

IBM Z Forward Acceleration Initiative

Program Information

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1

Earn rewards

IBM Z Forward Acceleration Initiative rewards are earned with the purchase of eligible IBM z16, z15 or LinuxONE III systems, including:

- 3931-A01, 8561-T01, 8561-LT1
- 8562-T02 and 8562-LT2 systems.

Note: 8562-LT2 with FC 0650 are not eligible to earn rewards.

Use rewards

IBM Z Forward Acceleration Initiative rewards can be used for select eligible services that are focused on accelerating the transformation of IT infrastructure and expediting the adoption of new technologies.



2

2

Earning rewards for IBM Z Forward

- Clients automatically earn IBM Z Forward Acceleration rewards at no additional charge with the purchase of eligible IBM z16, z15 or LinuxONE III systems
- Eligible systems:
 - 3931-A01, 8561-T01, 8561-LT1, 8562-T02 and 8562-LT2 systems.
Note: 8562-LT2 systems with feature code 0650 are not eligible to earn rewards.
- Eligible purchase entitles clients to:
 - For 3931-A01 - 1 reward per eligible system, with a bonus 3 rewards on the first purchase (after April 5, 2022)
 - For 8561-T01 or 8561-LT systems - 1 reward per eligible system, with a bonus 3 rewards on the first purchase (after Feb 15, 2020)
 - For 8562-T02 or 8562-LT2 (not including systems with FC 0650) – 1 reward per eligible system, with a bonus 1 reward on the first purchase (after April 1, 2021)
 - 1 reward for each additional eligible system
 - Program rewards and eligibility administered by IBM Systems Lab Services



3

3

Using rewards for IBM Z Forward

- Clients can use IBM Z Forward Acceleration rewards for a select set of services that are focused on helping clients make the most of their IBM Z investment and accelerate the transformation of their IT infrastructure and expedite the adoption of new technologies
- Services may be performed on any client owned IBM Z system on record within an IBM Customer Number within the same geography where rewards are earned.
- Rewards expire 1 year from system ship date
- Reward services are performed by IBM Systems Lab Services



4

4

IBM Z Forward Services for IBM zSystems and LinuxONE



5

5

About IBM TSS Technical Services - Systems Lab Services

IBM Z Forward Service Provider Team

Proven IBM zSystems and LinuxONE infrastructure expertise



Accelerate adoption (and use) of IBM zSystems and LinuxONE capabilities



Differentiate with business and deep technical skills and methodologies



Offer services to plan, design and implement IT infrastructure solutions



6

6

Overview of IBM Z Forward Rewards Eligible Services

Security	Modernization	Cyber Resiliency	Linux
 <ul style="list-style-type: none"> • Cyber Security Risk Assessment • Continuous Compliance • Quantum-Safe • Pervasive Encryption • Hyper Protect Data Controller • IBM zSystems Encryption Key Management • Multi-Factor Authentication • zSecure Suite 	 <ul style="list-style-type: none"> • AI on Z Implementation <i>Coming 2Q22</i> • Red Hat OpenShift on Z • IBM Cloud Infrastructure Center • z/OS Connect • z/OS Container Extensions • IBM zSystems Multi-Generation Currency and Migration Assessment 	 <ul style="list-style-type: none"> • Cyber Vault for IBM zSystems • IBM zSystems Resiliency 	 <ul style="list-style-type: none"> • Linux Migration • Hyper Protect Digital Asset Platform Deployment • Db2 Analytics Acceleration on Z (IDAA)

Refer to Z Forward Sales Kit for Offering Details: [Here](#)



IBM zSystems and LinuxONE
Quick Reference Guide

Cyber Security Risk Assessment for IBM zSystems

Overview

Cyberthreats are still on the rise, and most enterprises feel overwhelmed. Moreover, regulations are now mandating organizations start transitioning to new models and standards of Cyber Security.

Organizations must start with a Cyber Security assessment in the IBM zSystems perimeter to check today's best practices, map status to state-of-the-art Cyber Security and identify best next actions to harden security.

Z Forward Acceleration Rewards

IBM Systems Lab Services

Target Audience

- zSystems clients interested in a review of their Cyber Security posture
- Clients looking to ease integration of their zSystems perimeter with enterprise class Cyber Security transformation projects
- Clients interested in a phased approach to strengthening their zSystems security posture

Why Use This Service?

- Do you need help to identify security gaps that should be addressed?
- Do you need to accelerate transition to new cyber threats architecture model with zSystems?
- Do you want to leverage experienced zSystems security SMEs to help you strengthen your security posture?

Benefits

- Identify potential vulnerabilities within zSystems Cyber Security perimeter
- Position Cyber Security posture per business mandates (e.g., Zero Trust Architecture)
- Identify weaknesses according to several core security domains and obtain remediation recommendations

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Service Provided

Utilizing the Zero Trust Architecture framework as a model to assess and document Cyber Security Risk areas

Service is delivered via a set of interactive working sessions assessing the following aspects:

- Enterprise Identity governance
- Resources partitioning
- Authentication means
- Detection means
- State-of-the-art configuration for service security
- Change management

Service is delivered in sequence and includes three phases:

1. An assessment workshop
2. An assessment analysis
3. An assessment delivery

Deliverables

Collaborative workshop at client premises or remote

Summary report including:

- Overview of the existing architecture, and issues compared to the benchmark Zero Trust architecture
- Recommendations and best practices to secure applications and users while improving the user experience
- Findings on how client could reuse what exists today on their infrastructure

Next best actions may include security services to go deeper and address remediation areas

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

This service requires a minimum of 2 Z Forward Rewards

7

IBM zSystems Security and Compliance Center (zSCC) Readiness Assessment

Overview

The world changes rapidly, and regulatory requirements have become increasingly complex, putting pressure on those managing critical infrastructures.

