

```
library(dplyr)  
  
rladies_global %>%  
  filter(city == 'Amsterdam')
```



| BLOGDOWN

CREATING BLOGS AND WEBSITES WITH R MARKDOWN



Hello!

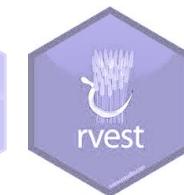
I'm **Aurore Paligot** and
I create stuff with **data**.
Visit my webpage [here](#).





“R is a free software environment for statistical computing and graphics”

— The R Project for Statistical Computing





#Little guide to follow this tutorial



R beginner level



Blogdown installed



A GitHub account



The R Series

blogdown

Creating Websites
with R Markdown



Yihui Xie
Amber Thomas
Alison Presmanes Hill

 CRC Press
Taylor & Francis Group
A CHAPMAN & HALL BOOK

“For blogdown, we hope users of all levels can at least get started as quickly as possible”

-  Yihui Xie [@xieyihui](https://twitter.com/xieyihui)
-  Amber Thomas [@ProQuesAsker](https://twitter.com/ProQuesAsker)
-  Alison Presmanes Hill [@apreshill](https://twitter.com/apreshill)

#Part 1: choose a template & write your first post

The screenshot shows the RStudio interface. On the left, the code editor displays an R Markdown file named '2019-11-14-hugo-blogdown-netlify.Rmd'. The code includes YAML front matter, R Markdown syntax, and a draft note. On the right, a browser window shows the generated static site content, featuring a pink header with the text 'Hugo + Blogdown + Netlify = a beautiful blog' and author information. Below the header is a draft note and a bulleted list of reasons for choosing this setup.

```
1+ ---  
2+ title: Hugo + Blogdown + Netlify = a beautiful blog  
3+ author: Aurore Paligot  
4+ date: '2019-11-14'  
5+ slug: hugo-blogdown-netlify  
6+ categories:  
7+ - R  
8+ tags:  
9+ - R Markdown  
10+ - blogdown  
11+ - Hugo  
12+ - Netlify  
13+ - GitHub  
14+ - blog  
15+ publishdate: '2019-11-14T23:54:53+01:00'  
16+ comments: yes  
17+ ---  
18+ #Hugo + Blogdown + Netlify = a beautiful blog  
19+ **This is a draft**  
20+  
21+ when thinking about building my own webpage, I was looking for an  
22+ - free  
23+ - easy  
24+ - quick  
25+ - beautiful  
26+  
27+ And voilà!
```

Hugo + Blogdown + Netlify = a beautiful blog
Aurore Paligot
2019-11-14
#Hugo + Blogdown + Netlify = a beautiful blog
This is a draft
When thinking about building my own webpage, I was looking for an option that would be :

- free
- easy
- quick
- beautiful

But most importantly, I wanted to be able to write and edit it as part of my regular workflow. R being currently my main programming language, the R package **Blogdown** allows me to do just that!

#Steps

1. Choose Hugo template
2. Download template with blogdown and set general parameters
3. Start adding content with R Markdown
4. Upload repo on GitHub
5. Deploy with Netlify
6. Apply for [rbind.io](#) domain

And voilà!



