

Current version

Documentation for v2.x.

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Setup

Guidance for installing and upgrading classroombookings.

Requirements

classroombookings is web-based software. This means that there is no executable (.exe) file - it must be run on a web server and accessed through a web browser. You are expected to have sufficient knowledge of setting up web servers in order to set it up.

- Apache or Nginx web server.
- PHP version: 5.5 or above, or 7.0 or above. **PHP 8 not currently supported.**
- PHP modules: GD, mysqli/pdo_mysql
- MySQL 5.x; MariaDB 5.x or 10.x. **MySQL 8 not currently supported.**
- Filesystem write access
- Apache module `mod_rewrite` for clean URLs (optional)

Installation

Please make sure your server environment is set up and meets the [requirements](#) before continuing.

Summary

The procedure for installing classroombookings should be straightforward for those familiar with web based software.

- Create a new empty database as well as a user that has full access to this database.
- Download the latest version and extract the files to a web-accessible folder on the server.
- Ensure the local and uploads directories have 'write' permissions. On Unix-based systems, this is usually 664 or 775.
- Visit the URL of the folder where you extracted the files.
- This will load the installer which will guide you through the rest of the installation process.

For more details guidance, continue reading.

Create the database

Classroombookings needs its own empty database. The procedure for doing this will vary depending on your server or hosting configuration, but you will commonly use an administrator-level account (such as 'root') to create the database and user account. It is easy to do this using visual tools like Adminer, HeidiSQL and phpMyAdmin, but it is possible to do it via the mysql command line client.

Using the command line client

This example shows how to log in to a server as the root user, creating the database `crbs_db` and user `crbs_user` with the password `6vTccw7zYF`. Replace these with your own choice of names and password.

```
$ mysql -u root -p

Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 3285
Server version: 10.3.8-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE crbs_db;
Query OK, 1 row affected (0.010 sec)

MariaDB [(none)]> GRANT ALL ON crbs_db.* TO 'crbs_user' IDENTIFIED BY '6vTccw7zYF';
Query OK, 0 rows affected (0.003 sec)

MariaDB [test_db]> exit;
Bye
```

Make a note of the database name, username and password. You will need them later.

Download, extract and upload

If you have the ability to download and extract zip files on the server itself, it's quicker, safer and more efficient to do that.

This example shows how to do this on the command line using the tools `wget` and `unzip`. Replace the URL to the zip file with the latest version, from the Download page. Change directory into the web server document root or `classroombookings` folder first, as the zip file will be extracted into the current folder.

```
$ wget
https://github.com/craigrodway/classroombookings/releases/download/v2.0.0/classroombookings-
v2.0.0.zip

$ unzip classroombookings-v2.0.0.zip -d .
```

If you don't have command line access to the server, download the zip file of the latest version from the website using a web browser and save it to your computer. Extract the archive to a temporary folder. You will then need to transfer all of these files to the server. How you do this will depend on what protocols your server supports, but this is commonly done via SCP, SFTP or FTP.

Filesystem permissions

There are two folders that need 'write' permissions from the web server user. This is essential for core functionality (user sessions and log files) and uploaded files (user import CSV, school logo, room photos) to work properly.

On Unix-based systems, this is usually represented by 664 or 775 in numeric values; or 'drwxrwxr-x' in its string representation.

If these aren't already set, you should be able to do this on the command line like in this example:

```
$ chmod -R 775 local
$ chmod -R 775 uploads
```

If you don't have command line access, most file transfer applications such as WinSCP or FileZilla allow these to be set via the interface.

Run the installer

Using a browser, visit the IP address or URL on the server where the classroombookings files were extracted. You should see the following page.

Install classroombookings - Configuration

Database connection details

Hostname*

Database name*

Username*

Password*

Database

Enter your database details here.

Ensure the database has been created, and the user has access to it.

Configuration

URL*

This is the web address that classroombookings will be accessed at. It must end with a forward slash /.

Next

In the **Database connection details** section, enter the details for connecting to your database. In the **Configuration** section, ensure the auto-detected URL matches the address that will be used by all users to access classroombookings. If it is not correct, change it to the address that will be used.

