Logos

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12 septembre 2015

Logos pour la cartographie

Dossier Trame_Commune/Logos

Les logos sont préférentiellement au format .png

source:

- ambulances: http://www.flaticon.com/free-icons/ambulance_225
- hélicos: http://www.flaticon.com/search/helicopters
- hospitals: http://www.flaticon.com/free-icon/hospital-buildings_33777
- SAMI, SDIS: http://www.flaticon.com/free-icon/male-telemarketer_81523
- déconta: http://www.flaticon.com/free-icon/man-showering_76657
- sang: http://www.flaticon.com/free-icon/blood-perfusion_69691

Licence: Icon made by Freepick from www.flaticon.com

Le dossier **Logos/data** contient un certain nombre d'images à différents niveaux de résolution:

- ambulance15
- shopper5 (hélicoptère)
- hospital11
- man253 (douche mobile)
- men39 (douche fixe)
- perfusion
- transport51 (ambulance)

Afficher une image PNG dans un graphe

- source: http://stackoverflow.com/questions/4975681/r-creating-graphs-where-the-nodes-are-images
- source: https://ryouready.wordpress.com/2014/09/12/using-colorized-png-pictograms-in-r-base-plots/ "'{} library(png) img <- readPNG(system.file("img", "Rlogo.png", package="png")) # une zone graphique plot(c(100, 250), c(300, 450), type = "n", xlab = "", ylab = "")

rasterImage(img, 150, 300, 200, 350, interpolate = TRUE) rasterImage(img, 100, 400, 110, 410, angle = 90, interpolate = TRUE)

file <- "rat.png" rat <- readPNG(file) rasterImage(rat, 100, 400, 134, 428, interpolate = TRUE)

"'

Ambulance

```
library(png)
# amb <- readPNG("Logos/data/transport51(8).png")
amb <- readPNG("data/transport51(8).png")
class(amb)
```

```
## [1] "array"
```

```
dim(amb)
```

```
## [1] 64 64  4
```

L'objet **amb** est un tableau numérique de 64 lignes et 64 colonnes avec quatre couches (red, green, blue, alpha; short RGBA).

Let's have a look at the first layer (red) and replace all non-zero entries by a one and the zeros by a dot. This will show us the pattern of non-zero values and we already see the contours.

```
l4 <- amb[,,1]
l4[l4 > 0] <- 1
l4[l4 == 0] <- "."
d <- apply(l4, 1, function(x) {
 cat(paste0(x, collapse=""), "\n")
})
```

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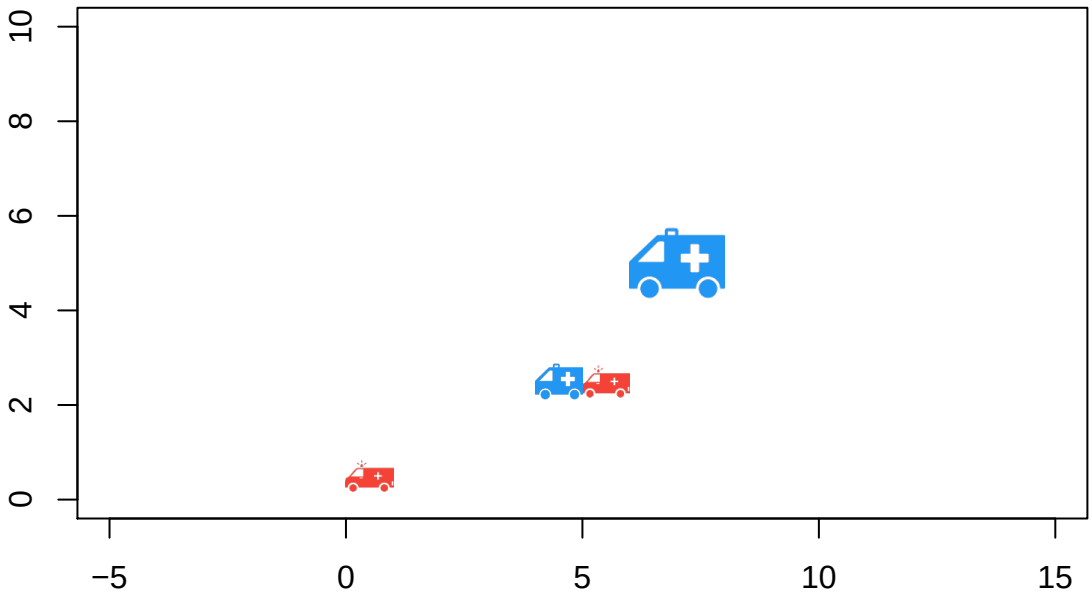
```

To display the image in R one way is to raster the image (i.e. the RGBA layers are collapsed into a layer of single HEX value) and print it using rasterImage.

