

BigFix Scanner 11.0.40.0 Release Notes

This document provides information about the BigFix Scanner update 11.0.40.0.

The update is cumulative and contains changes provided in the previous updates of the scanner.

Name of the component	Version	Updated in this Release
BigFix Scanner Site (NEW SITE!)	6	Yes
BigFix Scanner	11.0.40.0 on all supported platforms	Yes

BigFix Scanner - BigFix Scanner Service as part of product

With 11.0.40.0 BigFix Scanner Service is promoted to the standard feature of the product. So far it was available as a Technical Preview Feature.

Deploying BigFix Scanner Service means installation of additional Windows service. Please consult and agree within wider IT teams rollout of this across the environment. Some systems might monitor introducing new service on Windows endpoints and trigger alerts.

To continue upgrading or conducting the installation of the Wscan only part of BigFix Scanner use the already existing *Fixlet 1 Install or Upgrade Scanner - Wscan Only (11.0.40.0) (Superseded)*. Its title is adjusted to manifest its scope.

It is superseded by “*Fixlet 103 Install or Upgrade Scanner (11.0.40.0)*” which installs or upgrades both Service and Wscan parts, including the devices with enabled 11.0.39.0 Preview Feature. Once the fixlet is used, the endpoint is no longer relevant for Fixlet 1 and both parts have to be upgraded simultaneously.

The devices with activated 11.0.39.0 Preview Feature are not relevant for *Fixlet 1 Install or Upgrade Scanner - Wscan Only (11.0.40.0) (Superseded)* fixlet.

To revert back to Wscan Only deployment:

- If exclusions customization was made use the Excluded Directories analysis to copy the exclusions set currently applied
- Uninstall both the Scanner components with fixlet 4
- Install Scanner with fixlet 1
- Apply the exclusions again

Upgrade process is extended with creation of backup of Service executable and databases, and ability to restore it with the use of a dedicated *Fixlet 1011 BigFix Scanner Service restore from backup (Windows)* in case of failure. This requires additional disk space for storing backup of Service executable and databases located in `C:\Program Files (x86)\BigFix Enterprise\BES Client\tools\scanner\db`. The “*Fixlet 103 Install or Upgrade Scanner (11.0.40.0)*” contains relevance to ensure sufficient disk space for upgrade operation.

Technical preview features - not available in this update

This release has no Technical Preview Features and fixlets *100 Activate Preview Features* and *101 Deactivate Preview Features* are not relevant in release 11.0.40.0

File System Monitoring for Windows with USN Journal based monitoring

With 11.0.40.0 BigFix Scanner Service offers File System Monitoring for Windows that can be used as source of file system information for Wscansw and Wscanfs.

The foundation of the solution is classic time based disk crawling released in 11.0.38.1 working on any type of file system. In 11.0.39.0 it was extended with triggering the directory crawling when software package change was detected.

Version 11.0.40.0 brings leveraging USN Journal available with Windows NTFS file systems. Partitions using this system are crawled when there is a detected issue or deactivation of USN Journal and by default cache is updated only with help of USN Journal. This provides instant representation of the filesystem in the cache and opens us to continue the path towards shorter feedback loops in BigFix applications (e.g. Inventory Software Scan).

First time use of BigFix Scanner site

If the BigFix Scanner site is not visible, then execute the 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.'

Modified content

The version number of the Fixlet is 11.0.40.0.

The following Fixlets and Analyses are available in the BigFix Scanner site:

Fixlets

- Install or Upgrade Scanner **[NEW]**
- BigFix Scanner Service restore from backup (Windows) **[NEW]**
- BigFix Scanner Service Restart/Stop/Start **[NEW]**
- Install or Upgrade Scanner - Wscan Only (Superseded) **[updated]**
- Install or Upgrade Scanner - Wscan Only (9.2.35.0) (Superseded) **[updated]**
- Wscan CPU Threshold Setting
- Activate Preview Features **[disabled]**
- Add Excluded Directories
- Remove Excluded Directories
- Uninstall Scanner **[updated]**

- Create Scanner Wrapper for Scanner 11.0.0.0 or lower
- Cleanup Scanner Installations 11.0.0 (9.2.35) or lower
- (Deprecated) Change Scanner Cache Folder
- Deactivate Preview Features **[disabled]**
- Edit Scanner Trace Settings
- Configure Scan Cache **[updated]**
- Collect Logs from Endpoints
- Analyze the Relevance of a Fixlet or Task

Analyses

- File Scan Statistics – Scanner Service **[updated]**
- Scanner Information **[updated]**
- Excluded Directories
- Scanner Trace Settings **[updated]**

