenthesis. If there is a malformed triplet, we will skip to the next opening parenthesis and continue.

[Link](#)

- **IJ52233: UNIXV7: WCSFTIME() RETURNED INCORRECTLY FORMATTED STRING**

The output of %F in wcsftime will not adhere to C99 standard

[Link](#)

- **IJ52277: PROBABLE RMDEV HANG AFTER MICROCODE DOWNLOAD**
The rmdev command hangs sometimes, when invoked after microcode download to unconfigure fcnvme.
Problem conclusion
Solution is to fix fcnvme driver not to start FDMI registration when fcnvme instance is closed.
[Link](#)
- **IJ52232: UNIXV7: SIGWAIT: CHILD EXITED WITH CODE 153**
Both SIGQUIT and SIGXFSZ do not behave as expected in ksh
Problem conclusion
Setup SIGQUIT and SIGXFZ properly during signal initialisation.
[Link](#)
- **IJ52231: ERROR CAUSES MESSAGE TO STANDARD ERROR AND NON-ZERO EXIT**
For the broken pipe condition, exitstaus coming with zero with no any error message, instead it must return non-zero exit status with error message for broken pipe case.
Problem conclusion
The fix is to do an explicit fflush(stdout), with error checking, before calling exit().
[Link](#)
- **IJ52230: UNIXV7: BATCH DOESN'T RETAIN THE ENVIRONMENT SET**
Batch command when executed on ksh shell it was not retaining env variable (A__z) name value pair when spawned a subshell within ksh.
Problem conclusion
Batch command was internally using ksh93 which was changing the env variable since it was spawning ksh93 and was not able to retain env (A__z) value after execution.
[Link](#)
- **IJ52238: ISST:RESTVG WITH -S FAILS ON DIFFERENT SYSTEM WITHOUT LISTED PV**
If restvg is invoked without providing physical volumes (Pvs), and the PV name exists in the image.data file but is not found on the LPAR, an incorrect error message is displayed.
Problem conclusion
A check has been added to display a proper error message with the PV name if the PV(s) are not present on the LPAR.
[Link](#)
- **IJ52237: NFSV4 FILE CREATE HANGS DUE TO /ETC/NFS/SECURITY_DEFAULT**
If the /etc/nfs/security_default file is present in an AIX client, setclientid could fail, because not all the security flavors listed in the file would be attempted.
Problem conclusion
[Link](#)

- **IJ52234: LIBC LLU VERSION SUPPORT**
Potential data loss after LLU
Problem conclusion
Added wrappers in llu_reinit
[Link](#)
- **IJ52343: VIOS DR LIBRARY SUPPORT FOR EMC 8500**
In a VM Recovery Manager environment, adding a storage agent containing a Dell EMC PowerMax 8500 storage subsystem may fail with messages logged in vsmig.log on the VIO server similar to the following:

```
[dr_scsi_val.c 1.57 2050] dr_collect_details: Begin.  
[dr_scsi_val.c 1.57 2106] dr_collect_details: End.  
[dr_scsi_val.c 1.57 4007] dr_parse_std_inq: rc=0.  
[dr_scsi_val.c 1.57 563]  
parse_appliance_details_std_inq_data: rc=0.  
<snip>
```


[Link](#)
- **IJ52320: LOCAL MKGROUP FAILING IF LDAP GROUP EXISTS WITH SAME GID NUMBER**
If LDAP with netgroups is used, mkgroup will not be able to create a local group with a GID number that is the same as an LDAP-defined group. This changes default expected behaviour.
Problem conclusion
We will use similar logic that allow chuser to add NIS users to local groups into the mkgroup code. This will not change the expected behavior for local mkgroup with conflicting GID's.
[Link](#)
- **IJ52342: TPM UTILITIES LINKING WITH OLDER VERSION OF OPENSSL**
TPM utilities may not work as expected
Problem conclusion
Link TPM utilities with 3.0 openssl library
[Link](#)
- **IJ52353: SYSTEM CRASHED IN ASO_BUFGMGER_STOP_CPU_TRACE**
Note: this is a debug assert and will not be seen by customer.
[Link](#)
- **IJ52341: "GENCOPY" ERRORS SEEN IN "NIM" UPDATE CMD**
Run the nim -o update -a packages="package name" command when the .toc file does not contain the package name. The package will not be updated in the LPP source.
Problem conclusion
Refresh .toc
[Link](#)

