\*\*Method of Procedure (MoP) for Provisioning EKS with 2 Worker Nodes\*\*

1. \*\*Objective\*\*: This MoP provides the detailed steps to provision an Amazon Elastic Kubernetes Service (EKS) cluster with two worker nodes.

2. \*\*Scope\*\*: This procedure applies to the Project X Cloud Operations team responsible for provisioning EKS.

3. \*\*Pre-requisites\*\*:

\* AWS CLI version 2 along with kubectl and eksctl installed.

\* IAM Access with enough permissions to create EKS cluster.

4. \*\*Procedure\*\*:

4.1. \*\*Create an EKS cluster\*\*:

Open your terminal and run the following commands:

i. First, configure your AWS CLI:

```

aws configure

```

Enter your Access Key ID, Secret Access Key, Default region name (where the EKS cluster needs to be provisioned), and Default output format.

ii. Now, use 'eksctl' to create an EKS cluster:

```

eksctl create cluster --name my-cluster --nodes 2

```

This command automatically creates a cluster in your default region with two worker nodes. The number of nodes can be customized with the `--nodes` command.

4.2. \*\*Verify the EKS Cluster\*\*:

Now that the EKS cluster is created, run the following command to ensure that the nodes are running:

```

kubectl get nodes

```

This should return a list of two nodes, confirming that they're running.

5. \*\*Post-Procedure\*\*:

You are required to manage this EKS cluster, ensuring it runs smoothly and scaling it as necessary.

6. \*\*Support\*\*:

If you encounter challenges while performing this procedure, reach out to the senior cloud engineer or cloud operations manager.

7. \*\*Backup & Rollback Procedure\*\*:

\* Backup: Ensure to make a backup of your current EKS cluster configuration before the procedure for efficient rollback if required.

\* Rollback: In case of any failures, the environment can be rolled back to its original state using the backup.

8. \*\*Completion Time\*\*:

The procedure should typically not take more than 20-30 minutes, and the cluster should be up and running within an hour, depending on the AWS region and network speed.

This MoP should be followed meticulously to ensure successful provisioning of an EKS cluster with two worker nodes.