# The digital divide
## hurts hacking & libraries

## What to do?

Next HOPE 16jun10

I mostly work with libraries and schools. I describe my job as "teaching email to old people." I really like it. This is my town library. When I work there, filling in sometimes, they pay me $8/hour. Good thing I have an internet job [running MetaFilter] so I can pay my heating bill. I agitate a lot about the digital divide.

# google: "jailbreak iphone"

| Device | First available | First Jailbreak released | Latest firmware version | Latest Jailbreakable firmware version (released) |
|---|---|---|---|---|
| iPhone 2G (Original iPhone) | June 29, 2007 | July 10, 2007[11] | 3.1.3 | 3.1.3[note 1] |
| iPod Touch 1G | September 5, 2007 | October 10, 2007 | 3.1.3 | 3.1.3[note 2] |
| iPhone 3G | July 11, 2008 | July 20, 2008[12] | 4.0 | 4.0 |
| iPod Touch 2G (2nd Generation) (non-MC model) | September 9, 2008 | March 11, 2009[13] | 4.0 | 4.0 |
| iPhone 3GS (Old Bootrom iBoot-359.3) | June 19, 2009 | July 3, 2009[14] | 4.0 | 4.0 [15][16][17] [note 3] |
| iPod Touch 2G (2nd Generation) (8GB MC model) | September 9, 2009 | November 2, 2009[18] | 4.0 | 4.0 [19] [note 4] |
| iPhone 3GS (New Bootrom iBoot-359.3.2) | October 4, 2009 | November 4, 2009 | 4.0 | 4.0 [19] [note 5] |
| iPod Touch 3G (3rd Generation) | September 9, 2009 | October 11, 2009[18] | 4.0 | 4.0 [19] [note 6] |
| iPad (Wi-Fi model) | April 3, 2010 | April 4, 2010 | 3.2 | 3.2 |
| iPad (3G model) | April 30, 2010 | May 2, 2010 | 3.2 | 3.2 |
| iPhone 4 | June 24, 2010 | N/A | 4.0 | N/A [20][21] [note 7] |

Now I am not any sort of hacker, I don't code, but I know enough to google "jailbreak iphone" and follow instructions. Most importantly, I'm not afraid of doing this. How much worse could it be than having a device I can't customize? I think fear of tinkering for many people is fear of sunk costs, that it's all about money, and control. Sort of like the digital divide.
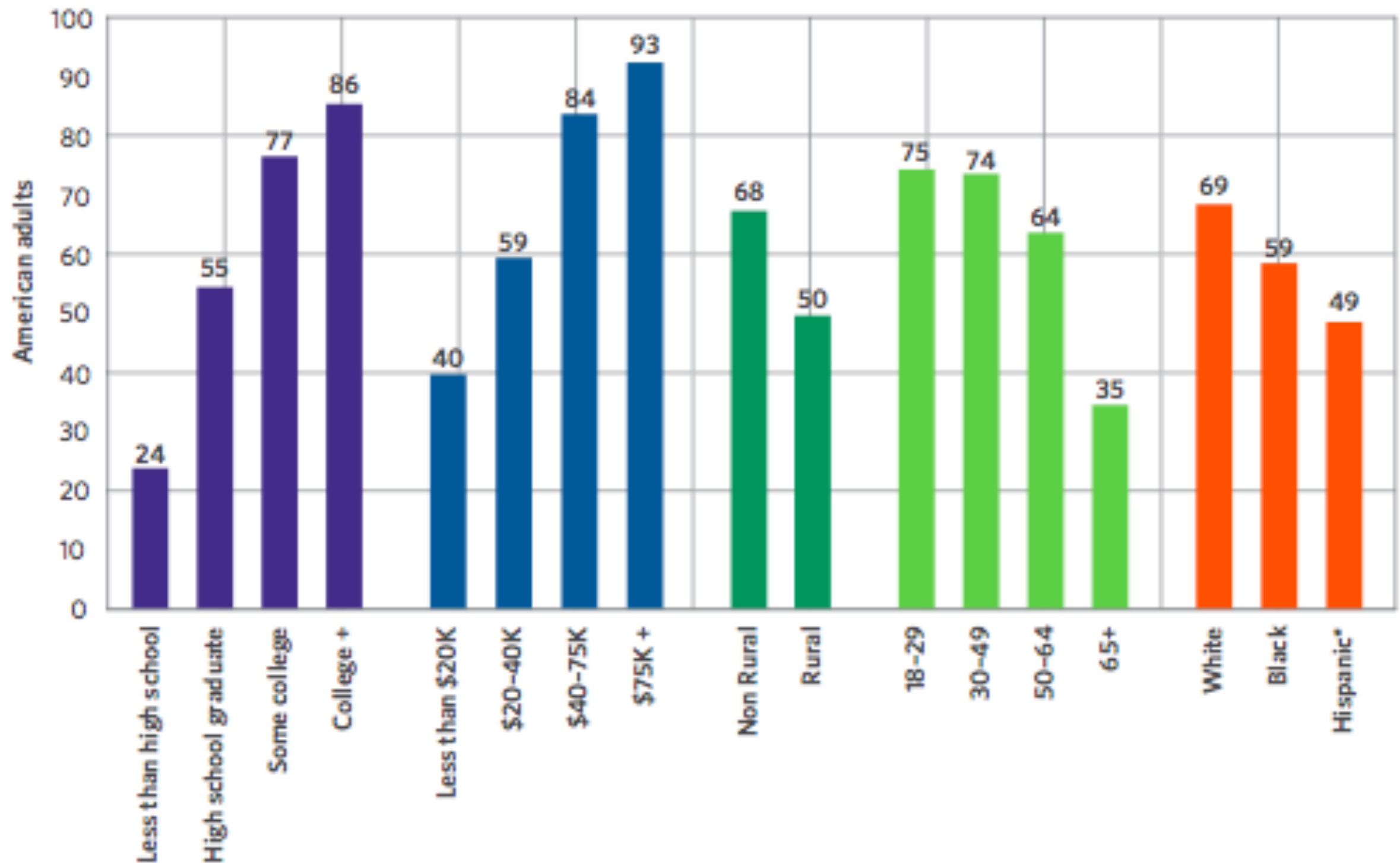
you could date me

