BigFix Inventory 10.0.12.0 Release Notes

This document provides information about the BigFix Inventory application update 10.0.12.0.

The update is cumulative and contains changes that were provided in the previous updates.

Name of the component	Version	Updated in this Release
BigFix Inventory Content Site	160	Yes
BigFix Inventory Software Catalog (main version)	10.0.12.0	Yes
BigFix Inventory Software Catalog (version on endpoint)	2638768	Yes
BigFix Inventory Server	10.0.12.0	Yes
BigFix Inventory Server: ILMT Core library	9.2.30.0	Yes
BigFix Inventory Server: ILMT Catalog	9.2.30.5	Yes
BigFix Inventory Scanner	9.2.29.0000 on HP-UX	No
	9.2.30.1000 on Windows	Yes
	9.2.30.0000 on other platforms	Yes
BigFix Inventory Disconnected Scanner (incl. package for Containers)	10.0.12.0	Yes
	9.2.30.0 on IBM I	Yes
BigFix Inventory VM Manager Tool	10.0.12.0	Yes
SAP Metric Data Collector	10.0.12.0	Yes
BigFix Inventory Image Scanner Script	10.0.12.0	Yes
BigFix Inventory Scanner Service	10.0.12.0	Yes
BigFix Inventory Cloud Adapter	10.0.12.0	Yes
Software Data Harvesting Tool for BigFix Inventory	1.1	No
BigFix Inventory Keystore Migration Tool	1.0	No

Allowed upgrade path

It is recommended to upgrade BigFix Inventory frequently to benefit from new features and security fixes. Please plan at least one upgrade per year.

Starting from 10.0.10.0 release, to ensure smooth upgrade process, support is provided for direct upgrade from the last 8 server releases. The minimal version for direct upgrade path is increased with every release.

Depending on the version number one or more update steps are necessary. The minimal version for direct upgrade path is **10.0.4.0.** For versions up to 10.0.1.0 (inclusive), upgrade first to 10.0.2.0 then upgrade to 10.0.10.0 using *Upgrade to interim version* fixlets.

For specific examples, refer to BigFix-Inventory-10.0.10.0-ReleaseNotes.pdf.

Changes to supported systems

Added support for the following platforms and systems as managed devices:
- CentOS Stream 9
- Oracle Enterprise Linux 9
- KDDI Cloud for Windows

For more information about supported systems, refer to the [Detailed System requirements.](#)

Enhanced Microsoft software reporting

This release offers several changes for Microsoft software inventory and license reporting.

Microsoft Licensing update

The following metrics have been added to BigFix Inventory to reflect the recent Microsoft Licensing changes.

- Microsoft Windows Server Physical Processor Core,
- Microsoft Windows Server Virtual Processor Core,
- Microsoft Windows Server Standard Physical Processor Core,
- Microsoft SQL Server Virtual Processor Core.

Along with previously delivered Microsoft SQL Server Physical Processor Core.

To be in line with current Microsoft licensing requirements reassign existing products to the new metrics. The newly discovered Microsoft products (SQL Server and Windows Server) are classified to the new metrics by default.

Note: The new Microsoft metrics are calculated only when there is an existing contract created for these metrics. The Metric value is not visible in the *All Metrics* panel.

Along with new Microsoft metrics, ready to use Microsoft Reports were adjusted:

- License compliance reports, for Microsoft SQL Server and Windows Server are based on *All Contracts* instead of *All Metrics*.
- New inventory reports, for Microsoft SQL Server and Windows Server, are based on *Software Classification* panel with adjusted set of visible columns to help with Microsoft license optimization.

Updated discovery for Microsoft SQL Server and its components

Details are listed under [Enhancements and important changes](#)

Refreshed End of Support dates for Microsoft Products

Details are listed under [Enhancements and important changes](#)

Contract management changes

The *All Contracts* panel has been enriched with Publisher and Software Product filtering capability which allows users to easily narrow down the scope of their work. It is possible now to define custom reports for particular Publisher or Software Product.

