

Curso Técnico Superior Profissional em: Tecnologias e Programação de Sistemas de Informação

2.º Ano/1.º Semestre

Unidade Curricular: Sistemas Gestores de Bases de Dados II

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TUTORIAL DE CONFIGURAÇÃO DO ATLAS

Com o crescimento dos serviços baseados na nuvem, agora é possível a criação e gestão de uma base de dados *MongoDB* de forma gratuita, sem ter de ser instalado localmente.

Realizar os seguintes passos para criar uma base de dados *MongoDB* na *cloud*.

1. Passo

Aceder ao link - <https://cloud.mongodb.com/user?nds=true#/atlas/register/accountProfile>

Primeiro é necessário, criar uma conta.

2. Passo

Para realizar a criação da conta no serviço **Atlas**, preencher os campos apresentados na imagem seguinte. Depois de preenchidos os dados, clicar no botão “**Continue**”.

Account Profile

Email Address

Password

✓ 8 characters minimum

✓ One letter

✓ One number

✓ One special character

First Name

Last Name

Phone Number

Company Name

Job Function

None Selected ▼

Country

Select Country ▼

☐ I agree to the [terms of service](#)

Already have an account? [Login](#)



Continue

3. Passo

Para criar uma base de dados é necessário a criação de um *cluster*.

Clusters

Overview

Security

Find a cluster...



Create a cluster

Choose your cloud provider, region, and specs.



Build a Cluster

Once your cluster is up and running, live migrate an existing MongoDB database into Atlas with our [Live Migration Service](#).

Para realizar essa acção, é preciso clicar no botão (**Build a Cluster**) que a seta está a apontar na imagem anterior.

4. Passo

No entanto, seja qual for a empresa e região que escolham devem seleccionar algumas das opções **FREE TIER AVAILABLE**, que são os gratuitos. Primeiro seleccionam (seta 1) o **Cloud Provider**, e em seguida a **Region** (onde está a seta 2).

Global Cluster Configuration >

Cloud Provider & Region AWS, N. Virginia (us-east-1) ▾

aws

Google Cloud Platform

Azure

Create a **free tier cluster** by selecting a region with **FREE TIER AVAILABLE** and choosing the **M0** cluster tier below.

★ recommended region ⓘ

NORTH AMERICA

🇺🇸 N. Virginia (us-east-1) ★

FREE TIER AVAILABLE

🇺🇸 Ohio (us-east-2) ★

🇺🇸 N. California (us-west-1)

🇺🇸 Oregon (us-west-2) ★

🇨🇦 Montreal (ca-central-1)

EUROPE

🇮🇪 Ireland (eu-west-1) ★

🇬🇧 London (eu-west-2) ★

🇫🇷 Paris (eu-west-3) ★

🇩🇪 Frankfurt (eu-central-1) ★

FREE TIER AVAILABLE

SOUTH AMERICA

AUSTRALIA

🇦🇺 Sydney (ap-southeast-2) ★

ASIA

🇯🇵 Tokyo (ap-northeast-1) ★

🇰🇷 Seoul (ap-northeast-2)

🇸🇬 Singapore (ap-southeast-1) ★

FREE TIER AVAILABLE

FREE

Free forever! Your M0 cluster is ideal for experimenting in a limited sandbox. You can upgrade to a production cluster anytime.

Cancel

Create Cluster

Na aba **Cluster Tier**, seleccionar o plano **M0**, onde está a apontar a seta.

Cluster Tier M0 (Shared RAM, 512 MB Storage) ▾

Base hourly rate is for a MongoDB replica set with 3 data bearing servers.

