



IBM Power Systems

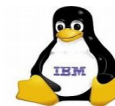
30 mn

PowerVC et PowerVM Remote Restart



SRR [Simplified Remote Restart]

Il était une fois le RR devenu Simplified Remote Restart ou SRR



Create Partition

This wizard helps you create a new logical partition and a default profile for it. You can use the partition properties or profile properties to make changes after you complete this wizard.

To create a partition, complete the following information:

System name : POWER8-S824C
Partition ID : 10
Partition name : myname

☐ Allow this partition to be suspended.
☒ Allow this partition to be remote restartable.
☐ Allow this partition to be vTPM capable

Warning: VTPM Trusted Key is the default key.
Sync Current configuration Capability Sync turned ON

~~reserved device storage~~

POWER8-S824C

General	Processors	Memory	I/O	Migration	Power-On Parameters	Capabilities	Advanced
Capability		Value					
Active Partition Mobility Capable		True					
Inactive Partition Mobility Capable		True					
IBM i Partition Mobility Capable		True					
Partition Processor Compatibility Mode Capable		True					
Partition Availability Priority Capable		True					
Electronic Error Reporting Capable		True					
Active Partition Processor Sharing Capable		True					
Firmware Power Saver Capable		True					
Hardware Power Saver Capable		True					
Virtual Switch Capable		True					
Virtual Fibre Channel Capable		True					
Active Memory Expansion Capable		True					
Hardware-Accelerated Active Memory Expansion Capable		True					
Partition Suspend Capable		True					
Partition Remote Restart Capable		True					
PowerVM Partition Remote Restart Capable		True					
Virtual Trusted Platform Module Capable		True					
Dynamic Platform Optimization Capable		True					
Virtual Server Network Phase 2 Capable		True					
PowerVM Partition Simplified Remote Restart Capable		True					

OK Cancel Help

Si la partition existe déjà, elle doit être Inactive pour changer de statut
→ mais ça c'était avant !

RR : Power 7 supporté avec

- HMC V8R8.1.0
- firmware 760 ou plus récent

 Ancien pour p7

 SRR

```
hscroot@HMC1:~> lssyscfg -r sys -m POWER8-S824C -F powervm_lpar_remote_restart_capable  
1  
hscroot@HMC1:~>
```

Il était une fois le RR devenu Simplified Remote Restart ou SRR

Vue HMC
“Enhanced”

Hardware Management Console

HMC1 Resources > All Systems > POWER8-S824C > Licensed Capabilities

POWER8-S824C

Operating

Capacity

Reserved Storage Pool

Shared Processor Pool

Shared Memory Pool

Capacity On Demand

CoD Functions

Licensed Capabilities

Serviceability

Tasks Log

Serviceability

Reference Code Log...

RIO Configuration...

PCI Configuration...

Topology

Virtual Networking Diagram

Virtual Storage Diagram

Licensed Capabilities

View and edit the runtime capabilities of the managed system.
[Learn More](#) →

Enter Activation Code View History Log View Code Information


PowerVM Licensed Capabilities


- ✓ Active Memory Sharing Capable
- ✓ Live Partition Mobility Capable
- ✓ Micro-Partitioning Capable
- ✓ Partition Suspend Capable
- ✓ PowerVM Partition Remote Restart Capable
- ✓ PowerVM Partition Simplified Remote Restart Capable
- ✓ SR-IOV Capable (Logical Port Limit)
- ✓ Virtual I/O Server Capable

Other Licensed Capabilities

- ✓ Active Memory Expansion Capable
- Active Memory Mirroring for Hypervisor Capable
- ✓ AIX Enablement for 256-Core Partition Capable
- Coherent Accelerator Processor Interface (CAPI)
- ✓ Dynamic Platform Optimization Capable
- ✓ IBM i 5250 Application Capable



Ancien pour p7 

SRR 

Simplified Remote Restart ou SRR

Les informations nécessaires pour le SRR sont stockées sur la HMC

- Même prérequis que pour le LPM concernant les entrées/sorties (virtualisés et visibles de deux chassis)

- POWER8

Firmware SC820 ou SV830 minimum POWER8

HMC V8R8.2.0

VIOS 2.2.3.4

ou plus récent

- Avec SSP : FW820, HMC V8R8.4.0, VIOS 2.2.4.0, ou plus récent

Conseillé
V8R8.6.0.1 (sp1)
et
FW 860

Jusqu'à quatre → 32 opérations SSR simultanées supportées par chassis cible



Le niveau de HMC
et de firmware
impose les
fonctionnalités
disponibles

Introduced in Power 7 & supported with HMC V8R8.1.0 & 760 firmware or later

Simplified Remote Restart ou SRR

rrstartlpar -o { validate
start
restart
cancel
cleanup } -m <source server> -t <destination server> -p <lpar name> | id <lpar id>

-- force
-- usesurldata

Pour qu'une opération SSR soit possible, le serveur source doit être dans un des états suivants :

- *Error*
- *Error -Dump in Progress*
- *Power Off*
- *no connection*

Simplified Remote Restart ou SRR – Apport de la HMC V8 R8.5

Un nombre important de modifications utiles ont été apportées au cours de l'année 2016

Améliorations clés

- Augmentation du nombre d'opération "redémarrage distant" à 32 par chassis cible
- Nettoyage automatique sur le système source après une opération réussie
- "redémarrage distant" sans connexion sur le système source ("dead host")
- Prise en compte d'un serveur complet hors service incluant le processeur de service
- Redémarrage avec console de gestion distante
- Chassis source et cible gérés par des consoles de gestion différentes

Améliorations utiles

- Nouvelle commande pour lister les niveaux systèmes, VM, console (`lsrrstartlpar -r sys|mc|lpar`)
- Outrepasser le LPM (p7 à p8 → ne concerne QUE le LPM)
- Possibilité de migrer des partitions SRR entre Power7 et Power8
- Interface de gestion des partitions & modèle
- Modèle pour créer des partitions avec la fonctionnalité SRR
- Gestion des partitions via le mode standard ou amélioré pour l'activation ou désactivation de la fonctionnalité SRR
- Pool de Processeur partagé
- Cartographie des interfaces FC virtuels (mapping)

source : <http://ibm.biz/IBM-What-s-new-HMCV8R86>

Simplified Remote Restart ou SRR – Apport de la HMC V8 R8.6

- Possibilité d'activer ou désactiver la fonctionnalité SRR quand la partition est active

