



Configuring and Using the Profiler Application

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Adding a Server to the Profiler

Adding vCenter to the ESXi Profiler

At the first login following installation of Hx Workload Profiler, you are redirected to the landing page where you can find the + **Add Workload** option on the top right corner of the page. You can select vCenter, then you can add multiple vCenters.

To calculate the metrics for a host, the Profiler captures the metrics for all the VMs on the Host. You then need to select the VM to be profiled. By default none of the VM's are selected.

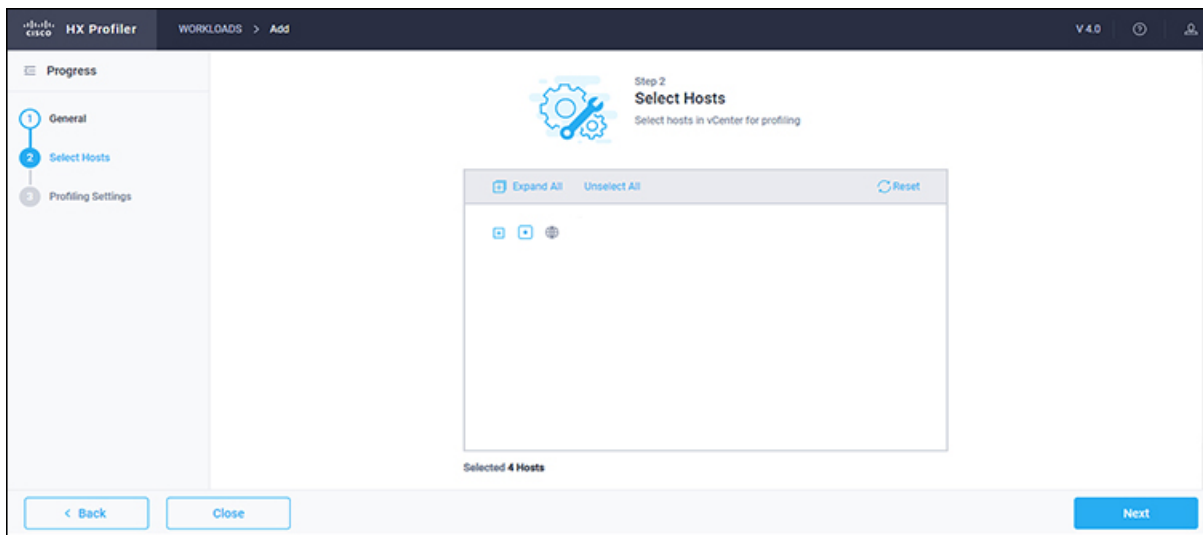
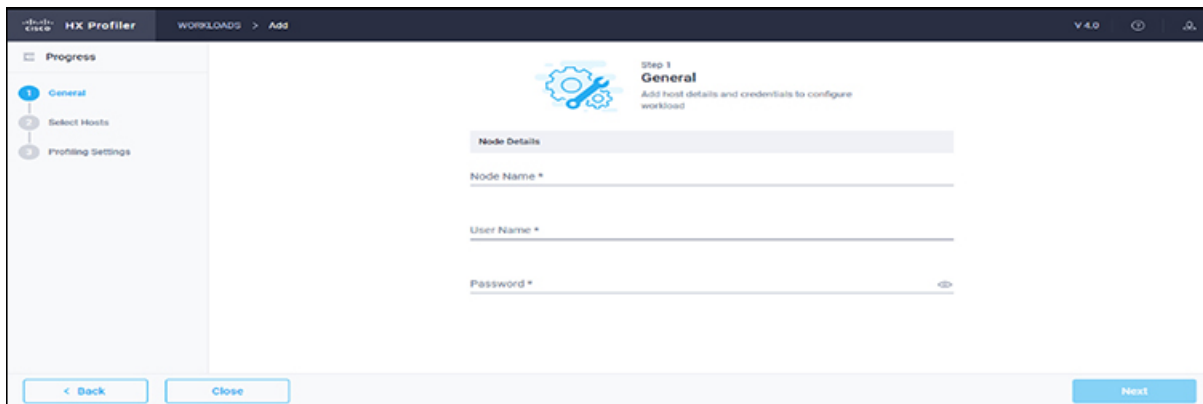
The workflow includes:

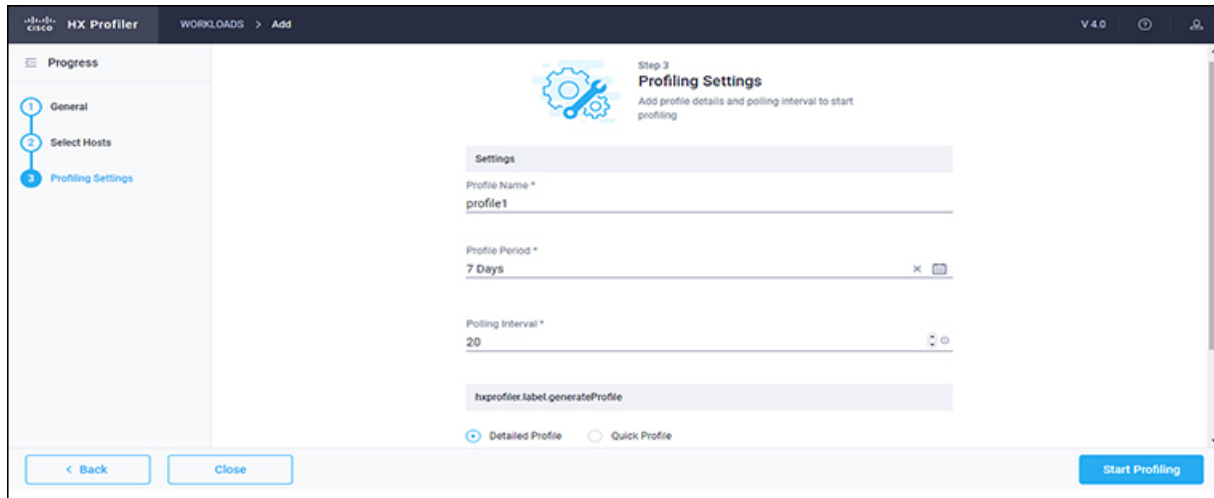
- **Node details tab:** Records your vCenter details and then connects to the vCenter. If the connection succeeds, the **Next** button displays enabling you to select the hosts for profiling.
- **Select Hosts tab:** Provides the vCenter details in hierarchy of vCenter, Datacenters, Clusters, and Hosts, with the option to select hosts to Profile. Default: All hosts in vCenter are selected.
- **Profiling Setting tab,** which provides:
 - **Profile Name:** for specifying the name of the profile which must be unique.
 - **Profile period:** for specifying the period of profiling. Default value is 7days and the minimum value is 1day.
 - **Polling Interval:** for specifies the frequency for which polling should occur.
 - **Quick Profile:** for a quick estimate
 - **Detailed Profile:** for detailed end-to-end profile results.

Step 1 Log in to the Profiler. See [Logging in to the ESXi Profiler](#).

Step 2 Follow the steps provided to enter values for the following options:

Item	Description
vCenter Name	Name of the vCenter you are adding.
User Name	Name of the user as part of the login credentials for the vCenter. Note HxProfiler uses VMware SDK to collect different performance metrics. This requires connecting to the VMware vSphere server using an user account that has either administrator privileges or with Server Manager role, which has the access privileges to get the performance data.
Password	The password set as part of the login credentials for the vCenter.
Polling Interval	The interval at which you want polling to occur. The default is 20 seconds. You can change the interval to between 20-120 seconds, based on the number of hosts and VMs being polled in that vCenter.

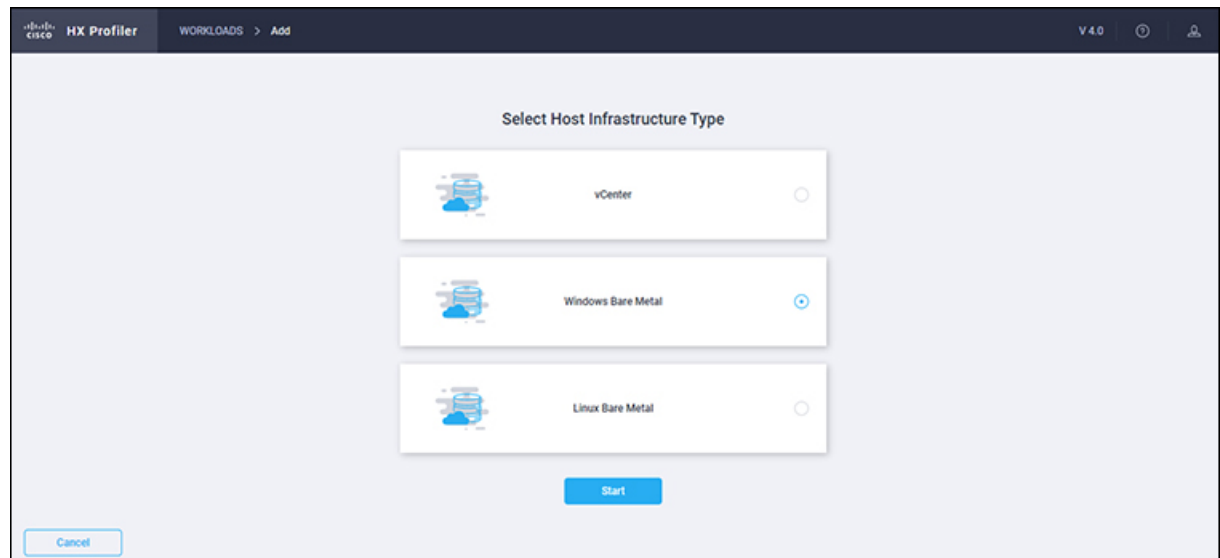




- Step 3** Click **Start Profiling**. The Profiler service starts automatically. When the connection status indicates successful connection, click **Next**.
- Step 4** On the **Poll filter** tab, review the hierarchy values.

Adding Windows Bare Metal to the Profiler

At the first login following installation of Hx Workload Profiler, you are redirected to + **Add Workflow**. You can select **Windows Bare Metal** to add Windows Bare Metal to the workload.



SUMMARY STEPS

1. Log in to the Profiler.
2. On the **Node details** tab, enter values for the following options:

3. If you select the Host Name/IP address option, click **Save**. If the given credentials / IP is valid, then workload will be added successfully. In case of any error, recheck and update the provided details, then click Save to add the workload successfully.
4. If you select the IP Address Range, click **Validate**. Given IP range and credentials are validated, and if any of the VMs are not reachable, any error details will be updated in tabular format.
5. If no errors are observed, click **Save**. If there are errors, please check the respective error VM details, rectify them manually and then click on **Revalidate**. Click **Save** to add the workload.

DETAILED STEPS

Step 1 Log in to the Profiler.

