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Social DRM for Accessibility

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Bookshare

Benetech's largest social enterprise is the [Bookshare](#) online library for people with print disabilities. Our commitment is to provide access to books for those who are unable to read a traditional print format and to do so without harming the economic interests of authors and publishers. (Please see Jim Fruchterman's 9/21/12 article, ["Upholding the Social Bargain: Bookshare and Copyright Compliance"](#))

The Problem with Traditional DRM

We find that traditional "strong" Digital Rights Management (DRM) restrictions are an impediment to the commercial distribution of accessible eBooks. Traditional DRM mechanisms can't tell the difference between access for the purpose of making an illegal copy and access for the purpose of sending the text to a braille notetaker/display or a voice synthesizer program that will read the text aloud. As a result, strong DRM has the unintended effect of preventing people with disabilities from reading the text that they are entitled to. We are therefore a proponent of "social" DRM schemes which allow interoperability with assistive technology (AT) devices and software.

Social DRM

We satisfy DRM requirements by employing a [Seven-Point Digital Rights Management Plan](#). This includes such techniques as:

- Watermarking – marking an ebook as being from our Bookshare library.
- Fingerprinting – embedding the user's name in plaintext in the downloaded ebook file and hiding the user ID information invisibly inside the main body of the book.
- Encryption – delivery through secure/encrypted channels.
- Monitoring – a security program monitors all transactions and automatically limits any user whose account downloads more than a fixed number of titles in a given month (typically 100 titles). In addition, Bookshare regularly searches the web for illegal copies of content originating from Bookshare user downloads and suspends the account of users found to have been the source of such content, as well as issuing take-down notices to the websites hosting such content.

We also make it clear to users in the agreements they sign when they join Bookshare that access to these books is a privilege and that bad behavior could imperil this access in the future. With 1.3 million downloads of ebooks per year using the social DRM scheme (fingerprinting only, no digital locks), we see about 10 instances of unauthorized copies available on the web, and almost all of those still have the name of our user in plain text in the file. On investigation, we find that most of these cases have to do with users who have inadvertently violated our terms by not understanding the technology. However, in a few cases, we have terminated access rights because there was evidence of clear intent to violate our commitment to restrict access to people with bona fide print disabilities.