

HPE Service Virtualization Management

Software Version: 3.80 Patch 1

User Guide



Hewlett Packard
Enterprise

Document Release Date: February 2016 | Software Release Date: February 2016

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Service Virtualization Management

Manage services from multiple Service Virtualization projects and servers in one location, without opening the projects.

After you create and configure virtual services in the Service Virtualization Designer, the services can be deployed on any Service Virtualization Server. Service Virtualization Management (SVM) provides a convenient method for allowing others to access and manage virtual services deployed on any Service Virtualization Server. For example, anyone performing testing can now work with the virtual services right from a browser window, with no additional installation or configuration.

In addition, Service Virtualization Management enables you to consume virtual services that are stored in a network location. You can download virtual services to your Service Virtualization Server, without the need to install the Service Virtualization Designer.

Note:

- This Help provides information on the Service Virtualization Management interface. For additional information on Service Virtualization, refer to the *HPE Service Virtualization User Guide*.
- The available options may vary based on your access permissions to a Service Virtualization Server. For more information, contact the Service Virtualization Server administrator.
- Make sure you are using a supported browser. For details, see the *HPE Service Virtualization Installation Guide*.

What do you want to do?

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Open SVM

Prerequisites - for the Service Virtualization Server administrator

Prerequisites:

- The Service Virtualization Management service must be running.

To start the SVM service:

On the Service Virtualization Server machine, from the Windows Start menu, select **All Programs > HPE Software > HPE Service Virtualization > Server 3.80 > Start Services of HPE Service Virtualization Server**.

This option starts both the Service Virtualization Server service and the Service Virtualization Management service.

- To log in to Service Virtualization Management, a user must be a member of the **SVM Users** group on the Service Virtualization Server machine. For details on the Service Virtualization user groups, see the *HPE Service Virtualization Installation Guide*.

Log in to SVM

1. In a browser window, enter one of the following URLs:

- **The Service Virtualization Management URL:**

```
https://<Service Virtualization Server IP or hostname>:<Service Virtualization Management port>
```

By default, the Service Virtualization Management port is 6086.

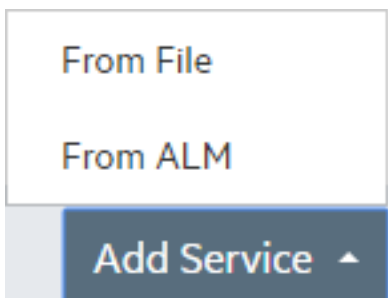
- **The Service Virtualization Server URL:**

```
<Service Virtualization Server IP or hostname>:<HTTP/HTTPS port number>/management
```

2. Log in to the server using a Windows domain user account.

Add services to the server

Select additional virtualization projects or services, stored on the network, to download to your Service Virtualization Server.



- "Add services from ALM " below
- "Add services from a virtualization project archive" below
- "Download from ALM" on the next page

Add services from ALM

To deploy services stored in HPE Application Lifecycle Management (ALM):

1. In the Services tab, on the bottom toolbar, click **Add Service** and select **From ALM**.
2. Enter the URL of the ALM server, and the logon credentials. The ALM server URL must be in the following format: <ALM server IP or hostname>:<port number>/qcbn.

Note: The 'qcbn' entry is optional. The https:// or http:// prefix is also optional. If you do not specify either, http:// is used.

3. Select the ALM domain and project to log in to.
4. All resources located in the ALM Resources module are displayed. Select one or more virtualization projects or services and click **Deploy selected**.

Note: If you select a virtualization project, all virtual services in the project are deployed to your server.

Add services from a virtualization project archive

To deploy services stored in a project archive file in the file system:

1. In the Services tab, on the bottom toolbar, click **Add Service** and select **From File**.
2. Click **Select file** to browse the file system and select a project. Select services, and click **Upload services**.

Note: You can only select virtualization projects that were exported from the Designer. Exported projects are stored with the file extension .vproj.a.

The services are downloaded to your Service Virtualization Server.

Download from ALM

To download a virtualization project file from the ALM repository to your file system:

In the Services tab, on the bottom toolbar, click **Download from ALM**.

