

APTARE IT Analytics™ Release Notes: Version 10.3.00

The 10.3.00 release includes all patch release fixes up to and including version 10.2.01P10. For additional details refer to previous release note versions.

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Patch Releases: APTARE IT Analytics 10.3.00P3

NOTE: If you already applied a custom patch after upgrading to 10.3.00P3 contact Support before applying one of the following patches as these patch releases may reverse the updates provided in the custom patch.

The 10.3.00P3 release includes all patch release fixes up to and including version 10.2.01P12. For additional details refer to previous release note versions.

- [10.3.00P3 Patch Release Notes](#)
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10.3.00P3 Patch Release Notes

The 10.3.00P3 release includes all patch release fixes up to and including version 10.2.01P12. The following software changes are included in this patch release.

Backup Manager Enhancements and Resolved Issues

Issue Number	Description
SC-19622	Rubrik Cloud Data Management now supports REST API V2 to collect all SLA domains.
SC-19009	Support for Veritas NetBackup version 8.2 has been added.
30991	Resolves an issue where after an upgrade a CommVault server was being duplicated in the Inventory and created licensing and collection issues.
30977	Resolves an issue when NetBackup saves to a Western Digital ActiveScale cloud storage device, the controlling host is not present and collection fails.

Capacity Manager Enhancements and Resolved Issues

Issue Number	Description
SC-19330 (SCP-605)	<ul style="list-style-type: none">• Certain IBM SVC Flash arrays do not return all the capacity values using the SMI-S interface (CIMOM objects). This leads to a discrepancy between APTARE IT Analytics reports and the IBM Flash array dashboard. This information is returned using the IBM CLI. This feature implements the execution of the CLI, persist data and enhance the Array Capacity & Utilization to reflect the same.• Support for IBM FlashSystem 840/900 has been added.• The following new views have been added to the SQL Template Designer under the <code>aps_v_svc_disk</code> table:<ul style="list-style-type: none">• <code>physical_used_capacity_kb</code>• <code>effective_used_capacity_kb</code>• <code>is_compressed</code>
SC-18293 (SCP-583)	Support for HPE Nimble Storage version 5.0.7.100-607338-opt has been added.
31004	Resolves an issue with IBM XIV data collection where if a host name has a space in it, collection exits instead of moving to the next host.
30966	Resolves an issue where NetApp Cluster Mode collection reporting, the LUN performance data was not being persisted.
30965	To provide historical data for IBM XIV, added <code>used_kb</code> to the table <code>aps_xiv_volume_log</code> and exposed to the views and Data Dictionary.
30824	Framework change to resolve an issue when drilling down on a storage pool. Now when drilling down on a storage pool, the record for the particular storage pool is displayed instead of showing all the storage pools for the array.

Fabric Manager Enhancements and Resolved Issues

Issue Number	Description
30995	Resolves an issue that was causing a SAN switch count mismatch. Now the filtering for the SAN Fabric Summary and Switch Summary match.

Portal Enhancements and Resolved Issues

Issue Number	Description
30986	The currency format is now displayed in the Capacity Billing and Usage policies after modifying the value in the System Configuration.
30974	Resolves an issue in a Linux environment that caused reports exported to Excel to not be sortable because a comma was erroneously inserted into the date format. For this release, the issue still exists in a Windows environment. Refer to Known Issues and Optimizations for details and steps for a workaround.
30972	Resolves an issue where AWS EC2 Snapshot report was not displaying data when run from the Inventory.
30959	Resolves the issue where extra rows were showing when drilling down from Alert Summary History to Alert History Detail on a rule instance.
30951	Resolves an issue where the upgrade to a Windows version for a 10.3 patch release was failing.

Virtualization Manager Enhancements and Resolved Issues

Issue Number	Description
SC-12826 (SCP-434)	VMware tags and custom attributes are now collected for ESX Hosts and VMs during the inventory collection. The tags will be displayed in the following reports: VM Summary, VM Detail, VM Server Summary, and VM Server Detail. New views have been created and existing views extended to expose these tags for users to create custom reports using the SQL Template Designer.

10.3.00P2 Patch Release Notes

The 10.3.00P2 release includes all patch release fixes up to and including version 10.2.01P12. The following software changes are included in this patch release.

Backup Manager Enhancements and Resolved Issues

Issue Number	Description
SC-19366	Support for Veritas Backup Exec 20 has been added.
SC-18722	Update to the framework to display multiple schedules for a protection policy in the Object Details report. This change is to accommodate connectors built with the APTARE SDK that require more than one schedule.
SC-18441, SC-18869	Documentation updates have been added that cover how to set up Veritas NetBackup data collectors in a cluster using a Veritas Infoscale Availability (VCS). Red Hat (RHEL) and Windows versions are included.
30934	Resolves an issue where certain large Data Domain file shares, the folder level compression probe took a long time to complete.
30931	EMC Data Domain Backup Data Collector policy now displays all servers instead of only displaying the first 50.
30904	Resolves an issue with HPDP data collection by increasing the column size of apt_hpd_session.gigabytes to NUMBER(15,2).

Capacity Manager Enhancements and Resolved Issues

Issue Number	Description
30911	Resolves an issue where when the values of a system parameter for retention days were manually set, an upgrade overwrote them with default values. Now, when APT_PURGE_RULES.retention_days is manually revised, the value is retained after an upgrade.
30521	Resolves an issue with the SDK API: com.aptare.storage.saveHostInfo where an incorrect message was displayed in scon errors when hostPortWWNs are missing.

