Customization + extensibility

Part of "Introduction to Positron" workshop

Posit Software, PBC

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Settings

Settings

- Nearly every part of Positron's editor, user interface, and functional behavior has customizable options.
- Settings can be customized at two different scores:
  - **User settings:** Settings that apply globally to any instance of Positron you open.
  - **Workspace settings:** Settings stored inside your workspace (folder) and only apply when the workspace is opened.
- Positron stores setting values in a settings JSON file.
- Settings can be changed by:
  - editing the settings JSON file or
  - using the Settings editor interface

Updating user settings

To update using the UI:

- In the Command Palette:
  Preferences: Open User Settings
- In the top menu:
  Positron > Settings... > Settings

To edit the JSON file:

In the Command Palette:
Preferences: Open User Settings (JSON)

Your turn

3m 00s

Customize user settings

- Update your user settings to change the Icon Theme to Minimal via the Settings editor interface.
  - Hint: Filter for settings with the word “icon”.
- Open the user `settings.json` file to confirm the change you made.
- In the user `settings.json` file, change the Icon Theme to `vs-seti` and save your changes.
- Go back to the Icon Theme settings in the Settings editor interface and confirm the change you made in the JSON file.

Settings — positron-workshop-project

New Open Search R 4.5.0 positron-workshop-project

Settings

icon 16 Settings Found

User Workspace

- Text Editor (2)
  - Diff Editor (1)
  - Suggestions (1)
- Workbench (7)
  - **Appearance** (2)
  - Breadcrumbs (1)
  - Editor Management (1)
- Window (1)
- Features (5)
  - Explorer (1)
  - Testing (1)
  - Source Control (1)
  - Terminal (2)

Workbench › Activity Bar: Icon Click Behavior

Controls the behavior of clicking an Activity Bar icon in the workbench. This value is ignored when Workbench › Activity Bar: Location is not set to `default`.

toggle

Workbench: Icon Theme

Specifies the file icon theme used in the workbench or 'null' to not show any file icons.

Seti (Visual Studio Code)

- None null
- Minimal (Visual Studio Code) vs-minimal
- Seti (Visual Studio Code) vs-seti default

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS DEBUG CONSOLE

main 0 0 Quarto: 1.8.11 Screen Reader Optimized

settings.json — positron-workshop-project

New Open Search R 4.5.0 positron-workshop-project

Settings settings.json

Users > mine > Library > Application Support > Positron > User > settings.json > ...

```
// Settings imported from Visual Studio Code
{
    "quarto.visualEditor.markdownWrap": "sentence",
    "positron.assistant.enable": true,
    "positron.assistant.enabledProviders": [
        "anthropic"
    ],
    "git.confirmSync": true,
    "workbench.iconTheme": "vs-minimal"
}
```

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS DEBUG CONSOLE

main /opt/homebrew/bin/python3 0 0 Quarto: 1.8.11 Ln 1, Col 1 Tab Size: 4 UTF-8 LF JSON with Comments

Change to
"Vs-seti"

Workspace settings

- Workspace settings are specific to a project and override user settings.
- Positron (like VS Code) stores workspace settings at the root of the project in a `.vscode` folder, making it easy to share settings with others in a version-controlled (e.g., Git) project.

Updating workspace settings

To update using the UI:

- In the Command Palette:
  Preferences: Open Workspace Settings
- In the top menu:
  Positron > Settings... > Settings

To edit the JSON file:

In the Command Palette:
Preferences: Open Workspace Settings (JSON)

Your turn

Customize workspace settings

3m 00s

- Update your workspace settings in the positron-workshop-project usig the Settings editor interface.
  - You can update whatever setting you like.
  - If you need inspiration, change the font size in the editor.
- Open the `settings.json` file in the .vscode folder of your project to confirm the change you made.
- Click on the Source Control icon in the Activity bar and view the diff created by updating your settings. Contrast this to what happened (or didn't happen) in the Source Control when you updated your user settings.