Template

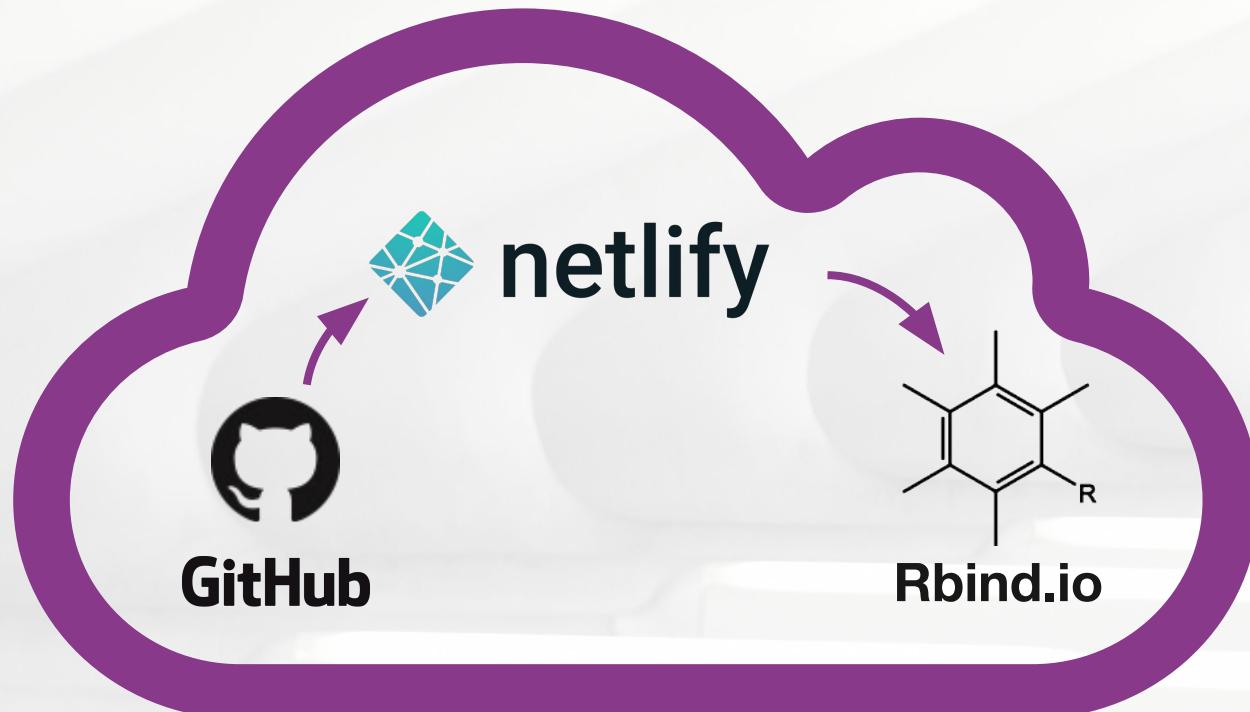


R package



Syntax

#Part 2: deploy your website & personalize your domain name

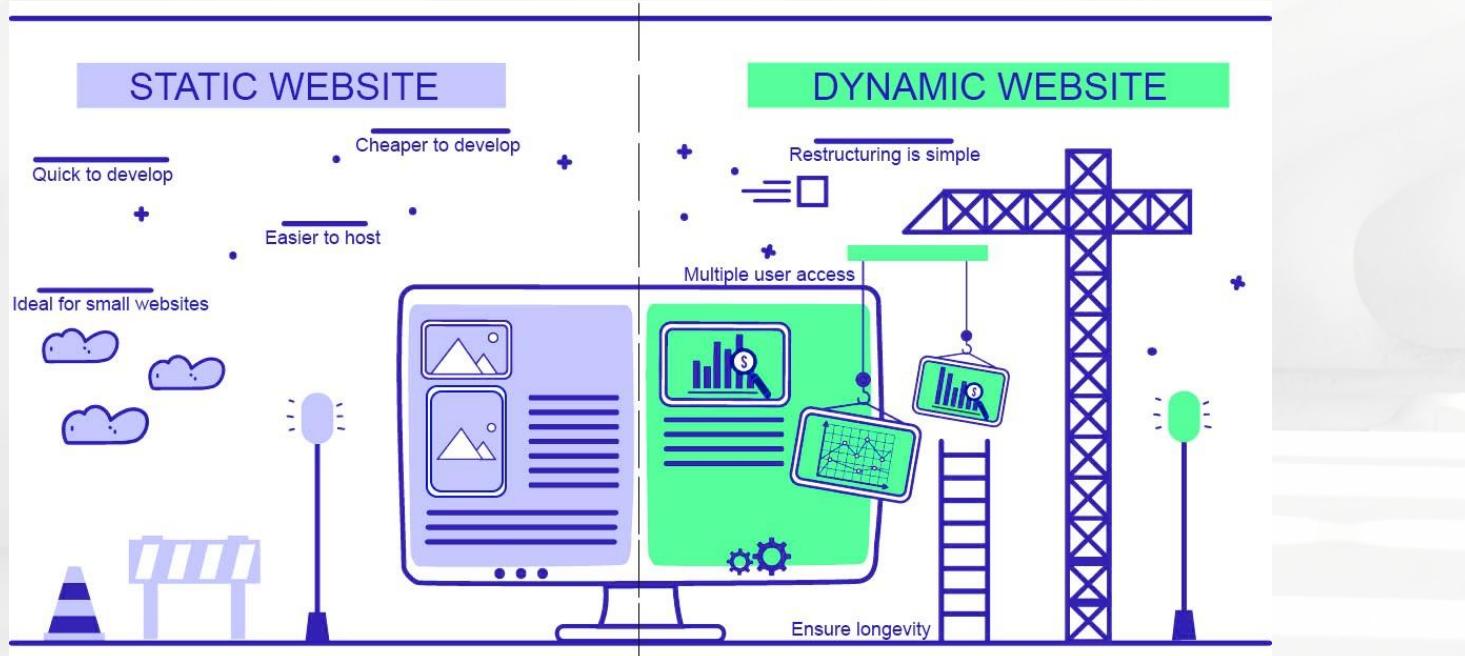


Host

Deploy

Domain

Static website vs. dynamic website



Source: [medium](#)

#Why and ?



*“Blogdown is the perfect tool to edit posts as part of your regular **R workflow**. It’s fast and easy.”*

Me, a happy user

*“Markdown means **simplicity** and **portability**: you will be able to convert your posts to PDFs, journal articles and even books.”*

Yihui Xie et al.

*“R Markdown creates **dynamics documents**: results, such as tables and graphics [can be] rendered dynamically from R code”*

Yihui Xie et al.



Step 1 : Let's start! Are you ready?

#1. Get today's handout and be sure to have
blogdown installed

#2. Open blogdown and install hugo

```
#Open blogdown library
library(blogdown)
#Install hugo
blogdown::install_hugo()
```



Step 2 : Choose your template

Option A : choose the default template

```
#lithium  
blogdown::new_site()
```

Option B : choose a preselected template

*# Specify the theme argument with the 'user/repo'
part of the corresponding GitHub link*

```
#ghostwriter  
blogdown::new_site(theme = 'jbub/ghostwriter')
```

lithium(default)

A screenshot of the lithium theme homepage. At the top, there's a navigation bar with links for 'About', 'GitHub', and 'Twitter'. Below the header, there are two sections for '2016' and '2015'. Each section contains a post title, a date, and a snippet of the post content. At the bottom left, there are links for 'RSS feed' and 'Made with '. The main content area has a light gray background.

academic

