### **Kollaborate Server**



### **Installation Guide**

Kollaborate Server is a local implementation of the Kollaborate cloud workflow system that allows you to run the service in-house on your own server and storage.

### **Features**

All of the features of the cloud version including:

- Video review and feedback
- · Comprehensive permissions system with department-level sandboxing
- Task tracking
- Team management
- Integration with <u>Digital Rebellion products</u>
- More features...

Kollaborate Server also features no storage or quota limitations in all editions and no per-project user limits on the Unlimited Edition.

### Requirements

- macOS, Linux or Windows computer
- Apache 2.4+
- PHP 7.2+
- MySQL 5.0+
- IonCube Loader
- ImageMagick
- FFMPEG
- Node.js

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# **Prerequisites**

This guide assumes you are familiar with the following topics or tasks in your operating system:

- · Managing files
- · Using the command line
- · Editing configuration files with a text editor
- · Modifying file and user permissions
- Executing command line scripts

If you are not familiar with these topics, please research them before continuing.

### Installing

If you have an existing installation of Kollaborate Server, please see the <u>Upgrading</u> section.

First setup a free account on <a href="www.kollaborate.tv">www.kollaborate.tv</a> and login to the <a href="Kollaborate Server">Kollaborate Server</a> page. Purchase an appropriate license for Kollaborate Server based on the number of users you will require per project, then download the latest version of Kollaborate Server.

The following guides provide the simplest method of installing the software and getting it up and running quickly. This is not recommended for a production environment so please see the <a href="Recommendations">Recommendations</a> section for a list of security and performance tips.

You will need to be logged into an admin user account to install Kollaborate Server.

### Mac installation

macOS ships with older versions of Apache and you can install the latest version manually, however the simplest way to setup a server is with MAMP.

- 1. Download and install MAMP from <a href="http://www.mamp.info">http://www.mamp.info</a>.
- 2. Copy the contents of the **Installation files** folder in your installer zip file to / **Applications/MAMP/htdocs**.
- 3. In MAMP preferences, set the Apache port to 80 and then click **Start Servers** in the main window.
- 4. Visit <a href="http://[your site]/install">http://[your site]/install</a>, where [your site] is the IP address or domain name of your site. Do not use localhost.
- 5. The installer will guide you step-by-step through the process. You will only be able to go to the next step when the previous step is successful. The installer will try to do everything automatically for you, but if it can't it will give you exact instructions on what to do manually.
- 6. After completing all the steps, you'll be presented with the admin login interface. Login with the admin email address and password you setup during the installation.
- 7. In the admin console, go to **Configure** and setup any additional settings such as paths to SSL certificates and email forwarding settings.

- 8. Delete the install and upgrade directories from the /Applications/MAMP/htdocs folder.
- 9. Navigate to your site's main URL or domain name in your web browser and login. You can now setup projects and invite users.
- 10. See the <u>Sending Emails</u> section for a guide on configuring the server to send emails.

**IMPORTANT:** The default installation of MAMP is extremely insecure. See Appendix B at the end of this manual for a guide to hardening it.

### **Ubuntu installation**

The following installation guide is for Ubuntu but it should be similar on other Linux / Unix distributions.

- 1. Install LAMP by typing the following at the command-line: sudo apt-get install tasksel sudo tasksel install lamp-server
- 2. Make sure the required PHP dependencies are installed with the following commands:

sudo apt-get install php7.2-json php7.2-gd php7.2-mbstring php7.2-xml curl libcurl3 libcurl3-dev php7.2-curl

- 2. Copy the contents of the **Installation files** folder in your installation zip file to **/var/www/html**. Make sure there are no other files in this folder before copying.
- 3. Start the server by typing **sudo service apache2 start** at the Terminal.
- 4. Visit <a href="http://[your site]/install">http://[your site]/install</a>, where [your site] is the IP address or domain name of your site. Do not use localhost.
- 5. The installer will guide you step-by-step through the process. You will only be able to go to the next step when the previous step is successful. The installer will try to do everything automatically for you, but if it can't it will give you exact instructions on what to do manually.
- After completing all the steps, you'll be presented with the admin login interface.
   Login with the admin email address and password you specified during the installation process.
- 7. In the admin console, go to **Configure** and setup any additional settings such as paths to SSL certificates and email forwarding settings.
- 8. Delete the install and upgrade directories from the **/var/www/html** folder.
- 9. Navigate to your site's main URL or domain name in your web browser and login. You can now setup projects and invite users.
- 10. See the <u>Sending Emails</u> section for a guide on configuring the server to send emails.

### Windows installation

The following installation guide is for Windows 10 but it should be similar for earlier versions.

