Imagemap Howto

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Introduction

This package enables you to create HTML that can be put on a web page along with a PNG graphic file to produce a graphic with clickable regions. These graphics are called imagemaps.

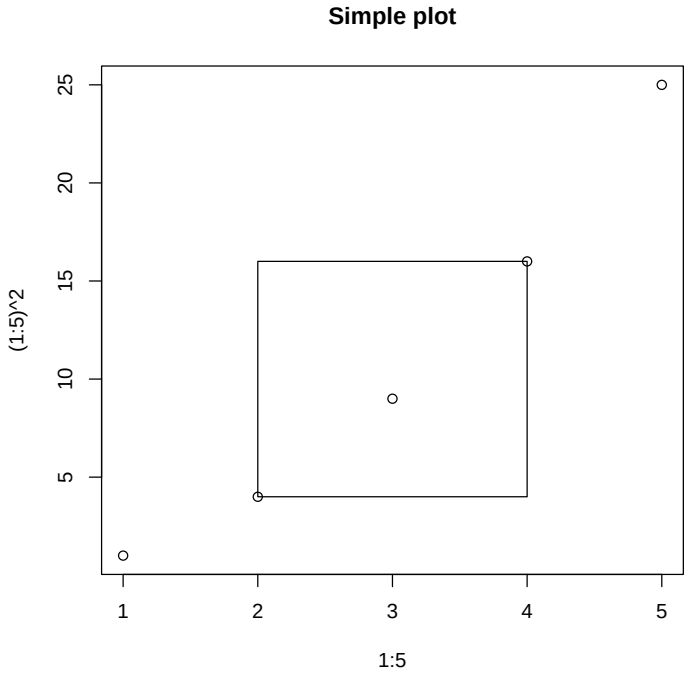
As a simple illustration we first show how to create a plot with one active region, a rectangle.

First we create a new imagemap object, giving it the height and width of the PNG file that we are to create:

```
> library(imagemap)
> im <- imagemap("Test",height=400,width=400)
```

This opens a new graphics device that sends output to the PNG file. Now you should create your plot on this device. We will plot the numbers from 1 to 5 and their squares, and draw a rectangle:

```
> plot(1:5,(1:5)^2)
> title("Simple plot")
> rect(2,2^2,4,4^2)
```



Next you need to add regions to the imagemap object. Here we add a rectangular clickable region that corresponds to the rectangle we drew on the plot:

```
> addRegion(im) <- imRect(2,2^2,4,4^2,href="rect1.html")
```

Then you create the HTML code for the imagemap, and close the imagemap which closes the PNG graphic device and produces the graphic file:

```
> createIM(im)

<img src="Test.png" usemap="#Test"  ISMAP>

<map name="Test">

<area shape="rect" coords="681,-3953,1302,-743" href="rect1.html"  >

</map>

> imClose(im)

Closing PNG file Test.png
null device
          1
```

Normally you would send the HTML to a file or other connection using the `file=` argument. Once this HTML chunk is embedded in a web page with the file `Test.png`, then you should see the plot with a clickable rectangle that takes the user to `rect1.html`.

The rest of this document gives fuller information on the workings of this package.

The `imagemap` function

The first thing to do when creating imagemaps in R is to create an `imagemap` object with the `imagemap()` function. This function takes three arguments:

- `file`: this gives the name of the MAP in the HTML, and also the name of the graphic file by appending `".png"`

Active region definitions

Default

Rectangles

Circles

Polygons

Points

HTML and image output