Network Setup Guide

Steps 2

The Learning Staircase Ltd™

the LEARNING STAIRCASE

Version 2.5
(Server version 1.5)

Written by David Lugg

Last Updated: 23-06-2016

Steps Manual

CONTENTS

INTRODUCTION

Welcome to the Steps2 Network Setup Guide! This document will introduce you to the main database models, as well as provide instructions how to setup both the clients and servers.

Steps will run on hybrid networks of Mac and PC; just reference the sections that are appropriate to your setup as needed. You can use Linux as a server (and any other OS/device that supports SMB/Samba) but the Steps application won't work on it.

We are happy to assist you installing Steps2 on your network, but please first read the troubleshooting/FAQ at the end of this document before contacting us. Most of the issues that occur are permissions problems where the client is not allowed to make changes to the database, or is not able to connect to the database at all due to missing/incorrect credentials. Our contact details are located the end of this document.

CLIENT SYSTEM REQUIREMENTS

These requirements are a rough guide. Because every computer has a different hardware and software setup, we cannot guarantee that it will work correctly on your computer, even if your computer meets these requirements. Please contact us if you have any queries regarding compatibility.

Processor	1.5 GHz
RAM	2048 MB
Harddrive space	About 900 MB
Operating System	Vista (all), Win7 (all), Win8/8.1 (non-RT), Win10 (all)
	OSX 10.6 - OSX10.11
Graphics	OpenGL 2.0 capable graphics card with at least 64 MB RAM.
Sound card required	

Please note on Vista, Windows 7, Windows 8 and Windows 10 it is also required that speakers or a headset be plugged in to run correctly.

Steps is a 32bit program.

Steps does NOT run on tablet devices, such as iPads, Android or Chromebooks. If you need to use these devices then we'd suggest looking at StepsWeb (stepsweb.com); a web-based version of Steps that runs through the browser.

DATABASE TYPES

These are the main ways you can have a database in Steps2 Network. You can see those options as they appear in the client when you first run Steps2 in the picture below. While guiding you through setting up the database, this guide will help you collect the information needed to setup the client.

Windows initial setup	Mac initial setup

Shared Folder

Like it sounds, this database is a shared folder (Samba/SMB) on another computer. This folder would be visible to your whole network and would contain the database files inside it.

SQL

This option can function with ether a SQLite3 or MySQL database. SQLite3 is the default option and requires very little set up. If you want to use MySQL then you'll need to install that separately. The Steps2 Server program and the Steps2 Network client communicate through TCP/IP.

Stand alone (Windows only)

For computers that aren't connected to your network, this option will store its records in the environment variable %homepath%\Learning Staircase\Steps Network\

Inside application (Mac only)

This option is suitable for networks and standalone installs. If the application is stored in a network share then all users can just run Steps from that share and be connected to the same database. Please note that copying the application will also copy the database inside it.

Database Types Comparison Table

	Advantages	**Disadvantages**
Shared Folder	• Easy to setup. • Easy to extract data.	• Possibility of corruption on hybrid networks.
SQL	• Enables real time communication between the server and client, enabling features such as multiplayer on the Vowel Ladder game. • Will be expanded in later versions to allow connectivity with Steps2 Home. • Resistant to corruption.	• More difficult to setup (firewall exceptions, task scheduling). • Difficult to extract data.
Stand alone (PC only)	• Easiest to setup. • Easy to extract data. • Doesn't require a network.	• No sharing of data with other computers.
Inside application (Mac only)	• Easiest to setup. • Easy to deploy.	• Potentially confusing to users if they copy the application and end up having a different database in each copy.

At the time of writing, you can convert a Shared Folder, Stand alone, or Inside application database into a SQL database, but not the other way around.
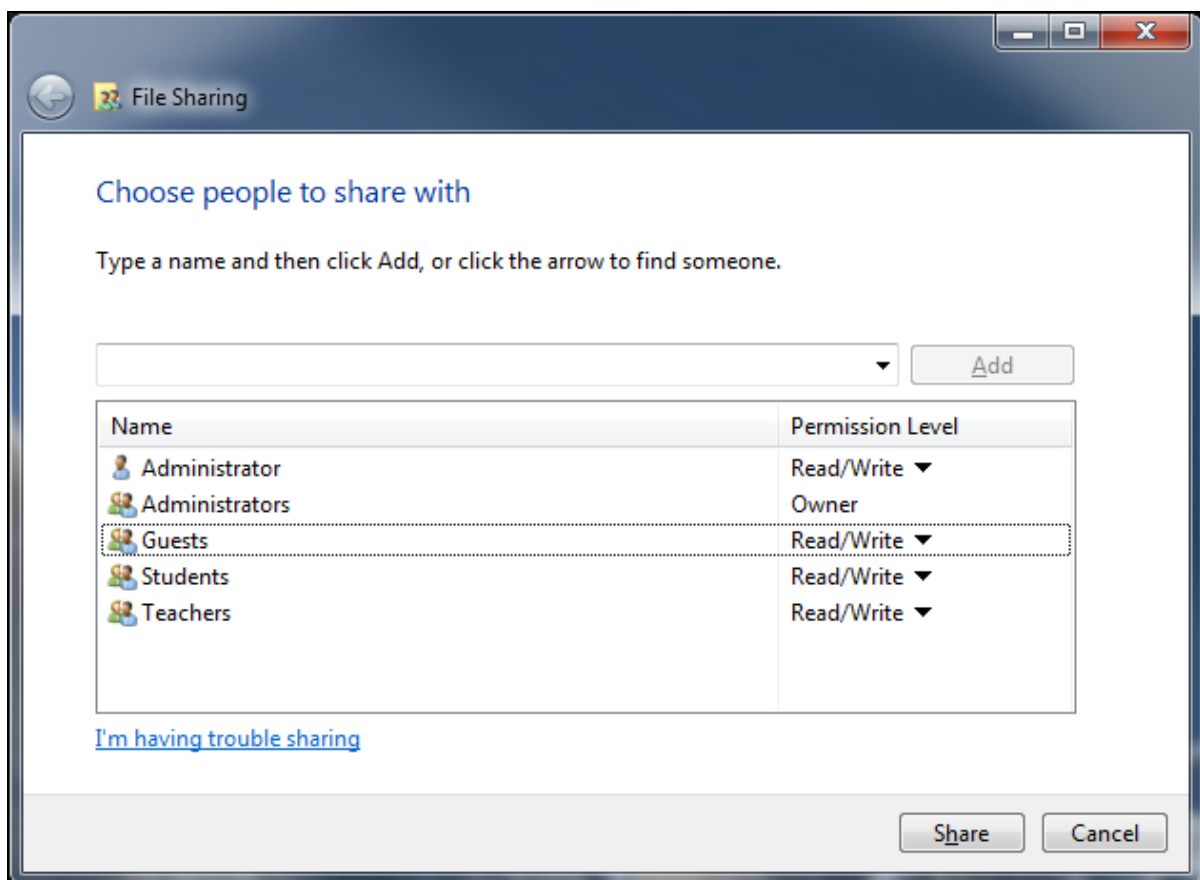
SHARED FOLDER SETUP

Shared Folder Server Setup

Windows server setup

1. Install 'Steps2 Shared Server.exe' on the server to a location that you can share over the network.
   E.g. F:\Steps_database

2. Share the root install folder with read and write access to all students and teachers.

3. Write down the network path to this folder so it can be entered into the clients.
   E.g. \\server\Steps_database\   - on Windows.
   Address for Macs will depend on the mounted volume path and is covered later under the client install instructions.

If the client computers require authentication (usernames and passwords) to access your server then you may need to use mapped network drives instead of referencing the path directly.

