

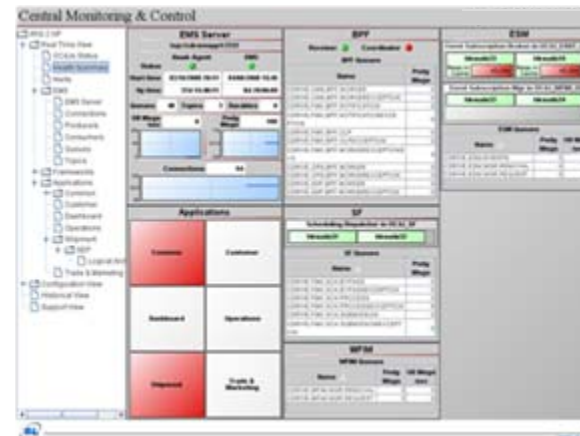
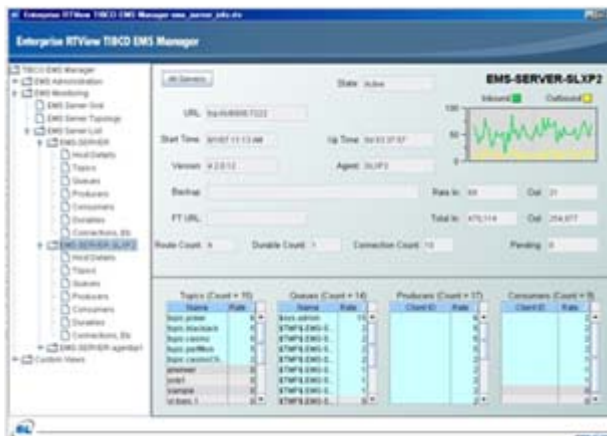
10 Crucial Steps to Ensuring Performance of TIBCO® BusinessWorks™





SL Corporation and TIBCO Relationship

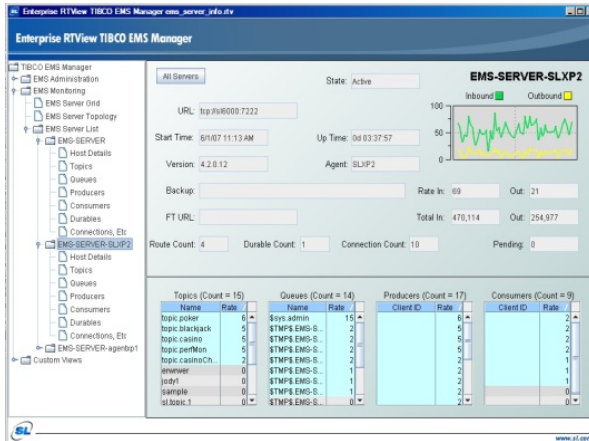
- SL has been a TIBCO alliance partner since 2002
- SL RTView was added to the TIBCO price list in April 2005
- A TIBCO-branded version of RTView was introduced in June 2005





