

## Safe Computing

Public Law for the Public's Lawyers '21  
School of Government  
UNC Chapel Hill



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## Agenda



- Know Your Data
- Protect Your Data
- Trending Threats / Ways to Protect Yourself
- Securing Your Home Network
- Last Pass
- Traveling Safely w/ Technology
- Additional Resources
- Q&A

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## Agenda



- This is intended to be a practical overview of recent trends and priorities.
- Deeper dives on specific topics are available at: [safecomputing.unc.edu](https://safecomputing.unc.edu)

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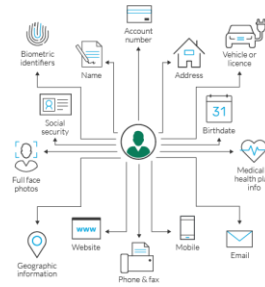
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## Know Your Data

- Regulated data.
  - Sensitive information with defined regulation (HIPAA, FERPA, SOX, etc.).
- Personally Identifiable Information.
  - VERY broad category.
  - Is regulated in some instances.
- Non-regulated sensitive business data.
- Think of sensitive data as the "crown jewels" of your information systems.



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## Protect Your Data

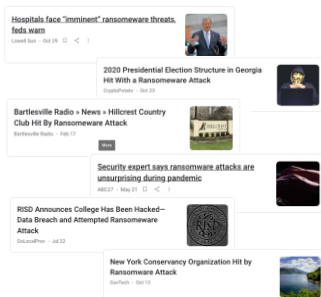
- Best Practices for protecting sensitive data.
  - Use only approved repositories.
  - Use unique and complex passwords for accounts – Lastpass Premium available at no cost for UNC community.
  - Encrypt storage on laptops.
  - Be sure that any cloud storage used to handle business data is covered by appropriate data use agreements or business associates agreements (BAA).



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## Trending Threats - Ransomware

- Ransomware
  - Malicious programs that lock your system and demand a ransom to restore your access.
- Used by sophisticated criminal enterprises.
- Generally require interaction from the user for initial infection.



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## Protecting Yourself - Ransomware

- Store work in an approved cloud location like onedrive.unc.edu or a network drive as directed by your IT department.
- Regularly backup your computer.
- Be wary of emails with attachments or that instruct you to download something.
- Only obtain software through your IT department.



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## Trending Threats - Phishing

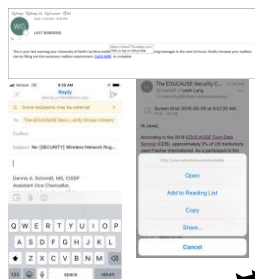
- Phishing
  - Using e-mail to defraud or infect users.
- Various approaches
  - Impersonation
  - Malicious Attachments
  - Malicious Links
- Require interaction from the user for success.



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## Protecting Yourself - Phishing

- Impersonation awareness
  - Always contact the person directly via alternate channel.
  - Don't buy or provide gift cards.
  - Trust your gut!
- Attachments
  - When in doubt don't open.
- Hover to discover
  - Works on phones!
- Report the message to your respective orgs IT group.



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## Phishing – Context Clues

- **Sense of Urgency**
  - Sending will say they need a response or confirmation quickly.
  - They may threaten consequences.
- **Discourages Alternative Communications**
  - Sender will try to keep the conversation where they can't be seen or heard.
- **Does the request make sense?**
  - Would the sender usually ask this of you?

**From:** Genevieve Neal-Perry, MD, PhD <patriciamore1916@gmail.com>  
**Sent on:** Monday, June 14, 2021 8:33:48 PM  
**To:** [REDACTED] <[REDACTED]@med.unc.edu>  
**Subject:** Urgent

Let me know when you are available. There is something I need you to do. I am going into a meeting now with limited phone calls.



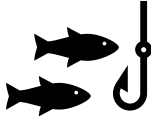
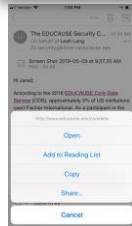
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## Phishing – Hover to Discover

- **On your computer:**
  - Place your cursor over any links to display the destination before clicking.
- **On your phone or tablet:**
  - Place your finger on the link to display the destination and options.

alina at Chapel Hill email account has been using <http://www.dla.kaltes.pl/vpn-edmsvc/unc.php?y=y&f=0>.  
 Click on tag to follow link.

<http://www.unc.edu>



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## Phishing – Putting it all together

- Sometimes only one warning sign may be present.
  - Maybe it came from what looks like a real e-mail address.
  - Maybe the link goes to what appears to be a real .com or .edu address.
- Pause and ask if the domain or sender make sense in combination.
  - Would this sender use this site?

**From:** YN-Perry <offCF@panda.edu>  
**Sent on:** Monday, June 21, 2021 2:52:24 PM  
**To:** Schmitt, Dennis <dennis\_schmitt@unc.edu>  
**Subject:** Telephone VM for dennis\_schmitt on 2021-06-21 AM-178

Hello dennis\_schmitt@unc.edu,

Your Virtual Office Extension has a new voicemail.

