

- In simple words, Cloud Computing refers to a mode of storing data & applications remotely and accessing those files via the Internet. Cloud Computing consist of 3 components:

Infrastructure as a Service(IaaS) Platform as a Service(PaaS)

Software as a Service(SaaS)

What is future of Cloud Computing?

The ability to upload data to "the cloud" and accessing it at our convenience (anytime, anywhere, on any device) is ensuring its bright future.







Enterprise cloud

subscription

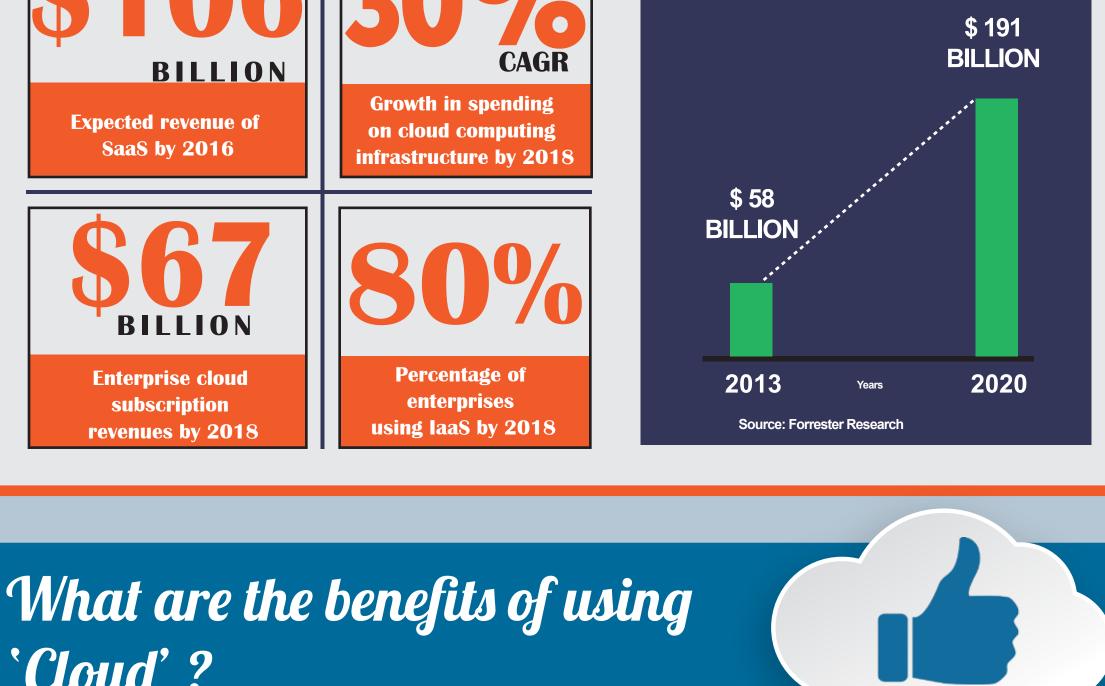
revenues by 2018

'Cloud'?

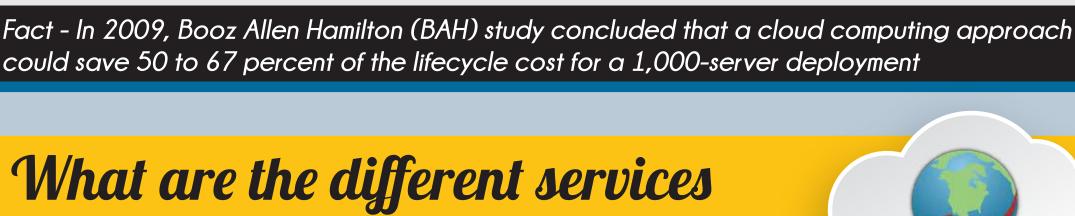
infrastructure by 2018 **Percentage of** enterprises using laaS by 2018

Growth in spending

on cloud computing



Cost Savings Accessibility Easy monitoring Scalability



Amazon Web Google Compute **CloudSigm AWS** Services

Windows Azure Dropbox Cloud Service Windows Azure Amazon Web Services (AWS) is probably the most widely used service in cloud computing on the basis of its features such as ease of use, mobile access and help & support.

available for Cloud Computing?



the cloud?

