

Veritas InfoScale Operations Manager 7.4.2 Update 5

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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

VIOM Patch 7.4.2.500

This document includes the following topics:

- [Post-installation tasks for this patch](#)
- [Changes introduced in this patch](#)
- [Known issues in this patch](#)

Post-installation tasks for this patch

After you install Patch 7.4.2.500 on a Veritas InfoScale Operations Manager (VIOM) Management Server and the managed hosts, update the following add-ons:

- Control Host (`VRTSsfmch-7.4.2.300` or later), which is applicable to the Management Server and the managed hosts. Update this add-on if you have configured agentless hosts, virtualization servers such as vCenter, HMC, and LPAR discoveries or storage arrays discoveries in the VIOM management console.
- Storage Insight add-on (`VRTSsfmsi-7.4.2.300` or later), which is applicable to the Management Server only. Update this add-on if you have configured storage array discoveries in the VIOM management console.

Changes introduced in this patch

The following sections describe the changes that are introduced in this patch.

Enhancements to support InfoScale Core Plus licensing

This patch provides several enhancements that let you work with the Core Plus licensing feature of InfoScale.

- The VIOM management console now lets you do the following tasks:

- Installing a VIOM CMS license key
 See [“Installing a VIOM CMS license key”](#) on page 5.
- Downloading the Core Plus coefficients file
 - Scheduling an automatic download of the Core Plus coefficient file from SORT to the CMS
 - Manually downloading the Core Plus coefficients file and uploading it to the CMS
 See [“Downloading the Core Plus coefficients file”](#) on page 6.
- Working with Core Plus licensing data
 - Collecting the Core Plus licensing data from the registered InfoScale servers
 See [“Collecting the Core Plus licensing data”](#) on page 7.
 - Downloading and viewing the InfoScale Core Plus report data
 See [“Downloading the Core Plus report and viewing the data”](#) on page 8.
 - Creating and viewing global reports of Core Plus licenses
 See [“Creating and viewing a global report of Core Plus licenses”](#) on page 11.

Installing a VIOM CMS license key

The VIOM management console displays the licensing status of a Management Server on the **Server** perspective > **Overview** tab > **License Registration Status** portlet.

Note: You need to generate a VIOM CMS license key only if you plan to work with the Core Plus licensing feature of InfoScale. This license key is to be generated from the Veritas Entitlement Management System (VEMS) portal, but it does not have a cost associated with it. This key is not required for any other VIOM features.

To install a VIOM CMS license key

- 1 If the status indicates that the key is not installed for the Management Server, click **Install key**.

Click **OK** when you are prompted for confirmation to navigate to the **Settings** perspective.
- 2 To directly install the key, open the **Settings** perspective > **Management Server** > **Server settings** tab (default).
- 3 Review the options and follow the instructions in the **Install license key** section.

Management Server

Server settings Environment

Install license key

Upload and install the VIOM CMS license key on this Management Server.
If you do not have a key, perform the following steps to generate one:

Step 1: Generate a host lock string for the VIOM Management Server by using the appropriate platform-specific command.
 UNIX - /opt/VRTSsfmcs/bin/VxLicGetHostLock.sh
 Windows - %ProgramFiles%\Veritas\VRTSsfmcs\bin\VxLicGetHostLock.ps1 /fqdn abc.xyz.com
 Sample host lock string : [sha512]156ef08e664f858cbd76f4611bb5b379fdd4a022f49ec6402cc42b55988448fb929d8b710d1615c1fb334e55451832615a2a5a61e85881018856507210368b02

Step 2: Log in to the [Veritas Entitlement Management System](#) (VEMS) portal to generate and download the license key.

Select license key file (.sif):

Various checks are performed on the downloaded file to ensure that it contains valid data. If the license key is already installed, an information message is displayed accordingly.

Downloading the Core Plus coefficients file

You can schedule the Core Plus Coefficients File to be downloaded automatically if the VIOM CMS has access to the public internet. Otherwise, you can download the file manually, and then upload it to the CMS.

To download the Core Plus coefficients file

- 1 Open the **Settings** perspective > **SORT** > **Core Plus Coefficients File Download Settings** tab (default).

The screenshot shows a web application window titled "SORT". It has three tabs: "Core Plus Coefficients File Download Settings" (selected), "SFHA Updates Download Settings", and "Price Tier Download Settings".

Under the "Core Plus Coefficients File automatic Download" section, there is an information icon and the text: "Configure an automatic, scheduled download if the VIOM CMS has access to the public internet." Below this is a checked checkbox labeled "Download Core Plus coefficients file". Further down are two dropdown menus: "Day of month:" with the value "1" and "Time of day:" with the value "00:00". A "Save" button is located below these dropdowns.

