BitCurator

Tools for Digital Forensics Methods and Workflows in Real-World Collecting Institutions

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WHAT WE’RE DOING

Developing tools, methods, and approaches for collecting professionals that incorporate the functionality of modern digital forensics tools (focusing on open source)

Cultivating professional connections and community building around the methods and software

Generating and disseminating supporting documentation
There are already many cases of self-contained Linux-based packages that bundle many of the tools in order to support digital forensics activities. However, they are not very approachable to library/archives professionals in terms of interface and documentation.

Some ongoing fundamental needs:

- Incorporation into the workflow of archives/library ingest and collection management, e.g. metadata conventions, hooks into existing CMS environments.

- Provision of public access to the data. The typical digital forensics scenario is a criminal investigation in which the public never gets access to the evidence that was seized. By contrast, collecting institutions who are creating disk images face issues of how to provide access to the data. This includes access interface issues, but also how to redact or restrict access to components of the image, based on confidentiality, intellectual property or other sensitivities.
SAVING THE BITS – ALL OF THEM
Safe, accurate disk imaging and image processing metadata creation

Diagram:
- Source media
  - Forensic write-blocker
  - Host system
    - Imaging software (aimage)
      - Bulk processing scripts
        - BitCurator GUI
          - AFF packaged image(s)
DATA ANALYTICS AND REPORTING
Knowing what you have, finding sensitive info, identifying problem areas
FORENSIC AUGMENTATION OF EXISTING WORKFLOWS

Every workflow has weak spots and compromises. BitCurator will provide forensic software tools that can be deployed independently and as supporting microservices.
**WHO AND WHEN**

- Funded by Andrew W. Mellon Foundation - October 1, 2011 – September 30, 2013
- Partners: SILS and Maryland Institute for Technology in the Humanities (MITH)
- Core Team:
  - Cal Lee, PI
  - Matt Kirschenbaum, Co-PI
  - Kam Woods, Technical Led
  - Alex Chassonoff, Project Manager (UNC SILS)
  - Porter Olsen (MITH)

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<td>Jeremy Leighton John, British Library</td>
<td>Jerome McDonough, University of Illinois</td>
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<td>Leslie Johnston, Library of Congress</td>
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