

Initiate SSH connection to the EMR Primary Node

1) Add inbound security rule to access EMR Primary Node by clicking on EC2 security groups for the Primary node

The screenshot shows the Amazon EMR console interface. The breadcrumb navigation at the top indicates the path: Amazon EMR > EMR on EC2: Clusters > My cluster. The 'Properties' tab is selected, displaying various cluster details. Under the 'Network and security' section, the 'EC2 security groups (firewall)' for the 'Primary node' are listed. The 'EMR managed security group' is identified as 'sg-0c63949181a427a7d'. Other security groups shown include 'Additional security groups' and 'Core and task nodes'.

Then add inbound rule to allow all ports and all ips

The screenshot displays the AWS Management Console for the security group 'sg-0c63949181a427a7d - ElasticMapReduce-master'. The 'Inbound rules' tab is active, showing a list of eight inbound rules. The rule 'sgr-03f56ed6499456be5' is highlighted, which allows SSH access (port 22) from any IP address (0.0.0.0/0). The table below summarizes the rules:

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source	Description
-	sgr-0ef6d99ab0deab36	-	All ICMP - IPv4	ICMP	All	sg-0885506b34bc88db...	-
-	sgr-0022f0beddad0a5e8	-	All TCP	TCP	0 - 65535	sg-0c63949181a427a7...	-
-	sgr-099dc54f825ad4f2	-	All UDP	UDP	0 - 65535	sg-0885506b34bc88db...	-
-	sgr-0aa182baa3ac66a9a	-	All UDP	UDP	0 - 65535	sg-0c63949181a427a7...	-
-	sgr-04e003f2867e11839	-	Custom TCP	TCP	8443	pl-f8bd5e91	-
-	sgr-00ab6175c25612331	-	All ICMP - IPv4	ICMP	All	sg-0c63949181a427a7...	-
-	sgr-030caef2f8b9c1f4	-	All TCP	TCP	0 - 65535	sg-0885506b34bc88db...	-
-	sgr-03f56ed6499456be5	IPv4	SSH	TCP	22	0.0.0.0/0	-

Click ok EC2 instance ID to login to the Primary Node

Amazon EMR > EMR on EC2: Clusters > My cluster

Cluster ARN
arn:aws:elasticmapreduce:us-east-1:345468497366:cluster/j-3EIMDZ3QC19OC

Cluster configuration
Instance groups

Capacity
1 Primary | 2 Core | 0 Task

Installed applications
Flink 1.20.0, HBase 2.6.2, Hadoop 3.4.1, Hive 3.13, Hue 4.11.0, JupyterEnterpriseGateway 2.6.0, JupyterHub 1.5.0, Livy 0.8.0, Pig 0.17.0, Spark 3.5.5

Persistent application UIs
[Spark History Server](#)
[YARN Timeline Server](#)
[Tez UI](#)

Primary node public DNS
[ec2-44-202-113-163.compute-1.amazonaws.com](#)
[Connect to the Primary node using SSH](#)
[Connect to the Primary node using SSM](#)

Creation time
August 02, 2025, 18:15 (UTC+03:00)

Elapsed time
1 hour, 4 minutes

Properties | Bootstrap actions | **Instances (Hardware)** | Steps | Applications | Configurations | Monitoring | Events | Tags (0)

Instance group settings Info

Cluster scaling option: Manually set cluster size

Core
Name and Maximum core nodes in the cluster
Core: 2 instances

[Edit cluster scaling option](#)

Instance groups (2) Info

With the instance groups configuration, each node type consists of the same instance type and the same purchasing option for instances: On-Demand or Spot.

[Find instances by status](#) | [Find resources by ID or type; or search for text within loaded results](#)

[Terminate instance](#) | [Resize instance group](#) | [Add task instance group](#)

Type and name	ID	Status	Instances	Purchasing option and p...	EB5 size (GiB)	EC2 Instance ID	Public D
Primary	ig-10H36GKM726FD	Running	1	On-Demand	-	-	-
m4.large 2 vCore, 8 GiB memory, EBS only storage	ci-00930101MFK5ZSN...	Running	-	On-Demand (\$0.100/hr)	32 (1 volume)	i-0d8eba8ffbe597eba	ec2-4
Core	ig-3W0QAQL6524GJ	Running	2	On-Demand	-	-	-

Click on the connect button

AWS > EC2 > Instances

Search: [Alt+S] | United States (N. Virginia) | [volumes/User4246148+Test_Student @ 3454-6849-7366](#)

EC2 > Instances

Instances (1/1) Info

Last updated less than a minute ago | [Connect](#) | [Instance state](#) | [Actions](#) | [Launch instances](#)

[Find instance by attribute or tag \(case-sensitive\)](#) | [Clear filters](#)

[Instance ID: i-0d8eba8ffbe597eba](#) | [Clear filters](#)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
i-0d8eba8ffbe597eba	i-0d8eba8ffbe597eba	Running	m4.large	2/2 checks passed	View alarms	us-east-1c

i-0d8eba8ffbe597eba

[Details](#) | [Status and alarms](#) | [Monitoring](#) | [Security](#) | [Networking](#) | [Storage](#) | [Tags](#)

Instance summary Info

Instance ID
[i-0d8eba8ffbe597eba](#)

IPv6 address
-

Hostname type
Private IP
IP name: ip-172-31-91-74.ec2.internal

Answer private resource DNS name
-

Auto-assigned IP address
[44.202.113.163](#) [Public IP]

Public IPv4 address
[44.202.113.163](#) | [open address](#)

Instance state
Running

Private IP DNS name (IPv4 only)
[ip-172-31-91-74.ec2.internal](#)

Instance type
m4.large

VPC ID
[vpc-060db8dffa1c992cb](#)

Private IPv4 addresses
[172.31.91.74](#)

Public DNS
[ec2-44-202-113-163.compute-1.amazonaws.com](#) | [open address](#)

Elastic IP addresses
-

AWS Compute Optimizer finding
[Opt-in to AWS Compute Optimizer for recommendations.](#) | [Learn more](#)

Click on the connect button

