

# Online Fraud Detection and Prevention (OFDP)

Hun Kim
Director, OFDP
Hun.Kim@irs.gov
202 283-6742



#### Table of Contents

- Online Fraud An Increasing Threat
- Online Fraud Detection and Prevention Office
- Online Fraud Trends and Methodologies
- Online Fraud Detection and Prevention Update
- Conclusion

### Increasing threats are facing the IRS and American Taxpayers

- FTC estimates 10 million Americans' identities are stolen each year
  - Dumpster Diving: Rummaging through trash looking for bills or other documents
  - Skimming: Stolen credit/debit card numbers using a special storage device
  - Phishing: Fraudulent e-mail or pop up messages pretending to be financial institutions or companies to obtain personal information
  - Stealing: Wallets, purses, mail

IRS Nationwide

## Increasing threats are facing the IRS and American Taxpayers (cont.)

- Online fraud is an increasing concern for the public and can threaten the IRS business model if taxpayers lose confidence in the security of electronic channels
- Theft of taxpayer information can lead to refund and financial crimes
- Numerous stakeholders are involved in response to the online fraud incidents
- A comprehensive plan involving stakeholders is key to combating online fraud





#### Table of Contents

- Online Fraud An Increasing Threat
- Online Fraud Detection and Prevention Office
- Online Fraud Trends and Methodologies
- Online Fraud Detection and Prevention Update
- Conclusion

### Business Case to Support Online Fraud Detection and Prevention



- Reduced cost of processing: \$0.35 for an e-filed return vs. \$2.87 for a paper return
- 2005 Cyber Security Industry Alliance survey

IRS Nationwid

 48% of consumers avoid making online purchases due to fear of financial information theft

### Business Case to Support Online Fraud Detection and Prevention (cont.)



- 2006 Business Software Alliance and Harris Interactive Survey
  - Almost 30% of adults stated security fears compelled them to shop online less or not at all
- 2007 PhishTank report
  - IRS is the 24<sup>th</sup> most spoofed brand in the world

## Office of Privacy, Information Protection and Data Security

Privacy, Information Protection and Data Security (PIPDS)

Office of Privacy

IRS Nationwide

Identity Theft and Incident Management

Online Fraud Detection and Prevention

### Online Fraud Detection and Prevention

#### **OFDP Mission**

To reduce online fraud against the IRS and taxpayers

#### **OFDP Goals**

- Establish a rapid response capability to detect and mitigate against online fraud incidents
- Establish a robust analytic and operational information sharing capability to prevent and reduce risk
- Promote technological innovations and process improvements to tackle current and next generation online fraud schemes
- Promote online fraud outreach and awareness programs with public and private sectors to reduce vulnerabilities and minimize the severity of online fraud
- Create a culture of organizational excellence

#### **Outcomes**

- Reduce the number of fraudulent refunds issued
- Reduce the number of taxpayers who fall victim to online fraud schemes
- Raise public confidence in the e-Filing process and increase the number of efile returns submitted





#### Table of Contents

- Online Fraud An Increasing Threat
- Online Fraud Detection and Prevention Office
- Online Fraud Trends and Methodologies
- Online Fraud Detection and Prevention Update
- Conclusion





- Get Your Refund
  - Spam based
  - Unsophisticated attack methodology
  - Awareness is an effective countermeasure

### Online Fraud Methods



- e-file Phishing Sites
  - Web based
  - Advertised through commercial pay per click sites
  - Captures the victim's tax information and reroutes the refund to the phisher's bank account
  - Returns are submitted through valid
     Electronic Return Originators (EROs)
  - Targets Free File users

#### Online Fraud Methods

#### e-mail

From: "Internal Revenue Service"

Subject: IRS Notification - Fiscal Activity Date: Sun, 26 Aug 2007 23:57:35 +0300

After the last annual calculations of your fiscal activity we have determined that you are eligible to receive a tax refund of \$268.32.