Manage services

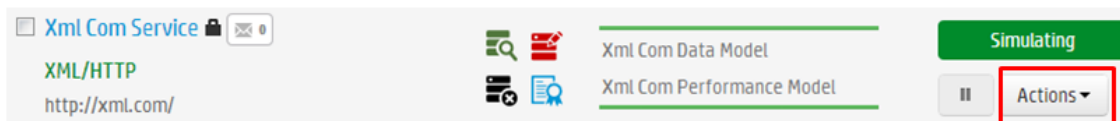
This section includes:

- "Change virtual service mode" below
- "Switch simulation models" on the next page
- "View service details" on page 10
- "Enable/disable message logging" on page 10

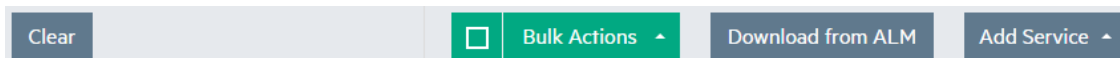
Change virtual service mode

The **Services** tab displays detailed information for the selected servers.

- To change the mode for a single service, click **Actions** to select an option.




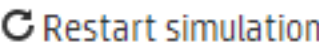
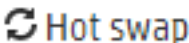


- To change the mode of one or more services, select the checkbox next to each service you want to manage, and click **Bulk Actions** on the bottom toolbar.



Note: If you select multiple services, the action you select is performed only on the applicable services.

Action	Description
Stop	<p>Places the selected services into Standby mode. Client requests are then answered by the real service.</p> <p>The virtual service redirects requests to the real service, and redirects responses from the real service back to the client. The virtual service is not learning or simulating real service behavior.</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Caution: If you stop a service that is in Learning mode, learned data is not saved.</p> </div>

Action	Description
 Simulate	<p>Places the selected services into Simulation mode. In Simulation mode, the virtual service responds to client requests, and the real service does not receive any communication.</p> <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>Tip: Make sure you have selected the simulation models that you want to use for the session from the Models column.</p> </div>
 Unlock	<p>Unlocks a service. A service is locked when it is in use, such as in either Learning or Simulating modes.</p>
 Undeploy	<p>Removes the selected services from the Service Virtualization Server.</p> <p>To redeploy an Offline service, change the mode of the service in the Service Virtualization Designer to Learning or Simulating.</p>
 Restart simulation	<p>Enables you to restart simulation after switching to a different data model. For details, see "Switch simulation models" below.</p>
 Hot swap	<p>Enables you to select a different performance model when the virtual service is in Simulating mode, without redeploying virtual service data and restarting simulation. For details, see "Switch simulation models" below.</p>

Switch simulation models

To select simulation models before simulation:

In the Services tab, select data and performance models for simulation in the **Models** column. Alternatively, click a service name to view or modify details for a specific service.

To switch simulation models during simulation:

Data Model:

Switching the data model during a simulation session requires you to restart the simulation.

Select a different model, and from the Actions menu, select **Restart Simulation**.

Performance Model:

Select a different model, and from the Actions menu, select **Hot swap**.

Any unsent messages waiting to be processed according to the response time of the current performance model are sent immediately. The new model is used for any subsequent requests.

When switching the performance model during simulation:

- neither the current model or the model you are selecting can be the **Offline** performance model.
- you cannot switch to the **Maximal Performance** model if you want to also use the **Real Service** data model.

View service details

To view detailed information for a specific service:

In the **Services** tab, click the name of the service.

Enable/disable message logging

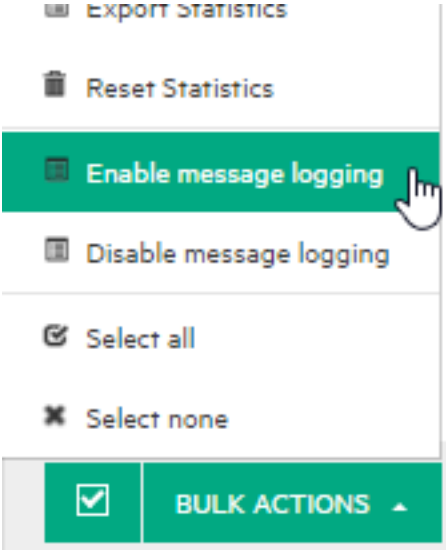

You can log request and response data generated during learning, simulation, and standby modes.

