COMMVAULT®

SP16 Newsletter

June 15, 2019

Contents

COMPLETE BACKUP AND RECOVERY 4

Deleting Messages Using Exchange Mailbox 4

Use a Linux Proxy and Recover Files for Linux Guest VMs in Oracle Cloud Infrastructure 4

Use ACLs to Restrict User Access to Data in 3DFS Shares 4

Setting Up Network Connectivity Between Client Groups Using Predefined Network Topologies in the Command Center 5

Analyze Performance Issues on Backup Jobs with the Performance Analysis Tool 5

Restore a PostgreSQL Server to a Disk (Application-Free Restore) 5

Improved Edge Monitor App 6

For VMware, You Can Use the NAS Transport Mode for Backup and Restore Operations 6

Using a Cloud Index Server for the Edge Drive 6

Use the Start Over Operation to Run the Next Backup Job as a Full Job After Media Becomes Corrupted 6

Single Sign-On for Identity Providers Using CAS Authentication 6

Export File System Backups as CIFS, SMB, and NFS Shares, at the Backup Set Level 7

Creating an Oracle Clone from Application-Aware Backup Snapshots 7

Mounting Snapshots as Physical Raw Disk Mapping (pRDM) Disks 7

Run an Incremental Backup Job While a Synthetic Full Backup is Running on a Virtual Server Agent 8

Microsoft SQL Server 2016 Standard Edition 8

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

PST Ingestion 8

Back Up and Restore Exchange Public Folders 8

Use Microsoft Outlook 2019 with Outlook Add-In and Outlook Add-In with ContentStore and Edge Attachment Store 9

Configure the Backup Operation Window for a Company 9

JOURNEY TO THE CLOUD 9

Back Up and Recover Virtual Machines for vCloud Director 9

Perform Application-Aware Backups of Azure Virtual Machines 10

VM Conversion from Azure to Amazon 10

Convert Virtual Machines from Nutanix AHV to Azure (Cross-Hypervisor Restore) 10

Convert Virtual Machines from Oracle VM to Azure (Cross-Hypervisor Restore) 11

Configure Retention Based on Message Deletion Time in Exchange Mailbox 11

Back Up and Restore Azure Database Using the MySQL Agent and the PostgreSQL Agent 12

Manage Exchange Online, SharePoint Online, and OneDrive for Business Using the Office 365 Solution in the Command Center 12

MODERN INFRASTRUCTURES 12

Manage Multiple CommCell Environments with Companies in the Cloud Services Portal 12

Opening the CommCell Console with a JAR File 13

Application Seed Package 13

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

Increase Scalability with Application Manager Node 13

Generic LDAP Domain Controllers and Attribute Filters in the Command Center 13

Configure HPE StoreOnce Catalyst Libraries Using UNIX and Linux MediaAgents 14

Metrocluster Configuration with the NetApp Storage Array 14

Cloning SQL Databases from the Arrays That Cannot Be Cloned 14

Vault Tracker in the Command Center 14

ContentStore Mail Server (IMAP) For Exchange Mailbox Agent 14

ORCHESTRATION AND AUTOMATION 15

Deduplication Pruning Performance Alert 15

Test and Interact with Commvault APIs Using API Explorer 15

Create Custom Applications Using the App Studio 15

UNDERSTAND AND ACTIVATE DATA 16

Enhanced Support for Databases in Governance Apps 16

Content Indexing Policy for Windows and UNIX File System Agents 16

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

COMPLETE BACKUP AND RECOVERY

Deleting Messages Using Exchange Mailbox

The delete feature allows the admin user to permanently delete any data that was backed up.

You can delete backed up messages from the secondary storage in the following ways:

- From the Command Center
- From the Web Console

KEY FEATURES

This is useful if you want to the delete data so that it cannot be restored again.

APPLICABLE AGENTS

Exchange Mailbox Agent

MORE INFORMATION

- Deleting Messages (Command Center)
- Deleting Messages (Web Console)

Use a Linux Proxy and Recover Files for Linux Guest VMs in Oracle Cloud Infrastructure

In the Command Center, you can use a Linux instance as a VSA proxy to back up and recover instances in Oracle Cloud Infrastructure.

You can perform live browse operations and restore files and folders information from backups of Linux guest instances.

