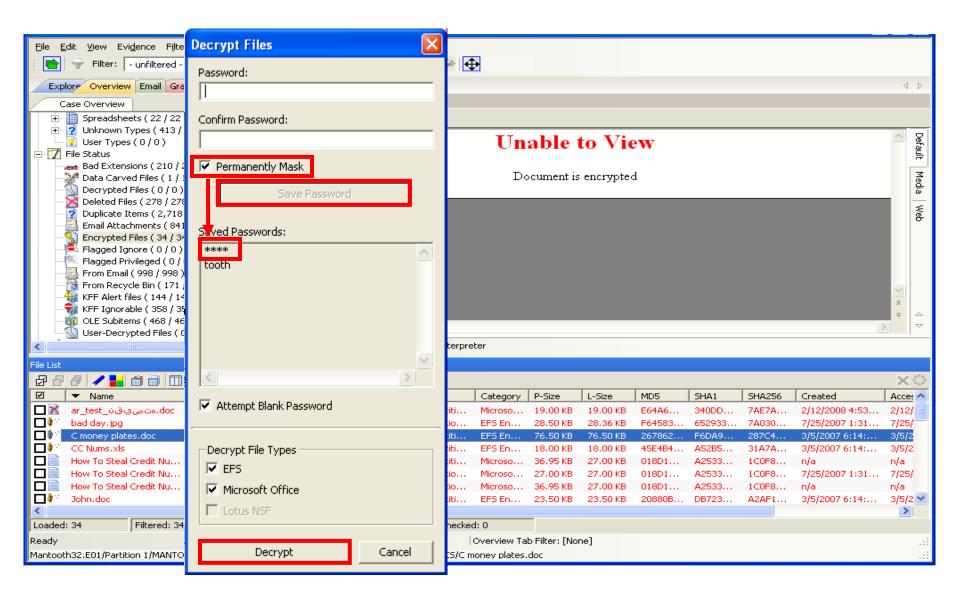


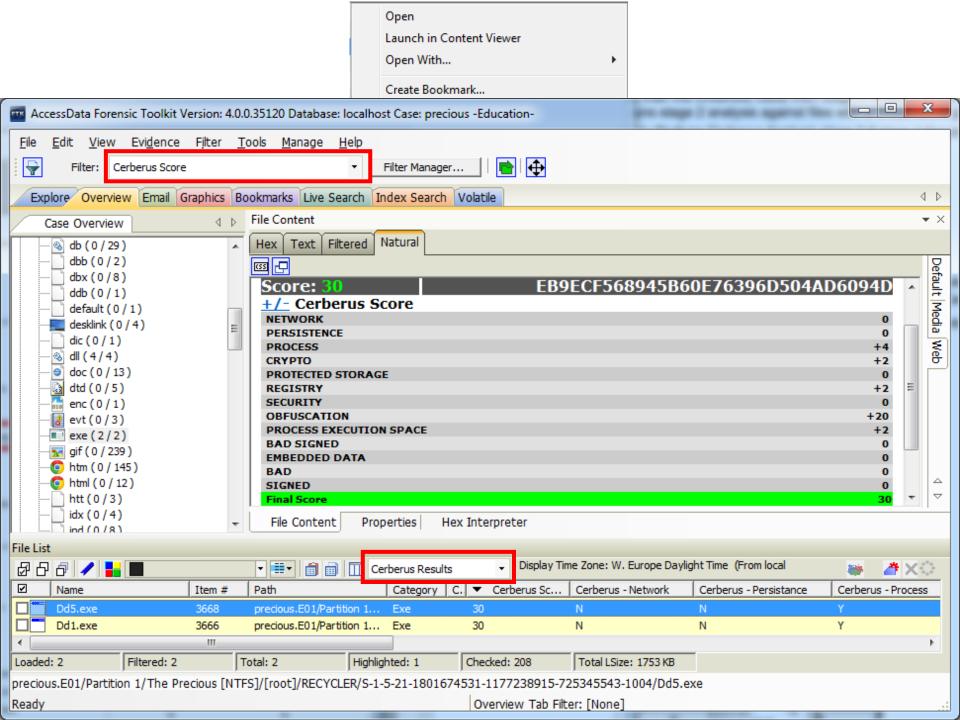


FTK 4/5

Additional Analysis
Elements of a Graphics case
Elements of a Email case

Decrypt Files



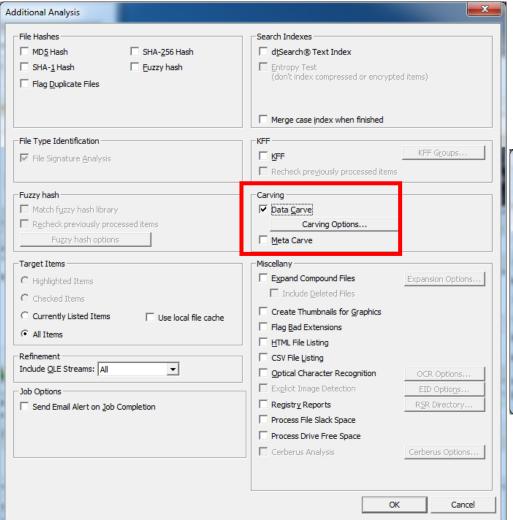


Cerberus Stage 1 Score

Attribute	Threat Score	Description
Network	+1	Imports networking functions.
Persistence	+4	Indicates signs of persistent behavior. For example, the ability to keep a binary running across computer restarts.
Process	+4	Imports functions to programmatically interact with processes. For example, reading or writing into a process's memory, or injecting code into another process.
Crypto	+2	Imports Microsoft Cryptographic Libraries. For example, the ability to encrypt and decrypt data.
Protected Storage	+5	Imports functions used to access protected storage. For example, Internet Explorer stores a database for form-filling in protected storage.
Registry	+2	Imports functions used to access or change values in the registry.
Security	+4	Imports functions used to modify user tokens. For example, attempting to clone a security token to impersonate another logged on user.
Obfuscation	+20	Contains a packer signature, contains sections of high entropy, or imports a low number of functions.
Process Execution Space	+2	Unusual activity in the Process Execution Space header. For example, a zero length raw section, unrealistic linker time, or the file size doesn't match the Process Execution Space header.
Bad Signed	+20	Contains a signature but the signature is bad.
Embedded Data	+5	Contains an embedded executable code.
Bad / Bit-Bad	l + 20	Contains an IRC or shellcode signature.
Signed / Bit Signed	-20	Contains a valid signature.

Additional Analysis

From the Case Examiner Interface menu > Evidence > Additional Analysis...



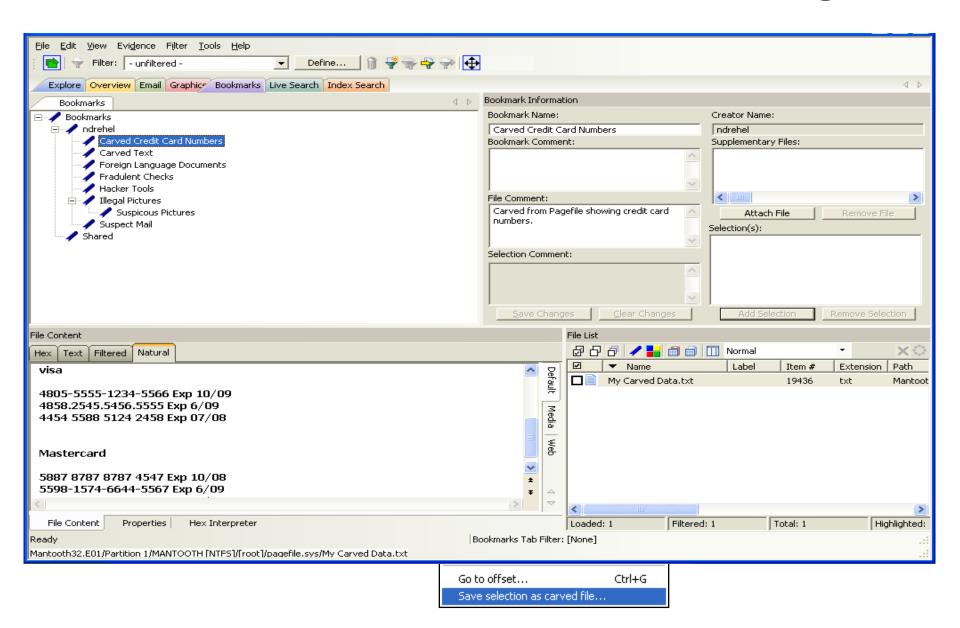
Meta Carve = Filesystem metadata

✓ AOL bag Files ✓ BMP Files	Exclude KFF Ignorable	
✓ EMF Files ✓ GIF Files ✓ HTML Files ✓ JPEG Files	Selected Carver Options Minimum File Size (bytes) Minimum Height (pixels)	0
✓ LNK Files ✓ OLE Files (MS Office) ✓ PDF Files ✓ PNG Files	Minimum Width (pixels)	0
Select All Clear All		

