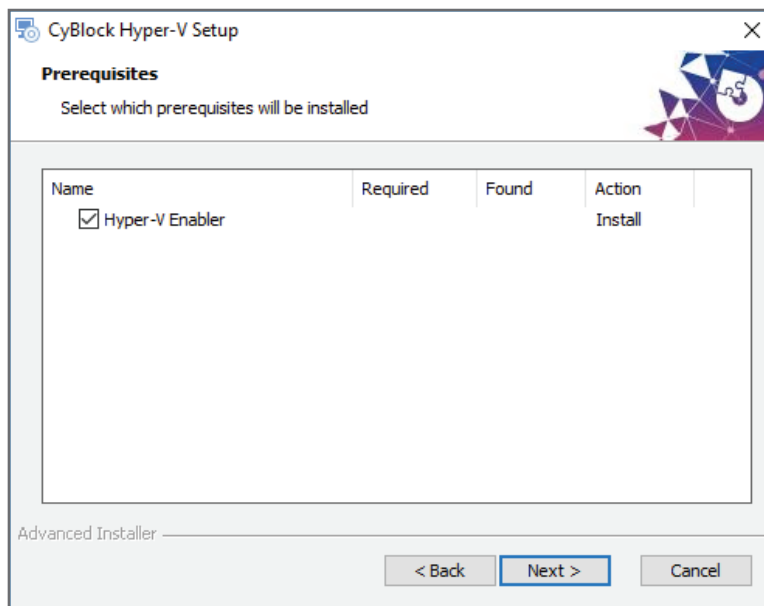


Important Information

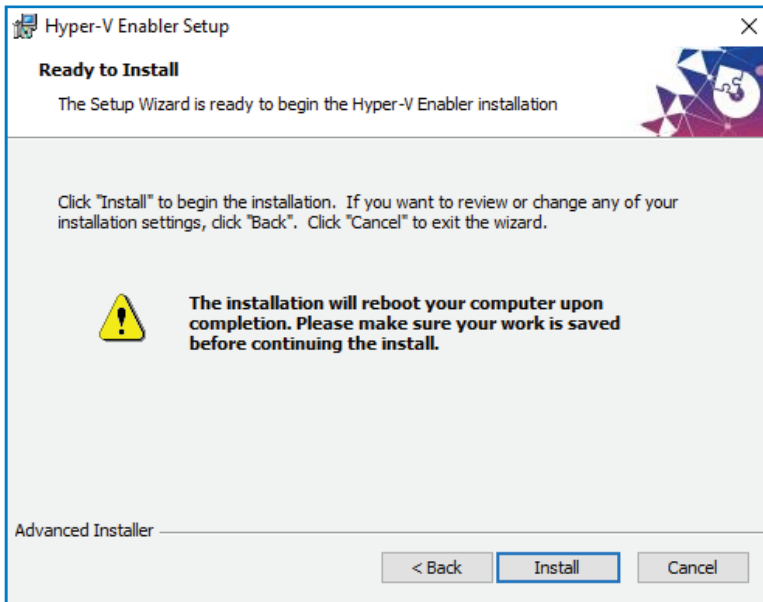
- This guide is for Microsoft Hyper-V hosts that run on Windows operating systems supporting virtual machine configuration versions 8.0 and earlier.
- For **evaluation**, 1 CyBlock VM instance and 1 metric server VM instance can be set up using sample data from your production logs. The instructions for this setup are provided below.
- For **production**, the system is very flexible. Only 1 CyBlock VM instance and x metric server VM instances are needed, where x depends on your environment and performance needs. Contact Technical Support for a production setup recommendation.

STEP 1: Download and install the VM files.

