


Deploy an ExtraHop recordstore with Hyper-V

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The following procedures explain how to deploy the ExtraHop virtual recordstore on the Microsoft Hyper-V platform. You must have experience administering your hypervisor product to complete these procedures.

Virtual machine requirements


You must have an existing installation of Hyper-V on Windows Server 2012 or later capable of hosting the virtual recordstore. In addition, you need Hyper-V Manager to manage the virtual machine.

 **Important:** ExtraHop tests virtual clusters on local storage for optimal performance. ExtraHop strongly recommends deploying virtual clusters on continuously available, low latency storage, such as a local disk, direct-attached storage (DAS), network-attached storage (NAS), or storage area network (SAN).

The following table provides the server hardware requirements for the recordstore.

vCPUs	Memory	Datastore disk
4	8 GB RAM	150 GB to 250 GB
8	16 GB RAM	150 GB to 500 GB
16	32 GB RAM	150 GB to 1 TB
32	64 GB RAM	150 GB to 2 TB

The hypervisor CPU should provide Streaming SIMD Extensions 4.2 (SSE4.2) and POPCNT instruction support.

 **Note:** When you deploy a recordstore, you must create a second virtual disk, which is required to store record data. The minimum datastore disk size for all configurations is 150 GB. Consult with your ExtraHop sales representative or ExtraHop Support to determine the datastore disk size that is best for your needs.

Import the ExtraHop virtual machine

Before you begin


If you have not already done so, download the ExtraHop firmware file for Hyper-V from the [ExtraHop Customer Portal](#) and extract the contents from the .zip file to your Windows Server.

1. On your Windows Server machine, open Server Manager.
2. From the Tools menu, click **Hyper-V Manager**.
3. In the Actions pane, click **Connect to Server...**
4. Select your virtualization server and then click **OK**.
5. In the Actions pane, click **Import Virtual Machine...**
If the Before You Begin screen appears, click **Next**. Otherwise, continue to the next step.
6. Click **Browse...** and navigate to the `exa-5100v` folder you extracted previously. Then click **Select Folder**.
7. Click **Next**.
8. On the Select Virtual Machine screen click **exa-5100v** and then click **Next**.

9. On the Choose Import Type screen, select **Copy the virtual machine (create a new unique ID)**.
10. On the Choose Folders for Virtual Machine Files screen, specify a new folder to store the virtual machine files, and then click **Next**.
11. On the Choose Storage Folders to Store Virtual Hard Disks screen, select the folder you specified in step 10, and then click **Next**.
12. On the Connect Storage screen, select **Remove storage**, and then click **Next**.
You will create the datastore virtual hard disk in a later procedure.
13. On the Connect Network screen, select **HyperV Virtual LAN** from the Connection drop-down list, and then click **Next**.
14. On the Summary screen, review your choices, and then click **Finish**. Wait for the files to finish copying.
15. Rename the virtual machine. In the Virtual Machines list, right-click the exa-5100v appliance and click **Rename...**
16. Type a unique name to easily identify multiple instances of recordstore that you are importing.
17. Repeat steps 5-14 for each additional recordstore.

Create a datastore disk

Create a virtual hard disk (VHDX) for each recordstore that you plan to deploy.

1. In the Virtual Machines list, right-click the recordstore and click **Settings**.
2. In the Hardware section, click **IDE Controller 0**.
3. Click **Hard Drive** and then click **Add**.
4. Select **Virtual hard disk** and then click **New**.
If the Before You Begin screen appears, click **Next**. Otherwise, continue to the next step.
5. On the Choose Disk Format screen, select **VHDX**, and then click **Next**.
6. On the Choose Disk Type screen, select **Fixed size** or **Dynamic**, and then click **Next**.
If you select **Dynamic**, make sure you do not over-allocate your disk space as you could potentially run out of storage space on your server.
7. In the Name field, type `extrahop-data.vhdx`.
The datastore disk for all recordstores must be named `extrahop-data.vhdx`
8. In the Location field, specify the file location where you imported the virtual machine files in the first procedure.
 -  **Important:** Save the extrahop-data.vhdx file in a unique location for each instance of the recordstore you are deploying.
9. On the Configure Disk screen, select **Create a new blank virtual hard disk**, and then type a value based on your requirements in the Size field. 150 GB is the minimum size.
10. Click **Next**.
11. Click **Finish**.
12. Click **Apply** and then click **OK**.
13. Repeat steps 1-12 for each additional recordstore you are deploying.

Configure memory and processor settings

Configure the amount of memory and virtual processors allocated to the recordstore based on the virtual machine requirements table above.

1. In the Virtual Machines list, right-click the recordstore, and then click **Settings**.
2. In the Hardware section, click **Memory**.
3. In the Startup RAM field, type the amount of memory you want to assign to the recordstore.


4. Click **Apply**.
5. In the Hardware section, click **Processor**.
6. In the Number of virtual processors field, specify the number of vCPUs you want to assign to the recordstore.
7. Click **Apply**.
8. Click **OK**.
9. Repeat steps 1-8 for each additional recordstore you are deploying.

Start the virtual machines

1. In the Virtual Machines list, right-click the virtual machine, and then select **Start**.
2. Right-click the virtual machine again and select **Connect**.
3. At the login prompt, type `shell`, and then press ENTER.
4. At the password prompt, type `default`, and then press ENTER.
5. Type `show ipaddr` and then press ENTER to display the IP address and netmask of the recordstore. If you need to configure a static IP address, see [Configure a static IP address through the CLI](#).
6. Repeat steps 1-5 for each additional recordstore you are deploying.

Configure a static IP address through the CLI

The ExtraHop system is configured by default with DHCP enabled. If your network does not support DHCP, no IP address is acquired, and you must configure a static address manually.

 **Important:** We strongly recommend [configuring a unique hostname](#). If the IP address on the sensor is changed, the console can re-establish connection easily to the sensor by hostname.

1. Access the CLI through an SSH connection, by connecting a USB keyboard and SVGA monitor to the physical ExtraHop appliance, or through an RS-232 serial (null modem) cable and a terminal emulator program. Set the terminal emulator to 115200 baud with 8 data bits, no parity, 1 stop bit (8N1), and hardware flow control disabled.
2. At the login prompt, type `shell` and then press ENTER.
3. At the password prompt, type `default`, and then press ENTER.
4. To configure the static IP address, run the following commands:

- a) Enable privileged commands:

```
enable
```

- b) At the password prompt, type `default`, and then press ENTER.
- c) Enter configuration mode:

```
configure
```

- d) Enter the interface configuration mode:

```
interface
```

- e) Run the `ip` command and specify the IP address and DNS settings in the following format: `ip ipaddr <ip_address> <netmask> <gateway> <dns_server>`

For example:

```
ip ipaddr 10.10.2.14 255.255.0.0 10.10.1.253 10.10.1.254
```

- f) Leave the interface configuration section:

```
exit
```

- g) Save the running config file:

```
running_config save
```

- h) Type `y` and then press ENTER.

Configure the recordstore

After you configure an IP address for the recordstore, log in to the Administration settings on the ExtraHop system through `https://<extrahop-hostname-or-IP-address>/admin` and complete the following recommended procedures.



Note: The default administrator account, with unlimited privileges, has the username `setup` and the password is `default`.

- [Register your ExtraHop system](#)
- Review the [Explore Post-deployment Checklist](#) and configure additional recordstore settings.
- [Create an Explore cluster](#)
- [Connect the recordstore to a console and all sensors](#)
- [Send record data to the Explore appliance](#)