Data Compromises a Tax Practitioners "Nightmare"



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Internal Revenue Service Criminal Investigation

 Criminal Investigation serves the American public by investigating potential criminal violations of the Internal Revenue Code and related financial crimes in a manner that fosters confidence in the tax system and compliance with the law.





Overview

- IRS Publication 4557/NIST "Small Business Information Security: The Fundamentals"
 - —Identify: Data, People, Equipment "The Printer Breach"
 - —Protect: Limit Access, Updates, Firewalls, "Lost Passwords and Remote Access Breaches"





Overview (cont'd)

- —Detect: Anti-Virus, Spyware, "Lost Passwords to Spear Phishing and Malware Breaches"
- —Respond: Information Security Plan
- —Recover: Backups, "Ransomware Attack"
- Cyber Security Resources





- Identify and control who has access to your business information
- Conduct Background Checks
- Require individual user accounts for each employee
- Create policies and procedures for information security



Identify what information your business stores and

uses

	Example: Client files	Payroll Data	Employee Files	
Cost of revelation (Confidentiality)	High			
Cost to verify information (Integrity)	High			
Cost of lost access (Availability)	High.			
Cost of lost work	High			
Fines, penalties, customer notification	High			
Other legal costs	High			
Reputation / public Relations costs	High			
Cost to identify and repair problem	High			
Overall Score:	High			



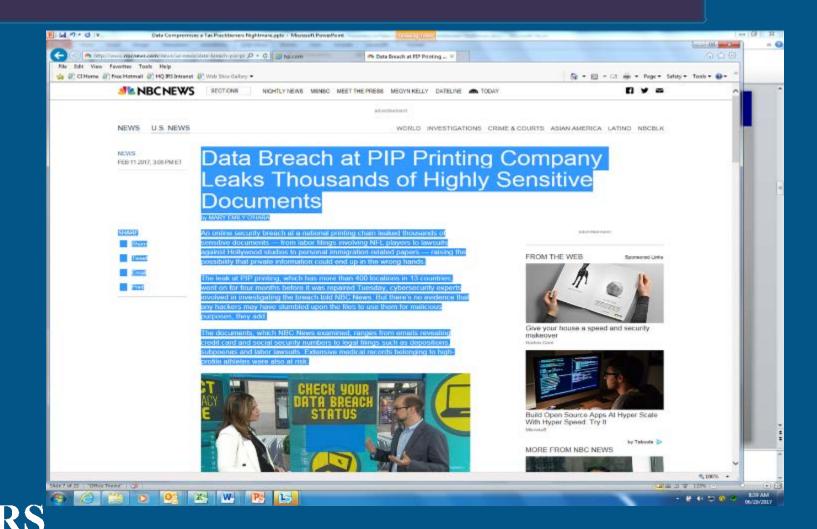
Develop an Inventory of IT Related Equipment

	Description (e.g. nickname, make, model, serial number, service ID, other identifying information)	Location	Type of information the product comes in contact with.	Overall Potential Impact
1	Cell phone; Type – Sonic; Version – 9.0 ID – "Police Box"	Mobile T&S Network	Email; Calendar; Customer Contact Information; Photos; Social Media; Locations; Medical Dictionary Application	High
2	Computers			
3	Printers			
4	Wireless Routers			
5	Remote Access			



- Practitioner Breach 1 "The Printer"
 - Office printer with wireless capabilities hooked to network
 - Manufacturer default password never changed
 - Perpetrator gained access via printer's wireless capabilities and manufacturer default password
 - -Gained full access to Firm's files





Protect

- Limit employee access to data and information
- Patch your operating systems and applications
- Install and activate software and hardware firewalls on all your business networks
- Secure your wireless access point and networks



Protect (continued)

- Set up web and email filters
- Use encryption for sensitive business information
- Dispose of old computers and media safely
- Train your employees



Protect

- Practitioner Breach 2 "Remote Access"
 - -IT Service Provider on monthly retainer
 - December 2016 IT Provider identifies attempted access via Remote Access Program
 - —January 2017 upgrades Remote Access to VPN
 - -February 2017 returns rejected



