



MANUAL – REGISTRO Y USO BÁSICO DE MONGO ATLAS

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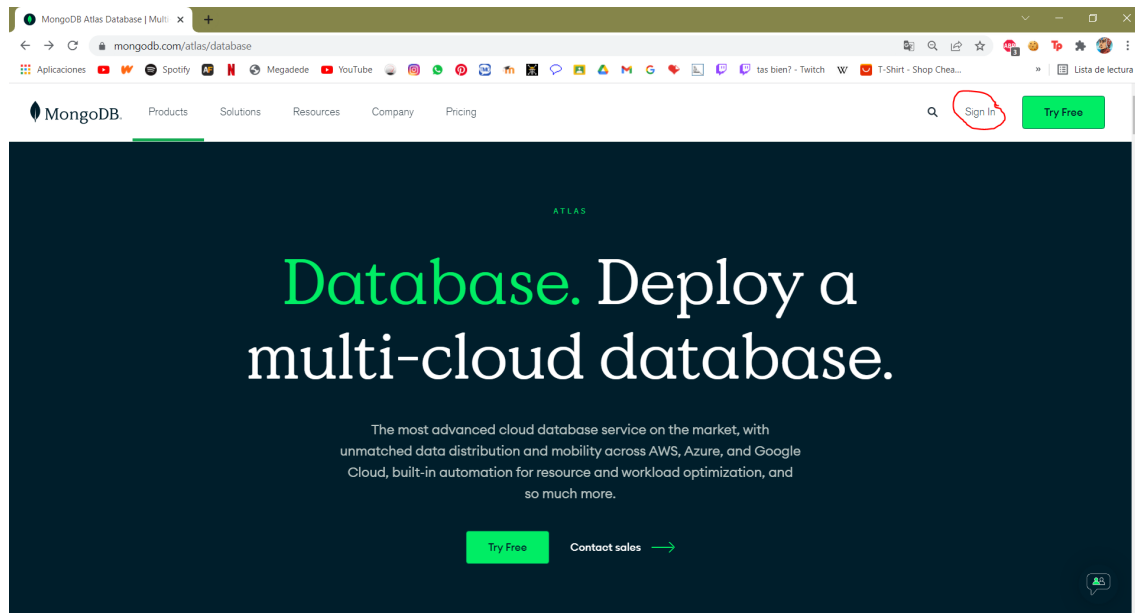
En este manual describimos el proceso del registro en mongo Atlas, y su configuración inicial, junto a los exports y a los imports.

Contenido

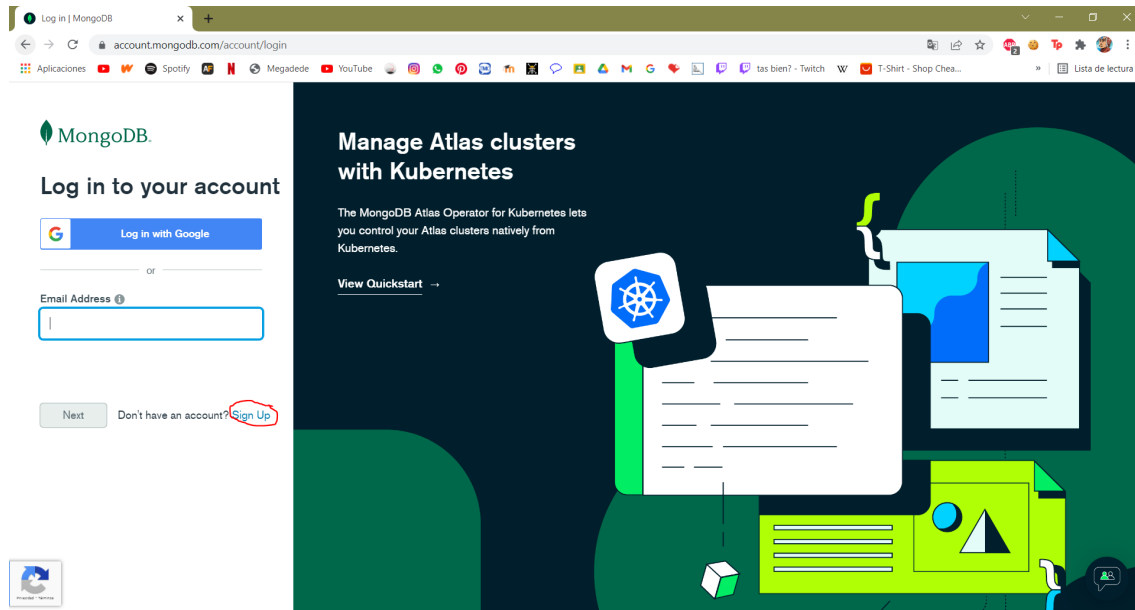
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REGISTRARSE EN MONGO ATLAS

