IBM Power Virtual Server

Migrate and modernize applications with hybrid cloud flexibility

Highlights

Expand to hybrid cloud and accelerate digital transformation

Modernize with industry-leading performance, security and resiliency

Leverage cost-effective, flexible compute capacity

Drive innovation with Oracle, SAP and IBM i workloads

In today's constantly evolving digital landscape, businesses require agile and reliable infrastructure to meet their ever-changing IT needs. IBM® Power® Virtual Server is designed to help companies do just that by offering a flexible, scalable and highly secure platform for running mission-critical workloads.

In addition, IBM Power Virtual Server helps you expand to hybrid cloud. You can also seamlessly move and manage workloads across both on and off-premises environments. With a hybrid cloud solution, organizations get the benefits of both on-premises infrastructure and cloud services. Those benefits can deliver cost-savings, greater flexibility and improved security.

Expand to hybrid cloud and accelerate digital transformation

Since the 2019 launch of IBM Power Virtual Server, leading enterprises have used it to successfully expand their on-premises servers to modern day hybrid-cloud infrastructures. IBM Power Virtual Server is designed to be an extension of Power systems on-premises environments and provides a frictionless path to hybrid cloud. It provides access and connectivity to Power systems in a hosted virtualized environment while maintaining the dependability and reputation Power customers have grown to appreciate on premises.

This offering is designed for businesses that want to quickly adopt, upgrade or expand their on-premises infrastructures economically in order to differentiate their business competitively. With data centers around the world and by using pay-as-you-go plans, IBM Power Virtual Server helps clients modernize and protect their on-premises development, test and production environments.

IBM handles hardware management and maintenance for IBM Power Virtual Server clients. Therefore, clients are able to spend extra time focused on scaling and modernizing their workload capabilities with readily available access to services offered by IBM Cloud® such as Red Hat® OpenShift®. You can leave server, storage and network management to IBM. We deliver the same robust level of security and virtualization isolation as on-premises Power systems deployments by using the advanced security of the IBM PowerVM® hypervisor.

Modernize with industry-leading performance, security and resiliency without re-platforming

IBM Power Virtual Server provides access to a stack of enterprise IBM Cloud services and enables application modernization through seamless access to cloud native and platform services. IBM Power is known for its scalability and performance for demanding workloads. The offering also delivers superior virtualization and management features for flexibility, security with better isolation and an integrated stack, and leading availability.

From top to bottom, IBM Power servers are designed for better security. Advanced security features are featured in the processor, hypervisor, operating system (OS), communications, storage, applications and even hardware (through built-in cryptography). IBM Power servers have features designed specifically to help users comply with security-related regulatory requirements, including identity and access management (IAM), hardware and software encryption, communication security capabilities, and extensive logging and reporting of security events.

IBM Power Virtual Server is a continuation of our commitment to deliver the security that today's enterprises need in an always-demanding online environment. We combined the security and isolation of an on-premises system with a virtualized environment's reliability and innovation.

22 global data centers, with even more locations on the way

IBM Power Virtual Server is powered by Power S Class and E Class enterprise systems that run IBM PowerVM server virtualization which gives users the reliability and resilience that they require. The offering helps enterprises remain operational even during storms and disasters thanks to 22 global data centers spread across 12 countries, with even more locations on the way. By incorporating both reliability and resilience into PowerVM technology, high availability (HA) and disaster recovery (DR) can be achieved with these virtualized machines.

Leverage cost-effective, flexible compute capacity

Today's enterprises must stay flexible to competitively meet intensive workload demands. IBM Power Virtual Server offers flexible consumption so you can add capacity to your Power infrastructure on demand and within minutes. The offering also allows you to grow your business at your own pace so you can extend workloads and manage costs with pay-as-you-use billing.