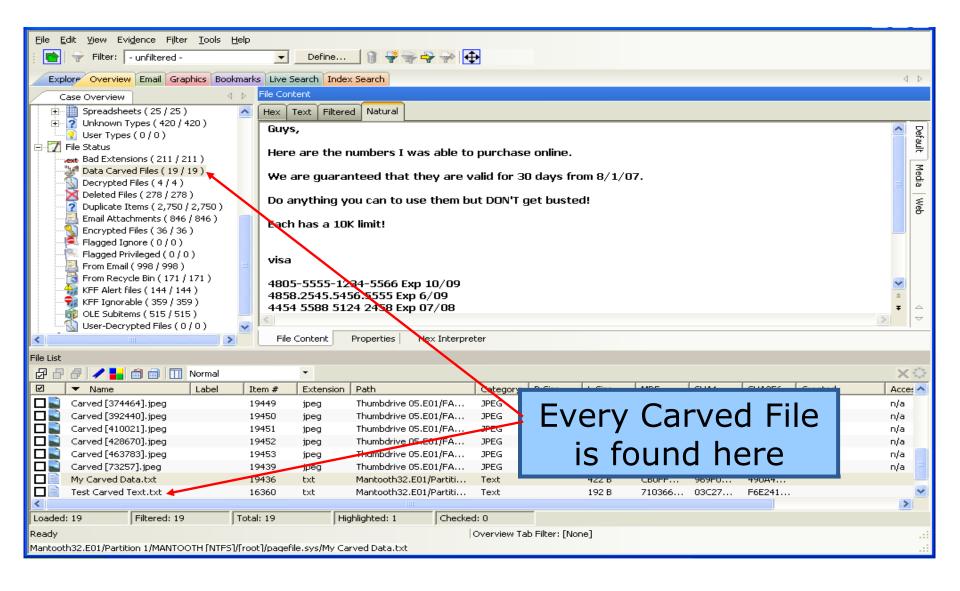
FTK – Data Carving

- Data Carving finds objects that are not referenced by a directory entry or MFT Record.
- You are adding records, not evidence!
- Carved items become independent items.
- Manually carved items are automatically indexed but not hashed.
- Added records are found in the Overview tab > File Status > Data Carved Files