Step 2 On the **Node details** tab, enter values for the following options:

Item	Description
Windows Cluster Name	Name of the cluster you are trying to add
Host Name/IP Address	To enter a single host / different IPs
IP Address Range	To enter a range of VM IPs
User Name	Login username for windows baremetal
Password	Login password for windows baremetal
Polling Interval (seconds)	Default 20 seconds

The screenshot shows the 'General' configuration page in the HX Profiler application. The page title is 'General' with the subtitle 'Add host details and credentials to configure workload'. A note indicates: 'Note : Supported and tested version of Windows Servers 2012R2, 2016 and 2019'. The configuration is divided into sections: 'Cluster Details' with a 'Windows Cluster Name *' field; 'Host' with radio buttons for 'Host Name / IP' (selected) and 'IP Address Range', and a 'Host IP *' field with a '+' icon; and 'Credentials' with fields for 'User Name' and 'Password'. At the bottom, there are buttons for '< Back', 'Close', and 'Next'. The left sidebar shows a 'Progress' section with 'General' (1) and 'Profiling Settings' (2).

- Step 3** If you select the Host Name/IP address option, click **Save**. If the given credentials / IP is valid, then workload will be added successfully. In case of any error, recheck and update the provided details, then click Save to add the workload successfully.
- Step 4** If you select the IP Address Range, click **Validate**. Given IP range and credentials are validated, and if any of the VMs are not reachable, any error details will be updated in tabular format.
- Step 5** If no errors are observed, click **Save**. If there are errors, please check the respective error VM details, rectify them manually and then click on **Revalidate**. Click **Save** to add the workload.

Adding Linux Bare Metal to the Profiler

At the first login following installation of Hx Workload Profiler, you are redirected to + **Add Workflow**. You can select **Linux Bare Metal** to add Linux Bare Metal to the workload.

SUMMARY STEPS

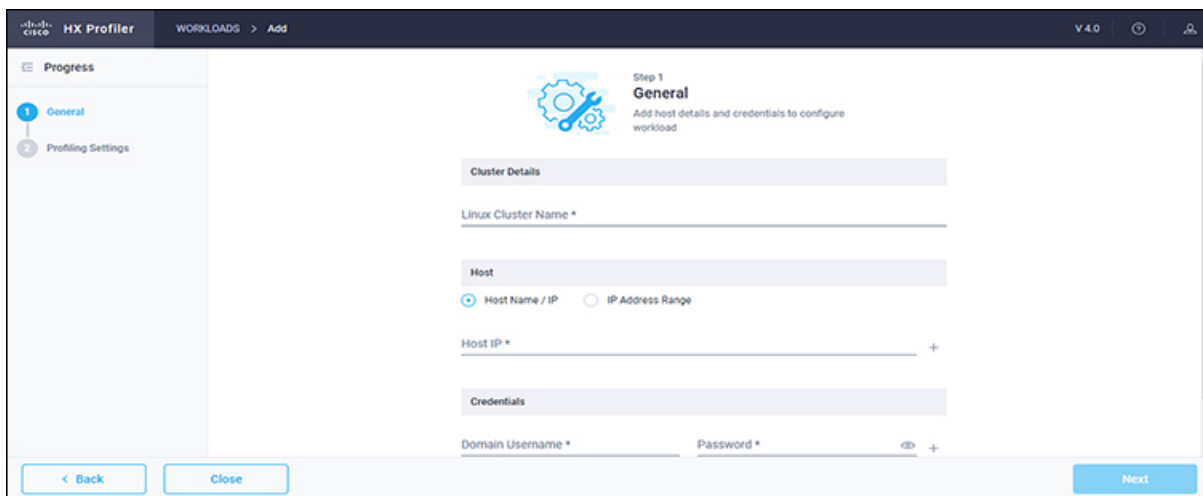
1. Log in to the Profiler.
2. On the **Node details** tab, enter values for the following options:
3. If you select the Host Name/IP address option, click **Save**. If the given credentials / IP is valid, then workload will be added successfully. In case of any error, recheck and update the provided details, then click Save to add the workload successfully.
4. If you select IP Address Range, click **Validate**. Given IP range and credentials are validated, and if any of the VMs are not reachable, any error details will be updated in tabular format.
5. If no errors are observed, click **Save**. If there are errors, please check the respective error VM details, rectify them manually and then click on **Revalidate**. Click **Save** to add the workload.

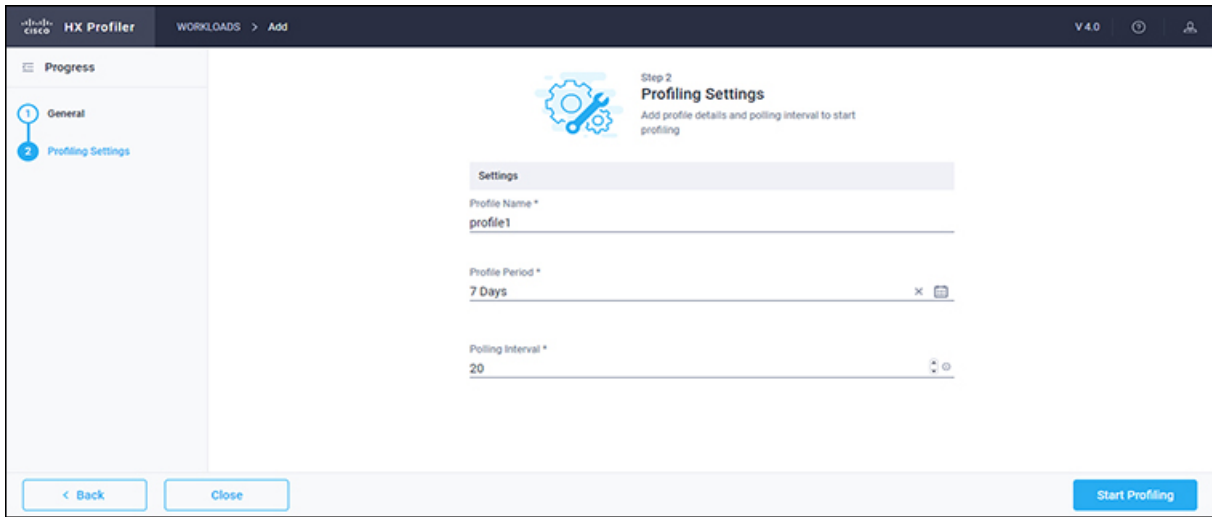
DETAILED STEPS

Step 1 Log in to the Profiler.

Step 2 On the **Node details** tab, enter values for the following options:

Item	Description
Linux Cluster Name	Name of the cluster you are trying to add
Host Name/IP Address	To enter a single host / different IPs
IP Address Range	To enter a range of VM IPs
User Name	Login username for Linux baremetal
Password	Login password for Linux baremetal
Polling Interval	Default 20 seconds





Step 3 If you select the Host Name/IP address option, click **Save**. If the given credentials / IP is valid, then workload will be added successfully. In case of any error, recheck and update the provided details, then click Save to add the workload successfully.

Step 4 If you select IP Address Range, click **Validate**. Given IP range and credentials are validated, and if any of the VMs are not reachable, any error details will be updated in tabular format.

Step 5 If no errors are observed, click **Save**. If there are errors, please check the respective error VM details, rectify them manually and then click on **Revalidate**. Click **Save** to add the workload.

Adding Hyper-V to the Profiler

At the first login following installation of the Hx Workload Profiler, you are redirected to the landing page where you can find the **Add Workload** option on the top right corner of the page. Select HyperV to add multiple HyperV.

To calculate the metrics for a host, the Profiler captures the metrics for all the VMs on the Host. Select the VM to be profiled (by default none of the VMs are selected).

The workflow includes:

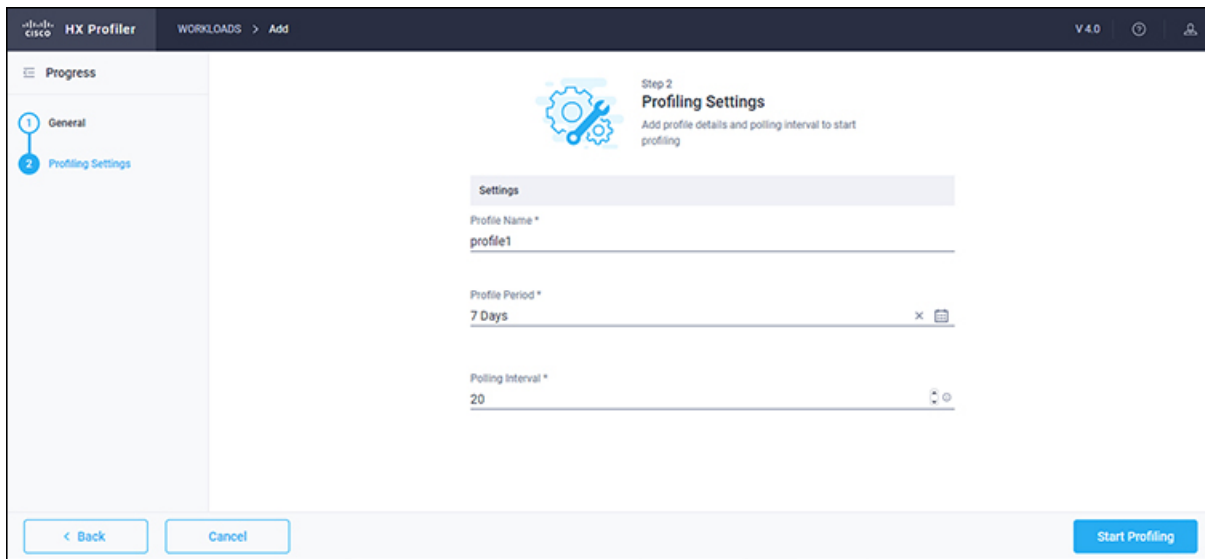
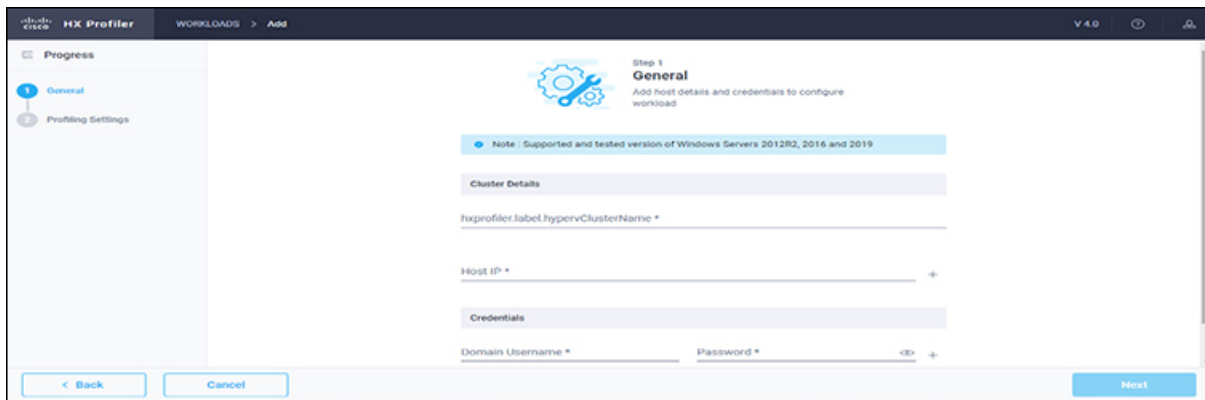
- Node details tab: Records your Hyper-V details and then connects to the Hyper-V. If the connection succeeds, details regarding the profile named appear. You can also specify and save the profile period time for profiling by clicking on the start profile button to start profiling.

