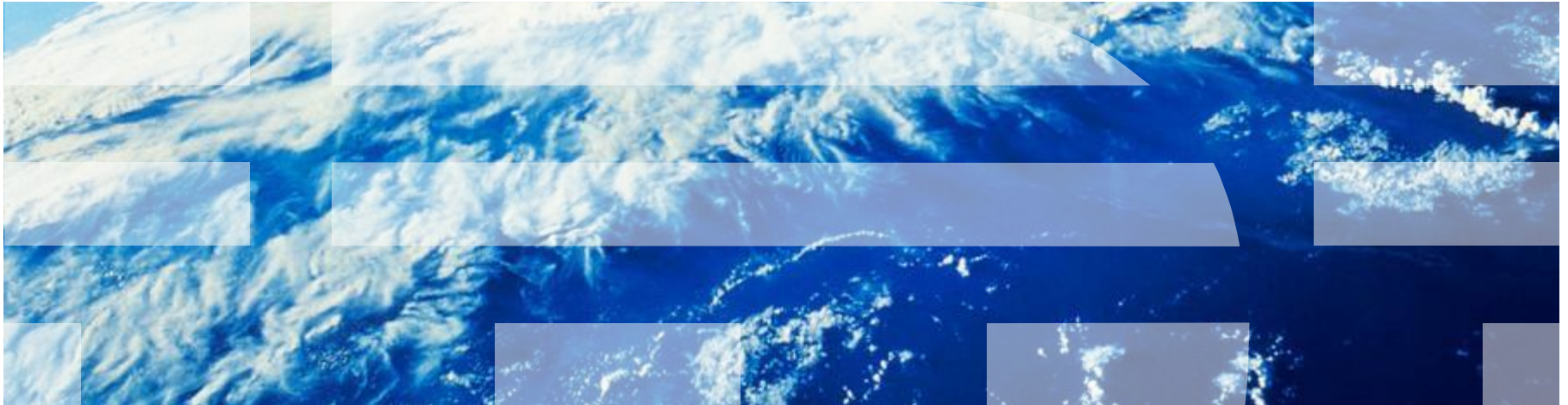


Business Activity Monitoring with WebSphere Message Broker and WebSphere Business Monitor

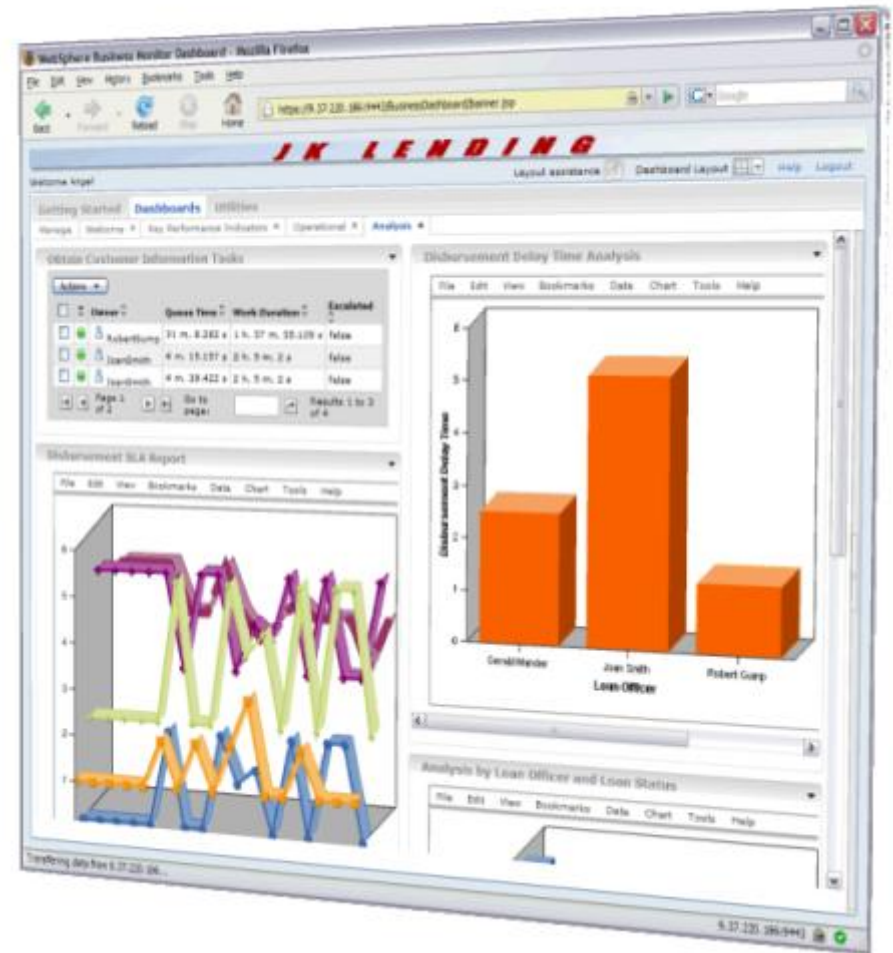
Matt Lucas – WebSphere Message Broker Lead Architect

Tetti Pandelias – Consulting IT Specialist, WebSphere SOA and BPM Architect

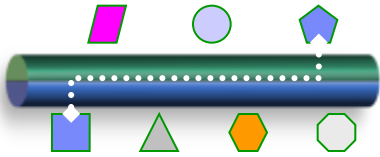


Agenda

- Message Broker Usage Patterns
- What is Business Activity Monitoring (BAM)?
- Implementation – IBM Business Monitor
 - Dashboard
 - Infrastructure
- Monitoring events in Message Broker

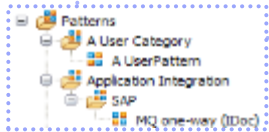
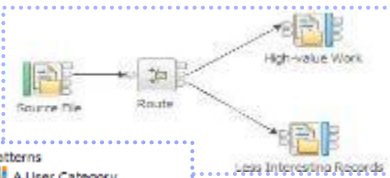


Message Broker Recap



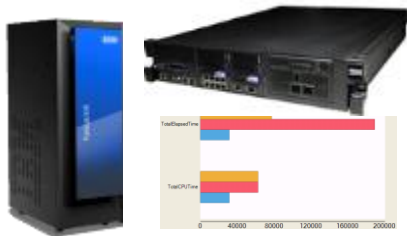
▪ Universal Connectivity: FROM anything TO anything

- Diverse Endpoints: applications, services, systems, devices, mobile...
- Diverse Environments: Web, WAS, MQ, .NET, SAP, Data, Batch...
- Diverse Message Formats: XML, Text, Binary, CSV, JSON, Industry...
- Diverse Protocols: MQ, HTTP, TCPIP, JMS, DB, Email, CICS, MFT...
- Diverse Processors: Route, Transform, Sequence, Monitor, Analyze...



▪ Powerful Solution Creation with Quick Time-to-Value

- Patterns for top-down parameterized solutions for common use-cases
- Graphical data flows for sophisticated endpoint connectivity scenarios
- Model business data using non-proprietary XSD and DFDL schemas
- Custom logic via graphical map, Java, JAXB, PHP, ESQL, XSL, .NET



▪ Flexible, Dynamic, Intelligent Solution Operation

- High performing, robust, scalable, lightweight architecture
- Various deployment options: traditional OS, Cloud, HVE, IWD, Pure...
- Provide Business Insight through Monitoring and Record and Replay
- Built-in caching and high availability for resilient, distributed workloads



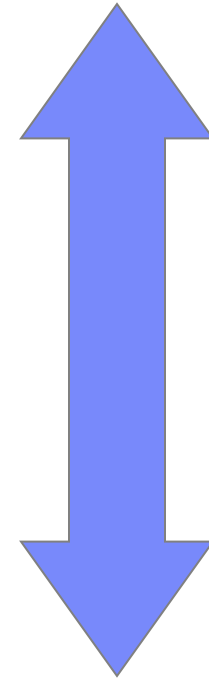
▪ Added Value through Industry-specific Content

- Domain expertise for wide applicability and ease of solution creation
- Message formats supported including SWIFT, EDI, TLOG, HL7...
- Healthcare Connectivity Pack
 - Includes Device and HL7 Connectors, Patterns and Tooling

Top Integration Usage Patterns

- What are the top issues that people want to solve with Message Broker?

- **Extend the Reach** of Existing Applications
- Distribute **Database** information to where it's needed
- Create a **File Hub** to connect batch and online applications
- Get the most from **Packaged Applications**
- Take advantage of **.NET applications**
- Provide a Policy Enforcement Point for **Secure Connectivity**
- Extend Enterprise to **Devices and Mobile**
- **Monitor** your business activity and act intelligently
- Detect and Act Upon **Business Events and Rules**
- Provide Connectivity and Integration for **Business Processes**
- Make an inventory and enable **Policy based management**

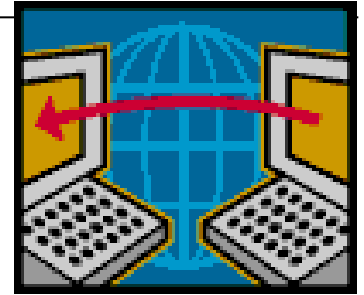


Common
usage
patterns

Emerging
usage
patterns

- New usage patterns are continually emerging as business needs evolve!

