



Connectivity & Integration *update*

2013 Business Partner Enablement
22. 1. 2013

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zWebSphere Brand Leader
DataPower Ambassador



1

Understand vision for ESB capabilities

2

Understand DataPower Basics

3

DataPower and ESB positioning

4

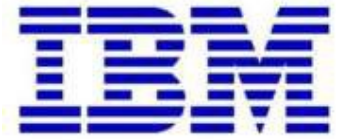
Summary & OI



Connectivity from IBM Delivers Unrivalled Customer Value



in Connectivity & Integration
market share*



Over **10,000** customers
worldwide and growing!

Report: IBM Named Marketshare Leader in Middleware Software

Announcement Marks Beginning of Second Decade of Software Leadership

“Gartner reported that IBM continues to be number one in other growing and key areas including the **Enterprise Service Bus Suites, Message Oriented Middleware Market, ...and Integration Appliances.**”

April, 2012

* Source: “*IBM Named Marketshare Leader in Middleware Software*”
<http://www-03.ibm.com/press/us/en/pressrelease/37376.wss>.



Shifts in Enterprise Service Bus requirements

1

Changing role of Developers

- Can't deliver full value of apps in isolation
- More responsible for connect apps they create
- Want simple way to compose apps that is consistent with their Enterprise Service Bus



2

Expanding scope of ESB projects

- Need broad, universal Enterprise Service Bus to
 - Bridging across enterprise silos - departments, locations
 - Connecting explosion of endpoints - mobile, cloud, sensors
 - Integrating across more diverse IT environments



3

Innovation enables more flexibility

- Advancements in creating embeddable technology
- Enabling development of modular ESB capabilities
- Can make ESB flex to address multiple use cases



4

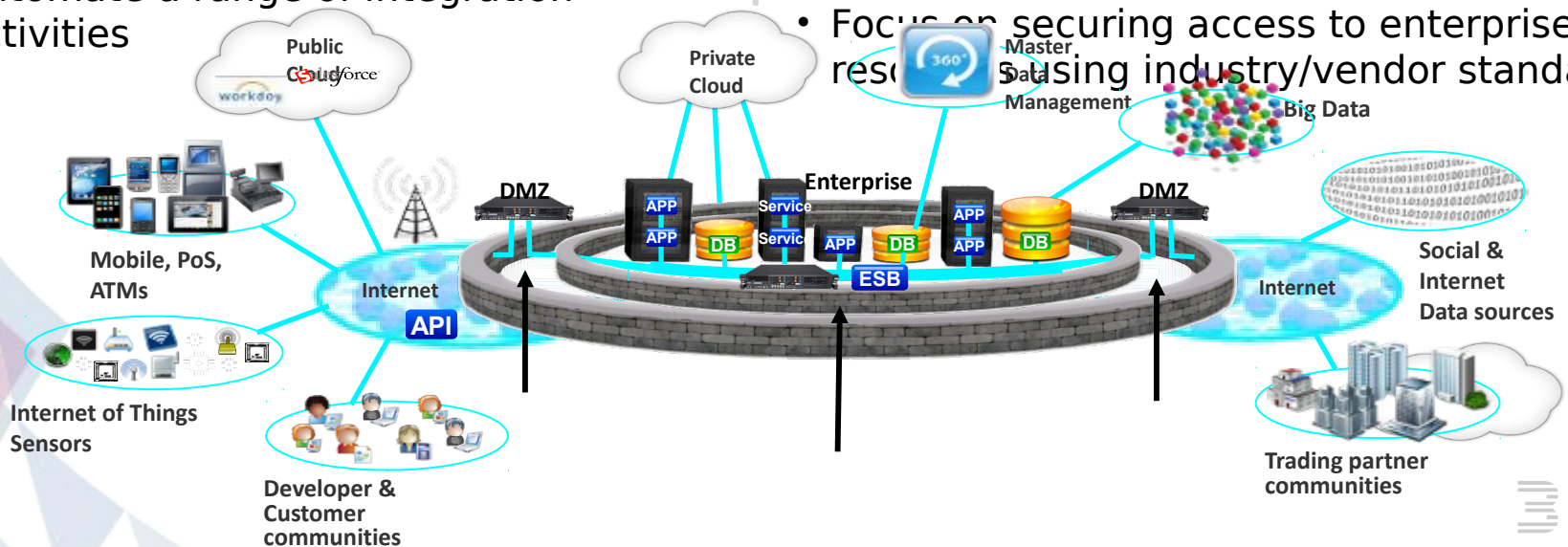
Security & Integration Use Cases

Enterprise Integration

- Clients seeking core foundation platform for universal integration – may call it an “ESB”
- Be able to integrate any endpoints – don't know what you're going to integrate in future
- Focus on timeliness of information circulating – being able to notify variety of end-points
- Automate a range of integration activities

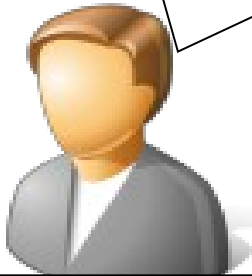
Security & Integration Gateway

- Clients seeking to secure and optimize the delivery of apps and services – may call this “SOA Gateway” or “Web Services/XML/API gateway” or “Mobile Gateway” or “B2B Gateway”
- Be able to provide lightweight integration including XML offload, message validation/filtering/transformation, dynamic routing & intelligent load distribution
- Focus on securing access to enterprise resources using industry/vendor standards



Security & Integration Customer Needs

I need a flexible way to connect my applications together so I'm not building point to point connections. I have to deal with multiple connections and message formats, and flexibility and reliability are critical.



Why Start Here?

- Flexible reuse-oriented foundation for building any-to-any connections
- Ideal for brokering message formats among systems
- Very high level of flexibility & reliability

I want to securely expose my enterprise data to external consumers/partners and also securely connect apps/services within the enterprise, while optimizing delivery of the workload.

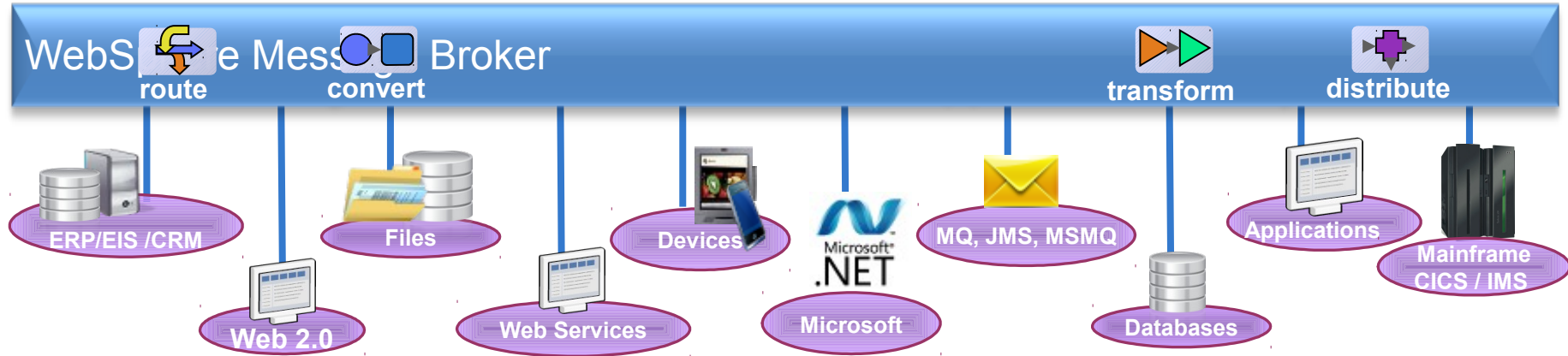


DataPower

Why Start Here?

