Random Hacks

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Six Apart / Shibuya Perl Mongers

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Hacking

- ## "Hacking is my life"
  - Hacking Perl (CPAN)
  - Hacking Applications
  - Hacking Services

- ## To Make my life a bit happier

  [O'Reilly's Hacks Series reclaims] the term "hacking" for the good guys--innovators who explore and experiment, unearth shortcuts, create useful tools, and come up with fun things to try on their own.

Agenda

- ## Web 2.0 Hacking

  - Blogging APIs

  - Data visualization

  - Folksonomies stuff

- ## iTunes Hacking

  … quite random
     Because I wrote this last night, 3am

What is Web 2.0?

- **Web 2.0 is Read-Write Web**
  - With RSS/Atom feeds
  - With Simple (REST) APIs
    - Weblogging
    - Social Networking
    - Photo Sharing
    - Social Bookmark
    - Folksonomies

Weblogging APIs

- ## Blogger API
  - Pyra Labs (Google)

- ## MetaWeblogAPI
  - Dave Winer (Radio Userland)
  - RSS 2.0

- ## MT API
  - Movable Type (Six Apart)

Weblogging APIs

- ## Based on XML-RPC
  - ### XML over HTTP

```
POST /RPC2 HTTP/1.0
Host: betty.userland.com
Content-Type: text/xml
Content-length: 181

<?xml version="1.0"?>
<methodCall>
<methodName>examples.getStateName</me
thodName>
<params><param>
  <value><i4>41</i4></value>
</param></params>
</methodCall>
```

```
HTTP/1.0 200 OK
Content-Type: text/xml
Content-length: 158

<?xml version="1.0"?>
<methodResponse>
<params><param>
<value>
  <string>South Dakota</string>
</value>
</param></params>
</methodResponse>
```

Demo

- ## Post IM chat logs to Blog

  - ### msn_to_blog.pl

    - MSN Messenger
    - Chat Log file is in XML (Optional Setting)
    - XML::LibXML to parse it
    - XMLRPC::Lite to post via MetaWeblog API

Modern Weblogging APIs

- ## AtomAPI (AtomPP)
  - RESTful APIs for Content Syndication
  - Part of Atom WG at IETF

- ## Solves issues with XML-RPCs
  - Damn simple
    - Sometimes ad-hoc
  - Clear Password
  - etc, etc.

AtomAPI

- ## Still not in version 1.0
  - ### 0.3 draft last week

- ## Nokia Lifeblog uses it
  - ### Integrated with TypePad
    - Experimental Six Apart namespace
  - ### Standalone resource posting
    - Similar to metaWeblog.newMediaObject
  - http://cognections.typepad.com/lifeblog/2004/12/lifeblog_postin.html

Demo

- Flickr2TypePadMMT
  - Uses Nokia LifeBlog API + Flickr API
    - XML::Atom::Client
    - XML::Simple
  - MMT = MultiMedia Template
    - New TypePad feature
    - Integrated with Photo Album
  - http://blog.bulknews.net/flickr2typepad.cgi
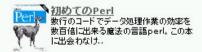
AdSense and Amazon

- **Make money with your Weblog**
  - Google AdSense is really nice
    - Display Ads based on your weblog context
  - But sometimes no Ads available
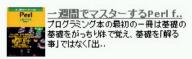 - I want to put Amazon ads in such cases
  - Hack it!

Demo

- ## AdSense Alt Ads with AWS
  - Use <$MTKeywords$> with MT Template
  - JavaScript to hack AdSense code
  - Hand-made AdSense immitator script
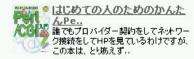   - To search Amazon Web Services

More Blogging Hacks

- ## The book
  - Blog Hacks
  - ISBN 4873111749
  - Only available in Japanese
  - English version now in plan

RESTish APIs in Web 2.0

- ## Yahoo! Search API

  - ### Damn simple XML over HTTP

    - XML::Simple + LWP::Simple

  - ### No SOAP support

    - Because SOAP raises many interoperability issues (evil laugh)
    - No WS-* glitches

Demo

- Yahoo! And Flickr aggregator
  - Search images in Y! and Flickr
  - Authority vs. folksonomy
  - http://blog.bulknews.net/imgsearch.cgi

iTunes Hacking

- ## The best music player
  - Rocks with Rendezvous sharing
  - Rocks with AirPort Express
- ## SDK available
  - AppleScript for Mac
  - WSH (COM) for Win32

Rendezvous

- ## Multicast DNS
  - Music files can be shared on iTunes
  - Using DAAP protocol
    - Digital Audio Access Protocol
    - Similar to DPAP (iPhoto)
      - Leon made Net::DPAP::Server
  - Perl binding: Net::DAAP::*

Demo

- **Browse iTunes share from browser**
  - Net::Rendezvous to find shared music
  - Net::DAAP::Client to search the library
    - You can even download the songs
    - But you shouldn't

AirPort Express

- **AirTunes**

  - Remote speaker over ethernet / Wi-Fi

  - RAOP over RTSP

    - RAOP: Remote Audio Output Protocol

    - RTSP: Real Time Streamin Protocol

  - DVDJon cracked the protocol

    - JustePort (C#)

    - Working on a perl port - Net::AirTunes

iTunes SDK

- ## Script your iTunes
  - With AppleScript or COM (OLE)
  - I'm a Windows guy, so use Win32::OLE
    - But the essense is the same with Mac

```
use Win32::OLE;
my $itunes = Win32::OLE->new("iTunes.Application");
print $itunes->currenTrack->title;
```

Demo

- ## Control iTunes from browsers
  - ### Standalone HTTPD
    - □ To avoid Apache Win32 security issue
    - □ With HTTP::Daemon
      - ■ I know I should try HTTP::Server::Simple, obra
  - ### Win32::OLE to control iTunes

Demo 2

- **RSS feed to audiobook**
  - Microsoft SAPI5
    - Text-to-Speech engine (WAV)
  - iTunes API
    - Encode the music into AAC
  - XML::RSS + Win32::SAPI5 + Win32::OLE
    - Microsoft and Apple collaboration

Summary

- **Blogging, Web 2.0 and iTunes**
  - APIs available to hackers
- **Hacking is easy**
  - Since they have damn simple APIs
  - via XML over HTTP or COM
- **Hacking is fun**
  - Just have fun