Basic Cluster

Create an environment and a basic cluster

# Objectives

Understand the UI of Confluent Cloud and use it to create an environment and a “basic” cluster.

# Lab

## First time in Confluent Cloud?

* If you do not have an organisation yet, follow “[Sign up and try it for free](https://confluent.cloud/signup)” on the same webpage, and enter a work or private email address. You will be issued a new account and $400 free credits, usually enough for this bootcamp.  
  Do *not* enter a credit card, or you might be charged at some stage!
* You will be sent an email for verification. Follow the link in the email to complete your registration.
* Log into your new account. You will be greeted immediately with an invitation to create your first cluster. Press **Advanced**, then press **Do this later** to avoid creating a cluster at this stage. Move forward to [Creating an Environment and Basic Cluster](#_x48dbot3frio) in this lab.
* To avoid entering a credit card, navigate to [Billing & payment](https://confluent.cloud/settings/billing/payment), scroll to the bottom, and add the promo code CONFLUENTDEV1. With this promo code, you will not have to enter your credit card info for 30 days or until your credits run out.
* Ensure that you delete all resources, such as clusters, after you have finished the bootcamp. This will avoid running out of credits during the bootcamp.

## Using an existing organisation

* Connect to your Confluent Cloud organisation. [https://confluent.cloud/login](https://confluent.cloud/login?iov_id=3c5cfd05-e879-4e55-b7bf-01567fb15f79)

## Creating an Environment and Basic Cluster

* Create a new Environment, for example, “bootcamp”.
  + Choose the Essentials Stream Governance Package.
* Create a Basic Cluster, again in a region close to you. For example, you could choose eu-west-1 (Dublin) in AWS if you are located in Western Europe.
  + You will use a “Single zone” for the Availability.
  + Give the cluster a name, “cluster\_0” is a bit non-descript.
  + Check usage limits and Uptime SLA
  + You might be asked to add your credit card details at this stage. Do not do this at this point, or you might get charged later. Instead, choose the Voucher Code option below and enter CONFLUENTDEV1 to override the need for a credit card.
  + Launch the cluster
* Investigate the different menus on the left of the cluster screen and familiarize yourself.
  + What is the Bootstrap Server?
  + Is the cluster visible on the public Internet?
  + Are there any API Keys created already?
  + Do we have any topics defined?
  + Is the ksqlDB cluster already created?
  + Are there any connectors defined?
  + Are there any clients defined?

# References

<https://docs.confluent.io/cloud/current/clusters/create-cluster.html#manage-ak-clusters-on-ccloud>

<https://docs.confluent.io/cloud/current/clusters/regions.html#cloud-providers-and-regions-for-ccloud>

# Expected Outcomes

* Have a running Basic cluster in the Confluent Cloud
* Be familiar with the Confluent Cloud UI, specifically the cluster management

# Check your understanding

This colour marks advanced questions.

* How many environments can you have in an organisation?
* Can you upgrade a Basic cluster to a Standard cluster?
  + What are the limitations?
* Which organisational entity is the (managed) Schema Registry attached to?
  + Is the schema registry shared or dedicated?
  + Why should you generally pick a Schema Registry with the same cloud provider as your Kafka cluster?
* Why do you need to create the ksqlDB cluster separately from the Kafka cluster?