



RAYVENTORY[®]

Technology Asset Inventory

Release Notes RayVentry Scan Engine
12.3



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Release Notes RayVentory Scan Engine

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Introduction

RayVentory Scan Engine provides a complete set of products for operating system inventory, as well as Oracle database, VMware vSphere / ESX, Hyper-V and SNMP inventory. The data can be processed, visualized, and analyzed with DataHub component, and additionally enriched with help of the Catalog services. The Server component ensures, that complex architectures can be effectively scanned, using our "decentralized scanning" concept.

This software set includes components which have the following core functions:

- RayVentory Scan Engine Scan Engine
- RayVentory Scan Engine Server
- RayVentory Scan Engine Data Hub
- RayVentory Scan Engine Catalog

With the intelligence and many automation possibilities, creating documentation has never been so easy and fast.

This new release 12.3 is a major service upgrade to the previous release. It contains several new features, major product improvements and resolved issues.

Hardware Requirements

This section lists the minimal hardware requirements for devices running RayVentory Scan Engine.

Minimal

- Screen resolution: 1024 x 768 pixels
- Color settings: 16 bit
- RAM: 2GB
- Disk space: 100MB

Recommended

- Screen resolution: 1280 x 1024 pixels
- Color settings: 32 bit
- RAM: 4GB or higher

- Disk space: 1GB or more

**Note:**

The installation of the RayVentory Scan Engine framework itself requires about 400MB of disk space. The amount of additional space needed depends on the size and number of incoming inventory results.

Software Requirements

General Prerequisites

The following operating systems are supported for the installation and running of RayVentory Scan Engine at the time of release.

- Windows 7
- Windows 8
- Windows 8.1
- Windows 10
- Windows 11
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows Server 2019
- Windows Server 2022
















































Required Software

- .NET Framework 4.7.2
- Visual C++ Redistributable for Visual Studio 2015-2022

Operating System Inventory

The following tables shows which versions of the different operating systems and which architectures are supported for the different inventory methods.

Windows (client)

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
Windows XP 	x86	 *		
	x86-64	 *		
Windows Vista 	x86	 *		
	x86-64	 *		
Windows 7 	x86	 *		 *
	x86-64	 *		 *
Windows 8 	x86	 *		 *
	x86-64	 *		 *
Windows 8.1 	x86	 *		 *
	x86-64	 *		 *
Windows 10	x86	 *		 *
	x86-64	 *		 *
	ARM64	 *		 *
Windows 11	x86	 *		 *

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
	x86-64	✓*	✓	✓*
	ARM64	✓*	✓	✓*

* - requires Microsoft Visual C++ Redistributable for Visual Studio 2015-2022

! - the system is not supported by Microsoft anymore

Windows Server












































Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
2003 !	x86	✓*	✓*	⊖
	x86-64	✓*	✓*	⊖
2003 R2 !	x86	✓*	✓*	⊖
	x86-64	✓*	✓*	⊖
2008 !	x86	✓*	✓*	✓*
	x86-64	✓*	✓*	✓*
2008 R2 !	x86-64	✓*	✓*	✓*
2012	x86-64	✓*	✓*	✓*
2012 R2	x86-64	✓*	✓*	✓*
2016	x86-64	✓*	✓*	✓*
2019	x86-64	✓*	✓*	✓*

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
2022	x86-64	✓*	✓*	✓*

* - requires Microsoft Visual C++ Redistributable for Visual Studio 2015-2022

! - the system is not supported by Microsoft anymore

RedHat Enterprise Linux (RHEL)

































Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
6 	x86	 *	 *	 **
	x86-64	 *	 *	 **
	PPC64		 *	
	PPC64le		 *	
7	x86	 *	 *	 **
	x86-64	 *	 *	 **
	PPC64	 *	 *	
	PPC64le		 *	
	ARM64		 *	
8	x86	 *	 *	 **
	x86-64	 *	 *	 **
	PPC64	 *	 *	
	PPC64le	 *	 *	
	ARM64		 *	

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

 - the system is not supported by RedHat anymore

SUSE Professional / Open SUSE
































Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
11 	x86	 *	 *	 **
	x86-64	 *	 *	 **
	PPC64	 *	 *	
	PPC64le	 *	 *	
	ARM64		 *	
12 	x86-64	 *	 *	 **
	PPC64le	 *	 *	
15	x86-64	 *	 *	 **
	PPC64le	 *	 *	
	ARM64		 *	

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

 - the system is not supported by SUSE anymore

SUSE Enterprise Server (SLES)






























Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
11 	x86	 *	 *	 **
	x86-64	 *	 *	 **
	PPC64	 *	 *	
	PPC64le	 *	 *	
	ARM64		 *	
12	x86-64	 *	 *	 **
	PPC64le	 *	 *	
15	x86-64	 *	 *	 **
	PPC64le	 *	 *	
	ARM64		 *	

