Map Painter User Manual

1. Opening a file

Upon receiving the Map Painter software an example will be given (a "maps" folder relative to the application) which you can play with to your hearth's content (modify, delete, etc.) but beware of the map_data.txt file! This file is essential in running the program. It is advised that if you want to modify the map outside the scope of the program (for example with Paint.net or Gimp) you should **always** generate a new map_data.txt (which can be done with the Map Processor software – https://shadow9876.itch.io/map-processor).

Furthermore if you already have a new map and files associated with the program (map_data.txt) you can simply delete the "maps" folder. Upon opening the app without the "maps" folder a dialogue will appear, where you can choose the path in which the program searches for images.

2. Controls

<u>Map Navigation</u>

Map Painter offers users intuitive and easy to learn inputs. That's why most input options can be self-explanatory. Below is a table of nearly all inputs:

Left click	Select province (at most 2 at a time)
Double left click	Select country (or e.g. region if regions map mode was last seen)
Right click	Select province (only 1 at a time)
Control left click (Ctrl + left click)	Add to province selection (no upper limit)
Shift left click	Remove from province selection (if it is amongst the selected provinces)
Dragging left (or middle) mouse button (holding it down and moving it)	Moving (on) the map
Scrolling	Zooming in and out
Up and down arrows	Moving between map modes
Control z (Ctrl + z)	Undo
Control y (Ctrl + y)	Redo
Control / (Ctrl + /)	Reset zoom

Map Painter also offers a few shortcuts aside from these basic controls:

p or 0	Enter provinces map mode
n or 1	Enter normal map mode
s or 2[*]	Enter subregions map mode
r or 3[*]	Enter regions map mode
c or 4[*]	Enter countries map mode
e or 5[*]	Enter empires map mode
k or 6[*]	Enter continents map mode
i	Shift focus from map to submenu

* These values may differ if certain map modes are not present

Enter	Select neighbours of the selection (the black area)

<u>Navigation in the submenu</u>
Map Painter displays information below the map position in a convenient submenu. If this menu is edited, values on the map change (for example the colour of a province, the name of a country, etc.). Even though this submenu is very intuitive to use, it still has a few shortcuts:

Enter	Change values on map (only selected entry)
Up or down arrow	Move between the entries
Tab	Move between the entries and buttons (down)
Shift tab	Move between the entries and buttons (up)

3. Scripting

Map Painter has a programmable interface as well which starts before the graphical interface. Whenever you open Map Painter a black window will appear before the map which will provide the necessary interface for scripting. Commands include:

[1, 2, 3] or 1,2,3	Select provinces by number
82*	Select country with these provinces
1..10	Select provinces from 1 to 10 (1, 2, 3, …, 10)
#ABCDEF	Select all visible provinces with this colour (for example if subregions map mode was last seen it will select all provinces with this subregion colour)
get <attribute> or g <attribute>	Get attribute of a selection
change <attribute> or c <attribute>	Change attribute of a selection
output <destination> or o <destination>	Change output destination from console to e.g. a file (write "console" to return to console output)
file <file_name> or f <file_name>	Input from file; it reads and executes all written instructions in the file, then switches back to console
export or exp	Export current work
p or s or r or ...	Change map modes (see complete list under "2. Controls")
undo or z	Undo action (similar to Control + z)
redo or y	Redo action (similar to Control + y)
quit or q	Quit application

List of attributes:

colour or c	Colour of the owner of the selection
subregion or s	Colour of the subregion of the selection
region or r	Colour of the region of the selection

country or cou	Colour of the country map mode of the selection
empire or e	Colour of the empire map mode of the selection
continent or cont	Colour of the continent of the selection
civil_war or ci	Civil war (only works if the selection is a country)
connection or con	Change connection of two provinces (might not work if more than two provinces are selected)

4. Additional functions

Map Painter has an accompanying file with it, which stores app data (app_data.data). Currently there are actions which can only be modified by this file. This includes:

font_size	This sets the font size of the application, if nothing is given it defaults to 11
quick_export (which can be enabled with Control i or Ctrl + i)	Skips export animation (decreases waiting time but offers no visual feedback)

5. Bugs

There are some basic bugs, which the software does not cover at this point in time. Please check if yours is amongst the following list:

Problem	Solution
The Map Processor gave me two lines of output, but I had more than one provinces	Is the line colour of your map consistently black (#000000 or rgb=(0,0,0))? If the answer is no, change it to black and try again
Once I load in the map into the Map Painter it fails to recognise some adjacencies	This is likely the fault of diagonal lines. Go along the coastline of the ocean and try to overwrite places where there is no continuous line (in the diagonals). It could also be a diagonal line issue on land if there is no water nearby.

These common problems will be available on the page's Github page (https://github.com/Shadow9876GitHub/Map-Painter) and will be constantly updated with new threads and new solutions. If you have any other problems, please tell us about it at https://github.com/Shadow9876GitHub/Map-Painter/issues.
Thank you for your attention! :)