

HP Operations Manager i Software

Data sheet

Gain competitive advantage through increased service levels

In today's highly competitive world, organizations are focusing their efforts on delivering new services at higher service levels using the latest technologies such as virtualization and cloud computing. To accomplish this, IT needs to leverage automation, collaboration, intelligence, and up-to-date data in such a way that valuable resources are used where they add the most value.

Business innovation challenges

It sounds simple, but freeing IT personnel from mundane, day-to-day activities and assigning them to more strategic initiatives is no easy task. The fastest approach is to consolidate IT event management activities into a single operations bridge that reduces duplication of effort, allows quick identification of the causes of IT incidents, and decreases the time it takes to rectify IT issues. Automatically identifying, prioritizing, analyzing, and remediating IT incidents significantly reduces the amount of time your IT organization needs to spend on monitoring and managing the IT infrastructure.

However, consolidating events from increasingly complex IT infrastructures into a single event stream proves difficult for many organizations. One challenge is that different IT silos, such as network, server, and storage teams, monitor events using their own tools and processes. There is no single cross-domain view of an event stream that includes monitoring of disparate technologies as well as products from multiple vendors. This leads to significant duplication of effort for both tier-1 operators and subject matter experts. Because there is no consistency from one team to another, they typically collaborate using manual processes. In addition, because separate tools do not work together, tasks that could otherwise be automated are not.

Another challenge that operations personnel face today—especially with the advent of newer technologies such as virtualization and cloud computing—is managing increasingly complex and dynamic IT ecosystems. What

used to be straightforward has now become difficult to monitor and manage because of the challenges associated with understanding how an issue with one of these newer technologies impacts the business.

Today, it is critical to monitor such technologies effectively, because a failure in one area will most likely affect others. If you don't understand the interdependencies within your IT environment, that failure can significantly impact your services and your competitive position in the marketplace.

HP Operations Manager i software

HP Operations Manager i (HP OMi) software uniquely addresses the challenges discussed above. What makes Operations Manager i unique? It is the only product that dynamically and automatically discovers and correlates—even as the environment changes—two sets of data: event data that indicates infrastructure- or service-impacting issues, and topology data that ties the IT infrastructure to the business services that rely on it. And two types of data can be brought into Operations Manager i—structured as well as unstructured, like log files—which allows for comprehensive insight when monitoring and managing business services.

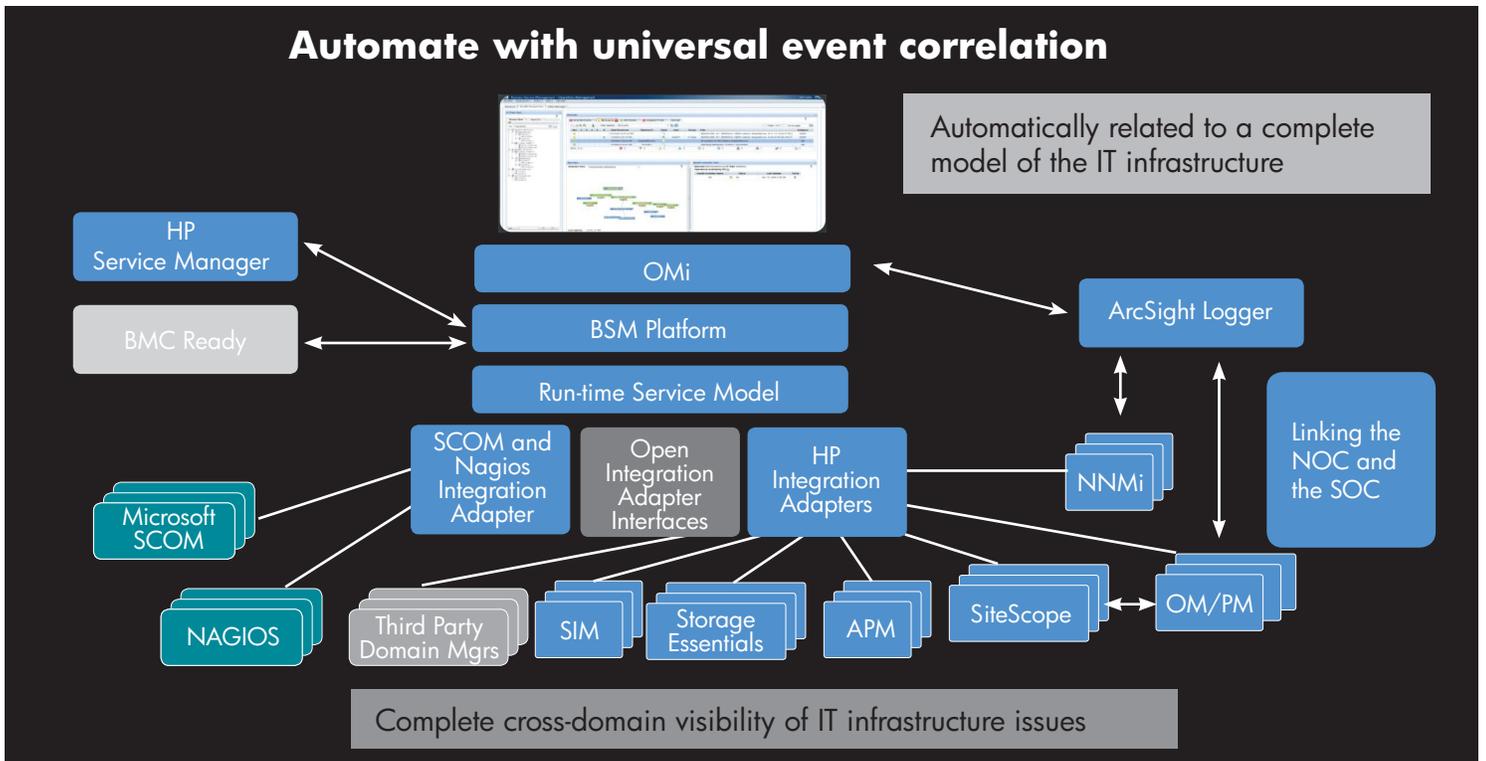
Using this rich set of information, Operations Manager i applies advanced logic to determine the real cause of an incident, provides advice on the likely business impact, and makes recommendations on how to prioritize remediation activities. Because Operations Manager i uses discovery data that enables the dynamic updating of event correlation and impact calculation rules, the guidance that the software provides to operations staff is accurate—even if the IT infrastructure changes.

