

Agenda

09h10 → 10h15

common
Romandie

AIX / PowerVM Trends and Directions



PowerVM

PowerVC Trends and Directions

PowerVC

IBM Power Systems

30 mn

AIX / PowerVM

AIX/6000

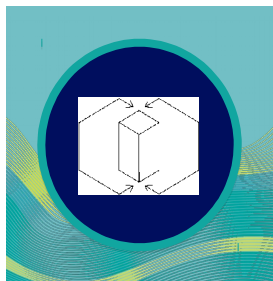


AIX L

AIX L 20



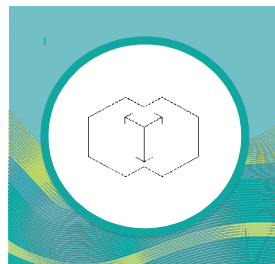
Power VM



Design for Cognitive Business

Concevoir les machines
pour répondre aux
besoins d'aujourd'hui

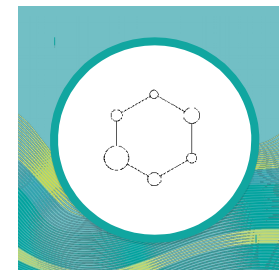
Big Data, Analytics, ML/DL ...*



Built with Collaborative Innovation

Utiliser les
compétences des
différents acteurs
spécialistes dans leur
domaine

Nvidia, Xilinx, Mellanox ...

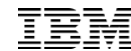


Deliver through A Cloud Platform

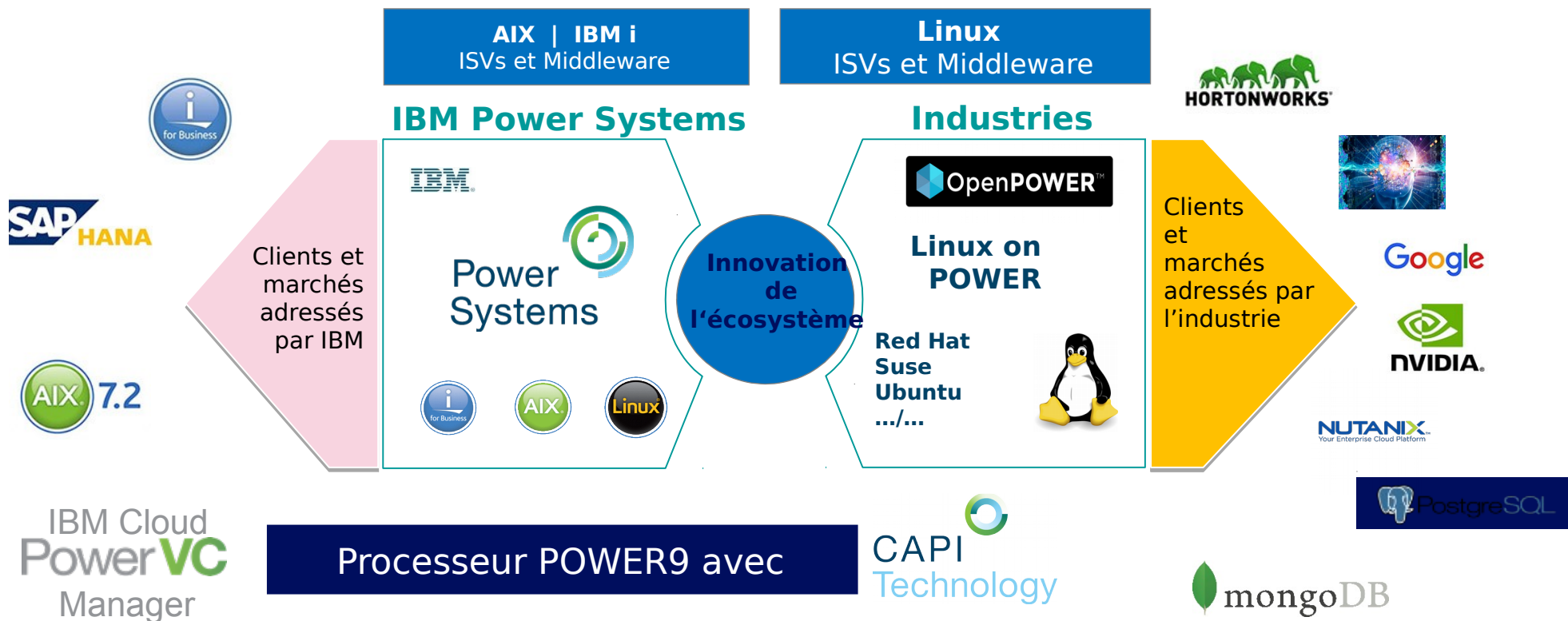
Faciliter l'accès aux
ressources et simplifier
l'administration à l'aide
des technologies

« Cloud »
PowerVC, Nutanix, ICP ...

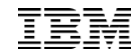
Un écosystème innovant et dynamique



Innover : Faire progresser les environnements traditionnels



2016 & 2017 AIX



**Dynamic System Optimizer
Support for POWER8**

**AIX 7.2 AME Support for 64K
Pages on POWER8**

http://ibm.biz/AIX_721_AME_64K

**AIX 7.2 Storage Reclaim
Support with Thin Provisioned
Storage Solutions**
(and AIX 7.1 TL 5)

http://ibm.biz/AIX_721_StorageUnmapSupport

**AIX 7.2 TCP IP Application
Repackaging**

**AIX 7.2 NIM Support HTTP
Protocol Support for SW
Updates**

(NIM Client support also in AIX 7.1 TL 4)

**16 Gbit Fibre Channel
Performance Enhancements**

http://ibm.biz/AIX_Enhanced_FC_Scaling

- **AIX Live Update Enhancements**

- Support for PowerVC Managed Environments
- Integration with Power Enterprise Pools

- **"Ready to deploy" AIX Cloud Images**

- For use with PowerVC and other potential clouds
- Also available for AIX 7.1 TL 5

- **AIX Installation from a USB Flash Drive**

- Also available in AIX 7.1 TL5

- **Shared Memory Communications over RDMA (SMC-R)**

- Enables TCP socket applications to transparently use RDMA for potentially improved performance, reduced latency, and CPU offload.

