



# **MyBox: Easy Tools Set User Guide - Overview**

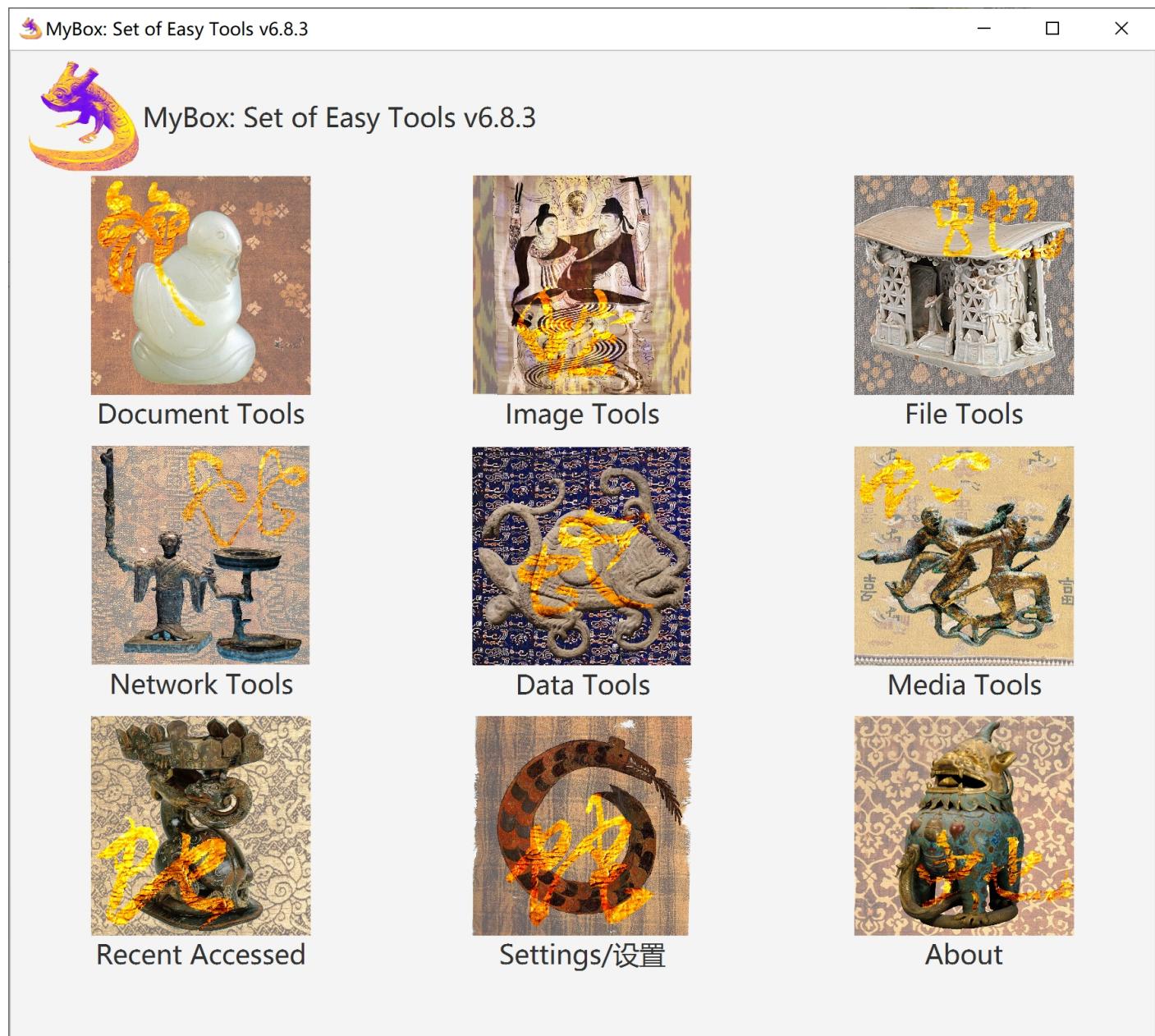
Author: Mara  
Version: 6.8.7  
Date: 2025-5-24

## Contents

1 Introduction.....	3
1.1 What's New.....	4
1.2 Notice.....	5
1.3 Cross Platforms .....	5
1.4 Internationalized .....	5
1.5 Personal.....	5
1.6 Friendly.....	5
1.7 Data Compatible.....	6
1.8 Embedded Database System.....	6
1.9 Assit Coding Self.....	6
2 Resources Addresses.....	7
3 Documents.....	8
4 Download and Execution.....	10
4.1 Source Codes.....	10
4.2 Self-contain packages.....	10
4.3 Jar.....	10
4.4 Versions.....	11
4.5 Configuration .....	11
4.6 Backup and Recover.....	11
4.7 Migration.....	12
5 Implementation.....	13
6 Common Functions in Interfaces.....	16
6.1 Main Interface.....	16
6.2 Interface Layout.....	17
6.3 Set Font Size.....	18
6.4 Open New Stage.....	18
6.5 Restore Scene Size.....	18
6.6 Recent Visited Files/Directories.....	19
6.7 Data Table.....	20
6.8 Context Menu.....	22
6.9 Window "Examples".....	22
6.10 Window "Histories".....	23
6.11 Color Block and Palette.....	24
6.12 Relationships between New Stage and Caller When Open Stage.....	25
7 Settings.....	26
7.1 Interface.....	27
7.2 Base.....	28
7.3 Data.....	28
7.4 Map.....	29
8 Window.....	30
9 Windows List.....	31
10 Clear expired data.....	32

## 1 Introduction

This is desktop application based on JavaFx to provide simple and easy functions. It's free and open sources.



## 1.1 What's New

2025-5-24 v6.8.7

- New:
  - Data trees:
    - Beside tree view, nodes can be view in table mode, that children are displayed in paginated table.  
Tree is better for deep(many levels) and narrow(limited children) data while paginated table is better for shallow(limited levels) and wide(many children) data.
    - Query nodes with either simple condition or filter expression.
  - Automatical testings: Import data for data trees.
- Improve:
  - Data manufacture:
    - Filter rows with simple condition which is comparison of single column.
    - When create data, attributes, columns, rows number, and values can be set.
    - Matrices can be external files.
    - In interfaces of selecting columns, concern lots of columns.
    - When add rows, copy values of current selected row.
  - Trim variables of batch functions. Make all internal indices as 0-based and exclusive end.
  - Make clear relationships between new stage and the caller when open stage.
  - Automatical testings are changed as event driven from time driven.
- Upgrade to Java 24.
- Solved problems:
  - Data manufacture:
    - When click button Save in csv mode, updates are not saved.
    - When change data in table mode, updates should be synchronized to other modes.
    - Functions “Simple/Multiple Linear Regression - Combination” do not work.
    - Error popped when open interface “Group Statistic”.
    - In html pages, null should be displayed as empty.
    - “Results are empty” should be displayed when no data is generated.
  - When handle PDF in batch, “start page” and “end page” do not work when multiple files are selected.
  - When handle files in batch, status may be updated incorrectly.
  - When refer javaScript from html, javaScript executor, instead of editor, should be displayed.
  - When close javaScript editor, endless loop happens.
  - The “Context Menu” button does not work in html interface.
  - Events listeners of html do not work sometimes.
  - Game “Mine”: Double right click should not work for opening around cells.

### Closed requirements/bugs in this version

Thanks for my cats GuaiGuai and BenBen. They are soft and warm lives with full of love.

## 1.2 Notice

Without enough testings, MyBox has low reliability and bad stability. When use MyBox, following may happen:

- Files/Data are damaged.
- Output wrong results.
- Functions fail.
- Other unexpected behaviours.

## 1.3 Cross Platforms

MyBox is implemented in pure Java and only based on open sources, and it can run on platforms which support Java 24.

Versions before v5.3 are based on Java 8.

## 1.4 Internationalized

1. All codes of MyBox are internationalized. Language can be switched in time.
2. Each language is defined in one resource files, like: "Messages\_NAME.properties".
3. Support adding new languages online. Table is provided with English as comparison. New languages take effects at once.  
Example, the new language is named as "aa", and its resource files are Messages\_aa.properties.
4. Translated languages can be shared with others: Put the files under "mybox\_languages" of data path and MyBox is aware of them immediately.
5. Embed Chinese and English, whose files are under path MyBox/src/main/resources/bundles/.

Language	Resource file of interface
Chinese	Messages_zh_CN.properties
English	Messages_en.properties

## 1.5 Personal

1. All functions are executed in local host.
2. All data are stored in local host.
3. No register/login/DataCenter/Cloud.
4. Access network only when user requests.
5. Only read/write data which user need.

## 1.6 Friendly

1. Provide tips of current function/interface.
2. Remember user's inputs or selections, and provide histories list.
3. Interfaces can be adjusted and some panes can be hidden.
4. Behaviours of some controls can be chosen.
5. Provide context menu and function menu to texts/image/html/table/tree.
6. Current texts/image/html/data can be popped.
7. Clipboards of texts/image/data can be managed.
8. Provide examples and useful information.
9. Appearance of interface and controls can be chosen and modified.

## 1.7 Data Compatible

1. Exported data are in common text formats, like txt/csv/xml/json/html.
2. Imported data are in common text format, like txt/csv.
3. At least one exported format can be imported.
4. Imported data are self-contain, that original data can be rebuilt without extra data.