Middleware Monitoring for TIBCO users

EMS Manager



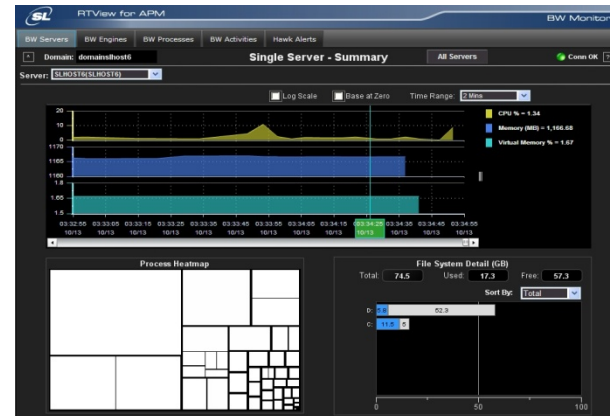
Rendezvous Monitor



Hawk Monitor



RTView for APM | BW Monitor





■ Partial TIBCO RTView Customer List

- A.G. Edwards
- Agilent
- Allstate Insurance
- Amgen
- AT&T
- Banco Azteca
- Bank of America
- Carphone Warehouse
- Citigroup National
- Citigroup Global Markets
- CLSA Limited
- CompuCredit
- CSPI Korea
- Delta Technology
- Deutsche Bank
- Dimension Data
- Elcoteq
- Fujitsu Siemens
- Grupo Elektra
- H&R Block
- Harrahs
- Intuit
- J.C. Penny
- Laureate Education
- Lehman
- LexisNexis
- Merial
- Mobilkom Austria
- New York ISO
- New York Power Authority
- OfficeMax
- OOCL
- OSLO Stock Exchange
- OTA Management
- PIT Telecommunications Indonesia
- R.L. Polk
- Payless Shoes Source Worldwide
- Pepsi
- Pirelli
- Prysmian
- R + L Carriers
- Royal Bank of Scotland
- SAC Capital Advisors
- Seagate
- SI Mobil
- Smart & Final
- Southwest Airlines
- SUN International
- Telecom Italia
- T-Mobile
- Telstra
- Tennessee Valley Authority
- Two Sigma
- UBS
- VIPnet
- Wachovia
- Wells Fargo



RTView® for APM | BW Monitor®

RTView for APM BW Monitor

Overview | BW Servers | BW Engines | BW Processes | BW Activities | Hawk Alerts

RTView® for APM | BW Monitor™

RTView® for APM | BW Monitor™ provides a centralized view of both real-time and historical performance metrics across numerous BusinessWorks engines and related services, processes and activities.

BW Servers

BW Engines

BW Processes

BW Activities

Hawk Alerts

Hover your mouse over the large icons for a full description of each BW display tab above.

RTView for APM

RTView for APM provides monitoring and management across a diverse application infrastructure.

J2EE

SOA

.NET

WEB

DISTRIBUTED/
MOM APPS

PACKAGED APPS

CUSTOM APPS

PACKAGED APPS

■ Challenges to Monitoring & Managing BusinessWorks

- **Provisioning**
 - Memory, usage and capacity, life cycle management

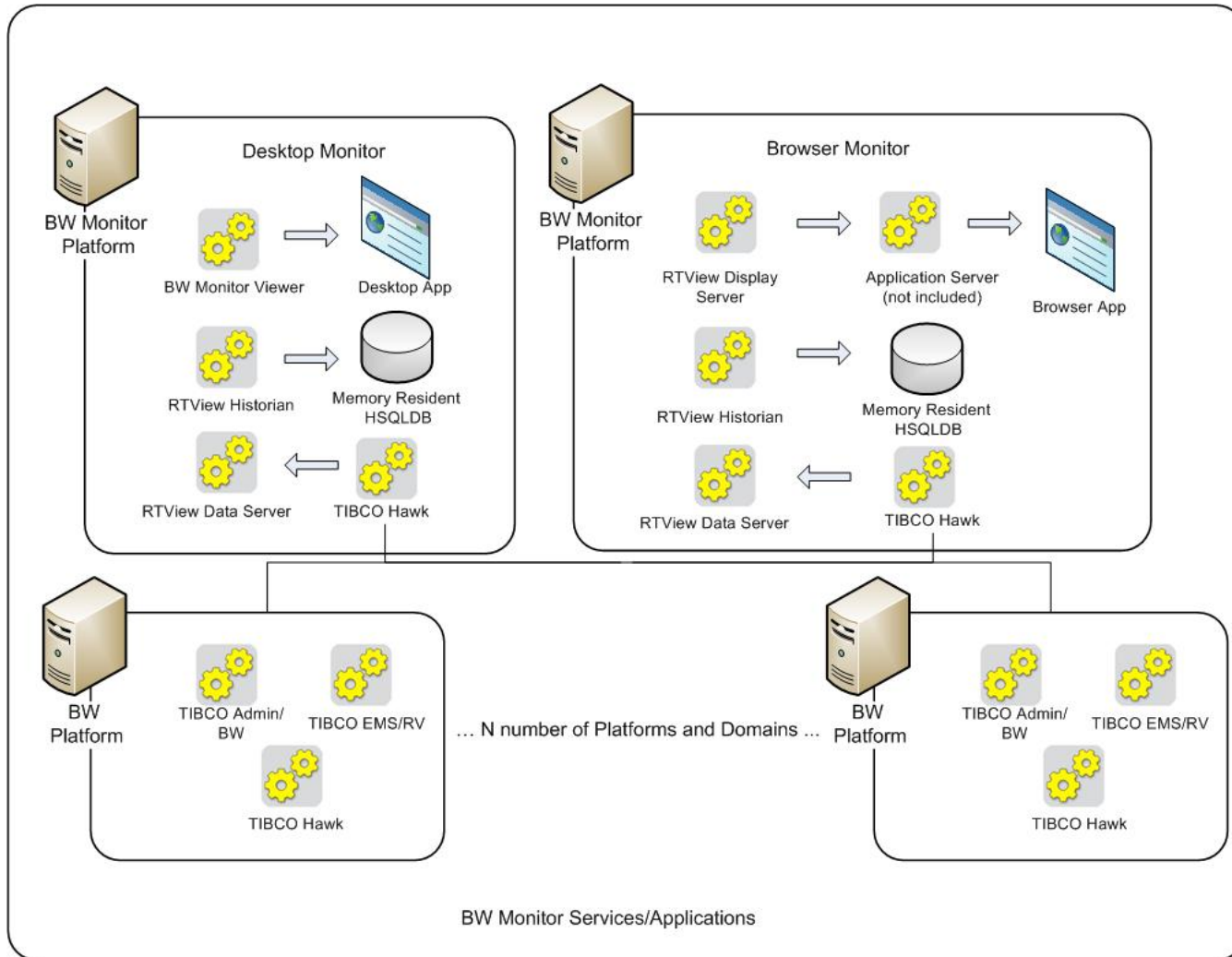
- **Performance**
 - Response times, SLAs, adapters

