Black Hat 2008 Highlights

OWASP KC Meeting
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Rohini Sulatycki

OWASP

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DNS Flaw – Dan Kaminsky

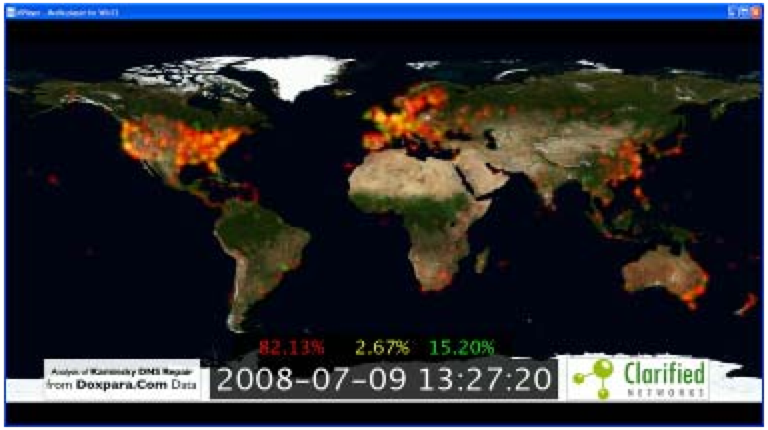
DNS Flaw – Dan Raminsky

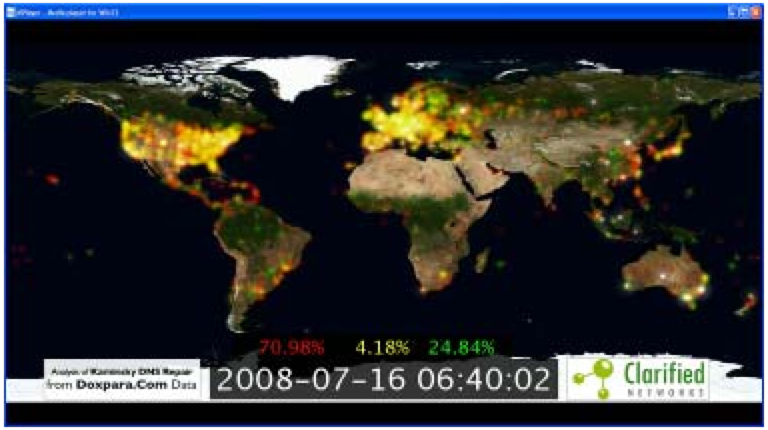
- Distributed DNS
  - Map names to numbers
  - Delegation and name servers
    - Send message out
    - Receive replies back
- Bad guys vs Good guys (good name server)
  - Race between good guy and bad guy
    - Bad guy could guess TXID and reply first
    - Odds are with the good guy
- Bad guy
    - could start multiple races with good name server
      - 1.foo.com, 2.foo.com etc
    - When he gets one he could say:
      - Go ask www.foo.com and here's it's address and set TTL

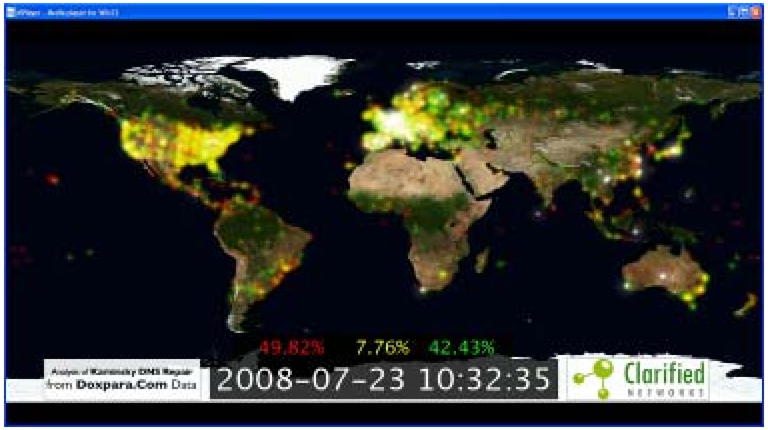
DNS Flaw Contd..

