## BigFix Inventory 11.0.2.0 Release Notes

This document provides information about the BigFix Inventory application update 11.0.2.0. The update is cumulative and contains changes provided in the previous updates.

| Name of the component                              | Version  | Updated<br>in this<br>Release |
|--|--|-------------------------------|
| BigFix Inventory Site (NEW SITE!)                  | 6  | Yes                           |
| BigFix Inventory Server                            | 11.0.2.0   | Yes                           |
| BigFix Inventory Server: ILMT Core library         | 9.2.37.0   | Yes*                          |
| BigFix Inventory Server: ILMT Catalog              | 9.2.37.8-20240904-0153   | Yes*                          |
| BigFix Inventory Server Software Catalog           | 20241125   | Yes*                          |
| BigFix Inventory Scanner Software Catalog - Major  | 2638921  | Yes*                          |
| BigFix Inventory Scanner                           | 11.0.37.0<br>BigFix Scanner is available under<br>the new BigFix Scanner site. | Yes                           |
| BigFix Inventory Disconnected Scanner              | 11.0.2.0<br>9.2.37.0 on IBM I  | Yes<br>Yes                    |
| BigFix Inventory Container Solution Packages       | 11.0.2.0   | Yes                           |
| BigFix Inventory VM Manager Tool                   | 11.0.2.0   | No                            |
| SAP Metric Data Collector                          | 11.0.2.0   | No                            |
| BigFix Inventory Image Scanner Script              | 11.0.2.0   | No                            |
| BigFix Inventory Scanner Service                   | 11.0.2.0   | No                            |
| BigFix Inventory Cloud Adapter                     | 11.0.2.0   | No                            |
| Software Data Harvesting Tool for BigFix Inventory | 1.1  | No                            |
| BigFix Inventory Keystore Migration Tool           | 1.0  | No                            |
| BigFix Inventory Utility                           | 1.1  | No                            |

\* Included in the server installation package

## Additional steps for upgrading to version 11.0.2 for the first time

Scanner-related content has been moved to a new, dedicated *BigFix Scanner* site. For this reason there is a need to execute one-time following steps.

- 1. Refresh the BigFix license to get access to the new site. Follow the procedure described in Extending the license entitlements.
- 2. Enable the *BigFix Scanner* site.
- 3. Subscribe the site to 'All Computers.'

## Once this is done, follow the standard install and upgrade procedure using the Scanner fixlet from the new BigFix Scanner site.

# Remember to run 'Create Scanner Wrapper for Scanner 11.0.0 (9.2.35) or older' whenever it is applicable to use new versions of actions!

For more information about the scanner site content and new functions refer to the Scanner Release Notes <u>https://support.bigfix.com/bfi/BigFix-Scanner-11.0.37.0-ReleaseNotes.pdf</u>

## Scan Actions Compatibility with BigFix Inventory Server

In the next release, Initiate Software Scan and Upload Software Scan Results will require BigFix Inventory Server 10.0.4 or higher!

For optimized Data Import of file facts, both actions were updated to not collect delta result files that are no longer used since BigFix Inventory Server 10.0.4 (released 2021) and are unnecessarily transferred. Those files were retained for backward compatibility reasons until now.

If the BigFix Inventory server version you are using is lower than 10.0.4, please:

- plan to upgrade the BigFix Inventory Server to the latest version
- make a backup of the Initiate Software Scan and Upload Software Scan Results actions you are currently using in your environment to be able to recreate them if necessary.

## Additional steps for BigFix Inventory Server upgrade to version 11.x.

Upgrading BigFix Inventory Server from the 10.x version to 11.x. has a few additional steps to be followed before and after the standard upgrade procedure. Those steps are one-time tasks. For more details, check <u>https://support.bigfix.com/bfi/BigFix-Inventory-11.0.0.0-ReleaseNotes.pdf</u>.

Note: This is not applicable if the BigFix Inventory server was already installed using the new *BigFix Inventory* site (BigFix Inventory v10.0.15.0-20240123-1827). In such a case, only the standard upgrade procedure should be applied.

## Allowed upgrade path

Starting with release 11.0.0.0, server updates are available from a new BigFix Inventory site, and catalog updates are available from a new BigFix Inventory Discovery site.

#### Starting from release 11.0.2 (this one), Scanner is available from a new BigFix Scanner site.

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

BigFix Inventory Server allows the direct upgrades from a limited number of past releases. For version 11.0.2, the minimal version for direct upgrade path is 10.0.12.0.

