


**Staying Safe Online**  
*Montpelier Senior Center*



**Week 3**

# Using the Web Safely


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<https://tinyurl.com/3b6p3h8s>

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**Topics**



- Check the Link
- Download Carefully
- Avoid Public WiFi
- Passwords
- Two-factor Authentication
- Be Shy – Restrict PII
- Antivirus/Firewall Software
- Log Off When Finished
- Update System & Software
- Backups

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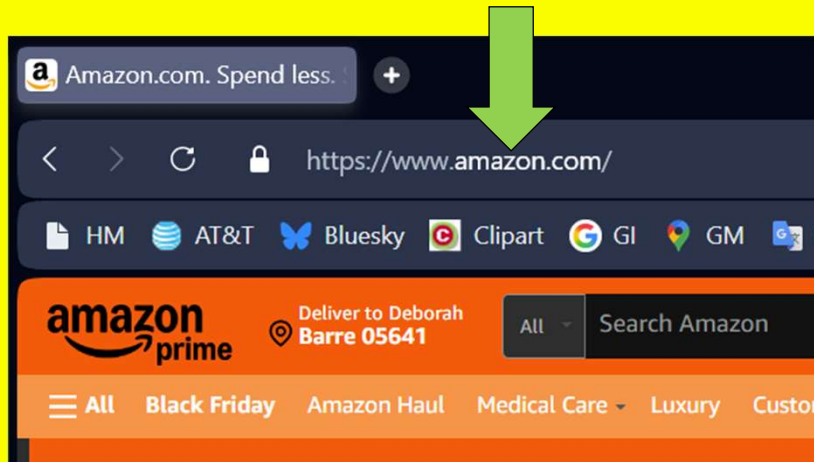
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## Check the Link (1)



➤ Easy to see when you use browser:



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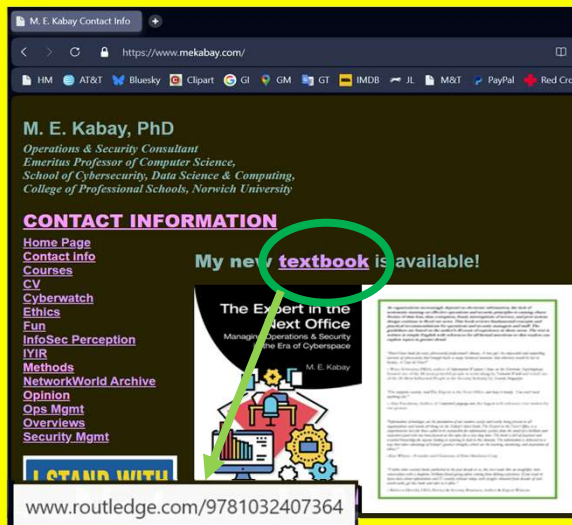
3

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## Check the Link (2)



➤ Important to check in page



Howevering the cursor over the link brings up the actual link at the bottom of the page (in this browser).

ROUTLEDGE is the publisher of the textbook.

If one doesn't know that, it is wise to look up the name before clicking on the link to be sure it's safe.

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## Check the Link (3)

➤ Particularly important in email



Your monthly activity summary is ready to review

Experian IdentityWorks® <noreply@e...> to me

Experian IdentityWorks®

Michel, review your monthly Experian IdentityWorks® monitoring results

Good News! Experian IdentityWorks® did not detect any new identity activity this month. Experian IdentityWorks® will continue monitoring your personal information and alert you if we find a match.

**Log In Now** → <https://click.alerts-mail.csid.com/?qs=>

Experian IdentityWorks® Customer Care

Experian IdentityWorks® • PO Box 2390 • Allen • TX • 75013 • [Privacy Policy](#) • [Terms and Conditions](#)

Reply Forward

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This was actually a legitimate email, not phishing.