Note: The message logging state (enabled/disabled) in the Designer or Service Virtualization Management is loaded when the virtual service is first opened. If the state is changed in the Designer or SVM, the state change may not display in the other instance of the Designer or SVM until the service page is reopened.

Enable logging for a single service

1. In the **Services** tab, click the name of the service for which you want to enable or disable message logging.
2. On the Service details page, under Service configuration, toggle the **Message Logging Enabled/Disabled** switch.

Message Logging Disabled
[Show logged messages](#)

Enable logging for multiple services	<ol style="list-style-type: none">1. In the Services tab, select two or more services for which you want to enable logging2. Click Bulk Actions > Enable message logging.  <p>The screenshot shows a dropdown menu for Bulk Actions. The menu items are: Export Statistics, Reset Statistics, Enable message logging (highlighted with a hand cursor), Disable message logging, Select all, and Select none. At the bottom of the menu is a 'BULK ACTIONS' button with a checkmark icon.</p>
View logged message data	<p>After service activity has generated logged messages, click Show logged messages on the Service details page to open the message viewer. For details, see "View message data" on page 17.</p>  <p>The screenshot shows a 'Message Logging' toggle switch that is currently turned on (blue). To the right of the toggle is the text 'Enabled'. Below the toggle is a blue link labeled 'Show logged messages' with a hand cursor pointing to it.</p>

Manage servers

This section includes:

- ["Add or remove a server" below](#)
- ["Edit server details" on the next page](#)
- ["Switch servers" on the next page](#)
- ["Manage agents" on the next page](#)

Add or remove a server

Click the **Servers** tab.

- **Add a server**

Click **Add server**. Enter a server URL and click **Add**.

The server URL must be in the following format: <Service Virtualization Server IP or hostname>:<Service Virtualization Management port>.

When you add a server, Service Virtualization performs Service Discovery, and any services deployed on the selected server are displayed in the Service Virtualization Management interface. You can now view and manage the services.

If you are requested to enter login credentials, log in using a Windows domain user account.

- **Delete a server**

Select a server and click **Delete server**, located on the upper-right side of the page.

Edit server details

In the Servers tab, modify details and click **Save Changes**.

Switch servers

By default, Service Virtualization Management provides information for the server on which it is installed. You can switch servers, or select additional servers to manage multiple servers at the same time.

To select servers to manage:

1. Click the **Services** tab.
2. Under **Filters**, select one or more servers to manage.

Manage agents

Manage Service Virtualization agents directly from Service Virtualization Management, including:

- **Create, delete, duplicate, or modify agent configurations.**
- **Test an agent configuration.**
- **Import or export agent configurations for use on any Service Virtualization Server.**

When you export an agent configuration, it is saved on the file system in the .agce file format in the location that you specify. You can export a single configuration, or all agent configurations on the server.

To import an agent configuration, you select an exported configuration file that is saved on the file system. If the import file contains multiple configurations, you can select which configurations you want to import.

If you choose to import an agent configuration that is identical to a configuration that already exists on your server, you can choose to overwrite your existing configuration, or create a new, additional configuration.

- **Manage agent permissions.**

By default, the SV Runtime Administrators user group can manage (view and edit) agent configurations. For details on the Service Virtualization user groups, see the *HPE Service Virtualization Installation Guide*.

To manage agents:

In the Servers tab, select a server and click **Manage Agents**.

To manage a specific agent configuration, select the configuration in the left pane and click one of the following tabs:

- **Agent Properties.** View or edit properties for the selected agent instance.
- **Agent Permissions.** View or edit permissions for the selected agent instance.