Primero, ingresaremos a [la web oficial de Mongo Atlas](https://mongodb.com/atlas/database):



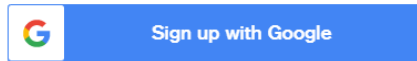
Y pulsaremos el botón “Sign in”. Ahora, le daremos a la opción de “Sign up” para darnos de alta como usuarios:



Nos pedirá que rellenemos una serie de datos personales. Una vez rellenados pulsaremos en “Sign up”:



Create your account



or

Email Address

We recommend using your work email

amenram1711@g.educaand.es ✓

First Name

Antonio Jose ✓

Last Name

Mendez Ramirez ✓

Password

***** ✓

Phone Number

653792644 ✓

Company Name

IES Punta del Verde ✓

Job Function

Student ▼

Country

Spain ▼

☒ I accept the [Privacy Policy](#) and the [Terms of Service](#)**Sign up**Have an account? [Log in now](#)

Ahora, nos pide que verifiquemos el e-mail correspondiente:



Great, now verify your email



Check your inbox at

<amenram1711@g.educaand.es> and click the verification link inside to complete your registration. This link will expire shortly, so verify soon!

Don't see an email? Check your spam folder.

Link expired? [Resend verification email](#)

Si entramos a la bandeja de entrada de nuestro Gmail, nos saldrá el correo de confirmación. Pulsaremos el botón "Verify email":



Email Address Verification



Verify Email

Secure your MongoDB account by verifying your email address.

This link will expire after 2 hours. To request another verification link, please [log in](#) to prompt a re-send link.

This message was sent from MongoDB, Inc., 1633 Broadway, 38th floor, NY, NY 10019

Y nos confirmará que nos hemos verificado correctamente:



Email successfully verified!



Continue

Nos pedirá responder unas preguntas sobre el uso que le daremos a Mongo:

Welcome to Atlas! 🌱

Tell us a few things about yourself and your project.



What is your goal today?

Your answer will help us guide you to successfully getting started with MongoDB Atlas.

- ☐ Build a new application
- ☐ Explore what I can build
- ☐ Migrate an existing application
- ☒ Learn MongoDB

What type of application are you building?

Content Management

What is your preferred language?

We'll use this to customize code samples and content we share with you. You can always change this later.

JS JavaScript


Y tendremos que elegir un plan de suscripción. Nosotros elegiremos el plan gratis:

MONGODB ATLAS

Deploy a cloud database

Experience the best of MongoDB on AWS, Azure, and Google Cloud. Choose a deployment option to get started.

PREVIEW

 **Serverless**


For serverless applications that aren't critical with variable traffic. Minimal configuration required.

- ✓ Pay only for the operations you run
- ✓ Resources scale seamlessly to meet your workload
- ✓ Always-on security and backups

[Create](#)

Starting at
\$0.30/1M reads

ADVANCED

 **Dedicated**


For production applications with sophisticated workload requirements. Advanced configuration controls.

- ✓ Network isolation and fine-grained access controls
- ✓ On-demand performance advice
- ✓ Multi-region and multi-cloud options available

[Create](#)

Starting at
\$0.08/hr*
*estimated cost \$56.94/month

FREE

 **Shared**

For learning and exploring MongoDB in a cloud environment. Basic configuration options.

- ✓ No credit card required to start
- ✓ Explore with sample datasets
- ✓ Upgrade to dedicated clusters for full functionality

[Create](#)

Starting at
FREE

[I'll do this later](#) [View all features](#) [Advanced Configuration Options](#)

Ahora, le daremos a “crear cluster”. Desde esta opción lo podremos configurar, de manera que nos da la opción de crear usuarios con los que conectarnos a la nube, pero esto lo dejaremos para más adelante.

