

Cloning an EMR Cluster

You will be using the same configuration for your EMR cluster in many modules depending upon your usage and the module itself, especially in modules such as course projects and Capstones.

Instead of configuring and setting up the EMR cluster everytime when you need to work on your code, you can clone the previously used EMR cluster configuration that will copy all the configurations from that cluster, including the hardware and software configuration as well as any other parameters, such as the YARN parameters that you may have set up.

1. Go to the **EMR dashboard** and select the cluster that you want to clone.

| <div> <div>Create cluster</div> <div>View details</div> <div>Clone</div> <div>Terminate</div> </div> | | | | | | |
|--|-------------------------------|-----------------|-------------------------|-----------------------------|---------------------|---------------------------|
| <div> <div>Filter:</div> <div>All clusters</div> <div>Filter clusters ...</div> <div>33 clusters (all loaded)</div> </div> | | | | | | |
| | Name | ID | Status | Creation time (UTC+5:30) | Elapsed time | Normalized instance hours |
| <input checked="" type="checkbox"/> | upgrad_emr | j-AHHN10TJHDVW | Terminated User request | 2021-07-16 19:53 (UTC+5:30) | 1 hour, 10 minutes | 8 |
| <input type="checkbox"/> | upGrad_EMR | j-177GAD8V54AE7 | Terminated User request | 2021-07-13 20:58 (UTC+5:30) | 1 hour, 50 minutes | 16 |
| <input type="checkbox"/> | upGrad_EMR | j-2G35TPE3669YZ | Terminated User request | 2021-07-09 20:42 (UTC+5:30) | 2 hours, 37 minutes | 24 |
| <input type="checkbox"/> | Capstone_lite | j-25ZB44OVPACEQ | Terminated User request | 2021-07-09 18:21 (UTC+5:30) | 2 hours, 21 minutes | 24 |
| <input type="checkbox"/> | upgrad_emr | j-2G7A7HUAW85O7 | Terminated User request | 2021-07-08 01:19 (UTC+5:30) | 2 minutes | 0 |
| <input type="checkbox"/> | upGrad_EMR | j-8LB468H1AFHW | Terminated User request | 2021-07-08 00:42 (UTC+5:30) | 1 hour, 9 minutes | 8 |
| <input type="checkbox"/> | Capstone_lite | j-2R8WFU11VFUK2 | Terminated User request | 2021-07-06 19:08 (UTC+5:30) | 4 hours, 21 minutes | 40 |
| <input type="checkbox"/> | Capstone_lite | j-SEJBN43MZ729 | Terminated User request | 2021-06-30 19:26 (UTC+5:30) | 4 hours, 5 minutes | 32 |

2. After selecting the cluster, click on the **'Clone'** button on the top-left of the dashboard towards the right to the 'View details' button.

| <div> <div>Create cluster</div> <div>View details</div> <div>Clone</div> <div>Terminate</div> </div> | | | | | | |
|--|----------------------------|--|--|--|--|--|
| <div> <div>Filter:</div> <div>All clusters</div> <div>Filter clusters ...</div> <div>33 clust</div> </div> | | | | | | |
| | Name | | | | | |
| <input checked="" type="checkbox"/> | upgrad_emr | | | | | |
| <input type="checkbox"/> | upGrad EMR | | | | | |

3. In the screen that follows, click on the **'Clone'** button again.

Cloning j-AHHN10TJHDWV

Would you like to include steps?

☒ Yes
 ☐ No

Cancel

Clone

4. After that if you want to change any parameters or configurations, you can still do that by going to the corresponding steps on the left side of the page. Otherwise, you can simply go to the bottom of the screen and click on the **'Create cluster'** button.

Step 1: Software and Steps

Step 2: Hardware

Step 3: General Cluster Settings

Step 4: Security

Security Options

EC2 key pair RHEL

☒ Cluster visible to all IAM users in account

Permissions

☐ Default ☒ Custom

Select custom roles to tailor permissions for your cluster.

EMR role EMR_DefaultRole

EC2 instance profile EMR_EC2_DefaultRole

Auto Scaling role Proceed without role

Security Configuration

EC2 security groups

An EC2 security group acts as a virtual firewall for your cluster nodes to control inbound and outbound traffic. There are two types of security groups you can configure, [EMR managed security groups](#) and [additional security groups](#). EMR will [automatically update](#) the rules in the EMR managed security groups in order to launch a cluster. [Learn more](#).

| Type | EMR managed security groups EMR will automatically update the selected group | Additional security groups EMR will not modify the selected groups |
|-------------|---|---|
| Master | Default: sg-00fcc219431b5c0a6 (ElasticMapReduce-) | No security groups selected |
| Core & Task | Default: sg-0a724c5cb4e439160 (ElasticMapReduce-) | No security groups selected |

[Create a security group](#)

Cancel

Previous

Create cluster

- The new cluster with the configuration of your previous cluster will now start setting up and you can start working on it as usual.

Cluster: upgrad_emr Starting Configuring cluster software

| Summary | Application user interfaces | Monitoring | Hardware | Configurations | Events | Steps | Bootstrap actions |
|---|-----------------------------|------------|----------|---|--------|-------|-------------------|
| Summary ID: j-24L8EPEMY6A07 Creation date: 2021-07-17 20:05 (UTC+5:30) Elapsed time: 7 minutes After last step completes: Cluster waits Termination protection: Off Change Tags: -- View All / Edit Master public DNS: ec2-34-207-142-34.compute-1.amazonaws.com View Connect to the Master Node Using SSH | | | | Configuration details Release label: emr-5.30.1 Hadoop distribution: Amazon 2.8.5 Applications: Hive 2.3.6, Hue 4.6.0, Mahout 0.13.0, Pig 0.17.0, Tez 0.9.2 Log URI: s3://aws-logs-367134191692-us-east-1/elasticmapreduce/ View EMRFS consistent view: Disabled Custom AMI ID: -- | | | |
| Application user interfaces Persistent user interfaces View : -- On-cluster user interfaces View : Not Enabled Enable an SSH Connection | | | | Network and hardware Availability zone: us-east-1a Subnet ID: subnet-0085edc222d4dad91 View Master: Bootstrapping 1 m4.xlarge Core: -- Task: -- Cluster scaling: Not enabled | | | |
| Security and access Key name: RHEL EC2 instance profile: EMR_EC2_DefaultRole EMR role: EMR_DefaultRole Visible to all users: All Change Security groups for Master: sg-00fcc219431b5c0a6 View (ElasticMapReduce-master) Security groups for Core & Task: sg-0a724c5cb4e439160 View (ElasticMapReduce-slave) | | | | | | | |