Business critical applications and in-flight data



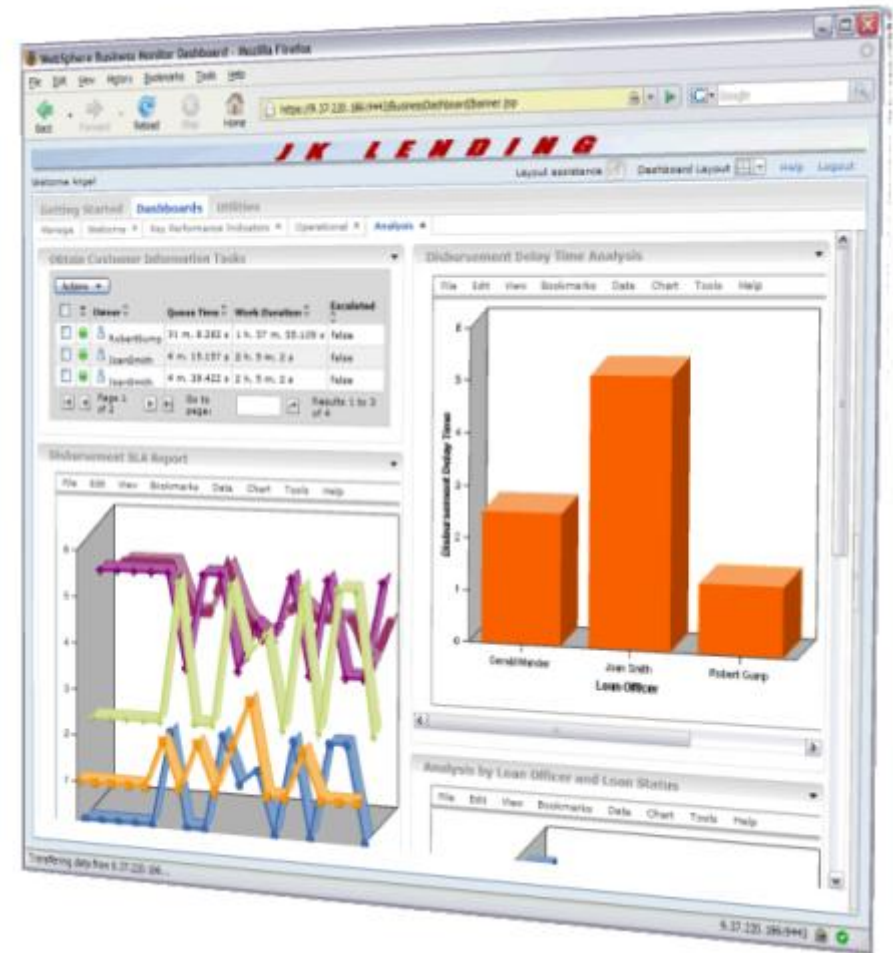
- Business applications rely on information exchange
 - Application to application communication represents business interactions
 - E.g. Web to Order system, Warehouse to Distribution, Payments to Accounts

- Business data passes through the ESB
 - Message Broker has full visibility of the data content in any format
 - Uniquely positioned to report on the status of the business data as it is being processed
 - Can emit events containing relevant data as well as the success or failure of transactions
 - Typical usage scenarios include
 - Audit
 - Data capture for potential later replay
 - Business Activity Monitoring...

- ...and IBM Business Monitor can provide real-time operational visibility of these business transactions

Agenda

- Message Broker Usage Patterns
- What is Business Activity Monitoring (BAM)?
- Implementation – IBM Business Monitor
 - Dashboard
 - Infrastructure
- Monitoring events in Message Broker



What is Business Activity Monitoring?

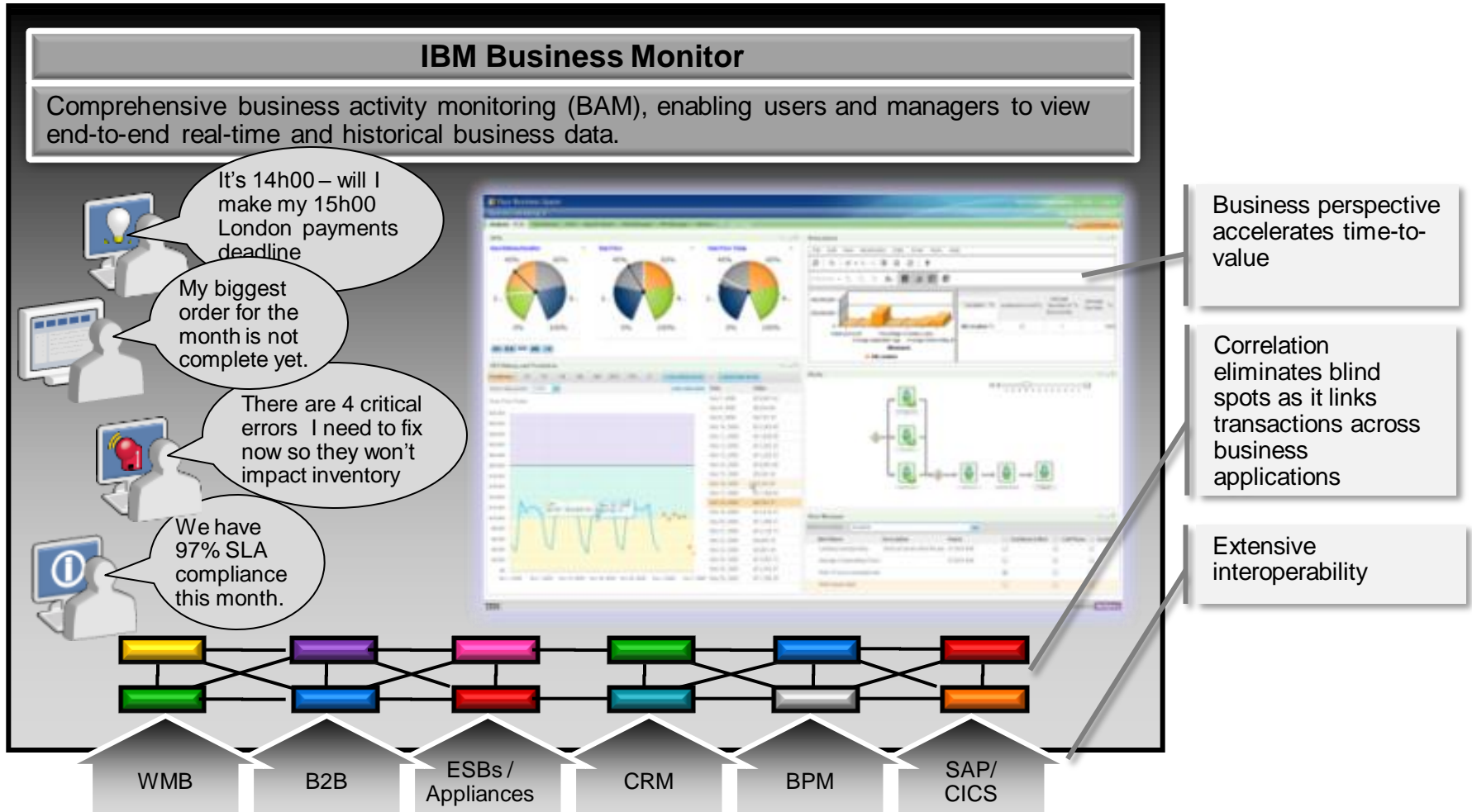
“Business activity monitoring tracks and measures **end to end business activity** by aggregating, analyzing, and presenting **real-time** information from **disparate sources**, and empowering the **business user**”

(from Wikipedia)



Business Activity Monitoring

- Foundation for Role Based End-to-End Visibility



IBM Business Monitor - Analyze a range of real time data

Take action faster with up-to-minute information on personalized dashboards

Individual business situations



- Drill down to investigate why John Smith's new bank account request has not been processed within the specified service level agreement

Aggregated KPIs across multiple processes



- Redirect Group A's backlogged new account opening queue to Group B to rebalance workload

Trend analysis



- Compare new account opening metrics across time periods to manage resources more effectively

IBM Business Monitor

- Reduce Risk and Increase Opportunity



“IBM Business Monitor allows me to make business improvements and manage exceptions via alerts and KPI. It allows me to look forward, rather than continually looking in the rear view mirror”

“When something goes wrong, I may not know about it until after a severe negative impact. I can’t catch problems before they occur. Even when I’m aware of bottlenecks, I can’t easily shift work to get around them. When I make changes in workflow, I’m not sure that it makes a difference.”

