Setting up On-Prem UiPath Orchestrator in AWS EC2

This section outlines the step-by-step guide to set up a single node UiPath orchestrator in AWS EC2. This installation does not cover elastic search and cyber ark credential management.

Before we get started, please refer to the software requirements in the official links: `https://docs.uipath.com/installation-and-upgrade/docs/orchestrator-software-requirements`

This chapter will provide an overview of UiPath RPA's advanced support areas like the UiPath Self-service catalog. Then it will introduce how different custom UiPath support and monitoring utilities can be built and utilized to add value to the setup.

Getting Started with EC2 and RDMS

1. Login to the AWS console and set up an EC2 Virtual machine – Windows 2019 Server in AWS. Make sure disk space and security groups are configured as recommended in the UiPath orchestrator installation guidelines.

Figure A.01

2. Log in to the newly setup EC2 and check to download the UiPath platform installer on-prem by signing up here: `https://www.uipath.com/developers/enterprise-edition-download`

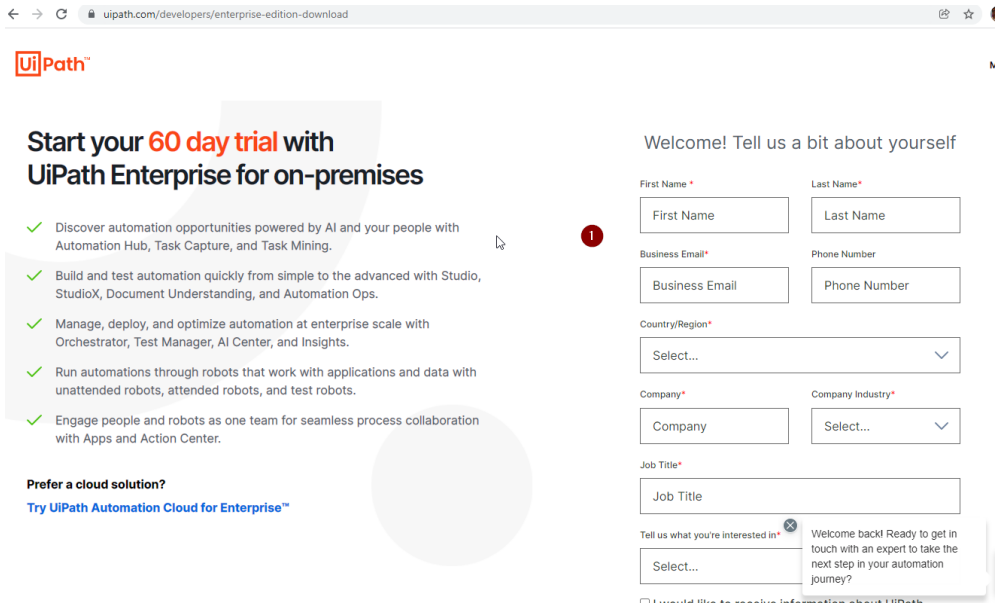

Figure A.02

3. The next important step is to set up a database in AWS for the UiPath Orchestrator.

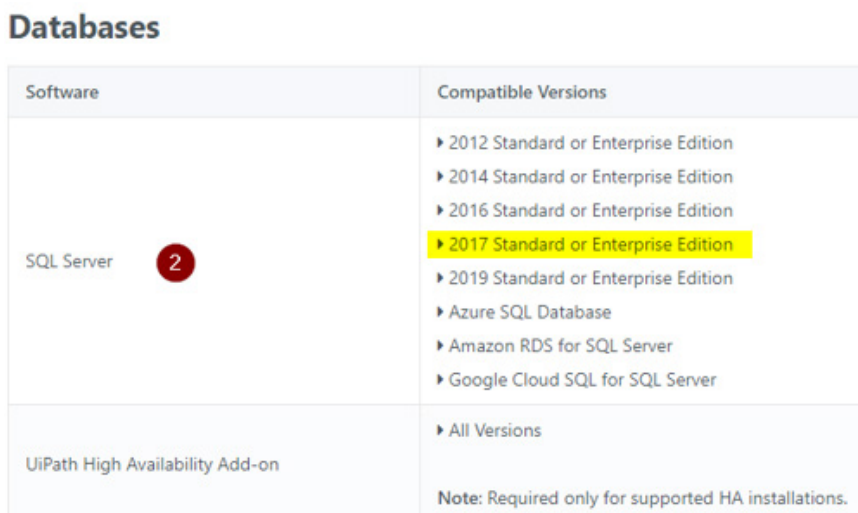

Figure A.03

AWS RDS setup and DB creation

1. Choose a supported SQL server and install a Database to install the Orchestrator. Log in to the AWS console and search for RDS.