IBM zSystems Security and Compliance Center (zSCC) offers a solution that automates the regulatory compliance checks on IBM zSystems and LinuxONE. Based on a co-creation workshop, SMEs help clients assess their readiness and build a deployment roadmap considering their specifics and regulatory requirements.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

Clients interested in learning more about IBM zSystems continuous compliance capabilities with IBM zSystems Security Compliance Center (zSCC)

Clients willing to plan a future deployment of zSCC considering infrastructure readiness and compliance objectives

Why Use This Service?

Leverage the knowledge of proven experts who work with IBM zSystems security and compliance projects

Learn best practices for building your continuous compliance strategy around IBM zSCC

Benefits

Clients will be properly prepared to build the IBM zSCC and begin the IBM zSystems continuous compliance journey to accelerate time to value for the solution and reduce the deployment time and effort.

Service Provided

Provide in-depth education of IBM zSCC prior to performing a readiness gap analysis of:

- Hardware and software
- Infrastructure and IT inventory

Analyze current client environment and overall regulatory and compliance objectives to identify:

- What is already available
- What will be available tomorrow
- What needs to be developed

Co-create the architecture for IBM zSCC considering the existing client requirements and regulations

Based upon the proposed architecture, share:

- Implementation recommendations and roadmap considering client specifics
- Advice on use cases and regulatory profiles
- Integration capabilities based upon zSCC components with SIEM and other security functions

Deliverables

Materials and assets to be left behind:

- Presentation materials
- Readiness assessment
- Co-creation report
- All created architecture work products

Recommendations and next best actions to deploy IBM zSCC

Top identified scenarios to be created on IBM zSCC

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Planned availability for this offering is June 2022



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Quantum Safe Assessment for IBM zSystems

Overview

Today's digital trust relies on encryption. Therefore, it is important to ensure that encryption is secured and meets appropriate standards.

Future quantum computers could pose potential risks, such as the ability to quickly break encryption algorithms and access sensitive data.

Therefore, it is wise to build a quantum safe strategy for critical business systems. This assessment will explore encryption quality to further improve the IBM zSystems encryption for both today and the future.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems clients interested in learning more about their zSystems encryption quality for compliance and standards
- Clients willing to know from an inventory their exposition to the quantum computing threats and how to build a quantum-safe strategy for their zSystems

Why Use This Service?

- Leverage the knowledge of proven experts who work with IBM zSystems Security and encryption projects
- Learn the latest IBM zSystems encryption technologies including the latest post- quantum cryptography features

Benefits

- Gain understanding of encryption areas that may represent potential exposures according to today's threats and tomorrow's potential problems
- Learn how to fix, update and remediate according to findings

Service Provided

Perform data collection to evaluate encryption quality and vulnerabilities:

- Cryptosystems and artifacts
- Security protocols
- Products, logic and services

Assess encryption strategy including:

- Governance and encryption guidelines
- Encryption control and monitoring

IBM Application Discovery and Delivery Intelligence (ADDI) with Crypto Discover is an optional inclusion and a software trial is possible.

Deliverables

Summary report with findings and recommendations

Discovery of where and what crypto is used by applications

Recommended next steps to strengthen IBM zSystems encryption capabilities to match with your existing and future objectives

Scenarios and step-by-step roadmap to build an IBM zSystems quantum safe harbor.

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This service requires a minimum of 1 Z Forward Rewards



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Pervasive Encryption Readiness Assessment

Overview

How can you determine if you're ready to start using IBM's exclusive, industry-leading IBM and LinuxONE Pervasive Encryption strategy to protect your data? IBM Systems Lab Services consultants will assist clients with planning for implementation of IBM zSystems or LinuxONE encryption capabilities.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

Clients who need to protect their data through use of encryption and would like to use the advanced encryption features of IBM zSystems or LinuxONE

Why Use This Service?

- Does your company or industry have mandates or regulations requiring data protection?
- Are you unsure as to how to get started with IBM zSystems or LinuxONE Pervasive Encryption?
- Do you need help with an existing encryption project?

Benefits

- This rapid readiness assessment will evaluate your environment and identify pre-requisite steps needed to get started with Pervasive Encryption
- Gain deeper insights into components needed to IBM zSystems and LinuxONE Pervasive Encryption

Service Provided

- Provide an in-depth education on pervasive encryption
- Analyze current environment and overall security and encryption objectives
- Perform a pervasive encryption readiness gap analysis
- Develop implementation recommendations and an implementation roadmap
- Advise on pervasive encryption concepts and best practices
- Document gap analysis, findings and recommendations

Deliverables

- Summary report containing an encryption readiness gap analysis and recommended implementation roadmap for pervasive encryption enablement
- Skills enablement and guidance on best practices for IBM zSystems or LinuxONE Encryption methods and procedures

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7

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11

Pervasive Encryption Implementation Assistance

Overview

IBM z/OS Dataset Encryption provides a simple, transparent and consumable approach to enable extensive encryption of data at rest through DFSMS access methods.