The enhanced recalculate option enables a simple 'what if' analysis as users no longer must wait for recalculation until the next data import.

Note: Recalculation is narrowed down to computer groups assigned to user. For example, if a user has visibility of only one department, then only this department is calculated upon clicking the button. This approach can be useful when distributing work between different Software Asset Managers.

Enhanced Package Data reporting

This release responds to top voted idea [**BFINV-I-193**] and it offers information about software installation dates. The installation date information is based on exact system data collected from endpoints in comparison to Computer: First Seen and Software Classification: Discovery Start that are related to BigFix Inventory data import time.

Package Data report is extended with installation date [**BFINV-I-193**] and installation path [**BFINV-I-43**] for Windows-type entries. The actual installation date helps in ensuring license compliance, while package installation path improves software discovery verification.

The new information is based on system registry data as provided by the package vendor, and Microsoft Installer (MSI) packages. Additionally, the installation date and path are collected for Windows operating system packages.

Note: This feature requires both upgrading BigFix Inventory server and restarting Initiate Software Scan fixlet (or upgrading Windows disconnected scanners). In order to ensure the new data is processed in the shortest time it is recommended to **upgrade the server first and then restart the fixlet.**

Included Software Catalog

This release includes Software Catalog version 10.0.12.0 with capability to discover 30+ new software versions from Microsoft and Tenable Network Security.

New template signatures included in this release:

Template signature is a method of discovery where the version of a component is detected automatically, and specific version added to the catalog on fly. Such template signatures include all component versions. They are used when the software is frequently updated and the deployment method is not changed. One template covers 10+ software versions.

Publisher Name	Component Name	Platform
Tenable Network Security Inc.	Nessus Agent	Windows, Linux

Changes made to the software component definition in catalog (e.g., modification of component name, version, or publisher) may cause creation of new definition of the component and removal of previous one. This leads to loss of Tagging, Classification and custom EOS information.
Additionally, when discovery is based on a signature evaluated on an endpoint, previous discovery results temporarily disappear until the next software scan and related data import. New catalog must be propagated to the endpoints before the scan execution.
Updated discovery mechanism for specific software with this behavior includes specific notes (for details refer to the list of enhancements and list of defects).

For more information, refer to:

Catalog Release Notes:
https://software.bigfix.com/download/tema/catalog/BFI_catalog_release_notes.pdf

Catalog Change List:
https://software.bigfix.com/download/tema/catalog/changelist/BFI_catalog_changelist_2023_03.pdf

Modified content

The version number of the fixlet is: 10.0.12.0

The following fixlets were updated and should be run to install the latest versions of the specific components:

- Upgrade to the latest version of BigFix Inventory
- Update VM Manager Tool to version
- Install VM Manager Tool
- Install Additional VM Manager Tool
- Install SAP Metric Data Collector
- Update SAP Metric Data Collector
- Download the Disconnected Scanner Package for IBM i
- Download the Disconnected Scanner Package
- Download the BigFix Inventory Container Solution Packages
- Download BigFix Inventory
- Install or Upgrade Scanner in private mode on Windows
- Install or Upgrade Scanner
- Software Catalog Update *(if BFI is not upgraded)*

The following fixlets were updated and require that actions created by their previous versions are stopped and then started by using the updated fixlets. Restarting actions is necessary to ensure that new features work properly:

- Run Capacity Scan and Upload Results
- Initiate Software Scan on Shared Disks
- Initiate Software Scan

The following fixlets were updated or added:

- Get Oracle Features
- Get Oracle Concurrent Sessions Number
- Clear Corrupted Scanner Installation

Enhancements and important changes

The following table lists enhancements and changes that are introduced in this update.