Pour visualiser :

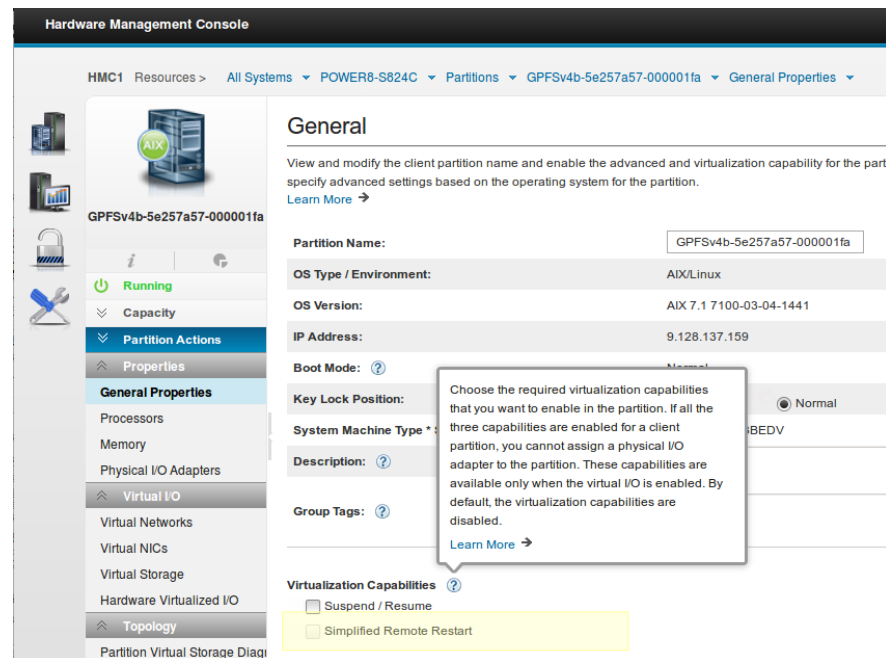
CLI `ssyscfg -r sys -Fdynamic_simplified_remote_restart_toggle_capable`

ou REST API pour visualiser le système géré

Pour activer ou désactiver :

`chsyscfg -r lpar -m <sys name> -i "name=<lpar_name>,simplified_remote_restart_capable=0|1"`

- La commande `rrstartlpar` permet de spécifier le 'mapping' des interfaces virtuels SCSI et NIC lors de la validation pour des opérations de redémarrage SRR distants



source : <http://ibm.biz/IBM-What-s-new-HMCV8R86>

Simplified Remote Restart ou SRR

Remote restart

Remote restart is a high availability option for logical partitions. When an error causes a server outage, a partition that is configured for remote restart can be restarted on a different physical server. Sometimes, it might take longer to start the server, in which case remote restart function can be used for faster re-provisioning of the partition. This can be done faster than restarting the server that failed and then restarting the partition.

- Enterprise Edition
- IBM PowerVM, Linux Edition

Simplified Remote Restart ou SRR



Simplified Remote Restart

<https://www.ibm.com/developerworks/community/forums/html/topic?id=536157a9-9f39-4a29-b362-d461ee62f03a&ps=25>
ou <http://ibm.biz/POWER-SRR>

