

IBM Power Systems Power to Cloud Rewards Program

Proven expertise to help IT leaders design, build, and deliver cloud platforms on IBM Power Systems servers

A large, stylized graphic of the letters 'IBM' in a bold, sans-serif font. The letters are composed of two shades of teal: a darker teal and a lighter teal. The letters are arranged in a way that they appear to be overlapping or layered, with the lighter teal parts appearing in front of the darker teal parts. The 'I' is solid dark teal. The first 'B' has a light teal top half and a dark teal bottom half. The second 'B' has a dark teal top half and a light teal bottom half. The 'M' is solid dark teal. The 'L' is solid light teal.

Highlights

- Helps accelerate the transformation of clients' IT infrastructure to cloud platforms
- Transforms successful PowerCare program to a new points-based reward system
- Extends selection of cloud enablement and deployment services
- Delivers new flexibility for points accumulation and redemption
- Leverages the proven expertise of IBM® Systems Lab Services consultants

Earning Points

Clients earn IBM Power to Cloud Rewards Program points at no additional charge with the purchase of IBM Power Systems™ Enterprise Cloud Offerings (C models). Purchase of Enterprise cloud servers entitles clients to:

- 20,000 Power Rewards points for E880C (also with purchase of Power® 780, 880, 795)
- 10,000 Power Rewards points for E870C (also with purchase of Power 770, 870)
- 5,000 Power Rewards points for E850C

Using Points

Clients can use IBM Power to Cloud Rewards Program points for a range of services to help transition from traditional IT platforms to private and hybrid cloud platforms. Power to Cloud Rewards points may be combined from different systems purchases and redeemed for eligible services. Power to Cloud Reward points expire one year from date of install.

Power to Cloud Rewards Service Offerings

Power to Cloud

Flexible, cloud-based solutions on Power Systems servers support open standards and technologies for maximum flexibility and price/performance advantages. Power to Cloud Rewards service options span design to initial technology deployment. You can select one of the following eight options:

1. IBM Cloud Design Workshop

IBM experts will examine your cloud requirements and create a blueprint for implementing the most suitable Power cloud solution. During the workshop, IBM will present a detailed overview of the available cloud offerings for Power Systems. The workshop will also gather information about your current virtualization and provisioning processes; current server, storage, and network environment; and expected cloud users and workloads. The consultant will then focus on creating a blueprint for a successful cloud implementation, documenting the planned hardware and software configuration, use cases, and success criteria.

2. PowerVC Enablement

IBM experts will set up a proof-of-concept IBM PowerVC environment in your data center. It's not intended to be the foundation of a production-ready solution; rather it provides a live environment to learn the features and functions of IBM PowerVC and observe the characteristics and behavior of the product in a non-disruptive setting. The PowerVC Enablement Power to Cloud Rewards can implement either PowerVC Standard Edition or Cloud PowerVC Manager. If the proposed users of the Power cloud are administrators, PowerVC Standard Edition tends to be more suitable. If the planned users of the cloud are end users, Cloud PowerVC Manager may be a better option.

3. Automation for DevOps Enablement

IBM experts will set up a proof-of-concept DevOps environment in your data center. It's not intended to be the foundation of a production-ready solution; rather it provides a live environment to gain experience with the capabilities and benefits of an automated DevOps solution. The main feature of a DevOps solution is the automation of initial and ongoing system configuration, software packages, fixes, security, and compliance. As part of this enablement, choose one of three leading automation for DevOps solutions, Chef, Puppet, or Ansible. This DevOps implementation may be standalone or integrated with PowerVC. If the DevOps implementation will be integrated with PowerVC, the Automation for DevOps Enablement service requires the IBM PowerVC Enablement service or an existing operational PowerVC environment.