Abstract Story	Description	Available since
[Contracts management] New metric Microsoft Windows Server Physical Processor Core for Datacenter edition	Added a new metric 'Microsoft Windows Server Physical Processor Core' for Microsoft Windows 2016, 2019 and 2022 Datacenter Edition.	10.0.12.0
[Contracts management] New metric Microsoft Windows Server Virtual Processor Core for Datacenter edition	Added a new metric 'Microsoft Windows Server Virtual Processor Core' for Microsoft Windows 2016, 2019 and 2022 Datacenter Edition.	10.0.12.0
[Contracts management] New metric Microsoft Windows Server Physical Processor Core for Standard edition	Added a new metric 'Microsoft Windows Server Standard Physical Processor Core' for Microsoft Windows 2016, 2019 and 2022 Standard Edition.	10.0.12.0
[Contracts management] New metric Microsoft SQL Server Virtual Processor Core for Standard and Enterprise editions	Added a new metric 'Microsoft SQL Server Virtual Processor Core' for Microsoft SQL Server Standard and Enterprise Editions.	10.0.12.0
[Contracts management] New filtering options in the All Contracts panel	Added the option to filter the *All Contracts* panel by *Publisher* and *Software Product Name.*	10.0.12.0
[Contracts management] Recalculation status notifications in the All Contracts panel	Added new notifications to the *All Contracts* panel indicating the status of the recalculation: • started • in progress • Completed	10.0.12.0
[Contracts management] Recalculation changes in the All Contracts panel	The recalculation in the All Contacts panel is executed within the scope of all computer groups that are accessible to an active user. Furthermore, recalculation is performed solely for **computer groups that are used in contract definition**s of the active user. The Recalculate button is active only when there is an existing contract which requires recalculation, and the current filters applied to All Contracts do not affect the button's behavior.	10.0.12.0

[Contracts management] Recalculation changes in the All Metrics panel	The *Recalculate* button in the *All Metrics* panel will no longer recalculate metrics added in the BigFix Inventory version 10.0.11 and subsequent releases (metrics for which the column Metric Quantity displays the text 'Calculated for Contract').	10.0.12.0
[Contracts management] New predefined report Microsoft Windows Server Inventory	Added 'Microsoft Windows Server Inventory' report to *Microsoft Reports* available in the dashboard panel. The new report is based on the Software Classification view.	10.0.12.0
[Contracts management] Updated predefined report Microsoft SQL Server Inventory	Redesigned 'Microsoft SQL Server Inventory' report available in Microsoft Reports section in the dashboard panel. This updated report displays columns in an ordered manner, which facilitates Software Asset Management (SAM) activities. Notably, the *Publisher Name* column is no longer displayed by default in the report.	10.0.12.0
[Contracts management] New predefined report Microsoft Windows Server Contracts	Added 'Microsoft Windows Server Contracts' report to *Microsoft Reports* available in the dashboard panel. The new report is based on the All Contracts view.	10.0.12.0
[Contracts management] New predefined report Microsoft SQL Server Contracts	Added 'Microsoft SQL Server Contracts' report to *Microsoft Reports* available in the dashboard panel. The report is based on the All Contracts view, and is a replacement for 'Microsoft SQL Server Measured License' report which has been removed.	10.0.12.0
[Contracts management] Improved search in metric field on Add/Edit Contract window	Changed the search criteria of the *Metric* field on the *Add/Edit Contract* window from 'starts with' to 'contains' to facilitate searching for metrics.	10.0.12.0
[Contracts management] Aligned elements in Add/Edit Contract window for better visibility	Changed *Add/Edit Contract* window to make it more compact.	10.0.12.0
Less relevant columns in Software Vendor reports are no longer displayed by default	*User Name, Private, Default Report, and Global Default Report* columns are no longer displayed by default in predefined per Vendor list of reports. Columns are still available and can be manually enabled from Configure View	10.0.12.0

