



cyber innovation center<sup>TM</sup>



**CYBER.ORG**  
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER



Cybersecurity Briefing  
February 2024

# National Cyber Research Park

## Redundant Capabilities

AEP Swepeco 15 KV Feed  
Fiber Optic Connection Services  
Internet Service Providers  
• LONI  
• Lumen  
• AT&T  
• Conterra Networks  
• Optimum

Entrance to BAFB

Barksdale Air Force Base



Current National Cyber Research Park Footprint



Available Research & Development Space



Available Commercial Development Space



# Economic Impact Across Bossier and Caddo Parishes



**3,148**

Permanent jobs supported

**\$8.7M**

New annual revenues for local governments

**\$192.7M**

Total annual household earnings added to the region

**\$57.4M**

Invested in K-12 STEM/Cyber Education

**\$80.7M**

Awarded in support of national defense for AFGSC

All statistics as of 2023 provided by Dr. Loren C. Scott



# National Cyber Research Park

## Economic Overlay and Expansion



Phase I  
(500,000 SF of office space)



Phase I - IV  
(2.5 million SF of office space)





# Protected workspaces for military and government partners

- Anti-terrorist and Force Protection code compliant
  - UFC-4-010-0
  - UG-2031-SHR
- Four fiber loops (one research, three commercial)
- Uninterrupted power and redundant water supply
- Hardened and reinforced glass with data theft protection
  - UG-2031-SHR
- Areas built to DoD SCI standards
  - DCID 6/9 and ICD 705
  - DoD 5105.21-M-1
- 24/7/365 security provided by Bossier City Police Department across campus
- 24hr building access for staff and tenants
- Multiple control points prior to office access
- Adaptable space to align with tenant requirements



# Innovation HQ connecting government, industry and academia



## Vision

A future with broader access to rapidly and efficiently design solutions for industry and government



## Mission

Foster innovation and collaboration to address technology challenges and opportunities



## Approach

Increase coordination between government, small businesses, academia, and industry

- Technology transfer and transition (T3)
- A scalable, multi-level security space for collaboration on large-scale challenges or small-scale design sprints
- Classified and unclassified suites for modeling & simulation and wargaming
- Nuclear enterprise modernization
- Rapid prototyping
- Outreach events for industry and academic collaboration
- Workforce development/knowledge transfer
- Data analytics



# Welcome

- Brief personal introduction and fun cybersecurity fact
- Quick audience poll: 'On a scale from 1 to 5, how confident are you in your cybersecurity knowledge?'



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Cyber Innovation Center  
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# Why Cybersecurity Matters

- The Digital Landscape: Stats on digital adoption and cybercrime trends
- Impactful Stories: High-profile breaches and consequences
- Everyday Risks: Phishing, ransomware, and more





## Examples

- Identity theft
- Child sexual abuse materials
- Financial theft
- Intellectual property violations
- Malware
- Malicious social engineering

# CYBERCRIME



## What is it?

Cybercrime is any crime which is committed electronically.

This can include...

- Theft
- Fraud
- Sometimes even murder



## Why should you care?

- Crime is a danger offline and on!
- Cyber self-defense basics can go a long way to keeping you and your data out of the hands of bad actors.



# MALWARE

## Examples

- Ransomware
- Adware
- Botnets
- Rootkits
- Spyware
- Viruses
- Worms



## What is it?

Any software intended to...

- Damage
- Disable
- Or give someone unauthorized access to your computer or other internet-connected device



## Why should you care?

- Most cybercrime begins with some sort of malware. You, your family, and your personal information is almost certainly at risk if malware finds its way onto your computer or devices.



# RANSOMWARE



## What is it?

Malware designed to make data or hardware inaccessible to the victim until a ransom is paid.



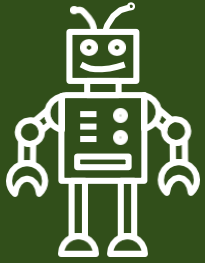
## Why should you care?

- Often downloaded as malicious email links
- Damage to both financial stability and reputation
- No guarantee that you will get your data back, even if you pay
- Often used as a decoy for other malicious activity

### Examples

- Cryptolocker
- Winlock
- Cryptowall
- Reveton
- Bad rabbit
- Crysis
- Wannacry





# BOTS



## What is it?

Bots are a type of program used for automating tasks on the internet.