Increased from the default value (12) to 20.

settings.json — positron-workshop-project — Untracked
New
Open
Search
R 4.5.0
positron-workshop-project
EXPLORER
POSI...
.vscode
settings.json U
.gitignore
hello.qmd
positron-workshop-...
README.md
OUTLINE
TIMELINE
QUARTO
Settings
settings.json U
.vscode > settings.json > ...
1 {
2 "editor.fontSize": 20
3 }
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
main*
/opt/homebrew/bin/python3
0 0
Quarto: 1.8.11
Ln 2, Col 2
Spaces: 4
UTF-8
LF
JSON with Comments

settings.json — positron-workshop-project — Untracked
New
Open
Search
R 4.5.0
positron-workshop-project
SOURCE CONTROL
CHANGES
Message (⌘Enter to commit on "m...
Commit
Changes
settings.json .vscode
U
settings.json U
.vscode > settings.json > ...
{
"editor.fontSize": 20
}
Shows that a new a new file was created.
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
main*
/opt/homebrew/bin/python3
0 0
Quarto: 1.8.11
Ln 2, Col 2
Spaces: 4
UTF-8
LF
JSON with Comments

Learn more

VS Code docs: User and workspace settings

code.visualstudio.com/docs/configure/settings

VS Code docs are good resources for understanding how Positron works!

Keyboard shortcuts

Keyboard shortcuts

- Positron lets you perform most tasks directly from the keyboard.
- The Keyboard Shortcuts editorlists all available commands with and without keyboard shortcuts, and enables you to change, remove, or reset their keyboard shortcuts using the available actions.
- You can open the Keyboard Shortcuts editor:
  - From the Command Palette: *Preferences: Open Keyboard Shortcuts*
  - From the top menu: *Code* > *Settings* > *Keyboard Shortcuts*

Keyboard shortcuts for Command Palette actions

- You can add a keyboard shortcut for any action you can take from the Command Palette.

- Any command in the command palette can get a keyboard shortcut
- Finding what a shortcut is bound to

Keyboard shortcuts for Command Palette actions

You can add a keyboard shortcut or customize the existing keyboard shortcut for any action you can take from the Command Palette.

Your RStudio keybindings in Positron

- You can enable RStudio keybindings in Positron with the Enable RStudio keybindings option.
- This might overwrite some of Positron's keybindings, so you might then wish to update / remove some newly enabled RStudio keybindings.

Learn more

VS Code docs: Keyboard shortcuts for Visual Studio Code

code.visualstudio.com/docs/configure/keybindings

Layout

Primary side bar

- By default, the Primary Side Bar is located on the left and shows views such as the Explorer, Search, and Source Control views.
- Contents of the Primary Side Bar is controlled by what is selected in the Activity Bar.

Demo

- Move the primary side bar to the right.
- Move the activity bar to the top.

Right click to reveal menu

positron-workshop-project
New
Open
Search
R 4.5.0
positron-workshop-project
EXPLORER
POSITRON-WORKSHOP-PROJECT
.gitignore
hello.qmd
positron-workshop-project.Rproj
README.md
OUTLINE
TIMELINE
QUARTO
Show All Commands
Go to File
Open Settings
Toggle Terminal
Find in Files
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
main
0 0
Quarto: 1.8.11
Screen Reader Optimized

Activity Bar on top,
and not blue anymore.

Customize layout control

- The title bar has buttons to toggle the visibility of UI elements.
- The rightmost button brings up the Customize Layout dropdown that gives you finer control over the visibility and layout of various UI elements.

Learn more

VS Code docs: Custom Layout

code.visualstudio.com/docs/configure/custom-layout

Extensions

Extensions

- Extensions let you add languages, debuggers, tools, themes, etc. to Positron to support your development workflow (just like in VS Code).
- Your Positron and VS Code extensions are separate and won't interfere with each other.
- Unlike in VS Code, you install Positron extensions from Open VSX.

3m 00s

Your turn

Install extension

- Click on the Extensions icon from the Activity Bar in Positron.
- If you haven’t yet done so, search for and install the Project Manager extension.
- If you have already installed it, or if you would like to install one more extension, find and install the Solarized & Selenized extension.
- Use the Command Palette to set the theme of your Positron window to a Solarized or Selenized theme of your choice. **Hint:** Start typing *theme* in the Command Palete.