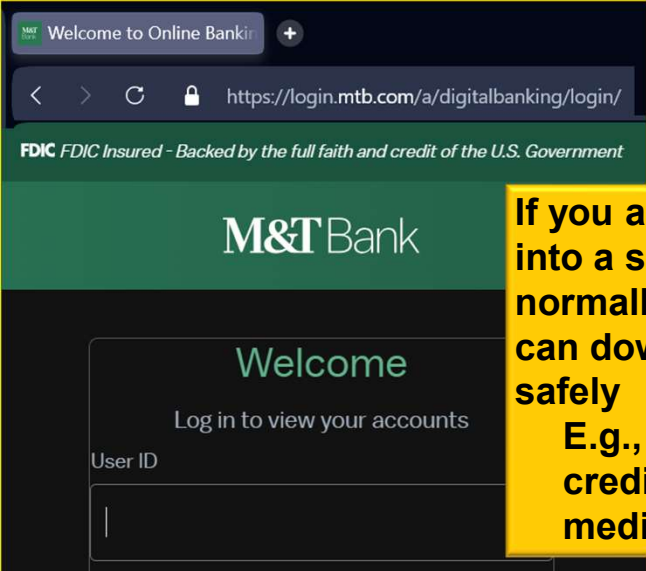
It simply illustrates that hovering the cursor over ANY link in email or on a Web page brings up the actual link.

In this case, the company uses a third-party emailing service. I checked and it's OK.

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## Download Carefully (1)



Welcome to Online Bankin

https://login.mtb.com/a/digitalbanking/login/

FDIC FDIC Insured - Backed by the full faith and credit of the U.S. Government

**M&T Bank**

Welcome

Log in to view your accounts

User ID

**If you are logged into a site you normally use, you can download files safely**

**E.g., banking, credit-card, medical systems**


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## Download Carefully (2)



From: support@mandtbank.com  
Date: today  
To: potential-victim@gmail.com  
Subject: Bank Statement

Hello customer,

Please download your current statement from

**FAKE LINK**

(<https://iwillstealyourinfo@crooks.com>)

**Do not download ANYTHING from strangers**

- Not from emails from random sender
- Not unexpected email from supposedly safe organization or person

**Contact the organization *yourself* to download information**

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## Avoid Public WiFi



- WiFi available at hotels, restaurants, offices....
- Easy to link phones, tablets, laptops
- **Be CAREFUL!**
  - ❑ May be unsafe
  - ❑ Can allow criminals to log onto network
  - ❑ Easier to steal passwords, insert malware on users' info

Wi-Fi

On 🔵

Current network

📶 **TP-Link\_5D16 2...** ⚙️  
Connected

Available networks

+ Add network

**USE FOR PUBLIC SITES,  
NOT SECURE SITES**

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## Passwords (1)

Passwords are **ONE authentication** method to prove that the **identification** is correct

➤ What you know that others don't know

Passwords

➤ What you have that others don't have

Tokens (e.g., physical keys)



➤ What you are that others aren't

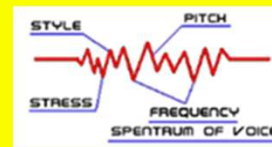
Biometrics (face, fingerprint)



➤ What you do that others do differently

Voice

Signature dynamics



## Passwords (2)

➤ Do not use publicly-available info for passwords!

Birthday

Partner's name

Mailing address

Pet's name

➤ Mix letters, numbers, symbols

➤ Store passwords securely

OUTLOOK "private" contact entry

Password safes/managers – programs store passwords using encryption



## Passwords (3)

- If you have to write passwords down on paper, store the paper securely! (e.g., a combination safe)
- Password safes or managers are reliable
  - ❑ Your browser may have that feature
  - ❑ Store userIDs & passwords for all the different logons
  - ❑ Use a password & strong encryption to prevent disclosure to hackers (as long as they don't have access to your device!)
- Windows, Apple, Android, iOS systems
  - ❑ Bitwarden
  - ❑ 1Password

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## Two-factor Authentication

- Example from normal life
  - ❑ Receive a phone call on your cell phone
  - ❑ See number calling you (factor 1) and recognize the voice of the caller (factor 2)
- Often must provide a code sent to your phone
  - ❑ Unique for specific login
  - ❑ Expires quickly (e.g., 10 minutes)
- Other systems – usually password +
  - ❑ Physical token
  - ❑ Biometric data

