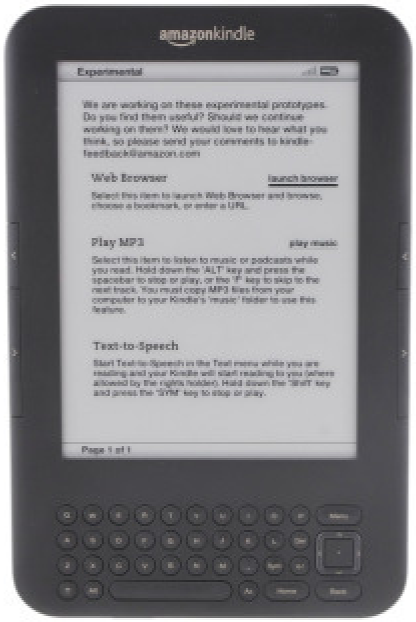
Megan Percy, a senior in the Computer and Digital Forensics program at Champlain College used the resources of the LCDI to conduct research with kindle forensics.



We are working on these experimental prototypes. Do you find them useful? Should we continue working on them? We would love to hear what you think, so please send your comments to kindle-feedback@amazon.com

Select this item to launch Web Browser and browse, choose a bookmark, or enter a URL.

Select this item to listen to music or podcasts while you read. Hold down the 'ALT' key and press the spacebar to stop or play, or the 'F' key to skip to the next track. You must copy MP3 files from your computer to your Kindle's 'music' folder to use this feature.

Start Text-to-Speech in the Text menu while you are reading and your Kindle will start reading to you (where allowed by the rights holder). Hold down the 'Shift' key and press the 'SYM' key to stop or play.

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Jon presented me with the Kindle project a couple weeks after I started working for LCDI in May. His initial thoughts were mostly out of curiosity, and we weren't really sure how far I'd be able to go with it. I began by simply doing my research. I read the paper that was in many ways the inspiration for the project, a capstone report by a student that had just graduated. I then began reading forums about hacking Kindles and navigating the file system. After days of research and investigation, I started working with our Kindle. I applied a jailbreak to the Kindle that allowed for further configurations to be made. This allowed me to then configure it for network access as a USB ethernet gadget. Once it was configured as an ethernet gadget, I was able to assign it an IP address so the computer would regard it as such. While it was plugged in via USB, I was able to use SSH to access the file system of the device as the root user. As such, I was also able to use the DD command to acquire the logical partitions of the Kindle from the file system to the local system. After using DD to acquire these partitions and move them to the local machine, I opened them up in EnCase to verify their authenticity. Once I had successfully verified that DD was behaving properly and the files were indeed the logical partitions, we began brainstorming ways to make this knowledge and skill useful to others. The Kindle operating system is a version of Linux, so we knew that this could make it difficult to simply write a tutorial for. So instead, we decided to automate the process. In order to do so, I wrote a script that would configure, access, and acquire the Kindle with minimal user-input. This script starts by asking the user what type and version of the Kindle it is. based on the user's answer, the script will configure the Kindle correctly. It also configured the network information, so the user does not have to do anything in order to access the Kindle via SSH. The script then asks the user where they want the DD files saved, and which partitions they wish to acquire. From their answers, the scripts acquires the desired partitions using DD then saves them to the desired folder. In short, all the user has to do is specify who (the version), what (which partitions, and where (destination to save to).