RayVentory Scan Engine 12.3

12.3.3510.49 [Update 06]

Released on 18 Aug 2022

Security improvements

- **ORATRACK** We fixed an issue with OracleDB scanner (`oratrack10.jar`), which was containing unused code belonging to logging library `log4j`. This library has not been used since version `12.3.3429.24`, and its physical presence in this build was unintentional. Other variants of Oratrack were not affected, and no code from the library was used at all. `RVP-1924` `ZEN-19919`

Resolved issue

- **NDTRACK** Fixed an issue with reporting of the `User` property inside of `Win32_Process` class entries. As a regression in version `12.3.3510.47`, the property was not reported if custom WMI scan for class `Win32_Process` was defined, even if required explicitly. `RVP-1922` `ZEN-19903`

12.3.3510.47 [Update 05]

Released on 11 Aug 2022

INVENTORY AGENT Support for Windows Certificate store on Windows `RVP-1374` `ZEN-18859` `ZEN-18262` `ZEN-16154`

In this build, we updated redistributable version of CURL on Windows with `schannel` support. This change allows the agent to use Windows Certificate store for trusted HTTP connections.

Other improvements

- **NDTRACK** Improved scanning for various co-existing versions of MS SQL server by `ndtrack`. `RVP-1849` `ZEN-19105`
- **ORATRACK** Improved timeout management for long-running `java.exe` processes, which may happen occasionally when running `oratrack` in combination with `DFUS`. `RVP-1869` `ZEN-19289`
- Increased maximum number of incoming GET requests for embedded HTTP server per second to 100. This change has a positive effect on upload throughput. `RVP-1847` `ZEN-18905`
- Improved performance of the device list with large number of computers for subsequent operations. `RVP-1859` `ZEN-19575`
- Added example files and configuration reflecting the recent (Update 04) changes how processes on Windows are reported. `RVP-1857`
- Windows 11 and Windows Server 2022 are now recognized during the AD discovery. `RVP-1884`

Resolved issues

- Fixed a security issue, where user and password could be logged open-text in the task runner log file in case of a failed job. `RVP-1876`
- Fixed a concurrency issue, in which scheduled tasks could overwrite each other's data. `RVP-1888` `ZEN-19663`
- Fixed minor inconsistencies in the documentation part about supported platforms. `RVP-1894`
- **NDTRACK** Fixed an issue with different data reported by Zero-Touch and Remote-Execution on the same machine. `RVP-1459` `ZEN-16625`
- Fixed issues with loading of Hyper-V data, once the underlying device is removed from the Devices view. `RVP-1763`
- **INVENTORY AGENT** Fixed an issue, where scheduler on macOS could create incorrect jobs. `RVP-1822`
- Fixed concurrency issues, which could prevent the next run date from being properly calculated. `RVP-1838` `ZEN-19231`
- Fixed nor-working SharePoint and Exchange scans with use of Zero-Touch methods. `RVP-864` `ZEN-13993` `ZEN-15127` `ZEN-19081`
- **NDTRACK** Fixed incomplete WMI scans for SQL Server related classes. `RVP-1744` `ZEN-18702`

- **POWERSHELL** Fixed broken call to `Get-DeviceConnections` with OS type set to `Unix` in the PowerShell automation module. `RVP-1766` `ZEN-18793`
- Fixed a vague statement about encryption key and security of the configuration in RayVentory Scan Engine User Guide. `RVP-1901`
- Added missing `MGS_Process` in the list of default classes used by Zero-Touch scanner on UNIX. `RVP-1802` `ZEN-18985`
- Fixed an issue with wrong day calculation in the Inventory results UI. `RVP-1867`

12.3.3449.44 [Update 04]

Released on 04 Jul 2022

Whitelisting for SaaS usage discovery `RVP-1717` `RVP-1856` `ZEN-18213` `ZEN-18396`

It is now possible to define a white list of domains / expressions, that can be used to filter what will be imported by the SaaS discovery module.

