

FTK 1.81.3 *Release Notes*

INTRODUCTION

This readme is a document listing important changes to FTK 1.81.

NEW FEATURES

- New export options that allow users to choose the format of files exported when HTML views are available. (User no longer has to export both the binary and html formats of these files)
- FTK can now use a larger virtual memory space (see instructions at the end of the release notes for details).

FIXES

- Improved performance while data carving during pre-processing.
- Improved stability when processing certain PGP files.
- Improved stability when processing certain AOL bag files.
- Improved stability when handling Unicode filenames
- Other general stability fixes in UI and processing.

FTK VIRTUAL MEMORY USAGE AND CONFIGURATION

FTK 1.x uses an architecture that can utilize a significant amount of memory. Sometimes it uses more memory than is available in real memory. The operating system facilitates this by giving FTK virtual memory. It gives the operating system 2 gigabytes, and 2 gigabytes to the FTK processes (of the 32 bit, 4 gigabyte address space that is available to the program). The processor maps virtual memory to wherever the real memory is when FTK accesses that memory. When FTK asks for memory, the operating system gives a contiguous block of address space (memory) of the size requested. Over time, the 2 gigabytes of address space becomes fragmented between allocated blocks. FTK sometimes asks for a block of memory that is bigger than the largest free block of physical memory available. This causes the program to crash because it can't get the memory it requires to

continue. This used to happen infrequently but as cases have gotten larger FTK encounters this much more frequently..

Most 32 bit operating systems from Microsoft have the ability to allow users to change the amount of virtual address space available to FTK and other applications. They call it 4GT RAM tuning. It is documented here, <http://msdn.microsoft.com/en-us/library/ms791558.aspx>, for the device driver people but it applies to applications as well. It states that

The 4 GT RAM Tuning feature is fully functional on Microsoft Windows 2000 Advanced Server, Microsoft Windows 2000 Datacenter Server, and all editions of Windows XP, Windows Server 2003, Windows Vista, and later versions of Windows.

Taking advantage of this feature will make it possible to avoid this crash except in extreme circumstances.

To make this work you will need FTK version 1.81.3 or greater. Then, you will do 1 of 2 things. For Windows XP and some Windows server operating systems, you simply edit boot.ini (a hidden system file at c:\boot.ini) and add /3GB switch to the end of the line.

For example, here is a sample boot.ini with the switch added

```
[boot loader]

timeout=30

default=multi(0)disk(0)rdisk(0)partition(2)\WINDOWS

[operating systems]

multi(0)disk(0)rdisk(0)partition(2)\WINDOWS="Microsoft Windows XP
Professional" /noexecute=optin /fastdetect /3GB
```

You can also divide the space differently by using

```
/3GB [ /userva=SizeInMB ]
```

Where SizeInMB is between 0 and 1024.

In windows server 2008 and Vista, you have to set this up by starting a command prompt as admin and then typing

```
Bcdedit /set IncreaseUserVA=SizeInMB
```

Where SizeInMB is a number between 2048 and 3072

We hope that this recommended settings change will alleviate this crash for customers and make the product more useful and effective.

COMMENTS?

We value all feedback from our customers. Please contact us at support@accessdata.com, or send documentation issues to documentation@accessdata.com.