BigFix Inventory 10.0.7.0 Release Notes

This document provides information about the BigFix Inventory application update 10.0.7.0. 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	148	Yes
BigFix Inventory Software Catalog (main version)	10.0.7.0	Yes
BigFix Inventory Software Catalog (version on endpoint)	2638667	Yes
BigFix Inventory Server	10.0.7.0	Yes
BigFix Inventory Server: ILMT Core library	9.2.25.0	Yes
BigFix Inventory Server: ILMT Catalog	9.2.25.0	Yes
BigFix Inventory Scanner	9.2.25.1000 (Windows)	Yes
	9.2.25.0000 (other platforms)	Yes
BigFix Inventory Disconnected Scanner	10.0.7.0	Yes
	9.2.25.0 (for IBM I)	Yes
BigFix Inventory VM Manager Tool	10.0.7.0	Yes
SAP Metric Data Collector	10.0.7.0	Yes

Allowed upgrade path

Minimal version recommended for direct upgrade path: 9.2.16

For version older than 9.2.16 upgrade first to 10.0.2 using already available fixlet.

Software discovery in containers

BigFix Inventory, starting from version 10.0.7.0, supports the discovery of software in Docker container images through standard discovery methods including catalog signatures, template signatures, installation registry and ISO SWID tags to cover traditional model of software deployment.

The application provides information about software running in containers, the container instances with basic properties and their status. This information allows you to determine the software deployment across container resources that are allocated.

BigFix Inventory was instrumented to allow for a separate BigFix Inventory server instance setup for software on image with container data collection and reporting. The supported maximum number of images, in a separate BigFix Inventory server instance, is equal to maximum number of supported disconnected endpoints as in case of standard BigFix Inventory server instance if configured in line with scalability guidelines.

A new plugin framework is available to talk to Kubernetes APIs of on-premise and public cloud containers to determine software usage of container instances.

Collection of container details is with use of two Cloud Adapter configurations

- Standard Kubernetes API for Kubernetes v1.18.0, Kubernetes v1.21.2 and Google Cloud v1.20.10.
- Generic Kubernetes API available in case own access method is preferred.

Image Scan solution covers two integration scenarios

- Automated monitoring - available as a service to monitor and request image scan only for images used in existing containers.
- Pipeline build process - to integrate with pipeline solution before image is available for deployment.

This dedicated solution does not require any BigFix component to be added into image neither installed in container.

Note: Software discovery in containers is covered by Active Container license metric. For details refer to license information text (English only) included in BigFix Inventory server package.

Included Software Catalog

This release includes Software Catalog version 10.0.7.0 with capability to discover around 440+ new software versions.

As an enhancement we added a discovery capability of Check Point SmartConsole on Windows platform for version - 80.40.

New template signatures included in this release:

Publisher Name	Component Name
Microsoft	Microsoft Visual Studio Code
Microsoft	Azure Data Studio
Microsoft	Microsoft Power BI Desktop
Adobe	Adobe Creative Cloud
Adobe	Adobe Genuine Software Integrity Service
Hewlett-Packard	HP Device Manager Configuration Center

For more information, please 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_2021_12.pdf

Modified content

The version number of the fixlet is: 10.0.7.0
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
- Upgrade to the interim version 10.0.2 of BigFix Inventory if version older than 9.2.14
- Software Catalog Update (if BFI not upgraded)
- Install or Upgrade Scanner
- Install or Upgrade Scanner in private mode on Windows
- Install SAP Metric Data Collector
- Update SAP Metric Data Collector
- Install VM Manager Tool
- Update VM Manager Tool
- Install Additional VM Manager Tool (OPTIONAL)
- Download the Disconnected Scanner Package for IBM I
- Download the Disconnected Scanner Package
- Download BigFix Inventory

The following fixlet was added and should be used to obtain install media for BigFix Inventory Container Solution

- Download the BigFix Inventory Container Solution Packages

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:

- Initiate Software Scan
- Upload Software Scan Results – no updates, but recommended to be refreshed to match Initiate Software Scan version

