DATAHUB

// Release Notes

Raynet One Data Hub 14.0

Release Notes for release 14.0

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Contents

Introduction

This new release 14.0 is a major upgrade to the previous release. It contains several new features, major product improvements and resolves reported issues. This document describes important changes and feature highlights using the previous version 12.6 Update 5 for comparison. When migrating from an older release, refer to corresponding Release Notes for more information about changes and migration paths.

What's new

Data Hub is now Raynet One Data Hub `RR-4216`

Data Hub has been rebranded to align more closely with the Raynet One platform, reinforcing its role as the centralized solution for data management.
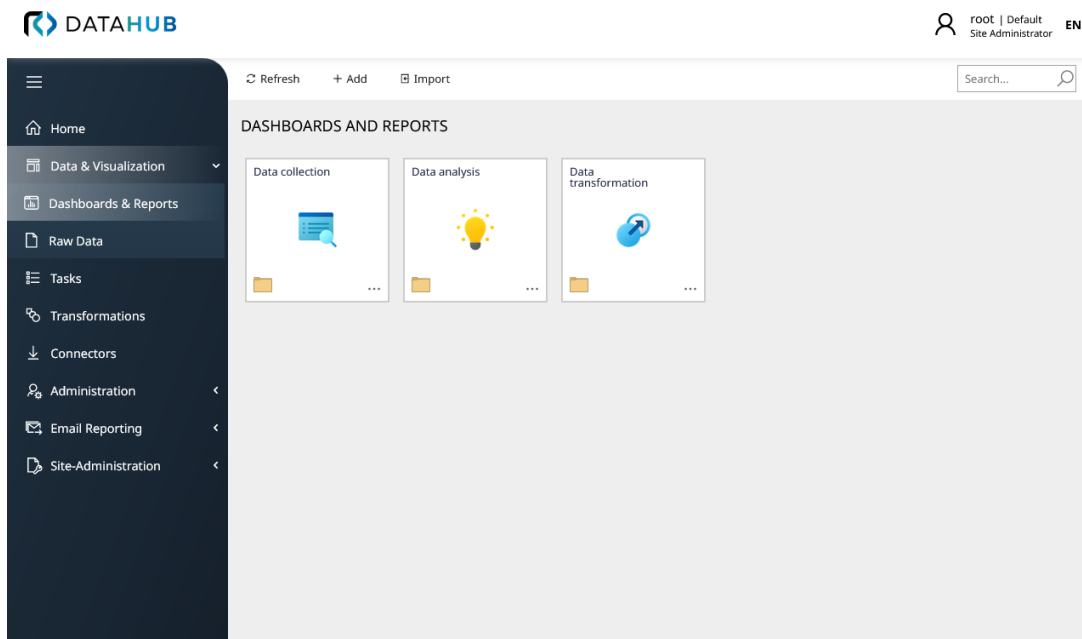
Intune Data Transformation `RR-4075` `RR-3533`

The raw Intune data collected is now also automatically processed by the default transformation and rendered in all relevant places, such as IT Visibility.

Kubernetes Support `RR-4156`

Data Hub can now be served via Kubernetes, thanks to improved configuration and feature enhancements.

Hardware data added to the standard data transformation pipeline `RR-4123`

Hardware data is now automatically processed by the standard transformation layer, which is created when the user imports the updated dashboards and reports. This function has the same semantic structure and purpose as its similar "software" counterpart.

Extra security for the Agent registration processes
`RR-4125`

A valid API key is now required when installing the Data Hub Agent. This ensures that only authorized uses are allowed and provides the agent installer with the necessary information for proper instance-agent setup.

Various improvements and new features in cloud connectors

In this version, there are four new connectors: GoodData, JetBrains Account, Microsoft Defender and OCI Database. `KOT-666` `KOT-671` `KOT-690` `KOT-596`
Additionally, several improvements and new features were implemented:

- (Microsoft 365) Added Direct Routing Calls. `KOT-698`
- (SAP Concur) Added new endpoint Expense Entries. `KOT-683`
- (Microsoft Graph Generic Query) Added missing features. `KOT-689`
- (Google Cloud Storage) - Added explicit error handling when downloading files. `KOT-636`
- (Microsoft 365) - Added `AccountEnabled` field to User table. `KOT-699`
- (Microsoft 365) - Improved error messages. `KOT-645` `KOT-694`
- (Microsoft Azure) - Improved error handling. `KOT-659`
- (ServiceNow) - Adjusted default page size to 2000. `KOT-677`
- (VMware vSphere) Added validation for Server URL. `KOT-643`
- (VMware vSphere) Improved log messages. `KOT-642`

