



NAPO-GMU Presentation

Your Digital Security & Privacy

<http://www.profburnett.com>

Master a Skill – Learn For Life

Outline

- **What is the Difference between Digital Security and Digital Privacy?**
- **How to Protect Your Digital Assets.**
- **How to Protect Your Digital Privacy.**
- **You've Been Compromised - Now What?**

Outcomes

- **Know What is Digital Security and Digital Privacy.**
- **Know Top Actions You Should Take to Protect Your Digital Assets & Privacy.**
- **Know When Your Digital Security and Digital Privacy have been Compromised and What to Do.**

What is Digital Security & Privacy?

- Digital security and privacy are two significant issues.
- Digital security pertains to protecting your digital assets.
- Digital privacy has two parts:
 - How you protect your digital identity.
 - How you protect your digital privacy.

Top 5 Actions

Protect Your Digital Assets, Identity, & Privacy

- 1. Use a Password Policy**
- 2. Protect Your Credit Files**
- 3. Protect Digital Data in the Cloud**
- 4. Use Privacy Controls**
- 5. Do Not Allow**
 - 3rd Party Cookies
 - Clickstream Tracking
 - Geotracking

What are my Digital Assets?



What is my Digital Identity?



Programmer
Web Developer
Program Assistant
Project Manager
Program Manager



Washington DC
New York City
Los Angeles, CA
Dallas, TX
Brussels, Belgium



a. Items Purchased between 01/01/2009 & 12/25/2010

You may view individual items or invoices by clicking the desired catalog or invoice number from the list below. To go back and change your search parameters, click the "New Search" button above on the right.

Results 1 - 30 of 404

Qty	Catalog	(Show Custom Part #s)	FDL Job Name	Date Shipped	Date Ordered	Invoice Date
100	Z&L25		K J 199	11/20/2010	11/20/2010	11/20/2010
200	HT21		209426	12/28/2009	12/28/2009	11/10/2010
-17	WSP2009a		CREDIT	2/19/2009	2/19/2009	2/20/2009
-1	WSP2009b		CREDIT	2/19/2009	2/19/2009	2/20/2009
5	WSP2452		210441	11/19/2010	11/17/2010	11/19/2010
1	WSP2452		TOWN	11/02/2010	11/02/2010	11/02/2010

What Threats to My Digital Identity?

Compromised Personal Identifying Information (PII)

Name Driver's license number
SSN Home address Birthplace
 Passport number
Date of Birth Telephone number
Credit card numbers Fingerprints
Facial Recognition Nickname
 Vehicle registration plate number

Compromised Digital Credentials

Email address
Login name IP address
 Handle
Screen name
Tracking ID Password
Digital Certificate

Compromised Digital Device Identification

IP address ESN
 Serial No
MAC Address
Barcode RFID

What are Digital Threats?

Types of Threats

- Physical damage
- Natural events
- Loss of essential services
- Compromise of information
- Technical failures
- Compromise of functions

Threat Origination

- Deliberate
- Accidental
- Environmental
- Negligence

Threat Classification

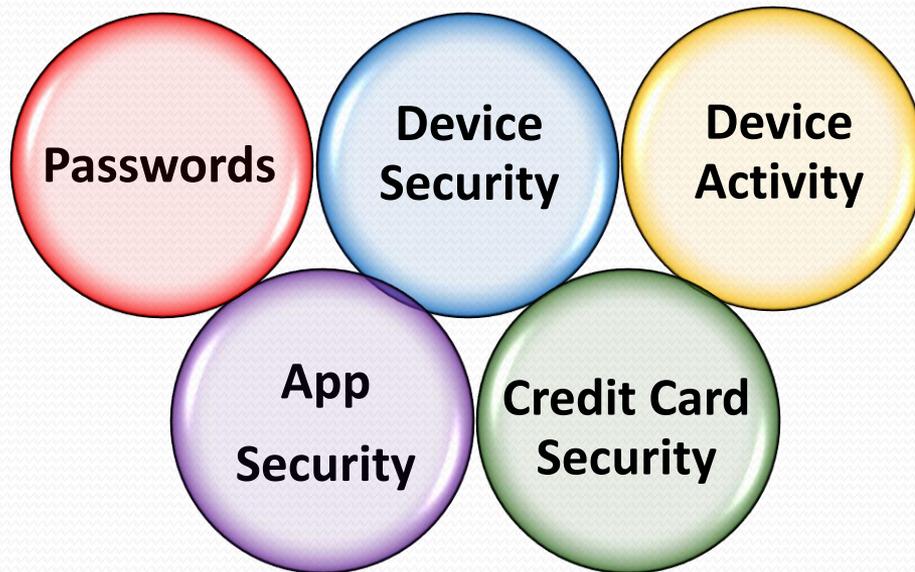
(STRIDE Model)