- **ProbeVue Enhancements**

- Enhanced CPU and Memory Statistics, stack trace enhancements, enhanced user function tracing

- **AIX Linux Toolbox Updates**

- Package updates and new ports

- **New Chef and Ansible assets**

- For AIX and VIOS patching

- **Enhanced JFS2 File System Defragmentation**

- **Etherchannel Network Interface Backup**

- **Watson2 Malloc Allocator Improvements**

- **National Language Support Updates**

- **OpenSSH Updates**

- **Tprof Enhancements**

- **Enhanced resiliency with transient SAN errors**

- **Migration support for versioned WPARs**

[Blog IBM Developer avec des détails complémentaires: https://ibm.biz/AIX_2017_TL_Releases](https://ibm.biz/AIX_2017_TL_Releases)

	Linux			AIX				for Business		
Power Systems	redhat	ubuntu Supported by Canonical	SUSE	AIX 5.3	AIX 6.1	AIX 7.1	AIX 7.2	IBM i 7.1	IBM i 7.2	IBM i 7.3
POWER9	✓	✓	✓		✓	✓	✓		✓	✓
POWER8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

• New AIX Levels supporting any I/O configuration available at P9 hardware GA

- AIX Version 7.2 TL2 SP02 (7200-02-02-1810) or later
- AIX Version 7.1 TL5 SP02 (7100-05-02-1810) or later
- AIX Version 6.1 TL 9 SP11 (6100-09-11-1810) or later (AIX 6.1 service extension required)

• Planned updates to existing AIX levels to support any P9 I/O configuration

- AIX Version 7.2 TL 0 SP06 (7200-00-06-1806) or later (planned avail. 5/4/2018)
- AIX Version 7.2 TL1 SP04 (7200-01-04-1806 or later (planned avail. 5/4/2018)
- AIX Version 7.1 TL4 SP06 (7100-04-06-1806) or later (planned avail. 5/4/2018)



• Existing AIX levels supported in LPM capable partitions

- AIX Version 7.2 TL2 SP01 (7200-02-01-1732) or later
- AIX Version 7.1 TL5 SP01 (7100-05-01-1731) or later
- AIX Version 7.2 TL1 SP01 (7200-01-01-1642) or later
- AIX Version 7.2 TL0 SP01 (7200-00-01-1543) or later
- AIX Version 7.1 TL4 SP01 (7100-04-01-1543) or later
- AIX Version 6.1 TL9 SP06 (6100-09-06-1543) or later

AIX Support selon la génération de Power System

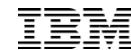


Power Platform	AIX 5.3	AIX 6.1	AIX 7.1	AIX 7.2
POWER4				
POWER5				
POWER6				
POWER7				
POWER8	(1, 2)			
POWER9	(2)			

 Support expired  Not Supported  Supported in P6 Mode  Supported in P7 Mode  Supported in P8 Mode  Supported in Native Mode

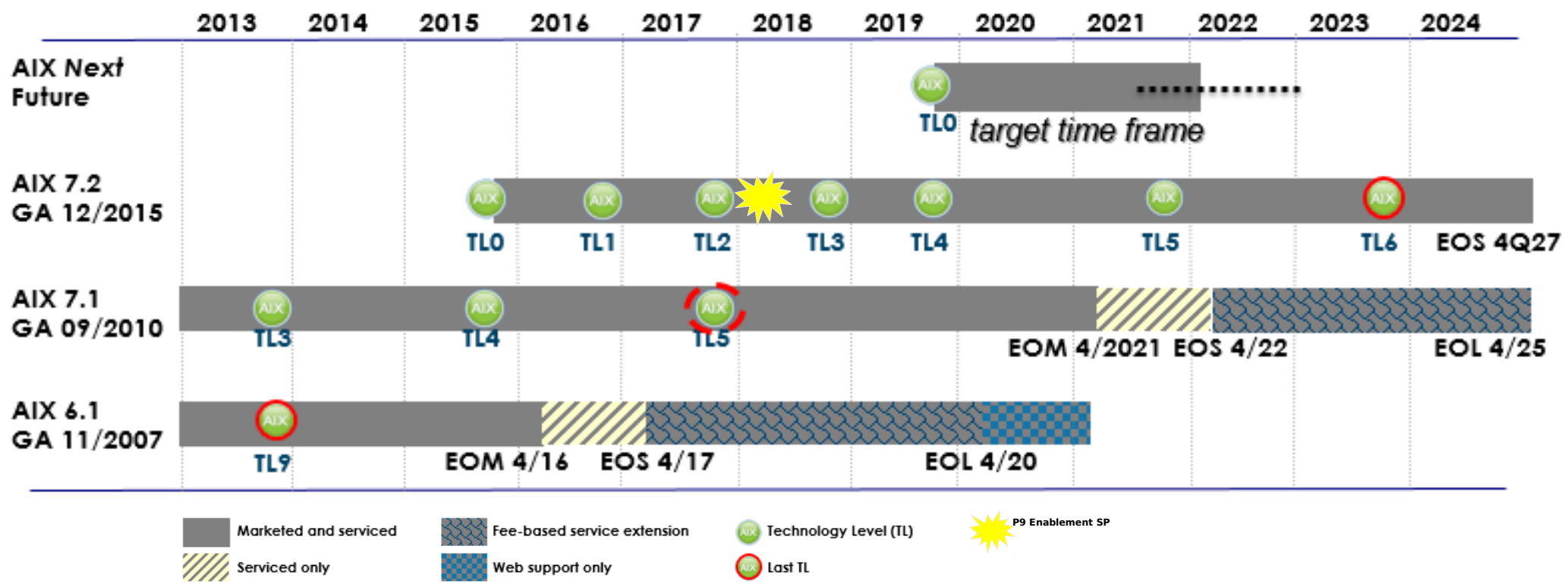
1. AIX 5.3 requires full I/O virtualization on POWER8
2. 7.1 Versioned WPARs are an option to run AIX 5.2 and AIX 5.3 environments on POWER8/POWER9

