Учреждение образования

«БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ ТЕХНОЛОГИЧЕСКИЙ УНИВЕРСИТЕТ»

Факультет информационных технологий

Кафедра информационных систем и технологий

**Лабораторная работа по теме № 6.**

«Установка почтового сервера с веб-интерфейсом на ОС Ubuntu Server 18.04»

Выполнил:

Студент: Герман А.Е.

ФИТ 3 курса 5 группы

Преподаватель: Сазонова Д.В.

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# **1 Расширение логического тома и файловой системы на нем на все имеющееся дисковое пространство**

|  |
| --- |
| sudo apt update  sudo apt install lvm2  sudo lsblk  sudo fdisk -l  sudo fdisk /dev/sda #p  sudo vgextend vg\_name /dev/sda1 |

Для ext4:

|  |
| --- |
| sudo resize2fs /dev/vg\_name/lv\_name |

Для XFS:

|  |
| --- |
| sudo xfs\_growfs /dev/your\_vg\_name/your\_lv\_name |

# **2 Экспорт баз данных**

|  |
| --- |
| su root  mysqldump -u root -p --all-databases > all\_databases.sql |

# **3 Установка MariaDB взамен MySQL**

## **Stop apt & remove lock**

|  |
| --- |
| sudo killall apt  sudo killall apt-get  sudo rm /var/lib/apt/lists/lock  sudo rm /var/cache/apt/archives/lock  sudo rm /var/lib/dpkg/lock\*  sudo dpkg --configure -a |

## **Purge mysql/mariadb packages**

|  |
| --- |
| sudo apt-get purge mysql\* mariadb\* -y  sudo apt-get autoremove  sudo apt-get autoclean |

## **Stop AppArmor**

|  |
| --- |
| sudo systemctl stop apparmor.service  sudo update-rc.d -f apparmor remove |

# OR/AND

|  |
| --- |
| sudo ln -s /etc/apparmor.d/usr.sbin.mysqld /etc/apparmor.d/disable/  sudo apparmor\_parser -R /etc/apparmor.d/usr.sbin.mysqld |

## **Check if all packages are OK**

|  |
| --- |
| dpkg --configure -a |

## **Reboot Important**

|  |
| --- |
| systemctl reboot |

## **Install mraiadb-server**

|  |
| --- |
| sudo apt-get install mariadb-server |

## **Turn on AppArmor**

|  |
| --- |
| sudo systemctl start apparmor.service  sudo update-rc.d apparmor defaults |

# OR/AND

sudo rm /etc/apparmor.d/disable/usr.sbin.mysqld

|  |
| --- |
| sudo systemctl stop mysql  sudo apt-get remove --purge mysql-server  sudo apt-get remove --purge mysql-client  sudo apt-get remove --purge mysql-common  sudo apt-get autoremove  sudo apt-get autoclean  sudo reboot |
| sudo apt update  sudo apt install mariadb-server-10.1  sudo systemctl start mariadb  sudo systemctl enable mariadb |
| mysql -u root -p < all\_databases.sql |

# **4 Настройка Apache для параллельной работы с Nginx**

|  |
| --- |
| sudo nano /etc/apache2/sites-available/site.herman.by.conf  sudo nano /etc/apache2/sites-available/forum.herman.by.conf  sudo nano /etc/apache2/sites-available/cloud.herman.by.conf  sudo nano /etc/apache2/sites-available/cloud.herman2.by.conf |
| sudo systemctl restart apache2 |
| sudo apt update  sudo apt install nginx |
| sudo nano /etc/nginx/sites-available/default |
| sudo nano /etc/nginx/sites-available/site.herman2.com.conf |
| server {  listen 8080;  server\_name site.herman2.com;  location / {  proxy\_pass http://127.0.0.1:8080;  proxy\_set\_header Host $host;  proxy\_set\_header X-Real-IP $remote\_addr;  proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;  proxy\_set\_header X-Forwarded-Proto $scheme;  }  } |
| sudo ln -s /etc/nginx/sites-available/your\_domain /etc/nginx/sites-enabled/  sudo systemctl restart nginx |

# **5 Установка iRedMail**

|  |
| --- |
| cd /tmp  wget https://github.com/iredmail/iRedMail/archive/1.5.2.tar.gz  tar -xvf 1.5.2.tar.gz  cd iRedMail-1.5.2  sudo bash iRedMail.sh |

### **==== Set up the Certs ====**

|  |
| --- |
| apt install software-properties-common  add-apt-repository ppa:certbot/certbot  apt install certbot  certbot certonly --webroot --agree-tos --email -d mail..com -w /var/www/html/ |

### **=== Installing the Certificate in Nginx ===**

sudo nano /etc/nginx/templates/ssl.tmpl

Find the following 2 lines:

ssl\_certificate /etc/ssl/certs/iRedMail.crt;

ssl\_certificate\_key /etc/ssl/private/iRedMail.key;

Replace them with:

ssl\_certificate /etc/letsencrypt/live/mail.your-domain.com/fullchain.pem;

ssl\_certificate\_key /etc/letsencrypt/live/mail.your-domain.com/privkey.pem;

Save and close the file. Then test nginx configuration and reload.

sudo nginx -t

sudo systemctl reload nginx