Raynet One Data Hub 14.1

14.1.6298.172 [Update 1]

Released on Mar 28, 2025

New Azure Compute Connector RCP-120 ZEN-32159

The new Azure Compute Connector in Raynet One Data Hub enables seamless integration with Microsoft Azure, allowing users to retrieve data on Virtual Machines (VMs) and Virtual Machine Scale Sets (VMSS). It provides key insights into cloud infrastructure, including VM configurations, network interfaces, storage, and licensing details. Users can customize data retrieval by enabling or disabling specific features, such as dedicated host information or scale set details.

With secure OAuth authentication and structured data outputs, this connector enhances visibility, governance, and resource optimization within Azure environments. Designed for ease of use, it simplifies cloud asset management and integrates seamlessly into existing data workflows.

Other improvements

- Improved removal of dependencies when cascading removal of dependent tasks. RREP-338
- Improved calculation of end-of-life status with Technology Catalog 14.1. RREP-336
- Default data transformation template now includes device relations from SCCM SQL tasks. RREP-335

Resolved issues

This release resolves several issues reported in our previous release.

- Resolved an issue with the Hypervisor Dashboard Overview dashboard that threw an error about a missing `GuestOS` column. RREP-308
- Fixed a problem with Data Hub running on MariaDB database, when saving the received data the following error occurred: `Row size too large. The maximum row size for the used table type, excluding BLOBs, is 65,535 bytes. This includes storage overhead. Refer to the MariaDB manual for details. To resolve this, some columns need to be changed to TEXT or BLOB.` RREP-330
- Automatic migration of the SQL Server backend from version 14.0 [Update 1] (excluding older and newer versions) is now possible and does not require any manual adjustments. RREP-332

14.1.6289.168 [RTM]

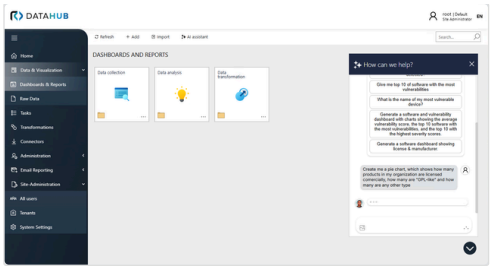
Released on Mar 18, 2025

AI-Powered Data Analysis and Visualization RREP-53 RREP-206 RREP-213 RREP-226 RREP-244

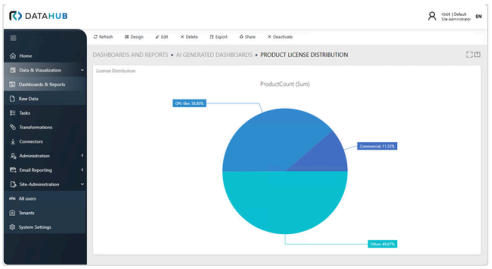
Raynet One Data Hub now features an AI-driven assistant that seamlessly integrates natural language processing with interactive dashboards. This intelligent assistant accepts both text and images as input, delivering real-time insights or dynamically generated visualizations based on your queries.

Simply ask a question or provide instructions, and the assistant will generate relevant insights. Here are some example prompts:

- *“How many vulnerabilities were reported?”*
- *“Create an overview of software reaching End-of-Life in the next three quarters.”*
- *“Generate a list of devices with the following columns: name, count of installed software, last inventory date.”*

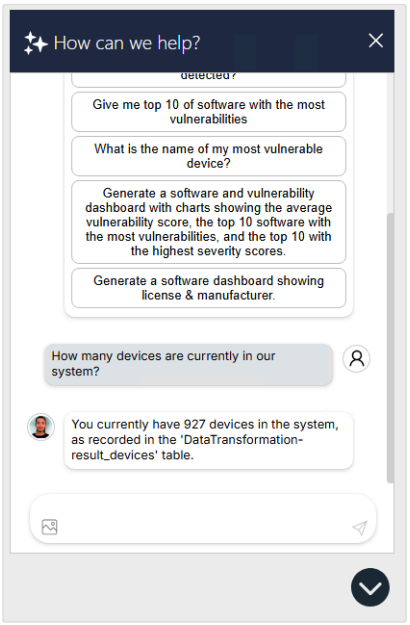


You can now ask the assistant to generate a report...