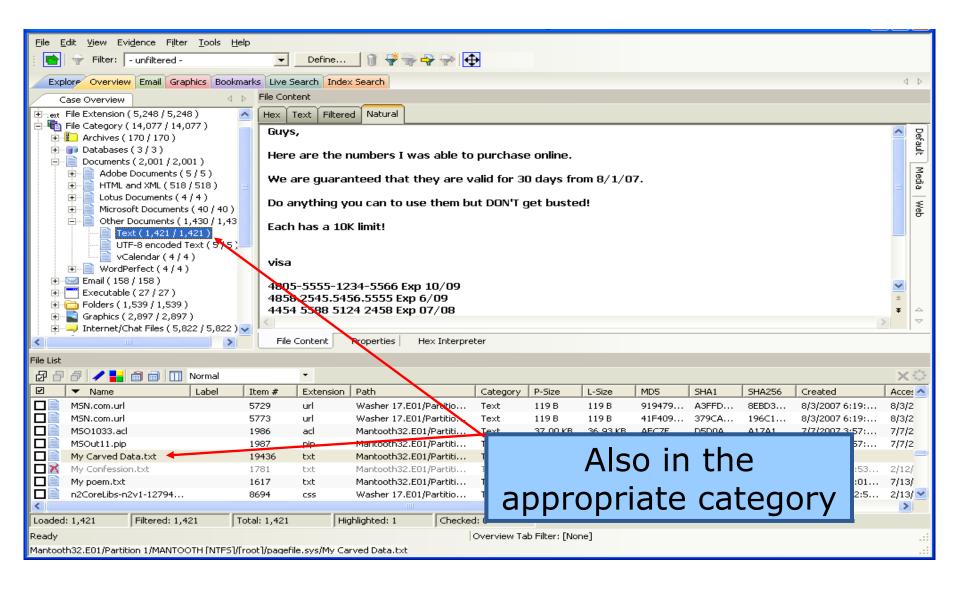
FTK – Manual Data Carving



FTK - Data Carving



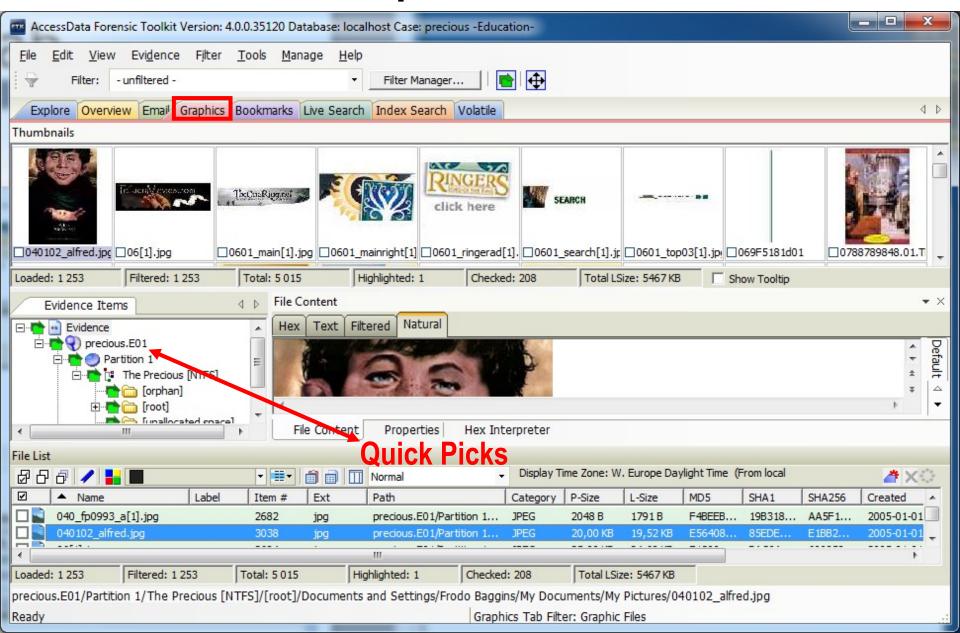
FTK – Data Carving



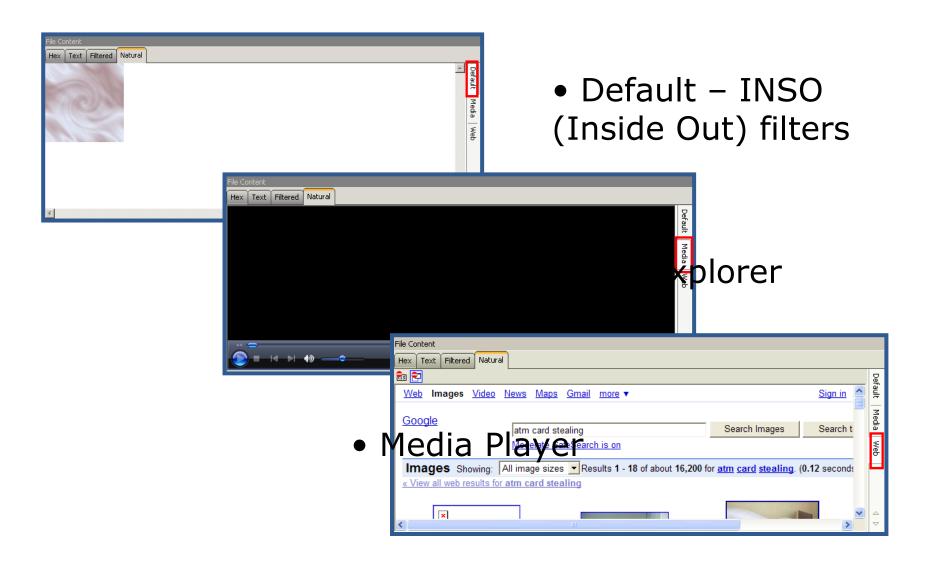
Elements of a Graphics Case

Doing This Might leave this **Registry Entries** Windows Login **Browser Cache** Browser Use **Browser History** Searching **Link Files** Viewing **Actual Item** Saving/Moving **Deleted Item** Downloading **Recycle Bin Entry** Deleting **Other Artifacts** Sharing

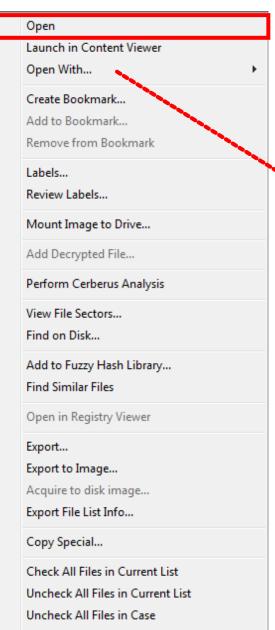
Graphics Tab



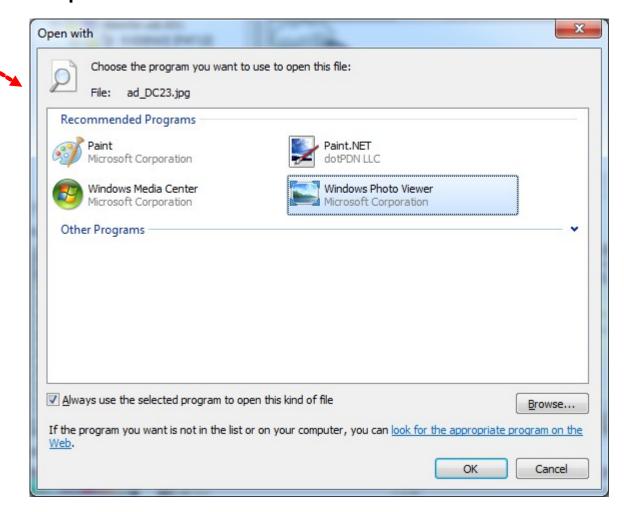
Viewer Options



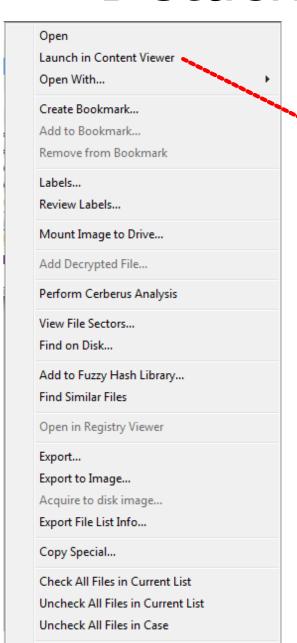
External Programs

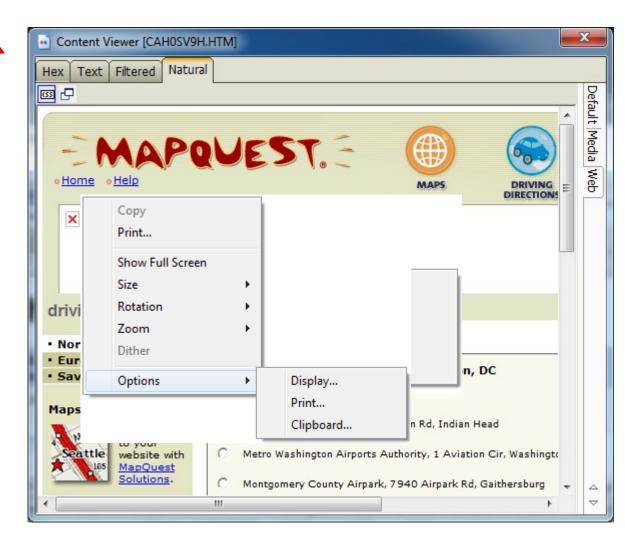


- Open or double-click directly opens the associated program
- Open With...



