

Veritas™ Smart Meter Getting Started Guide

VERITAS™

Veritas™ Smart Meter Getting Started Guide

Last updated: 2019-07-01

Legal Notice

Copyright © 2019 Veritas Technologies LLC. All rights reserved.

Veritas, the Veritas Logo, and NetBackup are trademarks or registered trademarks of Veritas Technologies LLC or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

This product may contain third-party software for which Veritas is required to provide attribution to the third party ("Third-party Programs"). Some of the Third-party Programs are available under open source or free software licenses. The License Agreement accompanying the Software does not alter any rights or obligations you may have under those open source or free software licenses. Refer to the Third-party Legal Notices document accompanying this Veritas product or available at:

<https://www.veritas.com/about/legal/license-agreements>

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation/reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Veritas Technologies LLC and its licensors, if any.

THE DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. VERITAS TECHNOLOGIES LLC SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, et seq. "Commercial Computer Software and Commercial Computer Software Documentation," as applicable, and any successor regulations, whether delivered by Veritas as on premises or hosted services. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Veritas Technologies LLC
2625 Augustine Drive
Santa Clara, CA 95054

<http://www.veritas.com>

Technical Support

Technical Support maintains support centers globally. All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policies. For information about our support offerings and how to contact Technical Support, visit our website:

<https://www.veritas.com/support>

You can manage your Veritas account information at the following URL:

<https://my.veritas.com>

If you have questions regarding an existing support agreement, please email the support agreement administration team for your region as follows:

Worldwide (except Japan)

CustomerCare@veritas.com

Japan

CustomerCare_Japan@veritas.com

Documentation

Make sure that you have the current version of the documentation. Each document displays the date of the last update on page 2. The latest documentation is available on the Veritas website:

<https://sort.veritas.com/documents>

Documentation feedback

Your feedback is important to us. Suggest improvements or report errors or omissions to the documentation. Include the document title, document version, chapter title, and section title of the text on which you are reporting. Send feedback to:

NB.docs@veritas.com

You can also see documentation information or ask a question on the Veritas community site:

<http://www.veritas.com/community/>

Veritas Services and Operations Readiness Tools (SORT)

Veritas Services and Operations Readiness Tools (SORT) is a website that provides information and tools to automate and simplify certain time-consuming administrative tasks. Depending on the product, SORT helps you prepare for installations and upgrades, identify risks in your datacenters, and improve operational efficiency. To see what services and tools SORT provides for your product, see the data sheet:

https://sort.veritas.com/data/support/SORT_Data_Sheet.pdf

Contents

Veritas™ Smart Meter	5
About Veritas Smart Meter	5
Data protection, privacy, and security standards	8
Data types collected and data collection events	9
Local repository for telemetry data	10
Enable Veritas Smart Meter	11
Important customer registration key information	16
Data transmission to Veritas	17
Manual upload of telemetry information	17
Frequently asked questions	19
Further information	33

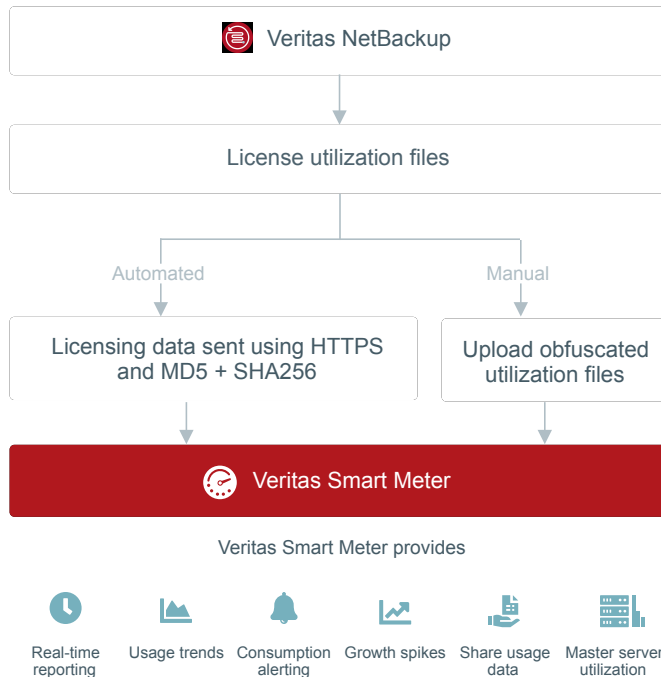
Veritas™ Smart Meter

About Veritas Smart Meter

Veritas Smart Meter helps you manage your NetBackup deployment more efficiently, spot trends, and plan for the future. With accurate, near real-time reporting, it reveals the total amount of data that is backed up. Smart Meter alerts you if you are close to exceeding your licensed capacity limits. You must be at NetBackup 8.1.2 or later to use Smart Meter.