AIX feature support on POWER9



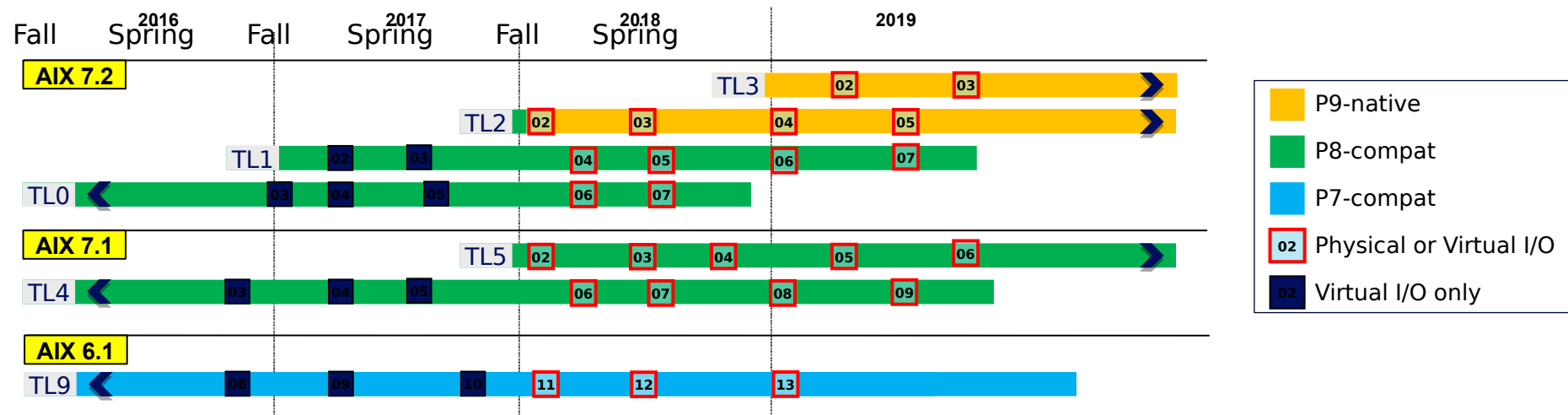
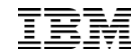
Feature	Description	Exploited by:	7.2 TL
Security			
Random number generator	User-mode accessible random number generator	Modified Apps; Java;	TL2
Performance Optimization			
Power 3.0B ISA extensions	VSX3, string, video encode, quad floating point, pc relative addressing, 32-bit overflow, Memory Atomics	Compilers; Base AIX; Modified Apps; Java	TL2
1536-thread single LPAR	192-core/SMT8 single system image support	AIX, Oracle	TL3
Acceleration			
GZIP acceleration	AIX zlib with transparent POWER9 on-chip deflate/inflate exploitation	Unmodified applications with zlib, Java, DB2	TL3
Virtualization			
Interrupt Virtualization Engine	AIX updates to directly exploit POWER9 interrupt controller. Hardware interrupt routing in a micro-partitioned environment. Bypass hypervisor call overhead.	AIX, VIOS	TL3

Feuille de route AIX



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Détails roadmap AIX POWER 9



AIX 7.2 POWER9 Exploitation

AIX 7.2 TL 2 (2017)

- DSO for P9
- P9 CAPI Enablement
- New P9 Instructions
- User Mode HW Random Number Generator

AIX 7.2 TL 3 (2018)

- GZIP HW Acceleration
- Interrupt Virtualization Engine
- OpenCAPI Attached Persistent Memory

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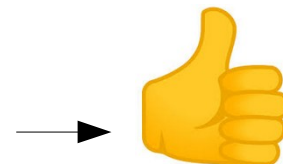
Gamme POWER9 Scale Out (PowerVM)



L922 9008-22L	S922 9009-22A	S914 9009-41A	S924 9009-42A	H922 9223-22H	H924 9223-42H
<ul style="list-style-type: none"> • 1,2-socket, 2U • 8,10,12 Cœurs/ socket • 32 IS RDIMM slots • 4TO de mémoire • 4 CAPI 2.0 Slots • Linux only • PowerVM • KVM (GA2) 	<ul style="list-style-type: none"> • 1,2-socket, 2U • 4, 8,10 Cœurs/ socket • 32 IS RDIMM slots • 4TO de mémoire • 4 CAPI 2.0 Slots • AIX, IBM i, & Linux • PowerVM 	<ul style="list-style-type: none"> • 1-socket, 4U & modèle Tour • 4,6,8 Cœurs/ socket • 16 IS RDIMM slots • 1TO de mémoire • 2 CAPI 2.0 Slots • RDX Media interne • AIX, IBM i, Linux • PowerVM 	<ul style="list-style-type: none"> • 2-socket, 4U • 8,10,12 Cœurs/ socket • 32 IS RDIMM slots • 4TO de mémoire • 4 CAPI 2.0 slots • RDX Media interne • AIX, IBM i, Linux • PowerVM 	<ul style="list-style-type: none"> • 1,2-socket, 2U • 4, 8,10 Cœurs/ socket • 32 IS RDIMM slots • 4TO de mémoire • 4 CAPI 2.0 Slots • AIX, IBM i (jusqu'à 25%) • Linux • PowerVM 	<ul style="list-style-type: none"> • 2-socket, 4U • 8,10,12 Cœurs/ socket • 32 IS RDIMM slots • 4TO de mémoire • 4 CAPI 2.0 slots • RDX Media interne • AIX, IBM i (jusqu'à 25%) • Linux • PowerVM
Leadership Technologique	<ul style="list-style-type: none"> • Prêt pour le Cloud – Capacités de virtualisation embarquées dans PowerVM • Jusqu'à 4To de mémoire dans 2 sockets – Mémoire RDIMMs au Standard de l'Industrie DDR4 • Ports externes à haut débit 25Gb/s – un port par socket • Deux adaptateurs d'amorçage internes NVMe Flash • Algorithmes embarqués dans le processeur de service permettant au processeur POWER9 de fonctionner à une fréquence toujours optimisée 				

- **Two new PCIe3 network adapters:**
 - 2-Port 10Gb NIC & RoCE SR/Cu Adapter
 - 2-Port 25/10Gb NIC & RoCE SR/Cu Adapter
 - Both adapters use the Mellanox ConnectX-4 Lx Network controller and support NIC SR-IOV
 - NIC SR-IOV support is extended to existing PCIe3 2-port 100GB NIC & RoCE QSFP28 adapter
 - feature codes #EC3M & #EC3L
- **Two new PCIe3 fibre channel adapters:**
 - 16Gb 4-port Fibre Channel Adapter
 - 32Gb 2-port Fibre Channel Adapter

Quid du support des cartes d'entrées
sorties existantes sur POWER8 ?



Compatibilité binaire d'AIX sur Nutanix garantie

AIX provides the same **binary compatibility** on Nutanix as is on Power models that support AIX on PowerVM which allows **applications** developed for **AIX 5 or greater** to run unchanged and without recompilation

Custom
Applications



WebSphere®
Application Server

**Binary Compatibility with Applications
From older AIX Releases
5.X and beyond**



PowerVM™

AIX 5.x & up
workloads



**IBM
Hyperconverged
Systems powered
by Nutanix**



AIX for IBM Hyperconverged Systems Powered by Nutanix

Nutanix Prism Central Multi-Cluster Infrastructure Management



Prism Console

CLI, Rest-Based
Infrastructure Services

AIX on IBM Hyperconverged Systems at a Glance

- AIX runs fully virtualized on Nutanix AHV
- Requires AIX 7.2 TL 2 SP2, or later
- Uses the AIX monthly subscription model from Passport Advantage
- It's the same binary distribution of AIX AIX 7.2 that runs on PowerVM platforms
- AIX on CS Series is binary compatible with AIX on PowerVM
- AIX “cloud ready” raw images allow efficient VM deployment on AHV

SSD

SSD

IBM Statement of Direction announced Feb 13, 2018 –

“IBM intends to enable selected AIX VM guests on IBM Hyperconverged Systems powered by Nutanix CS series”