8

Mac server setup

1. Install 'Steps2 Shared Server.mpkg' on the server to a location that you can share over the network.

2. Follow these guides to share the root install folder with read and write access to all students and teachers.

   For 10.5 and above:
   http://support.apple.com/kb/HT1549

If you have Windows clients on your network then please enable File Sharing for Windows too (see pictures). You can get to those options through System Preferences > Sharing.
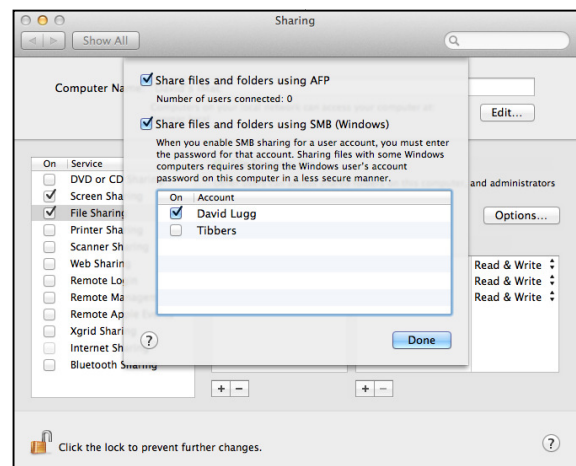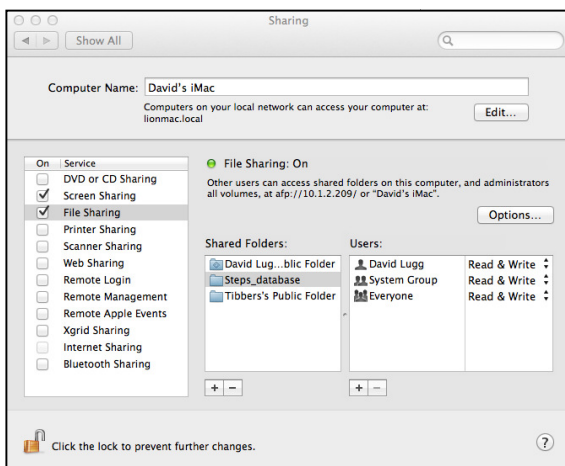
Linux server setup

1. Create an empty folder on the server in a location that you can share over the network.

2. Using Samba, share that folder with read and write access to all students and teachers.

3. Write down the network path to this folder so it can be entered into the clients. *E.g. \\server\Steps_database*

Shared Folder Client Setup

Windows client setup

All of the files for Steps are installed into the one folder. You may take the folder Steps is in and copy-paste it onto the other clients. Steps2 should be installed onto each client. You can run Steps2 straight from the server if it is on a mapped network drive.

1. Install 'Steps2 Network 2.x.x.exe'. (x's being replaced with version numbers)
    Once the database path is entered, you will only need read-access to the installation.

Running the installer
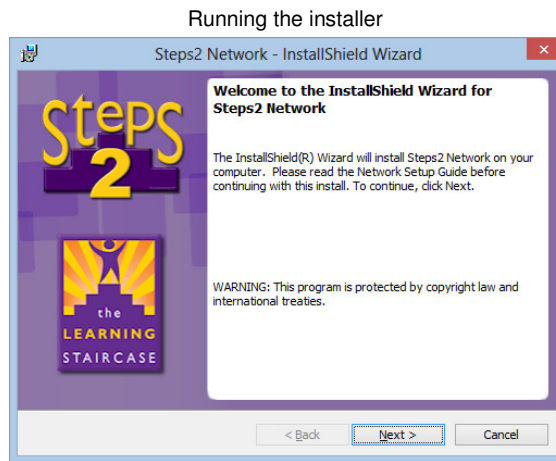
2. Run Steps2. You can find a shortcut on the desktop.

3. Click 'Continue' under 'Shared Folder'.

4. Enter the path to the Steps database.
    Example database path:
    \\server\Steps_database

    The database path is kept in a file called 'database_path.txt'. This file can be copied into other installations for a quicker setup.

5. Enter the license details if asked.
    This only needs to be done once to license the database.

Mac client setup

The Steps2 Network client is inside a DMG file labelled something like "Steps2 Network 2.x.x.dmg" where 'x' is a version number. You can find this DMG on the installation disk or on our website.

1. Mount the "Steps2 Network 2.x.x.dmg".
2. Drag the application within it into the Applications folder.

To connect Steps to the database, you'll first need to mount the volume from your server. Below is the easiest way to mount the drive, and then set it to automatically mount on startup. More advanced methods of mounting drives on many computers can be found easily on Google and is outside of the scope of this manual.

If you already have a mounted volume that you wish to use then skip steps 3-6. Please make sure that the mounted volume you have chosen has read/write/modify access for both students and teachers.

3. Browse to your server through 'Network'.
4. *Open the server, and then open the 'Steps_database'.*
   This will mount that volume. You should now see it on your desktop.
5. Go to System Preferences… > Users & Groups > Login Items
6. *Drag and drop the mounted volume into the 'Login Items'.*
   We'd suggest ticking the 'Hide' box too.

Dragging the Steps database into Login Items
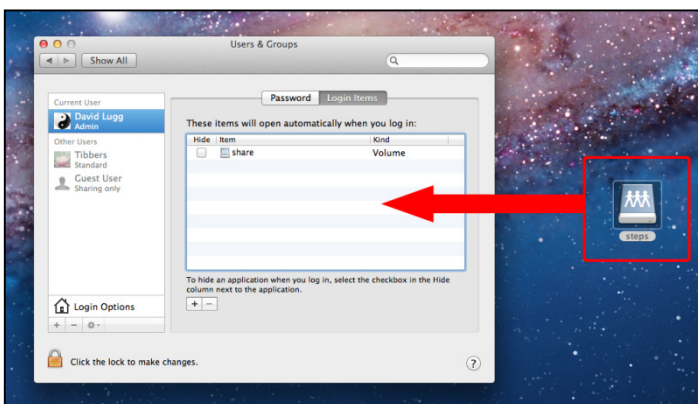
Hiding the mount
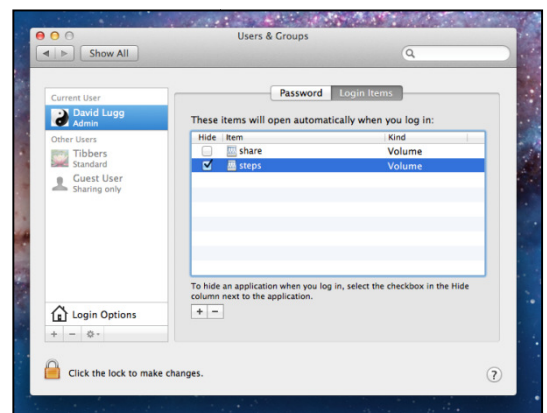
Now we need to tell the client application where the database is.

7. Launch Steps2 Network from the Applications folder.

8. Click "Continue" under the "Shared folder" option.

9. Enter the database path. If your mounted volume is called "Steps_database" then your path would likely be something like "/Volumes/Steps_database/".

10. Click "Continue". If the path you've chosen exists, and has read/write access, then it will save.

The settings configured in steps 7-10 are stored in a file called "database_path.txt" inside the Application and are stored as plain text. Assuming you setup the same mounted volume on every client computer, you'll be able to skip steps 7-10 by copying an already configured Steps2 Network application.

11. Enter the license details if asked.
    This only needs to be done once to license the database.

SQL SETUP

SQL Server setup: using SQLite3 (default)

Introduction

The Steps SQL Server is a small program that runs on your server and communicates with the clients through TCP sockets. The database itself is stored within the "steps2.db" file that you'll see pop up in the "Database" folder after launching the Steps2 SQL Server the first time.

Things to note:

Firewall
You may need to allow the Steps SQL Server through your firewall. The default out going port is 5775. The server will also need the port above it opened too:
E.g.
5775-5776

For every 500 concurrent users, another port will need to be opened up. For example, if you expected the max number of concurrent users would reach 1,300 then you'd need to allow the server through ports 5775-5778.