Please submit the tax refund request and allow us 6-9 days in order to process it.

A refund can be delayed for a variety of reasons. For example submitting invalid records or applying after the deadline.

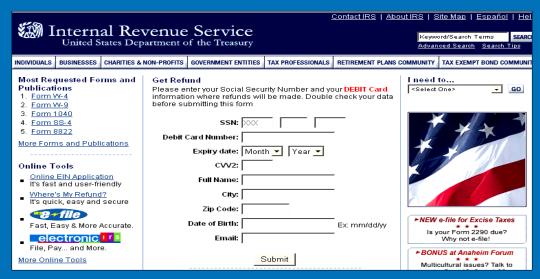
To access the form for your tax refund, please click here.

Regards,

Internal Revenue Service

© Copyright 2007, Internal Revenue Service U.S.A. All rights reserved.









### Fraudulent IRS e-mail

From: "Internal Revenue Service"

Subject: IRS Notification - Fiscal Activity Date: Sun, 26 Aug 2007 23:57:35 +0300

After the last annual calculations of your fiscal activity we have determined that you are eligible to receive a tax refund of \$268.32.

Please submit the tax refund request and allow us 6-9 days in order to process it.

A refund can be delayed for a variety of reasons. For example submitting invalid records or appying after the deadline.

To access the form for your tax refund, please <u>click here</u>.

Regards,

Internal Revenue Service

© Copyright 2007, Internal Revenue Service U.S.A. All rights reserved.

### Fraudulent Stimulus Payment e-mail



From: service@irs.gov

Date: 4/18/2008 12:32:00 PM

Subject: Get 2008 Economic Stimulus Refund (\$1800)

Over 130 million Americans will receive refunds as part of President Bush program to jumpstart the economy.

Our records indicate that you are qualified to receive the 2008 Economic Stimulus Refund.

The fastest and easiest way to receive your refund is by direct deposit to your checking/savings account.

Please click on the link and fill out the form and submit before April 18th, 2008 to ensure that your refund will be processed as soon as possible.

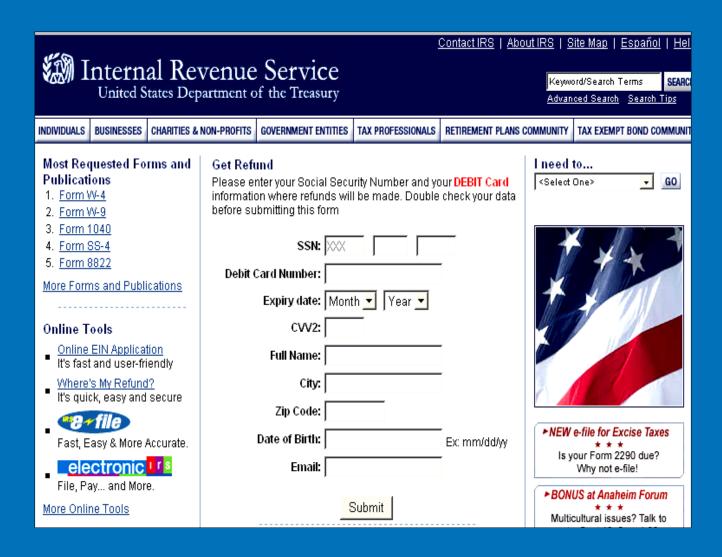
Submitting your form on April 18th, 2008 or later means that your refund will be delayed due to the volume of requests we anticipate for the Economic Stimulus Refund.

To access Economic Stimulus Refund, please click here.