IBM Business Monitor

- Reduce Risk and Increase Opportunity

- Snapshot of the 'state of the business'
 - In real-time (and historic)
 - Dashboards (KPIs, metrics, alert)
 - Role based
 - Business user customisable
 - Available anywhere, anytime
 - Correlating events across multiple systems or applications

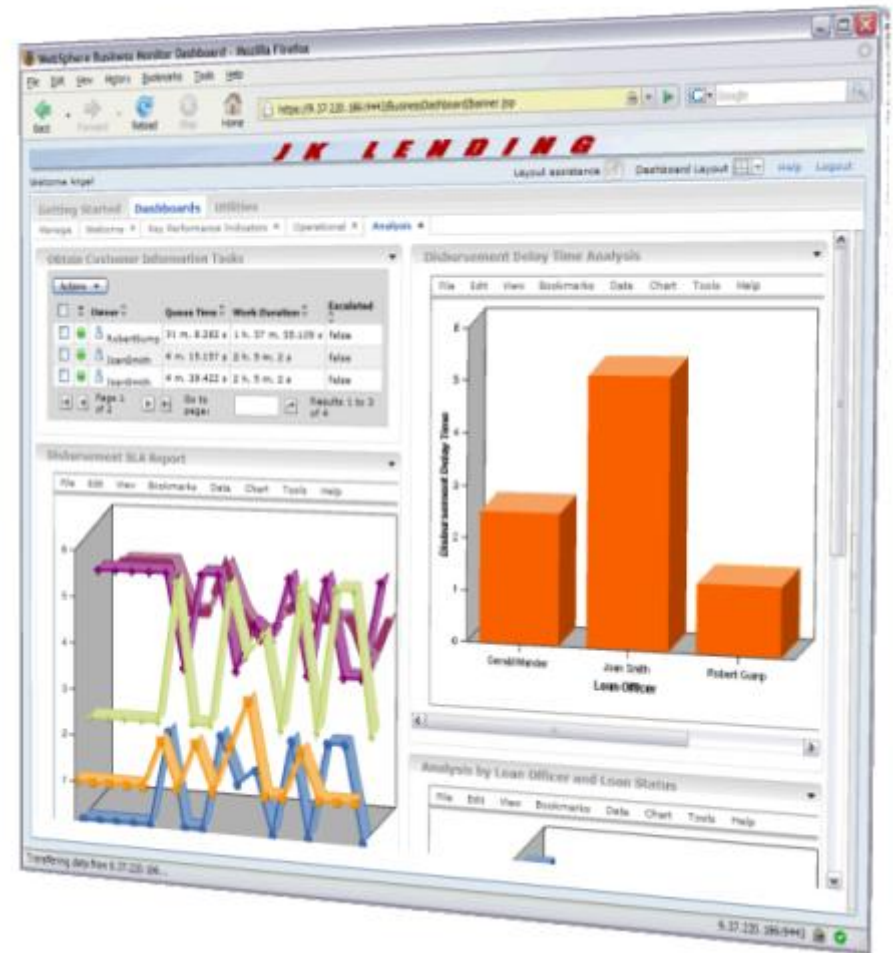


"IBM Business Monitor allows me to make business improvements and manage exceptions via alerts and KPI. It allows me to look forward, rather than continually looking in the rear view mirror"

"When something goes wrong, I may not know about it until after a severe negative impact. I can't catch problems before they occur. Even when I'm aware of bottlenecks, I can't easily shift work to get around them. When I make changes in workflow, I'm not sure that it makes a difference."

Agenda

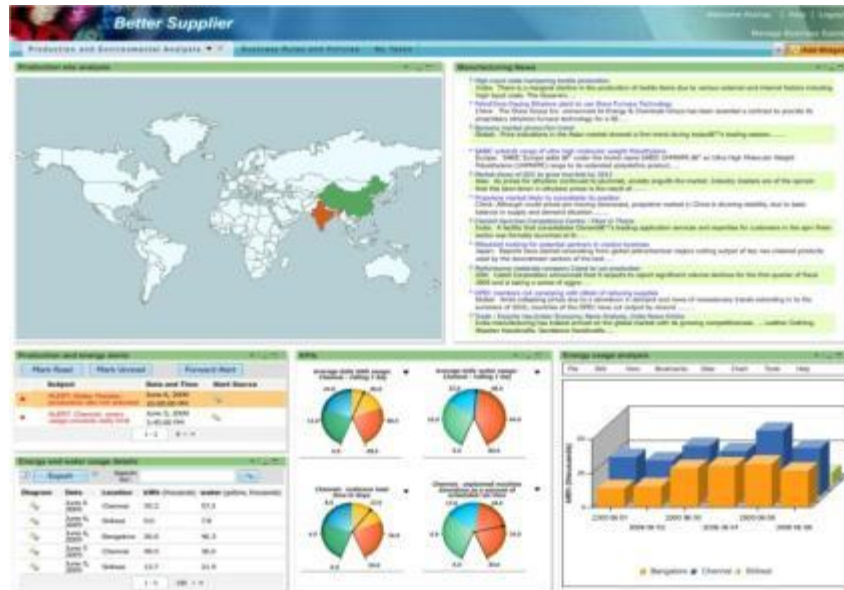
- Message Broker Usage Patterns
- What is Business Activity Monitoring (BAM)?
- Implementation – IBM Business Monitor
 - Dashboard
 - Infrastructure
- Monitoring events in Message Broker



IBM Business Monitor - Understand, monitor & explore business state

External Information

Information affecting business performance



Collaboration

Share metrics and models with teams to resolve situations

Business Alerts

Notification of situations that require response

Business Metrics

Key Performance Indicators for business units

Reports & Analysis

Understanding trends by combining real-time performance and historical information

Business Monitoring – Channels of delivering information



Business Space



On Blackberry smartphones and iPhones



In Excel



IBM Portal



Through Google Gadgets and Google Desktop







Business Space Widget Palette for Business IBM Monitor



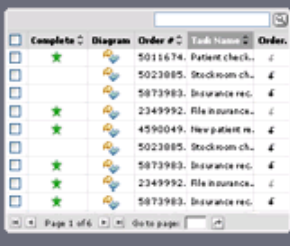
KPIs
This widget displays a dashboard with quantifiable measures designed to track the critical success factors of business processes.



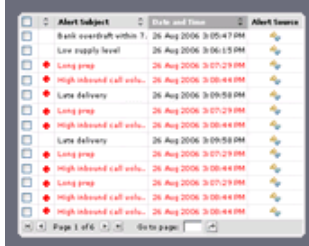
Report Views
This widget displays a dimensional report.



Alert Manager
This widget enables you to subscribe and unsubscribe alerts and select the notification you would like to receive.




Instances
This widget displays a dashboard with the available monitoring context in either individual instances or user-defined groups of context instances.



Alerts
This widget displays a dashboard with alert notifications of predefined situations occurring at run time.



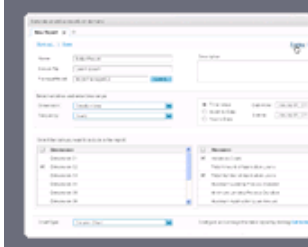
KPI Manager
This widget enables you to work with key performance indicators (KPIs) directly from the dashboard interface.



Diagrams
This widget displays a dashboard with diagrams and instance diagrams associated with a context.

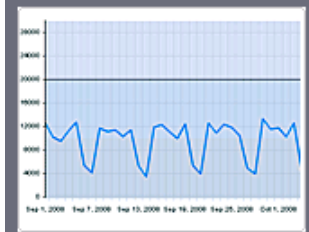


Human Tasks
This widget displays a dashboard with human tasks running inside any Business Process Execution Language (BPEL) process.



Report Designer
This widget allows for creating a simple dimensional report.

Widget Palette For Users to Customize their Business Space



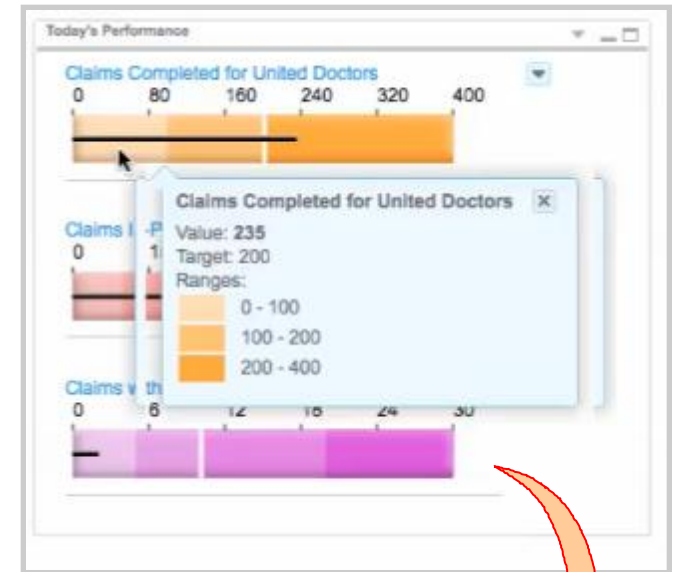
KPI History and Prediction
This widget displays a dashboard with a history of KPI values and predictions for future time periods.

Role-based business space templates span multiple products based on iWidget specification



Key Performance Indicators

Determine business performance compared to expectations



"Power Users" can add/change KPIs without ongoing IT involvement

KPI Properties

Name Definition Range Other Preview

* Operator: Average * Metric: AdjudicationDuration

Time reference: None

Data filter (Limits data to instances which match the specified criteria)

Add

Metric: Provider Operator: equals Value: United Doctors Case sensitive: [X]

Instances

Diagram	Loan ID	Loan Type	Size of Loan	Rate	Status	Loan Document ID	Assoc	Credit Check Date
	11000	Jumbo	525,000	5.375	Completed	4		1 h, 0 m, 0 s
	18000	Conforming	19,000	5.975	Processing	4		4 h, 0 m, 0 s
	21000	Conforming	298,000	5.5	Rescinded	4		0 h, 0 m, 0 s
	5000	Conforming	298,000	6	Processing	4	Paul Lyon	16 h, 0 m, 0 s
	1000	Conforming	358,000	6.125	Completed	4	Jane Parsons	9 h, 0 m, 0 s
	8000	Conforming	298,000	6	Processing	4	Paul Lyon	16 h, 0 m, 0 s
	7000	Conforming	298,000	5.5	Rescinded	4	Paul Lyon	0 h, 0 m, 0 s
	14000	Conforming	358,000	6.125	Completed	4	Jane Parsons	9 h, 0 m, 0 s
	15000	Conforming	358,000	6.25	Completed	4	Jane Parsons	2 h, 0 m, 0 s
	23000	Jumbo	525,000	5.375	Completed	4	Tim Copner	12 h, 0 m, 0 s

Page 1 of 3 Go to page: Results 1 to 10 of 23

"Drill to Instances" to check for values aggregated into the KPI.