Click **Next**. The installer will test the database connection using the details provided.

If the database connection test was successful, the next page will be displayed.

Install classroombookings - Information

Settings

School name*

Administrator user

Username*

Password*

At least 8 characters.

Next

[Back](#)

Enter the name of your school in the **School name** field.

Enter the desired username and password of the initial administrator-level user. This user will be created during the installation process. Remember the details you use, you will need these to log in after classroombookings has been installed.

Click **Next**.

Install classroombookings - Check requirements

Requirement	Status
PHP Version 5.5.0 or greater <small>Your PHP version is 7.2.2.</small>	OK
PHP module 'GD' is available	OK
Database connection	OK
Database is empty	OK
'local' directory exists and writable	OK
'uploads' directory exists and writable	OK

[Install](#) [Back](#)

The final page checks if certain requirements are met and displays the status. If all items are OK, you can finish the installation by clicking **Install**.

If there are any problems, the status will show an Error indicator and some guidance notes about what needs to be done.

Test School

Install classroombookings

Classroombookings has been installed!

 [Click here to log in](#)

Once it has been installed, click the link to go to the Login page. Enter the administrator user details you created earlier.

Login to Test School

Login

Username*

Password*

Login

Upgrading

If you already have an existing Version 2 installation of classroombookings and want to update it to the latest release of Version 2, the process should be straightforward and familiar if you have installed or updated Version 2 already.

Check that your hosting environment or server [meets the requirements](#), and then proceed with the steps below.

Summary

- Make a backup of your database.
- Download and extract the latest Version 2 archive you want to install.
- The following folders and files in your installation need to be replaced with files from new release:
 - application folder
 - assets folder
 - index.php file
- To do this, either:
 - rename them (e.g. application.old, assets.old, index.old.php) **or**;
 - move them somewhere else (it's a good idea to keep a copy in case you need to revert the changes)
- Place the extracted files from the latest Version 2 archive into the same folder as the current installation.
- Using a web browser, visit the URL of your classroombookings installation.

If everything still works, you can safely remove your backups of the application, assets, and index.php file.

There is no upgrade process to run, but any database changes that need to be done will be made

automatically without any intervention.

Special notes

Sometimes it may be necessary to carry out extra tasks for individual upgrades. Check below if that is the case for your version upgrades.

v2.0.1

There is a new file favicon.ico to add to the root folder, along with index.php. Extract this file from the downloaded archive along with application, assets and index.php.

Upgrading (from version 1)

If you already have an existing Version 1 installation of classroombookings and want to update it to Version 2, the process should be straightforward but involves some manual intervention.

Check that your hosting environment or server meets the [new requirements](#), and then proceed with the steps below.

Overview

- Make a backup of your database.
- Make a copy of the `index.php` file in your current classroombookings install.
- Download and extract the latest Version 2 archive.
- Place the version 2 files in the same folder as the current version 1 installation, making sure to overwrite or replace the `index.php` file. All other folders and files are new, and do not conflict with existing ones.
- Ensure the `local` and `uploads` directories have 'write' permissions. On Unix-based systems, this is usually 664 or 775.
- Using a web browser, visit the URL of the folder where you extracted the files. E.g. `http://local-server/classroombookings/`
- This will load the upgrade process which will guide you through the next steps.

The upgrade process carries out a number of tasks:

- Retrieves your current database settings, checks the connection, and looks for your current classroombookings installation.
- Copies any school logo or room photo files to a new location.
- Makes necessary changes to database tables.
- Upgrades the password storage security.
- Writes a new configuration file.

Backup your database

The upgrade process makes several changes to the database, so it is a good idea to make a backup copy should any of these fail. It is easy to do this using visual tools like Adminer, HeidiSQL and phpMyAdmin, but it is possible to do it via the mysqldump command line client.

