BitCuratorEdu Learning Object

Installation of BitCurator VM and Introduction to Disk Imaging Assignment

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Description

This assignment introduces students to the BitCurator environment by asking them to download and install the virtual machine, create a disk image using Guymager, and analyze the contents of the disk image .INFO file. It is a hands-on activity that familiarizes students with resources like the BitCurator Quick Start Guide.

Learning object type

Lesson plan/materials

Learning objectives

This learning object might be used in a lesson to satisfy the following learning objectives:

- Test and evaluate tools for use in born-digital archiving workflows.
- Practice using tools in the BitCurator Environment.
- Identify the appropriate tools to: safely acquire born-digital materials from storage media and other modes of transfer; assist in the appraisal of

born-digital materials; scan for sensitive information in born-digital materials; and package born-digital materials for preservation and access.

Assignment

LIS 60633
Digital Curation

BitCurator Exercise #1

Installation of Software and Introduction to Disk Imaging

Due: March 8, 2020, by midnight

Learning Outcomes

• Successfully install and become familiar with the BitCurator environment

• Use the Guymager disk imaging application found in BitCurator to acquire the contents
of a storage device and its associated metadata

Instructions

For this assignment, the goal is to get started with BitCurator by doing the following:

1. Install BitCurator on your local machine (desktop or laptop) (this requires the use of
VirtualBox software together with a virtual machine containing BitCurator; 2. Launch
and become familiar with the BitCurator tool suite;
3. Acquire a disk image of some sample digital materials from a USB storage device using
    Guymager, a disk imaging tool that is part of BitCurator.

BitCurator Installation and Disk Imaging Tips

• **To help you with BitCurator installation and disk imaging, you should consult the
QuickStart guide**. On Blackboard, I've created two PDFs that extract pages from the
official guide (one for installation of BitCurator, and the other for mounting disks and
creating disk images). If you want, you can download the full version of the guide from
the following website: https://distro.ibiblio.org/bitcurator/docs/BitCurator
Quickstart.pdf.

• Please note that **you will be using the VM option, not the Live ISO option**, so you will
not need to create a bootable USB drive prior to installation (ignore any instructions
about this).

• Make sure to **set up a Shared Folder**, as per the instructions, so that you can save files to your local computer environment (outside of the VM).

• If, at any time, you are asked for an **administrator password**, use the following: **bcadmin**

Getting Around in BitCurator

• To become familiar with BitCurator, you'll first want to view the video introducing the BitCurator environment (link in this week's module) as well as reading through this week's related readings and resources.

• Give yourself a bit of time to poke around in all the folders, to see what's in each one and where the various applications are located prior to starting with the disk imaging part of the exercise.

• Write blocking: Note that we will be using the built-in software write-blocker in BitCurator so that we don't accidentally make changes to the files that you're making a disk image of. In a production environment (not the testing environment that we are creating), it is preferred to use a hardware write blocker (see here for more details on forensic disk controllers, a.k.a., write blockers: https://en.wikipedia.org/wiki/Forensic_disk_controller).

Deliverables and Scoring

This assignment is primarily about installing and orienting yourself to BitCurator, so the deliverables should be easy to generate:

1. To show that you have successfully completed the installation of BitCurator and set it up properly, **provide a screenshot of the BitCurator virtual machine running in VirtualBox on your computer that includes a folder on the desktop called SampleData and shows that the icon for the USB drive is set to READ-ONLY.** Instructions for how to complete these tasks are available in the BitCurator-QuickStart-CreatingDiskImages PDF on Blackboard. You do not need to launch any applications prior to creating the screenshot. Attach the image when you submit this assignment (5 points).