Step 1 Log in to the Profiler. See [Logging in to the Hyper-V Profiler](#).

Step 2 On the **Node details** tab, enter values for the following options:

Item	Description
Hyper-V Cluster Name	Name of the Hyper-V you are adding.
Host IP	IP address of the Hyper-V node. The Add button allows you to add multiple Hyper-V host IP addresses.

Item	Description
User Name	Name of the user as part of the login credentials for the Hyper-V. Note The User Name must have the Admin role assigned to it.
Password	Password being set as part of the login credentials for the Hyper-V. The Add button allows you to add all the username and passwords for the IPs mentioned in the Host IP section. Note If the username and password is same for all the Hyper-Vs or any 2 or more Hyper-Vs, then there is no need to mention it again.
Polling Interval (seconds)	The interval at which you want polling to occur. Default: 20 seconds. You can change the interval to between 20 and 120 seconds.



Step 3 Click Save.

Starting Data Profiling

Starting ESXi Data Profiling

Following the successful addition of a vCenter Server, the new vCenter displays on the Data Inventory (home) page. You configure the profiling attributes by providing the profile name and duration.

Table 1: Profiling Operation Options

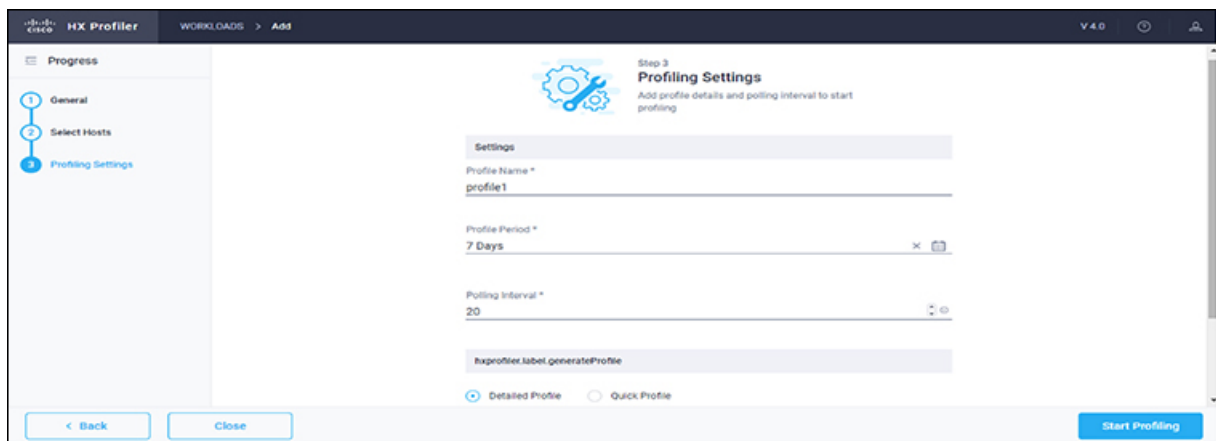
Item	Description
Delete (trash can)	Deletes a previously added vCenter.
Edit (pen)	Edit vCenter properties to add or remove hosts for polling.
Stop (symbol)	Stops the profiling so you can resume it later.
Reset (refresh symbol)	Performs a reset operation, which creates a new profile and starts polling. When you trigger reset, the profiler stops the active/running profile and creates a new one. A prompt asks for confirmation.
View Collection	Opens the View Collection page so you can browse through the collected data as part of the profiling to review the HOST and VM level data.

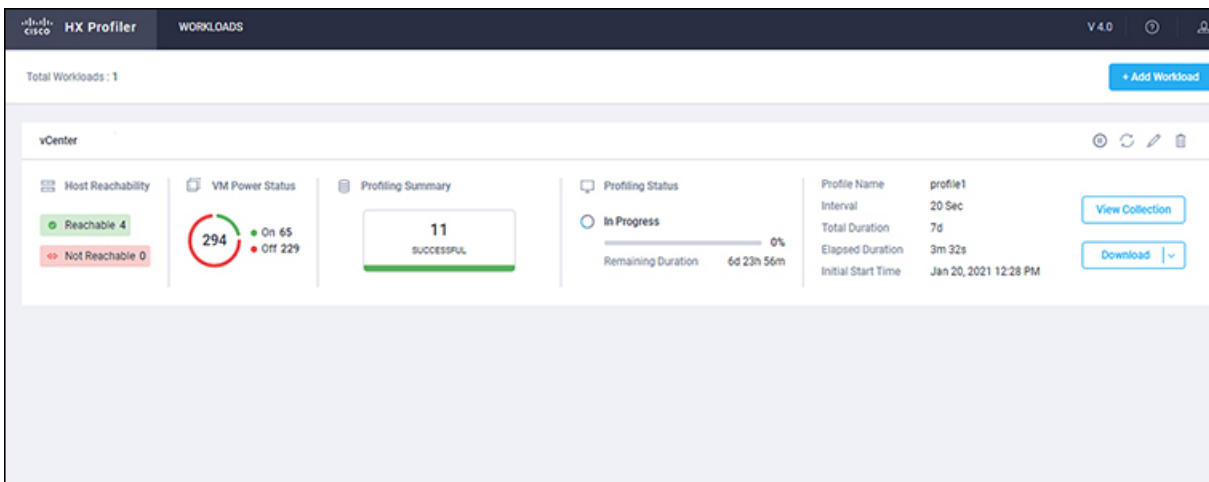
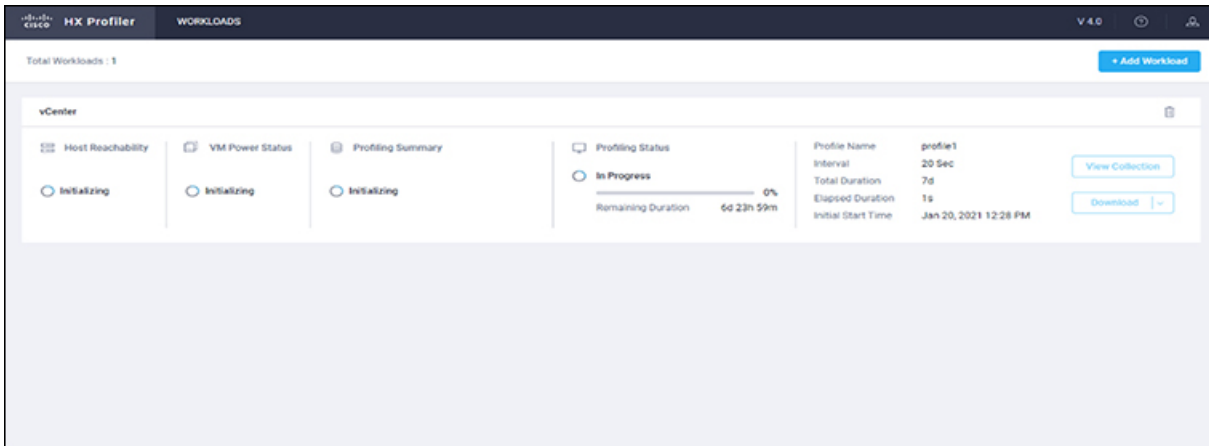
Profiling starts as soon as you enter the profiler name ,days and polling period.

Step 1

In the dialog that displays, perform the following steps:

- Enter a name for the profile.
- Select a duration value from the **Profiling Period** down-drop list.
- Click **Ok**.





Following successful profile creation, the Profiler begins polling the selected hosts and all the VMs on those hosts. When the polling starts, the data collector runs as a background process. The Datacenter Inventory page displays information about the hosts and polling, showing number of hosts and the status of the polling.

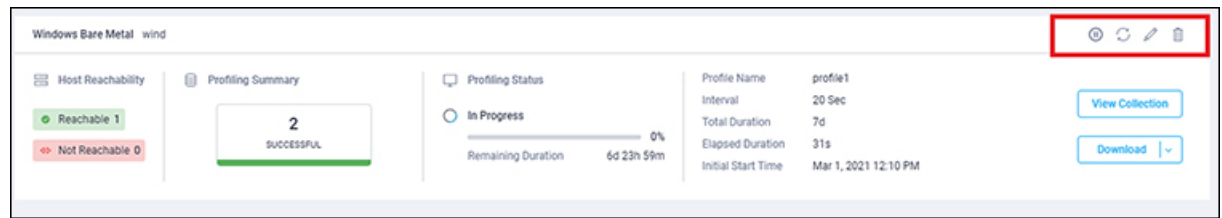
- Step 2** (Optional) To stop an in-progress profiling operation so you can resume it later, see [Stopping the Profiler Service](#).
- Step 3** (Optional) To stop an in-progress profiling operation, click **Reset**. You can then start a new one.
- Step 4** (Optional) To browse through the collected data, see [Viewing an ESXi Collection, on page 23](#).
- Step 5** (Optional) To download profiling data, see [Downloading ESXi Profiling Results, on page 14](#).

Starting Windows Bare Metal Data Profiling

Following the successful addition of a Windows Bare Metal, the newly added Windows Bare Metal displays on the Data Inventory (home) page. You can configure the profiling attributes by providing the profiling name and duration.

Table 2: Profiling Operation Options

Item	Description
Delete (trash can)	Deletes the selected Windows Bare Metal workload / node
Edit (pen)	Edit Windows Bare Metal to add / remove existing VM/hosts for profiling.
Stop (symbol)	Stops the profiling
Refresh	Performs a reset operation, which creates a new profile and starts the polling. When reset is clicked, profiler stops the active/running profile and creates a new one. A prompt asks for confirmation.
View Collection	Opens the View Collection page so you can browse through the collected data as part of the profiling to review the HOST and VM level data.



SUMMARY STEPS

1. (Optional) To stop an in-progress profiling operation so you can resume it later, see [Stopping the Profiler Service](#)
2. (Optional) To stop an in-progress profiling operation, click **Reset**. You can then start a new one.
3. (Optional) To browse through the collected data, see [Viewing an ESXi Collection, on page 23](#).
4. (Optional) To download profiling data, see [Downloading ESXi Profiling Results, on page 14](#).

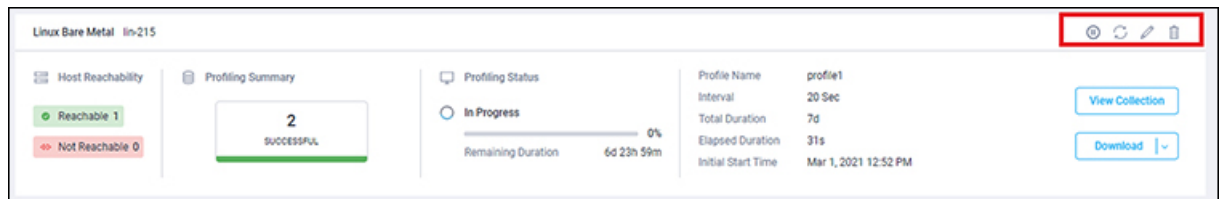
DETAILED STEPS

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- Step 1** (Optional) To stop an in-progress profiling operation so you can resume it later, see [Stopping the Profiler Service](#)
 - Step 2** (Optional) To stop an in-progress profiling operation, click **Reset**. You can then start a new one.
 - Step 3** (Optional) To browse through the collected data, see [Viewing an ESXi Collection, on page 23](#).
 - Step 4** (Optional) To download profiling data, see [Downloading ESXi Profiling Results, on page 14](#).
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Starting Linux Bare Metal Data Profiling

Following the successful addition of a Linux Bare Metal, the newly added Linux Bare Metal displays on the Data Inventory (home) page. You can configure the profiling attributes by providing the profiling name and duration.

