HP Business Service Management 9.2 and Operations Analytics

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Product Marketing – Network Management
Top trends for 2013

- Reduce Costs
- Cloud Adoption
- Mobile Computing
- Standardization
- Analytics
IT Apps/Services are evolving
Virtualization, Cloud and Mobility are increasing IT Service complexity

Virtualized IT Service

Physical IT Service

Hybrid/Cloud/Mobile Service

Complexity
Change volume, velocity
Managed but not owned

Change volume, velocity, variety

IT & Business Value

Time

2006
2010
2012
2013
HP Business Service Management

Achieve operational excellence… in a dynamic world

Run-time Service Model
Comprehensive, automated and up-to-date model for dynamic services

Universal event correlation & Service Intelligence

- End-user experience
- Transactions
- App diagnostics

- Server
- Network
- Virtualization
- 3rd party monitoring tools

Application Performance Management

Infrastructure Performance Management
Proactive – Identify issues using global synthetic transactions before your customers find them

Real Time – Capture each real user experience, transactions and behavior from every location

Depth – Drill down deep into transactions across the entire system, from end-user to the mainframe

Track – Know where every transaction is at every second of every day

360° view of application health

Proactive

Real time

Depth

End users

Private & public cloud

Mobile

Broad coverage of applications: SAP, Citrix, SharePoint, Java, .NET, Mobile applications, web 2.0, other protocols

Available on-premise or SaaS
HP Systems Management
Linking physical, virtual and hybrid cloud environments

**Consolidated Monitoring**
- Flexibility via both HP agents and HP SiteScope (agentless)
- Microsoft SCOM and Nagios events and topology via integration adaptors
- Other 3rd party events

**Heterogeneous Monitoring**
- Any physical platform (Linux, Windows, Unix)
- Market-leading virtualization platforms (VMware ESX, Microsoft Hyper-V, Citrix Xen, Solaris Zones)
- Packaged applications using Smart Plug-Ins

**Automatic root cause analysis**
- Topology-based Event Correlation (TBEC)
- Auto-baselining
- Dynamic thresholding
HP Network Management
Redefining your Network Management Practice

**Securely** manage more customers, departments or sites at lower cost.

**Quickly** and easily train, deploy, integrate & operate.

**Efficiently** monitor from a common console using unified network data.

**Automate** Root Cause Analysis, compliance, diagnostics & remediation.

**Manage** cloud, virtualization & advanced network services.

Network Operation Center

Fault Availability Performance Change
Configuration Compliance Diagnostics
Advanced Network Services Trending Reporting

Private Clouds  Enterprise Network  Public Clouds
Run-time Service Model
Comprehensive, automated, and up-to-date model for dynamic services
Run-time Service Model

Identify, Prioritize, Analyze, Resolve events and incidents faster

- Host
  - VM
    - Web server
  - VM
    - Exchange app
      - Active directory
    - VM
  - Hypervisor
  - Disk

Impacted users

Prioritized Issue

APPLICATIONS

VIRTUAL INFRASTRUCTURE

PHYSICAL HOST (server)

RESOURCES (network, storage)

USER EXPERIENCE
Automate with universal event correlation

Automatically related to a complete model of the IT infrastructure

Complete cross-domain visibility of IT infrastructure issues
HP Service Intelligence

Analytics that converts data into actionable knowledge

1. Service Health Analyzer (SHA)
   - Anticipate issues before they occur
2. Service Health Optimizer (SHO)
   - Optimize your IT engine
3. Service Health Reporter (SHR)
   - Understand issues from a services view
4. Service Level Management (SLM)
   - Align IT to business and gauge total

Analyze the past. Optimize the present. Anticipate the future.
Build upon the Run-time Service Model
Service Health Analyzer
“Run-time” Predictive Analytics

1. **ANTICIPATE** real IT issues
2. **PREVENT** business impact
3. **REMEDiate** events quickly

The Value You Get from SHA…

- Correlate real-time metric abnormalities with topology
  - Built upon the Run-time Service Model
- Automatically capture real thresholds
  - Uses historical performance data to build dynamic thresholds
- Take action before service impaired
  - Identifies abnormal behavior and sends out an alert
- **Zero Configuration. Zero maintenance.**
  - “Up and running in 1 hour”
SHA Proof Point: Predictive Analytics
SHA predicts issue **60 minutes** before it happened

1. Early morning: Metric performing within baseline

2. 10:30 am - SHA detects an anomaly and sends out an alert.