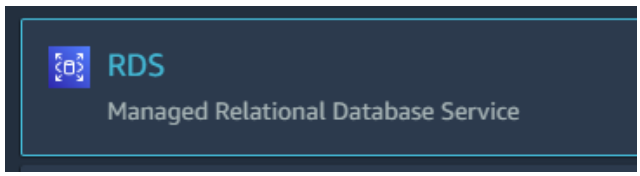

Figure A.04

2. Create a Microsoft SQL Server and a Database

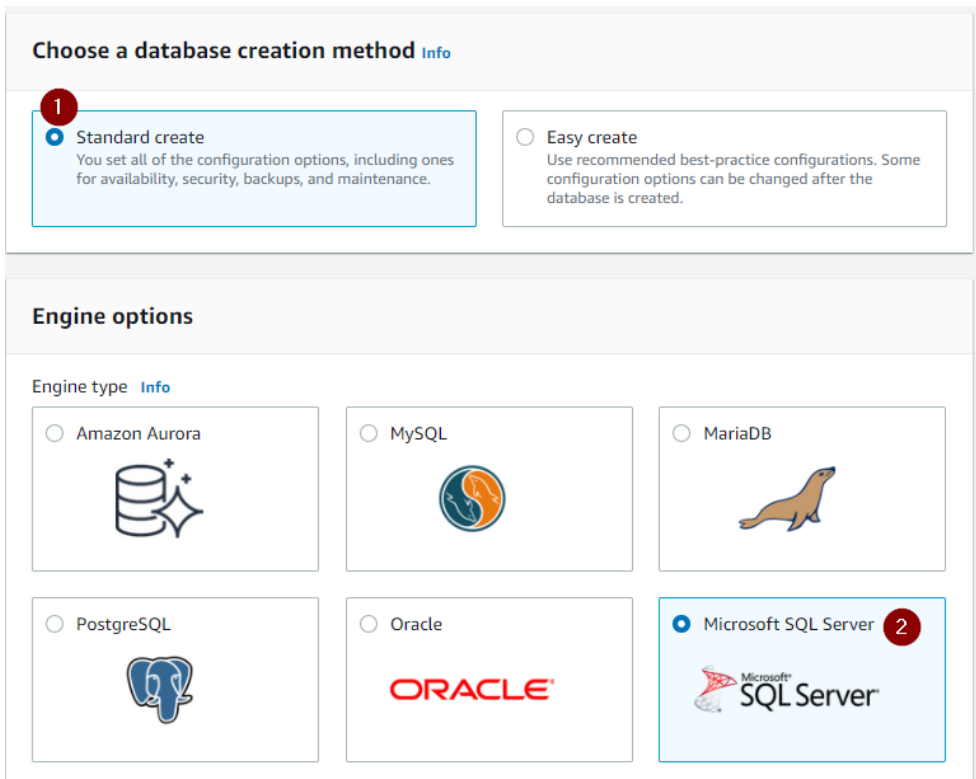

Figure A.05

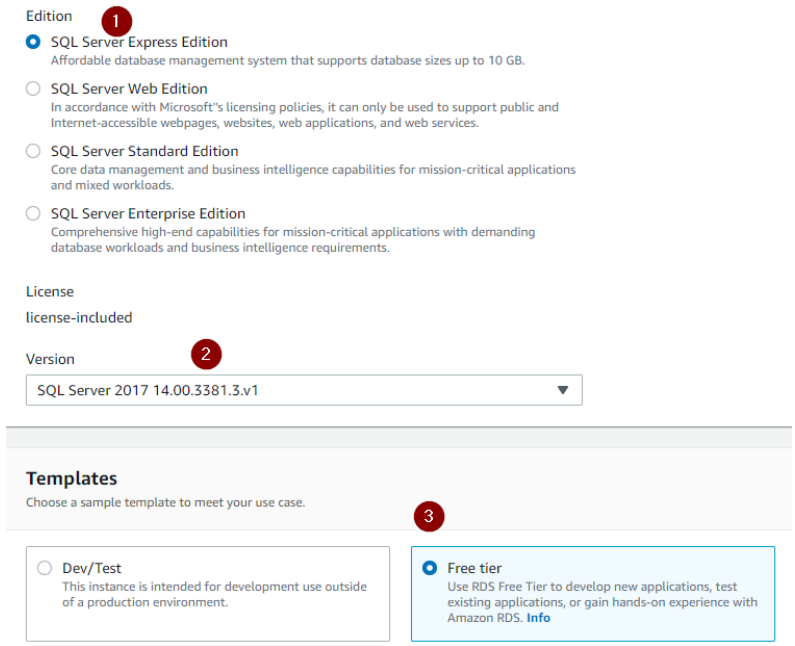

Figure A.06

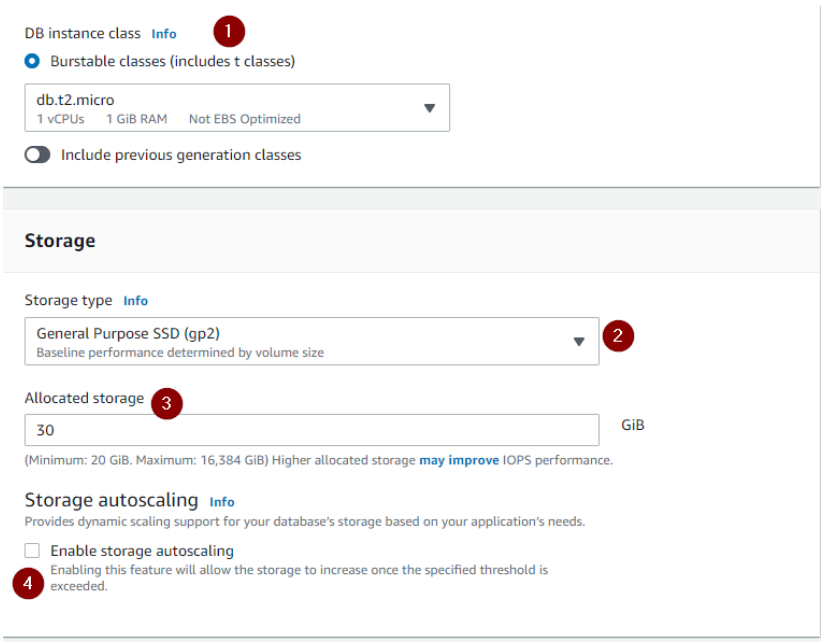

Figure A.07

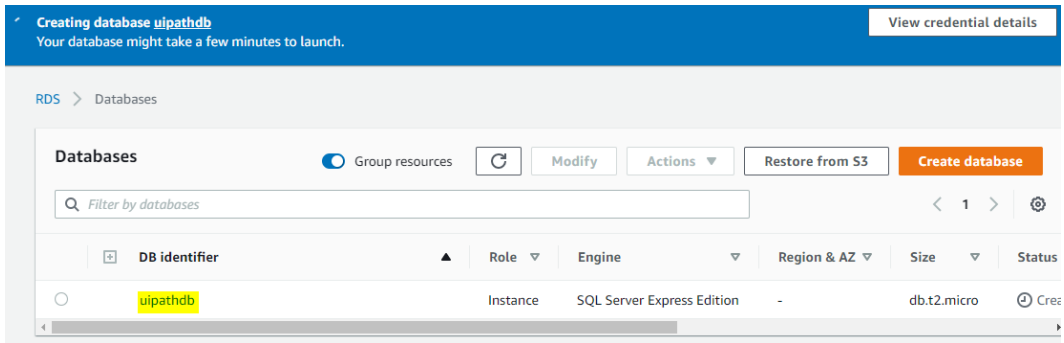

Figure A.08

The next step is to create a database on this new SQL server which will be used later for installation.

3. RDS Endpoint can be retrieved from the database's information. Use the RDS endpoint to configure the DB.

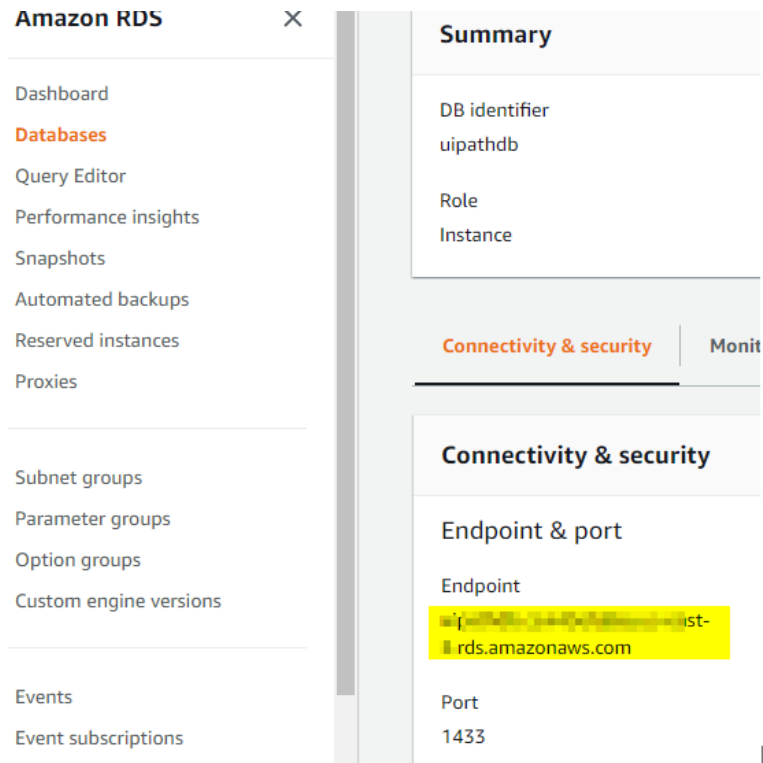

Figure A.09

SQL Server Management Studio (SSMS) is needed for the installation. Let's download and install the SSMS.

