

IBM Power Virtual Server for an IBM i Customer

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Dan Sundt

IBM i Power as-a-Service
Product Manager

Tel 507-253-3228

dansundt@us.ibm.com



COMMON

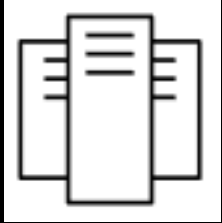
Session Objectives

IBM Power Virtual Server (PowerVS) provides a simple and straightforward solution for infrastructure modernization, while delivering the benefits of a hybrid cloud architecture. It provides a seamless and fast cloud transition for IBM Power workloads since there is no need to change architectures. A customer has access to additional application and data services as well as high availability and disaster recovery. Leading businesses worldwide use IBM Power Virtual Server for their production operations, so attend this session to hear the latest and greatest about IBM PowerVS for an IBM i customer.

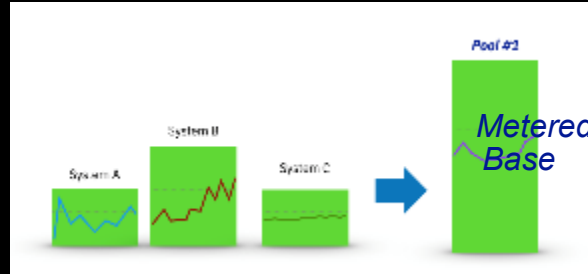


IBM Power Offers Flexibility to Deploy Where Needed

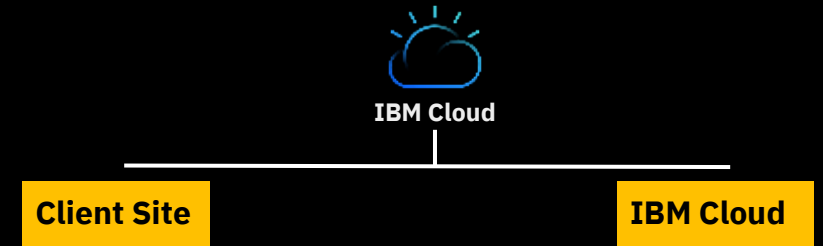
From current infrastructure



to hybrid infrastructure



to consumption as a service



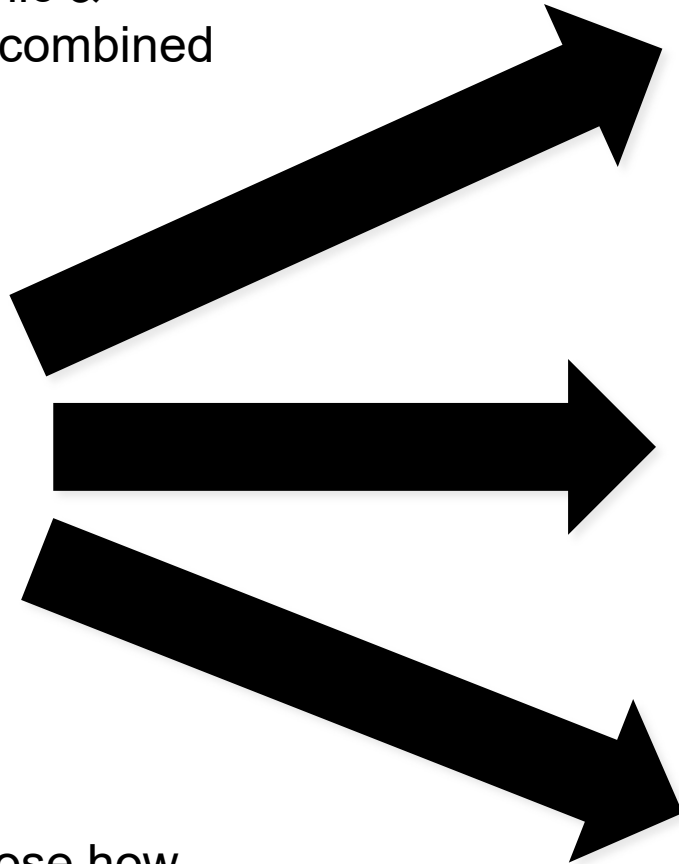
<p>Power10 Servers</p> <p>Core business apps and data</p>	<p>Power Private Cloud with Dynamic Capacity</p> <p>Pay for only what you use</p>	<p>Power in IBM Cloud</p> <p>Extend to public cloud</p>
<ul style="list-style-type: none"> ▪ Performance and scale leadership ▪ Class-leading availability ▪ End-to-end security from the processor to virtualization and operating system 	<ul style="list-style-type: none"> ▪ Flexible consumption options with built-in cost optimization ▪ Cloud-based monitoring, metering by the minute for Power and Red Hat Enterprise Linux and OpenShift ▪ Power10 and Power9 can co-exist in the same pool 	<ul style="list-style-type: none"> ▪ Consistent architecture to on-prem infrastructure ▪ Run AIX, IBM i, and Linux ▪ VM-as-a-Service for Dev/Test, HA/DR, modernization ▪ Global footprint with access to IBM Cloud services ▪ Now available on-premise

Hybrid Cloud Options for an IBM i Client

Hybrid clouds are public & private environments combined



IBM i clients can choose how to deploy their environment



Power Virtual Server IBM Cloud

Power Private Cloud

Power Standalone Server

OpenShift/Ansible

Key Take Aways

- IBM Power Virtual Server is IBM's Power in the cloud offering
- Same enterprise grade solution as on premise
- Growing adoption by customers

The world's best Cloud landing zone for IBM Power workloads

- **Accelerate time to value** when intentionally seeking workload placement
- **Reduces the risk** with differentiated security and compliance
- **Incrementally modernize mission critical applications** e.g. SAP, Oracle, IBM i, and Db2 on IBM Power

Savings Advantage: 30% or more based on your workload

Unlock the Hybrid Cloud with IBM Power Virtual Server

Why IBM PowerVS?

- Same HW, Same OS: No re-platforming
- Full Consumption model – compute, memory, storage; with IBM operations
- Security and compliance with end-to-end protection across all layers
- Business-driven workload placement



IBM Power Virtual Server

VM lifecycle management

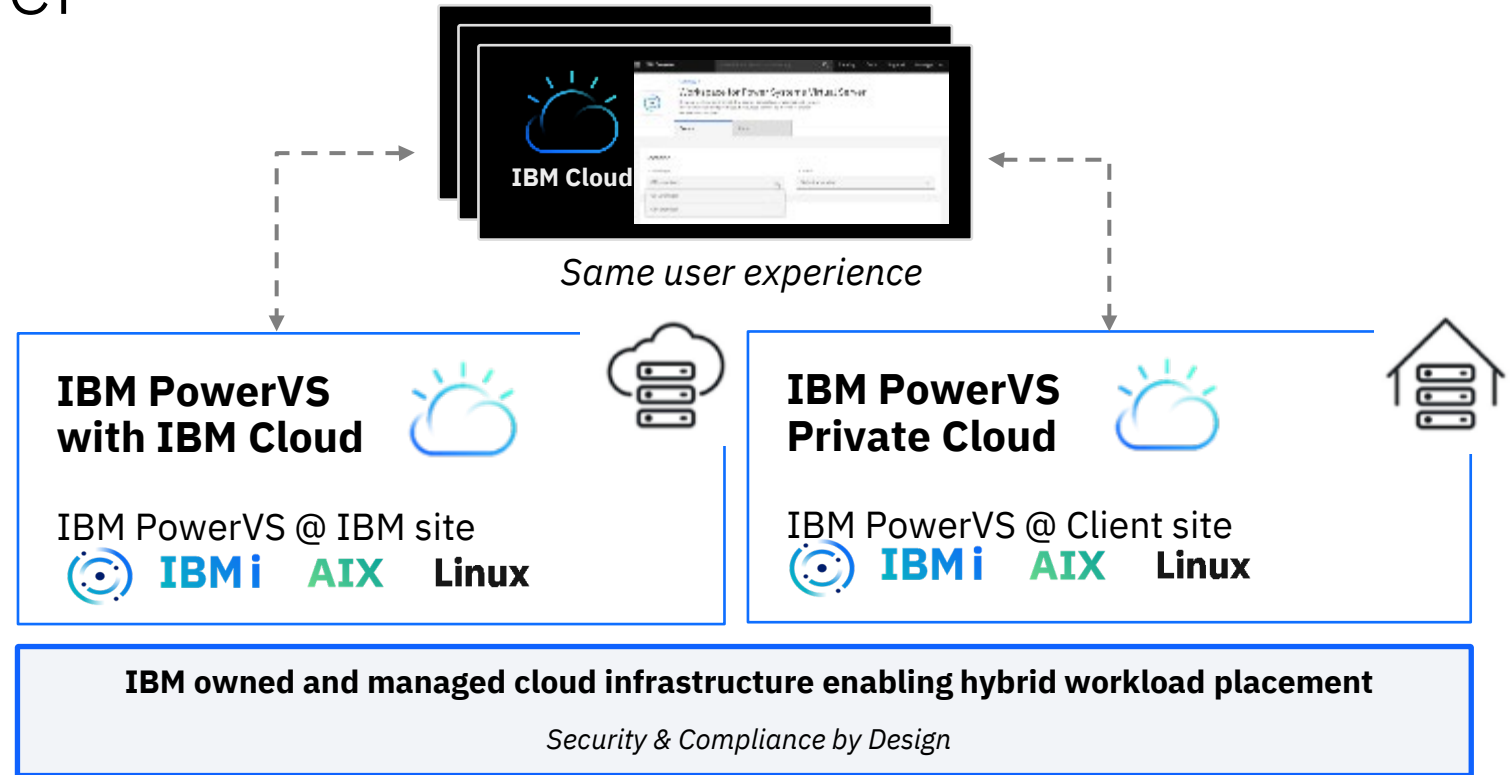
Storage management
(volumes, clones, snapshots,
replication, etc.)

Network management

Image management

Fully automatable interfaces
(e.g., API, Terraform, CLI,
etc.)

- Integration points for SAP,
Red Hat OpenShift IPI, etc.



1. Flexible consumption with no minimum commit or contract
2. No investment in data center space and energy
3. IBM for RISE with SAP (premium supplier option)

1. Data sovereignty required in country with no IBM public cloud
2. Regulated/sensitive data or workload requirements for on-premises
3. Workload has low-latency requirements with other on-premises infrastructure

IBM Power Virtual Server

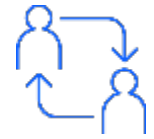
Power Virtual Server
provides full cloud
advantages



Access to 250+ IBM Cloud
services - Analytics, AI, ML



Superior IBM Cloud
security



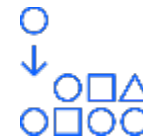
Reduce Dependency on
Specialized Skills

22

Data centers across
the globe and growing



No Upfront Cost



IBM Cloud Enterprise
Savings Plan



Cloud Agility

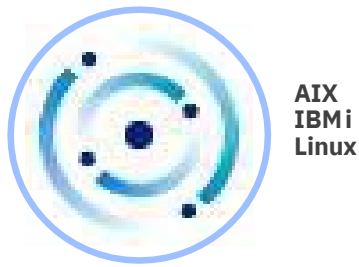


Flexibility to
Scale

700+

Customers deployed
Production, HA/DR, and
Dev/Test use cases

IBM PowerVS is Infrastructure as a Service (IaaS)



Power Virtual Server

Serves as the compute space for workloads

1. Broad network access
2. Measured service
3. Multi-tenancy
4. On-demand self-service
5. Rapid elasticity & scalability
6. Resource pooling

Traditional On-Premises	Infrastructure as a Service (IaaS)	Platform as a Service (PaaS)	Software as a Service (SaaS)
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
O/S	O/S	O/S	O/S
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

Client Manages

IBM Manages

Success Patterns

How Clients use
Power Virtual Server

Data Center
Optimization and
Operational
Excellence

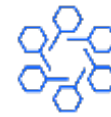
Business
continuity

Modernization
and AI



Optimize Data Center and Operational Excellence

- Adopt a hybrid cloud strategy with workload optimized on premises and on cloud
- Migrate all Power workload to cloud and eliminate datacenter completely and minimize TCO



Strengthen Business continuity

- Backup on premise workload to the cloud
- Establish backup, snapshots, HA or DR of your cloud workload



Modernizing and AI

- Application Developers can Quickly adapt to business changes with updates to Power workload
- Modernize business processes to deliver business outcome
- Containerize
- Infuse AI



SUPERIOR COURT OF CALIFORNIA

COUNTY OF MARIPOSA

“Six months ago, I wasn’t even sure it was possible to move the application and court data to IBM’s PowerVS cloud.