Monitor servers and services

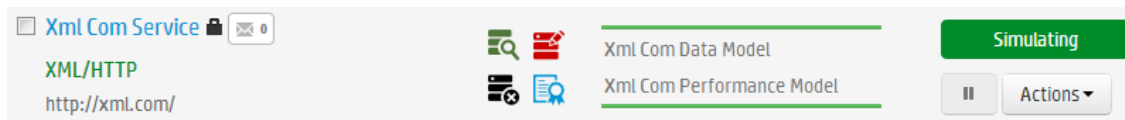
This section includes:

- ["Monitor virtual services" below](#)
- ["View a summary of server activity" on page 15](#)
- ["Export a list of virtual services deployed on a server" on page 17](#)

Monitor virtual services







Click the **Services** tab.

For each service, the following status information is displayed:



Note: By default, some status information is hidden. Click the arrow in a column header and select **Columns** to select columns to display or hide.

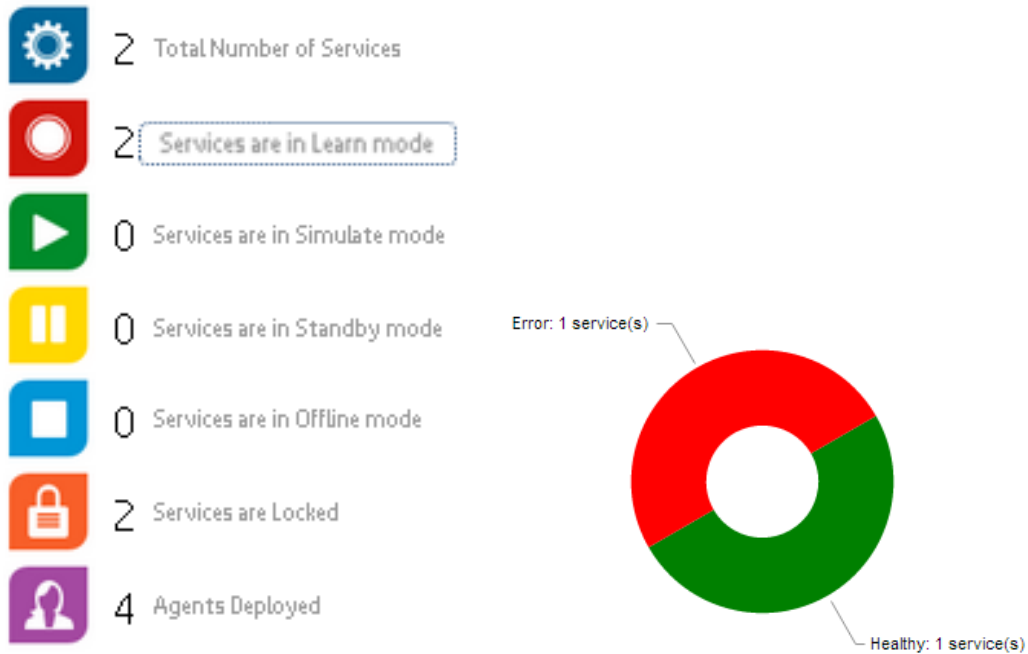
Service Name and Endpoint	The virtual service name, and the location of the virtual service endpoint. Tip: Click the service name to: <ul style="list-style-type: none">• view additional service details• change the service mode• view details of error and warning messages• enable message logging
----------------------------------	--

<p>Locked</p> 	<p>Hover over the lock icon to display the name of the user that has the service locked.</p>
<p>Protocols</p> 	<p>The message and transport protocols in use in the virtual service.</p>
<p>Message Count</p> 	<p>The number of messages passed through the virtual service during the current learning, simulation, or standby session.</p>
<p>Errors/Warnings</p>	<p>Indicates that errors and warnings occurred during the application or server run. Displayed when a problem occurs during a service lifecycle, such as during deployment, or while in Standby, Learning, or Simulating modes.</p> <p> Warning</p> <p> Error</p> <p>Tip: Click the service name to view details of errors, warnings, and information messages.</p>
<p>ACL</p>	<p>Your access permissions for the service.</p>  <p>If you have write permissions for the service, you can modify permissions for users. For details, see "Monitor servers and services" on the previous page.</p>
<p>Server Address</p>	<p>The Service Virtualization Server on which the service is deployed.</p>
<p>Project</p>	<p>The name of the service's virtualization project.</p>

