



FTK 7.3

Release Notes

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Introduction

This document lists the new features, fixed issues, and known issues for this version. All known issues published under previous release notes still apply until they are listed under “Fixed Issues.”

- What is New in 7.3 on page 2
- Fixed Issues on page 9
- Important Information on page 11
- Known Issues in 7.3 on page 15

What is New in 7.3

WARNING: DO NOT connect / integrate version 7.3 Forensic Tools to an existing eDiscovery 7.1.1 database. eDiscovery 7.1.1 can only be integrated with applications that shipped with Forensic Tools 7.1. For more information see “Upgrades” under the Known Issues in 7.3 section of this document.

The following items are new and improved for this release:

API

- Microsoft Outlook Address Book OLK file parsing. (FC-94)
- Every object parsed during object enumeration is now also assigned a GUID (Global Unique Identifier) value. (FC-209)
- Support for all NSF metadata fields for parsing and export to loadfile purposes. (FC-210)
- Support for all PST metadata fields for parsing and export to loadfile purposes. (FC-211)
- Export to load file can now utilize derived field values (such as populating null date values). (FC-212)
- All ZIP, RAR, and 7z container files now have the option to be treated as folders. (FC-214)
- When enabled, the following keys will generate statistics for the size of objects associated to a given label. (FC-216)
Sum of logical size of objects in a label:

```
<add key="RunGetAggregatedData" value="true"/>
```

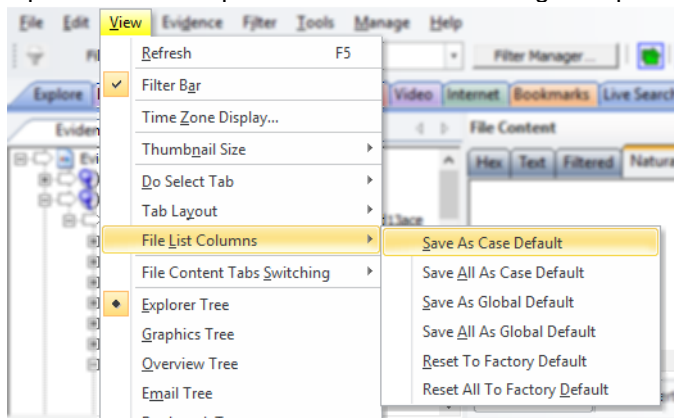
Sum of logical size of objects in a label grouped by File Category:

```
<add key="RunGetGroupedAggregatedData" value="true"/>
```

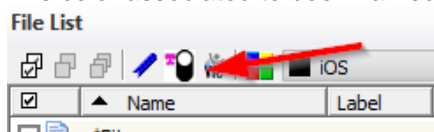
- File objects that generated errors or otherwise failed to process are now automatically tagged in order to notify the user. (FC-217)
- Disk image files contained within a disk image can now be (optionally) treated as an image and parsed as such. (FC-222 / FC-441)

Case Examiner

- Options to save a preferred column list setting on a per case and per tab basis. (FC-12)