What's more, because this data is now automatically discovered and maintained, the administrative burden typically associated with maintaining up-to-date IT information is significantly reduced. That translates to less time and effort spent by tier-1 operators on day-to-day operational activities and by expert staff on maintenance of operational management solutions.



Figure 1:

Operations Manager i consists of two components—the Event Management Foundation and Topology Based Event Correlation—both of which leverage the Run-time Service Model.



Automated discovery delivers current topology information with less overhead

The Run-time Service Model automatically receives discovery information about the IT infrastructure and the business services that rely on it from:

- HP Operations Smart Plug-Ins (infrastructure, virtualization, and application)
- HP Network Node Manager i (NNMi)
- HP Discovery and Dependency Mapping (DDM)

Information in this model federates with information residing in the HP Universal Configuration Management Database (CMDB) and third-party CMDBs.

HP Run-time Service Model

The Run-time Service Model—which comes with the Event Management Foundation—serves as a repository for all the discovered configuration items, including the relationships among them (topology) and dependencies between business services and IT infrastructure. The Run-time Service Model can receive discovery information from multiple automated discovery sources, which facilitates a complete and up-to-date picture of the managed environment, and enables sophisticated event-correlation and impact-analysis logic of Operations Manager i to deliver better operational and business value to the organization.

The Run-time Service Model is updated on a near-real-time basis whenever a monitored component or its context changes in any way. The resulting dynamic, accurate, and up-to-date view of how infrastructure components relate to one another speeds diagnosis and eases the burden of maintaining complex static rules and mappings, freeing expert staff to work on more strategic projects.

HP Operations Manager i Event Management Foundation

HP Operations Manager i Event Management Foundation provides a cross-domain view of the entire IT environment—covering virtualization technologies, cloud infrastructure, third-party products, applications, servers, storage, networks, HP End User Management (EUM) monitors, and much more—via a single, Web-based user interface. This single consistent and holistic view of

the entire IT ecosystem helps both operations teams and application support personnel decrease duplication of effort, increase collaboration across teams, and improve mean time to recovery (MTTR)—all of which promote more efficient utilization of operations staff.

In addition, operations teams can easily access visual representations of an event's business impact and gain insights on how infrastructure and EUM alerts are affecting applications and business services. Armed with this information, they can determine which activities to work on first based on prioritization levels—in effect increasing their efficiency in handling incidents.

