

Web UI installation

The background of the slide features a series of parallel diagonal stripes. From top-left to bottom-right, the stripes are orange, blue, orange, and light gray. The stripes are of varying widths and are set against a light gray background.

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Getting ready – download the files

1. Go to the website to download the Web UI application

Link : <http://www.axapsolutions.com/en/downloads>

Scroll down until you find the Web UI, as shown:

Avatax WebUI	
Version	Notes
v22090700	The web based application to calculate taxes for SAP B1. This version requires upgrading the web.config file. Minimum Avatax add-on Version: v22082900 Follow the steps detailed here

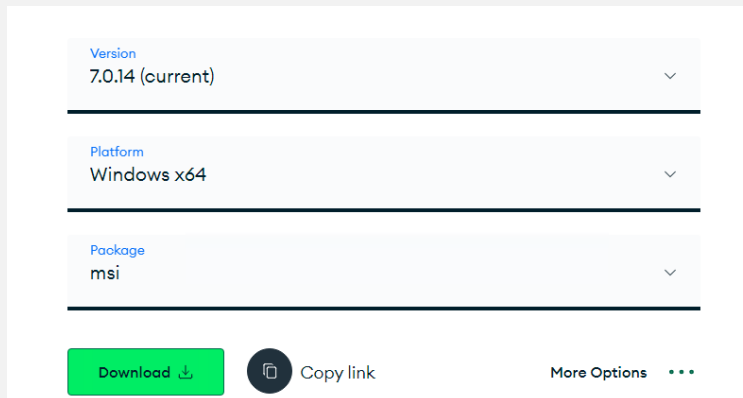
Download it, create a folder in your unit and save the solution (Zip file).

2. Install the “Mongo. dB” database

2.1 Download the installer

The Web UI application uses a database called “Mongo.db”, “community” edition.

<https://www.mongodb.com/try/download/community>



The screenshot shows the MongoDB download interface. It has three dropdown menus: 'Version' set to '7.0.14 (current)', 'Platform' set to 'Windows x64', and 'Package' set to 'msi'. Below these are three buttons: a green 'Download' button with a download icon, a 'Copy link' button with a copy icon, and a 'More Options' button with a three-dot menu icon.

There are different versions available, it is recommended to download the last edition. However, depending on the Windows installed, it could be an incompatibility with the latest release; in that case, try a previous version.

Also, for the newest versions you need to install the Mongo DB shell:

<https://www.mongodb.com/try/download/shell>

Version
2.3.0

Platform
Windows x64 (10+)

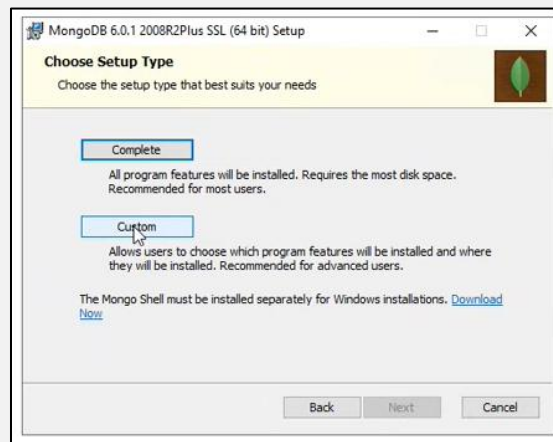
Package
zip

Download
Copy link
More Options

2.2 Install the database

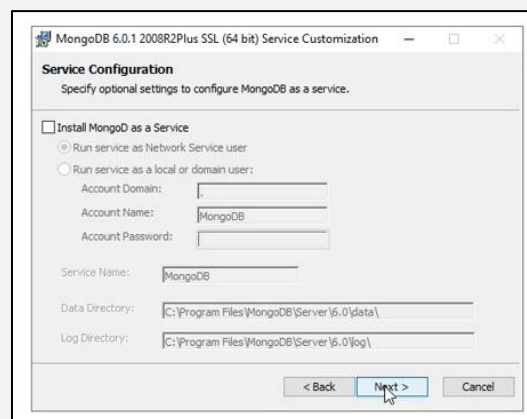
Press Next, in the next screen check the box to accept the terms & conditions.

Select “Custom”, when the below screen shows up.

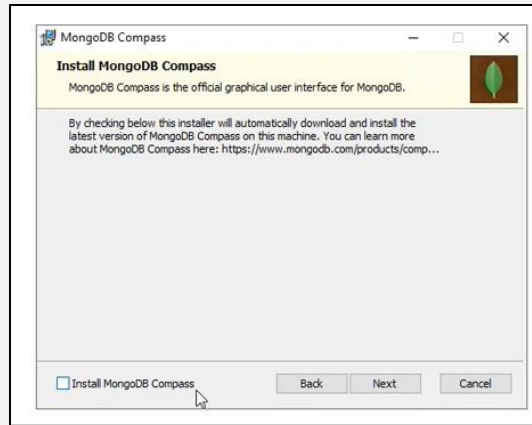


Press “Next” in the follow screen (“Custom set up”).

Afterwards, uncheck the box “Install MongoDB as a service” and press “Next” as shown in the below screen:



For the screen “Install Mongo Compass” uncheck the box:



Finally, press “Next” and Install.

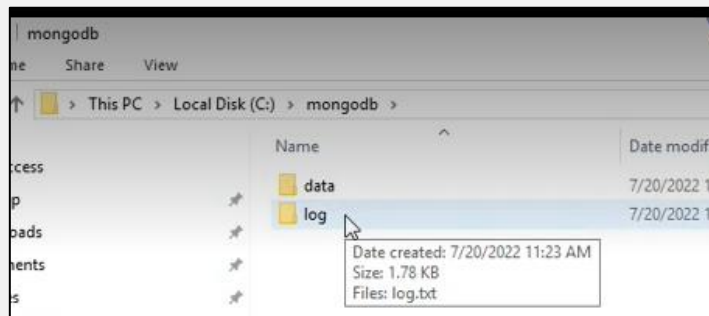
2.3 Set the MongoDB as a service

To have the Application running at all times, it must be configured as a service, this must be done manually.

2.3.1 Locate and create the folders

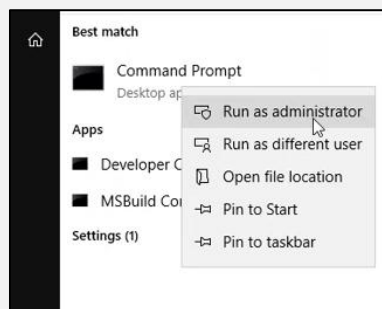
Two folders must be created in Disc C for the application.

As shown, one folder is for the data and another for the logs.

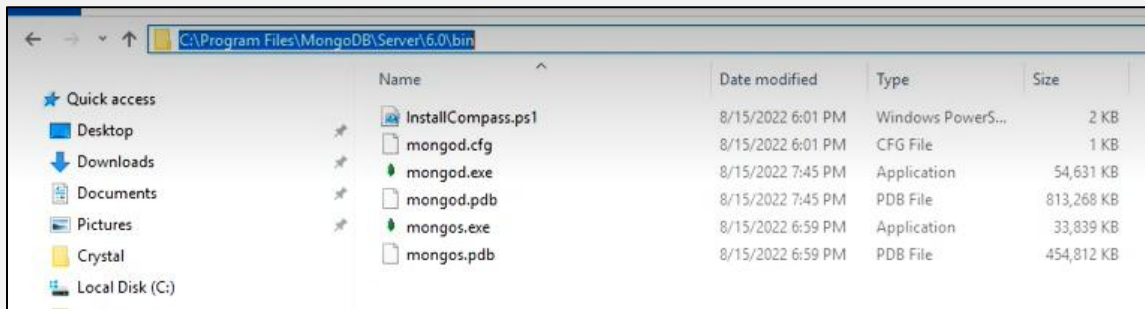


2.3.2 Create MongoDB as a service

Go to the windows start bar, type “cmd”, right click on the “command prompt” console because you must run it as an “Administrator”.