3. 11:00 am: Metric violates threshold

4. 11:30 am: Service now unavailable… standard monitoring generates alert

Gray Area: Dynamic threshold (baseline) created by SHP

SHA detected problem and sent alert **one full hour** before the service failed!
What else is needed for Operational Analytics

Event triage and Correlation

Understand the health and performance of IT

Log Management

Understand logs and raw data across IT

Operational Analytics

Better insight and business context
Machine data is everywhere

- Logs/ events/ flows
- Applications
- Cloud
- Structured/ raw
- Devices/ Network
- Virtual
- Users/ employee data
- Mobile devices
- Physical
What’s needed to understand your IT data

Log Intelligence - collect, store, analyze everything

Collect

Store

Analyze

- Managed cloud
- Traditional dc
- SaaS
- Storage
- App
- Software
- Driven
- Networks
- Managed
- Fabric
- Service
- Virtual
- Assuring the
- Hybrid
- Environment
- Packaged
- Applications
- Suppliers
- Public cloud
- Private cloud
- Employees
- IT
- Metrics/Analytics
- Mobile Monitoring
- Security
- Virtual Fabric
- Systems
- Model
- Systems Monitoring
- Alarms
- Performance
- Systems
- Monitoring
- Alerts
Collect everything
Comprehensive borderless collection from any log/ event/ flow generating source

- Any structured or unstructured data
- Agent or agent-less collection
- Legacy applications support
- Proprietary log formats
- Raw syslog
- Raw file based logs
- Events
Store everything
Convert all machine data into a single format for unified search, report, and retention

<table>
<thead>
<tr>
<th>Time (Event Time)</th>
<th>name</th>
<th>Device</th>
<th>Device Product</th>
<th>Category Behavior</th>
<th>Category DeviceGroup</th>
<th>Category Outcome</th>
<th>Category Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/17/2009 12:16:03:</td>
<td>Deny</td>
<td>Cisco</td>
<td>PIX</td>
<td>/Access</td>
<td>/Firewall</td>
<td>/Failure</td>
<td>/Informational/Warning</td>
</tr>
</tbody>
</table>

Benefit: Single data for searching, indexing, reporting, and archiving
Analyze everything

Simple text-based search tool for analysis, reporting, and troubleshooting

- Quick forensics and investigation through a simple search tool
- Easily search and report on historical data
- Retention of logs as per regulatory compliance
- Compliance reporting through continuous monitoring
- Feed unified data into event correlation engine for faster response to incidents
A new approach: Operational Analytics

Collect, store, and analyze enterprise IT data, apps, ops, devices, and everything else…

- Collect, store and analyze everything
- Consolidate in a single dashboard
- Correlate to understand impact and root cause
- Visibility into dynamic service models for better analysis
- Easily search logs and events for improved services and better decisions
Integrate across business, operations, security & testing to increase IT efficiencies

ArcSight – BSM Integration

Operations Bridge
- Apps
- Server
- Storage
- Network

Enterprise Security

Logs for Ops

Linking NOC and SOC

IT Search for Ops

1. Logs for Ops
2. IT Search for Ops
3. Linking NOC and SOC
Vodafone Ireland

Journey to Operational Excellence

Initial Challenge:
Reactive, introspective, fragmented IT operations process

Solution:
HP Business Service Management 9.2 (APM, OMi, DDMA, SHA, ArcSight Logger)

IT Improvements
- 66% reduction in customer impact
- 28% reduction in number of major incidents
- 77% reduction in cumulative monthly downtime

Business Benefits
- IT resources are more closely aligned with business needs
- IT better supports the business’ ability to improve customer retention, drive market growth and manage overhead costs
- Cost savings $1.2M in one year, 300% ROI
HP BSM differentiation
Only vendor to do ALL 6

- Real time visibility into rapid change
- Service Intelligence built on RTSM
- Manage across build, run & secure
- Automate with universal event correlation
- Broad heterogeneous coverage
- Predictive Analytics
THANK YOU