APPLICABLE AGENTS

Virtual Server Agent

SETUP REQUIREMENTS

Install the Virtual Server Agent and MediaAgent package on a CentOS 7.5 Linux instance so that it can serve as a Linux proxy and as a File Recovery Enabler for Linux (FREL).

MORE INFORMATION

- Restoring Guest Files and Folders for Oracle Cloud Infrastructure

Use ACLs to Restrict User Access to Data in 3DFS Shares

System administrators can use ACLs (access control lists) to restrict user access to files and folders in 3DFS shares.

KEY FEATURES

You can use the following versions of ACLs:

- NTFS
- NFS v4

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

SETUP REQUIREMENTS

- Install the following on the 3DFS Linux MediaAgent:
  - NFS-Ganesha version 2.5.1 or version 2.6.3
  - Samba version 4.8.3
  - The samba-winbind-clients RPM package
  - The tdb-tools RPM package
- Download the **nfs4acl_xattr.so** file from GitHub, and copy the file to the *software_installation_directory*\Base folder.

MORE INFORMATION

- Restricting User Access to 3DFS Shares with ACLs

Setting Up Network Connectivity Between Client Groups Using Predefined Network Topologies in the Command Center

When using the Command Center, you can use predefined topologies to set up network connectivity between client groups. The client groups use the network topology instances to establish connections between each other, either in one direction, or in both directions. The clients in the client groups can be the CommServe computer, MediaAgents, or client computers.

MORE INFORMATION

- Network Toplogies

Analyze Performance Issues on Backup Jobs with the Performance Analysis Tool

You can use the Performance Analysis tool to help analyze performance issues on a backup job. The tool provides a log file report that identifies bottlenecks and other issues related to the job.

MORE INFORMATION

- Performance Analysis Tool

Restore a PostgreSQL Server to a Disk (Application-Free Restore)

You can restore PostgreSQL data and transaction log files directly to a disk without the need for a PostgreSQL Agent on the destination computer.

KEY FEATURES

Restore to a disk is used in the following scenarios:

- To restore the PostgreSQL server data for disaster recovery
- To restore the transaction logs that are missing on a PostgreSQL Standby replication setup.
- To restore multiplexed data on the same media. The data from different backup jobs is passed to the client so that all of the interleaved backup jobs are restored in parallel.

APPLICABLE AGENTS

PostgreSQL Agent

MORE INFORMATION

- Restoring a PostgreSQL Server to a Disk (Application-Free Restore)

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

Improved Edge Monitor App

The Edge Monitor app for Windows uses the native Windows app design to provide an improved user interface.

MORE INFORMATION

- Accessing Edge Monitor

For VMware, You Can Use the NAS Transport Mode for Backup and Restore Operations

The NAS (network-attached storage) transport mode enables the proxy computer to read data directly from the network file server, without going through an ESX host or transferring data over the local area network (LAN).

You can use the NAS transport mode for the following operations:

- Streaming backup operations
- Backup copy operations
- Restoring full VM operations

MORE INFORMATION

- NAS Transport (CommCell Console)
- Editing VM Group Settings for VMware (Command Center)

Using a Cloud Index Server for the Edge Drive

You can use a Cloud Index Server to configure your Edge Drive.

A Cloud Index Server is scalable, and provides fault tolerance and high-availablility of the Index Server data.

MORE INFORMATION

- Configuring the Edge Drive Index Server

Use the Start Over Operation to Run the Next Backup Job as a Full Job After Media Becomes Corrupted

When media becomes corrupted, you can perform a start over operation on the associated storage policy. The start over operation automatically converts the next backup job to a full backup job for all the subclients and disables data aging at the subclient level.

After the full backup job completes, the Commvault software automatically enables data aging at the subclient level.

MORE INFORMATION

- Performing a Start Over Operation

Single Sign-On for Identity Providers Using CAS Authentication

You can integrate supported web applications that use the Central Authentication Service (CAS) protocol with Commvault to enable single sign-on (SSO) to Commvault web applications.

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

CAS is a protocol for single sign-on used by some third-party web applications, such as Huawei FusionCloud. After configuring SSO for CAS authentication, users can log in to their Huawei FusionCloud, and then access Commvault web applications without the need to sign in again.

KEY FEATURES

- Eliminate multiple logins: With single sign-on, users can log on to a third-party web service, and use that authentication to access the Commvault web services (such as the Web Console and the Command Center) without having to sign in again.
- Integration with more identify providers: In addition to other authentication protocols, you can configure single sign-on for CAS-based identity providers, such as Huawei FusionCloud.