- Spoofing of user identity
- Tampering
- Repudiation
- Information disclosure
(privacy breach or Data leak)
- Denial of Service (D.o.S.)
- Elevation of privilege

FBI Top Cyber Threats for 2020

- **Ransomware**
- **E-Mail Compromise**
- **Malware/Scareware**
- **Phishing/Spoofing**
- **Credit Card Fraud / Misuse**
- **Data Breach**
- **Denial of Service**

Protect Your Digital Assets in 5 Domains



How to Protect Your Digital Assets

Passwords

- **Use a Password Policy**
- **Use a Password Manager**
- **Use a Separate Password for:**
 - **Devices**
 - **Online and Offline Accounts**

How to Protect Your Digital Assets

Password Protection Policy

Asset Value	Type of Site	Password Strength
Low	Social Media	3 Level
Medium	Site where you pay for something	6 Level
High	Medical Site	8 Level & MFA
Very High	Banking	10 Level & MFA

- Develop a password usage policy based on type of asset.
- Never use the same password for your router/computer/email or online accounts.
- Avoid information of commonly known information (friends/family/colleagues).
- Encourage writing down passwords:
 - Keep in a safe place
 - Password Manager
 - Encrypted File

Password Strength Levels

Level	Asset Value	Alpha Characters	Numeric Characters	Special Characters	Total	MFA
1	None	4 (1 -UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	8	No
2	Low	5 (2-UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	9	No
3	Little	6 (3-UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	10	No
4	Some	7 (2-UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	11	No
5	Medium Low	8 (4-UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	12	No
6	Medium	8 (4-UC)	3 (0-9)	2 - !@#\$\$%^&*()?<>	13	No
7	Medium High	8 (4-UC)	3 (0-9)	3 - !@#\$\$%^&*()?<>	14	No
8	High	4 (1 -UC)	1 (0-9)	1 - !@#\$\$%^&*()?<>	6	Yes
9	Very High	4 (2-UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	8	Yes
10	Extremely High	6 (2-UC)	2 (0-9)	2 - !@#\$\$%^&*()?<>	10	Yes

How to Protect Your Digital Assets

Number & Special Character Sequence Password Use

<ul style="list-style-type: none">• Old Telephone Number Reversed• Old House Number Addresses• Graduation Date• Other Special Date• No SSN• No Birthdate	Numbers <ul style="list-style-type: none">• 1• 2• 3• 4• 5• 6• 7• 8• 9• 0	Special Characters <ul style="list-style-type: none">• 1 - !• 2 - @• 3 - #• 4 - \$• 5 - %• 6 - ^• 7 - &• 8 - *• 9 - (• 0 -)	Special Characters <ul style="list-style-type: none">• \• “• ‘• :• ;• <• >• ?• /
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How to Protect Your Digital Assets

Mnemonic Password Protection Policy

- Mnemonic Password

- Slogan
- Lyric of Song
- Passage
- Part of a poem
- A Number Sequence.
- Replace Lower Case with Upper Case.
- Replace Number with special character.

- I Can't Believe I Ate The Whole Thing – **IcBlaTwT**
AlkaSeltzer TV Commercial
- Imagine there's no countries, It isn't hard to do – **ItNcliHtD**
Imagine – John Lennon
- The most beautiful things in the world cannot be seen or touched – **tMbTiTwCbSoT**
Quote from Hellen Keller
- You may shoot me with your words, You may cut me with your eyes – **yMsMwYwyMcMwYe**
Still I Rise by Maya Angelou

How to Protect Your Digital Assets

Multi Factor Authentication Protection



Security Token



Smartphone Security Code



Smartphone App



Web-based Security Authorization



Biometric Security

Password Generators & Checkers

Online Password Generators

- [Strong Password Generator](#)
- [Strong Password Generator - 2](#)
- [LastPass Password Generator](#)
- [Strong Random Password Generator](#)
- [DashLane Password Generator](#)
- [Random Password Generator](#)
- [14 Best Password Generators](#)

