# Title: DevOps: Replacing data nodes in ES cluster

1. Change the cluster settings as follows.

  curl -XPUT "<http://localhost:9200/_cluster/settings>" -d'  
  {  
    "persistent": {  
      "indices.recovery.max\_bytes\_per\_sec": "750mb"  
    },  
    "transient" : {  
      "cluster.routing.allocation.cluster\_concurrent\_rebalance" : 1,  
      "cluster.routing.allocation.disable\_allocation" : true  
    }  
  }'

2. Boot all the new data instances and wait for the nodes to join the cluster.

  curl -XGET localhost:9200/\_cat/nodes?v

3. Now enable the shard relocation.

  curl -XPUT "<http://localhost:9200/_cluster/settings>" -d'  
  {  
    "transient" : {  
      "cluster.routing.allocation.disable\_allocation" : false  
    }  
  }'

4. Wait for shards to be rebalanced across the data nodes.

  curl -XGET localhost:9200/\_cat/allocation?v  
  curl -XGET localhost:9200/\_cat/health?v  
  curl -XGET localhost:9200/\_cat/shards?v

5. Once rebalancing is done, ssh into one old data node to be removed.  
  a. Comment the contents of /etc/monit.d/elasticsearch.monitrc  
  b. Reload monit config : monit reload

6. Remove the data node from the cluster.

  curl -XPOST http://localhost:9200/\_cluster/nodes/<node\_name>/\_shutdown  
  node\_name value can be found in the 'host' column of the result of curl -XGET localhost:9200/\_cat/nodes?v

7. Wait for shards to be rebalanced across the data nodes.

  curl -XGET localhost:9200/\_cat/allocation?v  
  curl -XGET localhost:9200/\_cat/health?v  
  curl -XGET localhost:9200/\_cat/shards?v

8. Repeat steps 5 - 7 for all the data nodes to be removed from the cluster one by one.

9. Once all old data nodes are removed, then change the cluster setting to default.

  curl -XPUT "<http://localhost:9200/_cluster/settings>" -d'  
  {  
    "persistent": {  
      "indices.recovery.max\_bytes\_per\_sec": "40mb"  
    },  
    "transient" : {  
      "cluster.routing.allocation.cluster\_concurrent\_rebalance" : 2  
    }  
  }'