



## HP Operations Center software

Monitor, diagnose and prioritize infrastructure problems based on business impact

## IT operations challenges

If you are in an enterprise IT organization, you need to maintain the availability and enhance the performance of servers and application components that support your company's business processes. Today, if your operators do not have the ability to prioritize incidents that occur due to service downtimes, then it defeats the purpose of IT aligning with the business. It all comes down to the business value of the services running on those infrastructure components.

At the same time, data center consolidation, along with rationalizing IT management tools and server virtualization, may be driving your organization to centralize operations event and system performance management. Take, for example, the typically chaotic state of IT operations—where responsibilities for application availability and performance are split across multiple groups and business silos. In such an environment, disparate tool sets offering limited integration tend to proliferate—making coordination difficult at best. Even virtualization poses additional complexity—if operations and support personnel cannot easily see what infrastructure elements support services, they cannot drill down to find infrastructure problems affecting service degradation.

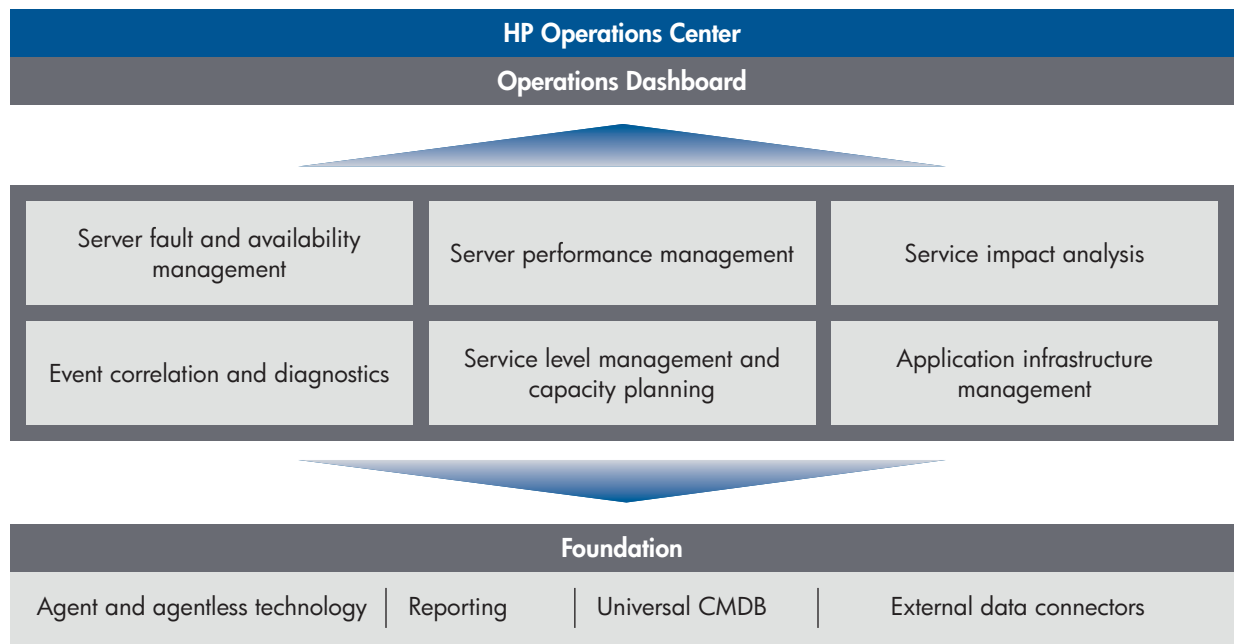
This is where HP Operations Center comes into play. It brings together all the capabilities you need to respond effectively to these challenges by providing end-to-end event, performance and availability management so that, at all times, IT staff is able to understand any IT event in terms of its impact on the business.