Under the "Core Plus Coefficients File manual Download" section, there is an information icon and the text: "Download the file manually if the VIOM CMS does not have access to the public internet." Below this are two steps:

- Step 1: Download the [InfoScale_CorePlus_Coefficients.json](#) file. (Alternative location for manual download: https://sort.veritas.com/public/infoscale/license/InfoScale_CorePlus_Coefficients.json)
- Step 2: Upload the file to the Management Server.

 Below the steps is a file input field with a "Browse..." button and an "Upload" button.

A "Close" button is located in the bottom right corner of the window.

- 2 To schedule the file to be downloaded automatically, select **Download Core Plus coefficients file**.
Optionally, specify the day of the month and the time at which you want this activity to be repeated.
- 3 To manually download the file, follow the instructions in the **Core Plus Coefficients File manual Download** section.

Collecting the Core Plus licensing data

The VIOM CMS can collect licensing data from the InfoScale nodes that are registered with the Management Server. The data is collected in a JSON file, which you can manually upload later to Veritas NetInsights Console.

To collect InfoScale licensing data

- 1** Open the **Licensing** perspective and click the **InfoScale licensing data collection** link at the top-left corner.

- 2** On the **InfoScale licensing data collection** dialog box, and click **Collect**.

The `cmsjsondata_current_date_current_time.json` file gets downloaded from the browser to your local system.

If you do not have a VIOM CMS license key installed, an empty file named `getcmsdatareport` gets downloaded instead. To get the file with the proper data, the valid license key must be installed.

Downloading the Core Plus report and viewing the data

Download the license utilization data for the InfoScale nodes that are registered with the Management Server. The data is available in a CSV file, which you can later provide to the Veritas InfoScale License Reconciliator tool. The tool compares this data with your account entitlements to provide a summary of your effective license position.

To download the report

- 1** Open the **Licensing** perspective and click the **InfoScale Core Plus report** link at the top.

- 2** On the **InfoScale Core Plus report** dialog box, and click **Download**.

The `InfoScale_CorePlus_License_Report.csv` file gets downloaded from the browser to your local system.

To view the details of Core Plus licenses directly on the management console

- 1 Open the **Licensing** perspective > **Core Plus details** tab.

This tab displays the license utilization data that is collected from the InfoScale nodes that are registered with the CMS.

InfoScale licensing data collection InfoScale Core Plus report												
Overview Deployment details Core Plus details Deployment policy Reports												
Search..												
Host	Product Bundle	License Type	Version	Meter Type	License Entitlement Type	InfoScale Deployment Type	VM	CPU model	#Cores(vCPUs)	Coreplus Coefficient	#Core Plus Credits Consumed	Core Mapping
dl...	ENTERPRI...	SLIC	7.4.2	PER-CORE	PERPETUAL	KEYLESS	Y	Intel(R) ...	4	0	0	VIOM license key ...
dl...	ENTERPRI...	SLIC	7.4.2	PER-CORE	PERPETUAL	KEYLESS	Y	Intel(R) ...	4	0	0	VIOM license key ...
												Properties
												Name ^ Value
												Entitlement ID A519...
												Host UUID dea7...
												Hypervisor Vendor VMw...
												License Keys -
												Platform Red ...

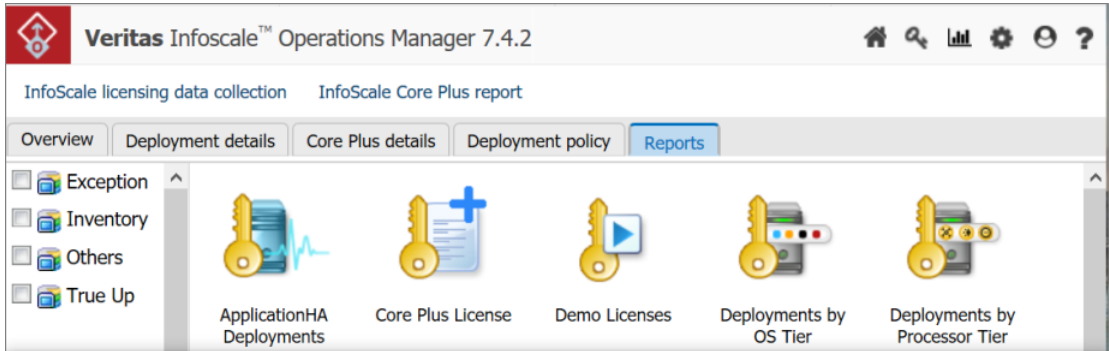
- 2 Use the **Search** field to filter the list based on the value that you enter.