4. Power Enterprise Pools Enablement

IBM experts will assist with the enablement of a Power Enterprise Pools environment composed of two or more Power Systems servers, new mobile activations for both processor and memory, and optionally the IBM Systems Lab Services LPM Automation Toolkit. The solution enables you to shift running applications from one system to another to perform system maintenance without downtime, helps balance workloads, and can help handle peaks in demand. Through the engagement, your team will gain an understanding of the environment for its ongoing management.

5. PowerVM Provisioning and Mobility Automation

IBM experts will implement, check or demonstrate Live Partition Mobility (LPM) and many of the latest virtualization features. This service strives to provide repeatable implementation processes and promotes use of best practices for VIOS and each supported OS environment (Linux, AIX®, IBM i). The IBM PowerVM® Provisioning and Mobility Automation offering primarily covers LPM readiness check, VIOS setup, and health check, and reinforces the latest Power server virtualization concepts and topics that may include (but are not limited to) NPIV, VSCSI, SEA, WPAR, Shared Processor Pools, virtual processor and entitlement capacity configuration, and tools assisting LPM migration.

6. Database as a Service

IBM experts will extend the capabilities of an existing PowerVC cloud solution to deploy database instances as a service (DBaaS). PowerVC will be used to capture and deploy a combined image that includes both the operating system and the database. As part of this process, the database itself will be deployed via PowerVC cloud-init scripts specific to that database. The result of the deploy will be a running VM (LPAR) with a running database instance. The DBaaS deployed with this service can be closed-source (such as Oracle) or open-source. The same PowerVC deployment method will be used and the difference will be the database-specific scripts that cloud-init will execute as part of the PowerVC deployment. The PowerVC Enablement Offering is a prerequisite to this offering.

7. Bluemix Design Workshop

IBM experts will examine your rapid application deployment and hybrid cloud requirements and create a blueprint for implementing the most suitable hybrid cloud solution with IBM Bluemix®. During the workshop, IBM will present a detailed overview of Bluemix capabilities and benefits for Power Systems. The consultant will then focus on creating a blueprint for a successful Bluemix implementation, documenting the planned hardware and software configuration, use cases, and success criteria.

8. Design for Private Cloud Monitoring and Capacity Planning

IBM experts will implement monitoring and capacity planning function in key cloud infrastructure components. During the engagement, IBM Tivoli® Monitoring (ITM) will be installed on an AIX server for a subset of managed endpoints. In addition to real-time monitoring, this product provides historical data analysis, capacity planning, and real-time interactive dashboards. Platforms monitored include AIX, Linux, HMC, VIOS, and IBM i. Additional services include upgrading existing environments, implementation of Tivoli Common Reporting (TCR), and workspace/dashboard customization. At the completion of the engagement, the consultant will provide a detailed, customized runbook documenting the steps taken to install and configure ITM on your systems.

POWER8 Migration

Clients seeking insight into system and/or application performance optimization should consider services that focus on implementation, planning, or use of virtualization technologies. Discover areas where machine consolidation and workload balance could apply. You can select one of the following three options:

1. POWER8 Migration Planning

IBM experts perform a pre-deployment infrastructure planning workshop ideal for first in generation installations of enterprise IBM POWER8® processor-based servers. This offering is an essential step to transition to POWER8 before a go-live installation plan is developed. Consider this workshop if this is the first instance of POWER8 in your enterprise, you want detailed discussion about best practices and migration scenarios, or are considering consolidation of your overall IT infrastructure footprint using virtualization and multitenancy.

2. POWER8 Migration Automation

IBM experts consult pre-production to assure best practices are used for upgrade/migration, performance, and virtualization during Power Systems provisioning process. This offering validates installation plans for POWER8 systems in process of deployment to the live environment. In a workshop setting, create or review existing design documents required for Power Systems provisioning, perform a go-live operational readiness review of Power Systems in the process of being provisioned and deployed, record and help remedy any gaps or deviations from best practices for PowerVM, introduce automated provisioning methods to ensure all systems are deployed consistently via a common standard, and introduce or update PowerVM Provisioning Toolkit for automated provisioning.