For more information about supported systems, refer to the <u>Detailed System Requirements.</u>

## BigFix Scanner, related fixlets, tasks and analyses

The BigFix Scanner package and related fixlets are now available from a new BigFix Scanner site. With this change, the scanner is prepared to be shared with other BigFix solutions and is enabled for independent delivery in the future.

For detailed information about the latest scanner version, refer to the Scanner Release Notes: <u>https://support.bigfix.com/bfi/BigFix-Scanner-11.0.37.0-ReleaseNotes.pdf</u>

The BigFix team introduced a new BigFix Scanner.

- New HCL binary (Linux on SystemZ / s390 available from BigFix Scanner v11.0.37.0).
- New versioning.
- Installed under BigFix Client directories.
- Backward compatible with BigFix Inventory Server.
- Wrapper to separate Fixlets and Analysis from Scanner deployment logic.

The scanner binaries and the location of the binaries are changed to be aligned with BigFix. As the scanner is now one of the BigFix Platform tools, it is located under the Bes Client directory \tool\scanner directory. The HCL BigFix Scanner does not support non-HCL applications. There is an option to retain the prior IBM CIT Scanner installation for non-HCL applications

#### **IMPORTANT!**

After the BigFix Inventory Site refresh, run the <u>on-time</u> action: *Create Scanner Wrapper for Scanner version 11.0.0.0 or lower* for all relevant endpoints. If this action was run before with the previous update, then it can be ignored now. This action enables the use of the newer BigFix Inventory site content (<u>including Analysis</u>).

#### Software product license types and software component categories

The Software catalog is extended with information pertaining to license types to indicate whether a software product is freeware, shareware, or proprietary, as well as information specifying the primary function of software components, like Database Management System or Operating System.

License Type helps to track license compliance and optimize license usage, and Software Category provides assistance with grouping and reporting depending on the type or purpose of installed software.

The following reports are enhanced with new data:

- Software Classification and Products & Metrics License Type column
- Software Installations and Software Components Software Category and Software Subcategory columns.

New columns are enabled by default in the above reports and are available for selection in any derived report.

The data is powered by AI, which is then manually corrected to achieve an accuracy of about 90%.

**Note:** If the software catalog version in BigFix Inventory before the server upgrade to 11.0.2 was 20241125 or newer, then it is required to reimport the catalog or update it to a new version after the upgrade in order to extract the new data for server processing.

For more information, including category definitions, refer to <u>https://help.hcl-</u> software.com/bigfix/11.0/inventory/Inventory/Discovery/license\_types\_software\_category.html

## Oracle Database Inventory enhancements

Data and logs collected by the *Get Oracle Database Measurements* fixlet can consume significant disk space on computers with large Oracle Databases and might impact BigFix Endpoint operation due to insufficient free disk space. To alleviate this, the following improvements were introduced:

- Decreased the size of log information collected by the fixlet. Some logs are collected only in the fixlet's debug mode.
- On the UNIX system, free disk space is checked in directories where the fixlet stores the raw measurement data from Oracle Databases. If free disk space is lower than 100MB before or during the fixlet operation, the fixlet deletes all collected raw data from the disk and returns with an error code. For me information, refer to BigFix Inventory documentation.

## Changes in license reporting of software products in BigFix portfolio

To accommodate changes in the licensing of software products within the BigFix portfolio, the fixlets for classifying BigFix endpoints in the BES Support site were updated to support the migration from the RVU to the MVS license metric. As a result, these fixlets will now classify BigFix endpoints installed on server operating systems by default under the MVS metric, and the BigFix Inventory documentation has been updated to reflect this change. Refer to <u>Using BigFix Inventory to calculate license for BigFix products</u>.

Additionally, the software catalog included with BigFix Inventory version 11.0.2.0 now contains product definitions for software products in the HCL BigFix portfolio, allowing customers to classify BigFix endpoints to these definitions.

## Included Software Catalog

Catalog updates are available from a new <u>BiqFix Inventory Discovery</u> site, and BigFix Inventory server version 11.x is required for all subsequent catalog releases.

BigFix Inventory server package includes Software Catalog version 20241125.

For catalog content details, refer to the catalog release notes: <u>https://support.bigfix.com/bfi/BigFix-Inventory-Catalog-20241125-ReleaseNotes.pdf</u>.