Changed hover text for selected columns	Added definition in hover text to *Server Cores, Server Active Sockets* and *Logical Processors* columns in *Hardware Inventory, Computers, Oracle Databases* and *Software Classification* reports.	10.0.12.0
Serviceability - Endpoint Catalog auto-restoration	If the catalog is removed for any reason (for example during a scanner reinstallation) it will be restored. **Note**: this is not applicable to MAC	
Restored Unrecognized Files report [Idea **BFINV-I-274**]	To maintain backward compatibility, the *Unrecognized Files* report has been restored. This is listing of the most frequently encountered unrecognized files in the infrastructure. **Note**: the report is not intended to be used for making decisions regarding the creation of software signatures, as the calculation of data may significantly impact the time it takes to import data (calculation of this report is disabled by default)	
Improved reports loading time by limiting TODO List to the Dashboard panel	Visibility of *TODO List* has been limited to the dashboard page. As a result, refresh of BigFix Inventory report is quicker.	
bzip2 / bzip2.exe are no longer shipped with BFI Server	`bzip2` executables are no longer shipped with BigFix Inventory Server. Decompression of `bzip2` compressed files is done using dedicated Java library.	10.0.12.0
Package installation path and date for software on Windows endpoints [Ideas **BFINV-I-43** and [**BFINV-I-193**]	Package installation path and installation date from Windows endpoints are collected during package scan. New data is displayed on *Package Data* and *Software Classification – Details* panels. Package installation path and date are also available via REST API: `api/sam/raw_package_facts` while package installation path for Windows packages is added to `/api/sam/unified/current/software`. Moreover, software instance installation path is obtained from matched Windows package data in case the other discovery methods do not provide it.	10.0.12.0

Added discovery for Microsoft SQL Server 2022 [Idea **BFINV-I-284**]	Added discovery for following Microsoft SQL Server 2022 Editions: • Standard • Enterprise • Express • Web • Developer • Enterprise Evaluation	10.0.12.0
Added discovery for additional Microsoft SQL Server Components [Idea **BFINV-I-298**]	Added discovery for the following Microsoft SQL Server Components: • Microsoft SQL Server 2008 R2 Native Client • Microsoft SQL Server 2012 Native Client • Microsoft SQL Server 2014 ADOMD.NET • Microsoft SQL Server 2014 Management Objects • Microsoft SQL Server 2016 LocalDB	10.0.12.0
Updated End of Support information for Microsoft software	The end of support date is added for 28 Microsoft components and updated for 3 Microsoft components.	10.0.12.0
IBM Virtualization Capacity reporting equivalent	BigFix Inventory 10.0.12.0 is equivalent to IBM License Metric Tool (ILMT) 9.2.30 for IBM Virtualization Capacity reporting. The update covers IBM sub-capacity calculation, IBM Catalog, PVU and Scanner parity. For the status of IBM validated releases, see the following BFI FAQ Document.	10.0.12.0

Defect fixes

For the list of known defects please refer to HCL Knowledge Base.

The following table lists BigFix Inventory **Server** APARs and other defects that are fixed in this update.

ID	Symptoms	Behavior after you install the update	Available since
KB0103184	BigFix Inventory long startup time due to initialization of Computer System API	The issue is fixed.	10.0.12.0
KB0102192	Database schema update to BigFix Inventory 10.0.11 fails on 1663767482_template_signature_defs_create_products.rb migration script.	The issue is fixed.	10.0.12.0
BI-14930	An error message appears after opening a *Product Name* link in the *Product Metrics per Contract* and *Product Metrics per Group* panels when the web browser local date is different than UTC date.	The issue is fixed.	10.0.12.0
BI-15132	'Is Incomplete' information on *All Contracts/Product Metrics per Contract* panels is not calculated for metrics other than *Microsoft SQL Server Physical Processor Cores.*	If there are no software instances under the contract, the value is 'No'. Otherwise, the information is calculated based on hardware inventory status for the following metrics: *Oracle Processor Core, Microsoft Physical Core with SA, Microsoft Single Physical Processor, Microsoft Dual Physical Processor* (as on *All Metrics* panel).	10.0.12.0
BI-14185	Mac Software is by default classified to *Unknown* metrics instead of *Install Seats.*	The issue is fixed.	10.0.12.0
BI-15144/ **IJ44202**	Partition cores are limited by the maximum capacity value on uncapped PowerPC Linux LPARs although they should not be limited.	Partition cores are no longer limited. License metric utilization for products that are installed on the affected machines might be higher after upgrade.	10.0.12.0
BI-15144/ **IJ42751**	Information from the VM Manager Tool is not merged with information from Capacity Scan from the KVM	The problem does not occur.	10.0.12.0