<p>Models</p>	<p>The data and performance simulation models currently in use for the selected service.</p> <p>Simulation model accuracy is displayed for services in Simulation mode. The percentage indicates the accuracy of data or performance model emulation of the real service by the virtual service.</p>								
<p>Mode</p>	<p>View or change the mode of the virtual service:</p> <table border="1" data-bbox="527 546 1375 997"> <tr> <td data-bbox="527 546 698 646"> <p>Simulating</p> </td> <td data-bbox="698 546 1375 646"> <p>The virtual service responds to client requests, and the real service does not receive any communication.</p> </td> </tr> <tr> <td data-bbox="527 646 698 747"> <p>Learning</p> </td> <td data-bbox="698 646 1375 747"> <p>The virtual service works as a proxy to record and learn the behavior of the real service.</p> </td> </tr> <tr> <td data-bbox="527 747 698 892"> <p>Standby</p> </td> <td data-bbox="698 747 1375 892"> <p>The virtual service redirects requests to the real service, and redirects responses from the real service back to the client.</p> </td> </tr> <tr> <td data-bbox="527 892 698 997"> <p>Offline</p> </td> <td data-bbox="698 892 1375 997"> <p>The virtual service is unavailable. This may indicate an error in the service's configuration.</p> </td> </tr> </table>	<p>Simulating</p>	<p>The virtual service responds to client requests, and the real service does not receive any communication.</p>	<p>Learning</p>	<p>The virtual service works as a proxy to record and learn the behavior of the real service.</p>	<p>Standby</p>	<p>The virtual service redirects requests to the real service, and redirects responses from the real service back to the client.</p>	<p>Offline</p>	<p>The virtual service is unavailable. This may indicate an error in the service's configuration.</p>
<p>Simulating</p>	<p>The virtual service responds to client requests, and the real service does not receive any communication.</p>								
<p>Learning</p>	<p>The virtual service works as a proxy to record and learn the behavior of the real service.</p>								
<p>Standby</p>	<p>The virtual service redirects requests to the real service, and redirects responses from the real service back to the client.</p>								
<p>Offline</p>	<p>The virtual service is unavailable. This may indicate an error in the service's configuration.</p>								

View a summary of server activity

The Home tab displays the **Dashboard** - a selection of statistics and graphs for all of the Service Virtualization Servers you are managing. You can view statistics on the services and protocols that are deployed on the server.



Tip: Click inside a graph to drill down to more details on the relevant services or servers.

The Dashboard displays the following server protocol and health statistics.

Server Health Chart	The percentage of services deployed on the server that contain errors, and the percentage of services that do not have any errors.
Server Protocol Distribution	The percentage of services using each protocol deployed on the server.
Top 5 Servers by Hardware Utilization	<p>The 5 configured servers with the highest utilization of server memory usage or server CPU usage, defined as the higher of the two.</p> <p>The scale for each server displays 4 bars, where:</p> <ul style="list-style-type: none"> • green = low and medium utilization • orange = high utilization • red = very high utilization <p>For example:</p> <p> Medium utilization</p> <p> Very high utilization</p>

**Bottom 5 services by
Data Model Accuracy**

The 5 services with the lowest accuracy of data model emulation of the real service by the virtual service.

Export a list of virtual services deployed on a server

You can export a list of virtual services deployed on a Service Virtualization Server.

The exported list includes details about each service, such as service name, ID, mode, deployment state, and data and performance models. You can see an overall picture of the deployed services, and identify any problem areas, such as simulation accuracy.

In addition, the number of default operations out of the total number of operations in a service is displayed. A **default operation** is an operation in the virtual service that is returning data from the default rule only. No request data coming in during learning or simulation is matching another rule in the data model. This can help you assess where you may want to enhance your virtual service.