* - requires `sudo`


** - requires `sudo` and `curl >= 7.19`

 - the system is not supported by SUSE anymore


















































CentOS

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
6 	x86	 *	 *	
	x86-64	 *	 *	
7	x86-x64	 *	 *	
	PPC64	 *	 *	
	PPC64le		 *	
	ARM64		 *	
8 	x86-x64	 *	 *	
	PPC64le	 *	 *	
	ARM64		 *	

* - requires `sudo`

 - the system is not supported by the CentOS Project anymore

Debian

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
8 	x86	 *	 *	 **
	x86-64	 *	 *	 **
	PPC64le	 *	 *	
	ARM64		 *	
9 	x86-x64	 *	 *	 **
	PPC64	 *	 *	 **
	PPC64le	 *	 *	
	ARM64		 *	
10	x86-x64	 *	 *	 **
	PPC64	 *	 *	 **
	PPC64le	 *	 *	
	ARM64		 *	
11	x86-x64	 *	 *	 **
	PPC64	 *	 *	 **
	PPC64le	 *	 *	
	ARM64		 *	

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

! - the system is not supported by Debian anymore

Ubuntu

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
14.04 !	x86	✓*	✓*	✓**
	x86-x64	✓*	✓*	✓**
	PPC64le	✓*	✓*	⊖
16.04 !	x86	✓*	✓*	✓**
	x86-x64	✓*	✓*	✓**
	PPC64le	✓*	✓*	⊖
18.04	x86	✓*	✓*	✓**
	x86-x64	✓*	✓*	✓**
	PPC64le	✓*	✓*	⊖
20.04	x86-x64	✓*	✓*	✓**
	PPC64le	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
21.10	x86-x64	✓*	✓*	✓**
	PPC64le	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
22.04	x86-x64	✓*	✓*	✓**
	PPC64le	✓*	✓*	⊖

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
	ARM64	⊘	✓*	⊘

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

! - the system is not supported by Canonical anymore

Fedora

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
21 !	x86	✓*	✓*	⊘
	x86-x64	✓*	✓*	⊘
	ARM64	⊘	✓*	⊘
22 !	x86	✓*	✓*	⊘
	x86-x64	✓*	✓*	⊘
	ARM64	⊘	✓*	⊘
23 !	x86	✓*	✓*	⊘
	x86-x64	✓*	✓*	⊘
	ARM64	⊘	✓*	⊘
24 !	x86	✓*	✓*	⊘
	x86-x64	✓*	✓*	⊘

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
	ARM64	⊖	✓*	⊖
25 !	x86	✓*	✓*	⊖
	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
26 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
27 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
28 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
29 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
30 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
31 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
32 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
33 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
34 !	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
35	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖
36	x86-x64	✓*	✓*	⊖
	ARM64	⊖	✓*	⊖

* - requires `sudo`

! - the system is not supported by the Fedora Project anymore

macOS

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
10.12 !	x86-x64	✓*	✓*	✓**
10.13 !	x86-x64	✓*	✓*	✓**
10.14 !	x86-x64	✓*	✓*	✓**
10.15	x86-x64	✓*	✓*	✓**
11	x86-x64	✓*	✓*	✓**
	ARM64 (Rosetta 2) M1	✓*	✓*	✓**
12	x86-x64	✓*	✓*	✓**
	ARM64 (Rosetta 2) M1	✓*	✓*	✓**

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

! - the system is not supported by Apple anymore

Solaris

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
10	SPARC	✓*	✓*	✓**
	x86-x64	✓*	✓*	✓**

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
11	SPARC	✓*	✓*	✓**
	x86-x64	✓*	✓*	✓**

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

AIX

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
6.1 !	PPC64	✓*	✓*	✓**
7.1	PPC64	✓*	✓*	✓**
7.2	PPC64	✓*	✓*	✓**
7.3	PPC64	✓*	✓*	✓**

* - requires `sudo`

** - requires `sudo` and `curl >= 7.19`

! - the system is not supported by IBM anymore

HP-UX

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
11i !	PARISC	✓*	✓*	✗

Version	Architecture	Portable / standalone / remote-execution	Zero-Touch (using WMI)	Inventory Agent (RVIA)
	Itanium	✓*	✓*	⊖
11i v2	PARISC	✓*	✓*	⊖
	Itanium	✓*	✓*	⊖
11i v3	PARISC	✓*	✓*	⊖
	Itanium	✓*	✓*	⊖

* - requires `sudo`

! - the system is not supported by HP anymore

VMware ESX/ESXi Inventory

The following platforms are supported:

- VMware ESX Server 3.0 and higher
- VMware ESXi Server
- VMware vCenter Server

Oracle Inventory

The following database components are supported:

- Oracle Database 9i
- Oracle Database 10g
- Oracle Database 11g
- Oracle Database 12c
- Oracle Database 18c Enterprise
- Oracle Database 18c Standard
- Oracle Database 19c Enterprise
- Oracle Database 21c Enterprise
- Oracle Database 19c Standard
- Oracle Database 21c Standard
- Oracle Database 18c Standard Edition 2
- Oracle Database 19c Standard Edition 2

Required Software

- Java Runtime 1.4.2 - 17 (Oracle JDK and Open JDK)
- Any operating system supporting Oracle JRE

Requirements RVIA

The following table represents the minimum requirements that are necessary for using the RayVentory Scan Engine Inventory Agent.

