Power Systems Virtual Server Client Presentation

Power Virtual Server

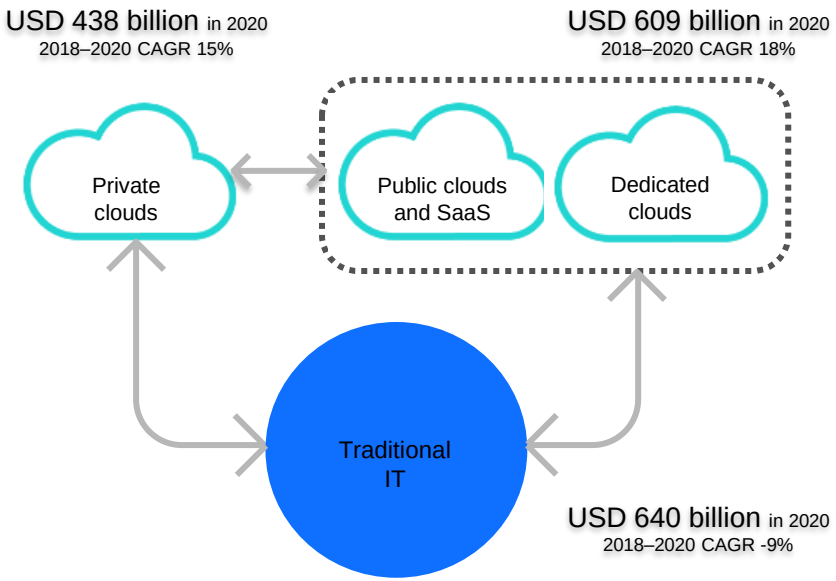
September 2022

LOGICALIS
Architects of Change

IBM

Overview

Hybrid and Multicloud are the new normal



A real-world look at multicloud

90%* of enterprises will be using a mix of cloud models by 2022

60%** of enterprises will utilize flexible consumption models by 2023

Movement between clouds	73% priority concern	
Connectivity between clouds	82% priority concern	
Consistency of management	67% priority concern	

* https://www.idc.com/getdoc.jsp?containerId=prMETA46165020
** *IDC FutureScape: Worldwide Datacenter 2019 Predictions, IDC #US42582518*

Sources: IDC Cloud Forecast; BCG & McKinsey

Clients that have relied on Power Systems On-Prem are looking to align more with their Cloud Strategy.

In other words, **businesses need a**
way to flexibly consume Power resources

* Linux is excluded

$6.86B Unix server market size*

30K active Power customers

IBM Cloud: The most open and secure public cloud for business

Open Innovation

- API Services that are cloud delivered
- Kubernetes on IBM Cloud: 1k+ clients, 19k+ clusters in production
- Major contributor to cloud native open source work: Istio, Knative, Razee, etc.

Security Leadership

- Highest compliance for data encryption
- Configurable so that even IBM cannot see your data
- Edge-to-cloud threat management with IBM security integration

Enterprise Grade

- #1 VMware public cloud 2,000 clients
- Cloud migration for Power AIX, IBM i, Z, SAP and mission critical
- Broadest portfolio of compute instances, including Power & X86

World's First Financial Services-Ready Public Cloud With Bank of America

Highest level of Encryption
FIPS 140-2 Level 4

Isolation for Cloud Native
ROKS & Containers on BareMetal

Integrated IaaS & PaaS
Enhanced Availability SLAs
HA: 99.99%, Non-HA: 99.9%

Higher SLA payouts vs Market
25% of monthly @ 60 min

No Cost Bandwidth b/w Regions
Significantly lower TCO

Audit Transparency
Traceable Serial number compliance

Full Control to the metal level
Full admin control of compute

Good Design Award for VPC

Good Design Award for API Connect

Customer Choice Award for Cloud IaaS

Stratus Award for User Experience

IBM Cloud: Preferred cloud to run SAP workloads by Enterprise customers

Customers put IBM Cloud in Top 3 cloud providers to run their SAP applications and workloads in IDC Infrastructure survey.

In most cases, customers preferred IBM Cloud above Amazon Web Services (AWS), Google Cloud and Microsoft Azure.

Top 3

IBM Cloud in Top 3 cloud platform consideration for Enterprise workloads

67%

large customers prefer IBM Cloud to run SAP business applications

46%

customers prefer IBM Cloud to run SAP HANA

53%

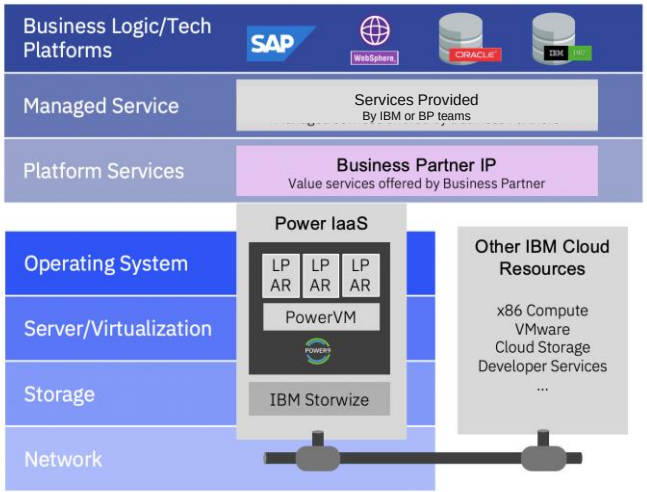
customer will host SAP S4/HANA on IBM Cloud

IBM Power Systems Virtual Server

Offering Description:

A user can purchase an AIX, IBM i, and Linux Power VM-based Virtual Machine-as-a-Service
IBM manages up to OS deployment and the client self-manages the OS and up.
Our users can purchase the offering through Cloud consumption-based pricing plans available through IBM Cloud Catalog.