- Purpose-built, hardened, DMZ-ready gateway appliances
- Ideal for securing and optimizing app/services delivery, while providing lightweight integration
- Hardware-based acceleration option

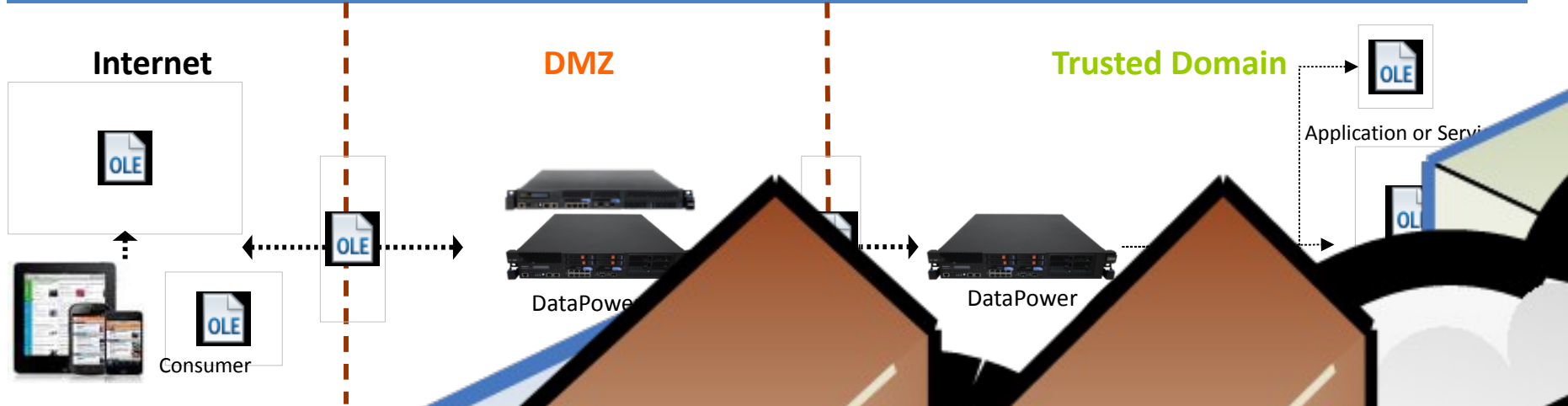
What is WebSphere Message Broker?



- Powerful integration Enterprise Service Bus for universal connectivity
 - Transforming and enriching any type of data
 - Complex routing capabilities with visual design tools
 - Enterprise-wide transactionality, scaling, performance, high availability
 - Range of transport protocols e.g. MQ, JMS, HTTP, FTP
 - Built-in integration to enterprise environments and applications e.g. CICS, IMS, DB2, SAP
 - Range of Editions (Express, Standard, Advanced) easy upgraded to full capabilities for industry-leading scalability (no new installation required)

What is WebSphere DataPower?

Security & Integration Gateway Appliances



- **Securely expose** enterprise workload
- **Securely connect** providing lightweight message/transaction management
- **Physical and virtual performance**
- Provides...
- **Simple**
- ...

Enhancing our ESB capabilities

1

Making it easier for Developers

- Quickly and easily connect their apps together
- Configure common tasks without deep integration skills
- Integral aspect of App Infrastructure Foundation
- Seamlessly deploy into Enterprise Service Bus



2

Enabling universal ESB projects

- Deliver universal ESB that clients are asking for
- As natural extension of App Infrastructure Foundation
- Truly heterogeneous connectivity throughout enterprise
- Bridge existing assets with the new environments



3

Deliver more flexible ESB capabilities

- Address range of use cases with one unified offering
- Modular capabilities that scale to fit any size project



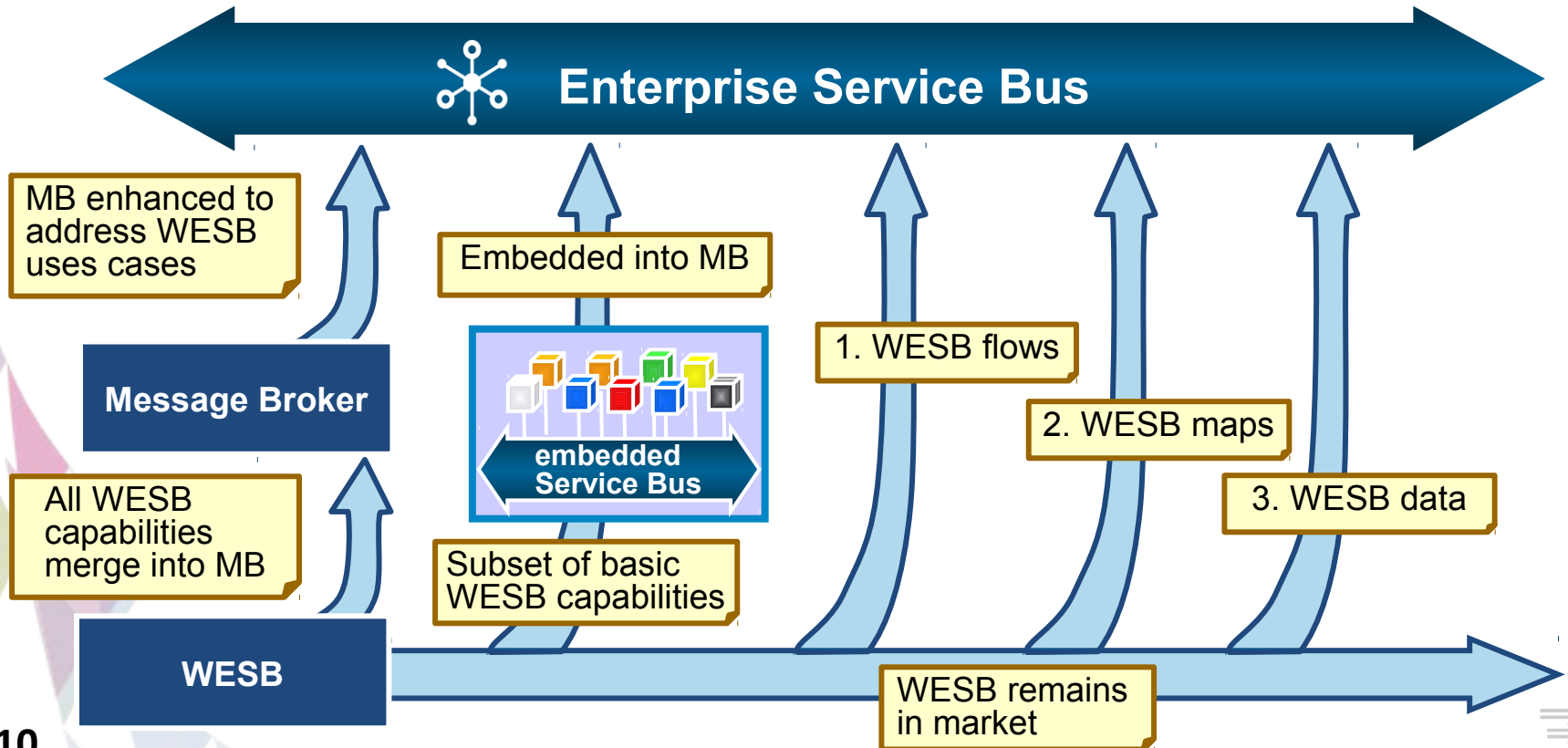
Evolving portfolio

Customers get all the capabilities of WESB within Message Broker

- All WESB's capabilities are merging into Broker – only some basic WESB capabilities go into WAS