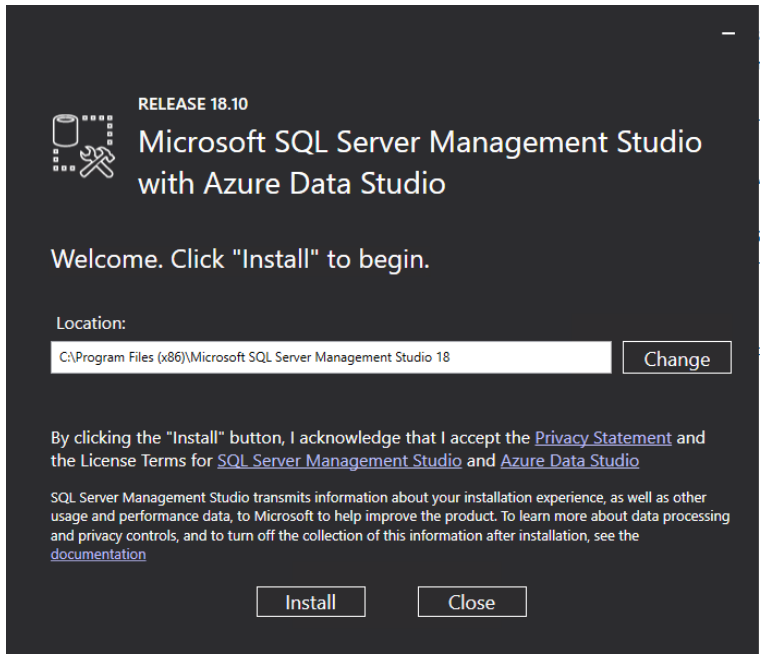

Figure A.10

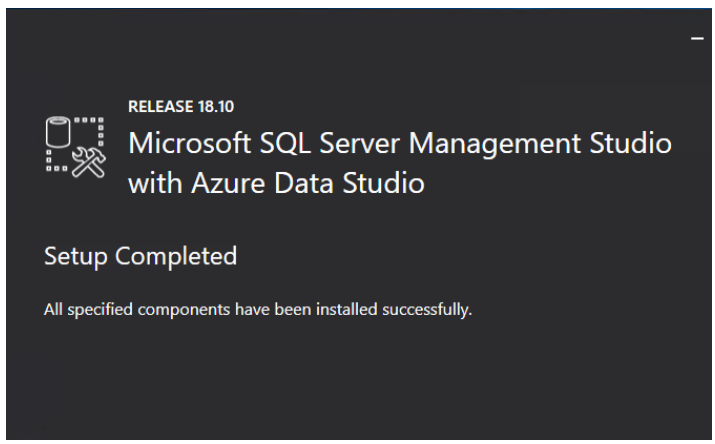

Figure A.11

4. Open MS SQL Server Manager and create a new DB called **UiPath_PROD**

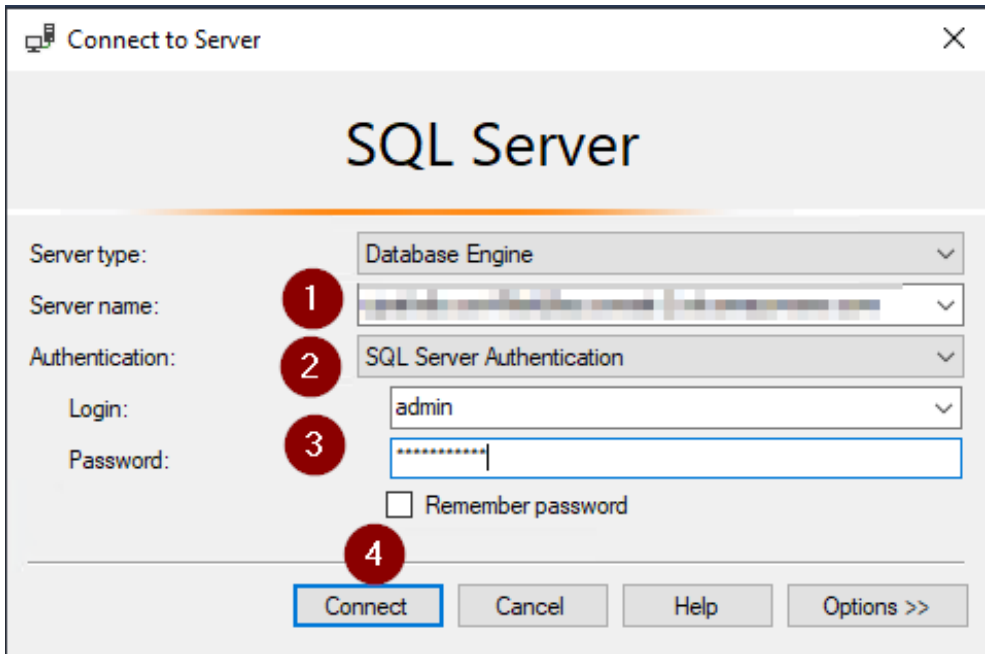

Figure A.12

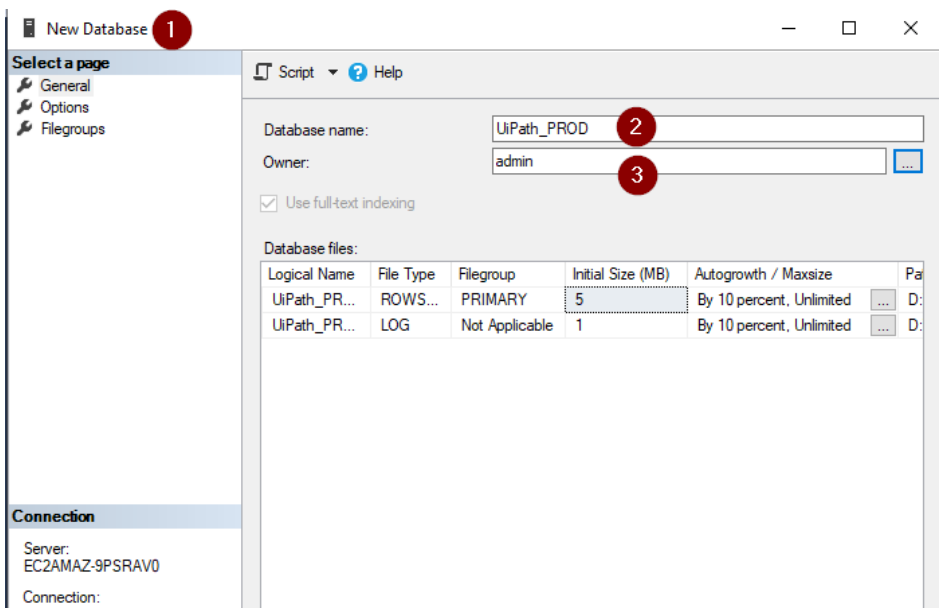

Figure A.13

This database will act as the UiPath Orchestrator application DB during installation.