KPIs – definable by end users

New Aggregate KPI Properties [X]

Name | **Definition** | Range | Other | Preview

* Operator: Average

* Metric: Avg Total Duration

Time reference: Last completed period

Period: Month

Time metric: CreationTime

Time zone: GMT

Location (for daylight saving): Europe/London

Owner	Type
Aggregate	Aggregate
Aggregate	Aggregate
Aggregate	Aggregate
Aggregate	Aggregate
Aggregate	Aggregate
Expression	Expression
Aggregate	Aggregate
Expression	Expression
Expression	Expression

Data filter (Limits data to instances which match the specified criteria)

Add

Metric: COMPLETED Operator: equals Value: True Case sensitive: ✗

Interactive Diagrams

- Show only instances of the clicked step in the diagram (e.g., backlog)
- You can also click on a row in the Instances widget, which causes the Diagram widget to update to show an instance-specific diagram

The screenshot displays the 'Watson Health Insurance Provider Relations Management' interface. At the top, there are navigation tabs: Overview, Health Claims, Providers Network, Health Savings, and My Tools. The main content area is divided into several sections:

- Claim Volume Distribution:** A flow diagram showing the stages of claim processing. The stages are: Claims Queued (0%), Claims Processing Started (0%), Claims Sorted (0%), HIPAA Validation (0%), Fraud Detection (5.128%), Adjudication (71.79%), Warehouse Staged (0%), and Claims Processing Complete (0%). A red box highlights the 'Warehouse Staged' step, with a red arrow pointing down to the table below.
- My Performance Indicators:** Four bar charts showing metrics: MTD Average Claim Processing Time, MTD First Pass Acceptance, MTD Total Claim Volume, and MTD Total Claim with Errors.
- Health Claims Table:** A table listing claim transactions. The table has columns for BatchID, Claim ID, Claim Type, Provider, Step, Status, Processing Time, and Claim Status History. The 'Step' column is currently set to 'Data Warehouse Staged', showing 8 rows of data.

BatchID	Claim ID	Claim Type	Provider	Step	Status	Processing Time	Claim Status History
UD-0197	CLAIM-7384	Primary	United Doctors	Data Warehouse Staged	OK	8 d, 0 h, 0 m, 20 s	
UD-0197	CLAIM-7385	Primary	United Doctors	Data Warehouse Staged	OK	8 d, 0 h, 0 m, 22 s	
UD-3636	CLAIM-9816	Medicare	United Doctors	Data Warehouse Staged	OK	11 d, 12 h, 0 m, 52 s	
UD-3636	CLAIM-9817	Medicare	United Doctors	Data Warehouse Staged	OK	11 d, 12 h, 0 m, 54 s	
UD-3636	CLAIM-9818	Medicare	United Doctors	Data Warehouse Staged	OK	11 d, 12 h, 0 m, 56 s	
UD-3636	CLAIM-9819	Medicare	United Doctors	Data Warehouse Staged	OK	11 d, 12 h, 0 m, 58 s	
UD-3636	CLAIM-9820	Medicare	United Doctors	Data Warehouse Staged	OK	11 d, 12 h, 1 m, 0 s	



User Alerts

Benefits

- Allow users to set and control the conditions under which alerts are sent, without ongoing IT involvement

Open Alert Manager from KPI

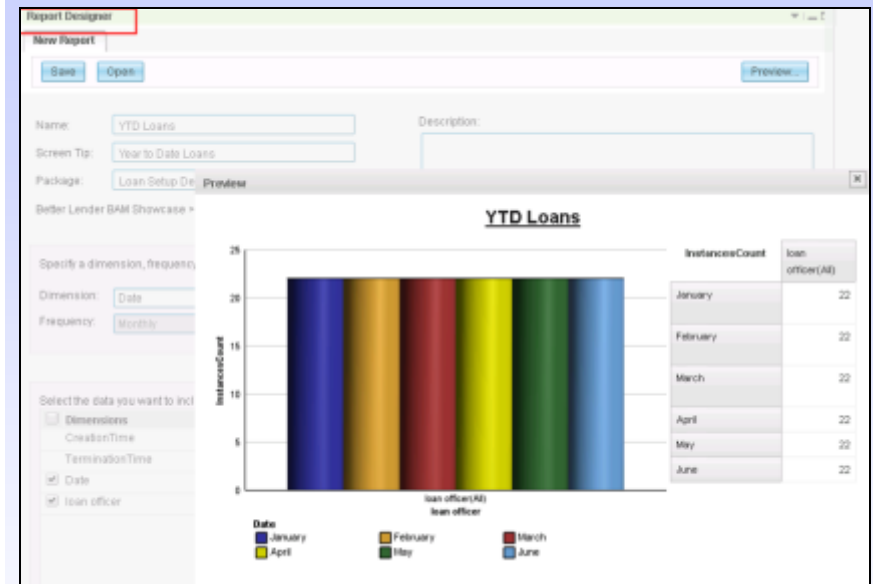
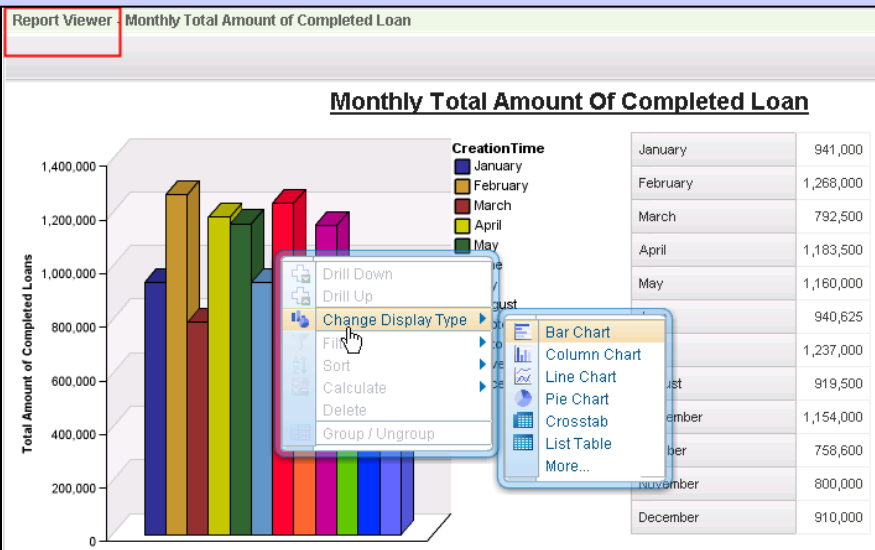
The screenshot shows the 'Better Lender Space' dashboard with a navigation bar at the top containing 'Home', 'Go to Spaces', 'Manage Spaces', 'Actions', 'admin', 'Help', and 'Logout'. Below the navigation bar are tabs for 'Business Alerts', 'Business at a Glance', 'New Loan Applications', 'Reports and Analysis', and 'Other Loan Applications'. The main content area is titled 'KPIs - Key Financial Indicators' and displays six gauge charts arranged in a 2x3 grid. The top row shows 'Month-to-Date' metrics for 'Amount of Completed Loans', 'Average Amount of Loan Application', and 'Total Amount of Loan Applications'. The bottom row shows 'Year-to-Date' metrics for the same categories. A red box highlights the 'Alert Manager' option in the context menu for the 'Month-to-Date Total Amount of Loan Applications' gauge. Below the KPIs is an 'Alerts' section with buttons for 'Mark Read', 'Mark Unread', 'Forward Alert', and 'Remove'. At the bottom, a list of alert subjects is visible, including 'Predicted Daily Orders below \$12000' and 'MTD Avg Amount of Loan Application below \$300,000'. An 'Alert Manager' window is overlaid on the bottom right, showing a table of configured alerts.

