

Tivoli. *Software Usage Analysis*
Version 1.3

Release Notes





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Product overview

The Tivoli Endpoint Manager Software Usage Analysis (SUA) application is a comprehensive tool used to identify under-utilized software, track software usage patterns and trends, and detect over-used software licenses to maintain compliance with license agreements.

Product documentation for SUA Version 1.3 includes an *Installation and Configuration Guide*, *Catalog Editor's Guide*, *User's Guide*, *Quick Start*, *Implementation Guide*, and *Release Notes*. These documents can be found at www.bigfix.com/support.

To purchase or download product updates, first check the BigFix website to determine if an upgrade is available. Go to www.bigfix.com and click the *Products* link.

System requirements

- The SUA application must be installed on a Microsoft Windows 2003 Server (32-bit or 64-bit) or a Microsoft Windows 2008 server (32-bit or 64-bit). This is your target application server.
- Tivoli Endpoint Manager Server version 7 must be available in your environment. The Tivoli Endpoint Manager SUA application can be installed on the same server, or on a separate server.
- SQL Server 2005 or 2008 (32-bit or 64-bit) with TCP/IP must be available in your environment. This server can be on the same computer as the SUA application or on a separate server. You can use the same database server used for the Tivoli Endpoint Manager Server, or a separate database server, depending on the size of your deployment and available hardware resources. This version of SUA supports all editions of SQL Server 2005 and 2008.
- SQL Server Browser is needed if you are using a named instance rather than the default instance of SQL Server. It is also needed by the Configurator to enumerate named instances in the server's combo box on the SQL credentials panel.

SQL Server Required Components

Component	Required by SUA
SQL Server 2005 or 2008	Yes
SQL Server Active Directory	No
SQL Server Agent	No
SQL Server Browser	Yes
SQL Server Full Text Search	No
SQL Server VSS Writer	No

Users and Administrators of the SUA application must use Internet Explorer version 7 or FireFox version 3 (or later versions) and Adobe Flash version 10 (or later) to access the application. Your browser must have cookies enabled to run the application correctly.

- To generate PDF format reports (in addition to CSV), you must have:
 - The Java JDK version 1.4 or higher (Java Development Toolkit) on your SUA Server. (Note: This is different from Java Runtime Environment.) If your SUA server OS is running a 64-bit architecture, download and install the 32-bit JDK 1.6 or later and ensure the installer creates the correct environment path variable for Java. Access Java JDK from Oracle's website: <http://www.oracle.com/technetwork/java/javase/downloads/index.html> to download the latest JDK.
 - The Ruby Java Bridge (RJB) version 1.1.6 on your SUA Server. Use Task #29, "Install Ruby Java Bridge" provided in the Fixlet Site to install this component onto your Tivoli Endpoint Manager for Software Usage Analysis Server. Your Server must have a Tivoli Endpoint Manager Agent installed to become relevant for this task. This task stops all related backend services, installs RJB, and then restarts the backend services. If JDK and the RJB are not installed, all DSS exports use the CSV output rather than PDF.
 - If you are upgrading from a previous version of the product, the RJB is already on your server and does not need to be added.
 - After the components are installed, your users must clear their browser cache before the PDF export option is available. For specific installation instructions, go to the BigFix [Knowledge Base](#).

User accounts

During installation and configuration, you are asked for usernames and passwords. Each stage of the installation (which installs different components) might require a user with different permissions. Use the table below to determine which username to use according to your stage of the installation process:

Stage 1 – Subscribe to the Content Site

Stage 2 – Install the SUA application

Stage 3 – Configure the services that run the software

Stage 4 – Configure the connection from the SUA application to the databases

Stage	Account Requirements	Type
1. Subscribe to DSS SAM Content Site	Tivoli Endpoint Manager Operator login with permissions to subscribe to content sites	Tivoli Endpoint Manager Operator
2. Install SUA	Administrator for the O/S where you're installing SUA *Note: A non-administrator might be able to run the Configurator, but this might result in an error.	Domain or local
3. Configure the services that run SUA and connect to the databases	Service account with db_datareader permissions on Tivoli Endpoint Manager database and read permission to the Tivoli Endpoint Manager server upload manager directory	Domain

4. Create the SUA databases	Specify using the service account with Administrator permissions on the database server, or User with SQL Authentication with Administrator permissions on database server	Domain SQL
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For additional guidance on user accounts and access, see the [Knowledge Base](#) on the BigFix support website.

Deployment sizing requirements

The SUA application runs in a variety of deployment configurations, depending on the size and architecture of your system and how you intend to use the application. Sizing requirements and hardware specifications vary according to your configuration.