And now, it just works.”

Director of Operations, Alan Crouse

IBM Power Virtual Server (PowerVS)

Offering Description:

- Self-provision and purchase monthly subscription Power IaaS instances from IBM Cloud.
- Self-service VM management of pool of compute, memory, storage, network infrastructure.
- Secure access to PowerVM based LPARs through client owned IBM Cloud resources.
- IBM manages IaaS resources and supports hardware/software up to OS deployment
- Client self-manages the Operating System and all software above the OS
- Client can bring their own OS images and add to available OS images.
- Client can bring their own Software for ISVs who support BYOL for Public Cloud

Systems: S922/S1022 scale-out, E980/E1080 scale-up

Compute: 0.25-240 cores (15 for S922, 33 for S1022, 143 for E980, 240 for E1080),
Dedicated or Shared option (capped or uncapped)

Memory: 8-64 GB per core

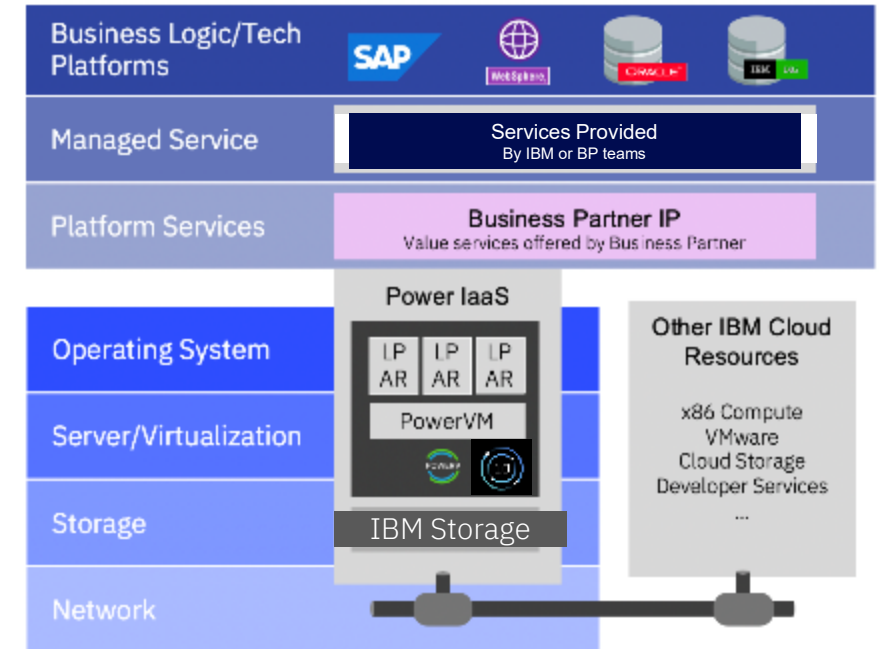
Storage Type: FS9200 all flash: Tier 0, Tier 1, Tier 3, Fixed IOPS
10 GB minimum / 2 TB maximum per disk, 10 GB increments

Network: Public and/or Private IP

OS: AIX / IBM i / Bring your own Linux

Data Centers: DAL-3, WDC-3, SAO-2, FRA-2, LON-2, TOR, MON, TOK, OSA, SYD-2,
MADRID-2, CHE

<https://www.ibm.com/cloud/power-virtual-server>



Multi-tenant, self managed, Power compute as-a-service in IBM Cloud with consumption-based OPEX pricing

Pricing Methodology:

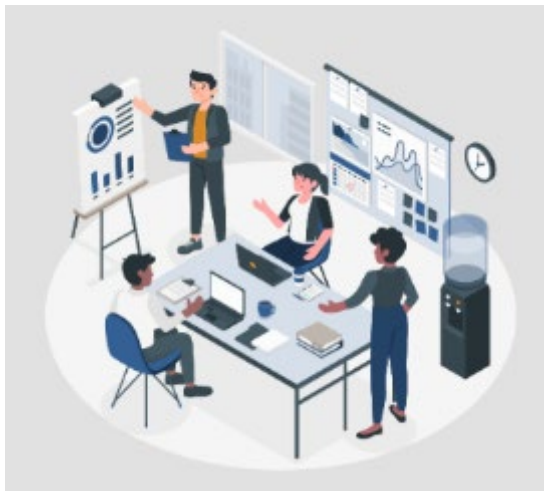
- Consumption based pricing:
 - Hourly pricing, monthly billing

Improving the IBM i Customer Journey to IBM Power Virtual Server



POC

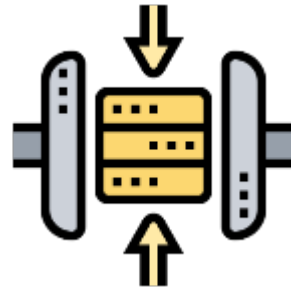
Center of Excellence (CoE) - Provides expertise, incentives, accelerators, deployment tools and best practices to simplify the PowerVS onboarding experience



Migration

Reduced migration time from weeks to days leveraging:

- New BRMS/save compression support providing smaller data sizes
- Networking configuration automation and speed improvements



Usability/Automation

Faster time to deploy and onboard from days to less than one hour by using PowerVS Deployable Architectures and QuickStart

Parameter	Description	Value
purchase_date	IBM Cloud date a server location where IBM Power VS Infrastructure will be created.	Select a value
profile	A unique identifier for resources. Must begin with a lowercase letter and end with a lowercase letter or number. This profile will be prepended to any resources provided by this template. Profiles must be 10 or fewer characters.	__NOT_SET__
profile_size	PowerVS instance profiles. These profiles can be overridden by specifying <code>vs_profile_instance_base_id</code> together with custom <code>profile</code> values in optional parameters.	ADX-XS (1cpu, 32GB, d... ADX-S (4cpu, 128GB, dia... ADX-M (8cpu, 256GB, di... ADX-L (16cpu, 512GB, di... IBM-XS (C,25cpu, 80E,... IBM-S (1cpu, 32GB, di... IBM-M (10cpu, 64GB, di...
external_access_ip	Specify the IP address of IDB to login through SSH to the environment after deployment. Access to this environment will be allowed only from this IP address.	

IBM Power Virtual Server in 2024 – Year of “Acceleration”

Accelerating Usability and Migration

1. **Reduce network configuration complexity** – from 30 days to 3 days via IBM Cloud VPN service
2. **Improved cloud network connectivity** (Power Edge Router)
3. **Simplified IBM i and AIX migration** using new migration guides and automation
 - IBM i Migrate While Active
4. **Secure automated backup with Compass** – simple, secure, automated backup and restore to protect IBM PowerVS data powered by IBM Storage Protect
5. **Simpler setup and execution of IBM i backup** using existing BRMS capability along with FalconStor VTL technology for de-duplication for efficient data transfer

Enhanced Capabilities, Automation and Cost Optimization

1. Data center expansion – 22 data centers in 9 countries across 12 regions – with more coming
2. Power10 server introduction and rollout
3. **Dedicated host support**
4. **Maintain technology currency** with quarterly updates to AIX, IBM i, RHEL and SUSE images
5. **Proactive resource and application monitoring** with PowerVS in IBM Cloud Monitoring dashboard
6. **Expanded business continuity and disaster recovery** with Global Replication Service (GRS)
7. **Optimize storage cost and performance** with flexible IOPs with new storage tiers
8. Simplified IBM i operational processes and reduced downtime with **Virtual Serial Number (VSN)**
9. Achieved 7 new compliance certifications (SOC 2 Type II, FS Cloud, etc.)

What's New in PowerVS for IBM i?

Aligned IBM i pricing

Increased storage volume limits

IBM i CBU-like DR licensing leveraging Shared Processor Pool (SPP) technology

Power Virtual Server / Dallas 10 / DanDAL10Workspace / Virtual server instances /

Create virtual server instance

- General
- Boot image
- Profile
- Storage volumes
- Network interfaces

Instance name	DanVSNTest
Number of instances	1
Virtual server pinning	None
SSH key	None

Boot image

Operating system

IBM i

Deploy empty virtual server instance ⓘ

Image

IBMi-75-04-2924-1

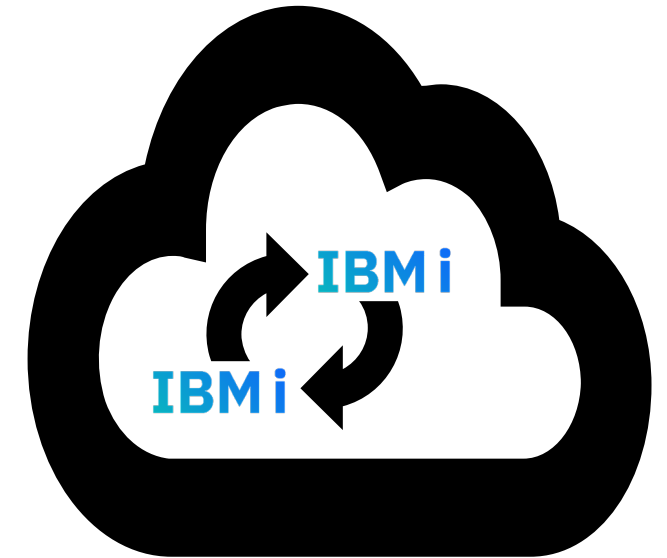
Virtual serial number (VSN) ⓘ

None

Tier

Tier 3 (3 IOPs / GB)

Success

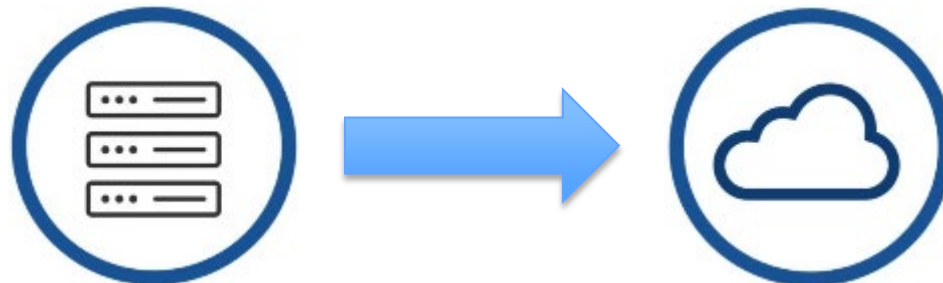


Virtual Serial Number (VSN) provides a platform for IBM i clients to enjoy the flexibility of cloud by decoupling the operating system from the underlying physical hardware

IBM i Migrate While Active

Easily migrate from on premise to PowerVS

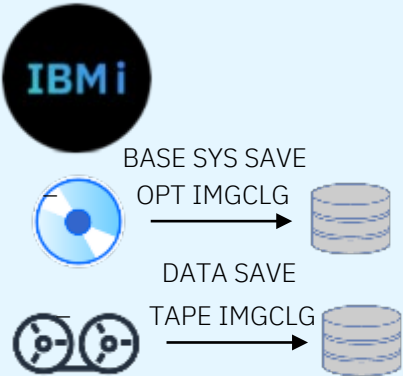
- IBM i standardized tooling to **migrate while active** with minimal impact to production
- Production downtime reduced from days to minutes/hours
 - Dependent on total data size, change rate and network bandwidth
- Automation to reduce the time it takes to seed the base copy
 - Eliminates multiple tools and manual processes for multi-step SAVE/RESTORE
- Production on premise remains available while changes are synchronized in real-time to the target system
 - Eliminates third party replication tools or multiple point in time SAVE/RESTORE iterations