Once the console opens to access the database you must type the location. So, you have to find where MongoDB was installed, and copy the path as shown :

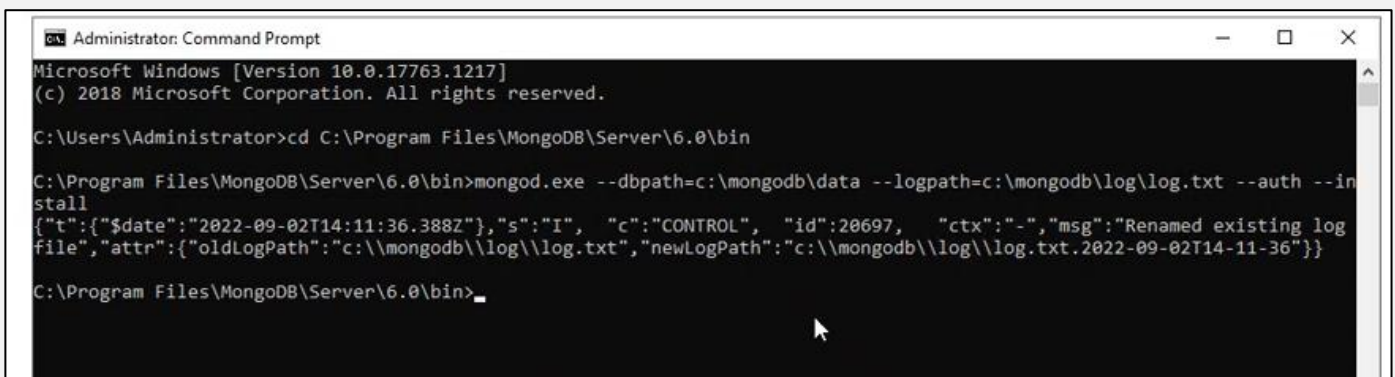


Then type in the console the letters “cd”, which stands for chain directory, and paste the path previously copied. Finally press enter.



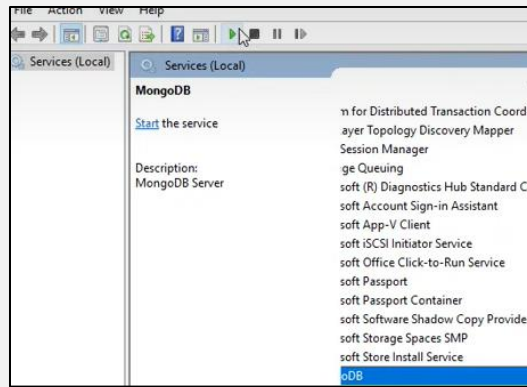
Afterward, add the following script and execute:

`mongod.exe --dbpath=c:\mongodb\data --logpath=c:\mongodb\log\log.txt --auth --install`

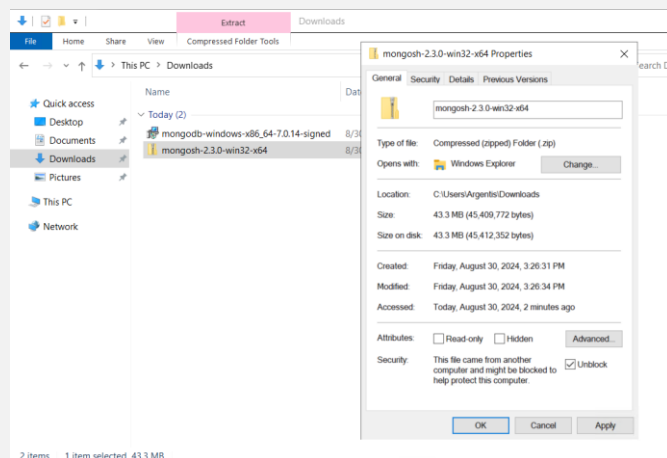


As a result of that, MongoDB should have been installed as a service on your PC.

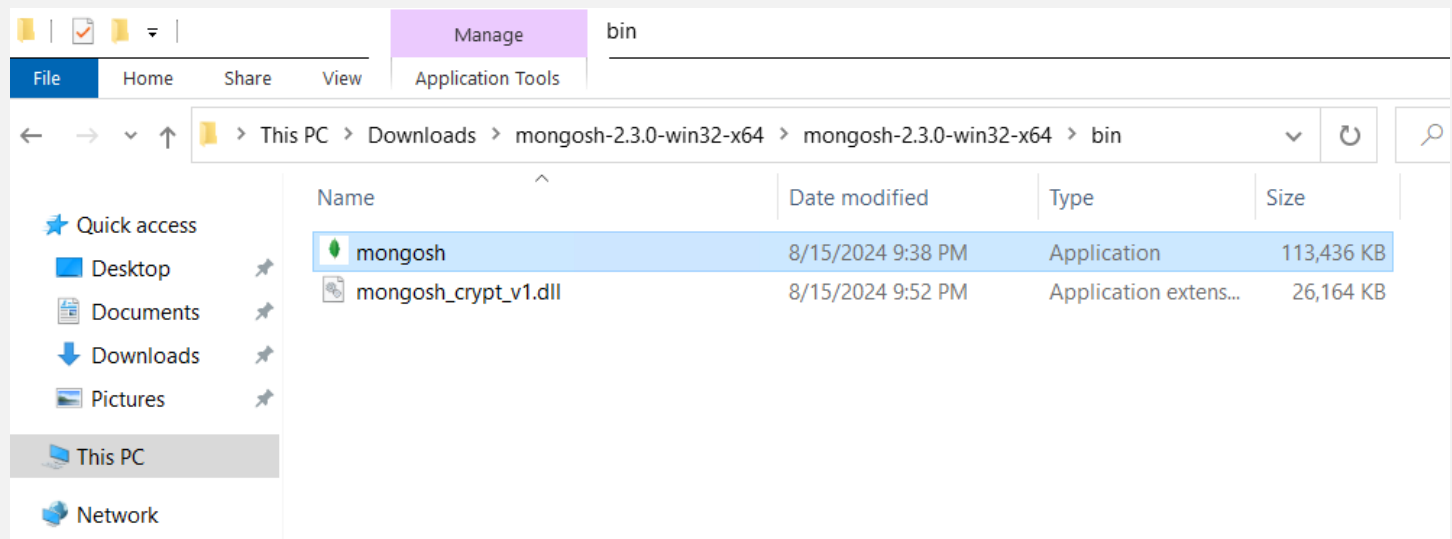
To check it, go to “Services” and search for it. Once it is found, select it and press “Run” as shown.



Search for the mongo shell file, Unblock and extract all the files



Search the file mongosh, and execute



Check the installation was successful by going back to the console and typing “mongo”, you should receive the below message

```
mongosh mongodb://127.0.0.1:27017/mongo?directConnection=true&serverSelectionTimeoutMS=2000
Please enter a MongoDB connection string (Default: mongodb://localhost/): mongo
mongo
Current Mongosh Log ID: 66ea04125edde1c8d6c73bf7
Connecting to:      mongodb://127.0.0.1:27017/mongo?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.3.1
Using MongoDB:      7.0.14
Using Mongosh:      2.3.1

For mongosh info see: https://www.mongodb.com/docs/mongodb-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

mongo> _
```

In the case something went wrong and you receive a failure message, you need to remove the mongo db. Please check the section to delete it.

2.3.3 Create the admin user in Mogo DB

Then you must add the below script to create the admin user and authenticate

```
db.createUser(
{
  user: "sa",
  pwd: "$b0admin",
  roles: [ { role: "userAdminAnyDatabase", db: "admin" } ]
}
```

Once the sentence is added, right click and you should get a message as shown:

```
mongo> use admin
switched to db admin
admin> db.createUser(
... {
...   user: "sa",
...   pwd: "$b0admin",
...   roles: [ { role: "userAdminAnyDatabase", db: "admin" } ]
... }
... )
{ ok: 1 }
admin> _
```


The other step is to authenticate the user so the database will allow us to modify the data.

If you get a 1 after you added the sentence then it was correctly created.

The comand is: db.auth("sa", "\$b0admin")

```
admin> db.auth("sa", "$b0admin")
{ ok: 1 }
admin> 
```

2.3.4 Create the database and an user for the WebUI

Type the below code in the console:

Insert

use Avatax

db.createUser(

{

user: "appUser",

pwd: "appUser6421",

roles: [{ role: "readWrite", db: "Avatax" }]

}

)

Result

```
admin> use Avatax
switched to db Avatax
Avatax> db.createUser(
... {
...   user: "appUser",
...   pwd: "appUser6421",
...   roles: [ { role: "readWrite", db: "Avatax" } ]
... }
... )
{ ok: 1 }
```

The other step is to authenticate the use, The comand is: db.auth("appUser", "appUser6421")

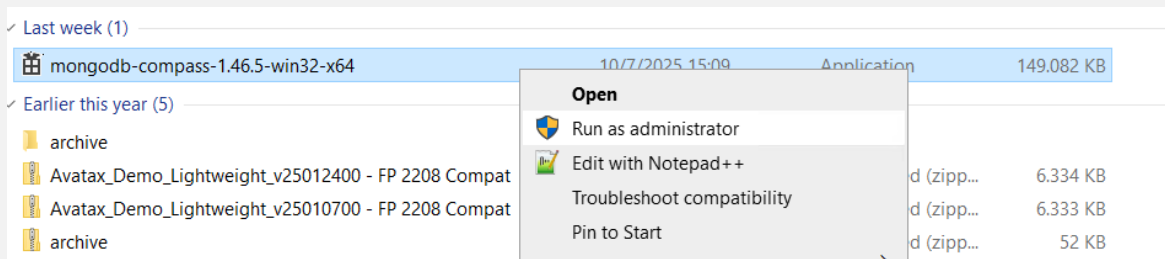
```
Avatax> db.auth("appUser", "appUser6421")
{ ok: 1 }
```

The database is unique for each instance, so if there is already one, but needs a second one; then you must create a new database by changing the name, user, and password.

