Solution brief

Automating incident management

HP Operations Manager and HP Operations Orchestration

HP Operations Manager: Product overview
HP Operations Manager is a consolidated event and performance management console that monitors the entire IT infrastructure to identify the root cause of event storms, allowing faster time to resolution at lower cost.

HP Operations Manager helps IT staff improve their efficiencies by automating event and availability monitoring and management processes. It provides a consolidated view into infrastructure health that helps companies preempt negative impacts on service. HP Operations Manager allows operators to handle more tasks on their own, freeing subject matter experts to focus on more strategic tasks.

HP Operations Orchestration: Product overview
HP Operations Orchestration automates routine IT operational tasks such as repetitive maintenance, change execution, and incident resolution through integration with your existing IT environment.

HP Operations Orchestration provides an intuitive visual interface to design, create, and share flows and operations easily. Flows created in HP Operations Orchestration work with most operating systems, databases, applications, and system management tools. The execution environment, with improved security, in HP Operations Orchestration includes the ability to run flows in a visually guided mode, scheduled mode, or completely automated mode. The reporting capabilities allow you to view automation results as dashboards or customizable reports.

Why use HP Operations Orchestration with HP Operations Manager?

- Automate mundane tasks, reducing the labor required to manage IT operations and enabling consistent application of IT processes
- Reduce labor costs by removing duplicate efforts of multiple domain experts working independently on the same problem
- Speed time to problem resolution, reducing the impact on the customer experience
- Improve productivity of subject matter experts by capturing their knowledge in automated run books and protecting them from routine troubleshooting functions
- Capture audit trail for all automated tasks in HP Service Desk to facilitate compliance with regulatory and company requirements

Overview

IT departments must now manage infrastructure that is growing in size, complexity, and rate of change with flat or shrinking budgets. CIOs often state that a large portion of their IT budgets typically goes toward the maintenance of current systems—otherwise known as "keep-the-lights-on spending." This leaves little room for innovation, which is essential to drive growth. Fortunately, there is a proven solution to improve this 70:30 ratio. When a company has centralized its event management, the next logical step is to automate operations to improve service quality while reducing operational costs.

Challenges with operations management

Expanding infrastructure
One of the primary challenges operations staff face is managing the enormous volume of alerts emanating from increasingly complex hardware and software infrastructure. In an environment with constrained resources, "doing more with less" must certainly seem like an understatement to the overworked IT staff.

Many IT departments are split into applications, infrastructure, and support teams. Support may be further divided by domains such as server, network, desktop, and storage. Support teams are also frequently structured into tier 1, tier 2, and tier 3 support, with the tiers denoting the level of expertise and depth that support personnel possess in a specific area.

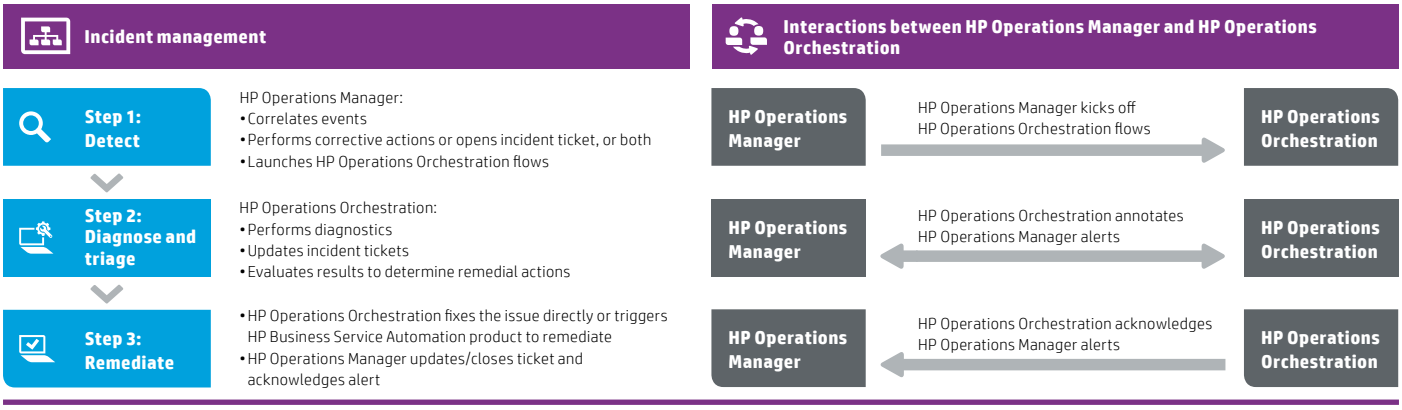
While this organizational structure is supposed to streamline operations, over time, these divisions can cause teams to get siloed.

