X.509 Authentication

> This feature is only available if you use Niagara with a version superior or equal to 4.11

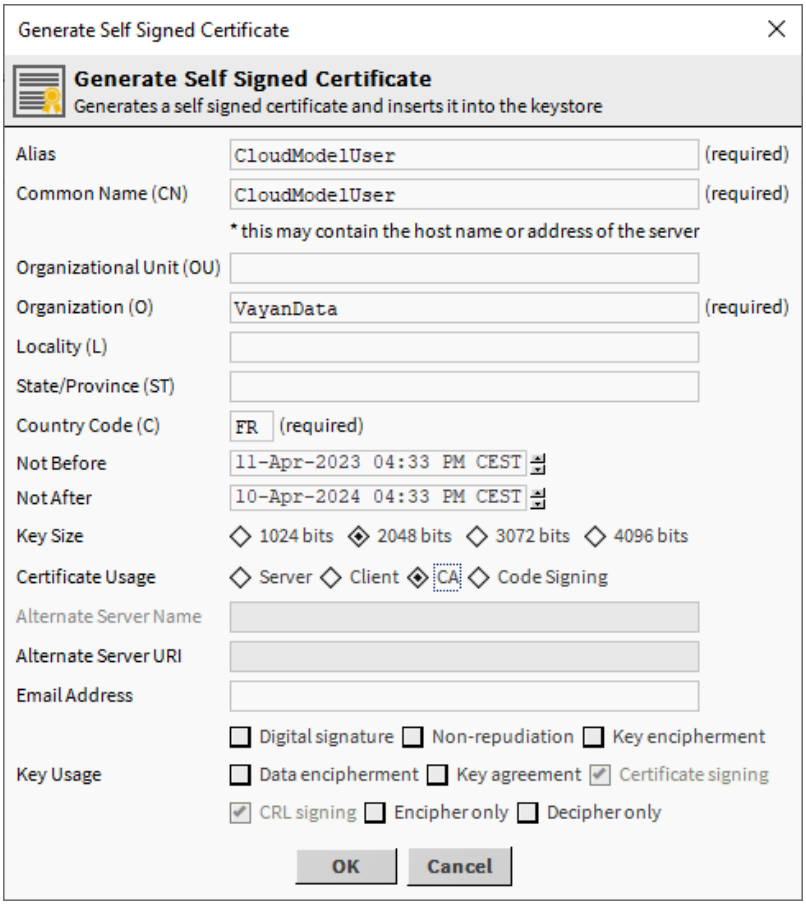
You can also authenticate using a certificate. Here's a tutorial on how to create a certificate for an Atlas database.

1. Create the certificate.

1.1 Create the Certificate Authority

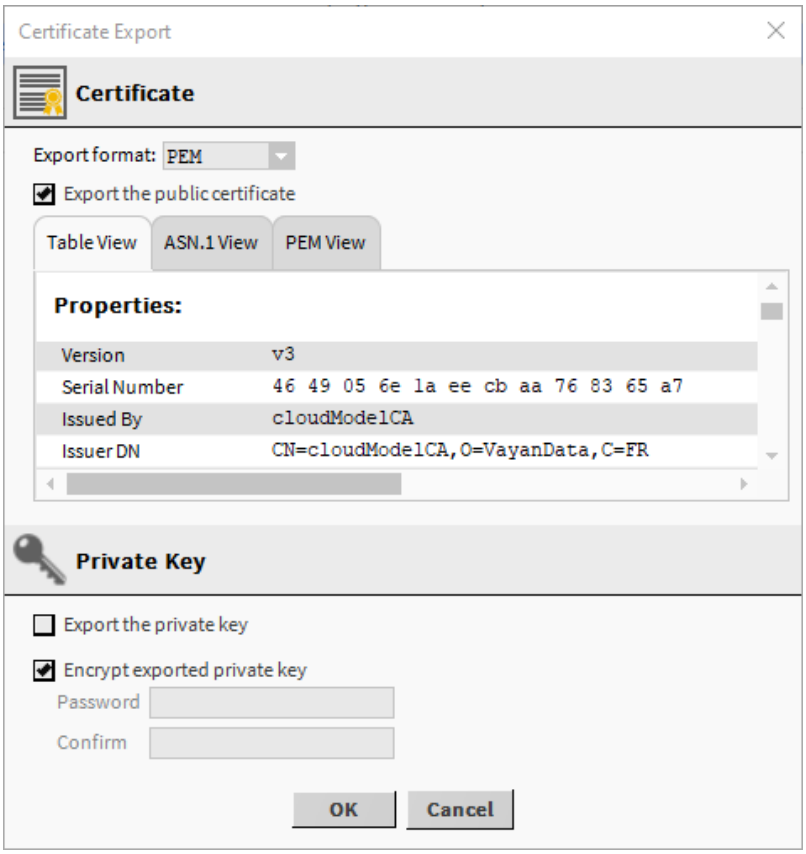
First you will need a Certificate Authority (CA).