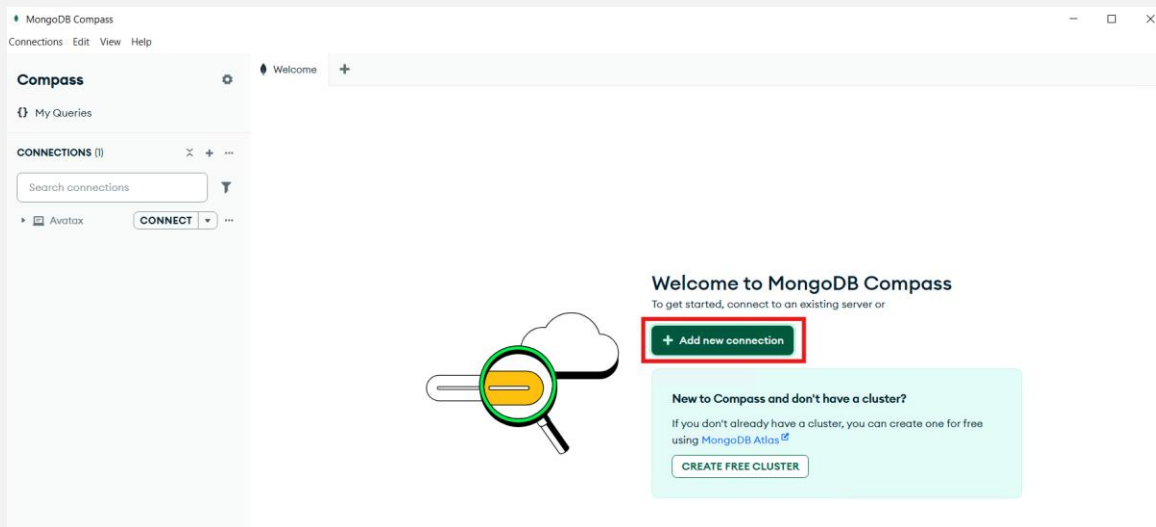
3. Download and install mongo compass

Navigate to this link to download it <https://www.mongodb.com/try/download/compass>

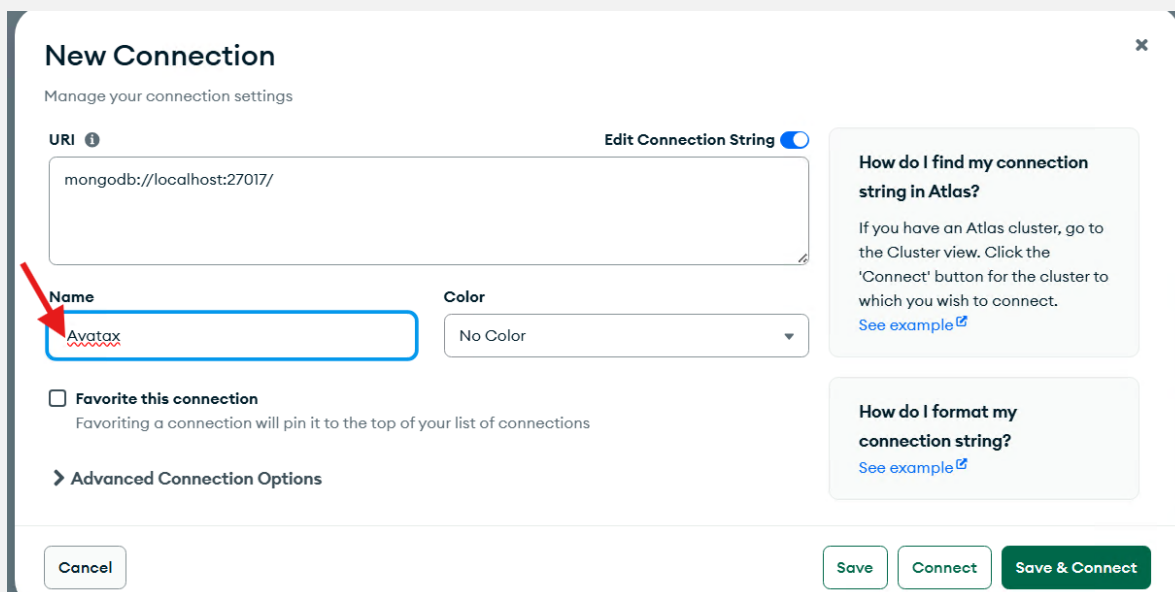
Install it.



Create a new connection



Then add a connection name and in the server set your type of connection



On the Advance Settings section, go to the Authentication, tab add the user details created for the WebUI database step 2.3.4

User : **appUser**

Password: **appUser6421**

The screenshot shows the 'New Connection' dialog box with the 'Authentication' tab selected. The 'Authentication Method' section has 'Username/Password' selected. The 'Username' field contains 'appUser' and the 'Password' field contains 'appUser6421'. The 'Authentication Database' field contains 'Avatax'. The 'Authentication Mechanism' section is empty. The 'Save & Connect' button is highlighted in green.

New Connection

Manage your connection settings

▼ **Advanced Connection Options**

General **Authentication** TLS/SSL Proxy/SSH In-Use Encryption Advanced

Authentication Method

Username/Password Username: appUser Optional

Password: Password: Optional

Authentication Database ?

Avatax Optional

Authentication Mechanism

Cancel Save Connect **Save & Connect**

How do I find my connection string in Atlas?

If you have an Atlas cluster, go to the Cluster view. Click the 'Connect' button for the cluster to which you wish to connect. [See example](#)

How do I format my connection string?

[See example](#)

Then, hit “Save & Connect”

The screenshot shows the 'New Connection' dialog box with the 'General' tab selected. The 'URI' field contains 'mongodb://localhost:27017/'. The 'Name' field contains 'Avatax' and the 'Color' dropdown is set to 'No Color'. The 'Favorite this connection' checkbox is unchecked. The 'Save & Connect' button is highlighted in green.

New Connection

Manage your connection settings

URI ? Edit Connection String ☒

mongodb://localhost:27017/

Name Avatax **Color** No Color

☐ **Favorite this connection**

Favoriting a connection will pin it to the top of your list of connections

➤ **Advanced Connection Options**

Cancel Save Connect **Save & Connect**

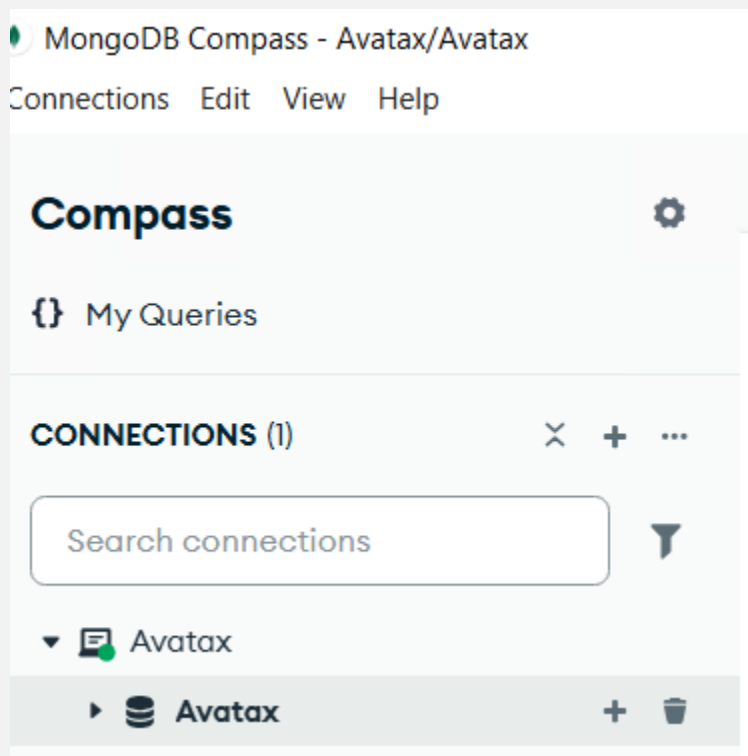
How do I find my connection string in Atlas?

