The IBM Power11 family of servers

IBM **Power11**

Tri-Delta Resources

Zero planned downtime for system maintenance[1]

IBM® Power® servers are built to help clients respond faster to business demands, protect data from core to cloud to the edge and streamline insights and automation while sustainably maximizing reliability. Power servers can modernize applications and infrastructure with a hybrid cloud experience that provides the agility companies need.

The new generation of IBM Power servers supports enhanced hybrid cloud capabilities for differentiated performance, security, serviceability and operating costs. That's why enterprises choose to run their core operations and analytical applications on Power servers. IBM Power11 servers help put innovation and performance to work where needed the most and they're designed to improve performance and security with the same reliability you have come to expect. Power servers are engineered for agility and empower you to:

Focus on your business, not your IT
Achieve new levels of system uptime and resource optimization through intelligent automation while lowering complexity and costs.

Optimize data and applications
Scale workloads where you want across hybrid cloud environments without compromise, reducing risks and supporting compliance.

Boost productivity with AI interoperability
Transform business workflows with AI-infused capabilities for greater speed and efficiency where your mission-critical data is—on prem or in the cloud on IBM Power Virtual Server.

Power is/ taking it to the next level.
Meet the Power11 family.

Since applications and business processes have differing demands, one size doesn't fit all. IBM Power offers a full range of Power servers, each of which delivers leading reliability, security, performance and scalability in its class. A totally integrated approach in design, development and testing helps ensure that each Power server meets the resiliency required for today's enterprise IT infrastructure.

	Power11 servers	Chassis	Processor(s)	Number of cores	Memory	Supported operating systems
	IBM Power E1180	1 - 4 units of 5U system nodes and 2U system control unit	Up to 4 per node	Up to 256	16 TB per node (up to 64 TB)	IBM® AIX®, IBM i or Linux®
	IBM Power E1150	4U rack-mounted	Up to 4	Up to 120	16 TB	AIX or Linux
	IBM Power S1124	4U rack-mounted	Up to 2	Up to 60	8 TB	AIX, IBM i or Linux
	IBM Power S1122	2U rack-mounted	Up to 2	Up to 60	4 TB	AIX, IBM i or Linux

Power is/ streamlining with an automated, virtualized and secured platform

IBM Concert
IBM Concert®, a gen AI-driven technology automation platform, streamlines application management and produces insights you can act on. Concert eliminates the uncertainties created by siloed systems and presents critical intelligence with a unified view.

- Complete visibility: Monitor apps across cloud-native, hybrid and multicloud environments.
- Proactive management: Detect and fix issues with AI-driven insights before they impact users.
- Operational resilience: Scale and automate intelligently with leading performance and reliability.

Hardware Management Console (HMC)
The HMC is an appliance used to configure and manage one or more Power servers. This console facilitates Power hardware management, Power hypervisor and virtualization management, service and update management and monitoring. It also functions as an integration point for other solutions.

IBM PowerVM
The IBM PowerVM® software, built into Power11 servers, is designed to enable you to build for the cloud faster by using virtual machines (VMs) and storage. It gives you server virtualization capabilities without limits. Businesses are turning to PowerVM server virtualization to consolidate multiple workloads onto fewer systems, increasing server utilization and reducing cost. PowerVM provides a secured and scalable server virtualization environment, for AIX, IBM i and Linux applications, built upon the reliability, availability and serviceability (RAS) features and the high-performance capabilities of IBM Power.

IBM PowerHA SystemMirror
The IBM PowerHA® SystemMirror® technology helps you address storage and high-availability (HA) requirements with a single integrated configuration through a simplified user interface.

IBM PowerVC
The IBM PowerVC software is based on virtual circuit (VC) technology and built on OpenStack. It provides simplified virtualization management and cloud deployments for IBM AIX, IBM i and Linux VMs running on the IBM Power platform. PowerVC is designed to help you build private cloud capabilities on Power servers and improve administrator productivity. It can further integrate with cloud environments through higher-level cloud orchestrators.

IBM PowerSC

IBM PowerSC is a security and compliance solution optimized for virtualized environments on IBM Power servers running AIX, IBM i or Linux. PowerSC sits at the top of the IBM Power server stack, integrating security features built at different layers. You can now centrally manage your security and compliance posture for all IBM AIX, IBM i and Linux operating systems and VMs on Power server endpoints. And this gives you better support for compliance audits, including the General Data Protection Regulation (GDPR).

IBM Power Cyber Vault

IBM Power Cyber Vault, in conjunction with IBM Storage and IBM Technology Expert Labs, is a solution helping organizations protect against ransomware by creating prescriptive, immutable, air-gapped copies of data. Power Cyber Vault also offers guaranteed threat detection within one minute[2] by leveraging AI-enhanced anomaly detection capabilities. When an attack occurs, it automatically responds by spinning up a clean room environment to validate data copies and enable fast recovery. This solution helps businesses quickly recover with minimal data loss and downtime, helping them address their business continuity and compliance requirements.