## HP Operations Center

HP Operations Center offers a comprehensive, modular, service-oriented approach to IT management. The HP approach improves availability across servers and provides sophisticated correlation of management information from multiple fault and performance measurement sources for greater operational efficiency. Instead of discrete IT management point tools that are spread throughout the enterprise, you can unify your operations management environment to monitor and proactively manage server components. This distributed, scalable management solution with enhanced security features helps you:

- Provide a reliable infrastructure to your application and business service teams
- Provide service impact analysis by prioritizing IT events to reduce business impact
- Monitor, correlate, control and report on the health and performance of a heterogeneous IT environment across boundaries
- Achieve IT or data center consolidation initiatives
- Increase staff efficiency and reduce the cost of IT operations
- Rapidly identify and correct root causes of IT infrastructure faults or performance degradations
- Carry out effective service level management along with service level reporting
- Conduct capacity planning with real-time and historical performance data

## HP Operations Center



### HP BSM: Analyze the business impact of IT problems.

HP Operations Center is a key component of the HP business service management (BSM) solution. BSM maps business services to their underlying applications, infrastructure and network components to help you analyze the business impact of IT problems and reduce the potential costs of IT service downtime.

Unlike other solutions, HP BSM takes both a top-down and bottom-up approach, combining HP Business Availability Center with HP Operations Center software and HP Network Management Center software—and supported by HP Universal CMDB software.

## HP Operations Center architecture

HP Operations Center brings together set of functionalities that work collectively to enable an effective bottom-up approach to Business Service Management.

## HP Operations Dashboard software

HP Operations Dashboard software gives your key users and stakeholders personalized views into end-to-end IT infrastructure service health. It lets you visualize infrastructure service health by consolidating data from multiple domain tools.

### Server fault and availability management

HP Operations Manager software provides a single-pane-of-glass view for close and efficient control of events happening across all systems, creating a “mission control” center for your entire distributed environment. It gives you a consistent system and fault-management process and workflow, to enable your operators to use common techniques for all managed multi-vendor objects across the environment.

### Server performance management

HP system performance tools like HP Performance Manager, Performance Agents, and HP GlancePlus software deliver a powerful system resource and performance management solution. HP system performance tools have led the industry for years,

providing 24 x 7 monitoring, consistent cross-platform metrics, bottleneck analysis and drill-down capability for heterogeneous server environments.

### Service impact analysis

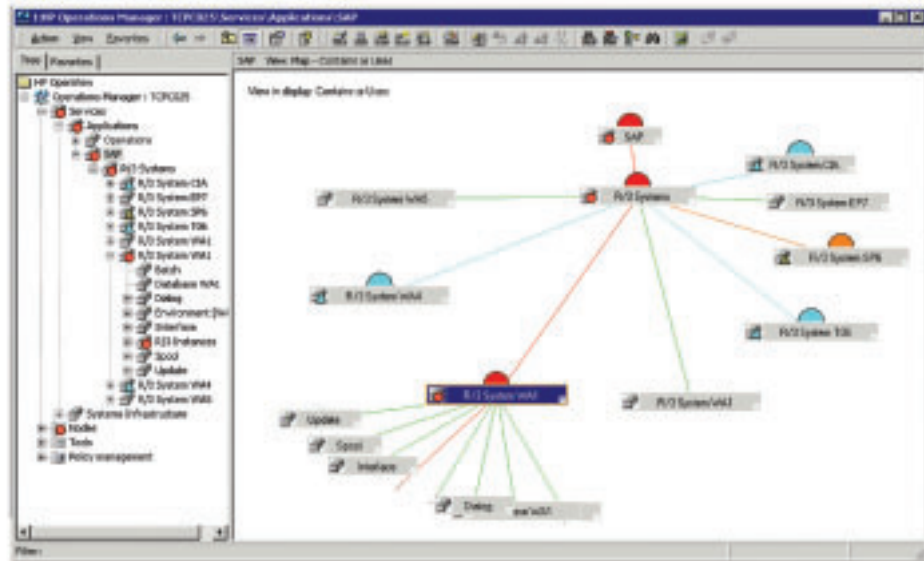
HP Operations Manager’s service maps provide the ability to visualize the health and status of critical IT business services. While creating these services may be complex and manual, with HP Operations Manager Dependency Mapping Automation, you can automate and simplify the creation and maintenance of business service views within HP Operations Manager. Service maps within HP Operations Manager can now include much greater business service context: impact analysis can indicate more than just the affected application and operations staff can now see when incidents are threatening the availability of the business processes, which rely on the IT infrastructure.