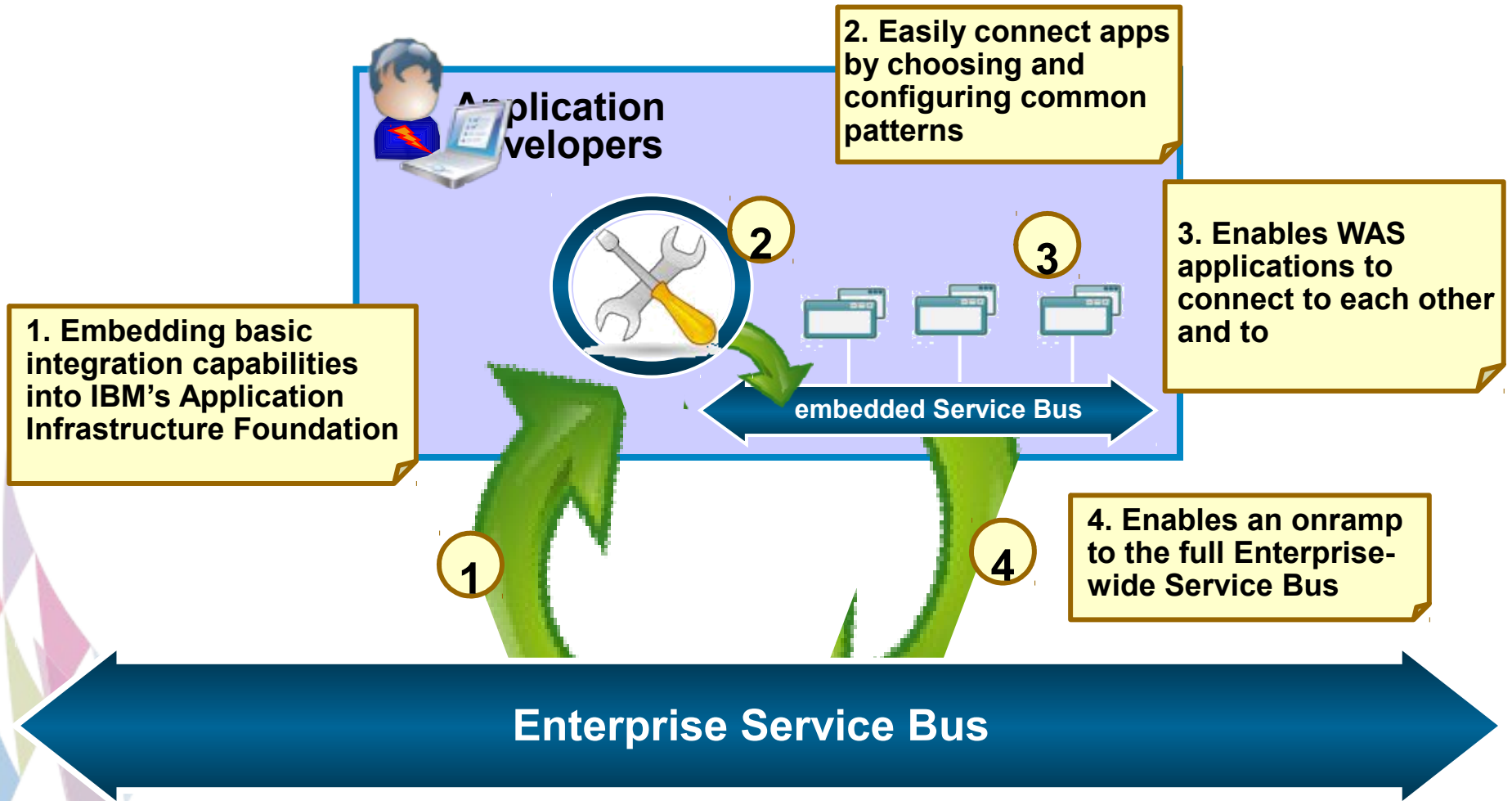
Significant innovation to Broker to add all the things WESB can do today