Consider the following factors to ensure the correct component processing speed, RAM, and disk space to accommodate your Tivoli Endpoint Manager Client capacity:

- The number of users accessing the SUA application determines how much processing power and RAM your server must have.
- The number of Tivoli Endpoint Manager Clients determines the amount of disk space required for files and for the database server.

Note: *If you are using SQL Server Express Edition, see the Microsoft website for size limitations.*

For a two-computer server configuration, 1MB per Tivoli Endpoint Manager Client must be allocated on the Tivoli Endpoint Manager Server split between files and the database, and 1-2MB per Tivoli Endpoint Manager Client on the SUA application system, also split between files and database.

For example, 10,000 Tivoli Endpoint Manager Clients requires 10GB of free space on the Tivoli Endpoint Manager Server, and 10-20GB free space on the SUA application machine. This scenario would require the Tivoli Endpoint Manager Server database to be on the same machine as the SUA application. For sizing requirements on other deployment configurations, see the Appendix.

Hardware specifications

The values listed below are recommended hardware specifications to provide optimum performance for similar sized deployments of the SUA application. If your deployment includes more than 20 SUA application users, consider augmenting your hardware specifications to the next higher scale, or contact BigFix Technical Support for assistance with hardware selection.

For best performance, consider the following recommendations:

Deployment Size	CPU	Memory	Hard Disks
< 250	2-3 GHz	1 GB	Standard HD
1,000	2-3 GHz - 2 Cores	2 GB	1 RAID Array (RAID 10, 5)
10,000	2-3 GHz - 2-4 Cores	4 GB	1-2 RAID Arrays (RAID 10)
50,000	2-3 GHz - 4 Cores	8 GB	2 RAID Arrays (RAID 10)
100,000	2-3 GHz - 4-8 Cores	12 GB	3 RAID Arrays (RAID 10)
> 200,000	2-3+ GHz - 8-16 Cores	16+ GB	3-4 RAID Arrays (RAID 10)

RAID arrays must support use of the disk cache for both reading and writing. Set the disk cache to 50/50 read write.

Resolved issues

The following table highlights Known Issues that have been **resolved** in SUA version 1.3:

Issue	Category	Description	Resolution
33817	Import	Application usage data did not correctly import when certain invalid characters appeared in the raw data.	The import process is now more tolerant to invalid characters.
32630	Import	Need more information in the import log about computers with malformed inventory data.	Additional information has been added to help identify and locate computers that have malformed inventory data.
34159	Software ID Properties	It was not possible to modify or delete properties used for software identification.	SUA Administrators can now modify or delete the default properties used for software ID. This is useful if you want to use a custom-installed applications analysis or custom application usage analysis.
34533	Import	The import process logs might include erroneous information about malformed data in raw inventory.	Spurious warnings in import about malformed data in executable scan files are now suppressed.

Known issues

Review the contents of the list of **Known Issues** below before contacting BigFix Support or reporting new issues.

Issue	Category	Description of Issue	Workaround
19761	Tivoli Endpoint Manager Server	Executable inventory does not aggregate to a single parent server in a Tivoli Endpoint Manager DSA (Distributed Server Architecture) configuration, nor does the data replicate across all DSA servers, so inventory will be incomplete when using SUA in an environment with DSA.	Configure DSA so that all computers report to a single root server rather than reporting dynamically to the various DSA servers. The implication is that although the Tivoli Endpoint Manager database replicates across DSA servers, the clients do not load balance across multiple root servers. Alternatively, you can contact BigFix for assistance with replicating the inventory data to a centralized location for SUA.
22469	Import	If an import is interrupted, the application will continue to allow users to log in even though there may be inaccurate data due to the incomplete import.	Run the import again and let it complete.
28761	UI	Computer Details: For executables designated as 'ambiguous', the 'Add' link is shown even though it is already there.	Be sure to use the Ambiguous Entries tool to ensure your Catalog meets your expectations.
21675	Export	PDF becomes unreadable with larger number of columns.	Use landscape view for the export to fit more columns. Ensure that the number of columns in view is not excessive.
22897	Installer	Selecting a valid database server from drop down list on the Database Settings screen during installation sometimes fails.	Ensure that the database server name and database name (if using a named instance) is correct. You might have to manually enter the name if it is not shown correctly in the drop-down list.
23281	Import	When deleting a datasource and then adding the same datasource again, any existing custom retrieved properties are lost.	After deleting a datasource, remove all custom retrieved properties. You can add them again after re-adding the datasource, and then run an import to re-populate the data.
27947, 27729	Catalog	It is possible to add an entry in the Catalog that is a duplicate of other entries.	Before adding to the Catalog, search for the item that you want to add to make sure it does not already exist. You can use the Ambiguous Entries tool to ensure your new items have not created any duplication.
28361	Configurator	During installation, certain configurations might result in the following error: "An error occurred connecting to the SQL server utility using TCP/IP. Ensure TCP/IP is enabled for the server." This might be an erroneous message.	First ensure that TCP/IP is enabled for your SQL server. Also ensure that you are using the SQL server port number for the server you are connecting to using the following convention: "Server name,port number".