IBM Systems Lab Services consultants will assist the customer in enabling IBM z/OS Dataset Encryption from the performance impact evaluation to finally activate the encryption.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who want to get started encrypting z/OS datasets

Why Use This Service?

- Does your company or industry have mandates or regulations requiring data protection?
- Are you unsure as to how to get started with z/OS Dataset Encryption?
- Do you need help with an existing deployment plan that may have stalled?

Benefits

- Leverage IBM zSystems security consultant expertise and experience on z/OS Dataset Encryption implementation

Service Provided

- Analyze software compatibility levels and pre-requisites
- Assist with role definition for data owners and administrators
- Assist with key definition and authorizations
- Perform validation of z/OS dataset encryption
- Project encryption performance using z/BNA on request
- Advise on ICSF Master Key management as needed

Deliverables

- Implementation workbook document
- Skills enablement and guidance on best practices for z/OS Dataset Encryption

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This service requires a minimum of 2 Z Forward Rewards



8

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12

Hyper Protect Data Controller Planning

Overview

IBM Hyper Protect Data Controller provides transparent, end-to-end, data-level protection and privacy. Now, you can encrypt your eligible data, grant and revoke access to it, and maintain control of it – even as it moves off the system of record within your enterprise. IBM Systems Lab Services consultants can help you gain deeper insight about Hyper Protect Data Controller and begin planning how you can get the most out of this powerful technology.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who are concerned about protecting their sensitive information when it is distributed across the enterprise and beyond

Why Use This Service?

- Is your business facing data privacy regulatory requirements?
- Are you worried about losing control of sensitive data when it is shared across your enterprise or beyond?

Benefits

- This planning workshop helps clients better understand how they can take advantage of the IBM Hyper Protect Data Controller technology
- Quickly envision how Hyper Protect Data Controller can be used in your business
- Streamline your ability to start using IBM Hyper Protect Data Controller

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Service Provided

- Analyze client architectural design for Hyper Protect Data Controller deployment
- Perform technical pre-requisites check
- Identify privacy needs according to business objectives and challenges
- Design Hyper Protect Data Controller Minimum Viable Product for selected business functions and their users
- Design high-level Hyper Protect Data Controller policy definitions
- Document workshop outcomes and next steps

Deliverables

- Design document containing high-level Hyper Protect Data Controller implementation roadmap and planned agreed-to use case(s)
- Guidance on best practices for implementation of Hyper Protect Data Controller

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This service requires a minimum of 1 Z Forward Rewards



Hyper Protect Data Controller Implementation Assistance

Overview

IBM Hyper Protect Data Controller, now available on IBM z15 and LinuxONE III platforms, provides transparent, end-to-end, data-level protection and privacy. Now, you can encrypt your eligible data, grant and revoke access to it, and maintain control of it – even as it moves off the system of record within your enterprise. IBM Systems Lab Services consultants can help you move from POC or early exploration to initial production.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who want begin using IBM Hyper Protect Data Controller to protect their data

Why Use This Service?

- Do you need to accelerate your ability to start using Hyper Protect Data Controller?
- Are you facing regulatory requirements to protect your data?
- Would you like to take advantage of proven expertise at deploying Hyper Protect Data Controller?

Benefits

- This service helps clients navigate the path from test or POC, to production with access to IBM Hyper Protect Data Controller experts
- Engagements can be tailored to the amount of assistance needed over your implementation plan

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Service Provided

- Review of overall Hyper Protect Data Controller implementation objectives and plans
- Planning and preparation of the infrastructure for Hyper Protect Data Controller
- Design of initial Hyper Protect Data Controller policies
- Testing initial Hyper Protect Data Controller policies
- Advise on transition to production methods and considerations
- Share Hyper Protect Data Controller skills and experience with client technical staff

Deliverables

- Advice and guidance on use and best practices for deploying and using IBM Hyper Protect Data Controller

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This service requires a minimum of 3 Z Forward Rewards



IBM zSystems Key Management Planning

Overview

Encryption keys and key management are critical elements to establishing a strong cyber resiliency capability. IBM encryption capabilities on IBM zSystems and LinuxONE are industry leading. IBM Systems Lab Services consultants have proven experience with encryption and key management. This service is designed to help clients establish a practical plan for encryption key management.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who are interested in IBM zSystems or LinuxONE encryption solutions and need to understand and establish a key management strategy

Why Use This Service?

- Are you unsure about your strategy or direction with IBM zSystems key management?
- Are you new to IBM zSystems key management?
- Do you need assistance getting your IBM zSystems key management setup and running?

Benefits

- This service is designed to help clients better understand IBM zSystems Key Management usage and considerations for their company
- The offering can cover a wide variety of topics relating to key management based on client need and each engagement is tailored to specific client needs and interests

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Service Provided

- This service is delivered as an interaction work session covering topics including:
 - Level of knowledge of encryption and key management
 - Regulatory requirements for data security
 - Current usage and experience with encryption and key management including SKLM, Network, Data Set
 - Application encryption requirements and targets
 - Digital Certificate usage and strategy
 - Usage of existing technologies such as RACF, LDAP

Deliverables

- Advice and guidance on IBM zSystems or LinuxONE Encryption Key management and best practices
- Summary report of findings and recommendations

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This service requires a minimum of 1 Z Forward Rewards



Trusted Key Entry Workstation Implementation

Overview

Encryption of sensitive data is a critical building block of security. IBM zSystems and LinuxONE provides unsurpassed encryption capabilities. The Trusted Key Workstation plays an important role in protecting the master key generation process. IBM Systems Lab Services consultants can help you plan and deploy your TKE workstation environment.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems or LinuxONE clients who need to implement a Trusted Key Workstation to support their encryption strategies and operations

Why Use This Service?