Item	Description
Delete (trash can)	Deletes selected Linux Bare Metal workload / node
Edit (pen)	Edit Linux Bare Metal to add / remove existing VM/hosts for profiling.
Stop (symbol)	Stops the profiling
Refresh	Performs a reset operation, which creates a new profile and starts the polling. When reset is clicked, profiler stops the active/running profile and creates a new one. A prompt asks for confirmation.
View Collection	Opens the View Collection page so you can browse through the collected data as part of the profiling to review the HOST and VM level data.



SUMMARY STEPS

1. (Optional) To stop an in-progress profiling operation so you can resume it later, see [Stopping the Profiler Service](#)
2. (Optional) To stop an in-progress profiling operation, click **Reset**. You can then start a new one.
3. (Optional) To browse through the collected data, see [Viewing an ESXi Collection, on page 23](#).
4. (Optional) To download profiling data, see [Downloading ESXi Profiling Results, on page 14](#).

DETAILED STEPS

-
- Step 1** (Optional) To stop an in-progress profiling operation so you can resume it later, see [Stopping the Profiler Service](#)
- Step 2** (Optional) To stop an in-progress profiling operation, click **Reset**. You can then start a new one.
- Step 3** (Optional) To browse through the collected data, see [Viewing an ESXi Collection, on page 23](#).
- Step 4** (Optional) To download profiling data, see [Downloading ESXi Profiling Results, on page 14](#).
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Starting Hyper-V Data Profiling

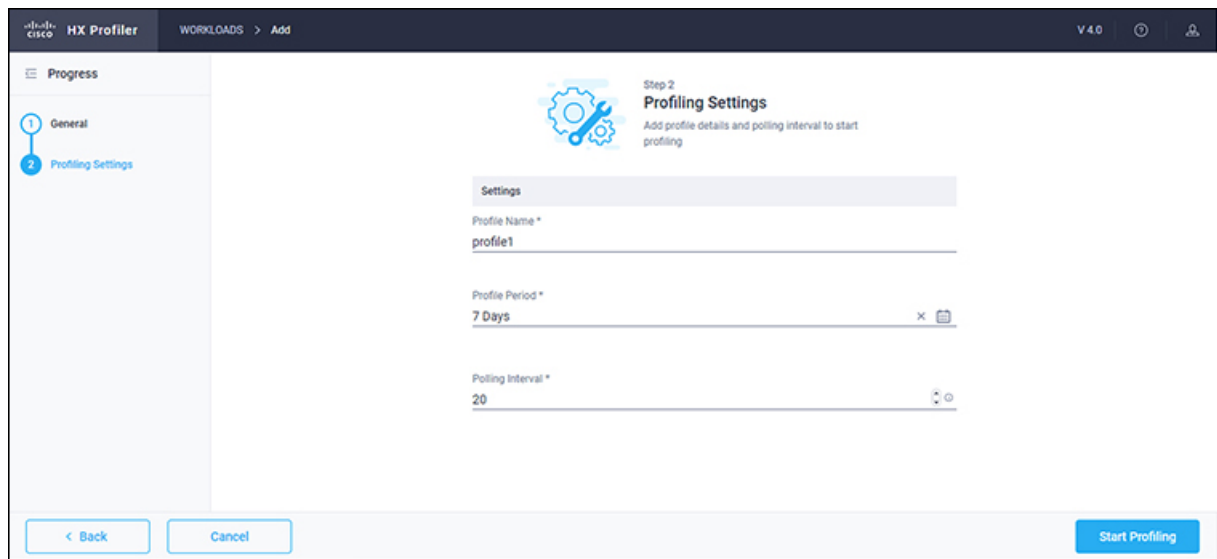
Following the successful addition of a Hyper-V Server, the new Hyper-V displays on the Data Inventory (home) page. You configure the profiling attributes by providing the profile name and duration.

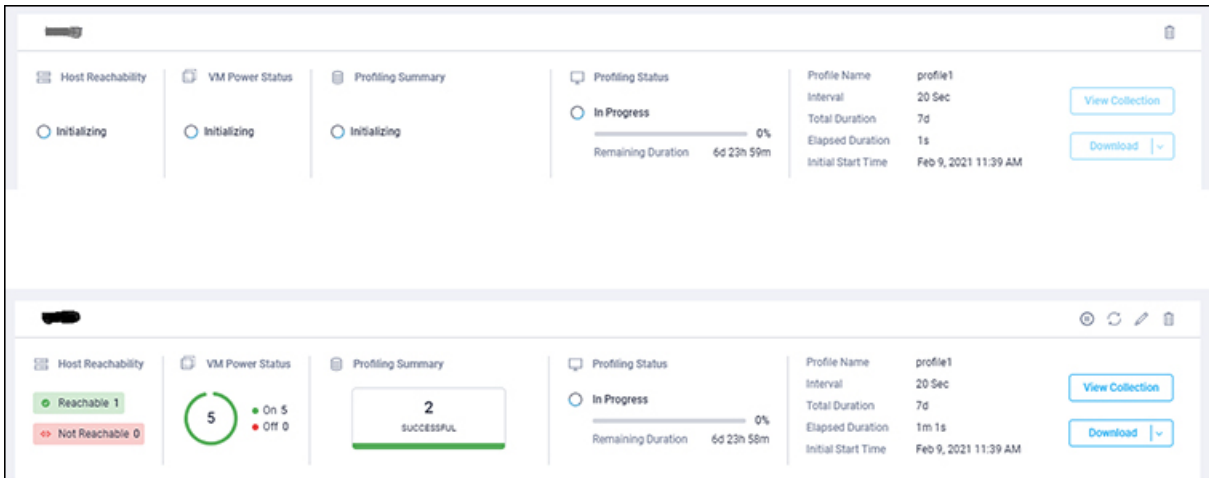
Table 3: Profiling Operation Options

Item	Description
Delete (trash can)	Deletes a previously added Hyper-V.
Edit (pen)	Edit Hyper-V properties to add or remove hosts for polling.
Stop (symbol)	Stops the profiling so you can resume it later.
Reset (refresh symbol)	Performs a reset operation, which creates a new profile and starts polling. When you trigger reset, the Profiler stops the active/running profile and creates a new one. A prompt asks for confirmation.
View Collection	Opens the View Collection page so you can browse through the collected data as part of the profiling to review the HOST and VM level data.

Step 1 In the dialog that displays, perform the following steps:

- a) Enter a name for the profile.
- b) Select a duration value from the **Profiling Period** down-drop list.
- c) Click **Ok**.





Following successful profile creation, the Profiler begins polling the selected hosts and all the VMs on those hosts. When the polling starts, the data collector runs as a background process. The Datacenter Inventory page displays information about the hosts and polling, showing the number of hosts and the status of the polling.

- Step 2** (Optional) To stop an in-progress profiling operation so you can resume it later.
- Step 3** (Optional) To stop an in-progress profiling operation, click **Reset**. You can then start a new one.
- Step 4** (Optional) To browse through the collected data, see [Viewing a Hyper-V Collection, on page 30](#).
- Step 5** (Optional) To download profiling data, see [Downloading Hyper-V Profiling Results, on page 16](#).

Downloading Profiling Results

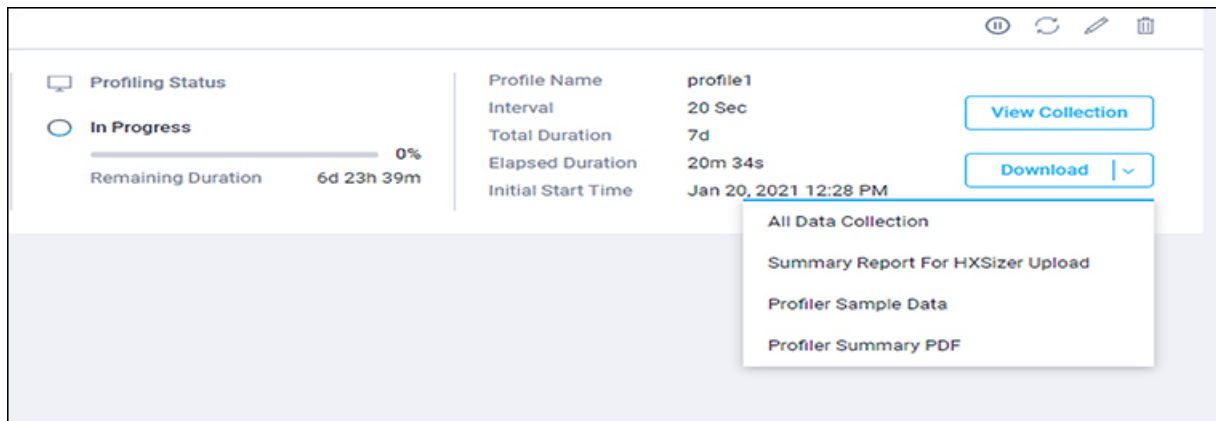
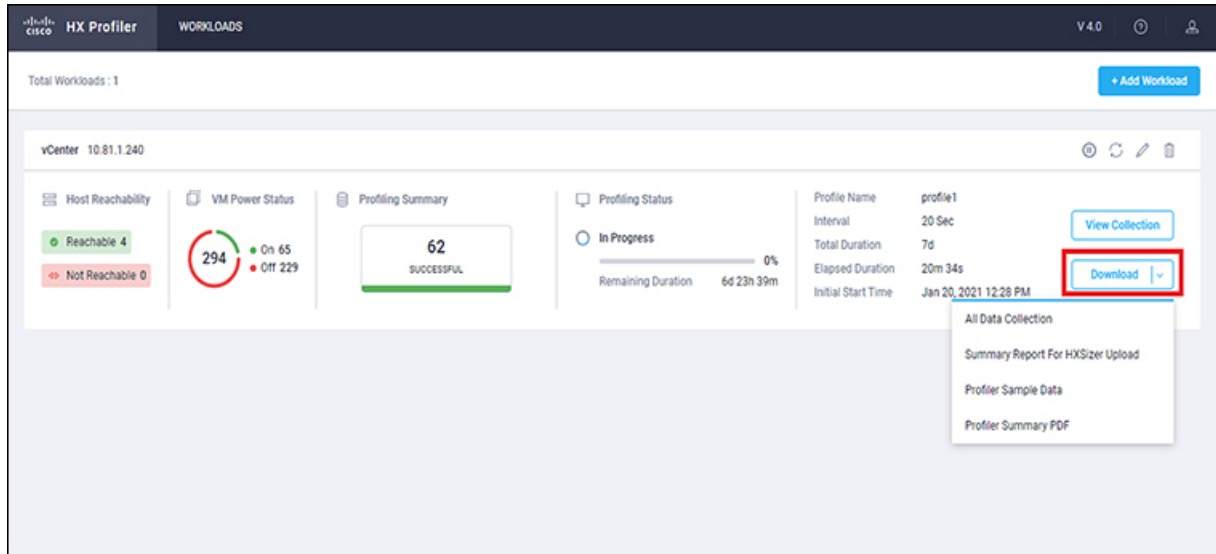
Downloading ESXi Profiling Results

Step 1 On the Datacenter Inventory page, locate and select the profile whose data you want to download.