If I could
only
get online....

I gave a talk at SXSW about the digital divide. Each time I talk about it I try to make it real to the people I'm talking to. This is hamfisted, but you get the idea. Where I live many people don't have broadband options that aren't spendy satellite because it doesn't make business sense to provide it. OK. More money issues.
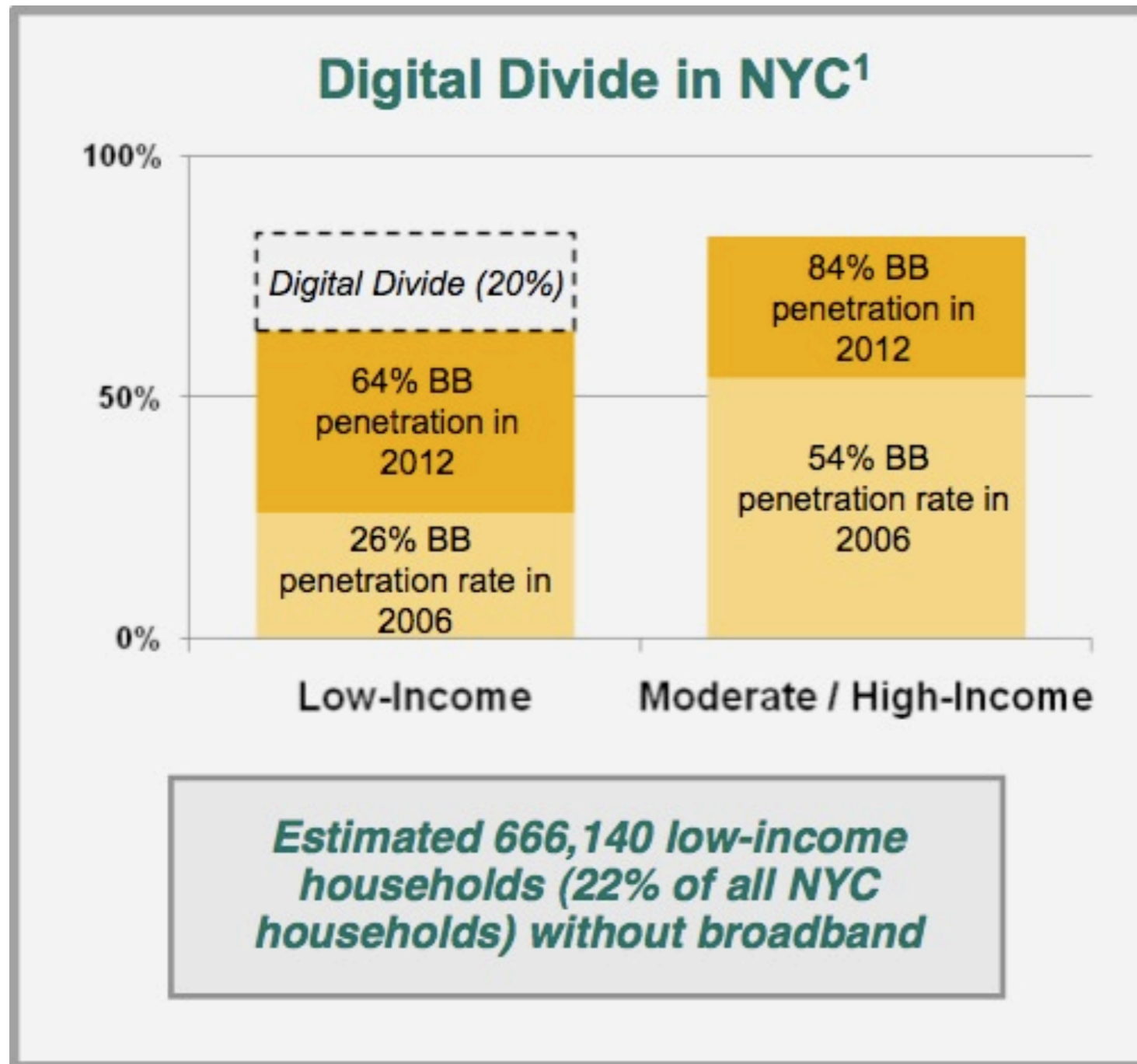
# who has broadband?