If you have an Atlas cluster, go to the Cluster view. Click the 'Connect' button for the cluster to which you wish to connect. [See example](#)

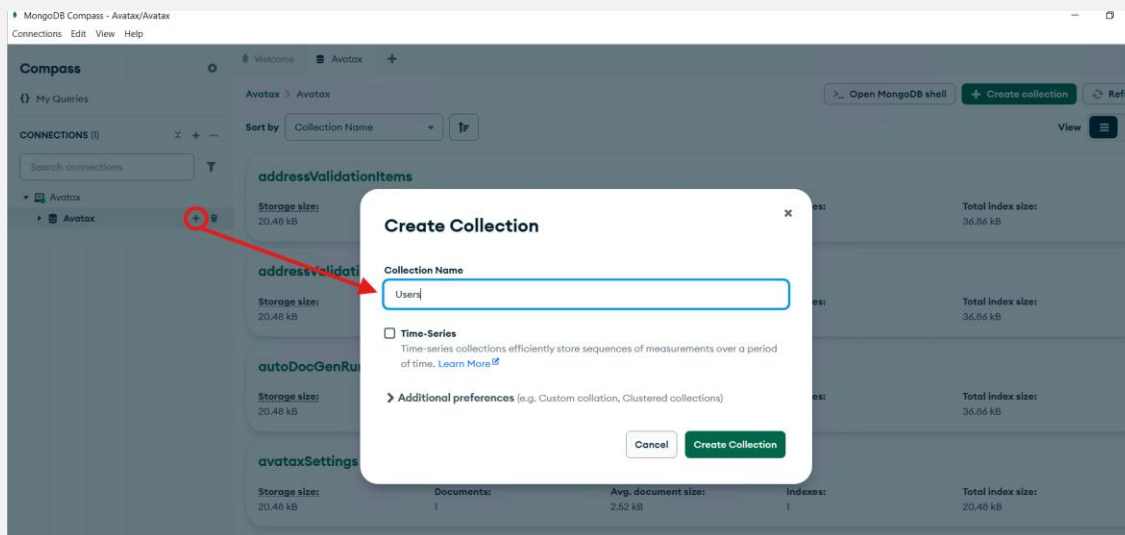
How do I format my connection string?

[See example](#)

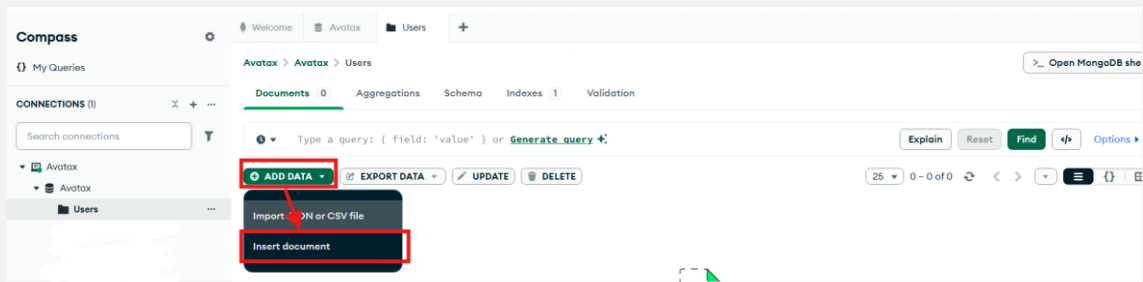
If everything is fine, you should see something like this:



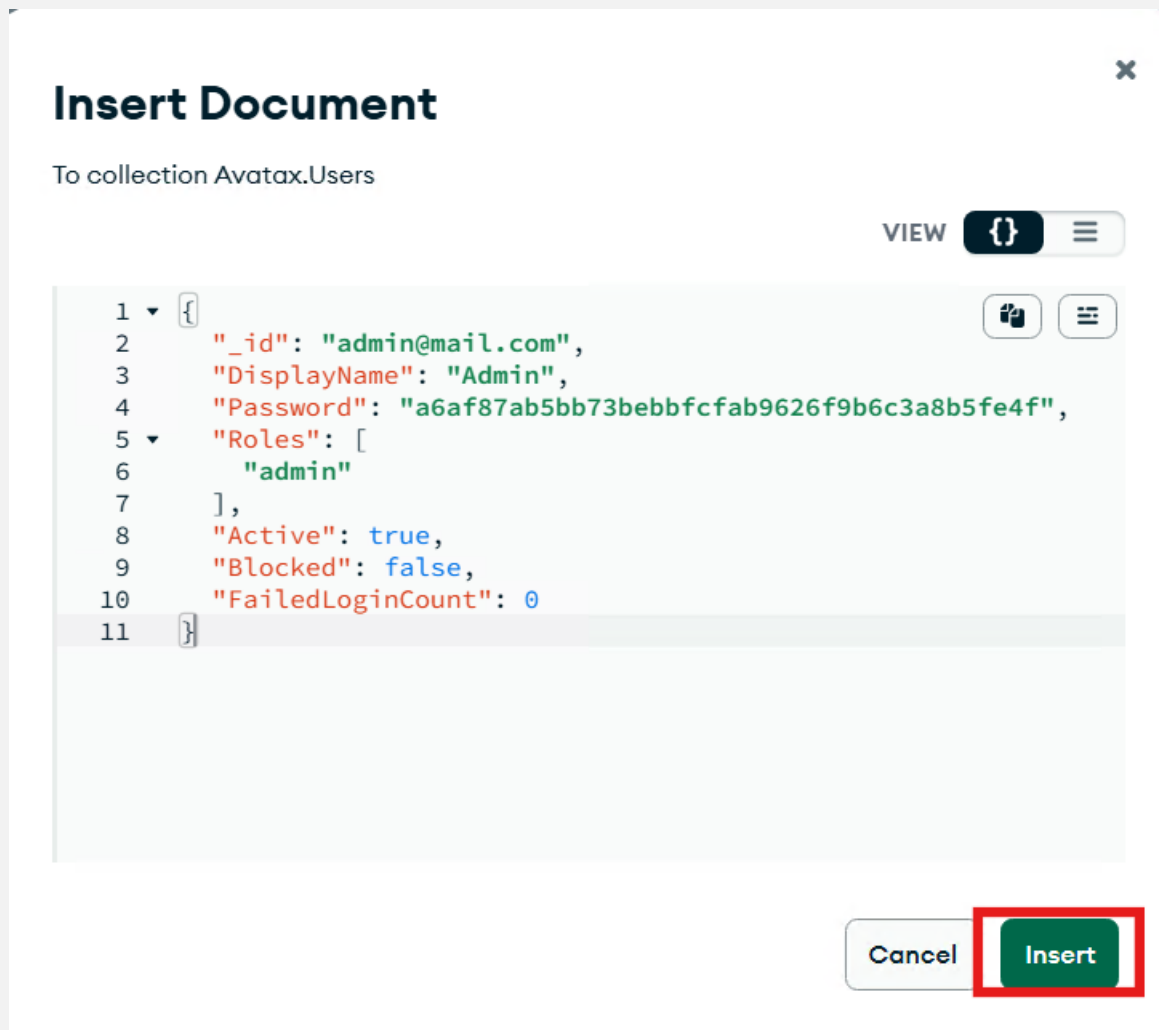
Create a folder named “users” (do not use capitals letters) under the collections.