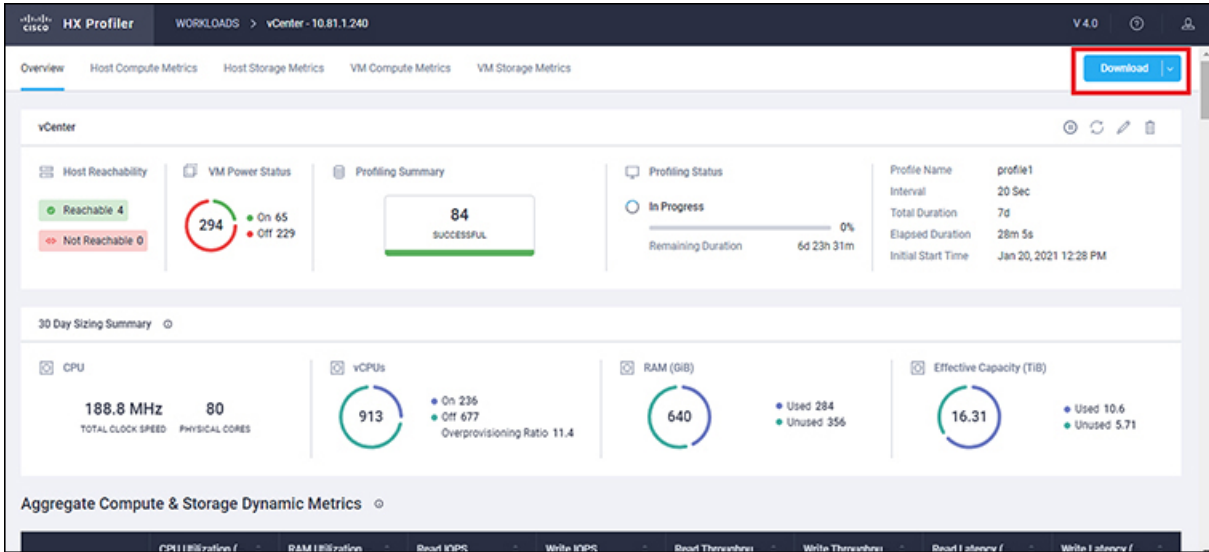
Step 2 Use the **Download** option to select one of the following:

Option	Description
All Data Collection	Downloads 30-day host summary, time series, and CVS for both the host and VM
Summary Report for HxSizer Upload	Collects the historic 30-day information from vCenter and does not require any active polling. The download provides the output in CSV format and can be directly uploaded to the Compute and Capacity Workload of HxSizer.
Profiler Sample Data	Downloads the sampled data for the selected profile in the following formats: <ul style="list-style-type: none"> • Summarized host data (CVS) • Summarized VM data (CVS) • Time series data of host (zipped CSV file) • Time series data of VM (zipped CSV file)

Option	Description
Profiler Summary PDF	PDF download



Step 3 You can still download the profiling results when viewing the compute, storage and network data of various hosts and VMs by clicking on the **Download** button on the top right corner of the UI.

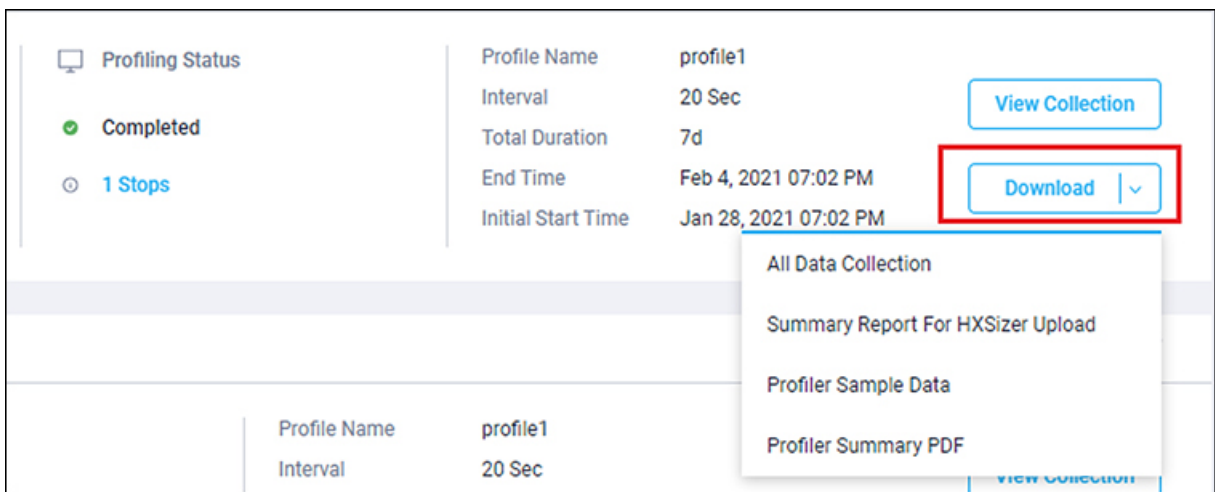
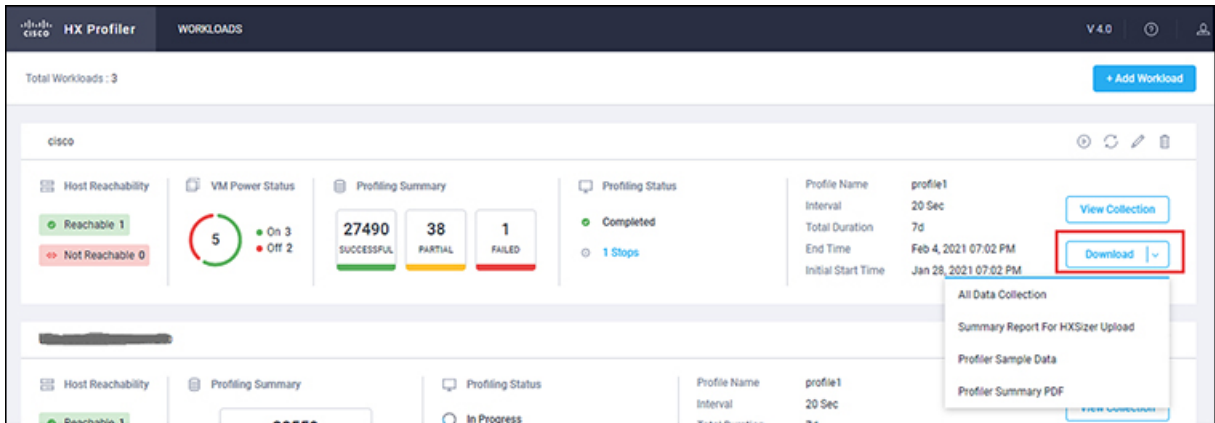


Downloading Hyper-V Profiling Results

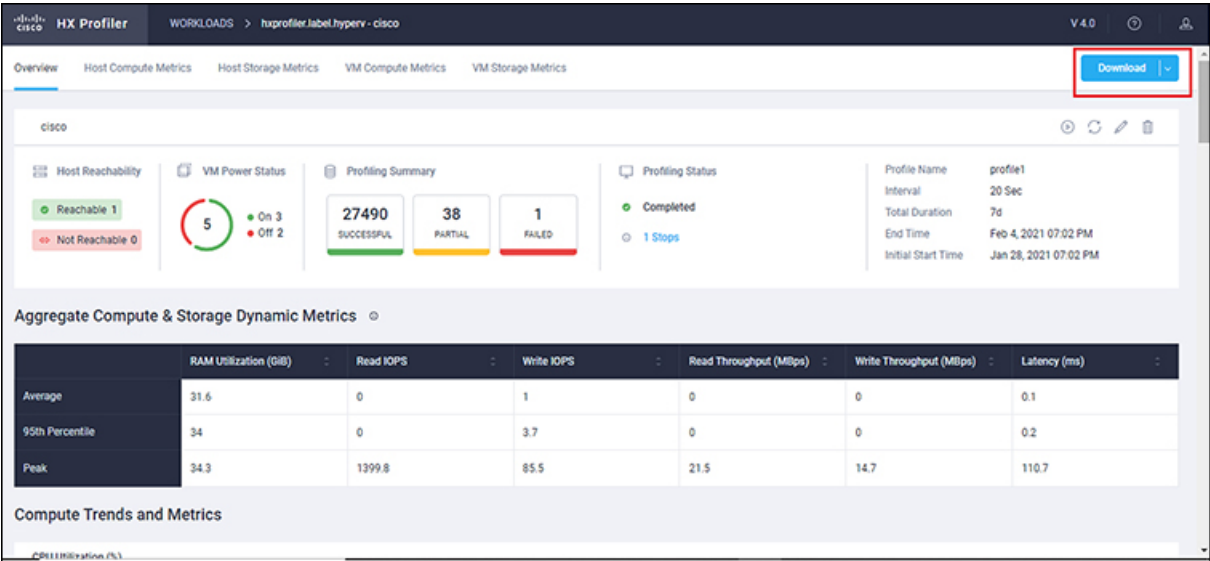
Step 1 On the Datacenter Inventory page, locate and select the profile whose data you want to download.

Step 2 Right-click the **Download** icon at the upper right of the page to select to download one of the following:

Option	Description
All Data Collection	Downloads time series and CVS for both the host and VM
Sizer Upload Summary	Collects the host summary information from Hyper-V. The download provides the output in CSV format and can be directly uploaded to the Compute and Capacity Workload of HxSizer.
Profiler sampled data	Downloads the sampled data for the selected profile in the following formats: <ul style="list-style-type: none"> Summarized host data (CVS) Summarized VM data (CVS) Time series data of host (zipped CSV file) Time series data of VM (zipped CSV file)
Profiler summary	PDF download



Step 3 You can still download the profiling results when viewing the compute, storage and network data of various hosts and VMs by clicking on the **Download** button on the top right of the UI.



Viewing Data Collections from Servers

Viewing ESXi Data Collections from vCenter Servers

The View Collection page has five tabs at the top left of the page, Overview, Host Compute Metrics, Host Storage Metrics, VM Compute Metrics, VM Storage Metrics. When clicked, they show summary data described in his section. The View Collection page also provides the summarized data for Compute Summary and Storage Summary of individual host and VMs. You can also fetch the data for specific period of profiling using the predefined filter present on the top right corner of the page with the minimum being 30minutes or the user can also use the time line to select the time period. The following sections describe the summary data shown through filter tool use and in that shown in each tab and view.