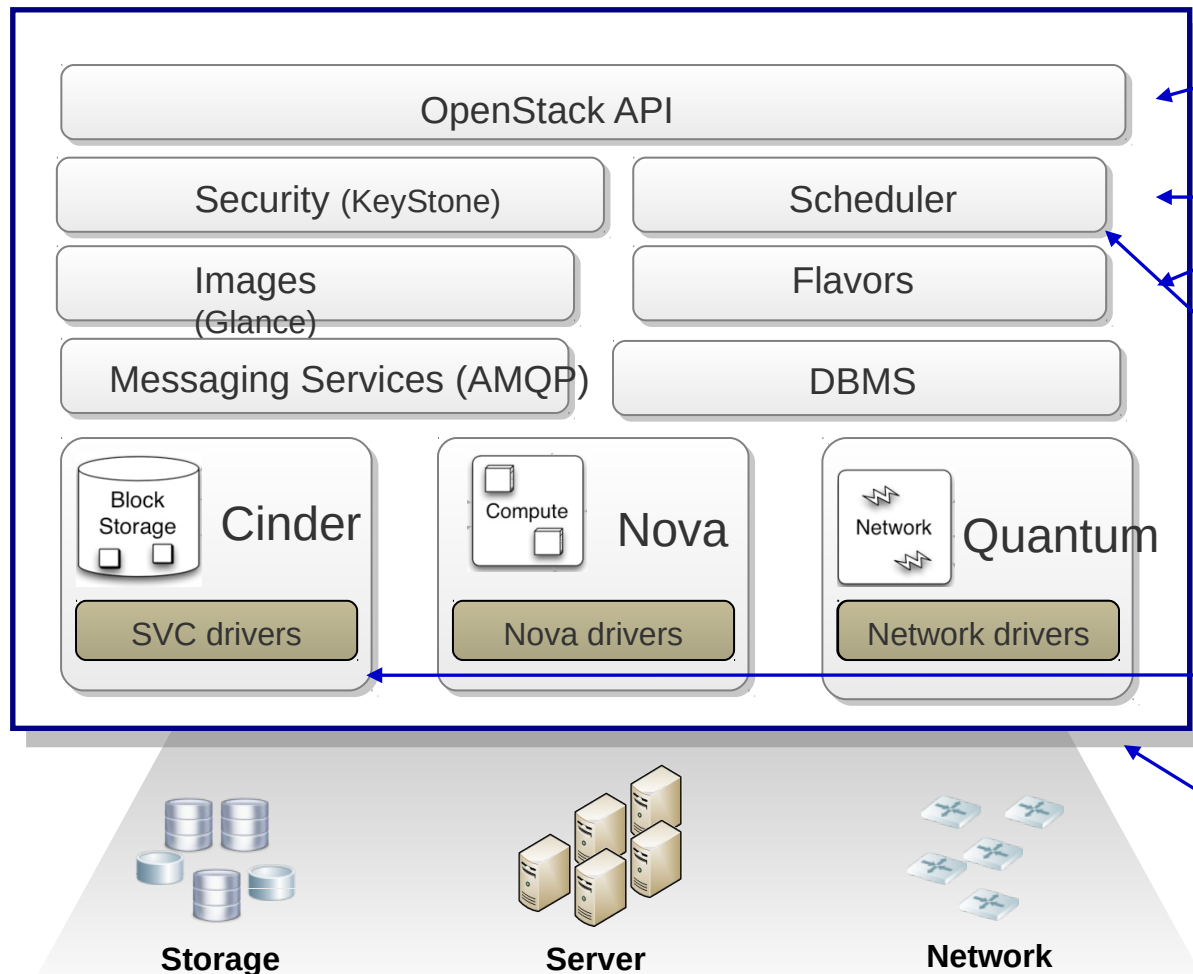
En résumé

- Multiples améliorations de la fonctionnalité SRR depuis 2 ans. C'était nécessaire pour être adopté !
- Nécessite les mêmes prérequis que pour le LPM → local synchrone !
-
- Consiste à **redémarrer** la VM sur un autre chassis
- Déclenchement possible via :
 - la ligne de commande : *rrstartlpar*
 - Rest API
(https://<hmcip>:12443/rest/api/uom/ManagedSystem/{ManagedSystem_UUID}/LogicalPartition/{LogicalPartition_UUID}/do/RemoteRestart)
 - Le logiciel “LPM Automation Tool” (*PowerCare* devenu *PowerToCloud*)
 - Et par ...



PowerVC [VC = Virtualisation Center]

Rappel sur l'Openstack



APIs & Extensions

- Virtualization Mgmt
- Monitoring & Events

Mgmt Capabilities

- Monitoring
- Event Mgmt
- VM Mgmt Extensions

Various Schedulers

- Workload Aware Mgmt
- Performance Mgmt
- Availability Mgmt
- Virtual Machine Placement

Virtualization Drivers

- SVC drivers for Storage

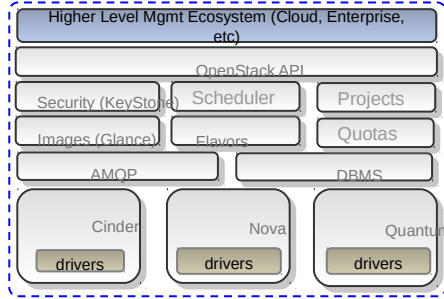
Packaging and Simplification

- Simplified Install and Configuration
- Intuitive Administration Model
- Focus on day 0/1 TTV

- 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

	V1.2	octobre 2013	Havanna
	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
Aujourd'hui →	V1.3.2	octobre 2016	Newton
	Vx	2ème T 2017	Ocata

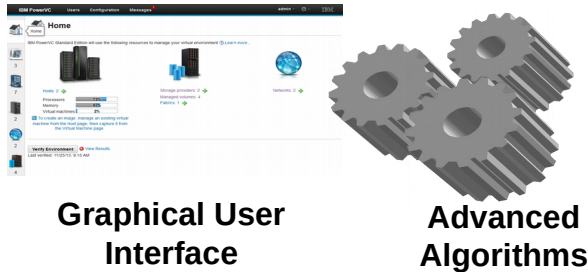
OpenStack + Drivers + IBM “value add” = PowerVC



Drivers for IBM Hardware









Some unique feature for IBM



<http://ibm.biz/IBM-KC-PowerVC-132>

Cycle de vie de PowerVC

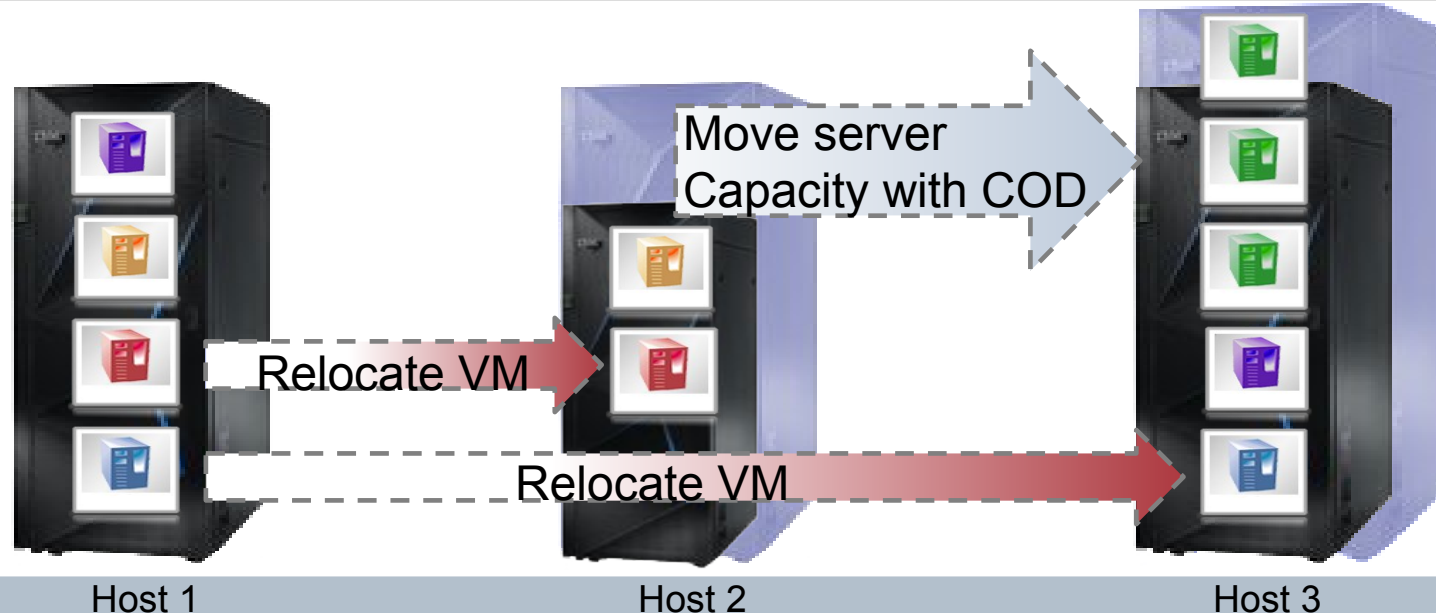
 Product name (** indicates comments or exception)	 Version/ Rel./Mod.	 Policy type	 Product ID	 General availability	 End of Support
PowerVC Express Edition	1.2.x	S	5765-VCX	2013-12-06	2016-09-30
PowerVC Standard Edition	1.2.x	S	5765-VCS	2013-12-06	2017-04-30
PowerVC Standard Edition	1.3.x	S	5765-VCS	2015-12-11	
PowerVC Base	1.1.0	S	5765-VCB	2013-06-14	2016-09-30
IBM Cloud PowerVC Manager	1.3.x	S	5765-VCC	2016-06-17	

