

# Running R on AWS

# Launch EC2

Navigate to EC2.

The screenshot shows the AWS IAM Management Console interface. The top navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, and user information (soroosh @ 2879-7850-2088, Global, Support). A search bar at the top left contains the text 'ec2'. Below the search bar is a grid of service icons and names. On the far right, a sidebar displays search results for 'ec2', listing various AWS services and roles. The sidebar has a header 'Showing 8 results' and sections for 'Trusted entities' and 'AWS service' entries.

**Search Results for 'ec2':**

- Trusted entities
  - AWS service: ec2
  - AWS service: elasticloadbalancing (Service-Link...
  - AWS service: elasticmapreduce (Service-Lin...
  - AWS service: support (Service-Linked role)
  - nv... AWS service: trustedadvisor (Service-Linked ...
  - AWS service: elasticmapreduce
  - AWS service: ec2
  - AWS service: elasticmapreduce
- AWS service
  - AWS service: ec2
  - AWS service: elasticloadbalancing
  - AWS service: elasticmapreduce
  - AWS service: support
  - AWS service: trustedadvisor
  - AWS service: elasticmapreduce

**Services Grid:**

- Compute:** EC2, Lightsail, ECR, ECS, EKS, Lambda, Batch, Elastic Beanstalk, Serverless Application Repository.
- Robotics:** AWS RoboMaker.
- Analytics:** Athena, EMR, CloudSearch, Elasticsearch Service, Kinesis, QuickSight, Data Pipeline, AWS Glue, MSK.
- Business Applications:** Alexa for Business, Amazon Chime, WorkMail.
- End User Computing:** WorkSpaces, AppStream 2.0, WorkDocs, WorkLink.
- Management & Governance:** AWS Organizations, CloudWatch, AWS Auto Scaling, CloudFormation, CloudTrail, Config, OpsWorks, Service Catalog, Systems Manager, Trusted Advisor, Managed Services, Control Tower, AWS License Manager, AWS Well-Architected Tool, Personal Health Dashboard.
- Security, Identity, & Compliance:** IAM, Resource Access Manager, Cognito, Secrets Manager, GuardDuty, Inspector, Amazon Macie, AWS Single Sign-On, Certificate Manager, Key Management Service, CloudHSM, Directory Service, WAF & Shield, Artifact, Security Hub.
- Internet Of Things:** IoT Core, Amazon FreeRTOS, IoT 1-Click, IoT Analytics, IoT Device Defender, IoT Device Management, IoT Events, IoT Greengrass, IoT SiteWise, IoT Things Graph.
- Game Development:** Amazon GameLift.
- Migration & Transfer:** AWS Migration Hub, Application Discovery Service.
- Media Services:** Elastic Transcoder, Kinesis Video Streams.
- Mobile:** AWS Amplify, Mobile Hub.

# Launch EC2

You can see running instances or launch a new instance here. Please click on Launch Instance.

The screenshot shows the AWS EC2 Management Console Home page. On the left, there's a navigation sidebar with sections like EC2 Dashboard, Instances, Images, Elastic Block Store, Network & Security, Load Balancing, Auto Scaling, and Systems Manager. The main content area has a 'Resources' section showing 0 Running Instances, 0 Dedicated Hosts, 0 Volumes, 0 Key Pairs, 0 Placement Groups, 0 Elastic IPs, 0 Snapshots, 0 Load Balancers, and 7 Security Groups. Below this is a 'Create Instance' section with a 'Launch Instance' button highlighted by a red box. To the right, there are sections for Account Attributes (Supported Platforms: EC2, VPC), Additional Information (Getting Started Guide, Documentation, All EC2 Resources, Forums, Pricing, Contact Us), and AWS Marketplace (listing Barracuda CloudGen Firewall for AWS - PAYG, Matillion ETL for Amazon Redshift, Trend Micro Deep Security). At the bottom, there are links for Feedback, English (US) language, and footer links for Privacy Policy and Terms of Use.

