# RELEASE NOTES

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FEATURES

The following features have been implemented in Snow License Manager 9:

Tracking of license model changes

To support tracking for licenses whose metrics or quantity change over time, it is now possible to edit the metric of a license and change the quantity your entitlement covers. Server-application licensing, for example, has evolved in line with rising hardware capacity – typically transforming from being based on number of installs, to number of processors, and now to number of processor cores. Discounts and conversion rates offered by vendors when upgrading can now be recorded in Snow License Manager.

Manual exclusion of computers from compliance calculation

Software vendors sometimes remove licensing requirements for applications. For example, a host running Windows Server enabled with only the Hyper-V role does not require a license. To cater for scenarios like this, exclusion rules can now be created to ignore one or more computers from the compliance calculation of a selected application.

Cost-assessment reports for Microsoft Windows Server

Understanding the optimum way to license a Microsoft Windows Server environment is a challenge for many organizations. Our new set of Windows Server Assessment reports provide a licensing recommendation for each host, based on the least expensive option for your edition – 2012, 2016, and 2019. A lowest-cost licensing report provides suggestions for Windows Server licensing across all versions and editions.

Hypervisor technology and high availability for datacenters and clusters

To determine correct licensing for complex datacenter and server environments is a SAM challenge that requires specialist knowledge and time. Datacenter virtualization adds to the complexity as potential movement of virtual machines can affect how licensing requirements apply. To reduce the level of complexity, the capability to specify if a datacenter is configured for high availability has been included in the cost-assessment reports for Microsoft Windows Server. The datacenter details page, which provides information about hosts, processors, cores, virtual machines, and a percentage indicator of license coverage, has also been enhanced to visualize high-availability data.

Incremental data maintenance

The default for the daily data maintenance task (the process that transfers inventory data to the Snow License Manager database) has been modified to identify and transfer just the data that has changed since the previous run – significantly reducing the amount of data that needs to be processed. In addition, use of temporary data storage aims to reduce database communication overload.

Direct access to user guides

Links to user guides for the web user interface are now available directly in the help section – removing the need to search the Snow Knowledge Base for documentation. Selecting the link User Guide: Web User Interface opens a new browser tab at the correct Knowledge base article, which in turn contains a link to the user guide (PDF).

Documentation is available in US English, French, German, Hungarian, Japanese, Polish, Russian, and Spanish. For supported languages, you will be directed to the page for your chosen interface.
language for Snow License Manager. For other interface languages, such as Chinese, Danish, or Norwegian you will be directed to the US-English version of the user guide.

Other documentation, such as Release Notes are available in US-English.

**Discovery for Google Cloud Compute Engine**

In the shift to cloud, organizations are moving away from running virtual machines and workloads on local datacenters, migrating to flexible cloud-based services. To ensure compliance and optimize spend, SAM managers require insight into what is running in their IaaS environments. This discovery feature provides overview and detailed information on the cloud servers running on Google Cloud Compute Engine that have not been inventoried. The discovery data is collected by Snow Integration Manager – please see product dependencies at the end of these notes for more information.

This feature is dependent on Snow Integration Manager 5.13.
ORACLE FEATURES

The following features for the Oracle Management Option have been implemented in Snow License Manager 9:

**Edit Oracle database data**

The information gathered by the Snow Inventory Oracle Scanner may require manual modification to ensure that the data accurately reflects the actual estate. The new capability has been added, enabling SAM managers to edit databases, and override granted/agreed management packs, installed/used options, and record decisions made for easy future reference. The Oracle Server Worksheet (OSW) is automatically populated based on the information supplied.

**License requirement for Oracle databases**

To provide SAM managers with instant access to information about whether an Oracle database requires a license or not, this information is now visible directly on the database overview page together with any record of manual overrides made. This capability lays the necessary groundwork for future features, such as license compliance calculations for Oracle databases.

**Lifetime support details for Oracle databases**

Knowing what type of support Oracle currently offers for a given database and when it ends, enables organizations to avoid risks associated with running unsupported software and control spend on maintenance. To provide the necessary information, Oracle lifetime support details are now visible directly on the database page; showing dates for end of Premier, Extended, and Sustaining Support for the Oracle product. For each support level, the Oracle overview page shows the number databases in your environment for which Oracle has ended support, linking to the list of these databases, providing SAM managers with the necessary details to take action.

**Oracle WebLogic Server discovery and inventory**

To optimize spend on Oracle middleware, an understanding of the software installed on an estate is crucial. However, achieving such insight for Oracle middleware can be challenging and time-consuming. Similar to databases, middleware licensing is further complicated by virtualization
technologies. In our commitment to optimizing enterprise software spend and mitigating risk, this first middleware offering from Snow provides discovery and inventory data for Oracle WebLogic Server. This functionality includes the possibility to add WebLogic Server to Oracle orders and delivery of an Oracle Server Worksheet (OSW) report for Oracle WebLogic Server.

**Track changes in Oracle database estate**

Changes that occur in an Oracle database estate may affect licensing requirements and present a financial risk if no action is taken. To highlight such changes and enable SAM managers to address potential risk areas, a *Last 4 weeks* column has been added to the Products tab in the Oracle overview. This column shows, for example, the number of management packs agreed, options used, and servers that have been added or removed during the previous 28 days. With this initial feature, we aim to create the foundation for additional features, such as automated tracking of changes.