Other Improvements and Changes

- Added new dashboards and reports to the library: Oracle Java powered by Unified Data Platform. `RR-4301`
- The Query Builder window is now larger to accommodate longer scripts and content. `RR-4108`
- Added a checkbox to hide/show empty tables in the Raw Data Viewer. `RR-3182`
- Stricter behavior for handling generated API keys. In this release, the API key is presented to the user after the token is created, preventing insecure behavior or unintentional leaking of API keys. `RR-3815`
- Increased the default single request timeout in the Catalog connector. `RR-2619`
- It is now possible to prevent PowerShell scripts from being executed by the Data Hub Agent. This can be achieved by adding a new configuration property `PowerShellScriptsExecutionEnabled` set to false (applies to both Windows and Docker builds). `RR-2824`
- The Active Directory (LDAP) connector has been improved for more robust data type handling, resulting in the elimination of mismatches and conversion issues. `RR-4228`
- Many internal and third-party components, controls, and interaction elements have been upgraded to the newer versions, ensuring improvements in performance, security, and robustness.

Resolved Issues

- Resolved an issue where the order of tables was ignored in the conflict resolution of a deduplication step. `RR-4204`
- Resolved an issue where writing the result to a Microsoft SQL Server database could fail for tables with compound primary keys. `RR-4182`
- Resolved minor issues with the IT Visibility Dashboard. `RR-4214`
- Resolved an issue where it was possible to inject a JavaScript code into the e-mail template. `RR-4094`
- Resolved an issue with Active Directory connector where all users were reported even if filter group was enabled. `RR-3496`
- Resolved issues with custom installation path and database setup on Windows. `RR-4230` `RR-4257`

Breaking Changes

- The application now targets .NET 8.0, which is a new requirement for Windows (official Docker images already include the framework).
- After migration, the old agents will not be able to communicate with the server. The reason for this is the missing API key, a change introduced to enforce the security of the product. To continue using the migrated agents, make sure that the API key is provided.

Known Issues

- On Windows, when upgrading existing version of Data Hub server, previous settings like KeyCloak connection or database settings may be lost. It is recommended to back-up the file `appsettings.json` and restore it after the installation is finished.
- Standard reports are available in the SQL-Server flavor only.
- The installer uses the SQL-Server as the default database type. In order to use MariaDB, skip the database creation step during the installation and adjust the configuration before starting the product for the first time. This does not affect the Docker-based installation, where the selection of the database type is determined by using a specific environment variable.
- Content-Security-Policy is not working anymore.
- Intune connector can not be run (It shows not licensed when trying to start from Tasks view) (In Task details view it still works.) Workaround is to re-create the task.
- Migration in MariaDB needs manual adjustments of the version table
- Custom Tenant Image is not showing on the initial tenant selection page.
- Dashboards with Sankey diagrams may not be properly exported.
- Raynet One Connector does not collect the OS information.
- Oracle DB Server Overview and Oracle DB Details Overview don't work - the workaround is to adjust filter `computer_id` parameter to `import_id`.
- For Azure and Office 365 tasks, the timeout is required for the task to be started.

Migration from Previous Versions

- This version is backward incompatible with release 12.0.
- When migrating from versions 12.1 - 12.5, first perform the migration to version 12.6 Update 5, and then proceed with 12.6 Update 5 -> 14.0.
- For versions 12.6, there is semi-automated migration process, which ensures that both the server and the agent can be migrated, together with user data.

For detailed information about the migration process, refer to the **Installation Guide**.

Migration from RayVentory Data Hub 12.6

The migration steps may vary depending on your setup (Windows/Docker) and the database engine in use (SQL Server/MariaDB).

Windows (MSI) + SQL Server

1. Install or upgrade the MSI server by following the MSI installation dialogs.
2. Access the web UI and create a new API key.
3. Download the latest version of the agent.
4. Install or upgrade the MSI agent.
5. Enter the newly created API key into the appropriate MSI dialog.

Windows (MSI) + MariaDB

1. Back up the `appsettings.json` file.
2. Install the MSI and select the "do not configure SQL Server" option in the MSI dialog.
3. Restore the `appsettings.json` file from your backup.
4. Update the connection strings in the file. Add `AllowUserVariables=True;UseAffectedRows=False` to both connection strings if you're using MariaDB.

   Example:
   ```
   Server=mariadb,3307;User
   ID=root;Password=raynetRootPassword;Database=DataHub_Default;AllowUserVar
   iables=True;UseAffectedRows=False
   ```

5. Restart IIS.
6. The database migration will occur on the first start.
7. If the web application reports a database version error or other errors (such as when creating a table), restart IIS again to resolve the issue.