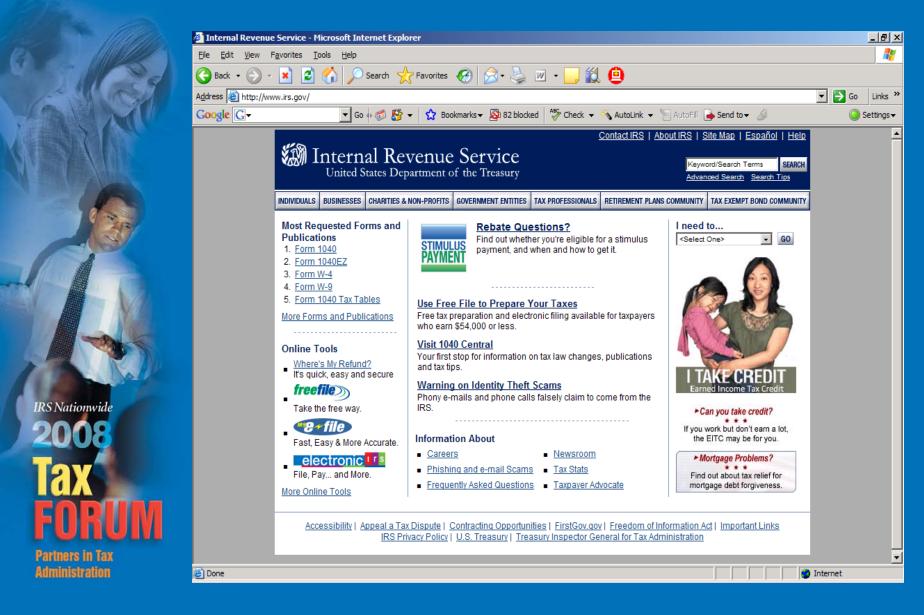
Link pointed to: <a href="http://forty-two.info/msm/install/templates/.www.irs.gov/get-refund/irfofgetstatus.htm">http://forty-two.info/msm/install/templates/.www.irs.gov/get-refund/irfofgetstatus.htm</a>