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## Be Shy – Restrict PII

- **DO NOT PROVIDE SOCIAL-SECURITY NUMBERS CASUALLY**
  - ❑ Only when YOU have logged in to site or service YOURSELF
- **Legitimate requests for SSN**
  - ❑ Financial institutions (for tax purposes)
  - ❑ Employers
  - ❑ Credit-reporting
  - ❑ Background checks
  - ❑ Insurance companies
- **Other organizations may ASK but you may DECLINE**

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## Antivirus/Firewall Software (1)


- **Antivirus (“antimalware”) protects against illegal software**
  - ❑ Malware can modify/steal data & block access
  - ❑ Viruses are self-replicating
  - ❑ Remote-access Trojans provide control by hackers
- **Firewalls usually integrated into security software**
  - ❑ Control access from external sources
  - ❑ Prevent infiltration of target systems

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## Antivirus/Firewall Software (2)




- For Windows systems (including Android phones)
- Bitdefender Total Security
  - ❑ Highly regarded
  - ❑ Anti-phishing
  - ❑ Anti-fraud
  - ❑ Anti-ransomware
  - ❑ Password manager
- Norton 360 Deluxe
- McAfee Total Protection
- Avast One

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## Antivirus/Firewall Software (3)




- Intego Mac Internet Security X9
- Bitdefender Premium Security for Mac
  - ❑ Aka “Bitdefender Antivirus for Mac”
- Norton 360 Deluxe for Mac
- Avast Premium Security for Mac

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## Log Off When Finished

- Do not leave system logged on (active) when you leave it
- Must not allow anyone to access system simply by using your existing session
- Applies even to home systems
  - ❑ Intruder could cause damage or steal info
  - ❑ Children could misuse system
    - ✓ Access dangerous sites (porn, abuse)
    - ✓ Some kids have charged \$thousands online using parents or grandparents' access to AMAZON etc.

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## Check Children's Systems


- Watch for access to online stores!
- Guardian 3 Mar 2025:
  - ❑ 8 year-old in Britain with iPhone
  - ❑ Accidentally had automatic access to parents' HSBC debit card
  - ❑ Spent equivalent of \$11,000
    - ✓ 270 payments in 3 months
    - ✓ Parents did not notice
    - ✓ No alerts from banks or Apple
  - ❑ Thought the charges were like in a game

<https://www.theguardian.com/money/2025/mar/03/our-eight-year-old-daughter-spent-over-8500-on-the-apple-app-store>

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## Update System & Software

- Allow your antimalware & operating system to update automatically
  - ☐ And can initiate update on demand


**Bitdefender Update** — ×

19%

**Update in progress ...**

Keep your product updated so it can easily detect even the newest threats and keep your device and data safe.

**Windows Update**




**You're up to date**

Last checked: Today, 13:31

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## Backups (1)

- Keep copies of your data on **EXTERNAL** resources
- Cloud storage (copies sent online to servers)
  - ☐ Microsoft Office 365
  - ☐ Backblaze (Windows & Mac)
  - ☐ iDrive for Mac
- Physical USB drives
  - ☐ 3TB (=3,000 GB = 3,000,000 KB) cost ~\$100
- Backup software
  - ☐ Windows:
    - ✓ WinZip (compresses modified files),
    - ✓ ViceVersa Pro (updates backup drive)
  - ☐ Mac: TimeMachine (built-in), Carbon Copy Cloner

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## Backups (2)



- Mich was in charge of operations centers in 1980s (Hewlett-Packard, Mathema Inc)
- Earned a living in operations-management consulting
  - Industry
  - Government
  - Education
- Therefore a bit fanatic about backups!

FREESPACE as of		2025-11-27	
DRIVE	Capacity (GB)	FREE (GB)	Freespace
1A	465	363	78%
1B	465	194	42%
2	931	381	41%
3A	465	28	6%
3B	465	73	16%
6	1853	674	36%
7	1393	369	26%
8	465	181	39%
9	5581	1987	36%
10	465	45	10%
11	186	54	29%
<b>TOTALS</b>	<b>12548</b>	<b>4348</b>	<b>35%</b>

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## OK, STAY SAFE!



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