Enhancements and important changes

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

Abstract	Description	Available since
Software discovery in containers	BigFix Inventory, starting from version 10.0.7.0, supports the discovery of software in Docker container images through standard discovery methods including catalog signatures, template signatures, installation registry and ISO SWID tags to cover traditional model of software deployment.	10.0.7.0
New license metric: Active Container	"Active Container" metric is added. To be able to bundle products to this metric, first assign the products to this metric on "Products & Metrics" panel.	10.0.7.0
IBM Virtualization Capacity reporting equivalent	BigFix Inventory 10.0.7.0 is equivalent to IBM License Metric Tool (ILMT) 9.2.25 for IBM Virtualization Capacity reporting For status of IBM validated releases see following BFI FAQ Document.	10.0.7.0
Checkbox to enable TLS1.2 was removed	Checkbox to enable TLS1.2 was removed from Management -> Server settings. TLS 1.2 was already enabled by default from previous release. There is no option to change to TLS 1.0 or 1.1 . Also, documentation was adjusted (steps to enable TLS 1.2 were removed). BFI is ready to support TLS 1.3 once BigFix Platform is ready.	10.0.7.0
Server installation no longer requiring ksh	Installation of the BigFix Inventory server no longer requires ksh which is not available by default on newer versions of Linux.	10.0.7.0
Support for Managed Devices running Windows 11	Added support for Windows 11 as managed device. Sofware discovery mechanism is covered except reporting of Windows OS 11 itself as a software on Software Classification and Package Data where the system is reported as Windows 10 until the next catalog update.	10.0.7.0
Disconnected scanner configuration script	Added scripts for Windows and Unix for easier configuration of disconnected scanner's parameters such as trace level and max log files size	10.0.7.0

Defect fixes

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

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

ID	Symptoms	Behavior after you install the update	Available since
Server updates			
KB0093673	Unable to access Contracts after first data import post BFI 10.0.5 upgrade	All Contracts panel works correctly after the first successful import after upgrade. BigFix Inventory restart after the import may be required.	10.0.7.0
KB0093969	Contracts API and CSV import return errors on DB2	The issue affected BigFix Inventory which in past was in version before 10.0.0 and is migrated to 10.0.6. In version 10.0.7, the problem is fixed.	10.0.7.0
KB0093647	Too many filters in new custom rule cause SQL error	Adding many filters in "Software Classification" cause error on BFI 10.0.6 and down versions. The reason of the error is DB Column size exceed for the related column. After the implementation, DB's migrated and incorrect data was removed with migration and maximized the column size.	10.0.7.0
KB0094205	Unsuccessful OS matching for Mac OS 11. Application could not identify Mac OS 11 machines as Mac OS, because the operating system is reported in a different way. This causes that package data is not reported for such machine.	Mac OS 11 is recognized properly, and package data is displayed.	10.0.7.0
KB0094388	Hundreds of open connections to BigFix database. BigFix database may stop accepting new connections. BigFix Inventory may stop working properly and be able to run Data Imports.	The issue is fixed. There was provided 10.0.6.0.1 hotfix.	10.0.7.0
KB0093835	Software not displayed on Software Classification despite signature matching. This can happen if a custom metric was assigned to the product.	The issue is fixed.	10.0.7.0

KB0092682	WAS Liberty PVU option found	The issue is fixed. WAS Liberty SWID ISO tags were removed from BigFix Inventory Server 10.0.7.0 installation package	10.0.7.0
KB0095168	In some scenarios an import process ia failing on Unix package facts step, due to improper parsing of long strings with special characters, which is breaking the import process	The issue is fixed.	10.0.7.0
KB0094017	Unix packages on Ubuntu operating system are empty if RPM Package Manager is installed. The sua_package_data file in the client's CIT folder is empty. There is no proper discovery on the endpoint where RPM Package Manager is installed; thus, BigFix Inventory does not report installed software for Linux Ubuntu clients.	The issue is fixed.	10.0.7.0
KB0093628	During import, while processing file facts SQL query fails due to too big difference between 2 dates	The issue is fixed, and corresponding validation has been added to catch issue early and not stop import process	10.0.7.0
KB0091998	Additional CIT Signatures in Endpoint Catalog that does not result in discovery of the software: ILMT core processing the ILMT catalog created some additional CIT rules and then signatures, which were propagated to the endpoints. There were matches, but not resulting in the software discovery during the import on BFI.	The issue is fixed in ILMT 9.2.25 adopted by BFI	10.0.7.0
BI-7645	Cross-site Request Forgery vulnerability in Login Form	After the changes attacker will get "Token has expired or is invalid. Refresh page to login." error and login from cross origin will be blocked.	10.0.7.0
BI-6318	Inconsistency between UI and CSV/PDF in "Connection Test Status" column for distributed VM Managers: • UI - always "Not Applicable" value	"Connection Test Status" for distributed VM Managers will always have "Not Applicable" value in UI and CSV/PDF reports.	10.0.7.0