Pre-requisite for Orchestrator Installation

Let's try to install other prerequisites needed before we start the installation:

URL Rewrite module installation

Open and install URL Rewrite from this URL: `https://www.iis.net/downloads/microsoft/url-rewrite`

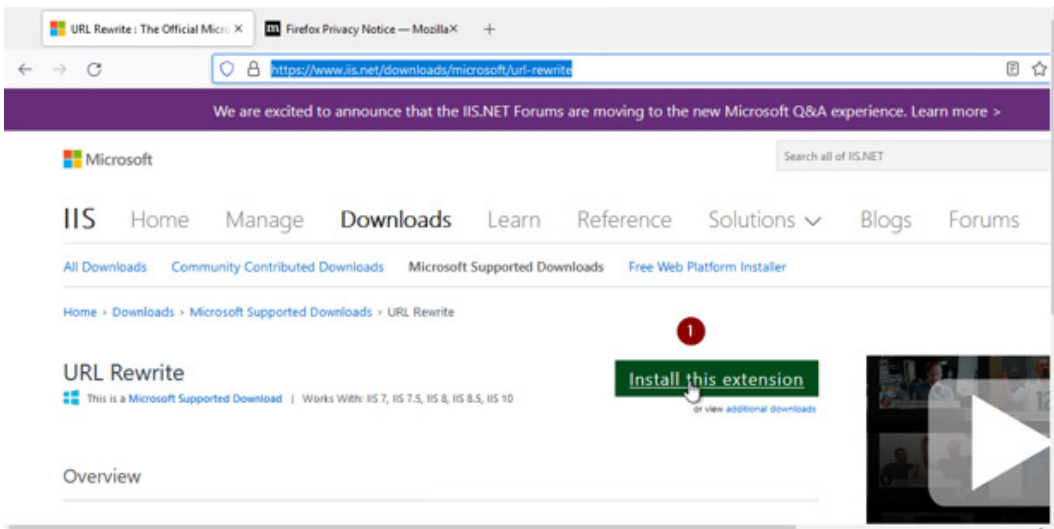

Figure A.14

> **Note**
> This will require a restart.

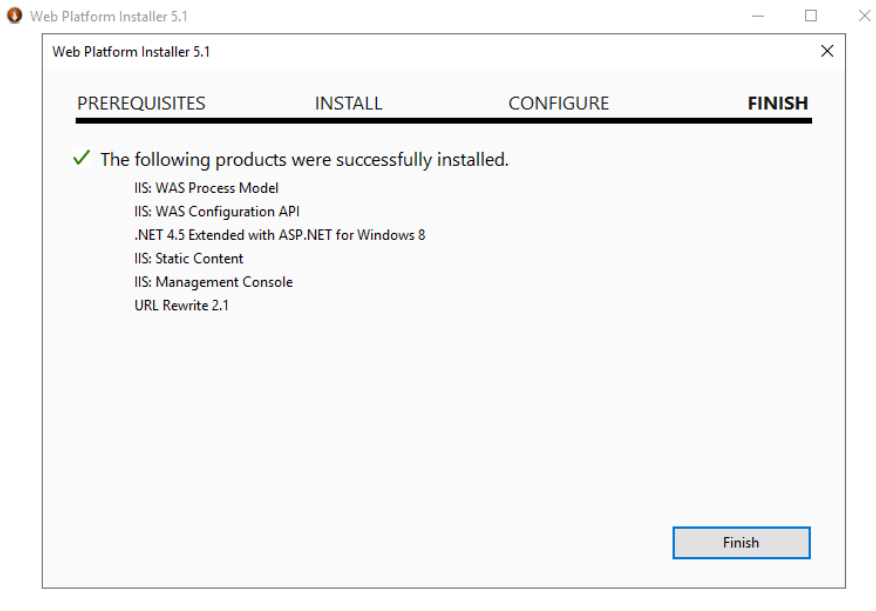

Figure A.15

Dot net installation- IIS Hosting bundle setup

Open and install the .NET Core runtime 3.1.x from this URL: `https://dotnet.microsoft.com/en-us/download/dotnet`.

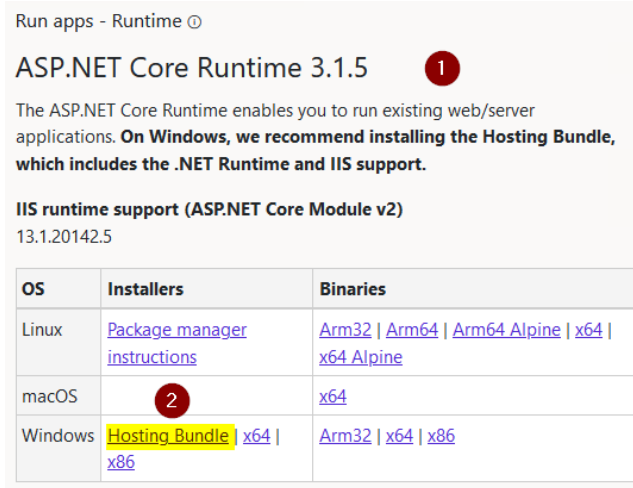

Figure A.16

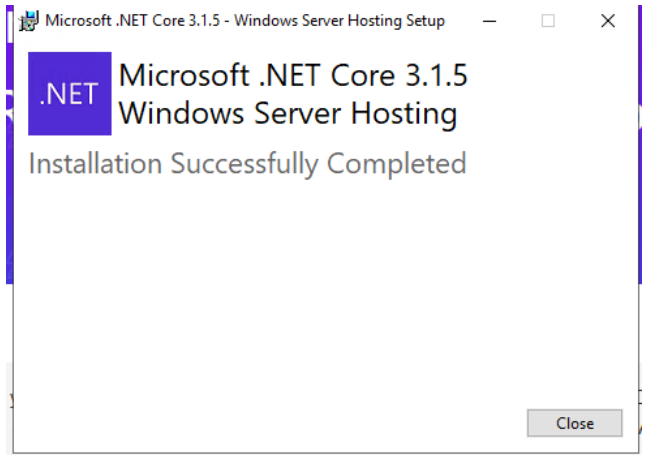

Figure A.17

IIS – Enable roles and features enablement

Next, we need to refer to this URL: `https://docs.uipath.com/installation-and-upgrade/docs/server-roles-and-features` and make a change to the existing IIS by opening the Server Manager.