HX Profiler WORKLOADS

Total Workloads : 1 + Add Workload

vCenter 10.81.1.240

Host Reachability Reachable 4 Not Reachable 0	VM Power Status 294 On 64 Off 230	Profiling Summary 3368 SUCCESSFUL 25 PARTIAL	Profiling Status In Progress 11% Remaining Duration 6d 5h 9m	Profile Name: profile1 Interval: 20 Sec Total Duration: 7d Elapsed Duration: 18h 50m 49s Initial Start Time: Jan 19, 2021 06:52 PM
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[View Collection](#) [Download](#)

HX Profiler WORKLOADS > vCenter

Overview Host Compute Metrics Host Storage Metrics VM Compute Metrics VM Storage Metrics Download

vCenter

Host Reachability Reachable 4 Not Reachable 0	VM Power Status 294 On 64 Off 230	Profiling Summary 3353 SUCCESSFUL 25 PARTIAL	Profiling Status In Progress 11% Remaining Duration 6d 5h 14m	Profile Name: profile1 Interval: 20 Sec Total Duration: 7d Elapsed Duration: 18h 45m 48s Initial Start Time: Jan 19, 2021 06:52 PM
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30 Day Sizing Summary

CPU 188.8 MHz TOTAL CLOCK SPEED 80 PHYSICAL CORES	vCPUs 913 On 232 Off 681 Overprovisioning Ratio 11.4	RAM (GiB) 640 Used 284 Unused 356	Effective Capacity (TiB) 16.31 Used 10.59 Unused 5.72
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Aggregate Compute & Storage Dynamic Metrics

CPU Utilization () RAM Utilization () Read IOPS () Write IOPS () Read Throughput () Write Throughput () Read Latency () Write Latency ()

HX Profiler WORKLOADS > vCenter

Overview Host Compute Metrics Host Storage Metrics VM Compute Metrics VM Storage Metrics Last updated on: 01:45 PM Download

Aggregate by Average value Reset Zoom 30m 1H 24H 1W 1M 2M

Jan 20, 12:46 PM Jan 20, 01:45 PM

Aggregate Metrics (All VMs Selected)

Status 294 On 64 Off 230	CPU 23399.6 MHz TOTAL CPU UTILIZATION	vCPUs 913 Active 232 Inactive 681	RAM (GiB) 2279.5 Used 290.5 Unused 1989	Transfer Rate (Mbps) 2 Receive 1.1 Transmit 0.9
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Aggregate Metrics (All VMs Selected)

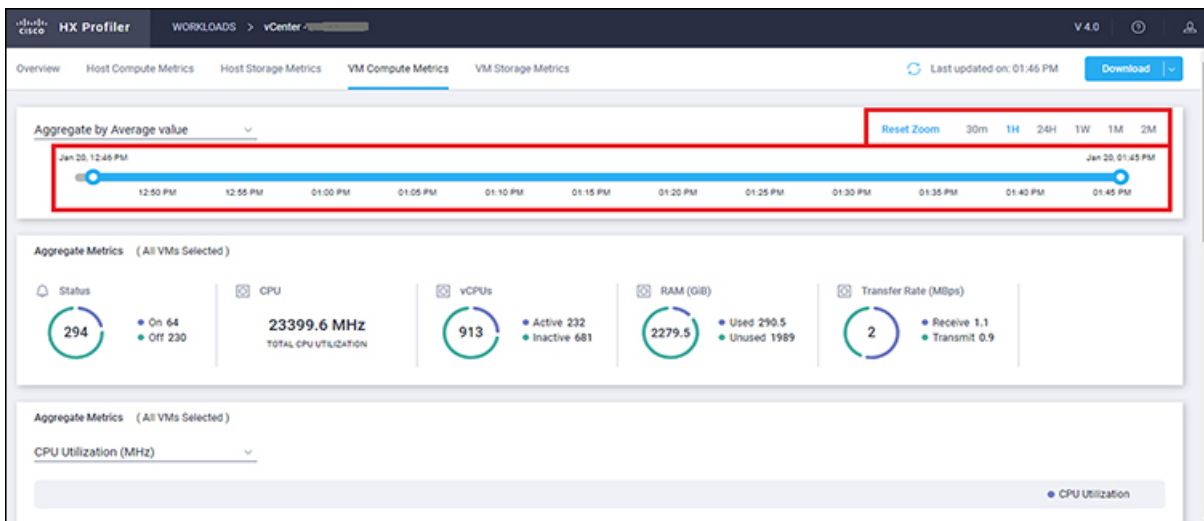
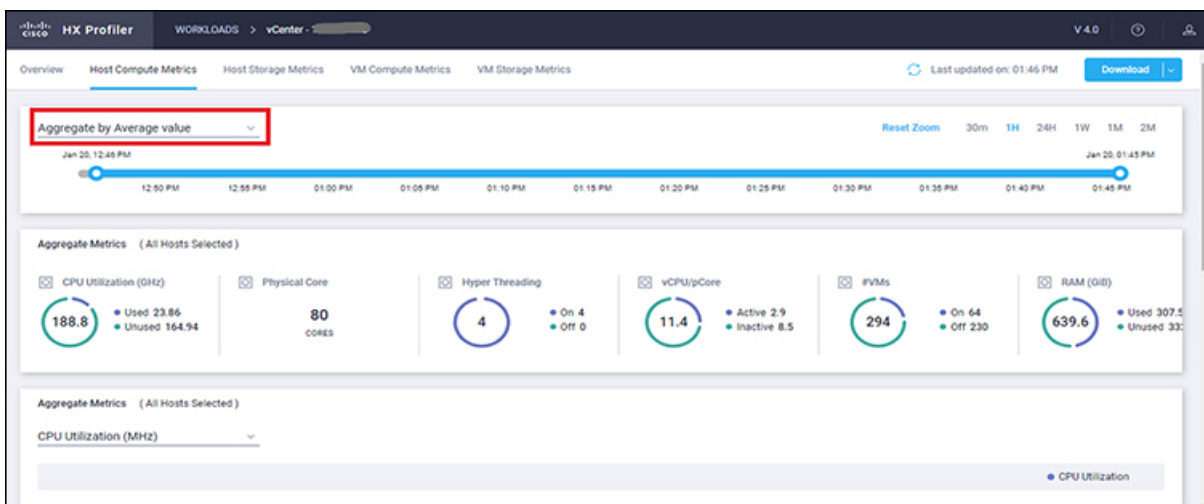
CPU Utilization (MHz)

CPU Utilization

Table 4: Host View Filter Options

Item	Description
Aggregation	Filters to view the summarizations based on peak or average selections. Your selection determines the display of the table metrics and trends. The summarized values represent the following: <ul style="list-style-type: none"> • Peak: Peak value of all the metrics in the selected interval • Average: Averages of all the values in the selected interval

You can filter Host metrics using the search option by host name only. For VM metrics, you can filter either by the Host name to which the VM belongs or directly with the VM name, using the search option.



Host and VM Summarized Metrics

Based on your time period and parameters selections, the Profiler computes and populates the compute and storage metrics. Metrics display for the following values:

Host View Compute Table

- Host_Name
- Processor Type
- Clock (GHz)
- #Physical Cores
- HT – ON/OFF
- CPU Util (MHz)
- CPU Util (%)
- #VMs
- vCPU of active VMs/pCore Ratio
- RAM (GB)
- RAM Util (GB)
- Network Throughput- Rx (Mbps)
- Network Throughput- Tx (Mbps)

Host View Storage Table

- Provisioned Capacity (TB)
- Used Storage Capacity (TB)
- Read Throughput (MBps)
- Write Throughput (MBps)
- Read (%)
- Write (%)
- Read IOPS
- Write IOPS
- Read Block Size (KB)
- Write Block Size (KB)
- Seq (%)
- Read Latency (ms)
- Write Latency (ms)

VM View Compute Table

- VM Name
- Status
- Host_Name

- vCPUs
- CPU Util (MHz)
- CPU Util (%)
- RAM (GB)
- RAM Util (GB)
- Network Throughput- Rx (Mbps)
- Network Throughput- Tx (Mbps)

VM View Storage Table

- VM Name
- Host_Name
- Disk Capacity (GB)
- Disk Used (GB)
- Read Throughput (MBps)
- Write Throughput (MBps)
- Read (%)
- Write (%)
- Read IOPS
- Write IOPS
- Read Block Size (KB)
- Write Block Size (KB)
- Seq (%)
- Read Latency (ms)
- Write Latency (ms)

Host and VM Trends

The View Collection page provides trend charts and an overview of various parameters at a host level and VM level for both compute and storage parameters. The overview provides information aggregate storage and compute matrix along with a 30-day sizing summary. You can view the trend charts by selecting the host or the VM from the table.

Metrics for the following values display in the trend charts:

Host View Compute Trends

- CPU Utilization (MHz)
- CPU Utilization (%)
- CPU Overprovisioning Ratio (%)

- RAM Utilization (%)
- RAM Overprovisioning Ratio (%)
- Receive Rate (Mbps)
- Transmit Rate (Mbps)

VM View Compute Trends

- Receive Rate (Mbps)
- Transmit Rate (Mbps)

Host and VM View Storage Trends

- Read Throughput (MBps)
- Write Throughput (MBps)
- Read Ratio
- Write Ratio
- Read IOPS
- Write IOPS
- Read Seq (%)
- Write Seq (%)
- Read Latency (ms)
- Write Latency (ms)
- Provisioned Capacity (TB)
- Used storage Capacity (TB)

Histogram Charts

- Read Block Size Histogram
- Write Block Size Histogram



Note You can plot the storage parameter charts for two comparable charts either from the Trend Line chart or from the Histogram chart.