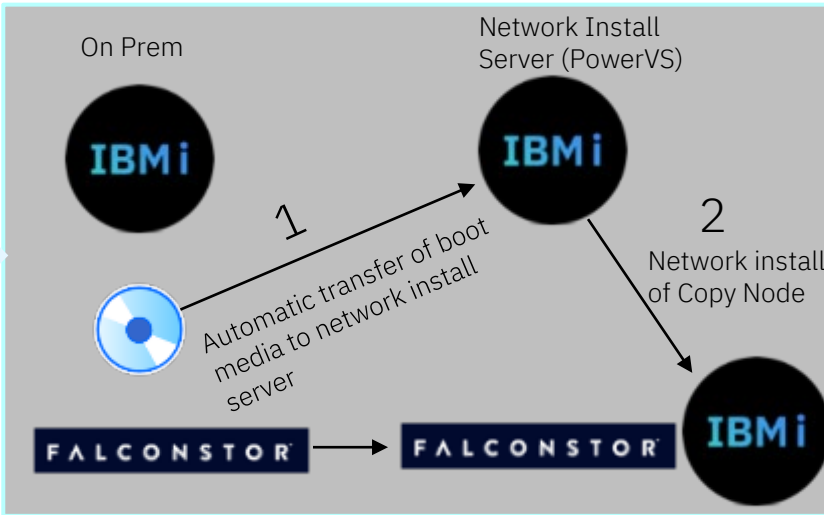
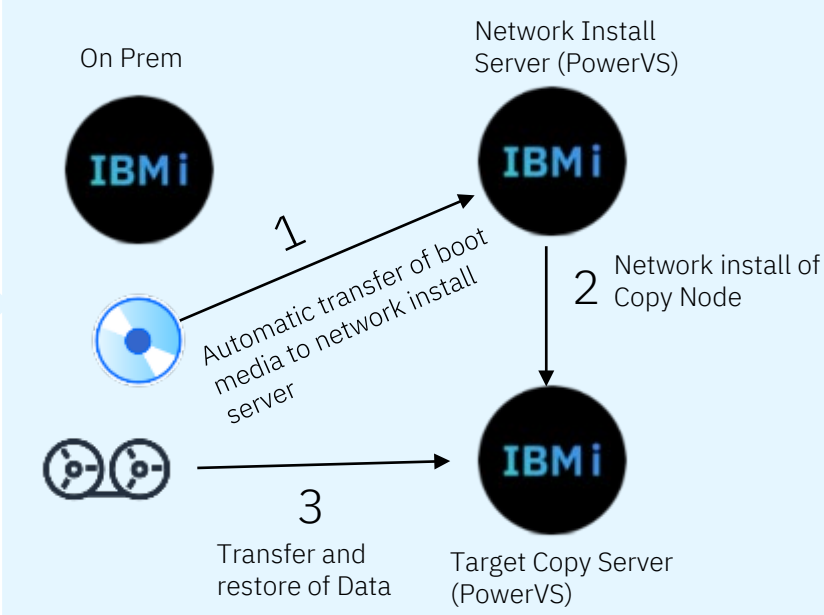
IBM i Migrate While Active – How it Works

Step 1: Initial System Save

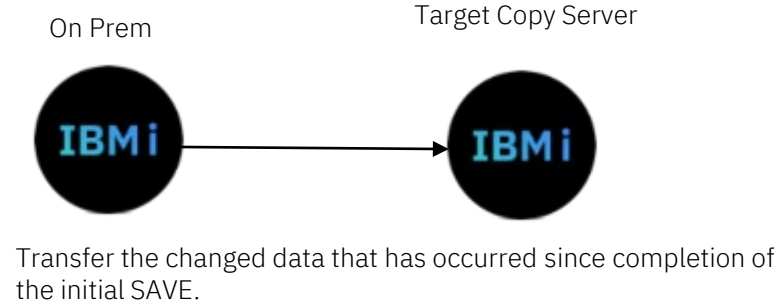
Pattern 1. Using IBM i Local Storage



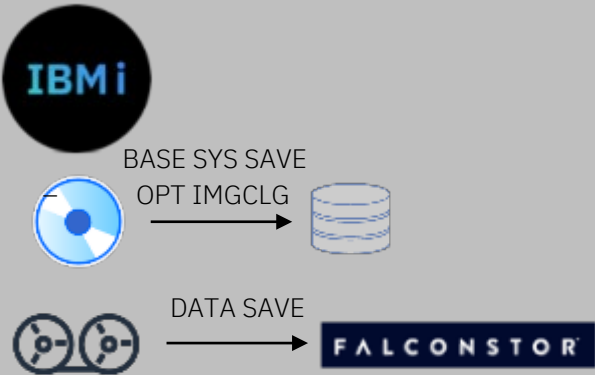
Step 2: Transfer SAVE to PowerVS



Step 3: Transfer Changed Data



Pattern 2. Use VTL for DATA SAVE



Physical Hardware Serial Number vs. Virtual Serial Number

Hardware Serial

Partition 1	Partition 2	Partition 3
Serial = 78-12345	Serial = 78-12345	Serial = 78-12345

Hardware Serial = 78-12345

All partitions use the hardware serial number of the physical server

Virtual Serial Number (VSN)

For example, on **9009-22G S/N 78-12345 > order FC #EVSN**

Partition 1	Partition 2	Partition 3
4850-VSN P10 Serial = V0-11111	Serial = V0-22222	Serial = V0-33333

Hardware Serial = 78-12345

With a VSN, each partition can have its own serial number that is not tied to the hardware serial number. You can also have a combination of VSN and hardware serial number partitions. The hardware serial number is still there and is used to identify the physical box and is the default in a partition if a VSN is not used.

PowerVS VSN GUI

Power Virtual Server / Dallas 10 / DanDAL10Workspace / Virtual server instances /

Create virtual server instance

- General
- Boot image
- Profile
- Storage volumes
- Network interfaces

General	
Instance name	DanVSNTest
Number of instances	1
Virtual server pinning	None
SSH key	None

Boot image	
Operating system	IBM i
<input type="checkbox"/> Deploy empty virtual server instance	
Image	IBMi-75-04-2924-1
Virtual serial number (VSN)	None
Tier	Tier 3 (3 IOPs / GB)

Success

Boot image

Operating system

IBM i

Deploy empty virtual server instance

Image

IBMi-75-04-2924-1

Virtual serial number (VSN)

None

[Learn more](#)

A virtual serial number (VSN) keeps track of installation, support entitlements, and licensing compliance for IBM i software.

To assign a VSN, your IBM Cloud account ID must be mapped to a customer number in ESS.

PowerVS VSN GUI – Edit Options

Virtual serial number (VSN) ×

A Virtual Serial Number (VSN) is assigned free of charge. It keeps track of installation, support entitlements, and licensing compliance for IBMi software. [Learn more](#)

VSN assignment

VSN assignment

- None
- Auto-assign
- Select from retained VSNs

Cancel Save

Virtual serial number (VSN) ×

A Virtual Serial Number (VSN) is assigned free of charge. It keeps track of installation, support entitlements, and licensing compliance for IBMi software. [Learn more](#)

VSN assignment VSN description
Optional

VSN assignment

- None
- Auto-assign
- Select from retained VSNs

i Account ID must be mapped to ESS
Attempting to assign without completing this step will result in a failure to provision the virtual server instance.
[Learn more](#)

Cancel Next

Virtual serial number (VSN) ×

A Virtual Serial Number (VSN) is assigned free of charge. It keeps track of installation, support entitlements, and licensing compliance for IBMi software. [Learn more](#)

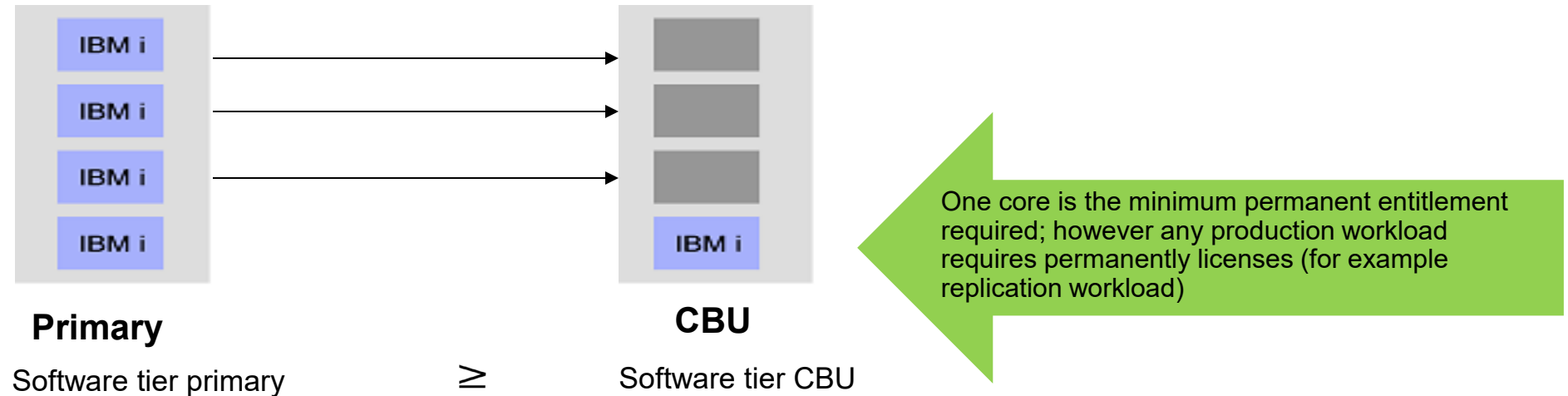
VSN assignment VSN description
Optional

VSN description (optional) 0/255

Ex: a list of software licenses to be installed on this VSN

Previous Save

IBM Power Capacity Backup Edition (CBU for i) - Overview



The CBU offering is used in high availability and disaster recovery deployments (on-premise)

Offering enables customers to move workload between boxes without fully redundant OS entitlements

Two-year temporary keys eliminate redundancy for eligible LPPs

CBU designation available only upon purchase of a new box and must be registered to a qualified primary.

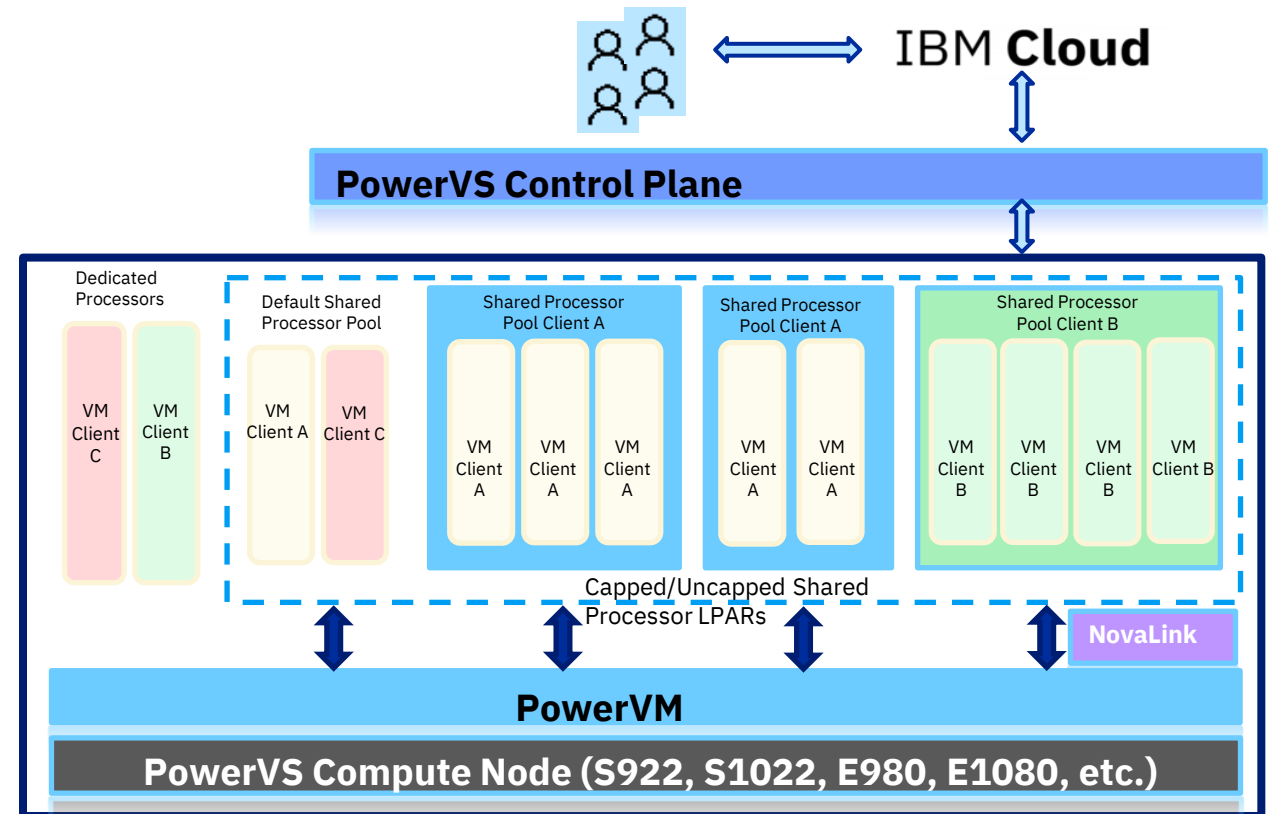
If a CBU is no longer affiliated with the original registering customer, it is not recognized as a CBU.