MORE INFORMATION

- Single Sign-On with CAS Integration

Export File System Backups as CIFS, SMB, and NFS Shares, at the Backup Set Level

To access the entire backup set data, you can export file system backups as CIFS, SMB, and NFS shares, at the backup set level.

MORE INFORMATION

- Creating an NFS or CIFS Share from the CommCell Console

Creating an Oracle Clone from Application-Aware Backup Snapshots

You can clone an Oracle database using the snapshots created from application-aware backups of a VMWare virtual machine that runs the Oracle application.

When you create a clone, you must specify the reservation period. When the reservation period expires, the system automatically frees up the resources for the clone database.

KEY FEATURES

Cloning the Oracle database is useful in the following scenarios:

- Duplicate large databases in a short amount of time
- Create test environments
- Retrieve data quickly without intensive resource use on the production environment
- Alleviate the load on production servers

MORE INFORMATION

- Creating an Oracle Clone Environment Using Application-Aware Backup Snapshots

Mounting Snapshots as Physical Raw Disk Mapping (pRDM) Disks

With physical raw device mapping (pRDM) mount support, you can mount snapshots directly on VMs that do not have dedicated Fibre Channel (FC) adapters, without the need for a physical mount proxy that has FC adapters.

APPLICABLE AGENTS

You can perform pRDM mount operations on the following snapshot agents:

- File system agents
- Microsoft SQL Server Agent

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

- Oracle Agent

MORE INFORMATION

- Snapshot Mount Operation using Physical RDM

Run an Incremental Backup Job While a Synthetic Full Backup is Running on a Virtual Server Agent

For Virtual Server Agents, you can run an incremental backup job while a synthetic full backup is running on the same subclient.

MORE INFORMATION

- Synthetic Full Backups FAQ: Can I run an incremental backup job while a synthetic full backup is running?

Microsoft SQL Server 2016 Standard Edition

Microsoft SQL Server 2016 Standard Edition is the SQL Server version that is used during the installation of Commvault server packages, such as the CommServe software.

Before Service Pack 16, Microsoft SQL Server 2014 Standard Edition was the version that was used during installations.

MORE INFORMATION

- See the "Database Engine" section in CommServe Server System Requirements
- Upgrading Microsoft SQL Server 2012 Enterprise to Microsoft SQL Server 2016 Standard Edition

PST Ingestion

You can use PST ingestion for both the User Mailbox subclient and the Journal Mailbox subclient to counter the challenges of backing up and restoring personal folders that are available on network shares.

MORE INFORMATION

- PST Ingestion

Back Up and Restore Exchange Public Folders

You can back up and restore Microsoft Exchange Public Folders by using the Exchange Mailbox Agent.

You must enable the All Public Folders group, and then assign Exchange archiving, cleanup, and retention policies to the group.

You can browse all Public Folder data at the user mailbox subclient level. You can perform archiving, restore, retention, and content indexing operations in all environments.

MORE INFORMATION

- Associating Public Folders with the Exchange Mailbox Agent User Mailbox Subclient Using All Public Folders - On-Premises
- Associating Public Folders with the Exchange Mailbox Agent User Mailbox Subclient Using All Public Folders - Hybrid
- Associating Public Folders with the Exchange Mailbox Agent User Mailbox Subclient Using All Public Folders - On-Premises AD
- Associating Public Folders with the Exchange Mailbox Agent User Mailbox Subclient Using All Public Folders - Azure AD

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

Use Microsoft Outlook 2019 with Outlook Add-In and Outlook Add-In with ContentStore and Edge Attachment Store

The Commvault software supports Microsoft Outlook 2019 for Outlook Add-In and Outlook Add-In with ContentStore and Edge Attachment Store.

KEY FEATURES

Outlook Add-In can be installed on any end-user computer that has Microsoft Outlook 2019 installed.

MORE INFORMATION

- Installing Outlook Add-In
- Installing Outlook Add-In with ContentStore and Edge Attachment Store

Configure the Backup Operation Window for a Company

Tenant administrators and service providers can define operation window rules for a company to prevent backup operations from running during certain time periods of the day.