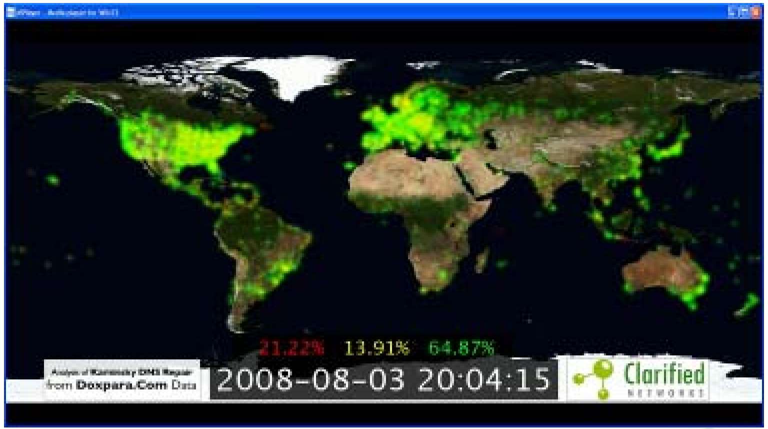
- Transaction ID – “random” number between 0 and 65535. The real name server knows the number, because it was contained in the request. The bad guy doesn’t know – at best, he can guess
- TTL not a security feature
  - 1 day
  - 1 hour
  - ...
- Issues
  - Redirect to malicious sites
  - Intercept and corrupt email attachments
  - ....

DNS Patching









Xploiting Google Gadgets: Gmalware and Beyond - Robert Hansen and Tom Stracener

Xploiting Google Gadgets: Gmalware and Beyond - Robert Hansen and Tom Stracener

- Gadgets are web-based software components based on HTML, CSS, and JavaScript.
  - http://code.google.com/apis/gadgets/docs/spec.html
- Gadget server must be able to satisfy a Gadget Rendering Request and a JavaScript Request
  - Get XML
  - Parse XML
  - Identify Locale and fetch messages
  - ..
  - Output gadget content

- Gadgets are largely 3rd party code and potentially malicious
- Gadgets can be easily weaponized into attack tools or payloads
- Gadgets can attack other gadgets, the desktop, or web sites
- Gadgets can have (most of) the same vulnerabilities as web applications

- Threat vectors
  - Spyware
  - Malware
  - Worms
  - Personal information theft
- Gmodules domain vulnerable to XSS
- Hosted code insecure
- Current architecture flawed
  - Security model opt-in

Get Rich or Die Trying ***"Making money on the Web, the black hat way" – Jeremiah Grossman and Arian Evans***

CAPTCHA

- Solving Captcha’s for cash
  - CAPTCHA
    - Automated turing test to test for humans vs. bots
- Why?
  - Spammers would like to register for multiple email addresses

- Solving Captcha’s for cash
  - CAPTCHA
    - Automated turing test to test for humans vs. bots
- Why?
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- How?
  - Flawed implementation
    - Answer replay
  - Low cost automated attack
  - Mechanical turk
  - Low cost
    - *“300-500 CAPTCHAs per person per hour. The clients pay between $9-15 per 1000 CAPTCHAs solved”*

Password Recovery

- China-based online “Password Recovery” services:
- You pay them to hack into “your” account.
- 300 Yuan ($43) to break an overseas mailbox password,
- with 85% probability of success.
- 200 Yuan ($29) to break a domestic mailbox password,
- with 90% probability of success.
- 1000 Yuan ($143) to break a company’s mailbox
- password (no success rate given).

OTHER

- Hire to Hack
- Monetize eCoupon
- Hacking banks
- Flawed return policies
- ...

Bad Sushi: Beating Phishers at their Own Game– Nitesh Dhanjani & Billy Rios

- Backtrack phishing e-mails to their malware and data repositories Monetize eCoupon
- Phishers use poor programming practices
  - Store credentials unprotected
  - Store CVV2
  - Sell credit cards and CVV2
    - 500 credit card numbers for $2500
- ATM Skimmers
  - Link to sites that sell physical skimming equipment

Spring Framework Vulnerability – Ounce Labs

- Data Submission of non-editable fields
  - Web MVC
  - DataBinder will bind all parameters to a server side command object
  - Hackers could use this to add parameters to *submit data to non-editable fields*
  - Mitigation: Explicity configure set of fields to bind by calling the setAllowedFields property of ech dataBinder
- ModelViewInjection
  - Client data is used as view name
  - http://www.springsource.com/securityadvisory