Registration process: client agrees to terms and conditions, CBU registration is validated, shipment is approved

CBU agreement requires that both the primary and CBU are owned by the same enterprise.

What are Shared Processor Pools (SPP)

- A reserved pool of processor capacity that is shared between a group of virtual server instances
- Allows more control over the processor capacity that can be used by a virtual server
- Optimizes processor utilization between virtual servers in the pool
- Provides improved TCO for Production and DR work loads
- Available in PowerVS Public and PowerVS Private

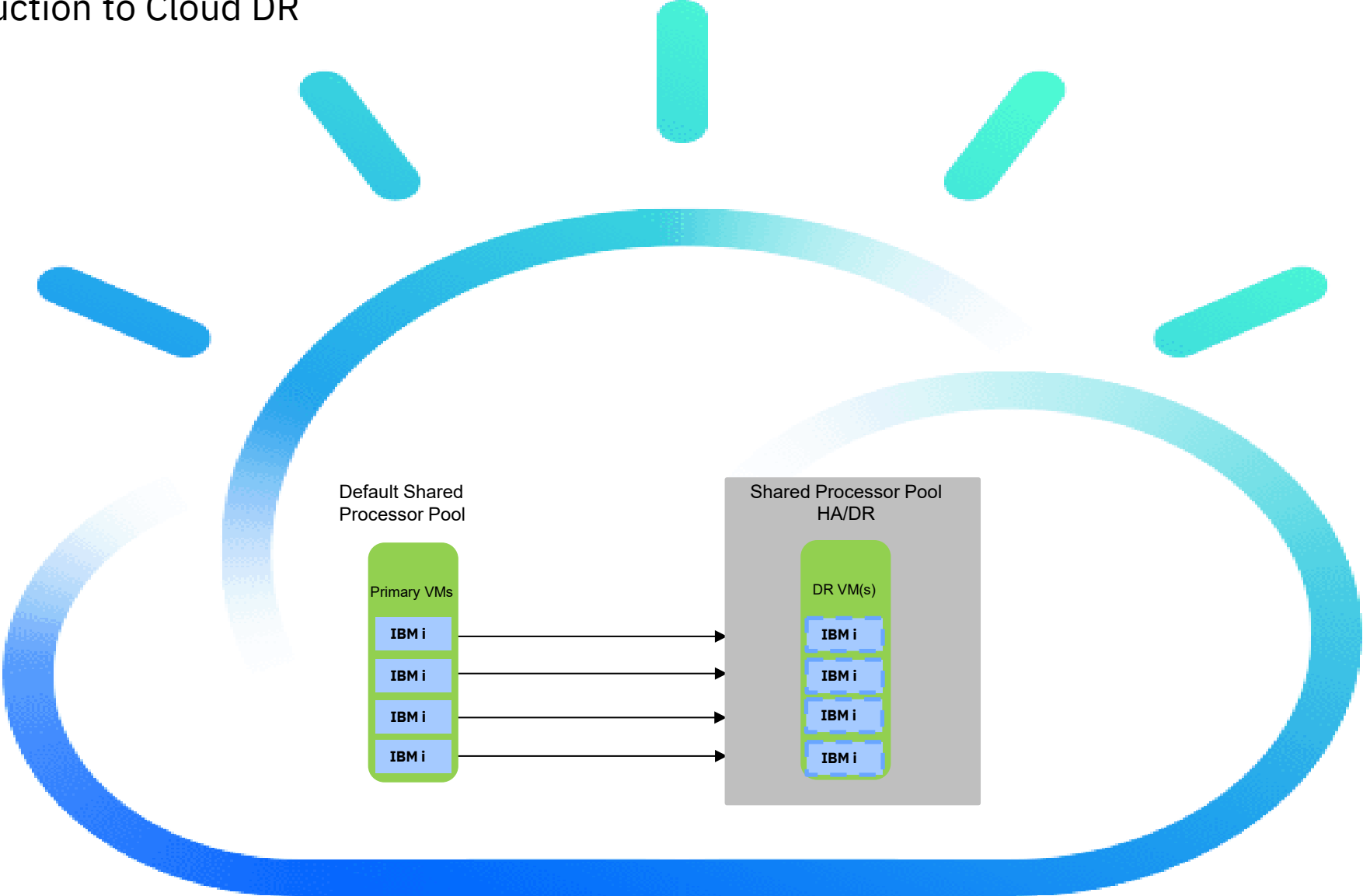


Power Virtual Server HA/DR IBM i Licensing using SPP

- SPP provides a way for a customer to assure/reserve hardware resources such as cores and memory like they would with the on-prem CBU (Capacity Backup Unit) offering for HA/DR operations, and can help optimize IBM i OS licensing
- Using a Power Virtual Server SPP to optimize “DR side” OS licenses
 - Customer creates a shared processor pool with cores = X
 - ...where X = the maximum number of cores that the partition(s) will potentially need
 - This step effectively ensures the customer has access to the cores whenever they're needed for any VM in the pool
 - To achieve the benefit of “optimized DR pricing,” customer deploys a VM(s) in the SPP with a small amount of entitled capacity (e.g., 0.25 cores) and whatever memory/storage they need
 - Customer will NOT be charged for the cores since they're already paying for the cores as part of the SPP creation
 - Customer will only pay for 0.25 cores of IBM i OS license charges
 - Customer will be charged for the memory BAU
 - When a HA/DR event occurs, customer can resize the VM(s) up to the appropriate number of cores they need and will pay for the appropriate IBM i OS's BAU – e.g., if they scale up to 4 cores, they'll pay for 4 cores of OS licenses

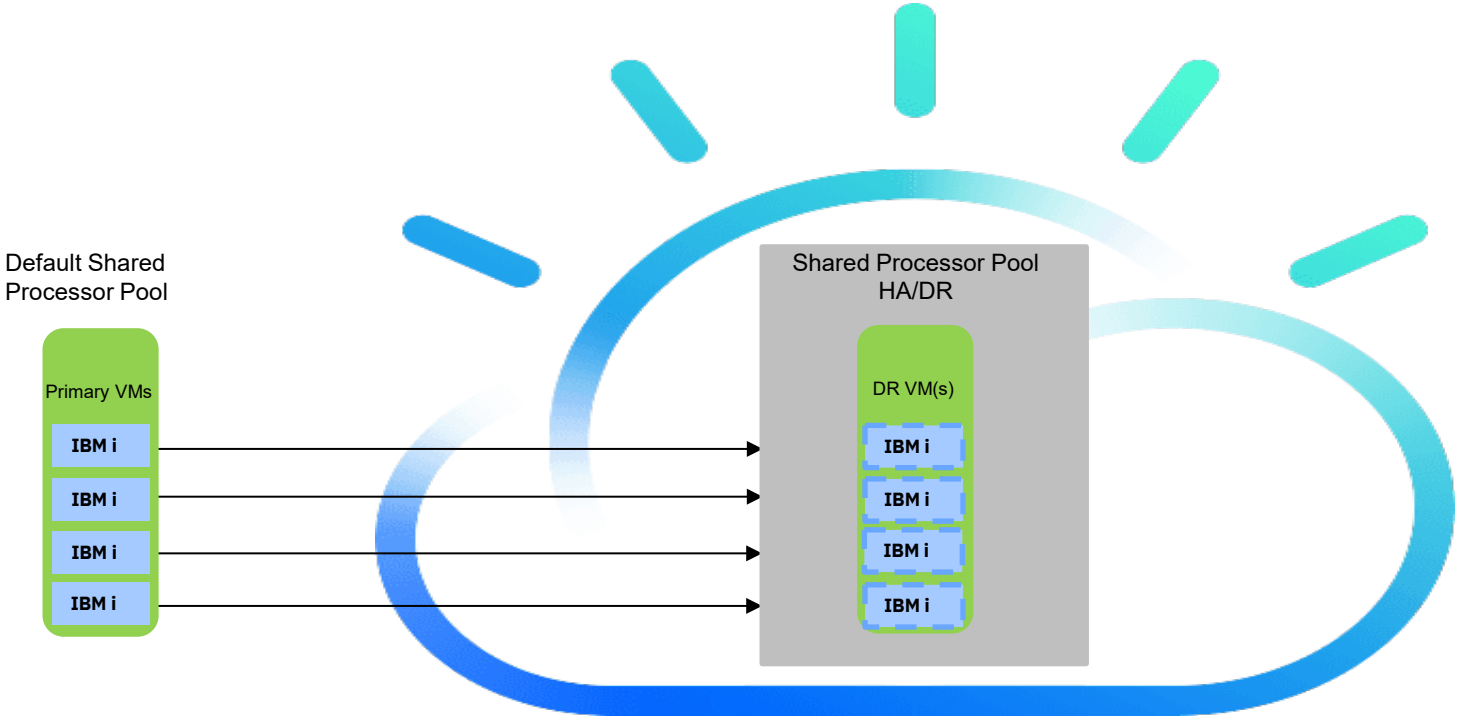
Power Virtual Server HA/DR IBM i Licensing using SPP

Cloud production to Cloud DR

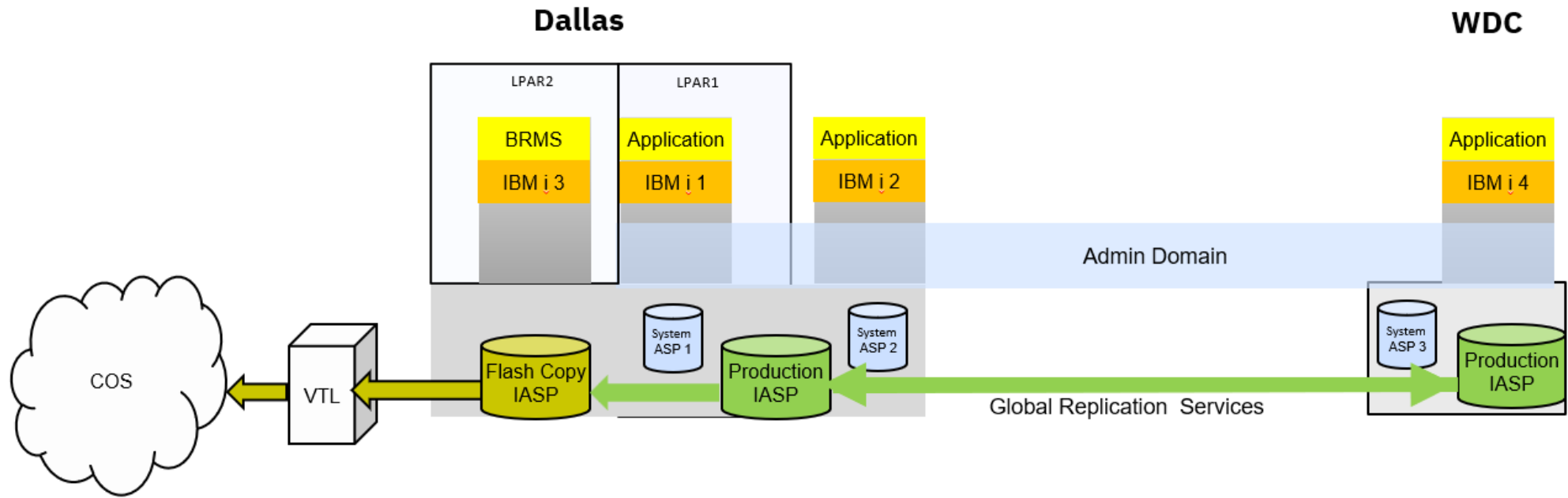


Power Virtual Server HA/DR IBM i Licensing using SPP

On-premise production to Cloud DR



Three “data centers” two remote cloud locations PowerHA IBM i cluster



Category	Capability being delivered.	Customer value
PowerVS HA/DR	PowerHA IBM i Integrate with IBM Power Virtual Server Global Replication Services (GRS)	Automated HA/DR in PowerVS based on storage replication enabling capability comparable to on-premise clustering
PowerVS HA/DR	PowerHA IBM i integrate with IBM Power Virtual Server FlashCopy	Providing IASP FlashCopy automation in PowerVS for offline saves to COS
PowerVS HA/DR	PowerHA IBM i integrate with IBM Power Virtual Server LUN Level Switching	Enables shared storage HA configurations comparable to on-premise deployments

April 8, 2025, Statement of Direction

Planning insights for IBM PowerHA SystemMirror for i

IBM intends to offer Full System Replication automation and Full System FlaschCopy orchestration capabilities as a product option in PowerHA SystemMirror for i via IBM Power Virtual Server and on-premise.