All selected services are exported as a list in HTML. You can save the list as an HTML page, or copy/paste the data into an Excel worksheet.

1. In the **Services** tab, under **Filters**, select a server, and set the filters to display the services you want.
2. In the services list, select one or more services, or choose **Select All**. You can export services from only one server at a time.
3. On the bottom toolbar, click **Bulk Actions > Export List**.

View message data



You can log request and response data generated during learning, simulation, and standby modes.

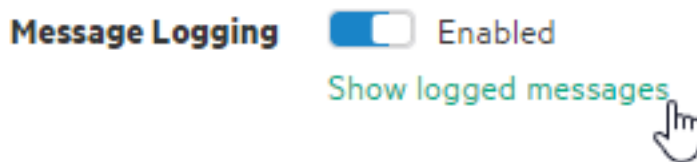
Message logs enable you to:

- Review the messages more closely to troubleshoot problems you may have.
- Check the responses generated for specific requests.
- Save and share logged messages with other users.
- Examine protocol data that is not stored elsewhere.

View logged messages

1. **Prerequisite:** Enable message logging for a virtual service. For details, see "[Manage services](#)" on page 8.
2. In the **Services** tab, click the service name to open the service details page.

3. Click **Show logged messages**.



4. The message log opens in a new browser window.

In the message viewer, you can:

<p>Filter messages</p>	<p>Filter messages by time, operation, client address, or message type (request/response).</p>
<p>Select multiple messages to compare or download</p>	<p>Pin one or more messages.</p> <p>Pinned / Timestamp</p> <hr/>
<p>Compare</p>	<p>Select 2 or more messages and click Compare Pinned.</p>
<p>Download</p>	<p>Select messages and click Download Pinned.</p>

Manage permissions

This section includes:

- ["View and change user access to a Service Virtualization Server" below](#)
- ["View and change user access to services" on the next page](#)

View and change user access to a Service Virtualization Server

1. In the **Servers** tab, select a server.
2. In the **Permissions** area, you can view the groups and users who have access to resources on the selected server.

- a. **Virtual Service Management.** Grant a user permission to deploy new services on the server.
 - b. **Agent Management.** Grant a user permission to create new agents on the server.
3. The following groups and users can add permissions for additional users and groups, and customize them according to your needs:
- members of the **SV Server Administrators** group
 - the resource creator
 - a user with *write* permissions for the resource
 - members of the **SV Publishers** group can add permissions for additional users and groups to **Virtual Service Management**
 - members of the **SV Runtime Administrators** group can add permissions for additional users and groups to **Agent Management**

Click **Add permission** and enter the name of a user or user group.

Note: You cannot delete the built-in Service Virtualization user groups from the server, or modify their permissions. For more details on the Service Virtualization user groups, see the *HPE Service Virtualization Installation Guide*.

View and change user access to services

For a single service

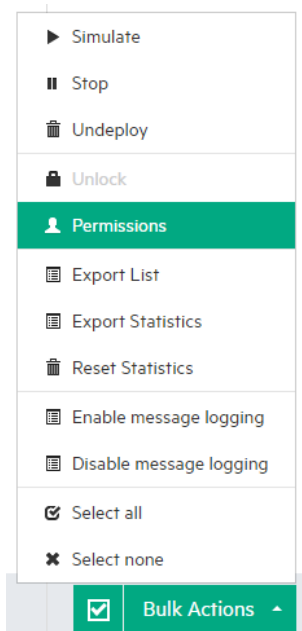
1. In the **Services** tab, click the name of the service.
2. In the **Permissions** area, you can view the groups and users who have access to the selected service.
3. If you are a member of the **SV Server Administrators** group, are the service creator, or have *write* permissions for the service, you can also add permissions for additional users and groups, and customize them according to your needs.

Click **Add permission** and enter the name of a user or user group.

Note: You cannot delete the built-in Service Virtualization user groups from the service, or modify their permissions. For more details on the Service Virtualization user groups and access permissions, see the *HPE Service Virtualization Installation Guide*.