PowerVC V1.3.0 Dynamic Resource Optimizer

Policy-based automation to balance workloads

PowerVC Dynamic Resource Optimizer allows for automated rebalancing of workloads between servers

- Server workload can be automatically balanced two ways:
 - Relocating Virtual Machines between servers
 - Moving processor capacity between servers using Power Enterprise Pool Capacity on Demand
- Works with AIX, IBM i or Linux VMs

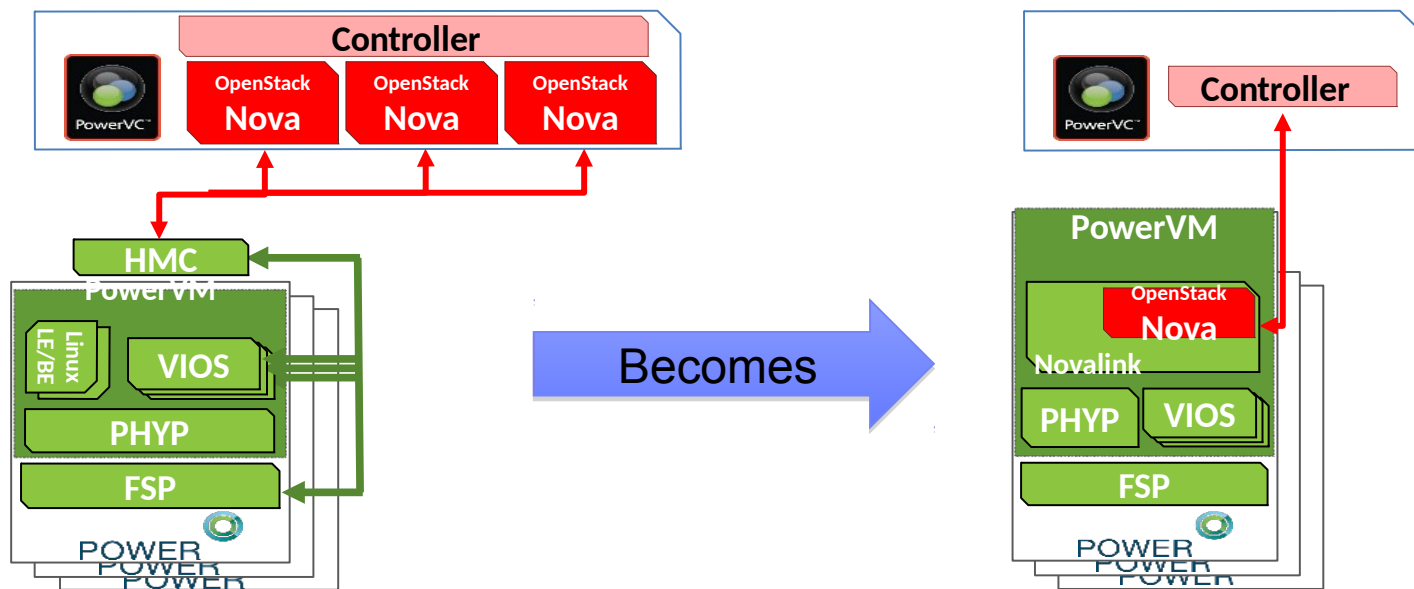


NovaLink architecture: POWER8 Platform Management

Goal: Simplify PowerVM virtualization, accelerate cloud enablement, and improve scale

Key Benefits

- ❑ Improved management scalability – support more virtual machines
- ❑ Aligns PowerVM with the OpenStack community scale model – simplifying future OpenStack exploitation
- ❑ Simplifies management configuration – HMC not needed for virtual machine deployment and configuration
- ❑ Enables flexibility to use any OpenStack based manager to manage PowerVM
- ❑ Uniform management for PowerVM and PowerKVM based systems




PowerVC : Annonce (réf ZP17-0038) du 9 mai pour une disponibilité au 23 juin 2017

- Cloud self-service improvements that provide:
- A new user interface for self-service policy management
- Email alerts to administrators for provisioning requests
- Enhanced metering that provides better data for chargeback of cloud tenants
- Project-level quota support to define finer control over tenants' resource usage
- Management of PowerVM®-based, software-defined networking configurations that simplifies and accelerates private cloud deployments
- Storage improvements, including Brocade virtual fabric support
- New reference architecture to enable highly available configurations for the PowerVC management server
- Dynamic Resource Optimizer, which can now balance Enterprise Pool mobile memory for NovaLink configurations

PowerVC et SRR

IBM PowerVC Configuration Messages ¹ DRO Events Requests phermes (ibm-default) ▾

Virtual Machines ▶ VM: AIX72-TL0SP1-120

 **VM: AIX72-TL0SP1-120**

Overview Attached Volumes Console

Owner:

Created: May 7, 2017 at 4:51:55 PM CEST

Last updated: May 7, 2017 at 5:18:44 PM CEST

Expiration date: None

▼ Specifications

Remote restart enabled: Enabled (This property can only be changed when the host supports remote restart and the virtual machine is shut off.)

