

Create a recordstore cluster

Published: 2024-07-22

For the best performance, data redundancy, and stability, you must configure at least three ExtraHop recordstores in a cluster.

When you create a recordstore cluster, be sure to deploy all nodes, including manager nodes, in the same location or data center. For more information on supported recordstore cluster configurations, see [Recordstore cluster guidelines](#).

-  **Important:** If you are creating a recordstore cluster with six to nine nodes, you must configure the cluster with at least three manager-only nodes. For more information, see [Deploying manager-only nodes](#).

In the following example, the recordstores have the following IP addresses:

- Node 1: 10.20.227.177
- Node 2: 10.20.227.178
- Node 3: 10.20.227.179

You will join nodes 2 and 3 to node 1 to create the recordstore cluster. All three nodes are data nodes. You cannot join a data node to a manager node or join a manager node to a data node to create a cluster.

-  **Important:** Each node that you join must have the same configuration (physical or virtual) and the same ExtraHop firmware version.

Before you begin

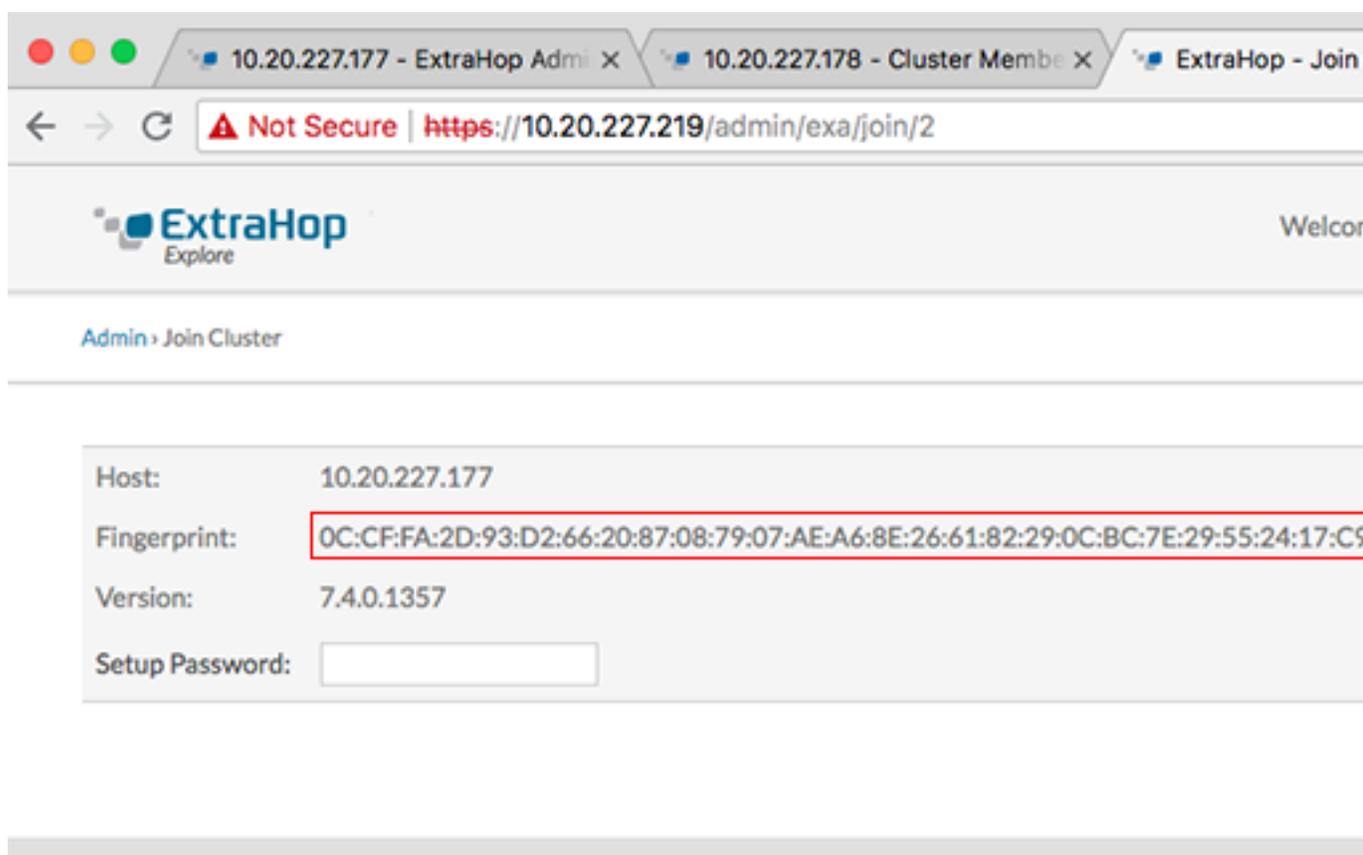
You must have already installed or provisioned the recordstores in your environment before proceeding.