American adults (%) by category:

| Category | % |
| --- | --- |
| Less than high school | 24 |
| High school graduate | 55 |
| Some college | 77 |
| College + | 86 |
| Less than $20K | 40 |
| $20–40K | 59 |
| $40–75K | 84 |
| $75K + | 93 |
| Non Rural | 68 |
| Rural | 50 |
| 18–29 | 75 |
| 30–49 | 74 |
| 50–64 | 64 |
| 65+ | 35 |
| White | 69 |
| Black | 59 |
| Hispanic* | 49 |

*Hispanics includes both English and Spanish-speaking Hispanics

FCC Stats: 35% of US adults have no broadband at home... 22% do not use the internet at all. People think this is all "old people who will die off" which is really not true. It's more low income, immigrant/non-English speakers and people with disabilities. In rural areas it's true, people will age out and be replaced with people who get computers. But they still don't have cell phone service or broadband access. And we're learning that broadband access is more important than having a computer as far as really "getting" technology. Familiarity is necessary to exploration. Urban areas...

# urban digital divide



Digital Divide in NYC[1]

Low-Income: Digital Divide (20%), 64% BB penetration in 2012, 26% BB penetration rate in 2006

Moderate / High-Income: 84% BB penetration in 2012, 54% BB penetration rate in 2006

Estimated 666,140 low-income households (22% of all NYC households) without broadband

In urban areas you get churn, people with concentrated poverty, residential segregation, low functional literacy, limited English proficiency, not a lot of social networks, low employment [so no access to computers]. People leave poverty pockets and re replaced by more poor people. 25% of New York City Housing Authority (NYCHA) households had broadband and this drops to five percent of NYCHA residents over 65 years of age. Five! They have electricity.... right? Cell phones? Why don't they have broadband?

Back to libraries. seventy-one percent of libraries in the US report that they are the only source of free access to computers and the internet in their communities. This is Washington VT population 1047. I got briefly famous on the internet when I made a video about installing ubuntu on the library's donated computers. And then... [funding cut, librarian divorced, basement flooded]. What you might not know about libraries...

