

ОТЧЕТ ЛАБОРАТОРНОЙ РАБОТЫ 6

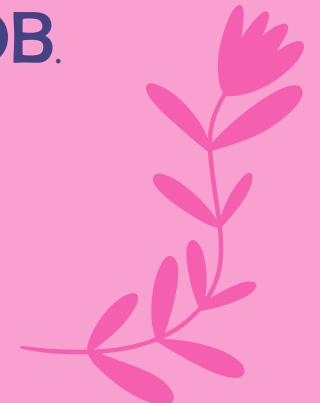
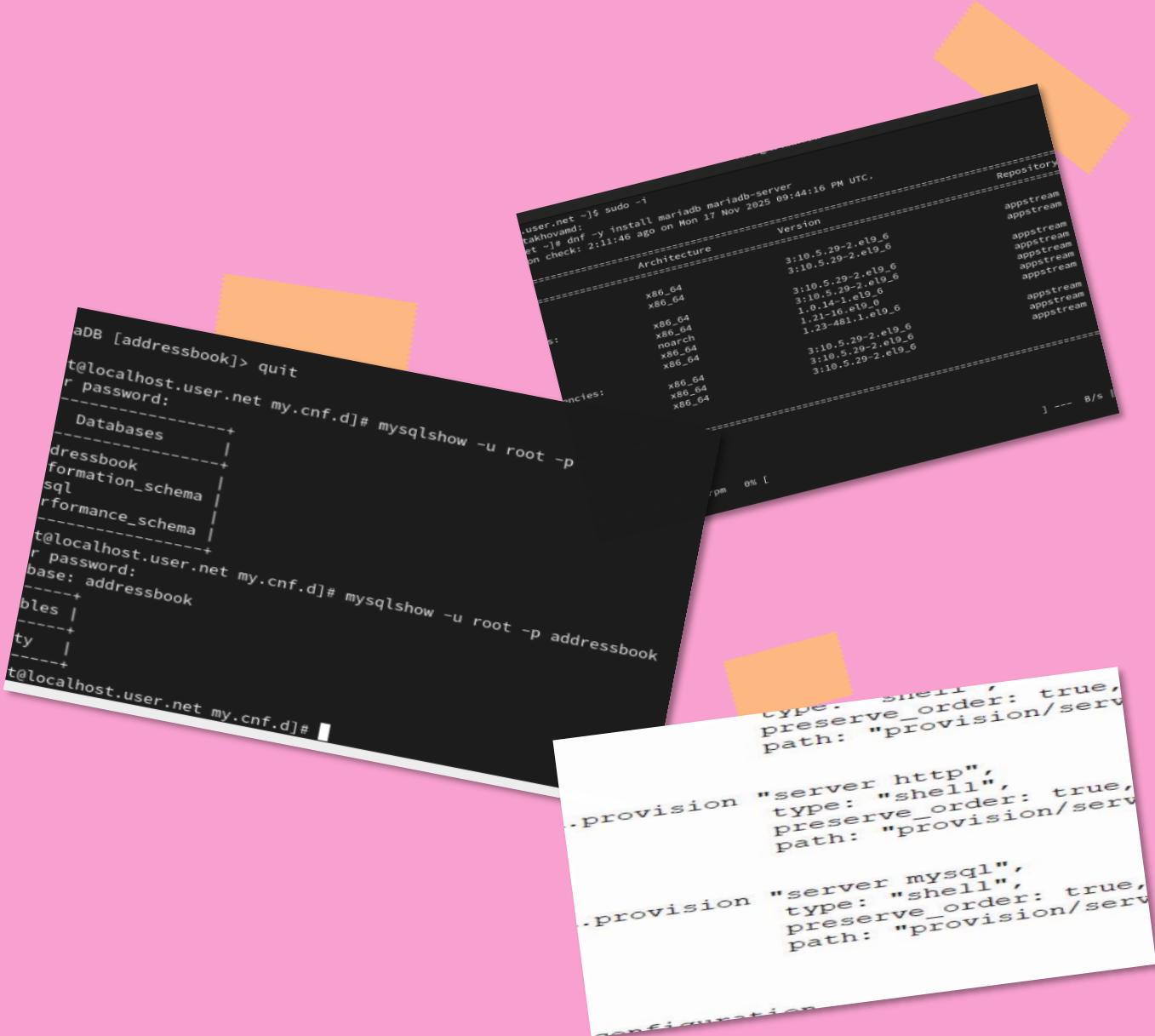
дисциплина

АДМИНИСТРИРОВАНИЕ СЕТЕВЫХ ПОДСИСТЕМ



ЦЕЛЬ РАБОТЫ

Приобретение практических навыков по установке и конфигурированию системы управления базами данных на примере программного обеспечения MariaDB.