Figure 1 Veritas Smart Meter overview

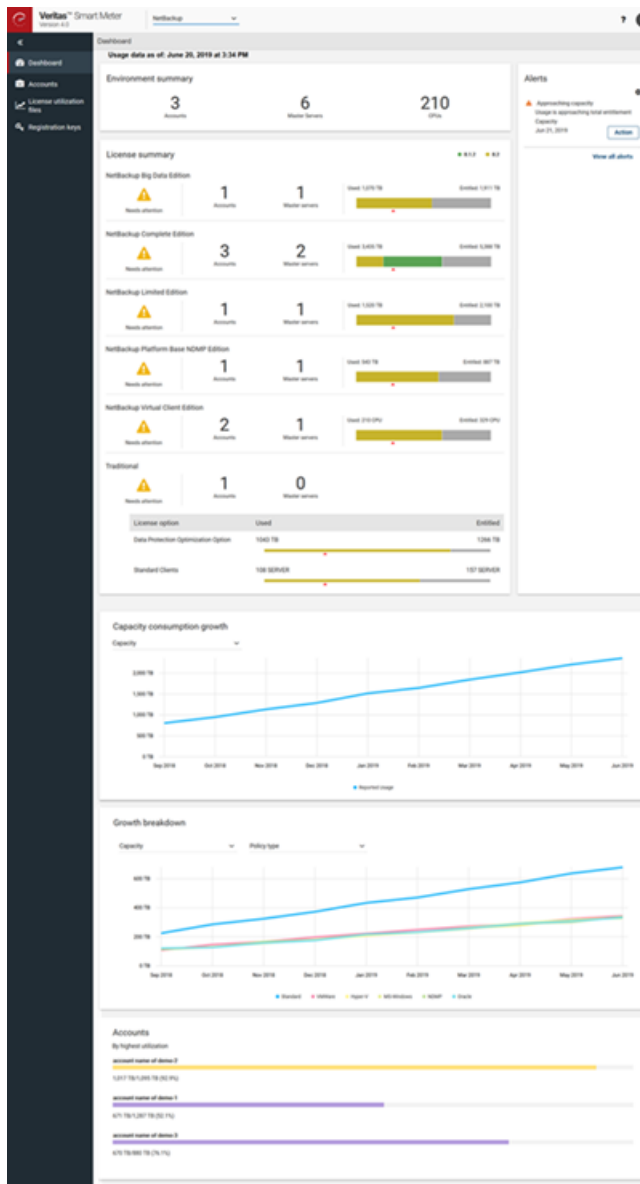
Veritas Smart Meter overview



Smart Meter provides:

- Accurate, near real-time reporting of terabytes protected, total number of protected clients or the total storage capacity, and the total number of sockets of a hypervisor whose virtual machines are protected.
- A graphical display of usage trends
- Tracking of consumption & alerts before entitlements are exceeded
- Easy planning and budgeting, for each of your accounts
- Identify growth spikes
- View the breakup of usage information based on license type and NetBackup product version
- Master server level information now available. You can add the master server name within Smart Meter

Figure 2 Veritas Smart Meter dashboard



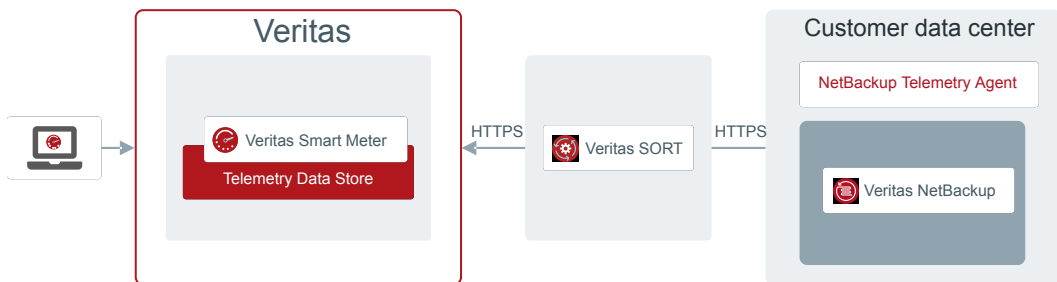
You must have NetBackup 8.2 or later to view Traditional and NetBackup Enterprise Virtual Client (NEVC) usage information on Smart Meter.

For customers who use Capacity licensing (NDMP, Limited Edition, BigData, or Complete), Traditional licensing, or NEVC licensing, Smart Meter helps accurately measure capacity usage to give total visibility into how each of the protected workloads consume storage, enabling efficient planning. Smart Meter also eliminates the need for these customers to manually upload telemetry data to Veritas.

You can access Veritas Smart Meter portal with Google Chrome, Mozilla Firefox, or Microsoft Edge at the following URL:

<https://taas.veritas.com/>

Figure 3 Veritas Smart Meter conceptual architecture



Data protection, privacy, and security standards

Veritas is committed to your privacy and your data security. Smart Meter does not provide Veritas any visibility to customer's data content including personally identifiable information. Smart Meter collects limited configuration data that some customers may deem sensitive, such as the host name and IP addresses. Veritas recognizes the sensitivity of this data in the eyes of the customer and upholds stringent practices to secure it. Veritas adheres to the European GDPR rules and regulations. For more information about how Veritas manages customer privacy and our commitment to GDPR refer to the following site:

<https://www.veritas.com/about/privacy/>

How does Veritas ensure your private information stays private?

Veritas Smart Meter does not collect user or business data. Additionally, Veritas Smart Meter does not collect any data that describes files, databases, and other proprietary information.

Once the data is collected on your local computers, any unique customer information is obscured using a hash algorithm. Veritas Smart Meter obfuscates any fields

where you are prompted to enter user information. Policy names and server names are examples of obfuscated data. Veritas uses a cryptographic hash algorithm to mask customer-specific data.

How does Veritas secure the data in transit?

After the data is collected and any unique customer information is obscured, the data is transmitted securely to Veritas using industry standard encryption methods. In addition, all Smart Meter traffic from your network is outbound only.

Smart Meter uses the `HTTPS` protocol to secure the data in transit. You must configure your firewall to allow `HTTPS` traffic out of your network to take advantage of Smart Meter. All data is maintained securely on Veritas servers in accordance with Veritas' privacy standards.

Veritas uses the following standards to protect the data that is sent to Veritas:

- MD5 and SHA256: Hashing algorithms used for obfuscating customer information.
- HTTPS (SSL/TLS encrypted): Used in data transmission.

How is the data maintained securely at Veritas?

After obfuscation on-site and secure transmission to Veritas, the data is stored in the Amazon S3 cloud. The S3 data is encrypted with AES-256.

Data types collected and data collection events

In connection with Customer's use of the Licensed Software, Veritas may collect, retain, disclose and use certain information ("Collected Data"), including, without limitation, through the use of various mechanisms and tools, such as Veritas Smart Meter. For the purposes of this Section, Veritas Smart Meter is a tool that is designed to collect the information below. Smart Meter is designed to allow automatic data uploading to Veritas. A customer's environment may be configured to not allow automatic data uploading.