Then go to the file “user”, right click and press insert a document



A screen pops up, paste the below script

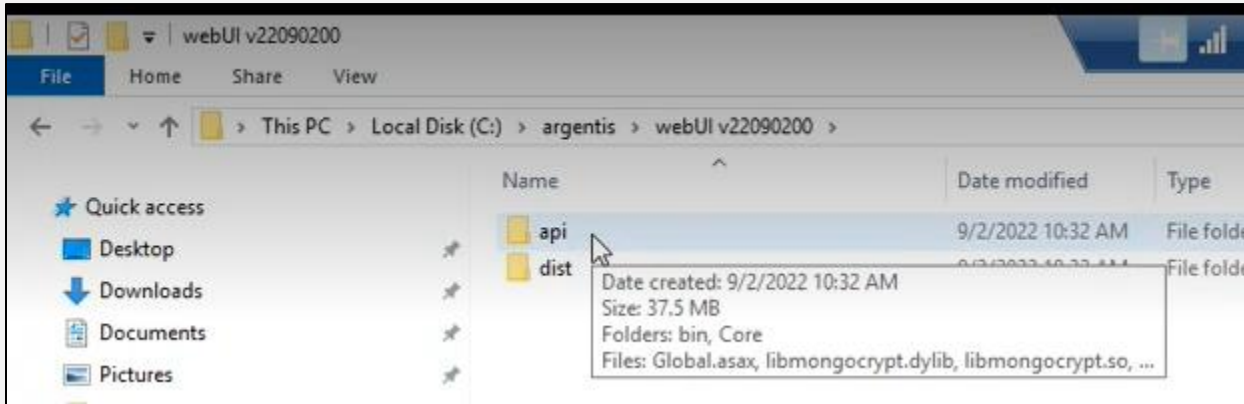


```
{
  "_id": "admin@mail.com",
  "DisplayName": "Admin",
  "Password": "a6af87ab5bb73bebbfcfab9626f9b6c3a8b5fe4f",
  "Roles": [
    "admin"
  ],
  "Active": true,
  "Blocked": false,
```

```
"FailedLoginCount": 0  
}}
```

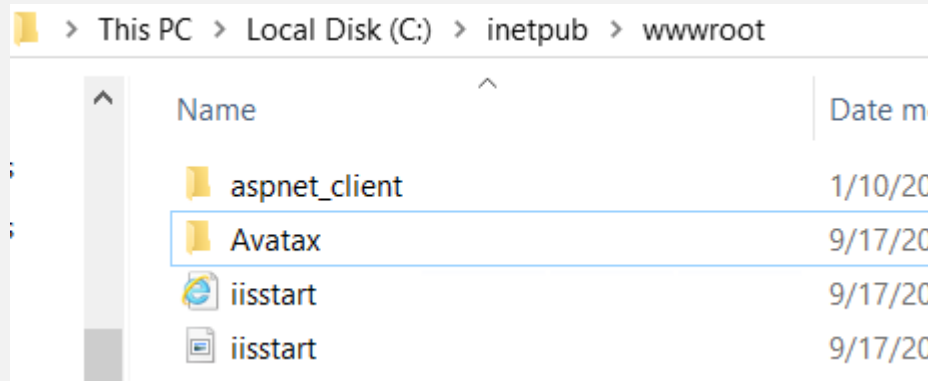
4. Creating the WebUI as an application.

On step 1, you downloaded the application, you should save it in a folder as shown:

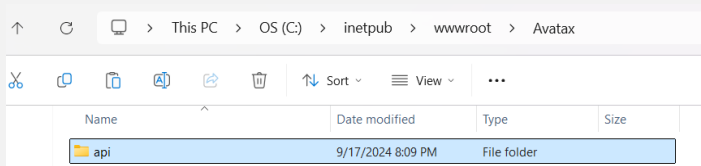


4.1 Configuring the application in IIS

Go to the path shown below and create a folder for Avatax.



Then copy the folder “api” of the solution and take it to the above location



Inside “Api” folder there should be a document “Web.config”.

If it isn’t, then look for it in the “bin” folder; copy it and put it in the “api” folder.

The “Web config” is a document that indicates to IIS that Avatax is an application and explains how it works.

This PC > OS (C:) > inetpub > wwwroot > Avatax > api > bin >				
Name	Date modified	Type	Size	
System.Net.Http.Extensions.Compression...	9/4/2024 3:18 PM	Application extens...	14 KB	
System.Net.Http.Formatting.dll	9/4/2024 3:18 PM	Application extens...	185 KB	
System.Net.Http.WebRequest.dll	9/4/2024 3:18 PM	Application extens...	25 KB	
System.Numerics.Vectors.dll	9/4/2024 3:18 PM	Application extens...	114 KB	
System.Runtime.CompilerServices.Unsafe...	9/4/2024 3:18 PM	Application extens...	18 KB	
System.Runtime.InteropServices.RuntimeL...	9/4/2024 3:18 PM	Application extens...	21 KB	
System.Security.AccessControl.dll	9/4/2024 3:18 PM	Application extens...	37 KB	
System.Security.Principal.Windows.dll	9/4/2024 3:18 PM	Application extens...	18 KB	
System.Text.Encoding.CodePages.dll	9/4/2024 3:18 PM	Application extens...	749 KB	
System.Text.Encoding.Web.dll	9/4/2024 3:18 PM	Application extens...	78 KB	
System.Text.Json.dll	9/4/2024 3:18 PM	Application extens...	629 KB	
System.Threading.Tasks.Extensions.dll	9/4/2024 3:18 PM	Application extens...	26 KB	
System.ValueTuple.dll	9/4/2024 3:18 PM	Application extens...	25 KB	
System.Web.Cors.dll	9/4/2024 3:18 PM	Application extens...	28 KB	
System.Web.Http.Cors.dll	9/4/2024 3:18 PM	Application extens...	40 KB	
System.Web.Http.dll	9/4/2024 3:18 PM	Application extens...	444 KB	
System.Web.Http.WebHost.dll	9/4/2024 3:18 PM	Application extens...	79 KB	
Web.config	9/4/2024 3:18 PM	CONFIG File	8 KB	
Web.Debug.config	9/4/2024 3:18 PM	CONFIG File	2 KB	
Web.Release.config	9/4/2024 3:18 PM	CONFIG File	2 KB	
ZstdSharp.dll	9/4/2024 3:18 PM	Application extens...	431 KB	

If you open it , it looks like below.

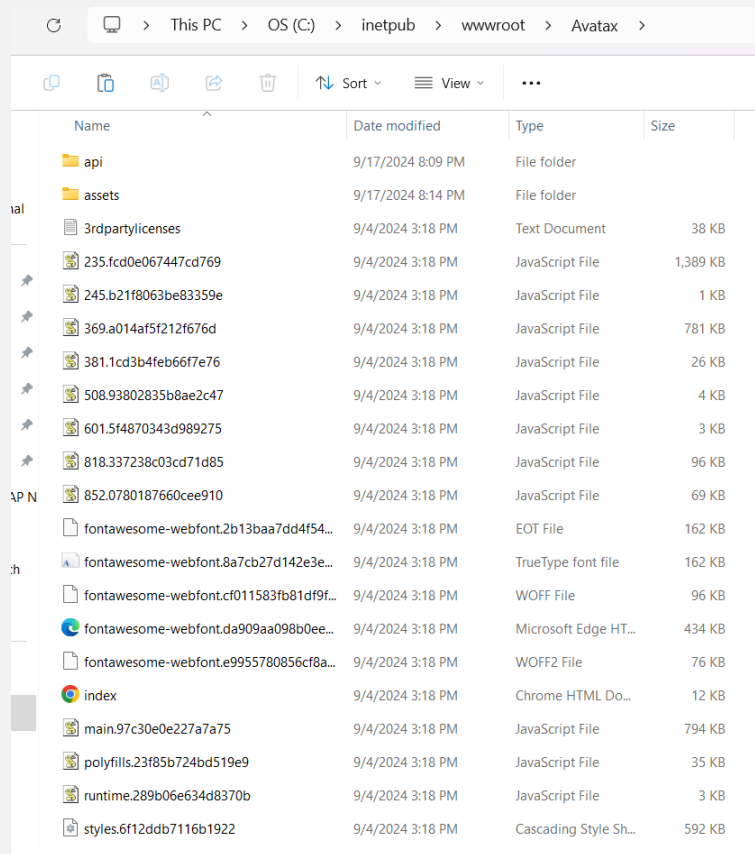
In row 16 it is the connection chain, which indicates to IIS where to connect to find the database.

```

1 <?xml version="1.0" encoding="utf-8"?>
2 <!--
3 For more information on how to configure your ASP.NET application, please visit
4 http://go.microsoft.com/fwlink/?LinkId=301879
5 ==>
6 <configuration>
7 <configSections>
8 <section name="log4net" type="log4net.Config.Log4NetConfigurationSectionHandler, log4net" requirePermission="false" />
9 </configSections>
10 <appSettings>
11 <add key="owin:AutomaticAppStartup" value="false" />
12 <!--JWT Authentication-->
13 <add key="jwtSecret" value="49nfbuinfl2bsu284nBbn9b482nBYVFP2021B2h291mBb2uns" />
14 <add key="jwtHashAlgorithm" value="HS256" />
15 <!--MongoDB Server-->
16 <add key="mongoDbConnString" value="mongodb://appUser:appUser64213localhost:27017/Avatax?safe=true" />
17 <add key="mongoDbName" value="Avatax" />
18 <!--Default Language-->
19 <add key="language" value="es" />
20 <add key="version" value="1.0" />
21 <!--HTTP API-->
22 <add key="log" value="false" />
23 <add key="compress" value="true" />
24 <!--Log Documents-->
25 <add key="logDeep" value="true" />
26 </appSettings>
27 <!--
28 For a description of web.config changes see http://go.microsoft.com/fwlink/?LinkId=235367.
29
30 The following attributes can be set on the <httpRuntime> tag.
31 <system.Web>
32 <httpRuntime targetFramework="4.6" />
33 </system.Web>
34 -->
35 <system.web>
36 <customErrors mode="Off" />
37 <compilation targetFramework="4.8" />
38 <httpRuntime targetFramework="4.6" maxRequestLength="56000" />
39 <globalization culture="en-US" uiCulture="en" />
40 </system.web>
41 <log4net>
42 <appender name="RollingLogFileAppenderOutput" type="log4net.Appender.RollingFileAppender">
43 <file value="c:/logs/AvataxWebAPI_" />
44 <appendToFile value="true" />
45 <rollingStyle value="Date" />
46 <datePattern value="yyyyMMdd'.log'" />
47 <maxSizeRollBackups value="10" />
48 <maximumFileSize value="5MB" />
49 <staticLogFileName value="false" />
50 <layout type="log4net.Layout.PatternLayout">
51 <conversionPattern value="%date [%thread] %-5level - %message%newline" />
52 </layout>
53 </appender>
54 </log4net>
55 </configuration>