Note: The **Coreplus Coefficient**, **#Core Plus Credits Consumed**, and **Core Mapping** columns display relevant data only when a valid VIOM CMS license key is installed.

- 3 (Optional) Use the **Properties** section to view details like the entitlement ID and the license keys associated with an InfoScale server.

To view the Core Plus License report

- 1 Open the **Licensing** perspective > **Reports** tab.



- 2 Click **Core Plus License** to open the report in a new browser window.

Core Plus License Report - Mozilla Firefox

https://[redacted].com:14161/vom/licenses/report/showreport?title=...

Subscribe Save as CSV Email

Core Plus License Information
This report lists the core plus credits consumed by each infoscale server

Generated at: Sep 9, 2021 AM

Host	Product Bundle	License Type	Version	Meter Type	License Entitlement Type	InfoScale Deployment Type	Entitlement ID	Platform	VM	CPU model	#Cores	Core plus Coefficient	#Core Plus Credits Consumed
[redacted]	ENTERPRISE	SLIC	7.4.2	PER-CORE	PERPETUAL	KEYLESS	[redacted]	Red Hat Enterprise Linux	Y	Intel(R) Xeon(R) Gold	4	0	0

Note: The **Core plus Coefficient**, **#Core Plus Credits Consumed**, and **Core Mapping** columns display relevant data only when a valid VIOM CMS license key is installed.

- 3 (Optional) Verify that the **Generated at** field displays the correct date and time stamp. As with other VIOM reports, you can subscribe to this report, save it as a CSV file, or send it by email in the HTML or the CSV format.

Creating and viewing a global report of Core Plus licenses

The VIOM management console lets you generate a global report of InfoScale Core Plus license utilization data. A global report can include data from multiple management servers.

To create and view a global report of Core Plus licenses

- 1 Open the **Global Reports** perspective > **Reports** tab.
- 2 Click **Create report** to create a global report of Core Plus licenses.

Create report

Report details

Title: Core Plus Licensing

Description: View Core Plus license utilization data for registered InfoScale servers

SQL query:

Management servers

☒ localhost

i **Create**

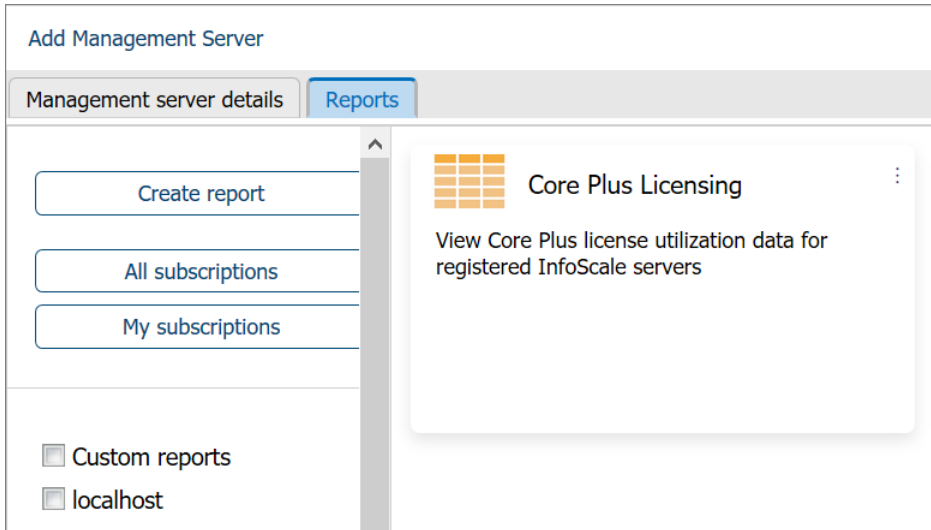
- 3 Specify a report title and description, and select the VIOM management servers on which you want to run the report.

- 4 Click the **i** (information) icon to view the list of Veritas-provided SQL queries that you can use to create various global reports.