Systems: S922, E980
Compute: 0.25-143 cores (15 for S922, 143 for E980),
Shared (capped or uncapped) or Dedicated option
Storage Type: FS9200 all flash: Tier 3 (SSD) or Tier 1 (NVMe)
10 GB minimum / 2 TB maximum per disk, 10 GB increments
Network: Public and/or Private IP
OS: AIX / IBM i / Linux
Data Center Locations: DAL, WDC, SAO, FRA, LON, TOR, MON, TOK, OSA, SYD



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

Why Power Systems Virtual Server?

15 Datacenters across the globe

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

Key solutions

- Certified SAP
- Certified SAP NetWeaver HANA
- Oracle
- Epic (Pilot mode)
- Red Hat OpenShift
- IBM Cloud Paks
- AIX, IBM i, and Linux Solutions

Comprehensive Compliance

- GDPR/LGPD
- SOC1 Type 1 and Type 2
- SOC2 Type 2, PCI (coming)
- HIPAA
- ISO 27K

Enterprise Architecture	Identical enterprise stack as certified on-prem architecture, in microprocessors, firmware, PowerVM, PowerVC and dual VIOS.
Power10 in Power Virtual Server Statement of Direction	IBM intends to deploy Power10 in select Power Virtual Server datacenters. Power10 in Power Virtual Server is intended to deliver improved performance, scale, security and embedded AI capabilities, allowing clients to further enhance their Power hybrid cloud infrastructure.

IBM Power Systems - Power Virtual Server

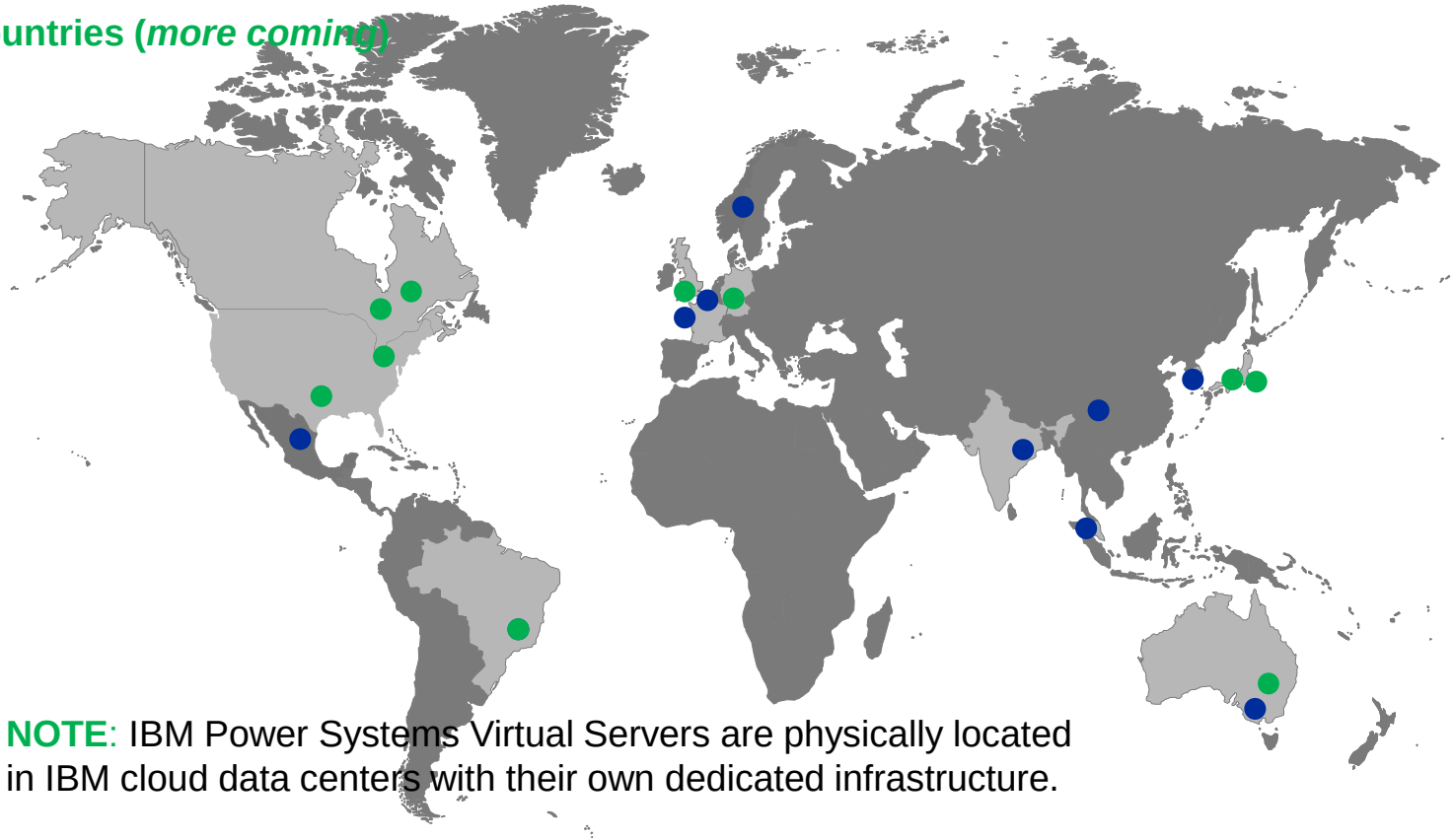
Worldwide deployment locations*

15 data centers in 7 countries (*more coming*)

Americas
- **Dallas**
- **Washington DC**
- **Toronto**
- **Montreal**
- Mexico City
- **Sao Paulo**

EMEA
- Amsterdam
- **Frankfurt**
- **London**
- Oslo
- Paris

APAC
- Chennai
- Hong Kong
- Melbourne
- Seoul
- Singapore
- **Sydney**
- **Osaka**
- **Tokyo**



NOTE: IBM Power Systems Virtual Servers are physically located in IBM cloud data centers with their own dedicated infrastructure.