- Are you unsure as to how to get started with TKE workstation?
- Do you need to deploy a TKE to support IBM zSystems or LinuxONE security features?

Benefits

- This service will help you design and deploy a secure, reliable master key management environment and how to use the TKE workstation for key management
- Accelerate the planning and first deployment of a TKE Workstation and associated key management processes

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Service Provided

- Design master key ceremonies based on the TKE workstation and role-based access control principles
- Implement a Trusted Key Entry workstation and smart cards for one (1) test LPAR
- Advise on how to use TKE workstation, create and manage master keys, conduct key ceremonies and use role-based access control
- Document TKE implementation information

Deliverables

- Implementation of a Trusted Key Entry infrastructure
- Summary report of master key management processes and procedures
- Recommendations on security strategies for IBM zSystems or LinuxONE encryption

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This service requires a minimum of 1 Z Forward Rewards



IBM Security Guardium Key Lifecycle Manager

Overview

Encryption of sensitive data is a critical building block of security. IBM zSystems and LinuxONE provides unsurpassed encryption capabilities. IBM Systems Lab Services consultants help you develop and implement a viable encryption key management solution architecture.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients looking for help in planning tape and storage encryption key management or looking to simplify their current key management environment

Why Use This Service?

- Do you need help planning for data at rest encryption using IBM and OEM encrypting storage devices and IBM Security Guardium Key Lifecycle Manager?
- Do you need to ensure that your encryption strategy supports regulatory compliance standards?

Benefits

- Assists Security Key Lifecycle Management clients looking to simplify their key management environment for z/OS or Linux
- Access to proven planning and implementation expertise with IBM zSystems encryption key management technologies and capabilities

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Service Provided

- Analyze scope of desired Security Key Lifecycle Management
- Design and document encryption strategy and solution for tape and storage encrypting devices and associated key management for both IBM and KMIP in as required
- Advise on recommended solution architecture, setup, administration, maintenance techniques, backup, disaster recovery and complex migration and merger scenarios as required
- Document solution design, findings and recommendations

Deliverables

- Summary report containing detailed IBM Security Guardium Key Lifecycle Manager solution description, implementation details, and guidelines to aide in process development

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This service requires a minimum of 2 Z Forward Rewards



IBM Enterprise Key Management Foundation

Overview

IBM Enterprise Key Management Foundation (EKMF) lets you manage crypto on multiple IBM zSystems machines from a central EKMF workstation designed to meet PCI compliance. IBM Systems Lab Services consultants provide planning and implementation assistance for EKMF or EKMF Web Edition.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who need to manage a high volume of IBM zSystems security keys and/or need to ensure key management compliance with regulatory standards such as PCI-DSS

Why Use This Service?

- Do you need a way to manage a high volume of encryption keys and certificates?
- Would you like to simplify management of security keys?

Benefits

- This service enables key management on a secure workstation using IBM crypto cards with templates to automate and streamline key management
- Designed to support high-volume, safe key management and expandable to other encryption needs such as application level cryptography or certificates

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Service Provided

- Facilitate an EKMF planning meeting advising on prerequisites, installation, configuration and project dependencies
- Assist with implementation including:
 - EKMF Software in the TEST environment
 - Enrolling host systems to one EKMF agent
 - Defining RACF profiles to enable EKMF
 - Customize a key template for dataset encryption
 - z/OS EKMF Agent and Key Repository
- Demonstrate EKMFWEB capabilities such as audit trails, dataset dashboard and more
- To transfer skills to the client
- To assist client with production roll-out

Services are available for EKMF or EKMF Web Edition

Deliverables

- Summary EKMF implementation report
- Skills enablement for EKMF
- Guidance on best practices for EKMF use

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This service requires a minimum of 2 Z Forward Rewards



ICSF Master Key Enablement Service

Overview

ICSF Key Management is a key element of the IBM z/OS cryptographic capabilities. Proper configuration and setup is essential. IBM Systems Lab Services consultants will assist with helps ICSF Master Keys setup the ICSF Procedure design, RACF updates to support ICSF functions, and assistance in setting up a proper Master Key creation ceremony.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients new to ICSF Master Keys and would like to accelerate the enablement of master keys

Why Use This Service?

- Would you like to accelerate startup and use of ICSF Master Keys?
- Do you need help understanding and architecting how ICSF Master Key Management can be used in your installation?

Benefits

- Accelerate ICSF Master Key implementation and ability to create a secure environment using IBM zSystems crypto hardware
- Leverage ICSF expertise to educate your staff on how to manage and maintain your IBM zSystems crypto environment

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Service Provided

- Analyze client requirements and needs for ICSF Master Key usage
- Advise on best practices for ICSF management and usage
- Design and implement ICSF procedures
- Implement IBM Crypto Hardware
- Document and review client-specific ICSF Implementation Activities and Information

Deliverables

- Summary ICSF Master Key Implementation Report
- Skills enablement for ICSF Master Key usage
- Guidance on best practices for ICSF Master Key use

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This service requires a minimum of 1 Z Forward Rewards



IBM zSystems Multi-Factor Authentication Planning and Implementation

Overview

The need for strong authentication for the enterprise environment has been a driving requirement within the IBM zSystems space. z/OS 2.4 supports authenticating via two factor authentication using RSA keys. IBM Systems Lab Services consultants will assist you in enabling the IBM zSystems support using Pin and RSA rotating key technology or IBM Touch Token app.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who require strong authentication for users
- Clients who already have RSA rotating key services or wants to implement IBM Touch Token
- Clients who need to support their existing Personal Identity Verification (PIV) and Common Access Card (CAC)

Why Use This Service?