## Resource

Status: Borrowed
Last Activity: 1994/12/27

Prefix: BU

Accession No: 1

Type: Non-fiction

Dewey: NF 001 Nus

Subjects:
Animals
Cats

ISBN: ISBN

Illustrated: ☑

Author: Nussbaum, Hedda

Title: Charlie Brown's book of questions & answers

Description: This is the story of a young lad who has all the answers to all of the questions most often asked by school age children. The answers

Series: Charlie Brown

Copyright: 1976

Publisher: Publisher

Cost: 24.95

Location: Location

Purchased:

Pages: 235    Bibliography – Pages: 232 to 234

Patron Id: 43    Andrea Lippert

Date: 1993/10/26

**Buttons:** Add | Delete | Save | Borrow | Return | Status

**Bottom buttons:** Find | First | Prior | Next | Last | Exit

We buy the worst software in the world. Other than payroll and benefits one of our largest expenses is licensing fees for bad software and terrible interfaces to proprietary content. This is currently available software. Looks like it was built for Windows 3.1. Whole industries have sprung up offering somethign called "the discovery layer" which is basically "we'll put a nice front end on your crappy software"

**STEP 1**

FIND A BOOK YOU'RE INTERESTED IN

Edition: Unabridged
by George Crile
   Christopher Lane

Publisher:        Black
Subject(s):       Histo
                  Nonf
Language(s):      Engli
Awards:           Audi
                  Audio

Share
Email a friend

**STEP 2**

ADD BOOK TO YOUR CART

Fa

s W
Sto
y

Add to SelectList
Add to Wish List

IA format)

**STEP 3**
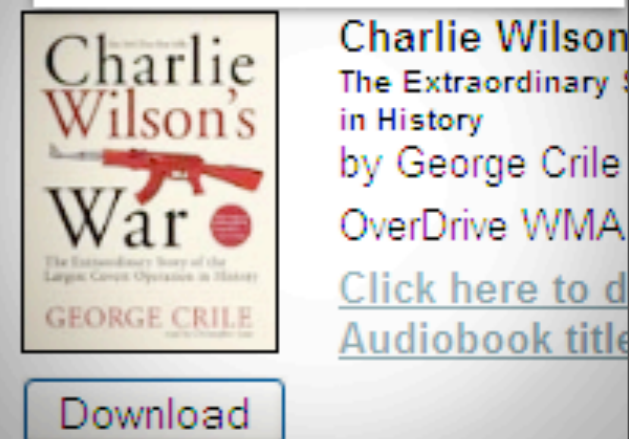
LOGIN AND CHECK OUT YOUR BOOK

Card Number in the space provided be

umber:

Login

id CLEVNET library card. Click here

**STEP 4**

GET A DOWNLOAD LINK

Charlie Wilson
The Extraordinary S
in History
by George Crile
OverDrive WMA
Click here to d
Audiobook title

Download

**STEP 5**

BOOT UP WINDOWS

Windows XP
Stopped

**Configuration**
Memory 260 MB
Floppy Disk
Hard Disk 1

**STEP 6**
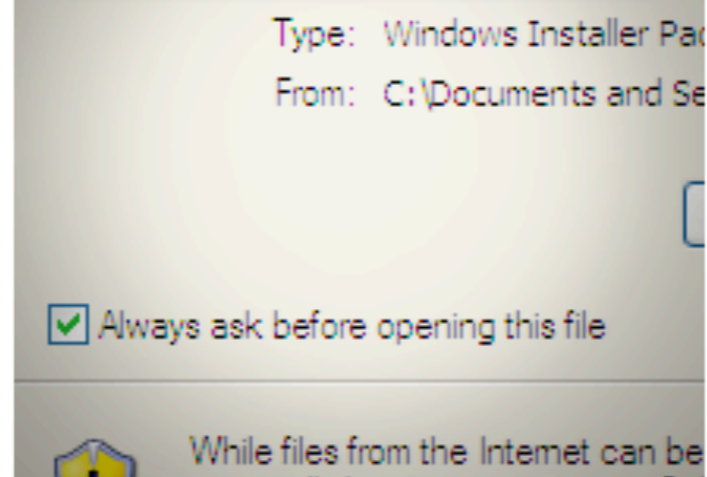
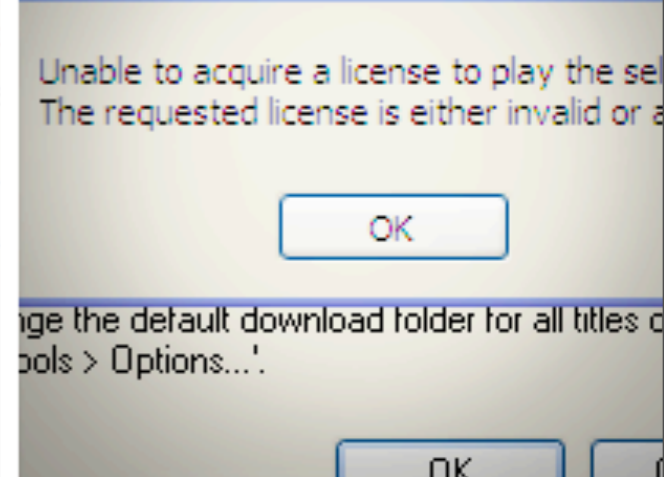DOWNLOAD PROPRIETARY SOFTWARE