Detached Content Viewer

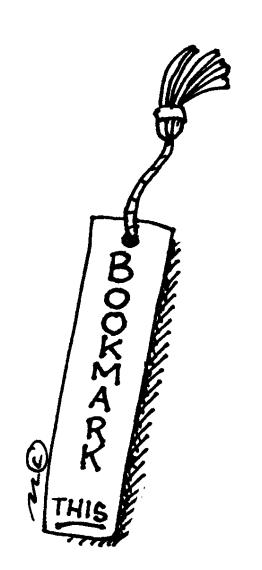




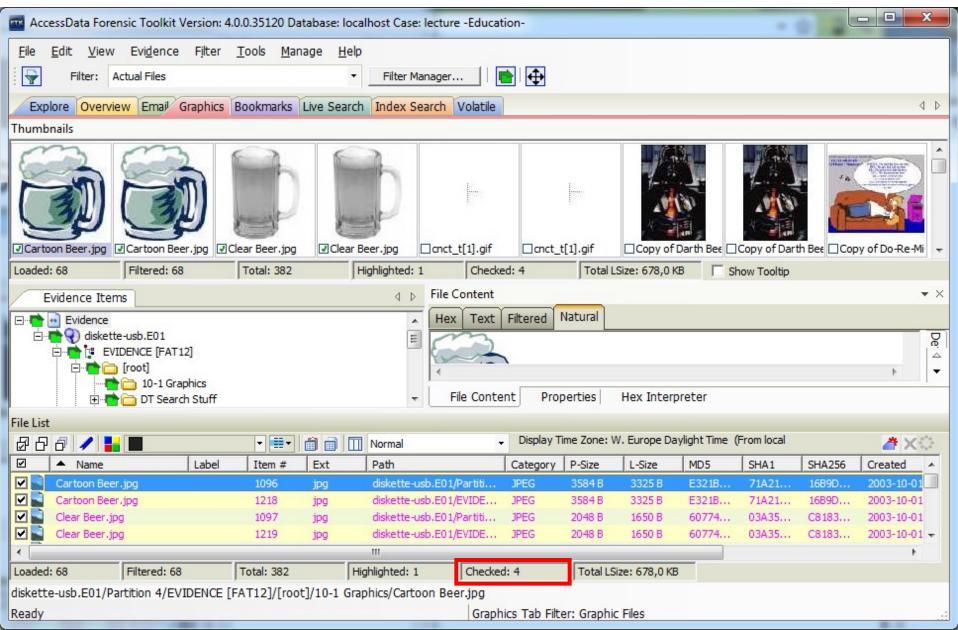
Marking Graphics

Two procedures:

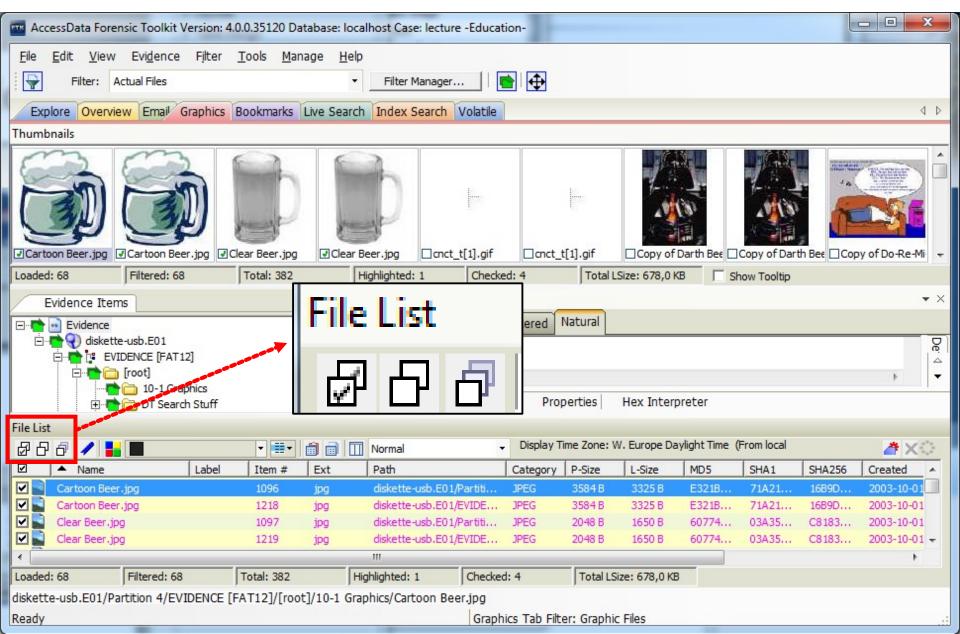
- Check an Image
- Create a Bookmark
 - Works as usual