Once the cause of an incident has been identified and prioritized, it is important to enable tier-1 operations staff to address resolution of the issue in a consistent manner and, whenever possible, in an automated fashion. However, when manual activities are required, Event Management Foundation provides operators with a number of context-sensitive facilities—directly from the event browsing interface—to guide and speed their activities, as well as instructions and knowledge-base links, which are embedded directly within events.

These facilities, along with the Event Management Foundation's automated incident resolution, promote streamlined and consistent incident management, and reduce errors, rework, and incident escalations by tier-1 operators. The ultimate outcomes are higher IT operator productivity, more time for expert staff to work on strategic initiatives, and improved business service availability.

Figure 2:
OMi Health Perspective Views

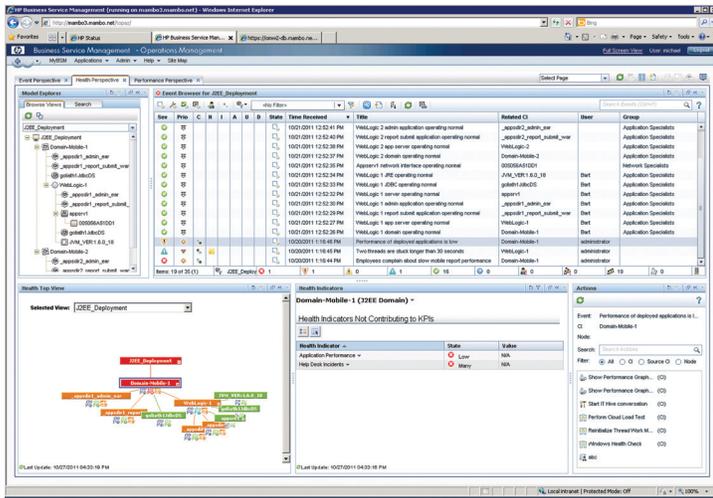
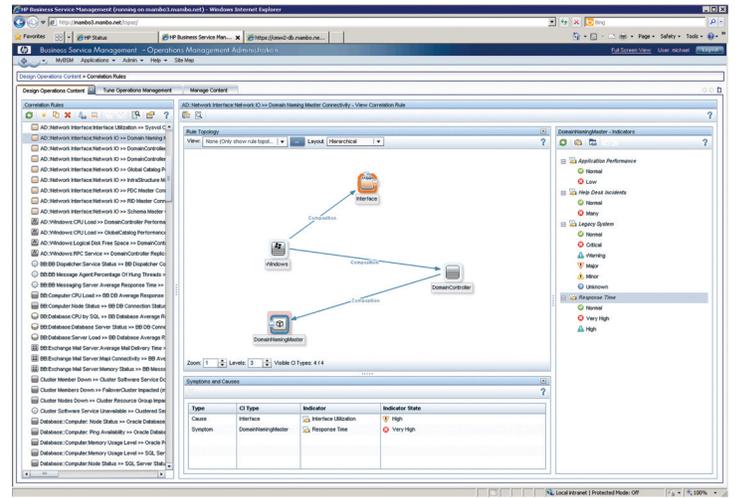


Figure 3:
OMi Topology Based Event Correlation—dynamic rules



HP Operations Center

HP Operations Center products consolidate fault and performance events across servers, storage, applications, and networks using a combination of agents and agent-less monitoring. HP Operations Center products include:

- HP Operations Manager i
- HP Operations Manager
- HP Performance Manager
- HP Reporter
- HP GlancePlus
- Agents
- HP SiteScope
- HP Smart Plug-Ins

HP Operations Manager i Topology-Based Event Correlation

HP Operations Manager i TBEC is dynamic in the sense that it is based on the discovered information and relationships present in the Run-time Service Model. It also adapts in near real time to updated discovery information. For example, TBEC can accommodate the addition of new infrastructure components, movement of applications within a cluster, or re-allocation of virtualized machines as soon as discovery has updated the Run-time Service Model.

TBEC utilizes detailed, comprehensive, and automatically updated discovery and relationship information to analyze alerts and events, and ultimately determine the event that is most likely the cause of an incident. Operators are presented with a clear representation of which event they need to investigate and what symptoms can be ignored, which then helps them determine the team best suited to resolve an incident. With TBEC, there is less need to guess at the cause of an incident or spend time chasing symptoms—so operations staff can fix issues faster, handle more incidents, escalate fewer issues to expert staff, and collaborate more effectively to resolve problems—all of which ultimately help make incident management more efficient.