OverDrive
Media Console

**STEP 7**

INSTALL SOFTWARE

etu

Type:    Windows Installer Pac
From:    C:\Documents and Se

☑ Always ask before opening this file

While files from the Internet can be

**STEP 8**

GET CRYPTIC ERROR

Unable to acquire a license to play the se
The requested license is either invalid or a

OK

nge the default download folder for all titles
ools > Options...'.

OK

**STEP 9**

GOOGLE YOUR PROBLEM

arch

Res

p to When I attempt to transfer an OverDrive WMA Audiobook to an Apple ... This emer
ates that the .... In OverDrive Media Console v3.2 ...
bridged.lib.everdrive.com/.../Help-Tech-Format25.htm - Cached - Similar - b

Slide 1 - OverDrive - Global distributor of digital eBooks ...
Format: Microsoft Powerpoint
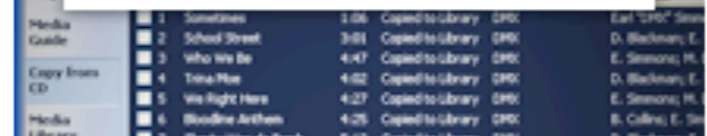
**STEP 10**

LEARN THAT YOU NEED AN UPDATED SECURITY CERTIFICATE

**STEP 11**

OPEN WINDOWS MEDIA PLAYER

Now
Playe

Media
Guide

Copy from
CD

Media
Libra

1  Sometimes
2  School Street
3  Who We Be
4  Trina Mae
5  We Right Here
6  Bloodine Anthem

**STEP 12**

DOWNLOAD NEW SECURITY CERTIFICATE

Sec

⚠ The security certificate was issued by a c
not chosen to trust. View the certificate to
you want to trust the certifying authority.