3. POWER8 Migration Validation

IBM experts consult pre-production to assure operational readiness preceding POWER8 systems go-live deployment. In a workshop setting, gain prior approval on live testing for migration validation testing via a structured plan or POWER8 resilience testing via a structured test plan; validate migration plans using NIM, LPM, or replication methods; validate installed hardware and settings; agree on a structured operational test plan; and live test to validate hardware system resilience.

SAP HANA

With the availability of SAP HANA on Power, IBM Systems Lab Services has the services to get your HANA database installed, performing, and running correctly. You can select one of the following four options:

1. SAP HANA on Power Install

IBM experts will install SAP HANA on Power, which includes a pre-visit consultation on planning and design of the HANA on Linux architecture and layout. The install will include configuring LPARs and installing Linux and all required Linux updates. HANA file systems will be created based on your specifications and then tested with SAP's kpi tool (hwcct). After the install of the HANA database and instance, connectivity and completion will be verified by connecting from SAP's HANA Studio. Optional services include setup of the VIO server and installation and setup of a HANA Replication Server.

2. SAP HANA on Power Systems Health Check

IBM experts will assess any HANA concerns before they can impact your critical operations—including hardware, software, and setup—to identify areas of exposure. With this option you gain access to best practices and the latest technology to maximize your HANA investment and reduce risks. You will receive a comprehensive presentation that includes recommendations to address issues and risks identified.

3. SAP HANA on Power Performance Assessment

IBM experts will analyze your HANA system for areas of performance bottlenecks and tuning optimizations. The offering will review I/O performance (using SAP hwcct tool), CPU utilization and memory performance; IBM PowerVP™ may also be used to graphically measure CPU and memory affinity. You will receive a comprehensive presentation that includes information about current performance and recommendations to improve performance.

4. SAP HANA on Power Migration Workshop

IBM experts will provide a workshop environment to help you understand the practical aspects of planning and executing a migration from any database or HANA on x86 to HANA on Power. The workshop will discuss planning, sizing, and executing the migration; SAP migration tools, methodologies and best practices; and lessons learned from previous HANA migrations. A non-production sample migration can be added to the workshop that will provide hands-on practical experience and guide you through each step.

Linux on IBM Power Systems

IBM experts bring the skills and experience of Lab Services to your enterprise through on-site consulting and show you the advantages of running Linux on Power Systems. IBM will provide services to help you install, configure, and exploit the capabilities of Power Systems servers and Linux to build a solid foundation for a Linux solution. IBM will work with your team to identify platform requirements, issues with, and strategies for your Power Systems environment, and architect a solution to address those objectives. IBM will implement core solution elements with the installation and configuration of Linux and key functions that target your objectives.

Security

Companies frequently fail to deploy important security controls that expose themselves to increased risks. In addition to financial loss, the ramifications of a security breach could be unforeseeable litigation, identity theft, the bringing down of networks, and harm to a company's brand. IBM Systems Lab Services provides services to help reduce your security risk and improve the security of your information assets. You can select one of the following four options:

1. Security Assessment

IBM experts will perform a security assessment on your Power Systems server running Linux, AIX, or IBM i. This comprehensive security assessment of a single partition includes Red Hat Enterprise Linux Security Assessment (based on security controls recommended by the U.S. National Security Agency Information Assurance Directorate), a document detailing assessment results, qualitative risk analysis, various types of compliance (with specific support for PCI and ISO/IEC 27002), available IBM PowerSC™ solutions to assist with security and compliance issues, consultation on findings, and guidance to remediate identified security risks.

2. PowerSC Enablement

IBM experts provide consulting services on the essential capabilities of one of the selected PowerSC options to enable day-to-day administration and use. This offering is for clients who want to evaluate or have already obtained a license version of PowerSC for AIX or one or more components of the PowerSC Tools for IBM i. Options include PowerSC Tools for IBM i services (software components available at additional charge), Real Time Compliance Workshop, Security and Compliance Workshop, Trusted Logging Workshop, or Trusted Network Connect and Patch Management Workshop.