Backing up
You may want to stop the Steps SQL Server process before backing up. If the server is currently writing to the SQLite3 database at the time of backup then the backup might not be complete. Usually the database should only be getting written to as students are using Steps.

The database can be found in the "Database" folder, called "steps2.db".

Storing sounds
Custom sounds are stored inside the "Sounds" folder. They are stored as WAV files.

Typical setup:
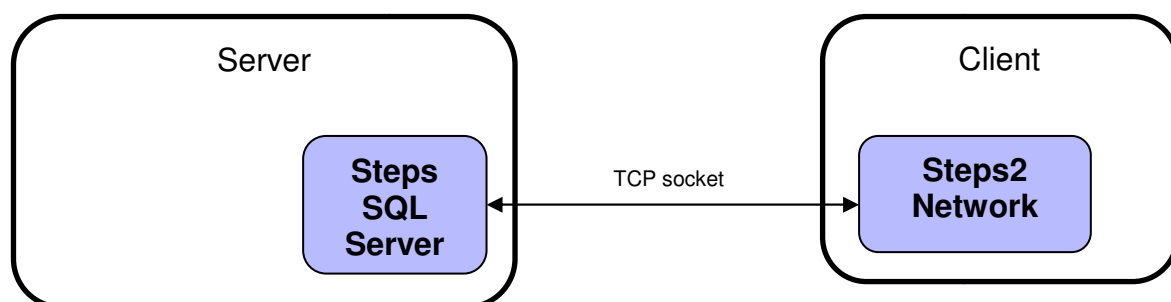
Windows server setup

1. Install "Steps2 SQL Server 1.x.x.exe" on your server.
   For optional configuration, see "database_settings.ini" inside the install location.

The following steps are for testing connectivity. If you wish to skip testing it then go to step 10

2. Run the Steps2 SQL Server under an Administrator account.
   Start Menu > Learning Staircase > Launch stepsServer.exe

3. Allow Steps2 SQL Server through the firewall if prompted.
   You may need to do this manually if not prompted.

4. Install Steps2 Network on a test computer and run it. When asked for database type, pick SQL.

5. Enter the following details:
   Host: The IP address (or hostname) of your server.
   Port: 5775 (default)
   Image path: Leave blank

6. Click 'Continue'. If everything is setup correctly then you should see a list of green ticks.

7. Enter the license details as per your DVD case (or email, if that's how it was sent to you). Click 'Continue' when done.
   You should now see the login screen for Steps2 Network with some initial setup options. You can configure that now, or just leave it for someone else to decide later on.

8. Close Steps2 Network.

9. Close Steps2 SQL Server.

Now we're going to setup Steps2 SQL Server to run as a task. We will setup the task to run the Steps2 SQL Server in the background while there are no users logged into the server.

10. Start the Task Scheduler.

11. Click "Create Task...".
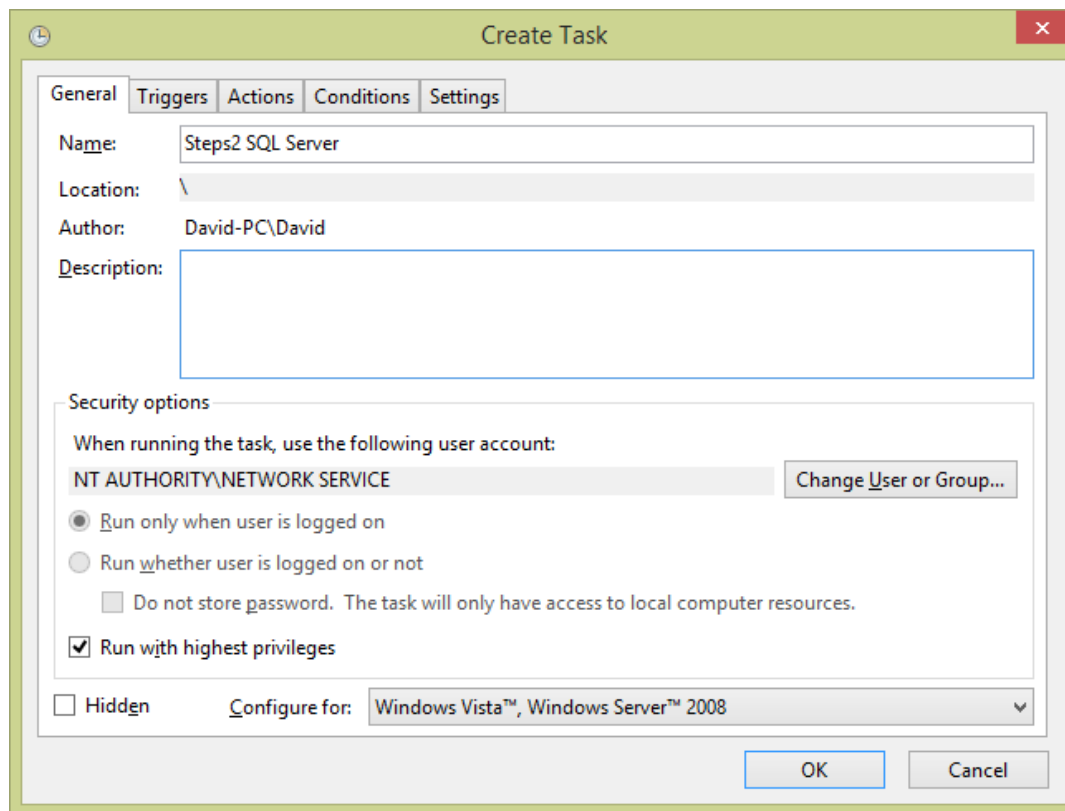
12. Make the following changes to the General tab:
    Name: Steps2 SQL Server
    Change User or Group: Set to "NETWORK SERVICE"
    Run with highest privileges: Tick

13. On the Triggers tab, click "New..."
    a. In the drop down option labelled "Begin the task:", change it to "At Startup".
    b. Click OK.

14. On the Actions tab, click "New..."
    a. In "Program/Script:" browse to the Steps2 SQL Server installation and choose stepsServer.exe.
    b. In "Start in (optional)" enter the directory that stepsServer.exe is located in.
    c. Click OK.

15. On the Settings tab, untick the option labelled "Stop the task if it runs longer than:".

16. Click OK to create the task.

17. Click on "Task Scheduler Library" and find the newly created task.

18. Right click on the new task and click "Run".

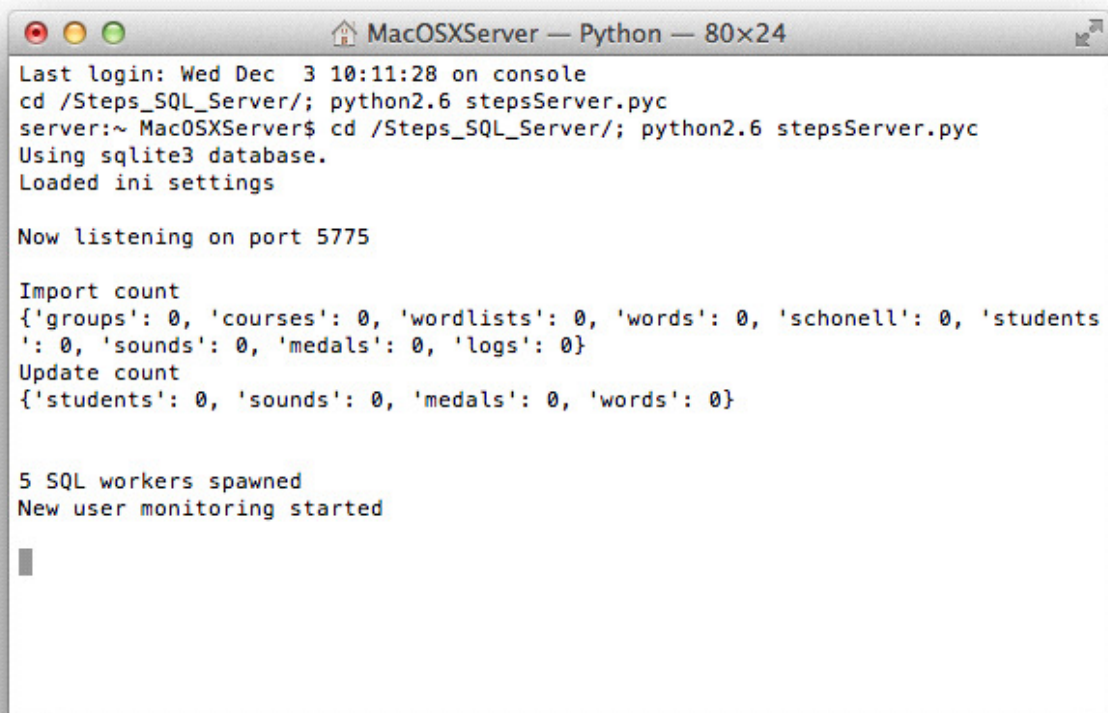The Steps2 Network clients should now be able to connect to your server.