Fabric Manager Enhancements and Resolved Issues

Issue Number	Description
SC-19092	This update enables the display of physical and virtual node port WWNs (and connected devices) for Brocade NPIV in the following reports: <ul style="list-style-type: none">• Switch Port Summary• Switch Port Detail
SC-19091	A new report, Node Port Summary enables users to see how each connected device, for example a host or an array, is connected from the SAN Fabric switch. This report is available as a drill down from # of Conn Dev column in the following reports: <ul style="list-style-type: none">• SAN Fabric Summary• Switch Summary• Switch Details

Portal Enhancements and Resolved Issues

Issue Number	Description
30945	This fix resolves an error that occurred while executing connector.bat, due to which Connector developer utility (APTARE SDK) could not be used.
30926	Resolves an issue where email generated from the Portal was not properly handling the formatting of the copyright symbol.
30907	Resolves a sorting issue in the Host Group Overview which is displayed in the Inventory.

10.3.00P1 Patch Release Notes

The 10.3.00P1 release includes all patch release fixes up to and including version 10.2.01P12. The following software changes are included in this patch release.

Backup Manager Enhancements and Resolved Issues

Issue Number	Description
SC-18498	Adds reporting support for new NetBackup types. These new types are accessible using either the SQL Template Designer or the Dynamic Template Designer.
SC-17728 (SCP-539)	<p>In the Data Domain System Summary - Backup report, using the value in the System column, drill down to the Data Domain System Detail report. On this report, a new field # of disks has been added below Last Poll Date. From the new field, drill down to Data Domain Disk Summary report.</p> <p>In addition, the Data Domain System Summary - Backup report, under the heading Filesystem, the column, # of Disks, the value now drills down to the Data Domain Disk Summary report.</p>
SC-17005 (SCP-523)	Two new columns have been added to the Backup License Usage Details report: Source ID and Source Internal Name . Access this Super User only report by running the License Summary and clicking the value link in the Used column for the Backup Manager module.
30856	Resolves an issue where HP Data Protection (HPDP) data collection was failing.
30828	<p>Adds error messaging for Oracle RMAN collection issues. Test Connection now displays an error message and potential resolution if a schema does not have any registered databases to collect.</p> <p>For the Jobs probe, a message is now displayed if a schema doesn't have any registered databases to collect.</p>
30827	Improved error messaging for Oracle RMAN to make it clearer when an Oracle instance cannot be connected to by Service Name and the collector falls back to trying to connect by SID.
30805	Resolves an issue where multiple data collections of an unfinished IBM Spectrum Protect (TSM) job involving VM backups resulted in a duplicate jobs.
30772	<p>Resolves an issue where in the Inventory the following backup reports:</p> <ul style="list-style-type: none">• Job Volume Summary• Job Error Code• Job Duration• Error Log Summary by Server• Error Log Summary• Error Log Summary by Policy• Consecutive Errors• Server Consumption Summary <p>A default job type was not selected for the Edit Scope dialog.</p>
30425	Resolves an issue where the command output for bpplclients changed in the latest version of NetBackup and the Policy Clients probe was failing.

Capacity Manager Enhancements and Resolved Issues

Issue Number	Description
30872	Resolves an issue with EMC XtremIO collection that caused a failure while executing the REST API.
30773	For IBM XIV collection, array_name was used as the object_id. With this change, the array's serial number will now be used as the object_id, because it should be unique for each array.
30741	Resolves an issue where a large number of datastores were missing from the database table apt_v_vmw_map_datastore_lun.
30408	Improves the WinServer NFS Server statistics and connector latency performance number calculations.

Cloud Enhancements and Resolved Issues

Issue Number	Description
30607	Resolves an issue with AWS billing records collection failure.

Portal Enhancements and Resolved Issues

Issue Number	Description
SC-18514	Under Alerts , when defining the scope for an Alert Policy, drag and drop has been added as a feature to be consistent with the behavior on other scope selector screens.
30898	Corrects the description for the Alert rule: NetBackup Disk Volume Usage.
30896	Resolves a typo in the body of the email text for a license request.
30863	Filtering on Exit Status has been added to High Job Failure alert rule.
30861	Resolves an issue where a user with access privileges to only reports could not log in to the Portal.
30841	Removes an invalid statement about the JDK version from the upgrade script.
30840	Resolves an issue where SNMP details and the script configuration were not being saved for a Report-Based Alert.
30835	Resolves an issue that caused the SNMP delivery method to fail when creating an Alert policy.
30738	Resolves a drill down issue where the Alert Summary to Alert Detail was displaying incorrect alert types.
30525	Resolves a interface behavior issue in the System Configuration where after saving an update, the focus shifted to the first tab in the section. The focus now remains on the active tab after saving.
30524	Resolves an issue in the System Configuration settings when large values were entered into the fields and produced an incomplete error message. A new message with character limitations is now displayed.
30160	Resolves an issue where the sort function stopped working for host groups in the Inventory.

Virtualization Manager Enhancements and Resolved Issues

Issue Number	Description
SC-18157 (SCP-473)	The reports, Datastore Utilization Summary and Datastore Detail now display a field Cluster Name to show relationships and report on Datastore Clusters. In addition, new and modified views are available in the SQL Template Designer: <ul style="list-style-type: none">• apt_v_vmw_datastore_cluster• apt_v_vmw_datastore_cluster_log• apt_v_vmw_datastore• apt_v_vmw_virtual_machine
30780	Fix improves the performance of a scheduled job 'vmw_purge_pkg.purgeVMWLogDaily'. The process now uses a loop and handles one ESX (and its VMs) at a time, instead of all ESXs at once.
30643	Removes an erroneous EOFException error from VMware logging.