Excluded from automated remote restart: No (Edit)

Memory: 2 GB (Dedicated), 57% current utilization

Processors: 1 (0.5 Shared units), 0.36% current utilization

Minimum memory (MB): 2,048

Maximum memory (MB): 2,048

Minimum processors: 1

Maximum processors: 1

Availability priority: 127

Processor mode: Shared

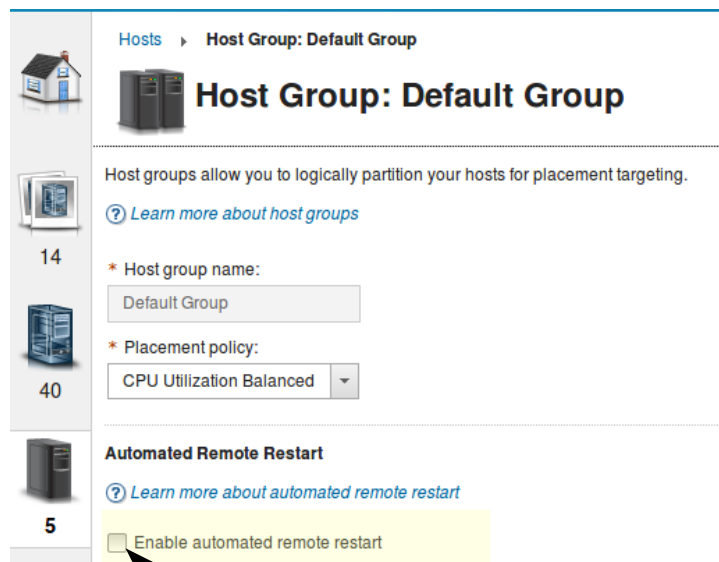
Vue HMC “enhanced”

Virtualization Capabilities ?

- ☐ Suspend / Resume
- ☐ Simplified Remote Restart

Level Microcode ?
FW860 nécessaire

PowerVC, SRR et ARR



Hosts > Host Group: Default Group

Host Group: Default Group

Host groups allow you to logically partition your hosts for placement targeting.
[Learn more about host groups](#)

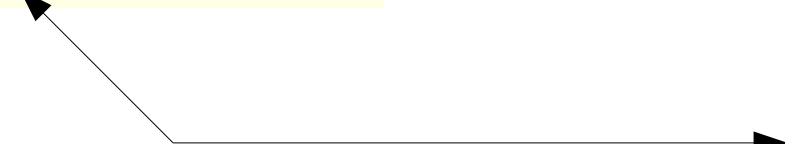
* Host group name:
Default Group

* Placement policy:
CPU Utilization Balanced

Automated Remote Restart

[Learn more about automated remote restart](#)

☐ Enable automated remote restart



☒ Enable automated remote restart

* Run interval (minutes): [?](#)

* Stabilization (times): [?](#)

Les valeurs par défaut seront certainement à modifier

PowerVC et SRR

SRR : Cette fonctionnalité requiert l'édition PowerVM Enterprise et accélère la reprise en permettant les VM d'être redémarrées sur d'autres systèmes sans intervention manuel pour re créer les définitions des VM, le statut des VM et les configurations stockages. SRR le fait pour vous. Déployé avec PowerVC, il est possible d'initier un redémarrage de toutes les VM d'un hôte source hors service avec juste quelques clics de souris.

HMC 860 (Novembre 2016) – Permet le positionnement du paramètre “SRR” sans devoir arrêter la VM. Plus d'arrêt de service nécessaire.

PowerVC 1.3.2 (Décembre 2016) – Ajout de la possibilité d'une gestion automatique du SRR. Power est notifié que le serveur tombe et initie automatiquement le SRR sur les hôtes cibles dans le groupe de hôte et peut de plus prioriser les VM : La production se démarre en premier.

Le même type de gestion doit être utilisé sur la source ET la cible : PowerVM NovaLink ou Hardware Management Console (HMC)

Les fichiers de configurations spécifiques à une VM sont conservés sur la HMC dans le répertoire `/data/srr/<cecid>/<vm_uuid>`. La HMC met à jour à intervalle régulier les fichiers. Les données des profils des VM sont donc maintenues à jour. Les informations de configuration incluent les informations liées au réseau, stockage, mémoire, processeur et aux adaptateurs. C'est évidemment critique pour un redémarrage distant de la VM.

Dès que la HMC reçoit la demande de redémarrage distant pour la VM, elle crée une nouvelle VM sur l'hôte cible et y applique la configuration de la VM. La VM est créée avec le même nom et le même ID unique.

Quand PowerVC est utilisé pour orchestrer le redémarrage distant, :

- Le nettoyage automatique peut être désactivé, par défaut il est actif
- Le paramétrage est conservé lors des mises à niveau mais pas sur une installation initiale


```
rrstartlpar -o set -r mc -i "auto_cleanup_enabled=0| 1"
```

```
lsrrstartlpar -r mc
```


PowerVC effectue le nettoyage de la VM d'origine une fois que le serveur et les VIOS sont démarrés. Un test est effectué par PowerVC toutes les deux minutes


Dès la connexion une vue globale !


IBM PowerVCUsersConfigurationMessagesDRO Eventsphermes ? IBM


**Home**


IBM PowerVC Standard Edition will use the following resources to manage your virtual environment ? [Learn more...](#)



11


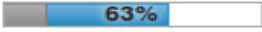

39



6


3



110




Hosts: 6 +
Virtual machines: 39
Processors  55%
Memory  63%



Storage providers: 2 +
Managed volumes: 110
Fabrics: 2 +



Networks: 3 +

Verify Environment  [View Results](#)
Last verified: 1/13/16, 1:16 PM

Accessibilité aux fonctionnalités dès la page d'accueil

IBM PowerVC Users Configuration Messages root ? IBM

Images

Refresh Deploy Delete Import Filter

Name	State	Operating System	Volume	Storage Provider	Last Updated
AIX71TL3SP3_OkP8	Active	aix	Image AIX71TL3SP3_OkP8	V7000	October 16, 2014 at 9:15:17 PM CEST
AIX_71-sample-for-deploy	Active	aix	Image AIX_71-sample-for-deploy	V7000	October 16, 2014 at 9:01:47 PM CEST
linuxppc64_rhel4_withrnc	Active	rhel	Image linuxppc64_rhel4_withrnc	V7000	October 16, 2014 at 8:59:29 PM CEST
ssp_AIXV713	Active	aix	Image ssp_AIXV713	cluster1	August 4, 2014 at 6:02:19 PM CEST

4 14 7 2 26

#image
#virtual machine
#host
#network
#storage volume

Total: 4 Selected: 0

Catalogue des images, prêtes à déployer

AIX
Linux
IBM i

















Images

 Refresh  Deploy  Delete  Import  Edit Description

Filter 

7 of 11 items shown. [Clear filter](#)

