CSI Driver for Dell EMC PowerMax

1.4

Release Notes
Rev. 03
September 2020

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

D≪LLEMC

Revision History

The following table presents the revision history of this document.

Table 1. Revision history

Revision	Date	Description
01	April 2020	The following sections were updated for CSI Driver for Dell EMC PowerMax Version 1.2: ● Product description ● Features of the CSI Driver for Dell EMC PowerMax ● Known problems and limitations
02	June 2020	The following sections were updated for CSI Driver for Dell EMC PowerMax Version 1.3: ● Product description ● Features of the CSI Driver for Dell EMC PowerMax
03	September 2020	The following sections were updated for CSI Driver for Dell EMC PowerMax Version 1.4: ● Product description ● Features of the CSI Driver for Dell EMC PowerMax

Product Description

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

New Features

The CSI Driver for Dell EMC PowerMax has the following new features:

● Supports Kubernetes versions 1.17, 1.18, and 1.19
● Supports OpenShift 4.3 and 4.4 with Red Hat Enterprise Linux CoreOS and Red Hat Enterprise Linux 7.6
● Supports Red Hat Enterprise Linux 7.6/7.7/7.8 host operating system
● Supports CentOS 7.6/7.7/7.8 host operating system
● Persistent Volume (PV) capabilities:
  ○ Resize
● Supports Raw Block Volumes
● Supports (Online) Volume Expansion

Known Issues

A list of known issues in this release.

Table 2. Known issues

Issue	Description
Linux native multipathing package - device-mapper-multipath	If the Linux native multipathing package *device-mapper-multipath* is installed on the Kubernetes nodes and the multipath daemon is not configured, then driver operations may fail. To get around this problem, either configure multipathing using the instructions that are provided in the *CSI Driver for Dell EMC PowerMax Product Guide* or remove the *device-mapper-multipath* package from the nodes. ⓘ **NOTE:** Stopping or disabling the multipath daemon can still result in driver failure. If usage of Linux native multipathing is not required, it is recommended to remove the package entirely from the node .
Creating more than 256 snapshots	You can only create 256 VolumeSnapshots using a single Persistent Volume Claim(PVC). Any attempts to create more than 256 Volume Snapshots on the same source PVC will fail indefinitely. If you want to create more Volume Snapshots of the same PVC, ensure that you delete some of the older VolumeSnapshots.
Slow volume attach/detach	If your Kubernetes (1.17, 1.18)/OpenShift (4.4) cluster has a lot of VolumeAttachment objects, the attach/detach operations will be very slow. This is a known issue and affects all CSI plugins. It is tracked here CSI VolumeAttachment slows pod startup time To get around this problem you can upgrade to the latest Kubernetes/OpenShift patches, which contain a partial fix: 1.17.8+, 1.18.5+, and OpenShift 4.4.16

Software Media, Organization, and Files

This section provides information about where to find the software files for this release of CSI Driver for Dell EMC PowerMax.

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

Additional Resources

This section provides more information about the product, how to get support, and provide feedback.

Documentation

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

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

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

Troubleshooting and Getting Help

Use the resources in this topic 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 PowerMax image available on Dell EMC Dockerhub is officially supported by Dell EMC. The source code available on Dell EMC 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 CSI driver setup, configuration issues, queries, and feedback, use the Dell EMC Container Community page. For any issues related to Dell EMC storage, contact Dell EMC Online Support.