28599	Catalog	If you use the Add link to initiate the Add to Catalog workflow from the Computer Detail page, the Add link persists until the next import.	Manually run an import, or wait until the next scheduled import. Then the Add link will change to reflect the newly-added Catalog entry.
19893	UI	On the Computer detail screen, properties with multiple values on the "BES Properties" tab only display the first value.	You can add the properties you want as Computer Properties in SUA for better usability, or you can use the BES Console to access this data.
20592	Import	If two datasources point to redundant DSA servers, the inventory is redundant.	If you have multiple datasources, ensure that they are not replicated DSA servers.
21119	Installer	SSL certificates are correctly used when configuring SUA to run in https mode, but the configuration process does not validate that the SSL certificate is valid during the installation.	Ensure that you have a valid SSL certificate before you use it for the SUA configuration. If you install using an invalid certificate, your SUA server might not run properly. In this case, check the BigFix Knowledge Base for information or contact BigFix Support.
21215	Installer	Configuration wizard UI is unresponsive during scripted actions, but it continues to install.	
22049	Java/JDK	Without Java on the SUA server, PDF export is not available to users and there is no warning.	Install JDK on the DSS server and restart all your Tivoli Endpoint Manager DSS services. Check the BigFix Knowledge Base for information or contact BigFix Support for more information.
23362	UI	Deleting BES group does not delete it from existing listings in SUA Computer Group.	Delete removed BES groups from SUA UI.
27156	SUA Server	If you already have Ruby on Rails installed on your SUA server when you install SUA, SUA install correctly, but fail to run.	You might need to edit Windows Environment Variables to direct the SUA Ruby code to the correct Ruby executables and libraries.
26418	Import	Changes to Computer Groups do not display in Filters & Columns immediately.	Need to run Import.
27145	UI	Some browsers might cache the Filters & Columns dialog, so after you add a Computer Property you must refresh the screen or logout and login before that property is shown in the dialog.	Refresh your browser screen or logout and login.
26929	Installer	Installer displays the "Show the Windows Installer log" checkbox, but it is not functional.	
28762	Import	When only one datasource is configured and that datasource is deleted, data is not erased from the Drill Down by Software tab.	The data is replaced after you add a new datasource and run an import.
32047	Scan directory	The datasource test button might show "success" when the exe	Be sure that the directory you specify is the location of the exe scan files



		scan directory points to the wrong path.	
31962	Apache	When upgrading SUA on Windows 2008, you see a warning message that restarts Apache.	Ignore the warning.
31618	Import	The Contract Import process cannot process 2-digit years in the 21st century.	Be sure to use four-digit years for imports.
31603	Installer	If you cancel the installation before it completes, you might be left with a partial installation.	Re-running the installer to its completion might rectify this issue.
31029	Import	Pressing "next" before resolving unmatched software titles during contract import will cause an error.	Go back and resolve the match before pressing <i>Next</i> .
29627	Inventory	There is no size limit on the BF_InventoryLog.lfd.	See the Upgrading section of the SUA <i>Installation and Configuration Guide</i> for specific information.
28632	Computer Properties	Some analysis properties show "Inactive" in the <i>Create Computer Properties</i> form, but they show active in the BES Console. When using them in SUA, the data is available in SUA.	There is no need to work around this UI issue – your data is in tact.
27678	Catalog	The Software Catalog editing UI does not consistently prevent you from creating duplicate entries in the Catalog. Creating duplicate entries will likely result in software recognition ambiguity and inconsistent inventory reports.	Avoid creating duplicate applications entries anywhere in the Catalog. To determine if you have ambiguous entries, use the Ambiguous Entries tool to find and reconcile them.
23562	Contracts	Contracts with a future purchase date should be inactive.	Do not include contracts with a future purchase date in your contract analyses.
27730	Installer	A non-Administrator user is able to run the Configurator, but gets an initialization error in the end of the installation.	A user with Administrative permissions must run the Installer.

Technical support

BigFix technical support site offers a number of specialized support options to help you learn, understand, and optimize your use of this product:

- [BigFix Support Site](#)
- [Documentation](#)
- [Knowledge Base](#)
- [Forums and Communities](#)





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