Deployment information follows:

- Hardware and software configuration specifics of each server:
 - IP address, IP type
 - Fully qualified domain name (FQDN)
 - Alias, host name, host ID, platform, and architecture
- CPU name, type, clock speed, etc.
- Time zone

- Environmental language
- Operating system version level
- Memory size
- Licensed NetBackup software version, features, and installed packages
- Additional Veritas packages that are installed

Usage information follows:

- NetBackup configuration settings
- Client counts by policy type and platform
- Storage unit configurations
- Media server counts by NetBackup version and platform
- Policy count by policy type
- Policy configurations
- Job records
- Media counts by media on hold and retention level
- Storage Lifecycle Policy (SLP) counts by operation type
- SLP configurations

To view the most updated data collection and usage information, please visit:

<https://www.veritas.com/about/privacy/>

Four different events prompt NetBackup to collect and transmit telemetry information to Veritas via Smart Meter. Some events occur because of user actions and others because of time passage. The events are:

- Installation, upgrade, and uninstall events
- Run-time events
- Domain information
- Usage reporting

Local repository for telemetry data

You can review local copies of the data that Veritas collects on each system with telemetry enabled. You can review local copies of the telemetry information that Veritas collects at the following locations:

- UNIX and Linux:

```
/var/veritas/telemetry/  
/usr/opensv/var/global/telemetry/dataset
```

- **Windows:**

```
%ALLUSERSPROFILE%\Veritas\telemetry\  
install_path\Veritas\NetBackup\var\global\telemetry\dataset
```

Within both the `telemetry` and `dataset` directories, there are additional subdirectories in the format `telemetry_YYYYmmdHHMMxxx`. The data that is transmitted to Veritas is in each of these subdirectories.

Note: The second Windows location (`..\global\telemetry\dataset`) may be different for Windows clusters. This location is based on the registry entries that are outside of where telemetry looks for data.

While all telemetry information on the local system is stored in human readable format, the data has passed through the MD5 hash algorithm. Any unique customer information is obfuscated when collected.

Note: The local repository is empty if the local disk is more than 85% full. Data sets are pruned automatically to avoid consuming too much disk space.

Enable Veritas Smart Meter

You must take additional actions to take advantage of the features and functionality of Veritas Smart Meter.

Figure 4 4-step registration process for Smart Meter

Smart Meter

3 Step registration process

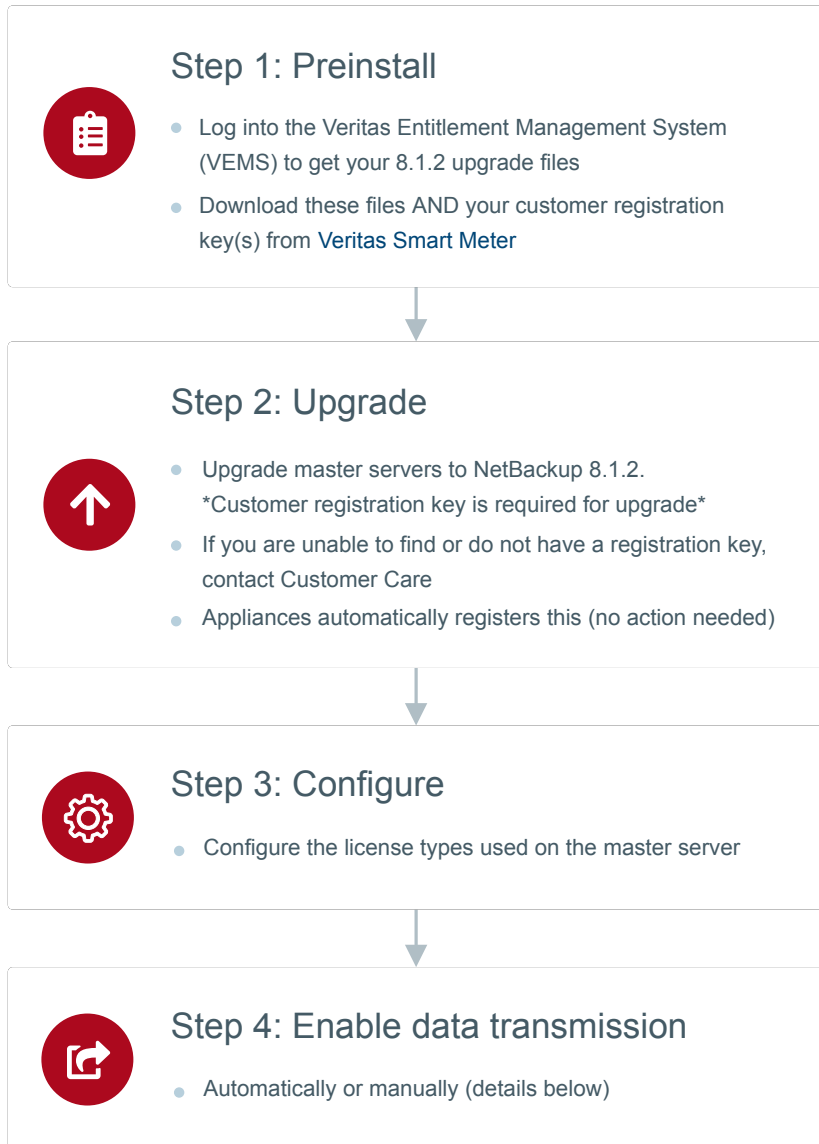


Table 1 Veritas Smart Meter process flow

Step	Action	Additional details
1	Preinstall	<p>Log into Smart Meter using your Veritas Account Manager credentials. Download the customer registration key before installation or upgrade. Installations and upgrades cannot proceed without this file.</p> <p>Note: Smart Meter is compatible with Google Chrome, Mozilla Firefox, and Microsoft Edge. Veritas does not recommend using Microsoft Internet Explorer, as it does not render all information correctly.</p> <p>To download the required customer registration key:</p> <ul style="list-style-type: none"> ■ Connect to the Veritas Smart Meter portal with Google Chrome, Mozilla Firefox, or Microsoft Edge: https://taas.veritas.com/ ■ Log into the Veritas Smart Meter portal with your Veritas Account Manager account. ■ Smart Meter displays all account IDs that are associated with your account. ■ Select Registration Keys and locate an Account ID that is associated with your account. ■ Use the download option in the Account file column to get that customer registration key. <p>If you see multiple files, download the customer registration key that matches the account for the specified master server.</p> <p>Warning: Do not modify the file name of the registration key.</p> <p>Contact Veritas Support if you cannot log into Smart Meter or download your customer registration key or keys. Support can assist you with the login and download of the customer registration key. If Support is unable to assist you with the download of the customer registration key, they can provide you with a temporary customer registration key file.</p>
2	Upgrade	<p>Smart Meter requires NetBackup 8.1.2 or later. You must install or upgrade your NetBackup master server to NetBackup 8.1.2 or later. As a part of the install or upgrade process, you must provide the customer registration key.</p> <p>The <i>NetBackup Upgrade Guide</i> provides comprehensive and detailed information on how to successfully upgrade your master server. You can find the <i>NetBackup Upgrade Guide</i> and other related NetBackup documentation at: https://www.veritas.com/docs/100040135</p> <p>In the <i>Veritas NetBackup Upgrade Guide</i>, refer to the Available NetBackup upgrade methods section for details on upgrade methods.</p>