Alert Name	Description	Owner	Dashboard Alert	Cell Phone	E-mail	Pager	Actions
Average Sales Revenue Below	Notification when sales revenue	admin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Excessive Order	Order received of excessive val.	admin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Print 72 hours exceeded Alert			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NTB Failure Alert			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Invalid Loan Application Alert			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fee Compliance Alert			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Reports & Drilldown Charts

Dimensional Reporting “built into” the Monitor dashboard

Design new reports and preview without leaving the dashboard



Business Monitor with built-in Cognos BI repository and services



Exploit optional Cognos product capability



Reports – design as an end user

Report Viewer

Job Status

Report Designer

New Report

Action

- Reset
- Export to PDF
- Undo

Open

- Excel 2002
- Excel 2007
- CSV
- XML

dimension, fre

None

Monthly

Change Display

- Table
- Column
- Bar
- Line
- Pie, Donut
- Area
- Scatter, Bubble, Point
- Gauge

Table

Column

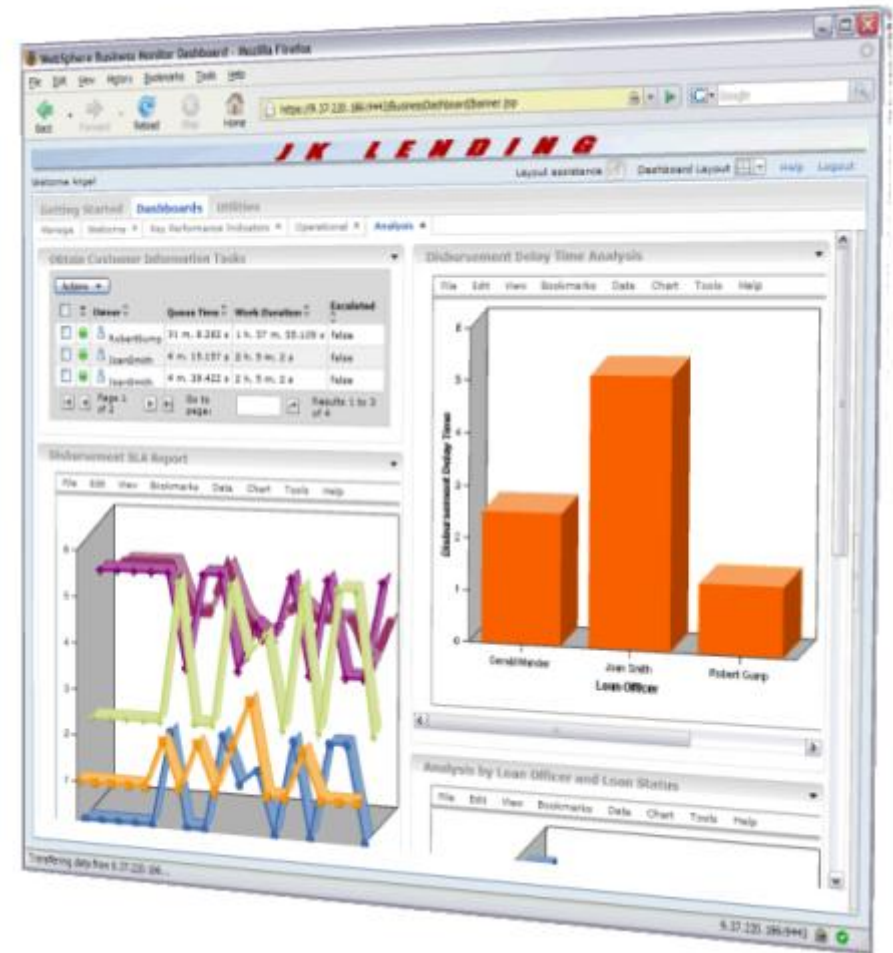
Bar

Line

OK Cancel

Agenda

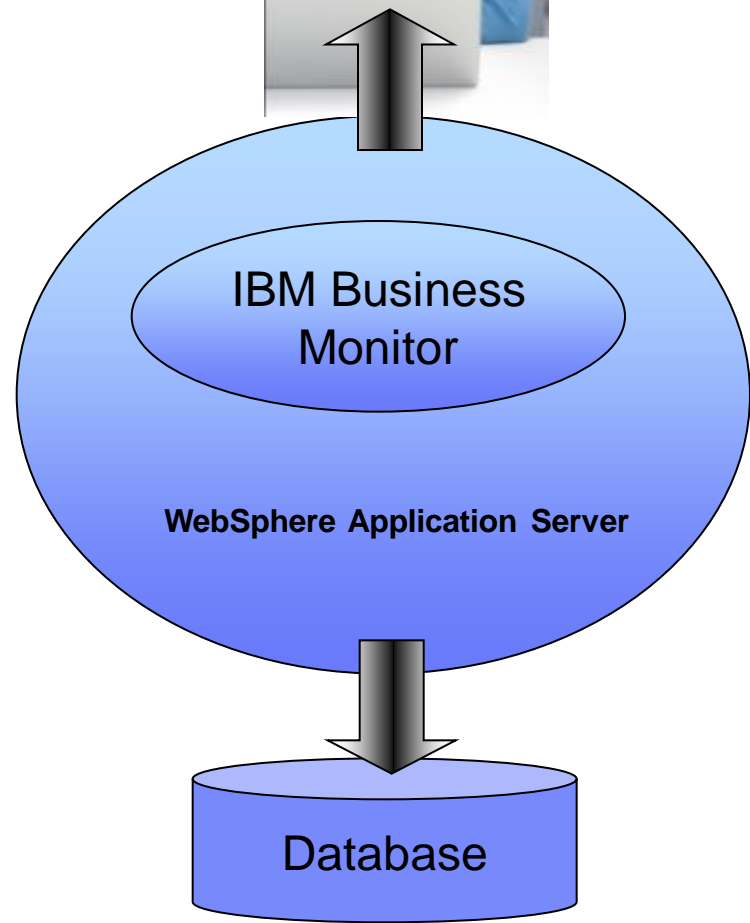
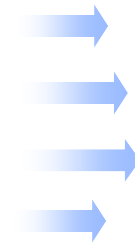
- Message Broker Usage Patterns
- What is Business Activity Monitoring (BAM)?
- Implementation – IBM Business Monitor
 - Dashboard
 - Infrastructure
- Monitoring events in Message Broker



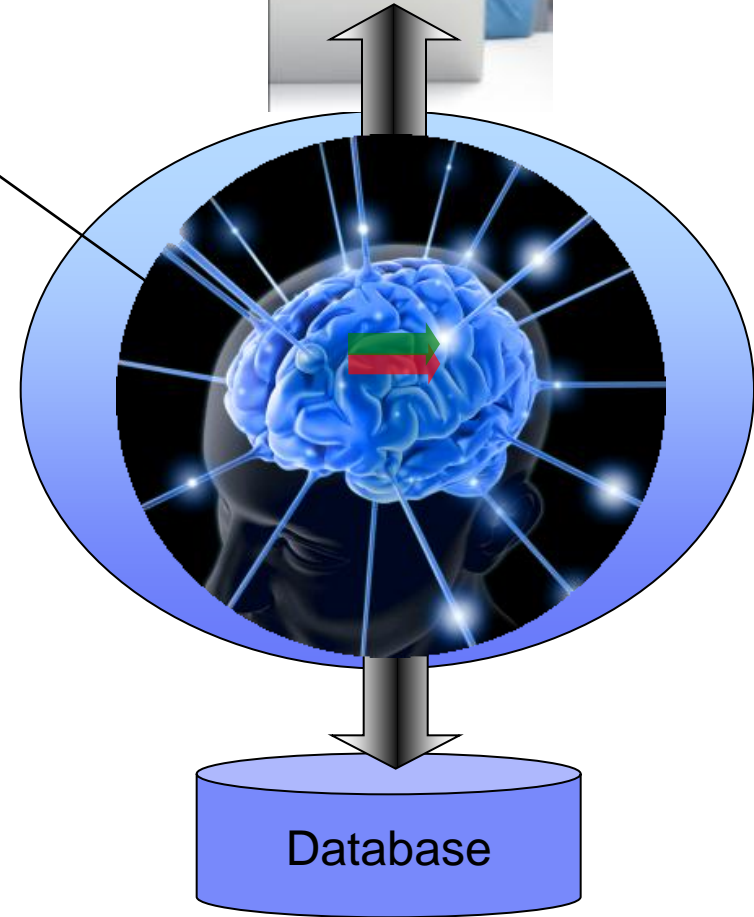
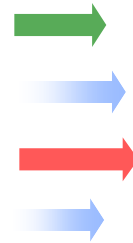
IBM Business Monitor



Emitted Events



IBM Business Monitor





What can we monitor?

Products offering first-class integration with Business Monitor

- emit events in defined format and generate monitor models

IBM Business Process Manager

WebSphere BRMS

WebSphere Decision Server

WebSphere ESB

WebSphere Message Broker

WebSphere MQ Workflow

WebSphere Process Server

Products offering basic integration with Business Monitor

- emit events in defined format. Create custom monitor model with Monitor Toolkit.