Done : May 2018 <https://ibm.biz/AIX72-Nutanix> and <https://ibm.biz/SUSE-Nutanix>

→ <http://ibm.biz/KC-AIX-Nutanix>

AIX & Nutanix sur infrastructure à IBM Montpellier



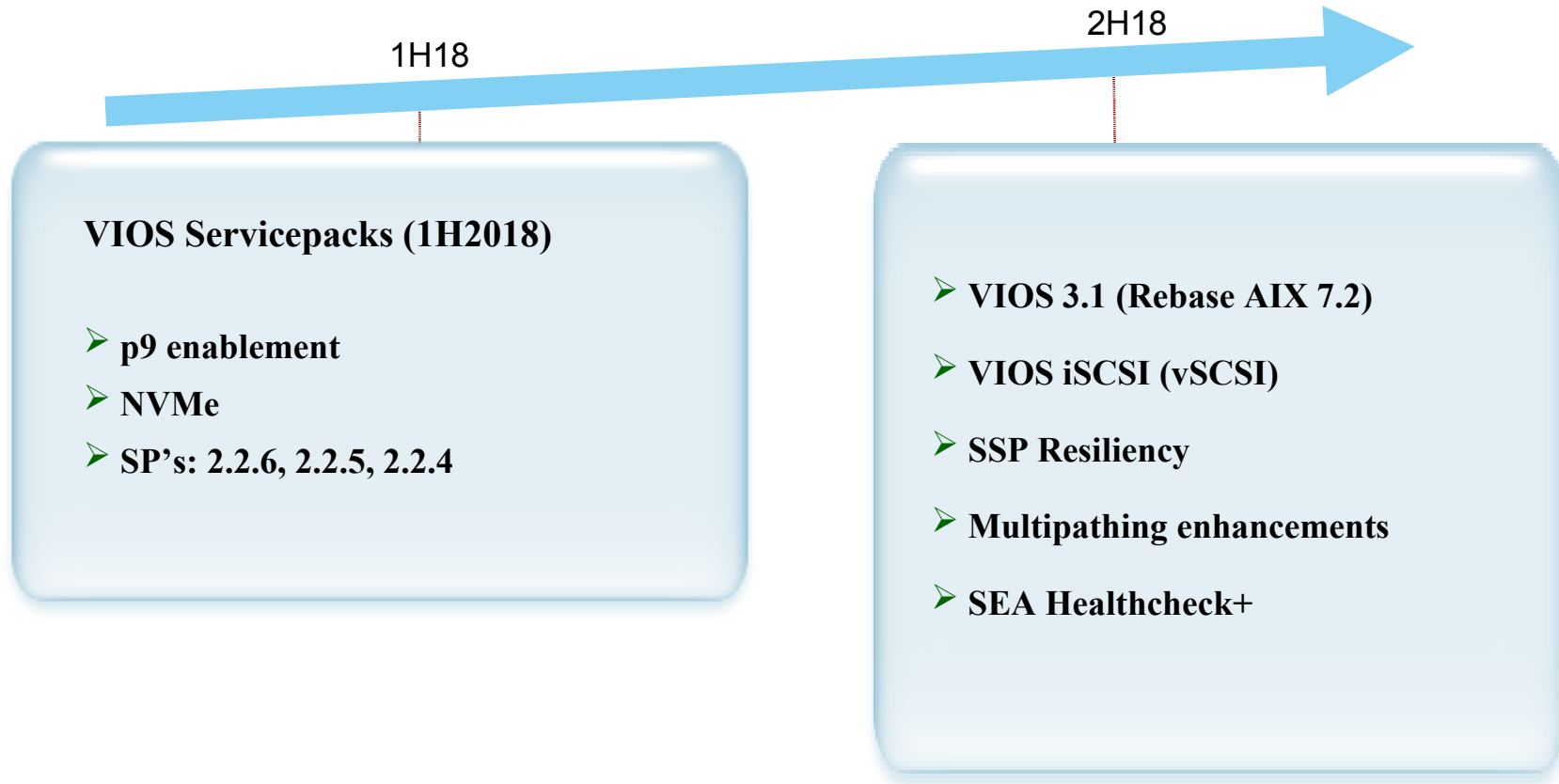
4 serveurs
modèle CS821

2x CPU POWER8 de 10 cœurs à 2.09 GHz
Jusqu'à 160 threads
Jusqu'à 256 Go de mémoire
Jusqu'à 7.68 To de flash
Hyperviseur Nutanix AHV

PowerVM

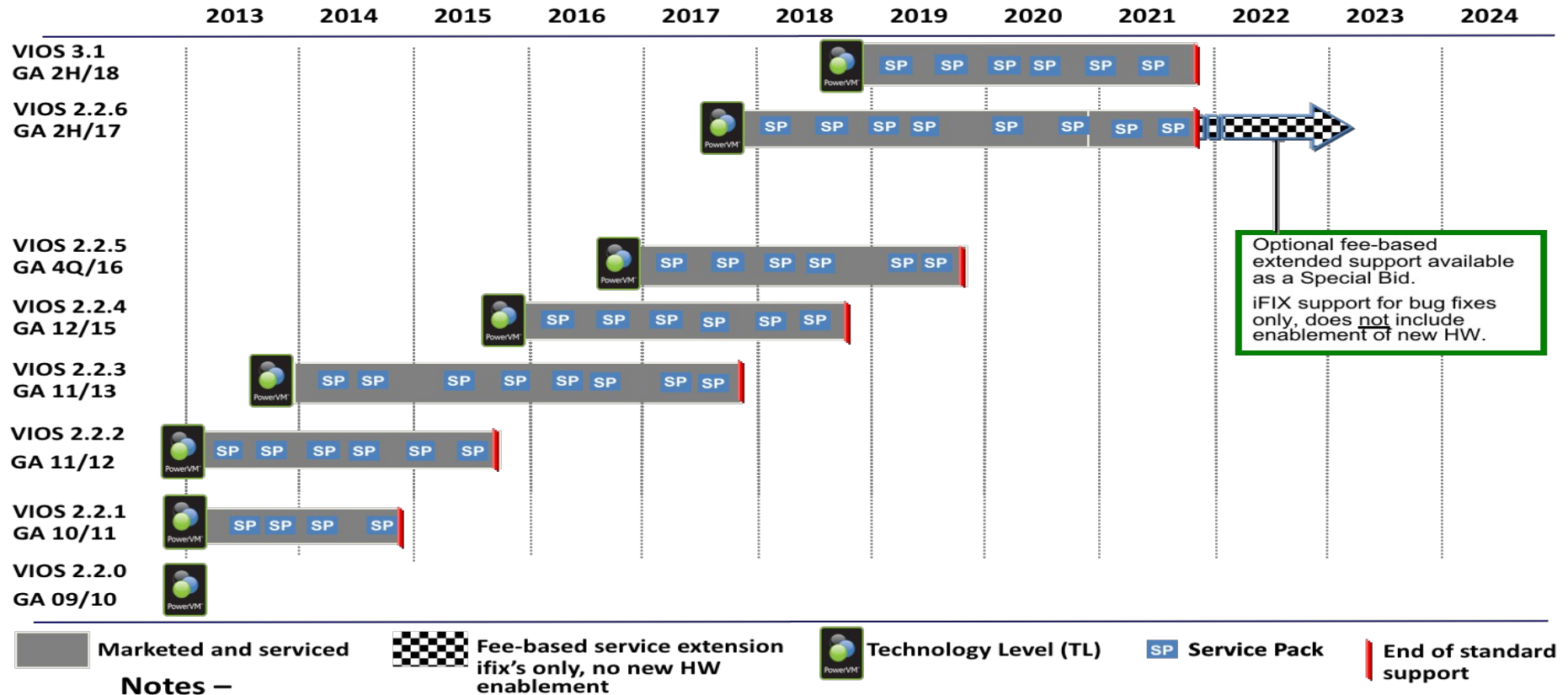
- Available VIOS versions for P9
 - VIOS 2.2.6.21 or later