	• CSV/PDF – adequate connection test status		
BI-7185	Contracts REST API validates required string custom fields	Validation of required string custom fields in PUT REST API is introduced.	10.0.7.0
BI-7324	Contracts REST API accepts non-string custom fields	Custom field values of types: integer, float, boolean are accepted also without quotation marks.	10.0.7.0
BI-7365	Contracts REST API and contracts UI support software having non-ASCII characters in names or publisher names	Software which contains non-ASCII characters is accepted in contracts REST API, as well as in the search field on UI. These issues occurred only in BigFix Inventory using SQL server database.	10.0.7.0
BI-7354	Contracts REST API supports non-ASCII characters	Contract fields like contract name in REST API can contain non-ASCII characters.	10.0.7.0
BI-7168	Improved error reporting for contracts CSV import	Error reporting for CSV import is improved for the cases when type id, computer group id or purchase order quantity is empty but it is expected to have a value.	10.0.7.0
BI-7207	Part of texts is translated according to Web browser's lang setting instead of user profile lang setting	Contracts CSV import logic was using language header instead of user language from profile. Which was leading to mismatch in language on errors inside modal window and outside of it.	10.0.7.0
BI-7318	Windows 2019 Exploit Protection feature can break SAML without exclusions in place for Java	On Windows 2019 Standard the default setting for Exploit Protection is "on". No BFI malfunctions were observed when launching the application in SSO mode when switching Exploit Protection on and off, restarting the server, etc.	10.0.7.0
Scanner updates			
IJ34778	VMware VMs with Hyper-V feature enabled are treated as physical machines.	The problem does not occur.	10.0.7.0
199533	Due to Kernel Lockdown feature CIT generates a lot of Operating System warnings during '/dev/mem' access.	No Kernel Lockdown warnings in dmesg output.	10.0.7.0

199463	The existing 'dumpsmbios' method doesn't allow to dump 'raw' smbios memory area. If _SM_ & _DMI_ anchor-strings are not discovered '--dumpsmbios' switch doesn't work at all.	'--dumpsmbios' switch allows to dump the whole smbios memory area.	10.0.7.0
199380 / IJ33747 (199413)	On machines with SeaBIOS '_DMI_' anchor string used to discover the SMBIOS Entry Point is being stated twice. The first entry points to some invalid memory address.	SMBIOS data can be correctly collected by CIT and returned in the hardware scan output.	10.0.7.0
199432	SQLite API have a problem with accessing its own Database file when path contains some character outside of ASCII character set.	'provider_cache3' can be used with UTF character set.	10.0.7.0
199481	The existing 'Nested Virtualization' discovery method is not reliable and provide ambiguities. Furthermore, some Nested Virtualization scenarios like running VM inside the VM of the same vendor are not being discovered at all.	'Nested Virtualization' check has been removed.	10.0.7.0
199338 (199110) / IJ33481	SharedPoolCapacityInCores and LparCapacityInCores fields are reported as -1 on local zone with pset assigned.	When local zone is assigned processor pool (pset), then we cannot report the totals of the LPAR capacity as based on the comment from the code, we: "invalidate because we don't know how many packages the system has beside what's in the pool". The fix is to changing the capacity scan in such a way that it reports the pool resources as the LPAR capacity (so potentially ignoring the additional packages not coming from the pool mentioned by the comment).	10.0.7.0
199307 / RFE 199191	CIT wscanvpd scanner hangs on a system with a corrupted rpm	rpm command execution is now done with a 300 seconds (5 minutes) timeout. After the	10.0.7.0

	registry due to hanging rpm command.	timeout expires the rpm process is finished and the CIT scanner command exits. Note: wscanvpd will return empty results on Linux in such case (if rpm is the only software registry scanned) and will exit with no error (return code 0). The current behavior is that wscanvpd does not return any error in case a given provider of software registry returns empty results. Nevertheless CIT logs will contain the following error messages (MIN level): Unable to execute rpm command, error code=-1. No output has been returned. Unable to preload packages (err = -1) Unable to get result from expression RpmProductList (err = -13111) (Error -13111 is a RegPlugin error meaning REG_PLUGIN_ERROR_UNABLE_TO_GET_PROGRAM_LIST)	
199540	The timestamp prefix of each cpuid log line (from 'cpuid -d' command) contains garbage or incomplete timestamp instead of a full correct timestamp. The problem was returning a locally defined variables, which were lost on a function exit.	The timestamp string is correctly returned, and the proper value is displayed in the cpuid log.	10.0.7.0
	Catalog updates		
KB0094222	Wrong discovery for SQL Server Management Studio.	Package information is used to determine version. Discovery for all existing releases 16.5 - 18.10 was added.	10.0.7.0
KB0094717	Wrong information about installed VisualSVN instances	Package information is used to determine version. Discovery for all existing releases 1.0 - 5.6 was added.	10.0.7.0