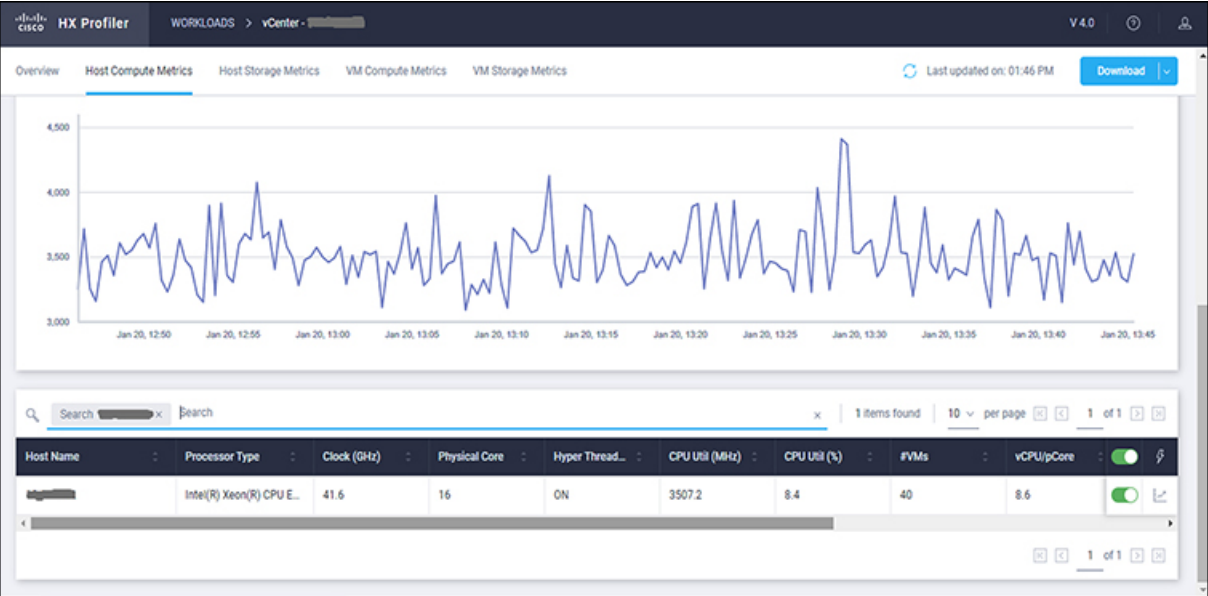
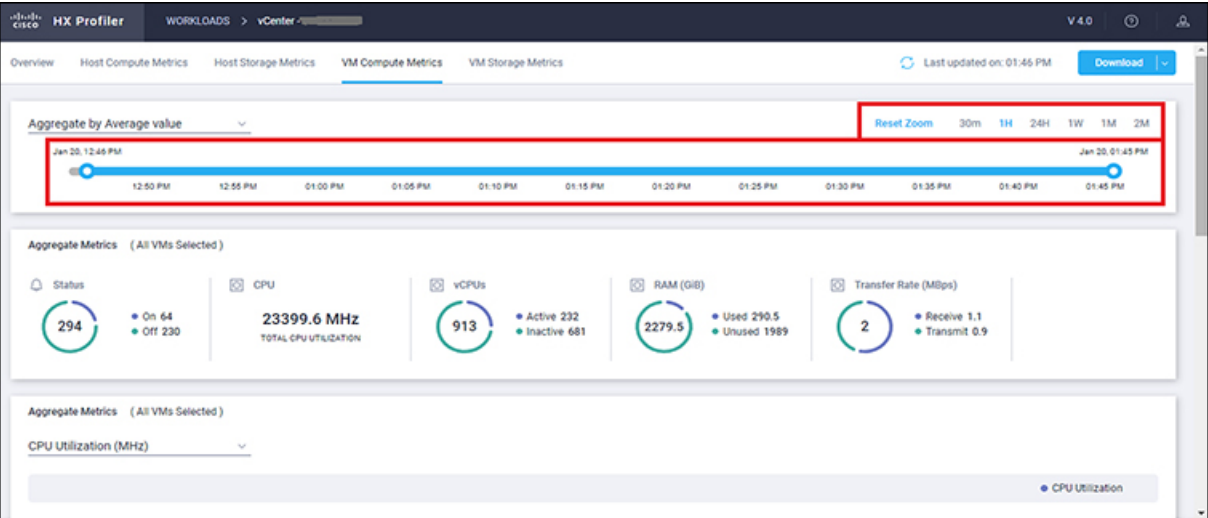
Viewing an ESXi Collection

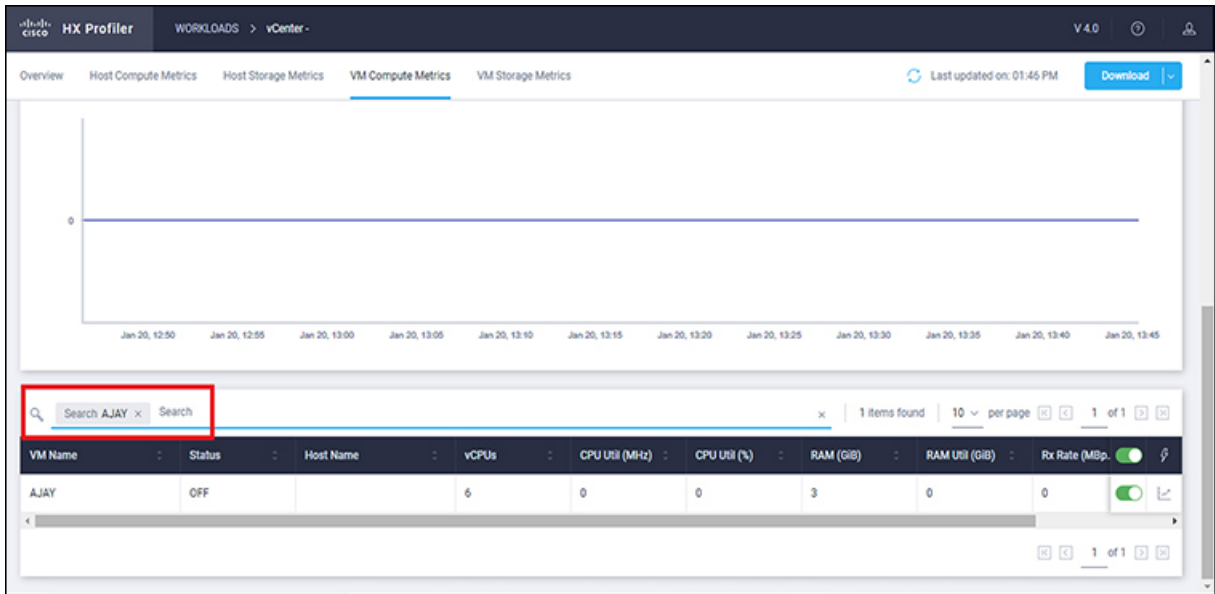
You can also use the filter and search tool in the Hosts and VM views to display only those hosts and VMs that you want to see.

You can also use the filter tool in the Hosts and VM views to display only those hosts and VMs you want to see.

Viewing an ESXi Collection

- Step 1** In the Datacenter Inventory page, click **View Collection** to browse through the collected data.
- Step 2** In the View Collection page, select between **Host Compute Metrics**, **Host StorageMetrics**, **VM Compute Metrics** or **VM Storage Metrics**.
- Step 3** In the **Select VMs** tab, select or unselect the toggle switch for the VMs you want to view, then click **Next**. All VMs are selected by default.
- Step 4** To view data for a different time period, select from the options in the top right corner with the default minimum value of 30 minutes. Use the time slider above the fixed time period selection to view data for a specific time range from the selected time period.





Viewing Data Collections from Hyper-V Servers

The View Collection page has five tabs at the top left of the page, Overview, Host Compute Metrics, Host Storage Metrics, VM Compute Metrics, VM Storage Metrics. When clicked, they show summary data described in his section. The View Collection page also provides the summarized data for Compute Summary and Storage Summary of individual hosts and VMs. You can also fetch the data for a specific period of profiling using the predefined filter present on the top right corner of the page with the minimum being 30minutes. You can also use the time line to select the time period. The following sections describe the summary data shown through filter tool use and in that shown in each tab and view.

Viewing Data Collections from Hyper-V Servers

HX Profiler WORKLOADS V 4.0

Total Workloads: 3 [+ Add Workload](#)

cisco

Host Reachability: Reachable 1, Not Reachable 0

VM Power Status: 5 (On 3, Off 2)

Profiling Summary: 27490 SUCCESSFUL, 38 PARTIAL, 1 FAILED

Profiling Status: Completed, 1 Stops

Profile Name: profile1
Interval: 20 Sec
Total Duration: 7d
End Time: Feb 4, 2021 07:02 PM
Initial Start Time: Jan 28, 2021 07:02 PM

[View Collection](#) [Download](#)

HX Profiler WORKLOADS > haxprofiler.label.hyperv - cisco V 4.0

Overview [Host Compute Metrics](#) [Host Storage Metrics](#) [VM Compute Metrics](#) [VM Storage Metrics](#) [Download](#)

cisco

Host Reachability: Reachable 1, Not Reachable 0

VM Power Status: 5 (On 3, Off 2)

Profiling Summary: 27490 SUCCESSFUL, 38 PARTIAL, 1 FAILED

Profiling Status: Completed, 1 Stops

Profile Name: profile1
Interval: 20 Sec
Total Duration: 7d
End Time: Feb 4, 2021 07:02 PM
Initial Start Time: Jan 28, 2021 07:02 PM

Aggregate Compute & Storage Dynamic Metrics

	RAM Utilization (GiB)	Read IOPS	Write IOPS	Read Throughput (MiBps)	Write Throughput (MiBps)	Latency (ms)
Average	33.6	0	1	0	0	0.1
95th Percentile	34	0	3.7	0	0	0.2
Peak	34.3	1399.8	85.5	21.5	14.7	110.7

Compute Trends and Metrics

HX Profiler WORKLOADS > haxprofiler.label.hyperv - cisco V 4.0

Overview [Host Compute Metrics](#) [Host Storage Metrics](#) [VM Compute Metrics](#) [VM Storage Metrics](#) Last updated on: 12:03 PM [Download](#)

Aggregate by Average value [Reset Zoom](#) 30m 1h 24h 1w 1m 2M

Feb 2 12:03 PM - Feb 9 12:03 PM

Aggregate Metrics (All Hosts Selected)

- Physical Core: 36 CORES
- Hyper Threading: 1 (On 1, Off 0)
- vCPU/pCore: 0.1 (Active 0.1, Inactive 0)
- #VMs: 5 (On 3, Off 2)
- RAM (GiB): 384 (Used 33.4, Unused 350.6)
- Transfer Rate (MBps): 0.2