Configuración del Cluster:

Añadiremos la IP 0.0.0.0 para poder conectarnos desde cualquier IP:

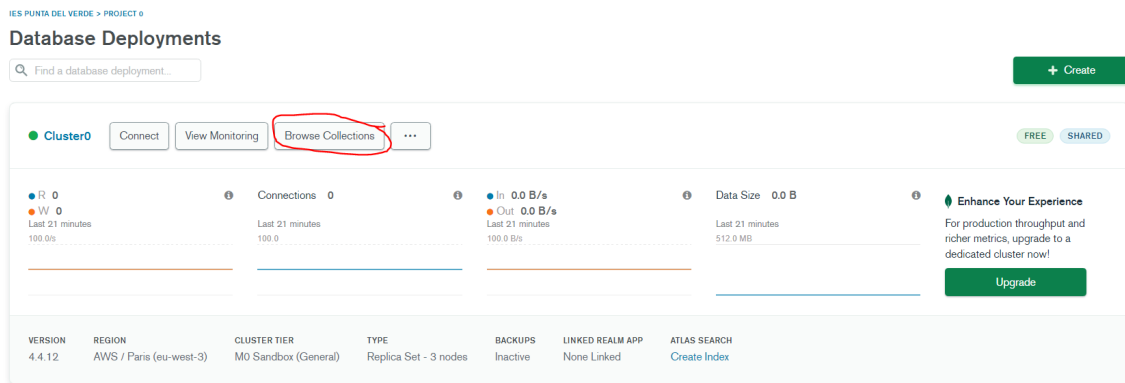
Add entries to your IP Access List

Only an IP address you add to your Access List will be able to connect to your project's clusters. You can manage existing IP entries via the [Network Access Page](#).

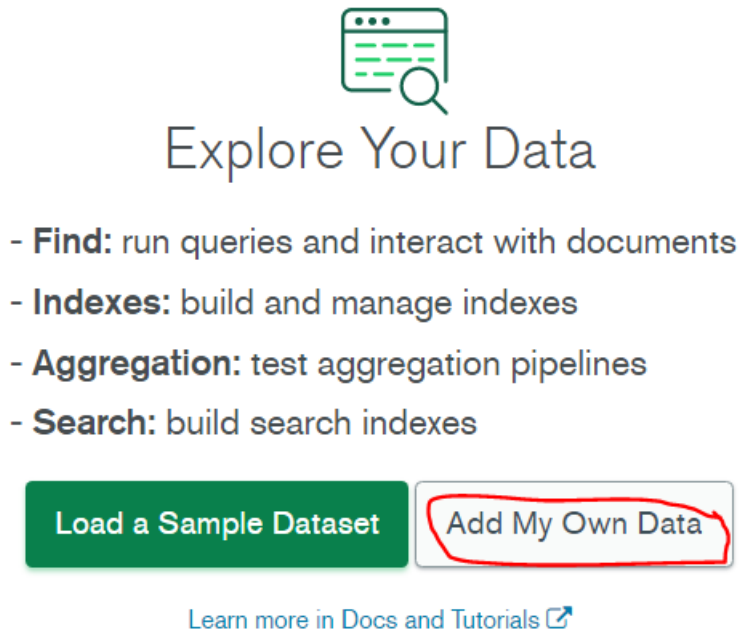
IP Address	Description	
<input type="text" value="Enter IP Address"/>	<input type="text" value="Enter description"/>	<input type="button" value="Add Entry"/> <input type="button" value="Add My Current IP Address"/>

IP Access List	Description	
0.0.0.0/0	0	<input type="button" value="REMOVE"/>

Ahora, nos iremos a la opción de Databases. Una vez dentro, le daremos a “Browse Collections”:



Nos dejará elegir entre añadir una base de datos ejemplo propio de Mongo o meter nuestra propia de base de datos. Elegiremos la 2ª opción:



Así que, crearemos la base de datos y su colección:

×

Create Database

Database name ?

Collection name ?

Additional Preferences

☐ Capped Collection ?

CancelCreate

Creación de usuario en mongo Atlas

Es el momento de crear el usuario que vamos a usar: ahora, nos iremos al menú y elegiremos la opción “Database Access”

IES PUNTA DEL VERDE > PROJECT 0

Database Access

Database Users

Custom Roles



Create a Database User

Set up database users, permissions, and authentication credentials in order to connect to your clusters.