***Sites in green denote both Power and X86 on-demand SAP deployment sites, blue is x86 only.**

Power Systems Virtual Server for SAP HANA

- IBM is the **only** company that
  - Has certified SAP HANA and NetWeaver instances on POWER
  - Delivers *SAP-certified* Hybrid Cloud offering for Power, on and off-premises
    - One-stop for all SAP business solutions. Create a migration path to SAP HANA!
    - Has granular and differentiated SAP HANA instances
    - 50+ SAP certified instances for Production workloads
    - Zero up-front cost to deploy SAP HANA on HE E980 Power Systems
  - *Leads the industry* for large instances in flexibility and competitive pricing
  - Can *scale and virtualize reliably* past 6TB
  - Enjoys a *price advantage* for Dev/Test with Paygo (Approximately 40% less expensive compared with AWS and Azure[1]) and is on par with one year commit

- Addresses both volatility and resiliency: Power is more stable, *enterprise class platform* with all flash NVM-E enabled network storage

- Provides superior *Storage resiliency*. You can trust that Power does not fail

- Linux subscription is coming in 2Q22

SAP certified cloud instances on POWER

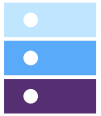
Enterprise Security, Performance and Resiliency

Fast Provisioning, Scalable; Comprehensive implementation services to architect and deploy SAP HANA based platforms

[1] Based on list $/TB pricing calculated as of 6/30/2020 for IBM Cloud at https://cloud.ibm.com/catalog/services/power-systems-virtual-server, AWS at https://www.awsprices.com/ and Azure at https://www.simform.com/compute-pricing-comparison-aws-azure-googlecloud/

[2] https://www.ibm.com/blogs/systems/why-ibm-power-systems-means-business-for-sap/

IBM for SAP: Your one-stop shop



Intel Bare Metal

IBM Cloud Bare Metal server, certified for SAP

12TB scale-up
SAP S/4HANA

12TB scale-up
SAP BW/4HANA

96TB scale-out
SAP BW/4HANA (16 nodes)

550,670 SAPS benchmark
world record for Intel on Cloud IaaS

IBM Cloud Bare Metal server, certified for SAP with Intel Optane DC Persistent Memory

18TB scale-up
SAP S/4HANA

18TB scale-up
SAP BW/4HANA

550,670 SAPS benchmark

Private Virtual Datacenter

IBM Cloud for VMware Solutions, certified for SAP

6TB scale-up
SAP S/4HANA

3TB scale-up
SAP BW/4HANA

32TB scale-out
SAP BW/4HANA (16 nodes)

495,603 SAPS benchmark

Virtual Servers

IBM Cloud Virtual Server Instance (Gen2), certified for SAP

5.6TB scale-up
SAP S/4HANA

5.6TB scale-up
SAP BW/4HANA

55,020 SAPS benchmark

IBM Power Virtual Server, certified for SAP NetWeaver and HANA

22.5TB scale-up
SAP S/4HANA

22.5TB scale-up
SAP BW/4HANA

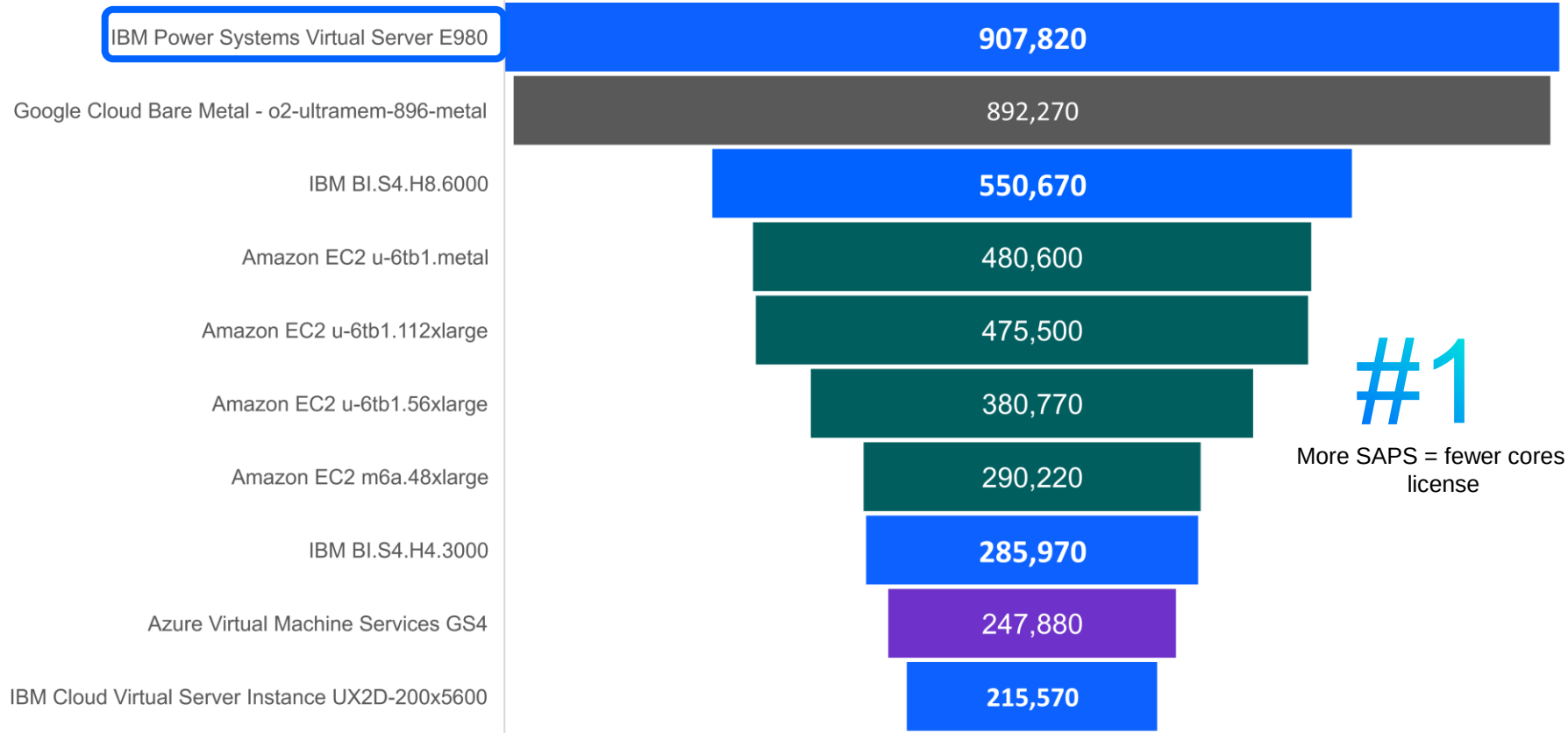
48TB scale-out
SAP BW/4HANA (8 nodes)