Customers will have a smooth upgrade path for WESB



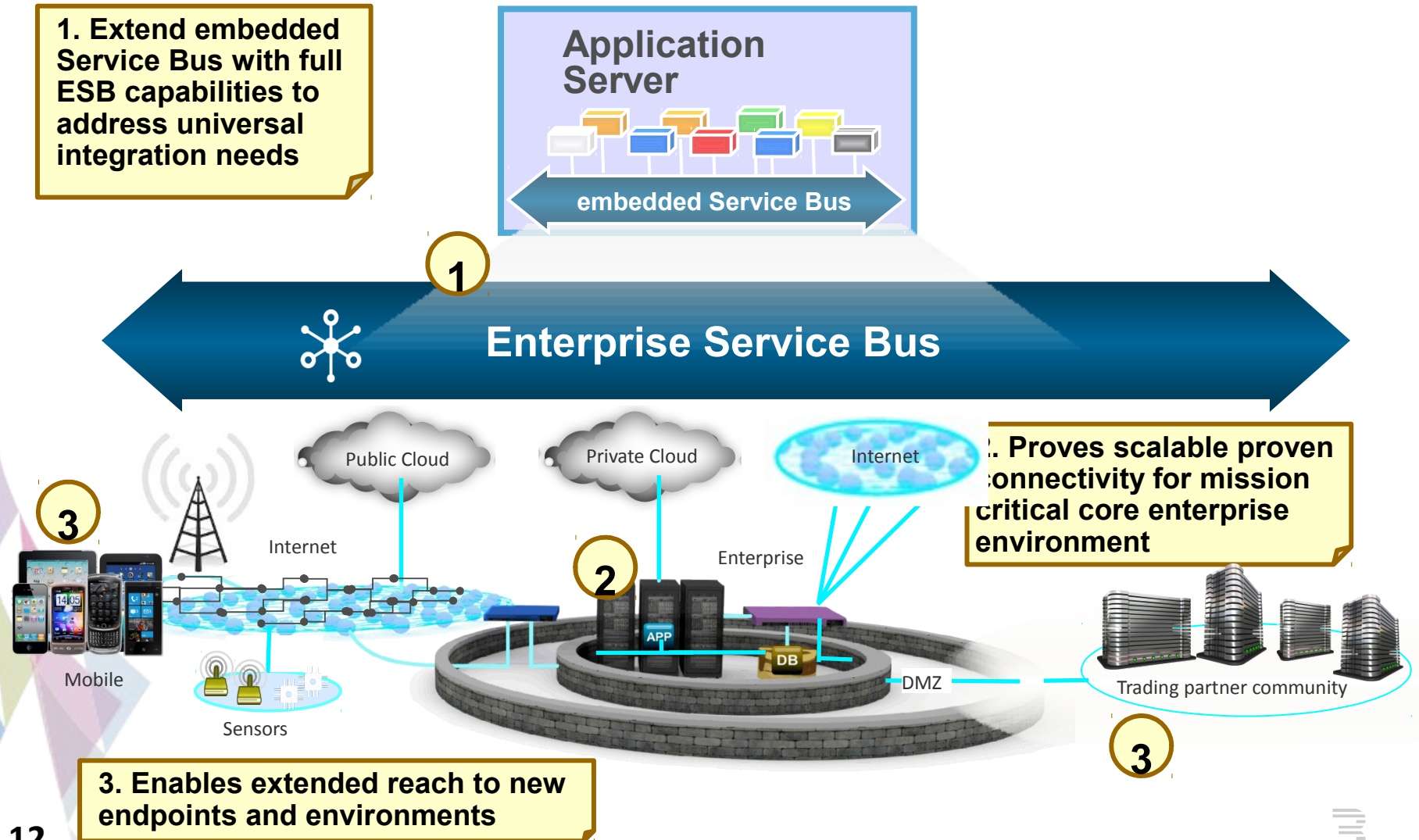
Making it Easier for Developers

Providing embedded capabilities to simplify connectivity tasks for developers

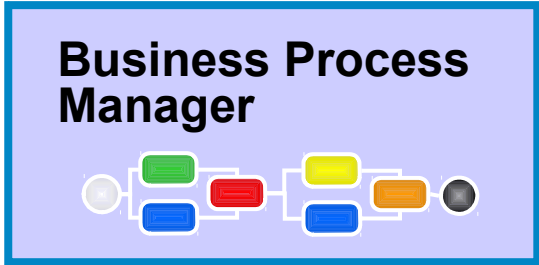


Enabling universal Enterprise Service Bus projects

Extending embedded Service Bus with full ESB capabilities



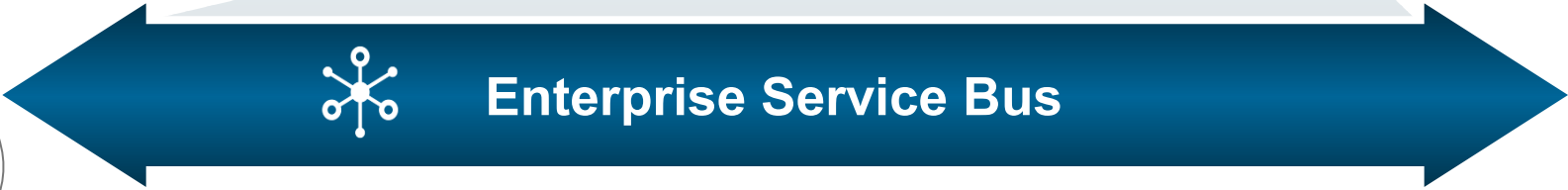
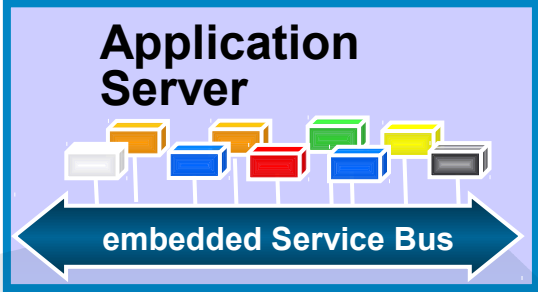
Intended Client Benefits



- Business Process Authors**
- ✓ Built-in connectivity to underpin processes
 - ✓ Don't need to care about how it works



- Application Developers**
- ✓ Simplifies common App connectivity tasks
 - ✓ Can use tools they're already familiar with
 - ✓ Fits within admin model they already know



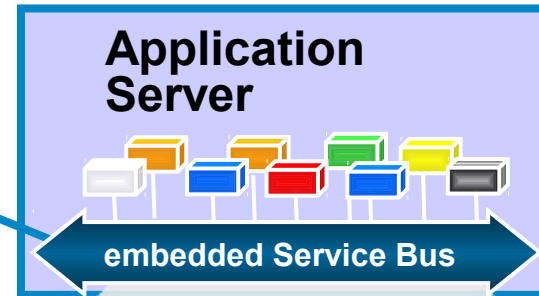
- Integration Developers**
- ✓ Provides full capabilities to connect virtually anything
 - ✓ Easy adoption path for Message Broker & WESB users
 - ✓ Provides natural extension to built-in connectivity capabilities



Seamless Service Bus Capabilities

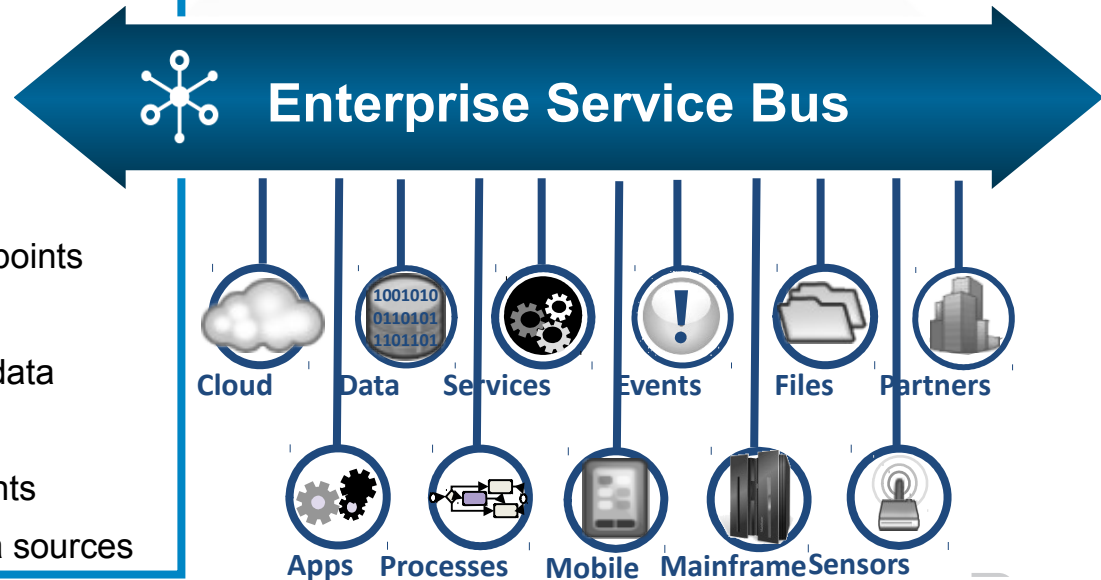
embedded Service Bus

- Integral to Application Server Infrastructure
- Basic “one-to-one” connectivity for WAS apps
- Managed centrally via WAS
- Can mediate between applications that use WAS
- Enables developers to configure common tasks
- Supports standard interfaces & data formats
- Designed for rapid integration of WAS apps