## 1.8 Embedded Database System

1. Derby is free and open sources:
  - When start MyBox for the first time, some seconds are cost to create internal database tables and write initial data.
  - All database files are under data path, so different target data sets can be handled by switching data paths.
  - Multiple MyBox instances can share data by visiting same data path.
  - When database files not found under data path(damaged or deleted unexpectedly), MyBox can create database automatically.
2. Derby runs in embedded mode by default:
  - External processes can not access the database.
  - Only one MyBox instance can use the database at the same time.
3. Derby can run in network mode:
  - The first visitor becomes the server.
  - Processes of local host can visit the database in port 1527 and becomes its clients.
  - Processes out of local host can not visit the database directly.
4. MyBox internal tables save the data required by all functions. User can access and modify the internal data online.
5. User can define customized database tables.
6. User can view and edit definitions and data of database tables in paginated tables, and execute SQL statements.
7. To implement data sorting, transposing, statistic, and grouping, MyBox will create temporary database tables, and clear them in time.

## 1.9 Assit Coding Self

1. Monitor memory/CPU usage in real time.
2. Adjust logging online.
3. Generate icons automatically.
4. Edit and apply languages online.
5. Test automatically.
6. All kinds of documents.

## 2 Resources Addresses

Contents	Link
Project Main Page	<a href="https://github.com/Mararsh/MyBox/">https://github.com/Mararsh/MyBox/</a>
Source Codes and Compiled Packages	<a href="https://github.com/Mararsh/MyBox/releases">https://github.com/Mararsh/MyBox/releases</a>
Submit Software Requirements and Problem Reports	<a href="https://github.com/Mararsh/MyBox/issues">https://github.com/Mararsh/MyBox/issues</a>
Data	<a href="https://github.com/Mararsh/MyBox_data">https://github.com/Mararsh/MyBox_data</a>
Documents	<a href="https://github.com/Mararsh/MyBoxDoc">https://github.com/Mararsh/MyBoxDoc</a>
Mirror Site	<a href="https://sourceforge.net/projects/mara-mybox/files/">https://sourceforge.net/projects/mara-mybox/files/</a>
Cloud Storage	<a href="https://pan.baidu.com/s/1fWMRzym_jh075OCX0D8y8A#list/path=%2F">https://pan.baidu.com/s/1fWMRzym_jh075OCX0D8y8A#list/path=%2F</a>

### 3 Documents

Name	Version	Time	English	Chinese
Development Logs	6.8.7	2025-5-24	<a href="#">html</a>	<a href="#">html</a>
Shortcuts and Icons	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
Functions List	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
Packing Steps	6.7.2	2023-4-16	<a href="#">html</a>	<a href="#">html</a>
Development Guide	2.1	2020-8-27	<a href="#">PDF odt</a>	<a href="#">PDF odt</a>
User Guide - Overview	6.8.7	2025-5-24	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - Data Tools	6.7.2	2023-4-16	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - Document Tools	6.7.1	2023-3-13	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - Image Tools	6.7.2	2023-4-16	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - File Tools	6.7.1	2023-3-13	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - Network Tools	6.7.2	2023-4-16	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - Media Tools	6.7.1	2023-3-13	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
User Guide - Development Tools	6.7.1	2023-3-13	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
Software Testing - Test Environment	6.8.7	2025-5-24	<a href="#">html</a>	<a href="#">html</a>
Software Testing - Base Functions' Verification List	6.8.7	2025-5-24	<a href="#">html</a>	<a href="#">html</a>
Software Testing - Compatibility Testing	6.8.7	2025-5-24	<a href="#">html</a>	<a href="#">html</a>
Software Testing - Detailed Testing	6.8.7	2025-5-24	<a href="#">html</a>	<a href="#">html</a>
Tips in Interfaces	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
About - Tree Information	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
About - Data in Two-dimensional Storage Structure	6.8.6	2025-3-30	<a href="#">html</a>	<a href="#">html</a>
About - Row Expression and Row Filter	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
About - Data Grouping	6.7.1	2023-3-13	<a href="#">html</a>	<a href="#">html</a>
About - Data Analysis	6.6.1	2022-11-16	<a href="#">html</a>	<a href="#">html</a>
About - Coordinate System	6.6.1	2022-11-16	<a href="#">html</a>	<a href="#">html</a>
About - Color	6.6.1	2022-11-16	<a href="#">html</a>	<a href="#">html</a>
About - Image Scope	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
About - Media	6.6.1	2022-11-16	<a href="#">html</a>	<a href="#">html</a>
About - Items in One Sentence About Java	6.7.3	2023-5-22	<a href="#">html</a>	<a href="#">html</a>
About - Items in One Sentence About JavaFx	6.7.3	2023-5-22	<a href="#">html</a>	<a href="#">html</a>
Examples - Html Tree	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
Examples - Text Tree	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
Examples - Favorite Address	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>

Name	Version	Time	English	Chinese
Examples - SQL	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
Examples - JShell	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
Examples - JEXL	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
Examples - JavaScript	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
Examples - Math Function	6.8.5	2025-3-5	<a href="#">html</a>	<a href="#">html</a>
Examples - Row Expression	6.8.6	2025-3-30	<a href="#">html</a>	<a href="#">html</a>
Examples - Data Column	6.8.2	2024-12-24	<a href="#">html</a>	<a href="#">html</a>
Examples - Geography Code	6.8.3	2025-1-27	<a href="#">html</a>	<a href="#">html</a>
Examples - Image Scope	6.8.6	2025-3-30	<a href="#">html</a>	<a href="#">html</a>
Palette - Default Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Common Web Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Chinese Traditional Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Japanese Traditional Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Colors from colorhexa.com	6.8.3	2025-1-27	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Art Hues Wheel(RYB) - 12 Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Art Hues Wheel(RYB) - 24 Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Art Hues Wheel(RYB) - 360 Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Optical Hues Wheel(RGB) - 12 Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Optical Hues Wheel(RGB) - 24 Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Optical Hues Wheel(RGB) - 360 Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Art Paints	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - MyBox Colors	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Palette - Gray Scale	6.7.8	2024-1-15	<a href="#">rgba all</a>	<a href="#">rgba all</a>
Stories of Images	6.8.5	2025-3-5	<a href="#">html</a> <a href="#">PDF odt</a>	<a href="#">html</a> <a href="#">PDF odt</a>
Useful Links	6.8.6	2025-3-30	<a href="#">html</a>	<a href="#">html</a>

## 4 Download and Execution

### 4.1 Source Codes

Source Codes	Size	Development Guide	Packing Steps
<a href="#">MyBox-src.zip</a>	120M-	<a href="#">pdf</a>	<a href="#">html</a>

### 4.2 Self-contain packages

Self-contain packages include all files and need not java env nor installation.

Platform	Link	Size	Launcher
win10 x64	<a href="#">MyBox-win-x64.zip</a>	360MB-	MyBox.exe
Mint x64	<a href="#">MyBox-Mint-x64.tar.gz</a>	360MB-	MyBox
mac	<a href="#">MyBox-mac.dmg</a>	360MB-	MyBox.app

User can double click the launcher to start MyBox or run it by command line. The default "Open Method" of image/text/PDF files can be associated to MyBox and a file can be opened directly by MyBox by double clicking the file's name.

### 4.3 Jar

When JRE or JDK([Oracle jdk](#) or [open jdk](#)) is installed, jar can run.

Platform	Link	Size	Requirements
win	<a href="#">MyBox-win-jar.zip</a>	280MB-	Java 24 or higher
linux	<a href="#">MyBox-linux.jar.gz</a>	280MB-	Java 24 or higher
mac	<a href="#">MyBox-mac.jar.gz</a>	280MB-	Java 24 or higher

Run following command to launch this program with Jar package:

```
java -jar MyBox.jar
```

A file path can follow the command as argument to be opened directly by MyBox. Example, following command will open the image:

```
java -jar MyBox.jar /tmp/a1.jpg
```

## 4.4 Versions

Contents of this document may be expired, but its links refer to the latest versions.

The latest versions and all archived versions can be downloaded in following addresses:

address	downloads	readme
github	<a href="https://github.com/Mararsh/MyBox/releases">https://github.com/Mararsh/MyBox/releases</a>	<a href="#">English</a> <a href="#">Chinese</a>
sourceforge	<a href="https://sourceforge.net/projects/mara-mybox/files/">https://sourceforge.net/projects/mara-mybox/files/</a>	<a href="#">English</a> <a href="#">Chinese</a>
cloud	<a href="https://pan.baidu.com/s/1fWMRzym_jh075OCX0D8y8A#list/path=%2F">https://pan.baidu.com/s/1fWMRzym_jh075OCX0D8y8A#list/path=%2F</a>	

## 4.5 Configuration

Configuration file is under "User Home":

Platform	Path of MyBox Configuration File
win	C:\users\UserName\mybox\MyBox_vVersion.ini
linux	/home/UserName/mybox/MyBox_vVersion.ini
mac	/Users/UserName/mybox/MyBox_vVersion.ini

Add parameter "config="FilePath"" when run jar to change configuration file temporarily.  
Function "Settings" can be used to change configuration values.

## 4.6 Backup and Recover

1. To backup, copy directories to other places.
2. To recover, override current directories with backup directories.
3. Need not backup each directory under data path.

Predefined directories under data path are listed below:

directory	role	internal referred	read/write automatically	need backup	comments
AppTemp	temporary files	yes	yes		cleared automatically
buttons	customized buttons	yes	yes		
data	internal data	yes	yes		
dataClipboard	data clipboard	yes	yes	yes	
managed/matrix	matrix	yes	yes	yes	
doc	internal documents	yes	yes		
downloads	download files		yes		
fileBackups	files' backups	yes	yes	yes	
generated	generated files		yes	user decides	
ICC	ICC profiles	yes	yes		
icons	icon files	yes	yes		
image	image files	yes	yes		
imageClipboard	image clipboard	yes	yes	yes	
imageHistories	image edit histories	yes	yes	yes	
imageScopes	image scopes	yes	yes	yes	
js	javascript	yes	yes		
logs	database logs		yes		
map	map files	yes	yes		
mybox_derby	database	yes	yes	yes	
mybox_languages	customized languages	yes	yes	yes	
security	cert files	yes	yes		
sound	sound files	yes	yes		

## 4.7 Migration

1. Each version has itself's configuration file. New version can copy parameters from existed versions.
2. Data handled in each version are under "Data Directory" referred by it. Multiple versions can refer to same data directory.
3. MyBox is backward compatibility: Later version can work on data of previous versions. While forward compatibility is not supported: Wrong may happen when old version handles data of new version.