Extensions
Welcome — positron-workshop-project
New
Open
Search
R 4.5.0
positron-workshop-project
EXTENSIONS
Search Extensions in Marke...
INSTALLED
Air - R Language Su... 17ms
R formatter and language ser...
Posit Software, PBC
GitHub Pull Requests 33ms
Pull Request and Issue Provi...
GitHub
Project Manager 5ms
Easily switch between projects
alefragnani
Quarto 128ms
Extension for the Quarto scie...
quarto
RECOMMENDED
Welcome
Positron
an IDE for data science
Start
New Notebook
New File
Open
Open...
New Folder...
New Folder from Git...
Connect to...
Recent
positron-workshop ~/Deskto...
SESSION
CONNECTIONS
R 4.5.0
filter
No variables have been created.
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
CONSOLE
~/Desktop/posit/positron-workshop-project
R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
>
PLOTS
main
0 0
Quarto: 1.8.11
Screen Reader Optimized

Welcome — positron-workshop-project
New
Open
Search
R 4.5.0
positron-workshop-project
EXTENSIONS: MARKETPLACE
Solarized
Solarized & Selen... 1K 5
A Solarized and Selenized co...
santoso-wijaya
Install
Solarized Sunset Th... 1K
A flat theme based on Solari...
jansim
Install
Better Solarized 12K
A Better Solarized theme for ...
Ed Heltzel
Install
Solarized Sharp 3K
muhammad-sammy
Install
Solarized High Contr... 96
Sepia-toned, high-contrast li...
tiny
Install
Welcome
Positron
an IDE for data science
Start
New Notebook
New File
Open
Open...
New Folder...
New Folder from Git...
Connect to...
Recent
positron-workshop ~/Deskto...
SESSION
CONNECTIONS
R 4.5.0
filter
No variables have been created.
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
CONSOLE
PLOTS
~/Desktop/posit/positron-workshop-project
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'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
>
main
0 0
Quarto: 1.8.11
Screen Reader Optimized

>theme
Preferences: Color Theme
recently used
Developer: Generate Color Theme From Current Settings
other commands
Preferences: Browse Color Themes in Marketplace
Preferences: File Icon Theme
Preferences: Product Icon Theme
Preferences: Toggle between Light/Dark Themes
New
Open
R 4.5.0
positron-workshop-project
EXTENSIONS: MARKETPLACE
Solarized
Solarized & Selenized
A Solarized and Selenized co...
santoso-wijaya
Solarized Sunset Th... 1K
A flat theme based on Solari...
jansim
Install
Better Solarized 12K
A Better Solarized theme for ...
Ed Heltzel
Install
Solarized Sharp 3K
muhammad-sammy
Install
Solarized High Contr... 96
Sepia-toned, high-contrast li...
tiny
Install
santoso-wijaya
1,269
A Solarized and Selenized color themes com...
Set Color Theme
Disable
Uninstall
DETAILS
FEATURES
CHANGELOG
Solarized and Selenized for VS Code
Solarized is a sixteen color palette (eight
Marketplace
Identifier santoso-wijaya.helios-selene
Version 0.3.18
Publish... 2024-07-08, 22:02:59
SESSION
CONNECTIONS
R 4.5.0
filter
No variables have been created.
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
CONSOLE
PLOTS
~/Desktop/posit/positron-workshop-project
R is a collaborative project with many contributors.
Type 'contributors()' for more information and
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Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
>
main
0 0
Quarto: 1.8.11
Screen Reader Optimized

Select Color Theme (detect system color mode disabled)
Browse Additional Color Themes...
Positron Light Default Positron Light
light themes
Selenized Light Selene Selenized Light
Solarized Light Helios Solarized Light
Positron Dark Default Positron Dark
dark themes
Selenized Dark Selene Selenized Dark
Solarized Dark Helios Solarized Dark
Tomorrow Night Blue
Light High Contrast Default High Contrast Light
high contrast themes
Dark High Contrast Default High Contrast
New
Open
R 4.5.0
positron-workshop-project
EXTENSIONS: MARKETPLACE
Solarized
Solarized & Selenized
A Solarized and Selenized co
santoso-wijaya
Solarized Sunset Th...
A flat theme based on Solari...
jansim
Install
Better Solarized
A Better Solarized theme for ...
Ed Heltzel
Install
Solarized Sharp
muhammad-sammy
Install
Solarized High Contr...
Sepia-toned, high-contrast li...
tiny
Install
DETAILS
FEATURES
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SESSION
CONNECTIONS
R 4.5.0
filter
No variables have been created.
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
CONSOLE
PLOTS
~/Desktop/posit/positron-workshop-project
R is a collaborative project with many contributors.
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Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
>
main
0 0
Quarto: 1.8.11
Screen Reader Optimized