Enterprise Service Bus

- Full ESB for universal integration
- Superset adding following capabilities:
 - + Standalone Bus that meditates across endpoints
 - + Supports full range of connectivity tasks
 - + Integration of all standard & non-standard data
 - + Connectors for broad range of endpoints
 - + Connectivity for heterogeneous environments
 - + Integrates virtually any apps, services, data sources



Comparing embedded and full ESB capabilities

Planned capabilities

Connects across WAS hosted applications

Support JDBC, REST, Web services

Can configure patterns to connect applications

Full ESB capabilities

Can define custom mediation flows

Standalone ESB to connect applications and services anywhere

Integrates more than XML and JSON formatted data

Integrates across more than SOAP and JMS protocols

Integrates between apps when neither are WAS hosted



*



Offering Vision

Simplicity

Single software offering
addressing all ESB
connectivity use cases

Lightweight with high
performance

Integrated

WAS and BPM integration

Standards support
including SOA

Runs anywhere including
Java and .NET



Enterprise Service Bus

Universal

Integrates **virtually**
anything, anywhere

Combines **any style** of
connectivity

Easy to Adopt

For new clients of all sizes

For existing WESB and
Message Broker clients

Scales to **any size** of project

Intelligent

Apply **intelligence** to real-time,
in-flight data including predictive
analytics, business rules

Built-in **life-cycle management**



Business Objectives



Deliver most powerful Enterprise Service Bus offering in the market



Protect and extend all customer investments



Easy adoption path for Message Broker and WESB customers



Differentiate with unmatched ease and breadth



Freedom to choose any starting point and grow



Enhance IBM Application Infrastructure Foundation with embedded Service Bus capabilities



Extend embedded Service Bus seamlessly with full connectivity capabilities that enable an Enterprise Service Bus



Deliver combined capabilities of today's connectivity products in a unified Enterprise Service Bus offering



Powerfully Simple Enterprise Service Bus

IBM WebSphere Message Broker V8

- IBM's **lightweight, comprehensive** Enterprise Service Bus
- Delivers **universal connectivity** and integration for heterogeneous IT environments
- Focus on **simplicity** – can run new integrations in as few as 4 clicks!
- Connect a **wide range** of applications, databases, files and messaging systems
- **Easy to install** in less than 20 minutes
- **Easy to deploy** with growing range of configurable integration patterns
- **Grows** from Express to Advanced ESB
- What's new and available in V8:
 - Comprehensive support for Microsoft .Net and integrated dev experience for MS Visual Studio
 - Record & Replay capability
 - High performance open standard parser (DFDL)
 - New Graphical Mapper for easy transformation
 - Built connectivity for IBM Sterling



Delivers universal connectivity & integration with full ESB capabilities

Updated!

Industry specific value designed for Healthcare

IBM WebSphere Message Broker Connectivity Pack for Healthcare V7.0.0.2

- Industry pack **tailored** to healthcare IT professionals
- Easy and **rapid patterns-based** connectivity for new and existing **HL7** based applications
- Operational monitoring for clinical apps
- Builds upon **scalability and quality** of WebSphere Message Broker v7 and v8
- What's new in V7.0.0.2:
 - Medical device nodes to provide direct connectivity to Bedside medical equipment - patient monitors, infusion pumps etc
 - New Medical device Patterns including Device to EMR
 - Operational monitoring for connected clinical devices
 - US FDA Registration as Class I Medical Device Data System



Enables rapid integration of clinic applications and now medical devices

Note: Due to regulatory considerations the WebSphere Message Broker Connectivity Pack for Healthcare is subject to usage restrictions and restricted country availability.





SECURE your SOA, Web 2.0, B2B, and Cloud environments



SIMPLIFY your connectivity infrastructure



ACCELERATE your time to value



GOVERN your evolving IT architecture



WebSphere DataPower Appliances provide a low startup cost, helping clients **increase ROI and reduce TCO** with specialized, consumable, dedicated appliances that combine superior performance and hardened security



DataPower – A Purpose Built Appliance

Specialized compiler technology creates optimized executable object code from transformations (e.g. XSLT) that execute **natively on hardware**

Everything is viewed as a transformation that is extensible via DataPower custom extension functions



High-performing throughput-optimized engine yields wire-speed capabilities

Purpose-built hardware to execute SOA workloads and transformations



SOA Security & Integration Operational Scenario

1. External Party makes Web Service request (Web Services = HTTPS with XML Payload)

2. Verify Signature
3. Decrypt & Validate
4. Access Identity Mgmt System
5. Authenticate & authorize

6. Insert security token (e.g. SAML, Kerberos)
7. Send request to integration layer

8. Transform XML
9. Switch protocol (e.g. HTTP to MQ)
10. Route based on content

Web Services Interfaces

Account Aggregation Invoice/Payment Broker Portal Customer Portal

HTTP

Identity Mgmt System (Tivoli, LDAP, etc)

DataPower Service Gateway (XG45)

HTTP

Verify Sign. Authenticate
Decrypt XML Authorize
Validate Audit

17. Send response back
16. Encrypt & Sign
15. Filter response

Security Layer

Integration Layer

Click to edit Master text styles

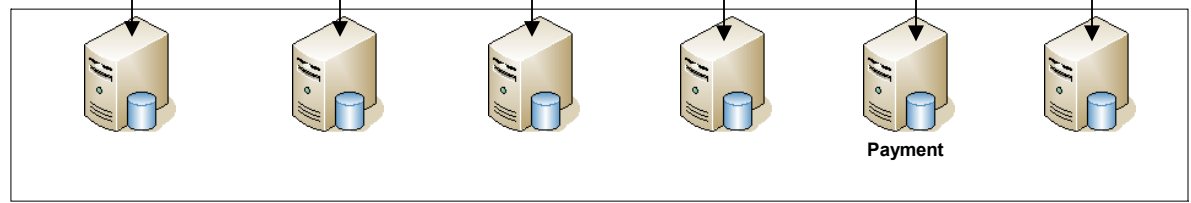
DataPower Integration Appliance (X152 or XG45 + DIM)

Transform XML
Protocol switch
Content Routing

14. Send to security layer
13. Transform response
12. Switch protocol
11. Aggregate response

MQ, JMS, FTP, HTTP, etc.