**Automatic population of environment column in Oracle Server Worksheet**

As part of a licensing audit, Oracle will request that you complete an Oracle Server Worksheet (OSW) – a declaration of all the Oracle products installed within your estate. The environment column, used to indicate the purpose of the product – test, development, or production – is now automatically populated for Oracle database products based on the information entered in Oracle database settings.
ENHANCEMENTS

The following enhancements have been implemented in Snow License Manager 9:

**Comma-separated IP addresses**

To improve readability, multiple IP addresses are now separated by a comma for the functions *Search for computers* and *List all computers*.

**Default setting for user-based licensing**

Applications based on a user metric tend to be licensed according to the number of primary users using the computer where the application is installed. To align with this tendency, the default is now set to *All primary users* for applications licensed on a user basis.

**Uphold security mechanisms**

Additional user input sanitization and encoding routines have been introduced to uphold protection from cross-site scripting (XSS) attacks.
CORRECTIONS

The following corrections have been implemented in Snow License Manager 9:

- Upgrade licenses can now be added with a different metric than the base license. The license metric of the base license remains unchanged (PRB0040512).
- Custom Compare Value can now be selected as metric type for cloud applications (PRB0041889).
- The Microsoft Office365 service can now handle duplicate data without raising a violation of primary key constraint error (PRB0041782).
- Snow has replaced the capability to contact our Support through an e-mail form, with a direct link to through our Support portal https://www.snowsoftware.com/support. Selecting SUPPORT under the Help menu now opens the portal in new browser tab (PRB0041932).
- When searching for licenses, it is now possible to select Downgrade rights as a column, to show this information in the search results. The data is consistent with results gained by selecting List all licenses and in the All licenses report (PRB0041930).
- Column headers reflect the language selected for the user interface when viewing saved reports (PRB0041073).
- Deleted computers are now included in the data displayed in the Inventoried computers per month widget, and the numbers shown in the New Inventoried and Previously Inventoried counts are now correct. Fix applies for users with access to the root organization node (PRB0041830).
- An application covered by a license with assignment type Site covers all installations of the application across the site. This concept now applies correctly for Site licenses imported to Snow License Manager – previously only one instance of the application was being covered (PRB0041862).
- Archiving computers functions as expected for all language versions – previously this capability was only working for the English language version (PRB0041867). Daily maintenance task no longer fails for autoconnect rules for devices in organization structure (PRB0041344).
- All errors encountered during the daily maintenance task are now logged correctly for troubleshooting (PRB0041343).
- Daily maintenance task no longer fails when null values are present in the database table for Oracle options. Tables in the Snow Inventory database and the target table in Snow License Manager can now accept null values (PRB0041452).
- When a user is moved within an Organization (manually or by auto-connect rules), the value for Number of users of the application per month shown on the History tab remains unaffected and duplicate users will no longer appear in the Users per month graph (PRB0041442).
- In the stored procedure JobInventoryComputersUpdate, the length of the ProcessorType column has been increased to prevent data truncation (PRB0041765).
- To prevent the Event Store from growing indefinitely, a disk-saving maintenance process now starts in the background when the Event Store service starts (PRB0041339).
- Aliases in the organizational structure are now deleted as expected when the structure is overwritten or imported (PRB0040233).
- Computers will continue to be recognized as the same entity, even when the hostname changes (PRB0040172).
- To reduce its runtime, the process to delete quarantined devices has been re-architectured (PRB0041339).
- Additional input validation has been added to the Snow Management and Configuration Center to ensure that input strings are no longer truncated. As a result, the error related to unpaired quotes in processing of user exclusion lists during the daily maintenance task no longer arises (PRB0041425).
ORACLE CORRECTIONS

- Selecting *Oracle overview* from the *Enterprise* menu no longer causes the browser to hang (PRB0041900).

- On the *Oracle overview* page, the numbers shown for inventoried Oracle computers (green column of the graph) are now correct (PRB0041694).

- Oracle data is now processed and presented correctly when data is gathered from multiple data sources using the same CID and Snow Inventory database, but with different sitenames (PRB0040852).

- The length of the Name column for applications in the Snow License Manager database has been increased to match the source information in Snow Inventory, to prevent errors related to the update of Oracle information from occurring during the daily maintenance task (PRB0041802).

- When a user creates a new Oracle order with *Database enterprise management* or *Enterprise Edition Options* selected as the product, runs the All Oracle order report, and then selects an order in the report, the order details open as expected (PRB0041913).

- Case sensitivity for usernames in Oracle is now supported (PRB0041589).
LICENSE KEY REQUIREMENTS

Installing Snow License Manager 9, or upgrading from an earlier version, requires a license key for Snow License Manager 9. For customers upgrading from Snow License Manager 8.3.5 or higher, the license key is entered in Snow Update Service.
INSTALL INFORMATION

When upgrading from Snow License Manager 8 to Snow License Manager 9, the disk space for
the Snow License Manager database will grow by approximately 35% – both data and transaction
log files. For a successful upgrade, ensure that the disk-space capacity is sufficient on the
database server where you are installing Snow License Manager 9.

To understand the full set of pre-requisites including product dependencies, Snow recommends
you review the Snow System Requirements document on our Knowledge Base before you upgrade
to Snow License Manager 9.

NOTE
Snow License Manager 9.0.0 does not support multiple Snow Inventory databases. Support for
such customer environments will be available in an upcoming release of Snow License
Manager.

For more information regarding Known Limitations, refer to: Known Limitations: Snow License
Manager 9.0.0.
PRODUCT DEPENDENCIES

Upgrading to Snow License Manager 9 requires Snow License Manager version 8.3.6 or higher.

To run Snow License Manager 9 requires Snow Inventory Server version 6.0.3.

The feature for Discovery for Google Cloud Compute Engine requires Snow Integration Manager 5.13 or higher.