Table 1 Veritas Smart Meter process flow (*continued*)

Step	Action	Additional details
3	Post upgrade or install	<p>Associate the appropriate or new customer registration key in NetBackup 8.1.2 or later after upgrade or installation.</p> <ol style="list-style-type: none"> Access the following location on the master server: <ul style="list-style-type: none"> UNIX <code>/usr/opensv/var/global/customer_registration</code> Windows <code><NetBackup_install_directory>\var\global\customer_registration</code> <p>Rename or remove the existing customer registration key.</p> <ol style="list-style-type: none"> Download the appropriate or new customer registration key or aggregate key from Smart Meter to a temporary location. <p>Warning: Do not modify the file name of the new registration key.</p> Open a web browser and go to the following URL: https://masterserver/webui/login <p>The <code>masterserver</code> is the host name or IP address of the NetBackup master server that you want to sign in to.</p> Enter your credentials and click Sign in. When you are prompted to upload the customer registration key, select and upload the appropriate key for this master server. If you installed an aggregate registration key, select the correct registration key for this server from the drop-down list. <p>Note: You can also perform steps 5 and 6 from Usage reporting widget on the NetBackup web UI Dashboard.</p> Configure the license type using the <code>bpsetconfig</code> command. <p>More information about configuring the license type is available. See the <i>NetBackup Administrator's Guide Volume II</i>.</p>
4	Transmit	<p>Transmit the telemetry data to Veritas.</p> <ul style="list-style-type: none"> See “Data transmission to Veritas” on page 17. See “Manual upload of telemetry information” on page 17.

Environment with multiple master servers

This section is only applicable to capacity licensing. In an environment with multiple master servers, you can configure `nbdeployutil` on a specific master to collect

usage from some or all of your master servers. In this case, only that specific master server needs to be upgraded to 8.1.2 or later. Additionally, you only need to place the customer registration key on that one master server. This server acts as a proxy for all your included master servers and transmits the telemetry information to Veritas. All these master servers must use the same customer identifier.

More information about `nbdeployutil` is available. See the *NetBackup Administrator's Guide Volume II* and the *NetBackup Commands Reference Guide*.

Important customer registration key information

Please note the following information about customer registration keys:

- The customer registration key does not contain any entitlement information.
- When you sign in to Smart Meter, you can see a list of all account IDs associated with your account.
- You can download a single customer registration key or an aggregate key:
 - A single key is associated with a single account.
 - You can also download an aggregate customer registration key that is associated with multiple account IDs. If you download an aggregate key, the NetBackup web UI prompts you to select the account ID that is associated with the master server.

Caution: Do not modify the file name of the registration key.

- The customer registration key is required during NetBackup 8.1.2 or later installation or upgrade.
- You can use a customer registration key with one or more of your master servers and regardless of the entitlement type that is associated with the account. However, usage reporting is only available for an account that uses capacity licensing.
- The usage details for a master server are reported for the account that is associated with that master server. (The account was determined from customer registration key that you selected during installation or upgrade.)
- To change the account ID that is associated with the master server, see the **Post upgrade or install** section from the following topic:
See [“Enable Veritas Smart Meter”](#) on page 11.
- For every account ID in Smart Meter, you can see the capacity usage compared to your entitled capacity.

Data transmission to Veritas

The required telemetry information is uploaded to Veritas in two different ways. Your upload method choice depends on your preference.

By default, the data is uploaded automatically every day. This method requires the least user intervention and ensures the Smart Meter data is current. This method requires an open port on your firewall to transmit `HTTPS` traffic. The default port for `HTTPS` traffic is port 443.

If your environment does not allow for automatic uploads, you can manually upload the required telemetry information.

See [“Manual upload of telemetry information”](#) on page 17.

Manual upload of telemetry information

If your environment does not allow automatic upload of Smart Meter data, you can manually upload the required usage reporting information in the Veritas Smart Meter application. For example, if you have an air-gapped environment, you can use the manual upload method to provide capacity data to Smart Meter. While this method lets you review the information before it is transmitted to Veritas, the data within Smart Meter is not as accurate.

Veritas recommends manually uploading the data at least once a month, more often for larger environments. The usage notifications and monitoring features are most useful when they are current.

To upload Smart Meter data:

- 1 Log into Smart Meter with your Veritas Account Manager credentials.
- 2 Select **License utilization files** on the left side of the screen.
- 3 In the resulting screen, select **Upload files**.
- 4 Browse to the telemetry files you want to upload. The correct place to find the license utilization files for Smart Meter is:
 - UNIX and Linux: `/usr/opensv/var/global/incremental/`
 - Windows: `install_path\Veritas\NetBackup\var\global\incremental`
 - File name:
`hostuuid_startinterval_netbackup_capacity-utilization.json`

Note: This file contains the license utilization information that is necessary for Smart Meter. To see all telemetry information Veritas collects, see:

See [“Local repository for telemetry data”](#) on page 10.

The older json files were consuming space on the master server. With Veritas 8.2 or later, the older json files will be removed based on the `PURGE_INTERVAL` parameter in the `nbdeployutilconfig.txt` file. Ensure that the `PURGE_INTERVAL` parameter value is such that the json files are available when you have to upload them to the Smart Meter portal.

- 5 Select the files you want to upload and click **Choose**. The files are uploaded to Veritas.
- 6 In the **License utilization files** screen, you see a list of all files that you uploaded to Veritas.