HTTP MQ JMS DB FTP other



Request Message

Response Message



Configuration-driven approach speeds time to market

- Enforce security standards with zero coding
- Uses intuitive pipeline message processing
- Import/export configurations between environments
- Transaction probe shows message content between actions for debugging

The image displays the WebSphere DataPower configuration interface. At the top, the rule name is 'SecureServicePolicyRequestRule' and the direction is 'Client to Origin'. Below this are buttons for 'New Rule' and 'Delete Rule'. A central bar provides instructions: 'Create rule: Click New, drag action icons onto line. Edit rule: Click on...'. A pipeline of action icons is shown, including Filter, Sign, Verify, Validate, Encrypt, Decrypt, Transform, Route, AAA, Results, and Advanced. The 'Sign' action is highlighted with a magnifying glass, showing its configuration details:

- Envelope Method:** Enveloped Method, Enveloping Method, SOAPSec Method, WSSec Method, Advanced
- Message Type:** SOAP Message, SOAP With Attachments, Raw XML Document, Selected Elements (Field-Level), Advanced
- Asynchronous:** on, off
- WS-Security Version:** 1.0, Save
- Use Asymmetric Key:** on, off, Save
- Signing Algorithm:** rsa, Save
- Key:** (none), +, ..., Save
- Certificate:** (none), +, ..., Save



New streamlined WebSphere DataPower Appliance offering meets your Security and Connectivity needs

Service Gateway XG45

- Multiprotocol
- Enhanced Security Capabilities
- Routing and Service Level Management
- Fine-grained authorization
- Includes Tivoli Option (TAM / TFIM access)
- Centralized Policy Enforcement
- Rich authentication
- Application Optimization and Load Balancing
- Data Integration Module – includes binary Data support and ODBC

Integration Appliance XI52, XI50b and XI50z

Additional Network Interfaces
More HDD for logging and Audit
Increased performance
SFTP

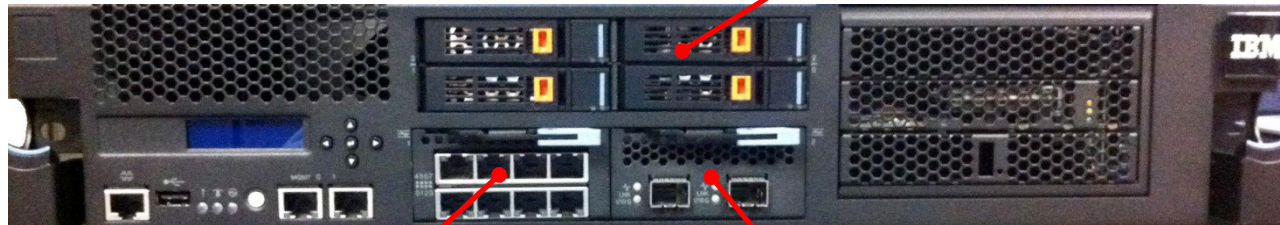
- IMS Connect
- TIBCO EMS
- ODBC
- Tivoli Option

B2B Appliance XB62

- Unparalleled B2B performance
- Secure B2B messaging (EDIINT AS1, AS2, AS3)
- Trading Partner Profile management
- Transaction viewing and resending
- EDI and ebXML Support
- Native MQ FTE Integration

New Hardware Platform: 7199 (9005) – XI52, XB62

- **Features**
- **Customer Replaceable Units (CRUs) and Field Replaceable Units (FRUs)**
- **Higher performance purpose-built hardware**
- **Hard drive standard but not required for proper operation**
- **1 Gb and 10 Gb ports standard**
- **2U in size**



RAID mirroring
and striping
across four drives

8 1-Gigabit
Ethernet
NICs

2 10-Gigabit
Ethernet NICs

New Hardware Platform: 7198 (9005) – XG45

24
Gigabytes
Memory

RAID mirroring
and striping
across two
300GB drives

2 10-Gigabit
Ethernet
NICs

4 1-Gigabit
Ethernet
NICs



IBM WebSphere DataPower Virtual Edition

Deployment flexibility & reduced cost for development and test environments

New!

What's New?

- WebSphere DataPower XG45 and XI52 physical appliance functionality in a “virtual appliance” form-factor running on VMware hypervisor

Features/Business Value

- Industry-leading workload security, optimization, and integration functionality similar to the corresponding physical DataPower appliance models
- Powered by a purpose-built platform including an embedded, optimized DataPower Operating System
- Ability to upgrade and downgrade firmware similar to physical appliances
- Seamless configuration migration between physical and virtual appliances

Client Benefits

- A flexible, cost effective choice for non-production environments
- A production solution for environments not suitable for physical appliance deployment
- Offers ability to use virtual appliances for development/test environments and physical appliances for staging, production and disaster recovery

Announce date
Oct 23, 2012

GA date
Nov 30, 2012



- Product Name**
- ✓ WebSphere DataPower Service Gateway XG45 Virtual Edition (PPA Product ID: 5725-J90)
 - ✓ WebSphere DataPower Integration Appliance XI52 Virtual Edition (PPA Product ID: 5725-J91)
- Dates**
- ✓ **Announce:** October 23, 2012, **GA:** November 30, 2012 (Pre-GA build for customer demo available Nov 7th)
- Functionality**
- ✓ Same workload security, optimization, & integration functionality as the corresponding physical appliance model. Exceptions:
 - No Hardware Security Module (HSM) support for FIPS compliance
 - No cryptographic hardware acceleration support
 - Not part of Common Criteria certification effort in progress for physical appliances
 - ✓ Each “virtual appliance” is powered by the same purpose-built platform as the physical appliance model, and includes an embedded, optimized DataPower Operating System
 - ✓ Uses signed/encrypted firmware images like physical appliances, doesn’t allow install of other software
 - ✓ Uses “scrypt4” format firmware image (scrypt2/3 are used by physical appliances), does not run or support firmware prior to v5.0.0
- Versions**
- ✓ Two versions for each product, Production & Non-Production, each priced separately:
 - **XG45 Virtual Edition for Non-Production Environments:** For non-production use. Includes following optional features at no additional cost: Application Optimization, Data Integration Module
 - **XG45 Virtual Edition:** For production use. Optional features must be ordered separately.
 - ** Both XG45 Virtual Edition versions include the Tivoli Access Manager feature like physical appliance model
 - **XI52 Virtual Edition for Non-Production Environments:** For non-production use. Includes following optional features at no additional cost: Application Optimization, Database Connectivity, Tivoli Access Manager
 - **XI52 Virtual Edition:** For production use. Optional features must be ordered separately.
 - ** TIBCO EMS feature is not available at this time, it’ll be a chargeable feature for both versions when available.
- Primary Use**
- ✓ Flexible deployment option, cost effective choice for development & test environments
 - ✓ Solution for environment not suitable for physical appliance deployments
- Pricing**
- ✓ Available through Passport Advantage. Priced based on Processor Value Unit (PVU)
- Hypervisor**
- ✓ **VMware** ESX v4.0, v4.1 OR ESXi v4.0, v4.1, v5.0, v5.1 (aka vSphere, current version is v5.1)
- Requirements**
- ✓ Minimum virtual resources for each virtual edition appliance
 - **4 vCPU** (i.e. virtual core) and 4GB RAM

