

# Screen Pixel Ruler [master]

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# Overview

Screen Pixel Ruler is a on screen ruler that can assist in measuring elements from web pages, documents or software which does not implement a native ruler. Based on .NET Core 3.1 and inspired by MioPlanet PixelRuler, this software is supported on Windows 7 and higher.

## Features

- Global hotkeys to trigger functionality when other software is in focus.
- Rotatable vertical or horizontal ruler. **Ctrl + Shift + Alt + R**
- Customizable ruler themes.
- Freezable position. **Ctrl + Shift + Alt + F**
- Guideline system that can lock the mouse cursor horizontally or vertically
- Position 0 of the ruler to the current cursor location. **Ctrl + Shift + Alt + S**

A list of all shortcuts can be found [here](#).

## Installation

Screen Pixel Ruler can be installed from either the Installer or via Chocolatey Package Management by running the command `choco install screenpixelruler`. Both the installer and package will install the .NET Core 3.1 runtime if it is not present.



# User Interface

The user interface consists of a single ruler that can be displayed either horizontally or vertically.



Figure 1: The Ruler user interface.

Pressing the secondary mouse button on the ruler will display a context menu called the *Ruler Menu*. The secondary button is usually the right mouse button.

The ruler can be rotated using the `Ctrl + Shift + Alt + R` key combination or by the *Rotate* menu item in the *Ruler Menu*.

It is not possible to have both a vertical and a horizontal ruler displayed at the same time.





# Guidelines

Guidelines allow you to mark specific points on the ruler.

## Adding and Removing Guidelines

You can add and remove guidelines by using the Ruler Menu > Guidelines submenu. Adding a guideline will add a new guideline at the cursor position on the ruler.

## Clearing Guidelines

## Importing and Exporting Guidelines



# Global Shortcuts

These shortcuts can be used even when the Screen Pixel Ruler is not focused.

Keystroke	Function
Ctrl + Shift + Alt + R	Change ruler rotation.
Ctrl + Shift + Alt + E	Flip ruler notch direction.
Ctrl + Shift + Alt + F	Freeze the position marker on the ruler.
Ctrl + Shift + Alt + S	Move position 0 of the ruler to the current mouse position.
Ctrl + Shift + Alt + X	Exit Screen Pixel Ruler 2.
Ctrl + Shift + Alt + A	Add Guideline at current position on the ruler.
Ctrl + Shift + Alt + D	Delete nearest Guideline from current position on the ruler.
Ctrl + Shift + Alt + G	Lock mouse position to nearest Guideline.



# Configuration

You can access the configuration by right clicking the ruler and selecting *Options*. This will then display the *Options window* where you can change the configuration.

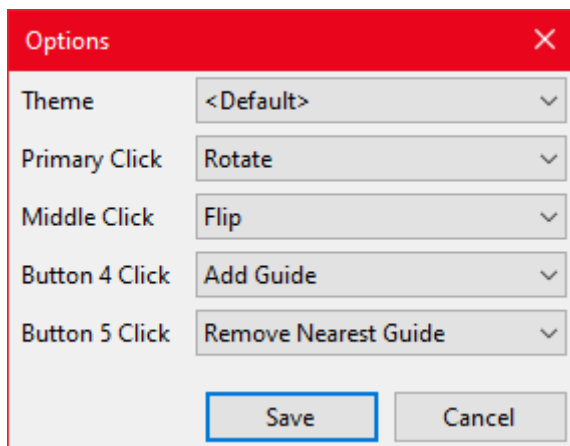


Figure 2: The options window.

## Options

### Theme

Allows you to change the theme of the ruler.

## Primary Click, Middle Click, Button 4 Click, Button 5 Click

Allows you to assign mouse button clicking the ruler to specific functionality. Pressing and holding the primary click will allow you to move the ruler.

The primary click is determined by the *Select your primary button* option in the *Mouse Settings* on Microsoft Windows.

## Location

Configuration is stored in two locations depending on if you installed from the installer or from the chocolatey package.