Checking Graphics



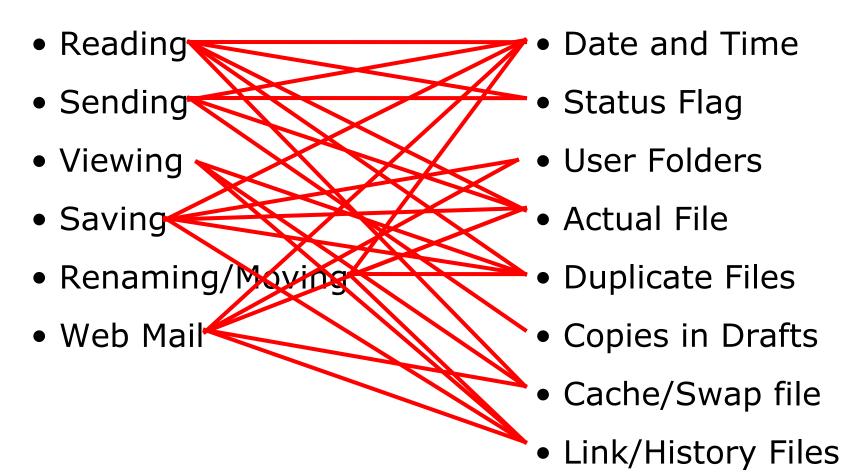
Change Checked Graphics



Elements of an Email Case

Doing This

Might leave this



Popular Applications

Application

Type of Email File

AOL® Personal Filing Cabinet (.PFC)

Outlook® .PST Files

Mozilla Thunderbird .mbox (plain text file)

Eudora Mail .mbx (effektivare variant av .mbox)

The Bat! .MSB, .TBB, TBN

Outlook Express .DBX like dBase?

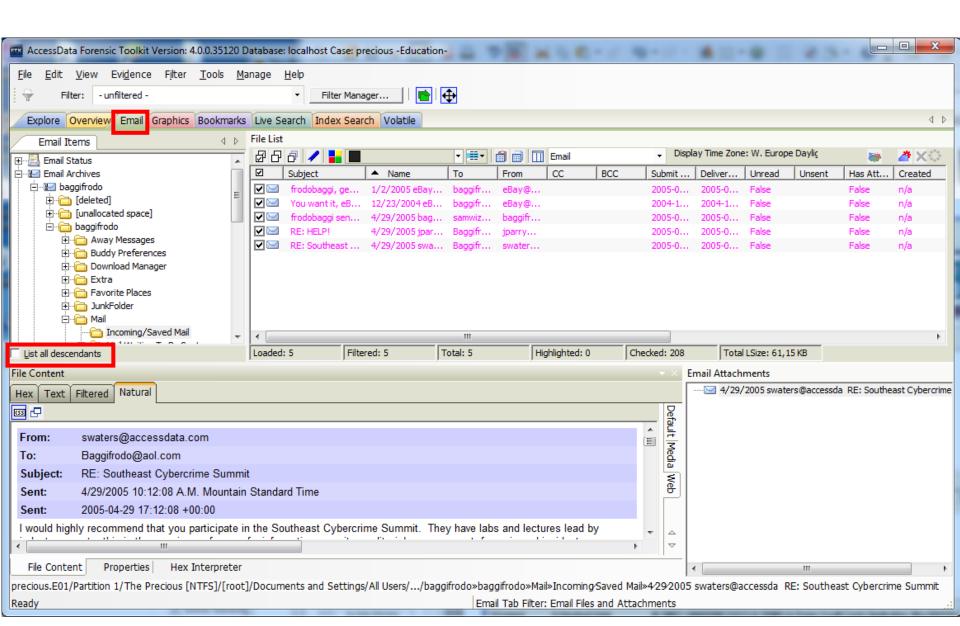
Lotus Notes .NSF

Windows (Vista/7) Mail plain text .EML (email)

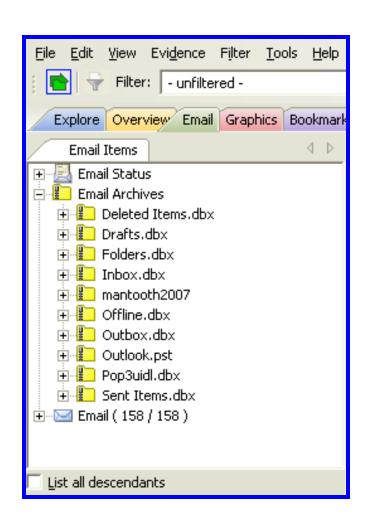
Other? Cached or POP'ed Messages

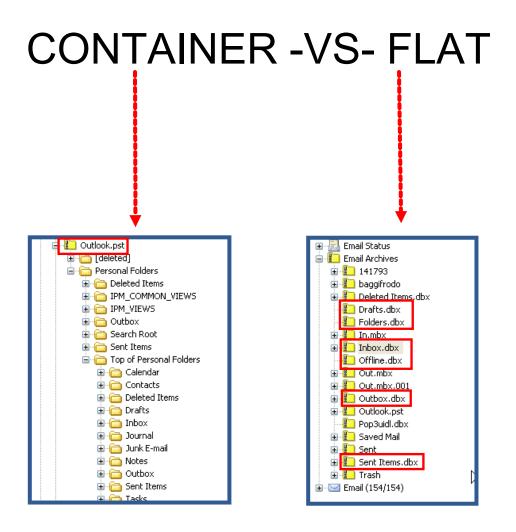
- What about Web mail?
- The path to where the email actually is stored varies a lot between different programs and OS versions