.. and the result can be a fully interactive dashboard that can be further customized.

No need to dig through reports or write complex queries—just ask and get the answers you need, instantly. You can even paste an image to describe your idea, and the system will generate a matching layout.



The assistant is also great for inline answering and getting quick facts and figures.

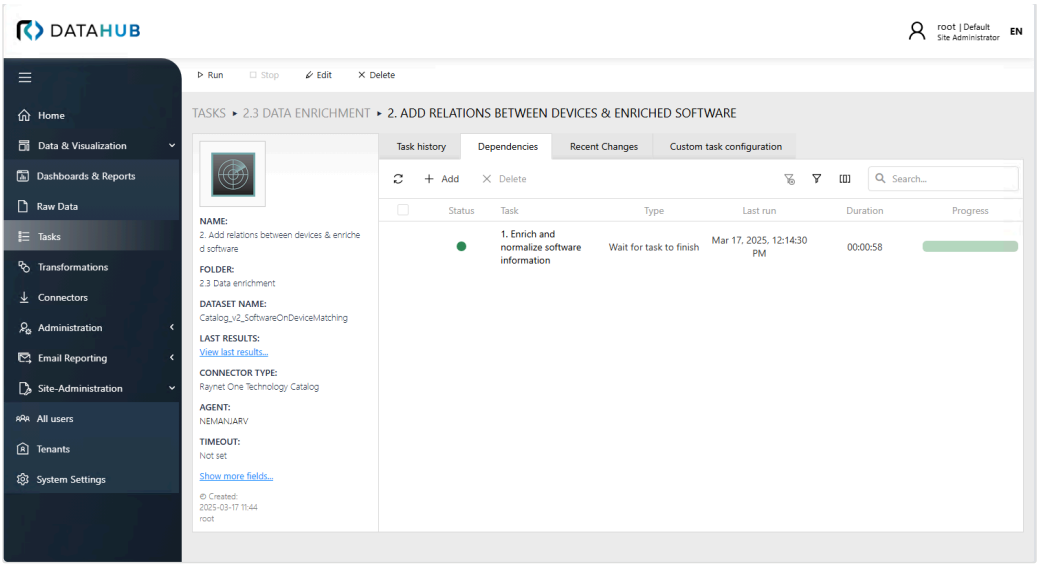
Whether you're tracking vulnerabilities, monitoring software lifecycles, or compiling inventory data, this assistant helps you focus on decisions rather than data wrangling.

> This feature requires an active OpenAI API subscription. For more details, visit https://openai.com/api/pricing/ .

Task Dependencies for Smarter Execution RREP-79

You can now define dependencies between tasks, ensuring that each task runs only when its required data is available.

With task dependencies in place, a task will wait for its prerequisite data before execution, preventing errors caused by missing information. Additionally, tasks can be chained, meaning they will execute in the correct sequence—even if their original scheduled times have already passed.