Instance Details

6.Click on Launch Instance

I would like to connect with

WARNING: UNPROTECTED PRIVATE KEY FILE!

Amazon Linux AMI

https://aws.amazon.com/amazon-linux-ami/2015.03-release-notes/ 25 package(s) needed for security, out of 54 available Run "sudo yum update" to apply all updates. [ec2-user@ip-172-31-5-130 ~]\$

: aws-cfn-bootstrap-1.4-5.4.amzn1.noarch : rubygem20-psych-2.0.0-1.21.amzn1.x86_64

: kernel-tools-3.14.35-28.38.amzn1.x86_64

: python27-2.7.9-4.114.amzn1.x86_64 : libcom_err-1.42.12-1.34.amzn1.x86_64

: yum-3.4.3-137.54.amzn1.noarch

: ec2-utils-0.4-1.22.amzn1.noarch

: libss-1.42.12-1.34.amzn1.x86_64

This private key will be ignored.
bad permissions: ignore key: newestkeypair.pem
Permission denied (publickey).

9.Here we are trying to install R

Verifying

Verifying Verifying

Verifying

Verifying

Verifying Verifying

Verifying

at.x86_64 0:3.1.10-44.13.amzn1

aws-cfn-bootstrap.noarch 0:1.4-9.4.amzn1

cryptsetup.x86_64 0:1.6.3-2.19.amzn1 e2fsprogs.x86_64 0:1.42.12-4.35.amzn1

ec2-utils.noarch 0:0.4-1.23.amzn1

gnupg2.x86_64 0:2.0.25-2.29.amzn1 krb5-libs.x86_64 0:1.10.3-37.29.amzn1 libcurl.x86_64 0:7.40.0-3.51.amzn1

libss.x86_64 0:1.42.12-4.35.amzn1 python27.x86_64 0:2.7.9-4.115.amzn1

python27-jmespath.noarch 0:0.7.1-1.9.amzn1

python27-setuptools.noarch 0:12.2-1.30.amzn1

It is required that your private key files are NOT accessible by others.

ajay@Inspiron-3542:~/Desktop\$ chmod 400 newestkeypair.pem ajay@Inspiron-3542:~/Desktop\$ ssh -i newestkeypair.pem ec2-user@54.175.99.147

Storage

prices.

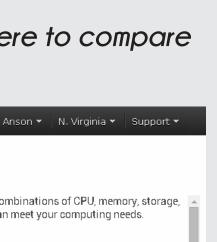






2.Click on Run Instance 3.Choose operating System for your virtual machine that you will access remotely. Here we have choosen Amazon Linux. 4.Choose Instance Type (size of RAM) and memory needed). See here to compare

Services v Edit √ Step 2: 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. Learn more about instance types and how they can meet your computing needs All instance types 🔻 Current generation 💌 Show/Hide Columns



Network Performance (i) -

Low to Moderate

Low to Moderate

Edit instance details

Edit storage

96/107

99/107

100/107

aws-apitools-common.noarch 0:1.1.0-1.9.amzn1

cloud-init.noarch 0:0.7.6-2.5.amzn1

ec2-net-utils.noarch 0:0.4-1.23.amzn1

libselinux.x86_64 0:2.1.10-3.22.amzn1

pcre.x86_64 0:8.21-7.7.amzn1 python27-boto.noarch 0:2.38.0-1.7.amzn1

python27-devel.x86_64 0:2.7.9-4.115.amzn1

RStudio - Do

< 1 to 5 of 5 > >

VPC ID

vpc-bc1634d9

vpc-bc1634d9

vpc-bc1634d9

vpc-bc1634d9

vpc-bc1634d9

launch-wizard-3

created 2015-07-

Privacy Policy

Ajay ▼ N. Virginia ▼

Instance State

running

< 1 to 1 of 1</pre>

Status Checks

2/2 checks ...

