

LOB Mapping Tool - Instructions

This document provides instructions on how to set up and run the R code that generates the LOB Mapping Tool.

Pre-requisites

Before running the code, please ensure you have the following software downloaded:

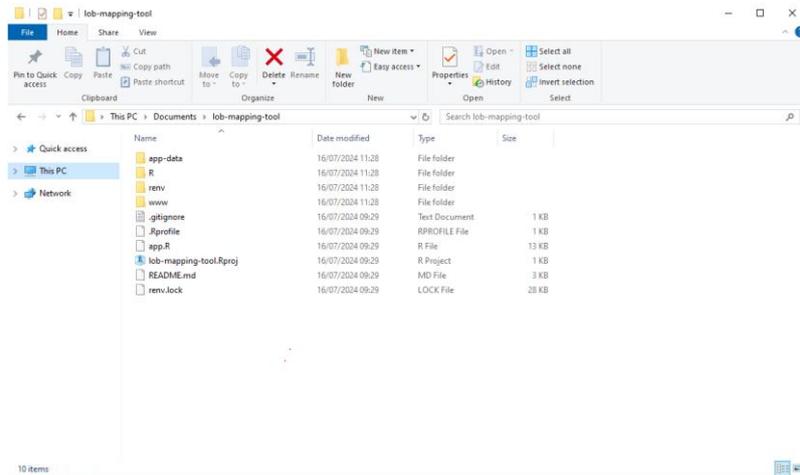
R 4.2.3 - [The Comprehensive R Archive Network \(imperial.ac.uk\)](https://www.imperial.ac.uk/comprehenhensive-r-network/)

Note: The app should run with any version of R > 4.1, but we recommend R 4.2.3 to guarantee all functionality works as expected.

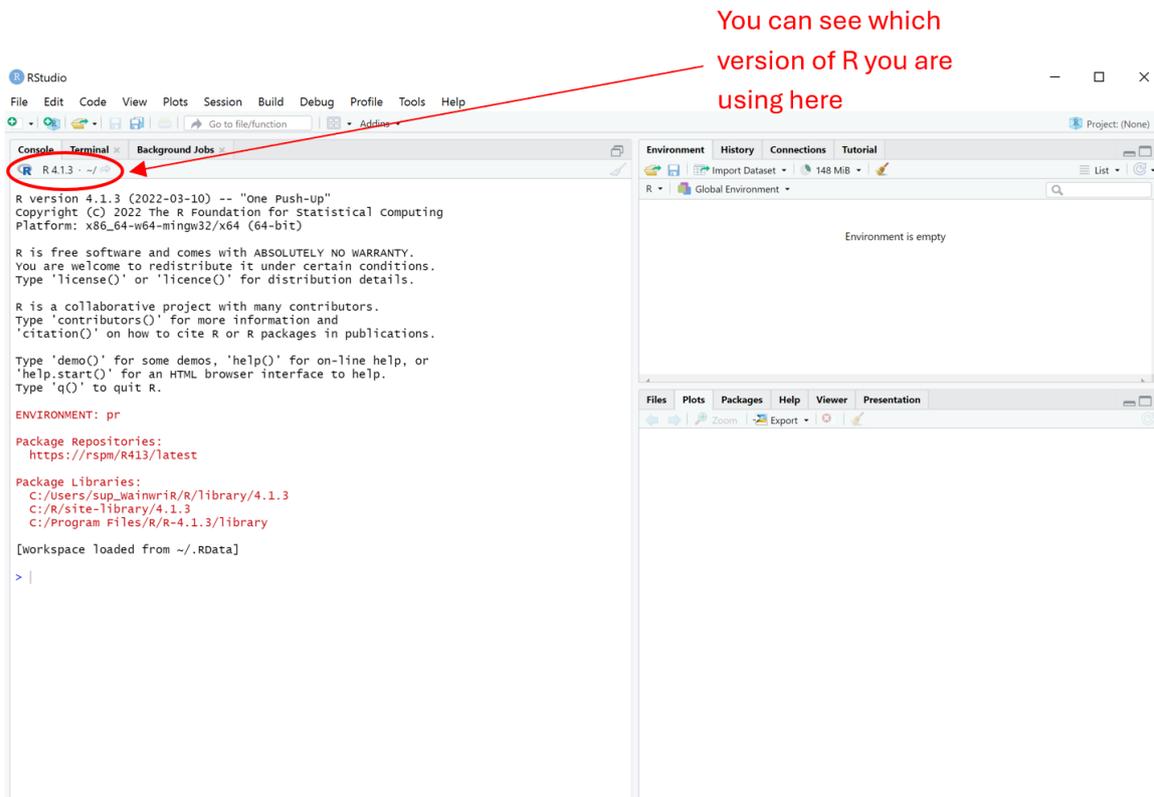
RStudio - [Download RStudio - Posit](https://posit.co/what-is-rstudio/)