## 5 Implementation

MyBox is based on following open sources:

Name	Role	Link
JDK	Java	<a href="http://jdk.java.net/">http://jdk.java.net/</a>
		<a href="https://www.oracle.com/technetwork/java/javase/downloads/index.html">https://www.oracle.com/technetwork/java/javase/downloads/index.html</a>
		<a href="https://docs.oracle.com/en/java/javase/23/docs/api/index.html">https://docs.oracle.com/en/java/javase/23/docs/api/index.html</a>
JavaFx	GUI	<a href="https://gluonhq.com/products/javafx/">https://gluonhq.com/products/javafx/</a>
		<a href="https://docs.oracle.com/javafx/2/">https://docs.oracle.com/javafx/2/</a>
		<a href="https://gluonhq.com/products/scene-builder/">https://gluonhq.com/products/scene-builder/</a>
		<a href="https://openjfx.io/javadoc/23/">https://openjfx.io/javadoc/23/</a>
Derby	Database	<a href="http://db.apache.org/derby/">http://db.apache.org/derby/</a>
NetBeans	IDE	<a href="https://netbeans.org/">https://netbeans.org/</a>
jpackage	pack	<a href="https://docs.oracle.com/en/java/javase/23/docs/specs/man/jpackage.html">https://docs.oracle.com/en/java/javase/23/docs/specs/man/jpackage.html</a>
maven	build	<a href="https://maven.apache.org/">https://maven.apache.org/</a>
jai-imageio	Image manufacture	<a href="https://github.com/jai-imageio/jai-imageio-core">https://github.com/jai-imageio/jai-imageio-core</a>
PDFBox	PDF manufacture	<a href="https://pdfbox.apache.org/">https://pdfbox.apache.org/</a>
PDF2DOM	PDF to html	<a href="http://cssbox.sourceforge.net/pdf2dom/">http://cssbox.sourceforge.net/pdf2dom/</a>
GifDecoder	Decode broken gif	<a href="https://github.com/DhyanB/Open-Imaging/">https://github.com/DhyanB/Open-Imaging/</a>
EncodingDetect	Determine encoding of text file	<a href="https://www.cnblogs.com/ChurchYim/p/8427373.html">https://www.cnblogs.com/ChurchYim/p/8427373.html</a>
Lindbloom	Color theory	<a href="http://brucelindbloom.com/index.html">http://brucelindbloom.com/index.html</a>
Free Icons	Icon	<a href="https://icons8.com/icons/set/home">https://icons8.com/icons/set/home</a>
tess4j	OCR	<a href="https://github.com/nguyenq/tess4j">https://github.com/nguyenq/tess4j</a>
tesseract	OCR	<a href="https://github.com/tesseract-ocr/tesseract">https://github.com/tesseract-ocr/tesseract</a>
barcode4j	Create barcodes	<a href="http://barcode4j.sourceforge.net">http://barcode4j.sourceforge.net</a>
zxing	Create/Decode barcodes	<a href="https://github.com/zxing/zxing">https://github.com/zxing/zxing</a>
flexmark-java	Convert Markdown	<a href="https://github.com/vsch/flexmark-java">https://github.com/vsch/flexmark-java</a>
commons-compress	archive/compress	<a href="https://commons.apache.org/proper/commons-compress">https://commons.apache.org/proper/commons-compress</a>
XZ for Java	archive/compress	<a href="https://tukaani.org/xz/java.html">https://tukaani.org/xz/java.html</a>
ffmpeg	convert/create medias	<a href="http://ffmpeg.org">http://ffmpeg.org</a>
image4j	ico format	<a href="https://github.com/imcdonagh/image4j">https://github.com/imcdonagh/image4j</a>
AutoCommitCell	Submit updates	<a href="https://stackoverflow.com/questions/24694616(Ogmios)">https://stackoverflow.com/questions/24694616(Ogmios)</a>
GaoDe	Map	<a href="https://lbs.amap.com/api/javascript-api/summary">https://lbs.amap.com/api/javascript-api/summary</a>
GaoDe	Coordinate	<a href="https://lbs.amap.com/api/webservice/guide/api/georegeo">https://lbs.amap.com/api/webservice/guide/api/georegeo</a>

Name	Role	Link
WeiBo	Image materials	<a href="https://weibo.com/3876734080/InmB1aPiL?type=comment#_rnd1582211299665">https://weibo.com/3876734080/InmB1aPiL? type=comment#_rnd1582211299665</a>
poi	Microsoft Documents	<a href="https://poi.apache.org">https://poi.apache.org</a>
LabeledBarChart	JavaFx charts	<a href="https://stackoverflow.com/questions/34286062/how-to-clear-text-added-in-a-javafx-barchart/41494789#41494789 (Roland)">https://stackoverflow.com/questions/34286062/how-to-clear-text-added-in-a-javafx-barchart/41494789#41494789 (Roland)</a>
commons-csv	CSV	<a href="https://commons.apache.org/proper/commons-csv/">https://commons.apache.org/proper/commons-csv/</a>
geonames	Location data	<a href="https://www.geonames.org/countries/">https://www.geonames.org/countries/</a>
world-area	Location data	<a href="https://github.com/wizardcode/world-area">https://github.com/wizardcode/world-area</a>
China National Bureau of Statistics	Data	<a href="https://data.stats.gov.cn/">https://data.stats.gov.cn/</a>
JHU	COVID-19 data	<a href="https://github.com/CSSEGISandData/COVID-19">https://github.com/CSSEGISandData/COVID-19</a>
Website	Color data	<a href="https://tool.lanrentuku.com/color/china.html">https://tool.lanrentuku.com/color/china.html</a>
Book	Materials	ISBN:978-7-5330-2773-5
National Geomatics Center of China	Map	<a href="http://lbs.tianditu.gov.cn/api/js4.0/guide.html">http://lbs.tianditu.gov.cn/api/js4.0/guide.html</a>
movebank	Location data	<a href="https://www.datarepository.movebank.org">https://www.datarepository.movebank.org</a>
CoordinateConverter	convert coordinates	<a href="https://www.jianshu.com/p/c39a2c72dc65?from=singlmessage">https://www.jianshu.com/p/c39a2c72dc65?from=singlmessage</a>
JavaMail	email	<a href="https://javaee.github.io/javamail/">https://javaee.github.io/javamail/</a>
Commons IO	File IO	<a href="https://commons.apache.org/proper/commons-io/">https://commons.apache.org/proper/commons-io/</a>
colorhexa	Color data	<a href="https://www.colorhexa.com/color-names">https://www.colorhexa.com/color-names</a>
WQY	Font file	<a href="http://wenq.org/wqy2/">http://wenq.org/wqy2/</a>
ttc2ttf	Extract ttf	<a href="https://github.com/fermi1981/TTC_TTF">https://github.com/fermi1981/TTC_TTF</a>
Book	Materials	ISBN:978-7-03-0307290-0
PaginatedPdfTable	PDF	<a href="https://github.com/eduardohl/Paginated-PDFBox-Table-Sample">https://github.com/eduardohl/Paginated-PDFBox-Table-Sample</a>
jsoup	html	<a href="https://jsoup.org/">https://jsoup.org/</a>
ZhiHu	Materials	<a href="https://www.zhihu.com/question/41580677/answer/1300242801">https://www.zhihu.com/question/41580677/answer/1300242801</a>
commons-math	Calculation	<a href="https://commons.apache.org/proper/commons-math/index.html">https://commons.apache.org/proper/commons-math/index.html</a>
JEXL	Calculation	<a href="https://commons.apache.org/proper/commons-jexl">https://commons.apache.org/proper/commons-jexl</a>
OpenOffice	Document	<a href="http://www.openoffice.org/">http://www.openoffice.org/</a>
nashorn	JavaScript	<a href="https://openjdk.org/projects/nashorn/">https://openjdk.org/projects/nashorn/</a>
echarts-gl	WebGL	<a href="https://github.com/ecomfe/echarts-gl">https://github.com/ecomfe/echarts-gl</a>
RYB hues	art colors	<a href="https://blog.csdn.net/weixin_44938037/article/details/90599711">https://blog.csdn.net/weixin_44938037/article/details/90599711</a>
jsch	sftp	<a href="http://www.jcraft.com/jsch/">http://www.jcraft.com/jsch/</a>
jackson	json	<a href="https://github.com/FasterXML/jackson">https://github.com/FasterXML/jackson</a>
batik	SVG	<a href="https://xmlgraphics.apache.org/batik/">https://xmlgraphics.apache.org/batik/</a>
jankovicsandras	SVG	<a href="https://github.com/jankovicsandras/imagetracerjava">https://github.com/jankovicsandras/imagetracerjava</a>
miguelemosreverte	SVG	<a href="https://github.com/miguelemosreverte/imagetracerjava">https://github.com/miguelemosreverte/imagetracerjava</a>

