

Monitoring your SOA and Reporting the Status

Monitor and Dashboards







Business Monitoring at a Glance

- Monitor Business Performance
 - Active processes can be monitored, bottlenecks can be eliminated
 - Track Key Performance Indicators
- Respond to Situations
 - Detect anomalous situations in realtime...
 - ...out of threshold KPIs
 - ...individual process instances that need attention
 - Take corrective action before problems arise
- Enable earlier and better insight
 - Analyze KPIs over time and other dimensions
 - Drill up and down, slice and dice business measures to identify trends







What is Business Activity Monitoring?



- The goals of BAM are to provide real time information about the status and results of various operations, processes, and transactions so business decisions can be informed, quickly address problem areas, and re-position organizations to take full advantage of emerging opportunities.
- BAM systems are driven by business events, fed directly from integration software or from Business Process Management software

Source: www.wikipedia.org





Business Process Management





An integrated role in SOA environments





WebSphere Business Monitor - Capabilities

- Monitor the Business Performance of real processes
- Detect Business Situations and take action
- Gather Business Intelligence from collected process data
- Create intuitive rolebased dashboards
- Manage in-flight processes







Monitor the business performance of processes



• Display KPIs graphically as gauges or value in range graphs with status indicators

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Account Opening Cost Indicator

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View Key Performance Indicators (KPIs) calculated from real process data



Detect Business Situations and take action Detect anomalous situations and take action

- View alerts from active processes
- Notifications sent for manual response
 - Email
 - Pager
 - SMS messages
- Invoke automated responses
 - A BPEL process
 - A Web Service







Gather Business Intelligence from collected data



Analyze business metrics over time to identify trends

Discover previously hidden patterns using dimensional analysis

- Slice & dice process data
- Drill up & down

Leverages DB2® Alphablox and **Cube View® technology**

Populate a business performance warehouse in near real time





Reports

Create Role-based Dashboards



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Assemble dashboards from different views

- Instances view
- Report view
- Dimensional view
- KPI view
- Gauge view
- Alert view
- Organizational view

Combine standard & custom views to meet the business need



Manage in flight processes



Monitor processes

- Process Status
- Execution paths
- Inspect process instance data
- Examine durations, costs

Administer process instances

- Start / Stop process instances
- Transfer work items

Export actual process data to WebSphere Business Modeler

- Run new simulations based on REAL data
- Improve accuracy reduce risk





Feedback Enables Continuous Improvement

- Leverage real information about your business
 - Better decisions, quicker
 - Core business facts (runtime statistics) from monitor are passed back into WebSphere Business Clean with E Modeler for simulation, analysis, diagnosis, and action



- Business process improvement
- Discover true process behaviors
- Fact based simulation leading to improved process design





Simplest Picture of WebSphere Business Monitor







Major build steps – overview







Logical Sequence for Monitoring





Model / Monitor Lifecycle – role perspective





Model / Monitor lifecycle – product perspective





Agenda - Labs

- Labs
 - Lab 15 Create Business Measures
 - Use WebSphere Business Modeler to create high level KPI descriptions for an existing process.
 - Lab 15.2 Implement Business Measures

• Use WebSphere Integration Developer's Business Monitoring perspective (Monitor Model Editor) to define how and when the KPIs are calculated and displayed.

- Lab 15.3 – Deployment Overview

• Use WebSphere Application Server Administration features to examine the deployment steps for the Monitor Model.

Lab 16 – Dashboard Lab

 Use WebSphere Portal Server Administration features to define dashboard pages, configure and personalize the portlets, and review the process data.



Lab 15 Intro – Create Business Measures

- Examine the existing process model
- Plan the business measures
- Create the business measures
- Review the monitored values
- Prepare the model for completion
 and export for assembly

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Business Measure D	etails
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Name	Account Opening Cost Indicator
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	rate per task if needed.
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Lab 15.2 Intro – Implement Business Measures

- Generate Event Definitions and the Monitor Model from the BPEL process created by WebSphere Business Modeler
- Merge the contents from the Monitor Model created by WebSphere Business Modeler
- Define the low level elements required for KPIs
- Define the low level elements required for Dimensions
- Complete the data mart portion of the Monitor Model
- Complete the KPI portion of the Monitor

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	Average Process Duration	Account Verification Duration Stopwatch Fact	Average
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CustomerRetrieval_InputCriterion C		CustomerRetrieval_InputCriterion	Maximun
CreditReportServiceElectronic_Input		CreditReportServiceElectronic_InputCriterion	Count
CreditRiskAssessmentBusinessRule_I		CreditRiskAssessmentBusinessRule_InputCri	Average
		ET	





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Lab 15.3 Intro – Deployment Overview

- Generate the runtime application (Enterprise Archive or EAR file) that represents your Monitor Model.
- Install the application in the Monitor Server, and use the Setup Wizard to define several additional artifacts/definitions for your Monitor Model as it will run in the Monitor Server environment:
 - Once these steps are completed the Monitor
 Model has been installed and composition
 process events.

Application AVMMEAR CEI distribution mode

📆 Startable

Run Data Services Generation

M Import D82 Cube Definition

Managa Alphablox Cube Configure CEI Distribution Setup

steps



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Lab 16 Intro – Dashboard Lab

- Configure new dashboard pages
 - Visualize the layout of the new dashboard pages
 - Make copies of the supplied WebSphere Business Monitor portlets
 - Create new dashboard pages
 - Add the copied portlets to the dashboard pages
- Configure, Edit and Personalize
 the portlets
- Examine data presented by the dashboard pages