When operation windows are configured, operations that would start within the operation window parameters go into a queued state (rather than a pending state). After the operation window ends, the queued operations automatically resume.

MORE INFORMATION

- Creating an Operation Window for a Company

JOURNEY TO THE CLOUD

Back Up and Recover Virtual Machines for vCloud Director

From Service Pack 14, you can define a virtualization client to back up and restore virtual machines in a vCloud Director deployment, instead of configuring a vCenter virtualization client to support vCloud. A single vCloud Director client can protect VMs across multiple vCenters that are registered in vCloud Director.

You can perform streaming backups for vCloud. You can recover full VMs or guest files and folders.

To protect vCloud Director VMs, you can configure a vCloud Director virtualization client in CommCell Console or a hypervisor in Command Center.

APPLICABLE AGENTS

Virtual Server Agent

MORE INFORMATION

- Adding a vCloud Hypervisor
- vCloud Director

Perform Application-Aware Backups of Azure Virtual Machines

You can use Commvault software to perform application-aware backup operations for virtual machines that run under Microsoft Azure Resource Manager and that host the following applications:

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

- Active Directory
- Microsoft Exchange
- Microsoft SharePoint
- Microsoft SQL Server
- MySQL
- Oracle database for Windows

This feature is supported for both streaming and IntelliSnap backups. You can perform application-aware backups using Microsoft Azure on both the CommCell Console and the Command Center.

APPLICABLE AGENTS

- Active Directory Agent
- Exchange Database Agent
- Microsoft SharePoint Agent
- Microsoft SQL Server Agent
- MySQL Agent
- Oracle Agent
- Virtual Server Agent for Microsoft Azure

MORE INFORMATION

- Application-Aware Backups for the Virtual Server Agent (CommCell Console)
- Application-Aware Backups (Command Center)

VM Conversion from Azure to Amazon

When restoring an Azure virtual machine from a backup, you can restore the virtual machine as an Amazon Elastic Compute Cloud (EC2) instance or as an Amazon Web Services (AWS) instance that is part of a Virtual Private Cloud (VPC).

You can perform conversions from a streaming backup, a backup copy, or an auxiliary copy.

APPLICABLE AGENTS

- Virtual Server Agent for Amazon
- Virtual Server Agent for Azure

MORE INFORMATION

- Converting from Azure to Amazon (Command Center)
- Converting from Azure to Amazon (CommCell Console)

Convert Virtual Machines from Nutanix AHV to Azure (Cross-Hypervisor Restore)

When restoring a virtual machine from a backup for Nutanix AHV, you can convert the VM to Azure Resource Manager.

This feature can be used to migrate workloads to Azure, or to recover VMs in Azure if the Nutanix AHV deployment is unavailable.

This option is available from the Command Center or from the CommCell Console.

APPLICABLE AGENTS

Virtual Server Agent

SETUP REQUIREMENTS

Create a hypervisor (virtualization client) for Azure.

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

MORE INFORMATION

- Converting from Nutanix AHV to Azure (Command Center)
- Converting from Nutanix AHV to Azure (CommCell Console)

Convert Virtual Machines from Oracle VM to Azure (Cross-Hypervisor Restore)

When restoring a virtual machine from a backup for Oracle VM, you can convert the VM to Azure Resource Manager.

This feature can be used to migrate workloads to Azure, or to recover VMs in Azure if the Oracle VM deployment is unavailable.

This option is available from the Command Center or from the CommCell Console.

APPLICABLE AGENTS

Virtual Server Agent

SETUP REQUIREMENTS

Create a hypervisor (virtualization client) for Azure.

MORE INFORMATION

- Converting from Oracle VM to Azure (Command Center)
- Converting from Oracle VM to Azure (CommCell Console)

Configure Retention Based on Message Deletion Time in Exchange Mailbox

For Microsoft Exchange Online, when you create a new retention policy, you can use the **Deletion Time Based Retention** option to base the default amount of time that messages are retained on the time the messages are deleted.

Use this option when creating retention policies for backups.

This option is available only for Exchange Online.

APPLICABLE AGENTS

Exchange Mailbox Agent

MORE INFORMATION

- Creating Exchange Retention Policies

Back Up and Restore Azure Database Using the MySQL Agent and the PostgreSQL Agent

You can perform logical dumps of Azure databases so that you can move the data to cloud storage or to on-premises storage.