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products or functionality is not a commitment, promise, or legal obligation to deliver any material, code or functionality, and may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Power Virtual Server Ecosystem Adopts New Hybrid Model



ISV's
(aaS model)



Migration HA/DR



Service providers

API-Bridge

API-Bridge for PowerVS - Trial
By OmniScience Co., Ltd.

Leverage IBM i programs and data assets to achieve integration with external applications and web services.



FalconStor StorSafe VTL for PowerVS Cloud
By FalconStor Software

Reduce your monthly PowerVS backup storage cost by up to 90%, while improving your existing backup solution performance.



BUS4i System Copy - Migrate 23 for Power i
By T.S.P. - Gesellschaft fuer Informationssysteme mbH

BUS4i System Copy moves and migrates your IBM I to another. Backup and restore your data and applications in a single step



FNTS Managed Services for PowerVS Cloud
By First National Technology Solutions

Managed services for PowerVS instances which includes monitoring, configuration, patching, and capacity management.



PAYTESTER
By CLAI PAYMENTS USA LLC

Test any payment system from any channel, and get rid of the complexity of testing multiple channels and transactions.



Rocket iCluster HA/DR
By Rocket Software, Inc.

Cost-Effective High Availability and Disaster Recovery Software for IBM Cloud Power Virtual Server



PowerVS Migration as a Service
By Wanclouds Inc.

Wanclouds' Managed PowerVS Migration as a Service offering for IBM

PowerVS Release Notes

IBM Cloud

Catalog Cost Estimator Help

Cookie preferences and do not sell or share my personal information

Product guide
Power Virtual Server

Search guide

Get started

Getting started with IBM Power Virtual Server

Release notes

What is IBM Power Virtual Server?

Architecture

Locations

Pricing

High availability and disaster recovery

Backup strategies

Migration strategies

Replication

Security and compliance

Use cases

View as PDF

IBM Cloud Docs / Power Virtual Server /

Release notes

Last updated 2025-05-20

Use these release notes to learn about the latest changes to the IBM® Power® Virtual Server.

May 2025

- If you have existing IBM Cloud Connections that are managed from non-PFR enabled workspaces, you can now view and delete them using the [IBM Cloud CLI](#) or [API](#) from a PFR-enabled workspace.

IBM data center

- The following RHEL OS stock images are refreshed and available for Power Virtual Servers in the IBM data centers:
 - RHFI 9.4 for SAP
 - RHFI 9.2 for SAP
 - RHFI 8.10 for SAP
 - RHEL 8.8 for SAP
 - RHEL 8.10 general purpose
 - RHEL 9.4 general purpose
- You can deploy SAP NetWeaver sr2 profiles on IBM Power servers. For more information, see [SAP NetWeaver profiles](#).

April 2025

IBM data center

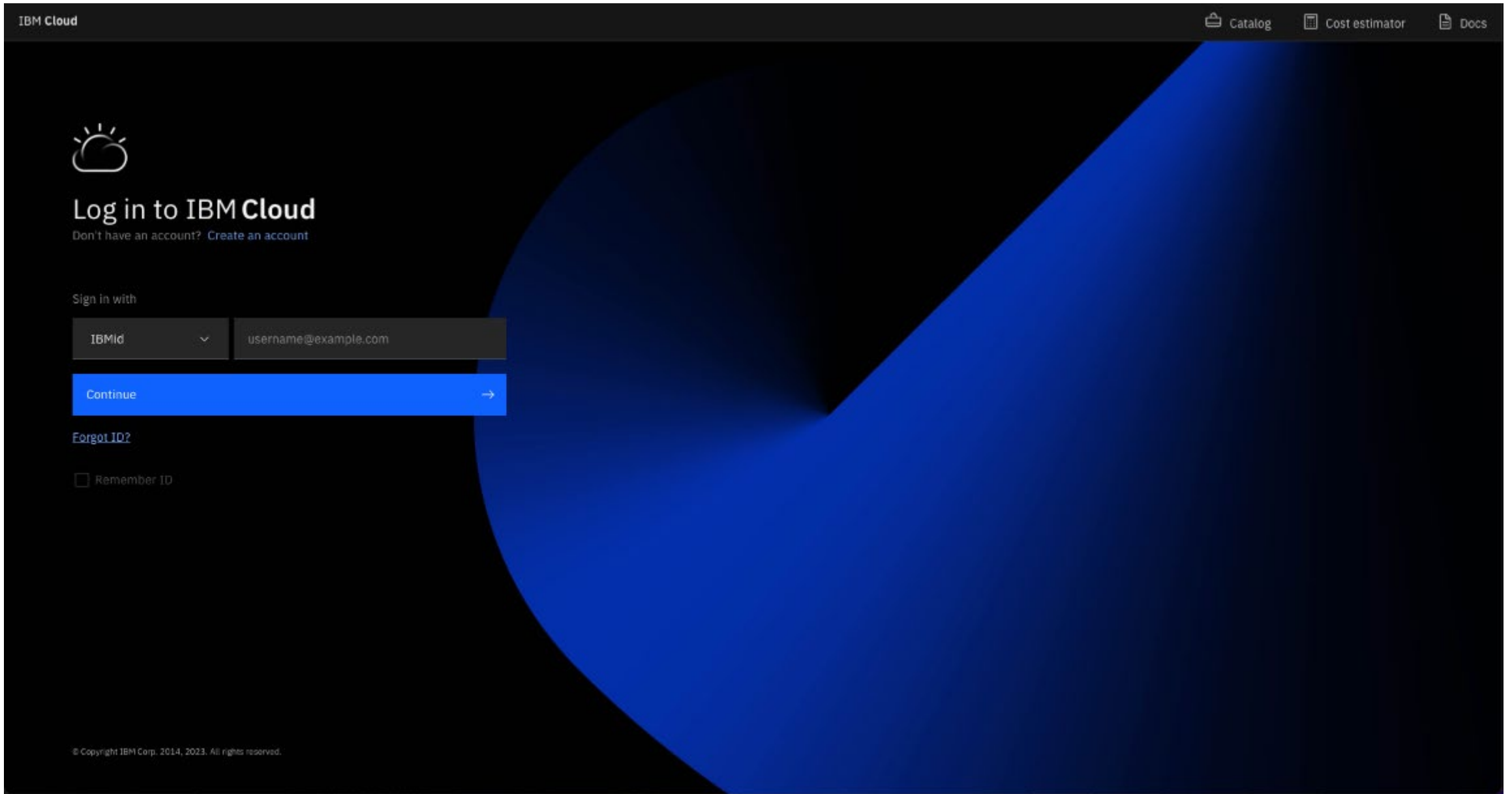
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- April 2024
- March 2024
- February 2024

<https://cloud.ibm.com/docs/power-iaas?topic=power-iaas-release-notes>


Create Power Virtual Server Workspace





IBM Cloud

Catalog Cost estimator Docs



Log in to IBM Cloud

Don't have an account? [Create an account](#)

Sign in with

IBMid

Continue →

[Forgot ID?](#)

Remember ID

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Power Virtual Server

The screenshot shows the IBM Cloud catalog interface. At the top, there are navigation links for 'Catalog', 'Cost Estimator', and 'Help'. A search bar contains the text 'power'. Below the search bar, the results are displayed under the heading 'Search results for 'power'' and 'Viewing 81 products'. A category filter on the left lists various categories such as 'Compute (20)', 'Containers (4)', 'Networking (8)', 'Storage (15)', 'Enterprise applications (4)', 'AI / Machine Learning (1)', 'Analytics (1)', 'Databases (7)', 'Developer tools (4)', 'Logging and monitoring (1)', 'Migration (12)', and 'Integration (2)'. The main content area shows a list of search results. The first result, 'Power Virtual Server' by IBM, is highlighted with a green circle. It includes a description: 'Provision flexible, secure, and scalable compute capacity for Power Systems enterprise workloads' and a 'Service' tag. Other visible results include 'Power Virtual Server with VPC landing zone', 'Power Virtual Server for SAP HANA', and 'Power i Migrate 23 Services'. The top right of the page features a navigation bar with 'Log in' and 'Sign up' buttons, and a cookie consent banner.

<https://cloud.ibm.com/catalog>

Select Your Data Center

Create workspace

Create About

Workspace name

Resource group

Cloud Test

Region

- Dallas
- Dallas 10
- Dallas 12**
- Frankfurt 1
- Frankfurt 2
- London 04

PowerVS availability

Worldwide 22 data centers in 7 countries, across 10 regions, and growing!

Americas (4 Regions)

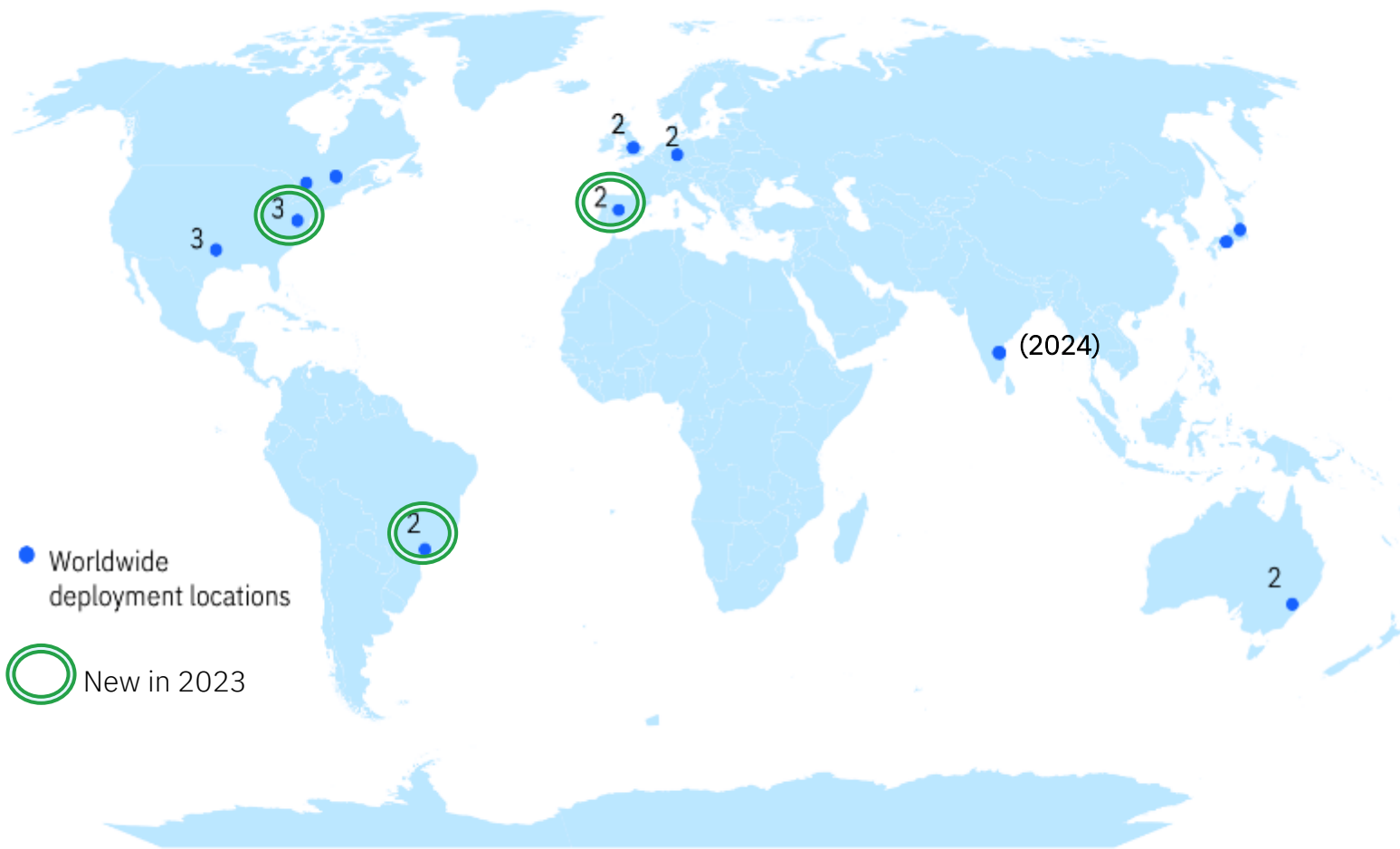
- Dallas (3)
- Washington DC (3) **WDC07 NEW in 2023**
- Toronto
- Montreal
- Sao Paulo (2) **SAO04 NEW in 2023**