**New voicemail details:**  
**Received from:** [REDACTED]  
**Date/Time:** June 21, 2021, 07:52:24 AM Anonymous  
**Duration:** 11 seconds  
**VM Message:** May you missed my call earlier regarding ...  
**Listen:** [Click to Listen](#)

[View transcript of this voicemail](#) You're looking at a transcript of a voicemail message. To hear the voicemail, click on the play button.

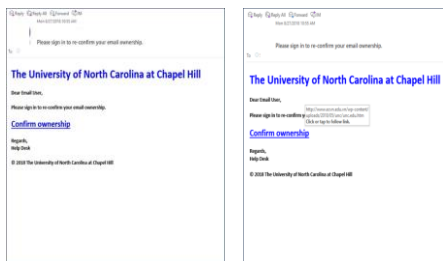


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## Phishing – Examples



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From: VoiceMessage <donald.giron@fieldhouse.com>  
 Sent: Monday, November 26, 2018 2:19 PM  
 To: Haring, Steve <sharing@email.unc.edu>  
 Subject: New Audio VM +1 (251) 579 - 3142



+1 (251) 579 - 3142 sent you a Voice Message.

Received From	+1 (251) 579 - 3142
Sent To	steve_haring@unc.edu
Time Received	12:45:04 PM GST
Duration	01:23

[\[Listen to Voice Message Here\]](#)

Thank you  
 Microsoft VoiceMail

From: VoiceMessage <donald.giron@fieldhouse.com>  
 Sent: Monday, November 26, 2018 2:19 PM  
 To: Haring, Steve <sharing@email.unc.edu>  
 Subject: New Audio VM +1 (251) 579 - 3142



+1 (251) 579 - 3142 sent you a Voice Message.

Received From	+1 (251) 579 - 3142
Sent To	steve_haring@unc.edu
Time Received	12:45:04 PM GST
Duration	01: Click or tap to follow link.

[\[Listen to Voice Message Here\]](#)

Thank you  
 Microsoft VoiceMail

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From: Steve Matson <smatson.unc.edu@gmail.com>  
 Date: Tuesday, February 12, 2019 at 9:27 AM  
 To: "smatson.unc.edu" <"smatson.unc.edu">  
 Subject: Re: Hello

I need you to help me get those gift cards from the store, I will reimburse you back when I get back to the office.  
 I need to send to someone and it is very important. You call a meeting and I need to get it sent right away. If none of my best friends son's birthday, the amount I need you to get right now is \$200. I'll send it to be reimbursing back to you. I need physical cards which you are going to get from the store. When you get them, scratch it and take pictures of the cards and attach it to this email then send it to me here ok.

On Tue, 12 Feb 2019 at 06:26, "smatson.unc.edu" wrote:

Happy to help. So call when you are out. I will be back on campus around 12:30 if you want to meet.

From: Steve Matson <smatson.unc.edu@gmail.com>  
 Date: Tuesday, February 12, 2019 at 9:25 AM  
 To: "smatson.unc.edu" <"smatson.unc.edu">  
 Subject: Re: Hello

I'm in a meeting right now and that's why I'm contacting you through here. I should have called you but phone is not allowed to be used during the meeting. I don't know when the meeting will be rounding off and I want you to help me out on something very important right away.

On Tue, 12 Feb 2019 at 06:25, "smatson.unc.edu" wrote:

At Duke this morning. Call if you would like. 913 use you.

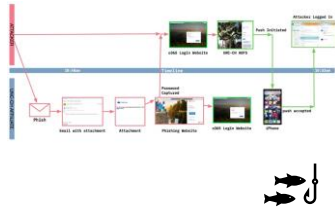
From: Steve Matson <smatson.unc.edu@gmail.com>  
 Date: Tuesday, February 12, 2019 at 9:23 AM  
 To: "smatson.unc.edu" <"smatson.unc.edu">  
 Subject: Hello

Are you in campus?

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## Phishing – What about two factor authentication?

- There have been successful "spear-phishing" attacks that circumvent technical controls.
- Situational awareness is your best tool!
  - Is this login notification expected?
  - If so, was the URL checked before entering credentials?
  - Don't hesitate to report after the fact if you suspect something.



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## Working From Home

- VPN
  - Full tunnel vs Split tunnel.
  - Talk to your IT staff about what solutions are available.
- Secure devices in your home with a password and enable updates.
- What happens if you can't connect to UNC resources?
  - Why this sometimes happens.
  - What to do.



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## Traveling Safely

- Use a VPN
- Avoid public/open WiFi
  - Invest in a hotspot or use your phone as a mobile hotspot.
- Only take what you need
- Full guide available at:
  - [safecomputing.unc.edu](https://safecomputing.unc.edu)



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## Additional Resources

- One-Stop Informational Site
  - [safecomputing.unc.edu](https://safecomputing.unc.edu)
- Podcast
  - [Dataatrest.unc.edu](https://dataatrest.unc.edu)
- Training
  - Available through Connect Carolina



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Thank you!

- Charlie Mewshaw
  - Operations and Incident Handling Team Lead in the ITS Information Security Office
  - [cmewshaw@unc.edu](mailto:cmewshaw@unc.edu)

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