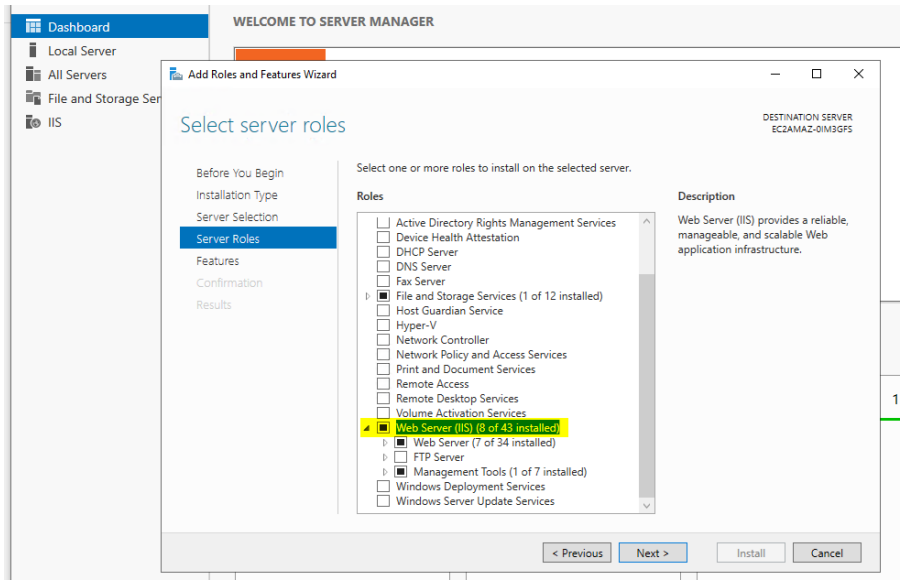

Figure A.18

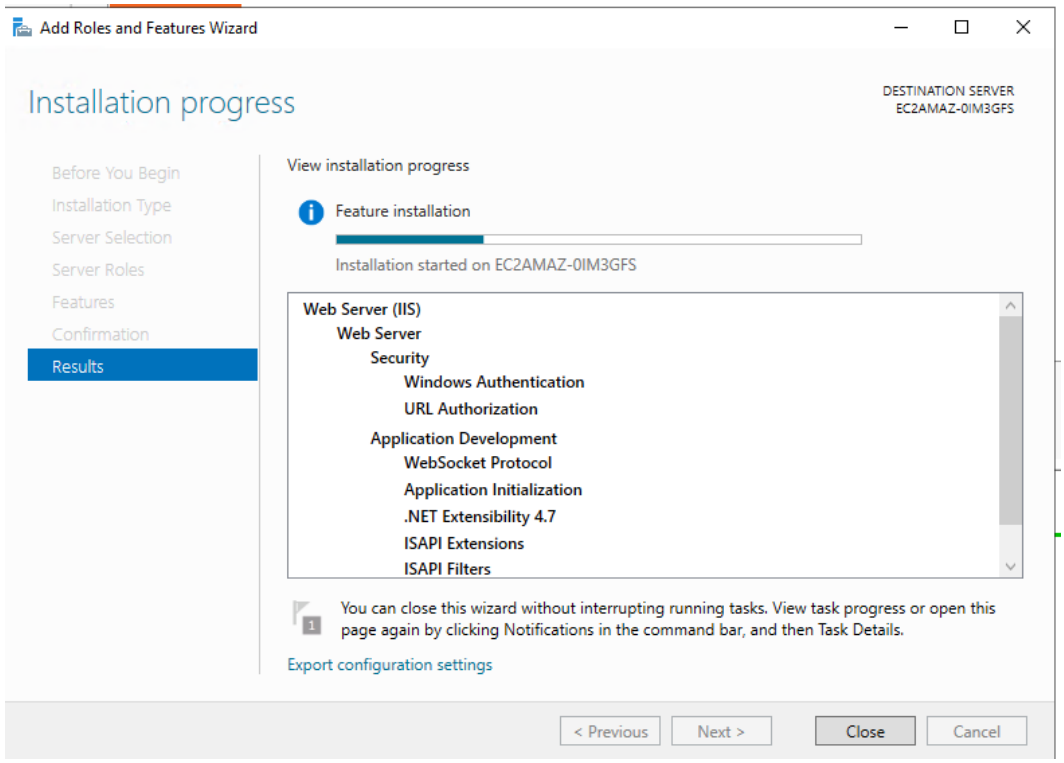

Figure A.19

Once successfully installed, close the Server manager

Web certificates setup

Web server certificates are needed to certify the connection to the web server is secure from the browser. There are 3 types of web certificates accepted by the IIS Manager

- Trusted certificates – e.g. Go Daddy, Verizon etc.
- Domain Certification – Valid in an environment e.g. ABC bank
- Self-sign – for Non-domain users.

Self-signed certificates can be used for our trial setup purposes as we are not connected to the domain. For enterprise installation, trusted certificates are recommended.

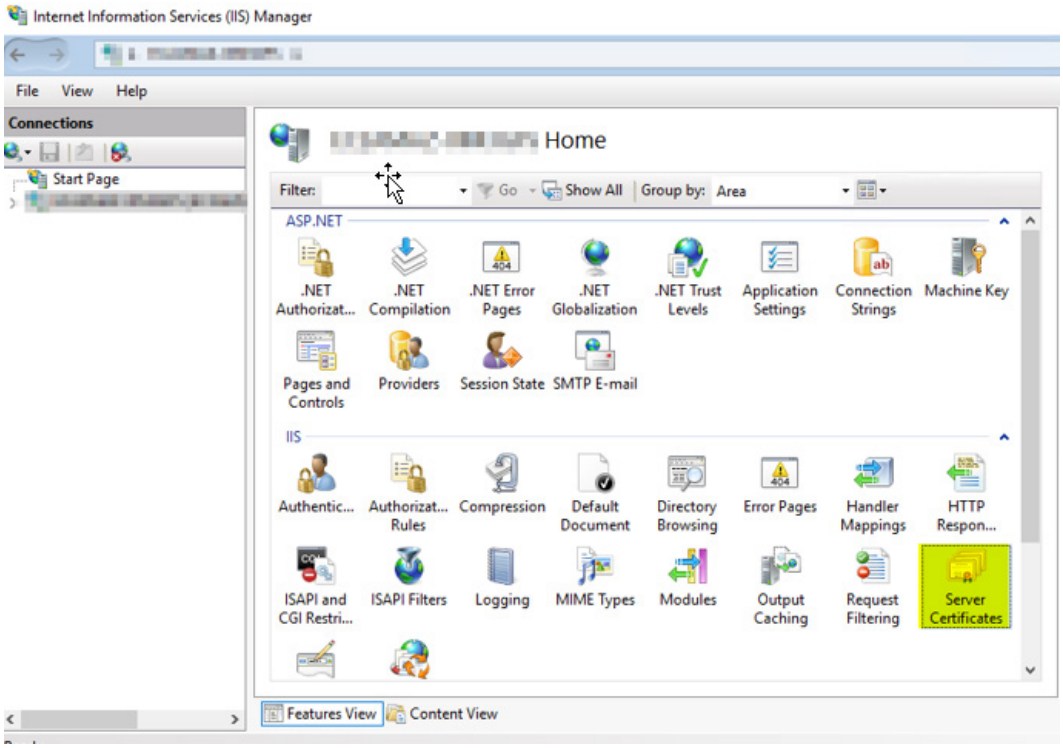

Figure A.20

To create the Self-sign certificates, open **IIS Manager| Server Certificates** and click on **Create Self-Signed Certificate**.