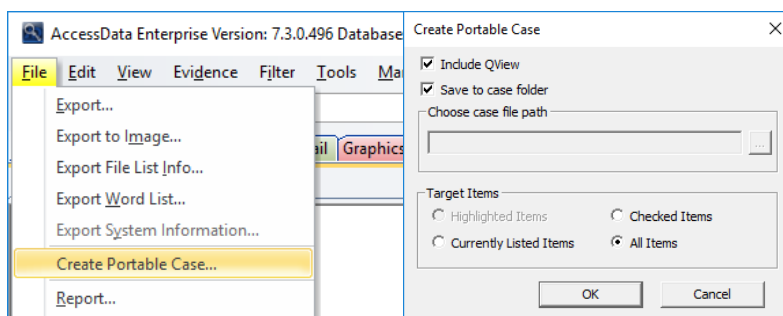


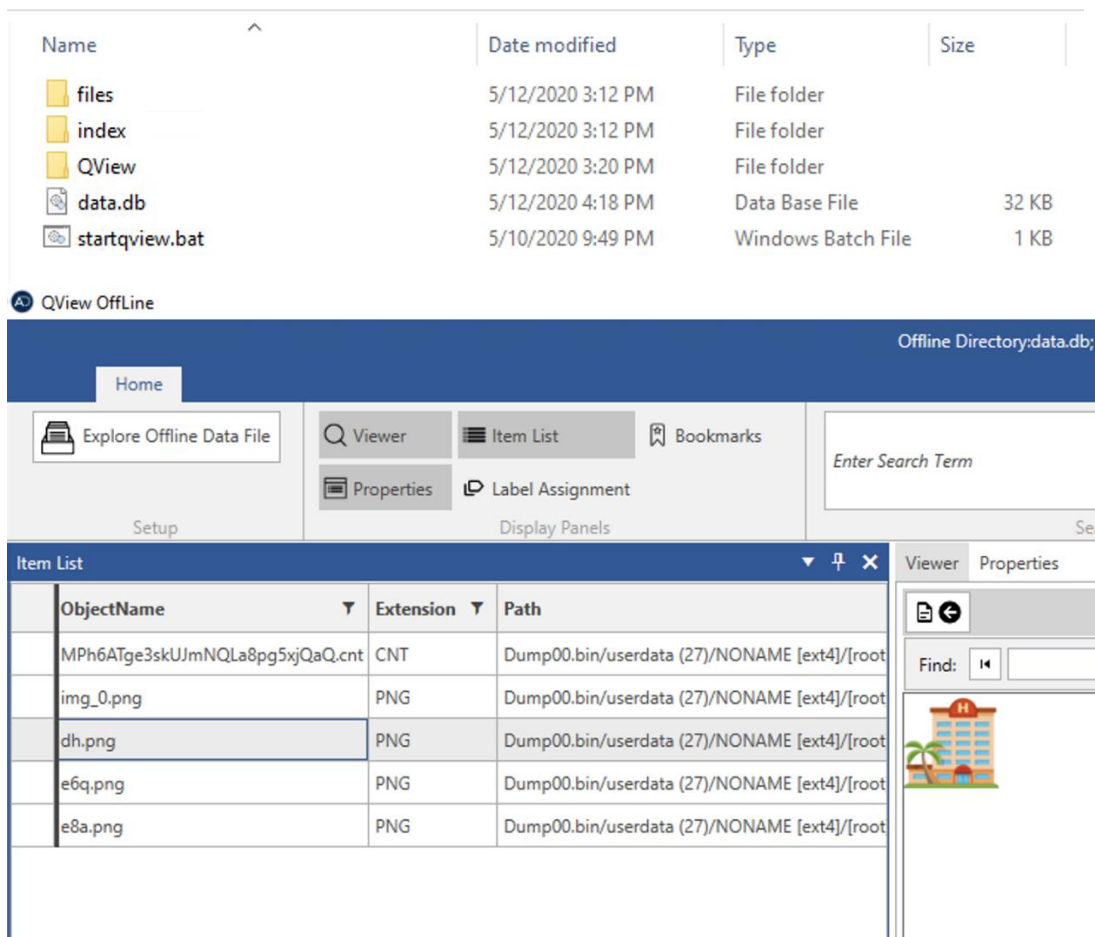
- Evidence time zone selection now lists "UTC/GMT" at the top of the drop-down menu. (FC-482)
- The color associated to bookmarked items in the file list can now be toggled on or off. (FC-549)



- Option to "Create Portable Case..." (export case data to offline container for review in QView Offline) is now available. (FC-745)

NOTE: This feature is dependent on the Quin-c service (that is shipped with 7.3) to be installed and running.





NOTE: QView Offline requires Microsoft .NET Framework 4.7.2 and Visual C++ 2013 Redistributable to be installed. The QView Offline installer does not automatically install those prerequisite libraries.