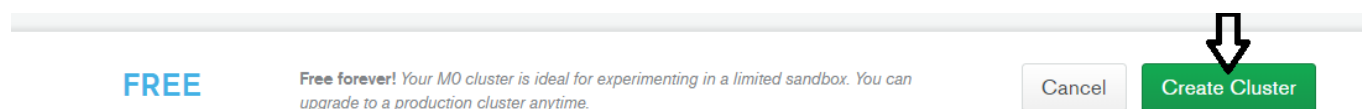
Shared Clusters ⓘ

✓ M0	Shared RAM	512 MB Storage	Shared vCPUs	Free forever
M2	Shared RAM	2 GB Storage	Shared vCPUs	\$9 / MONTH
M5	Shared RAM	5 GB Storage	Shared vCPUs	\$25 / MONTH

Dedicated Development Clusters ⓘ

M10	2 GB RAM	10 GB Storage	0.2 vCPUs	from \$0.08/hr
M20	4 GB RAM	20 GB Storage	0.4 vCPUs	from \$0.20/hr

Em seguida, clicar no botão que a seta está a apontar.



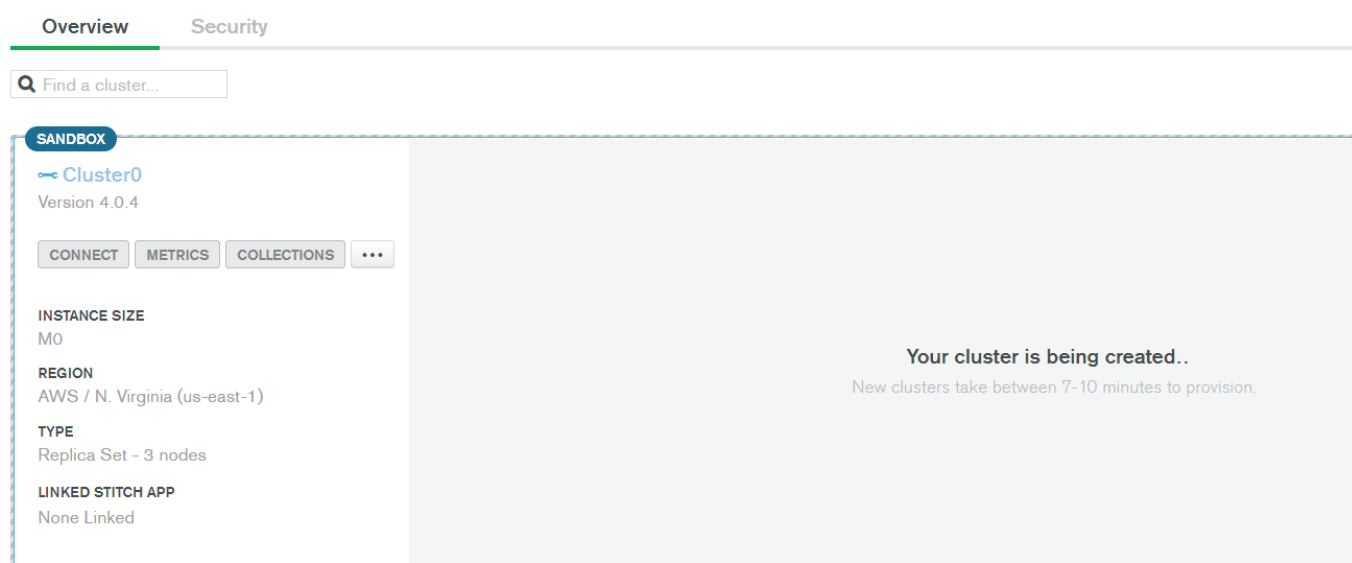
Na imagem abaixo e para finalizar, clicar onde está a seta a apontar.



5. Passo

Irá aparecer uma nova página, em que demora algum tempo a criação desse *cluster*.

