

WebSphere ESB to IBM Integration Bus

A leap forward to a platform for the future

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Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.



Topics



Roadmap



Lower your costs



The Easy Move



Additional capability



IIB is lean and fast



Information & Education



Roadmap



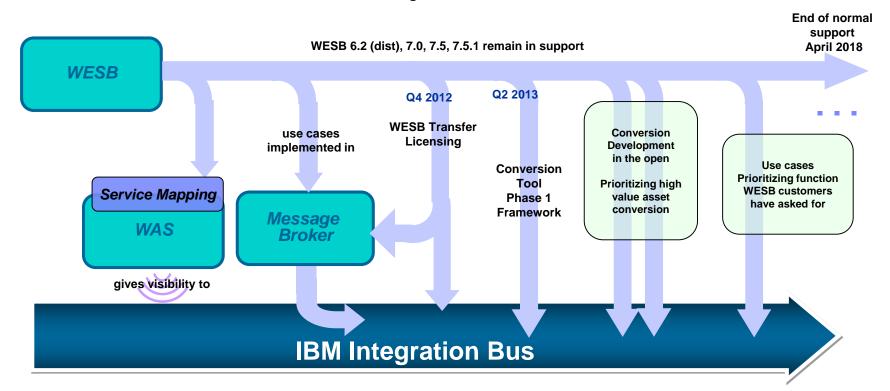


WebSphere Message Broker has been evolved to address WESB use cases

- WESB remains in support throughout transition
- IBM Integration Bus becomes IBM's integration backbone

WebSphere ESB clients are provided with a smooth adoption path

- No cost WESB Transfer Licensing to IBM Integration Bus
- Conversion tool harvests WESB assets to accelerate conversion to Integration Bus
- IBM Software Services conversion offerings





No cost WESB PVU transfer options to IIB

Option 1 (original) 1 PVU of WESB gives 1 PVU of IIB (scale mode)

- Identical \$ value
- Comparable scalability
- Comparable capability

Option 2 (new)

2 PVU of WESB gives 1 PVU of IIB Advanced plus 1 PVU of IIB Idle Stand-by

- Added \$ value
- Comparable scalability
- Enhanced capability
- Includes production usage of WebSphere Adapters
 - SAP, Siebel, PeopleSoft, JDEdwards
- IIB HA ready (active and idle parts included)



Offering the best capabilities of both WebSphere Message Broker and WebSphere ESB Both standards-based and any-to-any

IBM Integration Bus

Service Mapper

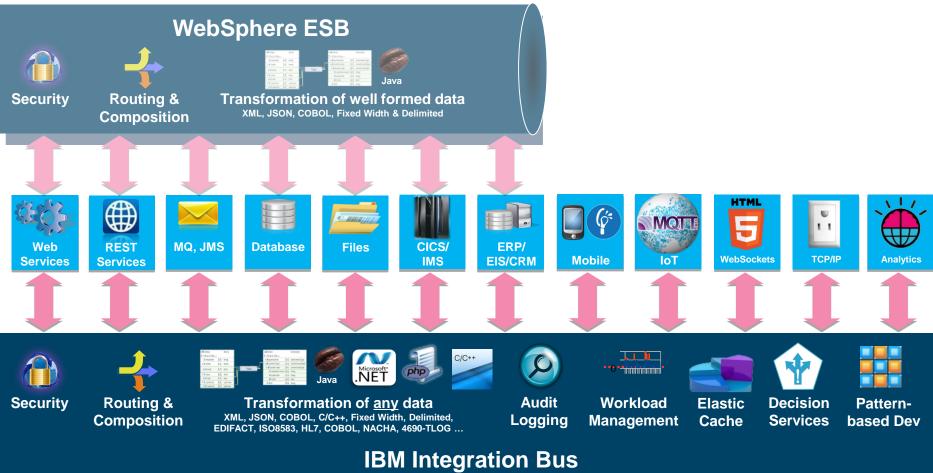
- Integration with WAS
- Existing Java skills
- Integrate XML, JSON or custom data
- Web Service orientation
- Runs anywhere including cloud
- High performance
- Lightweight
- Standards-based & any to any end points
- Minimal pre-reqs