Pay-as-you-go options lets you economically consume capacity across the worldwide data centers. With the pay-as-you-go model, there are no commitments so you can use IBM Power Virtual Server data center capacity and resources as needed, provisioning virtual machines in the event of seasonal or timely business changes to accommodate high and low traffic on demand. You can add and remove capacity as needed and only pay for what you use, when you use it. This versatility is especially helpful when creating developer test environments for workloads. Deprovisioning these virtual machines after testing helps lower costs.

Drive innovation with Oracle, SAP and IBM i workloads
Power Virtual Server is an ideal virtual machine value for use with Oracle, SAP and IBM i in the cloud. For over 35 years, clients have relied on IBM Power to deploy Oracle database and application workloads. Many of the world's largest banks, pharmaceutical retailers, power providers, industrial companies and a number of US Federal agencies run Oracle software on Power.

The IBM Power Virtual Server environment consists of SAN Storage, Power servers, PowerVM Hypervisor, and AIX Operating Systems that are certified for Oracle DB (12c, 18c, 19c) including Real Application Clusters (RAC). This same stack is used by tens of thousands of customers in their current IT environment. The IBM Power Virtual Server environment consists of similarly certified versions of the AIX Operating System for Oracle Fusion Middleware and Oracle applications such as JD Edwards, PeopleSoft, E-Business Suite, Siebel, Oracle Retail, industry applications and others, providing the full complement of Oracle software on Power Virtual Server as available in on-premises AIX environments.

IBM Power Virtual Server is an SAP-certified platform for SAP HANA and SAP NetWeaver applications. Power Virtual Server helps accelerate SAP ERP modernization so businesses can improve their competitiveness and reduce costs with the most granular certified SAP instances.

When you use IBM Power Virtual Server, you'll have access to over 50 SAP-certified production instances. Plus, you can also access customizable instances that can be specifically sized for your environment—encouraging an agile, flexible approach to today's toughest problems.

You can also run SAP HANA workloads on Red Hat Enterprise Linux (RHEL) that runs on IBM Power Virtual Server. Together, IBM, Red Hat and SAP offer a comprehensive hardware and software foundation for SAP HANA workloads. Based on Red Hat Enterprise Linux for SAP Solutions and IBM Power, this integrated solution can deliver the flexibility, resilience and performance SAP HANA requires.

IBM i provides continuous availability, enhanced security, simplified management and integration with new technologies. IBM i only runs on Power and can be difficult to replatform to x86 architecture. IBM i on Power Virtual Server helps clients lower TCO and increase flexibility with OpEx consumption. You're also able to deploy your IT stack as a service with the IBM i System Subscription to help lower costs.

Conclusion

Businesses looking to accelerate digital transformation are deploying on hybrid cloud and moving data, applications and business processes to the cloud. The adoption of hybrid cloud is driven by the benefits these businesses enjoy which can include better security, cost-saving innovation, accelerated development, broader accessibility and business continuity.

Your organization now has a clear path to hybrid cloud with IBM Power Virtual Server. Leading enterprises across the globe are using IBM Power Virtual Server to successfully expand their on-premises servers to modern day hybrid cloud infrastructures and accomplish business goals such as business continuity planning, modernization, data center efficiency, operational excellence and cost optimization.

Business continuity planning helps keep your business running with reliable failover solutions including backup, high availability and disaster recovery. Application modernization helps you improve competitiveness, reduce costs, and improve your ability to respond to changing market demands and customer needs. Data center optimization can accelerate time to value, business expansion and worldwide growth by optimizing your data center. Operational excellence and cost optimization help reduce operational costs, improve service and response times, and strengthen off-hours coverage.

Why IBM?

IBM has pioneered technologies and provided services that help companies manage their valuable business data. IBM Power helps customers respond faster to business demands, protect data from core to cloud, and streamline insights and automation while maximizing reliability in a sustainable way.

For more information

To learn more about IBM Power Virtual Server, contact your IBM representative or IBM Business Partner, or visit ibm.com/products/power-virtual-server.

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