2. **Create a disk image of a USB storage device (such as a thumb drive). using the Guymager software found in the Imaging and Recovery folder** (see Quick Start guide for instructions on how to do this) and upload it to Blackboard. It is strongly recommended that you choose something with limited storage capacity like a thumb drive or memory card. Make sure that you have your USB mount policy set to READ ONLY and have the split size setting large enough to make a single disk image. **To**
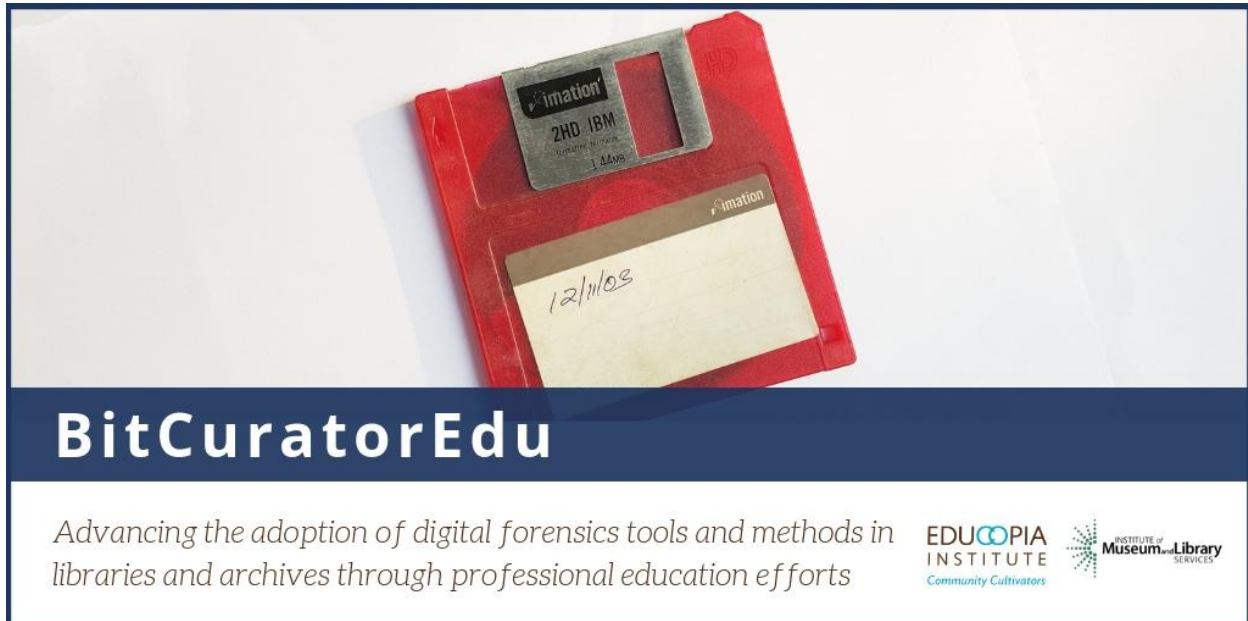
> **complete this part of the assignment, you should attach 2 files after disk imaging: the .E01 image file and the .INFO file** (3 points).

3. Open the .INFO file and scan through its contents. **Answer the following questions and paste your answers into the text box when submitting this assignment** (2 points). a. What sorts of information does the .INFO file contain?

> b. Which information might be useful to retain as part of the acquisition process?

<u>Help with BitCurator</u>

For those who are having difficulties with installation, setup, or disk imaging, please contact me directly at **[contact information]**. Do not contact the KSU Help Desk, as they have no knowledge of BitCurator. You can also post to the BitCurator question board, but you are likely to get a quicker response from me through email. I can also schedule a Zoom session for students if they need more hands-on assistance beyond what can be done via email.

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The BitCuratorEdu project is a three-year effort funded by the Institute of Museum and Library Services (IMLS) to study and advance the adoption of digital forensics tools and methods in libraries and archives through professional education efforts. This project is a partnership between Educopia Institute and the School of Information and Library Science at the University of North Carolina at Chapel Hill, along with the Council of State Archivists (CoSA) and several Masters-level programs in library and information science.