Setting up the app for the first time

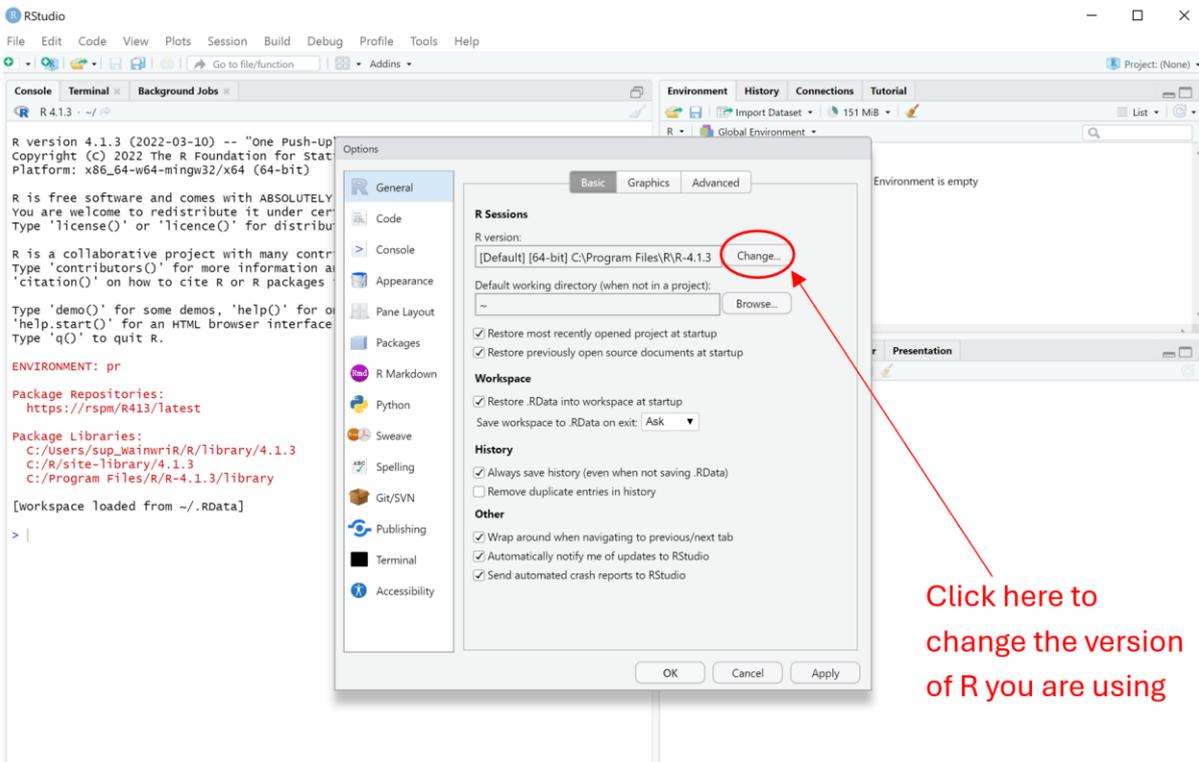
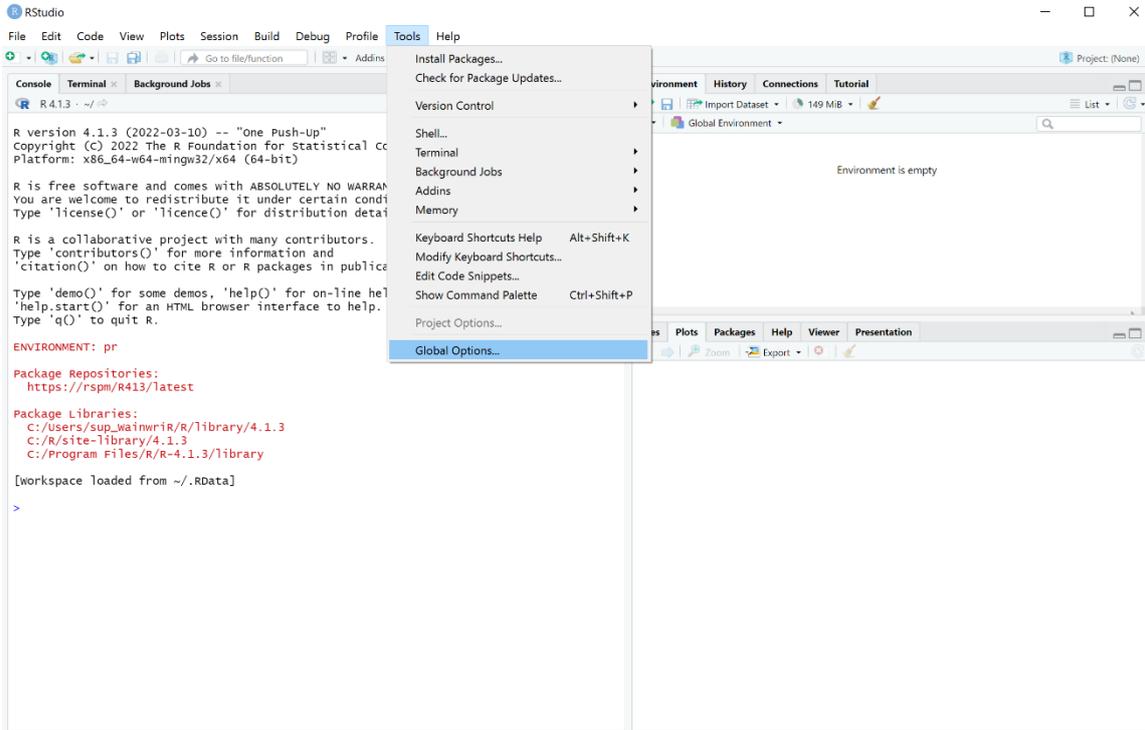
1. Download the folder 'lob-mapping-tool.zip'. This contains the code for the app.
2. Unzip the folder so that the contents are in their own enclosing folder called 'lob-mapping-tool', like in the screenshot below.