- **Troubleshooting**
 - Early warning of degradation
 - Quick response during change events
 - Post-failure analysis

■ Solution Options

- Hawk, TIBCO Admin, log files
- TIBCO SPM
 - Service monitoring, service performance
- SL's BW Monitor
 - Provide Hawk, TIBCO Admin, and log file metrics - aggregated in one dashboard with historical references

RTView® for APM | BW Monitor® Architecture





BW Servers

BW Engines

BW Processes

BW Activities

Hawk Alerts

Domain: ^

All BW Servers

Heatmap

Table

Conn OK ?

SLHOST6(SLHOST6)



CPU

MEM

BW Engines 2

SLHOST5(SLHOST5)



CPU

MEM

BW Engines 2



Filter:

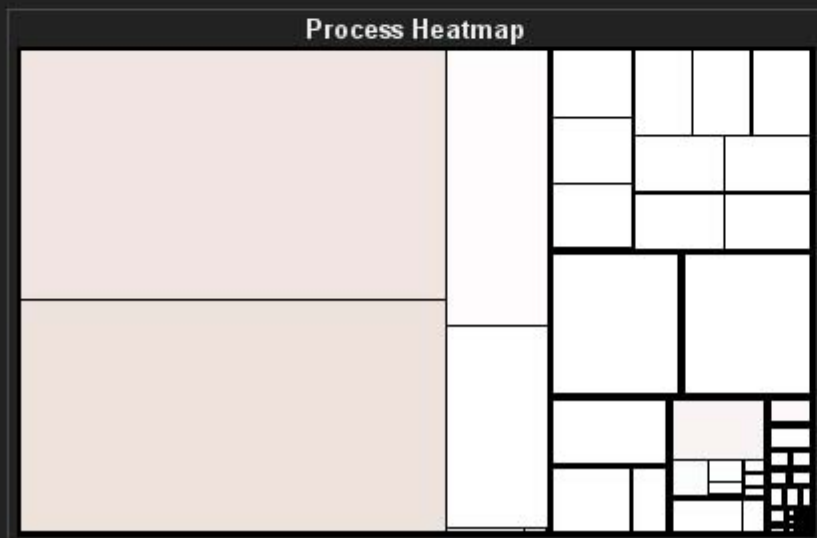
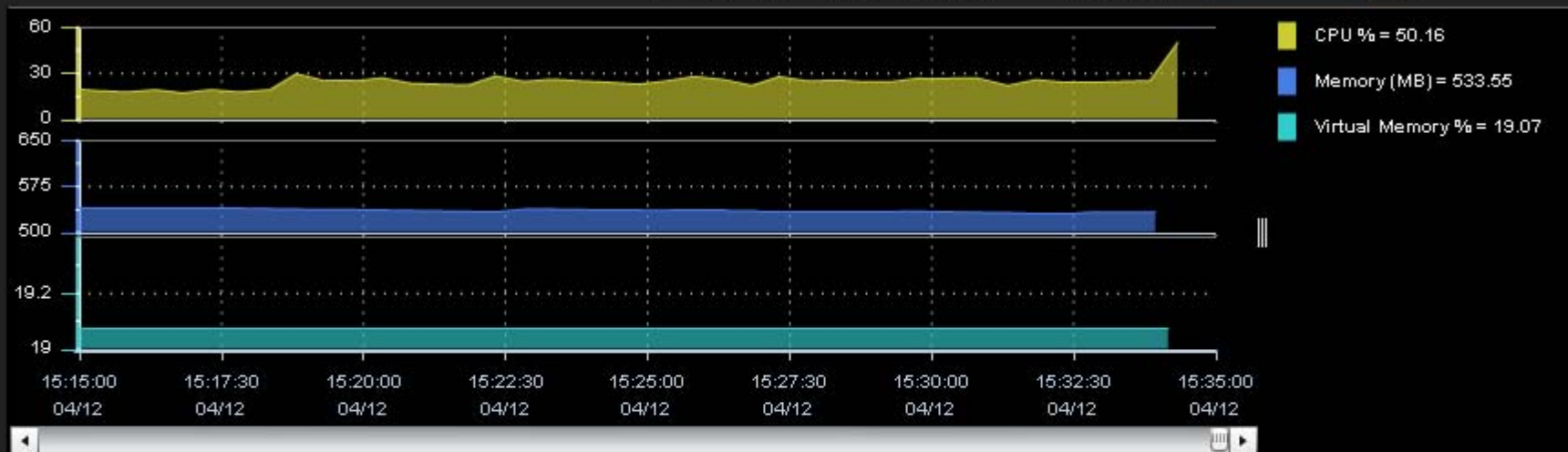
Single Server - Summary