3. AIX Role Based Access Control Workshop

IBM experts know the common thread in most major security breaches (and one of the greatest threats to an AIX environment) is the exploitation of administrative access. This workshop will teach you how to configure role based access control (RBAC) to reduce dangerous and unnecessary root related administrative access, implement true separation of duties capabilities, streamline general AIX auditing using RBAC-based auditing, and deploy Domain RBAC for access control options not possible with other security tooling.

4. BigFix Patch Management

IBM experts will implement and configure IBM BigFix® Lifecycle, including patch management and server automation. BigFix is a single-console management application that can be used to identify, patch, and report on managed endpoints running on Power hardware. With this capability, a BigFix user can create and enforce patch management policies across all AIX and Linux servers in the enterprise from a single console. At the completion of the engagement, the consultant will provide a detailed, customized runbook documenting the steps taken to install and configure BigFix Lifecycle on your systems.

Power Systems Availability

IBM experts bring the skills and experience of Lab Services to your enterprise through on-site consulting, which can assist you in taking advantage of availability technologies on Power Systems. You can select one of the following three options:

1. Power Systems Availability Optimization

IBM experts will conduct an analysis of your Power Systems infrastructure running Linux, AIX, or IBM i based on your availability requirements for potential areas of exposure and review for best practices. The intent of this assessment is to identify system exposures that may affect overall availability and provide recommendations to help mitigate those risks. You will receive a comprehensive presentation that includes recommendations to address risks identified.

2. Power Systems Health Check

IBM experts will assess the health of your Linux, AIX, or IBM i computing environment by identifying problems before they can impact your critical operations—including hardware, software, and setup—to identify areas of exposure. With this option you gain access to best practices and technology to maximize resource utilization to improve your return on investment. You will receive a comprehensive presentation that includes recommendations to address risks identified.

3. PowerHA SystemMirror

IBM experts will conduct a health check or planning and assistance workshop for high availability solutions on AIX or IBM i. The PowerHA® SystemMirror Health Check assesses the health of your cluster environment by identifying issues before they can impact critical operations including hardware, software, and setup. You will receive a comprehensive presentation that includes recommendations to address risks identified. The PowerHA SystemMirror Planning and Assistance workshop provides technical resources to help clients define a PowerHA SystemMirror cluster and assist with the development of deployment and implementation plans. A review of the latest enhancements such as PowerVM Live Partition Mobility, Smart Assist, Cluster Aware AIX, and others is included.

Performance

These offerings are for clients who want information regarding system and or application performance optimization. They can help further optimize systems for better resources utilization and performance. You can choose from two options:

1. Systems Performance Assessment

IBM experts will help clients who want to tune and/or obtain best practices regarding system performance optimization. Designed to assess how well systems are tuned for virtualization and high workload environment, this assessment is best for pre-production performance/health check or post-production performance optimization and workload analysis. Consultants may leverage PowerVP and virtualization features to further optimize the system for better resource utilization and performance.

2. Application Performance Assessment

IBM experts identify how well an application is developed to exploit the latest POWER® technology features. This assessment is best for pre-production performance and benchmark testing, and leverages AIX and IBM i performance tools assisting application benchmark and scalability study. It's most effective when working side-by-side with an application subject matter expert. The Application Performance Assessment is currently offered for AIX and IBM i.

Power to Cloud Rewards Technical Training

IBM provides on-site training and hands-on skills building at your location. Experience high-quality training from recognized worldwide subject matter experts in areas of Power technology. Choose from a selection of course topics and solution areas.

Course Title

AIX Jumpstart for UNIX Professionals (AP330): Provides focused training for experienced UNIX administrators on how to install, customize, and administer AIX in a multiuser partitioned environment.

PowerHA SystemMirror 7.1 Implementation and Administration (AP290): This course is designed to prepare you to install and configure a highly available cluster.