This example demonstrates how to use the command to create a copy of the crbs_db database and save it to the crbs_db_backup.sql file, logging in as the crbs_user user.

```
$ mysqldump -u crbs_user -p crbs_db > crbs_db_backup.sql
Enter password: *****
```

Download, extract and upload

If you have the ability to download and extract zip files on the server itself, it's quicker, safer and more efficient to do that.

This example shows how to do this on the command line using the tools wget and unzip. Replace the URL to the zip file with the latest version, from the Download page. Change directory into the web server document root or classroombookings folder first, as the zip file will be extracted into the current folder.

```
$ wget
https://github.com/craigrodway/classroombookings/releases/download/v2.0.0/classroombookings-
v2.0.0.zip

$ unzip classroombookings-v2.0.0.zip -d .

...
replace ./index.php? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
...
```

If you don't have command line access to the server, download the zip file of the latest version

from the website using a web browser and save it to your computer. Extract the archive to a temporary folder. You will then need to transfer all of these files to the server. How you do this will depend on what protocols your server supports, but this is commonly done via SCP, SFTP or FTP.

Filesystem permissions

There are two folders that need 'write' permissions from the web server user. This is essential for core functionality (user sessions and log files) and uploaded files (user import CSV, school logo, room photos) to work properly.

On Unix-based systems, this is usually represented by 664 or 775 in numeric values; or 'drwxrwxr-x' in its string representation.

If these aren't already set, you should be able to do this on the command line like in this example:

```
$ chmod -R 775 local
$ chmod -R 775 uploads
```

If you don't have command line access, most file transfer applications such as WinSCP or FileZilla allow these to be set via the interface.

Run the upgrade process

Using a browser, visit the IP address or URL on the server where the classroombookings files were extracted. You should see the following page.

Upgrade classroombookings

Please take a backup of your classroombookings database before continuing.

Configuration

URL*

This is the web address that classroombookings will be accessed at. It must end with a forward slash /.

Requirement	Status
PHP Version 5.5.0 or greater Your PHP version is 5.6.30.	OK
PHP module 'GD' is available	OK
Database connection developer:*****@127.0.0.1/crbs_v1	OK
Database has classroombookings tables	OK
'local' directory exists and writable	OK
'uploads' directory exists and writable	OK

Upgrade

The upgrade process will try to automatically detect the URL your classroombookings installation uses, and populates the URL field. Check that this is correct, and adjust it if necessary.

It will also find your existing database settings, test your connection and check your current install.

If any errors are present, the status will report an error and display some guidance notes.

If all checks are successful, click the **Upgrade** button.

Upgrade classroombookings

Classroombookings has been upgraded!

Please check you can log in and that everything works as expected.

If it does, delete the following items that are no longer required:

- **system** folder
- **temp** folder
- **webroot** folder
- **classroombookings.sql** file
- **license.txt** file

 [Click here to log in](#)

When complete, the confirmation page will be displayed.

Check that your installation works as expected by logging in with your account details and confirm the various pages load OK.

If everything is fine, you can safely delete the following folders and files from version 1, as they are no longer required:

- `system` folder
- `temp` folder
- `webroot` folder
- `classroombookings.sql` file
- `license.txt` file

Managing

Guidance on how to manage and configure your installation.

Introduction

you can start changing settings to match your school and adding various items that make it work.

On a fresh installation, the suggested order for getting started is set out below.

- Add your information in the School Details page.
- Set global options in the Settings page.
- Set up the periods/lesson times in The School Day.
- Specify the dates of the Academic Year, followed by timetable weeks in Week Cycle.
- Add any Holidays that take place in the academic year.
- Add your bookable Rooms.
- Add new User accounts and/or set up LDAP authentication.
- Add timetabled lessons as recurring bookings.

As an administrator user, all of these can be done from the main Control Panel page.

Managing

School Details

You can use the School Details section to manage global information and settings for classroombookings.

School name and Website address

This is where you can add the name of your school, which is displayed in the header area of all pages. The Website Address isn't currently used but could be displayed in future versions, if populated.

School logo

This setting allows you to upload an image of the school logo, which will be displayed on the login page.

The School Day

Use the school day section to set up how your day operates - primarily, the lesson/period times. You do not need to enter breaks - just the periods that you want rooms to be able to be booked on.

