HP Business Service Management (BSM)

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Challenges for IT

Environments are rapidly changing and getting increasingly complex

Assuring the Hybrid environment

- Service models
- Mobile monitoring
- Software-driven networks
- Public cloud
- Private cloud
- Managed cloud
- In-house custom apps
- Systems monitoring
- Virtual fabric
- Packaged applications
- Suppliers
- Employees
- Security
- IT metrics/analytics
- Storage
- Private cloud
- SaaS
Challenges for IT

Environments are rapidly changing and getting increasingly complex

Dynamic environments (Virtualization, Cloud), Technologies (Mobile) & Trends (BYOD, DevOps) make IT Operations Management more challenging
IT Operations Management challenges

70% of IT budget spent on keeping the lights on...

Lack of visibility
Across the complex environments

Root Cause Analysis
Time consuming – for dynamic environments

Siloed environments
Siloed monitoring solutions

Is there a problem?
How serious?

What is causing the problem?

Do I have the right tools across silos?
What IT Needs: Consolidated 360 degree visibility

Single pane of glass view into the health of the business services
What IT Needs: Operational Analytics

Predict, prevent or resolve ANY issue

**IT Operational Analytics**

- Predictive Analytics
- Event Correlation
- Log Analysis

**Root Cause Analysis**
Time consuming – for dynamic environments

What is causing the problem?

**Collect**

**Store**

**Analyze**
What IT Needs: End to End coverage

Across all types of applications and infrastructure elements

Siloed environments
Siloed monitoring solutions

Do I have the right tools across silos?

Applications
- Cloud
- Mobile
- DevOps

Infrastructure
- Systems
- Network
- Storage

DYNAMIC SERVICE MODEL
HP Business Service Management

Top down and bottom up approach for dynamic environments

Applications
End User Experience
Transactions
Diagnostics

Run Time Service Model
Comprehensive, Automated, Dynamic

Infrastructure
Systems
Network
Storage

- Universal Event correlation
- Management & Reporting
- Analysis & Intelligence

- Reduce MTTR
- Reduce OpEx
- Improve health of business services

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BSM Portfolio

The different components of BSM

<table>
<thead>
<tr>
<th>Applications Mgmt</th>
<th>Systems Mgmt</th>
<th>Virtualization Mgmt</th>
<th>Network Mgmt</th>
<th>Storage Mgmt</th>
<th>Log Mgmt</th>
</tr>
</thead>
</table>

IT Operational Analytics & Intelligence

Service Health Dashboard, Event Management

Dynamic Service Model
HP BSM can help customers
Reduce cost, Reduce risk, Increase confidence

Reduce cost
Boeing reduced their costs by $1M per year with HP BSM

Minimize business impact when issues happen
Florida Blue lowered the time to resolve to problems by 80%

Increase service availability
Vodafone reduced downtime by 77%, increased availability to 99.9%
# Proven success in enterprise-class deployments

Thousands of deployments worldwide

<table>
<thead>
<tr>
<th>Availability and Performance</th>
<th>“Perhaps most important to the business is the increased customer satisfaction and productivity; with a <em>reduction of end-user availability impact hours</em> ... of 96.2%”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated Event and Incident</td>
<td>“With 90% fewer incidents and 80% improvement in incident <em>resolution</em>, we are better able to meet high standards for customer service, protect our brand and market share”</td>
</tr>
<tr>
<td>Capacity and Forecasting</td>
<td>“... more proactive and provide a higher level of service than we currently are able to... financially, it will allow us to provide <em>realistic forecasts</em> as well as the ability to “right size” our configurations”</td>
</tr>
<tr>
<td>Lowest Cost of Operations</td>
<td>“<em>reduce the operational budget by 35 percent</em> because of the intelligent information being leveraged from the HP products”</td>
</tr>
</tbody>
</table>
Vodafone KPI improvements

Annual Cost saving €1.2M, 1st year ROI 300%

Cumulative Customer Lost Hours

78% reduction

Average Service Restore Time

74% reduction

Root Cause Identification Rate

40% to > 90% Improvement

Major Incident Volume

19 % reduction
HP BSM: Industry recognized solution

Gartner
Oct 2011
Marketscope
NCCM


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The complete cycle of IT Operational Analytics:

Analyze the past. Optimize the present. Anticipate the future.

**Complex Event Processing**
Correlate events to root cause based on monitoring data

**Statistical Learning**
Detect anomalies by learning “normal” behavior. Predict, Prevent.

**Contextual Analysis**
Resolve issues through analysis of structured & unstructured log data

**Multi-Dimensional Reporting**
Forecast, trend & optimize based on real time and historical data
A new approach in Operational Analytics

Making the most of your IT data

With complexity of today’s heterogeneous environment sprawl, IT is faced with a new set of questions:

How do I know what’s important?  
How do I know when I’ll need the data?  
What am I to make of all this information?