All Servers

● Conn OK ?

Server:

Log Scale Base at Zero Time Range:





BW Servers

BW Engines

BW Processes

BW Activities

Hawk Alerts

Domain: *

All BW Engines

Heatmap

Table

Conn OK ?

Server: All Servers

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp.Procs



Uptime: 1d 20:20
 New Errors: 0
 Total Errors: 0
 Running Processes: 2
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-1.Procs



Uptime: 1d 20:19
 New Errors: 0
 Total Errors: 0
 Running Processes: 0
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-2.Procs



Uptime: 0d 18:52
 New Errors: 0
 Total Errors: 0
 Running Processes: 0
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-3.Procs



Uptime: 0d 18:38
 New Errors: 0
 Total Errors: 0
 Running Processes: 3
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-4.Procs



Uptime: 0d 18:50
 New Errors: 0
 Total Errors: 0
 Running Processes: 3
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-5.Procs



Uptime: 0d 18:48
 New Errors: 0
 Total Errors: 0
 Running Processes: 0
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-6.Procs



Uptime: 0d 18:47
 New Errors: 0
 Total Errors: 0
 Running Processes: 0
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE

SLHOST5(SLHOST5)

BW Engine: domainslhost5.BWApp-7.Procs



Uptime: 0d 18:46
 New Errors: 0
 Total Errors: 0
 Running Processes: 0
 Threads: 8



Used

Free

Total KB: 32,448

ACTIVE



Filter: No Filter

Single Engine - Summary

All Engines

Conn OK ?

Server: SLHOST5(domain5)