- Integrate with CICS, IMS, DB2
- · .NET & Visual Basic
- Messaging & Files
- Message replay
- Industry connectivity packs

Service Mapper: Allows for simple integration tasks without needing deep ESB skills. Narrowly scoped in capability for mapping between service interfaces to assist integrations

Moving to a functionally richer product





No charge for developers

Deployable full active/active

Streamlined to ESB use case

HTML5 web admin/monitoring

High scale MQ events/messaging







Lower Your Costs

Software cost reduction

- No need for separate Integration Designer toolkit licenses
- Development and Unit Test environments are free on IIB
- No need for IIB run time licenses for functional verification testing
- Active: Passive High Availability with priced Idle standby licensing
 - Idle is 20% cost of full license



IIB Advanced includes production usage entitlement of business adapters





Operational cost reduction

- IIB / WMB has been in the market for many more years than WESB
- Superior targeted user-level problem determination features
 - Record & Replay, Accounting & Stats, Activity Log
- Larger install base
- Larger community, more opportunities to find answers
- Larger quantity of IIB tech docs & education videos freely available





The Easy Move





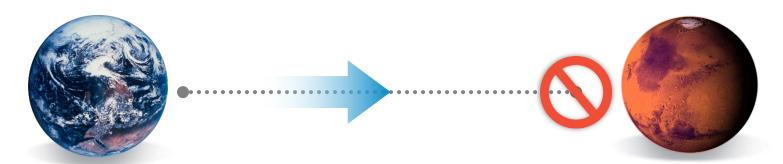
The Easy Move

Like moving to a biggerhouse





not to a **new** planet

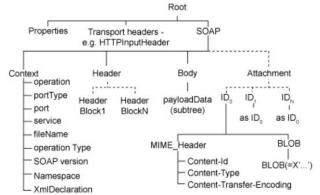


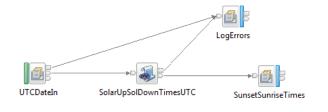


The Easy Move

- More familiar than you might think!
 - Familiar Eclipse-based tooling
 - Structured Messages
 - Transport headers
 - Context
 - Payload
 - Wired flows
 - Processing nodes
 - Properties for customization
 - In, Out & Fail terminals
 - Messages
 - Flow in as a request
 - Pass through interconnected processing nodes
 - Flow out as a response
 - Standards
 - WS, MQ, JMS, SOAP, HTTP, JDBC, Email, FlatFile, FTP, CICS, IMS
 - Java for custom logic
 - Subflows