A simple XML file can be used to define which websites are processed, for example:

```xml
<?xml version="1.0"?>
<Whitelist>
        <Saas Url="microsoft.com" Regex="false" />
        <Saas Url=".raynet." Regex="true" />
</Whitelist>
```

The XML file needs to be located in the following location for the RayVentory Inventory Agent to use it:

`C:\ProgramData\Raynet\RayVentoryInventoryAgent\SaaSwhitelisted.xml`

Alternatively, when using the SaaS discovery command line tool directly, the whitelist can be configured by providing a new parameter `--whitelist` (shorthand `-w`):

`UrlDiscoveryConsole.exe --whitelist saaswhitelist.xml`

Other improvements

- Many internal improvements to Zero-Touch scanner, optimized usage of commands and improved process handling on certain distributions. This should also resolve sporadic issues on some systems, including but not limited to CentOS 5.4. `RVP-1833` `ZEN-18939`
- Added plugins and additional auxiliary files to the standard NDTRACK Agent installation sources. `RVP-1787` `ZEN-18858`
- Improved performance of RayVentory Scan Engine UI when loading large number of devices. `RVP-1859`

Security improvements

- **INVENTORY AGENT** Fixed a security issue, where Inventory Agent could write sensitive information in event log when getting the configuration from Scan Engine. `RVP-1854` `ZEN-19308`
- **INVENTORY AGENT** Fixed a security issue in Inventory Agent (non-Windows), in which the libraries were referenced by relative, not absolute paths. `RVP-1826` `ZEN-19064`

Resolved issues

- Fixed issues with missing texts in log files. `RVP-1755` `ZEN-18624` `ZEN-18749` `ZEN-19183`
- Fixed migration from RayVentory Scan Engine 12.2, where the information about target filtered by list could be lost in the schedule configuration. `RVP-1757`

- **INVENTORY AGENT** Fixed an issue, where the Inventory Agent could not run on supported systems, where the required libraries (`lib stdc+`, `libgcc_s`) were missing. This change affects many systems, including but not limited to AIX and Solaris. `RVP-1777` `RVP-1851` `ZEN-19130`
- Fixed issues with importing of inventory files from Windows machines, where the results coming from remote execution / portable scan (`ndtrack`) were incompatible with the same results delivered by the Zero-Touch (RWI) counterpart. `RVP-1792` `ZEN-18857`
- **INVENTORY AGENT** Fixed broken upload of inventory files from OracleDB scanner `oratrack`. `RVP-1829`
- Fixed a timing issue in which the schedules could be in an inconsistent state. `RVP-1809` `ZEN-19140` `ZEN-19162`
- **INVENTORY AGENT** Fixed uploading of inventory files by Inventory Agent, which was deleting the files in case of a failed upload. In this build, the files will stay to be retried later. `RVP-1830`
- Fixed an issue in scheduler module, where removing a single schedule could remove all entries. `RVP-1842`
- **ORATRACK** Fixed an issue, where certain queries were not executed on OracleDB 12.1. `RVP-1852` `ZEN-19260`
- **INVENTORY AGENT** Fixed an infinite loop in search routine, which was executing on Solaris 10 when looking for cURL by the Inventory Agent. `RVP-1846`
- Fixed a `NullReferenceException` which could be thrown under certain conditions during the inventory upload in RayVentory Scan Engine. `RVP-1848` `ZEN-19277` `ZEN-19183`
- **ORATRACK** Fixed a regression in the logging module introduced in version *12.3.3429.24 (Update 02)*, where an exception could be thrown when running `oratrack` on JRE < 1.6 (due to missing `isEmpty()` method). `RVP-1862` `ZEN-19462`

12.3.3431.39 [Update 03]

Released on 03 Jun 2022

- Fixed zero-touch scanning of file content on non-Windows platforms (RIU). The issue caused general time-outs of hashing of special or device files (`/dev/*`), rendering the inventory results partially incomplete. The issue has been confirmed on some earlier version of CentOS, but could also affect other platforms. `RVP-1833` `ZEN-18939`
- Fixed a security issues in Inventory Agent (`rvia`) non-Windows shell script, which was using relative paths to binary files. In the new version, all paths are absolute. `RVP-1826` `ZEN-19064`
- Fixed binary of the Inventory Agent (`rvia`), which due to a faulty linking could not be properly run on some environments. `RVP-1777` `ZEN-18463`