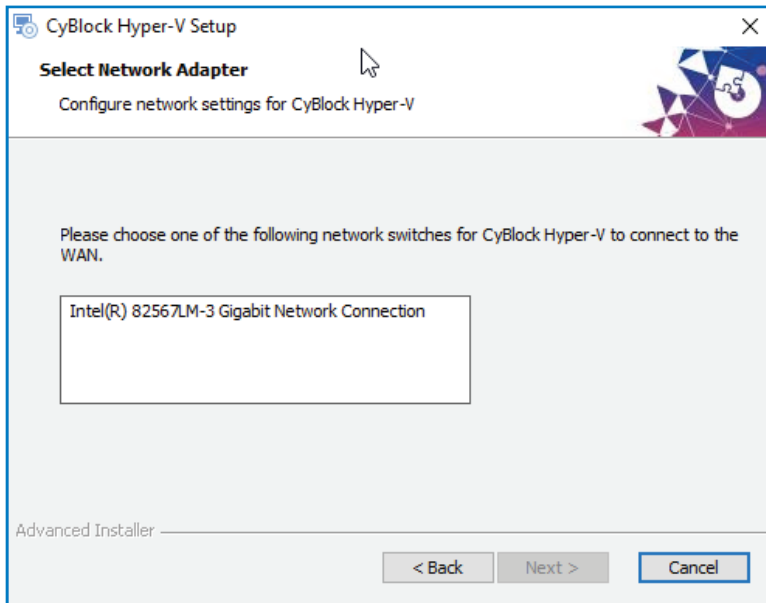
- Download the CyBlock Hyper-V VM .zip file and extract the files. You will see the following:
 - CyBlock folder containing the Windows installer .exe file
 - Metric Server folder containing the Windows installer .exe file
 - CyBlock Hyper-V Guide
- Double-click the executable file to begin creating the CyBlock VM.
- If Hyper-V is not enabled, the Prerequisites Setup wizard appears to assist you in installing the prerequisites.
 - Click **Next** to continue. On the Prerequisites screen, **Hyper-V Enabler** is selected by default.



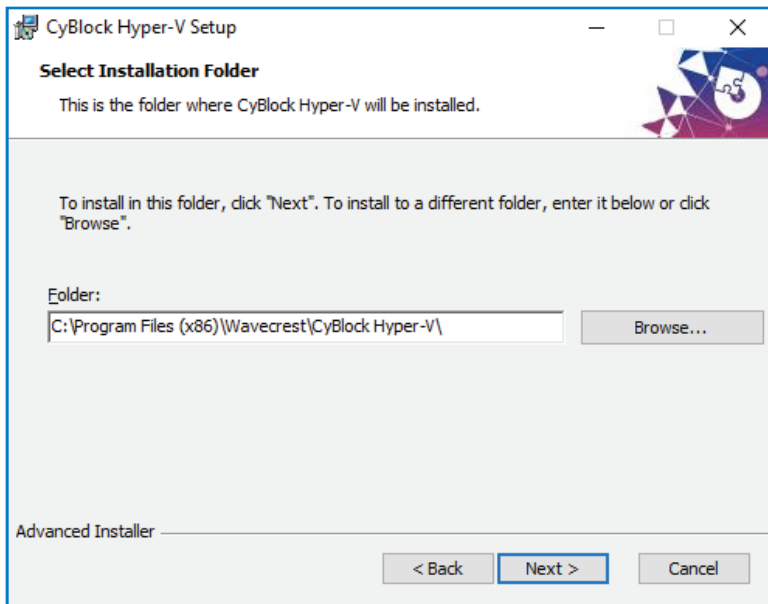
- Click **Next**. The Hyper-V Enabler Setup wizard appears to enable Hyper-V.
- Click **Next**. The Ready to Install screen appears with a warning that the installation will reboot your computer.
Note: Ensure that your work is saved before continuing with the install.



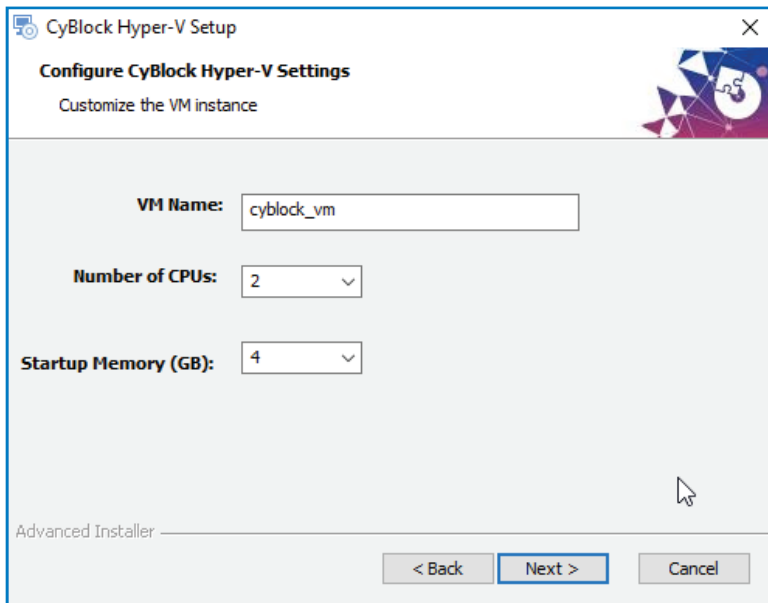
- To continue the install, click **Install**.
- After the setup is complete, click **Finish** to exit the wizard. Your computer will be restarted.
- The CyBlock Hyper-V Setup wizard appears. Now you will create a virtual external switch if one does not already exist.
- Click **Next** to continue.