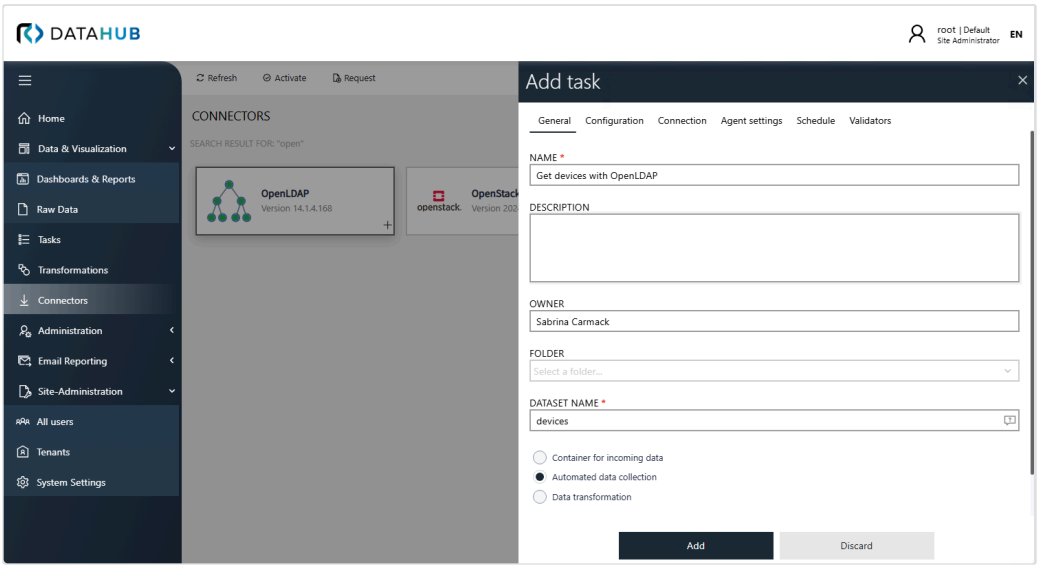


The newly introduced Dependencies tab shows the dependent tasks, and Data Hub takes care of proper orchestration.

This enhancement ensures smoother workflows, reduces failed executions, and helps maintain data integrity by running tasks in the right order. No more manual checks—just define dependencies and let the system handle the rest.

Generic OpenLDAP Connector RCP-43

In addition to the existing Active Directory (LDAP) connector, the system now supports OpenLDAP. Many organizations, especially those running Linux-based infrastructure, rely on OpenLDAP as an alternative to Microsoft Active Directory. OpenLDAP is widely used for centralized authentication, authorization, and directory management.



OpenLDAP configuration window

With this new connector, businesses operating outside of traditional Active Directory ecosystems can benefit from the same automated synchronization and access control capabilities, streamlining user and group management.

Enhanced Support for Third Party Connectors

The Data Hub now integrates with several key third-party products, offering greater flexibility and connectivity across your IT ecosystem. The newly added connectors include:





- **CrowdStrike Discovery** RCP-9 RCP-80 RCP-106
  Integration with CrowdStrike, a leading cybersecurity platform, to discover and track endpoints, ensuring comprehensive security visibility across your network.
- **Adobe Admin Console** RCP-105 RCP-11 ZEN-31026
  Seamlessly connect with Adobe Admin Console to manage Adobe software deployments, licenses, and users, simplifying enterprise-level software management.
- **JAMF Pro** RCP-70
  Link with JAMF Pro (V1 API), a powerful Apple device management solution, to enhance your ability to manage and secure macOS and iOS devices in your organization. The connector imports computer inventory, mobile devices, users, and application usage, and writes devices, applications, mobile devices, users, and application usage.
- **Kubernetes** RCP-68 RCP-116 RCP-61
  Gain visibility into your Kubernetes clusters and manage containerized applications more efficiently, ensuring better orchestration and scaling of workloads. The connector imports pods, nodes, containers and environments.
- **Amazon Relational Database Service (RDS)** RCP-73
  Integrate with Amazon RDS to monitor and manage relational databases hosted on AWS, simplifying database administration and providing real-time insights. The connector fetches information about all instances and option groups hosted at Amazon Relational Database Services (RDS) using AWS Java SDK 2.

These integrations allow organizations to synchronize data from a wide range of tools and systems, making it easier to manage IT environments and improve decision-making with consolidated, real-time information.

Extended Technology Catalog Integration RREP-261

The software data used for IT Visibility and optimization now includes additional fields, powered by the Raynet One Technology Catalog. As part of this update, the connector—formerly known as *RayVentory Catalog*—has been renamed to simply *Technology Catalog*.