# Choose an Amazon AMI

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Search for an AMI by entering a search term e.g. "Windows"

**Quick Start**

- My AMIs
- AWS Marketplace
- Community AMIs
- Free tier only (i)

**Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0de53d8956e8dcf80 (64-bit x86) / ami-06b382aba6c5a4f2c (64-bit Arm)**

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

**Select**

64-bit (x86)  
 64-bit (Arm)

**Amazon Linux AMI 2018.03.0 (HVM), SSD Volume Type - ami-0080e4c5bc078760e**

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

**Select**

64-bit (x86)

**Red Hat Enterprise Linux 7.6 (HVM), SSD Volume Type - ami-011b3ccf1bd6db744 (64-bit x86) / ami-0e3688b4a755ad736 (64-bit Arm)**

Red Hat Enterprise Linux version 7.6 (HVM), EBS General Purpose (SSD) Volume Type

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

**Select**

64-bit (x86)  
 64-bit (Arm)

**SUSE Linux Enterprise Server 15 (HVM), SSD Volume Type - ami-06ea7729e394412c8 (64-bit x86) / ami-0d7279e0c13593cb7 (64-bit Arm)**

SUSE Linux Enterprise Server 15 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

**Select**

64-bit (x86)  
 64-bit (Arm)

**Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-0a313d6098716f372 (64-bit x86) / ami-01ac7d9c1179d7b74 (64-bit Arm)**

Ubuntu Server 18.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

**Select**

64-bit (x86)  
 64-bit (Arm)

**Are you launching a database instance? Try Amazon RDS.**

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale your database on AWS by automating time-consuming database management tasks. With RDS, you can easily deploy **Amazon Aurora, MariaDB, MySQL, Oracle, PostgreSQL, and SQL Server** databases on AWS. **Aurora** is a MySQL- and PostgreSQL-compatible, enterprise-class database at 1/10th the cost of commercial databases. [Learn more about RDS](#)

**Launch a database using RDS**

# Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications.

The screenshot shows the AWS Launch Instance Wizard on the 'Step 2: Choose an Instance Type' page. The instance **m5.xlarge** is selected and highlighted with an orange border. The 'Review and Launch' button at the bottom right is also highlighted with an orange border.

	General purpose	m5d.4xlarge	16	64	2 x 300 (SSD)	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5d.12xlarge	48	192	2 x 900 (SSD)	Yes	10 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5d.24xlarge	96	384	4 x 900 (SSD)	Yes	25 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5d.metal	96	384	4 x 900 (SSD)	Yes	25 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5.large	2	8	EBS only	Yes	Up to 10 Gigabit	Yes
<input checked="" type="checkbox"/>	General purpose	m5.xlarge	4	16	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5.2xlarge	8	32	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5.4xlarge	16	64	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5.12xlarge	48	192	EBS only	Yes	10 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5.24xlarge	96	384	EBS only	Yes	25 Gigabit	Yes
<input type="checkbox"/>	General purpose	m5.metal	96	384	EBS only	Yes	25 Gigabit	Yes
<input type="checkbox"/>	General purpose	m4.large	2	8	EBS only	Yes	Moderate	Yes
<input type="checkbox"/>	General purpose	m4.xlarge	4	16	EBS only	Yes	High	Yes

Step 2: Choose an Instance Type

1. Choose AMI    2. Choose Instance Type    3. Configure Instance    4. Add Storage    5. Add Tags    6. Configure Security Group    7. Review

Cancel Previous Review and Launch Next: Configure Instance Details

# Configure Instance

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

The screenshot shows the AWS Launch Instance Wizard Step 3: Configure Instance Details. The page is titled "Step 3: Configure Instance Details" and includes a sub-instruction: "Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more." The configuration options are listed below:

- Number of instances:** 1 (input field) | [Launch into Auto Scaling Group](#)
- Purchasing option:**  Request Spot instances
- Network:** vpc-cb6523ad | [Create new VPC](#)
- Subnet:** subnet-6dcad024 | us-east-1a | Create new subnet  
251 IP Addresses available
- Auto-assign Public IP:** Use subnet setting (Enable)
- Placement group:**  Add instance to placement group
- Capacity Reservation:** Open | [Create new Capacity Reservation](#)
- IAM role:** AmazonS3FullAccess | [Create new IAM role](#)
- Shutdown behavior:** Stop
- Enable termination protection:**  Protect against accidental termination
- Monitoring:**  Enable CloudWatch detailed monitoring  
Additional charges apply.
- Tenancy:** Shared - Run a shared hardware instance | Additional charges will apply for dedicated tenancy.
- Elastic Inference:**  Add an Elastic Inference accelerator  
Additional charges apply.
- T2/T3 Unlimited:**  Enable  
Additional charges may apply

**Network interfaces:** (button)

Buttons at the bottom: [Cancel](#) | [Previous](#) | [Review and Launch](#) | [Next: Add Storage](#)

# User Data

User data runs after the instance is created. We use it to install R, RStudio Server and a new user to login in RStudio Server.

The screenshot shows the AWS Launch Instance Wizard at Step 3: Configure Instance Details. The User data section is highlighted with an orange box, containing the following script:

```
#!/bin/bash
#install R
yum install -y R

#install RStudio-Server 1.2.1335
wget https://download2.rstudio.org/server/centos6/x86_64/rstudio-server-rhel-1.2.1335.rpm
rpm -ivh rstudio-server-rhel-1.2.1335.rpm
```

The Next: Add Storage button is also highlighted with an orange box.

## User\_data

**shiny-user and shinypass are the username and password to login to RStudio Server.  
You can change it with any other name or pass your like!**

```
#!/bin/bash
#install R
sudo yum update -y
sudo amazon-linux-extras install -y R3.4

# Download RStudio Server
wget https://download2.rstudio.org/server/centos6/x86_64/rstudio-server-rhel-1.2.1335-x86_64.rpm
# Install RStudio Server
sudo yum install -y rstudio-server-rhel-1.2.1335-x86_64.rpm
rm rstudio-server-rhel-1.2.1335-x86_64.rpm

# needed for RCurl
sudo yum install -y libcurl-devel.x86_64

# add user(s)
useradd shiny-user
echo shiny-user:shinypass | sudo chpasswd

# Start RStudio Server
sudo /usr/sbin/rstudio-server start
```

# Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes.

The screenshot shows the AWS Launch Instance Wizard at Step 4: Add Storage. The URL is https://console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard. The page displays a table for adding storage volumes. A new volume row is being configured with the following details:

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/xvda	snap-062700013f593e38c	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

An "Add New Volume" button is visible below the table. A note states: "Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions." At the bottom, there are navigation buttons: Cancel, Previous, Review and Launch, and Next: Add Tags (which is highlighted with a red box).

# Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.

A copy of a tag can be applied to volumes, instances or both.

The screenshot shows the AWS Launch Instance Wizard at Step 5: Add Tags. The URL is https://console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:5. Add Tags. The wizard has seven steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags (highlighted), 6. Configure Security Group, and 7. Review.

**Step 5: Add Tags**

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.

A copy of a tag can be applied to volumes, instances or both.

Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (127 characters maximum)	Value (255 characters maximum)	Instances ⓘ	Volumes ⓘ
Name	ec2-r-server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
pro	r-server-creation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Add another tag** (Up to 50 tags maximum)

Cancel Previous **Review and Launch** Next: Configure Security Group

# Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, we add rules to allow specific traffic to reach your instance. Port 8787 is required to access rstudio server.