Name	State	Operating System	Description	Last Updated
 AIX61TL9SP5-ae	 Active	aix		August 28, 2015 at 1:48:13 PM CEST
 AIX61TL9SP5-ci	 Active	aix		August 31, 2015 at 10:46:00 AM CEST
 AIX71TL3SP5-ci	 Active	aix		August 31, 2015 at 5:02:06 PM CEST
 AIX72-ci	 Active	aix		February 19, 2016 at 5:22:04 PM CET
 IBMi72_capture_1	 Active	ibmi		January 15, 2016 at 6:43:29 PM CET
 Suse11SP4-ci	 Active	sles		November 13, 2015 at 10:01:53 AM CET
 ubuntu-ci	 Active	ubuntu		January 12, 2016 at 4:28:43 PM CET



Virtual Machines

Normal, serveurs hors tension

Refresh Start Stop Restart Delete Capture Resize Migrate Attach Volume Manage Existing

Unmanage

Filter

Name	Host	IP	State	Health	Task
AIX71TL3SP3	POWER8-S824B	9.128.137.259 (Static)	Shutdown	Critical	waiting on host
AIX71TL3SP3_OkP8	POWER8-S824B	9.128.137.15 (Static)	Active	Critical	Waiting on host
mechantel2	POWER8-S824B	9.128.137.158 (Static)	Active	Critical	Waiting on host
demoblu1	POWER8-S824C	9.128.137.171 (Static)	Active	OK	
demoblu2	POWER8-S824C	9.128.137.172 (Static)	Active	OK	
demoblu3	POWER8-S824C	9.128.137.173 (Static)	Active	OK	
GPFSv4A	Power770	9.128.137.141 (Static)	Active	OK	
gpfs1aix	Power770	9.128.137.40 (Static)	Active	OK	
gpfs2linux	Power770	9.128.137.41 (Static)	Active	OK	
linuxppc64-1	Power770	9.128.137.249 (Static)	Active	OK	
AIX7_OkP8_test	Pureflex-p270		Error	Critical	Initializing



Hosts

Normal, serveurs hors tension

Hosts

HMC Connections

[Refresh](#) [+ Add Host](#) [Remove Host](#) [Maintenance Mode](#) [Manage Existing Virtual Machines](#)

Filter



Name	Virtual Machines	State	Maintenance Status	Health	HMC Connection
POWER8-S824A	0	Error	OK	Critical	hmc2
POWER8-S824B	3	Error	OK	Critical	hmc2
POWER8-S824C	3	Operating	OK	OK	hmc2
Power770	4	Operating	OK	OK	hmc2
Pureflex-p260	0	Operating	OK	OK	hmc2
Pureflex-p270	1	Operating	OK	Attention	hmc2
Pureflex-p460	3	Operating	OK	OK	hmc2

Total: 7 Selected: 0



Images

**Refresh****Deploy****Delete**

Filter



Name	State	Operating system	Volume	Storage Provider	Last updated
AIX_71-sample-for-deploy	Active	aix	Image AIX_71-sample-for-deploy	V7000	April 22, 2014 at 9:59:07 AM CEST
linuxppc64_rhel4_witl	Active	rhel	Image linuxppc64_rhel4_withrm	V7000	March 31, 2014 at 3:11:16 PM CEST



2



3



8



2



3

Total: 2 Selected: 0

Images ▶ Deploy AIX_71-sample-for-deploy



Deploy AIX_71-sample-for-deploy

General

[? Learn more about how these lists are filtered...](#)

* Virtual machine name:

AIX_71-sample-for-deploy

* Instances:

1

Host: ?

Storage connectivity group: ?

Selected by placement policy

Any host in cluster1

Compute template:

3 - Medium

* Processors

2

Processor units

1

* Memory (MB)

4,096

* Disk size (GB)

40

Storage template: ?

V7000 default

Network

Primary network (system default gateway):

* IP address:

showroom-net

Current and projected use: ?

Your projected usage based on your selections is shown in this color.

Virtual machines (3)

Processor units (26.8)

96 Total

28%

Memory (194,304 MB)

950,272 MB Total

20%

Disk size (344.75 GB)

836 GB Total

41%

Networks > Add Network



Add Network

Specify the default values for this network. After the network is added, you can select it when deploying images.

[? Learn more about adding networks](#)

* Name:

* Subnet mask:

* VLAN ID: [?](#)

* Gateway:

IP address type: [?](#)

☐ Dynamic (DHCP) ☒ Static

Primary DNS:

Secondary DNS:

Starting IP address:

Ending IP address:

Shared Ethernet Adapter Mapping

Verify that the adapter that was automatically chosen for each host is correct for your network. If it is not correct, you can change it on this page.

[? Learn more about mapping Shared Ethernet Adapters](#)

Selected VLAN ID: 1

Add Network

Cancel

Images ▶ Deploy AIX_71-sample-for-deploy



Deploy AIX_71-sample-for-deploy

General

[? Learn more about how these lists are filtered...](#)

* Virtual machine name:

AIX_71-sample-for-deploy

* Instances:

1

Host: ?

Storage connectivity group: ?

Selected by placement policy

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showroom-net

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950,272 MB Total

20%

Disk size (344.75 GB)

836 GB Total

41%



2



2



8



2



3



Hosts

Hosts

HMC Connections



Refresh



Add Host



Remove Host



Manage Existing Virtual Machines

Filter



Name	Virtual Machines	State	Health	HMC Connection
Power720A	0	Operating	OK	hmc2
Power720B	0	Operating	OK	hmc2
Power750	1	Operating	OK	hmc2
Power770	0	Operating	OK	hmc2
Pureflex-p260	0	Operating	OK	hmc2
Pureflex-p260-4coeurs	0	Operating	OK	hmc2
Pureflex-p270	0	Operating	OK	hmc2
Pureflex-p460	1	Operating	OK	hmc2

Total: 8 Selected: 0



0



2



4



2



4



Networks



Refresh



Add Network



Edit Network



Remove Network



Name	VLAN ID	Type	Virtual Machine Usage	Subnet Mask	Gateway	DNS
Imported Network for VLAN 1 - ETHERNET0(Default)	1	DHCP	6			
showroom_net	1	Static	0	255.255.255.0	9.128.137.1	9.128.137.131, 9.64.163.21

Networks (2)