#### Fraudulent IRS Site



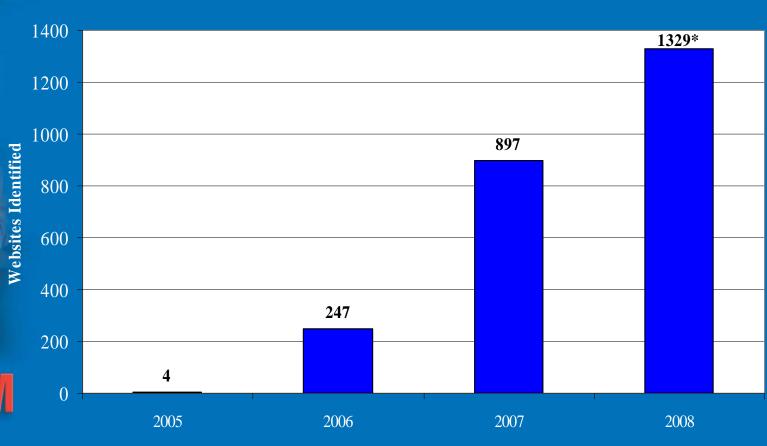


### Official IRS Site



### Phishing Statistics by Year 2005 - 2008

**Yearly Phishing Totals** 

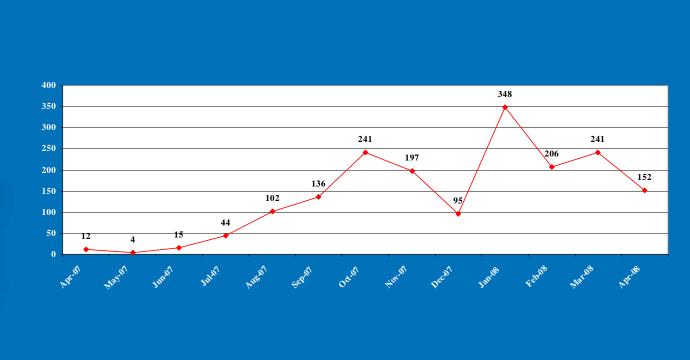


<sup>\*</sup> Per weekly MarkMonitor reports through May 23, 2008

IRS Nationwide

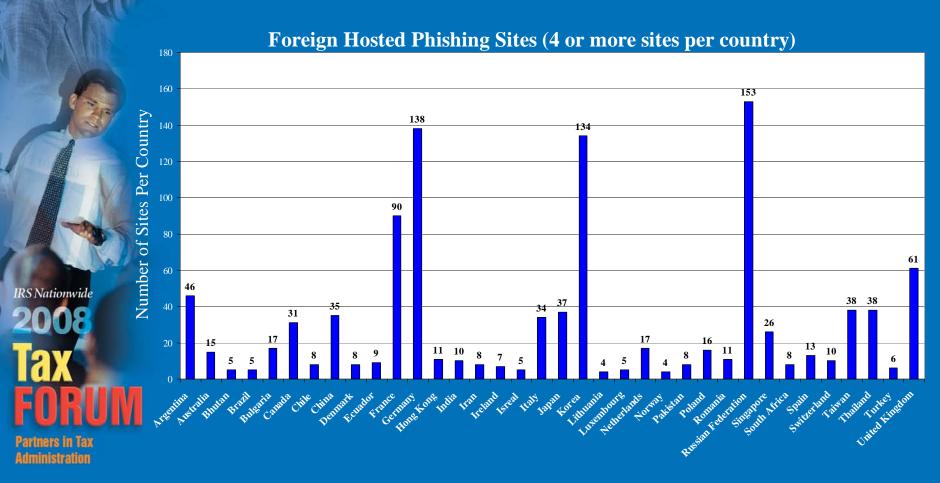
### Phishing Statistics by Month: April 2007 – May 2008

**Monthly Phishing Thru May 23, 2008** 



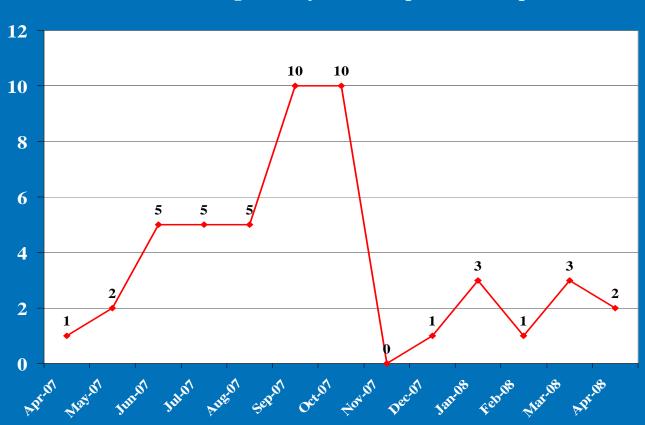


# Phishing Statistics: Foreign Hosted Phishing Sites April 2007 - May 2008



### e-File Phishing Sites by Month April 2007 – April 2008

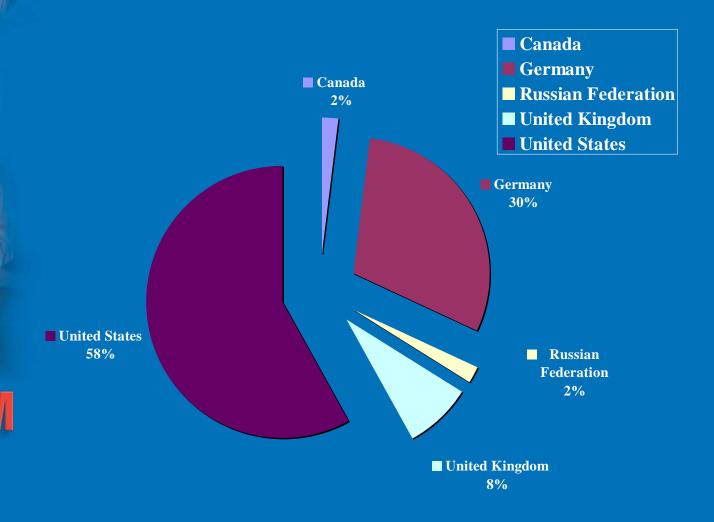
e-File Phishing Sites by Month April 2007 - April 2008