IBM PowerHA for i, Clustering, and IASP Implementation (AP340): Provides training for system programmers and administrators at an intermediate level who are considering high availability options for their IBM i environment.

Power Systems for AIX - Virtualization I; Implementing Virtualization (AP350): Explains the new features and benefits of virtualization including the processor virtualization, the Integrated Virtual Ethernet, the Virtual I/O Server, and virtual devices.

Performance for Power Systems AIX (AP250): Training on advanced PowerVM features such as Active Memory Expansion, shared dedicated processors, multiple shared processor pools, N_Port Virtualization, and Remote Live Partition Mobility.

Power Systems for AIX IV (AP310): Performance Management: You will develop skills to measure, analyze, and tune common performance issues on IBM Power Systems.

Performance for IBM i (AP260): This course will help you learn the techniques of performance analysis and capacity planning for systems and partitions running IBM i.

Implementing AIX Security Features (AP230): Learn to describe and implement security features including AIX base system security and AIX network security.

Implementation of Cloud with PowerVC on IBM Power Systems (AP30): The course covers planning for the PowerVC installation, customizing the environment, and configuring storage and includes capturing and deploying virtual machines.

Linux on Power Fundamentals and Performance (AP400): Learn installation, configuration, administration, and troubleshooting of SUSE Linux Enterprise Server and Red Hat Enterprise Linux. Also, learn concepts of Linux performance monitoring, including physical and virtual devices, with emphasis on processor, memory, and I/O operations.

Power Systems Technical Universities

After completion of a Power to Cloud Rewards service and the feedback request, receive a complimentary admission to one of our technical conferences. Power Systems Technical Universities are an intense, consolidated way to learn how to reduce operating costs, simplify the IT environment, access current and upcoming solution providers, and leverage new technology innovations like virtualization with POWER8. They offer hundreds of sessions on extensive topics, multiple training levels (beginner to advanced), and certification testing. Attendees hear details behind the latest POWER announcements and have an opportunity to see the latest Power Systems products and solutions in our Solution Center. Check for Technical University schedules at:

ibm.com/systems/services/conferenceseries

Power E880C, E870C, and E850C services

Services for Power E880C, E870C, and E850C are available under separate agreement. Contact IBM Systems Lab Services, your IBM representative, or your IBM Business Partner for details.

IBM Systems Lab Services and Training

IBM Systems Lab Services has the proven expertise to help leaders design, build, and deliver IT infrastructure for the cognitive era. We help IBM clients design for cognitive business, build with collaborative innovation, and deliver through a cloud platform.

Lab Services consultants' proven expertise derives from a combination of business and extensive practical technical experience, leveraging proven tools and methodologies. Our consultants perform IT Infrastructure services for clients on site, helping them solve business challenges, gain new skills, and discover best practices. Lab Services has a global presence and can deploy its consultants in any region as required.

Lab Services is uniquely positioned to help IBM clients through the lifecycle of designing, building, and delivering IT infrastructure for the cognitive era. We offer a wide range of services for Power Systems, IBM z Systems®, LinuxONE, and IBM Storage and Software Defined Infrastructure.

For more information

For more information on Lab Services, visit:

ibm.com/systems/services/labservices

More Power to Cloud Rewards information is available at:

ibm.com/systems/power/support/power-to-cloud

Contact your IBM representative, IBM Business Partner, or the IBM Power to Cloud team at:

pwrcloud@us.ibm.com



© Copyright IBM Corporation 2017

IBM Corporation
Route 100
Somers, NY 10589

Produced in the United States of America
January 2017

IBM, the IBM logo, ibm.com, AIX, BigFix, Bluemix, Power, POWER, Power Systems, POWER8, PowerHA, PowerSC, PowerVM, PowerVP, Tivoli, and z Systems are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

This document is current as of the initial date of publication and may be changed by IBM at any time.

Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.



Please Recycle