Online Password Checkers

- [Kaspersky Lab Password Checker](#)
- [Dashlane Password Checker](#)
- [My1Login's Password Strength Checker](#)
- [Password Checker Online](#)
- [RoboForm How Secure Is My Password](#)

Password Managers

PC Magazine Best Password Managers

RANK	PROGRAM	COST
1 – Editor Choice	<u>Dashlane 3</u>	Free / Premium - \$5/M / Plus - \$10/M
2– Editor Choice	<u>Keeper Password Manager & Digital Vault</u>	Free / Express - \$2/m / Advanced - \$5/M / Pro \$15/M
3	<u>RoboForm Everywhere 7</u>	Free / Indiv - \$23.88/Y / Family - \$47.75 /Y
4	<u>LastPass 3.0</u>	Families (6) - \$4/M
5	LastPass 3.0 Premium	\$2/M
6	<u>Zoho Vault</u>	Free / \$0.9 per user per month
7	<u>Sticky Password 7</u>	Free / 14.99/Y
8	<u>Intuitive Password 2.9</u>	Free / Express - \$2/m / Advanced - \$5/M / Pro \$15/M
9	<u>Keeper Password Manager & Digital Vault 8</u>	Personal \$2.50/M / Family \$5/M
10	<u>Norton Identity Safe</u>	Free
11	<u>my1login</u>	Free

How to Protect Your Digital Assets

Application Security

- Use and Update Antivirus Programs
- Update Your Apps Regularly
- Online / Cloud Apps
- Mobile Apps
- Local Resident Apps



How to Protect Your Digital Assets

Device Security

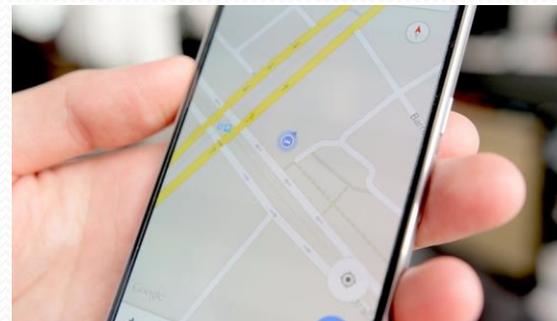
- **Secure All Devices – Antivirus & App Updates:**
 - Desktop
 - Laptop Tablet
 - Smartphone
 - Smart Watch
 - IoT Devices
- **Backup Your Data Regularly**



How to Protect Your Digital Assets

Device Activity

- **Monitor Your Computer Activity.**
- **Never open attachments or links in email, IM's from unknown people.**
- **Watch out for Social Engineering**



How to Protect Your Digital Assets

Credit Card Security

- Use Online CC for all Online Purchases.
- Use Offline CC for all Offline Purchases.
- Use Single Use CC for big purchases.
- Monitor Your Financial Accounts (Text Alerts)
- Receive Free Credit Report Monitoring.
- Freezing and Lock Your Credit Files
- Free Dark Web Scan



How to Protect Your Digital Assets

Stopping Robocalls - Text - Phone Scams

- **Don't answer calls from unknown numbers. If you answer such a call, hang up immediately.**
- **Be aware: Caller ID showing a "local" number does not necessarily mean it is a local caller.**
- **Do not respond to any questions, especially those that can be answered with "Yes."**
- **Never give out personal information:**
 - account numbers
 - Social Security numbers
 - mother's maiden names
 - Passwords
 - other identifying information in response to unexpected calls or if you are at all suspicious.
- **Inquiry from someone who says they represent a company or a government agency**
 - Hang up
 - Call the phone number on your account statement - in the phone book - Company's or government agency's website
 - Verify the authenticity of the request.

How to Protect Your Digital Assets

Stopping Robocalls - Text - Phone Scams

- Use a voice mail account password.
- Contact your phone company about call blocking tools.
- Use robocall-blocking technology
- Register your number on the [Do Not Call List](#).
- [File a complaint](#) with the FCC.