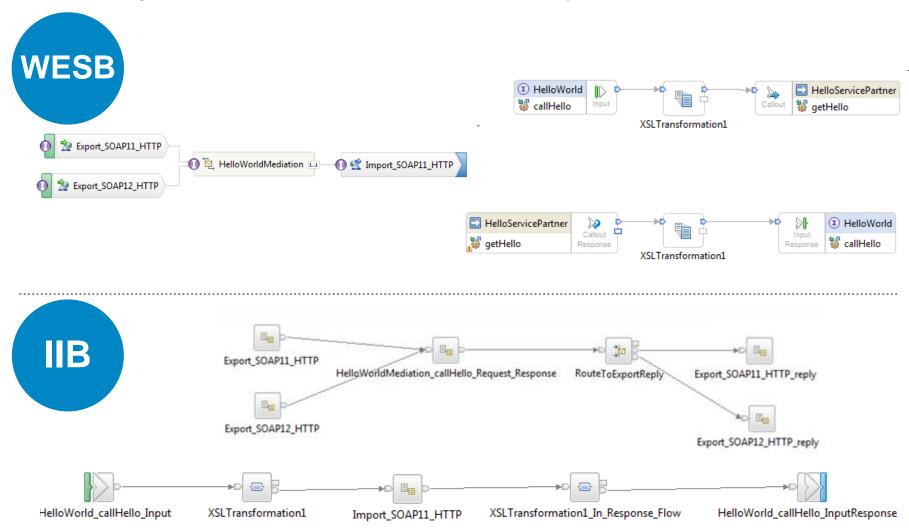








The Easy Move – Flow structure maps from WESB to IIB



Much more detail on this in the WESB Conversion Tool presentation later

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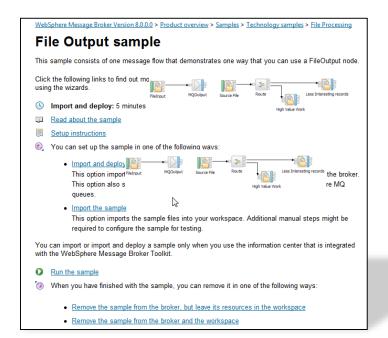


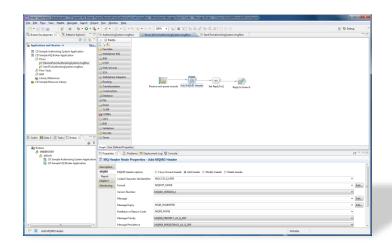
The Easy Move - Easy to Learn

Simple basic concepts supporting powerful capability

- Wide range of Patterns and Samples for common scenarios
 - Learn by practical example
 - Explore possibilities by customizing a working flow rather than starting from scratch

- IBM Education Assistant
 - Videos freely available
 - Show hands-on how-to







The Easy Move – Different naming, same function

WESB	IIB	Definition
Mediation module	.bar file	The unit of deployment of mediation capability
Mediation primitive	Node	An individual function applied to a message
Export component	Message flow	Provides inbound receipt of requests and sending responses
Import component	Message flow	Provides outbound sending of requests and receipt of responses
Flow component	Message flow	Contains request, response, fault and error flows
Binding	Input/output node	Protocol/transport specific configuration associated with an import or export
Function Selector	Route node	Pluggable logic which identifies the operation from a wire format message
Fault Selector	Route node	Pluggable logic which identifies the fault name from a wire format message
Business Object	Payload	Memory representation of an input/output/fault message
Service Message Object	Message tree	Memory representation of a Business Object plus additional contextual information

See IIBv10 documentation for a more complete list of name mappings



Additional Capability

Beyond WebSphere ESB





Positions better with landscapes of the future

- Format data stream and apply predictive rulesbased model
- Patterns for rapid mobile integration, including Worklight artifacts
- Cloud install and configure automation
- Community engagements points for developers and administrators

Business Analytics



Mobile Computing



Social Business



Additional functional nodes

Less customized Java code required, more maintainable

- Quicker time to value
- Lower barrier to entry, lower skills requirement

TCP/IP **IMS**

Timeout **CORBA**

.Net PHP

FTP, SFTP **Email**

Rules-based decisions Managed File Transfer

Additional Capability 2/4 Developer Experience



Easy data modeling of any message using DFDL

- Data Format Description Language Standard based
- · WESB is good for XML modeling
- IIB easily models any message format easily with DFDL
- High performance parsing and serialization

Next generation graphical data transformation mapper (GDM)

 Maps the (DFDL) modeled message data from source to destination

JAXB Java transformations

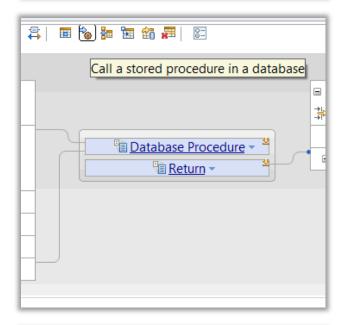
Write Java transformations using simple standard JAXB-style object model get and set operations

```
DFDL Test - Parse: Runs the DFDL parser with the provided physical input data and Status: Parsing completed: Thu Jun 14 12:06:05 BST 2012

Input
Data: /ST_DFDL_CSV/TestData.txt

Parsed Input
Characters

1 Year Make Model Description Price 1
2 2009 SK Inc MBTk7 "4293cc V8" 53880.00 1
3 2010 Hans On DFDL "3000cc straight 6" 313 4 2010 AOD corp MB8, "4163cc V8", 51435.00
```