Engine: domain5\host5.BWApp-21.Procs

Engine Information

Status: **ACTIVE** Process ID: **7652**

Uptime: **24d 20:31** Instance ID: **0**

Version: **0** Threads: **8**

New Errors: **0** Total Errors: **0**

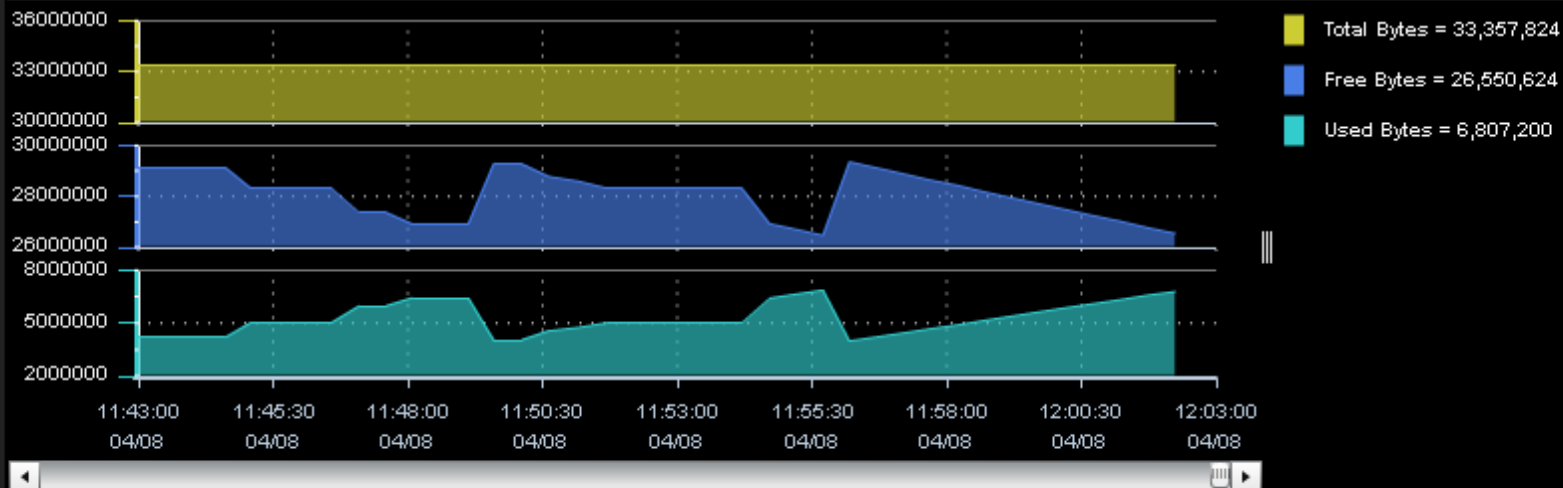
CPU %: **0.0** Memory (KB): **32,140**

Total Running Processes: **0**

Engine Memory Usage

TIME	TotalBytes	FreeBytes	UsedBytes	PercentUsed
03:35:00 AM	33,357,824	27,942,552	5,415,271	15.0
03:40:00 AM	33,357,824	27,491,370	5,866,453	17.0
03:45:00 AM	33,357,824	28,286,226	5,071,597	14.0
03:50:00 AM	33,357,824	27,908,225	5,449,598	15.0
03:55:00 AM	33,357,824	27,971,960	5,385,863	15.0
04:00:00 AM	33,357,824	27,599,485	5,758,338	16.0
04:05:00 AM	33,357,824	28,284,081	5,073,742	14.0
04:10:00 AM	33,357,824	28,130,378	5,227,445	15.0
04:15:00 AM	33,357,824	27,973,588	5,384,236	15.0
04:20:00 AM	33,357,824	27,505,439	5,852,384	17.0
04:25:00 AM	33,357,824	28,284,683	5,073,140	14.0

Log Scale Base at Zero Time Range: 20 Mins





BW Servers | BW Engines | **BW Processes** | BW Activities | Hawk Alerts

All BW Processes

Table

Conn OK ?