A screenshot of the academic theme homepage. It features a large profile picture of Lena Smith at the top, followed by her biography: 'Lena Smith is a professor of artificial intelligence at the Stanford AI Lab. Her research interests include distributed robotics, mobile computing and programmable matter. She leads the Robotic Neurobiology group, which develops self-reconfiguring robots, systems of self-organizing robots, and mobile sensor networks.' Below this is a 'Recent Publications' section with a thumbnail image and a link to 'More Publications >'. On the right side, there are sections for 'Education' and 'Interests'.

creative portfolio

A screenshot of the creative portfolio theme homepage. It shows a grid of seven items, each representing a different piece of work. Each item includes a small image, a title ('NAME OF THE WORK 2' or 'NAME OF THE WORK 3'), and a brief description. The first item describes a 'graveyard keeper' who made Give Sixth Hatt, a creature he be don't them. The second item is about reaching the first hills of the Icicle Mountains. The third item is about bookmarkagrove, the headline of Aynsley Village and the subtitle of her own road, the Line Lane. The fourth item is about abundantly made Give Sixth Hatt, a creature he be don't them. The fifth item is about abundantly made Give Sixth Hatt, a creature he be don't them. The sixth item is about abundantly made Give Sixth Hatt, a creature he be don't them. The seventh item is about abundantly made Give Sixth Hatt, a creature he be don't them.

ghostwriter

A screenshot of the ghostwriter theme homepage. At the top, there's a navigation bar with links for 'HUGO TEMPLATE PRIMER', 'ABOUT HUGO', 'GETTING STARTED WITH HUGO', and 'TUTORIALS'. Below the header, there's a section titled '(HUGO) TEMPLATE PRIMER' with a 'PUBLISHED MARCH, APRIL 2, 2014 BY MY NAME'. The main content area contains a paragraph about the Hugo template engine, a note about Go templates, an introduction to Go Templates, a section on Basic Syntax, and a note about Go lang templates.

