

Convert an existing Explore cluster that has master nodes

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If your Explore cluster was configured with a single master node or you converted full-sized nodes to serve as dedicated masters, complete the procedures in this guide to convert your existing nodes to data-only and add three dedicated master-only nodes.

Depending on your cluster configuration, you might need to convert former master nodes (such as a physical node or larger virtual node configured as master-only node) to data-only nodes or you might need to remove a former master-only node from the cluster.

- If the cluster has a master node with insufficient resources, you should remove that node from the cluster.
- If the cluster has a single master node that meets the resource specifications, you only need to deploy two other master-only nodes.
- If the cluster has a master node with the full resources required for a data-only node, you can repurpose the higher-resourced node as a data-only node and deploy three new master-only nodes.

Before you begin

- Review the specifications and guidelines in [Deploying master nodes](#).
- Deploy the new master nodes according to the [guide for your implementation](#), but do not join the nodes to the cluster or connect the nodes to Discover or Command appliances. Depending on your implementation, reduce the data disk size to meet the [master node specifications](#).
- [Register each master node](#) with the correct product license. Master-only nodes have dedicated SKUs; be sure to verify these licenses with your account team.

Disable record ingest

1. Log in to the Admin UI on any data-only node.
2. In the Explore Cluster Settings section, click **Cluster Data Management**.
3. Click **Disable Record Ingest**.

Update the Running Config for all existing nodes

1. Log in to the Administration page through `https://<extrahop-hostname-or-IP-address>/admin` on an existing node in the cluster.
2. In the Appliance Settings section, click **Running Config**.
3. Click **Edit Config**.
4. In the section for cluster, delete any entries for `"min_master_nodes"` or `"master": false`.
5. Click **Update**.
6. Click **Done**.
7. Click **Save config** and then click **Save**.
8. In the Appliance Settings section, click **Shutdown or Restart**.
9. Next to the Search service, click **Restart**.
10. Repeat these steps on each existing node in the cluster.

Next steps

[Join each master-only node](#) to the existing cluster and then continue to configure the new master-only nodes.

Configure three master-only nodes

1. Log in to the Admin UI on a node intended for cluster task management.
2. In the Appliance Settings section, click **Running Config**.
3. Click **Edit config**.
4. Add an entry to the Running Config file by completing the following steps:
 - a) Add a comma after the second to last curly brace (}).
 - b) Press ENTER to create a new line.
 - c) Paste the following code on the new line before the final curly brace:

```
"cluster": {
  "data": false,
  "min_master_nodes": 2
}
```

5. Click **Update**.
6. Click **Done**.
7. Click **Save config** and then click **Save**.
8. In the Appliance Settings section, click **Shutdown or Restart**.
9. Next to the Search service, click **Restart**.
10. Repeat these steps on each master-only node.

Configure the data-only nodes

1. Log in to the Admin UI on a node intended for data storage.
2. In the Appliance Settings section, click **Running Config**.
3. Click **Edit config**.
4. Add an entry to the Running Config file by completing the following steps:
 - a) Add a comma after the second to last curly brace (}).
 - b) Press ENTER to create a new line.
 - c) Paste the following code on the new line before the final curly brace:

```
"cluster": {
  "master": false,
  "min_master_nodes": 2
}
```

5. Click **Update**.
6. Click **Done**.
7. Click **Save config** and then click **Save**.
8. In the Appliance Settings section, click **Shutdown or Restart**.
9. Next to the Search service, click **Restart**.
10. Repeat these steps on each data-only node.

Next steps

After all of the nodes are configured with their designated role, [connect each data-only node to Discover and Command appliances](#). Master nodes should not be connected to a Discover or Command appliance.



Tip: [Learn how to add or remove nodes from a cluster that has master nodes](#).

Enable record ingest

1. Log in to the Admin UI on any data-only node.
2. In the Explore Cluster Settings section, click **Cluster Data Management**.
3. Click **Enable Record Ingest**.

Verify Running Config settings for all nodes

It is critical that only three nodes in the cluster section have entries for `"data": false`.

1. Log in to the Administration page through `https://<extrahop-hostname-or-IP-address>/admin` on an existing node in the cluster.
2. In the Appliance Settings section, click **Running Config**.
3. Click **Edit Config**.
4. Review the entry in the section for cluster and verify that the node has the correct entry for the node role (such as `"data": false` for master-only nodes and `"master": false` for data-only nodes). Repeat these steps for each node in the cluster. If more than three nodes in the cluster have an entry for `"data": false`, review your node specifications and update the entries.

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