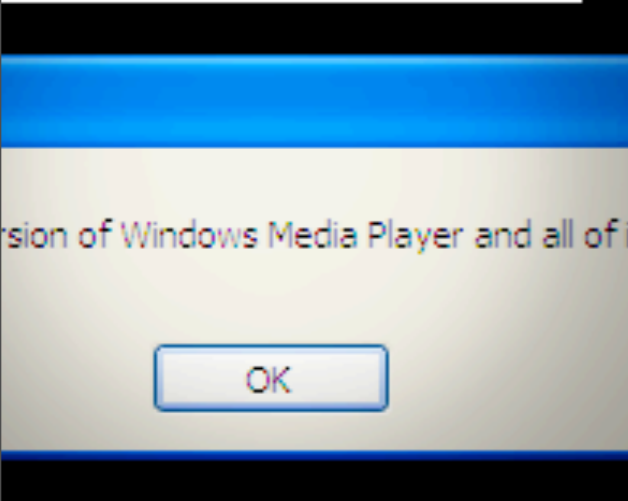I don't know if you've tried downloadable audiobooks lately, but Overdrive is the worst product in the world. It makes people hate content. And part of this is DRM. But part of it is that the people who are buying digital products, with public money, don't even know what good design, or awesome looking DRM software even looks like. And they're making big decisions about ebooks and  million dollar software contracts with people who tell them that THIS is the future of ebooks. And their patrons don't know any better or they're getting all their free content on bittorent anyhow. The trick is to have the people with the good ideas, somehow stick around to create and implement them.
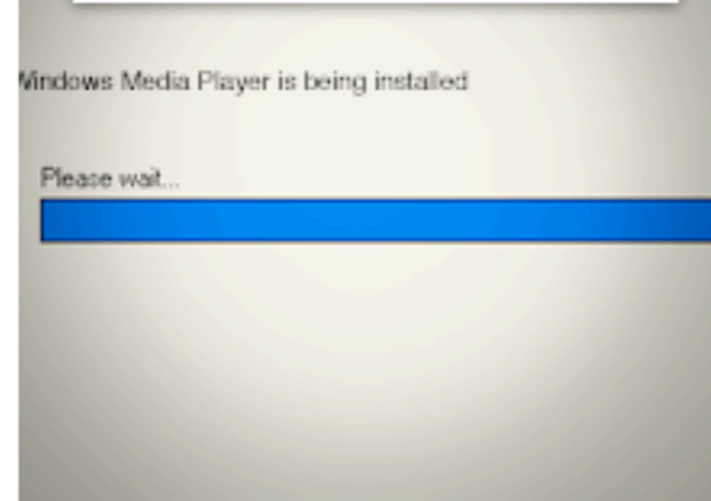
**STEP 13**
LEARN THAT YOU NEED TO UPDATE WINDOWS MEDIA PLAYER
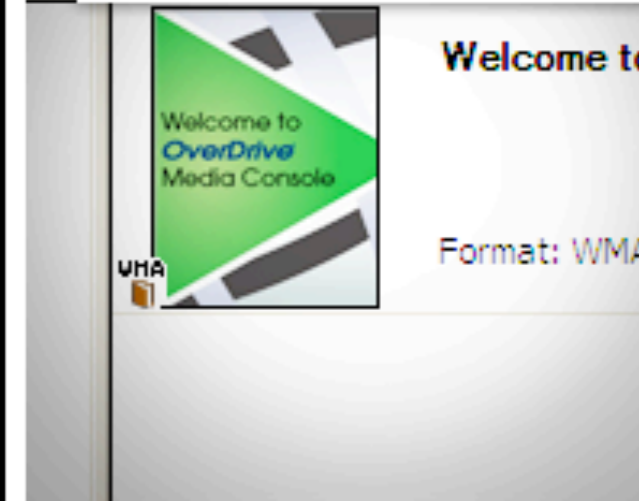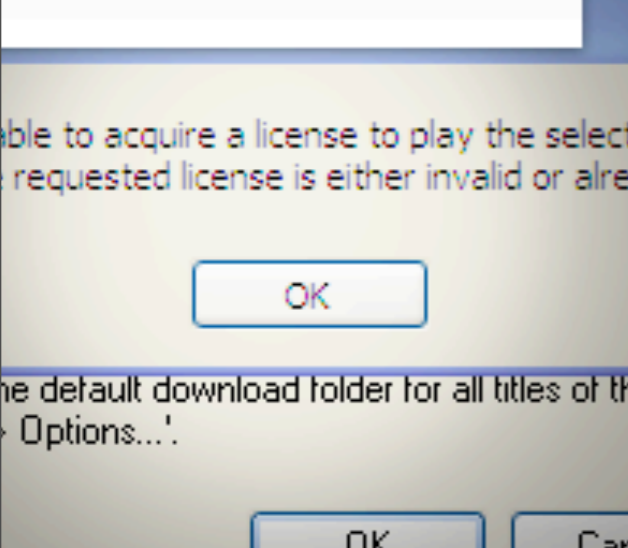
**STEP 14**
INSTALL UPDATE