907,820 SAPS benchmark
world record across all Cloud IaaS

For further details, please read SAP Note 2393917 for VMware and SAP Note 2055470 for IBM POWER

Putting Smarter to Work

Big 4 IaaS Providers - SAPS Benchmark*



#1

More SAPS = fewer cores to license

https://www.sap.com/dmc/exp/2018-benchmark-directory/

*As of Feb 14, 2022

Epic on Power Virtual Server and IBM Cloud

Epic on IBM Cloud is an IaaS offering to host Epic workloads on IBM VMware x86 cloud and Power Virtual Server that has low latency access to IBM Cloud.

Solution intends to provide seamless experience for Epic clients that would like to start their cloud journey by moving some of their workloads to the cloud. Our solution is designed to provide best performance by:

- **Hosting Epic Chronicles DB and Reporting tier* (with Clarity on Oracle) on E980 and S922 dedicated LPARs running on AIX with** high-performance **IBM Flash Storage.**
- **Hosting Hyperspace and Web tiers on dedicated, single-tenant bare metal Intel Cascade Lake** processor running a VMware hypervisor
- Providing high speed interconnect (10Gbps) between PowerVS and x86 cloud

Now Accepting Nominations for the Pilot Program

NON- PROD

DR

Up to 22M GREFs with E980

(Estimated based on on-prem performance)

Scalability, High Performance for compute and data-intensive workloads

High Throughput (Up to 127K IOPS) and Low Latency: Meet or exceed Epic Hardware Configuration Guide IOPS read/writes throughput

Reliability, Availability and Security (data protection for protected health info)

Use Cases

Types of clients

AIX/ IBM i/ Linux

Current Customers

Use Case:

Wants to upgrade or expand their options to deploy on-premise and off premise

Client Need:

- Disaster Recovery as a service
- Dev test environments
- **Expand IT infrastructure** to the cloud
- Justify the capital spending to refresh and long-term capacity planning for growth

MSPs/CSPs

Managed Service Provider/ Cloud Service

Use Case:

Wants this to **offer the service** to their customers.

Client Need:

- Be able to service their customers that want a cloud option and it gives them the ability to provide different or new services
- Looking to get out of the game of buying and hosting their own data centers, it leads to better economic model.

ISVs

Independent Software Vendors

Use Case:

Wants to **host and create** a SaaS offering. Certify SW and DevOps

Client Needs:

- An **infrastructure to take to their SaaS to customers quickly** without needing to deploy infrastructure
- **Taking advantage of the GEO footprint that they get from the Cloud**
- Looking to **leverage IBM cloud to expand** into additional markets
- **Reduce development costs**

Customer Use Cases Summary

Business Continuity Planning

Reliable failover solutions

- Backup, HA, DR
- Reduce Capex
- Flexible DR capacity
- Reduce capacity planning complexity and capacity headroom

Data Center Strategy Optimization

Business expansion and worldwide growth

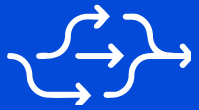
- Rehost: architecture aligned with on-prem certified stack.
- Grow quickly. Accelerate time to value. Geographic expansion.
- Maintain ISV certifications and support.
- Business spinoff
- Multisite implementation with Production, HA, DR and Dev/test environment

Modernize

Modernize process and evaluate feasibility of cloud

- Increase business agility
- Modernize - connected with 190+ IBM Cloud® Services
- Cloud integrated API that easily integrates to existing tooling
- Shift from buying max capacity to provision on-demand
- Start with Dev/Test environment

Operational Excellence and Cost Optimization



Improve operational cost

- Ease of technology upgrade. Supported software.
- Pay-as-you-go billing. Capex to Opex.
- Align specialized skilled resources with key business objectives
- Improve service and response time, off hours coverage
- Improve business agility and flexibility

Use Case: Business Continuity Planning

Client Example: BRF

Problem Statement:

Clients run mission critical workloads on Power Systems, so they need high performance and reliable infrastructure plus consistent enterprise stack as on-prem to conduct their business continuity. They seek low-latency connections between on-prem and remote Power infrastructure.

