

## Installing Koha on Windows/Mac/Linux

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Welcome! This guide is intended for anyone wishing to run Koha Integrated Library System (<http://koha-community.org/>) on an existing windows/mac/linux system. Although the newest version of Koha is only available for a linux operating system, it is possible to run Koha on windows/mac using virtualization software.

This guide links to a pre-made image of the Koha server, which you can download and run (assuming virtua. The second option is to install from scratch. Keep in mind that with either option you will need a computer that is capable of running the virtualization software. As long as the host machine is only a few years old there should be no problem running the Koha system.

The images in the first install option are intended to provide you with an easy way to sample Koha. If you intend to use Koha, I HIGHLY recommend that you either change all the passwords (debian server, mysql, koha server) or install from scratch by following the direction for the second option.

### Current Build

Debian Ver: 10 Debian Server Login User: librarystaff Pass: library2021	Koha Ver: 20.11 Koha Patron Access: 127.0.0.1:8080 Koha Staff Access: 127.0.0.1:8081	(Pre-Made Image Info)  Koha Software Admin User: admin Pass: Library2021
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### [FAQ](#)

[Instructions for installing using a pre-made image.](#)

[Instructions for installing from scratch.](#)

I have started a google group, which you can join to be notified of future updates and ask questions <https://groups.google.com/g/koha-on-windows-mac-linux>

Please let me know if you find this information useful! Questions or comments can be emailed to [hertelj@t@gmail.com](mailto:hertelj@t@gmail.com) or send me a tweet <http://www.twitter.com/hertelj@t>

## FAQ

Q. I would like to login to the debian server. What is the username and password?

A. The username and password for the debian server are:

Username: librarystaff

Password: library2021

Root Password: library2021

Q. I would like to update the koha server. Is this possible?

A. Yes. If you want to update your install here are the steps to follow:

1. Backup the virtual machine so that you'll have a copy if something goes wrong. To do this, start virtual box, select the machine, and then go to File->Export Appliance.
2. Start the virtual machine.
3. Login to the terminal. The default username and password are both set to mathlibrary
4. Run the following commands from terminal  
su  
apt -y install koha-common

## Instructions for Installing Using a Pre-made Image

If you just want a system to try out quickly, this is the easiest way to do it. You will need to download the virtualization program, download the server image, and then import the image. There are two images available. The first image contains a fully installed library server. The second contains a library server that still needs to be setup.

### Instructions for Image 1: Koha 20.11

You can view of screencast of instructions here: <https://youtu.be/D03flcXXKqg>

1. Install Virtual Box on your machine <https://www.virtualbox.org/>
  - Note: You may need to enable hardware virtualization in the bios of the host computer (i.e., the computer running virtualbox).
2. Download library server image.

Most Current Koha 20.11

[https://drive.google.com/file/d/1-8XGX-ja123wA5oGT\\_fijE13wKFP2gZJ/view?usp=sharing](https://drive.google.com/file/d/1-8XGX-ja123wA5oGT_fijE13wKFP2gZJ/view?usp=sharing)

3. Import the image into virtual box.
4. Start the virtual machine.
5. Open a web browser

Staff Login: 127.0.0.1:8081

Guest Login: 127.0.0.1:8080

Default settings are:

Default library: Library

User accounts:

username: admin      password: Library2021

The admin account has full superlibrarian privileges.

## Instructions for Image 2: Koha Library Ready to Be Installed

1. Download the following image, import it, and start the virtual machine.  
<https://drive.google.com/file/d/1AZJZ7ODDtsFrBTZd7hkicXxC9TGMXoyf/view?usp=sharing>
2. Open [127.0.0.1:8081](http://127.0.0.1:8081) in a web browser and enter these credentials  
Username: koha\_library  
Pass: vBnWepcjfjBQS3y@
3. Follow the directions to set up the library server and select the options that you want to enable.
4. Login to the new system  
Staff Login: 127.0.0.1:8081  
Guest Login: 127.0.0.1:8080
5. Your system should be ready to be set up! You'll want to create new library, new users, etc. Check out the documentation on <http://koha-community.org/> for more info.

# Instructions for Installing Koha Library Software on a Debian Virtual Machine from Scratch

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To install Koha from scratch, you'll need to follow these general steps.

