**Solution: Configure Amazon EBS CSI driver for working PersistentVolumes in EKS**

**In essence we need to enable the AWS EBS CSI driver as an EKS addon. But beforehand we need to enable the IAM OIDC provider and create the IAM role for the EBS CSI driver. The easiest way to do both is to use [eksctl](https://github.com/weaveworks/eksctl) (other ways like**[**using plain aws cli or the AWS GUI are described in the docs**](https://docs.aws.amazon.com/eks/latest/userguide/managing-ebs-csi.html)**).**

**1.) Install eksctl**

**We assume here that**[**the aws cli is installed and configured**](https://docs.aws.amazon.com/cli/latest/userguide/cli-chap-configure.html)**- and you have access to your EKS cluster. To use eksctl we need to install it first. On a Mac use brew like:**

**brew tap weaveworks/tap**

**brew install weaveworks/tap/eksctl**

**or on Linux use:**

**curl --silent --location "https://github.com/weaveworks/eksctl/releases/latest/download/eksctl\_$(uname -s)\_amd64.tar.gz" | tar xz -C /tmp**

**sudo mv /tmp/eksctl /usr/local/bin**

**2.) Enable IAM OIDC provider**

**A prerequisite for the EBS CSI driver to work is to have an existing AWS Identity and Access Management (IAM) OpenID Connect (OIDC) provider for your cluster. This IAM OIDC provider can be enabled with the following command:**

**eksctl utils associate-iam-oidc-provider --region=eu-central-1 --cluster=YourClusterNameHere –approve**

**3.) Create Amazon EBS CSI driver IAM role**

**Now having eksctl in place, create the IAM role:**

**eksctl create iamserviceaccount \**

**--name ebs-csi-controller-sa \**

**--namespace kube-system \**

**--cluster YourClusterNameHere \**

**--attach-policy-arn arn:aws:iam::aws:policy/service-role/AmazonEBSCSIDriverPolicy \**

**--approve \**

**--role-only \**

**--role-name AmazonEKS\_EBS\_CSI\_DriverRole**

**As you can see AWS maintains a managed policy for us we can simply use (AWS maintains a managed policy, available at ARN arn:aws:iam::aws:policy/service-role/AmazonEBSCSIDriverPolicy). Only if you use encrypted EBS drives**[**you need to additionally add configuration to the policy**](https://github.com/kubernetes-sigs/aws-ebs-csi-driver/blob/master/docs/install.md#installation-1)**.**

**The command...**

**...deploys an AWS CloudFormation stack that creates an IAM role, attaches the IAM policy to it, and annotates the existing ebs-csi-controller-sa service account with the Amazon Resource Name (ARN) of the IAM role.**

**4.) Add the Amazon EBS CSI add-on**

**Now we can finally add the EBS CSI add-on. Therefor we also need the AWS Account id which we can obtain by running aws sts get-caller-identity --query Account --output text (see**[**Quick way to get AWS Account number from the AWS CLI tools?**](https://stackoverflow.com/questions/33791069/quick-way-to-get-aws-account-number-from-the-aws-cli-tools)**). Now the eksctl create addon command looks like this:**

**eksctl create addon --name aws-ebs-csi-driver --cluster YourClusterNameHere --service-account-role-arn arn:aws:iam::$(aws sts get-caller-identity --query Account --output text):role/AmazonEKS\_EBS\_CSI\_DriverRole –force**

**Now your PersistentVolumeClaim should get the status Bound while a EBS volume got created for you - and the Tekton Pipeline should run again.**