tranquilpeak

A screenshot of the tranquilpeak theme homepage. It features a sidebar with links for 'Home', 'Categories', 'Stack Overflow', 'Tags', 'Archives', 'About', and 'RSS'. The main content area shows three blog post showcases: 'Elements showcase' (May 28, 2015), 'Cover image showcase' (May 13, 2015), and a larger image of the Manhattan Bridge at sunset.

castanet

A screenshot of the castanet theme homepage. It features a sidebar with social media links for Facebook, Twitter, LinkedIn, YouTube, and others. The main content area shows a 'Latest Episode' titled 'Back to School' (Posted on Sunday, Sep 20, 2015) with a thumbnail of a microphone. Below it is another episode titled 'August Is Hot One' (Posted on Thursday, Aug 28, 2015). To the right, there's a 'SUBSCRIBE' section with links for iTunes, Android, Google Play Music, and a 'Subscribe via RSS' button. There's also a 'JOIN OUR MAILING' button.

Step 2 : Choose your template

#Option C: choose your favorite template on the Hugo gallery

Find the corresponding GitHub link by clicking on the download button

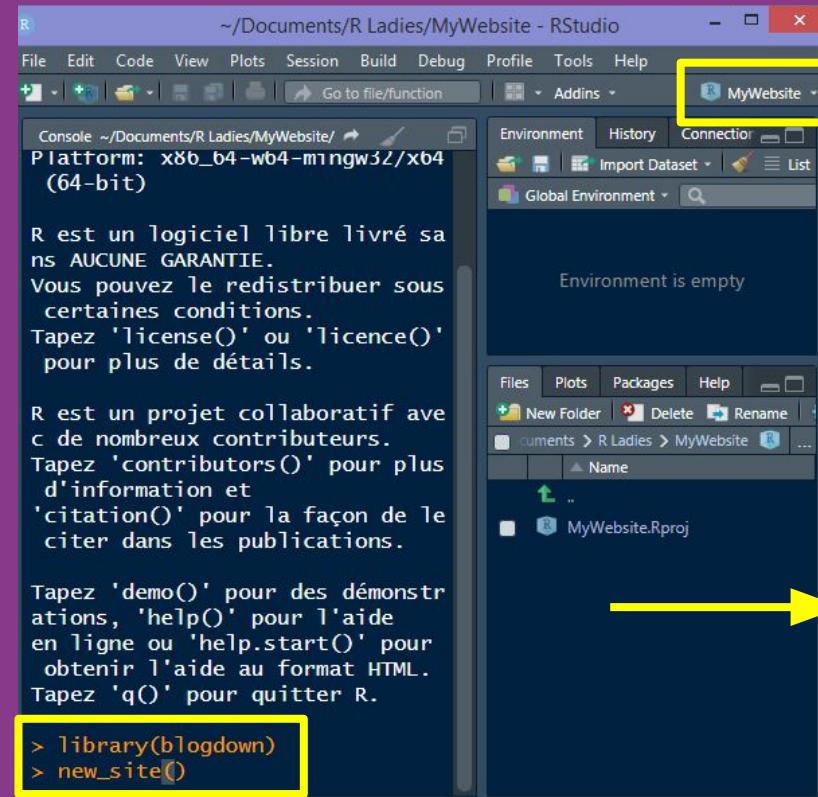


Hugo is really powerful. Be cautious with power:

*“the **more effort** you make in a complicated theme, the **more difficult** it is to switch to other themes in the future”*

Yihui Xie et al.

Step 3 : Download your template



The screenshot shows the RStudio interface with the following details:

- Title Bar:** ~/Documents/R Ladies/MyWebsite - RStudio
- Addins Menu:** A dropdown menu labeled "MyWebsite" is highlighted with a yellow box.
- Console:** Displays the R startup message and the command: > library(blogdown)
> new_site()
- Environment:** Shows "Environment is empty".
- File Explorer:** Shows the directory structure: ~/Documents/R Ladies/MyWebsite. A file named "MyWebsite.Rproj" is visible in the "Name" list.

*#3. Execute the
'new_site()'
function in the
console with the
theme of your
choice as an
argument*



*#1. Create a
new project*

*#2. Directory
must be empty*



Let the magic happen!