What's New: APTARE IT Analytics Version 10.3 Highlights

- [Monitoring and Alerting](#)
- [New System Support](#)
- [Usability Focus: Simplification](#)
- [Portal Performance Improvements](#)

Monitoring and Alerting

The new Alerting feature empowers you to intelligently and pro-actively ensure operational wellness. Through real-time symptom detection and notification, you can quickly spot problems across your datacenter, rapidly identify their causes, and minimize service degradation and disruption. Alert policies, built with pre-defined Alert Rules, enable you to define watch conditions within your datacenter, and create custom triggers based on set thresholds and time periods. Use the Baseline feature to help determine thresholds by leveraging your own historic data.

Through custom symptom detection and notification, your team can have an understanding of what's wrong and use the information to take the appropriate action. Functionality is available through the new **Alerts** tab. The following lists the highlights of the Alerting feature:

- **Badging in the Inventory (SC-17116)** - The Inventory displays badging to indicate the alerts on the specific objects with the ability to view relevant reports. Icons displayed in the Inventory Objects panel identify which objects have triggered a critical or warning alert using the thresholds you defined.
- **New Reports (SC-17318)** - Located in the new **Alerts** folder on the **Reports** tab, or available from anywhere in the Portal using Search:
 - **Alert Delivery Failure** - Lists alerts that one or more of the delivery mechanisms failed.
 - **Alert Detail** - Lists a summary of current alerts based on definitions in the Alert Policies and sorted by the most recent alert. Use this report to suppress/unsuppress alerts.
 - **Alert Detail History** - Lists a summary of alerts by Alert Policy for a selected time period.
 - **Alert Summary** - Donut chart displaying current alerts by Alert Policy with drill downs to Alert Detail.
 - **Alert Summary History** - Donut chart displaying all alerts by Alert Policy with drill downs to Alert Detail History.
 - **Alert Trend** - Bar chart displaying all alerts by alert type for a select time period. Filter the report by object types and Alert Rules.

- **Menu Restructure (SC-16076) (SC-15982) (SC-15983) (SC-16109)** - As a part of the new Alerts tab introduction, the **Tools** tab has been deprecated and the functions have been relocated. The following table displays the old and new locations.

Feature	Old Location	New Location
Dynamic Template Designer	Tools>Designers>Dynamic Template Designer	Reports>My Reports>New Dynamic Template
SQL Template Designer	Tools>Designers>SQL Template Designer	Reports>My Reports>New SQL Template
Method Designer	Tools>Designers>Method Designer	Admin>Reports>Method Designer
File List Export	Tools>File List>Export	Admin>File List>Export

New System Support

To provide the benefit of the latest security fixes, bug fixes, and performance advantages the following new versions are supported: (SCP-536)

- **Hitachi HDvM 8.5 Support** (SC-13562): New version support for Hitachi.
- **Apache 2.4.35 and 2.4.37 Support** (SC-16992) (SCP-568): New version support for Apache HTTP Web Server for new installations for both Linux and Windows.
- **Oracle 12c 12.2.01** (SC-15077) (SCP-536): New Oracle version support for new installations for both Linux and Windows.
- **Java 10.0.2** (SC-15975) (SCP-536): New Java version support for the Data Collector Server. Note, older versions of MS SQL Server may encounter compatibility issues. Collection occurs from the Microsoft SQL Server database used by a data collector. The version of Java used by APTARE IT Analytics version 10.3 disables some insecure TLS algorithms by default. Refer to the section in the Help *Upgrade Troubleshooting: Microsoft SQL Server and Java 10*. (30574)
- **Apache HTTP Web Server 2.4.38** (SC-18021) (SCP-536): New version support for new installations for both Linux and Windows.
- **Apache Tomcat Java Servlet Engine 8.5.38** (SC-18021) (SCP-536): New version support for new installations for both Linux and Windows.

Usability Focus: Simplification

Portal usability and simplification is a focus for this release. Numerous enhancements have been made across the user interface in an effort to deliver a better user experience.

Highlights include:

- **Licensing: Request and Upload through the Portal** (SCP-548) (SC-16441): The ability to apply a new license is now available from within the Portal. With this enhancement, the administration of license key installation has become easier and that equals less downtime. Access this new feature through the **Admin** tab under **Advanced**. If the Portal does not have a license or has an invalid license, a Super User can log into a license screen where they can request and upload a license.
- **System Configuration in the Portal** (SC-16591) (SC-15348) (SCP-557): Configuration and data retention settings are now available through the Portal for Super Users. Default settings and helper text are also displayed to provide more information about the parameters that control Portal and system behavior.
- **Adding Notes to Data Collector Policy Screens** (SC-16113) (SC-535): You can now add notes into all data collector policy screens. These notes are retained along with the policy information for a specific vendor and displayed on the Collector Administration page as a column making them searchable as well.

