Belisama

June Newsletter

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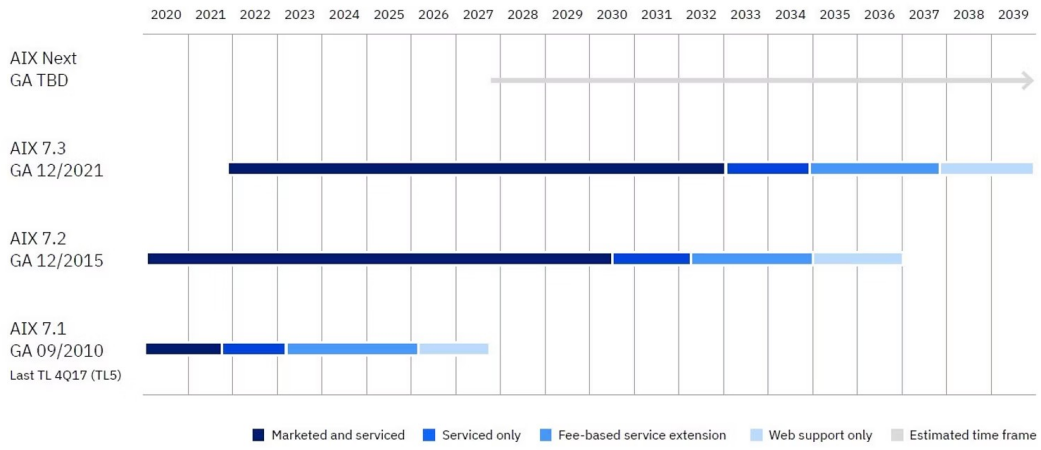
Greetings all,
I trust that those who's financial year has just ended, are off to a good start (or at least finished well!). We had a busy end to 24-25, and the recent weather in NSW added to the workload. Anyway we have Power11 to look forward too!

A few updates to share

- AIX Roadmap
  You are probably familiar with the AIX story and the security of the long support cycle:



*AIX roadmap. Timeline and release lifecycle service transitions are subject to change.

- Power11
  You will also recall towards the end of last year the discussion around Power11 started, and we were promised the usual X% performance improvements, mission critical workloads, exceptional reliability, advances in NVLINK and OpenCAPPI etc. Soon we will be getting actual specifics, so will be interesting to hear what has made the cut and if Power11 will continue to help enterprises propel digital transformation initiatives for their mission-critical infrastructure.
- What I understand:
  - The Power11 processor was designed to deliver higher clock speeds and up to 25% more cores per processor chip than equivalent Power10 systems
  - Improved RAS, better energy efficiency / management, and improved quantum-safe security

    - Improved packaging: The Power11 processor will have new integrated stack capacitor technology and advanced 2.5D packaging along with improved cooling/heatsinks with more efficient fans
    - Enhanced System Architecture: Memory architecture based on the recent DDR5 DDIMMs and enhanced OMI interfaces, allowing improved reliability, capacity, and bandwidth as well as supporting OMI DDR4 memory migrated from Power10 high-end systems.
    - AI Acceleration: Support for a range of AI use cases with the MMA architecture and the introduction of the Spyre accelerator card.
- Moore's Law??
  To get around the constraints imposed by Moore's Law, IBM has been exploring a range of options from a chiplet based approach to 3D stacking architectures. Both of which are also helping to control costs, manage energy/cooling and provide a strong base for the next versions of Power chip.
- In-Spyre-ing?
  IBM Research has been playing with AI for a long time, in 2019 the AI Hardware Centre started looking at new ways to make running AI more efficient – and in 2022 they unveiled a prototype AIU, or AI Unit, built from the ground up to handle AI workloads. Now we have the Spyre Card for both Z and P, the latest in the IBM range if AIUs. Each Spyre accelerator consists of 32 AI accelerators, 128 GB of memory on a PCIe 5X16 card. These cards can be clustered together to add many more accelerator cores to your Power System, for example 8 cards would add 256 accelerators and 1TB memory (coherent).
- Practical?
  Currently IBM is using a rack of AIUs to run HAP (hate, abuse and profanity) filtering for Watsonx – and using roughly 8 times less power with comparable throughput than a cluster of GPUs. We are looking forward to seeing some of the use cases for the Spyre card.
- IBM i
  For our IBM i customers, IBM intends to deliver a code assistant for RPG - a generative AI tool which helps developers of IBM i software understand existing RPG code, create new RPG function using natural language description, and automatically generate test cases for RPG code.
- PowerVS
  IBM has been putting a lot of focus on PowerVS and there are stories of Power11 appearing in some of the IBM Cloud data centers soon. I am not holding my breath for our local Dcs, as we have had a long wait for Power10 to appear.
  (Remember PowerVS supports AIX, IBM i, Linux and SAP RISE)

Quick bites

Security

Sorry, not a very exciting topic.. until it is. It has been alleged that a foreign national's sponsored team compromised a US firm using default credentials and had access for a number of months. This is a great example of why you need a reliable, accurate way to check and maintain your systems – PowerSC.

Chris Gibson has just published "A Guide to ClamAV Open-Source Anti-Malware for AIX"

Link

GitHub Actions – Now on Power

GitHub Actions – a continuous integration and continuous delivery (CI/CD) platform that allows you to automate your build, test, and deployment pipeline. You can create workflows that build and test every pull request to your repository, or deploy merged pull requests to production. GitHub Actions goes beyond just DevOps and lets you run workflows when other events happen in your repository. For example, you can run a workflow to automatically add the appropriate labels whenever someone creates a new issue in your repository.