- Do you have business requirements for 2 factor authentication?
- Are you looking to enhance your logon security?

Benefits

- Bring the added security of two-factor authentication to your IBM zSystems platform
- Enhance compliance with PCI-DSS 3.2 Multi-Factor Authentication directives
- Reduce risk of unauthorized access to your Z assets

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Service Provided

- Assist with planning and implementation of IBM zSystems Multi-Factor Authentication
- Assist with setup of up to 10 IDs using MFA services on IBM zSystems
- Setup of IBM Touch Token application as required
- Assistance with smartcard deployment as needed

Note: setup of RSA authentication server on distributed platform is not part of this service

Deliverables

- Summary MFA Implementation Report
- Guidance on best practices for IBM zSystems MFA usage
- Skills enablement for the deployed client MFA environment

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This service requires a minimum of 2 Z Forward Rewards



zSecure Implementation

Overview

The IBM zSecure Suite adds layers of security assurance that enhance the security and risk management in IBM zSystems hardware, software, virtualization and external security managers (ESMs) such as IBM RACF, CA ACF2 and CA Top Secret. Options include implementation assistance with:

- Admin, monitoring and alerts
- Auditing and compliance
- SIEM Adapter usage
- Command Verifier usage

These offerings leverage the proven expertise of IBM Systems Lab Services consultants to help you accelerate your adoption and use of zSecure Suite.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who are new to or want to expand their use of zSecure
- Clients wanting to create custom reports for their environment using zSecure

Why Use These Services?

- Do you need help understanding how to use the IBM zSecure Suite in your company?
- Are you new to zSecure and require skills transfer?
- Do you want to take advantage of the full power of zSecure?
- Do you want to create custom security reports or data extracts for your needs?

Benefits

- Accelerate your ability to use and gain insights from zSecure
- Enjoy a higher rate of return from your zSecure tools
- Create a more secure and auditable IBM zSystems environment
- Get ahead of the audit concerns

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Services Provided

- Assist client in understanding the full functionality of zSecure components
- Selected planning and implementation
- Review current configuration settings and optimize for your environment
- Hands-on guided demonstration of zSecure's functionality
- Customized solution that may include:
 - Assist client in creating custom reports, alters, data extracts, audit and other needs
 - Assist with QRADAR Adapter for data feed to QRADAR and other SIEMs
 - Clean up your security database
 - Test security updates before they are applied
 - Specialized workshop with ISPF and CARLA programming

Deliverables

- zSecure engagement summary report
- Additional deliverables will depend on what features the client is looking to address. The deliverables can range from a workbook to a custom JCL/CARLA job to generate report(s)

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This service requires a minimum of 1 Z Forward Rewards



Red Hat OpenShift Implementation Services

Overview

Red Hat OpenShift for IBM zSystems supports cloud-native applications being built once and deployed anywhere - and now extends this to on premises enterprise servers such as IBM zSystems and LinuxONE. IBM Systems Lab Services consultants will implement an OpenShift cloud-native solution based on a plan jointly developed with the client.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients interested in Kubernetes or investigating private cloud options and looking to get started with containers and cloud-native applications on IBM zSystems or LinuxONE

Why Use This Service?

- Are you investigating cloud-native apps or containers?
- Would you like to connect high-value information running on IBM zSystems or LinuxONE to your hybrid cloud world?
- Are you looking to provide microservices to your clients?

Benefits

- Accelerate your ability to get started with cloud native apps and, open-source apps in contains and use of containers for app modernization
- Leverage value from enterprise data via microservices and access to IBM's and analytics apps in containers

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Service Provided

- Plan for Red Hat OpenShift on IBM zSystems implementation – confirm scope, objectives and implementation details
- Implement Red Hat OpenShift for IBM zSystems with:
 - Kubernetes management of pods and services
 - Container image management
 - Intuitive UI for deployment, management, monitoring of containers
 - Easy helm chart deployment
 - Rich standard catalog of IBM and open-source cloud-native apps
- Advise on OpenShift best practices and usage tips
- Document implementation details

Deliverables

- Summary report containing details of this OpenShift implementation
- Guidance on best practices for Red Hat OpenShift on IBM zSystems usage
- Skills enablement specific to this OpenShift implementation are available as an optional add-on

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This service requires a minimum of 1 Z Forward Rewards



IBM Cloud Infrastructure Center Deployment Services

Overview

The IBM Cloud Infrastructure Center (ICIC) is an IaaS offering that provides a consistent, industry-standard user experience to define, instantiate, and manage the lifecycle of virtual infrastructure, deployment of images, and policies to maximize resource utilization. IBM Systems Lab Services will work with you to plan and deploy ICIC for your IBM zSystems or LinuxONE Infrastructure as a Service (IaaS) virtualization environment.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems and LinuxONE clients who are interested in private cloud options and are looking for an OpenStack standards-based solution for managing their IaaS at scale

Why Use This Service?