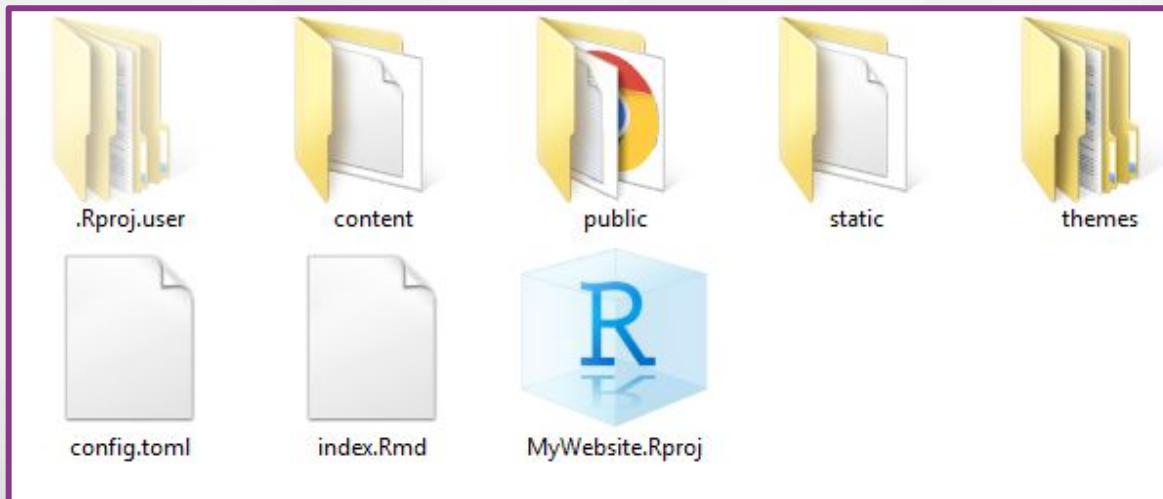
Unrelated Hadley Wickham meme

#Quick overview of the files and folders created

Write your posts
in /content/

/public/ is the
publishing directory

/static/ contains
images, HTML files, etc



Config.toml :
global settings

.Rproj & .Rprofile
files

/theme/ contains
template files

Step 4 : Set global options

#1. Create a startup profile file

```
#Option A: create a per-project file  
file.edit('.Rprofile')  
  
#Option B: create a general file  
file.edit('~/ .Rprofile')
```

console

#2. Set Rmarkdown extension and the author's

```
# name
```

```
#Profile: extension and author name  
options ( blogdown.ext = '.Rmd' ,  
          blogdown.author = 'Author Name' )
```

.Rprofile

#Quick overview of functions and addins

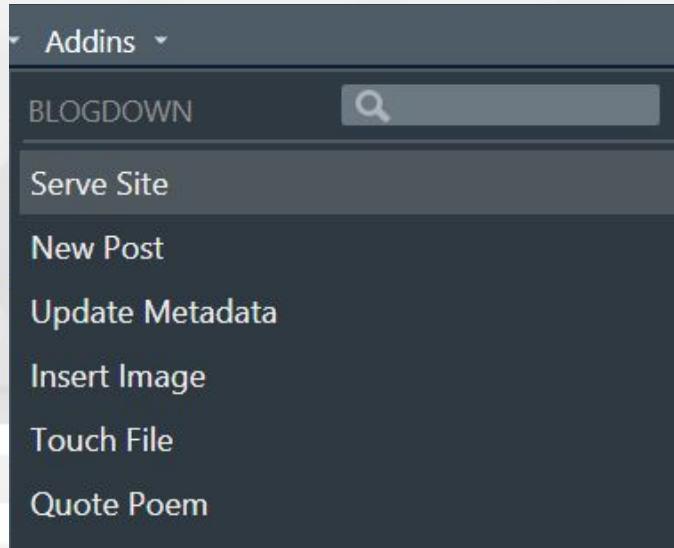


#To code...

```
#Preview your website
blogdown::serve_site()
```

```
#Create a new post
blogdown::new_post(
  title = 'my new post')
```

or not to code?