From an expert staff perspective, TBEC assists in streamlining work by allowing correlation rules to be defined only once. Because these rules are based on configuration item (CI) types, not on components themselves, they can be automatically applied to each new CI as the Run-time Service Model dynamically discovers and captures it and its interrelationships. With no need to update correlation rules according to the changes in the IT environment, ongoing rules maintenance is significantly decreased.

In addition, TBEC guides subject matter experts in the creation of new rules, thus ultimately reducing the amount of time they spend on maintaining operational solutions. For example, expert staff can create new TBEC rules by simply selecting events in the browser, where the topology behind these events is used as a starting point by Operations Manager i.

Tools that enhance Operation Manager i's capabilities

Many IT organizations need a single view of the entire IT ecosystem—a cross-domain view that encompasses all the technologies being used, whether old or new, including not just HP tools but also products from other vendors. Rich information in this holistic view—for example, an incident's cause within an event stream, how it was diagnosed, and how it was remediated—needs to interoperate with other tools in the IT ecosystem. The following is a selection of related solutions from HP and HP partners:

HP Application Performance Management products

With the increased use of cloud computing, it is important for you to understand your customers' experience and also how your business services are tied to and rely on which components in your IT environment. Through a common look and feel, HP Application Performance Management (APM) software—such as HP Business Process Monitor (BPM) and HP Real User Monitor (RUM)—are integrated with Operations Manager i, providing a foundation for collaboration among your organization's IT teams. And when these products are tied together, you also get consistent and transparent information on event streams and causal incidents—along with recommendations for resolving those incidents.

Service Intelligence products

HP offers Service Intelligence products that further enhance Operations Manager i's capabilities, including HP Service Health Reporter, HP Service Health Optimizer, HP Server Health Analyzer, and ArcSight Logger—the latter two providing the most benefits when used in conjunction with Operations Manager i. ArcSight Logger feeds pertinent events from unstructured log files to Operations Manager i, allowing for more comprehensive troubleshooting capabilities, as now both the structured and unstructured data is consumed by Operations Manager i. HP Service Health Analyzer, on the other hand, generates events with additional context, which is then provided to Operations Manager i. This additional context, such as similar incidents and recommended run books, facilitates faster MTTR.

Automated workflows and service desk integrations

Managing business services goes beyond just monitoring. It means managing the entire lifecycle of an event, which includes automatic submission with service desks and automated remediation using run books.

HP Operations Orchestration software allows for the execution of automated process steps—IT process workflows or “run books”—which are called by Operations Manager i. With more than 4000 out-of-the-box workflows, Operations Orchestration enables automatic remediation of recurring incidents—with no intervention from operations staff or subject matter experts. Where no automated remediation flow exists, tools—all in context of a selected event—are presented to users via Operations Manager i, providing a consolidated list of possible actions to take. These capabilities—speeding incident resolution and promoting consistent remediation—when integrated with Operations Manager i, allow your expert staff to work on initiatives that drive business innovation.

Operations Manager i also integrates with HP Service Manager and third-party service-desk offerings to automatically create and synchronize trouble tickets and third-party notification systems to notify IT staff (for example, via paging and SMS) for greater incident-handling efficiency.

Integrations with third-party monitoring tools

Operations Manager i consolidates IT monitoring across domains and third-party tools for comprehensive monitoring, at the same time protecting existing monitoring investments. For example, HP offers off-the-shelf Integration Adapters for Microsoft® Systems Center Operations Manager (SCOM) and Nagios, allowing for more sophisticated integration between these specific third-party monitoring tools and Operations Manager i.

A complete solution

HP provides a comprehensive curriculum of HP software courses, which provide the training you need to realize the full potential of your HP solutions and achieve better return on your IT investments. For more information about educational courses, visit www.hp.com/learn.

HP Financial Services

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HP Services

HP provides high-quality software services that address all aspects of your software application lifecycle needs. The wide range of HP service offerings—from online, self-solve support to proactive mission-critical services—enables you to choose the services that best match your business needs. For an overview of HP software services, visit www.hp.com/go/bsmprofessionalservices.

Conclusion

HP Operations Manager i enables you to deploy a consolidated IT operations bridge that delivers tangible business value. By combining advanced logic and a comprehensive, automatically discovered model of the IT infrastructure, the software takes the guesswork out of infrastructure monitoring.

HP Operations Manager i helps you transform operations to power business innovation. To learn more, visit www.hp.com/go/omi. For more resources on HP Operations Center: product downloads and our blog, visit www.hp.com/go/opc and www.hp.com/go/bsmblog.



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4AA2-3879ENW, Created December 2008; Updated November 2011, Rev. 3