For multiple services

1. In the **Services** tab, click the checkboxes for the services whose permission you want to view or manage.
2. On the bottom toolbar, click **Bulk Actions > Permissions**.



3. Select the permissions you want to assign, and click **Assign permissions**.

Change displayed data

This section includes:

- ["Filter services" below](#)
- ["Sort services" below](#)
- ["Show/Hide columns" below](#)
- ["Search for services" on the next page](#)

Filter services

Click the **Services** tab.

The filtering options are available in the left pane. Select or clear checkboxes to limit the services displayed.

Sort services

In the **Services** tab:

- Click a column header to reverse the sort order of the services.
- Drag a column header to the row above to group services according to that column.

Show/Hide columns

In the **Services** tab, click the arrow in a column header and select **Columns**. Select columns to display or hide.

Search for services

Click the **Services** tab or the **Home** tab, and enter text in the Search box.

The search is performed on the following:

- service name
- data model name
- performance model name
- the "Locked by" user name

View and analyze statistics

This section includes:

- ["Service statistics" below](#)
- ["Server statistics" on page 23](#)
- ["Modify statistics collection and calculation options" on page 25](#)

Service statistics

Service statistics are maintained for each virtual service deployed on the Service Virtualization Server. If the service is undeployed, statistics are removed.

Examine virtual service statistics to detect any problems, evaluate how the services are used, or identify where there might be opportunities for improvement. For example, if data model accuracy is poor, you may need to reconsider your data model configuration, or add more recorded data to the model.

For a single service:


In the **Services** tab, click a service name. On the service detail page, under **Runtime Statistics**, you can do the following:

- ["View aggregated statistics" below](#)
- ["View events" on the next page](#)
- ["Export statistics" on page 23](#)
- ["Reset statistics" on page 23](#)

View aggregated statistics

Statistics are continually collected by Service Virtualization, and then aggregated and displayed at regular intervals.

Tip:

- To display statistics using bar graphs instead of line graphs, click Chart Settings .

Clear the **Show line graph** option.

- Use your mouse to scroll through the data in the chart or graph.

- In the **Aggregated Statistics** tab, select a time interval.
- Select the statistics you want to see. Click a statistic on the legend to show or hide its data in the graph.

■ Tps
 ■ Response time
 ■ Clients Count
 ■ Errors
 ■ Warnings
 ■ Data Model Accuracy
 ■ Performance Model Accuracy

- Hover over points on the graph to show details of a specific point in time.

Simulation Time	Cumulated statistic showing how long the virtual service was in Simulation mode during the given interval.
Simulated Transactions	The cumulated number of calls counted while the service is in Simulation mode.
Response time	The time for the virtual service to process a request and return a relevant response.
Transactions per second (tps)	The number of responses that the virtual service sent per second.
Client count	The number of client connections to the Service Virtualization agent.
Errors	Errors that occurred during the service lifecycle.
Warnings	Warnings that were generated during the service lifecycle.
Data Model Accuracy	The accuracy of data model emulation of the real service by the virtual service.
Performance Model Accuracy	The accuracy of performance model emulation of the real service by the virtual service.

View events

The **Events** tab displays the list of changes of the service state, simulation restart, and other statistics. For details on each statistic, see ["View aggregated statistics" on the previous page](#).

Export statistics

Statistics are saved to a file in .xlsx format in a location that you choose.

1. Click **Export**.
2. In the Export Selected Time Interval dialog box, select a template and other preferences and click **Export**.

When you select the Aggregation Statistics export type, collected data is averaged according to the **Aggregation Interval**, and exported according to the **Statistics Interval**.

Reset statistics

Removes all statistics data for the current service.

For multiple services:

You can export or reset statistics for one or more services on a Service Virtualization Server.

1. In the **Services** tab, select one or more services from the same server.
2. From the Bulk Actions menu on the bottom toolbar, select **Export Statistics** or **Reset Statistics**.

For additional details, see ["Export statistics" above](#) or ["Reset statistics" above](#).

Server statistics

Examine server statistics to:

- identify and analyze problems on the Service Virtualization Server
- find the best server for service deployment

You can also use the Service Virtualization Server performance counters in other applications, such as HPE LoadRunner, to collect and analyze data.