Operating System	Minimum Version	Architecture	Additional Dependencies
Microsoft Windows	7	x86, x86_64	Visual C++ Redistributable for Visual Studio 2015-2022
RedHat Enterprise Linux (and compatible distributions)	6	x86, x86_64	sudo, curl >= 7.19
Debian GNU/Linux	8	x86, x86_64	sudo, curl >= 7.19
Ubuntu Linux	14.04	x86, x86_64	sudo, curl >= 7.19
SUSE Linux Enterprise	11	x86, x86_64	sudo, curl >= 7.19
IBM AIX	6.1	ppc64	sudo, curl >= 7.19
Oracle Solaris	10	x86, x86_64	sudo, curl >= 7.19
Apple macOS	10.12	x86_64, arm64	sudo, curl >= 7.19

Dependencies on Linux systems are set as package dependencies. The package management systems on UNIX systems do not offer setting package dependencies, but sudo is still required for first time configuration of RVIA and curl is required for uploading inventories and downloading schedules.

What's New?

CyberArk Vault Credentials Handling

It is now possible to use the CyberArk Vault for user/password types of credentials. The integration must be defined separately for each of the credentials. [RVP-1251](#) [RVP-1657](#)

EDIT ITEM

Logical name:

Enabled:

Target name pattern:

The pattern is used to automatically match devices, even if no specific credentials have been defined for them. If you leave this empty, the credentials will be matched against all computers having no other valid credentials.

User name:

Cyberark Url:

Cyberark SSL Certificate: ...

Safe Name:

Ticket System:

Credential editor now has an option to use the CyberArk vault to retrieve the actual password.

Both password and SSL-certificate authentication against CyberArk are supported. CyberArk can be used for the following types of credentials: Windows, SSH, Oracle DB, and VMware.

Inventory Agent: Native Packages for Non-Windows Platforms

RayVentory Inventory Agent now has a native RPM, DEB, AIX, Solaris and macOS build [RVIA]. [RVP-](#)

1089 RVP-1254 RVP-1255 RVP-1258 RVP-1260 RVP-1266 RVP-1627 RVP-1631

Extended Database Scanning

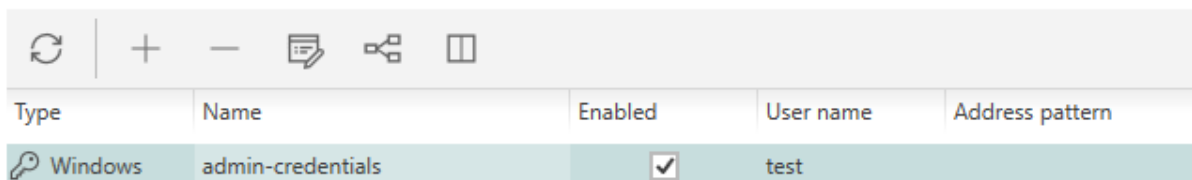
- RayVentory can now scan for MS SQL Server on Linux platforms [RIU]. RVP-1020
- There are several improvements in the DB2 scanner RVP-1383 and in the Oracle DB scanner. RVP-1568
- Scanning for DBFU statistics now supports connection to Oracle DB by SID addition to previously supported service names. RVP-1516

Preview of Scanned File Content

Content of scanned files can now be displayed in a basic file viewer available in the device inventory overview. RVP-1216

Disable and Enabling of Credentials

It is now possible to selectively disable credentials. RVP-1398 RVP-1415



Type	Name	Enabled	User name	Address pattern
Windows	admin-credentials	<input checked="" type="checkbox"/>	test	

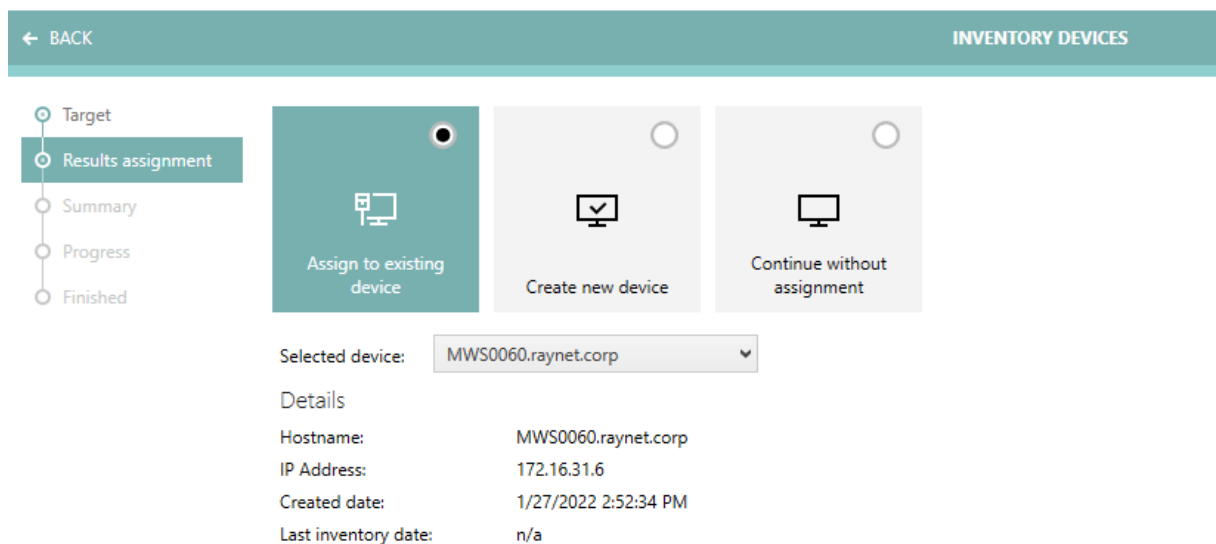
New column in the Credentials list - status (Enabled).