Clusters

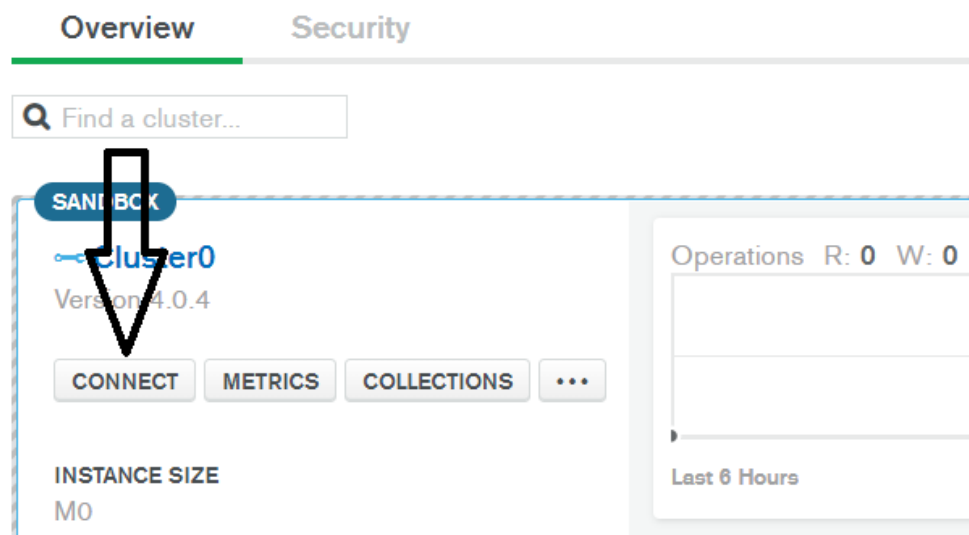


6. Passo

Neste passo, devem definir o IP permitido para aceder ao *cluster* e um utilizador.

Para essa definição tem de clicar no botão (**CONNECT**) que a seta está a apontar.

Clusters



The screenshot shows the 'Clusters' interface with two tabs: 'Overview' (active) and 'Security'. Below the tabs is a search bar labeled 'Find a cluster...'. A list of clusters is displayed, with the first one being 'SANDBOX' (highlighted in blue) and 'cluster0' (highlighted in blue). Below 'cluster0', it says 'Version 4.0.4'. There are four buttons: 'CONNECT', 'METRICS', 'COLLECTIONS', and a three-dot menu. A large black arrow points to the 'CONNECT' button. To the right of the cluster list, there is a panel showing 'Operations R: 0 W: 0' and a graph area labeled 'Last 6 Hours'.

Após ser clicado o botão **CONNECT**, aparecerá a seguinte informação.

Connect to Cluster0

Setup connection security > Choose a connection method > Connect

You need to secure your MongoDB Atlas cluster before you can use it. Set which users and IP addresses can access your cluster now. [Read more](#)

You can't connect yet. Set up your firewall access and user security permission below.

1 Whitelist your connection IP address

Add Your Current IP Address Add a Different IP Address

2 Create a MongoDB User

This first user will have [atlasAdmin](#) permissions for all clusters in this project. Keep your credentials handy, you'll need them for the next step.

Username Password Autogenerate Secure Password

ex. dbUser ex. dbUserPassword SHOW

Create MongoDB User

A primeira acção a fazer, é clicar no botão que a seta está a apontar, para definir o IP permitido.

Em seguida, definir no campo **IP Address** → **0.0.0.0/0**

E depois clicar no botão (**Add IP Address**) que a seta está a apontar.

Setup connection security

Choose a connection method

Connect

You need to secure your MongoDB Atlas cluster before you can use it. Set which users and IP addresses can access your cluster now. [Read more](#)

You can't connect yet. Set up your firewall access and user security permission below.

1 Whitelist your connection IP address

IP Address

0.0.0.0/0

Description (Optional)

An optional comment describing this entry

Cancel

Add IP Address

2 Create a MongoDB User

This first user will have [atlasAdmin](#) permissions for all clusters in this project.

Keep your credentials handy, you'll need them for the next step.

Username

ex. dbUser


Password

ex. dbUserPassword

Autogenerate Secure Password

SHOW

Create MongoDB User



A segunda acção a executar, é a definição de um utilizador para o *cluster*.

Preenchendo os campos e clicando no botão (**Create MongoDB User**) onde está a seta 1 a apontar.