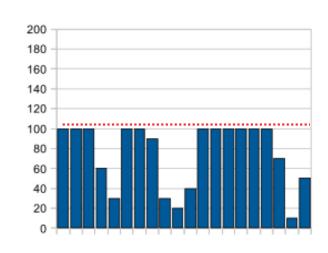
Browser based web administration

- Graphical visualization, statistics and analytics
- Zero footprint, no client maintenance or v2v updates required



Built in workload management via policy

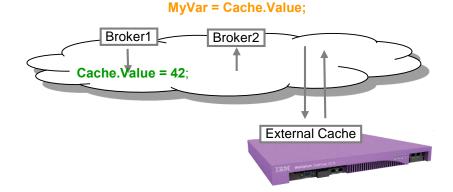
- · Notify threshold
- Max flow rate
- Unresponsive flows





High performing global cache

- Uses WebSphere eXtreme Scale coherent cache technology
- Share data between multiple integration nodes to improve response times and correlation times
- Support for external eXtreme Scale and DataPower XC10 appliances

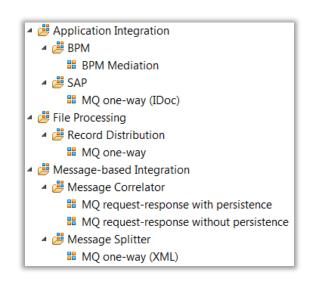


Reuse, expandable

Patterns

- No need to start from a blank screen.
- Rapid development
- · Lower barrier to entry, lower skills required

Pattern Authoring – reusable, customizable artifact User Defined Nodes





IB is Lean and Fast

Focused on user experience





IIB is Lean and Fast Download, install and create a service

IBM Integration Bus v10 (open beta)

First time user experience



Download & Install in 10 minutes

- Developer Edition
- Reduced footprint



Expose my first service in 40 minutes



Open Beta:

Download: ibm.biz/iibopenbeta **Discuss:** ibm.biz/iibopenbetaforum



IIB is Lean and Fast – Count the Clicks Focused efficiency of user experience



Reuse an existing asset	4 clicks
Deploy & test a simple integration	4 clicks
Diagnose and resolve a problem	4 clicks
Customize a java integration	
Redeploy on a new platform	drag & drop
Enable a service to be monitored	2 minutes



Information & Education





Education – Finding conversion news & additional information

WESB to IIB Conversion Community

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/W37b629a0f7aa 470 9_9506_bba2a096693d/page/WebSphere%20ESB%20conversion

WebSphere ESB Conversion Tool

IBM Integration Bus supplies a WebSphere ESB conversion tool as part of the Integration Toolkit. The conversion tool accelerates the conversion tool accelerates the conversion tool accelerates the conversion Toolkit. The conversion tool accelerates the conversion Toolkit. The conversion tool accelerates the conversion Toolkit. The conversion tool accelerates the conversion Toolkit.

The conversion tool follows a five-step process:

- 1. Import WebSphere ESB assets in a Project Interchange File
- 2. Select the objects within the file to be converted
- 3. Identify the converters (built-in, placeholder or custom) to be used for each object
- 4. Convert the assets, generating corresponding IBM Integration Bus flows
- 5. Review and action tasks created by the conversion process to complete the conversion

IBM Integration Bus v9 supplies a selection of built-in converters, a place-holder converter which creates an empty subflow, and two same

For more information on the conversion tool, see The WebSphere ESB conversion tool and Converting WebSphere Enterprise Service Bus resources by using the WebSphere ESB conversion tool.

You can download a free to use version of the Integration Toolkit as described <u>Getting started with IBM Integration Bus for Developers</u>. To conversion tool.

In order to enable and encourage 3rd-party extension of the conversion tool, the source code has been published on the Open Technologies for Integration (OT4I) github repository.