Server Health statistics provide metrics that monitor server hardware resource consumption.

Server Utilization statistics provide metrics that monitor server traffic.

Running Services statistics display all services on the server by mode. Services not listed are currently offline.

To view server statistics:

1. In the **Servers** tab, select a server.
2. Under **Server Health**, view a summary of server statistics.

Hardware utilization	Utilization of server memory usage or server CPU usage, defined as the higher of the two. For example, if a server's memory usage is 50%, and it's CPU usage is 70%, the displayed hardware usage will be 70%.
Server errors	Total number of errors on the Service Virtualization Server since the last restart. Click the Server errors link to view details on all errors and warnings on the selected Service Virtualization Server.

3. Click **See detailed server information** to view more statistics for all services on the server. The statistics are based on Windows Performance Counters. You can use them for monitoring your virtual services using 3rd party tools. For more details, see "Performance Counters" in the *HPE Service Virtualization User Guide*.
 Minimum, maximum, and average values are displayed for the time interval currently displayed in the graph.

Server Health Statistics	
CPU usage	Current CPU usage on the Service Virtualization Server machine.
Memory usage	Current memory usage on the Service Virtualization Server machine.
Server errors	Number of errors on the Service Virtualization Server. New = new errors that were logged during the time interval displayed in the graph. Last 24h = total errors logged in the past 24 hours, with or without a server restart. Total = total errors since last time the Service Virtualization Server was started.
Database response time	Communication latency between the Service Virtualization Server and the database.
Server Utilization Statistics	
Transactions per second	The average value for all services deployed on the Service Virtualization Server.
Connections to the server	The number of connections from clients to Service Virtualization agents.

Message size	The average message size for all services deployed on the Service Virtualization Server.
Data throughput	The average data capacity for all services deployed on the Service Virtualization Server.

Modify statistics collection and calculation options

You may want to change the default configuration for statistics collection and calculation.

View current settings

Search for the following in the Server log file:

- **Sampling Interval** - the frequency with which data is recorded.
- **Writing Interval** - the frequency with which the collected data is aggregated and displayed in the Service Virtualization Management graphs and charts.
- **Removing Stats After** - the duration for which raw statistics data is stored.

Modify the settings

1. Open the Service Virtualization Server configuration file (HP.SV.StandaloneServer.exe.config) on the Server machine, located in the bin directory of the server installation folder.
2. Under **Server Statistics**, edit the following keys:

```
<add key="Server.Statistics.SamplingInterval" value="00:00:01" />
```

where `SamplingInterval` is the frequency with which data is recorded.

Default value = 1 second

```
<add key="Server.Statistics.WritingInterval" value="00:01:00" />
```

where `WritingInterval` is the frequency with which the collected data is aggregated and displayed in the Service Virtualization Management graphs and charts.

Default value = 1 minute

```
<add key="Server.Statistics.MaxAge" value="1.0:00:00" />
```

where `MaxAge` is the duration for which raw statistics data is stored.

Default value = 1 day

Frequently Asked Questions (FAQs)

Why can't I place services into Learning mode?

You can only place virtual services into Learning mode from within the Service Virtualization Designer, in an open project.

How can I refresh the data?

Data is automatically refreshed several times per minute.

How can I see which server I am connected to?

Click the **Services** tab.

The servers to which you are connected are selected in the left pane.

Can I see any additional information for a specific service?

In the Services tab, click a **service name** to:

- view a summary of service details
- change the service mode
- view notifications of errors, warnings, and informational messages
- view/manage the service's user access permissions

I can't change the data model for one of my services. What's the problem?

When a service is in learning or simulation mode, you cannot change the simulation models. You must first stop the learning or simulation session.

Can I see which agents are deployed on the server?

Yes. In the Home tab, under Quick Links, click **Agents Deployed** to view details of the agents.

Where's the best place to deploy new services?

Consult the server statistics in the Home tab Dashboard to determine which Service Virtualization Server has the lightest load.

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