12.3.3429.24 [Update 02]

Released on 11 May 2022

General improvements

- In RVIA, we improved RAM consumption by optimizing code and places where memory leaks could happen. `RVP-1729` `ZEN-18529`
- Improved descriptions of configuration of remote execution and Hyper-V properties. `RVP-1772` `RVP-1781` `RVP-1782` `RVP-1774` `RVP-1775`
- Windows Server 2019 and 2022 now have logos in the Inventory view. `RVP-1642`
- If a DNS name cannot be resolved, the `hostname` property from VMware API is now used in vSphere scans. `RVP-1758`

Security improvements

- OracleDB scanner (`oratrack`) now does not use log4j library anymore. Due to security concerns, the tool has been rewritten by replacing the library with a secure implementation. `RVP-1630` `ZEN-17954` `ZEN-18457` `ZEN-18809`
- macOS packages for the Inventory Agent are now digitally signed. `RVP-1330` `ZEN-18681`

Resolved issues

- Fixed an issue with `ndtrack` failing if DNS resolution was not properly configured. `RVP-1749` `ZEN-18560` `ZEN-18679`

- Fixed a critical issue, where incoming NDI files were stored in the installation folder after being accepted by the HTTP upload service. `RVP-1753` `ZEN-18737`
- Fixed an issue with RVIA ignoring compression and deleting local NDI files. `RVP-1288` `ZEN-15896`
- Fixed an issue with schedule times not changed properly on macOS. `RVP-1733`
- Fixed a regression in version 12.3, in which it was not possible to put the files in the `Results\RemoteExection` folder to add them to the connection list. `RVP-1754` `ZEN-18710`
- Fixed an issue with vSphere inventory not showing FQDN in scope. `RVP-1758` `ZEN-18488`
- Fixed an issue, where logs files could be written directly in INSTALLDIR. `RVP-1776`
- Fixed an issue, where a failure during reading of vSphere tag would leave the complete scan process as failed. In this version, failure of reading a tag does not break the inventory scan of vSphere devices. `RVP-1681` `ZEN-17336`
- Fixed an issue with missing `Name` property of an operating system on macOS devices. `RVP-1742`

12.3.3394.15 [Update 01]

Released on 04 Apr 2022

- Fixed detection of Java 1.5 and older by RayVentory Inventory Agent (non-Windows). `RVP-1725`
- Fixed application logs for `curl` uploads, which previously could contain a clear-text sensitive data. `RVP-1666`
- Look-up for `curl` on non-Windows system has been improved. In this version, if `curl` is not found in the `PATH` variable, the agent performs a one-time file scan for it, and stores the result of the look-up for subsequent usage. `RVP-1724`
- Filtering devices in scheduled inventory operation now also respects the host name (previously only IP addresses were considered). `RVP-1728`
- Fixed an issue with frequent timeouts of file scans on AIX machines with network shares. In this build, if network scan is disabled, command line switch `-xdev` will be used for `find` command. `RVP-1716`

12.3 [RTM]
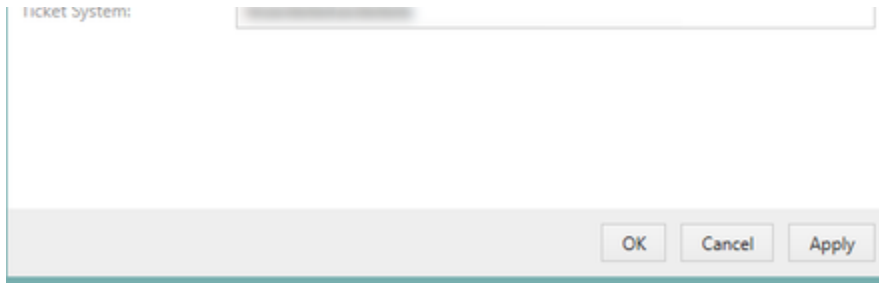
Released on 22 Feb 2022

Feature Highlights

CyberArk Vault Credentials Handling

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

Both password and SSL-certificate authentication against CyberArk are supported. CyberArk can be used for the following types of credentials: Windows, SSH, OracleDB, 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 OracleDB scanner. `RVP-1568`
- Scanning for DBFU statistics now supports connection to Oracle DB by SID in addition to previously supported service names. `RVP-1516`

