Physical integration increases collaborative synergy across DataPower and zEnterprise environments.

**Summary of benefits:** are seen in the areas of:
- Configuration management: Broad integration with System z
- Subsystem: Higher performance with multiple levels of XML optimization
- Networking: Comprehensive load distribution and HA options
- Security: Higher levels of security assurance certifications available with hardware
- Management: Simplified deployment and ongoing management
- Tooling: Consistent tooling across IBM product family

The DataPower X10z uses the security and auditibility features and functions of host hardware, host software, & application software provided by the hardware in support of the zBX. The zBX chip set component of the zBX is thus not common use cases for this appliance.

**NOTE1:** In general far archives is not support i9 but p20 through a second private network.

**NOTE2:** X10z is fundamentally the same as that for the X150 and X150h (at the 3.1.8 firmware level)

- Physical integration with any-to-any transformation between disparate message formats with integrated message-level security and superior performance
- Provides comprehensive enablement for core System z2 environments to enable web-based workloads
- Enables SOA and XML applications with System z web services for seamless integration of distributed and System z platforms
- Offers standards-based, centralized System z governance, and extreme reliability through integrated security, management, and Solve Page+F5 security through a second private network

**DataPower X10z** is a multifunctional appliance that can help provide multiple levels of XML optimization, streamline and secure valuable service-oriented architecture (SOA) applications, and provide drop-in replacements for heterogeneous environments by enabling core Enterprise Service Bus (ESB) functionality; routing, bridging, transformation, and event handling; and to help simplify, govern, and enhance the network security for XML and web services.

When the DataPower X10z is installed within the zEnterprise environment, 2Manager will provide integration management for the appliance to simplify control and operations including change management, energy monitoring, problem detection, problem reporting, and dispatching of an IBM System z Service Representative as needed.

The DataPower X10z appliance is a front-end server to help manage and optimize XML messages in a SOAP or HTTP format allowing:
- Monitoring of messages as by response times, message rates, or message transaction type size.
- Parsing of messages to allow specific routing based on Quality of Service requirements by user or transaction type.
- The ability to take synchronous or asynchronous action based on the message, such as additional database calls to add to the message, or to modify the content message.
- Optimization of message processing by managing protocol, encryption, and security fields. It then can forward to the System z just the message data content.
- Management of the application firewall to provide secure XML, threat protection, or digital certification.
- It can validate messages by looking at the user, the fields being referenced, and the message format.

Conversion of XML to more efficient protocols than the SOAP or HTTP format, such as WebSphere MQ, the zBX provides additional benefits to the DataPower appliance environment in the areas of:

**Blade hardware management**
- Improved cooling and power management controls, including cooling of the frame and energy monitoring and management of the DataPower blade.
- Virtual network provisioning.
- Call-home for current and expected problems with automatic dispatch of IBM SSR.

**Hardware Management Console integration**
- Single view showing the System z environment together with the DataPower blade in an overall hardware operational perspective
- Group GUI operations for functions supported on HMC such as activate or deactivate blades.

**Improved availability**
- Guided placement of blades to optimize built-in redundancy in all components at the rack, BladeCenter, and HMC levels, including top of rack switch, ESM switches, and physical network.
- DataPower power on appliance failures. The HMC/SE can also be used to re-cycle the DataPower appliance.

**Networking**
- Virtual network provisioning.
- Enforced isolation network traffic via VLAN support.
- 1Gb end-to-end network infrastructure.
- Built-in network redundancy.
- Network protection via IEDN, possibly obviating any perceived need for encryption of flows between DataPower and the target back-end System z server.

**Monitoring and Reporting**
- Monitoring and reporting of DataPower hardware health and degraded operation via HMC.
- Monitoring of all hardware, call-home, and auto-parts replacement.
- Consolidation and integration of DataPower hardware problem reporting with other problems reported in zBX.

**System z value**
- Simplified ordering of the DataPower appliance via System z allows the proper blade infrastructure to be transparently ordered.
- Simplified upgrades keep MES history so the upgrades flow based on what is installed.
- System z service on the zBX and DataPower blade with a single point of service provides 24x7 maintenance with IBM SSR support.
- The DataPower appliance becomes part of the data center and comes under data center control.

**Although not specific to the zBX environment, dynamic load balancing to DataPower appliances is available using the zOS® Communications Server Sysplex Distributor.

**The 2462 Model 4BX** is designed to work together with the IBM 2458 Model 012 zBX.

- It is functionally equivalent to an IBM 4915-4BX with similar feature codes.
- When you configure the IBM 2458 Model 002 with feature code 0611, it will provide a hardware order for the IBM 2462 Model 4BX and its hardware feature codes and a software and software maintenance order for the required software features.
Common Core Values
Management by System z Unified Resource Manager increases simplification of your infrastructure
Increased reliability for DataPower XI50z on zBX includes faster response for system critical applications
Enhances the Cloud Computing model by allowing a single hardware end-to-end infrastructure and integration of both distributed and System z application
Re-Use of z assets for SOA, without re-training System z resources
Enhancement of high scalability and mission critical design, System z and DataPower offer tremendous value for large enterprise customers
End to End SOA with integration of DataPower XI50z on zBX which simplifies the administrative monitoring of applications
DataPower’s ease of configuration allows z-centric resources to become effective at using SOA concepts and technologies quickly