What that means to the client:

Create customer confidence to use HA, backup and disaster recovery infrastructure for on and off-premises environments.

Have reliable business continuity without doubling CAPEX

Examples

- A Power on-premises customer backing up or doing HA/DR to a PowerVS data center
- Reprioritizing or existing data center strategy

Why PowerVS?

- Seamlessly move and manage workloads across cloud and on-premises environments
- Broad geo footprint

Which clients might be interested?

- Clients with mission critical workloads that cannot fail or go down
- On-premises clients seeking hybrid cloud solutions
- Clients looking to offload partial data center responsibility to IBM

Use Case: Data Center Strategy Optimization

Client Example: Iptor

Problem Statement:

Clients are exiting data centers or stopping CAPEX need a certified Power infrastructure to continue deliver them performance, security, and reliability as well software license saving. Clients realign IT skills with their business mission.

What that means to the client:

Consistent architecture across enterprise stack (microprocessors, firmware, virtualization management and OS) as on-prem

Frictionless migration

No CAPEX or up-front payment

Cloud flexibility and agility

IBM Cloud compliance and security

Examples

- Reprioritizing or existing data center strategy
- Reduce IT assets for business spin off / acquisition
- WW expansion

Why PowerVS?

- SAP certification
- Oracle support
- Deep Power and Cloud skills in IBM
- Broad geo footprint

Which clients might be interested?

- Clients with mission critical workloads that cannot fail or go down
- Clients looking to offload data center responsibility to IBM
- Clients seek ease of business expansion

Use Case: Modernize

Client Example: FNZ

Problem Statement:

Clients need to do short term work without impacting production environment. Many also want a quick and low-cost way to validate performance of the latest Power technology, upgrade to newer software as they start their hybrid cloud journey.

What that means to the client:

Use pay-as-you-use billing as clients start projects without capital outlay; run multiple tests simultaneously; and spin up or down as needed.

PowerVS gives clients the ability to quickly and easily spin up Power virtual servers.

Examples

- Software upgrade (AIX 7.3, IBM i next)
- New application development / test
- ISV testing in the new Power platform
- Early container work

Why PowerVS?

- Easy to move to QA and Production
- Flexibility and agility
- Client-paced modernization

Which clients might be interested?

- Current on-premises clients looking to modernize
- Clients reaching software or hardware EoL / EoS
- Clients wanting to develop, upgrade and test new software, as well as hardware performance
- Those with an interest in deploying containers as well as virtual machines

Use Case: Operational Excellence and Cost Optimization

Client Example: Labeyrie

Problem Statement:

Clients need flexible ways to modernize while optimizing costs as well as facing the loss of specialized skilled resources (AIX, IBM i, etc).

What that means to the client:

Shift from buying max capacity to provisioning on-demand to keep up to date with the latest software, keeping up with current skills and streamlining licensing costs.

Examples

- Software upgrade (AIX 7.3, IBM i next)
- Hybrid cloud strategy

Why PowerVS?

- Same experience on and off-premises
- Flexibility and agility
- Client-paced modernization

Which clients might be interested?

- Current Power7 and Power8 clients
- Clients looking to reprioritize internal resources and skills
- Clients reaching software or hardware EoL / EoS
- Clients shifting from Capex to Opex

Client Wins

Power Systems Virtual Server External References

FNZ

Figaro (IBM i)
Read more

brf

SAP ECC (AIX) and SAP HANA (Linux)
Read more

Coca-Cola EUROPEAN PARTNERS

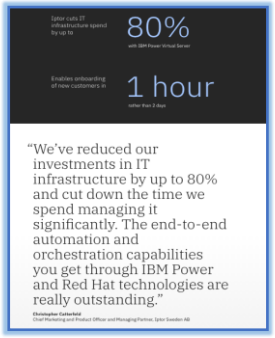
SAP ECC (AIX)
Read more

ID LOGISTICS

Logistic applications (IBM i)
Read more

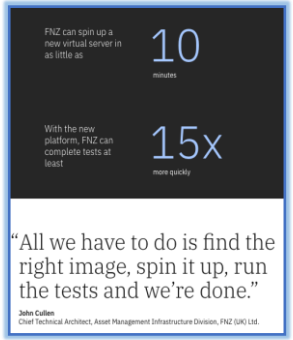
LABEYRIE FINE FOODS

Oracle JDE (AIX)
Read more



UNIVERSITY OF FUKUI

DB2 (AIX)
Read more



iptor

Homegrown applications (IBM i)
Read more

New External References

ECO GAS

SAP HANA Hybrid Cloud
Read more

Raiffeisen Bank International
Member of RBI Group

Banking software and Sybase (AIX)
Read more

GRUPO MODELO, S.A.B. DE C.V. - MEXICO -

AVON

CITY FURNITURE

What our clients are saying

IBM Power Systems Virtual Server has been recognized by TrustRadius as a leader in Infrastructure-as-a-Service (IaaS)

In IaaS, IBM Power Systems Virtual Server received awards for **"Best Feature Set"** and **"Best Relationship"** for **2022.**

- *The awards are based entirely on client feedback and are not influenced by analyst opinion.*

The offering was compared to other competing offerings, such as **Microsoft Azure** and **Amazon AWS**.

MARCH 15, 2022

IBM Power System Virtual Server best server!