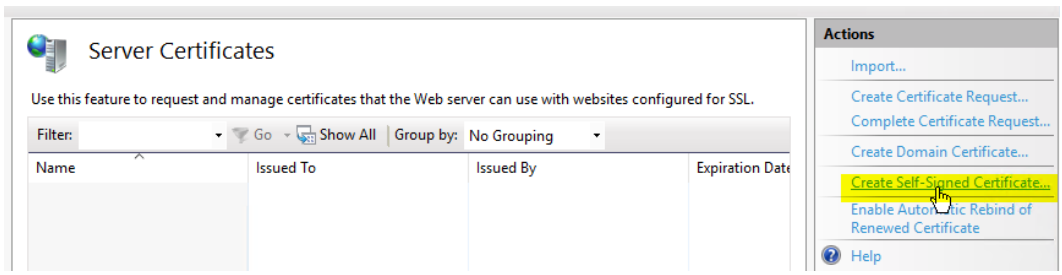

Figure A.21

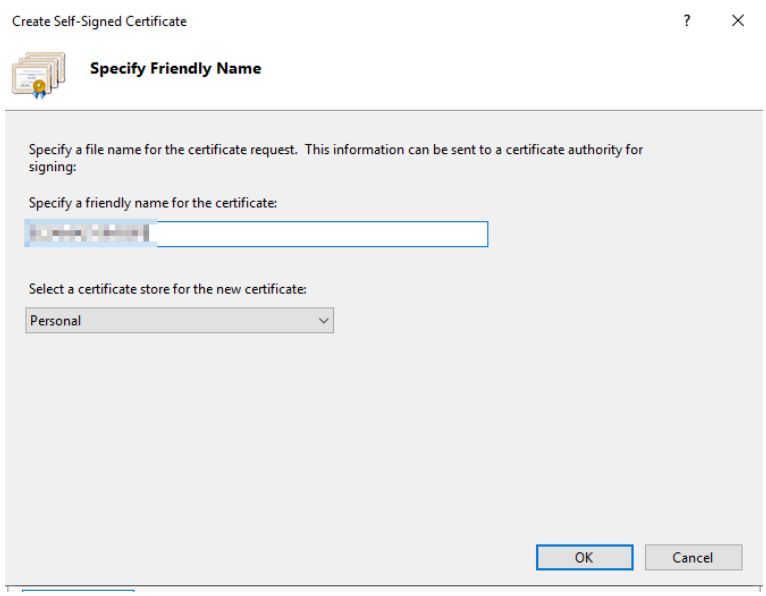

Figure A.22

Now the self-signed certificate is visible in the certificates tab. This concluded the prerequisite setup for the UiPath orchestrator installation.

Begin actual Orchestrator Installation

1. To Install the UiPath Orchestrator, please run the downloaded installer in the AWS EC2 machine where all the prerequisites are installed.