Preview of Scanned File Content

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

Disabling and Enabling of Credentials

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

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.
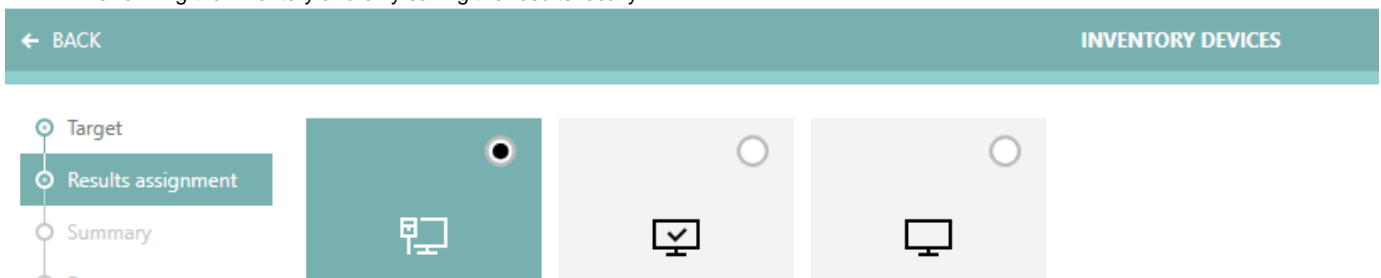
Assign to existing device	Create new device	Continue without assignment

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

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

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 large amount of data. `RVP-1485`

Other Improvements and Changes

- Zero-Touch Windows Scan now correctly recognizes default registry keys. `RVP-1272`
- Added support for custom SSH ports for scheduled tasks. `RVP-1432`
- Added auto-detection of target type based on the property `guestFullName` obtained from vSphere scanning. `RVP-344`
- Added a query for `BANNER_FULL` Oracle DB scanner (*oratrack*). `RVP-1579`
- Scanning for DBFU statistics now supports connection to Oracle DB by SID in addition to previously supported service names. `RVP-1516`
- Improved behavior after failed ESX inventory scan. `RVP-770`
- Custom properties are now uploaded with their default values. `RVP-976`
- If OracleDB scanner (*oratrack*) encounters an exception of the type `OracleSqlException`, its error code is now reported in the failure message. `RVP-1518`
- Improved feedback and upload error messages shown in the UI after a failed upload of NDI files. `RVP-1026`
- 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`
- Added additional properties to the default config files: `configDownloadProxyUser`, `configDownloadProxyPassword`, `generalTaskMaxDelay`, `resultUploadProxyUser`, `resultUploadProxyPassword`, `encryptionKey` [RVIA]. `RVP-1245` `RVP-1350`
- Added confirmation dialog when removing config file [RVIA]. `RVP-1246`
- Encryption key settings have been moved from Usage into the General section [RVIA]. `RVP-1262`
- 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 HPUX. `RVP-1355`
- Implemented enhanced process scanning to get filename and MD5 Checksum of running processes. `RVP-1380`
- New UI for upload rules in Scan Engine settings. `RVP-1571`
- Default shell has been changed from BASH to SH for install, local run, and upload run scripts. `RVP-1385`
- SSH Key and Passphrase are now shown (in plain text) in the Wizard Summary. `RVP-1418`
- 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`
- Added a limit for the maximum file size of Inventory Agent log files. The default limit is now 1 MB. `RVP-1175`
- Logon/Start schedule types now support delaying. `RVP-1233`
- Inventory Agent now comes with bundled custom inventory scripts. `RVP-1234`
- The default configuration for the Inventory Agent has now a sample line for maximum task delay (set to `30`). The line is commented-out in the standard configuration. `RVP-1240`
- Software usage scanner now supports persisting of collected data before premature reboots and shut-down events. `RVP-1587`