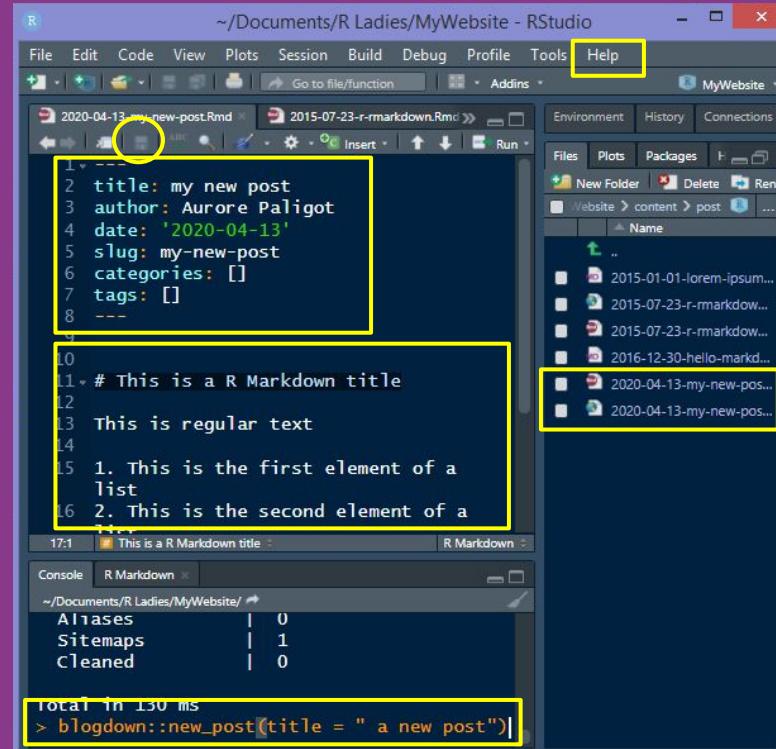
Step 5 : Create your first post with syntax



*YAML metadata
can be modified
with the addin*

*2. Start
writing with R
markdown*

*1. Create a new
post with the
function
`new_post()` or
the addin*



The screenshot shows the RStudio interface with the following elements highlighted:

- File menu:** Help (highlighted)
- Code editor:** A file named "2020-04-13-my-new-post.Rmd" containing YAML metadata and R Markdown code.
- YAML metadata:** title: my new post, author: Aurore Paligot, date: '2020-04-13', slug: my-new-post, categories: [], tags: []
- R Markdown code:** # This is a R Markdown title, followed by regular text and a list.
- File browser:** Shows a folder structure under "MyWebsite" with files like "2015-01-01-lorem-ipsum..." and "2020-04-13-my-new-post..."
- Console:** Shows the command `blogdown::new_post(title = " a new post")` and its execution results.

*3. Save your
progress*

*Your .Rmd file and
its HTML version
are stored under
`/content/post/`*

*4. Preview your
website with the
`serve_site()`
function or with
the addin*



Step 5 : Create your first post with syntax*

```
## Create a post with
- a header
- a list
- **bold** or *italic* text
- a link
```

```
## And/Or
1. a r code (formula)
2. a r code (result)
3. a graph
```

Create a post with

- a header
- a list
- **bold** or *italic* text
- a link

And/Or

1. a r code (printed)
2. a r code (not printed)
3. a graph

```
y <- 5+2
```

```
y
```

```
## [1] 7
```

Step 5 : Explore other options

The Insert image addin stores your image
in the right /static folder

Add tags and categories to your posts with
the update metadata addin

Hide a post by changing its extension
ex.from .Rmd to .Rmkd



Step 6: Update the config.toml file

```
baseurl = "/"
languageCode = "en-us"
title = "A Hugo website" ←
theme = "hugo-lithium"
googleAnalytics = ""
disqusShortname = ""
ignoreFiles = ["\".Rmd\"", "\".Rmarkdown\"", "_files\"", "_cache\""]

[permalinks]
  post = "/:year/:month/:day/:slug/" ←

[[menu.main]]
  name = "About"
  url = "/about/"
[[menu.main]]
  name = "GitHub"
  url = "https://github.com/rstudio/blogdown" ←
[[menu.main]]
  name = "Twitter"
  url = "https://twitter.com/rstudio" ←
[params]
  description = "A website built through Hugo and blogdown."
```