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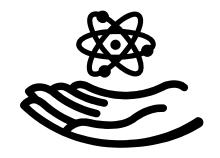


Education - One day IIB Proof of Technology (PoT) education



IIB detailed technical background of functional and administrative capability

Hands-on lab exercises (contact your IBM account team)

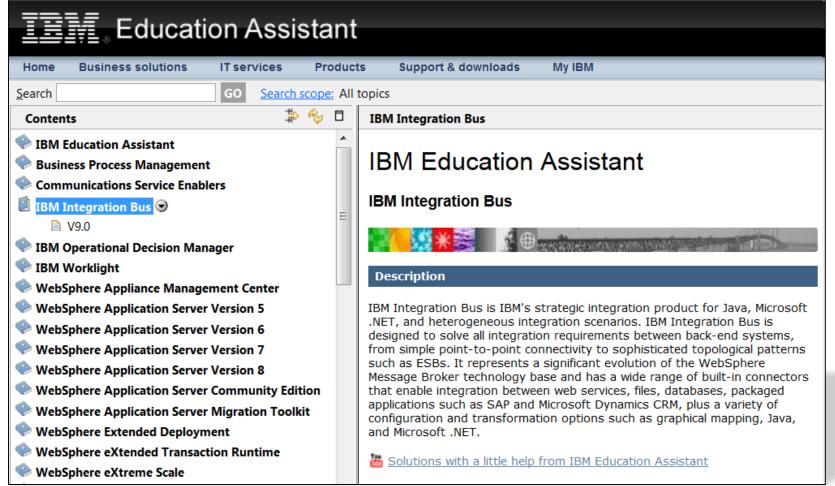




Education – IBM Education Assistant (IEA) videos

IBM Education Assistant (free educational videos etc)

http://publib.boulder.ibm.com/infocenter/ieduasst/v1r1m0/index.jsp



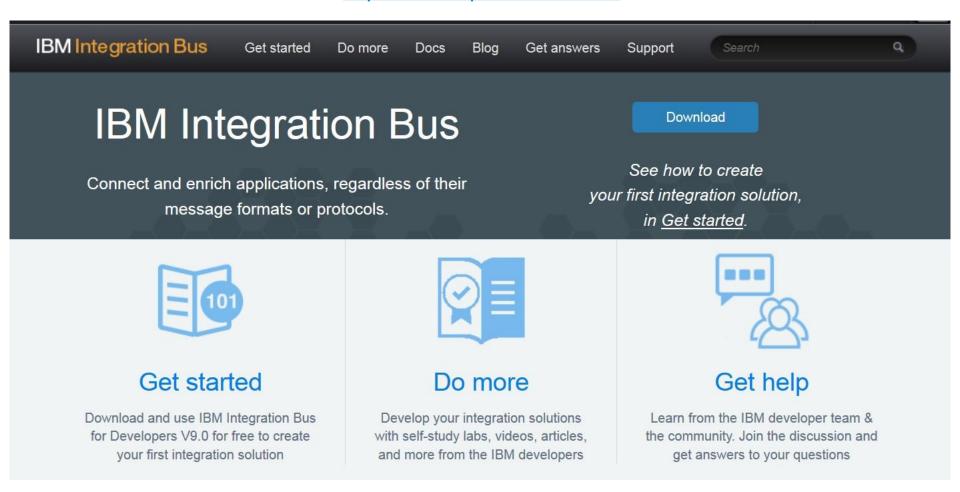
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Education – Finding developer answers

IIB Developer site: Get Started, Do More, Get Help

https://developer.ibm.com/iib/





Education – The Knowledge Collection Pulling all the information sources together

Knowledge Collection migrating to IBM Integration Bus

http://www-01.ibm.com/support/docview.wss?uid=swg27038014#7

Knowledge Collection: Migration for IBM Integration Bus and WebSphere Message Broker

Education

Abstract

This Knowledge Collection is a compilation of links to the most frequently accessed technotes, webcast replays, developerWorks articles, blogs, videos and publications dealing with Migration of IBM Integration Bus (IIB) and WebSphere Message Broker (WMB).

Content

Directory of items within this Knowledge Collection

- **↓** Migration Assistance
- Collecting documentation for Migration problems
- **↓** Technotes
- ↓ developerWorks Articles
- ↓ Blogs
- **↓** Publications