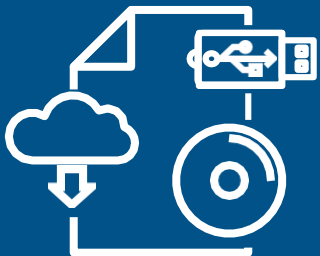
## Why should you care?

Malicious bots can:

- Gather passwords
- Log keystrokes
- Obtain financial information
- Hijack social media accounts
- Use your email to send spam
- Open back doors on the infected device

### Did You Know?

Not all bots are bad. When you use a search engine, these results are made possible by the help of bots “crawling” the internet and indexing content. Chatbots like Siri and Alexa are another common type of “good” bot.



# PHYSICAL CYBER ATTACKS

## Did You Know?

Anything connected to the internet is potentially vulnerable, from e-scooters to laptops to cargo ships.



## What is it?

Physical cyber attacks use hardware, external storage devices, or other physical attack vectors to infect, damage, or otherwise compromise digital systems. This can include...

- USB storage devices
- CD/DVD
- Internet of Things (IoT)



## Why should you care?

- Easy to overlook
- Difficult to identify and detect
- Extremely difficult to remove
- Can do anything from installing ransomware, to sending copies of or modifying information systems, to dismantling networks



# SOCIAL ENGINEERING

## Examples

- Phishing
- Pretexting
- Baiting
- Quid pro quo
- Tailgating
- Inside job
- Swatting



## What is it?

- Cybercriminals can take advantage of you by using information commonly available through...
- Social media platforms
- Location sharing
- In-person conversations



## Why should you care?

- Your privacy isn't just a luxury – it's a security measure
- Attacks can be successful with little to no programming knowledge or ability
- Technological security measures can only protect you so much – you are your best defense





## Examples

Your location is embedded as metadata in every picture you take with your phone. Turn location services off when you aren't using them to make it more difficult for bad actors to view this information.

# SWATTING



## What is it?

An attack centered around location sharing in which bad actors call the police claiming the victim has committed a crime...

- Bomb Threat
- Armed Intruder
- Violent Incident



## Why should you care?

- Physical and immediate consequences
- Sometimes was intended merely as a prank
- Arrest and serious injury can result
- Reduce risk by sharing your location only with trusted individuals, and share vacation photos only after you've returned safely home



# PHISHING

## Examples

- Emails
- Text messages
- Phone calls
- Social media messages and posts
- Suspicious hyperlinks



## What is it?

Fake messages from a seemingly trusted or reputable source designed to convince you to...

- Reveal information
- Give unauthorized access to a system
- Click on a link
- Commit to a financial transaction



## Why should you care?

- Extremely common
- Can have severe consequences
- Devil's in the details

# POP QUIZ





The image shows a screenshot of a web browser displaying a phishing email. The browser's address bar shows a URL that mimics Google Docs but is clearly a fake. The email content features a background image of runners and a city skyline. Three callout boxes point to specific red flags: a forged URL, poor grammar, and scare tactics. The email text itself is a warning about account deletion, with a red box highlighting the main body of the message.

**1 Forged URL.**  
Although this domain uses "https" it is clearly not a Yahoo! domain.

**2 Poor grammar.**  
Unclear and grammatically incorrect text on a page is usually a clear giveaway of a phish.

**3 Scare tactics.**  
It's highly unlikely your email provider will delete your account due to "congestions."

**phishTank**


**Yahoo!! Mail is Upg**

This Email is from Yahoo! Customer Care and we are sending it to every Yahoo! Email User Accounts Owner for safety. We are having congestions due to the anonymous registration of Yahoo! accounts so we are shutting down some Yahoo! accounts and your account was among those to be deleted. We are send this email to you so that you can verify and let us know if you still want to use this account. If you are still interested please confirm your account. click bellow to verify your mail

\* Required



United States [Skip navigation] Home **Personal** Business | HSBC Premier | HSBC Advance | Contact Us

**HSBC**  The world's local bank

Search  **Go**

Checking Savings Home Loans Cards Insurance Investments Other Services Green **HSBC Online**

Personal Internet Banking | Business Internet Banking

## Personal Internet Banking - Log On

Enter your Username

Username  [Forgot Username?](#)