- Planned VIOS versions for P9
 - VIOS 2.2.4.60 or later
 - VIOS 2.2.5.40 or later
 - VIOS 3.1 or later



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VIOS Feuille de route



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IBM Power Systems

30 mn

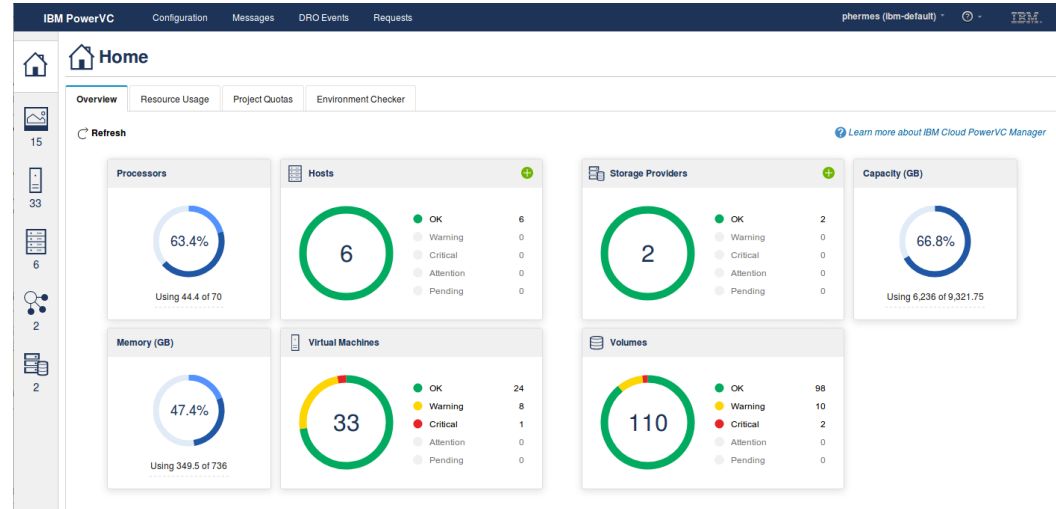
PowerVC

PowerVC

Les cinq raisons de nos clients pour implémenter PowerVC :

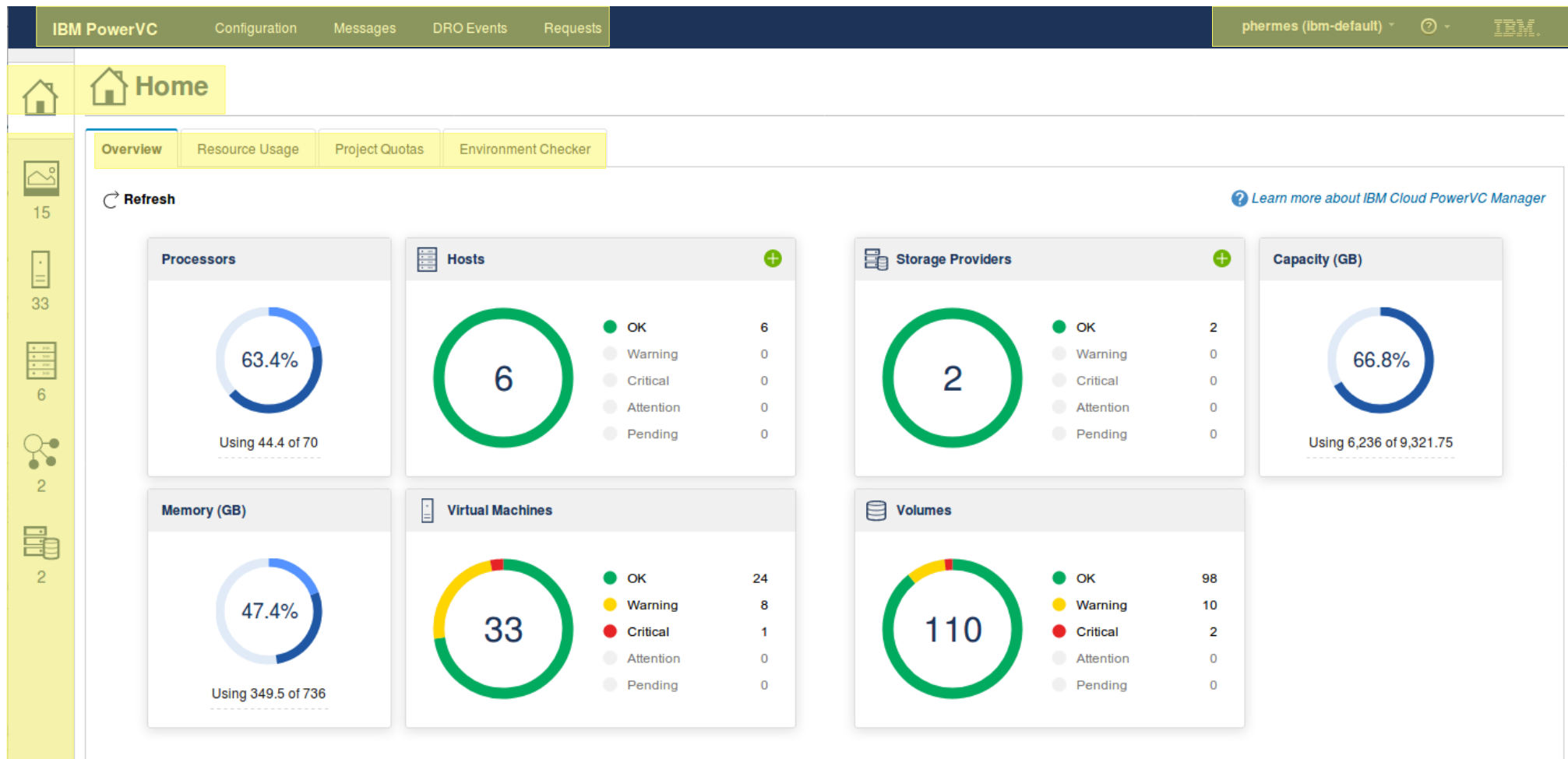
- 1. Déploiement de VMs en minutes** versus jours ou semaines
2. Fourni le socle pour des clouds Enterprise sur POWER
3. Réduit notablement les risques liés à des déploiements multiples
4. Fournit des fonctionnalités avancées très facile à utiliser
- 5. Permet la création d'un bloc pour des orchestrators de cloud**
(VMware vRA, ICO, etc.)