Database

- Microsoft SQL Server 2019 support. (FC-55)
- Support for Amazon Relational Database Service (RDS) has been optimized for better performance when used as FTK's evidence database. (FC-423)
- Encrypted SQL Server (server-level encryption only) support (FC-542)

Decryption

- Added support for decryption of Checkpoint FDE version 86.2.40.7 encrypted volumes. (FC-79)

Environment

- FTK Tools Suite now supports installing on Windows Server 2019. (FC-486)

- FTK can now be run as a normal user account and does not require “Run as Administrator” elevation in order to run. (FC-89)

NOTE: In order to run FTK under the identity of a normal user account, you must grant that user (or the group to which the user is a member) FULL CONTROL rights to the “AccessData” directory found at the following path:

%PROGRAMDATA%\AccessData

Additionally, the user account associated to the FTK and Evidence Processing Engine windows processes must have proper READ / WRITE permissions to the following directories:

Evidence Processing Engine’s temp directory.

Defined by this registry key:

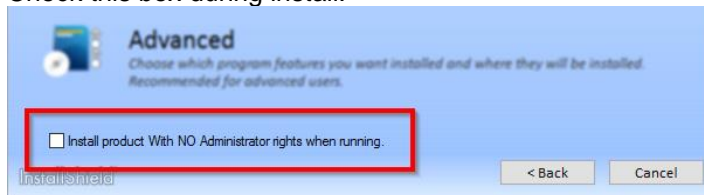
HKEY_LOCAL_MACHINE\SOFTWARE\AccessData\Products\Common | TempDir

Processing Manager’s “StateDirectory”

Defined by this registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\AccessData\Products\Evidence Processing Engine\[VERSION] | StateDirectory

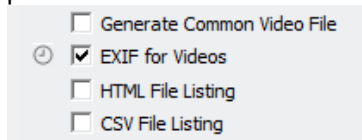
Check this box during install:



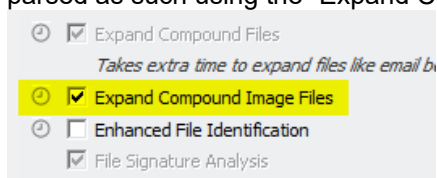
Evidence Parsing

- Support for parsing the latest revision of Advanced Forensics Format (AFF4) image format (FC-33)
Note: AFF4 images are not expanded by default. See “Expand Compound Files” processing option menu.

- XMP metadata (similar to EXIF data) can now be (evidence processing option) parsed from processed MP4 and most all other modern video file formats. (FC-35)



- Microsoft Outlook Address Book OLK file parsing. (FC-94)
- Disk image files contained within a disk image can now be (optionally) treated as an image and parsed as such using the “Expand Compound Image Files” processing option. (FC-222 / FC-441)



- XFS (versions 3, 4, and 5) file system parsing. (FC-359, FC-404)
- Support for parsing E01 and LX01 images created by the Tableau Imager Tx1 v2.1 and v2.2. (FC-363 / FC-379)
- Support for parsing X-rays CTR images (FC-449)
NOTE: Not expanded by default. See “Expand Compound Files” processing option menu.
- Tools menu now includes an Enhanced Internet Artifact Analysis parser which automatically identifies and categorizes all expanded browser artifacts to streamline review. (FC-559 / FC-635)

NOTE: This feature is dependent on the Quin-c service (that is shipped with 7.3) to be installed and running.

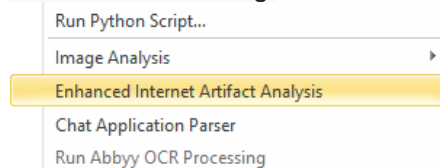
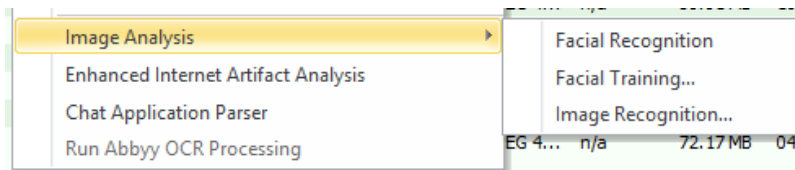