**Continue**

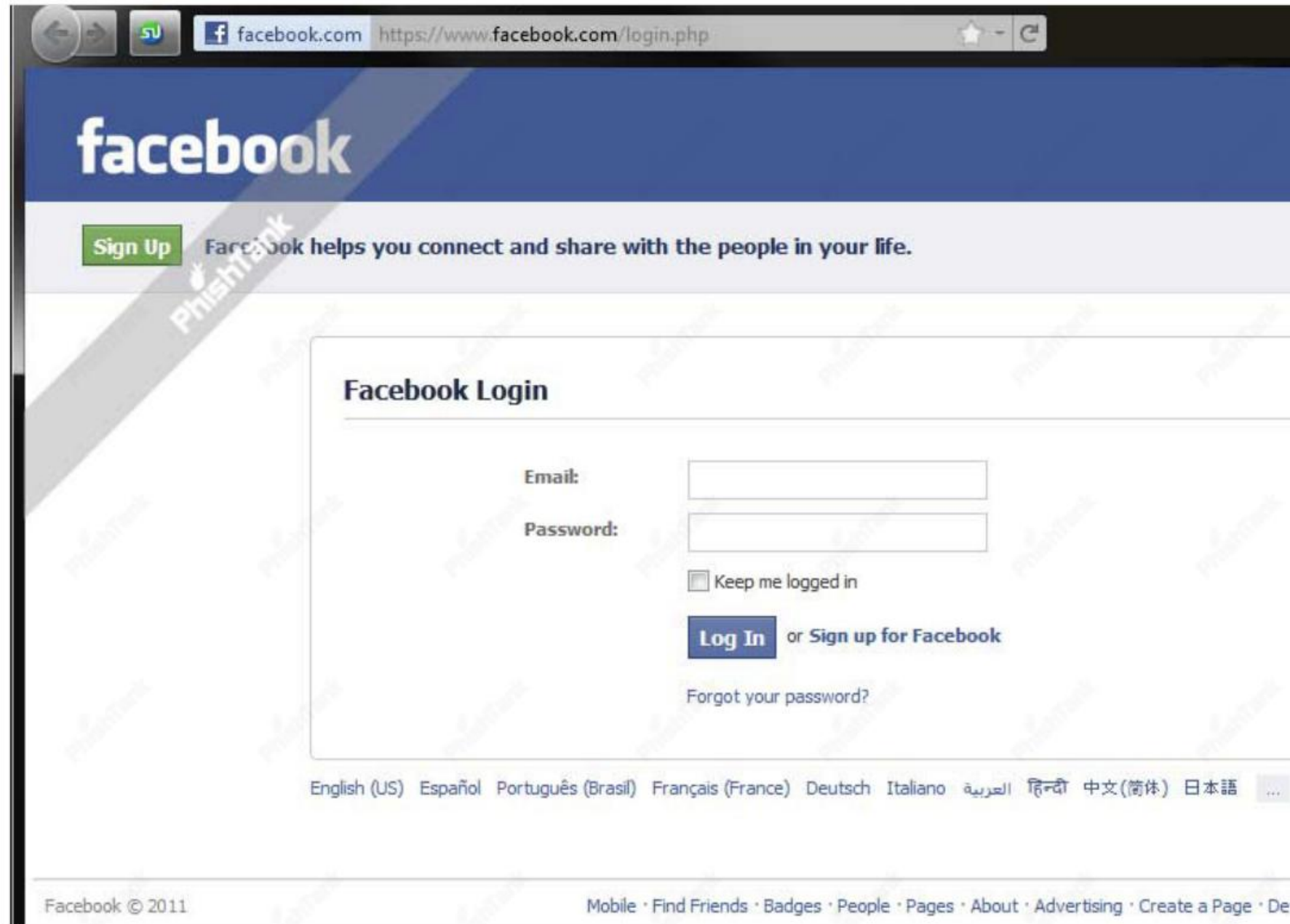
Customer Service



- ▶ [New customer? Register Now!](#)
- ▶ [Why do I need a Username and a Password?](#)

Information about the new  
Personal Internet Banking  
**log on process.**

▶ **Learn more**





← →   http://www.aa.airlinesaamemeber.com/login.php

Home | Login | My Account | Worldwide Sites | Contact AA | FAQ Search... **GO**

# American Airlines<sup>®</sup>

AA.com<sup>®</sup>

**AA.com**

## Login

**ESPAÑOL**

**Reservations** ▶  
**Travel Information** ▶  
**Net SAAver & Special Offers<sup>SM</sup>** ▶  
**AAdvantage<sup>®</sup>** ▶  
**Products & Gifts** ▶  
**Business Programs & Agency Reference** ▶  
**About Us** ▶

**Deal Finder™**  
Get Details ▶▶

**To login:**

- Enter your AAdvantage Number
- Enter your Password
- Click **Go**

If you do not have an AAdvantage number, click [Enroll in the AAdvantage Program](#).