2



2



8



2



2



Storage

Volumes

Storage Providers

Fabrics

**Refresh****Create****Delete**

Filter



Name	Size (GB)	State	Health	Attached Virtual Machine	Storage Template	Description
Image AIX_71-sample-for-deploy	40	Available	OK		V7000 default	Volume for image AIX_71-sample-for-deploy
Image linuxppc64_rhel4_v	40	Available	OK		V7000 default	Volume for image linuxppc64_rhel4_v

Total: 2 Selected: 0



0



2



4



2



4



Storage

Volumes

Storage Providers

Fabrics

Volumes

Storage Providers

Fabrics



Refresh



Create



Delete

Filter



Name	Size (GB)	State	Health	Attached Virtual Machine	Storage Template	Description
Image AIX_71-sample-for-deploy	40	Available	OK		V7000 default	Volume for image AIX_71-sample-for-deploy
Image linuxppc64_rhel4_v	40	Available	OK		V7000 default	Volume for image linuxppc64_rhel4_withr



2



2



8



2



2



Storage

Volumes

Storage Providers

Fabrics

Refresh



Add Fabric



Edit Fabric



Remove Fabric

Filter



Name	Managed IP Address	A/B Fabric Designation
Brocade B40 (bas)	9.128.137.147	B
Brocade B40 (haut)	9.128.137.146	A

Total: 2 Selected: 0



Configuration

▼ General Settings

Placement Policy

Use placement policy settings to control how your virtual machines will be distributed across host systems.

▼ Templates

Compute Templates

Use compute templates to deploy virtual machines with preset values for settings such as memory, disk, and processors.

Storage Templates

Use storage templates to deploy virtual machines with preset values, such as a specific volume type, storage pool, and storage provider.

▼ Host-to-Storage Connectivity

Storage Connectivity Groups

Use storage connectivity groups to control deployment placement. This ensures access to the correct storage providers.

Fibre Channel Port Configuration

Use Fibre Channel port configuration to control deployment through Fibre Channel ports and fabrics.



4



14



7



2



26

Configuration ▸ Placement Policy



Placement Policy

Specify the desired placement policy and click Save to update the placement policy. [? Learn more about placement policies](#)

- ☒ Distribute virtual machines evenly across all hosts (striping).
- ☐ Place virtual machines on a single host until it is fully utilized, then move on to the next host (packing).

Save

Cancel

Configuration > Compute Templates



Compute Templates

Refresh Create Edit Delete

Filter



Name	Processors	Memory (MB)	Disk size (GB)
blu_cognos	3	32,768	20
blu_db2	3	49,152	20
blu_db2blu	3	100,352	20
m1.large	4	8,192	80
m1.medium	2	4,096	40
m1.small	1	2,048	40
m1.tiny	1	512	1
m1.xlarge	8	16,384	160

Total: 8 Selected: 0

Configuration ▸ Storage Templates



Storage Templates

[Refresh](#) | [Create](#) | [Edit](#) | [Delete](#)

Name	Type	Storage Provider 1 ▲	Storage Pool	Default 2 ▼
V7000 default	Thin Provisioned	V7000	SCE_POWER_Thib	Yes
DemoP8_DB2_BLU	Generic	V7000	Pool_Demo_DB2BLU	No
cluster1 default	Thin Provisioned	cluster1	Default	Yes

Total: 3 Selected: 0



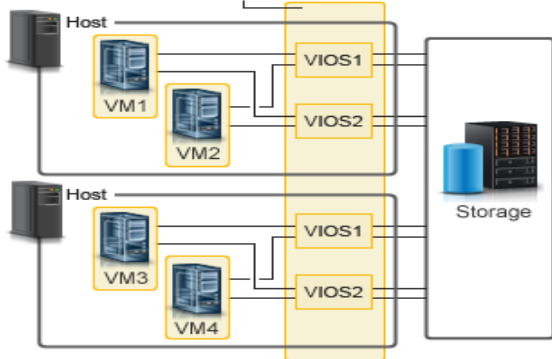
Storage Connectivity Groups

Overview

Your storage environment is ready!

PowerVC is automatically set up with basic storage connectivity to support image deployments, so you do not need to take any actions.

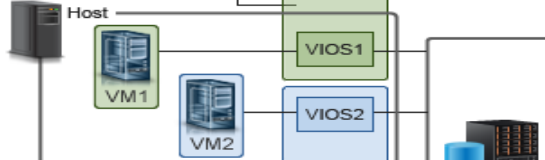
Default Storage Connectivity Group



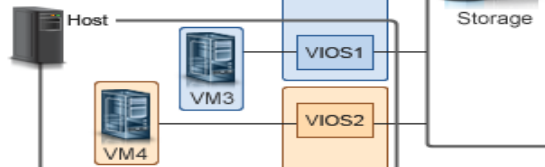
Specify advanced settings.

If you need advanced storage connectivity for image deployment, open a storage connectivity group section below to create additional groups. [Learn more...](#)

Storage Connectivity Group 1



Storage Connectivity Group 2



Storage Connectivity Group 3



[Configuration](#) ▶ **Storage Connectivity Groups**



Storage Connectivity Groups

VM4
Storage Connectivity Group 3

▼ Storage Controller-Backed Groups

Refresh | **Create** | **Edit** | **Delete**



Name	Enabled	Boot Health	Data Health	Auto-add Members	Boot Volume Type	Ready Members
Any host, all VIOS	Yes	OK	OK	Yes	NPIV	Boot: 8, Data: 8
LPM_OK	Yes	OK	OK	Yes	NPIV	Boot: 8, Data: 8

Total: 2 Selected: 0

▼ Shared Storage Pool-Backed Groups

Refresh | **Create** | **Edit** | **Delete**



Name	Enabled	Boot Health	Data Health	Associated SSP	Access Storage Controllers	Auto-add members	Ready Members
Any host in cluster1	Yes	OK	OK	cluster1	Yes	Yes	Boot: 2, Data: 2

Total: 1 Selected: 0

Configuration > Fibre Channel Port Configuration



Fibre Channel Port Configuration

[Learn about Fibre Channel port configuration](#)