Domain: *

Server: All Servers

Engine: All Engines

Size = Completion Count
Color = Most Recent Execution Time

Most Recent Execution Time: 2,196 4,393

agent6x

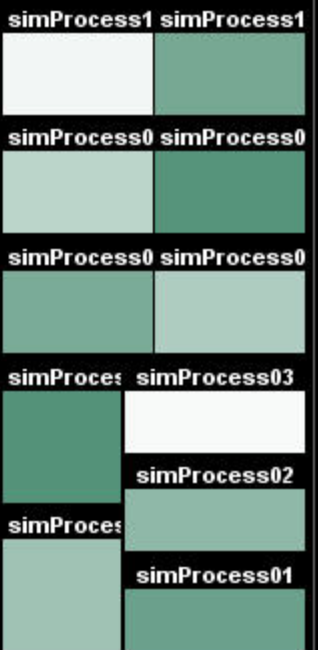
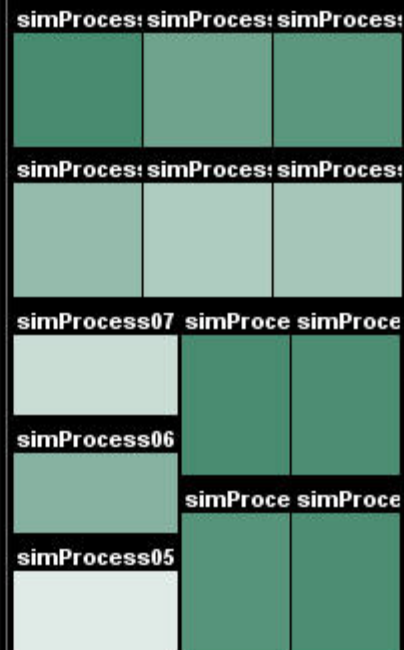
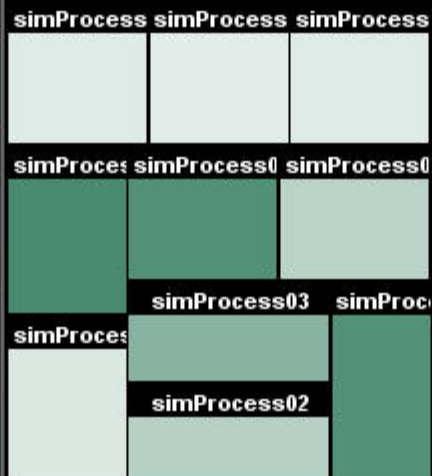
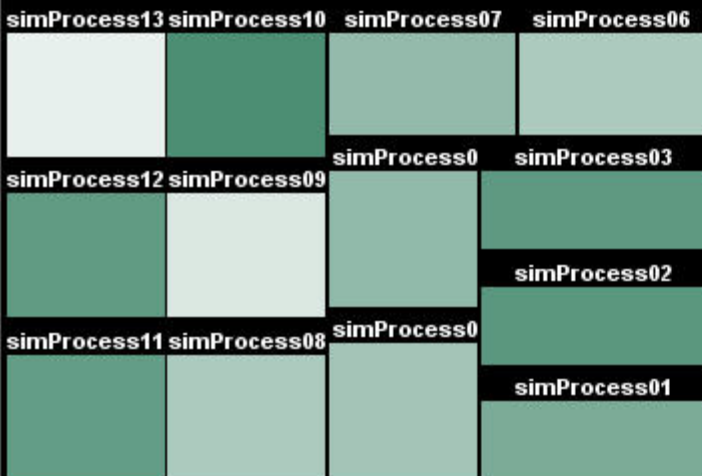
agent5x

APMBWDomain.BWSimD.Procs

APMBWDomain.BWSimC.Procs

QADomain.BWSim1.Procs

APMBWDomain.BWSim4.Procs

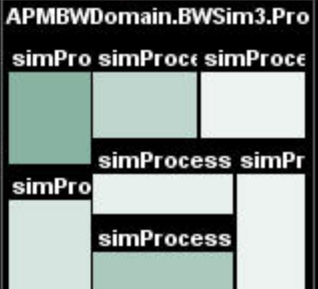
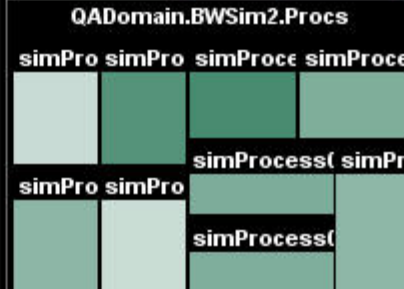
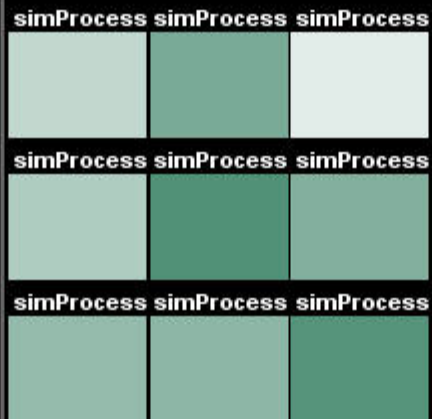


QADomain.BWSimA.Procs

QADomain.BWSimB.Procs

QADomain.BWSim2.Procs

APMBWDomain.BWSim3.Procs





- Overview
- BW Servers
- BW Engines
- BW Processes**
- BW Activities
- Hawk Alerts

Filter: **No Filter**

Single Process - Summary

All Processes

Conn OK ?