Table 2

Automatic	Manual
<p>1 Enable the licensing usage telemetry for Smart Meter by downloading the customer registration key or account ID file for one or more accounts.</p> <p>2 After signing in to Smart Meter, you must download the customer registration key or account ID file of your accounts. These files are installed on your local NetBackup master server or servers during installation or upgrade.</p> <p>If all your master servers can connect to Smart Meter and send data, install the customer registration key on all of the master servers.</p> <p>Ensure that you have set up scheduled runs of <code>nbdeployutil</code>, the tool that generates the usage data used by Smart Meter.</p>	<p>1 If your environment doesn't allow automatic uploads, you can upload telemetry files to Veritas to update Smart Meter.</p> <p>Smart Meter lets you manually upload telemetry files so that you can link and review your licensed capacity and usage.</p> <p>Ensure that you have set up scheduled runs of <code>nbdeployutil</code>, the tool that generates the usage data used by Smart Meter.</p> <p>2 Copy the <code>hostuid_startinterval_netbackup_capacity-utilization.json</code> files that provides the usage information, from the following location:</p> <ul style="list-style-type: none"> ■ UNIX: <code>/usr/openv/var/global/incremental</code> ■ Windows: <code>install_path\var\global\incremental</code> <p>Note: The policy names, client names, and master server names are obfuscated in the file.</p> <p>Use the License utilization files page to upload the file(s).</p>

Frequently asked questions

Table 3 includes some of the frequently asked questions about Veritas Smart Meter.

Table 3 Frequently asked questions

Question	Answer
Smart Meter overview	
What browsers does Smart Meter support?	Smart Meter is compatible with Google Chrome, Mozilla Firefox, and Microsoft Edge. Veritas does not recommend using Microsoft Internet Explorer, as it does not render all information correctly.
Why do I sometimes not see the Customer Registration Keys screen when I click it on the left?	An intermittent issue exists with the URLs for Smart Meter screens. If you click another one of the options on the left and then click Customer Registration Keys again, the URL resets to https://taas.veritas.com/#/enableTelemetry .
What licensing types are supported by Smart Meter?	<p>The following license types are supported by Smart Meter:</p> <ul style="list-style-type: none"> ■ NetBackup Platform Base Complete Edition ■ NetBackup Platform Base Limited Edition ■ Netbackup Platform Base Big Data Workload Edition ■ NetBackup Platform Base NDMP Edition ■ NetBackup Enterprise Virtual Client Edition (8.2 or later) ■ NetBackup Traditional Licensing Model Edition (8.2 or later) <p>If you have NetBackup 8.1.2, your capacity license usage is displayed under the NetBackup Platform Base Complete Edition license type.</p>
If I do not use capacity licensing, do I still need a customer registration key during NetBackup installation or upgrade?	<p>Yes! To complete the NetBackup installation or upgrade, you must download a registration key with your current license.</p> <p>By adding a registration key, you can manage and track licensing in Smart Meter.</p>
How does Smart Meter handle misspelled customer names?	This situation would occur in less than 1% of the cases. In such cases, call customer support to correct the customer names in the ERP system.
Does Smart Meter work with 360 data management bundles?	The usage and entitlement is displayed only for the NetBackup software component.

Table 3 Frequently asked questions (*continued*)

Question	Answer
Can you tell me about how Smart Meter handles the telemetry information?	<p>Smart Meter does not collect user or business data. Additionally, Smart Meter does not collect any data that describes files, databases, and other proprietary information. After the data is collected on your local computers, any unique customer information is obscured using a hash algorithm (MD5 and SHA256). Smart Meter obfuscates any fields for which you are prompted to enter user information. Policy names and server names are examples of obfuscated data. Veritas uses a cryptographic hash algorithm to mask customer-specific data.</p> <p>After the data is collected and any unique customer information is obscured, the data is transmitted securely to Veritas using industry standard encryption methods. In addition, all Smart Meter traffic from your network is outbound only. Smart Meter uses the <code>HTTPS</code> protocol (SSL/TLS encrypted) to secure the data in transit. You must configure your firewall to allow <code>HTTPS</code> traffic out of your network to take advantage of Smart Meter.</p>
How does my telemetry data travel to the Smart Meter portal?	<p>The <code>nbtelometry</code> process securely sends the data to https://telemetry.veritas.com that is part of the Veritas SORT infrastructure. The data is then transmitted securely to the Smart Meter for processing and display on the portal.</p>

Table 3 Frequently asked questions (*continued*)

Question	Answer
How can I confirm that the data that is shared with Veritas Smart Meter is secure and masked?	

Table 3 Frequently asked questions (*continued*)

Question	Answer
	<p>In the Capacity, Traditional, and NEVC usage reports (created by <code>nbdeployutil</code>) the data is not masked because you might want to work with the reports. The usage reports are NOT shared with Veritas Smart Meter.</p> <p>The JSON file that is shared with Veritas Smart Meter is located on your master server at the following location:</p> <p>UNIX and Linux: <code>/usr/opensv/var/global/incremental/</code></p> <p>Windows: <code>install_path\Veritas\NetBackup\var\global\incremental</code></p> <p>File name: <code>hostuuid_startinterval_netbackup_capacity-utilization.json</code></p> <p>The JSON file is different than the standard <code>nbdeployutil</code> reports (<code>.out</code> and <code>.xls</code> files).</p> <p>For example, you can see in this sample that the Master Name, Client Name and Policy Name have all been masked.</p> <pre> active_account_information customer_identifier_value "FLPK-3" selection_type "user" customer_identifier_document_created_by "smart_meter" customer_identifier_document_timestamp 1525120750 customer_identifier_document_version "1.0" customer_identifier_document_updated_by "smart_meter" document_version "1.0" document_type "capacity-utilization" start_interval 20180713 appliance_serial_number "na" server_identifier_value "763AE951-6BF4-1014-84C4-BF6B1B9526AF" accuracy "OK" master_server "65e043f207e518a21ba9d04613fd094967 bd49e2c81081068172cd5e000ce4a8" charged_size 2322432 </pre>

Table 3 Frequently asked questions (*continued*)