Mac server setup

1. Install "Steps2 SQL Server 1.x.x.mpkg.
   You may need to unzip the installation first.

The default installation path is:
/Steps_SQL_Server

2. *Run "start.app" from inside the Steps2 SQL Server installation.*
   This will spawn a Terminal window. It may be hidden behind any other open
   windows.

The Steps2 Network clients should now be able to connect to your server.

```
●  ●  ●              🏠 MacOSXServer — Python — 80×24
Last login: Wed Dec  3 10:11:28 on console
cd /Steps_SQL_Server/; python2.6 stepsServer.pyc
server:~ MacOSXServer$ cd /Steps_SQL_Server/; python2.6 stepsServer.pyc
Using sqlite3 database.
Loaded ini settings

Now listening on port 5775

Import count
{'groups': 0, 'courses': 0, 'wordlists': 0, 'words': 0, 'schonell': 0, 'students
': 0, 'sounds': 0, 'medals': 0, 'logs': 0}
Update count
{'students': 0, 'sounds': 0, 'medals': 0, 'words': 0}


5 SQL workers spawned
New user monitoring started

▊
```

Note:
The application "start.app" is just a wrapper for the AppleScript "start.scpt". Feel free to open it and see how the server is launched. The code in that script may be useful if you wanted to launch the server in other ways.

SQL Server setup: using MySQL

Introduction
There are two major components to the SQL server setup; the MySQL server which is the database itself, and the Steps SQL Server which is an application that connects to clients via TCP/IP and stores the Steps data on MySQL.

MySQL
MySQL is developed by Oracle Corporation and can be downloaded from www.mysql.com.

MySQL is quite widely used so please be cautious when installing it that you aren't overwriting a previous installation. You can run multiple copies of MySQL on the same server, or setup the Steps database within your existing MySQL database.

Steps SQL Server
This is a small program that acts as the interface between the Steps2 Network client and the MySQL server. It does not need to be running on the same computer as the MySQL database, although it would make things easier if it were.

Typical setup:

Server		
MySQL	**Steps SQL Server**	TCP socket

Client
Steps2 Network

Alternative setup:

Server	Server2	
MySQL	**Steps SQL Server**	TCP socket

Client
Steps2 Network
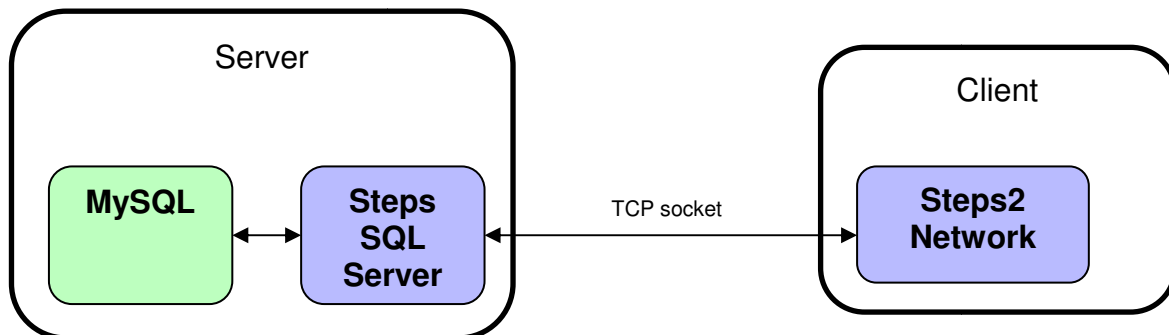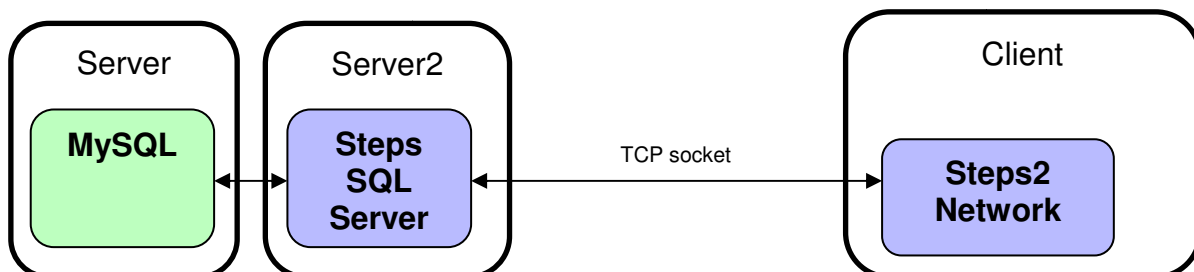
Windows server setup

Steps SQL Server setup

1. Install "Steps2 SQL Server 1.x.x.exe" on your server.

Creating the database

2. Open the MySQL Workbench, and open your desired database (usually "localhost")
3. Click on "Data Import/Restore"
4. Choose the second choice "Import from Self-Contained File", and choose the "lssteps.sql" file inside the Steps SQL Server installation.
   Default directory is in Program Files (x86)\Steps SQL Server
5. For "Default Target Schema", click "New…" and call it "lssteps". Click "Start Import".

Creating a new user in MySQL

6. Click "Users and Privileges"
7. Click "Add Account". Give it the following options:
   a. Login Name: lssteps
   b. Password: lssteps
   c. Limit to Hosts Matching: localhost (Don't use "%" unless your MySQL database is on a different server to the Steps SQL Server)
8. Under the Schema Privileges tab, click "Add Entry…"
9. Pick "Selected schema", and choose "lssteps"
10. Tick all the boxes under "Object Rights"
11. Click "Apply".
    This should create the account.

Configuring the Steps SQL Server

12. Go to the folder that the Steps SQL Server is installed in.
    Default directory is in Program Files (x86)\Steps SQL Server
13. Open database_settings.ini
    If you wanted different passwords or anything else that is not a default, then this is the place to set it
14. Change the second line (starts with "SQLlib=") to: "SQLlib=mysql"
15. Save and close it.

The following steps are for testing connectivity. If you wish to skip testing it then go to step 27

19. Run the Steps2 SQL Server (stepsServer.exe) as Administrator.
    Normally it would be run from the NETWORK SERVICE account, which also has access to the correct folders).

20. Allow Steps2 SQL Server through the firewall if prompted.
    You may need to do this manually if not prompted.

21. Install Steps2 Network on a test computer and run it. When asked for database type, pick SQL.

22. Enter the following details:
    Host: The IP address (or hostname) of your server.
    Port: 5775 (default)
    Image path: Leave blank

23. Click 'Continue'. If everything is setup correctly then you should see a list of green ticks.

24. Enter the license details as per your DVD case (or email, if that's how it was sent to you). Click 'Continue' when done.
    You should now see the login screen for Steps2 Network with some initial setup options. You can configure that now, or just leave it for someone else to decide later on.