Image Recognition

- Image Recognition now offers built-in training models categories for the TensorFlow A.I. engine (such as “banknotes”, “cannabis”, “pistol”, etc) to automatically identify the graphic images in your case. (FC-2 / FC-145 / FC-462)



Installation

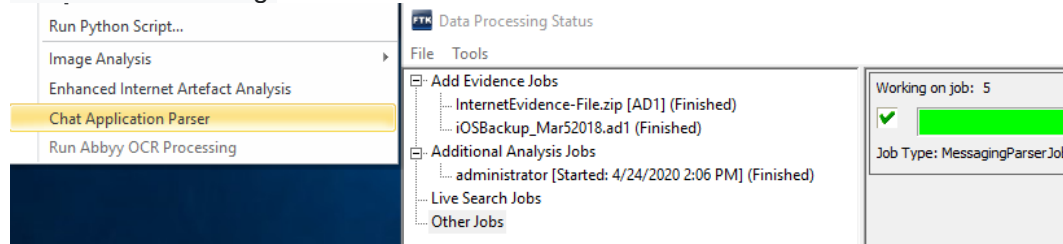
- The AccessData Evidence Processing Engine is now automatically uninstalled when uninstalling the FTK Tools Suite. (FC-439)
- The Forensic Tools Suite automatically installs CodeMeter Runtime version 7.0a.
- A new build of FTK Imager (version 4.3.1.1) is available on the Forensic Tools installation ISO and can be installed manually or via the autorun.exe.

Mobile Devices

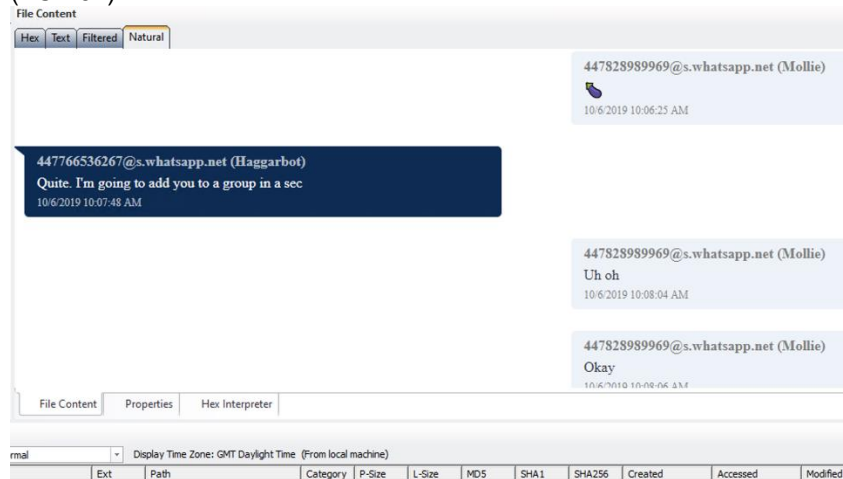
Improved application parsing overall (via the Chat Application Parser in the Tools menu) which includes the following enhancements (FC-636 / FC-637).

NOTE: This feature is dependent on the Quin-c service (that is shipped with 7.3) to be

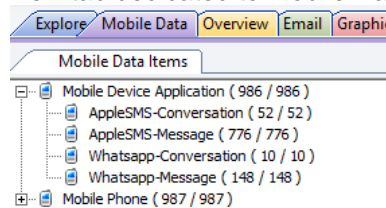
installed and running.



