



Datasheet

OnCommand Workflow Automation

Workflow automation to standardize processes

Key Benefits

Deploy Reliable, Customizable Automated Workflows

- Control the cost of managing growing virtual and cloud environments.
- Use built-in workflow automation to set up, provision, migrate, clone, decommission, and more.
- Achieve fast, reliable deployments for enterprise applications, including VMware, Oracle, Microsoft, SAP, and Citrix.

Adhere to Storage Best Practices

- Employ a consistent method for storage workflow automation across data centers.
- Drive out manual errors and drive up service quality and availability.
- Enhance operational efficiency and productivity.

Improve Customer Satisfaction

- Enable one-click self-service.
- Integrate with your orchestrator for seamless IT as a service.
- Accelerate time to market for delivering new services.

The Challenge

Manual processes are insufficient

As organizations continue to virtualize and create private and hybrid cloud environments, IT organizations are turning to automation and integrated management solutions to help them manage their growing, changing, and evolving environments. Current trends show that managing data growth and data center modernization (updates to create highly virtualized and automated facilities) are top priorities for many IT organizations today.

Many IT professionals still perform numerous storage management tasks manually, which creates downsides such as:

- Human error might affect availability or cause downtime.
- Provisioning might be delayed until staff is available.
- Best practices might not be followed.
- Storage might not be optimized.

Continuing with a manual approach when faced with managing data growth is not an appealing proposition. That is why many IT organizations are looking for a better, easier way of doing things.

The introduction of cloud-based processes presents a new set of challenges for IT organizations, often requiring a new way of managing their data and storage. When you consider that some organizations also have orchestration and custom software solutions in place, these new processes only compound the challenge of managing data effectively and efficiently.

How can you leverage your existing staff and their skillsets and expertise successfully to meet the automation needs of your on-premises, private, or hybrid cloud environment? You need the right tools from a partner who understands your business as it evolves from on-premises to a cloud environment.

The Solution

Workflow automation saves time and money

NetApp's vision for the future of data management is to create a Data Fabric that spans your entire IT landscape. The Data Fabric enabled by NetApp takes the worry and complexity out of managing and maintaining control of data across private and public cloud resources. Organizations can adhere to internal data security policies, maintain compliance with government regulations, and promote greater innovation and IT responsiveness. With a Data Fabric, you achieve:

- Freedom of choice when it comes to how you manage your data
- The ability to move your data seamlessly from flash to disk to cloud while maintaining control of the data
- Faster responsiveness to internal and external customers with automation and integration

NetApp® OnCommand® Workflow Automation delivers on the Data Fabric vision, providing automation and integration to meet the demands of today's evolving IT organization. Whether managing storage on the premises or in a cloud environment, Workflow Automation makes it easy to quickly create simple or complex workflows. Storage administrators can create storage workflows for the most frequent tasks and make them available to consumers for one-click automation. Storage architects can automate time-consuming, complex processes to meet cost-saving objectives, a common goal when moving data to the cloud.

With Workflow Automation, you can integrate storage workflows with existing IT orchestration processes for fast, seamless delivery of services to your consumers. And by implementing Workflow Automation in storage management operations, you can also standardize and integrate processes to align with NetApp best practices for data management.

Get fast and reliable automation

Software engineering skills are not required to use OnCommand Workflow Automation, and web-based training is available to help you start out smoothly. When using Workflow Automation, you view each storage workflow as a series of steps, from start to finish, to complete each process. Workflow Automation comes with more than 60 standard workflows to help you get started quickly.

In addition, your storage architects or administrators can define workflows based on policies and service-level objectives to align them with organizational and NetApp best practices. You also maintain control over development and maintenance of the automated workflows so that they are aligned with changing business requirements. As just a few examples, you can:

- Provision, migrate, or decommission storage for databases or file systems.
- Automate your data protection process to a disaster recovery location on the premises or in the cloud.
- Set up storage for an application as part of an end-to-end orchestration process.
- Clone and set up a new dev/test environment, then tear it down when it's no longer needed.
- Set up the FlexPod® Datacenter platform or virtual desktops, or conduct a centralized NetApp SnapManager® software activation.

Explore the Storage Automation Store

The Storage Automation Store is a place where you can download certified software packs to use with OnCommand Workflow Automation and OnCommand Unified Manager to extend data management capabilities. And you can access the site directly from the OnCommand Workflow Automation interface. Before you create a custom workflow, explore the Storage Automation Store to see whether a custom workflow is already available. NetApp supported workflow packs are published on a more frequent basis than the product release cycle, so you can take advantage of new workflow packs as soon as they become available.