How to Protect Your Digital Assets

Robocall Blocker Apps

Android

- Call Blocker Free
- Master call blocker
- Safest Call Blocker
- Should I Answer?
- Blacklist Plus
- Truecaller

iOS

- Call Controls (iOS) ...
- Whoscall (iOS) ...
- Truecaller (iOS) ...
- Avast Call Blocker – Spam Blocking \$\$
- Mr. Number (iOS)
- YouMail \$\$

How to Protect Your Digital Assets

e-Skimming



Fraudulent Website Link
(Spoofed)
or Magecart Code



PII entered on
Fraudulent Receiver site



Hacker collects PII



Hacker post PII
on Dark Web

Hacker purchases PII
on Dark Web



How to Protect Your Digital Assets

e-Skimming

- **Apple Pay**
- **PayPal**
- **Similar mobile payment**
- **Send one-time token of your CC info.**
- **Shop on well-known, reputable sites.**
- **Use one-time-use money or credit cards.**
- **Enable two-factor authentication.**
- **Use strong passwords that are unique to the websites and accounts they unlock. Change passwords frequently.**
- **Activate transaction alerts on all credit cards and bank accounts for free.**
- **Consider freezing your credit to prevent the creation of new accounts.**

**If you've been notified of such breaches - get a new credit card.
Check your statements weekly for misuse.
File a detailed complaint at the [FBI Internet Crime Complaint Center](#)**