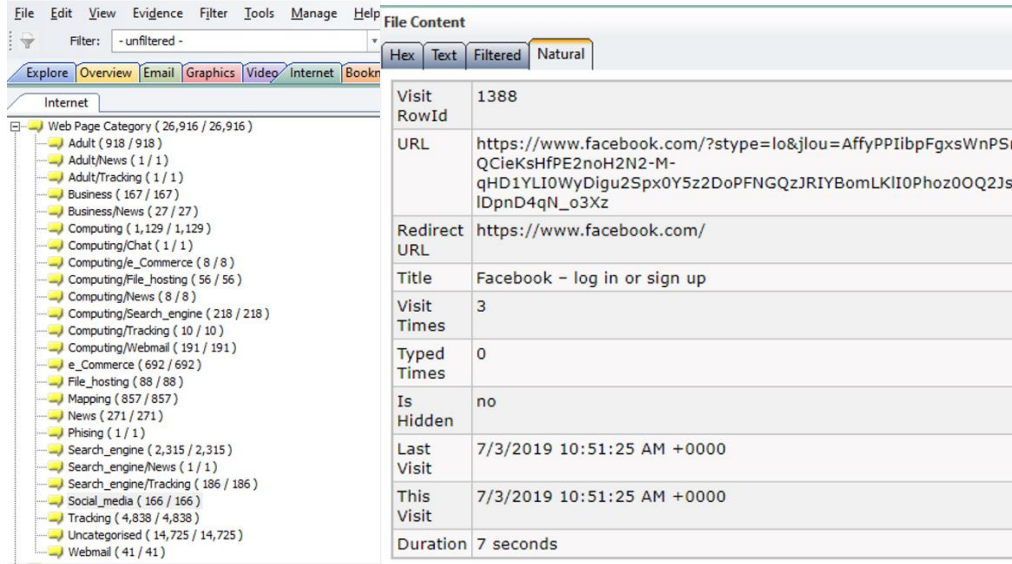
- Improved parsing of Android contacts2.db
- For a full list of supported mobile messaging apps FTK is able to parse, see Appendix A.
- All Chat and SMS conversations are now rendered using easy-to-read conversation bubbles. (FC-207)



- Parsing XRY v9 files is now supported. (FC-448)
NOTE: Not expanded by default. See “Expand Compound Files” processing option menu.
- New tab dedicated to Mobile Data analysis in Case Examiner (FC-480)



- New categorization trees for organizing data objects parsed from chat and messaging applications. (FC-519)



OCR

- LeadTools OCR engine (the default OCR engine in FTK) has been updated to version 20. OCR job completion time is now 40% faster than previous versions. (FC-460)

New Lead Tools OCR Languages Supported:

Afrikaans	Albanian	Azerbaijani	Basque
Belarusian	Croatian	Estonian	Galician
Icelandic	Macedonian	Malay	Maltese
Swahili	Telugu	Thai	

Search

- The version of dtSearch integrated into the application has been upgraded to version 7.95. (FC-151 / FC-330 / FC-479)

For additional information on other fixes / changes in this version of dtSearch see the vendor's release notes page: <https://www.dtsearch.com/ReleaseNotes.html>

- New options to offer greater control over the dtSearch index and searching. (FC-13)
- Accent Sensitive Indexing
The "Indexing Options" dialog now includes a checkbox to "Create an Optional Accent Sensitive Index." FTK has always and still does default to an Accent Sensitive Index. This means that "abc" will only find "abc" and "äbc" will only find "äbc". In Examiner, the "Index Search" tab's "Options..." dialog an option called "Accents are significant" will appear in cases where an Accent Sensitive Index has been generated and can be selected to control how accents are treated.
- Cache Filtered Text in the index
Filtered Text is being cached in the dtSearch index by default, however it can be toggled on or

off. The advantage to caching filtered text is that it produces more reliable search hit highlighting and it reduces the time to return index search results. However, NOT caching filtered text will result in a smaller index and shorter time to complete the indexing process.

- **Expanded HTML Indexing**
This option is enabled by default in the built-in evidence processing profiles. When selected, it indexes HTML comments, links, imagesrc, metadata, CSS style sheets, etc.
- **ZIP and RAR files**
Indexes the internal file list for ZIP and RAR file archives. This is now enabled by default for all indexing jobs.