Disabled credentials are ignored when resolving a working set of authentication methods for each target device even if they match device pattern and type.

Improved Local Inventory Scans Triggered from UI

When executing local scans AND the local machine is found to be already in the list of managed machines, RayVentory Scan Engine will now show extra options allowing the user to define the desired behavior. RVP-460

- Performing the inventory and then assigning the results to an already existing device.
- Performing the inventory and then creating a new device.
- Performing the inventory and only saving the results locally.



← BACK INVENTORY DEVICES

Target
Results assignment
Summary
Progress
Finished

Assign to existing device
Create new device
Continue without assignment

Selected device: MWS0060.raynet.corp

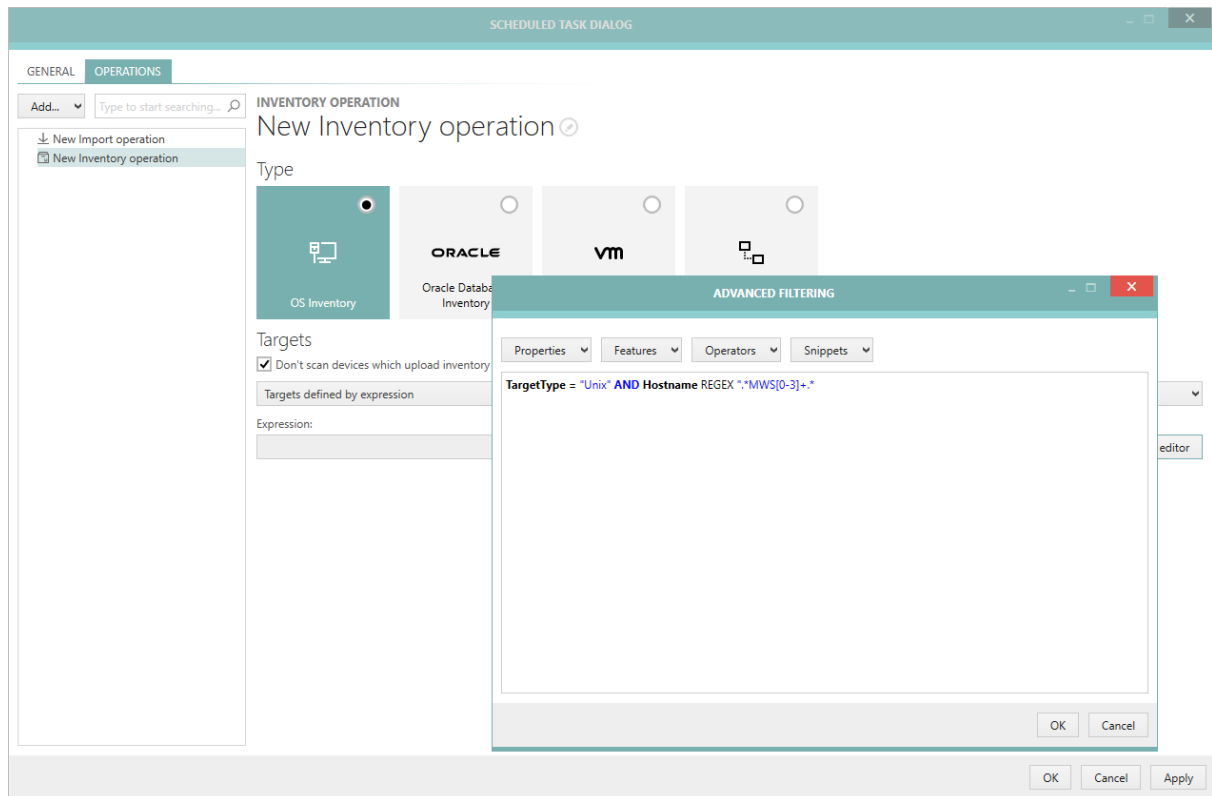
Details

Hostname:	MWS0060.raynet.corp
IP Address:	172.16.31.6
Created date:	1/27/2022 2:52:34 PM
Last inventory date:	n/a

If the current machine is already on the list, RayVentory Scan Engine will offer the user several options.

