Red Hat OpenShift for IBM Power

Highlights

- Integrated platform includes container host, Kubernetes, and application life-cycle management using your choice of infrastructure
- Security-focused, validated container content and services from a wide partner ecosystem
- IBM Power enterprise class infrastructure for low latency and high performance
- Efficient scaling of cloud infrastructure, on-premise and collocated in IBM Cloud
- Proven security and reliability

Overview

Organizations are challenged with delivering extraordinary customer experiences by developing new applications while modernizing existing applications to accelerate their cloud-native journey. Developers and IT operations teams require flexibility and agility in order to develop and deploy applications across multiple infrastructures, from on-premise to the public cloud. Red Hat® OpenShift® on IBM® Power® empowers organizations to accelerate digital transformation with scalability and added security across the hybrid cloud through a secure and resilient foundation for cloud-native development on IBM Power.

Red Hat OpenShift is a trusted Kubernetes enterprise platform that supports modern, hybrid-cloud application development and provides a consistent foundation for applications anywhere-across physical, virtual, private, and public clouds. Red Hat OpenShift and IBM Cloud® Paks on IBM Power bring the consistency developers need to build and deploy cloud-native applications across the hybrid cloud and accelerate the path to application modernization.

Modernize and build cloud-native applications

Red Hat OpenShift is a single platform for application innovation that lets organizations operate consistently across any infrastructure with full-stack automated operations and streamlined developer workflows, empowering teams to innovate continuously and outpace rising customer expectations. Red Hat OpenShift lets organizations accelerate their cloud-native journey with a trusted platform to build new cloud-native, containerized applications, while benefiting from the reliability, adaptability, and performance from IBM Power. Designed to offer flexibility and choice for a variety of cloud consumption models, Red Hat OpenShift on IBM Power improves continuity to establish a hybrid cloud environment so that organizations can be ready for today and build for the future.

Efficient cloud infrastructure scaling

As organizations modernize existing applications to cloud-native architectures, scalability remains a crucial factor for delivering innovation and better customer experiences. Red Hat OpenShift enables applications to scale to thousands of instances across hundreds of nodes in seconds, providing the power to respond to unpredictable demands. Additionally, IBM Power provides a pay-per-use consumption model in both on-premise and off-premise environments and can scale applications up and down based on demand. It also enables low-latency connection between apps and data by colocating cloud-native apps with existing VM-based apps running on AIX®, IBM i, or Linux® environments. Additionally with built-in virtualization, users can dynamically add or remove memory and CPUs allocated to worker node virtual machines (VMs). This offering allows organizations to take advantage of the scalability of Red Hat OpenShift and IBM Power to deliver excellent customer experiences of demand.

"Availability of hybrid cloud credits along with new appliance-like options of hardware and Red Hat software, including Red Hat OpenShift to provide consistency between on-premise IBM Power Systems and off-premise clouds, can offer ease of entry into the new hybrid cloud paradigm."

Jim Dixon, Vice President, Software & IBM Power Systems at Mainline Information Systems

Proven security and reliability

Red Hat OpenShift on IBM Power empowers organizations to modernize applications with a strong foundation built for security and reliability. IBM Power supports live partition mobility for uninterrupted access to critical data and applications, giving teams the confidence, they need to develop and deploy applications more securely. The compute infrastructure reduces unplanned downtime with less than two minutes per year, improving productivity for IT teams while reducing impact for end-users and critical business processes. With Red Hat OpenShift on IBM Power, teams can develop and deploy applications across the hybrid cloud with the security they need for critical workloads.

Infrastructure cost savings

Red Hat OpenShift on IBM Power optimizes infrastructure costs by reducing the number of servers needed without impacting performance. Teams can maximize cloud infrastructure utilization by dynamically allocating cores to busy worker nodes in shared processor pools. Container applications can also be colocated on the IBM Power server with AIX, IBM i data, reducing the number of servers and minimizing risk for disruption. By optimizing infrastructure utilization, organizations can simplify operations and reduce costs, which can be reallocated to core resources to accelerate application development.

Red Hat OpenShift on IBM Power Virtual Server

Red Hat OpenShift can be a critical part in helping organizations build an agile hybrid cloud, and it is available on IBM Power Virtual Server using OpenShift's platform-agnostic installer. The IBM Power Virtual Server is an enterprise Infrastructure-as-a-Service offering built around IBM Power servers colocated in IBM Cloud and offering access to over 200 IBM Cloud services. In addition, IBM Power Virtual Server clients can now run leading business applications like SAP HANA in an IBM Power-based cloud.

Find out more about Red Hat OpenShift and IBM Power Virtual Server.

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