Fixed Issues

The following items have been fixed in this release:

Case Examiner

- Very large PDF files (approx. 500MB or larger) now display properly in the viewer pane when XML keys (1GB and 2GB examples shown below) in the "Preferences.xml" are configured in bytes to display files below the size warning threshold. (FC-430)

"C:\ProgramData\AccessData\Products\Forensic Toolkit\[X.X]\Preferences.xml"

```
<LARGE_FILE_WARNING_SIZE>1048576000</LARGE_FILE_WARNING_SIZE>  
<VERY_LARGE_FILE_SIZE>2097152000</VERY_LARGE_FILE_SIZE>
```

- Resolved the issue where a Custom Column entry created in one case would appear as an available column template in other cases without being shared to that case. (FC-483)
- Logs generated by the Verify Image function that report a "failure" for MacQuisition evidence images now reflect the accurate match "Success" displayed in the "Drive/Image Verify Results" window. (FC-494)

Case Management

- Fixed issue where cases created by a Case Administrator user did not appear in the case list of an Application Administrator user. (FC-414)
- Case Restore jobs where graphics were not being mapped properly in the newly restored case have been corrected for backups made in version 7.3 or newer. (FC-495)

NOTE: The issue affected graphics parsed from images of iOS devices and therefore the evidence data sets would need to be reprocessed using 7.3 or newer.

Evidence Parsing

- Mobile chat picture attachments from UFDR images are now being parsed properly. (FC-39)

- Improved parsing of “setupapi.dev.log” and “setupapi.dev.YYYYMMDD_HHMMSS.log” logs from Window 10 systems in order to populate the “First Connect Time” field in the USB section of the system summary tab. (FC-230)
- The issue that caused the memory analysis profiles to not display in the drop-down list has been fixed. (FC-258)
- Addressed Windows 10 Mail archive parent / child and attachment parsing issues. (FC-399)
- Fixed the issue that prevented partitions to display properly when parsed from E01 images created by the Tableau TX1 Forensic Duplicator. (FC-507)

Evidence Processing

- Fixed the processing slow down caused when permissions would be assigned to an LDAP group and where no permissions were granted to the user(s) explicitly. (FC-41)
- Fixed root cause of “Unable to execute [INSTALLPATH]\ProcessingHost.exe” error. When configured for distributed processing, the application no longer attempts to detect a local processing engine. (FC-146)
- The issue that would cause some processed restore point partitions to show as “Unrecognized” has been fixed. (FC-412)

Examiner Interface

- Volume Shadow Copy (VSC) records, incorrectly listed as “Renamed From” or “Renamed To”, will now display correctly. (FC-598)

Important Information

Supported Platforms

Microsoft Windows Operating Systems Support

The following Windows operating systems are supported:

Windows OS Version	FTK Tools Suite Platform
Windows 7 (x86 / x64)	Support Expired
Windows 8 (x86 / x64)	Not Supported
Windows 8.1 (x86 / x64)	Not Supported
Windows 8.1 Update 1 (x86 / x64)	Not Supported
Windows 10 v1709 (x86 / x64)	Supported
Windows 10 v1809 (x86 / x64)	Supported
Windows 10 v1909 (x86 / x64)	Supported
Windows Server 2008 and R2 (x86 / x64)	Support Expired
Windows Server 2012 and R2	Supported
Windows Server 2016	Supported
Windows Server 2019	Supported
Windows Crash Dump (x86 / x64)	n/a

See the AD System Implementation Guide at

<https://support.accessdata.com/hc/en-us/sections/200667399-System-Specification-Guides>

Microsoft SQL Server Support

The following SQL databases are supported:

- SQL Server 2012
- SQL Server 2014
- SQL Server 2016
- SQL Server 2019

PostgreSQL Support

The following versions of PostgreSQL are supported:

- 9.6.3.5
- 11.2 (this is the version provided with the installation files)

For Additional Information

Latest Documentation

The documentation is sometimes updated. For the latest documentation, see the product download page:

<http://accessdata.com/product-download>

or download the zip file from

www.accessdata.com/productdocs/ftk/ftk.zip

Installation and Upgrade

- The FTK Suite (FTK, AD Lab, AD Enterprise) no longer supports multiple products of the same version running on the same machine at the same time. The user can only install one of the three products of a specific version on a single machine. (29786, 30927)
- All licensed AccessData applications require CodeMeter Runtime to be installed local to the system where the license information will be retrieved (this includes NLS client systems).