Installer: %appdata%\screenpixelruler\app.cfg

Chocolatey: %chocolateyinstall%\lib\screenpixelruler\tools\app.cfg

# Themes

Themes can change the ruler colour, size or even the interval of the hatch marks. Screen Pixel Ruler comes with some supplied themes.

## Supplied Themes

### Default

A simple black and white theme with a thin ruler. Great contrasting for easy visibility.

### Panda

A dark themed and large ruler.

### MioPlanet PixelRuler

A blue ruled designed to mimic the MioPlanet PixelRuler software.

### White Chocolate

A white on brown coloured theme.

## Location

Themes are stored in the two locations, depending on if you installed from the installer or from the chocolatey package.

Installer: %appdata%\screenpixelruler

Chocolatey: %chocolateyinstall%\lib\screenpixelruler\tools

## Creating a Theme

You can create your own themes for Screen Pixel Ruler. Themes have a `thm` file extension and are written in yaml.

### Objects

A string of text.

Either `true` or `false`.

A decimal number like 1.0 or 1.5.

A number like 1 or 15.

An array of objects.

A colour value. Supported input types are: - '#RRGGBB' Hex/HTML Colour - RRR, GGG, BBB Decimal (0-255) - ColorName Name

An array of either one ([ <colour> ]) or two colour values ([ <colour>, <colour> ]). If two colours are provided then the colour will be a gradient of both colours.

For a list of colour names see the KnownColor Enum reference.

## File Format

### Fields

```
Name <string> *The name of the theme.*
Cursor *Cursor themeing.*
  Line <colour> *The cursor line colour.*
  Font *The font used for the cursor.*
    Family <string> *The font family.*
    Size <decimal> *The font size.*
    Bold <boolean> *Whether the font is bold.*
    Italic <boolean> *Whether the font is italicised.*
    Underline <boolean> *Whether the font is underlined.*
    Strikeout <boolean> *Whether the font is striked out.*
  Background <colours> *The background colours for the cursor.*
  Frozen *The frozen colours for the cursor.*
    Line <colour> *The frozen line colour.*
    Font *The font used for the frozen cursor.*
      Family <string> *The font family.*
```



```

    Size <decimal> *The font size.*
    Bold <boolean> *Whether the font is bold.*
    Italic <boolean> *Whether the font is italicised.*
    Underline <boolean> *Whether the font is underlined.*
    Strikeout <boolean> *Whether the font is striked out.*
    Background <colours> *The frozen background colours.*
Locked *The guideline locked colours for the cursor.*
    Line <colour> *The locked line colour.*
    Font *The font used for the locked cursor.*
        Family <string> *The font family.*
        Size <decimal> *The font size.*
        Bold <boolean> *Whether the font is bold.*
        Italic <boolean> *Whether the font is italicised.*
        Underline <boolean> *Whether the font is underlined.*
        Strikeout <boolean> *Whether the font is striked out.*
        Background <colours> *The locked background colours.*
Ruler *Ruler themeing.*
    Size <number> *The size of the ruler in pixels.*
    Background <colours> *The background colour for the ruler.*
    Border
        Colour <colour> *The border colour.*
        Spacing <number> *The spacing between the border and the ruler.*
    Marks *The hatch marks.*
        Colour <colour> *The colour of the hatch marks.*
        Size
            Horizontal <number> *The size of the hatch marks when the ruler is horizontal.*
            Vertical <number> *The size of the hatch marks when the ruler is vertical.*
        Zero *The zero hatch mark.*
            NumberVisible <boolean> *Whether the number zero is displayed.*
            Size
                Horizontal <number> *The size of the zero hatch mark when the ruler is horizontal.*
                Vertical <number> *The size of the zero hatch mark when the ruler is vertical.*
        Sizes <array> *The sizes of the hatch marks.*
            Interval <number> *The interval of the hatch marks.*
            Colour <colour> *The colour of the hatch marks.*
            Size
                Horizontal <number> *The size of the hatch marks when the ruler is horizontal.*
                Vertical <number> *The size of the hatch marks when the ruler is vertical.*
Numbers *The numbers on the ruler.*
    Padding
        Horizontal <number> *The padding on the left and right of the numbers.*
        Vertical <number> *The padding on the top and bottom of the numbers.*
    Colour <colour> *The colour of the numbers.*
    Font *The font used for the numbers.*
        Family <string> *The font family.*