- ✓ Graphique
- ✓ Intuitif
- ✓ Simple

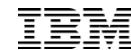


Trois éditions :

- ✓ IBM PowerVC Standard Edition (for virtualization management)
- ✓ IBM Cloud PowerVC Manager (for virtualization and private cloud management)
- ✓ IBM Cloud PowerVC Manager for Software-Defined Infrastructure (SDI)



PowerVC : les trois éditions



1. **Simple, simple, simple!**
2. **Deploy VMs in minutes instead of days or weeks**
3. Full lifecycle management of VMs
4. Automated VM recovery
5. Simplified maintenance with one-click host evacuation
6. Automated cloud optimization via DRO
7. Multi-tenancy and resource isolation
8. Software defined networking capabilities
9. OpenStack API enablement

<http://ibm.biz/PowerVC-14-std>

1. **EVERYTHING in PowerVC Standard Edition!**
2. **Self-service capabilities for cloud users** that enable **one-click deploy operations** for all genres of app. developers, data scientists, QA engineers, and so on
3. Provides cloud administrators with various policies and quota management to govern cloud operations
4. Import/export Vms between Clouds
5. DbaaS capability (Technical Preview)



<https://wiki.openstack.org/wiki/Trove>

<http://ibm.biz/PowerVC-14-mgr>

1. **EVERYTHING in PowerVC manager Edition!**
2. Integrates IBM Spectrum Scale (Data Management Edition 5.0)
3. Software-defined storage and compute capabilities
4. Enables SDE solution such as SAN-less private clouds

<http://ibm.biz/PowerVC-14-mgr-sdi>

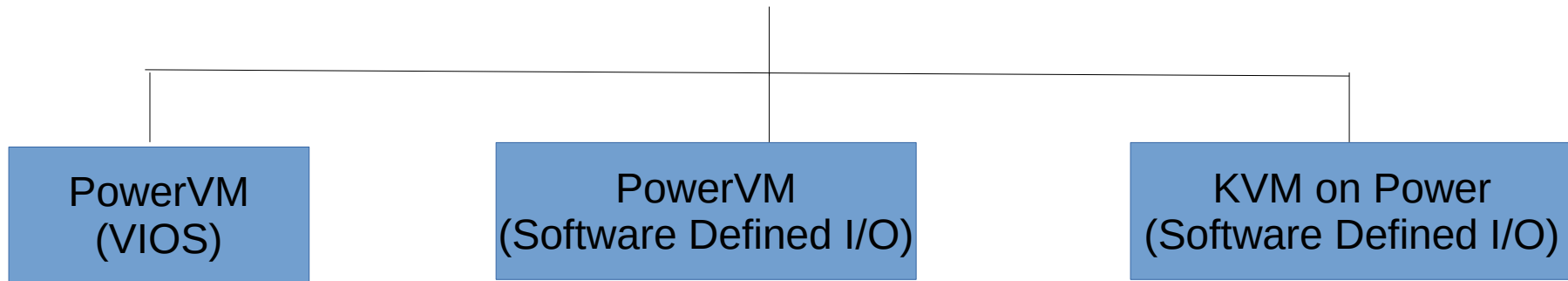
PowerVC gestion de la virtualisation sur de multiples POWER Systems



Une seule instance de PowerVC peut gérer une combinaison de plusieurs systèmes POWER

- PowerVM avec les VIOS habituels – dans une configuration HMC ou Novalink
- PowerVM avec Software Defined I/O avec l'utilisation de Novalink
- KVM sur Power avec Software Defined I/O

PowerVC



PowerVC SDI expands Infrastructure Options



Traditional PowerVM

Characteristics

- **Hypervisor:** PowerVM
- **Networking:** Shared Ethernet & SR-IOV
- **Storage:** Fibre Channel

Benefits

- Strong Performand and Reliability Characteristics
- Well-known Deployment Patterns

Typical Workloads

- Mission critical workloads – ex. Databases, SAP Hana, etc...
- License sensitive SW (via scale up cores)



Software Defined

Characteristics

- **Hypervisor:** PowerVM and KVM
- **Networking:** Open vSwitch
- **Storage:** Local Disk (SSD), Fibre Channel or iSCSI via IBM Spectrum Scale

Benefits

- Flexible configuration options enable cost-optimized, scale-out infrastructure
- Additional network control for micro-segmentation

Typical Workloads

- Scale out workloads – ex. Containers, Web Servers, Load Balancers, etc..
- Open Source workloads (via scale out cores)



PowerVC

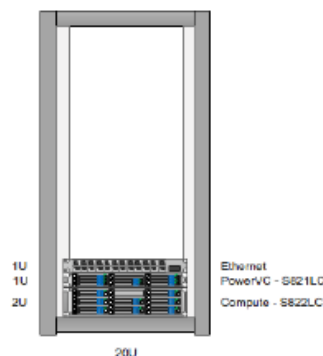
PowerVC permet la mise en oeuvre de nouvelles solutions Cloud



Kick the Tires

- Smallest cloud possible
- No data redundancy

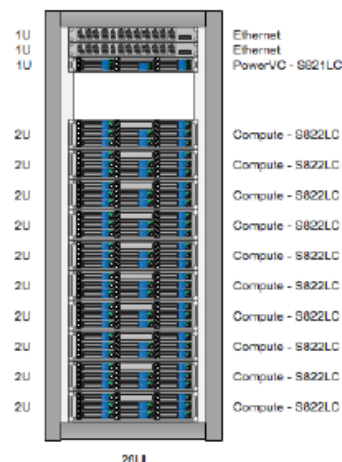
- 22 cores
- 512 GB mem
- 12 TB cluster
- Flash cache