### Login

Your password is case sensitive and must be 6-12 numbers and/or letters.

AAdvantage Number  [Forgot AAdvantage Number?](#)

Password  [Forgot/Need Password?](#)


☒ Remember My AAdvantage Number

☐ This is a public/shared computer, do not remember me.






[Password Help FAQs](#)

**GO**

[Enroll in the AAdvantage Program - It's Free!](#)

**DealFinder™** |  **RSS** | **AA.com** en Español

[Airline Tickets](#) | [AA Careers](#) | [Copyright](#) | [Legal](#) | [PRIVACY POLICY](#) | [Customer Service Plan](#) | [Browser Compatibility](#) | [Site Map](#)

http://www.aa.airlinesaamemeber.com/login.php

**2 No "https."**  
The real American Airlines login page will always use "https" indicating a secure login.

**1 Forged URL.**  
Even though **aa.com** is the real domain for American Airlines, the actual domain for this phish is **airlinesaamemeber.com**.

AA | FAQ | Search... GO

AA.com

ESPAÑOL

**Travel Information**

- Net SAAver & Special OffersSM
- AAAdvantage®
- Products & Gifts
- Business Programs & Agency Reference
- About Us

**Deal Finder™**  
Get Details >>>

**Login**  
Your password is case sensitive and must be 6-12 numbers and/or letters.

AAAdvantage Number  [Forgot AAAdvantage Number?](#)

Password  [Forgot/Need Password?](#)

☒ Remember My AAAdvantage Number

☐ This is a public/shared computer, do not remember me.

[Password Help FAQs](#)

**GO**

[Enroll in the AAAdvantage Program - It's Free!](#)

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To login:

- Enter your AAAdvantage Number
- Enter your Password
- Click Go

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AAAdvantage® | citi



Admirals Club®

member of oneworld

American Eagle

American Airlines Vacations. AAVacations.com



← → ↻   http://cedij.com.mx/data/paypal/paypal/www.paypal.com/www.paypog ☆ - C

[Log Out](#) | [Help](#) | [Security Center](#)

# PayPal

**My Account** | [Send Money](#) | [Request Money](#) | [Merchant Services](#) | [Auction Tools](#) | [Products & Services](#)

[Overview](#) | [Add Funds](#) | [Withdraw](#) | [History](#) | [Resolution Center](#) | [Profile](#)


## My Account Overview

**Set Up Your Account**

- > Add Bank Account
- > Get Verified

**Enhance Your Account**


- > Upgrade Account
- > PayPal Plus Credit Card
- > Confirm phone

 **An extra layer of protection**

[Order the PayPal Security Key](#)

**What's New**

- > Learn about important updates to Recent Activity
- > Shopping Is Safe And Easy With PayPal
- > See Where You Can Use PayPal

 Your account access is limited. [Remove this limitation.](#)

### Personal Information Profile

Make sure you enter the information accurately, and according to the formats required. Fill in all required fields.

\*Full Name:

\*Date of Birth:

\*Mother's Maiden Name:

\*Country:

\*Billing Address:

\*City:

\*State:

\*Zip Code:

Social Security Number:  -  -  \*United States Only

\*Home Phone Number:



http://cedij.com.mx/data/paypal/paypal/www.paypal.com/www.paypog

# PayPal

My Account | Send Money | Request Money


Overview | Add Funds | Withdraw | History

## Set Up Your Account

- > Add Bank Account
- > Get Verified

## Enhance Your Account

- > Upgrade Account
- > PayPal Plus Credit Card
- > Confirm phone

 An extra layer of protection  
[Order the PayPal Security Key](#)


### What's New

- > Learn about important updates to Recent Activity

### Policy Updates

August 30, 2007

## My Account Overview

 Your account access is limited. [Remove this limitation.](#)

### Personal Information Profile

Make sure you enter the information accurately, and according to the formats required. Fill in all required fields.