#### Modified content

The version number of the fixlet is: 11.0.2.0

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 the VM Manager Tool
- Update the SAP Metric Data Collector
- Install the VM Manager Tool
- Install the SAP Metric Data Collector
- Install the Additional VM Manager Tool
- Download the Disconnected Scanner Package for IBM i
- Download the Disconnected Scanner Package
- Download the BigFix Inventory Container Solution Packages
- Download BigFix Inventory
- Download the PVU table (if BigFix Inventory 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:

- Force Reupload of Software Scan Results
- Initiate Software Scan
- Upload Software Scan Results
- Run Capacity Scan and Upload Results
- Collect Detailed Hardware Information
- Run Capacity Scan on Virtualization Hosts

#### The following fixlets were updated:

- Get Oracle Hardware Auditing Data
- Get Oracle Database Measurements
- Collect Logs from Endpoints

The following fixlets are now deprecated:

• (Deprecated) Get Oracle Features

#### *The following fixlets were removed:*

- Install or Upgrade Scanner
- Uninstall Scanner
- Change Scanner Cache Folder
- Edit Scanner Trace Settings
- Configure Scan Cache
- Add Excluded Directories
- Remove Excluded Directories
- Collect Logs from Endpoints
- Create Scanner Wrapper for Scanner 11.0.0.0 or lower
- Cleanup Scanner Installations 11.0.0 (9.2.35) or lower

#### The following analyses were removed:

- Scanner Information
- Scanner Trace Settings
- Excluded Directories

## Enhancements and important changes

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

| Abstract  | Description  | Available<br>since |
|---|--|--------------------|
| [ <u>BFINV-I-205</u> ] Reports are<br>enhanced with product license<br>type and component category                | Software Classification, Software<br>Installations, Products & Metrics and<br>Software Components reports have new<br>columns:   | 11.0.2.0           |
|   | <ul> <li>'License Type' containing<br/>information about the license<br/>type of software products</li> <li>'Software Category' and<br/>'SoftwareSubcategory'<br/>containing information about<br/>functionality of software<br/>products</li> </ul> |                    |
|   | <b>Note</b> : This data is powered by AI and refined by the Discovery team, aiming at 90% accuracy.  |                    |
| [BFINV-I-138] Computer name<br>is presented in individual<br>computer report                                      | The <i>Computer Name</i> is now additionally visible as one of the columns in the individual computer report grid.   | 11.0.2.0           |
|   | This new column is also displayed in the contents of the exported individual computer report file, both in CSV and PDF.  |                    |
| [BFINV-I-113, BFINV-I-313]<br>Automate the removal of log<br>files: Data Import Log and FFDC<br>storage threshold | Two new Advanced Server settings have been added: 'import_logs_to_keep' and 'ffdc_logs_days_to_keep'.  | 11.0.2.0           |
|   | Data Import Log rotation: Configure the maximum number of data import log files to retain.   |                    |
|   | FFDC Log rotation: Automatically remove all logs older than a specified threshold.   |                    |
|   | The First Failure Data Capture (FFDC)<br>feature preserves the information that is<br>generated from a processing failure and<br>returns control to the affected engines.<br>The captured data is saved in a log file for<br>analyzing the problem.  |                    |
| Add System Serial Number for<br>Mac machines  | System serial numbers are now gathered<br>on Mac machines by the <i>Collect Detailed</i><br><i>Hardware Information</i> task.  | 11.0.2.0           |