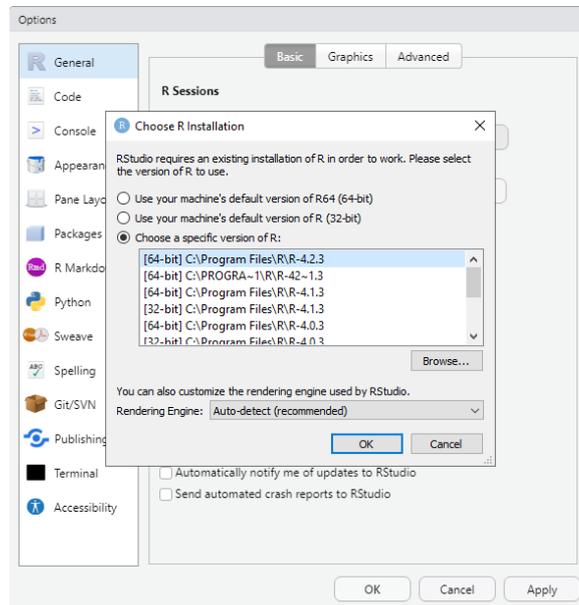
3. Open RStudio and confirm you are using R 4.2.3.



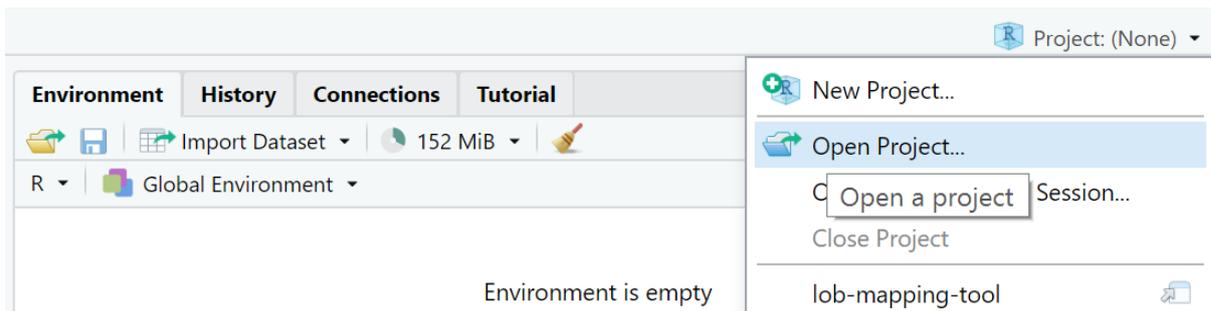
If you are using a different version of R, you can switch to version 4.2.3 in Tools > Global Options > General.



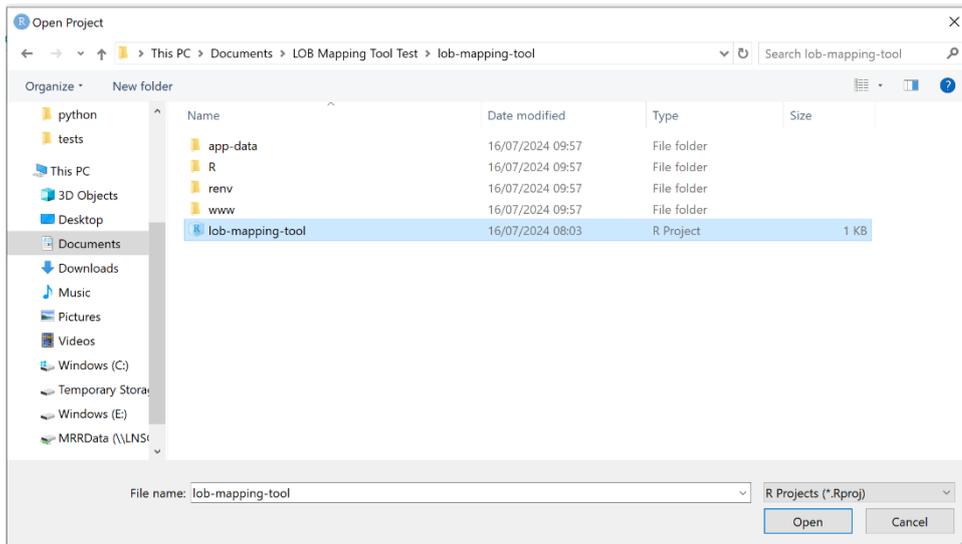
In the 'Choose R Installation' dialog box, select 'Choose a specific version of R'. Then select your installation of R 4.2.3 and click OK. You will then need to restart RStudio for this to take effect – you should be prompted to do this.