Collect everything  
Store everything  
Analyze anything
Consolidated Ops— the Service and Ops Bridge

Federate all fault & performance information to one place

- HP Service Manager
- BMC Remedy
- OMi
  - BSM Platform
  - Run-time Service Model
    - OOTB Integrations
    - Open BSM Connector Interfaces
    - HP Integration Adapters
- ArcSight Logger
- NNMi
- IBM Tivoli
- Microsoft SCOM
- NAGIOS
- 3rd Party Domain Mgrs
- APM
- SiteScope
- OM/PM

Application/Infrastructure
Applications
Storage
Mobile
Cloud
Clients
Network
Systems
OMi – the manager of managers – TBEC Today

Global IT view, less duplication, faster MTTR

Consolidate to single console

Correlate causal events

Network

Apps

Servers

3rd party

Cause

Symptoms
CLIP: Incident Management Process

As Is

App Response Time Slow
J2EE DB Connection Failing
Oracle Slow Query Time

Ticket #1
Ticket #2
Ticket #3

App Expert
Java Expert
DB Expert

Database Problem
Manual Resolution Process

Close Incident
Human Error → re-work

Closed Loop Incident Process

Auto Event Correlation
Symptom

App Response Time Flow
J2EE DB Connection Failing
Oracle Slow Query Time

Ticket #1
DB Expert or Operations Bridge

Automatic Resolution Flow

Runbook resolution process
Close Incident

Event correlation
Auto assignment
Automatic resolution
HP Application Performance Management (APM)

1) Monitor end user performance
   - End-user management (synthetic/real/client)

2) Pinpoint application bottlenecks
   - Transaction management (deep diagnostics/tracking)

3) Predict application performance issues
   - Predictive Analytics

APM 360
- One solution bundle

Transaction flow, e.g.; e-commerce order

End-user management
- Browser
- Citrix
- Mobile carriers
- Employees/Citizens

Cloud services/ISPs

Real User Monitor

Reporting and alerting in central console

Network

Web servers/load balancer

Web services

Application servers/composite applications

Databases

Mainframe

Employees

Virtual/physical hybrid environments
HP Systems Management

Assure across physical, virtual and hybrid cloud environments

Consolidated performance & event monitoring
All layers of technology from each managed system

Single solution to manage most complex heterogeneous environments
Physical, virtual and cloud (private and public)

“YES! we can monitor that!”
Agent and agent-less
Virtualization Performance Viewer (vPV)

Managing and optimizing in a virtualized world

Triage tool for tuning & troubleshooting virtualized infrastructure performance

For virtualization subject matter experts (vSMEs)

Heterogeneous hypervisor support (MS and VMware)

Lightweight, standalone product. Also integrates with other HP Software tools

Quick time-to-value: visualize data minutes after installation

Free production use version available at: http://www.hp.com/go/vpv
HP Automated Network Management

Manage faults, performance & availability of the network

- **Unified** fault, availability, & performance monitoring
- **Automated** compliance management, diagnostics, & remediation
- **Converged** management & security
HP Storage Essentials

The problem with Big Data – Big Storage!

1. Assets
   What do I have?

2. Capacity
   Who is using how much?

3. Performance
   How is it performing?

4. Reports
   Is it compliant, can I improve?
Built on the Run-time Service Model (RTSM)

Integrate across the lifecycle

BSM: Focus on operations
• Business service info & status
• End user/real user info & status
• Application/software info & status
• Infrastructure info & status

CMDB: Focus on configuration management
• Master of discovery & configuration
• Business service design & modeling
• Federation to HP products
• 3rd party integration

Authorized state

Synchronization

Federation

Actual state
Run-time Service Model

Identify, prioritize, analyze, resolve events and incidents faster

User Experience

Applications

Virtual Infrastructure

Physical Host (server)

Resources (network, storage)

Host

Disk

Hypervisor

VM

Web server

Exchange app

Active directory

Impacted users

Prioritized Issue
Run-time Service Model

Comprehensive, automated, and up-to-date model for dynamic services

Application Performance Management

Run-time Service Model

Infrastructure Performance Management

Integrated/Federated

HP CMS  3rd party CMDB

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Integration with HP IT Executive Scorecard

Single pane of glass for IT performance
Industry’s broadest coverage of IT investment
Key Performance Indicators cascaded throughout the portfolio
Open data model and studio for KPI expansion and customization
HP Services for BSM
BSM Solution Discovery Workshop

Map your BSM Journey

Maturity assessment and strategy

Initiatives roadmap

Business, Functional and Technical solution architecture

Critical use cases

Business case analysis
<table>
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<th><strong>One-line definitions</strong></th>
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<tr>
<td><strong>APM on SaaS</strong></td>
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<tr>
<td>Offers the core elements from the latest version of HP APM on SaaS. Monitors apps availability and performance either from inside customer premises, the cloud, or both.</td>
</tr>
<tr>
<td><strong>BAC Anywhere</strong></td>
</tr>
<tr>
<td>POPs for rent on SaaS. For all the HP BSM install base (onprem) who want to extend application monitoring capabilities for availability and performance anywhere in the world.</td>
</tr>
<tr>
<td><strong>Private Cloud BSM</strong></td>
</tr>
<tr>
<td>Hosted Ops Bridge, APM, and collectors, and integrations supported by RTSM with the benefits of the SaaS enterprise cloud: 24x7x356 operational support, 99.9% availability, ISO/IEC 27001:2005 certified</td>
</tr>
<tr>
<td><strong>Performance Anywhere PAw</strong></td>
</tr>
<tr>
<td>TBA in and SaaS only! light weight end-to-end app monitoring to quickly perform problems isolation by tagging app end user performance data (BPM) with Diagnostics drill down. Innovative Dev/Ops pridge.</td>
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Summary

BSM on SaaS offerings

APM on SaaS

- BASIC - ADVANCED
- Rapid deployment, ready to start in days
- Flexible subscriptions (service only or comprehensive)
- Access to SaaS Global POPs
- Fixed cost, on demand advanced conf. services

BAC Anywhere

- BASIC
- SaaS point solution for app monitoring over the firewalls.
- Access to SaaS global POPS
- Self service

BSM on SaaS

- BASIC - ADVANCED
- Hosted BSM on SaaS Private Cloud
- Predictable operational support costs
Thank You