EMEA (3 Regions)

- Frankfurt (2)
- London (2)
- Madrid (2) **MAD02 and MAD04 NEW in 2023**

APAC (3 Regions)

- Sydney (2)
- Osaka
- Tokyo
- **Chennai**



NOTE: IBM PowerVS are physically located in IBM Cloud data centers with their own dedicated infrastructure. For latest list of supported data centers, please visit this [documentation page](#).

Create IBM i Instance



Create Instance

The screenshot shows the IBM Cloud console interface. On the left is a dark sidebar with navigation options: Power Systems Virtual Server, Workspaces, demo, Compute, Virtual server instances (highlighted), Virtual appliances, Shared processor pools, SSH keys, Boot images, Networking, Subnets, Cloud connections, VPN connections, Storage volumes, Event logs, and Additional products and services. The main content area is titled 'Virtual server instances' and includes a search bar and a 'Servers' tab. Below the search bar is a table with columns: Name, IPs, Operating system, Cores, Memory, and Status. The table is currently empty, with a message: 'The virtual server instances list is empty. To provision, click Create Instance.' A red circle highlights the 'Create instance' button in the top right corner of the table area.

VM Creation

- ◉ Boot image
- ◉ Profile
- ◉ Storage volumes
- ◉ Network interfaces

Instance name

Number of instances

1 - +

A maximum of 5 instances can be provisioned at once.

Add to a server placement group ⓘ

Add to a shared processor pool ⓘ

Virtual server pinning ⓘ

Select virtual server pinning ▾

SSH key

Select SSH key ▾

Continue ↓

◉ Boot image

Next steps: Operating system, Image, Tier, Storage pool

◉ Profile

Next steps: Machine type, Core type, Cores, Memory

◉ Storage volumes

Next steps: Attach storage volumes

Total estimated cost \$0.00/hr \$0.00/mo

I agree to the Terms and conditions

Create

IBM i Software

‘Stock’ images available as boot volumes

- IBM i 7.2*
- IBM i 7.3*
- IBM i 7.4
- IBM i 7.5
- IBM i 7.6 coming soon

Additional LPPs are available to be added at create time or dynamically added later

All software is relative to this one VM

- 5770-HAS and 5733-ICC are per .25 core priced
- 5770-WDS is user based

SWMA included in the price of the software

*7.2 and 7.3 also include extended support

The screenshot displays a configuration interface for IBM i software. It features a dropdown menu for 'Operating system' set to 'IBM i'. Below this, there are checkboxes for 'IBM i Licenses', including 'IBM i Cloud Storage Solution', 'IBM i Power HA', and 'Rational Dev Studio for IBM i' (which is checked). A text input field for 'Number of users (RDS Only)' contains the value '5'. To the right, an 'Image' dropdown menu is open, showing options: 'Select an image', 'IBMi-72-09-003' (highlighted), 'IBMi-73-07-001', and 'IBMi-74-01-001'.

Base IBM i and LPP Package Software

•5770-SS1 IBM i OS – processor and includes unlimited users

- 5770-DG1: HTTP Server for i
- 5770-JV1: Developer Kit for Java
- 5770-NAE: Network Authentication Enablement for i
- 5733-SC1: Portable Utilities for i
- 5770-TC1: TCP/IP
- 5770-TS1: Transform Services for i
- 5770-UME: Universal Manageability Enablement for i
- 5770-XE1: IBM i Access for Windows
- Zend
- 5733-ARE: IBM Administration Runtime Expert
- 5798-FAX: IBM Facsimile Support for i
- 5770-SM1: IBM System Manager for i
- 5770-DFH: IBM CICS Transaction Server for i
- 5770-MG1: IBM Managed System Services for i
- 5770-SS1: IBM i Option 23, OptiConnect
- 5770-SS1 : IBM i Option 44, Encrypted Backup Enablement
- 5770-SS1 : IBM i Option 45, Encrypted ASP Enablement

- 5770-SS1 IBM i Option 18 Media & Storage Extensions
- 5770-SS1 IBM i Option 26 DB2 Symmetric Multiprocessing
- 5770-SS1 IBM i Option 27 DB2 Multisystem
- 5770-SS1 IBM i Option 38 PSF for IBM i Any Speed Printer Support
- 5770-SS1 IBM i Option 41 HA Switchable Resources
- 5770-SS1 IBM i Option 42 HA Journal Performance
- 5770-AF1: Advanced Function Printing for i (refer to Q&A)
- 5761-AMT: Rational Application Management Toolset
- 5770-AP1: Advanced DBCS Printer Support
- 5733-B45: AFP Font Collection for i
- 5770-BR1/BR2: Backup, Recovery and Media Services
- 5761-DB1: System/38 Utilities
- 5761-CM1: Communications Utilities
- 5761-DS2: Business Graphics Utility
- 5648-E77: InfoPrint Fonts
- 5769-FN1: AFP DBCS Fonts
- 5769-FNT: AFP Fonts
- 5722-IP1: InfoPrint Server for i
- 5770-JS1: Advanced Job Scheduler for i
- 5770-PT1: Performance Tools
- 5770-QU1: Query for i
- 5770-ST1: DB2 Query Manager and SQL Dev Kit for i
- 5733-XT2: XML Toolkit
- 5770-XW1: IBM i Access Family - unlimited users included

IBM i Compute Considerations

E980/E1080 is a P30 SW tier

- Up to 143/240 cores

S922/S1022 is a P10 SW tier

- Up to 4 cores

Profile

e980
✓ s922

Core type ⓘ
 Shared uncapped
 Shared capped
 Dedicated

Cores ⓘ
0.25 - +

Due to limited capacity on s922, the maximum availability of cores are 2.5.

Memory (GiB)
2 - +

Due to limited capacity on s922, the maximum availability of memory is 845 GiB.

Continue ↓

IBM i Shared Uncapped Processors

- CPU shows entitlement in .25 increments
- For IBM i, the VCPU # is rounded up
 - In this example the VCPU quantity would be 2
- IBM i has a limit of 4 VCPU/4 cores of entitlement on the S922/S1022 per VM

Core type ⓘ

Shared uncapped

Shared capped

Dedicated

Cores ⓘ

1.25

Due to limited capacity on s922, the maximum availability of cores are 2.

Memory (GiB)

2

Due to limited capacity on s922, the maximum availability of memory is 845 GiB.

[Continue](#) ↓

Power Virtual Server Storage Profiles

	Description	Where to use
Tier 3	Tier3 – 3 IOPS/GB Profile	Tier 3 storage provides up to 3 IOPS per provisioned GB. Tier 3 storage can be used where storage performance characteristics are not defined. Workload example – Application Server, non-production workloads
Tier 1	Tier1 – 10 IOPS/GB Profile	Tier 1 storage provides up to 10 IOPS per provisioned GB. Tier 1 is an ideal candidate for production workloads with defined performance characteristics. Workload example – Production workload, Databases etc.
Tier 0	Tier0 – 25 IOPS/GB Profile	Tier 0 storage provides up to 25 IOPS per provisioned GB. Tier 0 is an ideal candidate for higher-performance Databases like SAP HANA, Oracle DB or workloads that benefit from higher storage performance. Due to higher IOPS/GB, a customer can meet IOPS performance requirements at a lower capacity.
Fixed 5000 IOPS	Fixed5K IOPS Storage Profile	Fixed5K IOPS storage profile provides up to 5000 IOPS per volume. Fixed5K IOPS is limited to 200 GB volume size. Fixed5K is an ideal candidate where the highest performance is required for meeting specific workloads KPI's for example, for meeting the log file requirements of SAP HANA.

Network Considerations

Allow the VM to reach the public internet

Limited ports are open on the firewall

Network interfaces

At least one private or public network is required.

Public networks
A public network uses a public VLAN to connect to your VM. [Learn about the available firewall ports.](#)

On

Private networks
Use private networks to connect to existing subnets or go to the subnet tab to create a new subnet. Your progress here will be saved.

Search Attach +

Name	IP address	IP range	CIDR	
demo1	N/A	172.1.1.4 – 172.1.1.254	172.1.1.0/24	

Finish ↓

Attach VM to private vlans within the PowerVS workspace

IBM Cloud

Search resources and products...

Catalog Manage 1891425 - Kris Whitney's Account

demo / Virtual server instances [Learn more](#)

Servers Server placement group

Search Create instance +

Name	IPs	Operating system	Cores	Memory	Status
demo	172.1.1.189, 192.168.180.190	IBM i	1.25 cores	2 GiB	Active

Power Systems Virtual Server

Workspaces

demo

Compute

Virtual server instances

Virtual appliances

Shared processor pools

SSH keys

Boot images

Networking

Subnets

Cloud connections

VPN connections

Storage volumes

Event logs

Additional products and services

Console from the Cloud Web Page

The screenshot displays the IBM Cloud console interface. On the left is a dark sidebar with navigation options: IBM Cloud, Power Systems Virtual Server, Workspaces, demo, Compute, Virtual server instances (highlighted), Virtual appliances, Shared processor pools, SSH keys, Boot images, Networking, Subnets, Cloud connections, VPN connections, Storage volumes, Event logs, and Additional products and services. The main content area shows the details for a virtual server instance named 'demo'. The details are organized into three columns: Name (demo), Machine type (s922), Core type (Uncapped shared processor); ID (164f31bb-8acc-4722-b...), Boot image (IBMI-75-01-2924-2), Size (1.25 cores | 2 GiB); and Date created (April 20, 2023 at 9:...), Virtual server pinning (None), and Shared processor pool (None). Below the details is a 'System reference code' section with a table containing one entry: SRC C6004036 and Timestamp April 20, 2023 at 9:44:30 PM. A red circle highlights a 'VM actions' dropdown menu on the right side of the page, which includes options: OS shutdown, Immediate shutdown, Restart, IBM i operations, Open console (highlighted), and Capture and export (with an 'Open console' button).

demo / Virtual server instances / demo

Virtual server instance details

Name	demo	Machine type	s922	Core type	Uncapped shared processor
ID	164f31bb-8acc-4722-b...	Boot image	IBMI-75-01-2924-2	Size	1.25 cores 2 GiB
Date created	April 20, 2023 at 9:...	Virtual server pinning	None	Shared processor pool	None

System reference code

SRC	Timestamp
▼ C6004036	April 20, 2023 at 9:44:30 PM

VM actions

- OS shutdown
- Immediate shutdown
- Restart
- IBM i operations
- Open console
- Capture and export Open console