- **Adding Backup Servers Directly from Policy Screens (SC-16394) (SCP-547):** In an effort to simplify the configuration of data collector policies, the ability to add/edit the Backup Server directly from the data collector policy screens has been extended to the following vendors:
 - EMC Data Domain Backup
 - EMC NetWorker
 - Generic Backup
 - HP Data Protector
 - Veritas NetBackup
- **Importing Attributes and Assigning to Hosts in the Inventory (SC-16423) (SCP-546):** This new feature enables you to import attribute values to existing attributes and assign them to existing Hosts through the Inventory. You can also schedule this operation using Format Customizations (portal.properties file). Previously, this operation could only be completed using a load script. In an effort to simplify the process, this feature is now available through the Inventory.
- **Keyboard Shortcuts (SC-15375):** APTARE IT Analytics introduces standard keyboard shortcuts to help you work more efficiently. The **Reports** tab offers all available options and Delete is available on other grid-based tabs in the Portal. The following keyboard shortcuts are available on the **Reports** tab:

Operation	Keyboard Shortcut
Copy	Ctrl+C
Cut	Ctrl+X
Delete	Del or Delete
Paste	Ctrl+V
Select All	Ctrl+A

Delete (Del) is also available on the following pages:

- Admin >Users>Users and Privileges
- Admin>Users>User Groups
- Admin>Data Collection>Collector Administration
- Admin>Reports>Method Designer
- Admin>Advanced>Parameters
- Admin>Advanced>Attributes
- Admin>Advanced>Support Tools
- Monitor>Configure Threshold
- Monitor>Configure Alerts
- Monitor>Configure Report Alerts

Portal Performance Improvements

The Collector Status page has been optimized for performance. All options from the Time Period filter except Last Run have been removed. Last 24 hours has been added as a selection. (SC-15984)

New Reports

To provide the backup status for AWS EC2 instances, the following new reports are available under **Backup Manager>Management Reports** or from anywhere in the Portal using **Search**. (SC-17108)

- **AWS EC2 Snapshot**- Displays Amazon Web Services (AWS) EC2 instances with the status of snapshot backups.
- **AWS EC2 Snapshot Detail** - Displays Amazon Web Services (AWS) EC2 instances snapshot backup details including volume information, snapshot dates and sizes.

See also new reports listed under [Monitoring and Alerting](#).

Installation Prerequisites

Microsoft Windows

BEFORE installing APTARE IT Analytics 10.3.xx, verify Microsoft Visual C++ Runtime libraries are installed. (28038)

APTARE IT Analytics installs Apache HTTP Server which has a dependency on run-time components of Visual C++ libraries. These run-time components are included in the Microsoft Visual C++ 2015 Redistributable Update 3 RC. This Microsoft distribution is available for download from www.microsoft.com. If this redistributable update is not installed prior to running the APTARE IT Analytics installer, Apache HTTP Server will not be able to run.

Note: If you installed Microsoft Visual C++ 2015 *after* APTARE IT Analytics 10.3.xx was installed, and services are failing, manually install the Apache service using the following command:

```
C:\opt\apache\bin\httpd -k install -n "APTARE Apache"
```

Linux

For a new Linux installation running Apache 2.4.33 or later, OpenSSL is required. The following section covers the installation.

Building OpenSSL (Required for Apache 2.4.33 and later)

Requires perl 5.10 or higher.

As user root, execute the following the following steps:

```
wget --no-check-certificate https://www.openssl.org/source/openssl-1.1.0h.tar.gz
gunzip openssl-1.1.0h.tar.gz
tar -xf openssl-1.1.0h.tar
cd openssl-1.1.0h
./config -fPIC shared --prefix=/usr/local/openssl --openssldir=/usr/local/openssl
make
make install
```

Verifying the build

```
export LD_LIBRARY_PATH="/usr/local/openssl/lib"
/usr/local/openssl/bin/openssl version
OpenSSL 1.1.0h 27 Mar 2018
```

Enhancements and Resolved Issues by Category

The 10.3 release includes all patch release fixes up to and including version 10.2.01P10.

The APTARE Release Version 10.3 software release offers enhancements and resolved issues since the last release. The following tables list enhanced features and fixed issues by category. Be sure to also check these sections before installing or upgrading: [Portal Supported Operating Systems](#) and [Upgrading to Release Version 10.3.00](#). Upgrade instructions and sizing information in the technical documentation should also be consulted prior to upgrades.

- [Backup Manager Enhancements and Resolved Issues](#)
- [Capacity Manager Enhancements and Resolved Issues](#)
- [Cloud Enhancements and Resolved Issues](#)
- [Database Enhancements and Resolved Issues](#)
- [Data Collection Enhancements and Resolved Issues](#)
- [Portal Enhancements and Resolved Issues](#)
- [Virtualization Manager Enhancements and Resolved Issues](#)

Backup Manager Enhancements and Resolved Issues

Issue Number	Description
SC-16143	The layout for the Job Summary Scope Selector's Advanced Options has been updated for a better user experience.
30686	Resolves an EMC Networker collection issue where incorrect job types were sent for data persistence.
30618	Resolves an issue where deleting an orphan server during data purging was failing with an integrity constraint for table APT_TSM_BACKUP_JOB_ENTITY.
29736	Resolves an issue that was causing an error when attempting to persist IBM TSM Storage Pools. Changes were made to handle a new access type X.
28870	Adds an option in the scope selector to dynamically generate/display capacity units in reports based on the size.
28825	Resolves an issue with a drilldown count mismatch on the Job Status Summary for boundary conditions.
25093	Resolves an alignment issue in the scope selector dialog when running the Largest Backup Volume report.