|   | Other hardware attributes are not   |          |
|---|---|----------|
| <i>Computers</i> report extended<br>with <i>System Serial Number</i><br>information     | supported.<br>The information retrieved by <i>Collect</i><br><i>Detailed Hardware Information</i> task is<br>visible on the <i>Computers</i> report as<br><i>System Serial Number</i> under the <i>Detailed</i><br><i>Hardware Inventory</i> section. The same<br>data can be also obtained through the<br>REST API.  | 11.0.2.0 |
| [BFINV-I-76] [BFINV-I-31] Audit<br>Trail Information for non-IBM<br>products/components | Audit trail capability is extended to cover<br>operations on any software. It is disabled<br>by default and can be enabled by using a<br>new parameter,<br>'enable_audit_trail_for_non_ibm_softwa<br>re' which is added in the Advanced<br>Server settings. The parameter allows<br>you to decide if non-IBM<br>component/product bundling operations<br>are to be included in the Audit Trail.<br>A new column, 'Included in IBM audit<br>snapshot' is available in the Audit Trail<br>report. | 11.0.2.0 |
| Dedicated <i>BigFix Scanner</i> site<br>for scanner packages and<br>actions             | BigFix Scanner is now a shared BigFix<br>component. To support this change, the<br>BigFix Scanner package and related fixlets<br>are now available from a new 'BigFix<br>Scanner' site.<br>For details about site content moved<br>from the <i>BigFix Inventory</i> site to the new<br>scanner, refer to the Modified Content<br>section in this document and to the<br>BigFix Scanner release notes:<br>https://support.bigfix.com/bfi/BigFix-<br>Scanner-11.0.37.0-ReleaseNotes.pdf           | 11.0.2.0 |
| Update on classifying BigFix<br>endpoints   | Scanner-11.0.37.0-ReleaseNotes.pdf<br>One of BigFix's portfolio licensing<br>updates was to move the piecing from<br>RVU to MVS on server systems. Existing<br>customers have migrated from RVU to<br>MVS; however they may opt to stay on<br>RVU.<br>Due to this change, the behaviour of<br>fixlets for classifying endpoints is going to<br>be changed by the end of November<br>2024. After this change, the default<br>metric on servers will be MVS.                                      | 11.0.2.0 |
| Support for Red Hat OpenShift<br>Virtualization   | Red Hat OpenShift has been added to the supported VM Manager types. It allows   | 11.0.2.0 |

|   | you to monitor and manage software<br>licenses in virtual machines running<br>within OpenShift environments.   |          |
|---|--|----------|
| Support for KVM virtualization with Libvirt running in a container  | The Run Capacity Scan on Virtualization<br>Hosts fixlet supports libvirt<br>virtualization driver running in a<br>container.   | 11.0.2.0 |
| Hardening network security<br>configuration: restrict incoming<br>requests to selected HOSTS                              | By default BigFix Server is configured to<br>accept incoming traffic with any HTTP<br>HOST header. For production use, it is<br>recommended to limit accepted hosts<br>according to provided procedure:<br><u>Security configuration scenarios</u>   | 11.0.2.0 |
| Update of IBM components  | <ul> <li>Following IBM components have been updated:</li> <li>ILMT Core and catalog import libraries to 9.2.37 (released September 2024 by IBM)</li> </ul>   | 11.0.2.0 |
| Guidelines for calculating IBM<br>sub-capacity licences when<br>using IBM i Workload Groups<br>on IBM i operating system. | BigFix Inventory does not support the<br>automatic consideration of IBM i<br>Workload Groups. The same rules apply<br>as in the case of IBM License Metric Tool.<br>See the <u>documentation</u> for details.  | 11.0.2.0 |
| IBM Virtualization Capacity reporting equivalent  | BigFix Inventory 11.0.2.0 is equivalent to<br>IBM License Metric Tool (ILMT) 9.2.37.0<br>for IBM Virtualization Capacity reporting.<br>The update covers IBM sub-capacity<br>calculation, IBM Catalog, PVU and<br>Scanner parity. For the status of IBM<br>validated releases, see the following <u>BFI</u><br><u>FAQ Document</u> . | 11.0.2.0 |

## Defect fixes

For the list of known defects please refer to <u>HCL Knowledge Base</u>.

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<br>since |
|------------------|--|---|--------------------|
| <u>KB0111826</u> | Adobe Reader signatures<br>assigned new GUID after<br>each catalog update (no<br>changes in definition)  | GUIDs of the signatures will be<br>preserved in case there are no<br>updates to these signatures.   | 11.0.2.0           |
| BI-24521         | Canonical 3 signatures -<br>package & file are<br>constantly regenerated   | Software catalog import is optimized to preserve GUIDs in case there are no signature modifications.  | 11.0.2.0           |
| <u>KB0116368</u> | Some components have<br>no assigned products<br>after upgrade from BFI<br>v10  | Invalid components will be removed<br>during the next catalog import and<br>will no longer be reported. The<br>software catalog contains equivalents<br>to provide correct discovery results. | 11.0.2.0           |
| <u>KB0117297</u> | Import fails after<br>upgrading to BigFix<br>Inventory 11.0.1.   | Import succeeds.  | 11.0.2.0           |
| BI-27275         | Datasource removal<br>process has been<br>extended to cleanup<br>persistent tables<br>following already<br>removed tables with<br>data. This will impact the<br>duration of the Data<br>Source removal<br>operation. | Import succeeds.  | 11.0.2.0           |

