How-To Use OTC Application Operations Management (AOM) with Terraform-built Kubernetes Cluster (CCE)

This assumes that you have created a CCE via Terraform and you have a shared TFState, for example via a OBS Bucket. We recommend to put all the code from steps 1-3 inside a Terraform module. If you don't use a separate module for this, you must change step 3 from an output variable to a local variable.

1. Create a special user with a random password in the project where the CCE is provisioned.

```
resource "random_password" "icagentinstallerpw" {
    length           = 16
    special          = true
    override_special = "_%@"
}

resource opentelekomcloud_identity_user_v3 icagentinstaller {
    name     = "icagentinstaller"
    password = random_password.icagentinstallerpw.result
}
```

2. Create access keys for that user.

```
resource opentelekomcloud_identity_credential_v3 icagentinstaller_keys {
  user_id = opentelekomcloud_identity_user_v3.icagentinstaller.id
  status = "active"
  description = "Access and Secret Key of ICAgent Installer (installs
ICAgent on Kubernetes Nodes)"
}
```

3. Generate script that should be executed on kubernetes nodes after the normal installation.

```
output "node-postinstall-script" {
    depends_on =
[opentelekomcloud_identity_credential_v3.icagentinstaller_keys]
    value = "curl http://icagent-eu-de.obs.eu-de.otc.t-
systems.com/ICAgent_linux/apm_agent_install.sh > apm_agent_install.sh &&
REGION=eu-de bash apm_agent_install.sh -ak
${opentelekomcloud_identity_credential_v3.icagentinstaller_keys.access} -sk
${opentelekomcloud_identity_credential_v3.icagentinstaller_keys.secret} -
region eu-de -projectid ${var.otc_project_id} -obsdomain obs.eu-de.otc.t-
systems.com -accessip 100.125.7.25;"
}
```

4. Utilize script when initializing nodes of the kubernetes cluster.

```
 resource "opentelekomcloud_cce_node_v3" "nodes" {
     for_each          = var.nodes
     cluster_id        = opentelekomcloud_cce_cluster_v3.cluster.id
     name              =
"${var.node_name_prefix}-${var.stage_name}-${each.key}"

     # ...
     postinstall       = var.postinstall-script
     # ...
 }
```

5. Utilize it on separate node pools to support monitoring them, too.

```
 resource "opentelekomcloud_cce_node_pool_v3" "node_pool_autoscale" {
     cluster_id         = var.cluster_id
     name               = "${var.cluster_name}-node-pool-autoscale"

     # ...
     postinstall             = var.postinstall-script
     # ...
 }
```

6. Recreate nodes and node pools

```
terraform taint terraform taint
module.cluster.opentelekomcloud_cce_node_v3.nodes[\"1\"]
terraform taint terraform taint
module.cluster.opentelekomcloud_cce_node_v3.nodes[\"2\"]
terraform taint
module.cluster_autoscaling.opentelekomcloud_cce_node_pool_v3.node_pool_autos
cale
terraform apply
```

7. Check functionality in Web Console