The solution supports the following databases:

- PostgreSQL
- MySQL

The Commvault software uses the native database logical dump utilities to export the data from the Azure database. You can then restore the data to any of the following destinations:

- The same Azure database instance from which it was backed up
- A different Azure database instance

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

- A local database instance

KEY FEATURES

- Back up the data to a disk in the cloud or on-premises.
- End users can restore the data to the same instance, or to another database instance in the cloud or on-premises.

MORE INFORMATION

- Azure Database

Manage Exchange Online, SharePoint Online, and OneDrive for Business Using the Office 365 Solution in the Command Center

You can use the Office 365 Solution to back up and restore data in Exchange Online, SharePoint Online, and OneDrive for Business.

MORE INFORMATION

- Exchange Online
- OneDrive for Business
- SharePoint Online

MODERN INFRASTRUCTURES

Manage Multiple CommCell Environments with Companies in the Cloud Services Portal

CommCell administrators can manage multiple CommCell environments on the Cloud Services Portal by gathering the CommCell environments into logical groups called companies.

CommCell administrators can view the Companies page and create additional, subordinate companies by grouping one or more CommCell environments into a new company.

This feature is primarily targeted at administrators of Managed Service Provider (MSP) and Commvault Authorized Support Partner (CASP) environments.

KEY FEATURES

- Group CommCell environments by company.
- Manage user access to company information.
- View critical information on the Company Dashboard.

MORE INFORMATION

- Companies in Reports

Opening the CommCell Console with a JAR File

You can access the CommCell Console remotely from any computer using a JAR file as an alternative to using the web-based CommCell Console or the Java Web Start application. You can configure the software to remember the CommCell information that you enter, and then access the CommCell Console automatically. You can also select the CommCell from the list of CommCell environments that you accessed before.

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

MORE INFORMATION

- Opening the CommCell Console with a JAR File

Application Seed Package

You can create an application seed package, which is useful for deploying different agents and configurations across multiple computers.

An application seed package consists of a set of files that installs the Commvault software, and can also install additional Commvault features without requiring the installation media to reside locally on the machine. Instead, it uses the CommServe software cache to pull the payload needed for the additional features.

MORE INFORMATION

- Application Seed Packages

Increase Scalability with Application Manager Node

To increase the scalability of your environment, you can offload the Application Manager service from the CommServe computer to a different machine by installing the Application Manager Node package on a different client. Afterward, you can configure a computer group to use the Application Manager Node client as the Application Manager services host instead of the CommServe computer.

MORE INFORMATION

- Application Manager Node Overview

Generic LDAP Domain Controllers and Attribute Filters in the Command Center

You can add any LDAP-based domain controller to your CommCell environment by using the Command Center. You can also add subsets of objects from your LDAP domain controllers as domain controller objects in your CommCell environment. For example, you can add two different organizations from the same Active Directory as separate entities in the Command Center, which you can associate with different companies.

KEY FEATURES

- Add any LDAP-based domain controller.
- Filter subsets of objects (organizations, users, groups) from any LDAP domain controllers for greater flexibility and customization.

MORE INFORMATION

- Managing Domain Controllers

Configure HPE StoreOnce Catalyst Libraries Using UNIX and Linux MediaAgents

You can now configure HPE StoreOnce Catalyst libraries using AIX, HP-UX, Solaris, and Linux MediaAgents.

MORE INFORMATION

- HPE StoreOnce Catalyst Library - Support

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

Metrocluster Configuration with the NetApp Storage Array

You can configure metrocluster partners with the Commvault software and the NetApp storage array.

With MetroCluster, after switchover, backup operations work seamlessly from its MetroCluster partner.

KEY FEATURES

If switchover and switchback occur, IntelliSnap operations, the NetApp Replication with OCUM feature, and the NetApp Open Replication feature work seamlessly.

MORE INFORMATION

- Metrocluster Configuration

Cloning SQL Databases from the Arrays That Cannot Be Cloned

You can clone a SQL database from the arrays that cannot be cloned using an iSCSI server. You can create a copy of the SQL database using a full IntelliSnap backup or a block-level backup for a test environment.

MORE INFORMATION

- CommCell Console: Creating a SQL Server Clone Environment
- Command Center: Cloning a SQL Database

Vault Tracker in the Command Center

The Vault Tracker feature helps you to manage and track the media that are exported from a tape library and stored in an offsite location. The feature is now available in the Command Center.