Group description

Other bookmarks

Descript

launch-w

launch-w

This sec

default V

launch-w

Terms of Use

Show all downloads...

» Dther bookmarks

Support *

glibc-common.x86_64 0:2.17-55.143.amzn1

kernel-tools.x86_64 0:3.14.44-32.39.amzn1 libcom_err.x86_64 0:1.42.12-4.35.amzn1

curl.x86_64 0:7.40.0-3.51.amzn1

EBS-Optimized Available (i) -

Download Key Pair

vCPUs (i) Memory (GiB) Family Instance Storage (GB) (i) 🔻 t2.micro General purpose Free tier eligible

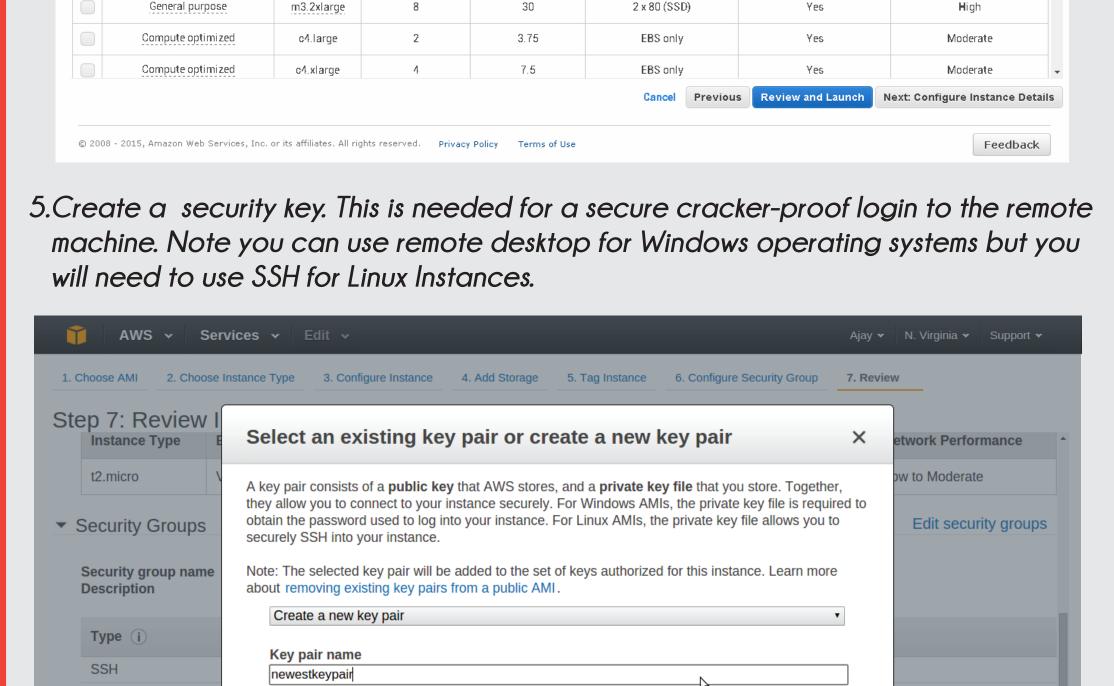
Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

General purpose t2.small

EBS only Low to Moderate General purpose t2.medium 3.75 1 x 4 (SSD) General purpose m3.medium Moderate m3.large General purpose 7.5 1 x 32 (SSD) Moderate General purpose 15 2 x 40 (SSD) **H**igh m3.xlarge

