Installing Semantic UI on Shiny® Server

with

B23

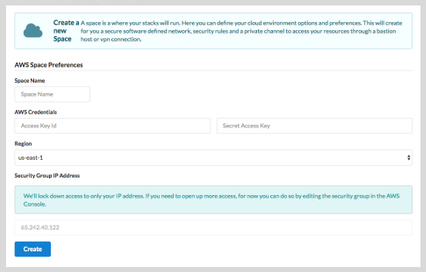
Run Shiny® Server with B23

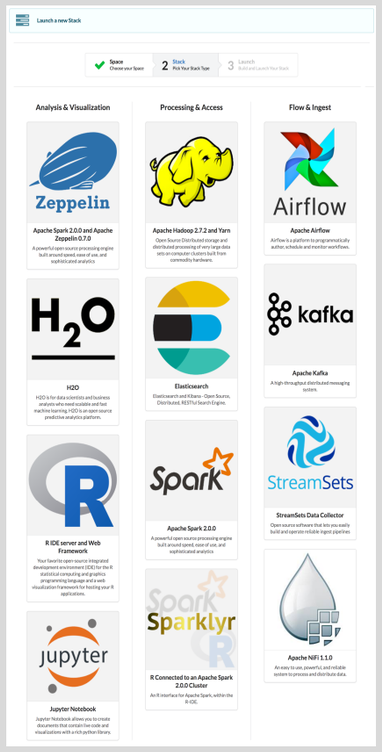
B23 Data Platform

It's a free platform for launching and managing data science tools in the cloud with an Amazon Web Services (AWS) account.

1. Go to **platform.b23.io** and access the Documentation tab to view instructions for creating an AWS account and setting up credentials for using BDP.

2. Launch a Space (Virtual Private Cloud) – you must have valid AWS credentials.

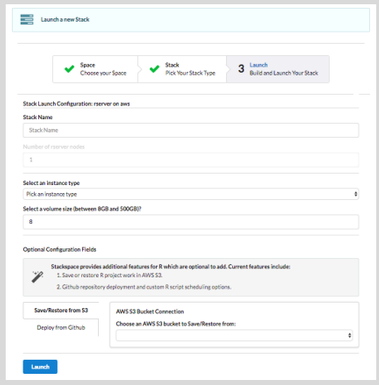




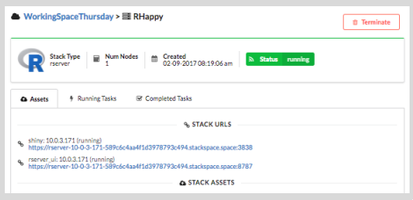
3. Once your Space is running, open the Stacks tab and select 'New Stack' then select the Space you created from the dropdown list.

4. Pick the R stack from the list of available stacks to launch:

5. Configure your R stack with a name, RAM/vCPU instance type (start small and work your way up as needed), and any of the optional configurations you want to try.

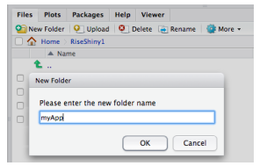


6. Once your Stack is running, it will expose URLs to Access the R and Shiny Servers.

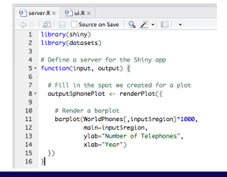


Create a Project and Deploy a Basic App Template

In the R working directory, create a new folder for storing your app files.



Seed the app folder with basic ui.R and server.R template scripts.

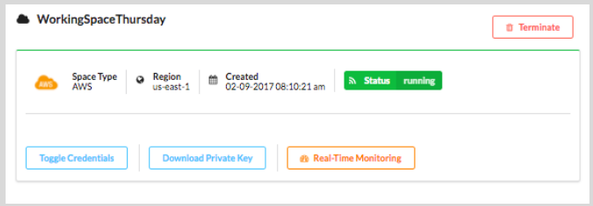


Use `deployShiny()` to send your app folder and files to Shiny® Server.

```
> library(B23r)
> deployShiny('myApp')
Access your shiny app by appending the app
name to your shiny-server stack URL
```

Open Secure Shell (SSH) for your R Stack

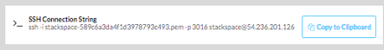
1. Download the private key for your Space



2. Open a terminal on your local machine and cd into the directory your key was downloaded into
3. Change permissions on the key to 600

```
Laptop-user$ cd Downloads
Laptop-user$ chmod 600 stackspace-YOUR-PRIVATE-KEY.pem
```

4. Click on the node card for rserver shown under 'Stack Assets'



5. Copy the SSH Connection String and copy it into your terminal

```
Laptop-user$ ssh -i stackspace…pem -p ...
[stackspace@ip ~]$
```

Install Semantic-UI

1. With your SSH connection established, become root user and install nodejs and gulp

```
[stackspace@ip ~]$ sudo -su root
[root@ip ~]$ sudo curl --silent --location https://
rpm.nodesource.com/setup_4.x | bash -
[root@ip ~]$ yum -y install nodejs
[root@ip ~]$ sudo npm install -g gulp
```

2. Change into the app directory you deployed to shiny-server and npm install semantic-ui

3. Hit enter to accept all default installation configurations

```
[root@ip ~]$ cd /srv/shiny-server/myApp
[root@ip ~]$ sudo npm install semantic-ui --save
```

4. Change into the newly created 'semantic' directory and use gulp to build

```
[root@ip ~]$ cd semantic
[root@ip ~]$ gulp build
```

5. Semantic UI should now be available for your Shiny® App!

Build and View your Apps

Go back to the R IDE and continue developing your application script files.

Use the updateShiny() function to push file changes out to Shiny® Server.

```
> library(B23r)
> updateShiny('myApp/ui.R')
Access your shiny app by appending the app
name to your shiny-server stack URL
```

Access your app by opening the shiny-server URL provided on the R Stack page under 'Assets'. Use username/password: admin/admin to open the server welcome page.

Append the name of your application to the end of this URL. If the app is error-free, it will load and be fully functional at this location.