Test School

[Control Panel](#)
[Logout](#)
 Logged in as Admin

The School Day

[+ Add Period](#)

Name	Start time	End Time	Duration	Days of week	
Period 1	09:00	10:00	1 Hour	Mo Tu We Th Fr Sa Su	
Period 2	10:00	11:00	1 Hour	Mo Tu We Th Fr Sa Su	
Period 3	11:15	12:15	1 Hour	Mo Tu We Th Fr Sa Su	
Period 4	13:00	14:00	1 Hour	Mo Tu We Th Fr Sa Su	
Period 5	14:00	15:00	1 Hour	Mo Tu We Th Fr Sa Su	

[+ Add Period](#)

It is recommended that periods *do not* overlap.

Some people find it useful to add "Before school" and "After school" periods, if rooms are sometimes used "out of hours".

When adding a Period, tick all of the weekdays that it is applicable to.

Timetable Weeks

Use the Week Cycle page to configure the timetable weeks that occur within the academic year.

Test School Control Panel Logout
Logged in as Admin

Timetable Week Cycle

[Add Week](#) [Academic Year](#)

Name	Colour	
Blue Week	Blue Week	 
Red Week	Red Week	 

[Add Week](#) [Academic Year](#)

These are essential for making recurring bookings. The flexibility in defining the weeks allows multi-week timetables to run throughout the academic year; but instead of alternating in a week one/week two fashion, you define each week in the year to a specific timetable week.

When you create a recurring booking, it is assigned to a room and period for the given day on the timetable week that the date falls on.

Example: creating a booking for Period 1 in Room 1 on a Monday in "Week 1" will ensure that the booking occurs every Week 1 on a Monday at Period 1 in Room 1.

If you only operate a simple one-week timetable, a week still needs to be added. Give it a name like 'Timetable', and tick all of the weeks in the year.

Each week can have its own colours, to help differentiate them in the Bookings page. Enter the colours using their hexadecimal format, E.g. `0074d9`.

Edit Week

Week Information

Name*

Background Colour*

Foreground Colour*

Week Dates

Please select the week-commencing (Monday) dates within the current academic year that this week applies to.

<input type="checkbox"/> 03 Sep 2018	<input checked="" type="checkbox"/> 10 Sep 2018
<input type="checkbox"/> 17 Sep 2018	<input checked="" type="checkbox"/> 24 Sep 2018
<input type="checkbox"/> 01 Oct 2018	<input checked="" type="checkbox"/> 08 Oct 2018
<input type="checkbox"/> 15 Oct 2018	<input checked="" type="checkbox"/> 22 Oct 2018
<input type="checkbox"/> 29 Oct 2018	<input checked="" type="checkbox"/> 05 Nov 2018
<input type="checkbox"/> 12 Nov 2018	<input checked="" type="checkbox"/> 19 Nov 2018
<input type="checkbox"/> 26 Nov 2018	<input checked="" type="checkbox"/> 03 Dec 2018
<input type="checkbox"/> 10 Dec 2018	<input checked="" type="checkbox"/> 17 Dec 2018
<input type="checkbox"/> 24 Dec 2018	<input type="checkbox"/> 31 Dec 2018
<input type="checkbox"/> 07 Jan 2019	<input checked="" type="checkbox"/> 14 Jan 2019
<input type="checkbox"/> 21 Jan 2019	<input checked="" type="checkbox"/> 28 Jan 2019
<input type="checkbox"/> 04 Feb 2019	<input checked="" type="checkbox"/> 11 Feb 2019
<input type="checkbox"/> 18 Feb 2019	<input checked="" type="checkbox"/> 25 Feb 2019
<input type="checkbox"/> 04 Mar 2019	<input checked="" type="checkbox"/> 11 Mar 2019
<input type="checkbox"/> 18 Mar 2019	<input checked="" type="checkbox"/> 25 Mar 2019
<input type="checkbox"/> 01 Apr 2019	<input checked="" type="checkbox"/> 08 Apr 2019
<input type="checkbox"/> 15 Apr 2019	<input type="checkbox"/> 22 Apr 2019
<input type="checkbox"/> 29 Apr 2019	<input checked="" type="checkbox"/> 06 May 2019
<input type="checkbox"/> 13 May 2019	<input checked="" type="checkbox"/> 20 May 2019
<input type="checkbox"/> 27 May 2019	<input checked="" type="checkbox"/> 03 Jun 2019
<input type="checkbox"/> 10 Jun 2019	<input checked="" type="checkbox"/> 17 Jun 2019
<input type="checkbox"/> 24 Jun 2019	<input checked="" type="checkbox"/> 01 Jul 2019
<input type="checkbox"/> 08 Jul 2019	<input checked="" type="checkbox"/> 15 Jul 2019