```
rimg <- as.raster(amb) # raster multilayer object
r <- nrow(rimg) / ncol(rimg) # image ratio
plot(c(0,10), c(0,10), type = "n", xlab = "", ylab = "", asp=1) # une zone graphique vide
rasterImage(rimg, 0, 0, 1, r) # img, x1, y1, x2, y2
rasterImage(rimg, 5, 2, 6, 3)

smur <- as.raster(readPNG("data/ambulance15(14).png"))
rasterImage(smur, 4, 2, 5, 3)
rasterImage(smur, 6, 4, 8, 6)
```



Essai de CArto

```
library(sp)
par(mar = c(0,0,2,0))

# carte de l'Alsace avec les villes sièges de SU
load("../../../Stat Resural/RPU_Doc/RPU_Carto-Pop-Alsace/Cartographie/Cartofile/als_ts.Rda") #ctss
 plot(ctss, main = "SAMU et SMUR en Alsace")
 load("../../../Stat Resural/RPU_Doc/RPU_Carto-Pop-Alsace/Cartographie/Cartofile/tsvilles.Rda")
 points(tsvilles[,2]*100,tsvilles[,3]*100,pch=20,col="red", cex = 1.2)
 text(tsvilles[,2]*100,tsvilles[,3]*100,tsvilles[,1],cex=0.8,pos=4)
box()

# SMUR
smur <- tsvilles[tsvilles$NOM %in% c('WISSEMBOURG','HAGUENAU','SAVERNE','STRASBOURG','SELESTAT','COLMAR
a.smur <- as.raster(readPNG("data/ambulance15(14).png"))
cx <- 6000 # coefficient d'aggrandissement (n = 9000)
x <- smur[,2]*100
y <- smur[,3]*100
dy <- 600 # déplacement de y (une valeur positive déplace vers le haut)
dx <- 0 # déplacement horizontal
rasterImage(a.smur, x, y + dy, x + cx, y + dy + cx) # img, x1, y1, x2, y2

# SAMU
samu <- tsvilles[tsvilles$NOM %in% c('STRASBOURG', 'MULHOUSE'),]
a.samu <- as.raster(readPNG("data/customer(3).png"))
rasterImage(a.samu, samu[,2]*100 - 10000, samu[,3]*100, samu[,2]*100 - 10000 + 10000, samu[,3]*100 + 10

# hélismur
a.heli <- as.raster(readPNG("data/chopper5(7).png"))
x <- samu[,2]*100
y <- samu[,3]*100
```

```
cx <- 15000
dx <- 8000
dy <- 12000
rasterImage(a.heli, x - dx, y - dy, x - dx + cx, y + cx - dy )

# légende
x <- 1037503 + 20000
y <- 6810919 - 10000

rasterImage(a.samu, x, y, x + 10000, y + 10000)
text(x + 10000, y + 5000, "SAMU", pos=4)

x <- x
y <- y - 10000
rasterImage(a.smur, x, y, x + 10000, y + 10000)
text(x + 10000, y + 5000, "SMUR", pos=4)

library(graphics) # cercle
x <- x + 5000
y <- y - 5000
symbols(x, y, circles = 1500, bg = "red", add = TRUE, inches = FALSE)
text(x + 8000, y , "SU", pos=4)

x <- x - 5000
y <- y - 12000
rasterImage(a.heli, x, y, x + 10000, y + 10000)
text(x + 10000, y + 5000, "HELISMUR", pos=4)
```

SAMU et SMUR en Alsace