Integration with Linux on IBM z14

Integration agility

The data flowing between you, your business systems and your customers can be a critical business asset. But inflexible application integration can make it difficult, if not impossible, to transform that data into actionable information in a way that supports the business.

Throughout the IT history, the integration of transactions, data, or processes has been an important part of most projects.

In the age of mobile devices, social networks, and cloud services, and big data analytics, integration is more important than ever, but the scope of the challenges for IT projects has changed.

Unquestionably one of the greatest IT challenges today is to respond very quick to new demands — a new business partner needs access to your ERP system, or finance needs immediate access to an human resource app to streamline payroll functions.

It is still not uncommon for enterprises to have dozens of applications that communicate in haphazard ways, meaning that applications and their connections are rigid, requiring hard-coded changes, which are costly and time-consuming.

It is no surprise that in such environments the more to change, the more complex the task of managing the communication becomes.

Integration solutions have to simplify the connectivity between IT assets, including existing applications, packaged applications and web services, without requiring coding changes. The solutions should provide a unified platform to integrate across applications, mobile devices, the emerging area of Internet of Things and business-to-business projects.

Simplify connectivity

There are several areas that need to be considered when simplifying the connectivity between your IT assets.

Remove point-to-point connectivity

Connectivity through an intermediary integration layer eliminates the need for point-to-point connectivity, thus you need to manage only two connections rather than a multitude.

Break down organizational boundaries

Connect new and existing applications across domains and departments to provide assured delivery of all data across a multitude of operating systems, environments and systems.

Support data in any format

As most business use many types of data, the integration technology has to support many data formats and must be able to perform conversion from one format to another.

Connect across an array of applications

Integrate across existing applications, mobile apps, packaged applications, such as SAP, and web services, thus providing access to data in an efficient and reliable way anywhere at anytime.

Monitor and capture data for analysis

Provide real-time visibility by monitoring the integrated data flow, and store data securely for offline analysis and audit logging.

Manage sensitive data

Secure the integrated data flow between source and target applications as it crosses organizational boundaries and various security domains.

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Use cases

Accelerate the digital transformation by leveraging existing systems. Deliver the platform for next generation integration, bridging between digital and traditional IT.

Enable mobile apps to unlock the services in your existing systems, by providing a way of flexible integration and context based interaction with the business anywhere at anytime.

Establish standardized integration for faster business decisions through real-time insights on business processes.

Enable the integration of premise services and applications into an hybrid IT environment to maximise value.

Integration Solutions

IBM® Integration Bus is an enterprise integration engine that offers a fast and simple way for systems and applications to communicate with each other. As a result, it helps to reduce complexity and save money.

IBM Integration Bus supports a range of integration choices, skills and interfaces to optimize the value of existing technology investments. It allows to perform business transaction monitoring and is a vital platform for the API economy and analytics.

IBM Integration Bus enables you to connect existing systems to mobile and other environments, helping you to create an integrated hybrid platform.

The IBM Integration Bus can be used alongside the leading messaging backbone IBM MQ.

IBM MQ (MQ) can transport any type of data as messages, enabling businesses to build flexible, reusable architectures such as service-oriented architecture (SOA) environments. It works with a broad range of platforms, applications, web services and communications protocols for security-rich message delivery.

MQ provides a communications layer for visibility and control of the messages and data flow inside and outside your organization.

Open source software solutions are available as well, such as Fluentd, Logstash or RabbitMQ.

Integration with Linux on IBM z14™ (z14).

Integration between large traditional systems to unmanned devices, messages to flow between different business applications, or a SOA implementation is a great workload fit for Linux® on all z14 models (M01, M02, M03, M04, M05, ZR1)

The support of standards such as Web Services and REST with JSON is important to make it easier to build new applications. And for agility and scalability, microservices offer the architectural style to implement independently deployable units of code that communicate via APIs via the IBM Integration Bus.

The most effective integration can be achieved, when the IBM Integration Bus or MQ is co-located next to mobile apps handled by MobileFirst™, data bases on IBM Z®, packaged applications like SAP, and web services, as well as to the core applications and data in CICS®, Db2® or IMS® running on z/OS® or z/VSE®.

Summary

Building an 'Integration hub' with Linux on IBM Z® enhances not only your flexibility and connectivity while controlling costs, but also provides you the flexibility, scalability and security of the IBM Z servers.