Disaster Recovery Plan

Database –

In the event of a database failure the backup database should automatically be promoted to the master database and ensure no loss of service. This will then repair the master database and recover automatically.

However, if you encounter an issue with the database, below are the steps required to recover.

1. Releasd2Prod – Click on Actions > Restore to point in time > Choose a time that you require. Backups are available for the previous 7 days.

Alternatively, if you need to create a new database, click on Snapshots > Restore Snapshots.

EC2 Instances –

EC2 instances are connected to auto scaling groups that should automatically replace any unhealthy instances. However, if you need to manually recover the instance the following steps are recommended.

1. Check if the EC2 instances is running. If not click start. The initial webserver instances have termination protection enabled so they should always be available in either a running or stopped state.
2. If you need to create a new instance, this can be done from Launch Instance > My AMI’s > Releasd-Prod-2021
3. If the EC2 instance is not currently running the webserver then run the command:

bundle exec cap production unicorn:start

1. Instances are available in two availability zones, so highly available and very unlikely to go down.

Good Habits –

The following steps should be completed on a semi-regular basis.

* Snapshot of RDS – these are done automatically but I would recommend creating a new RDS snapshot once a month and to delete any out-dated ones. Especially before any major updates/upgrades.
* Snapshot of EC2 – Since the code is deployed via CI it isn’t required to create a snapshot of EC2 unless you adjust the requirements/software installed on an EC2 instance. If that is the case create a new snapshot but ensure ‘No reboot’ is checked to avoid service disruption.

M5.XLARGE Pricing

The webservers run on M5.Xlarge. I would recommend a 1 Year Standard Term as you should not need to change Instance Family.

Standard 1 Year Term – No Upfront – 37% Saving (Per instance – You have 2)

Table

Description automatically generated

M4.Large Pricing

Your staging worker and production worker use this type. You have two of these in EU-Ireland.

Table

Description automatically generated

M5.4xlarge Pricing

This is your biggest instance and is based in EU-London. This is your PDF Service and there is only 1.

Table

Description automatically generated

DB.m5.xlarge – Pricing

You have one of these. This is your Database and is available in EU-Ireland.

Table

Description automatically generated

**How to purchase reserved instances**

EC2

MAKE SURE REGION IS SET TO EU-IRELAND

1. Click on Services > EC2
2. Click on Reserved Instance which is under the Instances sub menu on the left hand side.
3. Add the items to the reserved instances that you require: (M5.xlarge x 2 = webservers), (M4.large x 2 = service workers).
4. Ensure the platform is Linux/Unix.
5. Click Search
6. Choose the qty required and add to cart

AFTER COMPLETE - CHANGE REGION TO EU-LONDON

1. Click on Services > EC2
2. Click on Reserved Instance which is under the Instances sub menu on the left hand side.
3. Add the items to the reserved instances that you require: (M5.4xlarge x 1 = PDF Server.
4. Ensure the platform is Linux/Unix.

RDS

MAKE SURE REGION IS SET TO EU-IRELAND

1. Click on Services > RDS
2. Click on Reserved Instance on the left hand side.
3. Choose mysql
4. Choose db.M5.Xlarge
5. Multi-AZ – YES