УСТАНОВКА MARIADB



```
Remove anonymous users? [Y/n] Y
... Success!

Normally, root should only be allowed to connect from 'localhost'. This
ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n] Y
... Success!

By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] Y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] Y
... Success!

Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.

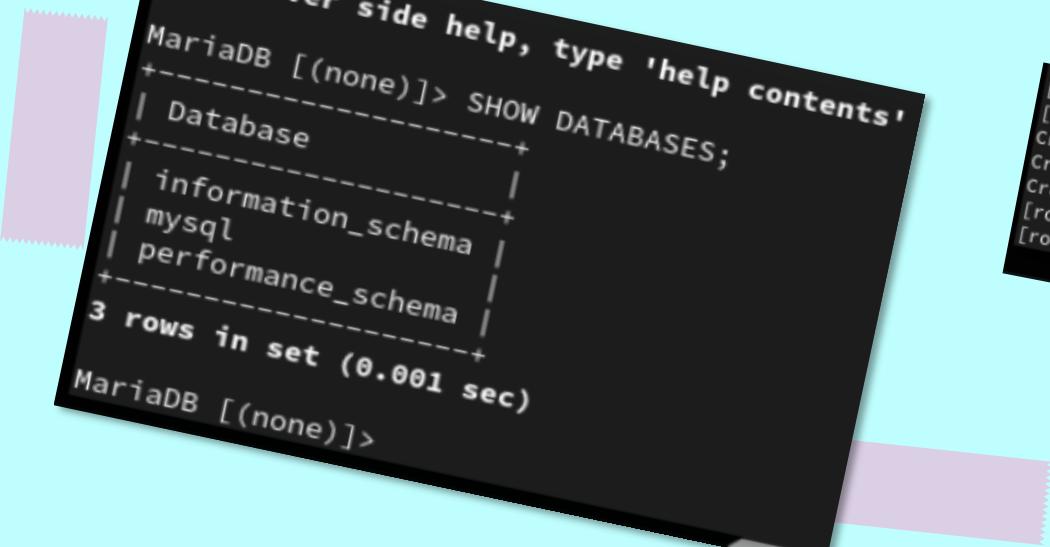
Thanks for using MariaDB!
[root@localhost user.net etc]#
```

```
root@localhost:~# rpm -q mariadb-libs
x86_64 2:1-117.el9_6 apps
mariadb-connector-c-3.2.6-1.el9_0.x86_64
x86_64 1.22.12-4.el9_6 apps
log4cplus-2.0.5-15.el9.x86_64
x86_64 5.14.0-570.58.1.el9_6 based
mariadb-connector-c-3.2.6-1.el9_0.noarch
x86_64 5.14.0-570.58.1.el9_6 based
mariadb-connector-c-config-3.2.6-1.el9_0.noarch
x86_64 5.14.0-570.58.1.el9_6 based
x86_64 1.6.3-1.el9
kea-2.6.4-1.el9.x86_64
x86_64 1.1.0-2.el9_6.1 based
kea-libs-2.6.4-1.el9.x86_64
x86_64 1.4.2-2.el9 apps
log4cplus-2.0.5-15.el9.x86_64
x86_64 0.1.1-1.el9 apps
mariadb-connector-c-3.2.6-1.el9_0.x86_64
x86_64 2.22.0-1.el9 apps
mariadb-connector-c-config-3.2.6-1.el9_0.noarch
x86_64 0^20250217.gale48a0-13.el9_6 apps
postgresql-private-libs-13.22-1.el9_6.x86_64
noarch 0^20250217.gale48a0-13.el9_6 apps
x86_64 0.9.6-25.el9 based
mariadb-libs-1.22.12-4.el9_6
noarch 0.9.6-25.el9 based
mariadb-connector-c-3.2.6-1.el9_0.noarch
noarch 0.9.6-25.el9 based
mariadb-connector-c-config-3.2.6-1.el9_0.noarch
noarch 0.9.6-25.el9 based
size: 1.4 G
N]:
```

КОНФИГУРАЦИЯ КОДИРОВКИ СИМВОЛОВ



```
root@localhost:/etc
GNU nano 5.6.1
[client]
default-character-set = utf8
[mysqld]
character-set-server = utf8
```



```
For server side help, type 'help contents'
MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.001 sec)
MariaDB [(none)]>
```



```
[root@localhost.user.net etc]# systemctl start mariadb
[root@localhost.user.net etc]# systemctl enable mariadb
Created symlink /etc/systemd/system/mysql.service → /usr/lib/systemd/system/mariadb.service.
Created symlink /etc/systemd/system/mysqld.service → /usr/lib/systemd/system/mariadb.service.
Created symlink /etc/systemd/system/multi-user.target.wants/mariadb.service → /usr/lib/systemd/system/mariadb.service.
[root@localhost.user.net etc]# ss -tulpen | grep mysql
[root@localhost.user.net etc]#
```