25. Close Steps2 Network.

26. Close Steps2 SQL Server.

Setting up a Task to keep the Steps SQL Server running

27. Start the Task Scheduler.

28. Click "Create Task...".
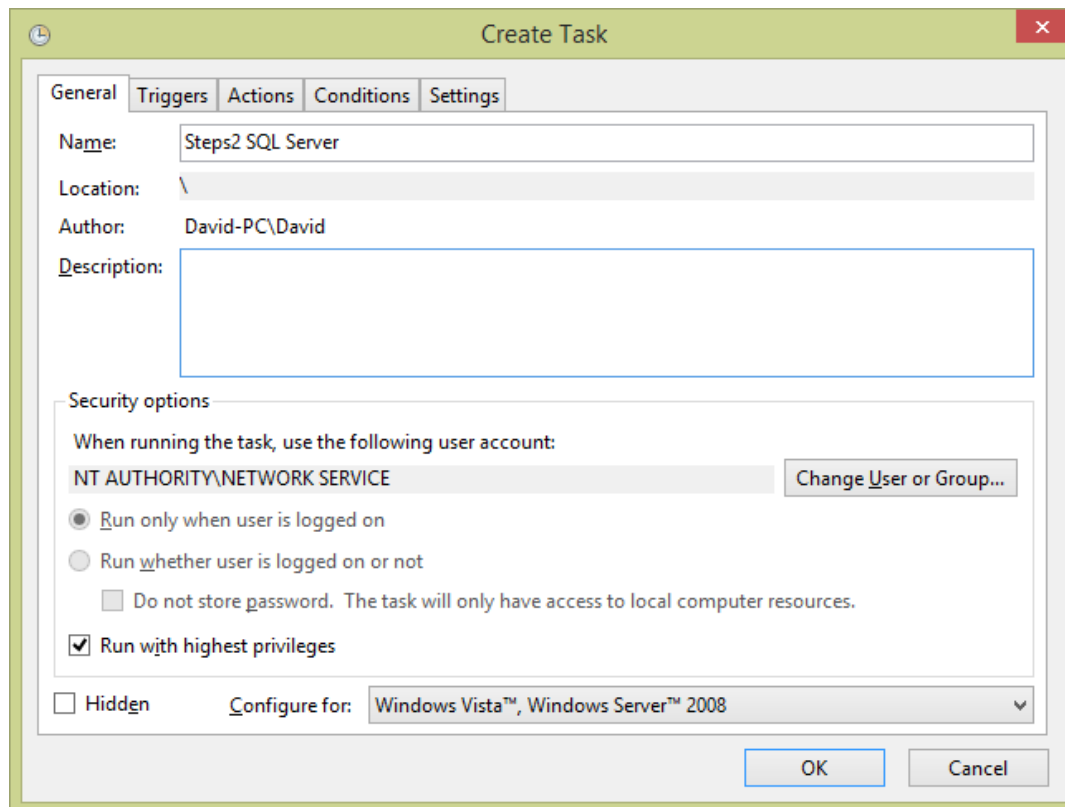
29. Make the following changes to the General tab:
    Name: Steps2 SQL Server
    Change User or Group: Set to "NETWORK SERVICE"
    Run with highest privileges: Tick

30. On the Triggers tab, click "New..."
    a. In the drop down option labelled "Begin the task:", change it to "At Startup".
    b. Click OK.

31. On the Actions tab, click "New..."
    c. In "Program/Script:" browse to the Steps2 SQL Server installation and choose stepsServer.exe.
    d. In "Start in (optional)" enter the directory that stepsServer.exe is located in.
    e. Click OK.

32. On the Settings tab, untick the option labelled "Stop the task if it runs longer than:".

33. Click OK to create the task.

34. Click on "Task Scheduler Library" and find the newly created task.

35. Right click on the new task and click "Run".

The Steps2 Network clients should now be able to connect to your server.

Mac server setup

Steps SQL Server setup

1. Install "Steps2 SQL Server 1.x.x.mpkg.
   You may need to unzip the installation first.

Creating the database

2. Open the MySQL Workbench, and open your desired database (usually "localhost")

3. Click on "Data Import/Restore"

4. Choose the second choice "Import from Self-Contained File", and choose the "lssteps.sql" file inside the Steps SQL Server installation.
   Default directory is in /Steps_SQL_Server

5. For "Default Target Schema", click "New…" and call it "lssteps". Click "Start Import".

Creating a new user in MySQL

6. Click "Users and Privileges"

7. Click "Add Account". Give it the following options:

    a. Login Name: lssteps

    b. Password: lssteps

    c. Limit to Hosts Matching: localhost (Don't use "%" unless your MySQL database is on a different server to the Steps SQL Server)

8. Under the Schema Privileges tab, click "Add Entry…"

9. Pick "Selected schema", and choose "lssteps"

10. Tick all the boxes under "Object Rights"

11. Click "Apply".
    This should create the account.
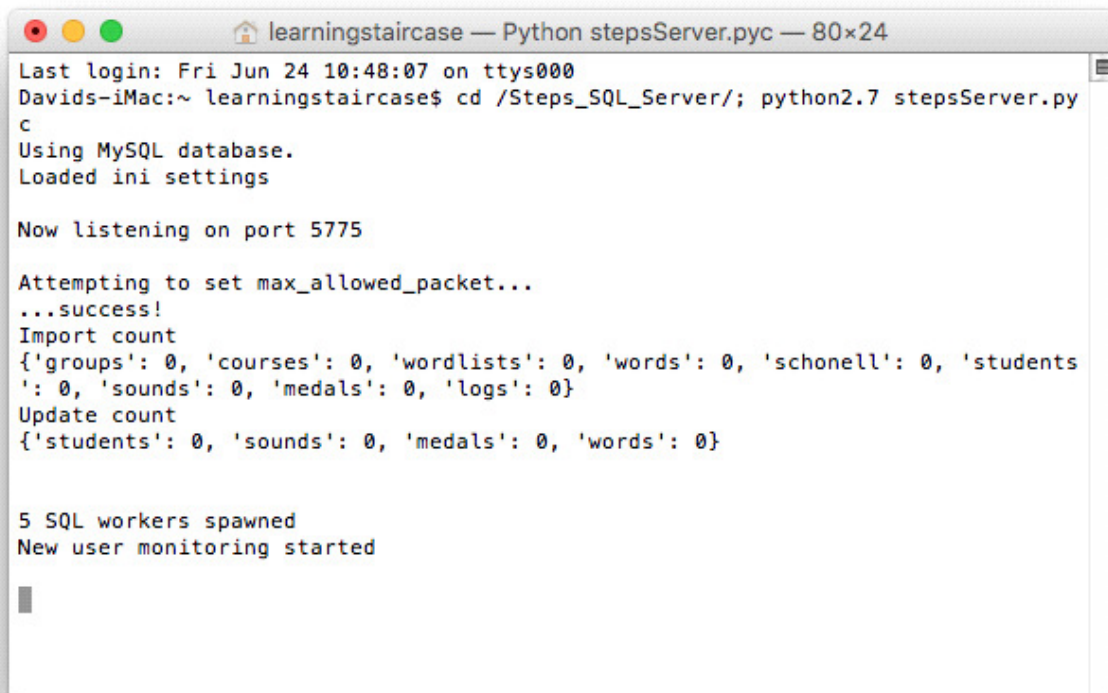
Configuring the Steps SQL Server

12. Go to the folder that the Steps SQL Server is installed in.
    Default directory is in /Steps_SQL_Server

13. Open database_settings.ini
    If you wanted different passwords or anything else that is not a default, then this is the place to set it

14. Change the second line (starts with "SQLlib=") to: "SQLlib=mysql"

15. Save and close it.

Running the Steps SQL Server

16. Run "start.app" from inside the Steps2 SQL Server installation.
This will spawn a Terminal window. It may be hidden behind any other open windows.