Launch instance wizard | EC2

https://console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

**Step 6: Configure Security Group**

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group:  Create a new security group  Select an existing security group

Security group name: rserver

Description: rserver-tcp-ports

Type	Protocol	Port Range	Source	Description
Custom TCP	TCP	8787	Anywhere	0.0.0.0/0, ::/0 e.g. SSH for Admin Desktop
Custom TCP	TCP	3838	Anywhere	0.0.0.0/0, ::/0 e.g. SSH for Admin Desktop

Add Rule

**Warning**  
You will not be able to connect to this instance as the AMI requires port(s) 22 to be open in order to have access. Your current security group doesn't have port(s) 22 open.

**Warning**  
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Previous Review and Launch

# Review and Launch

Please review your instance launch details. You will prompt with key to access the instance. Please use no key for now.

The screenshot shows the AWS Launch Instance Wizard at Step 7: Review Instance Launch. The page displays the configuration details for launching an Amazon Linux 2 AMI (HVM) instance. Key details include:

- AMI Details:** Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0de53d8956e8dcf80. It is a Free tier eligible instance.
- Instance Type:** t2.micro, ECUs: Variable, vCPUs: 1, Memory (GiB): 1, Instance Storage (GB): EBS only, EBS-Optimized Available: -, Network Performance: Low to Moderate.
- Security Groups:** rserver, which includes rules for TCP ports 8787 and 3838.
- Tags:** None listed.

At the bottom right, there are buttons for **Cancel**, **Previous**, and a large blue **Launch** button, which is highlighted with a red box.

# Launch Status

The screenshot shows the AWS Launch Instance Wizard - Launch Status page. At the top, there's a green success message: "Your instances are now launching" with a link to "View launch log". Below it, a blue info message encourages users to "Get notified of estimated charges" by creating billing alerts. The main content area is titled "How to connect to your instances" and includes instructions about instance launching and connecting. It lists helpful resources like the User Guide and Discussion Forum. A "View Instances" button is highlighted with a red box.

Launch instance wizard | EC2 x

https://console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

AWS Services Resource Groups

soroosh @ 2879-7850-2088 N. Virginia Support

## Launch Status

Your instances are now launching

The following instance launches have been initiated: [i-03533c69eb99428e6](#) [View launch log](#)

Get notified of estimated charges

Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

### How to connect to your instances

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click [View Instances](#) to monitor your instances' status. Once your instances are in the **running** state, you can [connect](#) to them from the Instances screen. [Find out](#) how to connect to your instances.

Here are some helpful resources to get you started

- [How to connect to your Linux instance](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: User Guide](#)
- [Amazon EC2: Discussion Forum](#)

While your instances are launching you can also

[Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)

[Create and attach additional EBS volumes](#) (Additional charges may apply)

[Manage security groups](#)

[View Instances](#)

Feedback English (US) © 2008 - 2019, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use

# Select a key pair

No key pair is needed for this tutorial. Select “Proceed without a key pair” and click on Launch Instances

The screenshot shows the AWS Launch Instance Wizard at Step 7: Review Instance Launch. On the left, there's a sidebar with sections for AMI Details (Amazon Linux 2 AMI (HVM), SSD Volume Type, Free tier eligible), Instance Type (t2.micro), and Security Groups (Security group name: launch-wizard-2, Description: launch-wizard-2 created 2019-04-18T11:39:36.767-07:00). The main area has tabs for Choose AMI, Choose Instance Type, Configure Instance, Add Storage, Add Tags, Configure Security Group, and Review. The Review tab is active. A modal window titled "Select an existing key pair or create a new key pair" is overlaid. It contains a note about key pairs and two options: "Proceed without a key pair" (selected) and "I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI." The "Launch Instances" button is highlighted with a yellow box.

Launch instance wizard | EC2

https://console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

Services Resource Groups

soroosh @ 2879-7850-2088 N. Virginia Support

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

**Improve your instances' security.** Your instances may be accessible from any IP address. You can also open additional ports in your security groups.