СОЗДАНИЕ БАЗЫ ДАННЫХ

```
MariaDB [addressbook]> SELECT * FROM city;
+-----+-----+
| name | city |
+-----+-----+
| Иванов | Москва |
| о Петров | Сочи |
| Сидоров | Дубна |
+-----+-----+
3 rows in set (0.001 sec)

MariaDB [addressbook]> CREATE USER astakhovamd@'%' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.007 sec)

MariaDB [addressbook]> GRANT SELECT,INSERT,UPDATE,DELETE ON addressbook.* TO astakhovamd@'%';
Query OK, 0 rows affected (0.003 sec)

MariaDB [addressbook]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)

MariaDB [addressbook]> DESCRIBE city;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| name | varchar(40) | YES | | NULL | |
| city | varchar(40) | YES | | NULL | |
+-----+-----+-----+-----+-----+
2 rows in set (0.001 sec)

MariaDB [addressbook]> quit
```



```
)> USE addressbook;
ed
ssbook]> SHOW TABLES;
00 sec)

ssbook]> CREATE TABLE city(name VARCHAR(40), city VARCHAR(40));
ws affected (0.006 sec)

ssbook]> CREATE TABLE city(name VARCHAR(40), city VARCHAR(40));
501): Table 'city' already exists
ssbook]> INSERT INTO city(name,city) VALUES ("Иванов", "Москва");
w affected (0.003 sec)

ssbook]> INSERT INTO city(name,city) VALUES ("о Петров", "Сочи");
w affected (0.006 sec)

ssbook]> INSERT INTO city(name,city) VALUES ("Сидоров", "Дубна");
w affected (0.007 sec)

ssbook]> SELECT * FROM city;
+-----+
| city |
+-----+
| Москва |
| Сочи |
| Дубна |
+-----+
(0.001 sec)
```

РЕЗЕРВНЫЕ КОПИИ

```
[astakhovamd@localhost.user.net ~]$ sudo -i
[sudo] password for astakhovamd:
[root@localhost.user.net ~]# mkdir -p /var/backup
[root@localhost.user.net ~]# mysqldump -u root -p addressbook > /var/backup/addressbook.sql
Enter password:
[root@localhost.user.net ~]# mysqldump -u root -p addressbook | gzip > /var/backup/addressbook.sql.gz
Enter password:
[root@localhost.user.net ~]# mysqldump -u root -p addressbook | gzip > $(date +/var/backup/addressbook.%Y%m%d.%H%M%S.sql.gz)
Enter password:
[root@localhost.user.net ~]# mysql -u root -p addressbook < /var/backup/addressbook.sql
Enter password:
[root@localhost.user.net ~]# zcat /var/backup/addressbook.sql.gz | mysql -u root -p addressbook
Enter password:
[root@localhost.user.net ~]#
```

```
root@localhost:/vagrant/provision/server
root@localhost:/etc          x   root@localhost:/etc/my.cnf.d      x   root@localhost:/vagrant/
                                     mysql.sh

GNU nano 5.6.1
#!/bin/bash
echo "Provisioning script $@"
systemctl restart named
echo "Install needed packages"
dnf -y install mariadb mariadb-server
echo "Copy configuration files"
cp -R /vagrant/provision/server/mysql/etc/* /etc
mkdir -p /var/backup
cp -R /vagrant/provision/server/mysql/var/backup/* /var/backup
echo "Start mysql service"
systemctl enable mariadb
systemctl start mariadb
if [[ ! -d /var/lib/mysql/mysql ]]
then
echo "Securing mariadb"
mysql_secure_installation <<EOF
y
123456
123456
y
y
y
y
EOF
echo "Create database"
mysql -u root -p123456 <<EOF
CREATE DATABASE addressbook CHARACTER SET utf8 COLLATE utf8_general_ci;
EOF
mysql -u root -p123456 addressbook < /var/backup/addressbook.sql
fi
```

```
type: "shell",
preserve_order: true,
path: "provision/server/dhcp.sh"

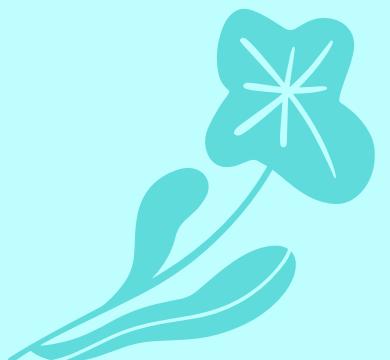
end

server.vm.provision "server http",
type: "shell",
preserve_order: true,
path: "provision/server/http.sh"
end

server.vm.provision "server mysql",
type: "shell",
preserve_order: true,
path: "provision/server/mysql.sh"
end

## Client configuration
```

ВНЕСЕНИЕ ИЗМЕНЕНИЙ В НАСТРОЙКИ ВНУТРЕННЕГО ОКРУЖЕНИЯ ВИРТУАЛЬНОЙ МАШИНЫ



СПАСИБО ЗА ВНИМАНИЕ!

