Duplicate environment creation process for Carve-out Mendix applications

Summary

This carve-out process involves the deletion of all data within this application, excluding the data related to the DEM business group. Subsequently, we will take a backup of the data and files, which will be provided to Envalior, the new company formed from DEM. Once all these steps are completed, the environment can be terminated

Create duplicate environment for care-out process

To Create duplicate carve-out environment for Mendix applications follow the link to create pipelines How to: Mendix ap p Deployment to AWS

Once pipelines are created and deployed in dev, take a production database backup and restore with below steps

1. Log in to the database stepping stone (euaws00as0119-windows remote machine)
2. Open **pgAdmin** with the configured Mendix PostgreSQL database and Create a database server connection for the respective application in the prod environment (if no existing connection).
3. Connect to the application's database and take a backup.
4. Stop the care-out application

```
kubectl scale deployments/<app name>-leader -n mendix --replicas=0
```

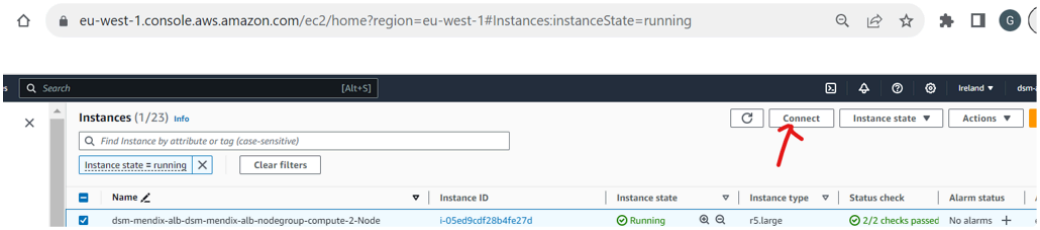
5. Create database server connection in pgAdmin for the carve-out application in dev .
6. Connect to the application and restore the database backup from the original application

Download the s3 files from prod and upload in dev carve-out application.

we won't be able to directly copy objects between the two S3 bucket in different account here as the objects are encrypted by AWS managed KMS key. Unfortunately, when we use AWS managed KMS key we cannot provide cross-account access as this KMS key is

internal to an account. hence we decided to download the s3 files locally (ec2 instance) and upload them with desired aws s3 bucket.

1. Log in to the AWS dev account **dsm-mx-dt #214223246956** and go to the ec2 console
2. Open any one of the EKS EC2 instances with a 200GB EBS volume and connect with the session manager



3. Once logged into the ec2 instance switch to the root user by running the command

```
sudo su -
```

4. Change the directory with below command

```
cd /home/ec2-user
```

5. Create a new directory in the ec2-user path with below command

```
mikdir <exampledirectoryname>
```

6. Go to the newly created directory to download the s3 files by using the below command

```
cd <exampledirectoryname>
```

7. Copy your **production** AWS account access, secret key, and token and paste them in the EC2 instance to access AWS resources programmatically for downloading S3 files.

```
export AWS_ACCESS_KEY_ID="***************"
export AWS_SECRET_ACCESS_KEY="**********************"
export
AWS_SESSION_TOKEN="*************************************************************************"
```

8. Use the command to download the S3 files from the production AWS S3 bucket.

```
aws s3 sync s3://dsm-mx-dicivaluereport-prd-eu-west-1 .
```

9. Copy your **development** AWS account access, secret key, and token and paste them in the EC2 instance to access AWS resources programmatically for uploading S3 files to the Dev AWS S3 bucket.

```
export AWS_ACCESS_KEY_ID="***************"
export AWS_SECRET_ACCESS_KEY="**********************"
export
AWS_SESSION_TOKEN="*************************************************************************"
```

10. Use the command to upload the S3 files from the EC2 instance to the Dev AWS S3 bucket.

```
aws s3 sync /home/ec2-user/exampledirectoryname/ s3://dsm-mx-dicicarveout-dt-eu-west-1/
```

11. Once uploaded, use the command to check the file count and size to compare with the original and carve-out applications' data.

```
aws s3 ls --summarize --human-readable --recursive s3://dsm-mx-dicicarveout-prd-eu-west-1/
```

12. Delete the all files downloaded in the ec2 instance after uploaded in the s3 bucket.

```
rm -rf <exampledirectoryname>
```

13. After validating the file counts, start the carve-out application using the command.

```
kubectl scale deployments/<app name>-leader -n mendix --replicas=1
```

14. Once the application up and run, inform to the developer to start the carve-out process.