Verified User
Consultant in Information Technology
Information Technology & Services Company, 10,001+ employees

MARCH 30, 2022

IBM Power System Virtual Server--most reliable and scalable

Verified User
Engineer in Information Technology
Electrical & Electronic Manufacturing Company, 10,001+ employees

MARCH 15, 2022

IBM Power System Virtual Server is more cost-effective and more efficient for me

Verified User
Administrator in Information Technology
Information Technology & Services Company, 10,001+ employees

MARCH 12, 2022

The Most Secure and Quickly Responding System Available

Verified User
Engineer in Information Technology
Information Technology & Services Company, 10,001+ employees

MARCH 28, 2022

IBM POWER SYSTEM VIRTUAL SERVER- BEST SYSTEM

Verified User
General Manager in Manufacturing
Security & Investigations Company, 1001-5000 employees

APRIL 05, 2022

IBM Power System Virtual Server: excellent performance and security.

Verified User
Engineer in Engineering
Information Technology & Services Company, 10,001+ employees

Brasil Foods (BRF)

Challenge:

The client needed to modernize without having to re-platform. The key was not to have any down-time, and re-platforming would mean downtime.

Solution:

Expand SAP ECC and SAP HANA from on-prem Production to DR in PowerVS

IBM unique value :

SAP certification, flexibility to grow as needed for DR

Company: BRF is a Brazilian company that produces and manufactures protein. They have been a long-time customer of IBM.

Market: Distribution

Solution components: E980 and S922 based virtual machines running SAP HANA on Linux SUSE and SAP ECC on AIX, Hortolandia data center for on-prem, DR to SAO01, Kyndryl Managed Services

Why IBM?

- Cost efficient with DR
- Upscaling
- Robustness of PowerVS solution
- SAP HANA certification
- Hybrid cloud solution

A Large North America Brewery

Challenge:

Migrate SAP workloads for Power on Prem to Power Systems Virtual Server before July 2021

Solution:

Production, HA, and DR solution to run SAP ECC and DB2 on AIX COS, Backup, Advanced Support

IBM unique value:

Certification for SAP on PowerVS

Company: A large brewery in North America marks a huge Q1 win for Power Systems Virtual Server. The client has one of the largest databases in the Americas and needed a strategy to migrate SAP workloads on Power using AIX and DB2

Market: Distribution

Solution components: Power VS S922 and E980, Migration of SAP Production and Non-Production workloads, HA implementation using PowerHA, Implementation of DRP, Kyndryl to migrate and manage IaaS, IBM Business Partner does SW level migration

Why IBM?

- PowerVS certification with SAP
- Right sizing and pricing of what was needed
- Trusted advisor relationship with client CIO
- HA/DR capabilities and failover between data centers

Iptor

Challenge:

The client has been using IBM i for a long time and wanted a solution that could be cloud-native as well as IBM i and increase speed to market.

Solution:

IBM i ISV expands globally. Successful PoC with PowerVS and OpenShift converted to a commercial account

IBM unique value :

Ability to expand to other geos e.g. EU, US, SYD

Company: Iptor Supply Chain Systems, is a supply chain management company that provides professional services and enterprise resource management software for distributors and wholesalers.

Market: EMEA

Solution components: Home grown applications on IBM i on S922 virtual machines, Kyndryl data center in Copenhagen, Cloud data centers and HA in Frankfurt, expansion to Dallas and Sydney

Why IBM?

- IBM relationship
- IBM i requirements same as on premises
- On premises + cloud data center
- 6 months currently to onboard in Copenhagen; with PowerVS it takes 1 week

FNZ

Challenge:

FNZ needed open systems and agile platforms, plus the ability to shift from on premise to a hybrid cloud environment, shifting from Capex to Opex, and doing all this while maintaining regulatory compliance

Solution:

Dev/Test solution and automation of Figaro on IBM i

IBM unique value:

Cost savings, flexibility

Company: FNZ provides a core set of integrated technology, transaction and asset services to support end-to-end wealth management

Market: Financial

Solution components: IBM i, Figaro, CSI PowerCloud platform, dev/test environment, RedHat, Cloud Paks

Why IBM?

- **25% reduction in cost** of running production workloads
- Automated Test as a Service environment is at least **15 times faster** compared to carrying out the same task manually
- Automation capabilities

Labeyrie Fine Foods

Challenge:

Outsourcing unmanaged HA infrastructure looking to free resources from low value tasks to refocus on new projects.

Solution:

Migrate on-prem Oracle JDE solution to PowerVS. Backup also included.

IBM unique value :

Intel and PowerVS in Frankfurt, resource cost optimization

Company: Labeyrie Fine Foods – LFF - is a holding company of the French food industry with the following brands: Labeyrie, Blini, Delpierre, Labeyrie.

Market: Distribution

Solution components: IBM Power Systems Virtual Server, JD Edwards (JDE), AIX

Why IBM?

- Makes an Enterprise class Power architecture available in a flexible way as clients modernize
- Makes migration of existing on-premises workloads easy by using an identical technology stack designed for Power Systems
- Quick migrations enabled with a new infrastructure management model

Value Proposition

Building the PowerVS Business Case on Balanced Scorecard of Quantitative and Qualitative Benefits

Align IT Investments

Free up / re-focus on-premises hardware capacity

Cloud for warm or cold failover environments, sized to meet cost and workload activation needs

Redundant data center / hot site, active:active or scale up options

Data storage backup and replication for secure, reliable accessibility and disaster recovery

Rebuild and/or replace aging IT infrastructure with cloud

Shifting to Opex from Capex

Cost Savings

Workload bursting to handle seasonal loads

Using cloud to manage and adhere to new and emerging regulatory and security policies

Respond quickly to changing market dynamics with greater efficiency

Reduce costs and free up resources for other purposes

Drive down TCO

User Satisfaction

Entry point to hybrid cloud

Rehosting applications on cloud at infrastructure EOL

Cost reductions in cloud - eliminate peak headroom, future growth capacity, etc.