Add New Database User

[Learn more](#)

Le daremos a la opción “Add New Database User” y nos pedirá unos datos sobre el usuario que vamos crear (Le daremos los permisos por defecto):

Add New Database User

Create a database user to grant an application or user, access to databases and collections in your clusters in this Atlas project. Granular access control can be configured with default privileges or custom roles. You can grant access to an Atlas project or organization using the corresponding [Access Manager](#)

Authentication Method

Password

Certificate

AWS IAM
(MongoDB 4.4 and up)

MongoDB uses [SCRAM](#) as its default authentication method.

Password Authentication

amenram

..... SHOW

Autogenerate Secure Password

Copy

Database User Privileges

Configure role based access control by assigning database users a mix of one built-in role, multiple custom roles, and multiple specific privileges. A user will gain access to all actions within the roles assigned to them, not just the actions those roles share in common. **You must choose at least one role or privilege.** [Learn more about roles.](#)

Built-in Role

Select one [built-in role](#) for this user.

1 SELECTED ▼

Sincronización Atlas-Compass

Una vez terminemos de crear el usuario, nos conectaremos a la base de datos anteriormente creada desde Compass. Para ello, vamos al apartado de Cluster y le damos a la opción “Connect”:

Cluster0

Connect

View Monitoring

Browse Collections

...

FREE

SHARED

Monitoring for Cluster0 is Paused

Monitoring will automatically resume when you connect to your cluster. Visit [the documentation](#) for more info.

VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED REALM APP	ATLAS SEARCH
5.0.6	AWS / Paris (eu-west-3)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked	Create Index

Escogeremos la opción de Compass:

Connect to Cluster0

✓ Setup connection security > Choose a connection method > Connect

Choose a connection method [View documentation](#)

Get your pre-formatted connection string by selecting your tool below.

- Connect with the MongoDB Shell**
Interact with your cluster using MongoDB's interactive Javascript interface >
- Connect your application**
Connect your application to your cluster using MongoDB's native drivers >
- Connect using MongoDB Compass**
Explore, modify, and visualize your data with MongoDB's GUI >

Go Back Close

Una vez elegido, nos saldrá un enlace para importar la base de datos a Compass:

New Connection ☆ FAVORITE

Fill in connection fields individually



Paste your connection string (SRV or Standard ⓘ)

mongodb+srv://amenram:<password>@cluster0.r6zkt.mongodb.net/test

Connect

IMPORTANTE: TENEMOS QUE CAMBIAR <password> POR LA CONTRASEÑA QUE LE HEMOS DADO AL USUARIO ANTERIORMENTE.

Si vamos al apartado de las bases de datos, podemos ver que se ha creado correctamente:

Database Name	Storage Size	Collections	Indexes	
admin	0.0B	0	0	
local	0.0B	7	0	
ventas	4.1KB	1	1	

Para probar la conectividad y la sincronización entre Compass y la nube, vamos a crear una nueva colección en la base de datos “ventas” desde Compass:V

Create Collection

Collection Name

☐ Capped Collection

Fixed-size collections that support high-throughput operations that insert and retrieve documents based on insertion order. 

☐ Use Custom Collation

Collation allows users to specify language-specific rules for string comparison, such as rules for lettercase and accent marks. 

☐ Time-Series

Time-series collections efficiently store sequences of measurements over a period of time.

Vemos como se ha creado en Compass:

Collections						
CREATE COLLECTION						
Collection Name	Documents	Avg. Document Size	Total Document Size	Num. Indexes	Total Index Size	Properties
Herramientas	0	-	0.0 B		0.0 B	
articulos	0	-	0.0 B	1	4.1 KB	

Y como a su vez se ha creado en Atlas:

▼ ventas

Herramientas

articulos

Conectarse desde Shell

Ahora vamos a ver otra forma de conectarnos, en este caso desde Powershell. Le daremos al botón de “Connect” y elegiremos la opción:

Connect to Cluster0


✓ Setup connection security

Choose a connection method

Connect


Choose a connection method [View documentation](#)

Get your pre-formatted connection string by selecting your tool below.