Scale Out OpenPOWER

- 10-node cluster with storage redundancy

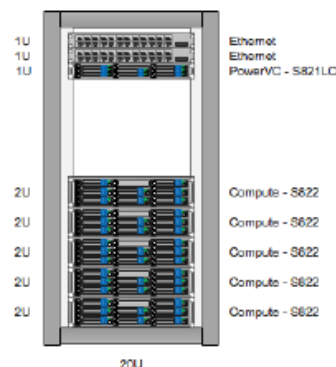
- 10/25 GigE
- 220 cores
- 5 TB memory
- 120 TB physical
- 40 TB cluster
- Flash cache



SAN-less PowerVM

- 5-node PowerVM cluster
- Runs AIX, IBM i (Tech Preview) and Linux

- 10/40 GigE
- 100 cores @ 3.42 Ghz
- 2.5 TB memory
- 45 TB physical
- 15 TB cluster
- Flash cache



Référence :
- TechU Orlando 2018
Ian Robinson

Building a Cloud with the Software-Defined Infrastructure Features of IBM PowerVC V1.4



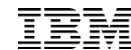
<http://ibm.biz/PowerVC-14-Cloud-Redbook>

- ✓ Support for POWER9 servers running the PowerVM hypervisor (Support for POWER6 is removed)
- ✓ Streamlined deployment for SAP HANA workloads
- ✓ Integration with IBM Cloud Private (IBM Cloud Private integration)
- ✓ Add or remove data and metadata disks from the IBM Spectrum Scale™ cluster
- ✓ Quality of Service (QoS) technical preview (SDN)
- ✓ SQL based authentication for service users
- ✓ Security groups (SDN)
- ✓ Affinity score checking
- ✓ Dual-initiator target zoning
- ✓ Automatically configure candidate port groups for EMC VMAX storage devices
- ✓ Support for asynchronous copies on IBM® System Storage® DS8000® storage devices
- ✓ Set the storage template ID for an existing volume
- ✓ Built-in NPS survey (Web form) launch (Satisfaction survey)
- ✓ Support for OpenStack "Queens" release
- ✓ Improvements to PowerVC Manager for Software-Defined Infrastructure (simplified add and remove disk capability)

- Austin (Austin, Texas): The first design summit took place in Austin, TX
- 2011.1 Bexar (San Antonio, Texas): San Antonio is located in Bexar county
- 2011.2 Cactus: Cactus is a city in Texas
- 2011.3 Diablo 🏠 (Santa Clara, California): Diablo is a city in the bay area near Santa Clara
- 2012.1 Essex 🏠 (Boston, Massachusetts): Essex is a city near Boston
- 2012.2 Folsom 🏠 (San Francisco, California): Folsom is a city near San Francisco
- 2013.1 Grizzly 🏠 (San Diego, California): Grizzly is an element of the state flag of California
- 2013.2 Havana 🏠 (Portland, Oregon): Havana is an unincorporated community in Oregon
- 2014.1 Icehouse 🏠 (Hong Kong): Ice House is a street in Hong Kong
- 2014.2 Juno (Atlanta, Georgia): Juno is a locality in Georgia
- 2015.1 Kilo (Paris, France): Paris (Sèvres, actually, but that's close enough) is home to the Kilogram, the only remaining SI unit tied to an artifact
- 2015.2 Liberty (Vancouver, British Columbia): Liberty is a village in the Canadian province of Saskatchewan
- 2016.1 Mitaka (Tokyo, Japan): Mitaka is a city located in Tokyo Metropolis, Japan
- 2016.2 Newton (Austin, Texas): The "Newton House", located at 1013 E. Ninth St., Austin, TX, is listed on the National Register of Historic Places
- 2017.1 Ocata (Barcelona, Spain): Ocata is a beach about 20 minutes north of Barcelona by train

Version PowerVC	V1.2	octobre 2013	Havanna	Version OpenStack
	V1.2.1	avril 2014	Icehouse	
	V1.2.2	octobre 2014	Juno	
	V1.2.3	avril 2015	Kilo	
	V1.3	octobre 2015	Liberty	
	V1.3.1	avril 2016	Mitaka	
	V1.3.2	octobre 2016	Newton	
	V1.3.3	avril 2017	Ocata	
	V1.4.0	octobre 2017	Pike	
	V1.4.1	avril 2018	Queens	
	?	?	Rocky	

Tentative PowerVC Roadmap



	2H2018	1H2019+
PowerVC Release	1.4.2 and related fix packs (e.g., 1.4.2.1)	1.4.3 and related fix packs (e.g., 1.4.3.1)
Common Enablement	<ul style="list-style-type: none"> Python 3: Compute and network nodes ICP/CAM integration (Host Groups, FlexVolume) Support for different mgmt. and customer networks 	<ul style="list-style-type: none"> Rebase to OpenStack Stein Python 3: Management server DRO: VM right-sizing Docker container for management plane Keystone federated identity Inactive VM migration Support for IO metrics (network util., storage IOPs, etc.)
PowerVM Enablement	<ul style="list-style-type: none"> POWER9: Encrypted and compressed LPM POWER9: Toleration of PAYG pools for scale-up SR-IOV support for HMC-managed servers AIX secure boot Support for Brocade SSH keys during fabric registration Automated storage port load-balancing using whitelists 	<ul style="list-style-type: none"> Linux secure boot Support for Hitachi GAD-enabled volumes Auto-discovery of IP address during VM import Storwize Hyperswap replication SR-IOV max bandwidth/capacity setting Remote restart with fewer resources on target side Provide pluggable storage driver for FC tape Cross-HMC remote restart
SDI Enablement	<ul style="list-style-type: none"> Support for "SDI mode" on Red Hat-based NovaLink SDN: QoS enablement 	<ul style="list-style-type: none"> SDS: Multi-cluster support SDS: SAN flash cache SDS: SAN-backed cluster scale to 100 nodes SDN: Security groups Redundant storage Redundant network (OVS)
KVM Enablement	<ul style="list-style-type: none"> Support for POWER9 (Red Hat 7.5 and Ubuntu 18.04) 	<ul style="list-style-type: none"> Support for PCI passthrough Currency with Red Hat and Ubuntu releases
Hardware Platforms	<ul style="list-style-type: none"> All enterprise POWER7, POWER8 and POWER9 POWER8 and POWER9 LC (Boston, Witherspoon) 	<ul style="list-style-type: none"> All enterprise POWER7, POWER8 and POWER9 POWER8 and POWER9 LC (Boston, Witherspoon)
Hypervisors	<ul style="list-style-type: none"> PowerVM KVM on Power (Ubuntu 16.04, 18.04, Red Hat 7.5+) 	<ul style="list-style-type: none"> PowerVM KVM on Power (Ubuntu 16.04, 18.04, Red Hat 7.5+)

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Groupes LinkedIn



- IBM PowerVM <https://ibm.biz/powervmgrp>
- AIX Technology Forum <https://ibm.biz/aixgroup>
- PowerHA SystemMirror <https://ibm.biz/powerhagrp>
- PowerVC <https://ibm.biz/powervclink>
- IBM GDR <http://ibm.biz/powerGDRgrp>

DeveloperWorks



- IBM PowerVM <http://ibm.biz/powervmwiki>
- IBM AIX <https://ibm.biz/aixwiki>
- AIX Open Source Forum <https://ibm.biz/AIXopensourceForum>
- Linux on Power <https://ibm.biz/linuxonpower>
- IBM I <http://ibm.biz/devibmi>
- PowerHA SystemMirror <https://ibm.biz/powerhawiki>

Quelques pages ajoutées suite à des questions après la session

Permet d'effectuer une demande d'amélioration sur un produit à IBM

Etape 1 : Créer la demande <https://www.ibm.com/developerworks/rfe/>

Etape 2 : Diffuser cette demande et voter !