Power is/ modernizing with a trusted hybrid cloud

IBM Power Virtual Server

IT experts face growing pressure to modernize without compromising performance, security or availability. They worry about business continuity, the impact of AI on applications, rising infrastructure costs and data sovereignty requirements. IBM Power Virtual Server addresses these needs with a consumption-based model, on-prem and public cloud options and a consistent hybrid experience. With a strong ecosystem and the availability of Power11 servers, you can modernize at their own pace with enterprise-grade confidence.

Built on the trusted IBM Power platform, IBM Power Virtual Server provides several benefits.

- Consistent infrastructure: Simplified onboarding, business continuity features, robust security, private cloud capabilities and reduced total cost of ownership (TCO)
- Operational excellence: Extended reliability, availability and scalability of Power on hybrid cloud
- Robust ecosystem: Integrated with IBM Cloud®, Red Hat® OpenShift® Container Platform and IBM watsonx®, along with support for RISE with SAP and solutions from independent software vendors (ISVs) and members of the IBM Business Partner® program

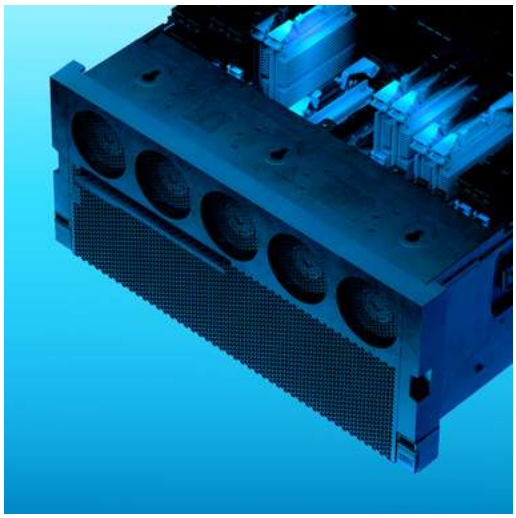
Enterprises already using Red Hat Ansible technology for other IT infrastructures—such as x86 or IBM Z® servers—can seamlessly integrate it with Power servers as well.

Red Hat OpenShift Container Platform
Red Hat OpenShift Container Platform is an enterprise-ready Kubernetes container platform with full-stack automated operations built to manage hybrid cloud deployments. The Red Hat OpenShift platform is optimized to improve developer productivity and help promote innovation. It is fully supported on all IBM Power servers—IBM Power8® processors and later versions. Designed to offer flexibility for a variety of cloud consumption models, the Red Hat OpenShift platform on Power technology can help you modernize your core enterprise applications for the next wave of digital transformation.

Red Hat Ansible Automation Platform
Red Hat® Ansible® Automation Platform is enabled for IBM Power servers running AIX and IBM i across private and public cloud infrastructures. Red Hat Ansible-certified content for IBM Power helps you include workloads on the Power platform as part of your wider enterprise automation strategy through the Red Hat Ansible Automation Platform ecosystem. Enterprises already using Red Hat Ansible technology for other IT infrastructures—such as x86 or IBM Z® servers—can seamlessly integrate with Power servers as well. The Ansible content helps enable DevOps automation through unified workflow orchestration with configuration management, provisioning and application deployment in a single platform, which delivers an easier user experience.

IBM Instana
The IBM Instana® solution provides real-time observability for applications running on Power processor-based servers, helping teams quickly detect and resolve performance issues. It offers deep visibility into workloads, infrastructure and dependencies, enabling proactive monitoring and faster root cause analysis. This improved visibility enhances operational efficiency and supports high availability in hybrid cloud environments.

IBM Turbonomic
The IBM Turbonomic® platform can be integrated with Power processor-based servers to optimize application performance and resource utilization. By analyzing real-time workload demand and supply, Turbonomic helps ensure that workloads running on PowerVMs are continuously resourced for performance while maximizing efficiency. This resource optimization helps reduce operational costs, improve infrastructure agility and maintain service-level objectives across hybrid cloud environments.



Achieve

↑99.9999%

maximized uptime[3]

Power is/ accelerating mission-critical workloads

IBM Power for SAP HANA and RISE with SAP
IBM Power servers are designed for data-intensive and mission-critical workloads such as SAP HANA, enabling clients to simplify and accelerate their SAP HANA and SAP S/4HANA deployments—whether on prem, in the cloud with IBM Power Virtual Server or through RISE with SAP.

- Provision faster: IBM Power servers can enable rapid access to SAP HANA through simplified capacity allocation and built-in, firmware-based virtualization with minimal overhead, making it easy to scale capacity and consolidate production, development and test environments.
- Scale affordably: With granular resource allocation down to 0.01 cores and 1 GB—scaling up to 40 TB—Power servers let you grow incrementally, paying only for what you need.
- Maximize uptime: A leader in reliability for over 15 years, IBM Power delivers 99.9999% uptime[3] and includes intelligent memory protection that proactively detects and resolves faults before they impact performance.
- Accelerate SAP Transformation: Migrate SAP S/4HANA workloads from IBM Power servers on premises to the cloud within 90 days[4] through RISE with SAP on IBM Power Virtual Server. And streamline your move with the IBM Transformation Suite for SAP Applications.