More Granular Selection of Devices Affected by Scheduled and One-Time Scans

There are some new options to filter devices by regular expression and string matching. RVP-1302



It is now possible to use extended filtering for OS types in the Discovery Wizard. RVP-1001 RVP-1187

Detection

How we should determine the Operating System type (Windows/Unix*) on the target device?

- By using Active Directory information
This option uses attribute operatingSystem from a corresponding directory entry in Active Directory
- By scanning ports
RayVentry Scan Engine scans opened ports typical for Windows and Unix* machines

Operating system filter

Select which types of operating system you want to detect

Client Server Custom ✓

Operating system:

Windows

Security Improvements

On non-Windows, it is now possible to force secure temp folder creation for `ndtrack.sh` [RVP-1419](#) and for temporary files. [RVP-1367](#)

Performance Improvements

- We improved performance and general throughput and stability of the internal HTTP server for incoming inventory data. [RVP-1370](#) [RVP-1417](#)
- Internal storage of the data has been changed from XML to an embedded SQLite database. As such, all read and write operations (for example changing device properties, handling inventory and discovery results) are much faster, even with a large amount of data. [RVP-1485](#)

Other Improvements and Changes

- Added auto detection of target type based on the property `guestFullName` obtained from vSphere scanning. [RVP-344](#)
- Improved behavior after failed ESX inventory scan. [RVP-770](#)
- Custom properties are now uploaded with their default values. [RVP-976](#)
- Improved feedback and upload error messages shown in the UI after a failed upload of NDI files. [RVP-1026](#)
- Added a limit for the maximum file size of Inventory Agent log files. The default limit is now 1 MB. [RVP-1175](#)
- Credentials generated into the default configuration file are now encrypted [RVIA]. [RVP-1195](#)
- Changing the local storage in the Settings screen now forces a restart before the settings are applied. [RVP-1217](#)

- In the local inventory wizard, a zero-touch scan is now offered to the user. RVP-1228
- Logon/Start schedule types now support delaying. RVP-1233
- The Inventory Agent now comes with bundled custom inventory scripts. RVP-1234
- The default configuration for the Inventory Agent now has a sample line for maximum task delay (set to 30). The line is commented-out in the standard configuration. RVP-1240
- Added additional properties to the default config file: `configDownloadProxyUser`, `configDownloadProxyPassword`, `generalTaskMaxDelay`, `resultUploadProxyUser`, `resultUploadProxyPassword`, `encryptionKey` [RVIA]. RVP-1245 RVP-1350
- Added confirmation dialog when removing the config file [RVIA]. RVP-1246
- Encryption key settings have been moved from Usage into the General section [RVIA]. RVP-1262
- Zero-Touch Windows Scan now correctly recognizes default registry keys. RVP-1272
- Added a maintenance tool for housekeeping and maintenance activities. RVP-1321
- Deleting of devices and other scannable objects now also cleans-up their associated NDI files. RVP-1354
- Improved algorithm for finding sudo paths on HP-UX. RVP-1355
- Implemented enhanced process scanning to get filename and MD5 Checksum of running processes. RVP-1380
- Default shell has been changed from bash to SH for install, local run, and upload scripts. RVP-1385
- SSH Key and Passphrase are now shown (in plain text) in the Wizard Summary. RVP-1418
- Added support for custom SSH ports for scheduled tasks. RVP-1432
- Evidence for `VMWARE_NetworkAdapterConfiguration` hardware records is set as expected. RVP-1433
- Improved displaying of dropdown menu of *Proxy Credentials*. RVP-1440
- Improved scanning of already discovered SNMP services. RVP-1448
- Improved OracleDB Remote Execution timeout behavior. It does not trigger anymore if timeout is set to 0. RVP-1451
- Improved network discovery logic to avoid duplicate entities. RVP-1454
- Scanning for DBFU statistics now supports connection to Oracle DB by SID in addition to previously supported service names. RVP-1516
- If the OracleDB scanner (`oratrack`) encounters an exception of the type `OracleSQLException`, its error code is now reported in the failure message. RVP-1518
- New UI for upload rules in Scan Engine settings. RVP-1571

-
- Added a query for `BANNER_FULL` Oracle DB scanner (oratrack). RVP-1579
 - Software usage scanner now supports persisting of collected data before premature reboots and shutdown events. RVP-1587

Resolved Issues

The following issues have been resolved in RayVentory Scan Engine in 12.3.