### Event correlation and diagnostics

HP Operations Agents provide sophisticated event correlation techniques to effectively manage the data and events collected and aggregated from multiple sources. Irrelevant and duplicated events can be suppressed or filtered out. Relevant events can then be correlated to produce actionable and enriched management information. In addition, dependencies and propagation rules show the root-cause of the event to reduce mean-time-to-recovery and downtime.

### Service impact analysis:

Understand the business impact of IT problems through HP Operations Manager's service views.



### Service level management and capacity planning

HP Operations Center provides the insight you need for an effective service-level management and capacity planning exercise. Data collected from HP Performance Agents can be exported in various formats to HP Performance Insight software, HP Reporter software and other partner tools like SAS, HyperFormix and OPNET, for use in capacity planning, statistical analysis and spreadsheet applications. With HP Performance Insight software, you can know the answers to questions such as

- Are you currently meeting your service-level agreements (SLAs)?
- What is the availability and performance of your services and the networks, systems and applications that make up that service?
- What components of a service are likely to fail and when?

In addition, forecast and capacity planning reports identify potential problems before users see them and gain the vital information necessary to reduce new expenses by balancing loads to under-utilized resources.

### Application infrastructure management

HP Operations Smart Plug-ins and HP SiteScope solution templates add value by being an ideal source for consolidated application monitoring. If you require a solution to monitor the depth and breadth of critical applications, Smart Plug-ins can provide out-of-the-box

integration into the central console, with predefined reports to near continuously prove that the application service is under control. If you need to add little overhead to production systems, HP SiteScope solution templates can reduce agent installation and related issues, speed deployment and provide a broad perspective to the end-user experience, with an outside-in view of service levels.

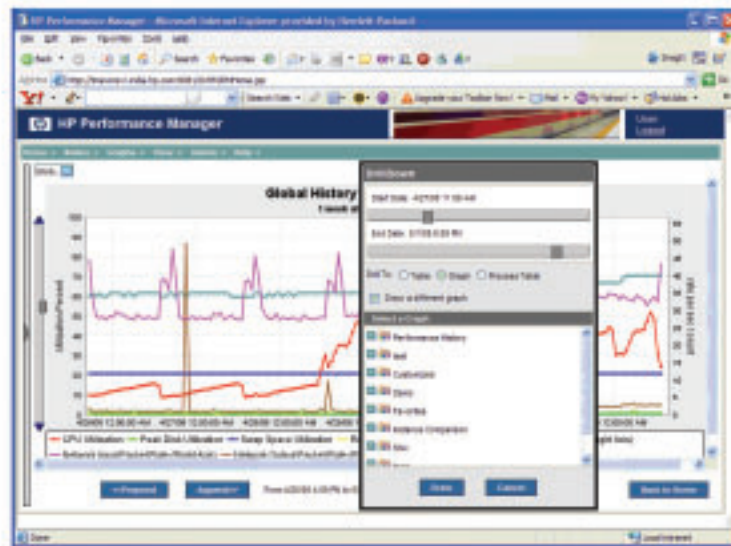
## HP Operations Center modules

### HP Operations Dashboard software

HP Operations Dashboard lets you visualize infrastructure service health by consolidating data from multiple domain tools. It leverages existing infrastructure models in various domain tools to build end-to-end infrastructure service views. Built on standards based technologies, such as portal servers, JSR-168 compliant portlets and web services/SOA-based data integrations it provides a low TCO. Using HP Operations Dashboard, you can:

- Achieve transparency and trust with key users and stakeholders by proactively sharing consolidated and relevant IT management information
- Share IT management data with other IT departments to verify that inter-dependencies are understood and to reduce redundant activities
- Create management views that allow your IT executives and IT managers to visualize the health of the infrastructure under their responsibility





### HP Operations Manager software

HP Operations Manager provides comprehensive event management, proactive performance monitoring, automated alerting, reporting and graphing for operating systems, middleware and applications. HP Operations Manager software acts as the consolidated enterprise operations console for your entire IT infrastructure. Integration of events from the network monitoring solution and end user experience monitoring provides IT operations staff with a comprehensive view of the infrastructure and user experience. With HP Operations Manager software, you can:

- Model all of the IT infrastructure and customer experience events that contribute to a business service and prioritize operational activities
- Understand health of end-to-end IT services through “single pane of glass”
- Automate standard operational processes including monitoring, root cause analysis and corrective actions
- Support environments of all sizes, from 10 to 1,000+ servers
- Enforce manager-of-manager hierarchies, establish follow-the-sun management, and competency center policies
- Integrate and correlate third-party tools and data into one management solution

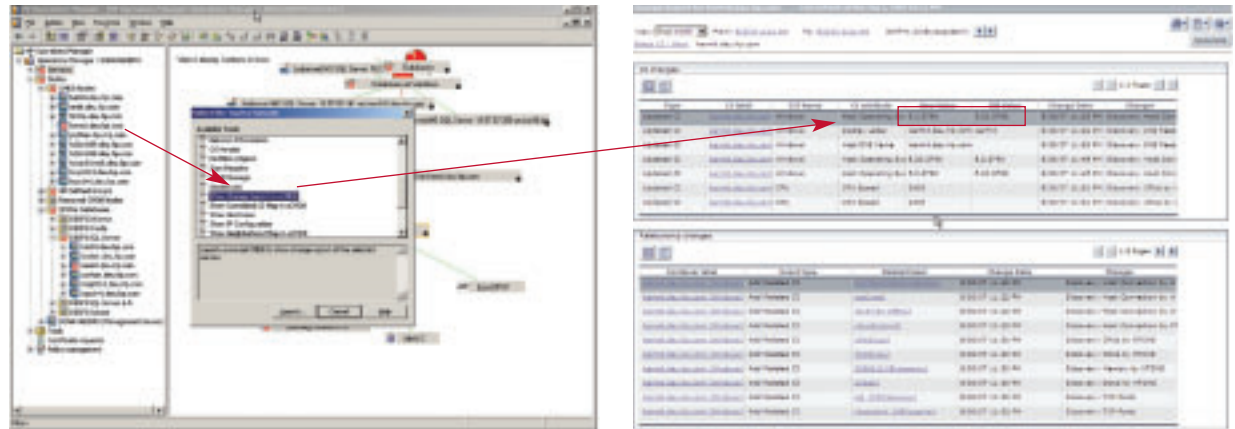
### HP Operations Manager Dependency Mapping Automation software

HP Operations Manager Dependency Mapping Automation simplifies the creation and maintenance of business service views within HP Operations Manager to enable business impact and root-cause analysis for operational incidents. It consolidates systems and managed services information in a single place, the HP Universal Configuration Management Database (CMDB), to provide shared and consistent views across multiple HP Operations Manager servers. For instance, you can streamline incident analysis by providing drill down from managed nodes or services in HP Operations Manager into their change history within the HP Universal CMDB. This software allows you to:

- Automate maintenance of business service views and dependencies
- Connect the IT infrastructure to the logical application and business services that depend upon it
- Perform application and business-focused impact analysis for incidents
- Reduce maintenance of operational service views
- Present one consistent version of the truth

### Improve root cause analysis:

With HP Operations Manager Dependency Mapping Automation software, you can view change history information in context.