Human resource investment can focus on business outcomes, not on IT operations

Optimizing IT investments on hypercritical business objectives

Availability of expert resources in competitive hiring markets

Active monitoring and speed of response to service issues

Operational Efficiency

Expansion of existing workloads

Address performance needs for specific applications

Development and testing environments

Deploying new business solutions when needed without IT capital outlay

Move key applications to cloud to perform modernization

Free up resources to focus on the business; backlog of application updates, user needs, etc.

IBM Systems Technical Services Power Virtual Server Offerings

IBM Power
Quick Reference Guide

Power Virtual Server AIX, IBM i and SAP HANA Migration

Overview

This service is designed to assist you migrate AIX, IBM i and SAP HANA workloads to Power Virtual Server (PowerVS). It will assist you with planning and performing migration of an on-premises workload to PowerVS, with advice on follow on options for backup and disaster recovery for your new PowerVS environment.

Power to Cloud Rewards

IBM Systems Lab Services

Target Audience

- Clients running AIX, IBM i and SAP HANA considering public cloud

Why Use This Service?

- Are you considering Power in the cloud or a pay-as-you-go consumption model for Power?
- Are looking for the flexibility of a hybrid cloud model for AIX, IBM i or SAP HANA?
- Are you struggling to find AIX or IBM i skills for on-premise workload management?

- Benefits
- This service helps you migrate to PowerVS, leveraging best practices for networking, security, backup and disaster recovery
- It enables you to move with confidence to a public cloud OpEx consumption model as part of your infrastructure strategy

Service Provided

- Perform required migration planning including selecting a use case with target LPAR and VPN networking
- Perform migration of **one** example LPAR (AIX, IBM i, SAP HANA) to PowerVS including configuration of basic VPN networking
  - Note that additional LPARs and complex networking can be migrated/configured with additional billable services
- Advise on follow on options for cloud security, backup and resiliency tools
  - Note that neither software tools nor performing configuration for security, backups or HA/DR are included in this service but are available with additional billable services
- Advise on deployment of additional workloads in PowerVS

Deliverables

- Migration of selected workload on an example LPAR to PowerVS with configuration of VPN networking
- Recommendations for additional configuration of complex networking, security, backup and disaster recovery options, which are not included in this migration service
- Skills enablement and guidance on best practices for public cloud management, troubleshooting and security

Contacts

- Contact us at ibmsls@ibm.com or your local Systems Lab Services team

IBM

IBM Power
Quick Reference Guide

Red Hat OpenShift in Power Virtual Server

Overview

This service is designed to help you deploy cloud-native container-based workloads as a virtual server on Power in the IBM Cloud. It will help you accelerate your adoption and management of containers, with focus on getting started with a sample cloud native application.

Power to Cloud Rewards

IBM Systems
Lab Services

Target Audience

- Clients that want to get started with container workloads in the IBM Cloud

Why Use This Service?

- Are you investigating cloud-native apps or containers without on-premise investment?
- Do you want to provide microservices to application modernization teams?

- Benefits
- You will be able to get started faster with Red Hat OpenShift and contained-based workloads in the cloud
- You will learn how to deploy a sample cloud-native application with Red Hat OpenShift
- You will be able to offer microservices options to your application modernization team

Service Provided

- Perform a technical readiness assessment for deploying workloads in the IBM Cloud including preparation for networking, security, backup and resiliency
- Implement a basic OpenShift cluster on PowerVS in IBM Cloud
- Implement Kubernetes management of pods and services
- Advise on Terraform automation
- Implement container image management
- Use intuitive UI for deployment, management, monitoring of containers
- Deploy sample cloud-native application
- Customization of the service available for additional use cases, such as IBM Cloud Paks, complex OpenShift clusters and network deployments

Deliverables

- Design document for IBM Cloud virtual server
- Deployment of a basic OpenShift cluster deployed in PowerVS
- Sample application deployed on OpenShift
- Recommendations for optimal Kubernetes operations and monitoring procedures including for networking, backup and disaster recovery
- Skills enablement and guidance on best practices for public cloud management, troubleshooting and security

Contacts

- Contact us at ibmsls@ibm.com or your local Lab Services team

IBM

IBM Power
Quick Reference Guide

Cloud Design Workshop

Overview

The Cloud Design Workshop for Power can help you design a plan for private, public or hybrid multi-cloud implementation. It is designed to develop a robust blueprint for implementing Power cloud solution, either on-premises or in a public cloud.

Power to Cloud Rewards

IBM Systems
Lab Services

Target Audience

- Clients that are running Power and considering a private, public or hybrid cloud

Why Use This Service?

- Are you running AIX, IBM i or Linux on Power and want to implement a private cloud or move to a public cloud?
- Are you interested in cloud-native solutions and want to deploy self-service provisioning for DevOps?
- Are you considering using PowerVC, Ansible or VMWare vRealize for operations process automation?
- Benefits
- The cloud design service is customized to a specific client's environment and goals for multiple cloud scenarios
- The service identifies key stakeholders across compute, storage and networking teams and best practices for their cooperating for cloud provisioning

Service Provided

- Advise on available Power private cloud solutions, including PowerVC, OpenShift and Ansible
- Advise on available Power public cloud solutions, including IBM Cloud with Power Virtual Servers for AIX and IBM i
- Advise on available Power hybrid cloud solutions, including with OpenShift and IBM Cloud Pak for Multi-Cloud Management
- Analyze current virtualization and provisioning processes
- Analyze current server, storage and network environment
- Analyze current software stacks and virtual machine images
- Develop use cases for cloud implementation
- Plan possible cloud workloads and user expectations
- Plan hardware and software environment for selected cloud implementation