- **Software descriptions**
  Each detected software entry now includes a brief description outlining its purpose, significance, and key functions. This added context enhances IT asset visibility and supports optimization efforts. RREP-29 RREP-236
- **Enhanced EoL/EoS state detection**
  The catalog now better identifies whether a software product is still supported, even when vendors have not explicitly announced End-of-Life (EoL) or End-of-Support (EoS) dates. Previously, such cases were marked as unknown, but starting with version 14.1, they will be categorized as supported or not supported—even when no official date is available. RREP-177
- **Information origin markers**
  For release dates, End-of-Life or End-of-Service data, Data Hub now provides information about its origin. This can be either information from the publisher (official sites, blogs, communities), from an independent party (like software aggregators, internet encyclopedias, independent forums), or data based on pattern analysis by mathematical models and artificial intelligence. RREP-177
- **More transparent data modification**
  Entries in the Technology Catalog now include a last modification date from the official Raynet instance, making it easier to track updates and synchronize data with external APIs. The modification date is available for the following objects: manufacturer, software product & version, hardware product & model. RREP-29 RREP-5

- **Better resilience to hardware duplicates**
  Even if your hardware data contains duplicate entries, the Technology Catalogue Connector now handles them with grace. The previous restriction on unique *manufacturer-product-model* combinations has been removed. This change affects users who directly use the Technology Catalogue functionality without the inventory scans performed by Raynet One or RayVentory. RREP-59
- **Other under-the-hood improvements**
  This release also introduces various backend improvements, particularly in handling non-Windows software signatures. These enhancements will be fully phased in across upcoming versions. RREP-86

With richer software data, clearer lifecycle insights, and improved transparency, IT teams can make more informed decisions, streamline asset management, and enhance automation in IT Visibility and optimization tasks.

> For On-Premise Technology Catalog users: to use this feature, your instance must be upgraded to version 14.1 or later.

Extended Raynet One Connector RR-4405 RREP-269 RR-237 RREP-237 RR-4333

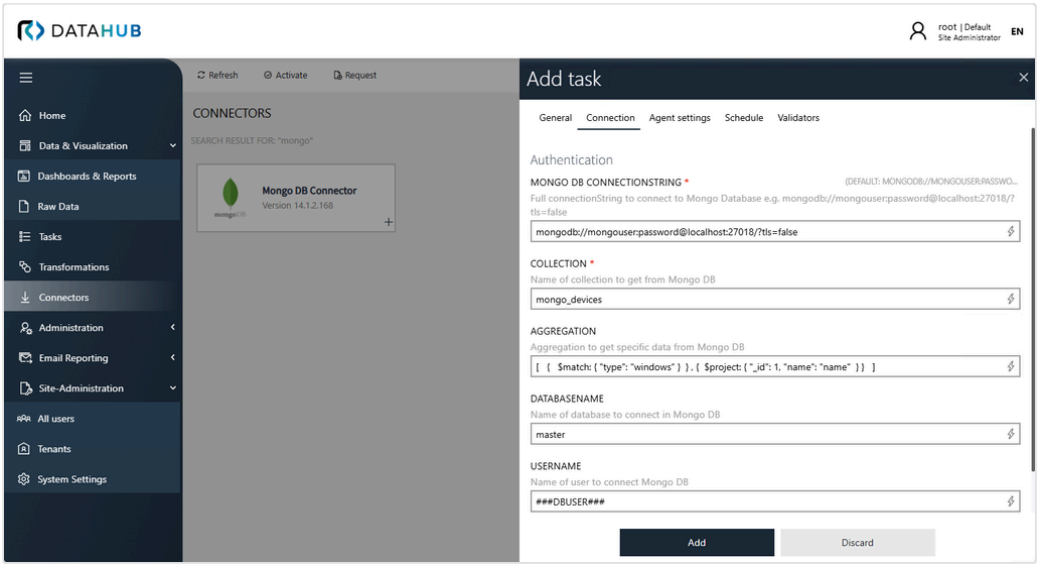
This version brings several enhancements to the integration between Raynet One Data Hub and the Raynet One platform, improving both performance and data consistency.