**AMI Details**

**Amazon Linux 2 AMI (HVM), SSD Volume Type**  
Free tier eligible Amazon Linux 2 comes with five years support packages through extras.  
Root Device Type: ebs Virtualization type: hvm

**Instance Type**

Instance Type	ECUs	vCPUs
t2.micro	Variable	1

**Security Groups**

Security group name: launch-wizard-2  
Description: launch-wizard-2 created 2019-04-18T11:39:36.767-07:00

Network Performance: Low to Moderate

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Proceed without a key pair  
 I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI.

Cancel Launch Instances

Feedback English (US)

© 2008 - 2019, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use

# Check the status

Please copy the ip-address of your server under the IPv4 Public IP.

The screenshot shows the AWS EC2 Management console interface. On the left, there's a sidebar with navigation links for EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Launch Templates, Spot Requests, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, Images, AMIs, and Bundle Tasks. Below that are sections for Elastic Block Store (Volumes, Snapshots, Lifecycle Manager) and Network & Security (Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces). The main content area shows a table of instances. A search bar at the top of the table has the ID 'i-03533c69eb99428e6' entered. The columns include Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, Alarm Status, Public DNS (IPv4), IPv4 Public IP, IPv6 IPs, Key Name, Monitoring, and Launch Time. The 'ec2-r-server' row is selected, and its details are shown in a modal below. The 'IPv4 Public IP' field contains '35.172.191.204', which is highlighted with a red box. The modal also displays other instance details like Instance ID (i-03533c69eb99428e6), Instance state (pending), Instance type (t2.micro), Availability zone (us-east-1a), Security groups (rserver), and AMI ID (amzn2-ami-hvm-20200313-x86\_64-gn2 /ami-0de53d8956e8d1cf0).

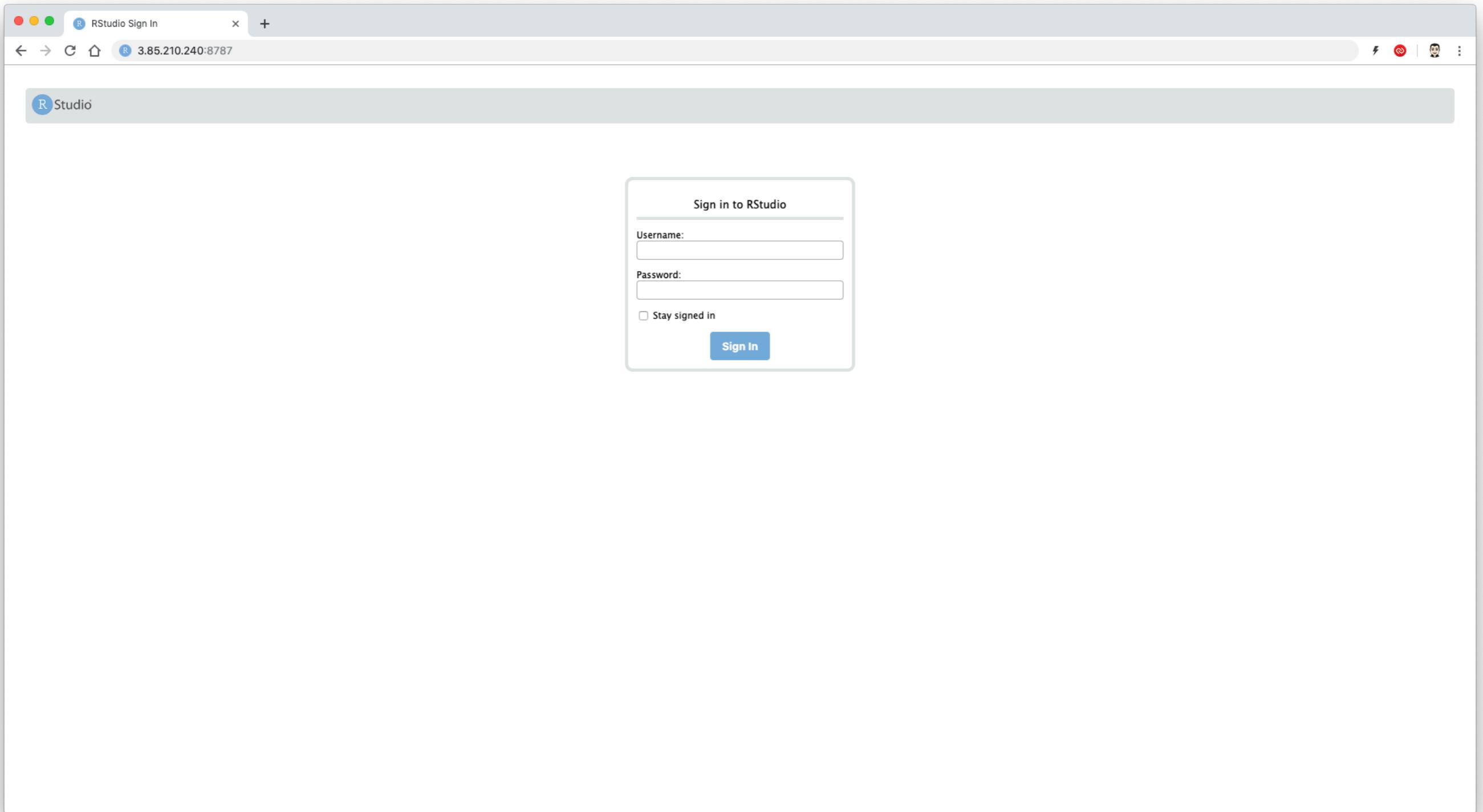
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name	Monitoring	Launch Time
ec2-r-server	i-03533c69eb99428e6	t2.micro	us-east-1a	pending	Initializing	None	-	35.172.191.204	-	-	disabled	April 13, 2019