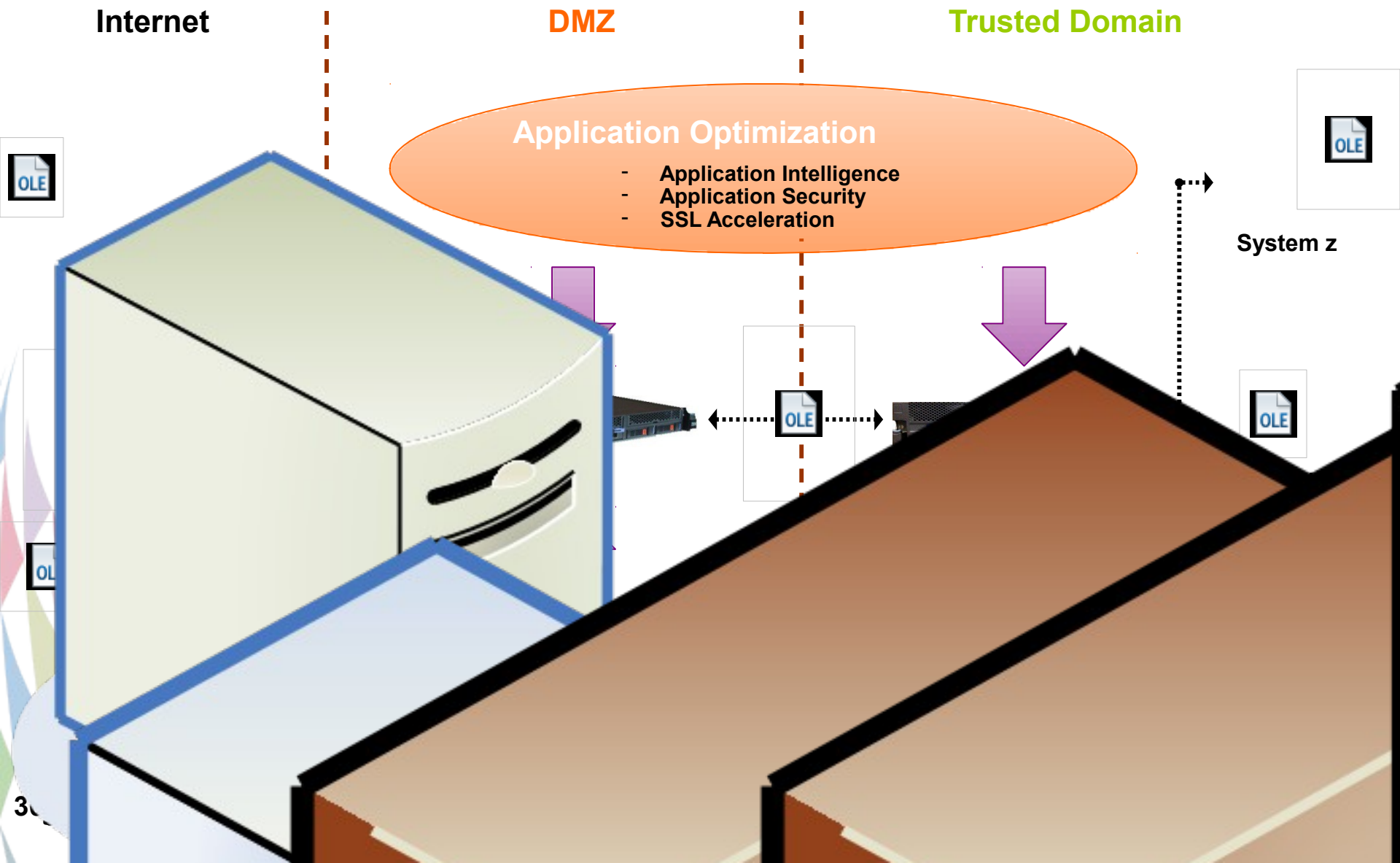
DataPower Virtual Appliance Positioning

- Physical appliances for all environments
 - Hardened physical security (FIPS 140-2 compliance, and Common Criteria EAL4)
 - Simplified deployment
 - Hardware acceleration for fast performance
 - Lower TCO
- Virtual for Test and Development and physical for Staging, Production and Disaster Recovery
 - Flexible and cost effective Test / Development environments

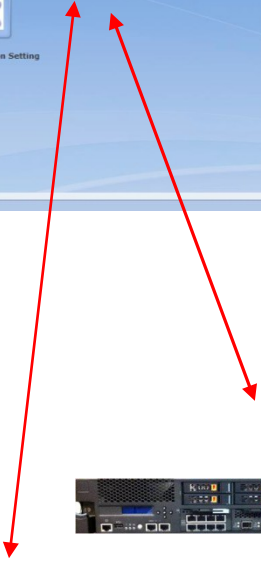
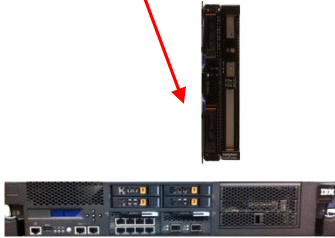
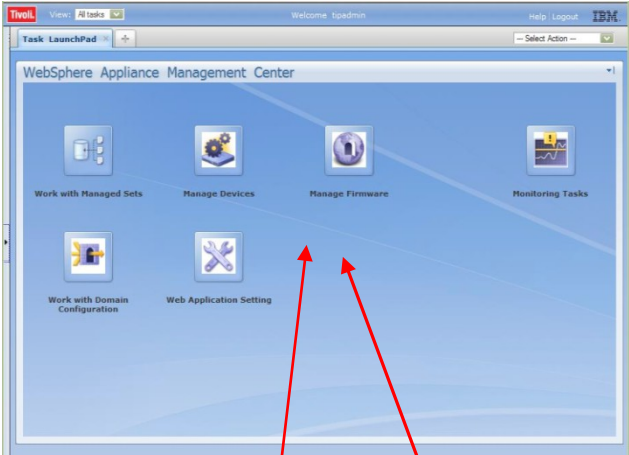
	Development	Test (Functional & System)	Test (Performance & Load)	Staging	Production	Disaster Recovery
Physical for all environments	Physical	Physical	Physical	Physical	Physical	Physical
Virtual for lower environments (Recommended)	Virtual	Virtual	Physical	Physical	Physical	Physical
Virtual for lower environments (Minimum)	Virtual	Virtual	Virtual	Physical	Physical	Physical