- 1. Install Apache, PHP and MySQL. The easiest way of doing this is by downloading Uniform Server: <a href="http://www.uniformserver.com">http://www.uniformserver.com</a>
- 2. Install Uniform Server to C:\, which will place the contents into C:\UniServer, then copy the contents of the **Installation files** folder in your installation zip file to **C:** \UniServer\www.
- 3. Visit <a href="http://[your site]/install">http://[your site]/install</a>, where [your site] is the IP address or domain name of your site. Do not use localhost.
- 4. The installer will guide you step-by-step through the process. You will only be able to go to the next step when the previous step is successful. The installer will try to do everything automatically for you, but if it can't it will give you exact instructions on what to do manually.
- 5. After completing all the steps, you'll be presented with the admin login interface. Login with the admin username and password you set up during installation.
- 6. In the admin console, go to **Configure** and setup any additional settings such as paths to SSL certificates and email forwarding settings.
- 7. Delete the install and upgrade directories from the C:\UniServer\www folder.
- 8. Navigate to your site's main URL or domain name in your web browser and login. You can now setup projects and invite users.
- 9. See the Sending Emails section for a guide on configuring the server to send emails.

### **Sending Emails**

There are two options for sending emails - sending them directly from the server or routing them through Digital Rebellion servers. This is available for a monthly fee, with the main advantage being that you can host from a dynamic IP address and do not have to worry about configuring the server to limit the likelihood that emails will be interpreted as spam.

To set up email routing, visit the <u>Kollaborate Server</u> portal and subscribe to the Email Routing add-on. Then go to the admin panel and click Customize. Switch email routing on, then enter the access and user keys specified on the Kollaborate Server page next to the add-on. Note that emails routed through Digital Rebellion servers may take a few minutes longer to arrive than normal.

To setup email directly on the server, please see the following guides:

Ubuntu: https://help.ubuntu.com/community/PostfixBasicSetupHowto.

Mac: http://benjaminrojas.net/configuring-postfix-to-send-mail-from-mac-os-x-mountain-

lion/

Windows: http://wiki.uniformserver.com/index.php/PHP mail function

### **Recommendations**

The following recommendations are advised to improve performance and security in a production environment.

- 1. Create a new database user with a secure password, then update the site configuration page (located in the admin console) and set the database user to the new user. Then delete or disable the root account.
- Load your php.ini file in a text editor. Look for the items post\_max\_size and upload\_max\_filesize and set them both to a high value such as 10000M (10 GB). These items limit the largest file you can upload.
- Give your server a fixed IP address on your local network. If you need access outside of your company, consider a dynamic DNS service or purchase a fixed IP address from your ISP.
  - For simplicity we recommend giving Kollaborate Server its own domain or subdomain, such as kollaborate.mycompany.com.
- 3. Purchase an SSL certificate from an authorized certificate authority such as Verisign, Comodo, Thawte, etc. Setup your Apache server to use the certificate and then visit the Configure page of the admin console to tell it to use a secure connection and point it to the certificate and key files.
  - If you setup an SSL certificate, we recommend editing your Apache configuration or .htaccess files to force SSL connections at all times.
- 4. Use strong passwords for database users, admins and other logins. Remove or rename default users, or at the very least change their passwords.
- 5. Configure a firewall to block all incoming ports except 80, 443 and 8000.
- 6. Use the Microsoft <u>SPF Record Wizard</u> to setup an SPF record for your domain so that email clients will trust emails sent from your server and not automatically mark them as spam or prevent them reaching the recipient.

### Security software compatibility

Security software like mod\_security and mod\_evasive are designed to protect your server from attackers who may try to post binary data or flood the server with requests that occur far too frequently to be from legitimate users.

However, Digital Rebellion applications legitimately using the Kollaborate API may be incorrectly considered to be attacking the server if the security settings are too strict.

Most security products will have a monitoring mode where errors are logged but no blocking takes place. We recommend testing Kollaborate Server in this mode to decide the best security settings to choose.

We recommend keeping security settings lenient so persistent attackers will be blocked but legitimately heavy users will not.

# **Upgrading**

If you already have an existing Kollaborate Server installation, use these steps to upgrade to the latest version.

- 1. Select all files in the **Installation files** folder in the zip file **except the config folder** and copy them to your web root, overwriting the existing files.
- 2. Navigate to <a href="http://localhost/upgrade">http://localhost/upgrade</a> in your web browser.
- 3. Click the Upgrade button to upgrade your installation. The upgrade process may take a while.
- 4. Delete the upgrade and install folders from your web root.