Instance: i-03533c69eb99428e6 (ec2-r-server) Public IP: 35.172.191.204

Description	Status Checks	Monitoring	Tags
Instance ID: i-03533c69eb99428e6	Public DNS (IPv4): -	IPv4 Public IP: 35.172.191.204	
Instance state: pending	IPv6 IPs: -	Private DNS: ip-172-30-0-176.ec2.internal	
Instance type: t2.micro	Private IPs: 172.30.0.176	Secondary private IPs: -	
Elastic IPs:	VPC ID: vpc-cb6523ad	Subnet ID: subnet-fdca024	
Availability zone: us-east-1a			
Security groups: rserver . view inbound rules . view outbound rules			
Scheduled events: -			
AMI ID: amzn2-ami-hvm-20200313-x86_64-gn2 /ami-0de53d8956e8d1cf0			

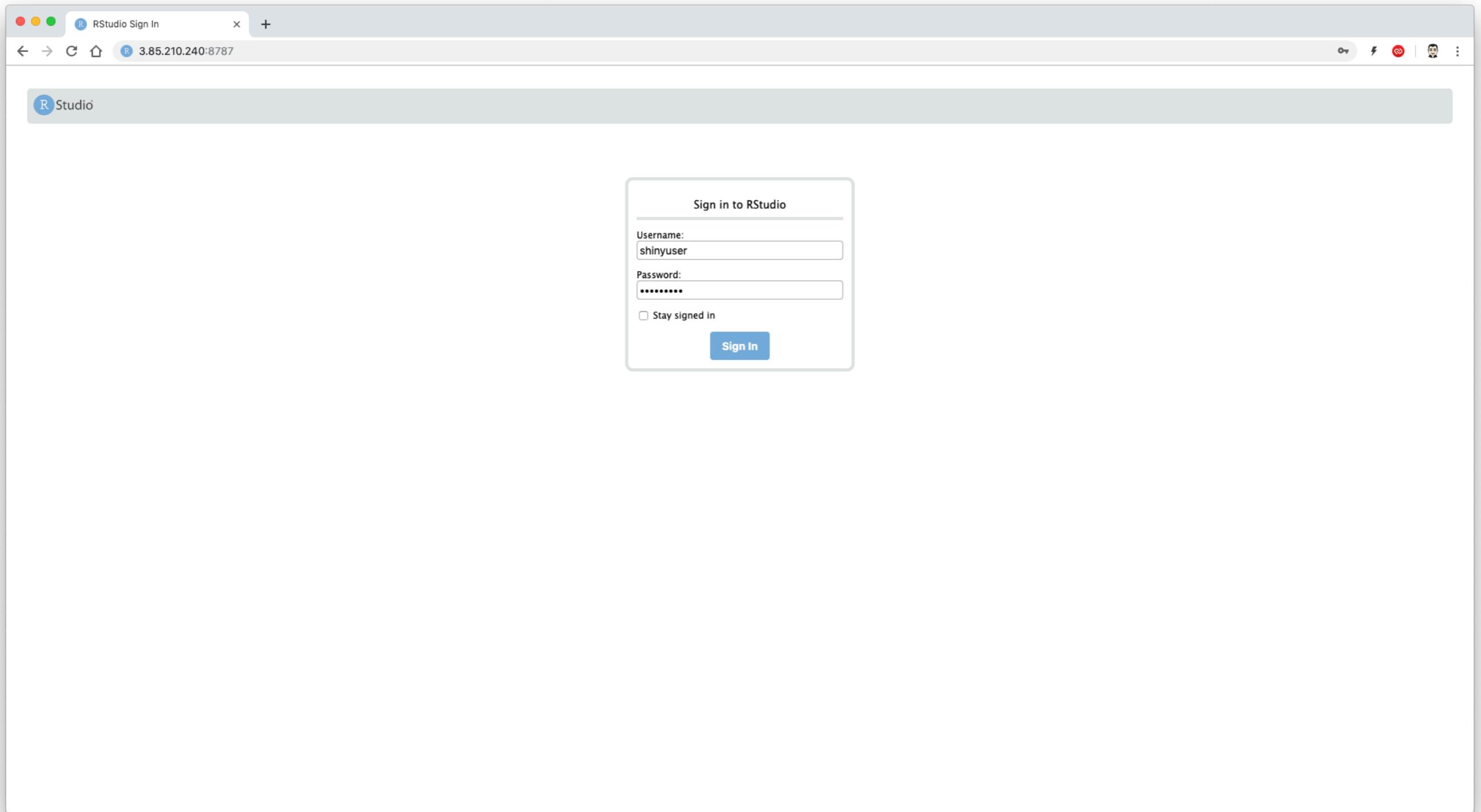
# Login

Now open your browser and navigate to `http://<server-ip>:8787`



# RStudio

Enter the username and password which was used in user data to login to rstudio server.



# RStudio

Install RCurl, download a csv file and run some code.

The screenshot shows the RStudio interface with the following components:

- Top Bar:** Includes tabs for "Instances | EC2 Management" and "RStudio".
- Header Bar:** Shows the URL "Not Secure | 54.165.21.146:8787" and various icons for navigation, search, and user profile.
- Code Editor (Left):** An R script titled "Untitled1" containing the following code:

```
1 install.packages('RCurl')
2
3 library("RCurl")
4 data <- read.table(textConnection(getURL("https://cgiardata.s3-us-west-2.amazonaws.com/ccafs/amzn.csv")))
5 head(data)
6
```
- Environment (Top Right):** Displays the "Global Environment" tab, which is currently empty.
- Files (Bottom Right):** Shows a file tree with a single folder named "R".
- Console (Bottom Left):** Displays the output of the R script execution, including package installation logs and the loading of the "RCurl" package.