IRS Nationwide

## E-File Phishing Sites by Host Country April 2007 – May 2008

e-File Phishing Sites by Hosting Country



IRS Nationwide



#### Table of Contents

- Online Fraud An Increasing Threat
- Online Fraud Detection and Prevention Office
- Online Fraud Trends and Methodologies
- Online Fraud Detection and Prevention Update
- Conclusion

- Established an initial operating capability to detect, analyze, and shut down fraudulent sites
- Developed partnerships to pursue criminal investigation
  - Department of Justice
  - US Attorney
  - Treasury Inspector General for Tax
     Administration
  - Criminal Investigation



- Developed partnerships to notify victims and take account maintenance actions as appropriate
  - Office of Identity Theft and Incident
     Management
  - Customer Account Services



- Initiated internal IRS collaboration initiatives with a number of organizations
  - Criminal Investigation

IRS Nationwid

- Computer Security Incident Response
   Center
- Electronic Tax Administration
- Office of Communication, Liaison and Disclosure

- Initiated IRS collaboration initiatives with a number of organizations
  - Multi State Information Sharing and Analysis Center (MS-ISAC)
  - US Secret Service- Electronic Crimes
     Task Force
  - Department of Justice- Computer Crimes and Intellectual Property
  - Federal Trade Commission

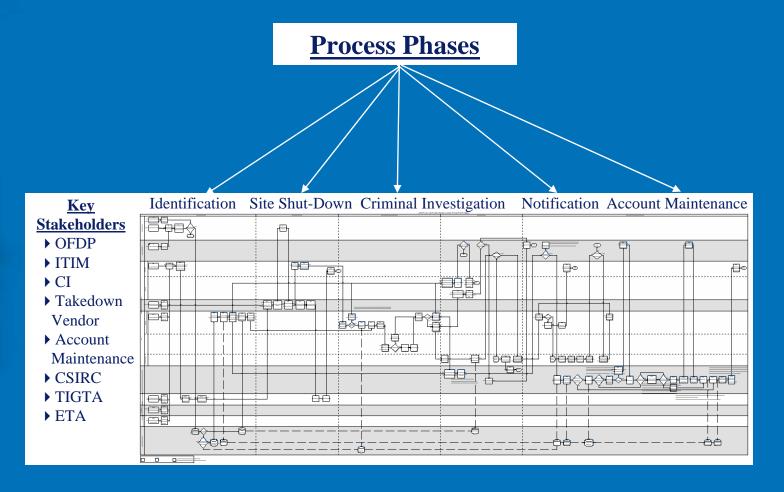
IRS Nationwide

- Initiated IRS collaboration initiatives with a number of organizations
  - National Cyber Security Alliance Anti-Phishing Task Force
  - Anti-Phishing Working Group
  - BITS Financial Services Roundtable
  - Department of Homeland Security-National Cyber Security Division



PIPDS has developed an online fraud, refund crimes, and taxpayer assistance process

IRS Nationwide





#### Table of Contents

- Online Fraud An Increasing Threat
- Online Fraud Detection and Prevention Office
- Online Fraud Trends and Methodologies
- Online Fraud Detection and Prevention Update
- Conclusion



#### Conclusion

- Online fraud is a global issue
- Execution of a comprehensive strategy in partnership with all stakeholders is the key to success
- Please visit
  - http://onguardonline.gov
  - www.IRS.gov



#### Conclusion

- Please report suspicious tax related e-mails to
  - IRS: phishing@irs.gov
  - FTC: www.ftc.gov/idtheft