- Are you investigating on premises IaaS as part of your cloud deployment
- Is self service important?
- Do you need an easy to deploy but powerful solution?

Benefits

- Simplify deployment and lifecycle management of virtual servers
- Easily integrate with other systems via standard REST APIs and open
- With ready to use portal, build your own on-premise cloud infrastructure in days

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Service Provided

- Implement Cloud Infrastructure Center on one system with:
 - Self service portal
 - Industry standardization and REST API integration capability
 - Automate virtual server, network and storage
 - Automated lifecycle management
 - Core based in OpenStack
- Document implementation details

Deliverables

- Summary report containing the details of your IBM Cloud Infrastructure Center deployment
- Additional skills transfer (optional at additional cost)

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This service requires a minimum of 1 Z Forward Rewards



IBM z/OS Connect Planning and Implementation Services

Overview

IBM z/OS Connect Enterprise Edition is an integral element of IBM zSystems Application Modernization. IBM® z/OS® Connect Enterprise Edition (EE) V2.0 provides a common and consistent interface to Subsystems and Data that are resident on the IBM zSystems environment. It enables use of RESTful APIs, integration with OpenAPI and uses intuitive tooling to deliver IBM zSystems Application Modernization capabilities.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems clients who are interested in modernization existing IBM zSystems applications.

Why Use This Service?

- Are you looking to leverage APIs and Z application modernization techniques to leverage access to IBM zSystems data sources and applications
- Does the client need to develop new mobile, cloud or web applications that need to access z/OS Data or subsystems?

Benefits

- Accelerate IBM zSystems Application Modernization initiatives by leveraging the strength of z/OS Connect Enterprise Edition.
- Enhance understanding and use of z/OS Connect Enterprise Edition

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Service Provided

Systems Lab Services consultants will assist clients in the planning, deployment and use of z/OS Connect Enterprise Edition in support of their z Application Modernization initiatives. Services may include:

- Analyze prerequisite software and environment readiness for z/OS Connect implementation.
- Deploy one instance of z/OS Connect EE Run Time Server
- Define deployment artifacts as discoverable APIs and assist with configuration of artifacts using the GUI tooling for z/OS Connect.
- Demonstrate end-to-end connectivity using z/OS Connect Enterprise Edition
- Advise on best practice usage methods for z/OS Connect

Deliverables

- Implementation workbook document
- Skills enablement and guidance on best practices for z/OS Connect Enterprise Edition

Contact

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

This service requires a minimum of 1 Z Forward Rewards



z/OS Container Extensions (zCX) Planning and Deployment Services

Overview

IBM z/OS Container Extensions (IBM zCX) is a new feature z/OS Operating System (z/OS V2.4) that makes it possible to run Linux on IBM zSystems applications that are packaged as Docker container images on z/OS. Application developers can develop, and data centers can operate, popular open-source packages, Linux applications, IBM software, and third-party software together with z/OS applications and data. This service helps clients accelerate their use of zCX.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems developers who want to run containerized Linux applications within the IBM z/OS environment

Why Use This Service?

- Do you have open source or Linux applications that interact with z/OS applications?
- Is managing multiple platform types for these applications difficult, or would you like to simplify this environment?

Benefits

- Build containerized applications using Docker and Linux skills without detailed z/OS knowledge
- Integrate zCX workloads with existing z/OS workload management, infrastructure, and operations strategy leveraging z/OS strengths such as security, networking, high availability, and disaster recovery
- Increase access to data analytics on z/OS by providing developers with standard OpenAPI-compliant RESTful services

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Service Provided

Advise on zCX conceptual basics and common uses

Assist with planning for zCX implementation including considerations related to software compatibility, memory usage, storage requirements, networking connectivity, security and backup/recovery

Advise and assist with provisioning of first zCX container

Advise on zCX operational best practices and share zCX skills and knowledge throughout engagement

Deliverables

- Implementation of an initial test zCX Container Extension instance
- Skills enablement for zCX
- Summary report on engagement activities and recommendations
- Guidance on best practices for zCX use

Contact

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

This service requires a minimum of 1 Z Forward Rewards



IBM zSystems Multi-Generation Currency and Migration Assessment

Overview

The IBM zSystems system multi-generation currency and migration assessment and assistance is a special currency and migration service offering designed for clients who are on older IBM zSystems generations and would like to move to IBM z16 and take advantage of new high-value features and functions offered with z16.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems clients running IBM zSystems BC12 or older technology who want to migrate to latest IBM zSystems and take advantage of features available on current IBM zSystems hardware and software.

Why Use This Service?

- Do you need help to get current on your IBM zSystems software?
- Are you interested in reducing risk associated with out-of-date or out-of-support IBM software running on IBM zSystems?

Benefits

- Quickly assess your current state of software currency and establish a practical and actionable plan to enhance currency

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Service Provided

- Identify and validate the scope and overall objectives of the currency and migration project

- Identify and request any required client-provided system information for currency assessment

- Perform overall environment discovery and review to determine current state

- Review current software currency and maintenance methods and procedures used

- Identify high-level dependencies and migration activities anticipated

- Develop a recommended migration approach

- Document high-level migration approach, assumptions and basic migration phase timeline

Deliverables

- High-level currency and migration report including assessment observations, recommendations, basic migration approach, timeline and estimated effort

Contact

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

This service requires a minimum of 4 Z Forward Rewards

Note: additional hours may be acquired at an additional cost to assist with execution of the migration plan.