The Steps2 Network clients should now be able to connect to your server.

```
Last login: Fri Jun 24 10:48:07 on ttys000
Davids-iMac:~ learningstaircase$ cd /Steps_SQL_Server/; python2.7 stepsServer.py
c
Using MySQL database.
Loaded ini settings

Now listening on port 5775

Attempting to set max_allowed_packet...
...success!
Import count
{'groups': 0, 'courses': 0, 'wordlists': 0, 'words': 0, 'schonell': 0, 'students
': 0, 'sounds': 0, 'medals': 0, 'logs': 0}
Update count
{'students': 0, 'sounds': 0, 'medals': 0, 'words': 0}


5 SQL workers spawned
New user monitoring started
```

Note:
The application "start.app" is just a wrapper for the AppleScript "start.scpt". Feel free to open it and see how the server is launched. The code in that script may be useful if you wanted to launch the server in other ways.

SQL client setup

Windows client setup

All of the files for Steps are installed into the one folder. You may take the folder Steps is in and copy-paste it onto the other clients. Steps2 should be installed onto each client. You can run Steps2 straight from the server if it is on a mapped network drive.

1. Install 'Steps2 Network 2.x.x.exe'. (x's being replaced with version numbers)
   Once the database path is entered, you will only need read-access to the installation.

Running the installer

2. Run Steps2. You can find a shortcut on the desktop.

3. Click 'Continue' under 'SQL'.

4. Enter the "Host" and "Port" for the Steps server.
   You may need to enter the IP address for the "Host" field, rather than the hostname.

The database path is kept in a file called 'database_path.txt'. This file can be copied into other installations for a quicker setup.

5. -optional-
   Enter the "Custom image path".
   If you have setup a network share where custom images can be saved for Steps to show then enter that path. E.g. \\server\steps_images

6. Enter the license details if asked.
   This only needs to be done once to license the database.

Mac client setup

The Steps2 Network client is inside a DMG file labelled something like "Steps2 Network 2.x.x.dmg" where 'x' is a version number. You can find this DMG on the installation disk or on our website.

1. Mount the "Steps2 Network 2.x.x.dmg".
2. Drag the application within it into the Applications folder.

Now we need to tell the client application where the database is.

3. Launch Steps2 Network from the Applications folder.
4. Click "Continue" under the "SQL" option.
5. Enter the "Host" and "Port" for the Steps server.
   You may need to enter the IP address for the "Host" field, rather than the hostname.
6. Click "Continue". If the path you've chosen exists and is accessable, then it will save.

The settings configured in steps 3-6 are stored in a file called "database_path.txt" inside the Application and are stored as plain text. You can skip the configuration if you're copying an already configured Steps2 Network application from your network or a memory stick.

7. Enter the license details if asked.
   This only needs to be done once to license the database.

STAND ALONE SETUP (WINDOWS ONLY)

1. Install 'Steps2 Network 2.x.x.exe'. (x's being replaced with version numbers)
   Once the database path is entered, you will only need read-access to the installation.

Running the installer
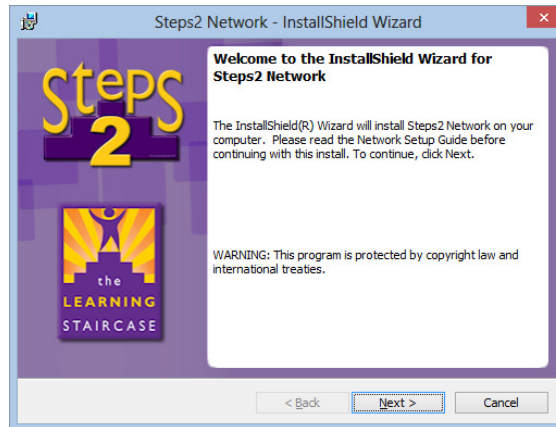
2. Run Steps2. You can find a shortcut on the desktop.

3. Click 'Continue' under 'Stand alone'.

4. Enter the license details.

Steps Manual

INSIDE APPLICATION SETUP (MAC ONLY)

1. Drag and drop the Steps2 Network application to a location that your teachers and students can access.
   If you don't need to share the database with multiple users then you can drag the application onto the Mac itself instead.

2. Run Steps2 Network.

3. Click 'Continue' under 'Inside Application'.

4. Enter the license details.

Optional further setup

If you have some computers that are on a slower network connection (e.g. wireless) then you may want to install Steps2 Network onto those computers. You can then use the "Shared Folder" option in these installs to point them towards the database within the application.

For example, if you've placed a copy of Steps2 Network in a volume called "apps", your Shared folder database path might look like this:

/Volumes/apps/Steps2.x.x.app/Contents/database/

PC CLIENT DISTRIBUTION USING MSI INSTALLER

We've included the MSI installer for your convenience. The choices on the previous page of instructions can all be set using an MST.

Values in italics are instructions for what to enter. Values not in italics need to be entered as shown. Values are case sensitive.

For Shared folder databases

Variable	Value
DATABASE_MODE	shared
SHARED_DATABASE_PATH	*This is the path to the SMB share for the Steps database. e.g. \\server\steps*
IMG_PATH	*This is often the same path as above, however you can use a separate folder for custom images if you want. Sometimes clients may want the images to be in a read-only share to avoid users defacing the images.*
InstallMode	Complete

For SQL databases

Variable	Value
DATABASE_MODE	SQL
SQL_HOST	*Host name or IP of the computer running the Steps2 Server. e.g. 10.0.0.2*
SQL_PORT	*Port for the Steps2 Server. If not set, it defaults to 5775.*
IMG_PATH	*This is the path to the SMB share for the custom wordlist images. If you don't want to use this feature then set it to "database\" (without quotes).*
InstallMode	Complete

For Stand alone databases

Variable	Value
DATABASE_MODE	app
SHARED_DATABASE_PATH	database\
IMG_PATH	database\
InstallMode	Complete

If you wanted to use a script to deploy Steps2 Network using any of the above tables, you could format the command like this:

Example Shared folder command

c:\Windows\System32\msiexec.exe /i "**server\Steps2 Network 2.x.x.msi**" /qb /l*v c:\Windows\debug\steps.log DATABASE_MODE="**regular**" SHARED_DATABASE_PATH ="**server\stepsdatabase**\" IMG_PATH="**server\stepsdatabase**\" InstallMode="complete"
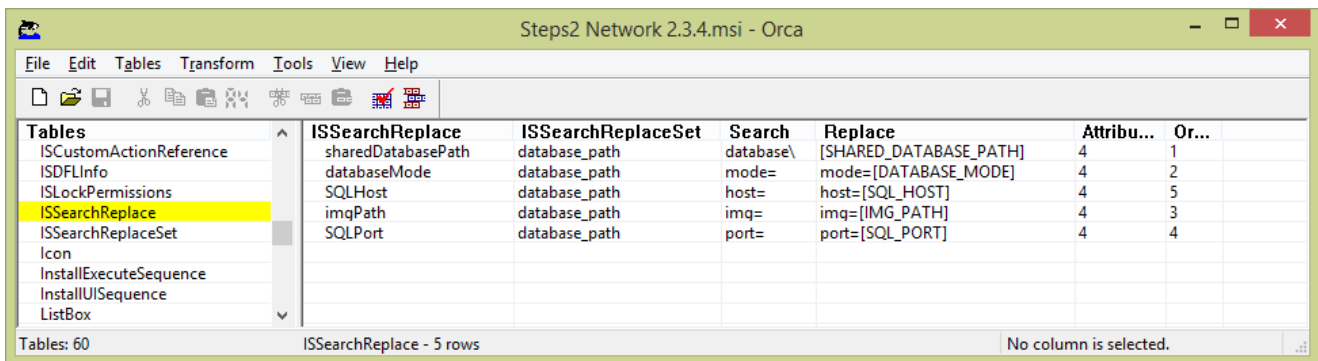
The parts marked in bold would need to be changed to suit your environment.