Capacity Manager Enhancements and Resolved Issues

Issue Number	Description
30752	Resolves a Dell EMC ECS collection issue that occurred while collecting namespace information.
30656	Fixes an issue that caused EMC VPLEX collection to fail because data was not returned from the Rest API calls.
30641	Logging changes made for IBM Enterprise collection to avoid excessive logging during scheduled runs.
30612	Increased length of the column h3p_ldev_id to NUMBER (8, 0) to accommodate larger values.
29953	IBM SVC Pool and Storage System past data is now supported for reporting purposes. Two new log tables have been added: <ul style="list-style-type: none">• APS_SVC_STORAGE_SYSTEM_LOG• APS_SVC_STORAGE_POOL_LOG Both tables are exposed in the SQL Template Designer and Dynamic Template Designer under IBM SVC.
29951	EMC Isilon Node and Disk past data is now supported for reporting purposes. Two new log tables: <ul style="list-style-type: none">• APS_ISI_NODE_LOG• APS_ISI_DISK_LOG Both tables are exposed in the SQL Template Designer and Dynamic Template Designer under EMC Isilon.

Cloud Enhancements and Resolved Issues

Issue Number	Description
30701	Resolves an issue with Amazon Web Services (AWS) S3 bucket collection. Collection now supports anonymous users specified in policies using the short form "Principal": "*".
30462	Resolves a database error caused by an empty data being sent by Microsoft Azure Virtual Machine collection.

Database Enhancements and Resolved Issues

Issue Number	Description
29219	Increased the maximum size of data files for new installs.
30203	Risk mitigation rule <i>Backup Job Size Variance</i> now reports on Sources instead of Clients.

Data Collection Enhancements and Resolved Issues

Issue Number	Description
30574	With the new Java 10 support for the Data Collector Server older versions of MS SQL Server may encounter compatibility issues. Collection occurs from the Microsoft SQL Server database used by a data collector. The version of Java used by APTARE IT Analytics version 10.3 disables some insecure TLS algorithms by default. Refer to the section in the Help, <i>Upgrade Troubleshooting: Microsoft SQL Server and Java 10</i> .
30466	This fix resolves an issue where aptare_agent services were not stopped/started as expected when a Linux data collector was rebooted using "reboot" command.
21328	Fixes an issue with data collection starting immediately on changing the schedule for the probe.

Portal Enhancements and Resolved Issues

Issue Number	Description
SC-18281	The feature Configure Proxy Server , previously available from Admin>Advanced>Configure Proxy Server is now available from Admin>Advanced>System Configuration on the Portal tab under Proxy Server .
30544	Resolves an issue where under Support Tools, when a new Support Package request was created, and Auto Upload to ftp.aptare.com was selected, the file was not getting uploaded to the FTP site.
30517	Updated the email address used for requesting a license to license-aptare@veritas.com. This is auto-populated in the email to field when generated from the portal.
30354	Resolves a security issue that was identified when an error stack was displayed in the browser. Now the system redirect errors to the default error page instead of displaying or returning an internal error to the browser.
30354	Resolves an issue that was preventing the ability to add users after an external LDAP reconfiguration.
30326	Removed the drilldown from the status column in Data Collector Status Summary report.
30233	Mission Control Backup report now accepts Backup servers as input.
30091	Resolves an issue where some Dynamic Template Designer reports with a job type in the Advanced dialog failed to cache.
29887	Added the ability for an empty host group to add hosts in the Inventory list view.
29868	Global name change for Hitachi Data Systems (HDS) - changed to Hitachi or Hitachi Vantara.
29816	Resolves a scrolling issue in the Inventory hierarchy panel.
29076	Improves the caching mechanism for reports that are not tabular.
28870	Added a new option, Dynamic , to the scope selector under Show Capacity in . This allows for the dynamic calculation of the units in the report based on size. With this enhancement, if you choose Dynamic as an option and run the report, the data value will be displayed as follows: <ul style="list-style-type: none">• If the value in the report is greater than say 1024MB then show in GB• If the value is greater than 1024 GB show TB

Issue Number	Description
28816	Resolves an issue with User Privileges where a user with Admin>Collector Status privilege, but not Admin>Collector Administration privilege was able to access the Admin>Collector Administration by clicking the collector names or collector policies in the Collector Status grid. Now access is restricted to Collector Administration from Collector Status view.
28707	In the SQL Template Designer, in Custom text fields , users can now enter a combination of three different formats for example: 'a','b' or 'a','b' or a,b.
28680	A new directory has been created to organize license keys. The new sub-folder path is /opt/aptare/licenses.
27582	Resolves an issue in the SQL Template Designer where default values defined for a custom query combo box in the scope selector were not being retained when the template was used.
27582	Resolves an issue where the correct default value was not selected in the SQL Template Designer dialog as set in the RTD template
19041	In the SQL Template Designer, renamed the following columns in the database views apt_v_avm_node and apt_v_avm_node_log for a more accurate description: <ul style="list-style-type: none"> • DISK_READS_KB to DISK_READS_SEC • DISK_WRITES_KB to DISK_WRITES_SEC • NETWORK_READS_KB to NETWORK_READS_SEC • NETWORK_WRITES_KB to NETWORK_WRITES_SEC

Virtualization Manager Enhancements and Resolved Issues

Issue Number	Description
30006	Added 2 new columns to the VM Summary report: # of CPU and Total Memory.
29617	Improves the performance of collection time for VMware CPU Performance data.
29616	Improves the performance of collection time for VMware Disk Performance data.
28773	Resolves a performance issue with the VM Size Forecast report.

Supported Configurations

See the *APTARE Certified Configurations Guide* for a complete list of supported products and configurations for the APTARE IT Analytics platform products.

