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)

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

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.

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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.



RStudio

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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.

R General	Basic Graphics Advanced
🐘 Code	R Sessions
> Console	Choose R Installation X
📑 Appearan	RStudio requires an existing installation of R in order to work. Please select the version of R to use.
Pane Layo	Use your machine's default version of R64 (64-bit) Use your machine's default version of R (32-bit)
Packages	Choose a specific version of R:
🔤 R Markdo	[64-bit] C:\Program Files\R\R-4.2.3
🥐 Python	[64-bit] C:\Program Files\R\R-4.1.3 [32-bit] C:\Program Files\R\R-4.1.3
😕 Sweave	[04-bit] C:\Program Files\K\K-4.0.3 [32-hit] C:\Program Files\R\R-4.0.3
ABC Spelling	Browse
💕 Git/SVN	You can also customize the rendering engine used by RStudio. Rendering Engine: Auto-detect (recommended)
💁 Publishing	OK Cancel
Terminal	Automatically notify me of updates to RStudio
Accessibili	Send automated crash reports to RStudio
	OK Cancel Apply

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

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

- → ✓ ↑ ↓ > This P Organize - New folder ↓ python ^ ↓ tests	C > Documents > LOB Mapping Tool T	est ≯ lob-mapping-tool	v D	Search lob-mapping-tool	Q
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File name	: lob-mapping-tool		~	R Projects (*.Rproj)	~

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

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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()					
<pre># Downloading packages</pre>					
- Downloading rlang from CRAN	ОК	[2 Mb in 2.1s]			
- Downloading digest from CRAN	ОК	[325.7 кb in 1.0s]			
- Downloading cli from CRAN	ОК	[1.6 Mb in 0.99s]			
- Downloading markdown from CRAN	ОК	[158.5 кb in 0.98s]			
- Downloading xfun from CRAN	ОК	[672.7 Kb in 1.0s]			
- Downloading knitr from CRAN	ОК	[1.3 Mb in 1.1s]			
- Downloading evaluate from CRAN	ОК	[101.6 кb in 0.88s]			
- Downloading yaml from CRAN	ОК	[213.3 Kb in 0.98s]			
- Downloading reactR from CRAN	ОК	[616.6 кb in 0.98s]			
- Downloading crayon from CRAN	ОК	[196.7 кb 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	Llinked	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 second	ls.			
>				

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).