## MyBox User Guide – Overview v6.8.7

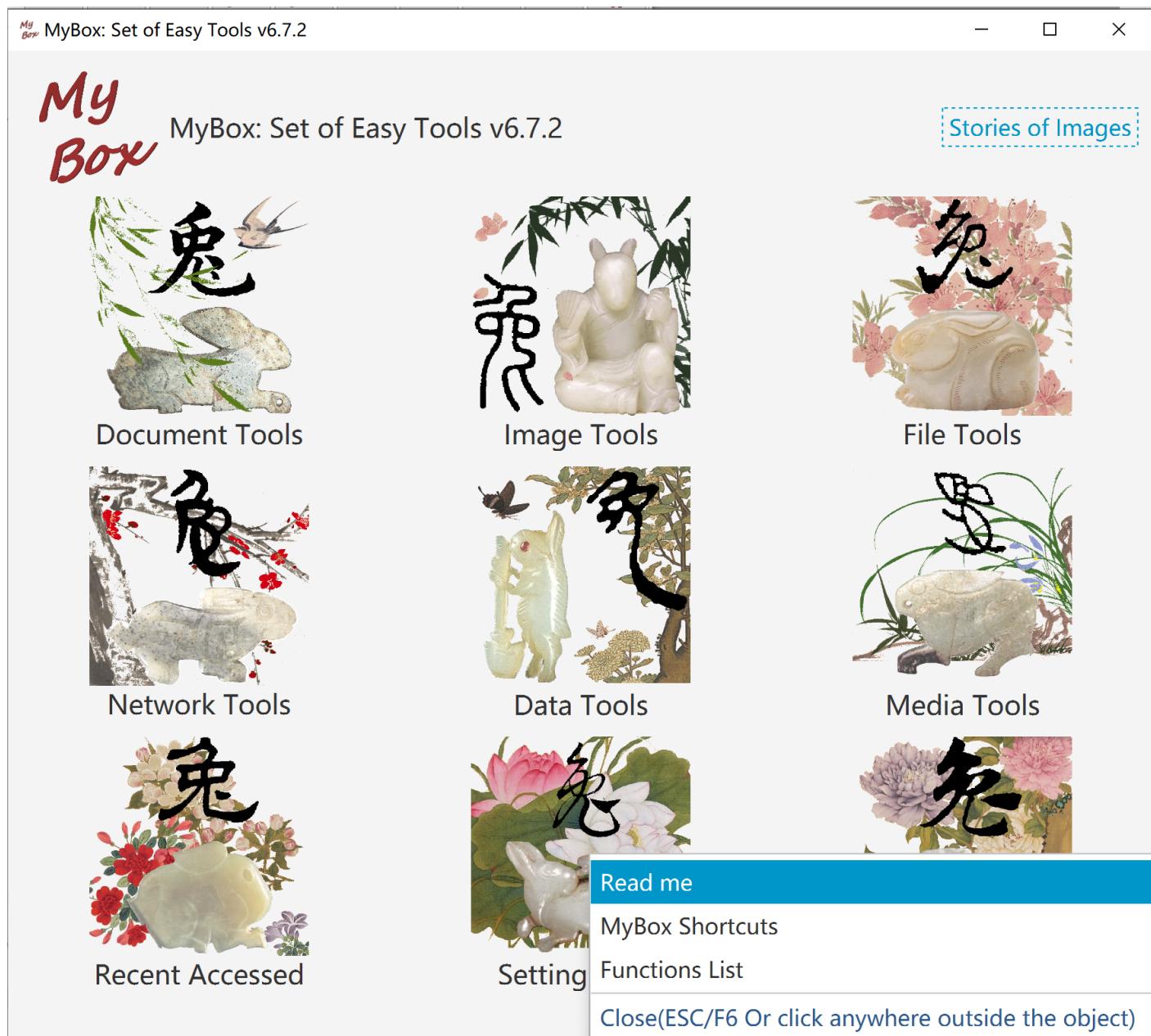
Name	Role	Link
webp-imageio	WebP	<a href="https://github.com/sejda-pdf/webp-imageio">https://github.com/sejda-pdf/webp-imageio</a>
Book	Materials	ISBN:7-5305-231 7-1
DeepSeek	Knowledge	<a href="https://www.deepseek.com/">https://www.deepseek.com/</a>

## 6 Common Functions in Interfaces

### 6.1 Main Interface

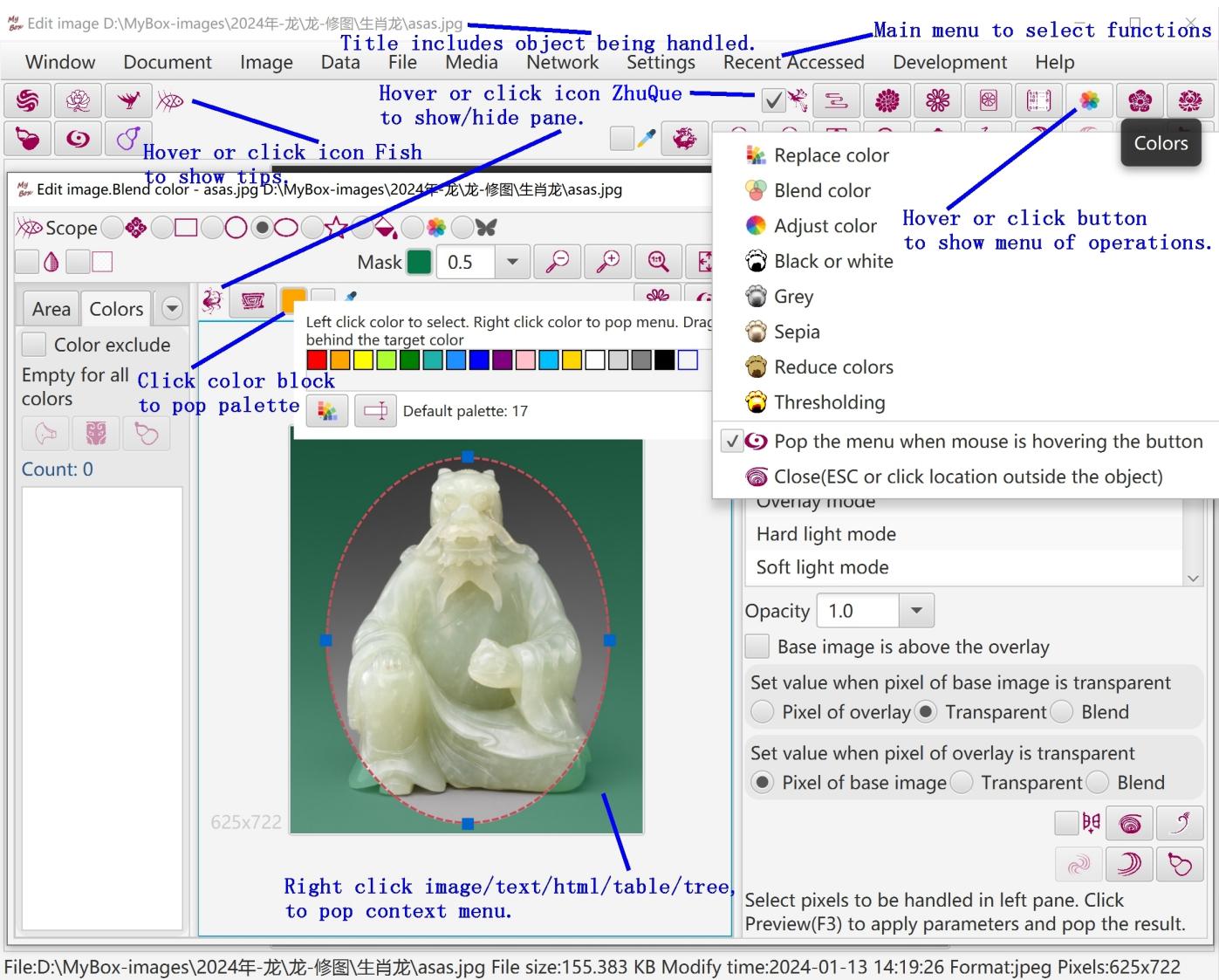
Main interface is shown after MyBox is launched. Move mouse over one icon to pop its menu. Then select a tool to start.

In any interface of MyBox, click key F8 to pop the main interface.



## 6.2 Interface Layout

1. Window title includes the object name being handled.
2. Main menu in top to open windows of functions.
3. Some interfaces include pagination toolbar which is generally in bottom.
4. Some interface include icon Fish. Hover mouse upon it to pop tips.
5. Some interfaces include left pane or right pane. If icon Rosefinch is there, hover mouse upon it to hide/show the pane.
6. To some buttons, checkbox, or icon, shortcut or tips will be popped when hover mouse upon them.

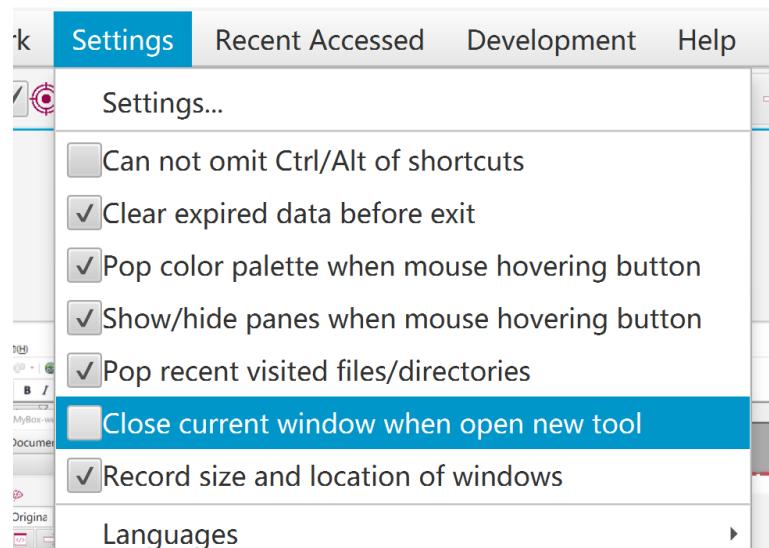


## 6.3 Set Font Size

1. Decrease font size by press key "CTRL" and key "-" at same time.
2. Increase font size by press key "CTRL" and key "=" at same time.
3. Select one font size of 12px, 15px, and 17px by click menu item directly.
4. Set font size in Setting window.