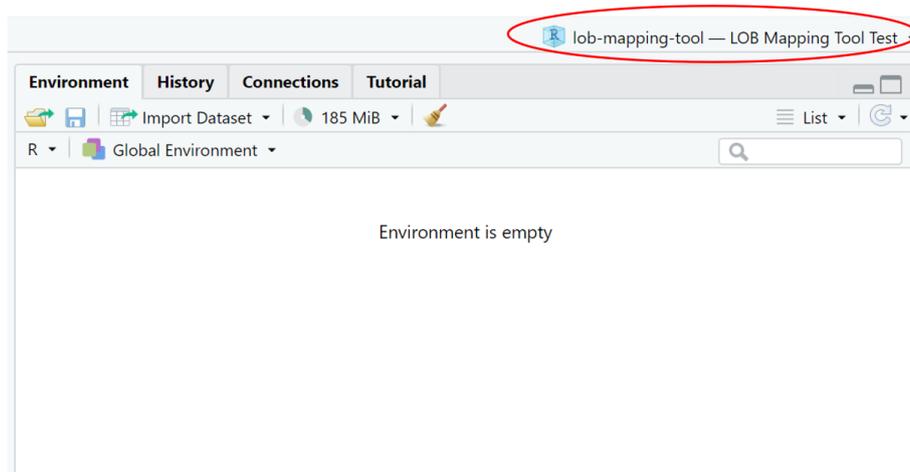
4. Click Project > Open Project in the top right corner of RStudio.



Navigate to where you have saved the application and open 'lob-mapping-tool.Rproj'



You should now be able to see 'lob-mapping-tool' in the top-right corner of your screen next to the cube symbol.



5. Type the command `renv::install()` in your console and press enter. The exact output you will see will vary, but you should see output that looks like this:

```

> renv::install()
# Downloading packages -----
- Downloading rlang from CRAN ...           OK [2 Mb in 2.1s]
- Downloading digest from CRAN ...         OK [325.7 Kb in 1.0s]
- Downloading cli from CRAN ...            OK [1.6 Mb in 0.99s]
- Downloading markdown from CRAN ...      OK [158.5 Kb in 0.98s]
- Downloading xfun from CRAN ...          OK [672.7 Kb in 1.0s]
- Downloading knitr from CRAN ...         OK [1.3 Mb in 1.1s]
- Downloading evaluate from CRAN ...      OK [101.6 Kb in 0.88s]
- Downloading yaml from CRAN ...          OK [213.3 Kb in 0.98s]
- Downloading reactR from CRAN ...        OK [616.6 Kb in 0.98s]
- Downloading crayon from CRAN ...        OK [196.7 Kb in 0.99s]
Successfully downloaded 10 packages in 18 seconds.

The following package(s) will be installed:
- anytime      [0.3.9]
- askpass      [1.2.0]
- base64enc    [0.1-3]
- BH           [1.84.0-0]
- bit          [4.0.5]
- bit64       [4.0.5]

```

The console will prompt you to confirm you want to install the packages like so:

```

These packages will be installed into "~/LOB Mapping Tool Test/lob-mapping-tool/renv/
library/R-4.1/x86_64-w64-mingw32".

Do you want to proceed? [Y/n]: Y

```

Type Y and press enter. This will install the required packages from a publicly available repository.

You should see output that looks like this:

```

- Installing sourcetools ...           OK [linked from cache]
- Installing shiny ...                 OK [linked from cache]
- Installing uuid ...                  OK [linked from cache]
- Installing shinyalert ...           OK [linked from cache]
- Installing BH ...                    OK [linked from cache]
- Installing anytime ...               OK [linked from cache]
- Installing shinywidgets ...         OK [linked from cache]
Successfully installed 88 packages in 11 seconds.
> |

```

6. Type the command `shiny::runApp(launch.browser = TRUE)` in your console and press enter to open the app in a web browser. You may get some warnings in red like in the screenshot below – you can safely ignore these

```
> shiny::runApp(launch.browser = TRUE)
Loading required package: shiny

Attaching package: 'bslib'

The following object is masked from 'package:utils':

  page
```

7. Once the App has launched, you can find instructions on the Home Page about how to use it for mapping your Reserving Classes to Lloyd's LOBs

Opening the app again

Once you have set the app up once on your computer, you shouldn't need to repeat any of the steps above.

You can simply type the command `shiny::runApp(launch.browser = TRUE)` into your console and press enter to reload the app for second and subsequent uses.

Troubleshooting

If you have any issues with running the code or using the app, please contact Chris Walker and Rosa Wainwright via the TPD Transformations mailbox (tpdtransformation@lloyds.com).