Academic Year

Classroombookings needs to know the dates of your Academic Year before the timetable weeks can be configured. Use the Academic Year link to set the start and end date for the year, typically from September to July.

Academic Year

 [Weeks](#)

Academic year

Start date:* 

End date:* 

Holidays

Holidays in classroombookings are periods of time where bookings cannot be made. The time can be as short as a single day, or a range of days spanning multiple weeks.

Test School  Control Panel  Logout
Logged in as Admin

School Holidays

[+ Add Holiday](#)

Name	Start Date	End Date	Duration	
Autumn break	22/10/2018	26/10/2018	5 Days	 
Christmas	21/12/2018	03/01/2019	2 Weeks	 

[+ Add Holiday](#)

Only enter the dates that fall within the holiday itself inclusive. Holidays affect bookings for all rooms and all periods during the time period that the holiday lasts.

Rooms

Rooms are the entities that users can make a booking for.

Test School

[Control Panel](#)
[Logout](#)
 Logged in as Admin

Rooms

+ [Add Room](#)
📄 [Custom Fields](#)

Name	Location	Teacher	Photo	
ICT 33	Floor #2	Marc Chaplyn		
ICT 42	Ground Floor	Jodie Kennifick		
Mobile Cart 1	Central			
Room 101	Block A	Montague Alcorn		
Suite 6	Block B	Roxanna Murphy		

+ [Add Room](#)
📄 [Custom Fields](#)

When adding a room, some of the information you enter (e.g. owner, location, photo and any custom fields) will be accessible and visible on the bookings page to other users.

The Room owner setting allows you to designate a classroombookings user as the owner of that room. This gives the user the special permission of being able to delete other user's bookings in their room.

Custom Fields

If you wish to highlight certain features of the rooms, you can do this using the custom fields section. Common uses for these are things like room capacity, number of computers available, or whether it has certain equipment such as printers or projectors.

Create your custom fields *before* adding rooms; it will save time.

Managing

Settings

Use the Settings page to control global settings for the installation. The settings are described in detail below.

Settings

Bookings

Booking in advance

How many days in the future users can make their own bookings. Enter 0 for no restriction.

Maximum active bookings

Maximum number of active single bookings for a user. Enter 0 for no limit. 'Active' is any single booking for a date and period start time in the future.

Display type

- One day at a time
 One room at a time

Specify the main focus of the bookings page.
One day at a time - all periods and rooms are shown for the selected date.
One room at a time - all periods and days of the week are shown for the selected room.

Columns

- Periods
 Rooms

Select which details you want to be displayed along the top of the bookings page.

User details

- Show users of recurring bookings
 Show users of single bookings

This setting controls the visibility of a booking's user on the Bookings page. User details are always displayed to administrators, and on user's own bookings.

Date formats

Dates follow the PHP format - [view reference](#).

Long date format

Long date format displayed at the top of the bookings page.

Weekday date format

Short date format for a specific weekday.

Period time format

Time format for periods.

Login Message

Display a custom message to users on the login page.

Enable

Message

Contact IT Support on extension 237 for help with logging in.

Maintenance Mode

Enabling Maintenance Mode prevents Teacher user accounts from viewing and making bookings. All users can still log in to make changes to their own account or change their password.

Maintenance Mode

Message

We're currently working on the new timetable, please check back soon!