IBM i and Power Virtual Server Backup Options

Backup to/on Power Virtual Server without VTL

- Leverage IBM Cloud Storage Solutions for IBM i (5733-ICC)
- Best for small environments of 2TB or less
- No deduplication of data
- Requires extra disk space



Power Virtual Server

Backup to/on Power Virtual Server with FalconStor VTL

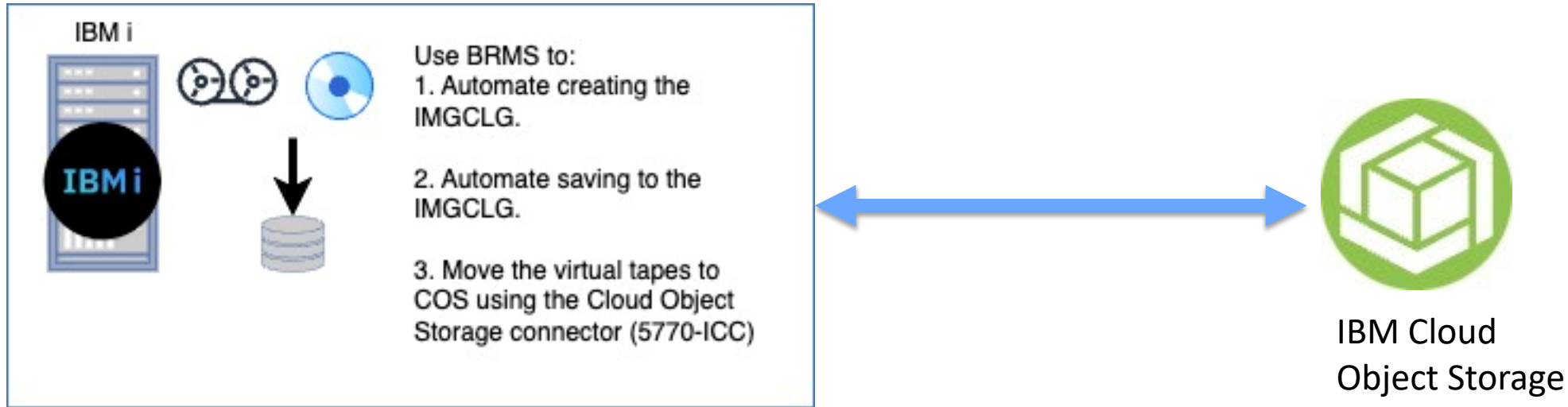
- Any size environment, scale as needed
- Data reduction with deduplication up to 95%
- Faster backups and restores



Power Virtual Server

FALCONSTOR

BRMS with Cloud Storage Solutions



Requires:

BRMS and ICC

Additional storage to save local first

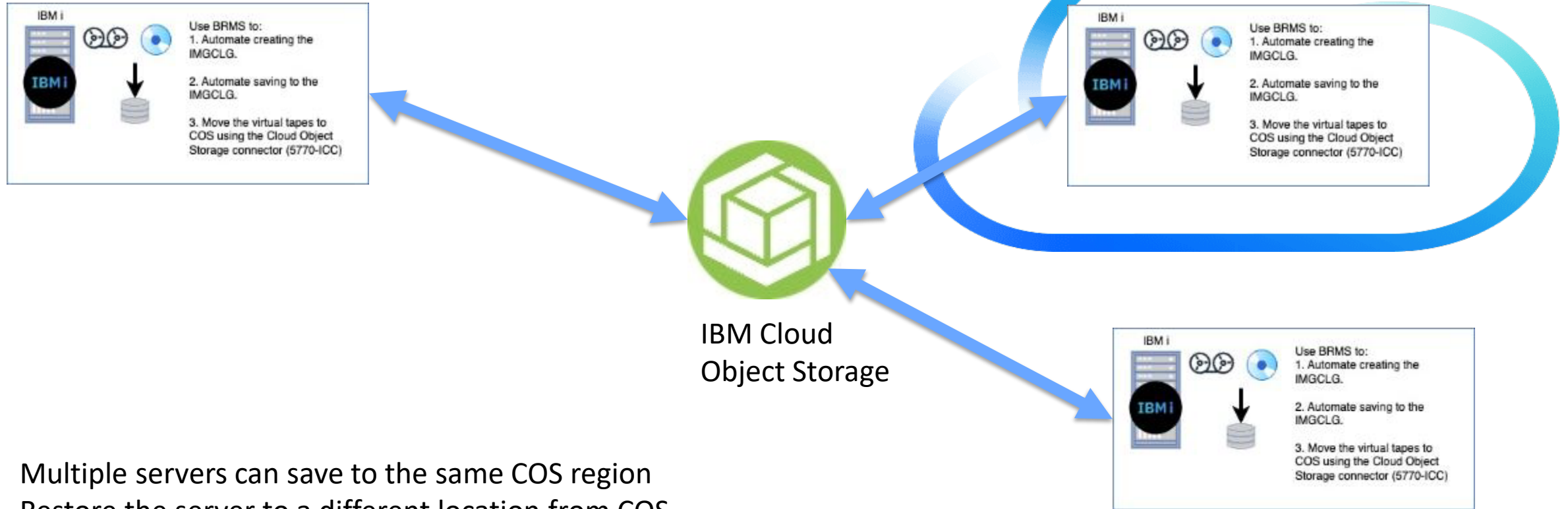
Compression is now supported, saves ~50% of the local storage requirements

Backup not complete until off the box, (limits size of lpar)

Compression can be utilized to reduce network transfer time

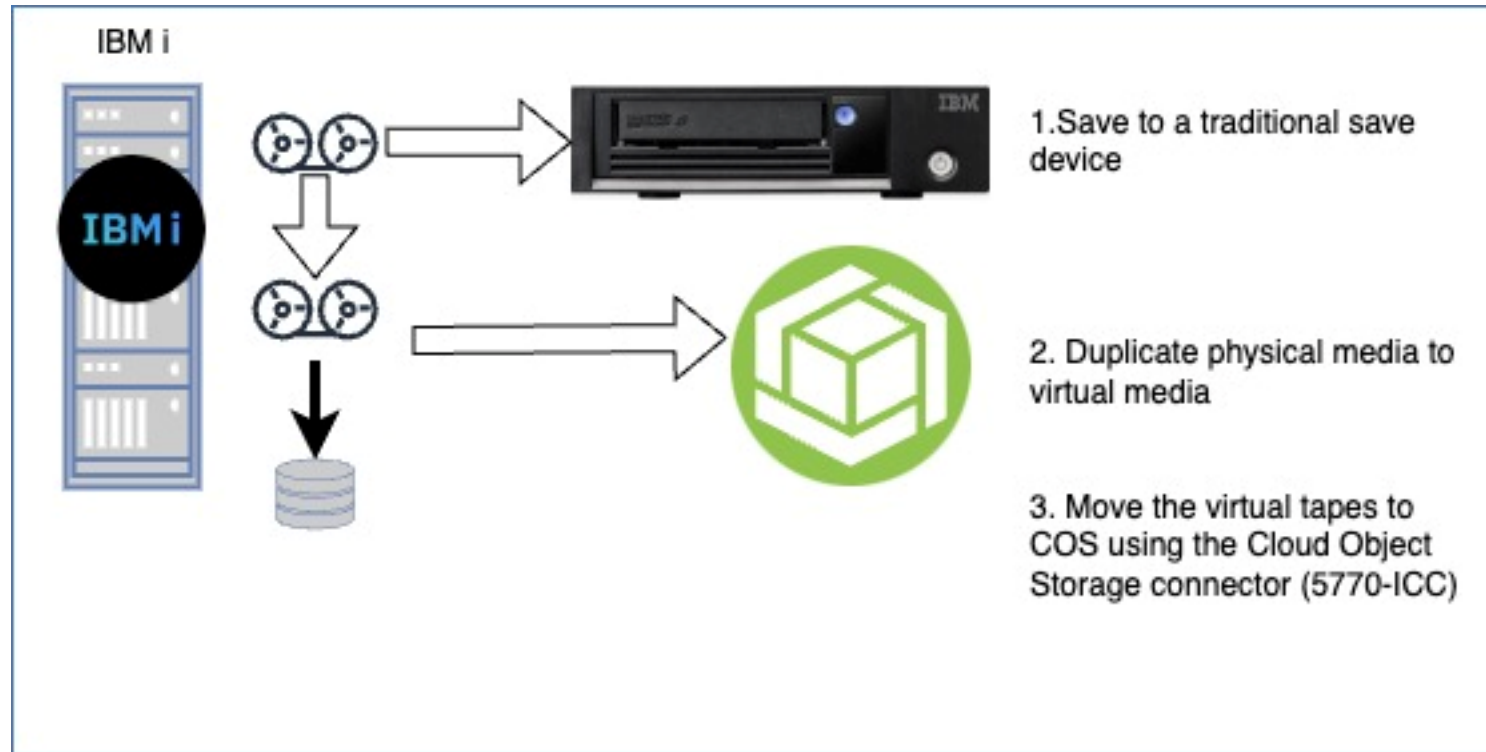
Full System restore requires a network install server

BRMS with Cloud Storage Solutions



Multiple servers can save to the same COS region
Restore the server to a different location from COS

Use IBM COS to Safeguard Backup Copies



BRMS automatically duplicates tapes to IBM Cloud Object Storage.
Use Retention Policies and Object Locks to create an immutable copy
Capable of Restoring in PowerVS as a clean room as part of a cyber resiliency strategy

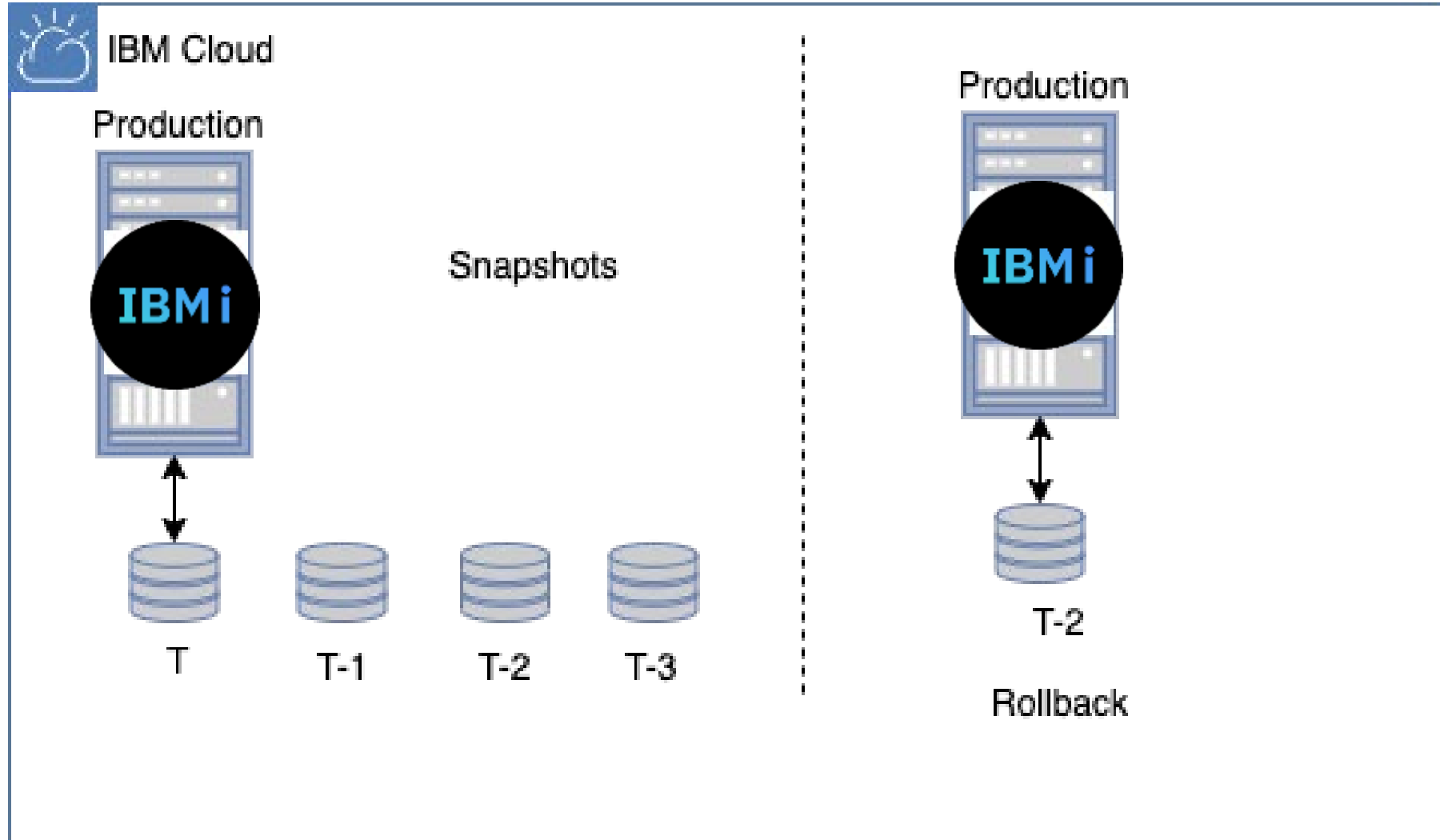
VTL to VTL Solution



Replicate DSI or Falconstor on-prem solutions to PowerVS Falconstor software VTL

- Only provision the IBM i partition in the event of a recovery
- Dynamic infrastructure to test recovery procedures

Snapshot and Rollback



IBM investment and help getting started

Try for free today



New PowerVS customers can receive \$2,000 USD Cloud Credits to experience PowerVS for the first time. [LINK](#)

Pilot Your Workload



Subject Matter Experts from IBM or Business Partners are ready to assist customers with pilot projects.