Email Tab



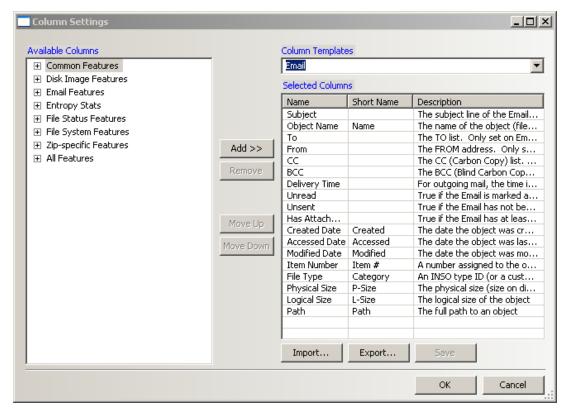
Email Container Formats



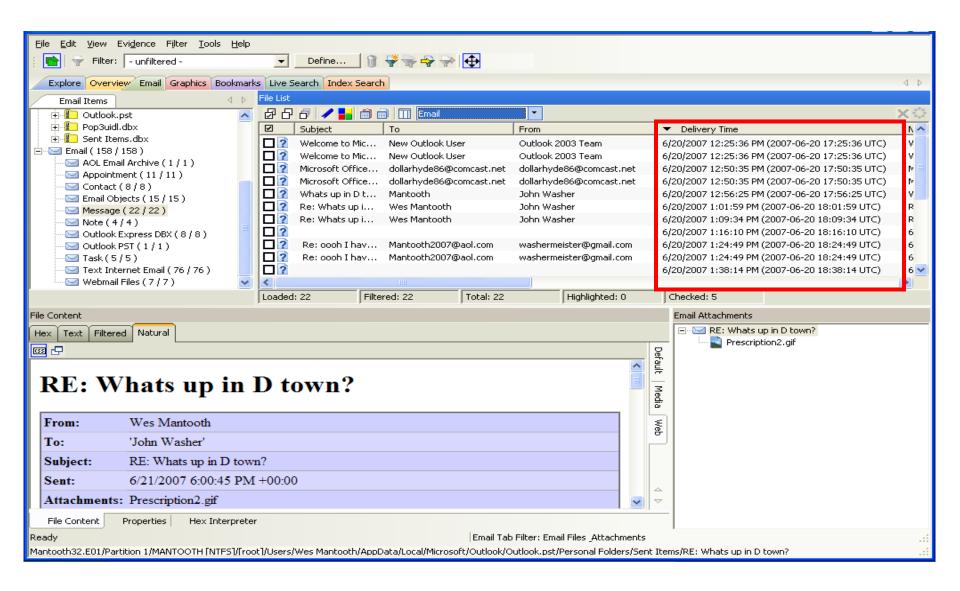


Sorting Emails

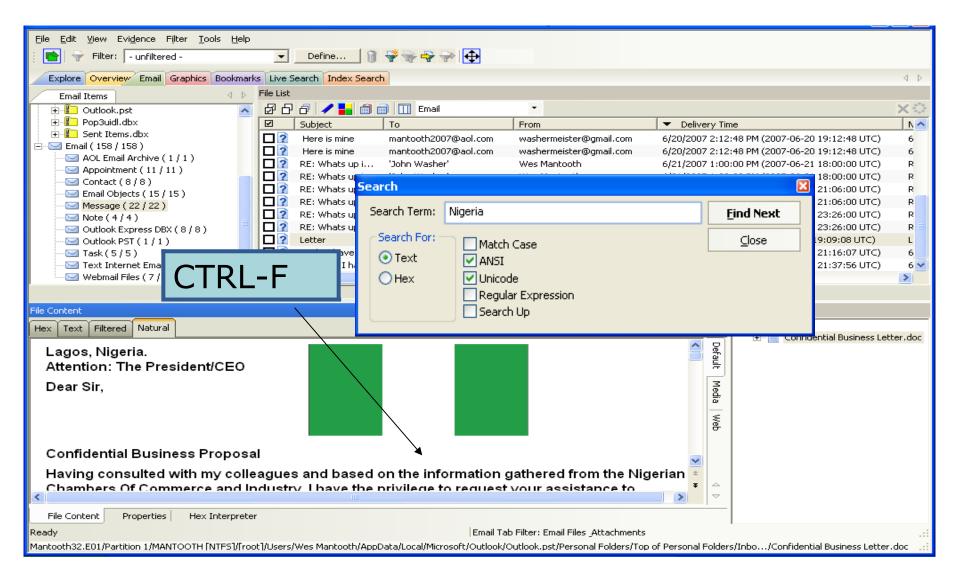
- Create Custom Column Settings
- Sort By Columns