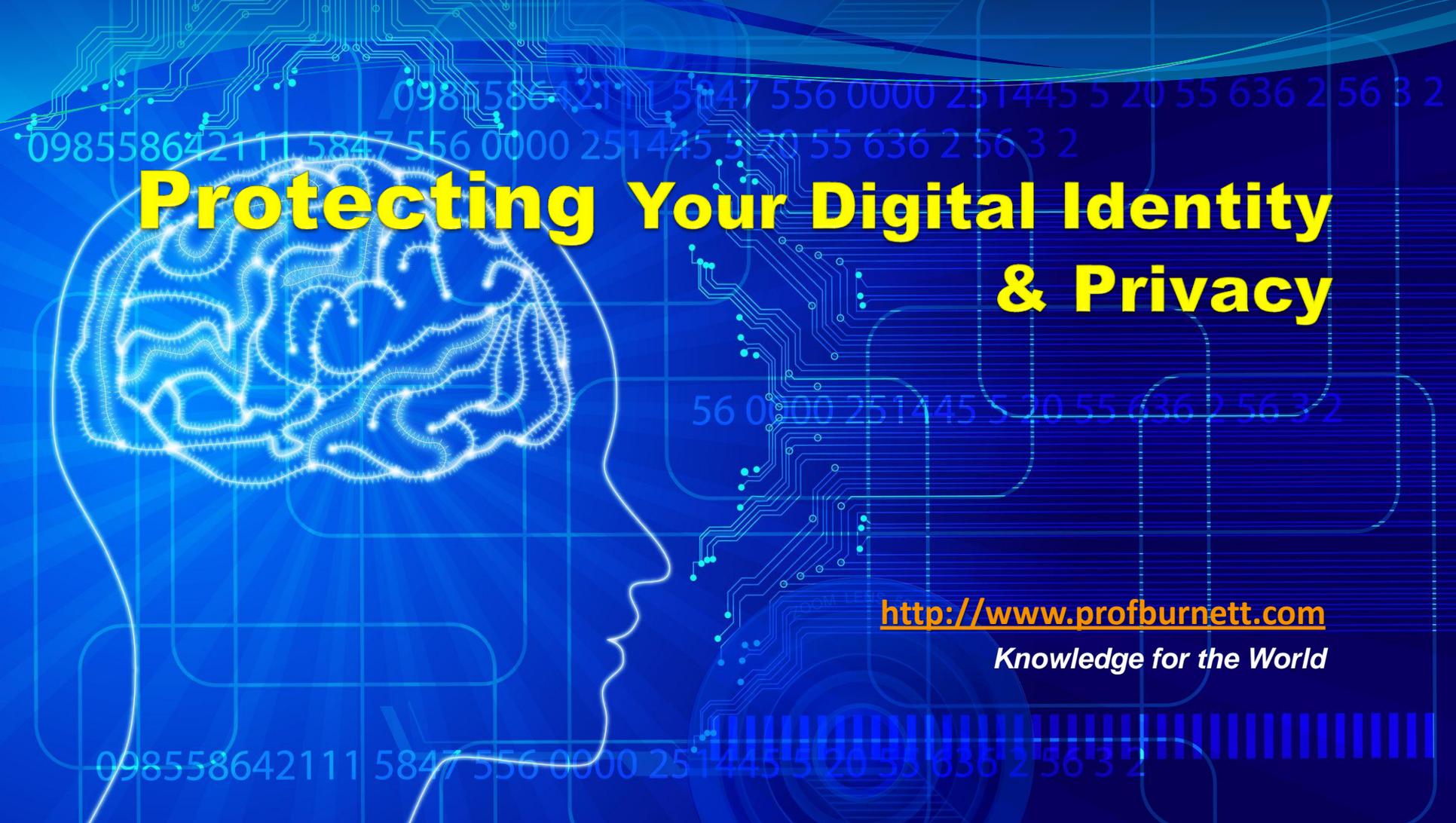
How to Protect Your Digital Assets

What digital security measures can I take to protect my digital assets?

1. Use a strong password (Multi-Factor Authentication)
2. Use a Password Manager
3. Use a separate password for your devices and accounts.
4. Use and Update Antivirus Programs
5. Update your apps regularly
6. Secure Your Cellphone
7. Secure your laptop/tablet
8. Backup your data regularly
9. Monitor your computer activity.
10. Never open attachments or links in email, IM's from unknown people.
11. Watch out for Social Engineering
12. Use online Credit Card for all online purchases.
13. Use a offline Credit Card for all offline purchases.
14. Monitor your financial account (Text Alerts)
15. Receive [free credit report monitoring](#).
16. [Freezing and locking your credit file](#).
17. [Free dark web scan](#).



Break



Protecting Your Digital Identity & Privacy

<http://www.profburnett.com>

Knowledge for the World

Top 5 Actions

Protect Your Digital Assets, Identity, & Privacy

1. Use a Password Policy
2. Monitor Your Credit Files
3. Backup Your Critical Digital Data (Offline & Cloud)
4. **Use Privacy Controls**
5. Do Not Allow
 - 3rd Party Cookies
 - Clickstream Tracking
 - Geotracking

Privacy Controls

- Facebook
- Twitter
- Google
- Microsoft
- Apple
- LinkedIn
- Yahoo
- Amazon
- TV's – STB
 - Comcast
 - Verizon
 - Verizon Email (See Yahoo)
- Cellphone Providers
 - AT&T
 - T-Mobile
 - Sprint
- WiFi Routers

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- Facebook
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 - Verizon
 - Verizon Email (See Yahoo)
- Cellphone Providers
 - AT&T
 - T-Mobile
 - Sprint
- WiFi Routers

Facebook Privacy Controls

- [Technolicious Facebook Privacy Guide](#)
- [Facebook Privacy Basics](#)
- [Data Policy](#)
- Posts
- Apps
- Profile
- <https://stalkscan.com/>
- **Advanced Privacy Controls**
 - Timeline and tagging options
 - Manage blocking
 - Customize app privacy
 - Apps, websites and Platforms
 - Apps others use
 - Ad Settings

Twitter Privacy Controls

- [Privacy Policy & Data Controls](#)
- **Privacy Settings**
- [Personalization and Data settings](#)
- [gPost Article on Twitter Controls](#)

Google Privacy Settings

- [Google Privacy Policies](#)
- Security Checkup
- Privacy Checkup
- [My Activity](#)
- [Data Takeout](#)
- [PC Magazine Google Privacy Article](#)

Google

My Account

Welcome, Eric Griffith

Control, protect, and secure your account, all in one place

My Account gives you quick access to settings and tools that let you safeguard your data, protect your privacy, and decide how your information can make Google services work better for you.

Sign-in & security >

Control your password and Google Account access.

Signing in to Google
Device activity & security events
Apps with account access

Security Checkup
Protect your account in just a few minutes by reviewing your security settings and activity
GET STARTED

Personal info & privacy >

Manage your visibility settings and the data we use to personalize your experience.

Your personal info
Contacts
Manage your Google activity
Ads Settings
Control your content

Privacy Checkup
Take this quick checkup to review important privacy settings and adjust them to your preference
GET STARTED

Account preferences >

Adjust account settings, like payment methods, languages, & storage options.