**STEP 15**
REBOOT WINDOWS

**STEP 16**
START UP OVERDRIVE MEDIA PLAYER

**STEP 17**
GET ANOTHER CRYPTIC ERROR MESSAGE
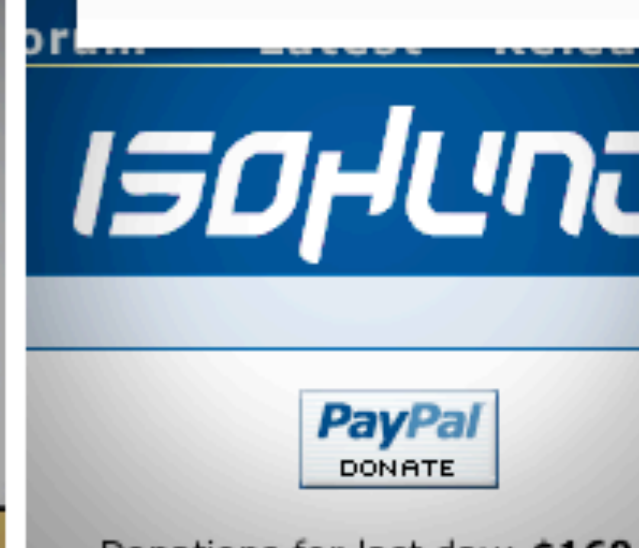
**STEP 18**
INSERT PROFANITY

**STEP 19**
GIVE UP ON STUPID LIBRARY
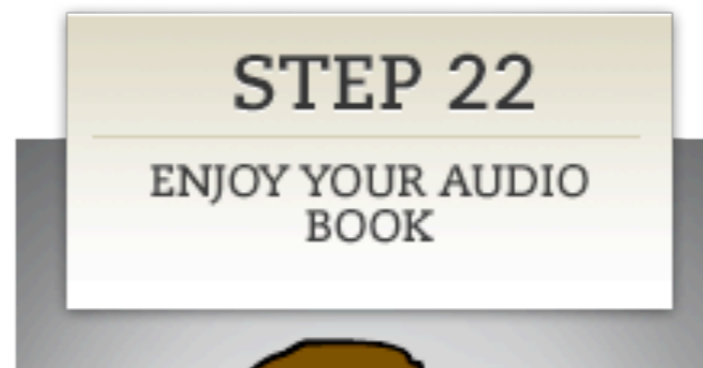
**STEP 20**
OPEN BIT TORRENT SITE

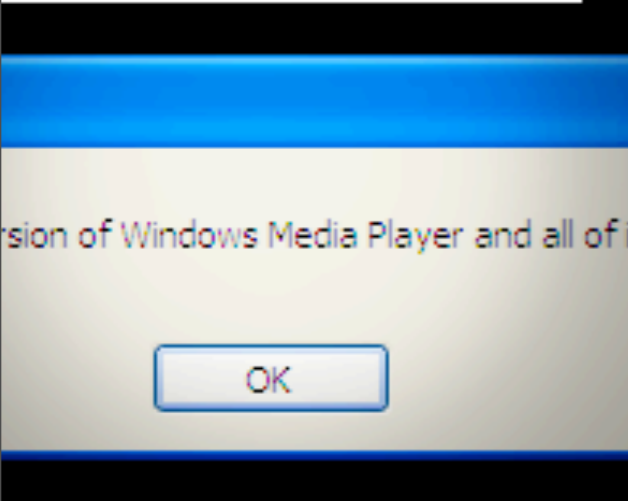**STEP 21**
CLICK DOWNLOAD

**STEP 22**
ENJOY YOUR AUDIO BOOK

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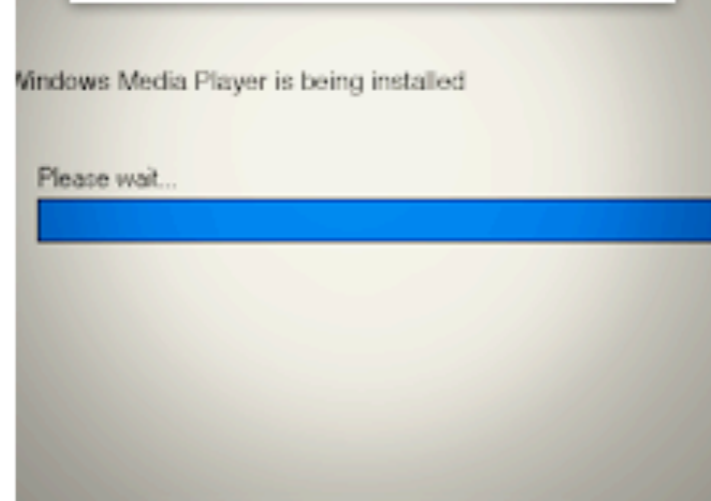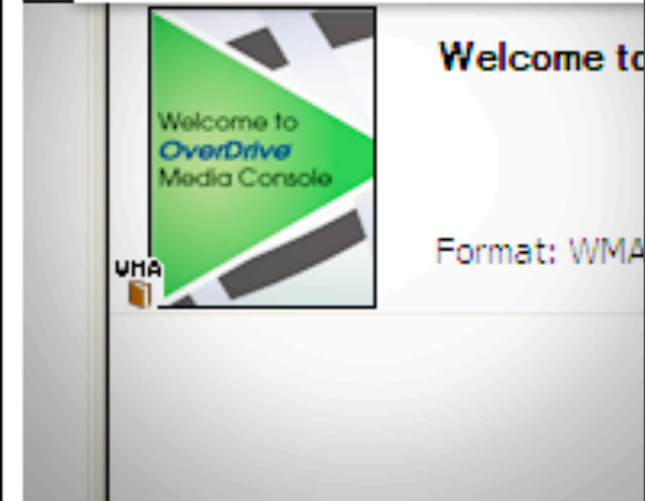
Happy 3rd Birthday