Deliverables

- Workshop creates a blueprint design document for later deployment of a selected cloud environment
- Recommendations on how to deploy the selected Cloud solution, typically - if a private cloud - using using PowerVC for provisioning of servers, storage and networking resources
- Skills enablement and guidance on best practices for successful cloud deployments

Contacts

- Contact us at ibmsls@ibm.com or your local Lab Services team

IBM

IBM Cloud Expert Labs
&
IBM Cloud Solution Engineering

IBM Cloud Expert Labs offerings focus on delivering IBM Cloud adoption

- ✓ Offerings focused on the end-to-end lifecycle of your client's IBM Cloud adoption journey
- ✓ We design, deploy, configure and migrate workloads for **ALL IBM Cloud** technologies
- ✓ Move workloads with minimum service interruptions to rapidly realize client value and MRR
- ✓ We provide the skills, experience, best practices and tools to give client's confidence in IBM Cloud

Drive IBM Cloud Adoption with IBM Cloud Expert Labs

Envision

Implement

Engagement Activities	Advise + Plan	Build + Migrate + Operate
IBM Cloud Technologies	Cloud Infrastructure (IaaS and PaaS) – VMware, IBM Power®, VPC, Bare Metal, Classic, firewalls, load balancers, networking, Veeam, Zerto, Skytap ……. Cloud Native – IBM Cloud Satellite™, ROKS/IKS , DevSecOps, SRE,	
Client Outcomes	**Velocity** Strategy to operational	**Value** Tangible ROI / **Confidence** In IBM Cloud

Cloud Expert Labs – IBM Power

Deploy workloads to flexible, secure and scalable compute for Power Systems in IBM Cloud

Advise

Activities

Design, build, migrate and operate requirements validation

Current environment discovery to inform IBM Cloud solution design

IBM Cloud solution design and definition

Outcomes

Actionable solution design document

Right sizing of environment (Bill of Materials) and services

Enablement on IBM Cloud capabilities

Workload migration plan

Roadmap to production operations and governance in IBM Cloud

Build

Activities

Provision and configure the solution design in IBM Cloud for development, test, production and/or disaster recovery environments

Networking and security configuration

Service integration configuration

IBM Cloud hands-on enablement

Outcomes

Bill of Material (BoM) provisioned and configured in IBM cloud and ready to accept workloads

Client enabled and confidence in IBM Cloud technologies

Migrate

Activities

Migrate workloads to IBM Cloud

Initial handover to client and/or Managed Services provider

Workloads tested, validated and operational in IBM Cloud

Outcomes

Workloads operational in IBM Cloud

Back up and/or DR in IBM Cloud

Client enabled in workloads running in IBM Cloud

Operate

Activities

Implement operation and governance models tailored for IBM Cloud

Implement DevOps, DevSecOps

Harden and improve on-cloud workload operation and performance

Outcomes

On-cloud workloads enhanced and hardened for cloud operation

IBM Cloud confidence and adoption expansion

Tight operational process interlock in IBM Cloud

Get started with IBM Cloud Expert Labs

Engage the extensive expertise of **IBM Cloud Expert Labs** to help you to help your clients adopt and consume IBM Cloud. Visit Seismic for more information, view our easy transaction options, or reach out to your IBM Cloud Expert Labs Principal to get started.

What IBM Cloud Solution Engineering Delivers

Constant engagement in all phases helps drive context for IBM and client throughout their engagement on IBM Cloud

This team will provide many services depending on the client requirements, examples include:

- Developing solution architectures and design
- Validating and vetting the solution architecture
- Validating our solution by working with Offering Management and Development
- Run internal testing to ensure planned SLAs are met
- Assistance bringing up workload as required including on-site with client
- Problem/issue debugging
- Accelerate problem resolution with client and IBM

White glove the Client from beginning to end

Strengthen the relationship between IBM & the client

Committed Use Savings Plans

Power Systems Virtual Server Committed Use Savings Plan

NEW: Up to 45% discount on Power Virtual Server deals

As of July 16, 2021, all workloads for PowerVS are now eligible for:

- 1-year committed use savings plan up to 30% discount
- 3-year committed use savings plan up to 45% discount
    - Applicable for all deals 3 years or more

Promotions

Frictionless Start on Power Systems Virtual Server

Method one: Hybrid out-of-the-box with Power10

- Purchase Power10 and receive PowerVS Entitlement. Type "**PowerVS1500**" to receive a USD 1,500 PowerVS credit
- Fully digital experience
- Lab Services included
- Learn more about PowerVS Hybrid - https://www.ibm.com/products/power-virtual-server/hybrid
- Provision PowerVS - https://cloud.ibm.com/catalog/services/power-systems-virtual-server

Method two: PowerVS Attach via IBM sellers

- Attach $5K of IBM Cloud PoC funding for clients to experience PowerVS. Applicable for new and existing Power Systems customers
- Contact IBM sellers or have your business partners contact their IBM sellers to request PowerVS Attach promotion here.

Participating data centers are MON01, LON04, TOK04, and SYD04, pending capacity availability.

Resources

Publicly Available References

- ***PowerVS product page*** **LINK**
- ***PowerVS Documentation*** **LINK**
- ***PowerVS Launch Page* – LINK**
- ***Youtube Videos (Start PowerVS at £2 / day) – LINK***
- ***IBM Power Systems Community* – LINK**

Responsibility Matrix

Power Virtual Server

Serves as the compute space for workloads

Power Virtual Server – RACI

On-Premises	Power Systems Virtual Server	Platform as a Service	Software as a Service
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

IBM Manages **Client Manages**


LOGICALIS
Architects of Change


IBM