Enhancements and important changes

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

Abstract	Description	Available since
BigFix Scanner Service available as standard feature	BigFix Scanner Service including File System Monitoring for Windows is promoted to the standard feature of the product. So far it was available as a Technical Preview Feature.	11.0.40.0
File System Monitoring: Leveraging NTFS USN Journal for monitoring	File System Monitoring uses the NTFS USN Journal for low resource / low latency file system information updates. The crawling of the disk is still preserved for other file systems and repeated on the USN Journal system every 3 days (by default).	11.0.40.0
Upgrade support for BigFix Scanner Service	Starting from 11.0.40.0 BigFix Scanner Service databases with data and configuration are subject for the upgrade process and data is preserved during the upgrade process. So far BigFix Scanner was not holding any non runtime data and was completely replaced during upgrade. Upgrade process requires additional disk space for creation of backup of current databases and Service executable. In case of failure during upgrade, BigFix Scanner Service can be restored using above mentioned backup with provided fixlets.	11.0.40.0
Enhanced collection of device CPU, memory, disk, partition, and WiFi metrics	BigFix Scanner Service collects following metrics: CPU: CurrentCPUQueueLength, PercentDPCTime, PercentInterruptTime, PercentPrivilegedTime, PercentProcessorTime, PercentUserTime Memory: AvailableBytes, CommittedBytes, PageFaultsPerSec, PageReadPerSec, PagesPerSec, PercentCommittedBytesInUse, PercentNonPagedPoolUsage, PercentPagedPoolUsage Disks: AverageDiskSecPerTransfer, CurrentDiskQueueLength, IOPS, SplitIOPS	11.0.40.0

	Partitions: FreeSpacePercent WiFi: WifiRxRate, WifiSignalStrength, WifiTxRate Those metrics serve BigFix solutions which utilize the common scanner data.	
Technical equivalent to IBM Common Inventory Technology component v9.2.40	Integrated IBM scanner capabilities to support the BigFix Inventory v11.0.5 — equivalent to IBM License Metric Tool 9.2.40 for IBM Virtualization Capacity reporting.	11.0.40.0

Defect fixes

For the list of known defects, please refer to [HCL Knowledge Base](#).

	Symptoms	Behavior after you install the update	Available since
KB0121953 (BI-31603)	PackageInfoMatch operator found a software on Windows that was upgraded or uninstalled	MSI Windows Registry hive is no longer considered as source of the data set for PackageInfoMatch operator.	11.0.40.0
KB0121923 (BI-31533)	Hardware scan steps taking more time than 300 seconds /Logging Only!/ 	Internal timeout for Windows Management Interface (WMI) calls has been reduced to 60 seconds. There has been added a log to highlight the wscanhw groups whose total evaluation time took longer than 60 seconds. Currently applications like BigFix Inventory use by default the 300 seconds timeout for complete execution. Some systems due to currently unknown reasons have WMI class running longer.	11.0.40.0
KB0123267 (BSU-16776)	Install Fixlets were relevant on no longer supported Linux x86 32 bit systems.	Scanner installation / upgrade fixlets relevance has been adjusted to exclude from relevant 32 bit Linux systems running on x86 architecture. Still the checks against versions of the glibc / glibcxx are part of the fixlet execution due to the nature of the check.	11.0.40.0
BSU-18004	File Scan Statistics Analyses not Applicable to all Windows Computer failing on 10.0.X BES Clients	The impacted analysis properties have been updated adding control on the BigFix Agent version and reporting a message to inform the required version in case control condition is not satisfied.	11.0.40.0

BI-33010	WscanFs commands runs long when checksum gathering is enabled on Windows endpoints	Windows Operating systems files pagefile.sys, swapfile.sys and hiberfil.sys are always skipped for checksum and header extraction. Already files with extensions .swidtag and .slmtag were exempted from header extraction.	11.0.40.0
BI-33492	traceCIT_scanned_dir s.log at the final summary log use the "-" sign before number	Improved log readability by replacing "-" as separator with ":"	11.0.40.0
BI-32788	sqlite DB WAL file grows to huge size	WAL file size limit setting restricts the size of the WAL file to 4MB	11.0.40.0
BI-32204	Comparison of versions are performed as strings	Version comparisons are performed as version	11.0.40.0
BI-33021	Messages logged during config initialization are not outputted when running in service mode	Messages during config initialization are logged in BigFix Scanner log file	11.0.40.0
BI-33480	Configure Scan Cache - fall back to cache2 not executed when scanner service is not installed	Attempting to configure the File System Monitoring cache when the scanner service is not present, a fall back to cache2 take place	11.0.40.0
BI-33483	Scanner Information - Service Status is not reported if provider cache is set to cache2/3	The Scanner Service status is reported by the Scanner Information analysis even if the provider cache is set to cache2/3	11.0.40.0

Security enhancements

No update

Scanner version and changes

The scanner version that is used with this update is 11.0.40.0 for all supported platforms.

Changes to supported systems

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

- Red Hat Enterprise Linux 10 on IBM Power
- Red Hat Enterprise Linux 10 on zSystems
- Red Hat Enterprise Linux 10 on x86-64
- CentOS Stream 10 x86-64

For more information about the supported systems, refer to the BigFix Scanner documentation

https://help.hcl-software.com/bigfix/11.0/BigFix_Scanner/BigFix_Scanner/Installation/supported_managed_devices.html.

Documentation

For more information about how to install, maintain, and use the scanner, refer to the new BigFix

Scanner user documentation: https://help.hcl-software.com/bigfix/11.0/BigFix_Scanner/index.html.