Cloud Based Relational Database Services (RDS) Support

The AccessData Suite can utilize the power and scale of the Amazon Aurora PostgreSQL Compatible cloud Database Service

AWS Aurora is an Amazon proprietary service that is wire compatible with PostgreSQL offering up to 5x faster than a traditional PostgreSQL instance.

To use the amazon RDS Instance, you will need to set up your instance in your AWS console prior to installing the AccessData Suite. When configuring your RDS instance, make sure that the DB engine version for your instance is PostgreSQL 11.4 or higher.

You will have two options: set a password for the "postgres" user, or to use IAM Authentication. AccessData's Forensic Tools Suite will not work with IAM Authentication. So make sure you keep track of the password set for your "postgres" user for future reference.

Important: AccessData recommends not making the Database "Publicly accessible" for security reasons. If using a VPN to connect to your cloud provider, you will need to update the rules for your security group to allow connections over your VPN.

AD Product Virtualization and Cloud Guidelines

Overview

This support KB article contains a document that outlines the support boundaries and procedures for supporting virtualized and cloud environments for AccessData software:

<https://support.accessdata.com/hc/en-us/articles/360009043514-Virtualization-and-AD-Products>

Running PostgreSQL on a Virtual Machine

If you run PostgreSQL on a virtual machine with a dynamically allocated virtual hard drive, you must manually stop the PostgreSQL service before rebooting the virtual machine. Otherwise, PostgreSQL will become corrupted.

If you run PostgreSQL on a virtual machine with a fixed size virtual hard drive, then PostgreSQL will not become corrupted when rebooting.

This does not apply to PostgreSQL instances hosted in a managed database service such as AWS Relational Database Service™.

Linux Agent Support

- Official Support for Red Hat Linux 6.x and 7.x
The 6.2 Linux Agent requires GLIBC 2.17 or newer. Collection from a system running on an older GLIBC version can be attempted using the 6.1 version of the Agent, which can be obtained by contacting AccessData Support. A system's GLIBC version can be determined by running the following command: `ldd -version`.

KFF

- The KFF Server uses the Apache Cassandra database. The version of Cassandra being used requires 64-bit Java 8. No other version of Java (7 or 9) is currently supported.
 - To install Java, go to: <https://java.com/en/download/windows-64bit.jsp>
 - If you are using a 32-bit browser, your browser may automatically download the 32-bit version. You must use the 64-bit version.
- Make sure that you use the latest version of the KFF Server.
See <https://accessdata.com/product-download> > Known File Filter 5.6 and up.
- When importing data using the KFF Import Utility, make sure that you get a confirmation that the import is complete before processing data using that KFF data. This is particularly important when importing NSRL data that takes several hours to import.

- Only the Project VIC and NSRL sets are locked/protected. All other sets in the KFF can be modified and archived.

Recommendations

- Cerberus writes binaries to the AD Temp folder momentarily in order to perform the malware analysis. Upon completion, it will quickly delete the binary. It is important to ensure that your antivirus is not scanning the AD Temp folder. If the antivirus deletes/quarantines the binary from the temp, Cerberus analysis will not be performed.
- When creating a Custom Data View, the available filter list should not include: Checked Files, Unchecked Files (checked status is not available across users), Bookmarked Files, Labeled Files (too broad and will include all bookmarks or labels). These filters have been removed from the list. (6533)

Known Issues in 7.3

Evidence Parsing

- AFF4 images are currently taking longer to process than expected. (FC-597)