EBS only

EBS only



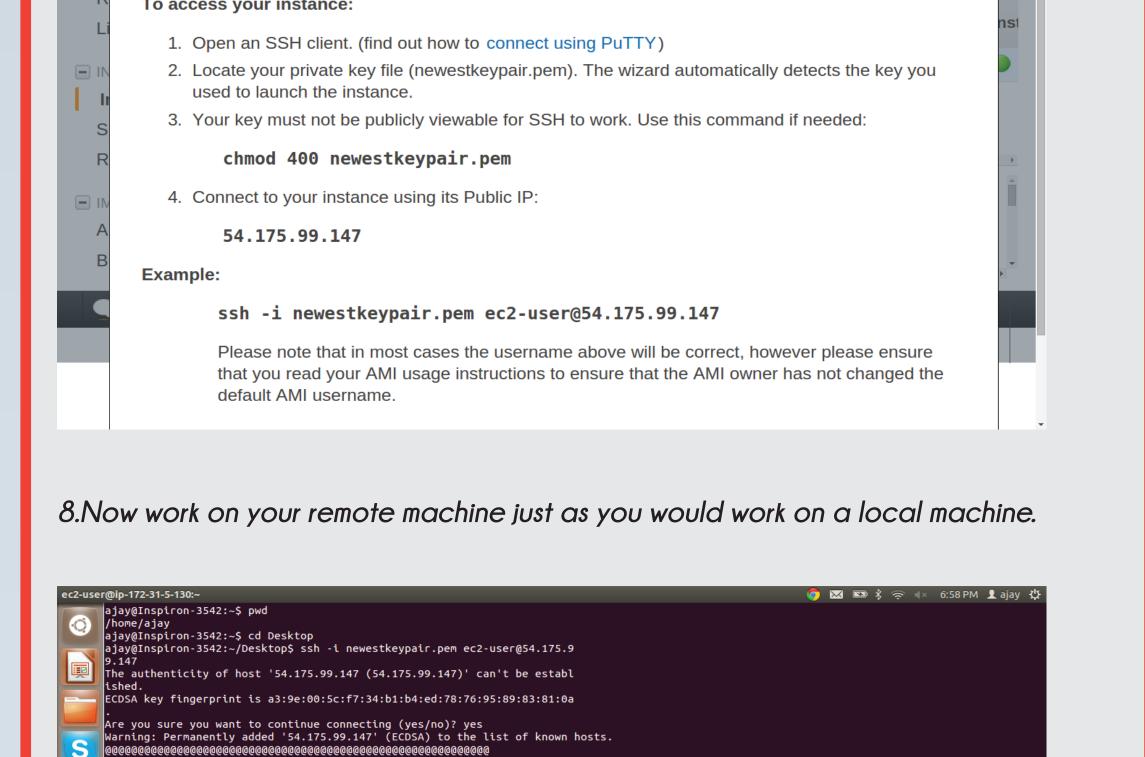
it in a secure and accessible location. You will not be able to download the file again after it's created. Edit tags Tags **Previous** Launch Launch Instances **Feedback**

You have gone full screen. Exit full screen (F11) rowser (Java required)

7.Connect to the instance using your security key following the instructions given.

A standalana CCH aliant

You have to download the **private key file** (*.pem file) before you can continue. **Store**



: python27-setuptools-12.2-1.29.amzn1.noarch Verifying Verifying : python27-pip-6.0.8-1.18.amzn1.noarch 102/107 Verifying : ec2-net-utils-0.4-1.22.amzn1.noarch 103/107 : libjpeg-turbo-1.2.90-5.9.amzn1.x86 64 Verifying 104/107 : python27-devel-2.7.9-4.114.amzn1.x86_64 105/107 Verifying Verifying : cryptsetup-libs-1.6.3-2.18.amzn1.x86_64 Verifying : rpm-4.11.2-2.63.amzn1.x86_64 107/107 kernel.x86_64 0:3.14.44-32.39.amzn1

aws-amitools-ec2.noarch 0:1.5.7-1.0.amzn1

cryptsetup-libs.x86_64 0:1.6.3-2.19.amzn1

e2fsprogs-libs.x86_64 0:1.42.12-4.35.amzn1

libjpeg-turbo.x86_64 0:1.2.90-5.10.amzn1

python27-libs.x86_64 0:2.7.9-4.115.amzn1

aws-cli.noarch 0:1.7.34-1.16.amzn1

gpgme.x86_64 0:1.4.3-5.15.amzn1 libcap-ng.x86_64 0:0.7.3-5.13.amzn1

openssl.x86_64 1:1.0.1k-10.86.amzn1 python27-bcdoc.noarch 0:0.16.0-1.9.amzn1

rpm.x86_64 0:4.11.2-2.64.amzn1

python27-botocore.noarch 0:1.0.0-0.1.b3.14.amzn1 python27-configobj.noarch 0:4.7.2-7.15.amzn1