Protect (continued)

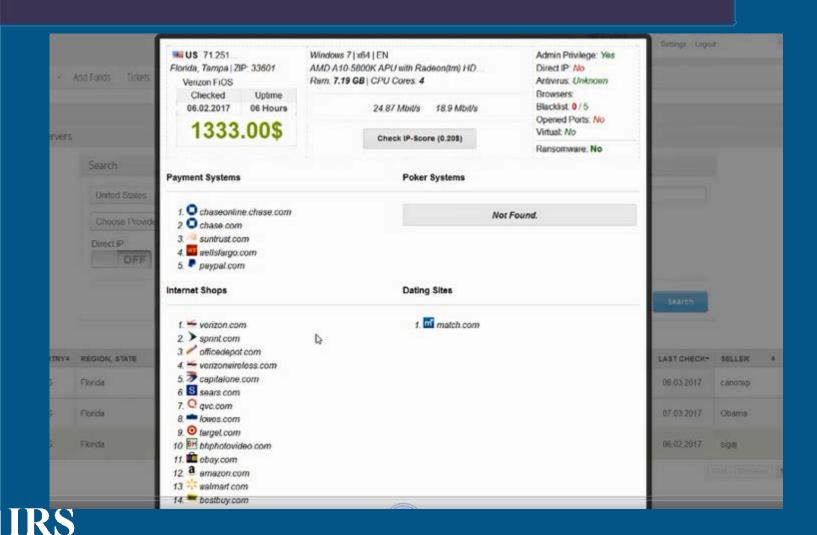
- —IT forensics reveal remote access compromise via employees infected home computer in 03/16
- Perpetrator loaded hidden program
 granting full access and capable of copying
 and extracting files
- Program concealed using a common file naming convention went undetected from 03/16 to 02/17
- -1/3 of clients ID Theft Victims

Protect

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Protect



Detect

- Install and update anti-virus, spyware, and other malware programs
- Maintain and monitor logs
- https://www.youtube.com/watch?v=RJJEyGk S9jA



Protect (Phishing Emails)

From: Posing as Outside Private Sector Entity

Date: Thu, Jun 22, 2017 at 10:54 AM

Subject: Database Error To: Tax Practitioners

In our database, there is a failure, we need your information about your account.

In addition, we need a photo of the driver's license, send all the data to the letter. Please do it as soon as possible, this will help us to revive the account.

- *Company Name *
- *EServices Username *
- *EServices Password *
- *EServices Pin *
- *CAF number*
- *Answers to a secret question*
- *EIN Number *
- *Business Name *
- *Owner/Principal Name *
- *Owner/Principal DOB *
- *Owner/Principal SSN *
- *Prior Years AGI



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*From: *SimonandMelisa Willetts [mailto:willettssimonandmelisa@gmail.com]
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My wife and I should have all our 2016 docs in a week or two.

Last year we moved from Wyomind DE ~ Mr Pryor was our previous CPA.

Here is our 2015 Tax Documents for your review. However, we can be on a call Friday 10AM ~ OK?

Simon & Melissa Willetts Shared - Tax Documents

http://rktaxprep.info/customers/Pryordocs2015/pdf/

On Fri, Feb 17, 2017 at 8:45 PM, Tax Practitioner wrote:

Good morning Simon & Melisa,

Yes, I am accepting new clients. Are you in the City area? Would you like to set up a time to meet?



^{*}Sent:* Monday, February 20, 2017 6:58 AM

^{*}To:* Tax Practitioner

^{*}Subject:* Re: Our 2016 Taxes

From: Tax Software Company

Sent: February 13, 2017 12:16 PM

To: Tax Professional Subject: Access Locked

Dear Customers,

Access to Tax Software has been suspended due to error(s) in your security details.

Follow the link below to unlock your access

Unlock

Thank you.

© Copyright 2017 Tax Software. All rights reserved.



