**my name is Nikolay. I am a member of the group lv401.**

**my first task was to set up a database for the project OMS, to be used by them after billd.**

**I installed a database on a virtual machine on a platform CentOS.**

**By default, on board the CentOS , already has a MariaDB installed.**

**But for the purpose of training, we replase the MariaDB on MySQL.**

**I've downloaded and installed a new RPM file with a MySQL. Сreated the new user of the database and granted him access rights with password.**

**Of couse, do not forget to add a rule to the firewall and open the port 3306**

**so that you can join the base**

**The next sub-task was to configure a Jenkins to work with the MySQL.**

**For this purpose, We downloaded and installed the necessary plug-ins**

**Next we set up the configuration of Jenkins himself and OMS progect.**

**To automatically create a database and fill it, write a script**

**as we see in the script you need to insert the login and password of the database and the user**

**In order to improve the security of the database**

**we set parameters such as login and password of the user and the MySql database through environment variables of Jenkins**

**We also write the path to the file that will fill the database.**

**These actions will take place when our project is building**

**My second task is to monitor our project using Grafana tool.**

**This is a powerful tool that allows you to display the status of each server in the form of charts and diagrams.**

**As a data source, the Grafana uses metrics which collected by another server Promithius.**

**Promithius collect metrics and send them on port :9100**

**We downloaded and installed the necessary plug-ins**

**to get started, we download and install graphon from the official site. By the way a good Installation Guide.**

**After installig theGrafana, we configure interfase .**

**Of couse, do not forget to add a rule to the firewall and open the port 3000**

**First of all, we add a data sources. In our case, we use it as a data source Promithius server.**

**Also, after installing the necessary plug-ins, we can install other sources**

**you can do other settings, but by default, you do not need to change most of them**

**very useful thing. as we can see, there are hints in the metric menu**

**there can be plenty of boards**

**now we will create a dashboard on which we will show the most important indicators for us.**

**To inform about the alert, I chose telegram. We can also use other ways of sending messages**

**setting up such way of message - was not easy**

**when creating queries , the clips are highlighted in the tape**

**The next step is to create an alarm rule if a malfunction or same errors occurs in the system or on servers**

**There is a separate menu item for this. Where we will create a rule for alert.**