```

Later, copy all the files from the folder “dist” (disc C, Argentis, WebUI) in the below location

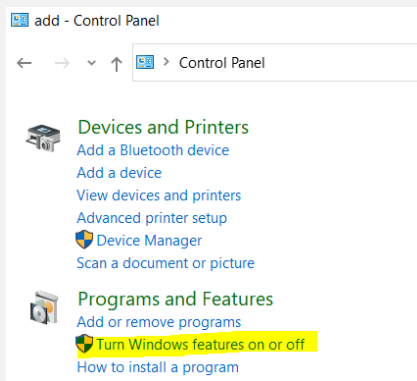


To run the application we need to create it in the IIS (a Windows feature that supports the use of others applications). This is a Windows element that can be turn on or off. (check the video if you don't have it).

Once it is installed or found, access to the IIS



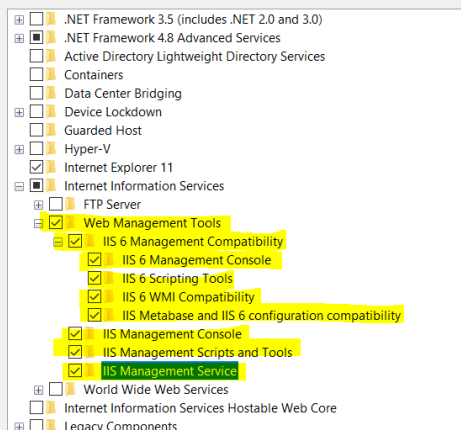
IMPORTANT: if the IIS is not installed, we need to install it. To do this, go to Control Panel, then press on “turn Windows features on or off”



Depending on the version of Windows we have installed, the view could vary. But you have to search for these services, and check all checkboxes related to IIS, then press ok, the component will be installed after a few minutes

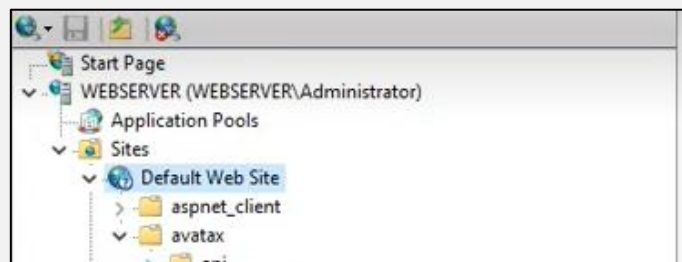
Turn Windows features on or off

To turn a feature on, select its check box. To turn a feature off, clear its check box. A

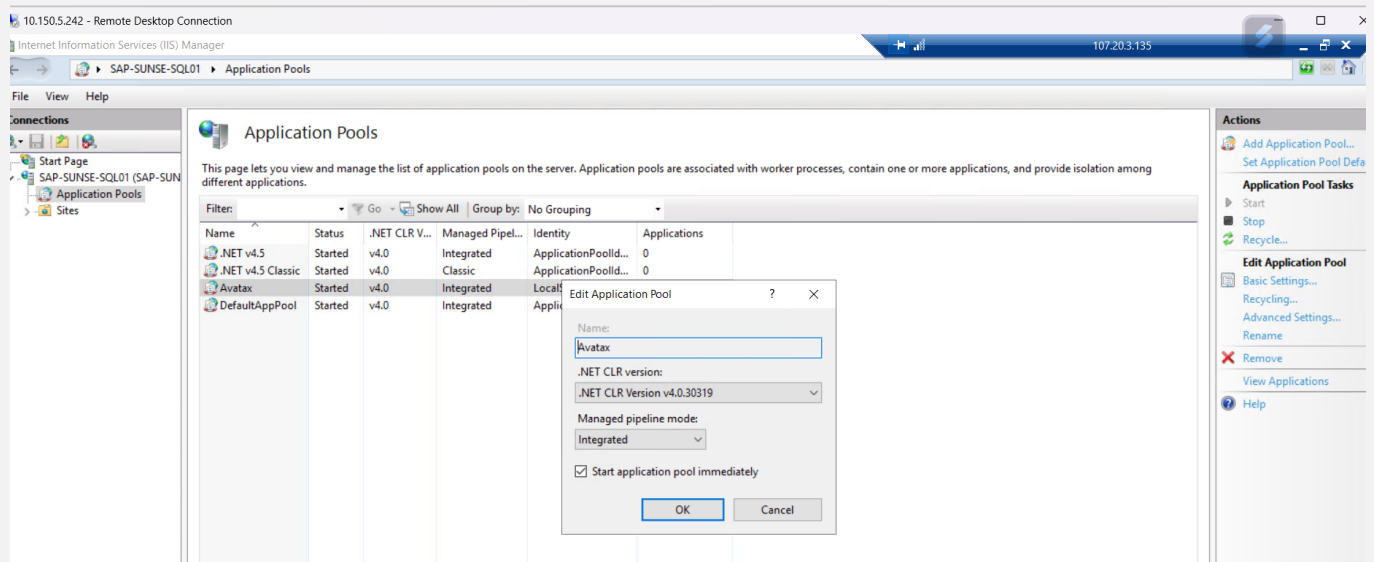


The IIS has a folder named “inetpub” where it stores all the applications.

Go to IIS and check if the application is already created.



Each application runs with a process, to configure it, it is necessary to create an application pool in IIS. So press on “Application pools”, select add application. Then configure one as shown:



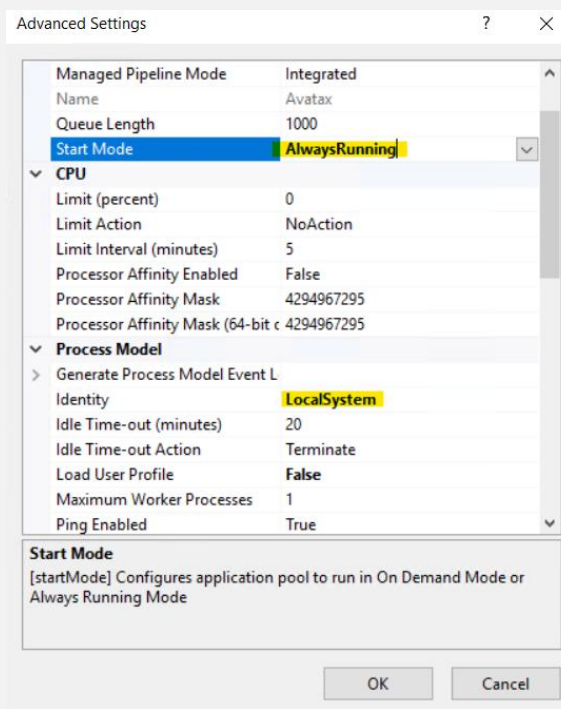
Some settings must be changed in the Application tool just created.

In order to do so, click on “Advanced settings” (right side of the screen) and make the below changes :

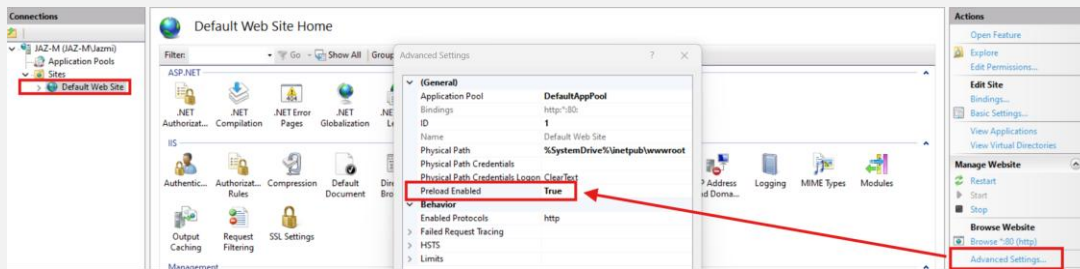
Start mode: select “Always running”.