- **IJ52328: DUMPING SIER, SIER2 AND SIER3 REGISTERS IN P10**
Tprof was reporting wrong results as the subhook associated with dumping SIERS' data was not post-processed in tprof.
Problem conclusion
In Tprof, the subhook associated with SIERS' data has been processed based on the type of profiling it does.
[Link](#)
- **IJ52327: DKEYEXCH CMD HANGS IN NIM MASTER**
Customer observes the dkeyexch script to be hanging. This hang can be interrupted only by manual intervention. The dkeyexch process will fail to perform the expected operation.
Problem conclusion
If private key is present without the public key counterpart, then take rename the private key with .old ext. Then, ssh-keygen will regenerate new key-pairs.
[Link](#)
- **IJ52326: KERBEROS MISSPELLED IN MESSAGE.**
Kerberos misspelled as Kereberos in logs.
[Link](#)
- **IJ52325: DUMPCHECK PRINTS UNKNOWN LOCALE**
dumpcheck script throws following warning message
/usr/lib/ras/dumpcheck
LC_MESSAGES: unknown locale
[Link](#)
- **IJ52336: CRASH DURING REBOOT**
LPAR crashed while rebooting with the below stack.
CRASH INFORMATION:
CPU 8 CSA F00000002FF47600 at time of crash, error code
for LEDs: 30000000
pvthread+0B7F00 STACK:
[07D1102C]entcore_ioctl+00058C (700DFEED00007262,
F00000002FF46290,
F00000002FF462B0, F1000C0073EF0000 [??])
<snip>
[Link](#)
- **IJ52346: PROBABLE I/O HANG DURING FC LINK FAILURE ERROR RECOVERY**
Probable I/O hang, during FC link error recovery situations, when Quick I/O failover feature is enabled. The Quick I/O failover feature is enabled by setting fscsi device ODM attribute 'fast_lnk_recov' to yes.
Problem conclusion
Modified the FC SCSI driver to avoid I/O hang.
[Link](#)

PowerHA:

- **IJ51911: POWERHA INCORRECTLY STARTS A RG WITH ANTICOLLOCATION DEPENDENCY**

If anticollocation dependency is configured, and starting RG like below, then it is not starting correctly. `clmgr online resource_group ROB_resgrp node=node3` Here, only one resource group(ROB_resgrp) is specified to start but it is trying to start the other dependent resource group also on node3.

If resource groups that are part of anticollocation dependency are specified to start then, instead of starting provided resource groups, PowerHA is trying to start all the anticollocation dependent resource groups.

[Link](#)

- **IJ51876: WRONG SMIT PICKLIST FOR 'PVM WATCHDOG TIMER' USING LANG=JA_JP**

When using `LANG=Ja_JP` the SMIT picklist for the field named 'PVM Watchdog timer' shows all possible values in the same line.

Local fix

Use `LANG=C`

[Link](#)

- **IJ52186: HA:UNEXPECTED TERMINATION OF CLSTRMGRES**

Unexpected termination of `clstrmgrES` (PowerHA 7.2.8). Cluster services went down if we bring the resource group online on the same node where resource group is offline.

[Link](#)

- **IJ52146: MANUALS INCORRECT FOR 'CLUSTER STARTUP SETTINGS' MENU**

The Manuals incorrectly refer to the line `Verify Cluster Prior to Startup?` in the 'Cluster Startup Settings' SMIT Menu. The `clmgr` man page also incorrectly refers to option

`'VERIFY_ON_START'`.

Problem summary

Verify Cluster prior to Startup functionality is no more used. So need to remove the options from `smit` and `clmgr` screens.

[Link](#)

- **IJ51514: PARENT AND CHILD, STOP AFTER AND START AFTER RESOURCE GROUP DEPENDENCIES ARE NOT SHOWING PROPERLY IN GUI**

Parent and child, stop after and start after resource group dependencies are not showing properly in GUI

[Link](#)

- **IJ51479: MODIFYING CLUSTER REPOSITORY MIRROR GROUP NAME IS DISPLAYING THE EXTRA LINES IN SMIT.**
Smitty is giving an extra line that it requires an argument when we modify the cluster repository mirror group name though the operation is successful.
 /usr/es/sbin/cluster/xd_generic/xd_cli/clxd_list_rdisk: option requires an argument u
clmgr query volume_group is throwing an arithmetic syntax error for the volume group with name contains hyphen.
cl_ezupdate help message is showing extra irrelevant message
 text ACTION : is read only on the console.
Problem conclusion
Added empty check of the value getting from the clxd list rdisk.
[Link](#)