How To Migrate SDDPCM to AIXPCM

- with or without SAN Boot? An answer from IBM Support.

Link

PowerVM How to perform live remote partition mobility (remote LPM)

Remote migration is the ability to use LPM between 2 servers on different HMCs, those HMCs might be distant.

Link

PowerVS

Unfortunately we all had problems accessing our resources in the IBM Power Cloud from late 2/6 to around 5/6. Luckily we had no issues with our environments – and I am still trying to find out what happened. I did hear a rumour that Google had some issues around the same time…). Will let you know if I hear anything.

GPFS/Scale/ESS 5.2.3/6.2.3

It is suggested holding off on this update for a little while due to some issues around NFS and SMB protocols. You are no longer able to download these versions – and 5.2.3.2/6.2.3.2 will be coming soon.

Link

In case you missed ….

- **Cyber Resilient Backup Patterns for IBM Power VS and Hybrid Workloads**
  The Panel explored three customer use cases including specific challenges, overview of solution patterns, and the impacts of Compass Secure Automated Backup.
  - Reduce risk moving on-premises Power workloads to the cloud
  - Hybrid data protection
  - Unify protection for Power and x86 workloads (VMware, KVM, etc.)

  Link

Coming soon

- **IBM Power Future (23:00 – 23:45 AEST; 21:00 – 21:45 SGT)**
  Hear the latest announcements and to learn more about the technology and value it will create for your organisation.
  Link

IBM alerts and notices

AIX alerts:

- **High Impact / Highly Pervasive APAR IJ53660**
  Live Kernel Update of a PowerVC managed LPAR may incorrectly remove a disk from the LPAR

  When certain errors are encountered communicating with PowerVC during Live Kernel Update (LKU), the wrong disk may be removed at the end of the LKU processing. This may result in a rootvg or data vg disk being detached and deleted from the LPAR. This can only occur when doing LKU of a PowerVC-managed LPAR, not when doing LKU of an HMC-managed LPAR.

  Recommended Action

  IBM recommends the following fix be applied before doing any Live Kernel Update of a PowerVC mangaged LPAR. No reboot is required after applying the ifix below:

  Affected AIX Levels and Recommended Fixes

Min Affected level	Max Affected level	Fix
bos.liveupdate.rte 7.3.1.0	bos.liveupdate.rte 7.3.1.4	N/A
bos.liveupdate.rte 7.3.2.0	bos.liveupdate.rte 7.3.2.2	7300-02-04
bos.liveupdate.rte 7.3.3.0	bos.liveupdate.rte 7.3.3.0	AIX 7300-03-01

  Link

- **AIX is vulnerable to sensitive information disclosure (CVE-2025-0167, CVE-2024-11053) and a denial of service (CVE-2024-9681) due to cURL libcurl**

Summary

Vulnerabilities in cURL libcurl could allow a remote attacker to obtain sensitive information (CVE-2025-0167, CVE-2024-11053) or cause a denial of service (CVE-2024-9681). AIX uses cURL libcurl as part of rsyslog, LV/PV encryption integration with HPCS and in Live Update for interacting with HMC.

Vulnerability Details

CVE-2025-0167 - When asked to use a `.netrc` file for credentials **and** to follow HTTP redirects, curl could leak the password used for the first host to the followed-to host under certain circumstances. This flaw only manifests itself if the netrc file has a `default` entry that omits both login and password. A rare circumstance.

CVE-2024-11053 - When asked to both use a `.netrc` file for credentials and to follow HTTP redirects, curl could leak the password used for the first host to the followed-to host under certain circumstances. This flaw only manifests itself if the netrc file has an entry that matches the redirect target hostname but the entry either omits just the password or omits both login and password.

CVE-2024-9681 - When curl is asked to use HSTS, the expiry time for a subdomain might overwrite a parent domain's cache entry, making it end sooner or later than otherwise intended. This affects curl using applications that enable HSTS and use URLs with the insecure `HTTP://` scheme and perform transfers with hosts like `x.example.com` as well as `example.com` where the first host is a subdomain of the second host. (The HSTS cache either needs to have been populated manually or there needs to have been previous HTTPS accesses done as the cache needs to have entries for the domains involved to trigger this problem.) When `x.example.com` responds with `Strict-Transport-Security:` headers, this bug can make the subdomain's expiry timeout *bleed over* and get set for the parent domain `example.com` in curl's HSTS cache. The result of a triggered bug is that HTTP accesses to `example.com` get converted to HTTPS for a different period of time than what was asked for by the origin server. If `example.com` for example stops supporting HTTPS at its expiry time, curl might then fail to access `http://example.com` until the (wrongly set) timeout expires. This bug can also expire the parent's entry *earlier*, thus making curl inadvertently switch back to insecure HTTP earlier than otherwise intended.

Affected Products and Versions

Affected Product(s)	Version(s)
AIX	7.3.1
AIX	7.3.2
AIX	7.3.3

Link

- **AIX/VIOS is vulnerable to an expected behaviour violation (CVE-2025-32728) due to OpenSSH**

  Summary

  AIX's OpenSSH DisableForwarding directive does not adhere to the documentation (CVE-2025-32728). OpenSSH is used by AIX for remote login.

  Vulnerability Details

  CVE-2025-32728 - In sshd in OpenSSH before 10.0, the DisableForwarding directive does not adhere to the documentation stating that it disables X11 and agent forwarding.

  Affected Products and Versions

Affected Product(s)	Version(s)
AIX	7.2
AIX	7.3
VIOS	3.1
VIOS	4.1

  Link

Keep safe and looking forward to sharing the (hopefully) great features coming with Power11
Red, Belisama