Docker

1. Ensure that `AllowUserVariables=True;UseAffectedRows=False` is set for MariaDB and `Encrypt=False` if you're using MSSQL, in the connection string within the compose file, under the web section.
2. Start Docker Compose:

```
docker compose up
```

3. The database migration will occur on the first start.
4. If the web application reports a database version error, restart the web container.
5. Restart the web container.
6. Go to the web UI and create a new API key.
7. Copy the created API key and insert it into the Docker Compose file under `DataHubApiKey`.

   Example:
   `DataHubApiKey=465N31G-1QHMYQD-JDGHPWC-BY3J4MX`

8. If you are using a non-dockerized Windows Agent, update the agent configuration.
9. Restart the agent container:

```
docker compose down
docker compose up
```

10. If Windows agents are connected, restart their agent services

Breaking Changes and Important Notes

- Some tasks and reports might need to be re-imported to benefit from changes and fixes brought by this release. This is especially valid for SQL-based tasks, where the logic is encapsulated as a SQL script in the *Task Configuration.*
- The server should be always installed with the matching version of the agent. Mixing versions (for example 14.0 Data Hub and 12.1 Data Hub Agent) is not recommended and may lead to unexpected issues.

Prerequisites

Hardware Requirements

RayVentory Data Hub

Requirements when SQL Server and Raynet One Data Hub are installed on the same machine:
- Min. 4 CPU cores
- Min. 8 GB of RAM
- Min. 20 GB of disk space

Requirements when only Raynet One Data Hub is installed on the machine:
- Min. 4 CPU cores
- Min. 4 GB of RAM
- Min. 10 GB of disk space

RayVentory Data Hub Agent

- CPU: Intel Core i5
- RAM: 4GB
- Disk space: 500 MB

Software Requirements

In this chapter, you will find essential details regarding the prerequisites for installing and using Raynet One Data Hub. The following topics are covered:

- **Installation on Windows**
  List of components required to install Data Hub / Data Hub Agent on Windows / Windows Server.

- **Installation using Docker**
  Supported host systems when leveraging Docker.

- **Supported web browsers**
  List of web browsers that are supported by Raynet One Data Hub

Installation on Windows

The following are the minimum software requirements for the installation and running of Raynet One Data Hub:

- Operating system:
  - Microsoft Windows Server 2016 or higher
  - Microsoft Windows 10 or newer
- IIS 8 or higher
- Microsoft .NET 8.0 – Windows Server Hosting Bundle (https://dotnet.microsoft.com/en-us/download/dotnet/8.0)
- One of the following database systems:
  - Microsoft SQL Server 2019 or newer
  - Microsoft SQL Server Express 2019 or newer
- If RayVentory Data Hub Agent is installed on the same machine as the server, then all requirements of Data Hub Agent also apply

> **Note:**
> In order to run hosting bundles, the "Universal C Runtime" is required. Modern Windows Servers should already have it, but it may be required to download for older ones. The oldest supported OS is currently Windows Server 2012 R2. More information can be found here: https://support.microsoft.com/en-us/help/2999226/update-for-universal-cruntime-in-windows,

Supported Database Servers and Versions for non-Microsoft SQL Server setups:

- MySQL 8.2
- MySQL 5.7
- MariaDB 10.9
- MariaDB 10.8
- MariaDB 10.7

Installation using Docker

In order to run this container you'll need docker installed.

- [Windows](#)
- [OS X](#)
- [Linux](#)

On Windows, make sure to use Linux Containers, WSL2 is recommended.

Supported Database Servers and Versions for non-Microsoft SQL Server setups:

- MySQL 8.2
- MySQL 5.7
- MariaDB 10.9
- MariaDB 10.8
- MariaDB 10.7

Supported web browsers

Given the widespread adoption of web standards, Raynet One Data Hub is designed to be compatible with virtually all modern web browsers. However, it's important to note that our regular testing and verification efforts are focused exclusively on the following browsers.

- Microsoft Edge version 102 and newer
- Mozilla Firefox version 102 and newer
- Google Chrome version 102 and newer

> **Note:**
> To ensure optimal performance and security while using our product, we strongly recommend adhering to best practices by keeping your web browser up-to-date and applying all available patches and updates.

Additional Information

Visit www.raynet.de for further information on Raynet One Data Hub, and take a look at the additional resources available at the Knowledge Base: http://raynetgmbh.zendesk.com/.

Raynet is looking forward to receiving your feedback from your Raynet One Data Hub experience. Please contact your Raynet service partner or use our Support Panel to add your ideas or requirements to the Raynet One Data Hub development roadmap!

DATA**HUB**

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As a global software vendor with market-leading solutions and complementary managed services, we make successful end-to-end management of IT projects and operations possible.

Following the mission **Discover to Manage**, our vision is that all companies worldwide achieve transparency and security as well as optimization of their IT Investment by using our technologies.

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