## 6.4 Open New Stage

To open new window for new scene and keep current scene in current window, **do not select** menu item "Settings"- "Close current window when open new tool".

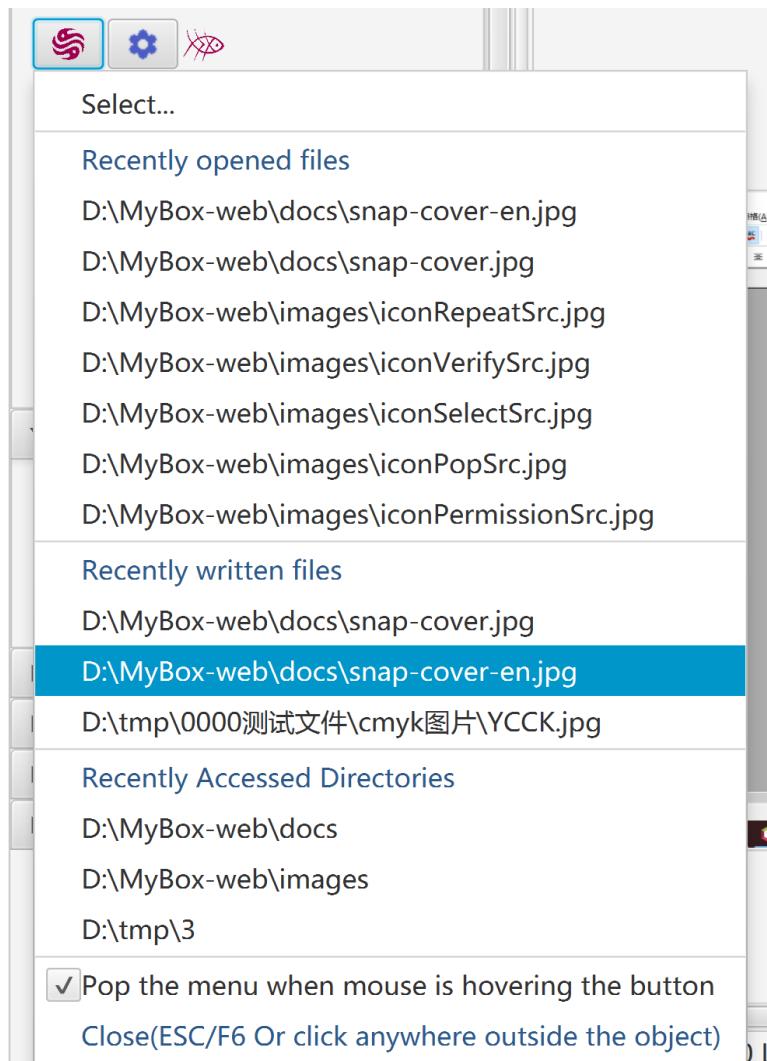


## 6.5 Restore Scene Size

By selecting menu item "Settings"- "Record size and location of windows", recent size and location of each stage will be saved and restored when it is opened again.

## 6.6 Recent Visited Files/Directories

When menu item "Settings"- "Pop recent visited files/directories" is selected, each access of files/directories will be record and list will be popped when mouse is moved upon the button of selection. Example:



## 6.7 Data Table

1. To select rows:
  - Press key SHIFT and click rows to select multiple rows of a range.
  - Press key CTRL and click rows to select multiple rows one by one.
  - Click the checkboxes in head of rows.
2. To edit data:
  - Header texts of editable columns are in blue (Editable primary keys are still in red).
  - Click the editable cell, then its input field will be shown.
  - Press ESC to discard modification. Press ENTER to commit modification.
  - Option to commit modification automatically when cell loses focus.
  - When data is committed, its value will be checked and invalid data will be rejected.
3. To display/hide columns, click button "+" in right side of table header.

This operation does not affect data.
4. To adjust order of columns, click and drag column headers.

This operation does not affect data.
5. - To order rows:
  - Click column header for ascending order by this column.
  - Click column header again for descending order by this column.
  - Click column header for third time to cancel ordering of this column.
  - Press SHIFT and click more column headers to order by multiple columns.

This operation only affect current data in table.
6. Header texts of primary keys are in red and auto-increated keys are in orange.

# MyBox User Guide – Overview v6.8.7

MyBox Edit CSV File : CSV - 20 - D:\tmp\mybox\_data\_v6.7.6\generated\csv\ChinaPopulation\_2023-09-28\_11-59-23-626\_0.csv \*

Window Document Image Data File Media Network Settings Recent Accessed Development Help

**Select rows and click button to handle.**

**Click header to sort rows.  
Drag header to adjust order of columns.**

**Click data cell to start editing.  
Press ESC key to cancel modification.  
Press ENTER key to commit update.**

**Pagination** — Selected: 1 Rows: [1-50]50/73 Page size 50 ▾ Page 1 ▾ /2 ⏪ ⏴ ⏵ ⏶ ⏷ ⏸ ⏹ ⏺ ⏻ ⏻

Table r...	Data row	year_	populatio...	male(ten t...	fema...
<input type="checkbox"/> 1	1	1949	5,4167	28,145	26,022
<input type="checkbox"/> 2	2	1950	6,0207	34,205	34,205
<input type="checkbox"/> 3	3	1951	6,6207	34,517	34,517
<input type="checkbox"/> 4	4	1952	7,0499	35,533	35,533
<input type="checkbox"/> 5	5	1953	7,3124	34,357	34,357
<input type="checkbox"/> 6	6	1954	7,6142	35,410	35,410
<input type="checkbox"/> 7	7	1955	7,8120	35,410	35,410
<input type="checkbox"/> 8	8	1956	7,9512	35,410	35,410
<input type="checkbox"/> 9	9	1957	8,0207	35,410	35,410
<input type="checkbox"/> 10	10	1958	8,0207	35,410	35,410
<input type="checkbox"/> 11	11	1959	8,0207	35,410	35,410
<input type="checkbox"/> 12	12	1960	8,0207	35,410	35,410
<input checked="" type="checkbox"/> 13	13	1961	65859	33,880	31,979
<input type="checkbox"/> 14	14	1962	6,7296	34,517	32,778
<input type="checkbox"/> 15	15	1963	6,9172	35,533	33,639
<input type="checkbox"/> 16	16	1964	7,0499	36,142	34,357
<input type="checkbox"/> 17	17	1965	7,2538	37,120	35,410
<input type="checkbox"/> 18	18	1966	7,4512	38,180	36,353

Columns\*\* Attributes View Edit\*

- Data
- Modify
- Trim
- Calculation**
- Charts
- Group Charts
- Examples
- Help
- Commit modification when the cell loses focus
- Verify data when save
- Pop the menu when mouse is hovering the button
- Close(ESC/F6 or click location outside the object)

## 6.8 Context Menu

1. This menu is popped when right click object like text, image, or table.
2. If interface includes button "Cloud", context menu will be popped when click this button.

## 6.9 Window "Examples"

Window "Examples" is popped when hover or click button "Examples".

The screenshot shows the MyBox application window with the title "Math Function: 2063 - tangent\_angle". The menu bar includes: Window, Document, Image, Data, File, Media, Network, Settings, Recent Accessed, Development, Help. The main area has tabs: Nodes, Tags, Time, Find. Below is a tree view of nodes:

Title	Hierarchy
unitary_quadratic_func...	1.1.1.3
unitary_linear_function	1.1.1.4
unitary_cubic_function	1.1.1.5
▼ Trigonometry	1.1.2
tangent_radian	1.1.2.1
tangent_angle	1.1.2.2
sine_radian	1.1.2.3
sine_angle	1.1.2.4
cosine_radian	1.1.2.5
cosine_angle	1.1.2.6
convert radian to angle	1.1.2.7
convert angle to radian	1.1.2.8
arcTangent_radian	1.1.2.9
arcTangent_angle	1.1.2.10
arcSine_radian	1.1.2.11
arcSine_angle	1.1.2.12
arcCosine_radian	1.1.2.13
arcCosine_angle	1.1.2.14
▼ Power Function	1.1.3