Question	Answer
	<pre>client_name "65e043f207e518a21ba9d04613fd094967 bd49e2c81081068172cd5e000ce4a8" total_size 2322432 policy_type "MS-Windows" accuracy_method 2 size_uom "kb" policy_name "e6f906b897ee168fa5b4f84883941b759 c53d3608b83bac5586c278ea55b7a27" accuracy_comment ""</pre> <p>If you use Smart Meter, then you can review the JSON files to confirm.</p> <p>Note: You can use Firefox or any other JSON viewer tool to review the JSON file.</p>
How does Veritas manage data privacy?	<p>For more information about how Veritas manages customer privacy and our commitment to GDPR refer to the following site:</p> <p>https://www.veritas.com/about/privacy/</p>
Does Smart Meter replace <code>nbdeployutil</code> for license audits?	<p>Smart Meter is the official tool for license usage measurement. The <code>nbdeployutil</code> command is, however, what provides information to Smart Meter. As such, <code>nbdeployutil</code> is still used. Additionally, <code>nbdeployutil</code> remains the source of record for all other NetBackup software licensing models.</p>
Can I use Smart metering if I'm not connected to the Internet?	<p>Yes, but you need to manually upload the capacity usage information from a computer with Internet connectivity.</p>
Can I use Smart Meter for log forwarding?	<p>This capability is not currently available.</p>
I would like to try out the Smart Meter. How can I get the customer registration key?	<p>If you have an ERP account with Veritas, you can access the Smart Meter and download the key from registration keys.</p>
Currently, I am not a Veritas customer but would like to try out NetBackup 8.1.2 or later and Smart Meter.	<p>Contact Support for the customer registration key that is required for NetBackup 8.1.2 or later installation. You will also need an ERP account with Veritas to access the Smart Meter.</p>

Table 3 Frequently asked questions (*continued*)

Question	Answer
Does the NetBackup Support Utility (NBSU) collect any information about <code>nbdeployutil</code> , Smart Meter, etc. Such as confirming the presence of a (valid) registration key, type of key (temporary, aggregate, normal), <code>nbdeployutil</code> configuration file settings, and any other relevant touch points that would provide evidence to assist in troubleshooting?	No information is collected about the <code>nbdeployutil</code> utility or its configuration in NBSU.
Who should I contact to know more about telemetry collections or pings?	Contact Support directly if you are impacted by telemetry collection or pings. Sales Engineers and/or Sales Representatives can contact Support on your behalf as well.
I would like to be able to export the content in Smart Meter for my management & Audit teams. Can I do that?	You can export, print, and email the content from Smart Meter.
What are the convergence plans for OpsCenter, Smart Meter, etc?	Veritas is working to determine the best solution for you to visualize all of your data needs.
Accounts, entitlement, and licensing	
As a user with traditional licensing, do I still required the registration key?	Yes, the registration key is required for upgrade and install.
How does the Smart Meter workflow affect the proof of concepts when we use Type 2 trialware and get entitlements from VEMS?	The Smart Meter workflow does not affect the proof of concepts. Data that is consumed under a proof of concept is measured against that entitlement, thus showing no overage in that particular environment. Proof of concept master server installs must contact support to get a temporary customer registration key.
How does Veritas ensure that my current customer information is correct in Smart Meter?	The customer is responsible to confirm that all information is accurate. If the information is entered inaccurately, Smart Meter reports the information inaccurately.

Table 3 Frequently asked questions (*continued*)

Question	Answer
How do I verify if Smart Meter is showing accurate usage information?	

Table 3 Frequently asked questions (*continued*)

Question	Answer
	<p>You can refer to the topics on the <code>nbdeployutil</code> utility in the NetBackup Administration Guide for any additional questions that you have. We intend to bring more granularity into Smart Meter that improve your product experience.</p> <p>Data from automated or scheduled runs of the <code>nbdeployutil</code> utility is transmitted to Smart Meter. During these runs, <code>nbdeployutil</code> also generates an excel report on the master server. You can compare the usage in Smart Meter with the usage in the excel report.</p> <p>Ensure that you are using the excel reports from ALL the master servers specified under the account specified in Smart Meter.</p> <p>The latest excel report is generated by <code>nbdeployutil</code> is available at the following path on the master server:</p> <ul style="list-style-type: none"> ■ Capacity licensing Unix: <code>/usr/opensv/var/global/incremental</code> Windows: <code>Install_Dir\Veritas\NetBackup\var\global\incremental</code> ■ Traditional licensing (8.2 or later) Unix: <code>/usr/opensv/var/global/traditional</code> Windows: <code>Install_Dir\Veritas\NetBackup\var\global\traditional</code> ■ NEVC (8.2 or later) Unix: <code>/usr/opensv/var/global/NEVC</code> Windows: <code>Install_Dir\Veritas\NetBackup\var\global\NEVC</code> <p>Older excel reports are available at the following path:</p> <ul style="list-style-type: none"> ■ Capacity licensing Unix: <code>/usr/opensv/var/global/incremental/archive</code> Windows: <code>Install_Dir\Veritas\NetBackup\var\global\incremental\archive</code> ■ Traditional licensing (8.2 or later) Unix: <code>/usr/opensv/var/global/traditional/archive</code> Windows: <code>Install_Dir\Veritas\NetBackup\var\global\traditional\archive</code>

Table 3 Frequently asked questions (*continued*)

Question	Answer
	<ul style="list-style-type: none"> ■ NEVC (8.2 or later) Unix: /usr/opensv/var/global/NEVC/archive Windows: <i>Install_Dir\Veritas\NetBackup\var\global\NEVC\archive</i>
<p>What if there are usage inaccuracies. What can I do?</p>	<p>You can contact Veritas Technical support and provide the directories within the incremental folders, which contain logs, based on your license type.</p> <p>The directories are located at the following path:</p> <ul style="list-style-type: none"> ■ Capacity licensing Unix: /usr/opensv/var/global/incremental Windows: <i>Install_Dir\Veritas\NetBackup\var\global\incremental</i> ■ Traditional licensing (8.2 or later) Unix: /usr/opensv/var/global/traditional Windows: <i>Install_Dir\Veritas\NetBackup\var\global\traditional</i> ■ NEVC (8.2 or later) Unix: /usr/opensv/var/global/NEVC Windows: <i>Install_Dir\Veritas\NetBackup\var\global\NEVC</i>
<p>What happens when customers split and or merge their businesses?</p>	<p>The customer account team handles the account split and merger processes in ERP and VEMS. Smart Meter pulls the usage information when other systems are updated and the following steps are taken:</p> <ul style="list-style-type: none"> ■ Master servers are running version 8.1.2 or later ■ The updated registration keys are added to the master servers ■ Data transmission is set up (manually or automatically)
<p>Can service providers use Smart Meter for charge back?</p>	<p>Yes. Since both the partner and customer have access to this portal, they can look at the same data together and work through the capacity overages.</p>