See your workload running on PowerVS

Get into Production Fast with Migration Funding



Customer can offset the cost of migration by leveraging migration funds for services from IBM or Business Partners.

Subject to eligibility requirements

Center of Excellence

IBM supporting Business Partners with best practices and training to run pilots and migrations.



Enterprise Savings Plan: Commitments shared across IBM Cloud and Power Virtual Server

IBM Power Virtual Server Homepage

IBM AI Hybrid Cloud Products Consulting Support Think

IBM Power Power Virtual Server Operating systems Software Resources Book a meeting

Home / Products /

IBM Power Virtual Server

Seamlessly move and manage workloads across both cloud and on-premises environments

Book a live demo → Calculate your cost →

Webcast: IBM Power Virtual Server Shared Processor Pools: Reduced TCO, Flexible Capacity and Enhanced Business Continuity
Tue, Jun 10, 2025 9:00 AM EDT Register now →

Trusted flexibility with accelerated outcomes


IBM® Power® Virtual Server is a family of configurable, multi-tenant, virtual IBM Power servers with access to IBM Cloud® services.

— Expand your hybrid cloud journey with IBM Power Virtual Server.


<https://www.ibm.com/products/power-virtual-server>

IBM Power Virtual Server Cloud Overview

IBM Cloud

 Catalog

 Cost Estimator

 Help 

Cookie preferences and do not sell or share my personal information

Contact IBM today to leverage a discount on an enterprise savings plan for a 1-year or 3-year commitment.

Everything you love about POWER with the benefits of Hybrid Cloud.

Pay-as-you-use billing make it easy to adjust workloads with flexible compute capacity.

Create a workspace

Estimate cost

Why Power Virtual Server?

Hybrid Cloud anywhere

Flexible pricing plans

Deploy workloads in the best environment for each application and manage them through a consistent experience, making hybrid cloud operations more efficient.

IBM data centers

Provision in one of or many data centers worldwide without the need to up-skill in specialized technologies.

Client location

Keep data localized in your premises with remote geo micro data centers, driven by local regulations, connected through IBM Cloud.

Getting started

<https://cloud.ibm.com/power/overview>

Deploy mission-critical enterprise workloads with IBM Power Virtual Server - Video

Contact IBM to leverage up to 45% discount with 3-year Committed Use Savings Plan or up to 30% discount with 1-year Committed Use Savings Plan.

Power Virtual Server

Workspaces

Everything you love about POWER with the benefits of Hybrid Cloud.

Pay-as-you-use billing make it easy to adjust workloads with flexible compute capacity.

Create a workspace Estimate cost

Get started

Quick start for dev test Advanced for production

1. Create a workspace

A workspace is a free working environment that acts as a folder for all Power Virtual Server resources at a specific geographic region, including compute, networking and storage resources.

2. Create a virtual server instance

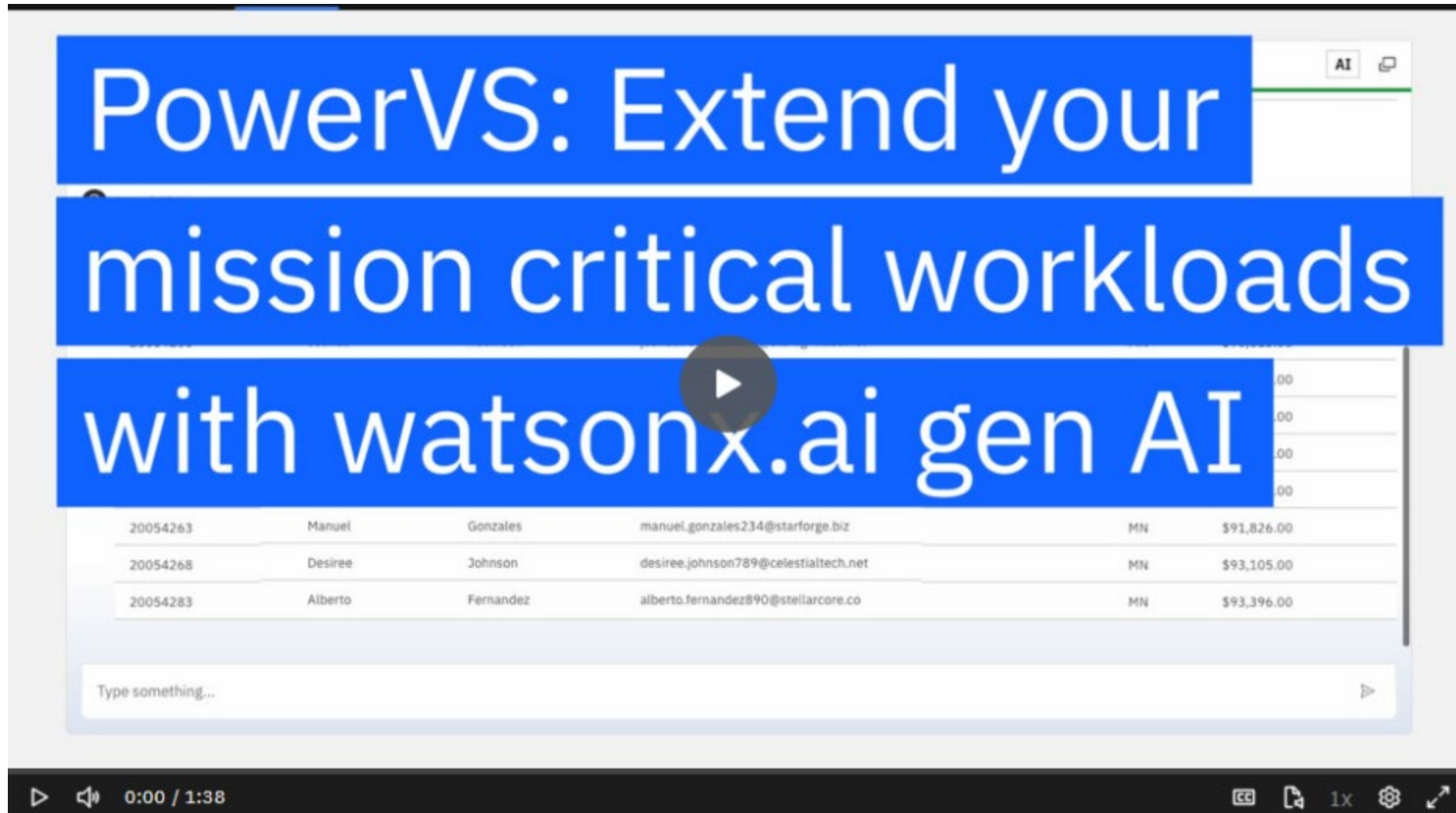
Deploy your first virtual server instance with the storage and networking needed.

0:00 / 3:05

CC 1x

https://mediacenter.ibm.com/media/1_ru8oojn5

Infusing AI into mission critical workloads with PowerVS and watsonx.ai - Video



PowerVS: Extend your mission critical workloads with watsonx.ai gen AI

20054263	Manuel	Gonzales	manuel.gonzales234@starforge.biz	MN	\$91,826.00
20054268	Desiree	Johnson	desiree.johnson789@celestialtech.net	MN	\$93,105.00
20054283	Alberto	Fernandez	alberto.fernandez890@stellarcore.co	MN	\$93,396.00




Type something...

0:00 / 1:38

https://mediacenter.ibm.com/media/Infusing%20AI%20into%20mission%20critical%20workloads%20with%20PowerVS%20and%20watsonx.ai/1_fzqutamr

IBM Power Virtual Server Cloud Docs

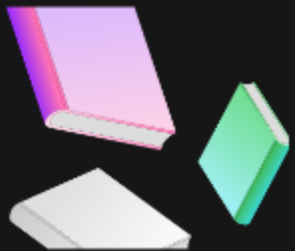
IBM Cloud

 Catalog  Cost Estimator  Help

Cookie preferences and do not sell or share my personal information

Log in Sign up

English



IBM Cloud Docs /


Power Virtual Server

With the Power Virtual Server, you can quickly create and deploy one or more virtual servers on IBM Cloud (that are running either the AIX, IBM i, or Linux operating systems).

Explore the docs

- [Getting started with IBM® Power® Virtual Servers](#)
- [Creating a Power Virtual Server](#)
- [About IBM Power Virtual Server in IBM data center architecture, key features, and hardware specifications](#)
- [About IBM Power Virtual Server Private Cloud in Client location architecture, key features, and hardware specifications](#)
- [FAQ](#)
- [Global Replication Services](#)

About this product 

[Go to product UI](#) 

Popular resources

Use Power Virtual Server to boost competitive advantage

Expand hybrid cloud and AI adoption with IBM Power Virtual Server to boost competitive...



Connecting Power Virtual Server to Microsoft Azure

This topic provides a detailed guide on how to connect IBM Power Virtual Server to Microsoft...



Recommended



<https://cloud.ibm.com/docs/power-iaas>

IBM Power Virtual Server Learning Path/Certification

IBM Training / Cloud /

IBM Power Virtual Server Specialty

The IBM® Power® Virtual Server system provides clients with the ability to scale their business according to seasonal demands using IBM Cloud®.

Explore Learning Path Certification Steps

Learning Path

Total assets: **10 courses**
Total time to completion: **6.1 hours**

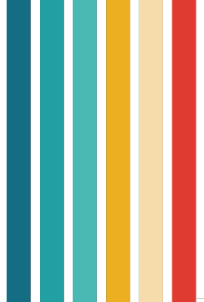
```
graph LR; A[Welcome and Introduction (1 asset)] --> B[Overview (1 asset)]; B --> C[Architecture and Technology (1 asset)]; C --> D[Use Cases and Solutions for Power... (3 assets)]; D --> E[Learning Survey (1 asset) Optional]; E --> F[Essentials Badge (1 asset)]; F --> G[Power Virtual Server Options (2 assets)]; G --> H[IBM Power Virtual Server v1 Specialty]; H --> I[Ready for certification exam*];
```

IBM Power Virtual Server v1 Specialty

Ready for certification exam*

*Certification exam offered at additional cost

<https://www.ibm.com/training/path/ibm-power-virtual-server-specialty-822>



Thank You



Dan Sundt

IBM i Power as-a-Service
Product Manager

Tel 507-253-3228

dansundt@us.ibm.com



COMMON

Daniel Sundt - IBM Power Virtual Server for an IBM i Customer

Please take the last minute of this session to complete the evaluation. A direct link to the evaluation can be found using the QR code to the right.