WebSphere Business Events

WebSphere DataPower Appliances

WebSphere Sensor Events

WebSphere Adapters

IBM Case Manager / Filenet BPM

CICS and IMS

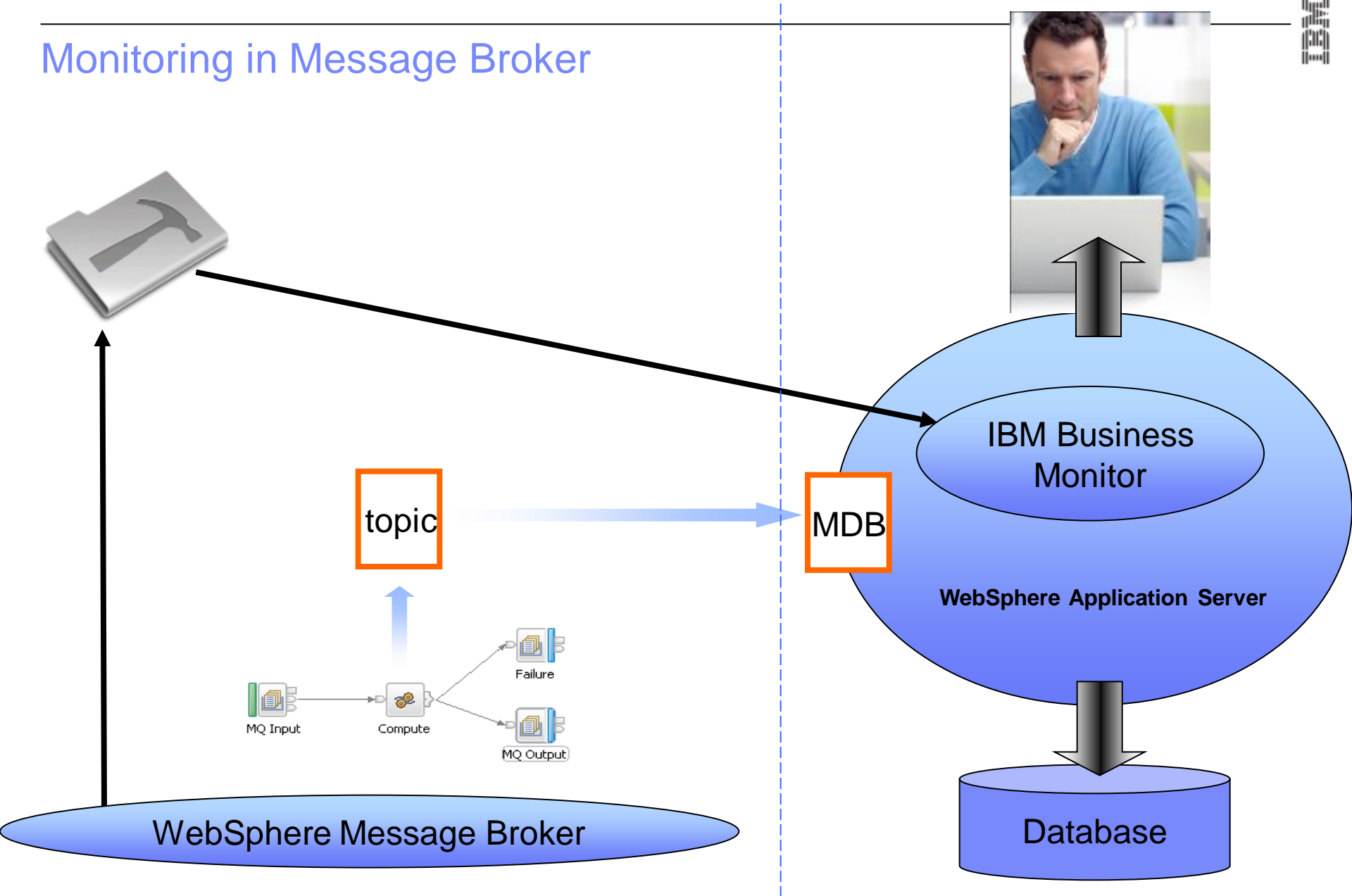
Sterling Commerce

IBM Intelligent Operations Center

“Everything Else” – Other Applications and Infrastructure

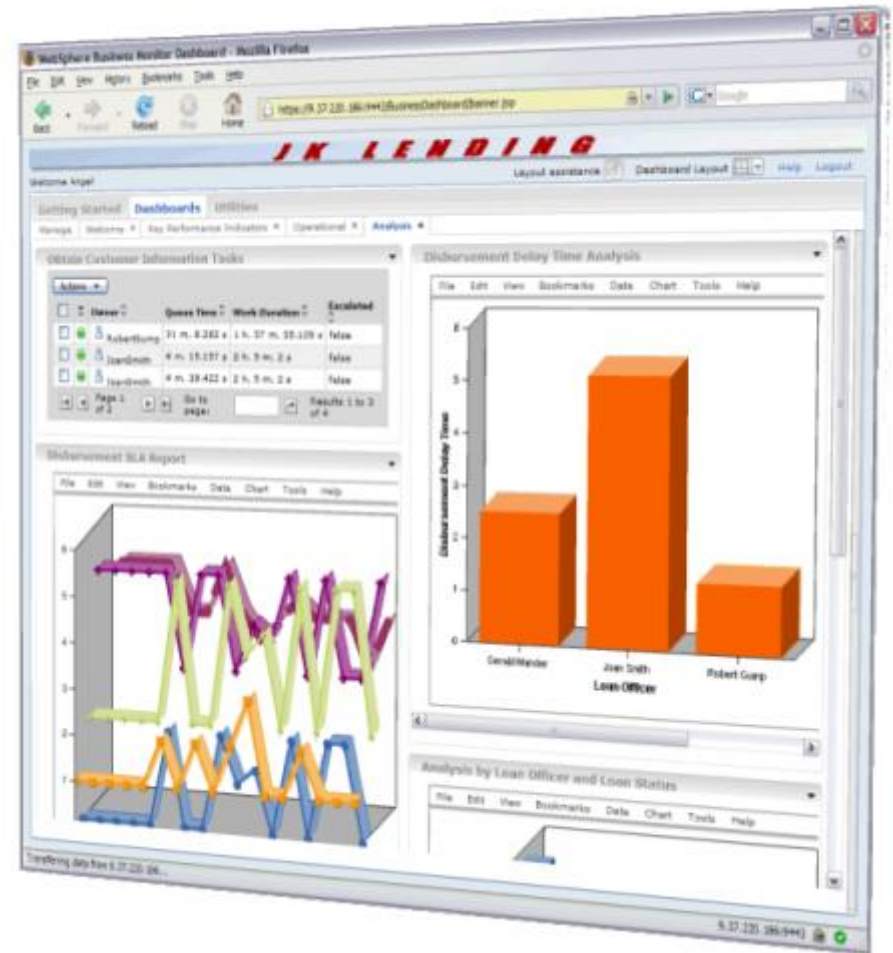
- Use one of the above products as a “proxy”
- Or use the JMS, REST or web service interface to send XML events to Monitor

Monitoring in Message Broker

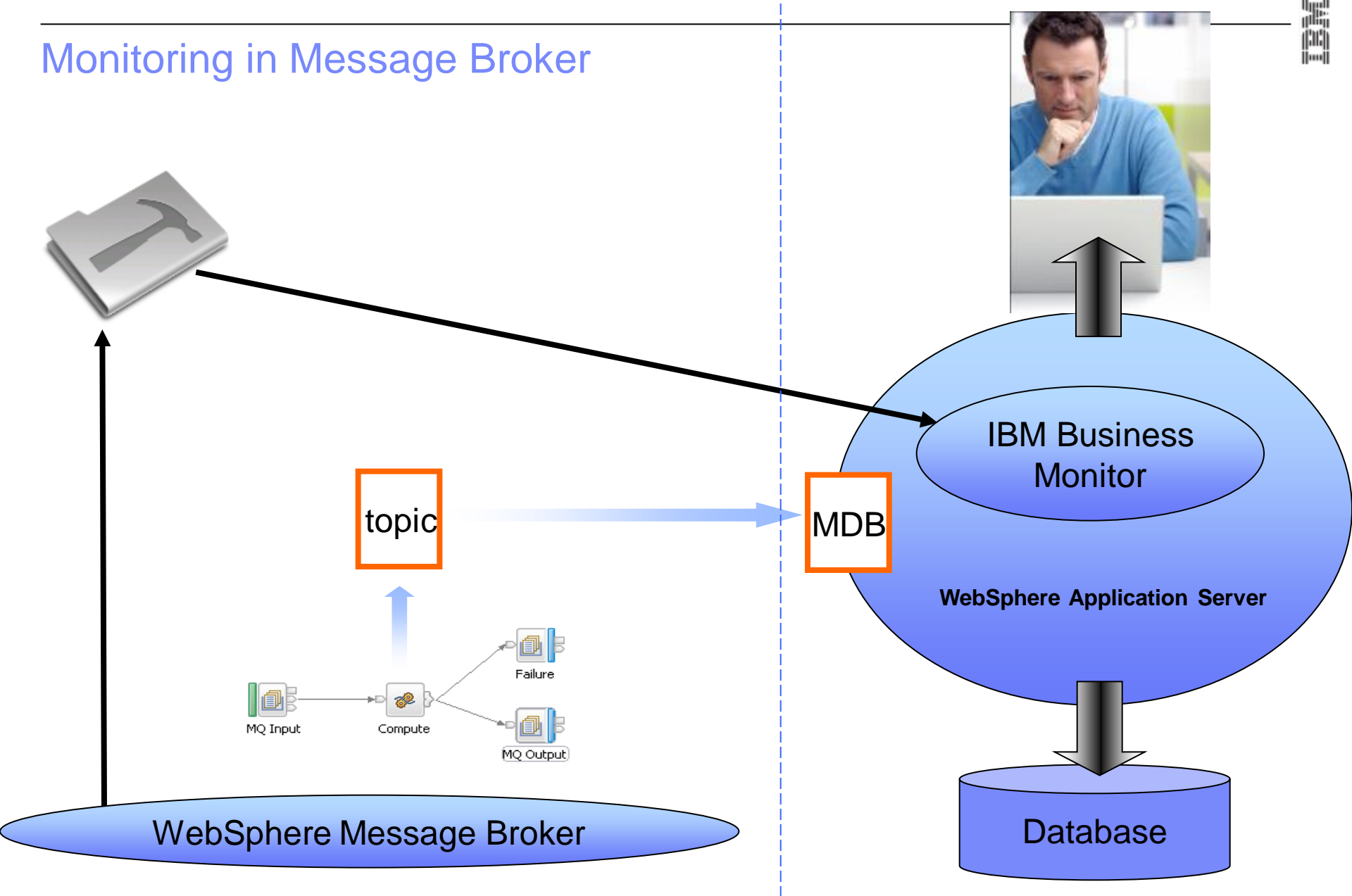


Agenda

- Message Broker Usage Patterns
- What is Business Activity Monitoring (BAM)?
- Implementation – IBM Business Monitor
 - Dashboard
 - Infrastructure
- Monitoring events in Message Broker



Monitoring in Message Broker



Monitoring support in Message Broker

- Events are published to an MQ topic
 - To allow multiple subscribers
 - To allow each subscriber to choose the level of granularity
 - Domain / Broker / Execution group / Message flow
- Event format is XML (published schema)
 - Designed to be compatible with CBE
 - Allows message broker to integrate with other monitoring applications
 - Allows entire message to be captured and logged to a database for audit purposes
- Events can be forwarded to monitoring tools, e.g. WebSphere Business Monitor
 - A WBM message driven bean is provided with the monitoring sample
 - The bean is hosted on a WebSphere Application Server and wraps the message broker event with a Common Base Event wrapper and then submits it to the CEI server.