Installation

- If ProcessingHost.exe is running at the time that the FTK Tools Suite v7.3 is being uninstalled, a warning prompt may be displayed behind the uninstall wizard which prevents the uninstall process from proceeding until acknowledged. (FCR-126)
- The Forensic Tools Suite installer lists Quin-C as a product installation option, however the 7.3 release of Forensic Tools, is not an official release of Quin-C and should not be used in a Quin-C production environment.
- FTK features that depend on QView or the Quin-C service will not present an error and will not notify the user that the dependency is unavailable. The feature will appear to do nothing if the pre-requisite is not installed and configured correctly. (FC-782 / FC-833)

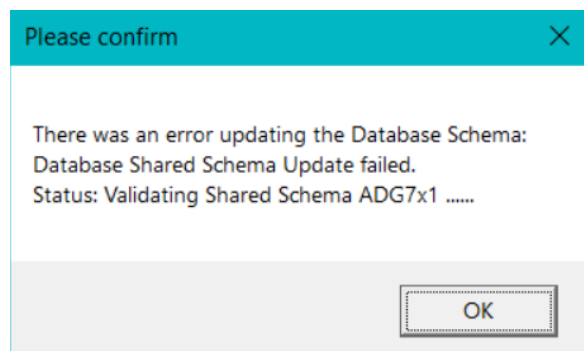
Live Evidence

- When running on Windows Server 2019, the Examiner interface is unable to mount an image to a virtual drive. (FC-741)

NOTE: Workaround is to close the FTK interface completely and try again.

Upgrades

- Connecting a version 7.3 Forensic Tools application to a database in use by eDiscovery 7.1.1 will cause the 7.3 application to attempt to automatically upgrade case schemas. eDiscovery 7.1.1 can only be integrated with applications that shipped with Forensic Tools 7.1.
- If for any reason you enter an incorrect database password when connecting 7.3 to your evidence database, you will be presented with an error stating there was an error updating the database schema. It does not inform you that the password was incorrect or allow you to re-enter the correct password. You must close FTK application completely and try again. (CRI-254)



Appendix A

The following is a list of messaging apps and the latest version currently supported by the Chat Application Parser :

Application	Android	iOS	Windows	macOS
AIM				
AppleSMS				
AndroidSMS	5.2			
Badoo	5.157	5.157		
Bloomberg				
Brosix	4.4			
ChatOn				
Cliq	4.26	4.4		
Discord		10.4.2	55975	
FacebookMessenger	258	262		
FacebookMessengerLite	258	256		
Flock	4.8	2.38		
FireChat				
GoogleHangouts				
GoogleTalk	2020.01			
Grindr	6.2			
Growlr	11.8			
GroupMe	5.43	5.39		
ICQ	8.3	8.5		
Instagram	129	134		
IM_Plus	7	10		
IMO	9.8	2020.3		
ImoPlus	9.8	2		
IMVU			IMVULog.log (web based)	IMVULog.log (web based)
KakaoTalk	8.7	8.8		

Application	Android	iOS	Windows	macOS
Kik	15.2	15.21		
Line	10.2	10.2		
LinkedIn	4.1	2020.04.24		
MeetMe				
Mei	3.6			
MeowChat	7.4			
MicrosoftTeams	1416/1.0.0	2.0.3		
Mood	1.8			
NextPlus				
ooVoo	4.2			
PalTalk				
Pulse	5.2			
Skype	8.56	8.58		
Slack	20.02	20.03		
Snapchat	10.8			
Tango				
Threema	4.2	4.5.3		
TamTam				
Telegram	5.15	5.15		
TextFree	8.5			
TextMe	3.21	3.22		
Textra	4.23			
TigerText	8.8	8.8		
TikTok	14.9			
Touch				
Twist	1.1	1.6		
Twitter	8.32	8.14		
Viber	12.4	12.6		

Application	Android	iOS	Windows	macOS
Vipole	2	1.22		
Voxer	3.18	3.21		
Whatsapp	2.2	2.2		
Xabber	2.6.6			
Zoom	4.6	4.6		

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