Example SQL command

c:\Windows\System32\msiexec.exe /i "**server\Steps2 Network 2.x.x.msi**" /qb /l*v c:\Windows\debug\steps.log DATABASE_MODE="**SQL**" SQL_HOST ="**10.0.0.2**" SQL_PORT="**5775**" InstallMode="complete"
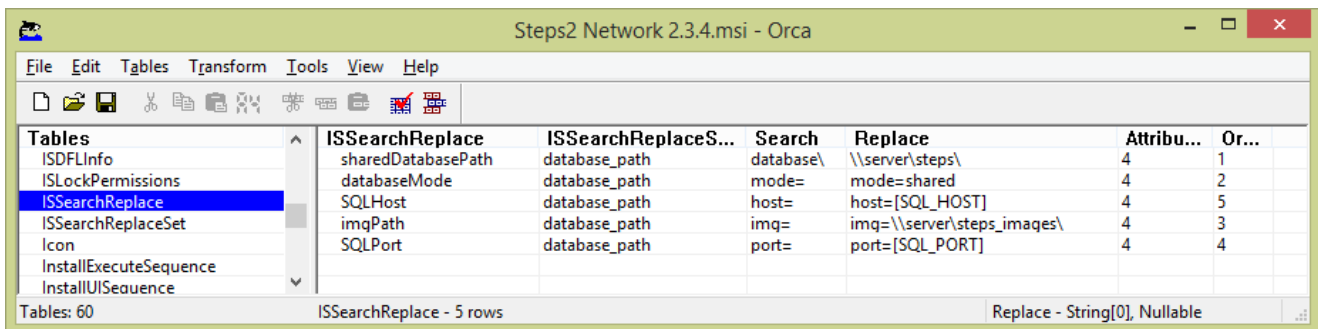
CONFIGURING THE MSI USING ORCA

You can configure the MSI installer using Orca and the tables above. The table you're looking for is called "ISSearchReplace" which you can see below in its unmodified state.

In this example I have chosen results to setup a Shared folder database. You can see that the "sharedDatabasePath", "databaseMode", and "imgPath" options have been set, and the others have been left as default. If you do not want to setup a folder for custom images then you can leave the "imgPath" as default.

INI SETTINGS

If there, the ini settings files will be loaded and used instead of the program defaults. A fresh install of Steps will come with ini settings files with some settings set, and others commented out as examples.

On Windows, this file is found in the root install folder and called settings.ini.

On Mac, this file is found inside the application:
contents/files/settings.ini

The format is strictly as follows: The field, then an equals sign ('='), followed by the setting.
E.g.
printMethod=1

If a line is not formatted like that then it will just be ignored and the default setting will be used.

Where there are a set number of explicit inputs, they will be listed out with what each one does.

The default setting is coloured in green when appropriate.

Client

The client ini file is called 'settings.ini' and is located in the root install folder. These settings should not need to be changed unless there is a problem. They will only affect the current computer.

profileSave
This setting does not get used in the Network edition of Steps. It instructs Home and Tutor editions to use the HOMEPATH environment variable for storing the database.
0 – Stored in 'database/'
1 – Stored in HOMEPATH environment variable
E.g.
profileSave=1

logicTicRate
Attempts to set how often the logic is processed per second. It is occasionally useful to set on computers that are struggling to run Steps, which are bottlenecked by processor power. Minimum usable setting is 10.
E.g.
logicTicRate=10

phyisicsTicRate
Attempts to set how often the physics is processed per second. Physics is rarely (if at all) used in most activities in Steps. It is occasionally useful to set on computers that are struggling to run Steps, which are bottlenecked by processor power. Minimum usable setting is 1.
E.g.
physicsTicRate=1

printMethod
By default Steps will generate the printed content then show it on screen for the user to preview before printing. On some computers this can cause issues when the graphics card can't decide which program to render, and makes things appear to lock up.
0 – Opens the generated content to preview in external program.
1 – Sends print data straight to default printer. Does not preview.
2 – Closes Steps, then opens the generated content to preview in external program.
E.g.
printMethod=0

windowed
Launches Steps in a window, or full screen. This will not affect Steps if launching Steps2.exe directly on PC. On PC, the default way to launch Steps is through the preloader.exe. This setting is ignored on Mac.
0 – Launches Steps in full screen.
1 – Launches Steps in a window.
E.g.
windowed=0

Database

The database ini file is called 'database_settings.ini' and is located inside the Steps database. These settings can mostly be changed from within Steps using the Admin menu. They are likely to change. If you are using the SQL database then these variables (plus more) are found in the table called 'variables'. Most of these settings can be configured from inside Steps.

accent
Sets the default accent for spoken words. Not all accents have 100% of the words recorded. The fallback is British English when the sound isn't available in the selected accent.
aus - Australian
en – British
nz – New Zealand
E.g.
accent=en

accessError
If set to 0, this will tell Steps to ignore the operating systems warning that a file is unwritable and attempt it anyway. This is useful particularly in Macs where SMB file shares can be slow updating Finder when new files have been created.
0 - Ignores the access error.
1 - Reports to the user when files are unwritable when trying to save.
E.g.
accessError=1

allowUpdateCheck
Enables the 'Check for Updates' button on the login screen.
0 – Disabled.
1 – Enabled.
E.g.
allowUpdateCheck=0

blocks
This will show/hide the Blocks game in the games menu.
0 – Hides Blocks
1 – Shows Blocks
E.g.
blocks=1

customCourse
This setting places the purple custom created courses at ether the top or bottom of the list of courses when viewing the "Wordlists" menu.
top – courses at the top of the list
bottom – courses at the bottom of the list
E.g.
customCourse=bottom

dateformat
This setting is currently not being used, however it is intended to be implemented for any field that shows the date. "D" is replaced with the day. "M" is replaced by the month. "Y" is replaced by the year. For example, the default value of "D.M.Y" would show the date like "27.03.2013".
E.g.
dateformat=D.M.Y

hangman
This will show/hide the Hangman game in the games menu.
0 – Hides Hangman
1 – Shows Hangman
E.g.
hangman=1

keepRecords
When a learner is being deleted, the user is asked if they would like to remove all records as well. If the records are kept then the learner can be imported back into Steps again later with all previous records intact.
0 – Permanently removes files on deletion.
1 – Keeps records.
E.g.
keepRecords=0

keyboard
Sets the keyboard layout in Steps. UK and US keyboards have some keys in different places, such as the dollar sign, pound sign, hash, etc. Setting this to the keyboard layout used on your computers will make the correct characters show in Steps when entering text. The option for keyboard layout is presented to the user when they first run Steps.
US - United States keyboard layout.
UK - United Kingdom keyboard layout.
E.g.
keyboard=US

maori
Enables the Maori language options. Designed for New Zealand schools, but can be used anywhere.
0 – Disabled Maori language options.
1 – Enabled Maori language options.
E.g.
maori=0

oldErrorNoise
Uses the original error noise when making mistakes.
0 - Uses new error noise.
1 - Uses original error noise.
E.g.
oldErrorNoise=0

region
Sets the region to check for updates in. This is done the first time you check for updates through Steps, but can be manually overridden in this setting if a new regional server gets added closer to you. Deleting the setting will prompt for a region next time the 'Check for Updates' button is clicked. The region list is downloaded before asking the question.
E.g.
region=New Zealand

save
Controls the save format of the database files. This should not be changed.
0 – Compression enabled.
1 – DO NOT USE.
2 – Increased file size, but resilient to corruption. These files are partially recoverable if sent to Steps tech support. Considerably slower to load.
3 – DO NOT USE.
4 – Legacy file format from before version 2,0,4. Kept for testing purposes only.
E.g.
save=0

shootingGames
This will show/hide any games that involve shooting.
0 – Hides shooting games
1 – Shows shooting games
E.g.
shootingGames=1

FAQ AND TROUBLE-SHOOTING SETUP AND INSTALL

PC

Why do I keep getting asked for the database path?
This normally means that you don't have write access to the database_path.txt file that stores the database path in it.

