Galaxy *i*DataAgent for NetApp NAS NDMP Release Notes (Rev. 14)

Software Release 4.2.0

Introduction

This document describes the contents, features, and open issues of the CommVault® Galaxy™ NetApp NAS NDMP *i*DataAgent™ software.

This *i*DataAgent is the backup and restore vehicle for data (files and folders) residing on a NetApp filer.

The NetApp NAS NDMP *i*DataAgent must be installed directly on the MediaAgent. For installation instructions, refer to the *Galaxy Client Installation and Administration Guide (NetApp NAS NDMP)*.

New Features

This release of the software includes the following new features:

- ✦ **Expanded platform support**

  The NetApp NAS NDMP *i*DataAgent can now run on a Solaris MediaAgent.

- ✦ **File System NDMP Restore Enabler**

  Allows data from a NetApp filer to be restored to a Windows File System client.

- ✦ **Extended Retention Periods for Storage Policy Copies**

  Facility to define additional retention rules for full backups based on time periods. (See the *CommServe Administration Guide* for a complete list of supported Agents.)

- ✦ **Incremental Storage Policies**

  Facility to include an Incremental Storage Policy for non-full backups within a Storage Policy used for full backups on the same subclient. This reduces the backup window and also effectively utilizes storage resources. (See the *CommServe Administration Guide* for a complete list of supported Agents.)

- ✦ **Enhanced Platform Selection options during installation**
  - – Automatic selection of other QiNetix components that are required for installing the selected component.
  - – Option to hide components that are not supported on the computer in which the installation is executed.
- ✦ **New Activity Control options**
  - – Facility to enable or disable all activities in the CommCell. This includes Data Protection, Data Recovery, Auxiliary Copy, Archive Pruning, Express Recovery Backups, Scheduled Reports, Export Media, Quick and Full Inventory and Scheduled jobs.
  - – Facility to individually enable or disable Data Protection, Data Recovery, Auxiliary Copy, Archive Pruning and Scheduled jobs.
- ✦ **New Alert Capabilities**

  `Agent Properties Modified` alert will now be generated when a subclient's properties are modified.
- ✦ **New Job Management Features**
  - – Reports and history information now displays the name of the user initiating the job.
  - – Job details now includes transfer time and throughput.
- ✦ **Report Enhancements**
  - – Enhanced report selection features, which includes a easy-to-use organization of the Report Selection interface.
  - – Facility to save some of the report output as an HTML or text file.
  - – Facility to save the report in a user-specified location on the CommServe local drive or network drive.
  - – Calendar and Detailed view type options for Backup and Migration reports.
- ✦ **Service Pack information**

  The Version tab now includes the Service Pack information, including details of patches applied on the specific computer/component.
- ✦ **Time Zone**

  Time zone included in all the relevant report filters and job history filters.

* **Upgrades**

  The following upgrade paths, including all Service Packs, are supported in this release:
  – 3.7.1 to 4.2.0
  – 4.1.0 to 4.2.0

Fixes

This release of the software includes fixes for the following caveats listed in the previous version of this release notes:

* Client level properties show firmware version.
* NAS index restores using NDMP version 4 no longer fail.
* Restoring a file to a directory that contains a directory now produces the correct error message.
* NAS no longer displays the incorrect failure message when you select a path at a lower level than the backup.
* NetApp release 6.1R1 incremental backups are not converted to full backups.

Notes

The following important items should be noted for this release:

GUI cannot report import/export function as successful with ONPTAP version 6.1.1R1

Upgrade to NetApps ONTAP version 6.1.1.R3.

Full system restores are not possible as root-blocks and NVRAM is not accessible for backup

DAR restore on ONTAP 6.4 when both files and directories are selected may only restore the files

From the Browse window select only files or only directories for the restore, then run a second restore job with the other type of data selected.

NetApp releases 6.2.2 and 6.3 do not back up hard and soft links correctly

Restores of selected Unicode files is not being backed up correctly for NetApp filers running ONTAP versions 6.1.3R1, 6.2.R1, 6.2.1 and 6.3.

Restore the entire directory that contains the file.

File System NDMP restore from very large backups may run very slowly

An In Place restore of a file that is a symbolic link may fail, and Galaxy will not display the reason why the restore failed

You can run an In Place restore and exclude the file(s) or run an Out of Place restore.