Resolved Issues

- Fixed an issue with upload rules definition, where a dot character (`.`) was turned into a comma (`,`) in the file extension filter input field. `RVP-1177`
- Selected device view has now a scrollbar if the content is too big. `RVP-1161`
- Fixed an issue with the port scanner disallowing port numbers higher than `32767`. `RVP-1178`
- 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 clipped headers in the Inventory summary table. `RVP-1184`
- Fixed finding of `java` on AIX platform. `RVP-1623`
- Resolved some language issues with Russian UI `RVP-1185`
- Fixed an issue with the configuration file for Inventory Agent missing the values for config download user and password even if they have been previously configured. `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 connection to HTTP service configured to use SSL on machines with TLS 1.0 disabled. In this build, the 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 an issue with CURL downloads never finishing in spite of operation timeout being defined. `RVP-1215`
- Fixed an issue with the Windows Installer file, which was not supporting installation on 32-bit systems. `RVP-1220`
- Fixed an issue with the installer failing to install the product due to firewall-related errors. `RVP-1339`
- 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 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`
- Removed misleading output regarding cronjobs. `RVP-1391`
- Fixed the way how `ndtrack.sh` gets its absolute path. `RVP-1437`
- Fixed an issue with the merging of NDI files, where the values of host name / IP address would only differ in casing, resulting in duplicated matches. `RVP-1247`
- Fixed an issue with the `MGS_Processor` class being duplicated in the resulting NDI files. `RVP-1273`
- 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`
- 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 uploading of compressed NDI files, where a random GUID was added to the file extension if the NDI was sent in compressed form (`.gz`). `RVP-1301`
- Added a fallback to use IP address for inventory if host resolution fails. `RVP-1067`
- Fixed wrong resolution of hostname and version of RHEL Server 6.10. `RVP-1284`
- 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 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`
- Restored field `LastSuccessfullInventoryMethod` for filtering purposes. `RVP-1322`
- Deactivated process scanning for AIX in `ndtrack.ini`. `RVP-1333`

- Added missing setting `usageUploadPeriod` to the default RVIA configuration. `RVP-1325`
- Initial HTTP server check availability now supports TLS 1.1/1.2. `RVP-1348`
- Increased size of the 'Name' column in Inventory Agent configuration dialog. `RVP-1337`
- Fixed possible crash during Active Directory Discovery. `RVP-1342`
- Resolve issues with excluding unneeded directories. `RVP-1313`
- Added support for TLS 1.1/1.2 for service check on RVSE startup. `RVP-1348`
- Improved updating of schedules.xml. `RVP-1013`
- 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 duplicate entries after discovery. `RVP-1407`
- Fixed minor translation issues. `RVP-1124`
- 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 incorrect value of the `configDownloadSource` property when a new configuration is created [RVIA]. `RVP-1219`
- Fixed empty view of the Oracle inventory details view. `RVP-1249`
- Fixed an issue which could leave SSH key credential type not working. `RVP-1319`
- 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`
- Fixed problem with vSphere inventory requiring double inventory scan. `RVP-1359`
- Fixed an issue with the Inventory Agent where scheduled tasks were not removed by the uninstallation script [RVIA]. `RVP-1372`
- Fixed an issue with unnecessary background DNS requests. `RVP-1399`
- Fixed typo in error message of OracleDB discovery. `RVP-1441`
- Fixed a problem where the timeout of a vSphere inventory could lead to previous results being deleted. `RVP-1462`
- Fixed a rare issue with single-instance mode check. `RVP-1442`
- 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 an issue with NDI content coming from `ndtrack` being rewritten upon receiving by Scan Engine. `RVP-1533`
- Fixed issues with communication over HTTPS. `RVP-1543`
- Fixed detection of the Tuning Pack on OracleDB 18+. `RVP-1552`
- Fixed wrong interpretation of a failed connection (Zero-Touch/UNIX) as success. `RVP-1554`
- Fixed missing MIME type in responses for requests to `/rviaconfig`. `RVP-1580`
- Fixed detection of Java 9. `RVP-1567`
- Fixed an issue in the UI when creating a discovery operation in a scheduled task. `RVP-1581`
- Fixed 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`
- Fixed issues with failing Hyper-V inventory and jumping from Hyper-V details to devices. `RVP-1632`

Known Issues

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