Why are medals/logs not being saved?
This means the students do not have write access to the database. Please make sure any account that is using Steps has write access to the Steps database.

What is this 'preloader' that starts before Steps?
The preloader launches Steps with the correct resolution and sets the windowed/fullscreen mode.

We upgraded to Windows 7 (or higher) and now Steps won't work.
Please make sure you have the correct graphics card drivers installed on your computer. Please get the drivers from the vendors website (e.g. nVidia, ATI, Intel, etc), not from Windows update.

I ran Windows Update and now Steps won't work.
In the past we have seen situations where Windows update has updated graphics card drivers so that they no longer provide complete OpenGL support. Go to your graphics card vendor website (e.g. nVidia, ATI, Intel, etc) and download the latest graphics card drivers from there.

Why does Steps stay black for minutes before becoming usable?
This can happen when Steps is being run from the server. Installing Steps on the client instead will get rid of that loading time.

Why does Steps stay black permanently? I'm using an Intel HD 3000 Integrated graphics card.
This particular graphics card has known issues with OpenGL. It's not as pretty, but you can change the colour depth on the computer to 16bit and set Steps to windowed mode. To set Steps to windowed mode, open 'settings.ini' next to Steps2.exe and set 'windowed' to 1.

Some text is white and Steps runs extremely slowly, keys hard to push.
This means the graphics card isn't able to run a high enough version of OpenGL. Usually this can be fixed by installing the correct graphics card drivers, but it may also mean that the graphics card just isn't powerful enough.

Mac

Can I move the icon for Steps?
Yes you can. It should work anywhere on your Mac. Your database may exist inside the application, so try to have everyone accessing the same copy if possible, or direct the database to a different folder.

Why are medals/logs not being saved?
This means the students do not have write access to the database. Please make sure any account that is using Steps has write access to the Steps database. You may need to setup an Access Control List for the database to ensure all the correct profiles have the correct permissions.

What files have write permission on the local machine, and why?
Only the database_path.txt and settings.ini should have write access. Once they've been setup, there is no reason for them to keep write access.

I often get errors that the database is missing/can't be found.
Make sure that the Steps database is always being mounted. The method mentioned in this manual of making the volume mount on login needs to be done on every account on the Mac that uses Steps. There are several ways to easily setup automatic volume mounting on Macs but that is beyond the scope of this manual.

This could also be caused by the wrong credentials being used to mount the volume.

Please also make sure that the group 'Everyone' has at least read access to 'database_path.txt'.

We have PowerPC Macs. Will Steps work on them?
Since version 2,2, PowerPC is no longer supported. However, we can send you an older version of Steps which does work on PowerPC. Be careful not to mix the client versions when connecting to the same database. For example, version 2,2 will save files in a way that version 2,0,4 cannot read.

We have Intel 10.7 (Lion) Macs. Will Steps work on them?
As of version 2,0,4 we are shipping Steps compiled for Intel, with compatibility for OS 10.7. For anyone who installed an earlier version of Steps before 2,0,4, you can download the conversion to Intel here:
http://www.learningstaircase.co.nz/steps/Steps2_LionFix_network.pkg.zip

General

Why does Steps ask for the license details every time the program starts?
This is probably a permissions problem on the server. Check to make sure that the client is allowed to make changes to the Steps database. You may also notice medals and logs not being saved. This issue can also be caused by a corrupted "groups_data.data" file in the database.

I started installing Steps patches on some clients but now some of the existing clients aren't working quite right.
It's very important that all clients are running the same version of Steps. Sometimes patches are released which change the file saving format, or order that the data is stored in.
Changes like that will cause the older clients to stop reading the files correctly, and possibly even damage the saved files beyond automatic recovery if they tried to save.

Version 2,1,0 and 2,2,5 will work on the same database. Version 2,3+ saves Maori content differently and will cause undesired results if viewing on an older version.

One/some computers complain about the license being expired, but I know it isn't.
Make sure the date is set correctly on all of the client computers.

FAQ AND TROUBLE-SHOOTING GENERAL USAGE

Does Steps work on mobile devices, such as iPad, Android or Chrome books?
No. Steps only works on PC and Mac. Steps also will not run on RT versions of Windows 8 (found on the cheaper variants of the Microsoft Surface). If in doubt, please contact our technical support with a link to information about the device you're interested in and we can tell you if it'll work or not.

We do have a web-based version of Steps called StepsWeb (https://www.stepsweb.com) that works on Android/iPad/Chromebook/Cloudbook/PC/Mac.

Why does the revision list change every time I click on it?
The revision list is generated using the words the student has made mistakes on. If there are not enough logged mistakes made by the user then Steps will fill up the list using random words. This list gets regenerated after every activity.

What is the Admin password?
steps

Can the Admin password be reset?
Yes. Delete admin_data.data (in the database) to reset the password to 'steps'. For the SQL database type you'll need to contact us to get a temporary password created so you can log into the Admin menu and change it.

What are all of these black boxes that open when I run Steps?
Steps comes with a console window that sits behind the main screen and prints out any errors if they occur. This is extremely helpful for tech-support if you should ever run into any problems.

I'm entering in the license details but Steps won't accept them. Why?
It's important to enter in all of the details exactly as we have supplied them to you. This includes the institution name. The license code is all lower case but the institution name is case-sensitive. If that doesn't solve it then check to make sure your computer has the current date set. If you are still having troubles then contact our tech-support for assistance.

When I click print, everything goes unresponsive and I don't see the print preview.
This is usually the graphics card not showing the print preview. It is actually there, and that's why your clicks aren't doing anything in Steps. You can close the 'invisible' print preview by clicking in the top right of the screen (where the close button for it would be). This can be fixed by changing the print settings in Admin page 2 to print without a preview, or by putting Steps into Windowed mode.

CONTACT US

<u>Technical Support</u>

New Zealand

The Learning Staircase Ltd
technical@learningstaircase.co.nz
PO Box 582
Rangiora 7440
New Zealand
Ph: 0800 701107
International Ph: +64 3 313 3625
www.learningstaircase.co.nz/

Australia

The Learning Staircase Ltd
technical@learningstaircase.com.au
International Ph: +64 3 313 3625 (New Zealand number)
www.learningstaircase.com.au

<u>Sales</u>

New Zealand

The Learning Staircase Ltd
sales@learningstaircase.co.nz
PO Box 582
Rangiora 7440
New Zealand
Ph: 0800 701107
International Ph: +64 3 313 3625
www.learningstaircase.co.nz/

Australia

The Learning Staircase Ltd
sales@learningstaircase.com.au
International Ph: +64 3 313 3625 (New Zealand number)
www.learningstaircase.com.au

SOFTWARE CREDITS

Educational content design

Ros Lugg

Software design and production

David Lugg

Voice actors

Australian	Colin Klupiec
British	Ros Lugg
New Zealand	Andy Galbraith (www.bullseyeproductions.co.nz)
	Catherine France

Thank you to all of the schools, tutors, and users that have provided feedback and suggestions!

The license for Steps is located inside 'License.txt', found in the root install folder for Steps. Imported libraries used in Steps are credited with licenses linked (where possible/requested) inside the license file.