- Overall performance has been optimized for faster and more efficient data transfers between the Data Hub and the Raynet One platform.
- The connector now returns more comprehensive operating system data, providing better visibility into the IT environment for improved decision-making.
- FQDN (Fully Qualified Domain Name) entries now follow a standardized pattern, even when the domain is empty, ensuring consistency across the system.
- Several optimizations and bug fixes were made based on feedback from pilot users, addressing specific issues and improving overall reliability.

These improvements ensure smoother integration and enhanced visibility into your IT infrastructure, with better performance, more reliable data, and fewer issues.

Generic Data Connector for MongoDB RCP-28

A new MongoDB Data Connector is now available, offering robust data exchange capabilities between MongoDB and the Data Hub.



Mongo connector configuration dialog

With this connector, you can now integrate MongoDB data more effectively into your workflows, perform advanced data operations, and store results in a format optimized for analysis.

More information about aggregations can be found in the official MongoDB documentation:
https://www.mongodb.com/docs/manual/aggregation/

First-Class MariaDB Integration RREP-144 RREP-158 RREP-180 RREP-205 RREP-283 RREP-276

MariaDB is now fully supported as a first-class database backend in Data Hub. While previous versions introduced compatibility on the core level, this release significantly enhances support with MariaDB-compatible templates, dashboards, reports, and tasks, along with various optimizations and fixes.

Now you can take full advantage of Data Hub's analytics and reporting capabilities without relying on proprietary SQL Server.

Support for Active-Passive High Availability RREP-41 ZEN-28013

With the latest update, Active-Passive High Availability (HA) scenarios are now supported, enhancing the resilience and reliability of the Data Hub infrastructure.

The new scheduler logic allows multiple Data Hub instances to run side-by-side in an active-passive configuration. One instance remains active, while the other is passive (idle), both connected to the same database. Using technologies like the Kubernetes Lease API, a leader election process can be set up, ensuring that only one instance is active at any given time, while the passive instance remains ready to take over, guaranteeing continuous service availability. The active-passive configuration also offers strong compatibility with external load balancers and failover strategies, ensuring seamless failover in case of instance failure.

This setup simplifies the deployment and testing of Data Hub updates, as the passive instance can be used for staging new releases before they are promoted to the active role. It also provides better scalability and load distribution, enhancing overall system reliability.

Security improvements

- The process for creating API keys has been streamlined with a more intuitive user interface, ensuring a smoother and more secure experience for users. RREP-217
- Security-related events are now logged in more detail, with granular control over what is tracked. This allows for better monitoring and auditing of critical activities. This subsystem now conforms to the standards and guidelines set by the German Bundesamt für Sicherheit in der Informatik (BSI), ensuring adherence to high security and data protection practices. RREP-61 ZEN-28585 ZEN-31374

Other Improvements

This update introduces several smaller but impactful enhancements aimed at improving flexibility, user experience, and system integration.

- Users can now adjust the maximum allowed page size when requesting data via the Data Hub REST APIs. This change can be made either through an environment variable or by modifying the `appsettings.json` file, providing more control over data retrieval. RREP-92 ZEN-27485
- A series of UI improvements have been implemented, ensuring that the interface adheres to Raynet's unified look and feel across all components, offering a more consistent and polished user experience. RREP-187 RREP-96 RREP-97 RREP-99 RREP-111 RREP-113 RREP-123 RREP-125 RREP-126 RREP-136 RREP-146 RREP-145 RREP-152 RREP-156 RREP-162 RREP-164 RREP-165 RREP-170 RREP-188 RREP-216 RREP-225 RREP-235 RREP-247 RREP-251 RREP-256 RREP-129
- Improved performance of Active Directory connector when handling many nested groups. In our tests, these operations are up to 10x faster. RREP-31 RCP-37 ZEN-28824
- A new API endpoint `v1/Collectors/getByTenantId` has been added, allowing users to retrieve a list of all available connectors, making it easier to integrate and manage third-party tools and services. RR-4326
  - The endpoint accepts parameters `tenantId` and additional filtering via boolean `onlyLicensed` and `onlyEnabled` URL parameters.
- Switching from design to the preview mode now is consistent for reports and dashboard designer. In this version, both will be saved when doing so to prevent possible loss of unsaved changes. In previous versions, the automatic save was only performed for