	host. As a result, the machine might appear as two separate entities in the PVU reports when software is installed both on the KVM host and on the VM.		
BI-15070	Recalculation triggered from All Contracts does not remove the *Recalculation Needed* icon.	The *Recalculation Needed* icon disappears properly after recalculation is completed.	10.0.12.0
BI-15065	*Recalculation needed* icon is sometimes not displayed on Contracts panel for PVU / RVU MAPC metrics.	*Recalculation needed* icon is properly displayed.	10.0.12.0
BI-14772	User-assigned default metrics are re-assigned during data or catalog import.	The issue is fixed.	10.0.12.0
BI-16092	It is difficult to create contracts due to searching inaccuracy on *Add/Edit Contract* window.	Improved searching of *Software Product* on *Add/Edit Contract* window. After the change, results will be first queried by the product name. If the query does not retrieve any results, it will fall back to the previous behavior.	10.0.12.0
BI-14940	A *Product Name* link in the *Product Metrics per Contract* and *Product Metrics per Group* panels doesn't redirect to proper *Software Classification* report for Microsoft metrics and the Oracle Processor Core metric.	A *Product Name* link in the *Product Metrics per Contract* and *Product Metrics per Group* panels now redirects to *Software Classification* report with proper set of filters and columns. The *Product Name* link for products with any of Microsoft metrics redirects to *Software Classification* report with the same set of columns as on predefined *Microsoft SQL Server Inventory* and *Microsoft Windows Server Inventory* reports. The *Product Name* link for products with *Oracle Processor Core* metric redirects to *Software Classification* report with the same set of columns as on predefined *Oracle Database Inventory* report.	10.0.12.0

The following table lists BigFix Inventory **Catalog** APARs and other defects that are fixed in this update.

ID	Symptoms	Behavior after you install the update	Available since
KB0102567	SSH Tectia Server detailed version was not reported due to the presence of regular signatures along with template signatures.	SSH Tectia signatures were removed and now template signatures report the detailed version. *Old discovery records will be closed, and new records will be opened.*	10.0.12.0
KB0102546	Nessus Agent is incorrectly discovered	Deleted incorrect signatures of Nessus Agent and added a template signature for both Windows and Linux platform. *Old discovery records will be closed, and new records will be opened.*	10.0.12.0
BI-15668	Version typo issue in SentinelOne Agent Signature.	Typo error has been corrected in Signature tags for Sentinel one Agent Signature. *Old discovery records will be closed, and new records will be opened.*	10.0.12.0

The following table lists BigFix Inventory **tools** APARs and other defects that are fixed in this update. It covers VM Manager, SAP Data Collector, Image Scanner, Scanner Service, Cloud Adapter.

ID	Symptoms	Behavior after you install the update	Available since
KB0101168	VM Manager 10.0.10 contains incorrectly named DLL file which causes problems with removal functionality.	Incorrect file name `vcrunt~1.dll` has been corrected to `vcruntime140.dll`.	10.0.12.0
BI-15049	When a cache file was accidentally deleted from a given computer, VM Manager was showing an incorrect message about invalid credentials.	The error message is corrected and simplified.	10.0.12.0
KB0101675	SAP Metric Data Collector failing with error 21.	Issue is fixed.	10.0.12

The following table lists BigFix Inventory **Scanner** APARs and other defects that are fixed in this update.