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<br>since |
|------------------|--|--|--------------------|
| BI-26846         | Log collector doesn't gather an installation log for new scanners                      | Missing logs are gathered in the log collector package   | 11.0.2.0           |
| <u>KB0117267</u> | Regression due to<br>[KB0113563] Missing exit<br>code for RPM command<br>access denied | Package Scan failure will not interrupt<br>execution of the Initiate Software<br>Scan action (as other scans). The<br>method to check scan success is to | 11.0.2.0           |

|                  |   | review the individual scans statuses<br>(Software Scan Status analysis).   |          |
|------------------|---|--|----------|
| <u>KB0116454</u> | 'Get Oracle Hardware<br>Auditing Data' fixlet is<br>failing on some Solaris 10<br>servers | 'Get Oracle Hardware Auditing Data'<br>works correctly on Solaris 10 servers   | 11.0.2.0 |
| <u>KB0114714</u> | Bundling of software<br>components changes<br>after data import                           | Components maintain their manual<br>catalog relation assignments and are<br>no longer automatically reassigned to<br>products during data import when<br>using custom relations. | 11.0.2.0 |

**Important!** For the BigFix Inventory Scanner APARs and other defects that are fixed *refer to the Scanner Release Notes* <u>https://support.bigfix.com/bfi/BigFix-Scanner-11.0.37.0-ReleaseNotes.pdf</u>

| ID               | Symptoms  | Behavior after the update  | Available<br>since |
|------------------|---|--|--------------------|
| <u>KB0117658</u> | MS SQL 2012 was listed as supported   | Correct list of supported SQL Server<br>versions is available at<br><u>https://help.hcl-</u><br><u>software.com/bigfix/11.0/inventory/l</u><br><u>nventory/planinconf/c_prereq.html</u><br>and <u>https://help.hcl-</u><br><u>software.com/bigfix/11.0/inventory/l</u><br><u>nventory/planinconf/r_software_requ</u><br><u>irements.html</u> | 11.0.2.0           |
| <u>KB0115173</u> | When attempting to<br>generate a report from<br>100k active computers<br>Out of Memory<br>exception is thrown | Documentation informs about higher<br>RAM requirements when generating<br>audit snapshots.   | 11.0.2.0           |

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

#### Security enhancements

- WebSphere Liberty updated to version 24.0.0.11
- IBM Java Runtime Environment for BigFix Inventory VM Manager Tool and SAP Metric Data Collector updated to version IBM Semeru Runtime Open Edition 8.0.422.5
- IBM Java Runtime Environment for BigFix Inventory Cloud Adapter and BigFix Inventory Scanner Service updated to version IBM Semeru Runtime Open Edition 17.0.12.7
- Rails framework upgrade from 6.1.7.8 to 7.2.2
- Rexml upgrade 3.3.7 to 3.3.9
- JRuby v9.4.6.0
- Spring Boot updated to version 3.3.5
- Spring Framework updated to version 6.1.14

### VM Manager Tool version and changes

The VM Manager Tool version that is used with this update is 11.0.2.0.

#### Scanner version and changes

The scanner version that is used with this update is 11.0.37.0 for scanner supported platforms. For details, refer to the scanner release notes https://support.bigfix.com/bfi/BigFix-Scanner-11.0.37.0-ReleaseNotes.pdf.

The disconnected scanner versions that are used with this update are 11.0.2.0 and 9.2.37.0 for IBM i.

#### Changes to supported systems

Scanner and Disconnected Scanner for Linux systems running on a 32-bit architecture is no longer available within the standard installation package.

Added support for the following platforms and systems for the managed devices:

- Ubuntu 24.04 LTS on x86
- OpenSUSE Leap 15.4, 15.5, 15.6 on x64

Added support for virtualization types:

RedHat OpenShift Virtualization

Support for following platforms is discontinued starting from BigFix Inventory v11.0.2:

- Microsoft Windows 8 (all editions)
- Microsoft Windows Server 2008 (all editions)
- Microsoft Windows Server 2008 R2 (all editions)
- Microsoft Windows Server 2012 (all editions)

For more information about BigFix Inventory supported systems, refer to the Detailed System Requirements.

#### Documentation

For more information about how to install, maintain, and use this application refer to BigFix Inventory user documentation: https://help.hcl-

software.com/bigfix/11.0/inventory/welcome/BigFix Inventory welcome.html