MORE INFORMATION

- Vault Tracker

ContentStore Mail Server (IMAP) For Exchange Mailbox Agent

You can configure the ContentStore Mail Server (IMAP) for the Exchange Mailbox Agent, and can give end users access to their backed up or archived mailbox messages on their mobile devices that support an IMAP client.

MORE INFORMATION

- ContentStore Mail Server (IMAP) For Exchange Mailbox Agent

ORCHESTRATION AND AUTOMATION

Deduplication Pruning Performance Alert

You can now configure the Dedup Pruning Performance alert, which is generated when the system detects anomalies in the DDB data pruning behavior for the following two entities:

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

- CommServe job records to be deleted
- DDB prunable blocks count

MORE INFORMATION

- See the Dedup Pruning Performance row in the List of Predefined Alerts table in Alerts and Notifications - Predefined Alerts.

Test and Interact with Commvault APIs Using API Explorer

The API Explorer is an application in Web Console for visualizing and interacting with the latest Commvault RESTful APIs.

Commvault's latest RESTful APIs follow the Swagger 2.0 specification, which means they are compatible with Swagger UI. Swagger UI is the open source framework that powers the Commvault API Explorer and makes visualizing and using the latest Commvault RESTful APIs easier for end users. From API Explorer, users can execute REST API requests and view responses from the CommCell environment directly from the Web Console.

KEY FEATURES

- You can view and run APIs directly from the Web Console.
- The latest APIs are designed to follow the Swagger specification.

MORE INFORMATION

- API Explorer

Create Custom Applications Using the App Studio

The App Studio is a low-code tool that developers can use to create custom applications in the Command Center.

You can build applications to collect and track data in a central location and to automate manual tasks. You and your coworkers can use these custom applications to share information and to collaborate more efficiently.

KEY FEATURES

- Create custom apps that appear in the Command Center.
- Include actionable elements, such as links, buttons, forms, and reports.
- Incorporate business logic that uses data tables and forms to guide user interaction.

MORE INFORMATION

- App Studio

UNDERSTAND AND ACTIVATE DATA

Enhanced Support for Databases in Governance Apps

- You can perform sensitive data analysis on Microsoft SQL Server databases and Oracle databases that employ TDE (Transparent Data Encryption). To start detecting TDE encrypted PII (personally identifiable information), add a Microsoft SQL Server database or an Oracle database as a data source to a project.
- You can use your Oracle wallet to provide credentials for your Oracle database data source.

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

MORE INFORMATION

- Governance Apps for GDPR
- Adding Database Data Sources to a Project

Content Indexing Policy for Windows and UNIX File System Agents

The content indexing solution uses multiple proxy servers to read the backed-up data and to content index the files based on a specific set of rules and filters.

You can configure content indexing for file system data at the subclient level.

APPLICABLE AGENTS

- Windows File System Agent
- UNIX File System Agent

MORE INFORMATION

- Content Indexing Policy for File System Agents

Copyright © 2019 Commvault Systems, Inc. All rights reserved.

©2019 Commvault Systems, Inc. All rights reserved. Commvault, Commvault and logo, the "CV" logo, Commvault Systems, Solving Forward, SIM, Singular Information Management, Simpana, Simpana OnePass, Commvault Galaxy, Unified Data Management, QiNetix, Quick Recovery, QR, CommNet, GridStor, Vault Tracker, Innervault, QuickSnap, QSnap, Recovery Director, CommServe, CommCell, IntelliSnap, ROMS, Commvault Edge, and Commvalue, are trademarks or registered trademarks of Commvault Systems, Inc. All other third party brands, products, service names, trademarks, or registered service marks are the property of and used to identify the products or services of their respective owners. All specifications are subject to change without notice.

The development release and timing of future product releases remains at Commvault's sole discretion. Commvault is providing the following information in accordance with Commvault's standard product communication policies. Any resulting features, functionality, and enhancements or timing of release of such features, functionality, and enhancements are at the sole discretion of Commvault and may be modified without notice. All product roadmap or other similar information does not represent a commitment to deliver any material, code, or functionality, and should not be relied upon in making a purchasing decision.

Visit the Commvault Documentation website for complete documentation of Commvault products.

COMMVAULT.COM | 888.746.3849 | GET-INFO@COMMVAULT.COM