1. Log in to the Administration settings on all three recordstores with the `setup` user account in three separate browser windows or tabs.
2. Select the browser window of node 1.
3. In the Status and Diagnostics section, click **Fingerprint** and note the fingerprint value.
You will later confirm that the fingerprint for node 1 matches when you join the remaining two nodes.
4. Select the browser window of node 2.
5. In the Explore Cluster Settings section, click **Join Cluster**.
6. In the **Host** field, type the hostname or IP address of data node 1 and then click **Continue**.



Note: For cloud-based deployments, be sure to type the IP address listed in the Interfaces table on the Connectivity page.

7. Confirm that the fingerprint on this page matches the fingerprint you noted in step 3.



8. In the **Setup Password** field, type the password for the node 1 `setup` user account and then click **Join**. When the join is complete, the Explore Cluster Settings section has two new entries: **Cluster Members** and **Cluster Data Management**.
9. Click **Cluster Members**.
You should see node 1 and node 2 in the list.

10.20.227.178 - Cluster Membe X

Not Secure | https://10.20.227.178/admin/extra/nodes/

ExtraHop Explore

Admin > Cluster Members

Cluster Members

Nickname	Host	Firmware Version	License Status	Con
10.20.227.177	10.20.227.177	7.4.0.1357	Nominal	Con
10.20.227.178 (this node)	10.20.227.178	7.4.0.1357	Nominal	Con

10. In the Status and Diagnostics section, click **Explore Cluster Status**.

Wait for the Status field to change to Green before adding the next node.

11. Repeat steps 5 through 10 to join each additional node to the new cluster.



Note: To avoid creating multiple clusters, always join a new node to an existing cluster and not to another single appliance.

12. When you have added all of your recordstores to the cluster, click **Cluster Members** in the Explore Cluster Settings section.

You should see all of the joined nodes in the list, similar to the following figure.

10.20.227.177 - ExtraHop Admi X | 10.20.227.178 - Connectivity - X | 10.20.227.179 - Cluster Membe X

Not Secure | https://10.20.227.219/admin/extra/nodes/

ExtraHop Explore

Welcome, setup. [Change default password](#) [Log Out](#) [Help](#)

Admin > Cluster Members

Hostname: 10.20.227.219 SID: EXTR-EXTR Version: 7.4.0.1357

Cluster Members

Nickname	Host	Firmware Version	License Status	Connection Status	Actions
10.20.227.177	10.20.227.177	7.4.0.1357	Nominal	Connected	Remove Node
10.20.227.178	10.20.227.178	7.4.0.1357	Nominal	Connected	Remove Node
10.20.227.179 (this node)	10.20.227.179	7.4.0.1357	Nominal	Connected	Leave Explore Cluster

13. In the Explore Cluster Settings section, click **Cluster Data Management** and make sure that **Replication Level** is set to **1** and **Shard Reallocation** is **ON**.

Next steps

Connect the console and sensors to ExtraHop recordstores [↗](#).

Recordstore cluster guidelines

The following table shows recommended guidelines for recordstore cluster configuration.

Number of Data Nodes	Supported Cluster Composition
1 or 2	Not supported
3	3 Mixed (Traditional Data + Manager) Nodes
4	4 Mixed (Traditional Data + Manager) Nodes
5	5 Mixed (Traditional Data + Manager) Nodes
6	6 Dedicated Data Nodes + 3 Dedicated Manager Nodes
7	7 Dedicated Data Nodes + 3 Dedicated Manager Nodes
8	8 Dedicated Data Nodes + 3 Dedicated Manager Nodes
9	9 Dedicated Data Nodes + 3 Dedicated Manager Nodes
10 or more	Not supported