Only the "root" account can be used by Galaxy to control NDMP on some ONTAP filer versions

This is true even though the filer may have multiple accounts with root privileges. Therefore, use only the "root" account. Note that some backup functionality will work with other accounts, but other functionality will not.

Performing a NAS backup or restore to a volume that does not have enough memory to create a snapshot for the backup, will cause the backup to fail

You can check the NAS Backup Log to verify the reason for the backup failure.

A NAS backup or restore that fails with the message "NDMP_NOT_AUTHORIZED_ERR" may be caused by the following:

✦ If the filer was recently re-built (or crashed and restarted), the password in NVRAM may not match the password in the password file. You can fix the problem by running the `passwd` command from a hyperterminal or other connection to the filer, then resetting the password (using the same password).

✦ The password entered in Galaxy may not match the root password. You can fix this problem by changing the password to the correct password in the `EDit NDMP Host Information` window.

Base Software Installation - Unix

Standard install menus no longer include the Base software package (CVGxBase) as an option. The Base software is now automatically installed when the first package is installed on the UNIX computer.

Job Results Folder

Unique folders for job results are provided under the `<Galaxy install>` directory.

License Simplification

Product families are now reduced to fewer license types. (See the *CommServe Administration Guide* for a complete list of QiNetix licenses.)

Features not supported by the NetApp NAS NDMP *i*DataAgent

- ✦ Backup anywhere for NAS-attached libraries
- ✦ Browse from specified path
- ✦ Command Line Interface backup
- ✦ Disaster Recovery (DR) Tool
- ✦ Global filters
- ✦ Image browse
- ✦ Load balancing for NAS-attached libraries
- ✦ Name Change Tool
- ✦ Pre/Post command for Restore
- ✦ Remote installs
- ✦ Remote patch installs
- ✦ Remote upgrades
- ✦ Restore anywhere from NAS-attached libraries
- ✦ Schedule Policy
- ✦ Storage Policy Copy Failover
- ✦ Synthetic Full backups

Caveats and Open Issues

The following caveats and open issues remain in this release. Recommended work-arounds are provided where possible.

Backup

File System NDMP restores of Unix type file names/directories may fail

Examine the target location and the data being restored to see if there will be any file name or type conflicts, and then run (or re-run) the restore job.

Some files in NetApp ONTAP 6.2 are saved with a zero offset

When a file is modified from a Windows machine which has an antivirus software running and protecting the NetApp shares, this file may be backed up with a zero offset and will not be available for direct access restore.

Slow Aux Copy jobs for ONTAP Versions 6.2.1 and below

Unless the tcpwinsize variable is set to "-1", aux copy jobs are very slow for NAS attached libraries. On the filer issue the following command to set the tcpwinsize variable:

```
ndmpd tcpwinsize -1
```

Note: This command has to be entered every time the filer is rebooted.

Restore

Restore of a selected file fails if the file contains a "\" character at the end of the name

Therefore, restore the parent directory of the associated file.

An In Place restore of a file that is a symbolic link may fail

In this event, Galaxy will display the following error message during the restore:
```
Could not create destination directory - conflict between
destination path and existing file or directory.
```

No event message is given when the restore of a large number of files fails

If the destination volume is out of inode space, the user can remove files or increase the number of allowed inodes. (Check nasbackup log)

Trademark Notice

CommVault, CommVault Systems and logo, QiNetix, CommVault Galaxy and design, CommCell, CommNet, CommServe, CommServe StorageManager, *i*DataAgent, MediaAgent, and Storage without Boundaries, are trademarks and, in certain jurisdictions, may be registered trademarks of CommVault Systems, Inc.

NetApps is a trademark or registered trademark of Network Appliance, Inc.

Microsoft, Windows, Windows NT, and Windows 2000 are trademarks or registered trademarks of Microsoft Corporation.

Sun and Solaris are trademarks or registered trademarks of Sun Microsystems.

InstallShield and UnInstallShield are registered trademarks of InstallShield Software Corporation

* Any other trademarks appearing in this document are the property of their respective owners

Patent Notice

This software is covered by US Patent Numbers 5,559,991, 5,642,496 and 6,418,478 and other patents pending.

Patent Notice

Galaxy iDataAgent for NetApp NAS NDMP - Release Notes (Rev. 14)