*#Change the title and
the description of your
website*

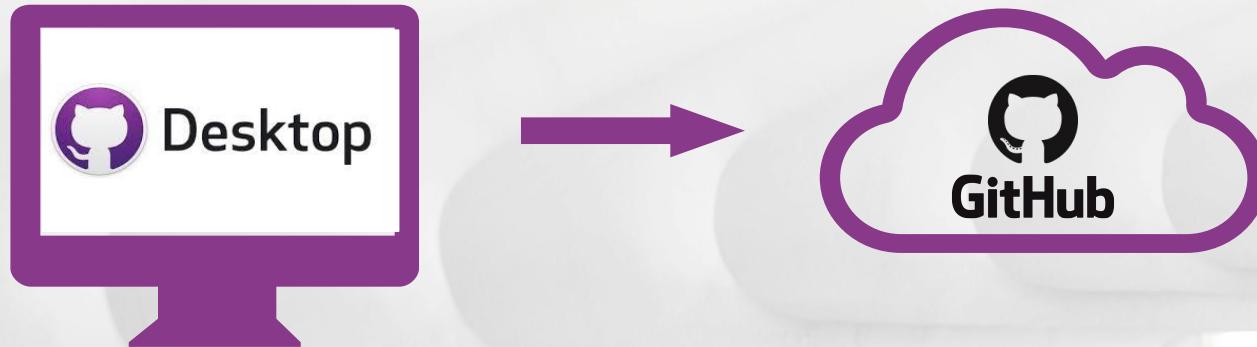
*#Change the urls of your
Social Media accounts*

*#Add a new Social Media
section*

#Hide a section

#Change the website logo

Step 7: Host your website on GitHub



Use your favorite method to push your project on GitHub

Step 8: Deploy your website with netlify

Sign up with your GitHub account

Pick your website repository

Check options and deploy

Sign up with one of the following:

 GitHub

 GitLab

 Bitbucket

Email



aurorepaligot ✓



aurorepaligot/Aboreal



aurorepaligot/MyWebsite

Can't see your repo here? [Configure the Net](#)

Owner

Aurore Paligot's team

Branch to deploy

master

Basic build settings

If you're using a static site generator or build tool, we'll need these se

[Learn more in the docs](#)

Build command

hugo

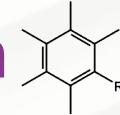
Publish directory

public

“Continuous Deployment: Choose the repository you want to link to your site on Netlify. When you push to Git, we run your build tool of choice on our servers and deploy the result.” Netlify



Step 9: Customize your domain name with



Fill an issue on
rbind/support

Wait for an answer

Add rbind subdomain
in your Netlify account

commented 19 hours ago • edited

Netlify website address

[https://\[REDACTED\].netlify.com/](https://[REDACTED].netlify.com/)

Preferred rbind.io subdomain

[REDACTED]rbind.io

Agreement

By submitting this request, I promise I will at [REDACTED]



Domains ?

Use your own domain for your Netlify site for free

Custom domains

By default, your site is always accessible via a Netlify subdomain. Custom domains allow you to access your site via one or more no

- [\[REDACTED\].netlify.com](#)
Default subdomain

Learn more about custom domains in the docs →

Add custom domain 

*“The goal of the Rbind project is to provide a service like WordPress.com or Medium, but **driven by the community** instead of a certain company. We hope users can help each other to build the websites they want.” Rbind*



Step 10: Update the url of your website

1. Update the base url of your config.toml file

```
baseurl = "https://mywebsite.rbind.io/"
```

*# 2. Create a _redirects file under the /static/
folder and redirect your default Netlify and
http subdomains to your primary domain*

```
http://random.netlify.com/* https://mywebsite.rbind.io/:splat 301!
```

```
http://mywebsite.rbind.io/* https://mywebsite.rbind.io/:splat 301!
```



References and links

Yihui Xie, Amber Thomas, and Alison Presmanes Hill. [Blogdown: Creating Websites with R Markdown](#). Last updated on 2020-04-03. Last consulted on 2020-04-14

Yihui Xie, [301 Redirect: The Most Important Technique in Maintaining Websites](#). Last updated on 2017-11-19. Last consulted on 2020-04-14

[Rbind Support](#), about section. Last consulted on 2020-04-14

[GitHub of Rbind support](#). [Open issue to request a .rbind.io subdomain]

L.Collado-Torres. [Blogdown Insert Image addin](#). Last updated on 2020-02-12. Last consulted on 2020-04-14



THANK YOU

Do you have questions about this workshop? Don't hesitate to contact [me](#)!

What is your feedback? Please, let us know.



BREAK