Connect with the MongoDB Shell
Interact with your cluster using MongoDB's interactive Javascript interface

>



Connect your application
Connect your application to your cluster using MongoDB's native drivers

>



Connect using MongoDB Compass
Explore, modify, and visualize your data with MongoDB's GUI

>

Go Back

Close

Nos dejará un comando que tenemos que ejecutar en nuestra Powershell:

3 Run your connection string in your command line

Use this connection string in your application:

```
mongosh "mongodb+srv://cluster0.r6zkt.mongodb.net/myFirstDatabase" --apiVersion 1 --username amenram
```

Si lo ejecutamos, vemos que es como si estuviésemos en Atlas, pero desde un “Modo texto”:

```
PS C:\Users\Ioni> mongo "mongodb+srv://cluster0.r6zkt.mongodb.net/myFirstDatabase" --apiVersion 1 --username amenram
MongoDB shell version v5.0.3
Enter password:
connecting to: mongodb://cluster0-shard-00-02.r6zkt.mongodb.net:27017,cluster0-shard-00-01.r6zkt.mongodb.net:27017,cluster0-shard-00-00.r6zkt.mongodb.net:27017/myFirstDatabase?authSource=admin&compressors=disabled&gssapiServiceName=mongodb&replicaSet=atlas-3hdpqi-shard-0&ssl=true
Implicit session: session { "id" : UUID("9e746ea9-9f6e-49da-b1a2-188ac729830c") }
MongoDB server version: 5.0.6

*****
Warning: the "mongo" shell has been superseded by "mongosh",
which delivers improved usability and compatibility. The "mongo" shell has been deprecated and will be removed in
an upcoming release.
We recommend you begin using "mongosh".
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
*****
WARNING: some history file lines were truncated at 4095 bytes.
MongoDB Enterprise atlas-3hdpqi-shard-0:PRIMARY>
```

```
MongoDB Enterprise atlas-3hdpqi-shard-0:PRIMARY> use ventas
switched to db ventas
MongoDB Enterprise atlas-3hdpqi-shard-0:PRIMARY> show collections
Herramientas
articulos
MongoDB Enterprise atlas-3hdpqi-shard-0:PRIMARY>
```


Aquí podemos crear bases de datos, colecciones, hacer inserts, hacer consultas, etc...

Importar y exportar bases de datos en Atlas

Para esto, necesitaremos crear un usuario Administrador para conectarnos a nuestro Atlas:

Nos tendremos que ir a Database Access > > Add new Database User y le daremos los privilegios de "Atlas Admin".

Add New Database User



Create a database user to grant an application or user, access to databases and collections in your clusters in this Atlas project. Granular access control can be configured with default privileges or custom roles. You can grant access to an Atlas project or organization using the corresponding [Access Manager](#) 

Authentication Method

Password	Certificate	AWS IAM (MongoDB 4.4 and up)
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MongoDB uses [SCRAM](#) as its default authentication method.

Password Authentication

admin	
.....	SHOW
 Autogenerate Secure Password	 Copy

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Built-in Role

Select one [built-in role](#) for this user.

Atlas admin ▼

La función de esto será subir una base local que tenemos guardada en nuestro disco duro a la nube. Nos tendremos que ir al Cluster > 3 puntitos > Command Line Tools:

[mongoimport](#) | imports content from an Extended JSON, CSV, or TSV export

```
mongoimport --uri mongodb+srv://admin:<PASSWORD>@cluster0.r6zkt.mongodb.net/<DATABASE>  
> --collection <COLLECTION> --type <FILETYPE> --file <FILENAME>
```

[mongoexport](#) | produces a JSON or CSV export of data stored in a MongoDB instance

```
mongoexport --uri mongodb+srv://admin:<PASSWORD>@cluster0.r6zkt.mongodb.net/<DATABASE>  
> --collection <COLLECTION> --type <FILETYPE> --out <FILENAME>
```

Primero, meteremos el mongoexport de la base local que queremos exportar, pasándole su fichero, y después lo exportaremos:

```
PS C:\Users\Toni> mongoexport --collection=articulos --out=c:\users\Toni\Desktop\autoart.json  
2022-03-03T10:18:50.247+0100 connected to: mongodb://localhost/  
2022-03-03T10:18:50.293+0100 exported 9 records  
PS C:\Users\Toni> mongoimport --uri mongodb+srv://admin:admin@cluster0.r6zkt.mongodb.net/ventas --collection articulos --type=json --file c:\users\Toni\Desktop\autoart.json  
2022-03-03T10:18:54.912+0100 connected to: mongodb+srv://[**REDACTED**]@cluster0.r6zkt.mongodb.net/ventas  
2022-03-03T10:18:55.087+0100 9 document(s) imported successfully. 0 document(s) failed to import.
```