New on the Open Source blog: Using the FSx for Lustre CSI Driver with Amazon EKS

by Sean White | on 16 APR 2019 | in Amazon Elastic Container Service, Amazon Elastic Container Service For Kubernetes, Amazon FSx For Lustre, Storage | Permalink | 💬 Comments | ↗ Share

From time to time the AWS Storage Blog will point you to storage related blog posts from other AWS blog channels that we think you will find interesting or helpful for your storage use cases. We wanted to share a post from the Open Source Blog that highlights a walk-through of using Amazon FSx for Lustre Container Storage Interface (CSI) Driver with Amazon EKS.

The Amazon Elastic Container Service for Kubernetes (Amazon EKS) team has been busy building CSI drivers for all our storage solutions, including Amazon FSx for Lustre: a fully-managed file system which has integrations with S3 and is optimized for compute-intensive workloads such as high-performance computing (HPC) and machine learning. Because the AWS FSx CSI Driver is potentially useful to any Kubernetes user, we've donated it to Kubernetes SIG-AWS. This blog post focuses on deploying the AWS FSx CSI driver to an Amazon EKS cluster.

You can now dynamically provision Amazon FSx for Lustre filesystems for your high performance computing workloads, and have a container automatically connected into this filesystem. FSx for Lustre provides a high-performance file system optimized for fast processing of workloads such as machine learning, high performance computing (HPC), video processing, financial modeling, and electronic design automation (EDA). These workloads commonly require data to be presented via a fast and scalable file system interface, and typically have data sets stored on long-term data stores like Amazon S3.

You can also use dynamic provisioning to consume the same persistent volume claim from multiple pods from different nodes. If you need to start your containers with a dataset automatically available, for example loading a machine learning training data set, you can even connect your StorageClass to an existing Amazon S3 bucket by using Dynamic Provisioning with Data Repository. Other examples can be found in the FSx for Lustre CSI Driver documentation.

To learn more, see the full AWS Open Source Blog post.

https://aws.amazon.com/blogs/opensource/using-fsx-lustre-csi-driver-amazon-eks/

https://github.com/kubernetes-sigs/aws-fsx-csi-driver

CSI Driver of AWS FSx for Lustre https://aws.amazon.com/fsx/lustre/

`aws` `fsx` `csi` `kubernetes` `k8s-sig-aws`

⊙ 91 commits	⌥ 1 branch	◌ 2 releases	⧑ 11 contributors	⚖ Apache-2.0

Branch: master ▾   New pull request   Find File   **Clone or download ▾**

🤖 **k8s-ci-robot** Merge pull request #64 from benoitbayol/patch-1 ⋯   Latest commit d20c305 on May 1

📁 .github	Update issue templates (#31)	3 months ago
📁 cmd	Fix klog init flag	4 months ago
📁 deploy/kubernetes	adding single manifest for driver	3 months ago
📁 docs	Add iam policy for FSx driver	2 months ago
📁 examples/kubernetes	updated specs and README for fsx size	2 months ago
📁 hack	Remove install lustre client hack script	3 months ago
📁 pkg	Fix typo	2 months ago
📁 tests/sanity	Implement dynamic provisioning for FSx for Lustre PV (#14)	4 months ago
📄 .gitignore	Change static and dynamic example to use ReadWriteMany by default	3 months ago
📄 .travis.yml	`aws/aws-fsx-csi-driver` -> `kubernetes-sigs/aws-fsx-csi-driver`	3 months ago
📄 CHANGELOG-0.x.md	`aws/csi-driver-amazon-fsx` -> `kubernetes-sigs/aws-fsx-csi-driver`	3 months ago
📄 CONTRIBUTING.md	Add Kubernetes code of conduct OWNER file	3 months ago
📄 Dockerfile	Update dockerfile to install official lustre client (#36)	3 months ago
📄 LICENSE	Creating initial file from template	6 months ago
📄 Makefile	Update manifest to use official amazon repo for contaier image (#37)	3 months ago
📄 OWNERS	Add OWNERS, SECURITY_CONTACTS and CoC files	3 months ago
📄 SECURITY_CONTACTS	Add OWNERS, SECURITY_CONTACTS and CoC files	3 months ago
📄 THIRD-PARTY	Support s3 data repository in dynamic provision (#33)	3 months ago
📄 code-of-conduct.md	Add OWNERS, SECURITY_CONTACTS and CoC files	3 months ago
📄 go.mod	Support s3 data repository in dynamic provision (#33)	3 months ago
📄 go.sum	Support s3 data repository in dynamic provision (#33)	3 months ago

📖 **README.md**

`build passing` `coverage 48%`

WARNING: This driver is currently an ALPHA release. This means that there may potentially be backwards compatible breaking changes moving forward. Do NOT use this driver in a production environment in its current state.

DISCLAIMER: This is not an officially supported Amazon product

aws