\$ sudo rstudio-server verify-installation

creating a custom TCP rule (click Edit on the tab below)

Edit ~

Create Security Group

Name

Description

Security Group: sg-02b14965

Inbound

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

Edit 🕶

mynewcloud

Launch Instance

🛗 Apps 🜟 Bookmarks 📠 nbviewer.ipythor 📠 nbviewer.ipythor 🖟 nbviewer.ipythor 🔀 Watch Game of Tl 🗋 Data Science Spe 🗀 iMacros

Connect

Filter by tags and attributes or search by keyword

i-d5d64b06

Services v

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Q Filter by tags and attributes or search by keyword

Group ID

sg-02b14965

sg-08ced66c

sg-56a1f632

sg-77a2f513

sg-fa94659d

Group name

Outbound

Tags

launch-

wizard-3

🔛 Apps 🙀 Bookmarks 📠 nbviewer.ipython 📠 nbviewer.ipython 🛍 nbviewer.ipython 🚾 Watch Game of T 🗋 Data Science Spe 🧰 iMacros

Actions ♥

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

EC2 Management Console - Google Chrome

AWS ~

Reserved Instances

ELASTIC BLOCK STORE

NETWORK & SECURITY

Security Groups

Placement Groups **Load Balancers**

Network Interfaces

Feedback

newestkeypair.pem

AWS ~

EC2 Dashboard

Events Tags

Reports

INSTANCES

Instances

Limits

1:1 [] (Top Level) \$

Sources

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Services v

English

IMAGES

AMIs

Volumes

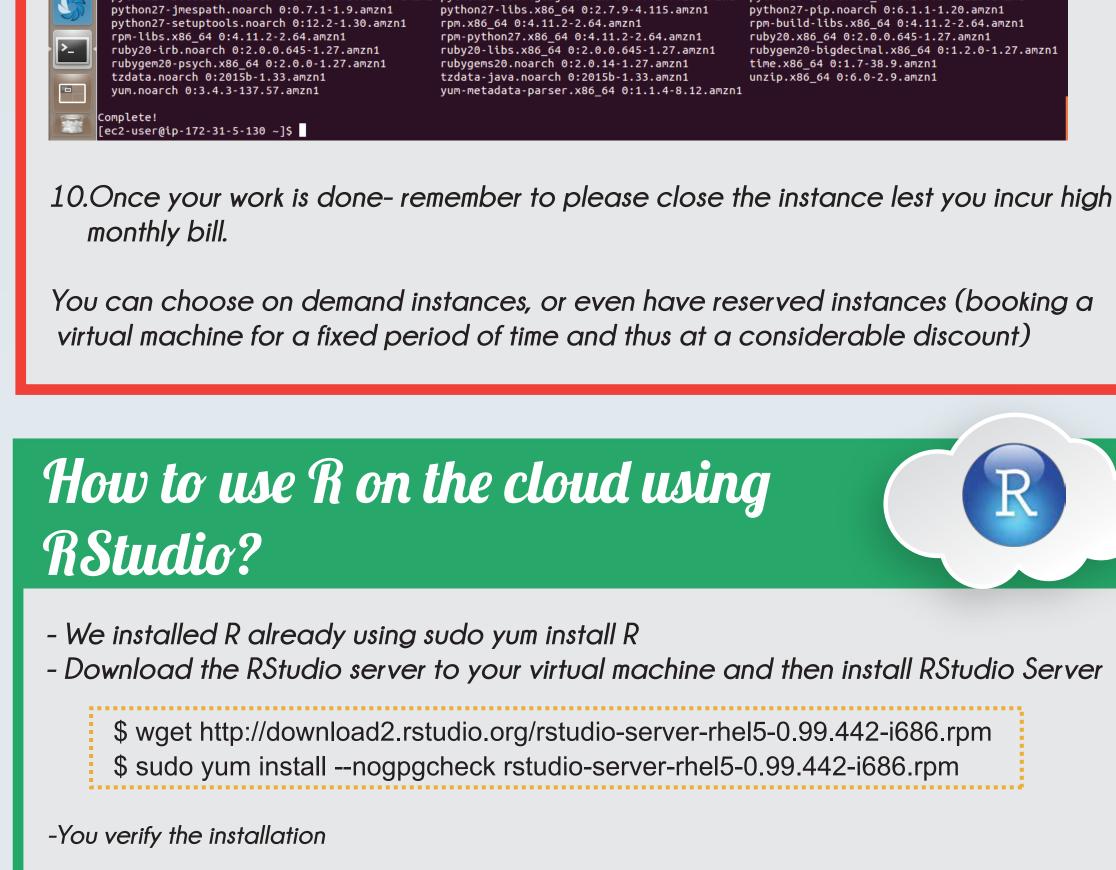
Snapshots

Elastic IPs

Key Pairs

Bundle Tasks

glibc.x86_64 0:2.17-55.143.amzn1



-You open the 8787 port using the security group in AWS Console(left margin Security Groups) by

Group Name

launch-wizard-3

launch-wizard-1

launch-wizard-2

default

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SAS- University Edition-SAS...

Availability Zone 🔻

us-east-1a

instance 1.sudo useradd newuser1 2.sudo passwd newuser1 -You find the public IP Address of the cloud instance from the Instances tab in the left margin EC2 Management Console - Google Chrome