Solarized Dark theme

Built-in extensions

- Built-in extensions (e.g., R, Positron Python, and Markdown Language Basics) are installed with Positron.
- They can only be updated by updating Positron.
- They can be seen in the extensions view with `@builtin`.

Demo

Built-in extensions

- Click on the Extensions icon in the Activity Bar.
- Type `@builtin` in the Extension search bar.
- Review the built-in extensions.

Built-in extensions > Features

Built-in extensions > Themes

Built-in extensions > Programming languages

Bundled extensions

- Bundled extensions (e.g., Quarto, Air, GitHub Pull Requests) are installed with Positron.
- They can be updated independently of updating Positron.

Other extensions

- Any other extensions need to be installed from Open VSX.
- Popular extensions you might consider installing are Project Manager, Shiny, Rainbox CSV, indent-rainbow, etc.
- You can also install Extension Packs; a collection of packs curated by users for specific tastes, tasks, or languages.

Your turn

5m 00s

Install the ugliest theme extension

- Find the ugliest theme extension you can.
- Install the extension and apply the theme.
- **Note:** You might get a warning about whether you trust the publisher of a theme you choose. Read the warning carefully. The decision is yours!

Extension: Dracula Theme Official — positron-workshop-project
New
Open
Search
R 4.5.0
positron-workshop-project
EXTENSIONS: MARKETPLACE
theme
Solarized & Selenized
A Solarized and Selenized colo...
santoso-wijaya
Dracula Theme Official
The official Dracula Theme: a ...
dracula-theme
Installing
base9-vscode
2K
base9-theme
Install
Wildberries
7K
4
A dark theme for purple lovers
wildberries-theme
Install
Material Theme (But I ...
2K
A Apache-2 licensed fork of M...
t3dotgg
Install
Cobalt2 Theme O...
19K
5
Official theme by Wes Bos.
wesbos
Install
XD Theme
4K
A theme because my settings ...
jeff-hykin
Install
OpenSumi Default Th...
14K
The default OpenSumi themes
opensumi
Install
MSDevStudio Default...
745
Extension: Dracula Theme Official
Dracula Theme Official
dracula-theme
158,746
(2)
The official Dracula Theme: a dark theme for many editors, shells, and more. ...
Do you trust the publisher "dracula-theme"?
The extension Dracula Theme Official is published by dracula-theme. This is the first extension you're installing from this publisher.
dracula-theme is not verified.
Positron has no control over the behavior of third-party extensions, including how they manage your personal data. Proceed only if you trust the publisher.
Learn More
Cancel
Trust Publisher & Install
this.location = props.location;
this.birthDate = props.birthDate;
this.deathDate = props.deathDate;
this.weaknesses = props.weaknesses;
}
get age() {
return this.calcAge();
}
Marketplace
Identifier dracula-theme.theme-dracula
Version 2.25.1
Publish... 2020-04-06, 23:07:47
Last Released 2024-09-05, 23:29:53
Categories
Themes
Resources
Marketplace
Repository
CONSOLE
TERMINAL
PROBLEMS
OUTPUT
PORTS
DEBUG CONSOLE
Filter (e.g. text, !exclude, \escape)
main
0 0
Quarto: 1.8.11
Screen Reader Optimized

Extension settings

- Installed Positron extensions can also contribute their own settings, which you can review under
  the Extensions section of the Settings editor.

- These can be set at the user or workspace level as well.

A word of caution

Extensions alter the look and functionality of Positron and can conflict with each other. We recommend being selective in extensions you have enabled at any given point, and disabling or uninstalling the ones you no longer use.

Learn more

Positron docs: Extensions

positron.posit.co/extensions.html