HP Operations Bridge

OMi 10

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Agenda

• Operations Bridge (OMi) Overview
• OMI 10
  • UI Enhancements
  • Architecture
• OM-to-OMi Evolution
HP Business Service Management

Ensure optimal IT performance and availability...in a dynamic world

Business Service Management

**Operations Bridge**
Consolidated management, accelerated root cause analysis

**Application Management**
End to end composite application performance management

**Operational Analytics**
Actionable analytics from events, logs, metrics & topology data

**Infrastructure Management**
Comprehensive visibility and monitoring of hybrid IT

Run Time Service Model

**Huge Installed Base**

**Patented Analytics:**
IT’s crystal ball

**Unique RTSM Engine**

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The “optimized” Operations Bridge

Application experts

Experts should be **focused on:**
- rolling-out new functionality for the business and driving innovation
- optimizing solutions that support Operations staff productivity

Infrastructure experts

Share relevant information to enable collaboration

Tier 1 Operations staff

Operations Bridge

Operations Staff
- handle the vast majority of application / infrastructure issues and incidents
- only escalate issues which have no pre-defined process or automated fix

But is this happening in your environment?
Operations Bridge

- Global, real time view of apps and infrastructure
- Advanced correlation and root cause across IT
- Automated workflows and orchestration
- Break through war-rooms with gamification, collaboration and mobile access

“Average incident resolution time been reduced from 30 mins to 2 mins and the administrator and fault management teams are not disturbed if the problem occurs during the night.”

Sinasi Bilgen, Turkcell

Gamification + Automation
Universal data model – A model of the IT landscape

People, places, and things

- Location
- Organization
- Person
- Facilities

Business enablement

- Business Service
- Business Process
- Business Function
- SLA

Depends on

Application and services

- Infrastructure Service
- Business Application
- Business Transaction

Depends on

Software

- Running Software
- Database
- Hypervisor
- Application Server

Runs on Installed on

Infrastructure

- Node
- IP Address
- Physical Host
- Logical Volume
- File System

@HP we call this the Run-Time Service model (RtSM)
RTSM - Making this work for IT operators

It’s all about dependencies

Business transactions

Transactions created from simulated user action scripts

J2EE application

Relationships from diagnostics

J2EE server

Metrics/KPIs from infrastructure monitoring

Server

Network interface
How RTSM empowers automated event analytics

Global IT view, less duplication, faster MTTR

Consolidate to single console

Correlate causal events

Network

Apps

Servers

3rd party

Cause

Symptoms
How RTSM empowers automated event analytics

Efficiency gains with advanced event causal correlation

Use case addressed
1. Something goes wrong in your environment
2. Monitoring reports multiple problems via events
3. Usually just 1 event describes the cause of the problem
4. Others are just symptoms
5. Fix the cause and the symptoms go away

Event analytics adapts based on automatically discovered data in the RTSM
Consolidated Ops— the Service and Ops Bridge

BSM 9.x high-level architecture
What we have heard from the user community

User interface should be more appealing

Upgrade is too complex

The product does need to scale higher

Large sets of documentation

Need support of small footprint installations:

single server install, embedded database, simple install experience
OMi 10 release themes

**Simplification**

- Address complexity concerns
- Embedded free of charge database
- Streamlined & integrated APM & OMi
- Reduce Connector footprint
- Gamification to explore product features

**OM to OMi Evolution**

- Close functional Gaps
- Agent Patch Deployment linked to MA
- Link to external knowledge base
- OMi infrastructure self monitoring
- OM policy & configuration migration tools
- OMi best practices doc for OM use cases
- Enterprise scale (#users, #Cis, events/sec, ...)

**Content**

- Extend Management Pack's to Cloud vendors
- Extend MPs to Msft Plaforms, SAP & Web Infra
- Extend connectors in depth & breath

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OMi 10
New Features
Operations Manager i 10

Simplification: Improve TTV and TCO

• Simplified install and configuration
  – Install includes Monitoring Automation, User Engagement, Management Packs
  – Express configuration using embedded PostgreSQL DB
  – OMi Virtual Appliance
  – Lightweight BSM Connector

• No cost PostgreSQL database support

• Refreshed UI
  – New look and feel
  – Simpler, faster navigation
  – New pages are HTML 5

• Help?
  – Discover OMi - Exploration map for new OMi admins
  – Streamlined documentation, online help and added how-to videos

• New role-based authorization

• Streamlined and integrated APM & OMi
New Operator UI pages
Allows multiple tabs
Smart navigation, that remembers your selection
Ad-hoc search to perform tasks faster
MyBSM ➔ MyWorkspace
KPI over time report page and component
Supporting dashboard, triaging and troubleshooting use cases
Discover OMi – the Exploration Map in OMi 10
Learn how to get started & explore advanced OMi features

• Discover OMi...
  – Tells you where to start and how to proceed
  – Explains steps briefly and offers links to corresponding UIs, online help and videos (where available)
  – Shows your progress
  – Shows fast path and advanced topics
  – Is easy to use
  – Offers built-in self-explanatory help

Event Suppression

Some events may have no importance with respect to managing your environment. As these events do not need to be viewed or acted on by the operators, they can be identified and permanently discarded before any processing is executed.