- [Portal Supported Operating Systems](#)
- [Oracle Database Requirements](#)
- [Supported Third-Party and Open Source Products](#)
- [Data Collector Supported Operating Systems Portal Installation Default Directory](#)
- [Portal Installation Default Directory](#)

Portal Supported Operating Systems

The following **64-bit platforms** are supported:

Operating System	Version
CentOS	6, 7
Red Hat Enterprise Linux	6, 7
SUSE Linux Enterprise	Upgrading to 10.3.XX: SUSE 11 New Installation 10.3.XX: SUSE 12
Windows	Upgrading to 10.3.XX: Win 2012, Win 2012 R2 Server New Installation 10.3.XX: Win 2016

Oracle Database Requirements

The embedded Oracle Database license is a restricted license and may only be used or accessed in conjunction with APTARE IT Analytics software.

APTARE IT Analytics software is certified with the Oracle binaries embedded with the software product. Note that the use of the embedded binaries must comply with *Oracle Database Standard Edition 2* license requirements, which permits use only on servers (including any virtual server platform) that have a maximum capacity of 2 physical CPU sockets (populated or not). If using a Cloud Provider, *Oracle Database Standard Edition 2* may be licensed only on Authorized Cloud Environment instances up to 8 virtual cores. Using non-embedded versions of Oracle (for example, installing in other pre-existing Oracle instances) is not a certified configuration and is not allowed by the license grant.

If explicitly licensed for the *APTARE IT Analytics with Partitioning*, the embedded Oracle binaries are Oracle Database Enterprise Edition with Partitioning. Note that the use of the embedded binaries must comply with *Oracle Database Enterprise Edition with Partitioning*. Using non-embedded versions of Oracle (for example, installing in other pre-existing Oracle instances) is not a certified configuration and is not allowed by the license grant.

If explicitly licensed for APTARE IT Analytics for Shared Services, the APTARE IT Analytics embedded Oracle binaries are not provided or licensed with the APTARE IT Analytics software and cannot be used with the APTARE IT Analytics for Shared Services. End Users are solely responsible for purchasing and licensing the Oracle database binaries required for the operation of the APTARE IT Analytics for Shared Services software.

For APTARE IT Analytics Managed Services Editions, the APTARE embedded Oracle binaries are not provided or licensed with the APTARE IT Analytics software and cannot be used with the Managed Services Editions of APTARE IT Analytics. Managed Services Partners are solely responsible for purchasing and licensing the Oracle database binaries required for the operation of the APTARE IT Analytics Managed Services Editions software.

Supported Third-Party and Open Source Products

When you install the Portal and Reporting Database software, you install a compilation of software, which includes open source and third-party software.

For a list of open source components and licenses, see the LICENSE, NOTICE, and license.txt files on the Portal server.

Portal: Supported Software

Software Product	LINUX	Windows
Oracle 11g Standard Edition (SE/SE2)	Upgrading to 10.3.xx <ul style="list-style-type: none"> 11.2.0.4.0 New Installation 10.3.xx <ul style="list-style-type: none"> Not supported 	Upgrading to 10.3.xx <ul style="list-style-type: none"> 11.2.0.4.0 New Installation 10.3.xx <ul style="list-style-type: none"> Not supported
Oracle 12c Standard Edition 2	Upgrading to 10.3.xx <ul style="list-style-type: none"> 12.1.0.2.0 New Installation 10.3.xx <ul style="list-style-type: none"> 12.2.01 	Upgrading to 10.3.xx <ul style="list-style-type: none"> 12.1.0.2.0 New Installation 10.3.xx <ul style="list-style-type: none"> 12.2.01
Oracle Java 2 Standard Edition SDK	10.0.2 64-bit	10.0.2 64-bit
VSphere Web Services SDK	5.5, 64-bit	5.5, 64-bit
Apache HTTP Web Server	Upgrading to 10.3.xx <ul style="list-style-type: none"> Manual upgrade to 2.4.38 is supported. New Installation 10.3.xx <ul style="list-style-type: none"> 2.4.38. If you are using SSL, OpenSSL 1.1.0h is required.* 	Upgrading to 10.3.xx <ul style="list-style-type: none"> Manual upgrade to 2.4.38 is supported. New Installation 10.3.xx <ul style="list-style-type: none"> 2.4.38. Verify that the C++ Redistributable for Visual Studio 2015 is installed.*
Apache Tomcat Java Servlet Engine	Upgrading to 10.3.xx <ul style="list-style-type: none"> 8.5.38. For IT Analytics to automatically upgrade your installation to 8.5.38, you must be running Tomcat version 7.0.42. If you have an older version of Tomcat installed, contact APTARE Global Support Services for assistance. New Installation 10.3.xx <ul style="list-style-type: none"> 8.5.38* 	Upgrading to 10.3.xx <ul style="list-style-type: none"> 8.5.38. For IT Analytics to automatically upgrade your installation to 8.5.38, you must be running Tomcat version 7.0.42. If you have an older version of Tomcat installed, contact APTARE Global Support Services for assistance. New Installation 10.3.xx <ul style="list-style-type: none"> 8.5.38*
OpenLDAP	2.4.37	2.1.29

If other versions of the above components are already running on the designated APTARE IT Analytics system, or other components are utilizing resources (such as specific ports) typically used by APTARE IT Analytics, the product usually can be reconfigured to work around these conflicts; however, this cannot be guaranteed.

*Refer to Support for updated binaries as they become available.