This is the message that will be displayed during maintenance mode.

Bookings

Booking in Advance

This option can be used to limit the number of days ahead that teacher user accounts can make bookings, based on the current day when making the booking.

Example: Setting value is 3 days. If today is Monday, teachers can book rooms between now and Thursday (+ 3 days).

Maximum active bookings

This option can be used to limit the number of *active* bookings a user can have at one time. An 'Active' booking is any single booking for a user that where the date and period date start time is now or in the future.

Example: Setting value is 5. If a teacher has 4 active bookings, they can only make one more. After they have made booking #5, they can't create any more. Once their earliest active booking takes place (has passed), they can create another one.

Display Type

This option changes the focus and layout of the bookings page.

- **One day at a time:** The booking page shows bookings for a single day, for all rooms and all periods. Users navigate by date.
- **One room at a time:** The booking page shows bookings for a single room, for all days of the week and all periods. Users navigate by week and room.

Columns

This determines which data aspect is shown on the bookings table across the top of the grid, and the options available change depending on the Display Type option above.

User details

Use this setting to specify whether a booking's *user* is visible to other users on the bookings screen. Usually these will be displayed, but they can be turned off if you don't want teacher-level users to see the names of others on bookings.

Date formats

These options control how the date and time is displayed to users on the bookings page in different areas.

The values should be PHP date/time format strings ([view reference](#))

Common formats

Form	Example
<code>l</code> <code>jS</code> <code>F Y</code>	Thursday 16th April 2020
<code>d/m/Y</code>	16/04/2020
<code>jS</code> <code>M</code>	16th Apr
<code>g: i</code>	8:30
<code>H: i</code>	16:45

Login Message

This section controls the message that can be displayed to users on the login page. It is useful of reminding users about things, giving special instructions, or telling them how to get support.

Maintenance Mode

When Maintenance Mode is enabled, Teacher users are prevented from viewing and making bookings, and the message will be displayed at the top of every page.

This is useful if you want to temporarily prevent changes from being made by most users.

Users

Users are central to accessing classroombookings. Users are identified by a username and password combination, and all passwords are stored locally in the classroombookings database in a secure hashed format.



Manage Users

[Add User](#) | [Import Users](#)

Type	Enabled	Username	Display name	Last login	
		admin	Admin	01/01/2019, 18:13	
		amcgenn9	Adamo McGenn	Never	
		ametzel8	Alameda Metzel	Never	
		dmaccallum7	Dickie MacCallum	Never	
		jkennifick1	Jodie Kennifick	Never	
		malcorn0	Montague Alcorn	Never	
		mchaplyn5	Marc Chaplyn	Never	
		mcumberledge6	Morgan Cumberledge	Never	
		mfelkin3	Myrvyn Felkin	Never	
		rmurphy2	Roxanna Murphy	Never	

1 2 3 >

[Add User](#) | [Import Users](#)

There are currently only two types of users: Administrator, and Teacher. Administrator users can do anything within the system. Teacher users can only create bookings for bookable rooms, up to number of days ahead as configured in the Booking in Advance setting. Teacher users do not have access to any of the management features.

Import from CSV

It is also possible to bulk import users from a CSV file using the Import users page.

Import Users

Import Source

CSV File*

users.csv

Maximum filesize **8.0 MB**.

Default values

Enter the default values that will be applied to all users if not specified in the import file.

Password

Type*

Enabled

CSV format

Your CSV file should be in this format:

```
username, firstname, lastname, email, password
```

It doesn't matter if it contains the header row.

Any usernames that already exist will be ignored.

The CSV file needs to be formatted with the following columns:

```
username, firstname, lastname, email, password
```

Click **Create Accounts** to process the CSV file. Each row in the file will be processed and a user account will be created, if possible.

If a user already exists in classroombookings with the same username, the row will be skipped and no changes will be made to the existing user.

A results page will be shown after they have been processed, displaying the success or failure status of each entry in the CSV file.