Table 3 Frequently asked questions (*continued*)

Question	Answer
<p>If I buy a new entitlement to expand my capacity, will I get a new customer registration key?</p>	<ul style="list-style-type: none"> ■ If the new entitlement is tied to the same account, the capacity will refresh and show the new total entitlement the next time you log in to the Smart Meter portal. ■ If the new entitlement is not tied to the same account: <ul style="list-style-type: none"> ■ Contact Customer Support. ■ Download the new registration key(s) and follow the instructions on the Smart Meter to add the key(s) on the appropriate master server.
<p>If my entitlements seem incorrect, how do I fix that?</p>	<p>Contact Support or your Sales team.</p>
<p>How do I reduce the number of account IDs that I have within the Veritas Entitlement Management System (VEMS)?</p>	<p>Contact your Sales team or Support to reduce or consolidate the number of account IDs you have in VEMS. Alternatively, when you place a new order ensure that the account name is congruent with the one that you already have.</p> <p>For example, if you already have an account as ABCD Incorporated avoid submitting the name as ABC Inc.</p>

Table 3 Frequently asked questions (*continued*)

Question	Answer
As a user how can I work with my business partner to grant them view access to the Smart Meter data?	<p>Use the following steps to grant view access to the Smart Meter data:</p> <ul style="list-style-type: none"> ■ Request your partner to: <ul style="list-style-type: none"> Create a Veritas account from the Support page (https://www.veritas.com/support/) and share the credentials (user ID and password). ■ Work with your partner to: <ul style="list-style-type: none"> Identify the VEMS account you want the partner to view using the Smart Meter. ■ Once you have identified the VEMS account: <ul style="list-style-type: none"> ■ Log in to VEMS. <p>Note: You need to have the administrator rights to grant view access to the partner.</p> ■ Click Entitlements on the main menu to view all entitlements and review the Accounts column to identify the accounts that you want the partner to view. ■ From the main menu, click the gear icon and from the Manage Users page, click Add User. ■ Add the partner's information and set the partner's access rights for every VEMS account. The following rights or privileges are possible: Administrator, Generate License Keys, Download Software or View. <p>Note: Ensure that you give appropriate access rights to the partners. The View option will enable the partners to view your data in Smart Meter.</p> <p>For more information, refer to the VEMS user guide: https://www.veritas.com/support/en_US/article.100040083</p>
How do I get a registration key for a trial or a Proof Of Concept (POC)?	If you cannot locate your registration keys or require a new registration key for the trial or POC, please contact your Sales team.

Setup for Smart Meter

Table 3 Frequently asked questions (*continued*)

Question	Answer
<p>What assistance can Veritas customer support provide during a domain upgrade when I need a registration key but I do not know the Veritas account?</p>	<p>Customer support is available to help acclimatize as many customers to Smart Meter as possible. They can provide you all the relevant information and provide keys to get your NetBackup environment running. You must, however, connect your actual keys to the master servers to get accurate information.</p>
<p>If I am a new backup administrator, do I need to download all customer registration keys again?</p>	<p>No. Once you are given visibility to the accounts in VEMS by your administrator, you can sign in to Smart Meter. The view should automatically populate with the same usage and entitlement information that had populated for the previous administrator.</p>
<p>How is the Smart Meter process affected if a person with Veritas Account Manager credentials leaves their organization?</p>	<p>The customer's organization should provide new customer contact information to the VAM and the VEMS systems for updated credentials and access.</p>
<p>If there is a network outage in my NetBackup setup, how is the data gap on the portal managed by NetBackup and Smart Meter?</p>	<p>There will be an attempt to upload the usage data automatically, but if attempt fails, the data will not be uploaded. In such a case, you can manually upload the usage data.</p>
<p>Does the <code>nbdeployutil</code> configuration file get backed up with the catalog?</p>	<p>Yes. The <code>nbdeployutil</code> configuration file (<code>nbdeployutilconfig.txt</code>) gets backed up with catalog backup.</p>
<p>How are the registration keys affected during disaster recovery scenarios? Is the customer ID file included in the catalog backup or DR package?</p>	<p>The key file is not included in the DR package. It must be re-applied at install time, just like the base license key.</p>
<p>Usage reporting</p>	
<p>How does Smart Meter resolve the duplicate or the inaccurate data that we had to manually resolve after we generated a report using the <code>nbdeployutil</code> tool?</p>	<p>The overlap reduction and accuracy improvements that are in NetBackup 8.1.2 or later resolve the duplicate data issues.</p> <p>Overlap and accuracy have improved across all of the major traditional workloads (Oracle, File System, SQL, Exchange, VMware, and NDMP), as well as the emerging workloads (Parallel Streaming Framework).</p>
<p>Along with using Smart Meter, can I still run the <code>nbdeployutil</code> tool manually or schedule the tool to gather and report usage data?</p>	<p>Yes.</p>

Table 3 Frequently asked questions (*continued*)