Data Collector Supported Operating Systems

APTARE recommends installing the Data Collector on a virtual machine (VM). The following **64-bit platforms** are supported:

Operating System	Version	New Install	Upgrade
Windows Server (Recommended)	2016 2012 R2 2012	Yes	Yes, requires .NET Framework 4 .NET Framework 4 is installed by default with Windows Server 2012.
CentOS	6, 7	Yes	Yes
Red Hat Enterprise Linux	6, 7	Yes	Yes
Solaris	10 and 11 (SPARC only)	For Veritas NetBackup collection only. Versions of Solaris below Solaris 10 Update 5 require a Centralized NetBackup Data Collector.	
SUSE Linux Enterprise	11,12	SUSE 12	SUSE 11

Portal Installation Default Directory

For Linux Portals, certain environments place security restrictions on directories. The Portal installer, which uses InstallAnywhere, extracts files into the /tmp directory. While the files can be written to the directory successfully, the execution of the installer may fail because the /tmp directory does not have execute privileges. (SC-2655)

An environment variable (IATEMPDIR) may need to be set to a different location so that the installer does not use the /tmp directory. This environment variable typically is set for one of two reasons:

- Insufficient space in the /tmp directory to extract the installer.
- /tmp is mounted as a file system without execute privileges.

Upgrading to Release Version 10.3.00

- [Before You Upgrade](#)
- [Resolve Issues with Oracle Patches on Windows Servers](#)
- [Activate New Features and Reports](#)
- [Performance Profiles and Transmitted Data](#)
- [Enhancements and Resolved Issues by Category](#)

Before You Upgrade

- The Portal must be running a minimum of version 10.2.00 to upgrade to APTARE Release Version 10.3.00.
- Identify the Java Version on the Data Collector Server and ensure that a 64-bit server is used for the Data Collector Server.
- Ensure that the aptare.jar is upgraded successfully.
- Refer to [Known Issues and Optimizations](#).
- APTARE Release Version 10.x.xx introduced several enhancements to attribute management, including a new attribute type, a *multi-object attribute*, replaces the way that attributes functioned in previous releases. In addition, because you may already have attributes in your database that have names that duplicate the system names introduced in APTARE Release Version 10.x.xx, the upgrade process must apply logic to prevent duplicate attribute names. Refer to *Attribute Merging* and *Attribute Management* sections in the help prior to upgrading for complete information.

- During a Portal upgrade to APTARE Release Version 10.x.xx, all Dynamic Template Designer Methods will be modified to associate a method with an enterprise object (such as an array or host), rather than the method being associated with a IT Analytics product (such as Capacity Manager). Refer to Upgrade Methods to Incorporate Enterprise Objects in the help for complete information.

Resolve Issues with Oracle Patches on Windows Servers

APTARE provides patches to third-party products, as needed. While applying the latest Oracle 11g patch on a Windows server, the process may fail when some files are in use. A message similar to the following will indicate which files are in use.

Sample Error Message During the Oracle 11g Windows Patch Process

```
[exec] Oracle Home      : c:\opt\oracle
[exec] Central Inventory : C:\opt\oracle\oraInventory
[exec] OPatch version   : 11.2.0.1.6
[exec] OUI version      : 11.2.0.2.0
[exec] Log file location : c:\opt\oracle\cfgtoollogs\opatch\opatch2012-03-20_13-51-50PM.log
[exec]
[exec] Applying interim patch '13247523' to OH 'c:\opt\oracle'
[exec] Verifying environment and performing prerequisite checks...
[exec] Prerequisite check "CheckActiveFilesAndExecutables" failed.
[exec] The details are:
[exec]
[exec] Following files are active :
[exec] c:\opt\oracle\bin\oci.dll
[exec] Log file location: c:\opt\oracle\cfgtoollogs\opatch\opatch2012-03-20_13-51-50PM.log
[exec]
[exec] Recommended actions: OPatch needs to modify files which are being used by some processes.
```

Procedure to Resolve the Patch Issue

If the patch fails with a message similar to the above sample error message, follow these steps.

Note: These steps refer to the Sample Error Message above, but you will need to substitute the file names and services specific to your error message.

1. Open a command prompt window.
2. Run the following `tasklist` command to list the processes that are using the file mentioned in the error message. In our example, the file is: `c:\opt\oracle\bin\oci.dll`. Use the file name that is referenced in your error message.

Example Command: `tasklist /m oci.dll`

Note that using the full path (for example, `c:\opt\oracle\bin\oci.dll`) in the `tasklist` command will *not* work.

Command Output:

Image Name	PID	Modules
oracle.exe	2744	oci.dll
TNSLSNR.EXE	2784	oci.dll
oravssw.exe	3064	oci.dll

- Use the following command to identify the process associated with the Image Names from the tasklist command output.

```
tasklist /svc
```

Command Output:

Image Name	PID	Services
oracle.exe	1120	OracleServicescdb
svchost.exe	2432	RemoteRegistry
vmtoolsd.exe	2460	VMTools
TNSLSNR.EXE	2876	OraclescdbTNSListener
dllhost.exe	3304	COMSysApp
msdtc.exe	3480	MSDTC

- Check if the services related to the Image Names can be stopped until the patch is applied.
 - Do NOT stop any Oracle services (check for service names that include Oracle).
 - Services names may not be exactly as you expect, as vendors may change names with new releases. You may need to do an Internet search to identify the service.
- If the services can be stopped, use the Windows Services Panel to stop the services associated with the Image Names.
- Re-apply the patch using the patch upgrade script.

```
C:\opt\aptare\upgrade\patches\patch.bat
```
- As a final step, go to the Windows Services Panel and re-start all the processes that you stopped in step 5.

Activate New Features and Reports

When new features and reports are introduced with a new product release, after you've upgraded you'll need to modify Administrative settings in the Portal to give your users access to these features. Find documentation for each release within the product by clicking **Help**.