You find the related interface at Administration > Event Processing > Correlation > Event Suppression.

Configuring an event suppression rule requires a filter to select the events to discard. When an event suppression rule is enabled, all events matching the filter are discarded from the event pipeline before unnecessary processing occurs. If it fits to your requirements, add a rule with a click on “New Item” “\“.

For more information look at the online help.

Learn how to get started & explore advanced OMi features
Return-On-Investment (ROI) page
Calculates cost savings based on event reduction

“Reduced By OMi” = events that were closed, correlated, or discarded automatically by TBEC, SBEC, TBEA, closing related events, duplicate suppression, EPI scripts, storm detection & event age
New User Management UI

Easy navigation and guided user workflow

Uses the newer UCMDB (v10) which has different authorization from UCMDB 9.x that includes role concept.

BSM 9.2x had some predefined roles – e.g., system viewer, but was limited set of roles and you could not adjust them.

With OMi 10 you can create, modify and reuse roles.

New UI is plugin free. No Java applets.
Monitoring Automation at a glance

- Monitoring Automation simplifies monitoring configuration for dynamic, hybrid environments by offering:
  - Topology-based monitoring configuration using RTSM
  - Automation of monitoring deployment
  - Hiding monitoring implementation details and technology
  - Single method to configure monitoring independent of technology
  - Easy-to-tune monitoring
  - Monitoring reporting
OMi Management Packs

OMi 10 Management Packs

Big data
- Hadoop (Apache, Cloudera distributions)
- HP Vertica database
- Amazon Web Services*

Cloud
- HP Cloud*

Middleware
- Apache Web Server*
- IBM WebSphere Application Server
- Oracle WebLogic Application Server

ERP
- SAP
- SAP HANA

Microsoft
- Active Directory
- Exchange

Databases
- Oracle RDBMS
- MS SQL Server
- SAP Sybase ASE

Infrastructure
- Systems, Clusters, Virtualisation*
- HP Storage Essentials**

R = SHR Content Pack available
* Free MPs
** Download from HPLN
## OMi Management Packs - Community Editions

### Database
- PostgreSQL
- MySQL

### Middleware
- Apache Tomcat
- ActiveMQ
- Glassfish
- RabbitMQ
- gunicorn

### Big Data & Cloud
- Apache Kafka
- NGINX
- Haproxy
- nodeJS

### Development & Automation
- Aternity
- CA Spectrum

### Generic protocols & mail servers
- Open LDAP
- Bind DNS
- OpenSSH
- DHCP
- HTTP
- File Change

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Simplified Product Installation & Configuration

• Express option for very quick and simple setups

• Benefits
  – Minimum configuration steps down from 35+ screens down to 2
  – Time to configure down from >1h to <15m
  – Interactive installation guide that adjusts and only shows what is relevant
    Eg, 5 pages instead of 100+ pages
Low cost OMi deployment

Using PostgreSQL database

- **PostgreSQL DB support**
  - True single server deployment with embedded PostgreSQL DB for smaller environments
  - Multi-server deployment with separate PostgreSQL DB for larger deployments

- **Customer Use**
  - No cost database option for OMi deployment

- **Benefit**
  - Reduced total cost of ownership and solution footprint
**Updated platform support**

Always check latest support matrix (SUMA) for up-to-date information

New!

- RHEL/OEL 7
- PostgreSQL DB
- MSSQL 2014
- OMi includes RTSM/UCMDB 10.11

- RHEL/OEL 5, IE 8, FF 24 no longer supported

Support matrix overview

- **Server OS**
  - Windows Server 2008/2012 incl R2
  - RHEL/OEL 6/7

- **Databases**
  - Oracle 11gR2/12c incl RAC
  - Microsoft SQL server 2008/2012/2014
  - PostgreSQL 9.3

- **Clients**
  - IE 9-11, FF 31 ESR, Safari 7.x (MacOS)

- See support matrix for details
OMi 10 Core architecture changes
Consolidated Ops— the Service and Ops Bridge
BSM 9.x high-level architecture

- HP Service Manager
- OMi
- BSM Platform
- Run-time Service Model
- UCMDB
- Events
- Topology
- OOTB Integrations
- Open BSM Connector Interfaces
- HP Integration Adapters
- OM
- 3rd Party Domain Mgrs
- Microsoft SCOM
- APM
- SiteScope
- NNMI
- Appliance/Virtualization
- Application Infrastructure
- Applications
- Storage
- Mobile
- Cloud
- Clients
- Network
- Systems
BSM deployment architecture based on APM/OMi 9.x
BSM 9. x ( <= 9.21)

BSM (Omi, MyBSM, RTSM, etc.)