EVERGREEN

There are a lot of awesome options out there. Open source online catalogs like Evergreen and Koha, the entire Open Library project and their FlipBook product, Firefox [and a million cool add-ons] and Open Office. Ubuntu, kubuntu and edubuntu and Linux. It's a great time to be a librarian. And if we're selling these ideas, people are buying them. They trust us. But we're not selling them as much as we could.

# "it's okay, it's legal"



I went to this great conference a few months ago where I saw some school technologists telling other technologists how to do more with less. One guy had a whole school media center up and running using MYTH–TV. Free. How great for his students, and how great he could tell us how to do it. We need more, much more of this.

# FUD

It Just Feels Right

BUT, for most of us, the combination of pressure from big business, lack of tech experience of staff and fear of the unknown means that we stick with what we know, which are big names, support contracts and the operating systems we love to hate [and that we get fat grants for]. And since we're the free internet game in town, we create culture for people who themselves may not know better. Tweaking requires some tech literacy even if it's just to say "well, let's try this..."

# AP Protect, Point, Pay

**News Story**

*The format provides a digital "container" for news that carries metadata, rights info and a tracking "beacon.*

**News Container ("hNews" format)**

**Users** *can consume, mash up and share the content based on rights*

**News Publisher**

*Publishers agree to register content with AP and apply protective format to news*

*Format protects content everywhere and enables RSS syndication, enhanced search, mobile apps and pay content models*

*Meanwhile, the tracking beacon sends signals back to the news registry informing publishers of uses and opportunities*

**News Consumer**

## AP news registry: A platform for protect, point and pay

**Permissions and Protection**
- ✓ Rights registry
- ✓ Tracking beacon
- ✓ Enforcement

**News Collection and Display**
- ✓ Content indexing
- ✓ Tagging for search
- ✓ AP news guide

**Usage Tracking and Reporting**
- ✓ Usage reports
- ✓ Publisher dashboards
- ✓ Royalty settlement

And we have to start with willingness to tinker if we want to get people to the point where they understand the necessity of the freedom to tinker, to quote the title of one of my favorite blogs. To challenge, DRM, to buy smarter software, to create our own tools and to PASS THIS CULTURE ON. So I've given you some "what not to do" let's run through some "what to do" ideas and you can ask more during the panel.

# AP Protect, Point, Pay

**News Publisher**

Sensationalist bullshit

Publishers have **no** fucking idea how the Web works

Some fucking clip art (we're that clueless)

We're inventing a DRMed format for text. People are going to love it, just like they love DRM on music and movies.

Our format will **magically** work everywhere. Unencumbered, standardized formats like RSS and HTML will bend over and take it, because we said so.

★chron.com

Google news

**Users** will come to our website, read the tripe that we pass off as news, and click on our ads. Google will be crushed beneath our might. Stop laughing.

**Unicorns**

People won't mind that a "tracking beacon" is telling us what they read.

What the hell is this? Is it a keg? Toxic waste?

**AP news registry:** because DRM will save our industry.

| **Meaningless Phrases** | **Fuck Yeah, Arial Eat a Dick, Helvetica** | **Look at This Fucking Graph It's Fucking Going Upwards** |
|---|---|---|
| ✓ Rights registry<br>✓ Tracking beacon<br>✓ Enforcement | ✓ Content indexing<br>✓ Tagging for search<br>✓ AP news guide | ✓ Usage reports<br>✓ Publisher dashboards<br>✓ Royalty settlement |

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# while you're out there

- ‣ **make it look simple, don't say "it's easy"**

- ‣ **encourage everyone to get involved in F/LOSS**

- ‣ **accept partial solutions**

- ‣ **understand the complete systems**

- ‣ **enjoy yourself, and brush your teeth**

# advice? desires?

‣ **people like to solve problems**

‣ **people like genuine options**

‣ **people like to feel competent**

‣ **people like to feel supported**

‣ **more yayz, fewer ur doin it rongs**

thanks!