KB0094947	False discovery of HP Device Manager 4.7	Old way of discovery got removed. Template signature was added for HP Device Manager Configuration Center instead.	10.0.7.0
KB0095067	SAP Open Client 16.0 was detected as version 15	Old components for versions 15 were replaced by the new ones which provide better discovery with the detailed version returned. Additionally, detection of version 16.0 was added.	10.0.7.0
BI-8516	There was the duplicated Java SE Development Kit discovery for version 8 (Oracle).	Java SE Development Kit discovery for version 8 was removed.	10.0.7.0
Document updates			
KB0094774	No data (previously Insufficient rights) VM status	Updated the document for "VM Manager – No data status (previously insufficient rights). Document link: VM manager statuses	10.0.7
KB0093658	IBM i Disconnected scanner package no longer matches our documentation	Updated the disconnected scanner topics to keep it up to date. Document link: • Preparing installation files for disconnected scans for IBM i • Installing the scanner and gathering initial data on IBM i systems	10.0.7
BI-7532	Connection to BigFix database using TLS fails when MS SQL Server does not support TLS 1.2.	Added information about minimum fixpack level for MS SQL Server database having TLS 1.2 support.	10.0.7.0
BI-6668	Rework of Detailed System requirements section	Dedicated pages have been created to list systems that are managed by BigFix Inventory and requirements for systems to host BigFix Inventory Server. Earlier, the information was on a single page. Document link: Detailed System requirements	10.0.7.0

VM Manager Tool / SAP Tool			
[KB0095486](#)	Log4j vulnerability in BigFix products	Updated log4j to version 2.15.0 due to CVE-2021-44228	10.0.7.0

Security enhancements

To maintain security, the following selected components and libraries were updated:

- Axios to version 0.21.4 - CVE-2021-3749
- *Log4j to version 2.15.0 in VM Manager Tool and SAP Tool - CVE-2021-44228, BigFix Inventory is not affected by CVE-2021-45046*

BiFix Inventory is shipped with TLS 1.2 enabled with algorithms as included in each included Java / WebSphere versions. It is possible to further restrict algorithms with an entry in customization.xml file which is extending server.xml definition.

Currently available algorithm list:

Algorithm considered as safe:

- TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384

Algorithm considered as weak, but accepted by scanning tools:

- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA256

Algorithm considered as weak but still included in standard setup:

- TLS_RSA_WITH_AES_128_CBC_SHA
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA

Please remember that Web Browsers used by users to connect to BigFix Inventory must support at least one of shortlisted algorithm in case of adjusting this list further.

VM Manager Tool version and changes

The VM Manager Tool version that is used with this update is 10.0.7.0.

Scanner version and changes

The scanner version that is used with this update is 9.2.25.1000 for Windows and 9.2.25.0000 for other platforms. The disconnected scanner version that is used with this update is 10.0.7.0 and 9.2.25.0 for IBM I.

Supported new systems and hypervisors.

Support is introduced for the following platforms and systems:

- NTT Enterprise Cloud Server
- Existing KVM with RHV-M also supports Oracle Linux KVM managed by Oracle Linux Virtualization Manager 4.3 and later (no immediate upgrade needed, to meet IBM subcapacity terms there is need to keep tool current)
  Name of virtualization manager changed from "KVM with RHV-M" to "KVM RHV-M or Oracle Linux Virtualization Manager".
- BIOS limits for Oracle Linux KVM managed by Oracle Linux Virtualization Manager.
- Power10 processor has been certified on AIX 7.1 and 7.2 operating systems.
- Power10 processor has been certified on SLES 12, 15 and RHEL 8 operating systems.
- Debian 11 x86 32 and 64-bit operating system is supported. CIT was tested on Vmware virtualization.
- Windows 11 is certified for Software Discovery and Hardware Information with BigFix Client 10.0.4 or higher. Windows 11 is detected as Windows 10 on Software Classification and Package Data – expected to be addressed in next release.

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