Learn more about SAP HANA on IBM Power →

IBM Power for Oracle Database
Embrace modernization for your Oracle workloads while managing control and compliance. With over 35 years of industry presence, Power11 continues to provide servers that drive higher utilization and consolidation with reliability, end-to-end encryption and flexible consumption options. Oracle certifies its products on IBM Power, providing users with comprehensive support and flexible deployment options, whether on prem or through IBM Power Virtual Server. IBM Power is your partner in navigating the complexities of data management with confidence.

Learn more about IBM Power for Oracle Database →

AI
IBM Power has a robust portfolio of capabilities optimized for AI and products to accelerate its impact in core workflows to drive business transformation. Power reduces security risks and improves latency and performance of models by bringing AI to where data lives and is generated. Power11 has on-chip acceleration, high parallelism and a large memory, providing a sustainable and secured platform to embed AI into transactions and workflows.

Additionally, IBM intends to incorporate the IBM Spyre™ Accelerator into Power11 offerings to provide additional AI compute capabilities. IBM Power11 processors and the IBM Spyre Accelerator are designed to enable the next-generation infrastructure to scale demanding AI workloads for businesses. The IBM Spyre Accelerator is a purpose-built enterprise-grade accelerator offering scalable capabilities for complex AI models and gen AI use cases. The new accelerator features 32 individual accelerator cores onboard, and each Spyre Accelerator is mounted on a PCIe card.

Learn about AI on Power →

Power is/ having flexibility with the operating systems you want

IBM AIX
Thousands of IBM AIX operating system users around the globe are running their core business applications on the AIX platform and using it to drive business growth and innovation. Built on a robust UNIX foundation for IBM Power, AIX offers a secured, scalable platform that facilitates seamless modernization. Integrate AI-driven insights and automate operations with Red Hat Ansible Automation Platform and implement hybrid cloud strategies through IBM Power Virtual Server. AIX enables containerized Linux microservices to run alongside traditional workloads, bridging the gap between legacy systems and cloud-native environments. AIX supports your modernization journey, driving smarter decisions and bolstering business resilience in an ever-evolving digital landscape.

IBM i
IBM i is a fully integrated operating system, which means the database, middleware, security, runtime and hypervisor are all integrated into the stack and licensed and supported as one. This integration helps organizations lower TCO, simplify systems management and do more with fewer resources. IBM i 7.6 contains enhancements to many base operating system components and to the licensed program products in the IBM i portfolio. Some of the new updates include security enhancements, application development tooling, database capabilities and system administration features. IBM watsonx Code Assistant® for i is a purpose-built solution that accelerates the IBM i application modernization process by helping developers to better understand existing code.

Enterprise Linux
The Enterprise Linux operating system on IBM Power is a solid foundation for your open-source hybrid cloud infrastructure that helps you modernize applications efficiently. It is built to realize all the benefits from your open hybrid cloud infrastructure and amplify the impact of open-source reliability, security and scalability—with industry-leading cloud-native deployment options.

Power is/ having the experts there for you, from start to finish

IBM Technology Expert Labs
IBM Technology Expert Labs offers infrastructure services to help you build hybrid cloud and enterprise IT. From servers and mainframes to storage systems and software, IBM Technology Expert Labs helps you deploy the building blocks of a next-generation IT infrastructure that empowers your business.

IBM Technology Lifecycle Services
Effectively managing your systems should be straightforward and efficient. With Power Expert Care, you get immediate access to a bundle of the most valuable services trusted by the IBM Power Community.

With the preselected bundle of services, Power Expert Care can help reduce the complexities of a lengthy procurement process. Clients are provided with leading service excellence backed by a suite of AI-powered tools to enhance response time, support case resolution and improve overall client satisfaction.

Let us help you create business agility with a flexible and secured hybrid cloud infrastructure. Contact a Power sales representative or IBM Business Partner, or visit IBM Garage™ to start the conversation today.

1. Based upon IBM internal testing of system upgrade scenarios; many (i.e. VIOS, hot plug adapters, I/O adapter FW, and concurrent system firmware updates) can be done in-place while some (i.e. non-concurrent system FW and HW maintenance) may require Live Partition Mobility (LPM) support.
2. This guarantee covers only the displaying of an alert in less than one minute. Remediation is in the form of drive replacement up to the cost of the covered product. Terms and conditions apply; full details can be found here.
3. Based on unplanned downtime of a single Power E1180 system as calculated in the Power11 processor-based systems RAS
4. Estimate based on internal IBM modeling of onboarding customers in an SAP landscape when moving SAP S/4HANA from Power on premises to Power Virtual Server, assuming the right level of customer collaboration around network integration and testing

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