Operations Orchestration: Powering Your IT Process Automation

Automate and orchestrate end-to-end processes with superior control and refreshing ease. For every operation, every integration, and every use case, Operations Orchestration delivers quick TTV and high ROI.

The Challenge: Handoffs, Errors, and Delays
IT service requests are rising as your ability to meet them plummets. How can you focus on strategic projects when you’re stalled by inefficiency—herding redundant tools, maintaining brittle integrations, and tending to error-prone processes? You need a better way to automate processes across teams, tools, and environments.

Orchestration, the automated coordination of IT processes, offers the high-speed approach you need. You can orchestrate any standardized, well-understood task or activity—from incident remediation to service management, database integration, infrastructure management, cloud service delivery, disaster recovery, and robotic process automation (RPA).

Jumpstart orchestration with basic task and IT process automation—for example, password resets, file cleanup, server reboots, and service restarts—then take on more strategic projects.

The Solution: Operations Orchestration
Operations Orchestration (OO) is an enterprise-scale orchestration platform. With the flexibility of a Swiss army knife, OO can be invoked from almost anywhere to connect, automate, and integrate processes across heterogeneous systems—from physical and virtual servers to network and storage devices, on-premise or in-cloud.

OO has three main components:

- **Workflow Designer** is where you design, customize, debug, and share automation workflows.
- **Central** is the robust orchestration engine that runs your workflows and provides an administrative interface for managing them.
- **Content Library** is a regularly maintained repository of thousands of operations, workflows, and integration adapters for numerous use cases—including cloud orchestration, server provisioning, self-service fulfillment, self-healing incident remediation, database and middleware provisioning, and disaster recovery.

With OO, break down silos, integrate tools and technologies, automate and standardize processes, and reduce errors. OO delivers quick time to value (TTV) and high ROI.
Rich Out-of-the-Box Content
Choose from thousands of ready-made operations and workflows. With technology-agnostic OO, you can plug-and-play content for traditional and new technologies, including VMware vCenter, Oracle, SAP, Amazon Web Services, Microsoft Azure, Docker, Google Cloud, and Alibaba Cloud. All content is available at ITOM Marketplace, an app-like store that brings together community-sourced, partner-created, and Micro Focus content.

Easy-to-Use Workflow Designer
Design automation workflows in one intuitive low-code/no-code visual interface—no programming required. Drag-and-drop out-of-the-box operations from the library or generate integration content in minutes using API wizards. Record and edit screen actions for RPA. Connect your content to other operations and test them with a built-in debugger. Alternatively, you can author text-based workflows through command line interface with YAML-based open source CloudSlang language. Because OO offers seamless integration with source-control solution GIT, you can save and share your code. It is applied and visible in Workflow Designer for collaborative design work between multiple authors in multiple locations.

Powerful Orchestration Engine
Run on demand, schedule, and monitor your processes at enterprise scale. Central is the powerful engine that runs the workflows and provides an administrative interface to manage workflows and IT user privileges. Run workflows sequentially or in parallel and inspect the step-by-step results of your workflows in real time. And view information, such as workflow history and average run time on the Central dashboard. A built-in calculator even displays the ROI benefits of your orchestration flows.

![Workflow Designer Diagram](image-url)  
*Figure 1.* Create, customize, and debug your automation in Workflow Designer.
Open and Extensible Platform
Achieve integrations across your IT ecosystem. Use rich out-of-the-box content or design your own using integration wizards for WADL- and REST-based APIs and Python-based operations. OO provides a complete set of REST APIs. That means your reusable orchestration workflows can be invoked from almost anywhere—including monitoring tools, service catalogs, cloud portals, command line interfaces, and websites.

UI Automation, Powered by RPA Robots
Combine screen automation with IT operation steps to automate entire processes in single workflow. RPA robots mimic screen-based human actions to perform repetitive tasks and extend automation to interfaces with difficult or no application programming interfaces (APIs).

Powered by AI-based machine learning, robots inspect web pages and mobile apps to identify screen objects—even ones they haven’t seen before—and emulate human intuition to determine their functions. They use OCR to read text (for example, text boxes and links) and computer vision to read visual elements (for example, shopping cart icons and login buttons). When a screen object changes, robots adapt.