DataPower + AO consolidates the infrastructure



Simplified Operations Management reduces operations costs



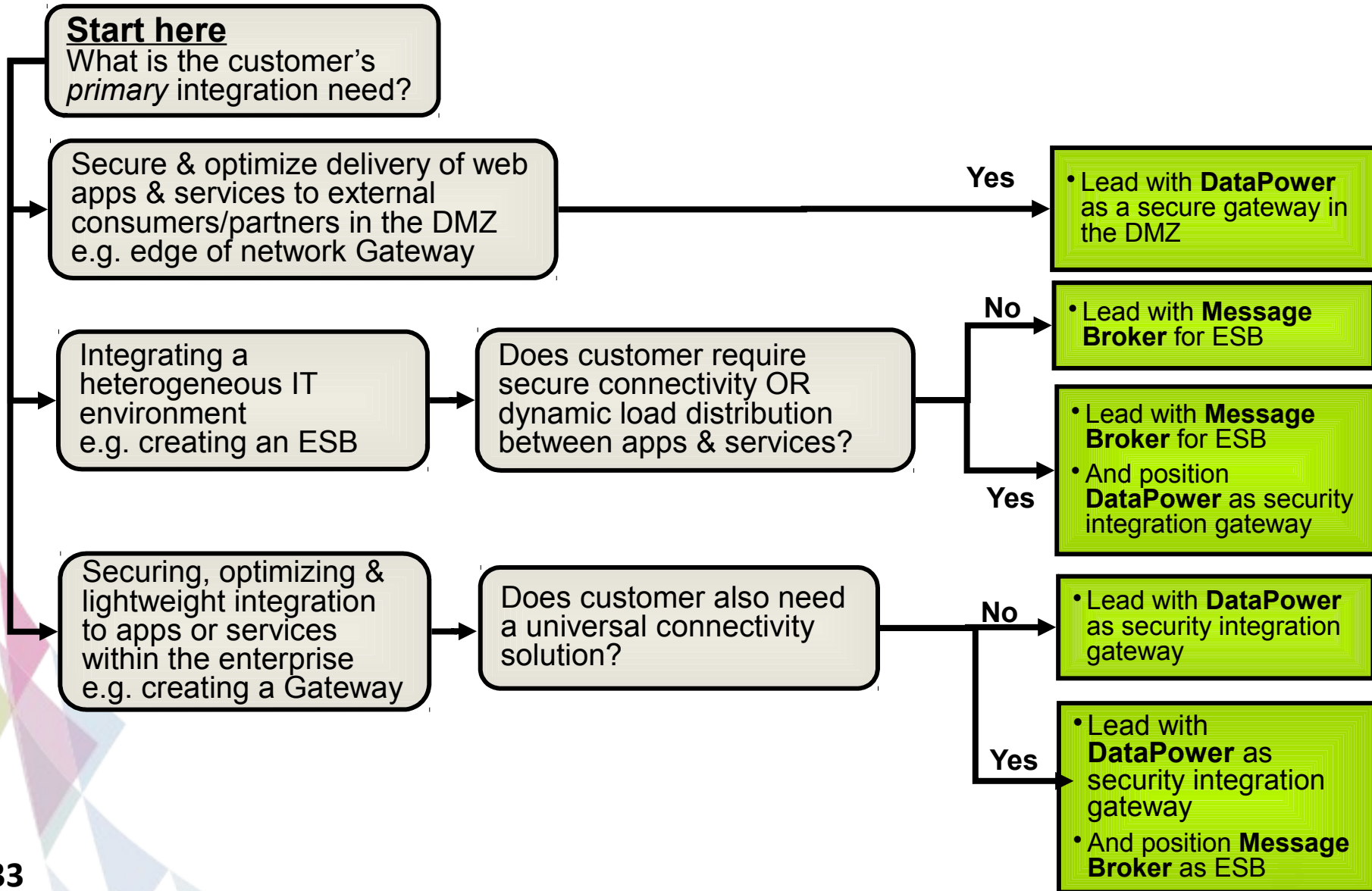
Enabling
Seamless
Integration

How to resell DataPower

- Route-to-Market
 - Sold as Tier 2 model
 - Channel Margin
 - 25% in case customer buys @List Price
 - 18% in case customer gets discounts
 - Sharing the Margin is your agreement with Distributor
 - Usual End User Discount is 30%
 - Send Discount Request with Business Justification to your local WebSphere Sales and cc: brabec_peter@at.ibm.com
- Pricing
 - Prices for off-shore country [in USD](#)
 - Price calculation [sample](#)
 - Virtual Appliances (recommended for Dev/Test) are PA Products
- Certifications
 - 2 Technical people have to pass [Certified DataPower Solution Implementer](#)
 - 1 WebSphere Sales Mastery



Positioning Guide



How to talk about DataPower and Message Broker, ONLY when both products are needed

How to describe the products

- DataPower provides **Gateway** capabilities – **IBM's Security & Integration Gateway** offering **security, optimization and integration** as a purpose-built appliance
- Message Broker provides **enterprise integration** capabilities – **IBM's ESB** (Enterprise Service Bus) offering for **universal connectivity**
- DataPower and Message Broker are **complementary offerings** in IBM's integration portfolio

How NOT to describe the products

- | | |
|--|--|
| ✗ DataPower is an ESB | ✓ Message Broker is IBM's ESB offering |
| | ✓ DataPower does provide transport protocol and message transformation capabilities but it does not provide a basis for a full ESB for universal connectivity |
| ✗ Message Broker provides security and optimization | ✓ DataPower is IBM's Security Integration Gateway offering |
| | ✓ Message Broker does not provide full built-in capabilities for securing and optimizing delivery of web apps and services |
| ✗ Mobile integration differentiates DataPower and Message Broker | ✓ Both offerings provide mobile capabilities
e.g. DataPower in the DMZ enables secure and optimized access and delivery of enterprise apps and services via |

Product Value Propositions

- **DataPower's core value** – secure & optimize delivery of apps & services while providing lightweight integration through a purpose-built gateway appliance
 - Provides security including threat protection, transport-layer & message-layer encryption, rich authentication, fine-grained authorization, auditing and token translation
 - Provides application optimization and lightweight integration including XML offload, message validation/filtering, message/transport protocol transformation, traffic control/quota enforcement, SOA governance & management, dynamic routing & intelligent load distribution
 - Focus is on acting as a security & integration gateway, not as an ESB foundation for universal connectivity
 - Affordable entry point with Service Gateway XG45 model that provides a secure gateway with application optimization capabilities
 - Offers deployment flexibility with physical and virtual appliances
- **Message Broker's core value** – Advanced ESB that enables universal integration for a wide range of applications, services, styles
 - Provides ESB functionality that supports high transaction volumes and QoS
 - Particularly useful for integrating on-premise applications, legacy systems, and custom data formats
 - Affordable entry point with WMB Express that provides a foundation for new services as customer grows
 - Appeals to MQ customer base with an ESB built on top of reliable messaging



Positioning DataPower and Message Broker

- **Some confusion in field about how to position**
- **Now focusing:**
 - DataPower on **Security & Integration Gateway** at the edge & within enterprise
 - Message Broker on **ESB** providing universal connectivity
- **Each offering addresses unique, complementary use cases**
- **Need to position clearly to be more competitive**
- **Look for opportunities to sell together to maximize revenue**

Questions ?!?



Summary

Q. What is changing?

- A. **Positioning.** DataPower Integration Appliance XI5* product(s) have historically been marketed as a “hardware ESB”, going forward, they’ll instead be positioned as a “Security & Integration Gateway Appliance”.

Q. Is DataPower’s integration functionality/capability changing?

- B. **No.** There are no current or future plans to limit DataPower’s integration functionality/capability. The change is only about slight positioning adjustment.

S. What competitive threats should I be aware of?

- A. **Several appliance competitors will offer an integrated security and integration solution. They are typically limited in integration capability, but may offer a significantly lower entry price and a less complex solution than a DataPower / Broker combined solution. In this situation, its best to position the product that meets the majority of the customer’s requirements to keep the solution simple and keep the costs as low as possible.**