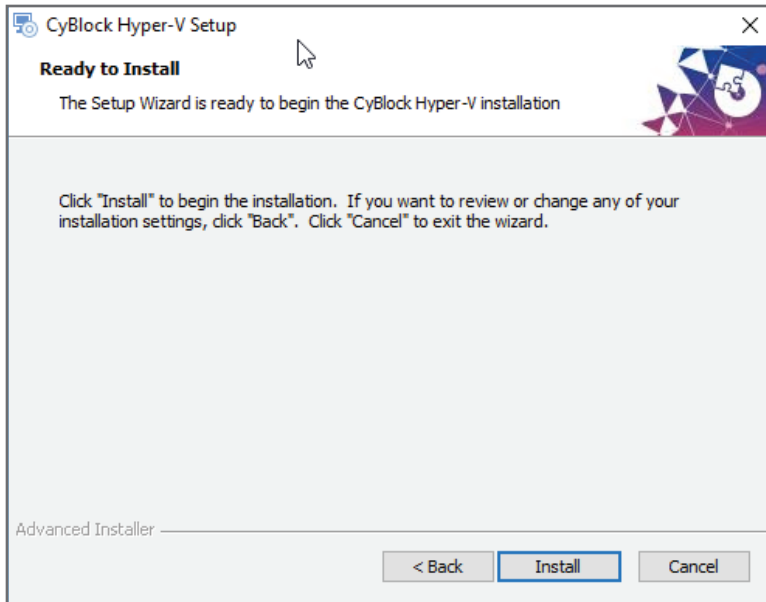
- On the Select Network Adapter screen, select a network switch from the list. (**Note:** If a virtual external switch already exists, you may select it from the Select Network Switch screen.)
- Click **Next**. You will now select where CyBlock Hyper-V will be installed.



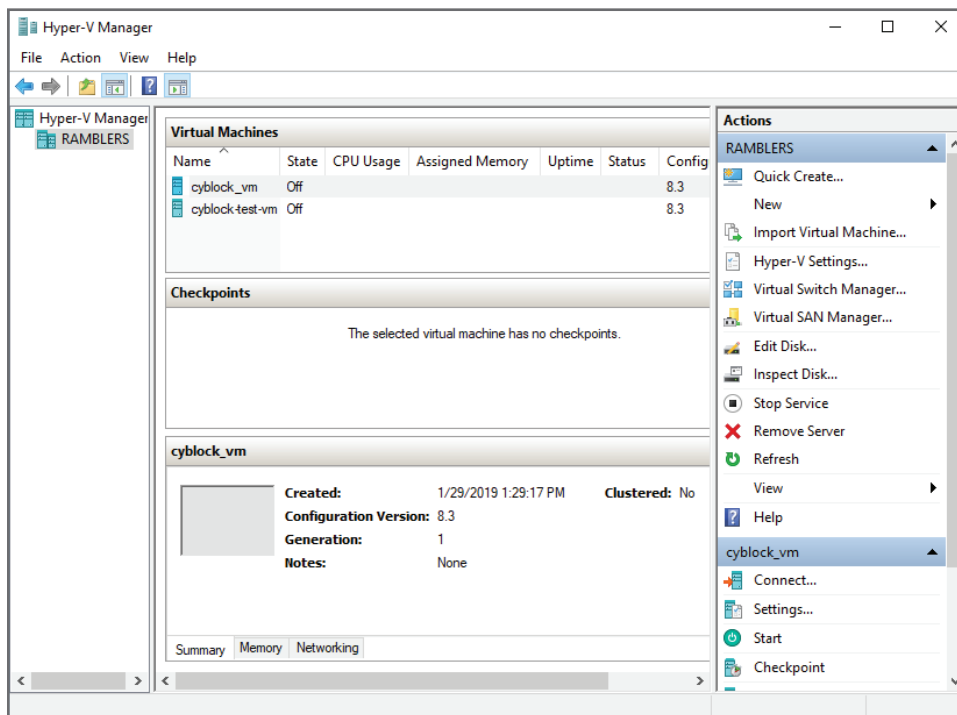
- Click **Next** to install in the default folder, or click **Browse** to select a different folder and then click **Next**.
- You can now customize the VM settings, i.e., VM name, number of CPUs, and startup memory.