### HP Performance Manager, HP GlancePlus, and HP Performance Agent software

HP Performance Manager software helps you determine how system resources are being used or misused by applications by providing near-real-time and historical performance data. Visualizing this performance data is key to managing the end-user experience and planning for change.

HP GlancePlus software provides server performance monitoring and diagnostic capabilities on all major UNIX systems, including Linux. It enables you to easily examine system activities, identify and resolve performance bottlenecks. With the drill-down capabilities of HP GlancePlus, you can examine your system and application behavior to an incredible level of detail.

The HP Performance Agent, with its patented intelligent collection technology, provides low-overhead monitoring of all servers in your distributed environment. It collects, summarizes, and logs resource and performance measurement data from applications, databases, networks, and operating systems. With these performance tools, you can:

- Keep business applications running smoothly and efficiently by viewing detailed information on individual processes, including CPU and memory use and time spent waiting for different system resources
- Isolate performance bottlenecks to improve uptime through the analysis of business transactions and their underlying applications, networks and systems

- Demonstrate service level compliance of key applications and services
- Examine in-depth the resource and performance trends of your virtual and physical systems
- Provide historical application and system information to reveal usage trends for future capacity planning

### HP Reporter software

HP Reporter includes templates that create unified reports that bring performance, system, and availability information together on a single graph and thereby identify root-cause issues more easily. These templates include server farm reports, transaction chain reports, application stack reports and configuration reports. In addition, it also supports cluster environments and generates virtualization metric reports. Using HP Reporter, you can:

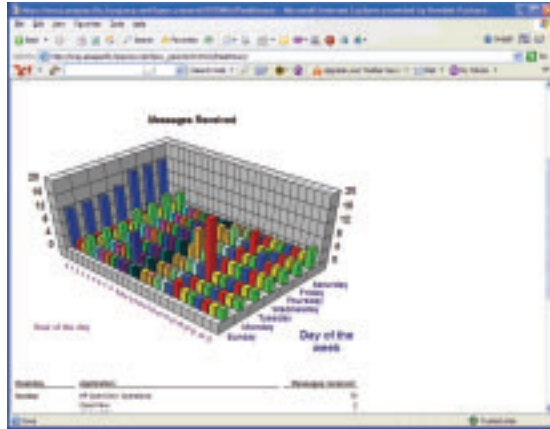
- Provide a web-based management reporting solution for your distributed IT environment
- Efficiently collect and report on status of systems and virtualized environments gathered from multiple data sources
- Improve visibility using near real-time and historical availability and performance reports

### HP Smart Plug-ins software

HP Smart Plug-ins (SPIs) reduce your manual configuration and management efforts. SPIs include application auto-discovery, pre-defined monitoring policies, actions, tools, and detailed performance data collection, graphs and reports. They are

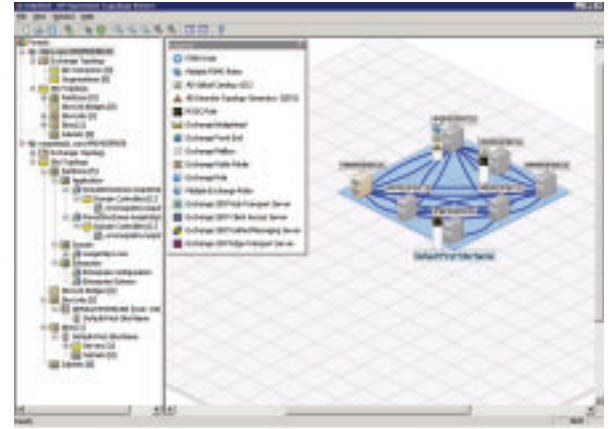
### Perform service level reporting:

Example of messages received over a period of 1 week based on hours produced by HP Reporter.