1. Install Virtual Box
2. Create a virtual linux machine
3. Download Debian iso image
4. Install debian on virtual machine
5. Add the koha-community repository
6. Install koha-common
7. Install MariaDB Server
8. Configure apache
9. Configure library instance
10. Configure the host os to route to the virtual machine
11. Configure Koha

## Detailed Steps

### Step 1

Install a virtual box on your machine. <https://www.virtualbox.org/>

### Step 2

Once virtual box is installed, create a new linux virtual machine. Use the default settings.

### Step 3

Download debian squeeze iso image <https://www.debian.org/distrib/>

Load the debian image in the cd/dvd drive of the virtual machine.

### Step 4

1. Boot the virtual machine and install debian by following the on-screen instructions. N
  - a. I chose **NOT** to install the graphical interface to keep the system small.
  - b. You will need to set up a username and password in the install. This is the username and password for the Debian server that you'll need in Step 5.
  - c. Install the webserver

2. Shutdown the virtual machine.
3. Remove the debian image in the cd/rom
4. Reboot the virtual machine.

#### Step 5

1. Login to the new system and become root (you can do this by using the su command)

```
su
```

2. Install gnupg  

```
apt install gnupg
```
3. Add the GPG key to your system so that you know that the packages haven't been tampered with:

```
wget -q -O- https://debian.koha-community.org/koha/gpg.asc | apt-key add -
```

4. Add the koha-community repository (instructions here:  
<https://wiki.koha-community.org/wiki/Debian> )

```
echo 'deb http://debian.koha-community.org/koha stable main' | tee  
/etc/apt/sources.list.d/koha.list
```

#### Step 6

1. Update the repository list and install koha.

```
apt-get update  
apt-get install koha-common
```

#### Step 7

1. Install MariaDB Server

```
sudo apt-get install mariadb-server
```

(Also do this if you did not install the webserver when setting up debian)

```
sudo apt install apache2
```

#### Step 8 Configure Apache

(Note, I had to run the following command to set the path and get a2enmod to workJ)

```
export PATH="$PATH:/sbin:/usr/sbin:/usr/local/sbin"
```

1. a2enmod rewrite
2. a2enmod cgi
3. Configure apache  
    Edit `/etc/apache2/ports.conf` and add  
    Listen 8080  
    Listen 8081
4. `/etc/init.d/apache2 restart`

#### Step 9

1. Create Library Instance, I have called the library "library" below  
    `koha-create --create-db library`
2. Setup plack  
    You will need set an Apache module for koha-plack works:  
  
    `a2enmod headers proxy_http`  
    then:  
  
    `koha-plack --enable library`  
    `koha-plack --start library`  
    `service apache2 restart`
3. Retrieve the admin password (you'll need this later)  
    Run this command  
    `koha-passwd libraryname`
4. Edit `/etc/apache2/sites-enabled/library.conf` and change ports under OPAC and Intranet  
    # OPAC  
    <VirtualHost \*:8080>  
    # Intranet  
    <VirtualHost \*:8081>
5. Edit `/etc/koha/koha-sites` change ports to 8080 and 8081

INTRAPORT="8080"

OPACPORT="8081"

#### Step 10

Configure host OS to route to the virtual machine. Now we need to route port to ports of the virtual machine. This can be done using the virtualbox.

- a. Shutdown the virtual machine.
- b. Go to Settings -> Network then click on the Advanced arrow and the button Port Forward
- c. Add two forwards I called mine GuestLogin and StaffLogin. Note that you only need to specify the port (leave the IP boxes blank)

GuestLogin    8080    8080

StaffLogin    8081    8081

#### Step 11

1. Configure Koha. You'll need the password from Step 9.3. The default user name is koha\_(you library name)
  - a. Start up the virtual machine (you may need to eject the iso image or change the boot order so that the live cd doesn't launch).
  - b. Login to the admin page on the virtual machine 127.0.0.1:8081
  - c. Select the options that you want to enable.
2. Login to the new system

Staff Login: 127.0.0.1:8081  
Guest Login: 127.0.0.1:8080
3. Your system should be ready to be set up! You'll want to create new library, new users, etc. Check out the documentation on <http://koha-community.org/> for more info.