Payments
Language & Input Tools
Accessibility
Your Google Drive storage
Delete your account or services

Find your phone
Whether you forgot where you left it or it was stolen, a few steps may help secure your phone or tablet
GET STARTED

My Activity
Discover and control the data that's created when you use Google services
GO TO MY ACTIVITY

Microsoft Privacy Controls

- Privacy at Microsoft
- Privacy Dashboard

Apple Privacy Controls

- Apple Privacy Policies
- Manage Your Privacy – By Device
- Touch ID
- Face ID

LinkedIn Privacy Controls

- LinkedIn Privacy Settings
- Account
- Privacy
- Ads
- Communications

Yahoo Privacy Controls

- Oath - Verizon
 - AOL
 - Yahoo
 - Tumblr
 - MapQuest
- Oath Privacy Controls

Amazon Privacy Controls

- Amazon Privacy Notice
- Your Profile
- Wish Lists
- Customer Reviews
- Amazon Prime

TV's – STB Privacy Guidelines

- Set Top Box (STB)
- Disable interactive services
- Limit ad tracking
- Opt out

Xfinity YouTube Channel

The screenshot shows the Xfinity YouTube channel page in a web browser. The browser's address bar displays the URL <https://www.youtube.com/user/xfinity/videos>. The page features a navigation menu on the left with options like Library, History, and a SIGN IN button. The main content area includes a banner for Xfinity xFi with the text "Change the way you" and a "SUBSCRIBE" button. Below the banner, the channel name "Xfinity" and "103K subscribers" are visible. The "VIDEOS" tab is selected, showing a grid of video uploads. The first video is "DIY or Don't - Xfinity Home (15sec)" with 124 views and 17 hours ago. Other videos include "The Xfinity Sports Zone", "Cómo configurar tu servicio de Xfinity Prepaid Internet...", "#WeLaGente Documentary. #HispanicHeritageMonth", "DIY or Don't - Xfinity Home (30sec)", and "Rendezvous - Xfinity xFi App Notifications".

Change the way you xfinity xFi

Xfinity 103K subscribers

HOME **VIDEOS** PLAYLISTS COMMUNITY CHANNELS ABOUT

Uploads PLAY ALL SORT BY

Video Title	Duration	Views	Time Ago
DIY or Don't - Xfinity Home (15sec)	0:16	124 views	17 hours ago
The Xfinity Sports Zone	1:01	1.4K views	3 weeks ago
Cómo configurar tu servicio de Xfinity Prepaid Internet...	2:16	3K views	1 month ago
#WeLaGente Documentary. #HispanicHeritageMonth	4:46	15K views	1 month ago
DIY or Don't - Xfinity Home (30sec)	0:30	4.4K views	1 month ago
Rendezvous - Xfinity xFi App Notifications	0:31	14K views	1 month ago

Comcast Customer Privacy Notice

- [Online Privacy Notice](#)
- [PDF](#)
- [XFINITY Data Usage Center](#)

Verizon YouTube Channel

The screenshot shows the Verizon YouTube channel page. At the top, there is a navigation bar with the YouTube logo, a search bar, and a 'SIGN IN' button. Below the navigation bar is a large banner image featuring the Verizon logo in large white letters on a city street. The channel name 'Verizon' is displayed with a profile picture of the Verizon logo and '256K subscribers'. A red 'SUBSCRIBE' button is visible. The main content area shows a video titled 'Be First to Real Time | 5G Ultra Wideband' with 84,837 views, posted 5 months ago. The video description reads: 'Speed. The faster it goes, the faster we need to make it go. Until one day, at Verizon, we went beyond speed. With Verizon 5G Ultra Wideband, we are entering the era of real time. And that will change everything.' A link to the Verizon website is provided: <https://www.verizon.com/5g>. On the right side, there is a 'SUGGESTED CHANNELS' section with links to NBC, Motorola US, and Apple, each with a 'SUBSCRIBE' button. The left sidebar contains navigation options: Home, Trending, Subscriptions, Library, and History. Below these are options to sign in to like videos, comment, and subscribe, and a 'SIGN IN' button. At the bottom of the sidebar, there is a 'BEST OF YOUTUBE' section with icons for Music, Sports, Gaming, Movies, TV Shows, News, and Live.