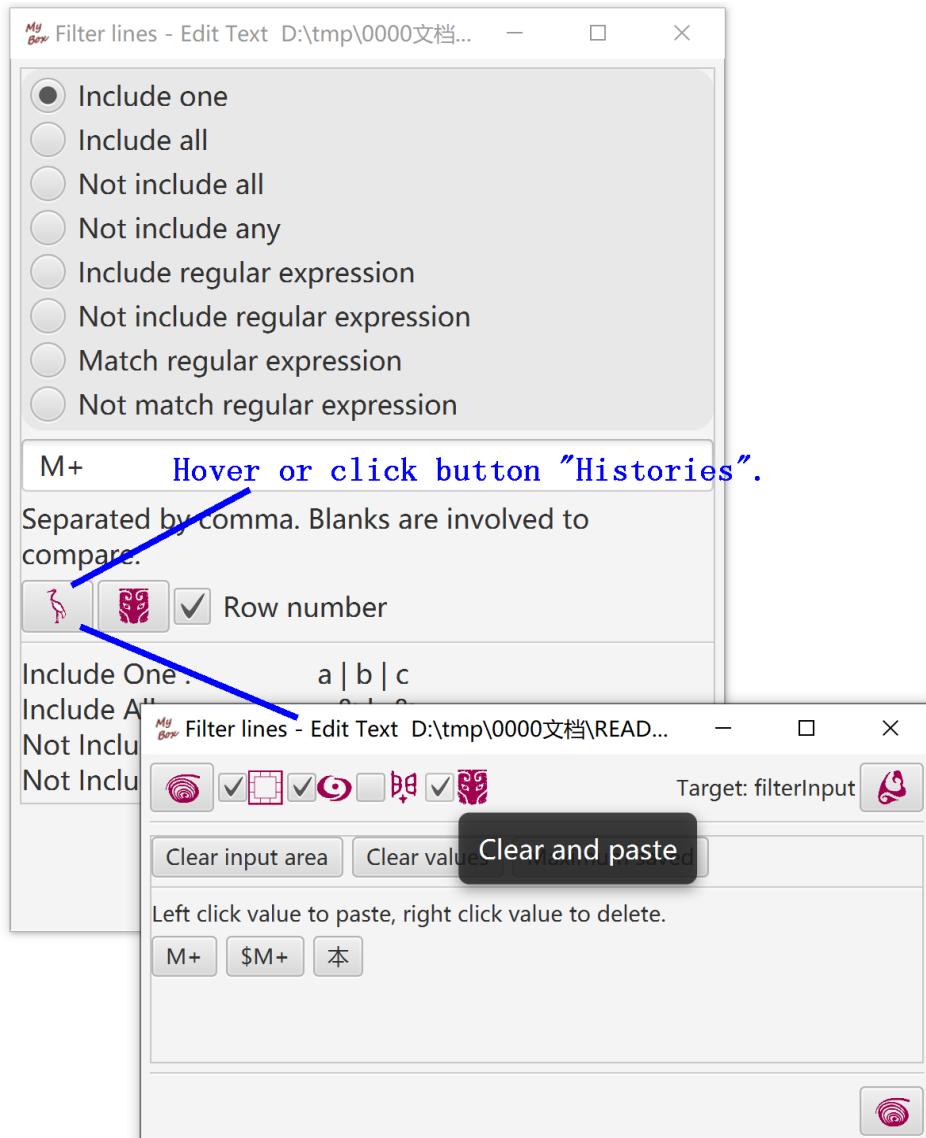
Below the tree view, it says "Expanded item count: 66".

The right side of the interface has toolbars for Nodes, Tags, Time, Find, and a "Cloud" icon. It also has tabs for Attributes and Math Function. The Math Function tab is active, showing:

- Function name: tangent\_angle **Hover or click button "Example".**
- Names of variables, separated by English comma: angle
- Expression: Math.tan( angle \* Math.PI / 180)
- A preview window titled "Math Function: 2063 - tangent\_angle" showing the expression and some checkboxes.
- A tooltip for the "Cloud" icon: "Select this option to make the pane as child window. Unselect this option to make the pane as pop window. Take effect when open this pane next time." It also says "Child window: can be moved and resized. Pop window: can be closed automatically when click outside the object."
- Function domain:  $( \text{angle} - 90 ) \% 180$
- Function parameters:  $\geq$ ,  $>$ ,  $\leq$ ,  $<$ ,  $\neq$ ,  $\&\&$ ,  $\|$ ,  $!$ ,  $" ==$ ,  $==$ ,  $" !=$ ,  $== =$ ,  $!= =$ ,  $true$ ,  $false$ ,  $null$ ,  $undefined$ .
- Math functions: Math.PI, Math.E, Math.random(), Math.abs(x), Math.pow(x,2), Math.pow(x,3), Math.sqrt(x), Math.pow(x,1d/3), Math.pow(3, x), Math.exp(x).

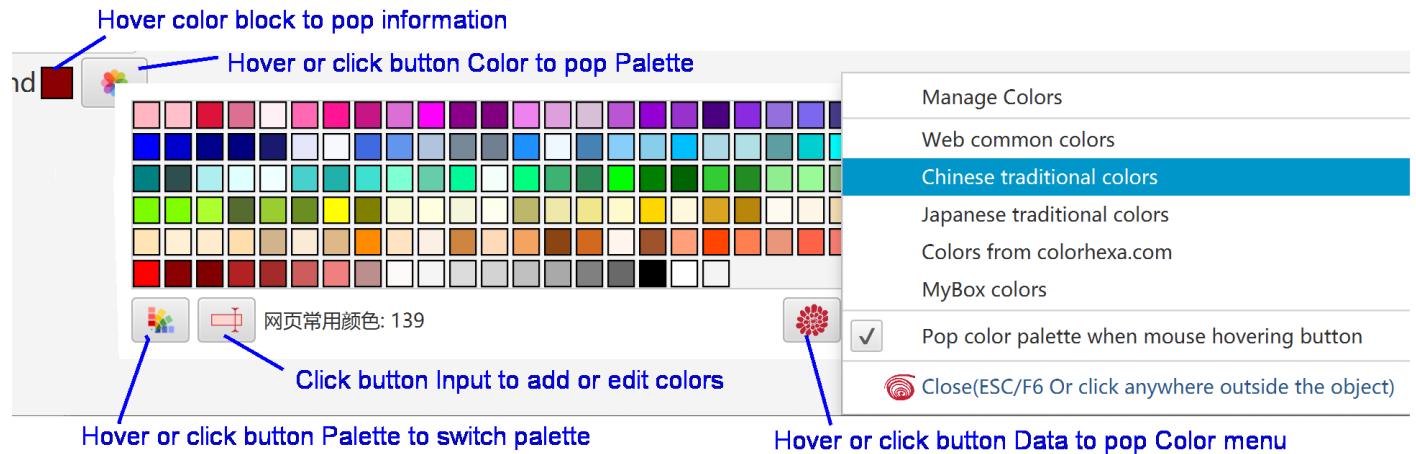
## 6.10 Window "Histories"

Hover or click button "Histories" to pop window "Histories".



## 6.11 Color Block and Palette

1. Hover color block to pop color's information.
2. Click color block to pop window Palette, and select or edit colors.

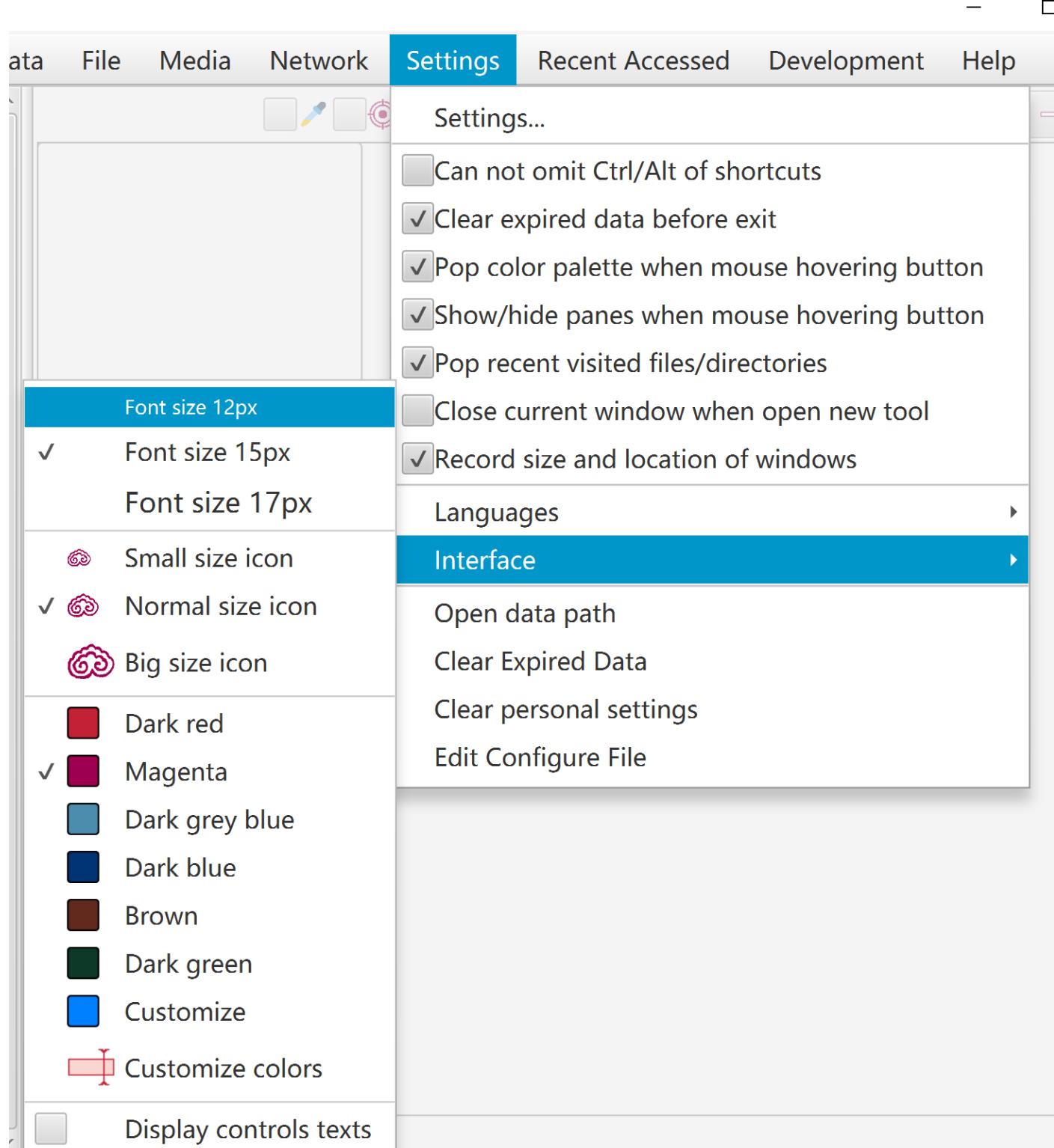


## 6.12 Relationships between New Stage and Caller When Open Stage

<b>stage type</b>	<b>caller owns</b>	<b>always on top</b>	<b>to front</b>	<b>close when caller close</b>	<b>other</b>
Normal			yes		
Child	yes	yes	yes	yes	
Popup	yes	yes	yes	yes	close automatically
ReferredTop		yes	yes	yes	
Referred			yes	yes	make caller iconified
Fork			yes		make caller iconified
Top		yes	yes		
OneOpen					only one instance
Replace			yes		close caller