Note: above tasks are representative and may be customized based on specific assessment focus



Cyber Vault for IBM zSystems Installation and Configuration

Overview

Are you looking for ways to improve data security on your mainframe storage?
Are you looking for ways to optimize or enhance your business continuity and disaster recovery and strategies?

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems client who are interested in protecting their data from cyber threats
- IBM zSystems clients who want to ensure their data is protected by a logical air gap

Why Use This Service?

- Are you looking to improve data security on your mainframe storage?
- Are you concerned about virus attacks?
- Are your policies and practices aligned with industry best practices?

Benefits

- Secure mainframe data with air gap Safeguarded Copies to prevent it from being accidentally or deliberately compromised
- Lab Services can provide air gap data storage which can not be altered

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Services Provided

Storage Services

- Implement Safeguarded Copy in IBM Copy Services Manager
- Implement Safeguarded Copy with Logical Corruption Protection for GDPS

IBM zSystems Services

- Assist with configuration of IBM zSystems Cyber Vault environment

Cyber Vault Services

- Develop strategy for automated creation of SGC data sets
- Verify client ability to emergency IPL off SGC data set
- Conduct a Cyber Incident Response simple recovery test from SGC data

Deliverables

- Analysis of existing storage environment
- Documentation of solution as implemented
- Training and Reference material for key components

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This service requires a minimum of 4 Z Forward Rewards



Cyber Vault for IBM zSystems System Component Data Recovery Validation

Overview

IBM Safeguarded copy combined with strong operational procedures can significantly strengthen your ability to respond to Cyber Security incidents. The foundation is built upon the industry-leading technologies of IBM Safeguarded Copy and the Data Recovery System approach which is focused on ensuring usable and restorable copies of critical system and application datasets and databases.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Mainframe customers who are interested in protecting their data from cyber threats
- Mainframe customers who want to ensure their data is protected by a logical air gap between production and backup

Why Use This Service?

- Do you need to validate restorability of your Safeguarded Copy air gap configuration?
- Are your policies and practices aligned to facilitate rapid and reliable recovery from cyber resiliency data loss incidents?

Benefits

- Secure mainframe data with air gap Safeguarded Copies to prevent accidental or deliberate corruption or destruction
- Utilize a pre-defined method for ensuring system and application component data is usable for recovery

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Service Provided

- Cyber Vault relies on client selected systems and applications datasets and databases critical to business continuity

- For selected operating system and middleware components following services may be selected:

- Identify middleware used in client environment
- Verify data integrity tools are functional and operating
- Develop automated strategy to continuous verify data integrity

- Perform data validation on selected components on a safeguarded copy backup to validate usability
 - Selected systems components recovery validation
 - Confirm SGC data can be used to perform systems components recovery

- Outline CV recovery processes for fast restore

- Analyze and advise on client-owned operational processes required to enablement use of CV

Deliverables

- Identification of client-owned operational procedures needed to facilitate data recovery in the event of a cyber resiliency incident
- Documentation of solution as implemented
- Training and Reference material for key components

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

This service requires a minimum of 4 Z Forward Rewards



IBM zSystems Resiliency Rapid Technical Assessment

Overview

The IBM zSystems Resiliency Rapid Technical Assessment provides a way to get a quick technical review of your environment resulting in a set of high-level recommendations and next steps to strengthen system resiliency. IBM Systems Lab Services consultants provide a variety of assessment options for many IBM zSystems and LinuxONE components including z/OS, Linux, Networking, Security, FiCON, Sysplex, Db2, CICS, IMS and WebSphere MQ Series

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- IBM zSystems clients interested in reducing the risk and business impact of service outages and want to quickly assess whether their systems meet general industry practices for resiliency

Why Use This Service?

- Are you experiencing IBM zSystems or LinuxONE availability or resiliency issues?
- Are you concerned about the cost and impact service outages have on your business?
- Are your policies and practices aligned with best practices?

Benefits

- Resiliency Rapid Technical Assessments are built on a proven methodology of data collection, analysis and recommendations based on industry best practices and many client experiences
- Resiliency Rapid Technical Assessments are customized to focus on a few specific areas based on client needs

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Service Provided

- Develop and provide specific data collection requirements needed to perform technical assessment analysis activities
- Receive and analyze data collected from client based on data collection requirements identified
- Analyze selected configuration and parameter files provided by client
- Analyze software currency levels and maintenance dependencies
- Analyze selected technical assessment reports as required
- Document technical assessment observations, findings and recommendations aimed at preventing outages and minimizing the impact
- Understand current state and identify gaps

Note: above tasks are representative and may be customized based on specific technical assessment focus

Deliverables

- A report suggesting next steps, more introspective solutions, and a high-level technical summary of assessment observations and findings
- Guidance on best practices for selected technical assessment review area(s)

Contact

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

This service requires a minimum of 1 Z Forward Rewards



Linux Migration Services

Overview

Running today's modern Linux workloads on the IBM LinuxONE or Linux on zSystems can provide significant benefits in terms of performance, scalability and cost of ownership. Linux Migration Services for LinuxONE or Linux on zSystems is a proven phased approach to help clients migrate their Linux environments.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients running Linux on x86 systems who are looking for improved scalability, cost and operational efficiencies for their environment

Why Use This Service?