In Platform > Certificate Management, in the User Key Store tab, create a new certificate by clicking on the "New" button.
A popup asking for information will appear, fill at least the required input fields, and select "CA" as the Certificate Usage and click on OK. Enter a password and click on OK. After some time your certificate should appear in the User Key Store Tab.



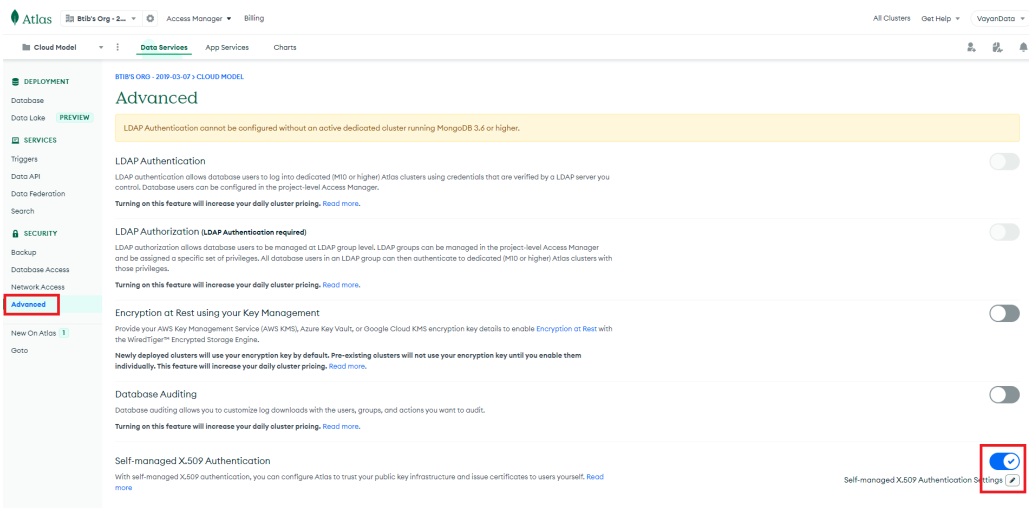
Select your newly created certificate, and using the "Export" button, export it.

A popup will appear, no modification is needed, click OK.



1.2 Add the Certificate Authority to Atlas

In the Atlas UI, select your Project in the left side Panel, select Advanced in the Security section.
Enable the Self-managed X.509 Authentication, edit the settings (click on the pencil button), upload your Certificate Authority and save.