ID	Symptoms	Behavior after you install the update	Available since
KB0101390	Import failure due to special characters in capacity scan file names.	Prevention added to endpoint side for the files and Server will no longer break the import if some Capacity Scan files will fail.	10.0.12.0
KB0103188	Detailed Hardware Scan corrupted results when UTF-8 character is incorrect in local character set.	There is enforced to use UTF-8 to read the file by analysis.	10.0.12.0
KB0103232	Multiple instances of Software Scan able to run simultaneously and cause 100% CPU usage	Fixlet checks for active scanner processes once again, before starting them	10.0.12.0

The following table lists BigFix Inventory **Fixlets** APARs and other defects that are fixed in this update.

ID	Symptoms	Behavior after you install the update	Available since
KB0101440	The fixlet *Get Oracle Features* creates incorrect detailed version in Oracle DB swidtag.	Improved collection of the correct detailed version from Oracle Database updates. Before the change version reported was 19.0.0.0.0, now 19.17.0.0.221018.	10.0.12.0
BI-14226	Extended application usage is not collected when amount of usage data to process exceeds 1 MB.	Extended application usage collection is by default disabled for all processes except Java. The data collection for all processes can be enabled with the new *Collect extended application usage statistics* option in the *Initiate Software Scan* fixlet.	10.0.12.0
BI-16340	The fixlet *Clear Corrupted Scanner* is evaluating endpoints with no scanner installed.	Optimized the order of Relevance to skip endpoints with no scanner installed and to improve evaluation performance.	10.0.12.0

The following table lists **user documentation** APARs and other defects that are fixed in this update.

ID	Symptoms	Behavior after you install the update	Available since
BI-15939	Missing information about interim upgrade on Upgrading to BigFix Inventory v10 site.	Updated the information about interim server upgrade in the document. Doc link: Upgrading to BigFix Inventory 10	10.0.12.0
KB0102706	BFI Catalog download failing with BigFix 10.0.8.0 / Certificate validation on.	Added new topics to provide solution on regenerating self-signed certificates and structuring private keys and certificates. Doc link: - Structuring and formatting private keys and certificates - Regenerating self-signed certificates	10.0.12.0
BI-15740	Nutanix documentation requires additional information	Added information about supported Nutanix version (Nutanix Prism Element) and the	10.0.12.0

		required user role to perform access the connection in the document.	

Security enhancements

- rails gem upgrade to 6.1.7.2 (CVE-2023-22792, CVE-2022-3704, CVE-2023-22795, CVE-2022-44566, CVE-2023-22794, CVE-2023-22796)
- rack gem upgrade to 2.2.6.4 (CVE-2023-27530, CVE-2022-44571, CVE-2022-44570, CVE-2022-44572)
- rails-html-sanitizer gem upgrade to 1.4.4 (CVE-2022-23517, CVE-2022-23518, CVE-2022-23520, CVE-2022-23519)
- globalid gem upgrade to 1.1.0 (CVE-2023-22799)
- json5-2.2.1 library upgraded to 2.2.3, json5-1.0.1 library upgraded to 1.0.2 (CVE-2022-46175)
- Snakeyaml library updated to version 2.0 in installer (CVE-2022-1471), note that version 1.33 is still used by jRuby stack, but vulnerable methods are not used
- Spring Boot updated to version 2.7.9
- Spring Framework updated to version 5.3.25
- WebSphere Liberty updated to version 23.0.0.1
- Semeru Java Runtime Open Edition for BFI Tools updated to version 8u362b09
- IBM Java Runtime Environment for BFI Server updated to version 8.0.7.20 (CVE-2022-21626, CVE-2022-21624)

VM Manager Tool version and changes

The VM Manager Tool version that is used with this update is 10.0.12.0.

Scanner version and changes

The scanner version that is used with this update is 9.2.30.1000 for Windows and 9.2.30.0000 for other platforms. The disconnected scanner version that is used with this update is 10.0.12.0 and 9.2.30.0 for IBM I.

Documentation

For more information about how to install, maintain, and use this application refer to BigFix Inventory user documentation:

https://help.hcltechsw.com/bigfix/10.0/inventory/welcome/BigFix_Inventory_welcome.html