- Improved updating of `schedules.xml`. RVP-1013
- Added a fallback to use the IP address for the inventory if the host resolution fails. RVP-1067
- Fixed minor translation errors. RVP-1124
- Selected device view now has a scrollbar if the content is too big. RVP-1161
- Fixed an issue with the upload rules definition where a dot character (.) was turned into a comma (,) in the file extension input field. RVP-1177
- Fixed an issue with the port scanner disallowing port numbers higher than 32767. RVP-1178
- Fixed clipped headers in the inventory summary table. RVP-1184
- Resolved some language issues with Russian UI. RVP-1185
- Fixed an issue with the configuration file for the Inventory Agent missing the values for config download user and password even if they have been configured previously. RVP-1194
- Fixed an issue with the Device Overview showing the Agent devices. This resulted in subtle issues, in which scheduled inventories were trying to inventory a device having an Inventory Agent installed. In this build, these devices will be excluded by having a special value of the inventory type set to `Upload`. RVP-1196
- Fixed an issue with the connection to the HTTP service configured to use SSL on machines with TLS 1.0 disabled. IN this build, this support is extended for TLS, TLS11, and TLS12. RVP-1200
- Fixed incorrect name of the Upload Service in the Event Viewer `Source` column. RVP-1205
- Fixed incorrect last scan status after scanning a device of an `unknown` type. RVP-1207
- Fixed issues with locating configuration files for the Inventory Agent resulting in discrepancies in configurations. RVP-1211
- Fixed a problem where a copy of Scan Engine could keep running after declining UAC prompt, preventing the user from starting another instance. RVP-1214
- Fixed an issue with CURL downloads never finishing in spite of operation timeout being defined. RVP-1215
- Fixed incorrect value of the `configDownloadSource` property when a new configuration is created [RVIA]. RVP-1219
- Fixed an issue with the Windows Installer file, which was not supporting installation on 32-bit systems. RVP-1220
- Fixed incorrect command line options for Oracle Inventory via Inventory Agent. RVP-1224

-
- Fixed an issue with Inventory operations never marked as `Finished` in the summary view.
RVP-1226

- Fixed executable metadata, resulting in Inventory Agent binary files being described as "OS Deployment Manager". [RVP-1227](#)
- Fixed an issue with the Agent configuration file command line being limited to 256 characters. A new higher limit of 4096 characters is supported by this Service Pack build. [RVP-1229](#)
- Fixed an issue with the Inventory Agent being unable to load the whitelist from the current working directory. [RVP-1231](#)
- Fixed an issue with the handling of spaces in configuration file names, which were resulting in download errors triggered by CURL. [RVP-1232](#)
- Fixed the behavior of the credential selection algorithm, which previously was respecting the IP address if and only if the host name pattern had not been defined. [RVP-1241](#)
- Fixed an issue with the merging of NDI files, where the values of host name / IP address would only differ in casing, resulting in duplicate matches. [RVP-1247](#)
- Fixed empty view of the Oracle inventory details view. [RVP-1249](#)
- Fixed an issue with the `MGS_Processor` class being duplicated in the resulting NDI files. [RVP-1273](#)
- Removed `Win32_logonSession`, `Win32_UserLogon`, and `Win32_InstalledStoreProgram` properties from the list of WMI properties scanned by default by zero-touch Windows methods. [RVP-1275](#)
- Fixed wrong resolution of hostname and version of RHEL Server 6.10. [RVP-1284](#)
- Fixed an issue with device filtering, which - on upgraded configurations - could always include all devices. [RVP-1285](#)
- Fixed an issue where devices for which the inventory was started at the same time could overwrite their NDI files after uploading the data to the RayVentory Scan Engine HTTP Server. [RVP-1287](#)
- Fixed uploading of compressed NDI files, where a random GUID was added to the file extension if the NDI was sent in compressed from (.gz). [RVP-1301](#)
- Added support for the property `usageUploadPeriod` in RayVentory Scan Engine and Inventory Agent. [RVP-1304](#)
- Improved logic of calculation of the application usage. [RVP-1305](#)
- Fixed a rare issue with machine name not being properly set in NDI. [RVP-1306](#)
- Fixed duplicated machines after uploading NDI results. [RVP-1307](#)
- Added an option to exclude machines from inventory uploads. [RVP-1310](#)
- Resolve issues with excluding unneeded directories. [RVP-1313](#)
- Fixed an issue which could leave the SSH key credential type not working. [RVP-1319](#)
- Restored field `LastSuccessfulInventoryMethod` for filtering purposes. [RVP-1322](#)
- Added missing setting `usageUploadPeriod` to the default RVIA configuration. [RVP-1325](#)

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- Deactivated process scanning for AIX in `ndtrack.ini`. RVP-1333