\*Full Name:

\*Date of Birth:  month  day  year

\*Mother's Maiden Name:

\*Country:  Select Country/Territory

\*Billing Address:

\*City:

\*State:  Select State

\*Zip Code:

\*Social Security Number:  -  -  \*United States Only

\*Home Phone Number:

This number will be used to contact you about Security Measures and/or issues regarding your PayPal account.



\*Driver License Number:


\*State Issued:





**1 Forged URL.**  
Even though the name "PayPal" appears in the domain name, it's not the real site.

**2 No "https."**  
The real PayPal, especially when requesting personal information, will always use "https" indicating a secure login.

**3 Asks too much information.**  
PayPal would not request your Social Security and driver's license numbers.

← →   http://27.251.96.35:8888/ ☆ - ↻

**amazon.com** Hello, [Sign in](#) to get personalized recommendations. New customer? [Start here.](#) **FREE 2-**  
Your Amazon.com |  [Today's Deals](#) | [Gifts & Wish Lists](#) | [Gift Cards](#) | Your Digital Items

[Shop All Departments](#)  Search     Cart

**Sign In**

What is your e-mail address?


My e-mail address is:

Do you have an Amazon.com password?

☐ No, I am a new customer.

☒ Yes, I have a password:

[Forgot your password?](#)

[Sign in using our secure server](#) 

**Sign In Help**

Forgot your password? [Get password help.](#)

Has your e-mail address changed? [Update it here.](#)

2 **No "https."**  
The real Amazon login page will always use "https" indicating a secure login.

1 **Forged URL.**  
Uses an IP address instead of an alphabetical domain name, which is often a telltale sign of a phish.

Sign In

What is your e-mail address?

My e-mail address is:

Do you have an Amazon.com password?

☐ No, I am a new customer.

☒ Yes, I have a password:

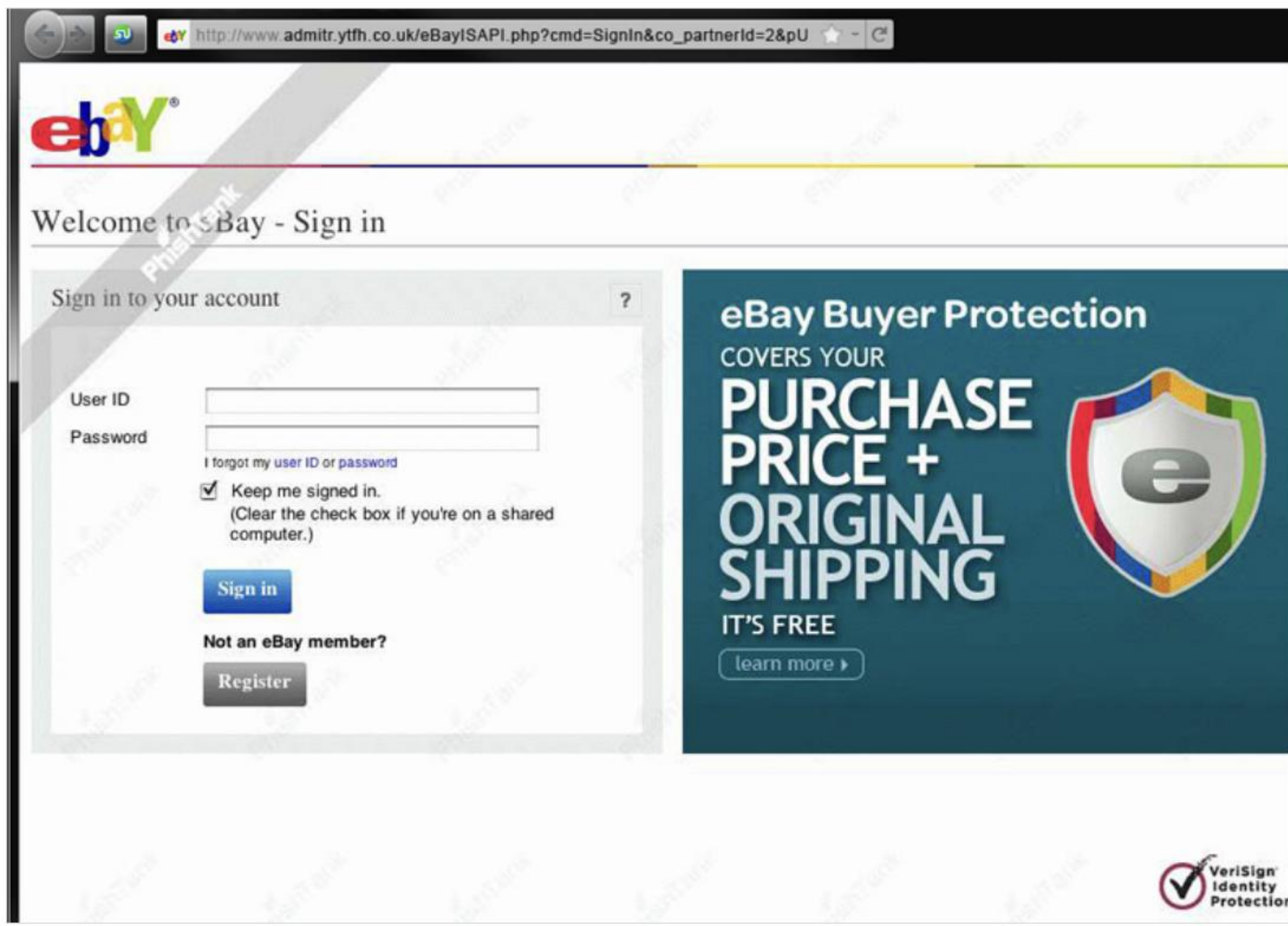
[Forgot your password?](#)

