What is VMware vCenter Orchestrator?

VMware vCenter Orchestrator is a workflow solution designed to meet the needs of today’s system administrators by automating and orchestrating virtualization activities and tasks. Through an easy drag-and-drop interface, administrators can automate tasks through pre-designed or customized workflows. Orchestrator can also be used as a workflow development platform for creating advanced workflow or “powered” applications that require utilize an underlying workflow engine.

How is VMware vCenter Orchestrator Used in the Enterprise?

VMware vCenter Orchestrator extends the management capabilities of VMware vCenter Server, enabling administrators and developers to automate the execution of more than 800 vSphere™ processes through workflow. Specifically, administrators can use VMware vCenter Orchestrator to perform bulk operations, upgrade operations and third-party system integration:

**Bulk Operations**
- Provisioning multiple virtual machines and executing post-provisioning scripts.
- Changing port groups of multiple virtual machines simultaneously.
- Engaging a snapshot of all virtual machines before “Patch Tuesday” (and remove them on Thursday).
- Detaching removable media or independent disks on all virtual machines.
- Turning off VMware® High Availability (HA) across all virtual machines.
- Modifying custom properties in hundreds of virtual machines.
- Orchestrating updates to VMware vSphere™ and operating systems.
- Engage both VMware VMotion™ and VMware Storage VMotion for virtual machines migrations.

**Upgrade Operations**
- Perform rolling upgrades to move virtual machines from Virtual Infrastructure to VMware vSphere™.

**Third-party System Interaction**
- Update change control tickets while provisioning or changing virtual machines.
- Take directed action from a service desk tool.
Easy integration

VMware vCenter Orchestrator is accessible via a Web or client interface. System administrators can also define how rights to the Web interface are distributed amongst an IT team. This allows other IT team members to run workflows but not modify the workflows themselves.

The solution also offers an open, flexible architecture that allows for integrations with existing third-party tools, such as service desks, change management systems, asset management tools, or other ITIL-based solutions. System administrators can use VMware vCenter Orchestrator to create processes for organizations, or leverage plug-ins to integrate processes with established tools and processes. VMware vCenter Orchestrator’s core engine contains a workflow library and plug-ins with some of the most popular applications on the market today, including databases, XML, SSH, WMI, SMTP (email) and other third-party tools. Plug-ins can also be created as needed.

Powered applications

System administrators can use VMware vCenter Orchestrator to create “powered” applications that use the underlying workflow engine as a foundation layer. For example, VMware vCenter Lifecycle Manager is an VMware vCenter Orchestrator “powered” application that provides best practices for requesting, approving, provisioning, tracking and decommissioning virtual machines. Administrators can create additional applications for a variety of business purposes.

How Does VMware vCenter Orchestrator Work?

Once VMware vCenter Orchestrator is connected to a directory service and has its database set up, users can create new or modify existing workflows for automation and orchestration tasks. VMware vCenter Orchestrator workflows can be created from scratch or pulled from a library of examples included out-of-the-box and designed specifically to meet the needs of system administrators.

VMware vCenter Orchestrator’s out-of-the-box workflows automate tasks or perform common, repetitive actions that solve daily administrative challenges. For example, an administrator may leverage the snapshot workflow to take a snapshot across a large number of virtual machines using a particular resource pool. Other out-of-the-box workflows enable administrators to have better visibility into resource utilization. For instance, a simple startup and notify workflow will notify the administrator by e-mail when a virtual machine is powered on.

All VMware vCenter Orchestrator workflows are stored in the product database. To engage a workflow, an administrator can schedule a specific time for the workflow to run, wait for an event (such as a failure) to trigger the workflow, or manually engage the workflow through the Web or client interfaces. Once initiated, the workflow will run automatically. Even if the workflow is interrupted, it will run to completion once it has re-established a connection with the required resources.

Key Features of VMware vCenter Orchestrator

Drag-and-Drop Workflow Creation

- Easily add or link workflow elements in the VMware vCenter Orchestrator workflow schema and align them together to produce simply or complex workflows. No scripting required.
- Enter start and stop workflow elements, specific workflows tasks (start virtual machine, shutdown virtual machine, suspend virtual machine), nested workflows (workflows within a workflow), etc. using simple controls.

Out-of-the-Box Workflows

- Choose from a library of pre-designed workflows.
- Automate repetitive administrative tasks that solve daily challenges.
- Gain better visibility into resource utilization with automated notification of essential tasks or events in the workflow.

Create New or Advanced Workflows with Building Blocks

- Access the VMware vCenter Server API and more than 800 actions possible within VMware vCenter Server.
- Link actions together to produce specific workflows to meet business needs.
- Leverage scripting for more advanced workflows.

Third-party Integration via Plug-Ins and API

- Use popular application and solutions plug-ins out of the box including XML, SSH, SMTP and WMI.
- Create new plug-ins or leverage Web services API.

Find Out More

For information or to purchase VMware products, call 1-877-4VMWARE (outside of North America dial +1-650-427-5000), visit www.vmware.com/products, or search online for an authorized reseller. For detailed product specifications and systems requirements, please refer to the VMware vCenter Orchestrator install and configure guide.