### Monitor health, availability, and performance of mission critical apps:

HP Operations Topology Viewer display both the location and roles of servers in an Exchange infrastructure.



preconfigured and link with the HP Operations Manager console to fully manage your business applications, e-commerce platforms, messaging services, databases and Internet infrastructure. With HP Smart Plug-ins, you can:

- Monitor the health, availability and performance of mission critical applications
- Show the business impact of failures
- Solve problems quickly by correlating performance metrics across all layers of the service (application, database, system and network) to understand interdependencies and get to the root cause
- Proactively identify problems and inform operators, thus reducing any impact to end-users

### HP Performance Insight software

HP Performance Insight is a scalable and customizable reporting and data-warehousing tool that collects, analyzes, and summarizes management data from various domains such as networks, systems applications, and services. Not only does it include out-of-the-box reports on management data collected and generated by popular HP Software tools, but it can also report on a wide range of network protocols and devices. With HP Performance Insight, you can:

- Provide tangible documentation of your SLA compliance and track SLA parameters before they impact users or invoke penalties
- Plan for appropriate capacity and identify over- and under-utilized elements

- Understand how systems, networks and applications affect the performance of your services
- Diagnose performance problems using recent and historical data
- Customize the out-of-the-box reports, create new reports and feed in new sources of data to report on

### HP SiteScope software

HP SiteScope provides agentless monitoring to compliment HP Operations agent-based technology. It monitors the availability and performance of distributed IT infrastructures—including servers, operating systems, network and Internet services, applications and application components. HP SiteScope continually monitors more than 65 types of IT infrastructure targets through a web-based architecture that is lightweight and highly customizable. With HP SiteScope software, you can:

- Gather detailed performance data for infrastructure targets without the need of an agent
- Enable the installation and monitoring of most environments within an hour
- Monitor more than 65 different target types for critical health and performance characteristics
- Proactive alerts before end users experience problems with customizable thresholds.
- Includes an integration module for HP Operations Manager, thereby serving as an integrated component of HP Operations Center

## Why HP Software?

HP software is uniquely positioned to meet your IT infrastructure operations and business service management requirements, we offer:

**Top-down and bottom-up management**—HP Software combines the top-down problem isolation of HP Business Availability Center with the bottom-up service impact analysis of HP Operations Center and HP Network Management Center. These feeds are then linked together in HP Universal CMDB to create a relationship view of business services and their underlying applications, infrastructure and network components.

**Market leadership**—HP is the proven market leader for availability and performance management. HP is documented as a leading vendor by market share and recognized by analysts as a leader in completeness of solution, vision and the ability to execute.

**Proven successes**—HP Operations Center has been successfully deployed in thousands of customer environments worldwide.

**Return on investment**—HP Operations Center provides a cost-effective, pragmatic, and modular solution for enhancing the availability and performance of IT components supporting business service management.

**A complete solution**—HP and HP Software Partners provide the industry's most comprehensive set of software and services for managing heterogeneous IT environments up through complete business service management.

## Get comprehensive training

HP provides a comprehensive curriculum of HP Software and IT service management courses. These offerings provide the training you need to realize the full potential

of your HP software, enhance application performance, increase your network enhancement and responsiveness, and achieve better return on your IT investments.

HP has more than 30 years of experience meeting complex education challenges. For more information about these and other educational courses, visit [www.hp.com/learn](http://www.hp.com/learn)

## Make a smart IT investment

HP Financial Services provides innovative financing and financial asset-management programs to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information on these services, contact your HP sales representative or visit [www.hp.com/go/hpfinancialservices](http://www.hp.com/go/hpfinancialservices)

## Succeed with HP Services

HP provides high-quality software services that address all aspects of your software application lifecycle needs. With HP, you have access to standards-based, modular, multi-platform software, coupled with global services and support. The wide range of HP service offerings—from online self-solve support to proactive mission-critical services—enables you to choose the services that superbly match your business needs. For an overview of HP Software services, visit [www.managementsoftware.hp.com/service](http://www.managementsoftware.hp.com/service)

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Technology for better business outcomes