### **Frequently Asked Questions**

#### Q. Can I store media files on a different drive / server?

A. Yes, as long as the drive is mounted on the server. Specify the full path in the config.php file.

#### Q. Can I use a separate database server?

A. Yes, specify the IP address or domain in the config.php file.

#### Q. What is the best way of bringing files into Kollaborate?

A. The easiest way is to use <u>Kollaborate Transfer</u>. It will automatically encode files, gather metadata and upload them to the server in one step.

#### Q. How do I get Digital Rebellion apps to communicate with Kollaborate Server?

A. Digital Rebellion apps will have options in their preferences for specifying the URL to Kollaborate Server. Point this URL to the URL of the server then login and they will communicate with the local server instead of the cloud.

# Q: I updated the configuration incorrectly and locked myself out. How do I change it back?

A. If you can't access the admin console to change the configuration, you can manually edit the configuration file **config.php** inside the **config** folder in your web directory.

#### Q: Which ports should I open / forward on my firewall?

A. Ports 80, 443 and 8000 should be open for traffic.

#### Q: How do I unregister the trial version so I can register my full license?

A: Navigate to the parent directory of your web root. For example, if your web root is / var/www, navigate to /var.

Delete the file **kollab\_server.inc**, then visit **http://[yoursite]/install** and keep clicking **Continue** until you get to the Licensing page. If you deleted the install folder (which is recommended for production installations), download Kollaborate Server again and copy the install folder back (do not copy any other folders).

Login with your Kollaborate cloud email address and password, then you will be automatically licensed to the full version of Kollaborate Server.

### **Troubleshooting**

Problem: Upon visiting the site you are presented with a blank white screen.

Solution: The most common cause of this is an incorrect license. Make sure you followed the steps of the Installation section correctly to generate and install your license. If you view your PHP log it should tell you the exact reason for the failure.

Problem: Emails don't arrive straight away.

Solution: The mail queue runs on a two minute timer, so emails will arrive at most two minutes late. This delay is doubled if using email routing.

Problem: Emails end up in recipients' spam boxes.

Solution: Do not send emails from a dynamic IP address. For best results, choose a fixed IP address that is linked to a domain and generate an SPF record for that domain.

Consider subscribing to <u>email routing</u> to simplify sending emails from Kollaborate Server.

Problem: Cut Notes sync / live comments don't work.

Solution: You may need to type the following:

cd [my Kollaborate Server installation]/websocket (e.g. cd /var/www/websocket)
npm install websocket.io

Then reboot the server.

Problem: I get a "Page Not Found" (404) error when logging in or clicking on a link.

Solution: This may occur if Apache is not configured to obey .htaccess files. In your site configuration file\* you need to change the line "AllowOverride None" to "AllowOverride All."

An example entry would be the following:

<Directory /var/www>
AllowOverride All
Options -Indexes +FollowSymLinks -MultiViews
</Directory>

\* On most systems this will be your global Apache config file but on others, most notably Ubuntu, these are separate files stored in /etc/apache2/sites-enabled.

### Uploads fail or appear to work but no file exists on the server

Uploads not working can be one of three things:

- 1. The file sizes for max\_post\_size and upload\_max\_filesize in php.ini are too low.
- 2. Permissions are preventing PHP from writing to your storage location. On Ubuntu the default Apache user is www-data so you can assign Apache as the owner of that drive by typing sudo chown -R www-data:www-data [path to storage directory]

(On OS X the default Apache user is \_www)

3. While your storage location is the final destination for the file, PHP first uploads it to your boot drive and then moves it across. So if your boot drive isn't big enough to hold the file it can cause the upload to fail. You can change the location with the **upload\_tmp\_dir** setting in php.ini.

## **Appendix A: Downgrading PHP in MAMP**

If you are using MAMP for Mac, it will by default use the latest version, however if the version is recent there may not be an lonCube loader for it. Follow these steps to downgrade to an earlier version:

- 1. Close MAMP.
- 2. Go to /Applications/MAMP/bin/php. This folder contains a wide range of PHP versions, but only the very lowest and highest will be available in the Preferences menu of MAMP.
- 3. Rename the folder with the highest version of PHP (e.g. "php5.5.3") and prefix it with "old-" (e.g. "old-php5.5.3").
- 4. Relaunch MAMP and go to Preferences. It should now show the next highest version of PHP as a choice in the version dropdown menu.

# **Appendix B: Enhancing MAMP security**

By default, MAMP for Mac makes PHPInfo and PHPMyAdmin available to any users who visit yoursite/MAMP. This can be useful when setting up the server but it will need to be disabled for real-world use.

To prevent users from accessing the MAMP subfolder, just rename the /Applications/ MAMP/bin/mamp folder and it will become inaccessible.