

VMware vCenter Orchestrator

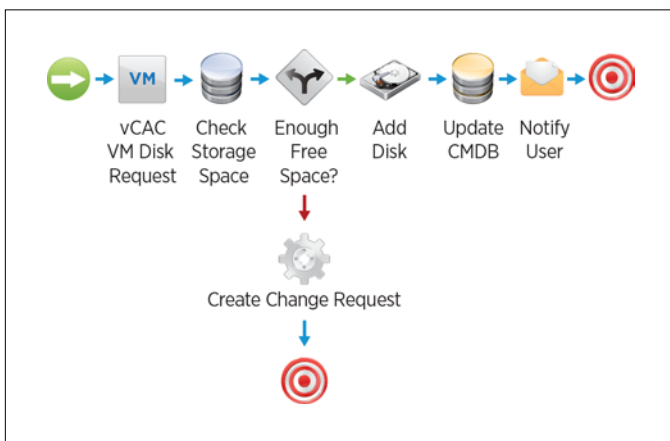
Executing Complex IT Operations Faster and at Lower Cost

AT A GLANCE

VMware vCenter™ Orchestrator™ 5.5 is drag-and-drop workflow software that helps automate IT service delivery and integrates VMware vCloud® Suite with the rest of your IT environment. The software, included at no extra charge with VMware vCenter™, enables administrators to develop complex automation tasks within the workflow designer. The workflows can be quickly accessed and launched directly from the VMware vSphere® client, from VMware vCloud® Automation Center™ or through various triggering mechanisms.

KEY BENEFITS

- Integrate VMware solutions into your IT environment and processes to rapidly accelerate IT operations.
- Reduce IT operating expenses and total cost of ownership of VMware solutions.
- Automate your cloud and accelerate transition to an IT-as-a-service model.



vCenter Orchestrator Workflow Visualizer

How Does VMware vCenter Orchestrator Work?

vCenter Orchestrator is a powerful automation tool designed for system administrators and IT operations staff who must streamline tasks and remediation actions and integrate these functions with third-party IT operations software. vCenter Orchestrator comprises the following features and components:

Workflow Development and Management

Workflow designer – Easy-to-use, drag-and-drop workflow elements produce simple or complex workflows. Available on Windows, Linux and Mac OS, the redesigned interface enables you to build complex automation routines with just a few clicks.

Workflow engine – You can create workflows by using custom building blocks initiated by the user or by using plug-ins from vCenter Orchestrator or from the VMware Solution Exchange. https://solutionexchange.vmware.com/store/category_groups/cloud-management.

Built-in workflow library – Using tasks in the vCenter Orchestrator library of workflows, you can

- Take a snapshot across a large number of virtual machines using a particular resource pool.
- View resource utilization.
- Notify the administrator by e-mail when a virtual machine is powered on.
- Create new or advanced workflows with building blocks.
- Link actions to produce specific workflows.

Scripting engine – You can create new building blocks for the vCenter Orchestrator platform. The scripting engine is enhanced with basic version control, variable type checking, namespace management and exception handling. It can be used in the building blocks for actions, workflows and policies.

Versioning – All vCenter Orchestrator workflows have version history, packaging and rollback capabilities, which allow basic change management during distribution of processes to different project stages and locations.

Checkpointing content database – Each step in the workflow is saved in a content database, enabling server restarts without loss of state and context. This feature is especially useful for long-running processes.

Central management – vCenter Orchestrator provides a central way to manage your processes and ensure that administrators use version-controlled scripts. Because it contains the scripts and process-related primitives in one place, you avoid releasing scripts without versioning and proper change control across the environment.

Plug-in SDK – The vCenter Orchestrator Plug-in Software Development Kit (SDK) jump-starts those who are new to vCenter Orchestrator plug-in development. It also enables advanced developers to integrate key SDK features into their existing development environments. The SDK consists of the following components:

- Eclipse add-on for vCenter Orchestrator plug-in development
- Command-line utilities
- vCenter Orchestrator sample plug-ins
- Developer guide
- Best practice guide

Performance and scalability – The software can execute hundreds or thousands of concurrent workflows on single or distributed architectures.

Security

vCenter Orchestrator provides the following advanced security functions:

- Public key infrastructure (PKI) to sign and encrypt content imported and exported between servers
- Digital rights management (DRM) to control how exported content might be viewed, edited and redistributed
- Secure socket layer (SSL) encrypted communications between the desktop client and the server, and HTTPS access to the Web front end
- Advanced access rights management to provide control over access to processes and objects

Integration

- **Cloud-readiness** – vCenter Orchestrator provides 100 percent coverage of the vSphere and VMware vCloud Director® APIs, and is integrated with other VMware solutions such as vCloud Director, VMware vCenter Update Manager™, and vCloud Automation Center. With this type of coverage, administrators or developers can automate virtually any task in their cloud and virtual infrastructure.
- **Ecosystem** – Use plug-ins and workflows published on VMware Solution Exchange, a marketplace of extensible solution plug-ins, to connect to multiple VMware and third-party applications.
- **Virtual appliance** – The vCenter Orchestrator virtual appliance significantly reduces the time and skill required to deploy vCenter Orchestrator and provides a low-cost alternative to the traditional Windows-based installation. Distributed in OVF (Open Virtualization Format), the appliance is prebuilt and preconfigured with all of the components included in the traditional installation. Additionally, the product can use either

the prebuilt directory services and database or external ones such as Active Directory or Oracle Database.

- **REST API** – vCenter Orchestrator provides a REST API to enable other applications to execute workflows.

What's New in vCenter Orchestrator 5.5?

New diagnostics – The vCenter Orchestrator client's new debugging and failure-diagnostic capabilities provide infrastructure and operations workflow developers with a simpler, more efficient development experience.

Improved scalability and high availability – By using the out-of-the-box clustering capabilities, architects can plan vCenter Orchestrator deployments with cloud scalability in mind. The new vCenter Orchestrator cluster mode provides greater availability and enables dynamic scale-up and scale-down of orchestration capacity when used with external load balancers. If vCenter Orchestrator servers become unavailable midway through a workflow execution, another vCenter Orchestrator node completes the workflow with no service interruption.

REST API enhancements – Release 5.5 facilitates use of the vCenter Orchestrator REST API with enhanced JavaScript Object Notation (JSON) support and simplified integration with vCenter single sign-on. These enhancements are configured to rapidly deploy vCenter Orchestrator instances for test and development purposes and to scale up automation capacity as demand increases. Additionally, these enhancements leverage vCenter Orchestrator workflows in a localized environment if the dedicated property files are used for the specific language.

Security enhancements – vCenter Orchestrator contains updated security policies, including operating-system updates and security-hardening script enhancements.

Improved integration with vSphere Web Client – In addition to using autodiscovery options to inventory VMware vSphere Web Client resources, virtual infrastructure administrators can manage and monitor vCenter Orchestrator instances or add them on demand directly from the vSphere Web Client virtual machine. Administrators can then copy the bitmap to the target VMware ESX® host and resume the virtual machine on the target ESX host. This entire process takes less than two seconds on a Gigabit Ethernet network.

Find Out More

For information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit <http://www.vmware.com/products> or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the VMware vCenter Orchestrator installation and configuration guide.