From: Impersonating a Software Company

To: Tax Practitioner

Sent: 8/10/2016 7:14:26 A.M. Eastern Daylight Time Subj: Software Update Notification (Do NOT Reply)

Software Company Product Notification System

Dear Client,

Please DO NOT Reply to this e-mail.

All replies to this address will not be received by Software Company.

Please download and install this important update to your computer.

Click Here

Thank you for using XXXXX Software.

-Customer Support.





Dear User:

Your e-services account is secure. We are doing a one time verification to your e-mail. This will work as a recovery in case your account is compromised. Click or copy the link below to your browser to complete this process.

https://la2.www4.irs.gov/pub/rup_login_1?TYPE=33554433& REALMOID=06-3e42c2f4-1c41-0019-0000-25b00000025b0&GUID=& 0000--4d5700004d57%26GUID%3d%26SMAUTHREASON%3d0%26METHOD% 3dGET%26SMAGENTNAME%3dlgjzN0Exzjjq7GXjalQAtum2VjVb ftpJfXjCX5EEznNQ6gB2VzGstn8fCh3KSapr%26TARGET%3d--SM---%2fPORTAL----PROD-%2fCRM-%2fsignon-%2ehtml

If you need any assistance with changing your password, please read the e-services FAQ. On-line assistance is also provided within the Change Password function.



Detect

- Practitioner Breach 3 "Malware"
 - Tax practitioner opens E-Mail with attachment and clicks on attachment.
 - IT Forensics reveal hidden program granting access was loaded when the attachment was opened



Detect (continued)

- —Malware and key logger were downloaded on network
- —Users on the network logged into various portals which allowed the username and passwords to be accessed.
- Perpetrators were able utilize the username and passwords to gain full access to financial information.



Respond

- Develop a plan for disasters and information security incidents
- The plan should include the following Roles and Responsibilities:
 - Who makes the decision to initiate recovery procedures and contact law enforcement
 - —What to do with your information systems (i.e. shut down/lock computers, move to backup site)

Respond (continued)

- —Contact IRS and State Tax Authorities
- —Who to call in case of an incident (i.e. How and when to contact senior executives, emergency personnel, cybersecurity professionals, legal professionals, service providers, or insurance providers)
- -State Notification Laws



Respond

IRS

- Tax professionals should contact IRS
 Stakeholder Liaison when a compromise is
 detected. The Stakeholder Liaison will
 refer Information within IRS (i.e. Criminal
 Investigations, Return Integrity &
 Compliance Services)
- —http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Stakeholder-Liaison-Local-Contacts-1



Respond (continued)

- State Tax Agencies
 - Tax professionals can e-mail the Federation of Tax Administrators to get information on how to report victim information to the appropriate state authorities.
 - -StateAlert@taxadmin.org



Recover

- Make full backups of important business data/information
- Make incremental backups of important business data/information
- Make improvements to processes/ procedures/technologies



Recover

- Practitioner Breach 4 "Ransomware"
 - Delivery of the ransomware came in the form of phishing e-mail to the human resource manager.
 - —Manger clicked on the link and ransomware was installed onto the network.



Recover (continued)

- Ransomware shutdown the system and demanded payment of \$1,500 in Bitcoins.
- —Perpetrators threatened to sell the PII on the dark web.
- —Tax practitioner paid \$1,500 and had IT specialist remove and restore the data using backup tapes



Cyber Security Resources

- Internal Revenue Service (IRS) Publication 4557
 - -https://www.irs.gov/pub/irs-pdf/p4557.pdf
- IRS RESOURCES for Tax Professionals
 - —https://www.irs.gov/for-tax-pros
- Latest News Protect Your Clients; Protect Yourself
 - —https://www.irs.gov/individuals/protectyour-clients-protect-yourself



Cyber Security Resources (continued)

- Federal Trade Commission
 - —https://www.ftc.gov/tips-advice/businesscenter/privacy-and-security/data-security
- FTC Start with Security
- National Institute of Standards and Technology (NIST); https://www.nist.gov/
- Small Business Information Security: The Fundamentals
 - http://nvlpubs.nist.gov/nistpubs/ir/2016/NIS T.IR.7621r1.pdf