- Click **Next** when finished configuring the VM resources. The Ready to Install screen appears.



- Click **Install** to begin the installation. It may take several minutes to uncompress the files and create the VM, and you are asked to wait.
- After the install is complete, the Setup wizard screen allows you to launch Hyper-V Manager.
- Click **Finish** and Hyper-V Manager will open.



- Verify that the virtual switch is assigned. Select *Virtual Switch Manager*.
- You should see “Virtual External Switch” in the list of Virtual Switches. Ensure the correct virtual switch is selected.
- Verify that the allocated resources for your virtual machine are correct. See the table below for the default resource settings.
- Start the virtual machine.

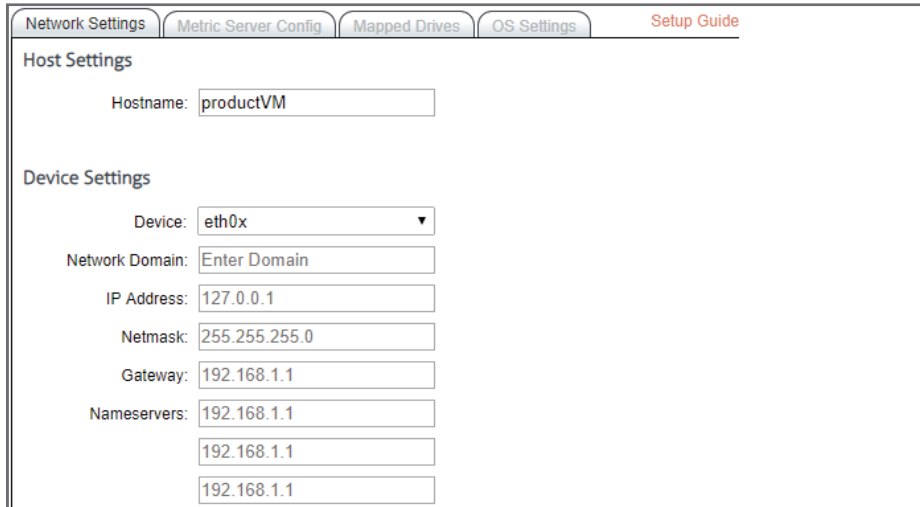
STEP 2: Create the metric server VM.

- Using the instructions in **STEP 1**, create the metric server VM. Be sure to start the virtual machine.
- If you need to add more metric servers, repeat the instructions, giving each virtual machine a different name.
- After the VM starts, the Wavecrest VM Configuration screen appears so that you can enter network information for each server. A Setup Guide link to the VM configuration steps below is also available.

STEP 3: Configure network settings for the CyBlock and metric server VMs.

Now you will configure the CyBlock and metric server VMs for your network.

- In the **Hostname** field, type a friendly name for the CyBlock VM.



The screenshot shows the 'Metric Server Config' tab of the VM Configuration screen. It is divided into two sections: 'Host Settings' and 'Device Settings'. Under 'Host Settings', the 'Hostname' field is filled with 'productVM'. Under 'Device Settings', the 'Device' is set to 'eth0x'. The 'Network Domain' is 'Enter Domain'. The 'IP Address' is '127.0.0.1', 'Netmask' is '255.255.255.0', 'Gateway' is '192.168.1.1', and 'Nameservers' are '192.168.1.1', '192.168.1.1', and '192.168.1.1'. A 'Setup Guide' link is visible in the top right corner.

- In the **Device** drop-down field, select the network device.
- In the **Network Domain** field, type the network domain name, e.g., internal.yourdomain.com.
- In the **IP Address** field, type a local IP address (IPv4 only) for the CyBlock VM.
- In the **Netmask** field, type the subnet mask.
- In the **Gateway** field, type the default gateway IP address of your network.
- In the **Nameservers** fields, enter the IP address of your primary DNS server. If you have a secondary DNS server, enter that IP address and so forth.
- Click **Submit** to apply the configuration.
- Repeat these steps to configure the metric server VM.
- If you need to add more metric servers, repeat these steps for each one.