In addition, the store allows you to upload your own custom Workflow Automation packs and share them with the product community. Although community-generated workflow packs do not come with NetApp Support, NetApp reviews each pack before publishing it. When you have identified the pack that you need, simply download it and import it into the OnCommand Workflow Automation library. Each NetApp supported pack comes with documentation to help you use the workflow. To browse the workflow packs that are available today, you can also go directly to the store: automationstore.netapp.com.

Remove the guesswork

If you determine that you need to create a custom workflow to meet specific business requirements, we make getting started easy. To create a custom workflow, start with the designer interface to construct or modify your workflow, as shown in Figure 1. Workflow Automation provides a rich library of predefined building blocks, as shown in Figure 2. You can also add another building block to the library or collaborate with NetApp to add a new building block. Then select from a list of commands to build the workflow steps, identify your execution options, and define your resource selection options. You can build workflows for a virtualized environment or a private, hybrid, or public cloud. The numerous options give you ample flexibility for building your workflows so that you can modernize how you manage your environment.

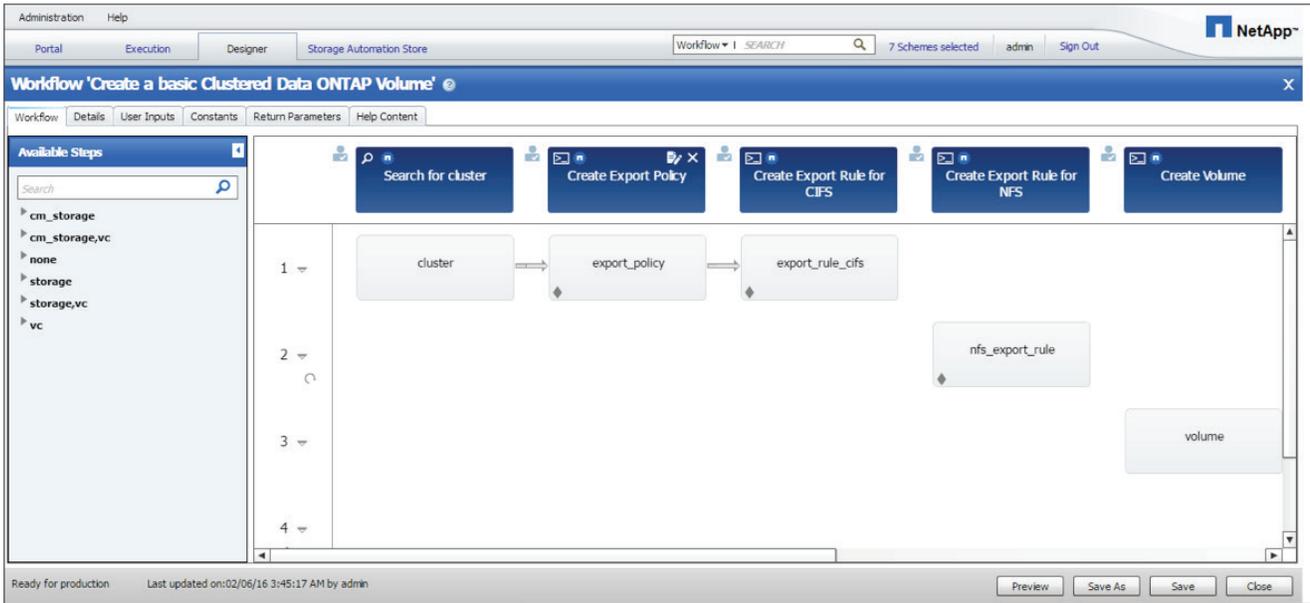


Figure 1) OnCommand Workflow Automation: Build your workflow easily, following a step-by-step design process.