```

```

Size <decimal> *The font size.*
Bold <boolean> *Whether the font is bold.*
Italic <boolean> *Whether the font is italicised.*
Underline <boolean> *Whether the font is underlined.*
Strikeout <boolean> *Whether the font is striked out.*
Display
  Interval <number> *The interval at which numbers should appear.*
Guidelines
  Guideline *The guidelines.*
  Colour <colour> *The colour of the guidelines.*
  Size
    Horizontal <number> *The size of the guidelines when the ruler is horizontal.*
    Vertical <number> *The size of the guidelines when the ruler is vertical.*
  Locked *The guideline locked onto.*
  Colour <colour> *The colour of the guideline that has been locked onto.*
  Size
    Horizontal <number> *The size of the guideline that has been locked onto when t
    Vertical <number> *The size of the guideline that has been locked onto when the
  Nearest *The guideline nearest to the cursor.*
  Colour <colour> *The colour of the nearest guideline.*
  Size
    Horizontal <number> *The size of the nearest guideline when the ruler is horiz
    Vertical <number> *The size of the nearest guideline when the ruler is vertical.

```

### Visual Guide

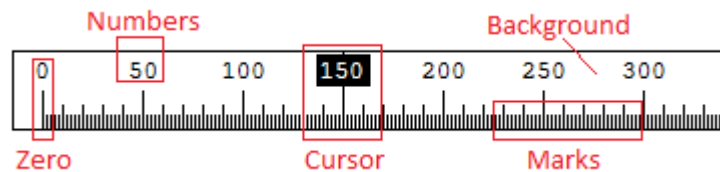


Figure 3: The Ruler user interface with theme elements highlighted.

*Zero* is the *Zero Mark* which is explained further below.

*Numbers* are configured in **Ruler** → **Number** section. The **Ruler** → **Number** → **Display** → **Interval** determines how often the numbers appear. An interval of 50 means that numbers will appear at the 50th, 100th, 150th, etc hatch marks. The other properties under **Ruler** → **Number** determine the font, colour and size of the numbers.

*Cursor* is the position of the mouse cursor on screen. Further explanation below.

*Background* is the background colour of the ruler. This is set at **Ruler → Background** and can be a single colour or a gradient when two colours are provided.

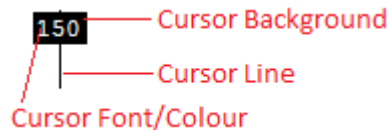


Figure 4: The cursor that appears in the ruler.

The above options are all configured in the **Ruler → Cursor** section.



Figure 5: The ruler hatch marks.

*Zero Mark* hatch mark is provided by the **Ruler → Marks → Zero → Size** property. You can also set the **Ruler → Marks → Zero → NumberVisible** property to **false** to omit the 0 number.

*Size interval 10* and *Size Interval 50* hatch marks are provided by the **Ruler → Marks → Sizes** array. The 50 pixel interval hatch mark:

```
...
Marks:
  Sizes:
    - Interval: 50
      Colour: #000000
      Size:
        Horizontal: 20
        Vertical: 40
...
```

*Marks Size* hatch marks are provided by the **Ruler → Marks → Size** properties. The colour is provided by the **Ruler → Marks → Colour** property.

### Default Values

Font: Family: Courier New Size: 9 Bold: false Italic: false Underline: false  
Strikeout: false

Cursor  $\rightarrow$  Locked: Cursor  $\rightarrow$  Frozen

Cursor  $\rightarrow$  Frozen: Cursor