- Is your current x86-based Linux environment complex and difficult to support?
- Are you interested in leveraging a strong scalability solution for running Linux?
- Are you experiencing high software license charges in your Linux environment?

Benefits

- Leverage a Linux infrastructure that is built for high scalability, performance and operational efficiency
- Use a proven phased migration methodology to move your Linux workloads with the help of consultants with proven migration expertise

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Service Provided

- Lead Workload Migration Discovery Meeting
 - Review workloads, operating environment, software components and dependencies
 - Develop high-level migration approach, identify risks and mitigations
 - Prepare for Workload Migration Assessment Workshop
- Conduct Linux Migration Assessment Workshop
 - High level analysis of workloads – current and future state definitions
 - Develop technical solution architecture
 - Develop migration project plan and roadmap
 - Determine Workload Migration Execution roles and responsibilities
 - Develop POC and validation plans as needed

Deliverables

- Documented high-level migration approach, assumptions and risk mitigation considerations
- Linux workload migration plan including:
 - Key assumptions and risks
 - Migration approach and plan
 - Technical solution architecture
 - Project roles and responsibilities
 - Migration Project Sizing and Schedule

Contact

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

This service requires a minimum of 2 Z Forward Rewards



Hyper Protect Digital Assets Platform Deployment Services

Overview

IBM Hyper Protect Digital Assets Platform Deployment Services enables protection of Linux workloads on IBM zSystems and LinuxONE throughout their lifecycle: build, management and deployment. As a result of enabling a secure cloud development environment, clients will build and deploy their own custom apps, vendor-provided apps, or open-source apps within the Hyper Protect environment.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who have current Linux experience and want to make use of IBM Hyper Protect environment to create a secure application build, deploy and run capability

Why Use This Service?

- Are you new to LinuxONE and would like help to accelerate your initial deployment of LinuxONE and the Hyper Protect Digital Assets Platform?

Benefits

- Accelerate planning and implementation of IBM Hyper Protect Digital Assets Platform environment
- Access to experienced consultants for skills transfer

Service Provided

- Conduct a remote pre-installation and pre-requisite planning
- Deploy a LinuxONE or Linux on IBM zSystems server
- Configure system via HMC and IBM DPM
- Define three (3) server partitions – (2 SSC + 1 plain LPAR)
- LPAR: deploy 5 Linux virtual servers under KVM (non-Hyper Protect)
- Validate Virt-Manager works with each KVM
- SSC: Deploy 5 Hyper Protect Virtual Servers, and deploy 1 secure build
- Tailor LinuxONE internal Networking and Storage definitions
- Optional Services (add'l cost)
 - Configure one (1) TKE workstation in test LPAR, install TKE listener, provision initial Smart Cards
 - Create TKE roles and conduct master key ceremony on Test LPAR

Deliverables

- Summary installation report containing information such as: hostnames, userids, passwords or ssh keys, and where to obtain IBM product support.
- Skills enablement and guidance on best practices on how to use system including topics such as how to deploy additional virtual servers

Contacts

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

This service requires a minimum of 2 Z Forward Rewards



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IBM Db2 Analytics Accelerator Implementation Enablement Assistance

Overview

IBM Db2 Analytics Accelerator for z/OS, delivers enterprise-grade transactional and analytic processing enabling an integrated, low-latency data coherency between Db2 for z/OS and the Db2 Analytics Accelerator running on directly on IBM zSystems or LinuxONE systems.

Z Forward Acceleration Rewards

IBM Systems
Lab Services

Target Audience

- Clients who want to run an integrated IBM Db2 Analytics Accelerator (IDAA) appliance directly on IBM zSystems or LinuxONE systems

Why Use This Service?

- Do you need to support Db2 analytics accelerations and would like to take advantage of scalability and performance of IBM zSystems or LinuxONE infrastructure for appliance functionality?

Benefits

- Accelerate planning and implementation of IDAA for z/OS on an IBM zSystems or LinuxONE platform
- Access to experienced consultants for skills transfer

Service Provided

- Remote pre-installation and pre-requisite planning
- Deploy a LinuxONE or Linux on IBM zSystems server
 - Configure system via HMC, IFLs, memory and IBM DPM
- Storage and Networking Configurations
 - Define and configure IDAA-related storage to support for IDAA runtime, operations and data pools
 - Define networking connections for SSC and connectivity to z/OS Db2
- Setup IBM IDAA Appliance on IBM zSystems or LinuxONE
 - Define and configure Secure Service Container
 - Install and configure Db2 Analytics Accelerator Appliance Runtime
- Review and recommend z/OS WLM and configuration parameters related to IDAA
- Enable client with knowledge on how to use newly installed IDAA

Deliverables

- Complete planning and implementation tasks for basic Db2 Analytics Accelerator for z/OS on IBM zSystems or LinuxONE
- Informal knowledge sharing regarding system configuration and basic understanding of Db2 Analytics Accelerator for z/OS on installed platform

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IBM Z Forward acceleration initiative

IBM Z Forward Acceleration helps clients make the most of their IBM zSystems investment and [accelerate the transformation](#) of their IT infrastructure and [expedite the adoption of new IBM zSystems technologies](#).



23

33

The IBM logo, consisting of the letters 'IBM' in a bold, blue, sans-serif font. The letters are composed of horizontal bars, with the 'I' and 'M' having a striped pattern and the 'B' having a solid blue fill.

24

34