[Application servers](#) > [server1](#) > [Message listener service](#) > **Listener Ports**

Use this page to configure listener ports upon which message-driven beans listen for messages. Each port specifies the JMS connection factory and JMS destination that a message-driven bean, deployed against that port, listens upon.

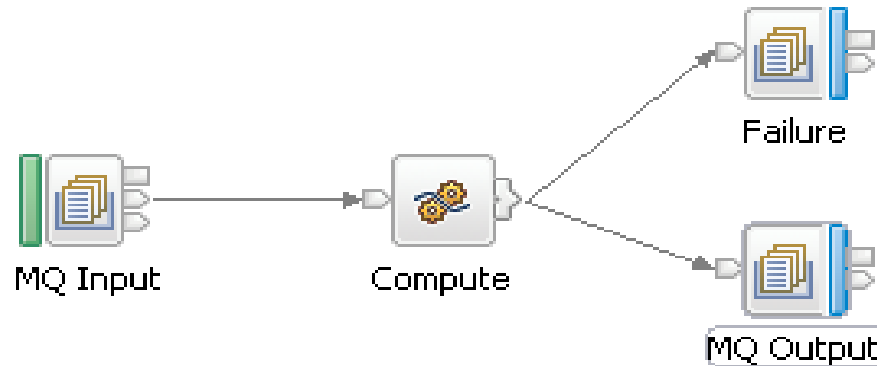
⊕ Preferences

Convert to activation specification New Delete Start Stop

Select	Name	Description	Connection factory JNDI name	Destination JNDI name	Status
<input type="checkbox"/>	WMBMDBEventListener		jms/topicConn	jms/topicName	

Total 1

Configuring monitoring events using the toolkit



Properties

Default Values for Message Flow Properties - MessageProcessor

Description [Configure monitoring events.](#)

Monitoring

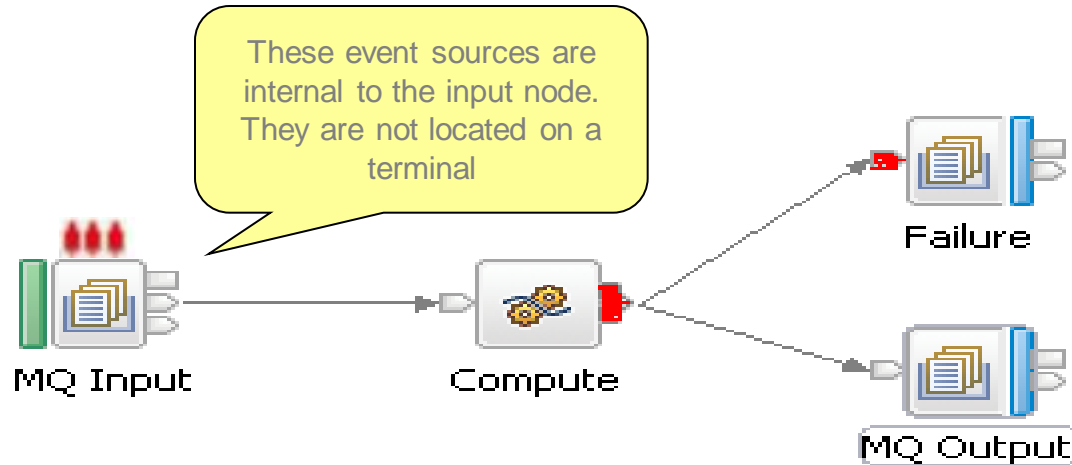
[Events](#)

5 events defined. Events are defined via the Monitoring tab of a selected node in the message flow.

Enabled	Node	Event Source	Event Source Address	Event Name	Event Filter
<input checked="" type="checkbox"/>	Compute	Out terminal	Compute.terminal.out	Compute.OutTerminal	true()
<input checked="" type="checkbox"/>	Failure	In terminal	Failure.terminal.in	Failure.InTerminal	true()
<input checked="" type="checkbox"/>	MQ Input	Transaction start	MQ Input.transaction.Start	MQ Input.TransactionStart	true()
<input checked="" type="checkbox"/>	MQ Input	Transaction end	MQ Input.transaction.End	MQ Input.TransactionEnd	true()
<input checked="" type="checkbox"/>	MQ Input	Transaction rollback	MQ Input.transaction.Rollback	MQ Input.TransactionRollback	true()
<input type="checkbox"/>					
<input type="checkbox"/>					

[Enable All](#) [Disable All](#)

Configuring monitoring events using the toolkit



Properties

Default Values for Message Flow Properties - MessageProcessor

Description [Configure monitoring events.](#)

Monitoring

Events

5 events defined. Events are defined via the Monitoring tab of a selected node in the message flow.

Enabled	Node	Event Source	Event Source Address	Event Name	Event Filter
<input checked="" type="checkbox"/>	Compute	Out terminal	Compute.terminal.out	Compute.OutTerminal	true()
<input checked="" type="checkbox"/>	Failure	In terminal	Failure.terminal.in	Failure.InTerminal	true()
<input checked="" type="checkbox"/>	MQ Input	Transaction start	MQ Input.transaction.Start	MQ Input.TransactionStart	true()
<input checked="" type="checkbox"/>	MQ Input	Transaction end	MQ Input.transaction.End	MQ Input.TransactionEnd	true()
<input checked="" type="checkbox"/>	MQ Input	Transaction rollback	MQ Input.transaction.Rollback	MQ Input.TransactionRollback	true()
<input type="checkbox"/>					
<input type="checkbox"/>					

Enable All

Disable All

Configuring: Adding an event to a node

The image shows three overlapping configuration windows in the Eclipse IDE:

- Event Source Configuration:** Shows fields for Event Source (dropdown), Event Source Address (text), Event Name (radio buttons for Literal and Data location), Event Filter (text), and Event Payload (Data location table).
- Event Correlation Configuration:** Shows Event Correlation description, Local transaction correlator (radio buttons for Automatic and Specify location of correlator), Parent transaction correlator (radio buttons for Automatic and Specify location of correlator), and Global transaction correlator (radio buttons for Automatic and Specify location of correlator).
- Event Unit Of Work Configuration:** Shows Event Unit Of Work description and radio buttons for Message flow, Independent, and None.

The **Mapping Node Properties - Mapping1** window is in the foreground, showing the **Monitoring** tab selected in the left sidebar. The **Events** table is empty, and the **Add...** button is circled in red. A red arrow points from this button to the **Event Source** dropdown in the **Event Source** configuration window.

Enabled	Event Source	Event Source Address

Configuring: Adding an event to a node

Add event

Basic Correlation Transaction

Event Source
Select the source of the event.

Transaction start
Transaction start
Transaction end
Transaction rollback
Failure terminal
Out terminal

Event source using an event source address. Use this value
Available event sources using runtime commands.

Start

Event Name
Provide the name by which events emitted from this source are to be known. Specify either a literal name, or the location of a character field in the message tree or elsewhere in the message assembly.

Literal SOAP Input1.TransactionStart

Data location Edit...

Event Filter
Provide an expression to control whether the event is emitted. The expression must evaluate to true or false, and can reference fields in the message tree or elsewhere in the message assembly. If you do not specify a value, the value true() is used.

true() Edit...

Select the event source. Input nodes include the special 'transaction' event sources

Configuring: Customizing an event

Add event

Basic | Correlation | Transaction

Event Source
Select the source of the event.
Transaction start

Event Source Address
The broker identifies an event source using an event source address. Use this value when you enable and disable event sources using runtime commands.
SOAP Input1.transaction.Start

Event Name
Provide the name by which events emitted from this source are to be known. Specify either a literal name, or the location of a character field in the message tree or elsewhere in the message assembly.
 Literal SOAP Input1.TransactionStart
 Data location [] Edit...

Event Filter
Provide an expression to control whether the event is emitted. The expression must evaluate to true or false, and can reference fields in the message tree or elsewhere in the message assembly. If you do not specify a value, the value true() is used.
true() Edit...