Robots also use attribute-based object recognition to identify 600+ screen objects across hundreds of applications—from web and Windows to SAP and PDF. Objects are recorded by their attributes, so robots adapt when an object moves or changes in color or size.

RPA is perfect for automating processes typically completed by humans or that require human intervention.

Secure, High-Availability Architecture
Safeguard IT services and make them available 24x7. Control access to Central tasks with Role-Based Access Control (RBAC) and determine which actions OO users are allowed to perform based on their role. Remote Action Server (RAS) is part of the OO topology and allows you to securely access devices outside of your own infrastructure—for example, remote third-party sites. With simple cluster deployment, you can deploy multiple Central instances (orchestration engines) and configure a load balancer to meet production environment needs.

Self-Service Portal
Make orchestration easy and accessible. Users can trigger pre-defined processes from a friendly portal, without the need to access Central. First-line IT Ops admins can run orchestration flows for basic IT tasks, such as reset passwords and file clean up. Database administrators can trigger a database service restart. And DevOps engineers can request new VM provisioning. Self-service boosts productivity for all.

TTV and ROI Benefits
OO customers easily save 250–2500 hours per month—which means quick time to value and high return on investment are inevitable.

Figure 2. Measure the value of your orchestration efforts with a built-in ROI calculator in Central.
“OO powers our entire Infrashop, responsible for infrastructure delivery. This combines and orchestrates the services and administration efforts of multiple in-house departments into a coordinated infrastructure delivery process. OO has provided ... easy, accessible automation....”

IT SPECIALIST
Medium Enterprise Banking Customer

<table>
<thead>
<tr>
<th>OO Content</th>
<th>Description</th>
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<tbody>
<tr>
<td>Base Content</td>
<td>Automate use cases such as manage users in Active Directory, run generic queries and statements in different database systems, send and receive email, run file system operations, and run generic HTTP clients or remote command executions.</td>
</tr>
<tr>
<td>Micro Focus Solutions Content</td>
<td>Enable orchestration for Micro Focus hybrid IT products, including Data Protector, Operations Bridge, Universal Discovery and CMDB, and Network Operations Manager.</td>
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<tr>
<td>Virtualization Content</td>
<td>Integrate with VMware vSphere VMware ESXi, Microsoft Hyper-V, Microsoft System Center Virtualization Manager, Linux KVM, and Citrix XenServer.</td>
</tr>
<tr>
<td>Cloud Content</td>
<td>Provision public cloud resources on platforms such as Amazon Web Services, Microsoft Azure, Google Cloud, and Alibaba Cloud.</td>
</tr>
<tr>
<td>Database Content</td>
<td>Integrate with database servers such as Microsoft SQL Server, Oracle, and Sybase.</td>
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<tr>
<td>DevOps Content</td>
<td>Orchestrate DevOps processes covering Jenkins, Nexus, Puppet, and Chef technologies.</td>
</tr>
<tr>
<td>Middleware Content</td>
<td>Integrate with middleware systems such as Oracle WebLogic, Citrix XenApp, Microsoft IIS, JBoss, Apache Tomcat, and IBM WebSphere.</td>
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<tr>
<td>SAP Provisioning and SAP LVM Content</td>
<td>Enable provisioning of complex SAP S/4 and S/4 HANA systems.</td>
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<tr>
<td>Office 365 Content</td>
<td>Orchestrate management of Office 365 users and mailboxes.</td>
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<tr>
<td>RPA Content</td>
<td>Design RPA use cases for SAP and OCR.</td>
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<tr>
<td>Server Automation Content</td>
<td>Enable use cases using Micro Focus Server Automation to provision, patch, update software, and perform audits on servers.</td>
</tr>
<tr>
<td>Service Management Automation X Content</td>
<td>Orchestrate IT service management use cases using Micro Focus Service Management Automation X.</td>
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Table 1. Examples of OO out-of-the-box content—available at the ITOM Marketplace.

Learn more at www.microfocus.com/oo

“OO has been the glue we use to integrate and automate our various infrastructure services into coherent solutions and deliver them faster, on demand.”

ENGINEER
Fortune 500 Retail Customer