- To enable reports that have been introduced in a new software release, search for *Assigning User Privileges* and *Enabling New Product Report Templates*.
- For this particular task, it is advantageous to configure User Groups so that you can make changes that apply to all members of the group. Search for *Creating User Groups* and *Setting User Group Privileges*.

Performance Profiles and Transmitted Data

Performance profiles are securely transmitted (over https) as anonymous and aggregated with other customers' profile data in *Profile Central*—the community pool hosted at APTARE, Inc., which is then imported into a customer's profile for reporting purposes. This import/export task occurs in a single, daily scheduled Portal process. Using the aggregated community profiles, companies can better gauge if the metrics collected in their environments are within a normal performance range. Profile data cannot be associated with any contributor. No company or environment-specific details, such as storage array or server names, are transmitted. No personally identifiable information is collected, used, or disclosed.

Note: To enable participation in Community Performance Profiling Cloud Policies, an authorized representative of your company must opt-in. Profile data cannot be associated with any contributor. No company or environment-specific details, such as storage array or server names, are transmitted. No personally identifiable information is collected, used, or disclosed. Note that you can opt-out at any time.

Known Issues and Optimizations

The following known issues are present in the APTARE Release Version 10.xx release.

Issue Number	Description
6956	The Portal un-install process on a Windows platform may not remove all the files in the APTARE IT Analytics package.
13723	The File Analytics File List Export feature has an issue where the number of files exported does not match the number of files shown in the File Categories report. This occurs <i>only</i> if the File Categories have been modified and the user running the report belongs to more than one Domain.
17287	Occasionally, tabular reports will display mis-aligned column headings. To avoid this issue, wait for the report to finish rendering before clicking on another tab.
18953	A report template exported from an earlier APTARE IT Analytics version can be imported into a later Portal software version, but the template may experience some loss of formatting when imported.
21948	When running checkinstall for VMware collection, error messages may not accurately reflect the cause of the error. Inspect the collector logs for the actual cause of the error.
22582	For SAN Fabric collection, in certain cases, the database may contain aliases that actually do not exist, but they appear to be associated with a zone.
23943	VMware performance collection may fail with an error: <i>specified parameter was not correct. querySpec.size</i> . A workaround can be found in this VMware KB article: https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2107096
24159	Some versions of vCenter (e.g., 5.5.0) have a hard-coded limit of 25,000 files and directories that can be listed for a directory in a Datastore. This limit may be different for different versions of vCenter. If any directory in a Datastore collected via vCenter has >25,000 files/subdirectories, the contents of that directory (and subdirectories) will not be collected and will be classified as <i>Unknown</i> in the Datastore Usage Breakdown report. Collecting directly from an ESX host does not appear to suffer from this issue, but that may also be version-dependent.
24349	EMC Isilon SMB shares in access zones are not being collected and reported in the EMC Isilon SMB Share Summary report.
30974	<p>An issue exists in a Windows environment that causes reports exported to Excel to contain a comma in the date format. This is caused by JDK 10 and the default locale provider. The date format change does not allow exported reports to be sorted by date. Prior to 10.3.xx, the date format was:</p> <p>Jul 30, 2019 11:00:45 AM</p> <p>After 10.3.xx, the format is:</p> <p>Jul 30, 2019, 11:00:45 AM</p> <p>To workaround this issue, change the default locale provider:</p> <ol style="list-style-type: none"> 1. Stop the Tomcat Portal service. 2. Open the setup Tomcat Portal Service script: C:\opt\aptare\utils\setupPortalTomcatService.bat 3. Add the parameter: Dlog4j.configuration=file:/C:\opt\aptare\portalconf\systemlogger.xml #-Djava.locale.providers=JRE,CLDR 4. Reinstall the Tomcat service by running the following from the command prompt: C:\opt\aptare\utils\setupPortalTomcatService.bat 5. Restart the Tomcat Portal service.

Optimizations

Certain environments may require optimizations to improve performance or to accommodate a large number of data collection policies.

Customize the Linux File Handle Setting for Large Collections

In Linux, a portion of memory is designated for *file handles*, which is the mechanism used to determine the number of files that can be open at one time. The default value is 1024. For large collection policy environments, this number may need to be increased to 8192 so that the collector does not exceed the open file handle limit. A large environment is characterized as any collector that is collecting from 20 or more subsystems, such as 20+ TSM instances or 20+ unique arrays.

To change the number of file handles, take the following steps.

1. On the Linux Data Collector server, edit `/etc/security/limits.conf` and at the end of the file, add these lines.

```
root soft nofile 8192
root hard nofile 8192
```

2. Log out and log back in as `root` to execute the following commands to validate all values have been set to 8192.

```
ulimit -n
ulimit -Hn
ulimit -Sn
```

3. Restart the Data Collector.

End-of-Life for Features

- **Microsoft Internet Explorer 9 Support: End of Life Notice** - APTARE IT Analytics no longer supports the browser Internet Explorer version 9. (SCP-460)
- The following reports are now obsolete and have been removed from APTARE IT Analytics: *Capacity Planning - Array*, *Capacity Planning - Host* and *Media Forecasting Dashboard*. Any saved instances of these reports will be deleted when the Portal is upgraded to APTARE Release Version 10 and above. (SC-7098)
- McData switches are no longer supported.
- RedHat 5 is no longer supported for Portal or Data Collector servers. (SC-8412)
- HP Data Protector versions 5.x and 6.x are no longer supported. (SCP-373)