SQL queries		
Note: Below table provides SQL queries required for report creation. You can use these SQL queries to create the reports.		
Name ▲	Query	Description
Audit report	SELECT C_WHEN AS "Date/Time", C_WHAT AS "Activity", C_WHERE AS "Location", C_TARGET AS "Target", C_WHO AS "User", AUTHORIZED AS "Authorized", C_WHY AS "Reason" FROM AUDIT_VIEW_LOG_R	Lists the VIOM activities for audit purpose.
Core Plus License	SELECT HOST AS "HOST", PRODUCT_BUNDLE AS "PRODUCT BUNDLE", LICENSE_TYPE AS "LICENSE TYPE", PRODUCT_VERSION AS "VERSION", METER_TYPE AS "METER TYPE", LICENSE_ENTITLEMENT_TYPE AS "LICENSE ENTITLEMENT TYPE", INFOSCALE_DEPLOYMENT_TYPE AS "INFOSCALE DEPLOYMENT TYPE", ENTITLEMENT_ID AS "ENTITLEMENT ID", PLATFORM AS "PLATFORM", VM AS "VM", CPU_MODEL AS "CPU MODEL", NCORE AS "#CORES", COREPLUS_COEFFICIENT AS "CORE PLUS COEFFICIENT", COREPLUS_CREDITS_CONSUMED AS "#CORE PLUS CREDITS CONSUMED", CORE_MAPPING AS "CORE MAPPING" FROM VOM_VIEW_COREPLUS_LICENSE_INFO	This report lists the core plus credits consumed by each infoscale server.
Disk groups, associated disks & volumes	SELECT DG_NAME AS "Disk group", DG_TYPE AS "Type", DG_FAMILY AS "Family", DG_TOTALSIZE AS "Total size", DG_FREESPACE AS "Free size", DG_NDISKS AS "Disks count", DG_NVOLS AS "Volumes count", HOST_NAME AS "Host" FROM SF_VIEW_HOST_DISKGROUP ORDER BY HOST_NAME	Lists all the Disk groups of all the servers along with number of disks and volumes associated. You can use this report to find out the free space in disk groups and number of

Copy the **Core Plus License** SQL query and close the box.

- 5 Click **Create** on the **Create report** box.



- 6 Verify that the new report appears in the **Reports** tab.

As with other VIOM global reports, you can run, modify, or remove this report.

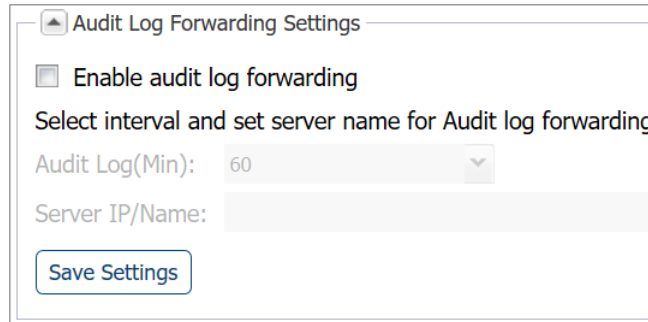
Provision to collect audit logs intermittently on a user-specified server

An audit log includes records of user actions on the CMS, like signing in, signing out, refreshing a host, creating volumes, and so on. This patch introduces the “audit log forwarding” feature, which lets you add the audit logs at specific intervals to the `/var/log/messages/syslog` file on the local server or on a remote server. You can enable or disable this scheduled activity from the **Settings** perspective of a VIOM Management Server. You can optionally specify the IP address or the name of a specific server where you want these logs to be forwarded.

Note: This feature is applicable to VIOM management servers on Linux only.

To access audit log forwarding settings

- 1 On the VIOM management console, open the **Settings** perspective.
- 2 Click **Management Server**; the **Server settings** tab appears by default.
- 3 Scroll down to locate the **Audit Log Forwarding Settings** section.



By default, audit log forwarding is disabled.

To enable audit log forwarding

- 1 Select the **Enable audit log forwarding** check box.
- 2 Use the **Audit Log(Min)** drop-down list to select the time intervals at which to forward the latest audit logs.

At each scheduled interval, the audit logs that are collected since the last instance are added to `/var/log/messages/syslog`.

- 3 (Optional) To forward the audit logs to a different server, enter the appropriate server name or IP address in the **Server IP/Name** text box.

Note: When you specify a server name or IP address, the `/etc/rsyslog.conf` file gets updated with the that value. The audit logs are then added to the `/var/log/messages/syslog` file on both, the CMS and the specified server.

- 4 Click **Save Settings**.

An information message confirms that the change is saved.

To disable audit log forwarding

- 1 Deselect **Enable audit log forwarding**.
- 2 Click **Save Settings**.

An information message confirms that the change is saved.

Known issues in this patch

- After you install a patch, the discovery of fabrics or switches from Brocade and Cisco may fail due to incorrect credentials.
Workaround: Reconfigure the fabrics and switches so that they can be discovered successfully.
- After you install a patch, two-factor authentication (2FA) for any existing credentials fails.
Workaround: Reset the pin; the new pin is then accepted by 2FA.