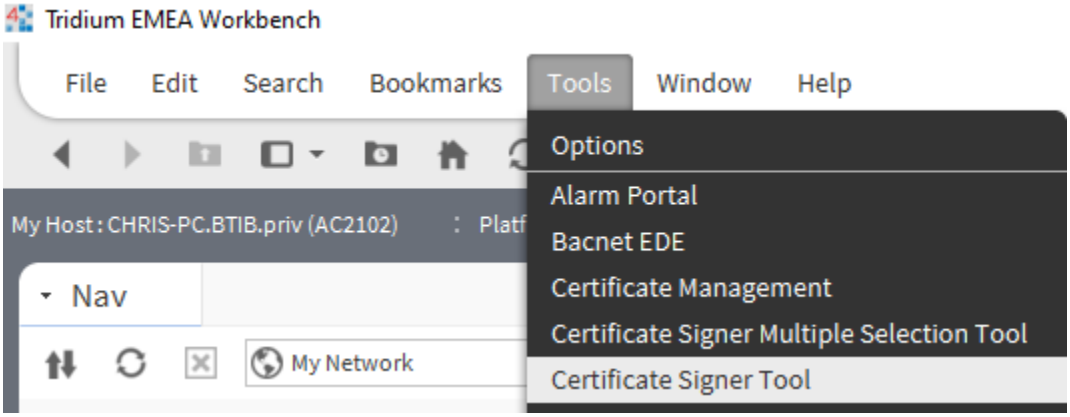


1.3 Create the Client Certificate

In the same way as in the 1.1 step, create a new certificate, but this time, select "Client" as the Certificate Usage.

To be accepted by mongo, this certificate needs to be signed.
Select the certificate and click on "Cert Request" and click OK in the popup and save.

In the Workbench, select the Tools tab and select the "Certificate Signer Tool"



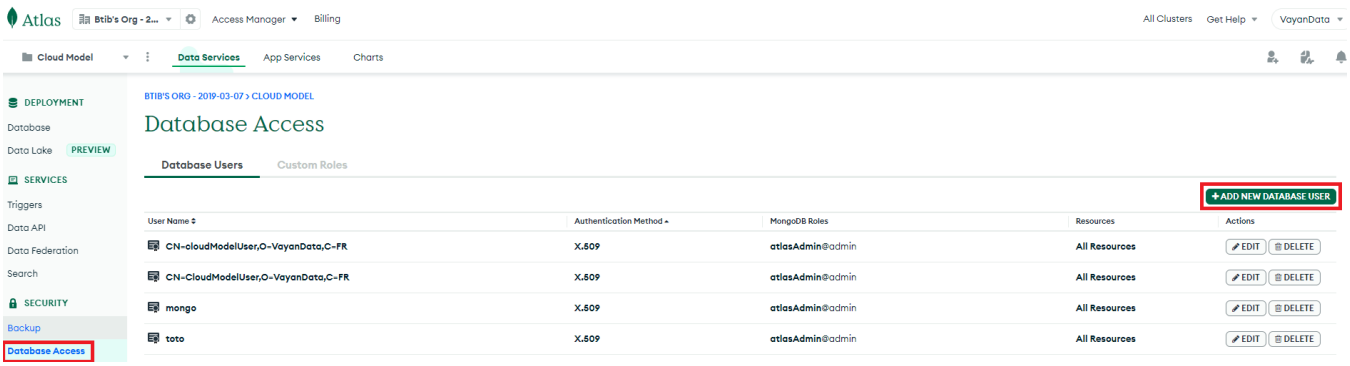
In the popup, select your newly created .csr file, select the CA alias created in step 1.1 with the password you used, and click OK. Now, choose a location for your pem file.

Next, click on import in the Certificate Manager and import the pem file that you just generated. Your certificate should now have a green shield .

Export this certificate but this time, with the private key. And import it in the User Key Store in your Station (Services > PlatformServices > CertManagerService).

1.4 Create a Mongo User

Go back in the Atlas UI, in your project and select the Database Access. And add a new User.



In the popup, select Certificate, and add the common name.
The common name must be the RFC2253 formatted subject from the client certificate. Here is a command line to obtain it (you might need to install openssl) :

openssl x509 -in <pathToClientPEM> -inform PEM -subject -nameopt RFC2253

Select a role and add the user.

2. Setup the connector

2.1 Put the Connection String

When a certificate is used to authenticate, the connection string is a bit different from the username+password one. It should look like this:

mongodb+srv://<hostname>/?authSource=%24external&authMechanism=MONGODB-X509&retryWrites=true&w=majority&tls=true

(the main difference is the presence of the authsource, and the authMechanism).

Fill this ConnectionString with your hostname and add it to your connector in the connectionString slot and fill the databaseName slot.

2.2 Put the Certificate

Drag and drop a ClientCertificateAuthentication from the palette (in the Authentication folder) in the AuthenticationSchemes component in your connector and select your certificateAlias.

Enable the Connector and it should successfully connect to your database.

> Since the 4.13, certificates can now have passwords, the slots in the ClientCertificateAuthentication have been adapted so you can enter the password