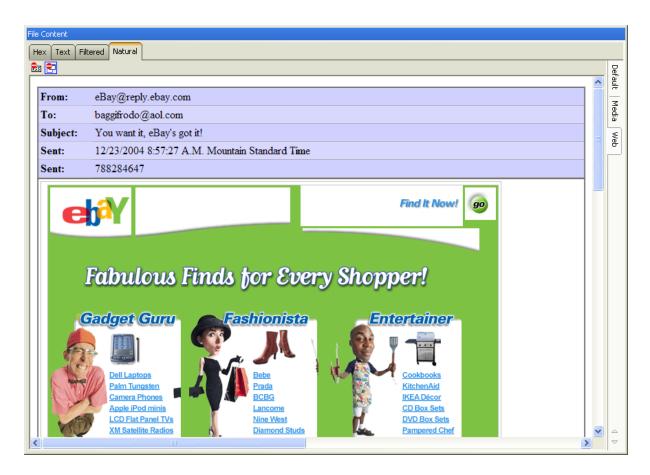
Sorting Emails



Finding Email Text



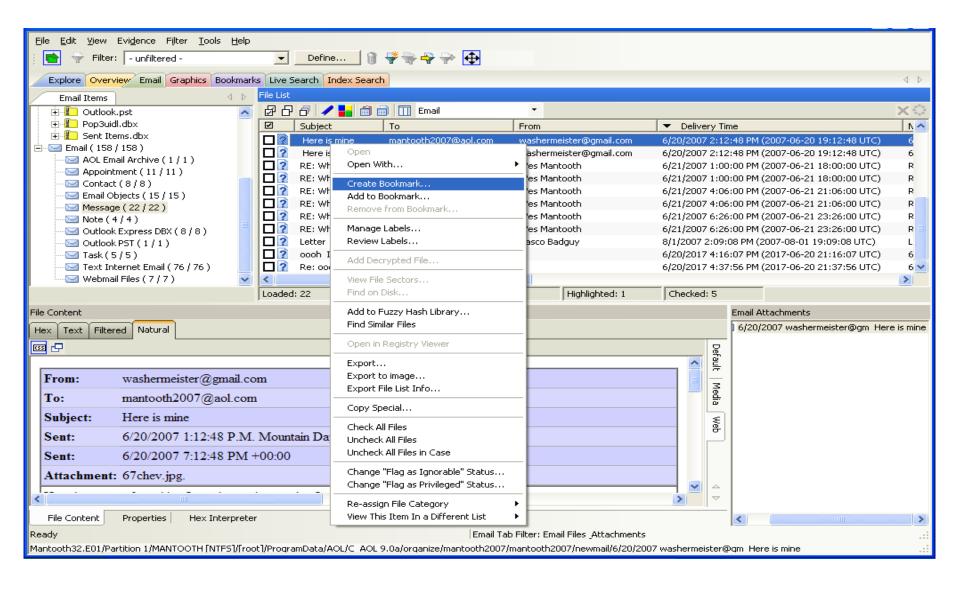
HTML Mail



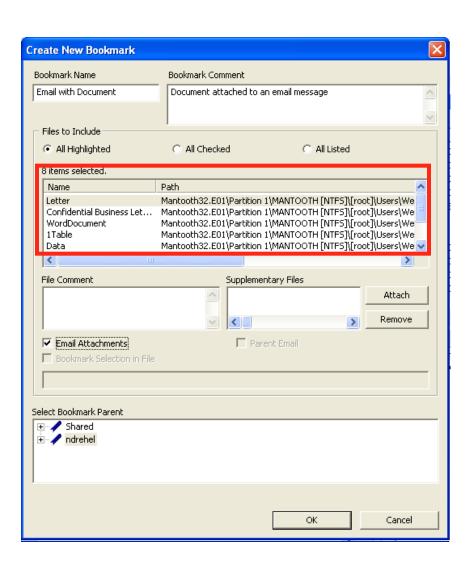
Mail containers may contain HTML mail.

Use caution when connected to the Internet!

Bookmarking Emails



Bookmarking Emails

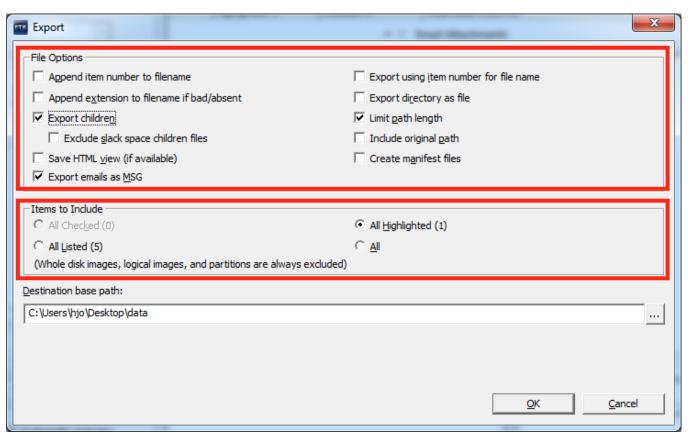


Options:

- Email Attachments
- Parent Email

Exporting Email Messages





Export email files into HTML or MSG format for broader compatibility (they look the way they should)