VMRM HA/DR

- **IJ52349: VIO_HS_ADD_VIOS RETURNING VIO_HS_STOP_VM RESPONSE**
In VMRM HA environment, when Ksys observes the failure in AddVios and removeVios, In response, it tags it as stop vm response.
[Link](#)
- **IJ52275: SVT_VMR_HADRHA: VM_CLEANUP_ON_HMC_SUCCESS EVENT LOGGED THRICE**
Same event will be logged multiple times.
[Link](#)

Firmware - HIPER

- **New Microcode for Firmware 1050 for 1050.21**
The latest service pack 1050.21 is now available for system firmware levels, ML1050, MM1050 and MH1050. This service pack includes the following Security/HIPER issues:
 Security problems were fixed for CVE-2023-1206 and CVE-2023-45871
For:
 E1050 (9043-MRX)
 L1022 (9786-22H)
 L1024 (9786-42H)
 S1014 (9105-41B)
 S1022 (9105-22A)
 S1022s (9105-22B)
 E1080 Server (9080-HEX)
[Link](#)

- **New Microcode for Firmware 950 .. 950.C0**
The latest service pack 950.C0 is now available for system firmware levels VL950, VM950, and VH950.
For:
 - S914 (9009-41G)
 - E950 Server (9040-MR9)
 - E980 Server (9080-M9S)
 - H922 Server (9223-22H)
 - H922 Server (9223-22S)
 - H924 Server (9223-42H)
 - H924 Server (9223-42S)
 - L922 Server (9008-22L)
 - S914 Server (9009-41A)
 - S922 Server (9009-22A)
 - S922 Server (9009-22G)
 - S924 Server (9009-42A)
 - S924 Server (9009-42G)

[Link](#)

GPFS / Scale Life cycle update

- **IBM Spectrum Scale Standard Edition, Version 5.1.x (5737-F33)**
 - GA 06-Nov-2020
 - EOM 13-Dec-2024
 - EOS 30-Sep-2025
- **IBM Spectrum Scale Data Access Edition, Version 5.1.x (5765-DAE)**
 - GA 12-Mar-2021
 - EOM 13-Dec-2024
 - EOS 30-Sep-2025
- **IBM Spectrum Scale Erasure Code Edition_5.1.x (5737-J34)**
 - GA 06-Nov-2020
 - EOM 13-Dec-2024
 - EOS 30-Sep-2025
- **IBM Spectrum Scale Data Management Edition_5.1.x (5737-F34)**
 - GA 06-Nov-2020
 - EOM 13-Dec-2024
 - EOS 30-Sep-2025

[Link](#)

* Lifecycle policy Standard: minimum 3 years support with extension of 2 years

GPFS / Scale Life flashes/HIPER

- **Canisters (code levels 6.1.9.0-6.1.9.3) of an IBM Storage Scale System 6000 may experience unplanned reboots**

IBM Storage Scale System 6000 canisters that run code levels 6.1.9.0 through 6.1.9.3 may experience unplanned reboots due to a PCIe driver problem, which can lead to unresponsive NVMe disks and potentially affect system performance. Some drives may not be detected by GNR after the reboot.

Users affected

This issue can be seen on IBM Storage Scale System 6000 (MTM 5149-F48). The code levels 6.1.9.0 through 6.1.9.3 are impacted.

Problem determination

If you see canisters unexpectedly rebooting and unresponsive NVMe drives after a reboot, check `/var/log/messages` or the console logs of one of the IBM Storage Scale System canisters, looking for the message “resetting controller due to AER”.

Example command to search for this error:

```
# grep "due to AER" /var/log/messages
```

If you are impacted by this issue, you will see an output similar to:

```
Jun 20 01:47:20 ess6000io3 kernel: nvme nvme9: resetting controller due to AER
```

[Link](#)

- **FlashCore Module (FCM) Critical update needed on FCMs on 3_x_x and 2_1_x Firmware**

FCMs that are on 3_x_x and 2_1_x firmware will go offline if they have not had a firmware upgrade in the last 800 - 900 days.