Question	Answer
I don't see any usage data on Smart Meter after I configure the automated data collection or manually uploading the utilization file. What should I do?	Ensure that you have set up scheduled runs of <code>nbdeployutil</code> , the tool that generates the usage data used by Smart Meter.
How do I set the schedule for when <code>nbdeployutil</code> runs?	<p>You can adjust the frequency for <code>nbdeployutil</code> in number of days. It runs after midnight based on the <code>FREQUENCY_IN_DAYS</code> setting.</p> <p>For capacity licensing, the setting is found in the <code>[NBDEPLOYUTIL_INCREMENTAL]</code> section of the <code>nbdeployutilconfig.txt</code> file.</p> <p>For traditional licensing (8.2 or later), the setting is found in the <code>[NBDEPLOYUTIL_INCREMENTAL_TRADITIONAL]</code> section of the <code>nbdeployutilconfig.txt</code> file.</p> <p>For NEVC licensing (8.2 or later), the setting is found in the <code>[NBDEPLOYUTIL_INCREMENTAL_NEVC]</code> section of the <code>nbdeployutilconfig.txt</code> file.</p> <p>The <code>nbdeployutilconfig.txt</code> file is located in:</p> <p>UNIX and Linux: <code>/usr/openv/var/global/</code></p> <p>Windows: <code>install_path\Veritas\NetBackup\var\global\</code></p>
How do I set the schedule for when the data transmits?	You can only control the upload of data based on the <code>FREQUENCY_IN_DAYS</code> value. The telemetry schedule launches every 15 minutes and transmits whenever the <code>UsageData_Sanitized.out</code> file is present.
Can I change the frequency at which <code>nbdeployutil</code> runs?	<p>Yes. You can change the frequency at which <code>nbdeployutil</code> runs, using the following command:</p> <p>Unix</p> <pre>nbdeployutil.exe --capacity --incremental --report --inc-settings "Install_Dir\netbackup\var\global\nbdeployutilconfig.txt" --hoursago <custom-time-interval></pre> <p>Windows</p> <pre>nbdeployutil.exe --capacity --incremental --report --inc-settings "/usr/openv/var/global/nbdeployutilconfig.txt" --hoursago <custom-time-interval></pre>

Table 3 Frequently asked questions (*continued*)

Question	Answer
How do I know that Smart Meter ran correctly and transmitted all data as expected?	<p>The NetBackup user interface notifies you if the data was not transmitted. Additionally, you can log into Smart Meter to review the files that were transmitted.</p> <p>In Smart Meter, select License utilization files and review the information in the Capacity utilization files table. This table shows details about what files were uploaded and when they were uploaded.</p> <p>You can also examine the <code>upload-nb-usagereporting.json</code> file. This file shows the last upload success, failure, and other information. That file is located in:</p> <p>UNIX and Linux: <code>/usr/opensv/var/global/telemetry/status/</code></p> <p>Windows: <code>install_path\Veritas\NetBackup\var\global\telemetry\status\</code></p>
If a master server is decommissioned does it automatically stop showing up in Smart Meter?	Yes. The server shops showing up in Smart Meter after a day.
What happens when a master server that I had set up for usage reporting in the portal is decommissioned?	The historical usage reporting data will be available with the Smart Meter portal but after the decommissioning, the portal will not receive any new data.
Will there be a special IP address to route the <code>nbdeployutil</code> reports coming over for Smart Meter?	NetBackup Telemetry and Smart Meter data both use https://telemetry.veritas.com , so you must open a port to that URL. By default, HTTPS traffic uses port 443.
How do I know if everything was set up correctly for Smart Meter?	When data begins to populate into Smart Meter. By default NetBackup uses port 443.
Why is the usage data not reported or updated on the NetBackup web user interface or Smart Meter?	For one of the likely reasons, refer to the following article: https://www.veritas.com/support/en_US/article.100044028.html
The <code>nbdeployutil</code> command can be configured with a <code>PURGE_INTERVAL</code> value for saving information. Will the Smart Meter portal report intervals longer than the 90 days? If you set the <code>PURGE_INTERVAL</code> for <code>nbdeployutil</code> to 365 days, will the Smart Meter Portal show 365 days' worth of data?	There is NO relation between purge interval in <code>nbdeployutil</code> and Smart Meter. Purge interval in <code>nbdeployutil</code> is related only to the report files (<code>.xls</code>) that are generated locally on the master server.

Table 3 Frequently asked questions (*continued*)

Question	Answer
<p>Can I change the automated frequency of nbdeployutil reporting?</p>	<p>Yes you can.</p> <p>Create a report for a time interval that is different than the default interval of 90 days. Run the following command:</p> <p>On Windows:</p> <pre>nbdeployutil.exe --capacity --incremental --report --inc-settings "install_dir\netbackup\var\global\nbdeployutilconfig.txt" --hoursago <custom-time-interval></pre> <p>On UNIX:</p> <pre>nbdeployutil.exe --capacity --incremental --report --inc-settings "/usr/opensv/var/global/nbdeployutilconfig.txt" --hoursago <custom-time-interval></pre> <p>The number of hours specified in <code>--hoursago</code> must be fewer than the <code>purge-interval</code> that is specified in the <code>nbdeployutilconfig.txt</code> file.</p> <p>Note: <code>nbdeployutil</code> uses existing gathered data to generate the custom interval report. You are not required to use the <code>--gather</code> option.</p>
<p>Why am I not receiving NEVC - socket related information on Smart Meter?</p>	<p>If you are not receiving socket related information, ensure that the backup host is using 8.2 or later version of NetBackup.</p>
<p>Why is there a change in the trend of capacity licensing usage reporting for 8.2 or later?</p>	<p>In <code>nbdeployutil</code>, if you set the flag in <code>bpsetconfig</code> for NetBackup Enterprise Virtual Client (NEVC) licensing type, in Smart Meter you will see a change in the trend of capacity licensing.</p> <p>As the NEVC license is selected, usage information for the virtualized environment is excluded from FETB/capacity licensing and is measured based on socket information as applicable under NEVC licensing.</p>

Further information

Please contact your Veritas sales representative or Customer Care for additional information about the Smart Meter service or for answers to questions that are not covered here.

If you are unsure who your sales representative is, contact Veritas for assistance:

<https://www.veritas.com/company/contact/>

If you are a Veritas partner, you can use the **PartnerNet** portal:

<https://partnernet.veritas.com/portal/faces/home>

- Customer Care in the United States:
 - 1-866-837-4827 or 1-512-813-2376
 - CustomerCare@veritas.com
 - https://www.veritas.com/content/support/en_US/contact-us.html
- Customer Care Worldwide
 - <https://www.veritas.com/company/contact>

For more information about how Veritas manages customer privacy and our commitment to GDPR refer to the following site:

<https://www.veritas.com/about/privacy/>

For more information about Veritas Entitlement Management System, refer to:

<https://www.veritas.com/docs/100040083>

The accuracy of licensing remains your responsibility. Veritas provides the data in Smart Meter for guidance.