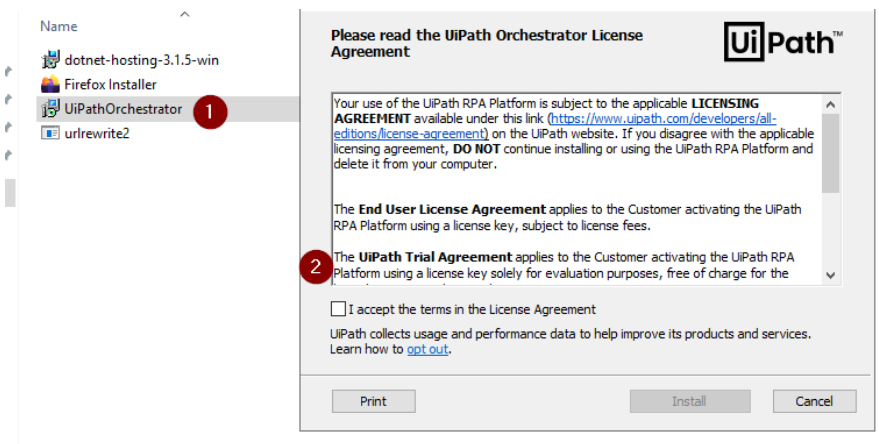

Figure A.23

2. Insights and test automation are also part of the bundle, but we can install them later by rerunning the installer.

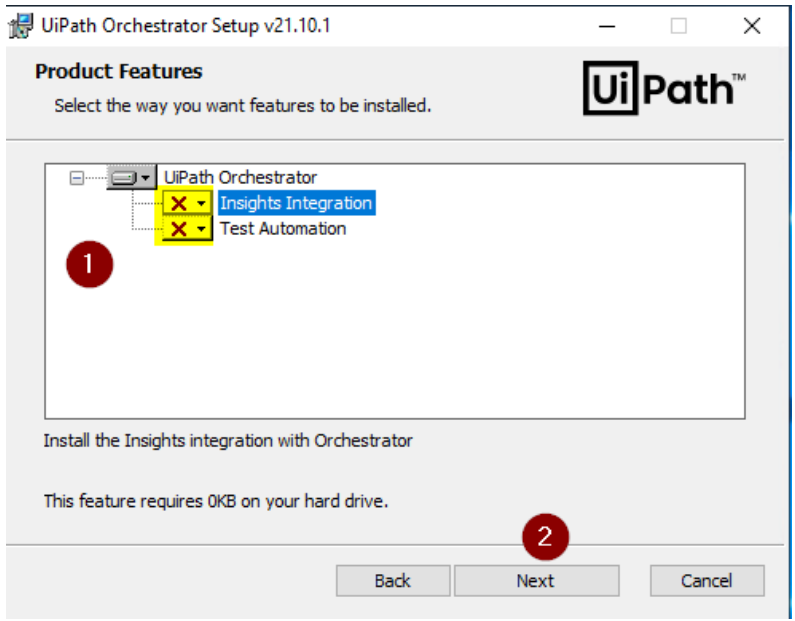

Figure A.24

3. Use the AWS RDS endpoint and credentials setup previously in the below dialog.

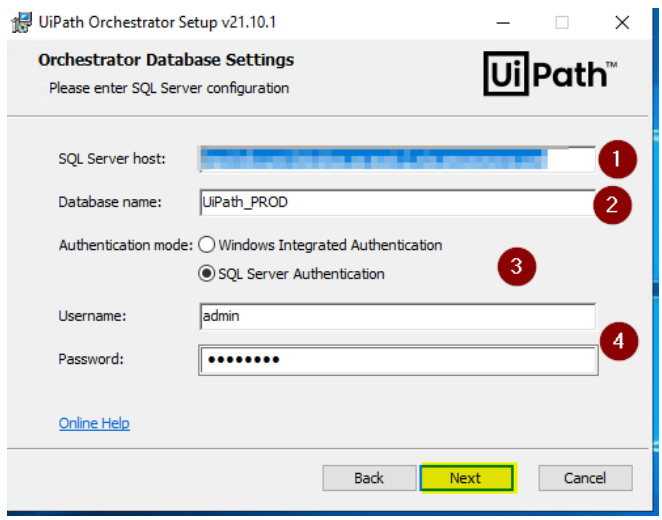

Figure A.25

4. Update the certificate name and validate the Database name too.

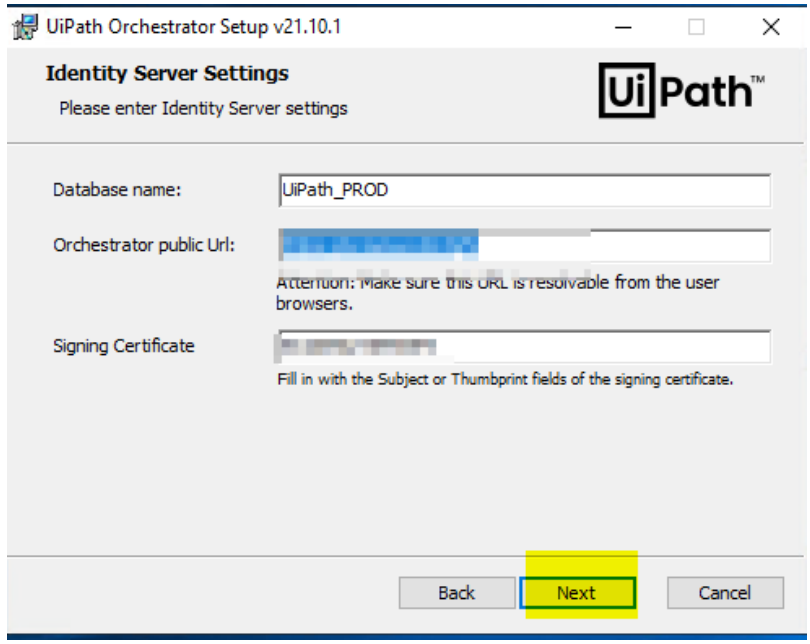

Figure A.26

5. Elastic search configuration is optional and we can set up this one at a later point.

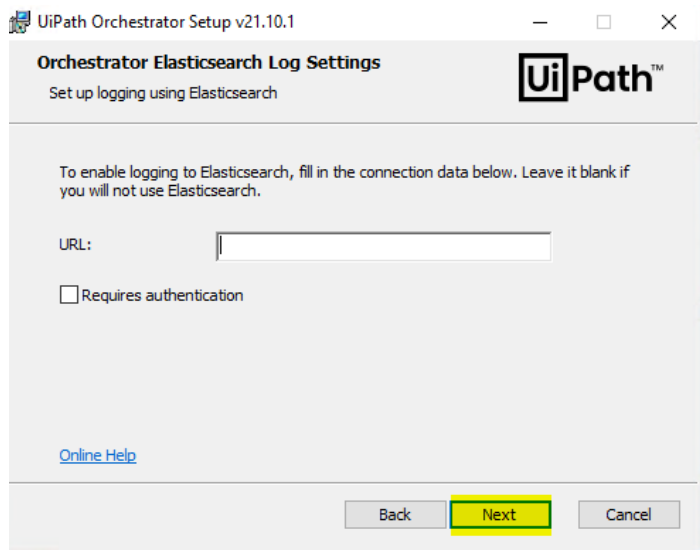

Figure A.27

6. Note down the host and default tenant credentials for the first time login and setup later.

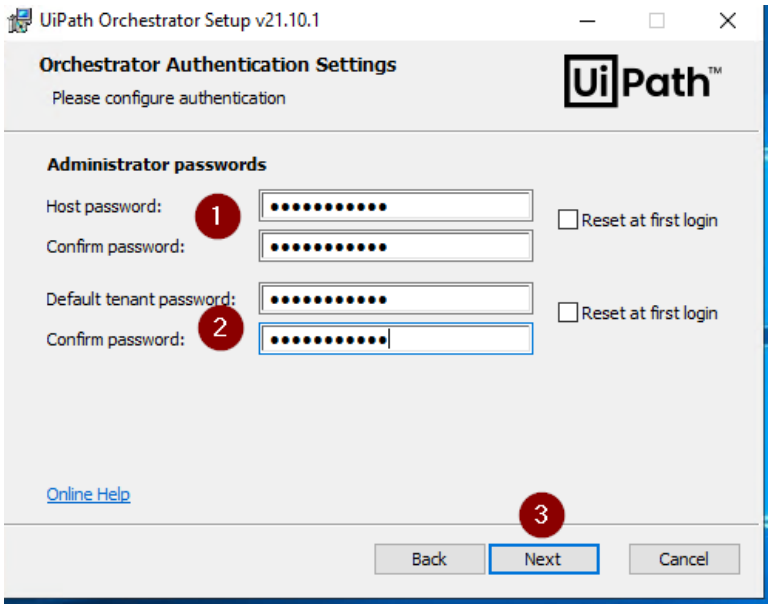

Figure A.28

7. Begin the installation.

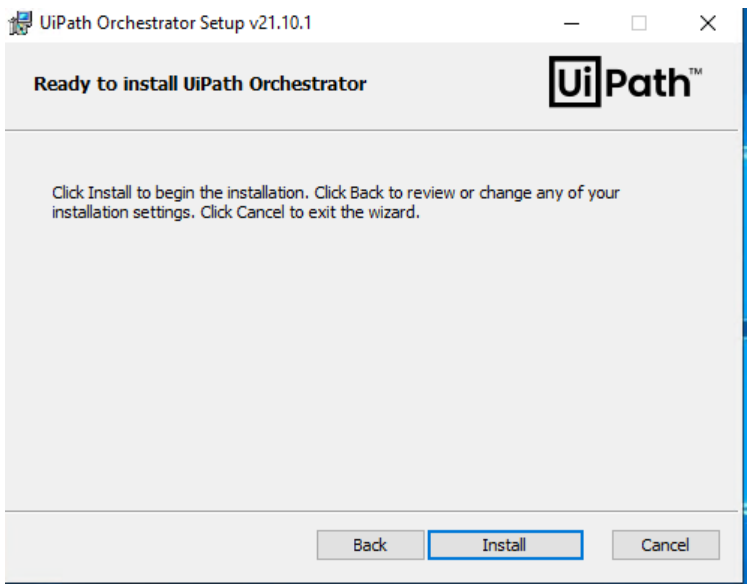

Figure A.29

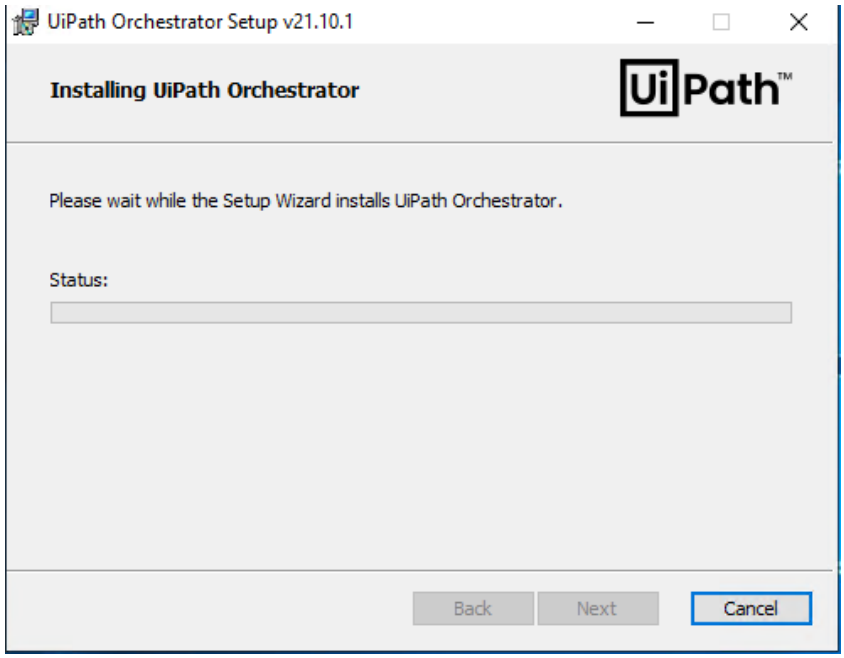

Figure A.30

Note:

For installation logs, use the cmd line prompt to execute the following:

```
msiexec.exe /i "C:\Users\Administrator\Downloads\
UiPathOrchestrator.msi" /lv* "C:\Users\Administrator\Desktop\
Log.txt"
```

Once the installation is successfully completed, verify the application before using.

Verify the Orchestrator installation

We can check the MS SQL Server Manager DB and check for all the tables being created as shown here:

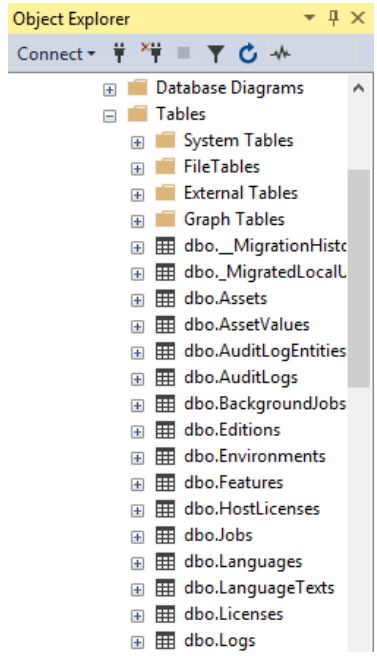

Figure A.31

Let's try to use the login using the Orchestrator URL and use the default tenant credential to login.

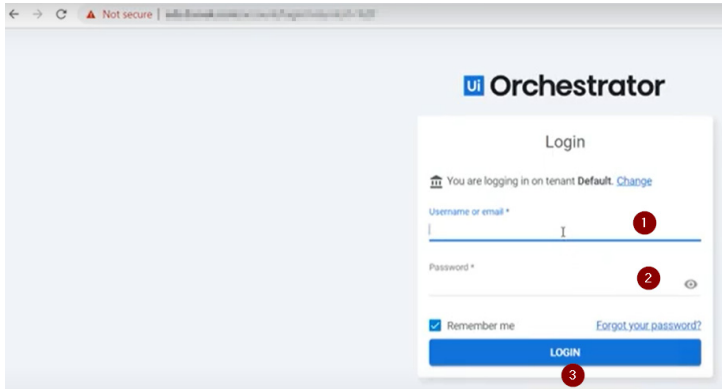

Figure A.32

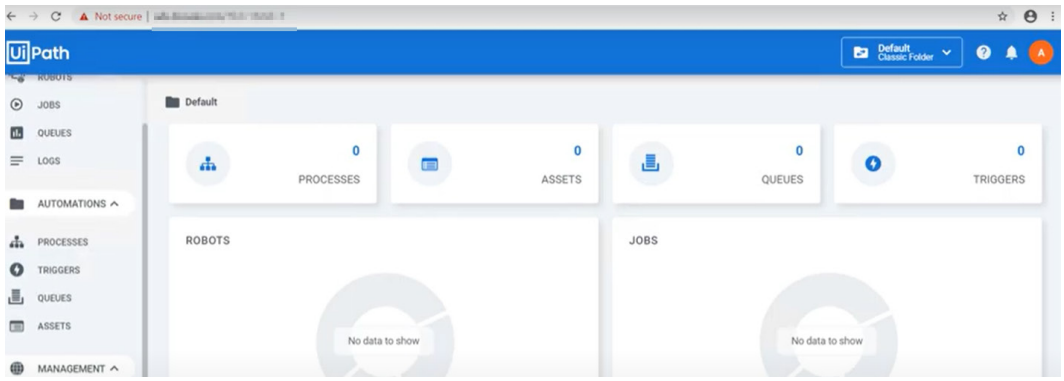

Figure A.33

Activate the license online to continue using it.

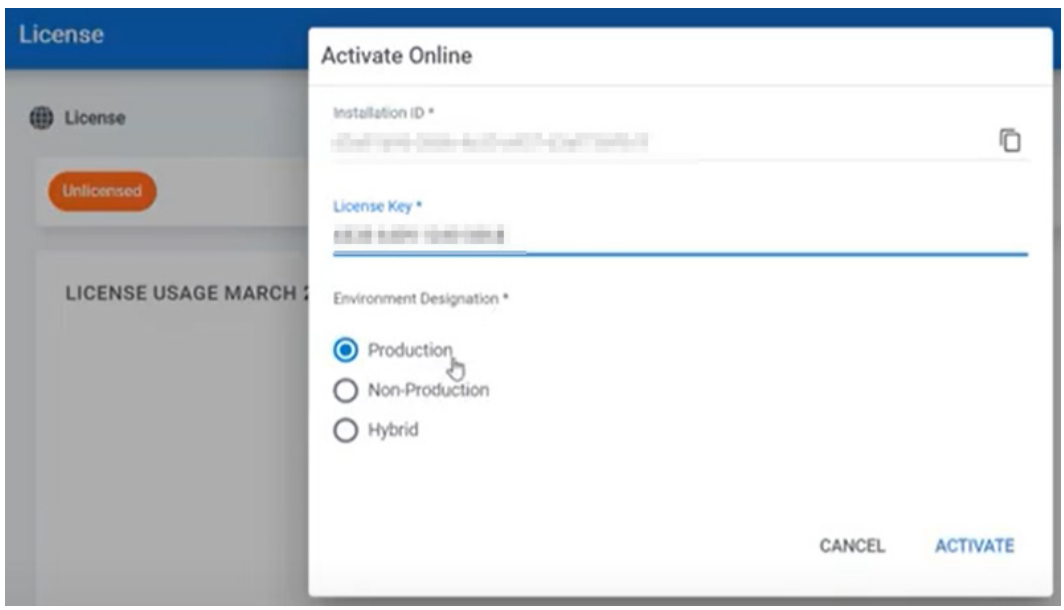

Figure A.34

In addition to this, check for `UiPath.Orchestrator.dll.config` file (`C:\Program Files (x86)\UiPath\Orchestrator`) in the installation folder. For more details on this, please refer to `https://docs.uipath.com/installation-and-upgrade/docs/uipath-orchestrator-dll-config`

This concludes the on-prem single node UiPath Orchestrator setup.