Imported Users

Row	Username	Created	Status
#1	malcorn0	No	User exists
#2	jkennifick1	No	User exists
#3	rmurphy2	No	User exists
#4	mfelkin3	No	User exists
#5	sbarcroft4	Yes	Success
#6	mchaplyn5	No	User exists
#7	mcumberledge6	No	User exists
#8	dmacallum7	No	User exists
#9	ametzl8	No	User exists
#10	amcgenn9	No	User exists

[All Users](#)[Import More Users](#)

Managing

LDAP Authentication

You can use LDAP Authentication to authenticate users against an Active Directory (AD) or LDAP server.

Support for this functionality requires that the PHP installation has the **ldap** extension enabled.

Authentication

LDAP

LDAP

Enable Use LDAP to authenticate users

Create users Automatically create user accounts on successful login.
 When enabled, any valid credentials returned from an LDAP authentication attempt will automatically create a classroombookings 'Teacher' account.
 When not enabled, only users who have a classroombookings account will be authenticated.

Connection

Server
 Hostname or IP address.

Port
 Standard ports are 389 (non-SSL) or 636 (SSL).

Protocol version
 Usually 3.

Use TLS

Ignore certificate

Bind DN format

This will vary depending on your server and configuration. The tag **:user** will be replaced with the authenticating user. Some common formats are:

- EXAMPLE.LOCAL\user
- :user@EXAMPLE.LOCAL
- uid=:user,cn=users,dc=example,dc=com

Search

Base DN
 E.g. dc=example,dc=local

Search filter
 Example: (&(attr=:user))
 The tag **:user** will be replaced by the user logging in.

User attribute mapping

When you use a search filter to find the authenticating user, you can populate the following classroombookings user details with attributes found in LDAP each time they log in.
 Combine multiple LDAP attributes by adding a colon before the attribute name, for example - **:givenName :sn**.
 Leave these fields blank to disable automatic population.

First Name
 E.g. givenName

Last Name
 E.g. sn

Display Name
 E.g. displayName or ':givenName :sn'

Test Settings

Change settings on the left then enter a username and password here to test them. You don't need to click Save before testing the credentials.

These credentials are only passed to the LDAP server and are never saved or stored.

Username

Password

You can choose to have classroombookings automatically create accounts upon successful authentication with the server, or only allow access to accounts that already exist.

When LDAP is enabled and a user successfully logs in, their password is hashed and stored in the classroombookings database, just like local users. This enables those users to log in even if the LDAP server is temporarily unavailable or the LDAP setting is turned off.

Connection

Firewall

The AD/LDAP server must be accessible over the network from the server that classroombookings is running on. Depending on your setup, this may involve opening and/or forwarding ports on firewalls.

If you are using the hosted cloud service, you will need to allow access to the port from the following IP address:

- `94.237.60.222` .

Server

This is the hostname or IP address of the AD/LDAP server to authenticate with. Currently, only one server is supported.

Port

The port number that the AD/LDAP server is running on.

Protocol version

The protocol version number that the AD/LDAP connection should use.

Use TLS

Specify whether to use TLS for the connection.

Ignore certificate

Choose this option to ignore any certificate errors when using a TLS connection. If you do not use this option, you may need to install and/or accept your AD/LDAP server's certificate on the classroombookings server.

Bind DN Format

Specify the format that the authenticating user will use when attempting to connect to the LDAP server. This will vary depending on your AD/LDAP server configuration and version. The keyword `:user` will be replaced by the username entered by the user.

Common formats are:

- `EXAMPLE. LOCAL\ :user`
- `:user@EXAMPLE. LOCAL`
- `uid=:user,cn=users,dc=example,dc=com`

Search

You can specify a search criteria to ensure that the authenticating user matches the given criteria here.

If you don't use this, any user who successfully authenticates can log in. Most organisations will want to enter a search criteria to ensure only a certain tree or group of users can log in to classroombookings, and deny another set.

Base DN

This is the Base DN that the search will start at.

Search filter

This is the AD/LDAP search filter used to find the user. The keyword `:user` will be replaced by the authenticating username.