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- Corrected the label for the checkbox that excludes devices uploading inventory files via HTTP. [RVP-1334](#)
 - Fixed refreshing of function buttons in schedule editor. [RVP-1335](#)
 - Increased the size of the **Name** column in the Inventory Agent configuration dialog. [RVP-1337](#)
 - Fixed an issue with the installer failing to install the product due to firewall-related errors. [RVP-1339](#)
 - Fixed possible crash during Active Directory Discovery. [RVP-1342](#)
 - Added support for TLS 1.1/1.2 for service check on RVSE startup. [RVP-1348](#)
 - Fixed problem with vSphere inventory requiring double inventory scan. [RVP-1359](#)
 - Scan Engine no longer puts out unnecessary lines to the console. [RVP-1364](#)
 - Improved file search for files with various encodings. [RVP-1366](#)
 - Fixed an issue with the Inventory Agent where scheduled tasks were not removed by the uninstallation script [RVIA]. [RVP-1372](#)
 - Removed misleading output regarding cronjobs. [RVP-1391](#)
 - Fixed an issue with unnecessary background DNS requests. [RVP-1399](#)
 - Fixed an issue with duplicate entries after discovery. [RVP-1407](#)
 - Fixed the way how `ndtrack.sh` gets its absolute path. [RVP-1437](#)
 - Fixed a type in the error message of the OracleDB discovery. [RVP-1441](#)
 - Fixed a rare issue with single-instance mode check. [RVP-1442](#)
 - Fixed a problem where the timeout of a vSphere inventory could lead to previous results being deleted. [RVP-1462](#)
 - Fixed the creation of new configuration files for RVIA which previously had no user and password configured by-default. [RVP-1464](#)
 - Fixed an issue with WMI queries, which were returning prematurely in case of a timeout set to 0. [RVP-1531](#)
 - Fixed issues with communication over HTTPS. [RVP-1543](#)
 - Fixed detection of the Tuning Pack on Oracle DB 18+. [RVP-1552](#)
 - Fixed wrong interpretation of a failed connection (Zero-Touch/UNIX) as success. [RVP-1554](#)
 - Fixed detection of Java 9. [RVP-1567](#)
 - Fixed missing MIME type in response for requests to `/rviaconfig`. [RVP-1580](#)
 - Fixed an issue in the UI when creating a discovery operation in a scheduled task. [RVP-1581](#)
 - Fixed finding of `java` on AIX platform. [RVP-1623](#)

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- Fixed issues with failing Hyper-V inventory and jumping from Hyper-V details to devices. [RVP-1632](#)

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- Fixed the importing of UNIX connections from CSV and issues where CSV could not be imported if not enough columns were visible. Additionally, CSV previewer now reads more lines (50 instead of 5). RVP-1636

Migrating from previous versions

Migrating from Scan Engine versions 12.2.2784 and newer

Perform upgrade using standard MSI installation (both Scan Engine and Inventory Agent must be updated separately).

Migrating from Scan Engine versions 12.2.2783 and lower

1. Perform upgrade using standard MSI installation (both Scan Engine and Inventory Agent must be updated separately).
2. Stop the RayVentory Scan Engine Scheduler service
 - a. Make sure to close the app and all its processes.
 - b. Using any text editor, open the file `C:\ProgramData\Raynet\RayVentoryPortal\Config\schedule.xml`.
 - c. Replace all occurrences of `<HostAndIpOperatorAnd>true</HostAndIpOperatorAnd>` with `<HostAndIpOperatorAnd>false</HostAndIpOperatorAnd>`
 - d. Start the RayVentory Scan Engine Scheduler service again

Migrating from RayVentory Portal

Preconditions

- The user must be an administrator
- Powershell version 3.0 or newer must be installed (information about the current version is contained within the `$PSVersionTable` variable)

Steps

1. Install RayVentory Scan Engine Scan Engine 12.3
2. Copy the migration script (see below) to a location where it can be started from a local system.
3. Open Windows PowerShell or Windows Terminal as administrator
4. Navigate to the folder where a local copy of migration script exists.
 - In case the execution of PowerShell scripts is restricted on the current system, execute additionally the following command to allow it temporarily:
`Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope Process`
 - In case the script is blocked by your system, unblock it with the following command:
`Unblock-File -Path .\MigrateRVPtoRVSE.ps1`
5. Execute the script
`.\MigrateRVPtoRVSE.ps1`
6. [Optional] Check if hard-coded values in configuration nodes of `config.xml` file are set to relative paths:
 - OracleTrackerFolderPath
 - NtrackExecutablePath
 - RIWClassesFile

Migration script

The following migration script is also available online:

<https://raynetgmbh.zendesk.com/hc/en-us/articles/360045755511-RVY200601-Migrating-RayVentory-Portal-to-RayVentory-Scan-Engine-12-0->

```
<#
@Title = A script to migrate from RayVentory Portal to RayVentory Scan
Engine
@Author = Raynet GmbH
@Version = 0.1
@Description = This script is supposed to adjust Config.xml files to fix
obsolete hardcoded paths
#>

# Setting up logging
Write-Host "Starting migration script"
$tempFilePath = [System.IO.Path]::Combine($env:TEMP,
"RVPtoRVSEmigration.log")
Start-Transcript -Path $tempFilePath -NoClobber -Append
```

```
Write-Host "PowerShell information"
$PSVersionTable
Write-Host ""

try {
    # Extraction of RVP appdata storage from Registry
    $appdataPath = [string]::Empty;
    $programFilePath = [string]::Empty;
    if ([Environment]::Is64BitProcess) {
        $appdataPath = Get-ItemProperty -Path "HKLM:\SOFTWARE\WOW6432Node
\Raynet\RayventoryPortal" -Name "AppDataPath" | Select-Object -
ExpandProperty "AppDataPath"
        $programFilePath = [Environment]::ExpandEnvironmentVariables("%
ProgramFiles(x86)%")
    }
    else {
        $appdataPath = Get-ItemProperty -Path "HKLM:\SOFTWARE\Raynet
\RayventoryPortal" -Name "AppDataPath" | Select-Object -ExpandProperty
"AppDataPath"
        $programFilePath = [Environment]::ExpandEnvironmentVariables("%
ProgramFiles%")
    }

    # Checking if configuration values are in place
    if ([string]::IsNullOrEmpty($appdataPath)) {
        Write-Warning -Message "Rayventory Portal configuration registry is
missing. No migration will be done."
        [System.Environment]::Exit(1)
    }

    $configFilePath = [System.IO.Path]::Combine($appdataPath, "Raynet",
"RayventoryPortal", "Config", "Config.xml");
    if (!(Test-Path($configFilePath))) {
        Write-Warning -Message "Configuration file not found. No migration
will be done."
        [System.Environment]::Exit(1)
    }
    else {
        # Updating hardcoded paths
        Write-Host "Updating hardcoded paths"

        [xml]$configContent = Get-Content -Path $configFilePath -Encoding
UTF8
        $oratrackPath =
$configContent.Configuration.OracleTrackerFolderPath;
        $ndtrackPath = $configContent.Configuration.NdtrackExecutablePath;

        $isRiwClassesEmpty = $false;
        $riwClassesPath = $configContent.Configuration.RIWClassesFile;
        if ([string]::IsNullOrEmpty($riwClassesPath)) {
            $isRiwClassesEmpty = $true;
        }
    }
}
```

```
$isContentChanged = $false

if (!(Test-Path $oratrackPath) -and !($oratrackPath -eq ".\Contrib\Oratrack")) {
    Write-Warning "OraTrack configuration is invalid : $oratrackPath. Will be reset to default: .\Contrib\Oratrack"
    $oratrackPath = ".\Contrib\Oratrack";
    $configContent.Configuration.OracleTrackerFolderPath = $oratrackPath;
    $isContentChanged = $true;
}

if (!(Test-Path $ndtrackPath) -and !($ndtrackPath -eq ".\Contrib\Ndtrack\ndtrack.exe")) {
    Write-Warning "NdTrack configuration is invalid : $ndtrackPath. Will be reset to default: .\Contrib\Ndtrack\ndtrack.exe"
    $ndtrackPath = ".\Contrib\Ndtrack\ndtrack.exe";
    $configContent.Configuration.NdtrackExecutablePath = $ndtrackPath;
    $isContentChanged = $true;
}

if (!$isRiwClassesEmpty -and !(Test-Path $riwClassesPath) -and !($riwClassesPath -eq ".\example.xml")) {
    $riwFileName = [System.IO.Path]::GetFileName($riwClassesPath);
    if ([string]::Equals($riwFileName, "example.xml")) {
        Write-Warning "Zero-Touch custom inventory configuration file path is invalid: $riwClassesPath. It will be reset to default: .\example.xml"
        $riwClassesPath = ".\example.xml";
        $configContent.Configuration.RIWClassesFile = $riwClassesPath;
        $isContentChanged = $true;
    }
    else {
        Write-Warning "Zero-Touch custom inventory configuration file path is invalid. Please manually adjust the configuration."
    }
}

if ($isContentChanged) {
    # Making a backup of configuration file
    $configBackupPath = $configFilePath + ".old";
    $nameNum = 1;
    $fullConfigBackupPath = $configBackupPath
    while (Test-Path $fullConfigBackupPath) {
        $fullConfigBackupPath = $configBackupPath + $nameNum;
        $nameNum += 1;
    }

    Write-Host "Making a backup of Config.xml: $fullConfigBackupPath"
    Copy-Item -Path $configFilePath -Destination $fullConfigBackupPath
}
```

```
        Write-Host "Writing changes back to Config.xml:
$configFilePath";
        Remove-Item -Path $configFilePath -Force
        $configContent.Save($configFilePath)
        Write-Host "Migration process was performed successfully"
    }
    else {
        Write-Host "No changes made to a configuration. Nothing will be
written."
    }
}
}
catch {
    Write-Warning "Migration failed. Check the log file."
    Write-Warning $_
}
finally {
    Stop-Transcript
}
```

Known Issues

These are the breaking changes in this release. A change is considered "breaking" if it significantly changes or removed a behavior, present in one of the previous releases.

For a list known issues in RayVentory Scan Engine refer to the Raynet [Knowledge Base](#). If there are any known issues, the respective information can be found here and will be kept up-to-date.

- RVP-1585 Server authentication using basic authentication does not work if no SSL/TLS is used. Either disable basic authentication or enable SSL/TLS.

Additional Information

Visit www.raynet.de for further information on RayVentory Scan Engine, 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 RayVentory Scan Engine experience. Please contact your Raynet service partner or use our [Support Panel](#) to add your ideas or requirements to the RayVentory Scan Engine development roadmap!

RayVentory Scan
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