It is necessary to make sure the IIS is not going to turn off the Application when it is not used. Otherwise, the schedule won't jobs run .

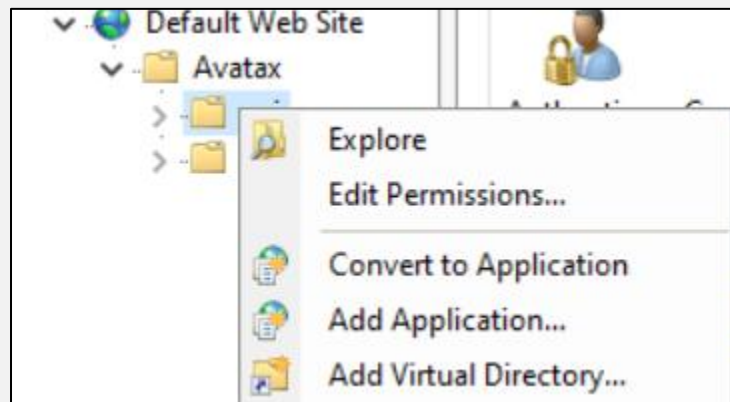
Identity: select “Local system” (if the client uses DI server)



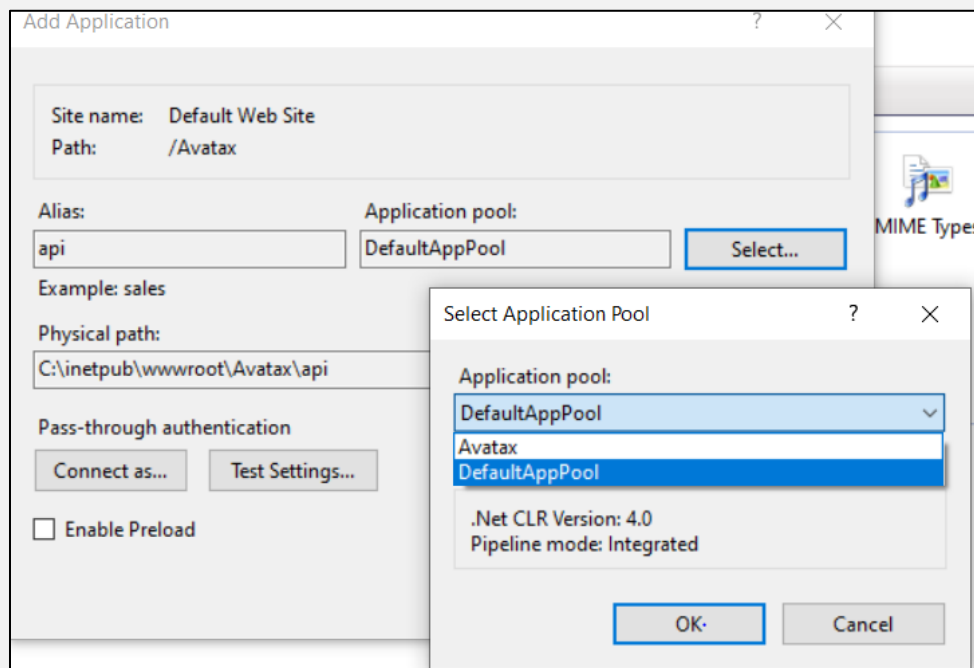
You need to change the preload to True on the Default Web Site



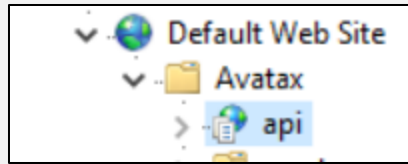
Then we need to convert the solution into an application. To do so, press right click on the “api” folder and select “convert to Application”.



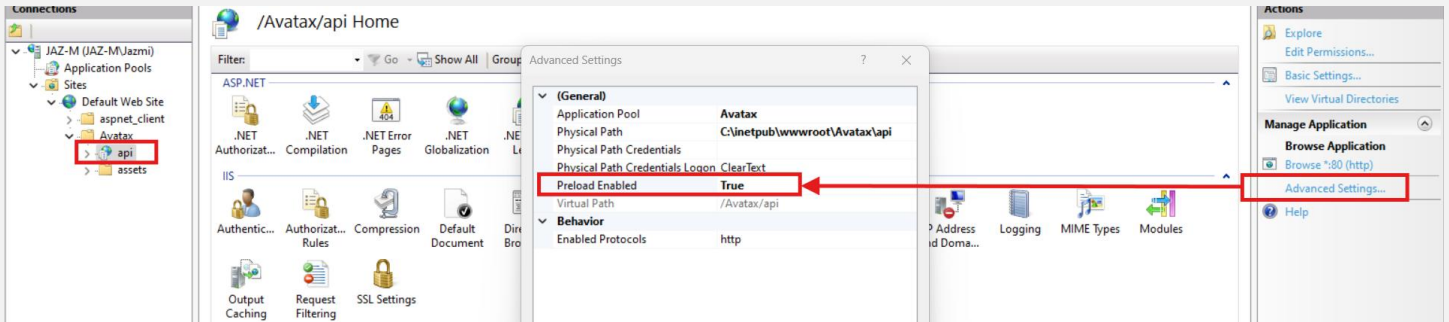
Afterwards, change the Application pool to “Avatax”



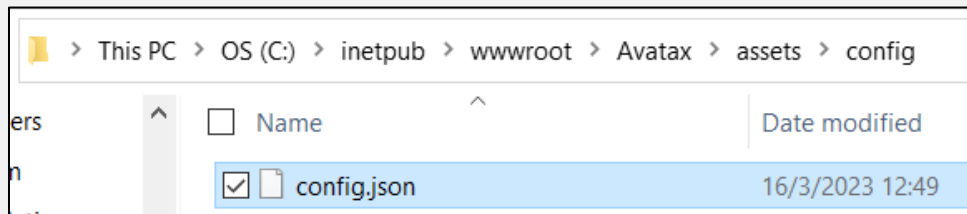
As a result the “api” folder must look like shown below because it was turned into an application



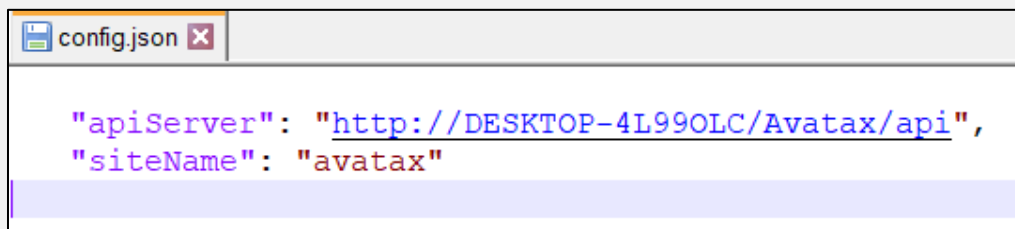
Once the application is create you Must selected ang go to the advance setting and change the preload to true



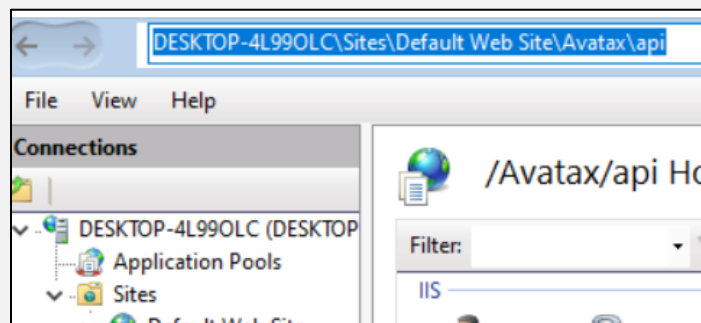
Now, open the JSON file and modify the URL accordingly.



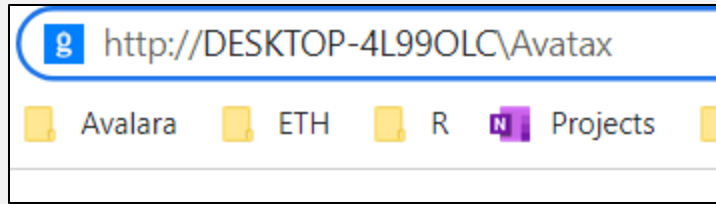
The below print shows the url to match with a specific local server. Yo should take the one for you.