The event name can be a literal value, or can be extracted from the message payload using an expression

Configuring: Adding a filter to an event

Add event

Basic | Correlation | Transaction

Event Source
Select the source of the event.
Transaction start

Event Source Address
The broker identifies an event source using an event source address. Use this value when you enable and disable event sources using runtime commands.
SOAP Input1.transaction.Start

Event Name
Provide the name by which events emitted from this source are to be known. Specify either a literal name, or the location of a character field in the message tree or elsewhere in the message assembly.

Literal SOAP Input1.TransactionStart
 Data location Edit...

Event Filter
Provide an expression to control whether the event is emitted. The expression must evaluate to true or false, and can reference fields in the message tree or elsewhere in the message assembly. If you do not specify a value, the value true() is used.
true() Edit...

XPath expression to indicate if this event should be emitted or not

Customizing an event – bitstream data

Add event

Basic Correlation Transaction

Event Payload

Most events need to contain data taken from fields in the message tree or from elsewhere in the message assembly. Data taken from simple fields or complex fields appears in the event in XML character format. An event can also contain bitstream data, which appears in the event as hexadecimal bytes.

Data location	

Include bitstream data in payload

Content Encoding

Add... Edit... Delete

Click here to add part or all of the bitstream to the event



Operational Control of Business Monitoring

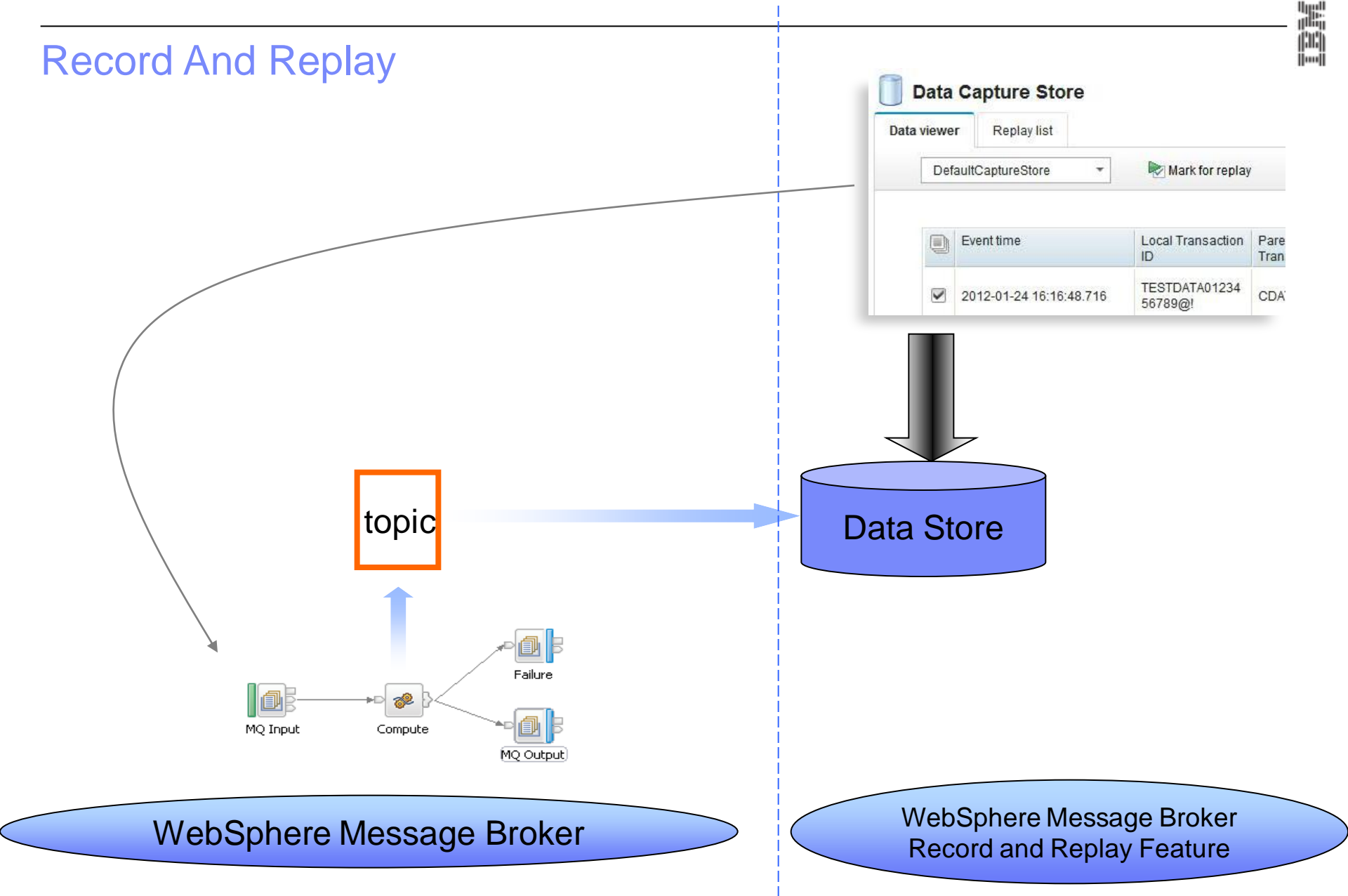
▪ **mqsireportflowmonitoring**

- Reports whether monitoring is active, and name of monitoring profile
- report all configured event sources for a single message flow
- report all available event sources in a single message flow
- Export the current monitoring properties as a monitoring profile.
- If monitoring profile is in use, registry contents are written to file
- If node properties are in use, XML is constructed from them
- **Tip: Use this to easily construct a monitoring profile, rather than hand-crafting it in a schema editor.**

▪ **mqsichangeflowmonitoring**

- activate monitoring for the specified message flow(s)
- set name of monitoring profile to use for the message flow(s)
- enable and disable individual event sources in a message flow
- Multiple event sources can be modified in a single command invocation
- No need to edit message flow and redeploy

Record And Replay



Data Capture Store

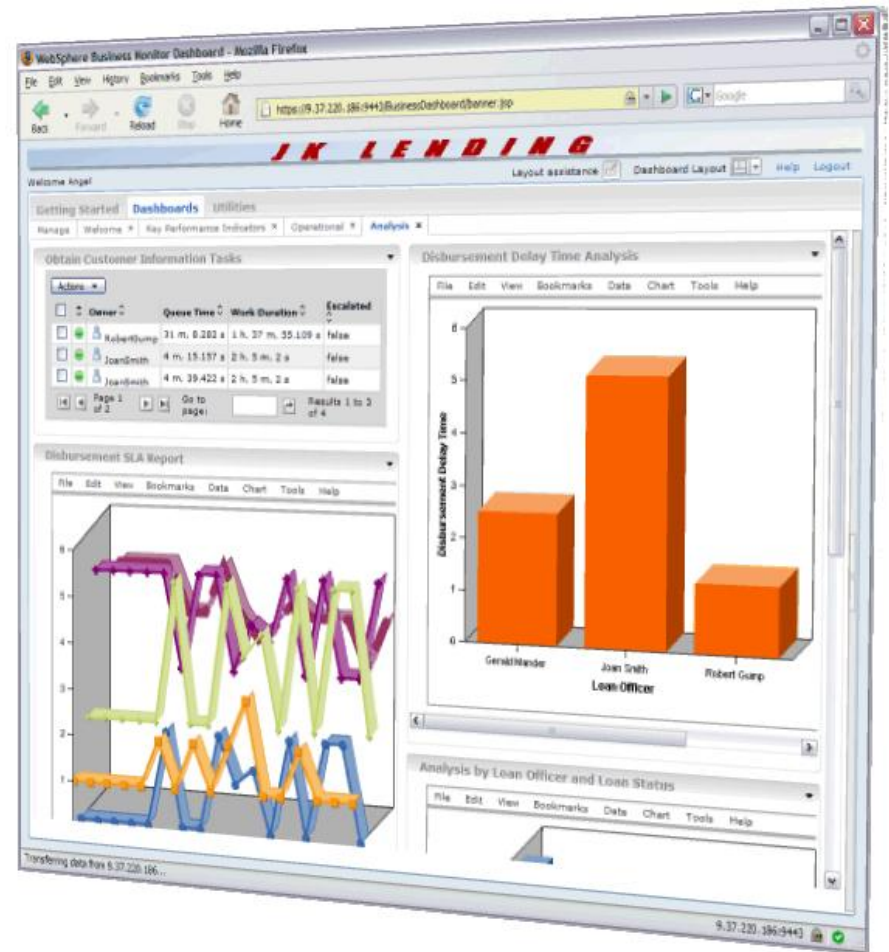
Data viewer | Replay list

DefaultCaptureStore | Mark for replay

Event time	Local Transaction ID	Parent Transaction ID
<input checked="" type="checkbox"/> 2012-01-24 16:16:48.716	TESTDATA0123456789@!	CDA...

Summary

- Message Broker Usage Patterns
- What is Business Activity Monitoring (BAM)?
- Implementation – IBM Business Monitor
 - Dashboard
 - Infrastructure
- Monitoring events in Message Broker



Backup

IBM Business Monitor

Right information, right time, right user

- **Reduce Risk & Increase Opportunity**
- Through **real-time** end-to-end **operational visibility** into your existing applications and systems
- To enable Business Users / Team leaders / Executives to **see contextual real time snapshots of business performance**
- **Using role-based customised dashboards** enabling 'personalised' views of KPIs, metrics and alerts



Client quote: 'Business Monitor allows me to make business improvements and manage by exception via alerts and KPIs. It allows me to look forward, rather than continually looking in the rear view mirror'