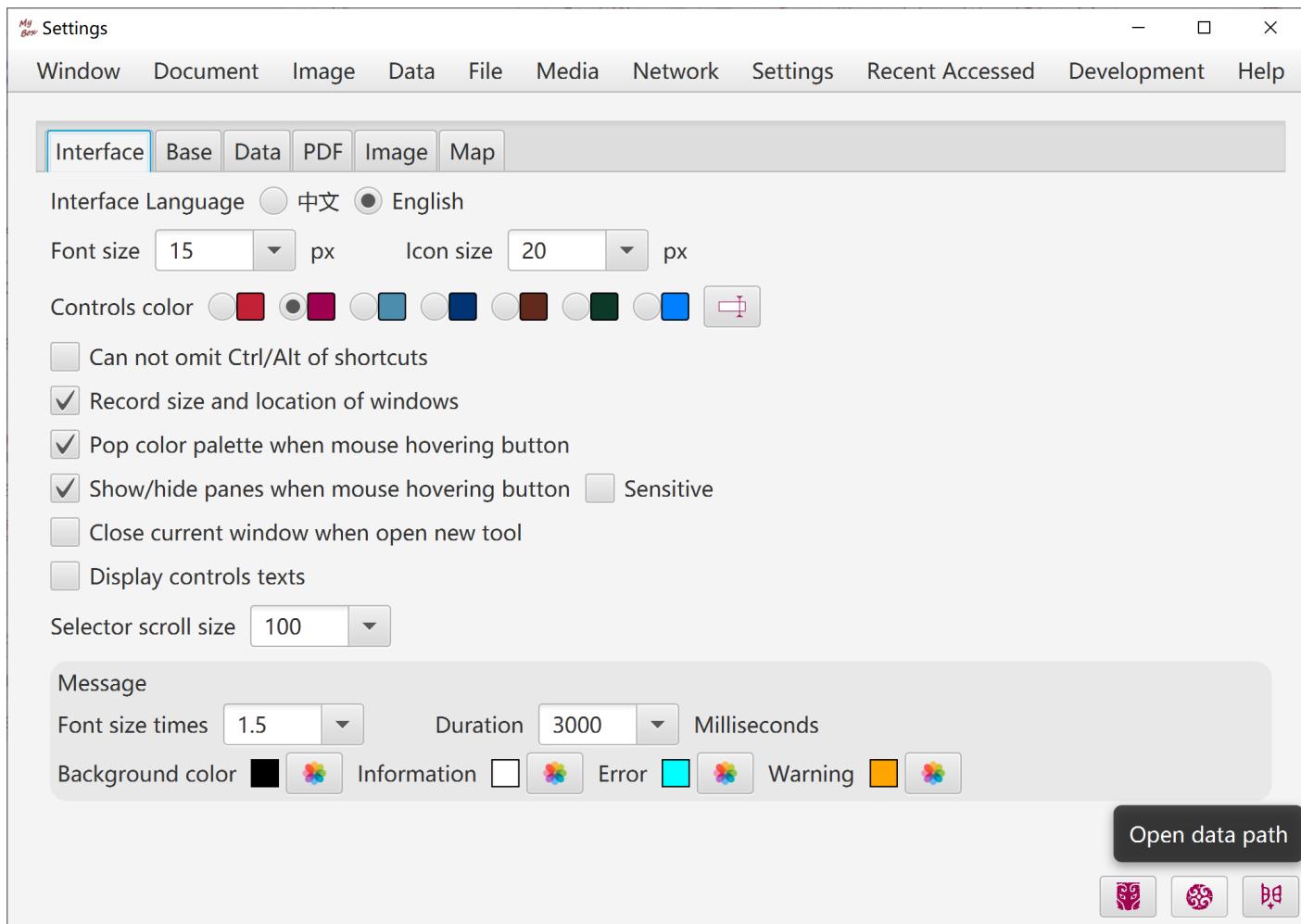
## 7 Settings

Select "Settings..." in main menu to open window Settings.



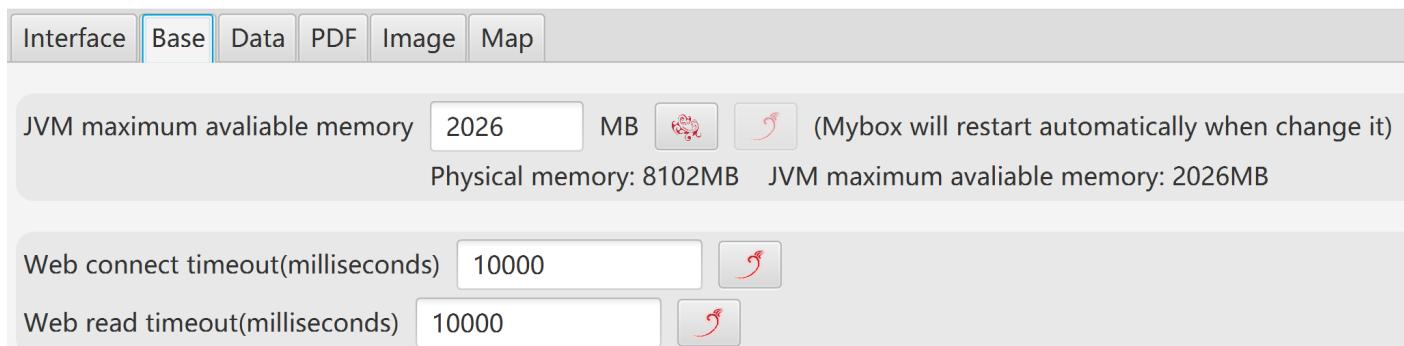
## 7.1 Interface

1. Language, font size, icon size
2. Select hi-dpi icons(100x100) or common icons(40x40).
3. Color of buttons can be customized.
4. Whether restore last size of each scene.
5. Whether open new stage to display scene.
6. Whether show/Hide splitted panes when mouse passing.
7. Whether pop stage "Set Color" when mouse passing.
8. Font size, color, duration of popped messages.



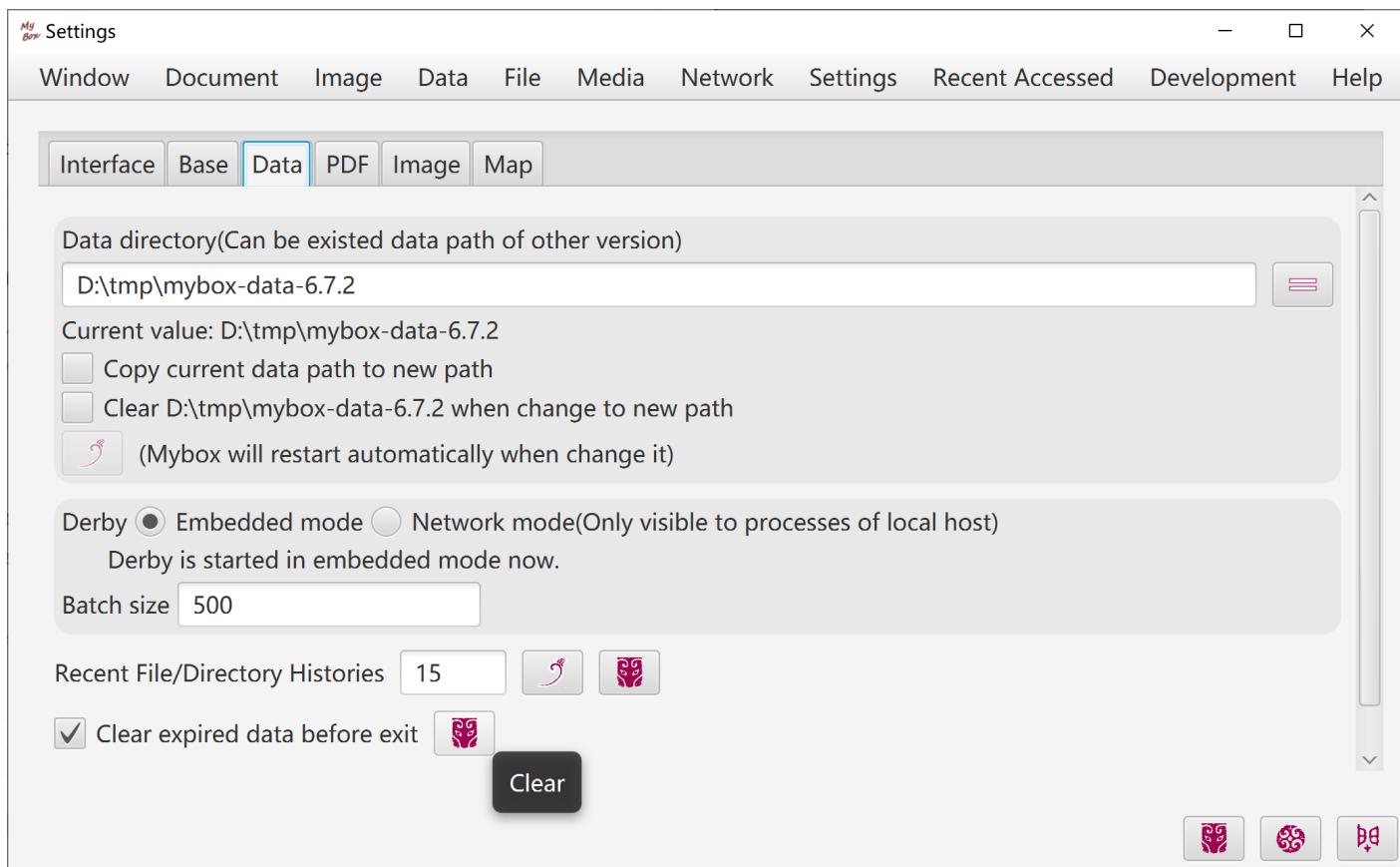
## 7.2 Base

1. Maximum memory usage of JVM
2. Network timeouts



## 7.3 Data

1. Data path
2. Derby driver mode and batch size.
3. Whether pop recent visited files/directories. And the number.
4. Whether close alarm clocks when exit program.