Server: **SLHOST5(domain5)**

Engine: **domains\host5.BWApp-21.Procs**

Process: **thirdAppProcess.process**

Process Starter **starter**

Time Since Update **00:00:01.531**

Execution Counts	
Created:	1,528,267
Completed:	1,528,267
Aborted:	0
Checkpointed:	0
Queued:	0
Suspended:	0
Swapped:	0
Since Reset:	1,528,267

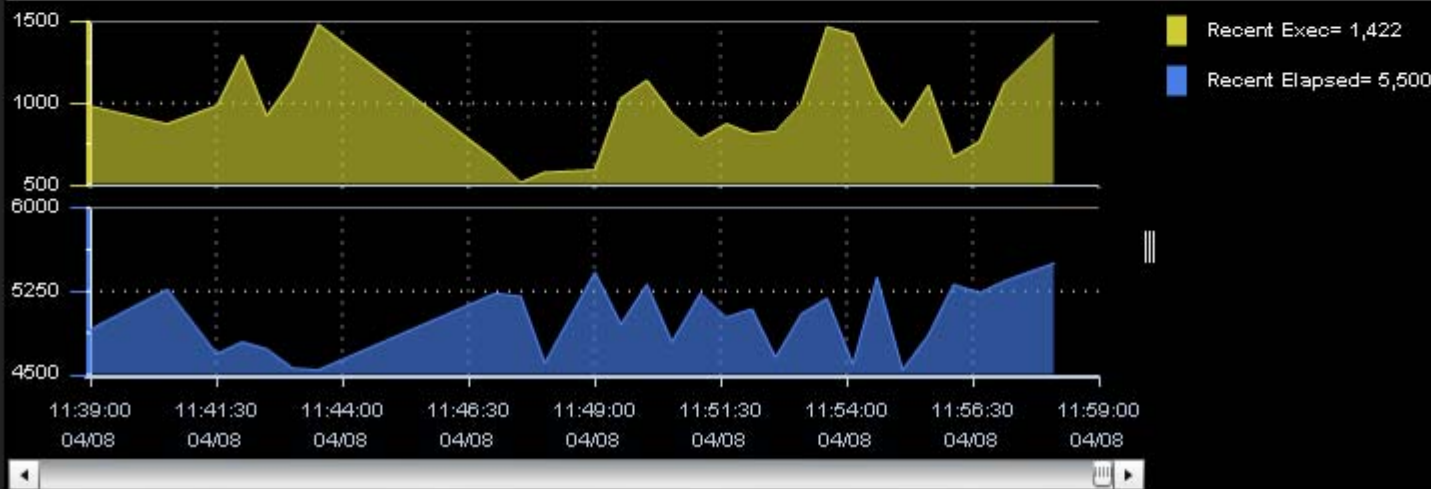
	Execution Times	Elapsed Times
Recent:	1,422	5,500
Average:	1,001	5,012
Min:	-168,787	-168,787
Max:	73,999	77,664
Total:	1,531,213,676	7,660,627,644

Activity History

Log Scale

Base at Zero

Time Range: **20 Mins**



Activity History

Server: SLHOST6(domain6)

Engine: domainslhost6.BWApp-1.Procs

Process: thirdAppProcess.process

Activities:

End

firstActivity

secondActivity

starter

End

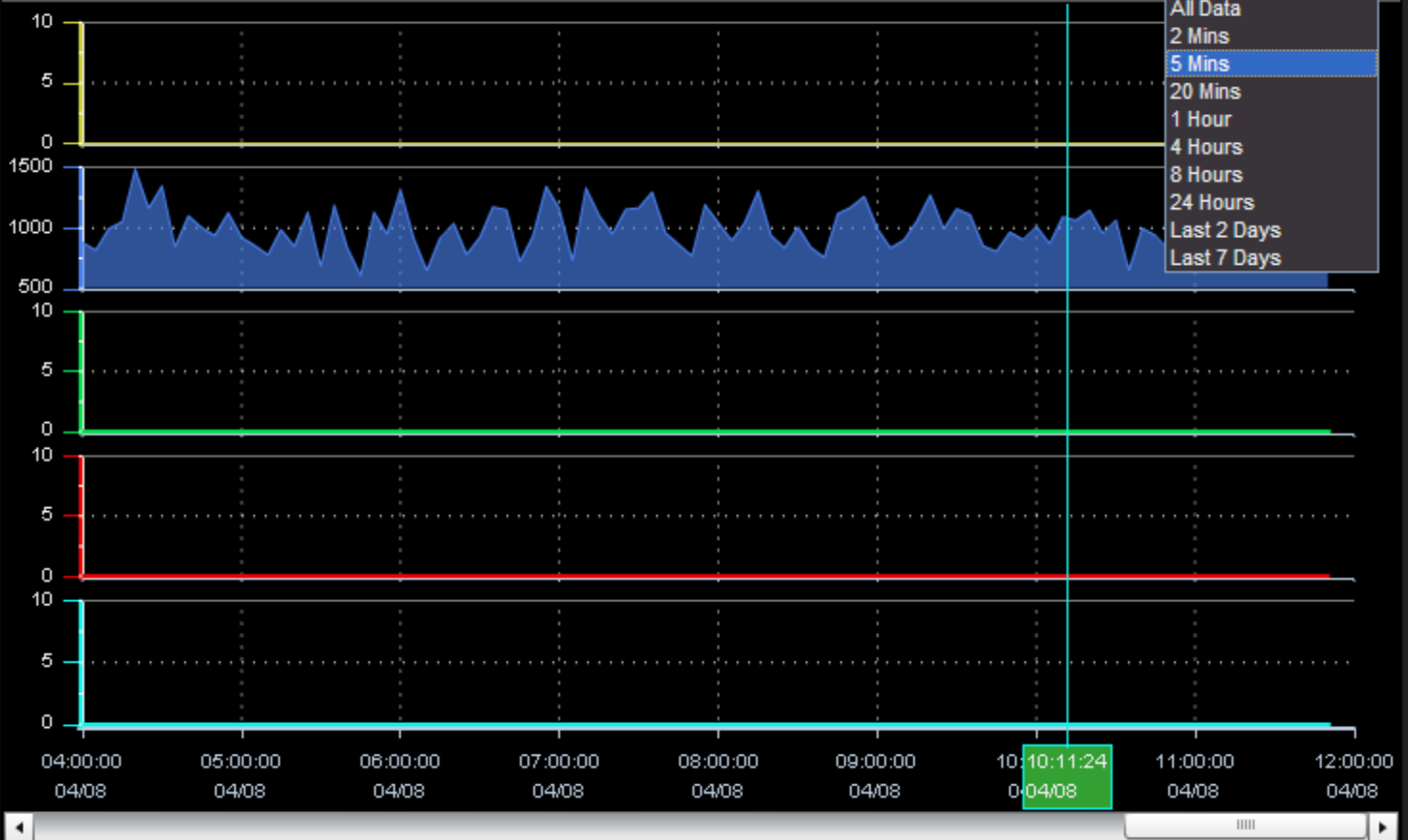
Execution Times:

Log Scale

Base at Zero

Time Range:

- 8 Hours
- All Data
- 2 Mins
- 5 Mins
- 20 Mins
- 1 Hour
- 4 Hours
- 8 Hours
- 24 Hours
- Last 2 Days
- Last 7 Days



➤ Gain Early Warning of Issues

1. **Monitor process execution times**
 - Drill down to view details on each activity the process performs
2. **Gain early warning of issues based on historical trends/defined thresholds**
 - Proactively detect issues
 - Perform immediate assessment of issues before they become critical



■ Perform Deep Analysis



3. **Correlate information across all BW servers, engines, processes and activities**
 - Aggregate information from multiple Hawk domains in real time
4. **Speed diagnosis and optimization with deep analytics**
5. **View persisted/compressed performance metrics over an extended period of time for greater context**

❖ Resolve the Problem vs. Restarting the BW Engine

6. Determine the exact point of failure

- Drill down into the steps of a service request to view details on processes and activities

7. Troubleshoot and solve the problem



■ Use Historical Trends to Ensure Future Performance

8. Optimize BW service response times based on historical usage trends
9. Determine the usage rates for a BW engine
10. Determine memory requirements for each BW engine and server (without over provisioning)

All Without Compromising System Performance



■ BW Monitor and Application Performance Management

BW Monitor is part of broader Application Performance Management (APM) solution

- **Built on RTView for APM framework**
- **Enable single-pane-of-glass views across TIBCO middleware, packaged and custom applications, and other monitoring tools**
- **Provide both breadth and depth in the monitoring and management of complex, multi-tier and geographically disperse software systems**
- **Quickly and cost-effectively deliver tailored dashboards, reliable alerts, power troubleshooting and historical analysis of overall system behavior**



For more information, or to request an evaluation of
BW Monitor, please visit:

www.sl.com

- or -

contact SL Corporation at
(415) 927-8400