Dashboards. Additionally, this means that refreshing the preview page does not lead to automatic revert to the previous state. RREP-94 RREP-140

- Warnings from license activation are now much clearly telling the actual reason of failed activation. RREP-176
- It is now possible to use a transformation step with more than 64 dependencies. RREP-250 ZEN-32260

Resolved Issues

This release addresses several key issues, enhancing stability and functionality across various areas of the Data Hub. The following problems have been resolved:

- Report sharing now works correctly when using an external identity provider (Keycloak). RREP-223 ZEN-32150
- Resolved issue with missing tasks related to Oracle functions and other minor issues. RREP-167 RREP-249
- Resolved issue with potential data loss in the Oracle Java Dashboard after migration from version 12.6 to 14.0, ensuring dashboards are now in the correct state without the dependency on hardware normalization by the Technology Catalog task. RREP-84 ZEN-31170
- Resolved issue with errors returned by the Portfolio Optimization task under *Data analysis>Portfolio optimization>Software portfolio overview>Software portfolio overview redundant software.* RREP-120
- Resolved issue with error 404 being displayed on the homepage after deleting a starred dashboard or report without first “unstarring” it. RREP-124 RREP-180
- Resolved issue with product activation occasionally not working, which required re-entering activation data. RREP-134
- Resolved issues with error message `Unexpected data at end of column_count packet` when using MariaDB database. RREP-93 ZEN-31343
- Resolved issues with error message `An exception occurred while iterating over the results of a query for context type 'Raynet.RayVentory.DataHub.Persistence.Context.RayVentoryDataHubTenantAwareContext'` when using MariaDB database. RREP-178 ZEN-28130
- Resolved issue with the transformation process incorrectly producing `NVARCHAR` length to unsupported values for string columns with lengths between `4000` and `10000` characters.
- Resolved issue with report exports to CSV and image formats, where a warning was shown but no report was created in some cases. RREP-157
- Resolved issue with incorrect behavior of the language selector button on the login page. RREP-161
- Resolved issue with SQL errors in the default query for Oracle Java MSI Installations. RREP-163
- Resolved issue with the `GetStatusFromUacAndLogon` macro in the standard transformation definition, improving support for `LAST_SEEN_DAYS` property, handling of `null` values, and string-based comparison for `AccountDisable` token. RREP-181 ZEN-31882
- Resolved issue with sorting in the reports view, where triggering the sort mechanism could lead to an error about missing documents. RREP-207
- Resolved issue with incorrect column types being produced by the *Enrich* steps in specific scenarios. RREP-233 ZEN-31432 ZEN-32174

Breaking changes

UI and front-end controls have been migrated to Angular 18. Note that this affects the list of supported web browsers (see https://angular.dev/reference/versions?utm_source=chatgpt.com#browser-support for more details). RCAT-4 RCAT-20

- Chrome and other Chromium-based browsers (Edge, Opera, Vivaldi, Brave etc.): 2 most recent versions
- Mozilla Firefox: latest and extended support release (ESR)
- Apple Safari: 2 most recent major versions

To run the “Standard Data Transformation” task, it is mandatory to set the `LAST_SEEN_DAYS` variable as the SQL macro `GetStatusFromUacAndLogon` is using that variable now.

⚠ Other and older browsers may still work, but since they are not officially supported by the Angular framework, they are not supported by the Raynet One Data Hub.