Editing rselen × 🔛 Business Anal × 🔳 Business Anal × 📑 (1) Ajay Ohri - × 🔱 cloud computi × 📈 How to do R P × 📦 EC2 Managem × 📵 RStudio - Dow ×

Actions ♥

Instance ID A Instance Type

t2.micro

-You create a new user with a new password using the SSH terminal for your virtual machine cloud

R Spot Requests Description Status Checks Monitoring Reserved Instances **Public DNS** ec2-54-175-99-Instance ID 147.compute-IMAGES 1.amazonaws.com AMIs Public IP 54.175.99.147 🔊 Instance state running **Bundle Tasks** Elastic IP Instance type t2.micro **■** ELASTIC BLOCK STORE Availability zone Private DNS ip-172-31-5us-east-1a Volumes 130.ec2.internal Snapshots Private IPs 172.31.5.130 Security groups launch-wizard-3. Feedback English © 2008 - 2015, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use newestkeypair.pem ♣ Show all downloads... × -You open your browser to IPAddress: 8787 and then login using the user id and password created above RStudio Sign In - Google Chrome 🥏 🗆 7:05 PM 👤 ajay 🖐 Editing rsel × A Business Ar × Business Ar × A A Business Ar × B Business Ar × A Business Ar × © 6 54.175.99.147:8787/auth-sign-in ☆ 🛂 🔼 🔘 👼 🗏 🔛 Apps 🜟 Bookmarks 👊 nbviewer.ipythor 脑 nbviewer.ipythor 🖟 nbviewer.ipythor 🔀 Match Game of T 🗋 Data Science Sper 🧀 iMacros » 📋 Other bookmarks R Studio

Sign in to RStudio

Username

Password:

Stay signed in

newestkeypair.pem Show all downloads... -Now you are ready to use R using the cloud through a browser File Edit Code View Plots Session Project Build Tools Help greg | 💽 🗸 🚰 🔻 🔒 🎒 🍎 Go to file/function Rroject: (I ── ── Workspace History Run Source - ☐ Import Dataset

Files Plots Packages Help

Rhistory

Rprofile

🎱 New Folder 🛛 👰 Upload 🚨 Delete 📝 Rename 🛮 🎡 More 🕶

Modified

232 bytes Jun 27, 2013, 9:4

Jun 27, 2013, 2:1

1.4 KB

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