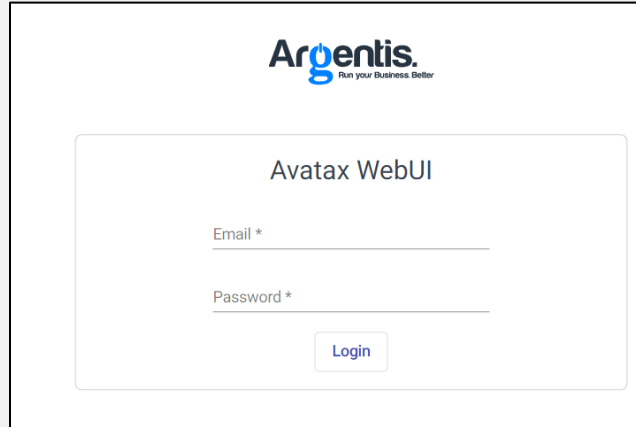
Copy the server's name from the ISS



Insert I the browser:



If everything is correct you should be able to access to the Web UI portal.

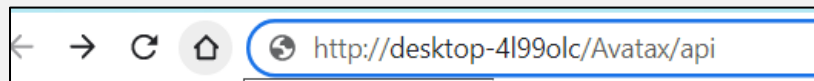


To Log in by DEFAULT :

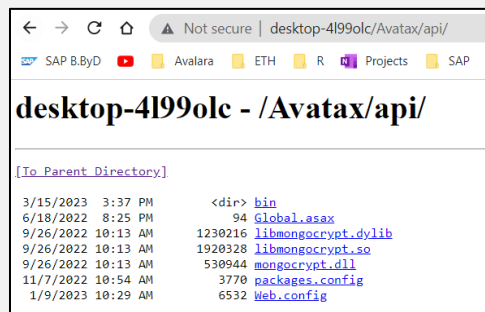
- User: admin@mail.com
- Password: \$boadmin..

5. Sanity check

To verify the installation was successfully done, you can type in the browser the same as before and add “/api”



If the installation is correct, you should see something like this



Otherwise, you might see something as shown :

HTTP Error 500.19 - Internal Server Error
The requested page cannot be accessed because the related configuration data for the page is invalid.

Detailed Error Information:		Requested URL	Physical Path	Logon Method	Logon User
Module	IIS Web Core	http://desktop-4l99olc:80/Avatax/api	C:\inetpub\wwwroot\Avatax\api	Not yet determined	Not yet determined
Notification	BeginRequest				
Handler	Not yet determined				
Error Code	0x80070021				
Config Error	This configuration section cannot be used at this path. This happens when the section is locked at a parent level. Locking is either by default (overrideModeDefault="Deny"), or set explicitly by a location tag with overrideMode="Deny" or the legacy allowOverride="false".				
Config File	\\?C:\inetpub\wwwroot\Avatax\api\web.config				

Config Source:

```

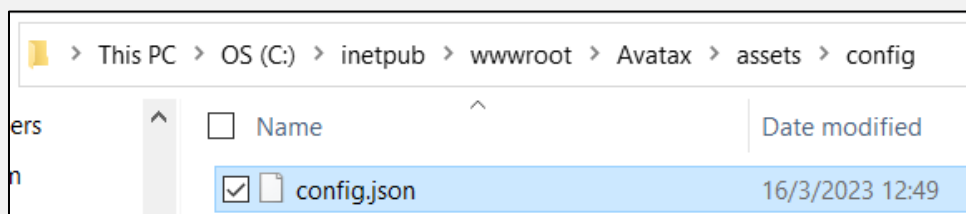
74: <directoryBrowse enabled="true" />
75: <handlers>
76:   <remove name="ExtensionlessUrlHandler-Integrated-4.0" />

```

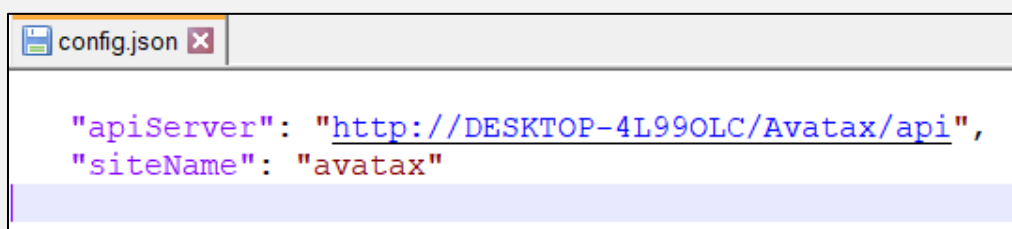
More Information:
This error occurs when there is a problem reading the configuration file for the Web server or Web application. In some cases, the event logs may contain more information about what caused this error.
[View more information >](#)

This error is caused because in the json document the address is set up as a local host, but the application is installed on desktop XXX.

In order to fix it, open the JSON file and modify the URL accordingly.



The below print shows the url to match with a specific local server. You should take the one for you.



6. Remove mongo db

If the mongo db isn't successfully installed, it needs to be removed.

Possible messages to receive if there is an error:

- A) Installer is missing a file

```
Administrator: Command Prompt

C:\Program Files\MongoDB\Server\6.0\bin>mongo
'mongo' is not recognized as an internal or external command,
operable program or batch file.

C:\Program Files\MongoDB\Server\6.0\bin>dir
Volume in drive C has no label.
Volume Serial Number is 7802-082B

Directory of C:\Program Files\MongoDB\Server\6.0\bin

09/02/2022  10:07 AM    <DIR>          .
09/02/2022  10:07 AM    <DIR>          ..
08/15/2022  06:01 PM             1,558 InstallCompass.ps1
08/15/2022  06:01 PM              559 mongod.cfg
08/15/2022  07:45 PM         55,941,632 mongod.exe
08/15/2022  07:45 PM        832,786,432 mongod.pdb
08/15/2022  06:59 PM        34,651,136 mongos.exe
08/15/2022  06:59 PM        465,727,488 mongos.pdb
               6 File(s)  1,389,108,805 bytes
               2 Dir(s)  1,330,040,832 bytes free

C:\Program Files\MongoDB\Server\6.0\bin>
```

First, you need to remove it from the cmd. Type this command to delete it: **mongod.exe --remove**

```
Administrator: Command Prompt

C:\Program Files\MongoDB\Server\6.0\bin>mongo
'mongo' is not recognized as an internal or external command,
operable program or batch file.

C:\Program Files\MongoDB\Server\6.0\bin>dir
Volume in drive C has no label.
Volume Serial Number is 7802-082B

Directory of C:\Program Files\MongoDB\Server\6.0\bin

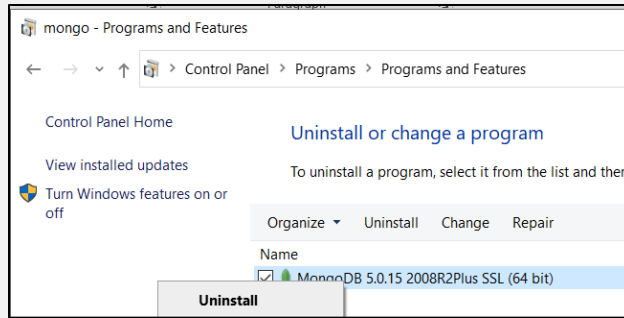
09/02/2022  10:07 AM    <DIR>          .
09/02/2022  10:07 AM    <DIR>          ..
08/15/2022  06:01 PM             1,558 InstallCompass.ps1
08/15/2022  06:01 PM              559 mongod.cfg
08/15/2022  07:45 PM         55,941,632 mongod.exe
08/15/2022  07:45 PM        832,786,432 mongod.pdb
08/15/2022  06:59 PM        34,651,136 mongos.exe
08/15/2022  06:59 PM        465,727,488 mongos.pdb
               6 File(s)  1,389,108,805 bytes
               2 Dir(s)  1,330,040,832 bytes free

C:\Program Files\MongoDB\Server\6.0\bin>mongod.exe --remove
```

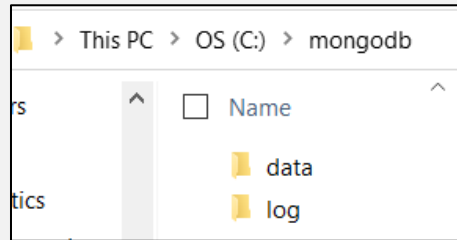
. Ty

Second, check in “Services” the mondo DB disappeared.

Third, go to “programs” in the panel control and press uninstall.



Finally, delete the mondo db folders created in the disc C.



After that, you should restart the installation process.

