# Metalica – FSD Assignment

**Components set up and configuration**

We are using various open source component in Metalica solution. All the components need to be hosted locally at defined port.

**Database**

We have used NoSQL – MongoDB database as persistence layer.

Install MongoDB community server 3.x <https://www.mongodb.com/download-center#community> and any client to visualize data. MongoDB compass is a good visualizer tool. <https://www.mongodb.com/products/compass>

Success installation would bring DB server at port **27017**.

**Message broker**

We have used RabbitMQ as message broker. Install rabbitmq-server-3.7.0.exe from <http://www.rabbitmq.com/install-windows.html>. It has dependency on Erlang, install it from <http://www.rabbitmq.com/which-erlang.html>.

**Service registry**

We have used “consul” for service discovery. Download it from <https://www.consul.io/>

Simply unzip it and then you can use “consul.exe”.

Run **consul agent –dev** command to start it. If all goes well, then you can see consul UI at <http://localhost:8500/>

API gateway

UI

Services

Trade Service

Notification Service

Reference data service

Market data service

**Ports**

|  |  |  |
| --- | --- | --- |
| **Service/Component** | **Port** | **Comment** |
| Consul | 8500 |  |
| MongoDB | 27017 |  |
| UI |  |  |
| Notification Service |  |  |
| Trade Service |  |  |
| Reference data service |  |  |
| Market data service |  |  |