Connect to Cluster0

Setup connection security

Choose a connection method

Connect

You need to secure your MongoDB Atlas cluster before you can use it. Set which users and IP addresses can access your cluster now. [Read more](#)

You can't connect yet. Set up your user security permission below.

1 Whitelist your connection IP address

✓ An IP address has been whitelisted. Add another whitelist entry in the [IP Whitelist tab](#).

2 Create a MongoDB User

This first user will have [atlasAdmin](#) permissions for all clusters in this project.

Keep your credentials handy, you'll need them for the next step.

Username

ex. dbUser

Password

Autogenerate Secure Password

ex. dbUserPassword

SHOW



Create MongoDB User

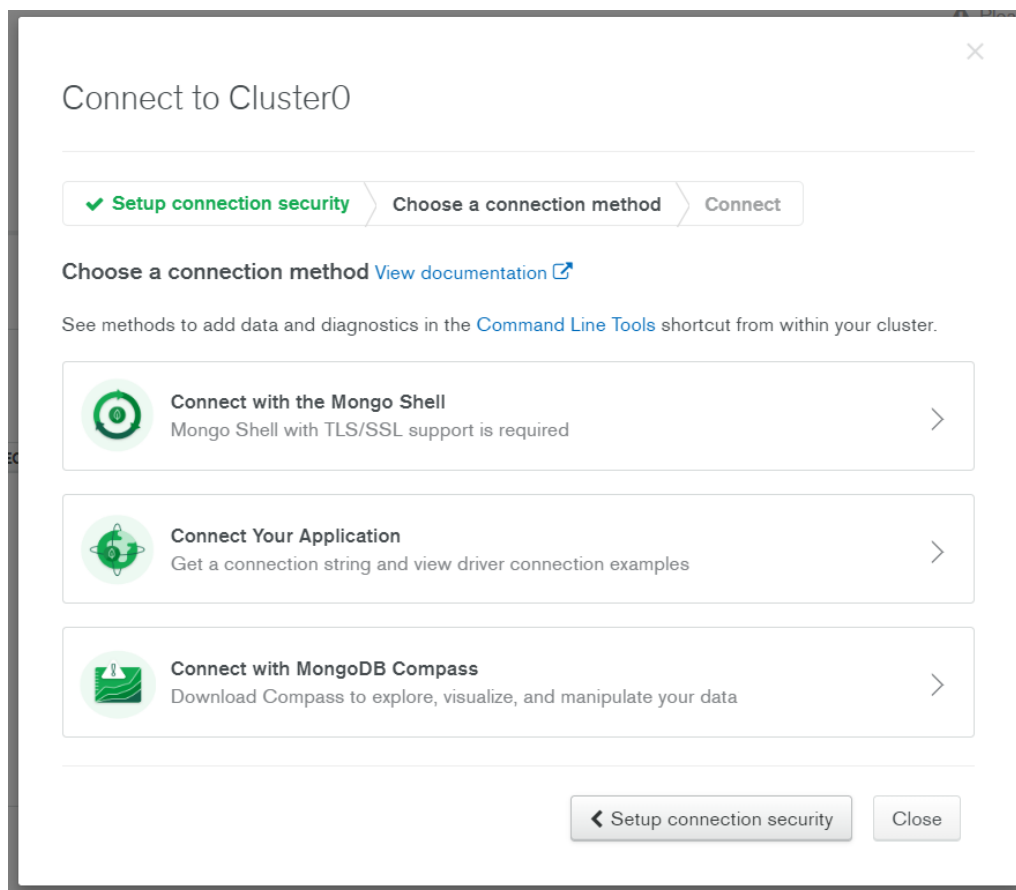


Close

Choose a connection method >

Para finalizar clicar no botão (**Choose a connection method**) que a seta 2 está a apontar.

7. Passo



Para a conexão ao *cluster*, existem 4 formas:

1. Pela **powershell** ou **cmd**.
2. Usando o *driver* do **MongoDB**, para uma determinada linguagem.
3. Usando um **ODM (Mongoose)**.
4. Usando o **Compass**.