Etape 3 : Suivre la demande

Etape 4 : Reboucler avec votre interlocuteur IBM favori

Exemples :

4 votes

→ Voted

Disable DNS from HMC CLI (120728)

Last updated: 11 Jun 2018

Planned for Future Release

Power Hardware Management Console

https://www.ibm.com/developerworks/rfe/execute?use_case=viewRfe&CR_ID=120728

9 votes

→ Voted

Select Project at login screen (120986)

Last updated: 07 Jun 2018

Submitted

PowerVC

https://www.ibm.com/developerworks/rfe/execute?use_case=viewRfe&CR_ID=120986

4 votes

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Ability to show the real utilization of a thin provisioned volume (120218)

Last updated: 04 Jun 2018

Submitted

PowerVC

https://www.ibm.com/developerworks/rfe/execute?use_case=viewRfe&CR_ID=120218

6 votes

→ Voted

IBM development took away the ability to dynamically add a vSCSI to a VIOS. We need that feature put back! (119887)

Last updated: 04 Jun 2018

Information Provided

Power Hardware Management Console

https://www.ibm.com/developerworks/rfe/execute?use_case=viewRfe&CR_ID=119887

▶ Réponse du LAB

<http://ibm.biz/powervmwiki>

09/25/2017	How Live Partition Mobility is Tested
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→ Intéressant

Allow migration with inactive Source Storage VIOS

- VIOS 2.2.4 or later and use dual VIOS configuration

Properties of managed system, General Settings panel:

General Settings

SaveCancel

View or change the general and advanced settings for the managed system.

Open AllClose

▼ Migration

View the partition mobility properties and change the migration policy for inactive partitions on the managed system.

Inactive Profile Migration Policy: ?

Partition Configuration ▼

☐ Allow Migration with Inactive Source Storage VIOS ?

Migration Capabilities

Type	Capable	Number of Supported Migrations	Number of Migrations in Progress
Inactive	Yes	16	0
Active	Yes	8	0

<http://ibm.biz/PowerVM-225>

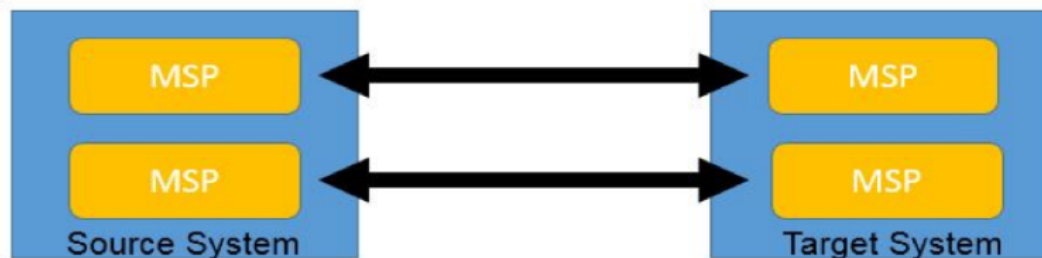
You are in: [Power Systems](#) > [IBM PowerVM](#) > [Blogs](#) > Live Partition Mobility (LPM) improvements in PowerVM 2.2.5

Live Partition Mobility (LPM) improvements in PowerVM 2.2.5

LPM Resiliency and Performance

Most customers utilize a dual Virtual I/O Server (VIOS) configuration to ensure the highest level of availability of client partitions. With PowerVM version 2.2.5 we are leveraging this configuration to provide additional resiliency and performance. Prior to version 2.2.5, there is a single Mover Service Partition pair that is responsible for the transmission of the data from the source server to the target server even in a dual VIOS configuration. The Mover Service Partition (MSP) is the term used to designate the VIOS that is chosen to transmit the partition's memory contents between servers. With the upgrade to PowerVM 2.2.5, changes have been made to utilize two MSPs in a dual VIOS environment.

Dual MSP connections for Live Partition Mobility



Où trouve la documentation sur les ReST API ?

→ IBM Knowledge Center <http://ibm.biz/KC-PowerVC-14-RestAPI>

Problème à résoudre :

Positionner le statut “remote restartable” à ON sur 100 partitions

Solution 1 :

Utiliser l'interface graphique de PowerVC et passer en revue une à une les 100 partitions

Solution 2 :

Utiliser ReST API pour interagir avec PowerVC par script

↖ Ouvrir le “panneau” à gauche de la page

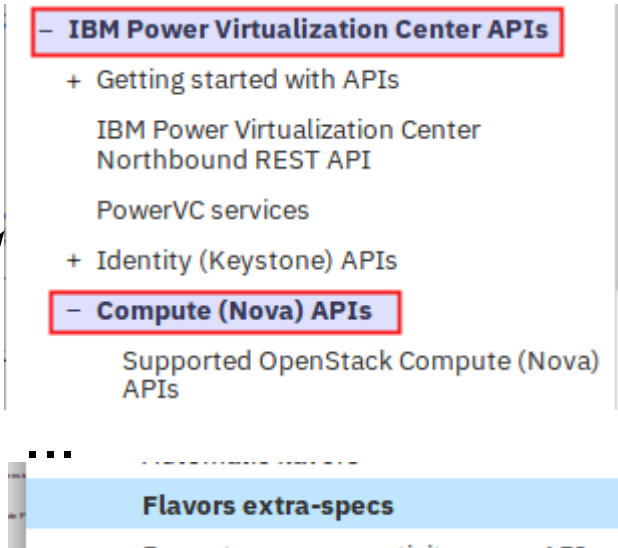
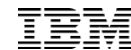
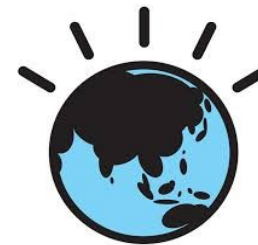


Table 1. Options for flavors extra-specs

powervm:srr_capability	true or false	If the value of simplified remote restart capability is set to true for the LPAR, you can remote restart the LPAR to supported CEC or host when the source CEC or host is down. The attribute defaults to false.
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M E R C I !



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