Verizon Privacy Policy

- [Verizon Privacy Policy](#)
- [Verizon Selects Preference Center](#)
- [Fios Privacy Policy](#) (for email See Yahoo)
- [Verizon Fios TV Terms of Service](#)

Cellphone Providers Privacy Controls

- AT&T – [Privacy Policy](#) / [Smart Controls](#)
- T-Mobile – [Privacy Statement](#) / [Protecting your Privacy](#)
- Verizon – [Privacy Dashboard](#) (OATH)

WiFi Routers

- **Change you defaults**
 - **Admin Name:**
 - **Password:**
- **Turn Off Wireless Router Broadcasting**
- **Use MAC Addressing**

Top 5 Actions

Protect Your Digital Assets, Identity, & Privacy

1. Use a Password Policy
2. Monitor Your Credit Files
3. Backup Your Critical Digital Data
4. Use Privacy Controls
5. **Do Not Allow**
 - **3rd Party Cookies**
 - **Clickstream Tracking (Do Not Track)**
 - **Geotracking (Do Not Track)**

How to Protect Your Digital Identity & Privacy

What security measures can I take to protect my digital identity?

De-identification



Implement DO-NOT -TRACK



Destroy Tracking Cookies



Do Not Accept Third-Party Cookies



Anonymous Searching



Destroy Click-Stream Data



Eliminate Device Fingerprinting



Use a Password Policy



Break



You've Been Compromised Now What?

Ransomware Remediation



- **DO NOT PANIC!**
- Never Pay Ransom!
- Restart Your Computer – Scareware Ransomware will be cleared.
- Follow Virus Protection Remediation Procedures
- Find/Determine Corrupted Accounts /Files
- Disable Accounts
- Delete Accounts / Files
- Use System Restore to Restore Accounts from Backups
- Restore Files from Unaffected Offline Backup Files
- Contact the FBI Internet Crime Complaint Center (IC3)

E-Mail Compromise Remediation

- **DO NOT PANIC!**
- Restart Your Computer
- Change Account Password
- Run Advanced System Repair Software
- Shutdown Email Account
- Contact anyone since your account was compromised
- [Contact the FBI Internet Crime Complaint Center \(IC3\)](#)



Malware/Scareware Remediation



- **DO NOT PANIC!**
- Restart Your Computer
- Check Antivirus Software
- Run Antivirus Software for Malware/Scareware
- Download and Run Malwarebytes Anti-Malware
- Contact the FBI Internet Crime Complaint Center (IC3)

Phishing/Spoofing Remediation

- **DO NOT PANIC!**
- Restart Your Computer
- Turn on your Email spam filter / Robocall App.
- Don't click on links or open attachments in emails/texts if it is from an unknown sender.
- Log in through a separate tab or window.
- Pick up the phone - Call or text the sender and confirm the sent the email/text.
- [Contact the FBI Internet Crime Complaint Center \(IC3\)](#)



Credit Card Fraud / Misuse Remediation



- **DO NOT PANIC!**
- Contact Credit Card Issuer
- Get New Credit Card
- Freeze / Lock Credit Agency Files
- Freeze / Lock Other Credit Files
- Contact the FBI Internet Crime Complaint Center (IC3)

How to Protect Your Digital Assets

Credit Freeze

- Starting Sept. 21, 2018
- Free to place or remove a freeze on your credit report.
- Equifax or 800-349-9960
- Experian or 888-397-3742
- TransUnion or 888-909-8872

Other Credits Agencies



<https://www.innovis.com/personal/creditReport>
1-800-540-2505



<https://www.chexsystems.com/>
800.428.9623



<https://www.nctue.com/>
1-866-349-5185

Data Breach Remediation

- **DO NOT PANIC!**
- Forty-eight U.S. states, Guam, District of Columbia, Puerto Rico, and Virgin Islands, have data breach notification laws.
- Mandated to notify customers in the event that their sensitive information is lost in a data breach.
- Pertain to only personal identification data, including bank account and Social Security numbers
- Does not require notification if the data is encrypted and unusable.
- Some companies are required by state law to offer credit monitoring and remediation services.
- [Contact the FBI Internet Crime Complaint Center \(IC3\)](#)



Denial of Service Remediation



- **DO NOT PANIC!**
- Business service mitigation is only remedy.
- Contact the FBI Internet Crime Complaint Center (IC3)



Questions

Review

- **What is the Difference between Digital Security and Digital Privacy?**
- **How to Protect Your Digital Assets.**
- **How to Protect Your Digital Privacy.**
- **You've Been Compromised - Now What?**