Match user with a keyword in their description:

```
(&(uid=:user)(description=staff))
```

Match user that has an email address AD/LDAP field:

```
(&(uid=:user)(|(description=staff)(email=*)))
```

Match user that is a member of a given group:

```
(&(uid=:user)(memberof=CN=Teachers,OU=Users,DC=Example,DC=com))
```

You can read more about the LDAP query syntax here: [Search Filter Syntax](#).

User attribute mapping

When you use a search filter to find the authenticating user, you can populate the following classroombookings user profile fields with their attributes found in LDAP each time they log in.

You can combine multiple AD/LDAP attributes by adding a colon before the attribute name, for example - `:givenName:sn`. If you are just specifying a single field, you do not need to include the colon.

If you leave the field blank, classroombookings will not attempt to populate those user details.

Testing the settings

You can check if the AD/LDAP settings entered on this page will work by using the *Test Settings* box on the right side of the page.

This is useful to test that a connection can be made and only the desired user accounts can successfully authenticate.

The connection settings on the page are used every time you click **Test credentials**, so you don't

need to click Save before testing.

Any error or success messages will be displayed under the box.

Test Settings

Change settings on the left then enter a username and password here to test them. You don't need to click Save before testing the credentials.

These credentials are only passed to the LDAP server and are never saved or stored.

Username

Password

 LDAP bind error or bad username and/or password.

 Invalid credentials

Bind DN: uid=test,dc=example,dc=com

Search filter: (&(uid=test)
(objectClass=person))

 Authentication success!

Display Name

Isaac Newton

Email address

newton@ldap.forumsys.com

Maintenance

Troubleshooting

Due to the nature of web-based software, various server environments and dependencies, sometimes things don't work as expected. When they don't, it can be tricky to find the source of the problem and fix it.

Logging

Classroombookings includes the ability to write information to log files at various thresholds; ranging from 0 (turned off completely) through to 4 (log everything possible). During installation, this threshold is set to 4 to ensure that any issues during installation are logged for troubleshooting purposes. After installation, this value is changed to 1 (errors only), so that log files don't fill up unnecessarily and maintain fast page load times.

If there are any problems, the generated log files are the first place to check. These are located in the `local/logs` folder, and a new file is saved for each day where the date is part of the filename. Inspect the log file with a text editor.

If this doesn't include any useful or obvious detail, increase the log threshold to 4. To do this, open the `local/config.php` file in a text editor, adjust the value for `log_threshold` and save it. Try again to complete the action that produced the error or unexpected behaviour, and re-open and inspect the current log file again for more clues.

```
<?php
defined('BASEPATH') OR exit('No direct script access allowed');

return array(

    'config' => array(
        'base_url' => 'http://classroombookings.local/',
        'log_threshold' => 4,
```

```
'index_page' => 'index.php',  
'uri_protocol' => 'REQUEST_URI',  
,  
  
...  
  
);
```

Displaying errors

By default, detailed technical errors aren't displayed, but this can be turned on.

To do this, create a plain text file called `.env` in the main classroombookings folder (same place as `index.php`). The contents of this file should just be the word `development`.

This tells the application to run in development mode, which will display errors when they are encountered. Once you have encountered an error and fixed the cause, turn off development mode by deleting the `.env` file, or changing the contents of it from `development` to `production`.

Server logs

Sometimes, classroombookings might not even load. This is sometimes due to missing or non-installed extensions that are required, or your server configuration not being detected or supported by classroombookings. Check your server error logs for more information.

Moving to another server

classroombookings doesn't have a built-in process for moving an installation to another server but it can be done manually fairly easily using the command line or other tools.

Summary

- On the source server:
 - Backup/export the database to a .sql file (using `mysqldump`)
 - Make a copy of all the files in the installation folder.
- On the destination server:
 - Create a database and user (similar to the installation process).
 - Import the .sql file (using the `mysql` command).
 - Place the files in the installation folder.
 - Reset file/folder permissions, if necessary. (See [installation](#)).
 - Edit the `local/config.php` file:
 - Add your new database credentials.
 - Update the URL if it has changed.