## 7.4 Map

### Data keys of map

Interface Base Data PDF Image **Map**

Following are free map keys shared by users of MyBox. You can request and set your private free/commercial map keys.

TianDiTu web key 0ddeb917def62b4691500526cc30a9b1  
<https://console.tianditu.gov.cn/api/key>

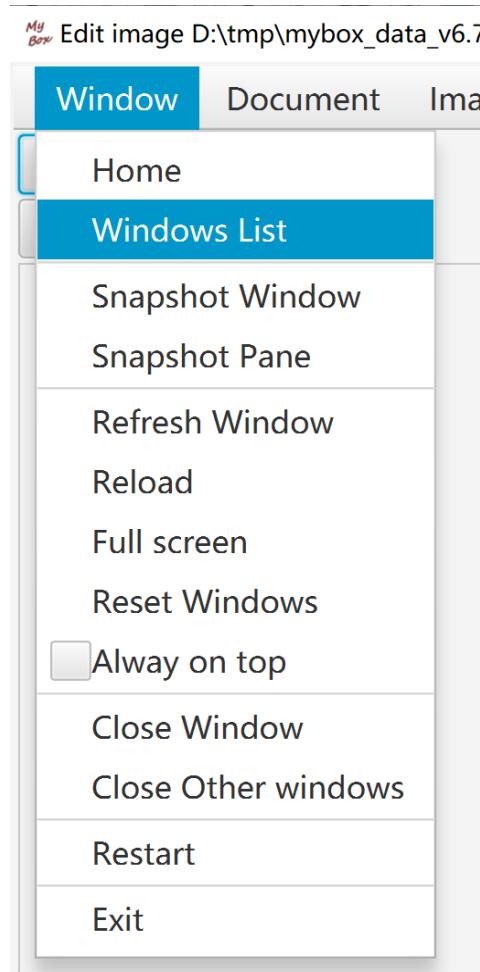
Web key of GaoDe map 06b9e078a51325a843dfefd57ffd876c

Web service key of GaoDe map d7444d9a7fae01fa850236d909ad4450  
<https://lbs.amap.com/dev/index>

## 8 Window

1. Refresh/Reset/Full-screen/Top windows.
2. Close other windows.
3. Reboot MyBox.
4. Recent visited tools.
5. Snapshot of window/pane.



## 9 Windows List

1. Click "Windows List" in menu "Window" to open this interface.
2. Display all of currently showing windows in MyBox.
3. Select some windows, and click button "Close".
4. Select some windows, and click button "Always on top".
5. Select some windows, and click button "Disable always on top".

Windows List

The screenshot shows the 'Windows List' interface with a toolbar at the top and a table below. The table has columns for window ID, title, visibility, modality, focus, always on top, child status, width, height, X position, Y position, full screen, iconified, maximized, resizable, and type. A context menu is open over row 6, with the option 'Disable "Alway on top"' highlighted. To the right of the table is a sidebar with checkboxes for filtering rows based on the columns listed above.

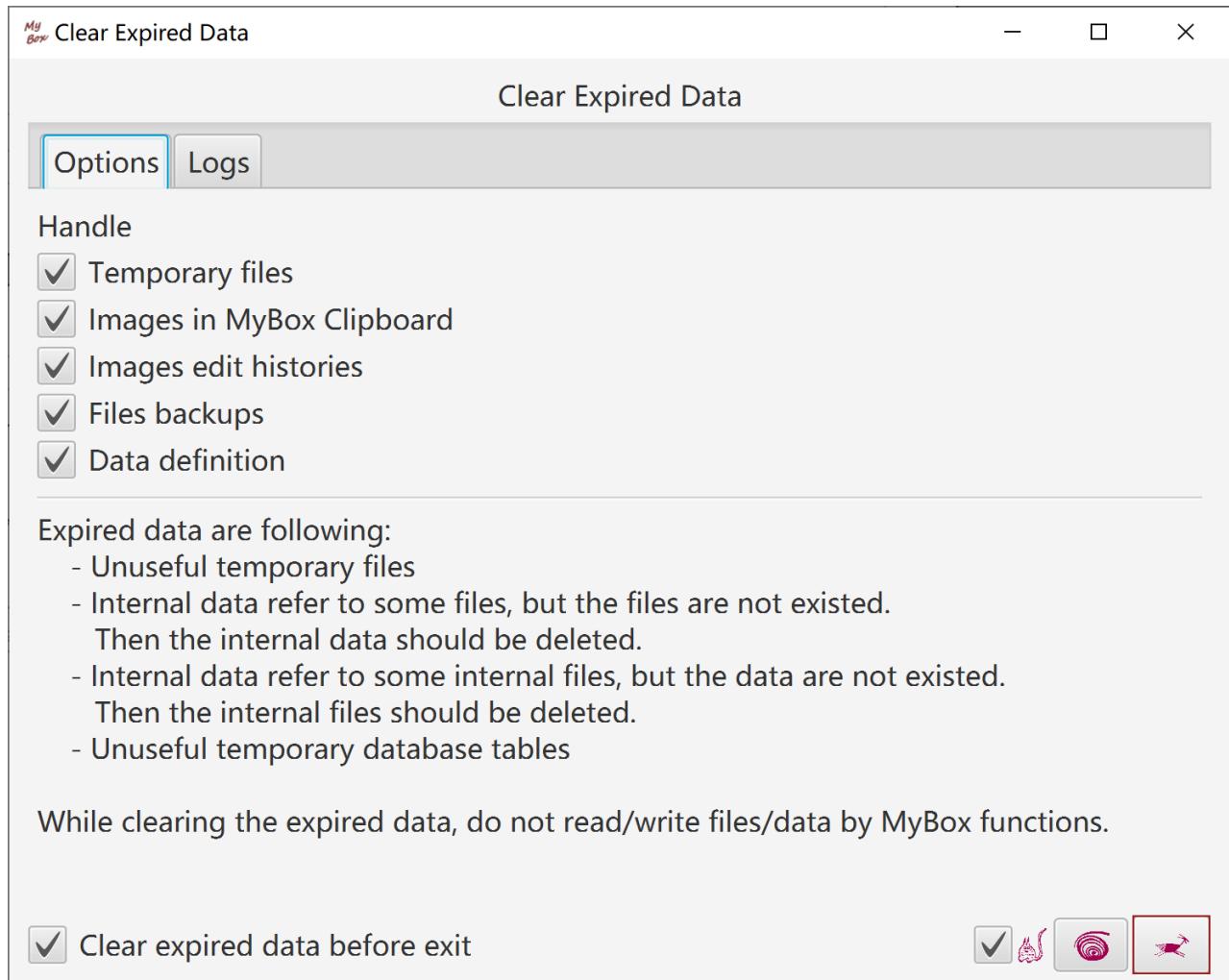
Table r...	Disable "Alway on top"	Sho...	Mod...	Focu...	Alwa...	Is child	Width	Height	X	Y	Full s...	Iconi...	M+
<input type="checkbox"/> 1	View Image	<input checked="" type="checkbox"/>					1012	735	119	132	<input checked="" type="checkbox"/>		
<input type="checkbox"/> 2	View Image *	<input checked="" type="checkbox"/>					1012	735	119	132	<input checked="" type="checkbox"/> Title		
<input type="checkbox"/> 3	Edit image D:\tmp\mybo...	<input checked="" type="checkbox"/>					1707	920	0	0	<input checked="" type="checkbox"/> Showing		
<input checked="" type="checkbox"/> 4	Edit image	<input checked="" type="checkbox"/>					1707	920	0	0	<input checked="" type="checkbox"/> Modality		
<input type="checkbox"/> 5	Notes	<input checked="" type="checkbox"/>					1012	735	347	60	<input checked="" type="checkbox"/> Focused		
<input checked="" type="checkbox"/> 6	Manufacture Data : CSV ...	<input checked="" type="checkbox"/>					1012	735	403	216	<input checked="" type="checkbox"/> Alway on top		
<input type="checkbox"/> 7	Edit CSV File : CSV - New...	<input checked="" type="checkbox"/>					1012	735	700	190	<input checked="" type="checkbox"/> Is child		
<input type="checkbox"/> 8	Windows List	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				1012	624	700	300	<input checked="" type="checkbox"/> Width		

Filter Options:

- Title
- Showing
- Modality
- Focused
- Alway on top
- Is child
- Width
- Height
- X
- Y
- Full screen
- Iconified
- Maximized
- Resizable
- Type

## 10 Clear expired data

1. Select "Clear Expired Data" in menu "Settings" to open this interface.
2. Select data to be handled.
3. While clearing expired data, do not read/write files/data by MyBox functions.
4. Option to clear expired data automatically before exit.



<End of Document>