STEP 4: Set up the CyBlock VM Array.

On the CyBlock VM server, you will add the metric server to the array.

- On the **Metric Server Config** tab, the **Index Grouping** field is prepopulated, and no changes are necessary.



The screenshot shows the 'Metric Server Config' tab of the VM Configuration screen. It is divided into two sections: 'Metric Server Settings' and 'Metric Array'. Under 'Metric Server Settings', the 'Index Grouping' is set to 'Weekly'. Under 'Metric Array', there is a list of 'Metric Servers' with three entries: 'client-01', 'master-01', and 'data-01', each with a red 'X' icon to its right. Below the list is an 'Enter metric server' field with a plus icon to its right. A 'Setup Guide' link is visible in the top right corner.

- Under **Metric Array**, click the green plus icon to add the metric server.
- Enter the IP address of the metric server that was used above.
- Click **Submit**.
- If you need to add more metric servers, repeat these steps on the metric server VM.

STEP 5: Add mapped drives for CyBlock VM installation (optional).

Mapped network drives may be set up to store log file data and to save reports. **Note:** In the list of mapped drives, the **Children** column may display 0 for the following reasons:

- The directory is empty.
 - The directory contains log files, but the remote path is invalid. Recheck your mapped drive settings to ensure they are correct.
- On the **Mapped Drives** tab, click the **Add New Mapped Drive** green plus icon.

Local Folder	Remote Path	Children
folder1	\\path\folder1	5
folder2	\\path\folder2	11
folder3	\\path\folder3	11

- In the **Local Folder** field, type a name for the new folder that you want to create for mapping.

Local Folder:
 Remote Folder:
 User Name:
 Password:

- In the **Remote Folder** field, type the remote path for the mapped drive.
- In the **Username** field, type the network user name authorized to access this drive.
- In the **Password** field, type the password for the authorized network user name.
- Click **Submit**. The mapped drive will be added to the Mapped Drives list.
- To delete a mapped drive, click the red x icon for the mapped drive you wish to delete.

STEP 6: Change the time zone of the VM if necessary.

If your virtual machines are not in the Eastern Time Zone, you can change the time zone for both product and metric server VMs.

- On the **OS Settings** tab, select your time zone from the **Select Time Zone** drop-down field. The VM will restart.

Select Time Zone:

Current time zone
 America/New York Monday, Nov 05, 2018, 02:05 PM (EST -0500)
Available time zones
 Africa/Abidjan Monday, Nov 05, 2018, 07:05 PM (GMT +0000)
 Africa/Accra Monday, Nov 05, 2018, 07:05 PM (GMT +0000)
 Africa/Algiers Monday, Nov 05, 2018, 08:05 PM (CET +0100)
 Africa/Bissau Monday, Nov 05, 2018, 07:05 PM (GMT +0000)
 Africa/Cairo Monday, Nov 05, 2018, 09:05 PM (EET +0200)

STEP 7: Log on to the CyBlock interface.

After a successful installation, users may now log on to the CyBlock interface through their browser. Go to `http://cyblock_VM_IP_address:7999`, where `cyblock_VM_IP_address` is the local IP address for the CyBlock VM server entered above. Enter the following information to log on:

- **Logon:** admin
- **Password:** password

STEP 8: Configure the metric server in CyBlock if necessary.

- After logging on to CyBlock, go to **Data Management - Report Database - Configuration - Settings**. The Metric Server Settings fields are prepopulated by the configuration in **STEP 5**.

Metric Server Settings

Server:

Port:

Index:

Buffer Size (KB):

- The **Server**, **Port**, and **Index** fields are prepopulated. Change the server IP address if necessary.
- The **Buffer Size** field is also prepopulated, and you may change this if necessary.
- Click **Update**.

Using Groups and IDs

Before importing log files, determine whether or not you will use grouping. Groups and IDs can be imported manually or automatically, or you can add each group or ID manually. If you choose not to use grouping, we recommend that you place all of your users in Ungrouped IDs. See the **User Management** section in the product manual.

Default resource settings

The table lists the default resources that are set when creating the VMs. Make any necessary changes according to your Wavecrest recommendation.

Resource	CyBlock VM	Metric Server VM
Processor	4	4
Memory	4 GB	8 GB
Root Drive	20 GB	20 GB
Storage Drive	40 GB	250 GB

Visit our knowledge base at kb.wavecrest.net.



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