[Sign in using our secure server](#)

**Sign In Help**

Forgot your password? [Get password help.](#)

Has your e-mail address changed? [Update it here.](#)





http://www.admitr.ytfh.co.uk/eBayISAPI.php?cmd=SignIn&co\_partnerId=2&pU

**1 Forged URL.**  
Even though the name "eBay" appears in the domain name, it's not the real site.

**2 No "https".**  
The real ebay login page will always use "https" indicating a secure login.

**3 Different font and design elements from the real eBay login screen.**

**4 Low graphic resolution.**

Welcome to eBay - Sign in

Sign in to your account

The real eBay uses a San Serif font

User ID

Password

I forgot my user ID or password

☒ Keep me signed in.  
(Clear the check box if you're on a shared computer.)

Sign in

Not an eBay member?

Register

eBay Buyer Protection  
COVERS YOUR  
**PURCHASE + ORIGINAL SHIPPING**  
IT'S FREE  
[learn more](#)

VeriSign Identity Protection





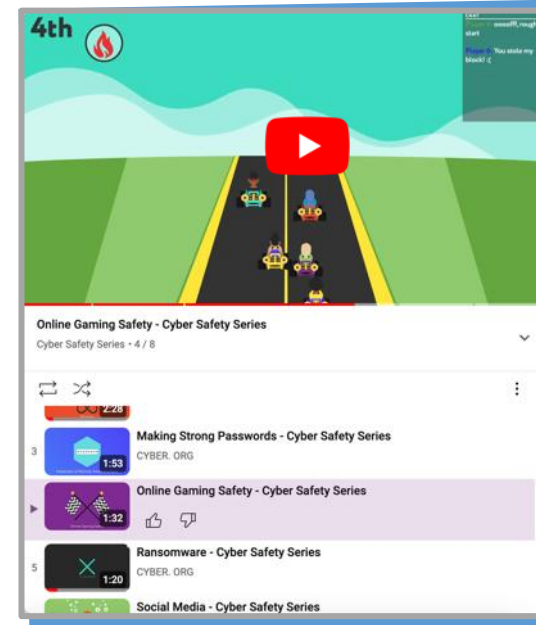
# Cyber Hygiene Best Practices

- Personal Security Tips:
  - Strong passwords and multi-factor authentication
  - Regular software updates
  - Recognizing phishing attempts
- Organizational Security Strategies:
  - Cybersecurity policies and training
  - Incident response plans
  - Regular security assessments



# Power of Collaboration

- Building a Cyber-Resilient Community:
  - Partnerships between businesses, government, and schools
  - Success stories of collaborative cybersecurity efforts
  - Available Resources: CYBER.ORG and government resources



Cyber Safety Video Series



Career Profiles

# Future Trends in Cybersecurity

- Emerging Threats: AI-driven attacks, IoT vulnerabilities
- Opportunities: Advances in threat detection and quantum security
- Call to Action: Stay informed and proactive



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