It is important that FCMs on 3_1_7 and lower be updated to FCM 3_1_15 firmware this year in 2024.

And

It is imperative that FCMs on 2_1_11 and lower be updated to FCM 2_1_12 firmware IMMEDIATELY.

Details

A counter used to keep track of inter-core communications between FCM NVMe core and the Flash controller firmware is not working properly resulting in a timeout that causes the drive to go offline. If three (3) FCMs should go offline, access will be lost to the array (DRAID6). This will happen on FCMs with 3_1_7 and lower or with 2_1_11 and lower firmware.

It is imperative that these FCMs are updated to 3_1_15, or 2_1_12 before they reach 800 days of runtime. Do not update the system software until after all FCMs have been updated, as this may trigger timeouts in an exposed drive.

This issue is resolved in the 3_1_8, 3_1_11, 3_1_15, and 2_1_12 firmware, included in the 240828 or later drive microcode package which is now available on IBM Fix Central.

[Link](#)

- **IBM Storage Scale System 5000 with Power9 servers (MTM 5105-22E) running IBM Storage Scale System code 6.1.8.3-6.1.9.2 can exhibit a high failure rate of NVDIMMs**

Due to an issue with the firmware (Power firmware VL950_138) of the NVDIMM device, the NVRAM pdisks that are used to store the log tip data might fail.

Although IBM Storage Scale System can continue to function without one or both NVRAM pdisks, the performance is impacted by their absence. Additionally, if both NVRAM pdisks within a recovery group fail, this will prevent recovery group initialization or cause a failover. Therefore, it is crucial to ensure that the NVRAM pdisks are functioning at all times.

Users affected

IBM Storage Scale System 5000, running code levels IBM Storage Scale System 6.1.8.3 through 6.1.9.2 (this level contains Power firmware VL950_138)

Problem Determination

The following symptoms will be present on a system that has the faulty firmware:

The Linux OS pmem device might be set into a read-only state. Check this by running the following command.

```
# tslsnvramstatus
```

The NVR device in the IBM Storage Scale System recovery groups can constantly change between diagnosing > ok > diagnosing in the mmlsrecoverygroupevents output.

The FSP error log will find multiple BC20E504 error logged.

Use the opal-elog-parse -l command to see if the following set of signatures are logged sequentially.

```
mca(n0p0cx) () NVDIMM Energy Source Temperature Warning - Low Temp Threshold
```

Then:

```
mca(n0p0cx) () NVDIMM Final Energy Source Lifetime Error
```

Confirm if you have the VL950_138 firmware installed. Run the following command.

```
#lsmcode
```

Recommendations

Upgrade to IBM Storage Scale System 6.1.9.3 or later, or 6.2.0.0 or later. This will upgrade the Power firmware to level VL950_145.

[Link](#)

AIX Hipers (to be published soon):

- **IJ52199: SYSTEM WENT INTO OPEN FIRMWARE WITH DUMP**

LV can become corrupted.

[Link](#)

- **IJ52216: PERF-1QP-NO PERFORMANCE IMPROVEMENT**

Consider LIO_WAIT mode for lio_listio/lio_listio64 for performance improvement.

[Link](#)

- **IJ52243: LPAR CRASH DURING DRMGR CPU ADD/REMOVE OPERATION**
Crash in LPAR during cpu add/remove operation. KDB(1)> f
[Link](#)
- **IJ52340: PENTEST:ARBITRARY FILE CREATE - TZUPG.PL**
low privileged users can access the intermediate files created the tzupg.pl tool
[Link](#)
- **IJ52337: KERNEXT IS LOADED EVEN AFTER CLUSTER REMOVED.**
The CAA kernel extension is still loaded even after the removal of the cluster.
[Link](#)
- **IJ52347: VIOS MAY CRASH IN VFC STACK WHEN FIO IS RUN ON RHEL CLIENT.**
System will crash.
[Link](#)
- **IJ52345: VIOS HANG OBSERVED FOR VFCHOST DRIVER - VFC**
VIOS commands hang for ODM lock because unconfiguration of vfc host hangs.
[Link](#)
- **IJ52333: MULTIPLE WARNING MESSAGE**
Editing desired values may lead to undesired results. Unwanted console logging for desired values
[Link](#)

Keep safe and hope to see you in Las Vegas (and for those that cannot make it, let me know and I can share the presentations).

Red, Belisama