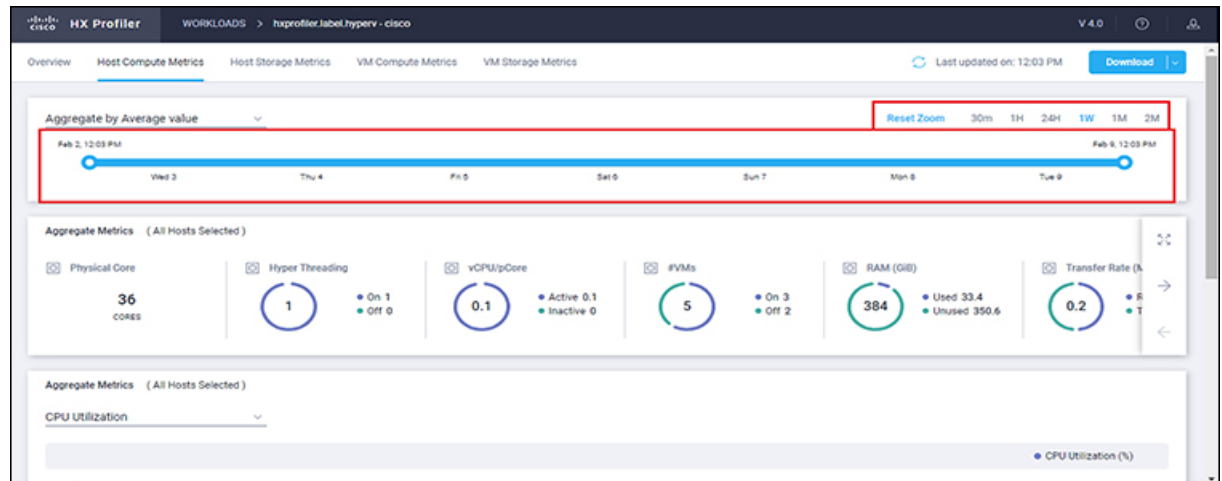
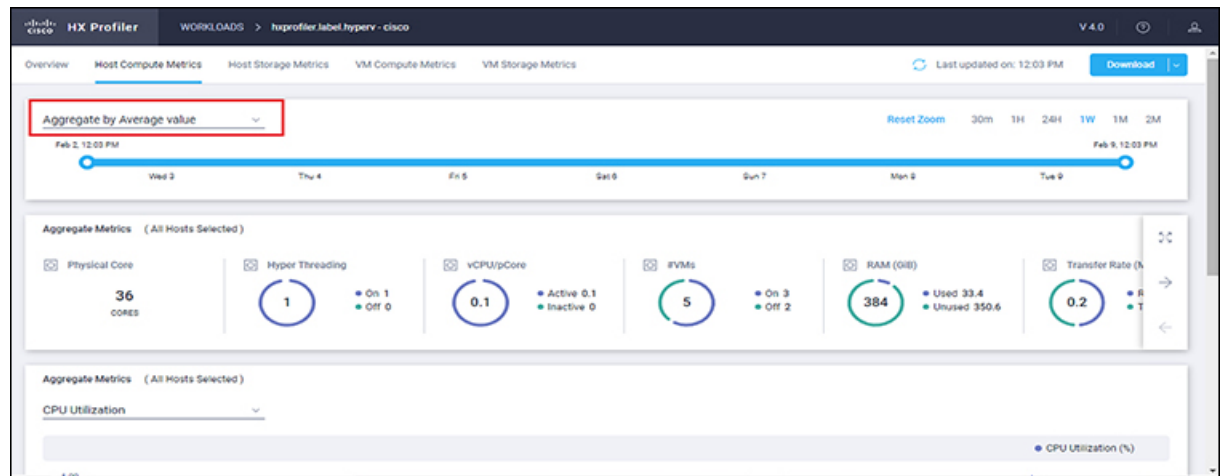
Aggregate Metrics (All Hosts Selected)

CPU Utilization: [CPU Utilization \(%\)](#)

Table 5: Host View Filter Drop-Down Options

Item	Description
Aggregation	<p>Filters to view the summarizations based on peak or average selections. Your selection determines the display of the table metrics and trends.</p> <p>The summarized values represent the following:</p> <ul style="list-style-type: none"> • Peak: Peak value of all the metrics in the selected interval • Average: Averages of all the values in the selected interval

You can filter Host metrics using the search option by host name only. For VM metrics, you can filter either by the Host name to which the VM belongs or directly with the VM name, using the search option.



Host and VM Summarized Metrics

Based on your time period and parameters selections, the Profiler computes and populates the compute and storage metrics. Metrics display for the following values:

Host View Compute Table

- Host Name
- Processor Type
- Clock (GHz)
- #Physical Cores
- Hyper Threading – ON/OFF
- CPU Util in %
- #VMs
- vCPU of active VMs/pCore Ratio
- RAM (GB)
- RAM Util (GB)
- Network Throughput- Rx (Mbps)
- Network Throughput- Tx (Mbps)

Host View Storage Table

- Host Name
- Provisioned Capacity (TiB)
- Used Storage Capacity (TiB)
- Read Throughput (MBps)
- Write Throughput (MBps)
- Read (%)
- Write (%)
- Read IOPS
- Write IOPS
- Latency (ms)

VM View Compute Table

- VM Name
- Status
- Host Name
- vCPUs
- CPU Util (MHz)
- CPU Util (%)
- RAM (GB)

- RAM Util (GB)
- Network Throughput- Rx (Mbps)
- Network Throughput- Tx (Mbps)

VM View Storage Table

- VM Name
- Host Name
- Disk Capacity (GB)
- Disk Used (GB)
- Read Throughput (MBps)
- Write Throughput (MBps)
- Read (%)
- Write (%)
- Read IOPS
- Write IOPS
- Latency (ms)

Host and VM Trends

The View Collection page provides trend charts and an overview of various parameters at a host level and VM level for both compute and storage parameters. The overview provides information related to aggregate storage and compute matrix. You can view the trend charts by selecting the host or the VM from the table.

Metrics for the following values display in the trend charts:

Host View Compute Trends

- CPU Overprovisioning Ratio (%)
- RAM Utilization (GB)
- RAM Overprovisioning Ratio (%)
- Receive Rate (Mbps)
- Transmit Rate (Mbps)

VM View Compute Trends

- RAM Utilization (GB)
- Receive Rate (Mbps)
- Transmit Rate (Mbps)

Host View Storage Trends

- Read Throughput (MBps)

- Write Throughput (MBps)
- Read Ratio
- Write Ratio
- Read IOPS
- Write IOPS
- Read Seq (%)
- Write Seq (%)
- Read Latency (ms)
- Write Latency (ms)

VM View Storage Trends

- Read Throughput (MBps)
- Write Throughput (MBps)
- Read Ratio
- Write Ratio
- Read IOPS
- Write IOPS



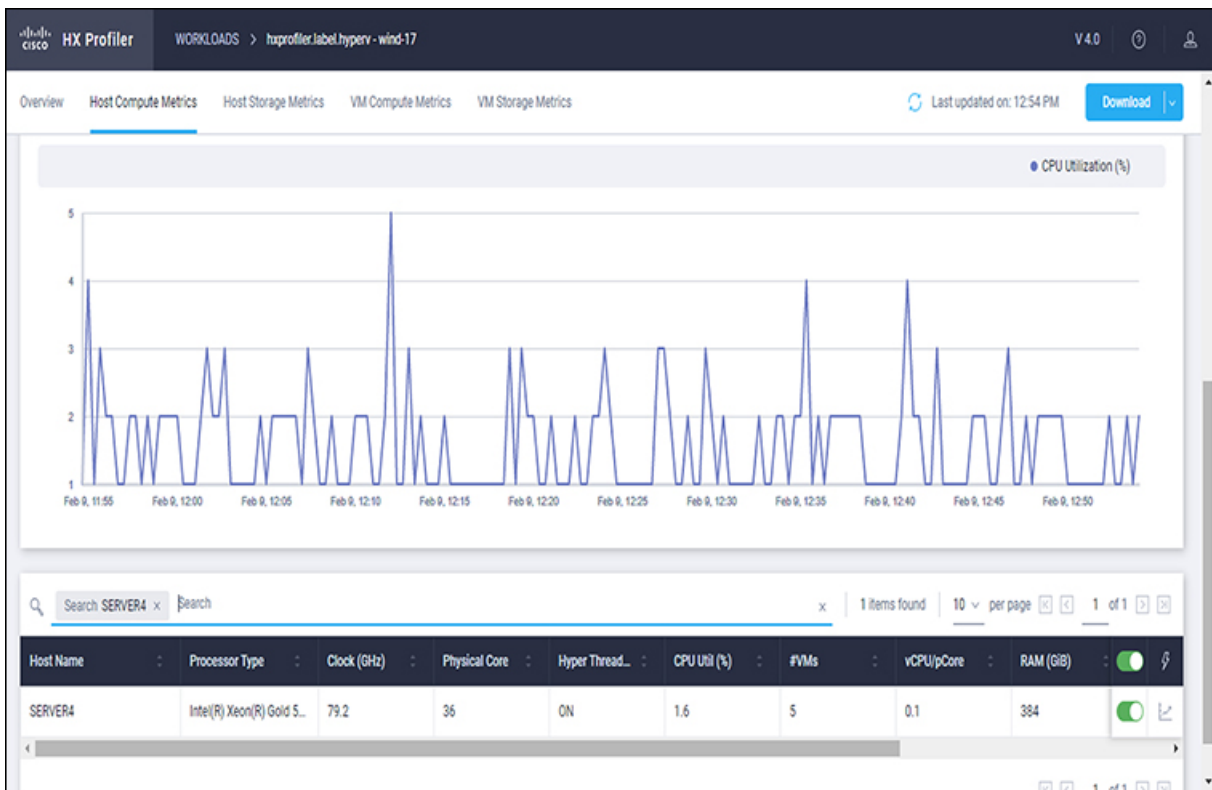
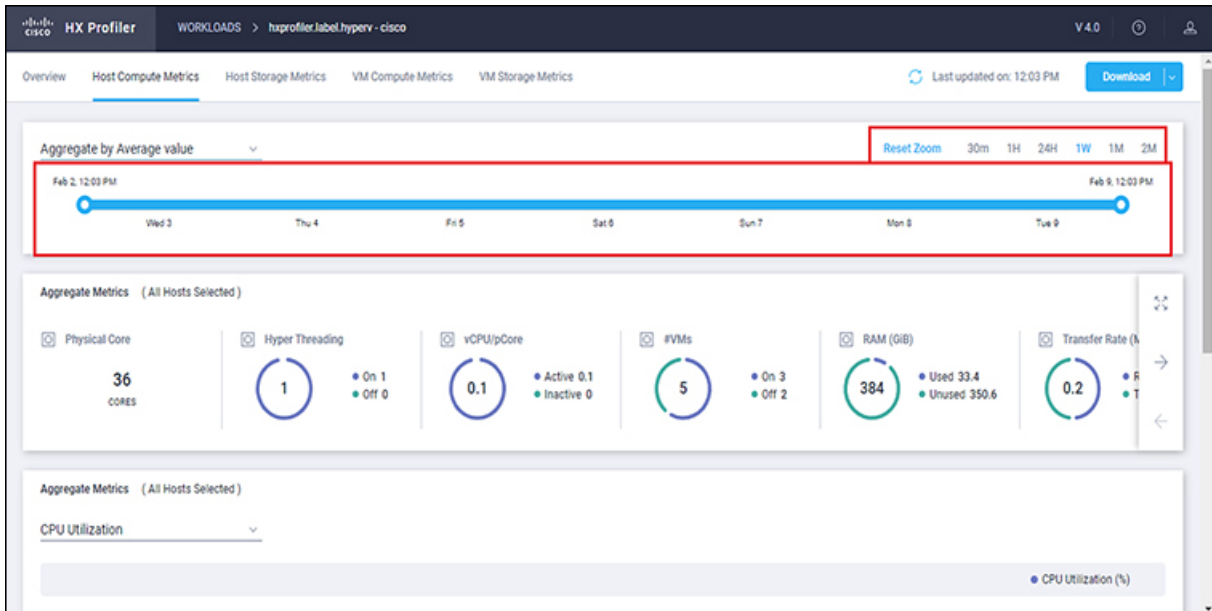
Note You can plot the storage parameter charts for two comparable charts from the Trend Line chart.

Viewing a Hyper-V Collection

You can view a summary of compute and storage parameters for the hosts and VMs available in the Hyper-V through the View Collections page as part of the profiling operation.

You can also use the filter and search tool in the Hosts and VM views to display only those hosts and VMs you want to see.

-
- Step 1** In the Datacenter Inventory page, click **View Collection** to browse through the collected data.
 - Step 2** In the View Collection page, select between **Host Compute Metrics**, **Host Storage Metrics**, **VM Compute Metrics** or **VM Storage Metrics**.
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Viewing a Hyper-V Collection