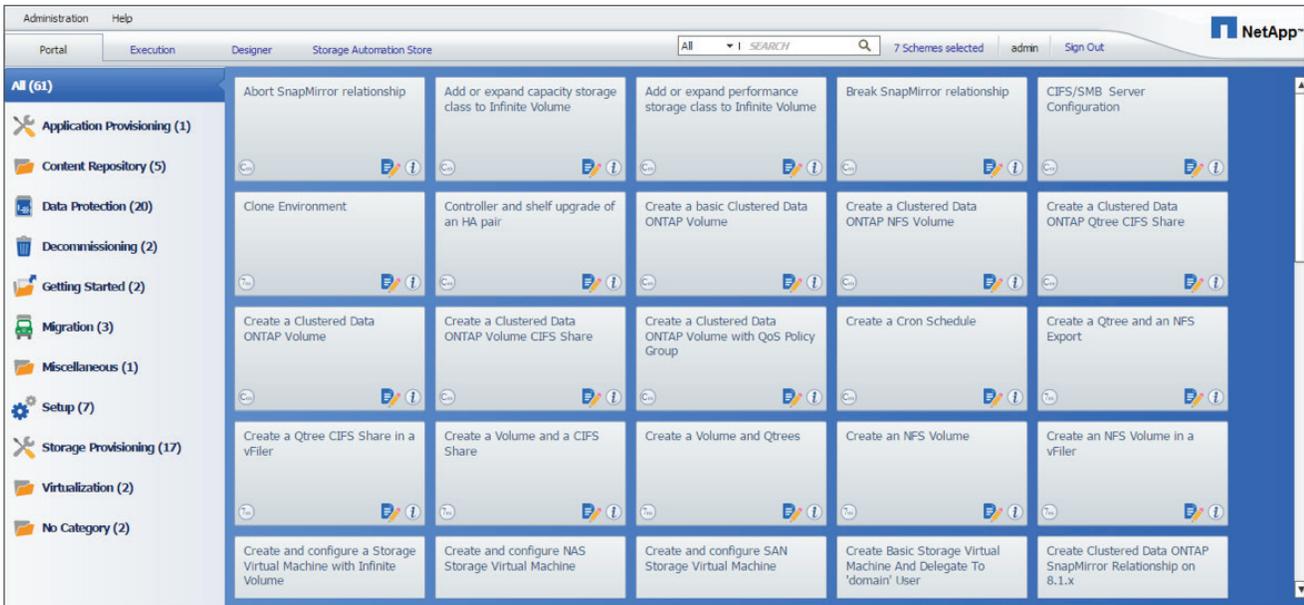


Figure 2) OnCommand Workflow Automation comes with more than 60 workflows that are organized by service category in the workflow Portal view. For ease of use, your custom workflows are also added to this library.

After you design your workflow, you can test it and publish it to authorized users. The workflows are accessed and executed by using the Workflow Automation portal. You can schedule workflows for execution at a later date or use an orchestration tool to trigger execution by using web services.

Get additional value with integration

Workflow Automation integrates with OnCommand Unified Manager to collect data about your storage environment. With this integration, you can leverage information in numerous OnCommand Unified Manager deployments to automate storage

and data protection processes. You can also automate processes across multivendor storage environments. Simply download the OnCommand Insight Connector from the Storage Automation Store to integrate OnCommand Insight as a data source for Workflow Automation.

In addition, Workflow Automation connects to internal systems to collect information to determine resource selection, to open tickets, and more. These capabilities allow you to speed up storage service delivery and accelerate time to market.

For example, Workflow Automation integrates with VMware vRealize Operations, VMware vRealize Automation, and vCloud Automation Center to deliver custom IT as a service with a single click. To invoke your workflows from an external portal or from the data center orchestration software, simply use the REST APIs that Workflow Automation provides. OnCommand Workflow Automation is a flexible framework, so the same approach is taken to integrate and automate with other orchestrators such as Cisco UCS Director or Microsoft System Center Orchestrator.

Reap ongoing benefits

With Workflow Automation, you get peace of mind knowing that you are creating automated workflows according to your business requirements and best practices. It also provides a full history of all your executed workflows and results. You can see who executed each workflow and when the workflow was executed. You can use this history for troubleshooting and auditing, so when things do not go as planned, you can pinpoint and resolve issues more easily. Organizations are using OnCommand Workflow Automation to drive out errors and drive up quality of service; to significantly increase availability; and to deliver consistent, reliable, and faster service.

Learn more about Workflow Automation

Workflow Automation is part of the NetApp OnCommand management software portfolio. To learn more about the management portfolio, including Workflow Automation, go to www.netapp.com/oncommand.

Get started on the path to operational efficiency by automating common, repeatable storage processes with consistent best practices and processes. A worldwide team of experts is ready to help maximize the effectiveness and increase the value of your storage investment for years to come.

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

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