Consolidating events improves visibility and service quality

Consolidating events into a single console resolves many of the issues related to organizational silos. This provides IT staff visibility into all the different IT domains in the organization at one time rather than just each staff member's individual area of responsibility. This single-pane-of-glass visibility greatly simplifies correlating events from disparate domains to determine the causal event of a problem or outage.

Using a single event console can significantly improve understanding of events and alerts being generated from the infrastructure. This helps prioritize and better define automated resolution of events. While cost savings through reducing time required for manual tasks is an obvious benefit, automation enables consistency in addressing complex IT problems. Consistency in execution of IT tasks decreases errors, thereby reducing risk of service failure and enabling achievement of business service-level agreements around availability and system uptime.

Figure 1. Interactions between HP Operations Manager and HP Operations Orchestration in automating incident management



How can HP Operations Manager and HP Operations Orchestration help?

HP Operations Manager serves as the consolidated event and performance management console. HP Operations Manager agents and the HP Operations Manager server narrow down the number of addressable events by removing irrelevant data and duplicate events. Policies at both the agent and server level weed out the noise, so only the most important events show up on the HP Operations Manager console. These policies can include fixes to common problems that are executed at the managed node, removing the need for alerts to even reach the console.

HP Operations Orchestration adds value by triaging and diagnosing the residual alerts, using flows that incorporate complex logic to handle incident resolution. Administrators create flows using HP Operations Orchestration Studio, which provides an easy-to-use, drag-and-drop interface. HP Operations Orchestration includes thousands of operations (building blocks for flows) that can be combined to create flows for a diverse set of IT infrastructure (for example, Windows® operating system, Oracle database, or Apache application server) and management tools (for example, HP Server Automation, BMC Remedy). If remediation is not possible, HP Operations Orchestration can escalate appropriately while capturing all information in a service desk tool.

Figure 1 describes the interaction of HP Operations Manager and HP Operations Orchestration in an incident management scenario.

Benefits of automated operations

Automated operations help customers reduce costs while improving service quality.

Reduced costs
By automating manual and repetitive steps, HP Operations Manager and HP Operations Orchestration reduce the amount of time and staff expertise it takes to handle incidents and alerts. Encoding the tribal knowledge into HP Operations Orchestration flows also helps tier 1 support handle and resolve fairly complex incidents, thus lowering escalations to tier 2 and tier 3 subject matter experts. The audit trail of incident tickets provides further documentation on diagnostic and troubleshooting steps. This kind of automation reduces use of expensive resources for troubleshooting and allows subject matter experts to focus on strategic projects.

Improved service quality
After knowledge has been translated into HP Operations Orchestration flows, human errors are largely reduced. This enables every support resource as well as the best support person in the organization to resolve issues.

In addition, HP Operations Orchestration flows addressable issues in the same, consistent way every time they run, performing the same action hundreds of times every day, if necessary.

By lowering errors while performing actions in standard and consistent ways, the risk of service downtime is reduced, making it easier for IT organizations to achieve service-level agreements.

Steps to automate operations

To summarize, here are the steps involved in automating operations.

- Consolidate multiple domain managers into a single HP Operations Manager console.
- Establish policies to determine "normal" behavior and document the troubleshooting processes and fixes to routine problems. This helps identify leading indicators that can be remediated before they turn into outages.
- Implement these processes as HP Operations Orchestration flows, enabling consistency in the corrective action and lowering costs from your IT operations.

Learn more at
hp.com/go/SystemsManagement
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For detailed information on HP Operations Orchestration, visit: **hp.com/go/oo**

To learn more about implementing HP Operations Manager and HP Operations Orchestration to automate incident management, visit: **hp.com/go/DCA**

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