CSI Driver for Dell EMC Unity

Version 1.3

Release Notes

September 2020

These release notes contain supplemental information about the CSI Driver for Dell EMC Unity. Topics include:

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Revision History

The following table presents the revision history of this document.

Table 1. Revision history

Revision	Date	Description
06	September 2020	Updated for version 1.3.
05	July 2020	Updated for version 1.2.1.
04	June 2020	Updated for version 1.2.
03	May 2020	Updated the following sections for 1.1.0.1 release: New features and changes Resolved issues
02	April 2020	Updated for version 1.1.
01	November 2019	First release of the product.

Product Description

This section describes the CSI Driver for Dell EMC Unity.

The CSI Driver for Dell EMC Unity is a plug-in that is installed into Kubernetes to provide persistent storage using Dell EMC Unity storage systems.

The CSI Driver adheres to the Container Storage Interface (CSI) specification version 1.1. It is compatible with Kubernetes versions 1.17, 1.18, and 1.19 running within a host operating system of Red Hat Enterprise Linux (RHEL) 7.6, 7.7, and 7.8 or CentOS 7.6, 7.7, and 7.8. It is also compatible with OpenShift 4.3/4.4 with Red Hat Enterprise Linux CoreOS and Red Hat Enterprise Linux 7.6. This release also supports Docker EE 3.1.

New Features

The CSI Driver for Dell EMC Unity supports the following features:

- Volume Expansion for FC, iSCSI, and NFS
- Volume Creation from snapshot for NFS
- Volume Cloning for FC, iSCSI, and NFS
- Docker EE 3.1
- Multi-array support on Operator
- Support for Unity OE 5.0.3

Changed Features

No features have been changed in this release.

Resolved Issues

This section contains the issues that were fixed in this release.

The following issue is resolved as part of the version 1.3 release:

• Global mount is now accessible directly on a node.

Known Issues

This section describes the known issues associated with this product.

Table 2. Known issues

Issue	Resolution or workaround, if known
When wrong user name and/or password is given for all the arrays driver may crash.	Replace the secret.json with correct user names and passwords, and bounce the controller and node pod.
603: Volume and snapshot name cannot have more than 63 characters.	All volume names and snapshot names (including prefix) must be less than 63 characters.
670: While creating a new pod, if the multipath driver on Kubernetes nodes is not able to issue the dm-uuid-mpath device for a given PVC, the driver picks the wwn-0x standard device to perform the mount operation. This may lead to data unavailability.	Restart the multipath driver, and ensure all devices are claimed with dm-uuid-mpath.
632: Pod stuck at container creating state for over 1 minute. Pod description shows Unable to find device after multiple discovery attempts: rpc error: code = NotFound desc = Check for disk path /dev/disk/by-id/wwn-0xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	 Check if the zoning is done correctly for the FC channel (if an FC-based volume is used), or that at least 1 iSCSI target is up on the array (if an iSCSI-based volume is used). If the problem persists, execute /usr/bin/rescanscsi-bus.sh -a -r. The script cleans up any stale devices present on the node. Install the sg3_utils package if the script is not present on the node.
659: unity namespace got deleted.	 Re-create the unity namespace. Uninstall the controller and node pods, and then re-install the pods. You should be able to continue the creation and deletion of Kubernetes objects as usual.
566: When creating a PVC from a snapshot, the PVC is automatically given the attributes of the default storage class.	Create a new custom storage class. The new custom storage class should have the following properties with the same value as in the default storage class: storage pool thin provision data reduction size Tiering Policy hostIOSize (for NFS) You must provide this storage class when creating a PVC from an existing snapshot.
326: When the same machine has two hosts with different hostnames but with the same IQN, the CSI Driver for Unity (v1.1) gives the following error: REP 0125: unable to find host.	Ensure that each host has a unique initiator IQN, and that the correct IQN was added to the corresponding host object on the array.
532: Not able to find storage class with xfs filetype.	Create a custom storage class for this type of requirement. An example follows of a custom storage class (in yaml format) that can be created in order to mount pvcs as an xfs filesystem. apiVersion: storage.k8s.io/v1 kind: StorageClass metadata: name: sc-xfs-iscsi parameters:

Table 2. Known issues (continued)

Issue	Resolution or workaround, if known
	<pre>isDataReductionEnabled: "false" storagepool: pool_1 thinProvisioned: "true" tieringPolicy: "3" protocol: "iSCSI" provisioner: csi-unity.dellemc.com reclaimPolicy: Delete.</pre>
After installing CSI Unity, the username/password of Unisphere changed.	Refer to the CSI Unity Product Guide for creating or replacing a new secret.
Make sure that the isDefaultArray parameter matches where necessary.	Make sure that the isDefaultArray parameter is set to true against the same storage array in both myvalues.yaml and secret.json files.
User encounters the error Error: storageclasses.storage.k8s.io "unity" already exists	In myvalues.yaml, the user has more than one array with isDefaultArray: "true" under storageArrayList. Make sure isDefaultArray is added to only one array under storageArrayList.

Software Media, Organization, and Files

This section provides information about where you can find the software files for this release of the CSI Driver for Dell EMC Unity.

The software package is available for download from the CSI Driver for Dell EMC Unity GitHub page.

Additional Resources

This section provides information about the CSI Driver for Dell EMC Unity, how to get support, and provide feedback.

Documentation

This section lists the related documentation for CSI Driver for Dell EMC Unity.

The CSI Driver for Dell EMC Unity is available on the CSI Driver for Dell EMC Unity GitHub page. The documentation includes the following:

- CSI Driver for Dell EMC Unity Release Notes (this document)
- CSI Driver for Dell EMC Unity Product Guide

Troubleshooting and Getting Help

Use the resources in this section to get help and support.

Product information

For documentation, release notes, software updates, and other information about Dell EMC products, go to Dell EMC Online Support.

Technical support

The CSI Driver for Dell EMC Unity image, which is the built driver code, is available on Dockerhub and is officially supported by Dell EMC.

The source code for the CSI Driver for Dell EMC Unity available on Github is unsupported and provided solely under the terms of the license attached to the source code. For clarity, Dell EMC does not provide support for any source code modifications.

For any CSI driver issues, questions, or feedback, join Dell EMC Container community.

Notes, cautions, and warnings

(i) NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.