Filter

Host:VIOS	Fibre Channel Port	WWPN	Status	Available Connections	Port Tag	Connectivity	Fabric
Power770:p770-VIOS1	fcs0	10000000C99C1546	OK	59	Enter a tag...	Any	B: Brocade B40 (bas)
Power770:p770-VIOS1	fcs1	10000000C99C1547	OK	61	Enter a tag...	Any	A: Brocade B40 (haut)
Power770:p770-VIOS2	fcs0	10000000C99C75CC	OK	60	Enter a tag...	Any	B: Brocade B40 (bas)
Power770:p770-VIOS2	fcs1	10000000C99C75CD	OK	60	Enter a tag...	Any	A: Brocade B40 (haut)
Pureflex-p260:p260B-vios1	fcs0	10000090FA626160	OK	64	LPM_OK	Any	B: Brocade B40 (bas)
Pureflex-p260:p260B-vios1	fcs1	10000090FA626161	OK	64	Enter a tag...	Any	A: Brocade B40 (haut)

Total: 30

Save

Cancel



Storage

Volumes

Storage Providers

Fabrics

Refresh Create Delete Manage Existing Unmanage

Filter

Name	Size (GB)	State	Health	Attached Virtual Machine	Storage Template	Description
TB_Global-aix-vWPAR_rootvg	100	In-Use	OK	global-aix-vWPAR		
Testv7000	5	Available	OK		V7000 default	Testv7000
data_to_load	400	In-Use	OK	demoblu3	DemoP8_DB2_BLU	volume pour data
demoblu1_cognos1	100	In-Use	OK	demoblu1	DemoP8_DB2_BLU	volume1 cognos
demoblu1_cognos2	100	In-Use	OK	demoblu1	DemoP8_DB2_BLU	volume 2 pour cognos
demoblu2_db2data1	100	In-Use	OK	demoblu2	DemoP8_DB2_BLU	vol1 demo db2blu
demoblu2_db2data2	100	In-Use	OK	demoblu2	DemoP8_DB2_BLU	vol2 demo blu
demoblu2_db2data3	100	In-Use	OK	demoblu2	DemoP8_DB2_BLU	vol3 demo blu
demoblu2_db2data4	100	In-Use	OK	demoblu2	DemoP8_DB2_BLU	vol4 demo blu
demoblu2_db2data5	100	In-Use	OK	demoblu2	DemoP8_DB2_BLU	vol5 demo blu

Total: 26 Selected: 0

Informations sur Internet

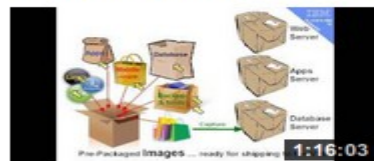
<https://www.youtube.com/channel/UCmRTu6oZwOO9UjxZWq1ZXPA>

OU

<http://tinyurl.com/IBMPowerVUGYoutubeChannel>



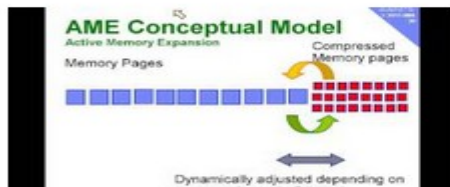
IBM Power VUG a mis en ligne une vidéo



35 PowerVC cool

il y a 1 semaine • 23 vues

Speaker: Nigel Griffiths - Advanced Technology Support (ATS),
IBM Power Systems, Europe...



IBM Power Systems Technical Webinars

de IBM Power VUG • 38 vidéos • 1 vue • 38 heures

IBM Power Systems technical webinar series (including Power Systems Virtualization - PowerVM). As an IT professional, you may have heard of IBM Power Systems (and PowerVM virtualization technologies) based around the IBM POWER processor. You may ... plus

<https://www.youtube.com/playlist?list=PL26RnsIScnAA1UcKH1LjCZvWPaKgQfef4>

OU

<http://tinyurl.com/IBMPowerVUGYoutubePlaylist>

PowerVC : cinq commandes peuvent suffire !

```
[root@powervc-admin ~]# /opt/ibm/powervc/bin/powervc-services
Usage: /opt/ibm/powervc/bin/powervc-services [service subset] stop|start|restart|status
Default is to control all services
service subset names to use:
nova, cinder, glance, neutron, keystone, validator, ego, ras, health, ceilometer, bumblebee
Example: /opt/ibm/powervc/bin/powervc-services nova stop

[root@powervc-admin ~]# /opt/ibm/powervc/bin/powervc-services status
openstack-loggingcontroller-service (pid 16800) is running...
keystone (pid 1262) is running...
openstack-glance-api (pid 17029) is running...
openstack-glance-registry (pid 17050) is running...
openstack-nova-api (pid 17070) is running...
openstack-nova-conductor (pid 17090) is running...
openstack-nova-scheduler (pid 17110) is running...
openstack-nova-compute-789523A_21E7ACB (pid 17159) is running...
openstack-nova-compute-789523X_21E7ABB (pid 17182) is running...
openstack-nova-compute-789543X_21E7A9B (pid 17203) is running...
openstack-nova-compute-795424X_21E7AAB (pid 17223) is running...
openstack-nova-compute-8233E8B_1010DFP (pid 17248) is running...
openstack-nova-compute-9117MMB_1010ECP (pid 17268) is running...
openstack-cinder-api (pid 17296) is running...
openstack-cinder-scheduler (pid 17320) is running...
openstack-cinder-volume-storwize_node1 (pid 17372) is running...
neutron (pid 17411) is running...
ego (pid 17382) is running...
openstack-nova-ibm-ego-resource-optimization (pid 16989) is running...
openstack-nova-ibm-notification (pid 17009) is running...
powervc-validator-api (pid 17454) is running...
powervc-cinder-ibm-health (pid 17482) is running...
powervc-nova-ibm-health (pid 17519) is running...
openstack-ceilometer-api (pid 17562) is running...
openstack-ceilometer-compute (pid 17595) is running...
openstack-ceilometer-central (pid 17626) is running...
openstack-ceilometer-collector (pid 17657) is running...
powervc-bumblebee (pid 17690) is running...
```

`/opt/ibm/powervc/bin/powervc-services start`
`/opt/ibm/powervc/bin/powervc-services stop`
`/opt/ibm/powervc/bin/powervc-services restart`
`/opt/ibm/powervc/bin//powervc-backup`
`/opt/ibm/powervc/bin//powervc-restore`

M E R C I !



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