- CMS
- SM / SAw
- BPM/RUM
- SiS
- OM Agents
- NNMi

3rd Party via BSMC 9

OM
Linux/Unix
Windows

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BSM deployment architecture based on APM/OMi 9.x
BSM 9.22 - 9.24 (with Monitoring Automation)

BSM (OMi, MyBSM, RTSM, etc.)

CMS  
SM / SAw

OM
Linux/Unix
Windows

OM Agents

3rd Party
via BSMC 9

BPM/RUM

SiS

NNMi
BSM deployment architecture with OMi 10
BSM 9.25 & OMi 10 (OM → OMi)

OMi 10
(Service Health, MyBSM, RTSM)

CMS
SM / SAw

OM
Linux/Unix
Windows

3rd Party via BSMC 9

APM
incl. Service Health, MyBSM, RTSM

SiS
BPM/RUM

SiS
OM Agents

NNMi
BSM deployment architecture with OMi 10
BSM 9.25 & OMi 10

OMi 10
(Service Health, MyBSM, RTSM)

- CMS
- SM/SAw

3rd Party via BSMC 9

APM incl. Service Health, MyBSM, RTSM

SiS, BPM/RUM

OM Agents

NNMi
OMi 10 – Architecture Changes

• Architecture that scales
  – OMi system can be optimized for OpsBridge use case
  – APM system can be optimized for application troubleshooting and triaging use cases

• Reduced complexity
  – Upgrade becomes simpler and can be done independently for OMi and APM

• APM becomes true domain manager
  – If required, application teams can operate their own instance

• Loosely-coupled systems can be enhanced quicker
  – new features can be delivered independently
  – E.g.- new Look & Feel, PostgreSQL DB support in OMi 10
OMi 10
Supporting the OM to OMi Evolution
OM to OMi Evolution

• Evolution Guide to plan & execute evolution from OM to OMi

• Enhancements in OMi 10 to support the evolution
Operations Manager i 10

OM to OMi Evolution

• Low cost, single server deployment
• Capability to patch OM agent
• External instruction text interface
• New command line interfaces
• OM/SPI evolution guides & tools
• Built-in self-monitoring
• Show policy group structure of imported OM policies
  – Important when policies are imported and should be grouped into aspects
• Improved policy/assignment update – guided workflows
• Redeploy instrumentation to multiple nodes
External Instructions
Retrieve instructions from external systems like knowledge bases, web pages or other external sources

• Returned text can include plain text with hyperlinks or HTML

• Based on event filter
  – Can use all event properties as input for instruction lookup (incl. instruction text attributes set in policy templates)
  – Instruction lookup doesn’t have to be built into policies - can be added later

Useful for BSMC integrations

• Allows lookup of instructions for SCOM, NNMi, Nagios events, ...
Managing HP Operations agents installations

- Install Operations agent patches and hotfixes using OMi console or CLI
- Manage Operations agents remotely using new CLIs opr-agt, opr-jobs
- Benefits
  - Simplified install & maintenance, lower TCO
Self-Monitoring

For Monitored Nodes, Connectors and OMi server components
OM to Operations Bridge evolution—the journey

You own HP Operations Manager?

You are entitled to HP Operations Bridge Premium

You can upgrade to HP Operations Bridge Ultimate

HP Operations Manager
HP Reporter

Consolidated event & performance management

HP Operations Bridge Premium

Service-driven
• Single pane of glass
• Adaptive event Mngt
• Dynamic service Health
• Built-in event reduction
• Automated monitoring
• Cross-domain reporting

HP Operations Bridge Ultimate

Analytics-driven
All of Premium +
• Log intelligence
• Business impact
• Root-cause analysis
• Predictive analysis
• Runbook automation

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OM to Operations Bridge evolution: quick time to value!

**Investment protection**
- Same Proven Processes
- License Entitlement
- Same Collectors

**Simple evolution**
- Step by step Guides
- Evolution tools
- At your pace

**Increased Value**
- New Innovative capabilities
- 70% MTTR Improvement
- 100% Automated

"M.A. will allow us to significantly reduce the TCO"

"MyBSM very flexible" - "... a pleasure to work with it"

"Existing features are very good"

"We’ve switched off OMW, OMi is great"