adding to your knowledge

FY2018 Information Security Awareness Oct. 1, 2017





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FY 2018 Information Security Awareness and Rules of Behavior Training

Welcome to "Destination ISA" – FY 2018 Information Security Awareness and Rules of Behavior Training!

Annual Basic Information Security Awareness and Rules of Behavior Training is mandatory for all USDA employees, contractors, partners, and volunteers (employees) that have or will be granted access any USDA information system. New employees, contractors, partners, and volunteers are required to complete the awareness training prior to gaining access to USDA systems. All users must stay abreast of USDA security policies, requirements, and issues. Users must make a conscientious effort to avert security breaches by complying with USDA and agency/staff office security policies, procedures, standards, practices, and alerts. Users are responsible for complying with the rules of behavior and this training as part of the approval process for obtaining access to a USDA information system.

By taking this course, you are meeting the legal requirement for all users of federal information systems to take annual basic computer security awareness training. This course is designed to help you understand the importance of information systems security, or ISS, its guiding principles, and what it means for your agency. This course also provides the "Rules of Behavior" that govern your use of USDA information technology (IT) resources.

It will identify potential risks and vulnerabilities associated with federal information systems, review your role in protecting these systems, and provide guidelines to follow at work to protect against attacks on information systems.



Course Overview

Information Security Awareness is an ongoing process – it is like a journey as we all navigate and interact with a variety of technologies in the course of doing your job. To mirror this "journey", this course has been mapped into what we call the 7 Destinations of Information Security Awareness.

Your role in taking this course is to navigate through each of these Destinations and successfully pass the related assessment.

This course consists of seven (7) Destinations.

- Destinations 1: Importance of Information Systems Security
- Destinations 2: Overall Threats to Information Systems Security
- Destinations 3: Social Engineering Threats
- Destinations 4: Internet Threats
- Destinations 5: Media Devices and Mobile Security
- Destinations 6: Physical Security & Classified Information
- Destinations 7: User Roles and Responsibilities

Destination 1: Importance of Information Systems Security (ISS)

The Internet has made it extremely easy to quickly obtain and transfer information. While global connectivity is very convenient, it also increases our vulnerability to outside attacks. The goals of ISS and the Rules of Behavior are to protect USDA information and information systems.

ISS and Rules of Behavior protect information from unauthorized access or modification and ensure that information systems are available to their users.

This means that a secure information system maintains confidentiality, integrity, and availability.

Rules of Behavior are a vital part of USDA information security. The rules inform users of their responsibilities and lets them know they will be held accountable for their actions while they are accessing USDA information. The rules apply to all users and IT devices capable of accessing USDA systems.

Learning Objective

After completing this lesson, you should be able to:

• Identify what information systems security is and why it is important.

This lesson includes the following topics:

History of ISS



- ISS and Rules of Behavior Legal Requirements
- Rules of Behavior Acceptable Behavior and Penalties
- Critical Infrastructure

History of ISS

Fifty years ago, computer systems presented relatively simple security challenges. They were expensive, understood by only a few, and isolated in controlled facilities.

Protecting these computer systems consisted of controlling access to the computer room and clearing the small number of specialists who needed such access.

As computer systems evolved, connectivity expanded, first by remote terminals, and eventually by local and wide-area networks, or LANs and WANs.

As the size and price of computers came down, microprocessors began to appear in the workplace and homes all across the world.

What was once a collection of separate systems is now best understood as a single, globally connected network. ISS now includes infrastructures neither owned, nor controlled by the federal government. Because of this global connectivity, a risk to one is a risk to all.

ISS and Rules of Behavior Legal Requirements

It is important that you are aware of the possibility of attacks against USDA systems and the method in which potential attacks could occur.

Understanding your responsibilities for protecting USDA information systems and how you can contribute to preventing attacks will contribute to the safety of USDA information systems.

USDA is required by law to ensure that anyone who aware of his or her responsibilities and complies with the established Rules of Behavior.

What you should know

The Federal Information Security Modernization Act of 2014, requires security awareness training to inform personnel, including contractors and other users of information systems that support the operations and assets of the agency, of information security risks associated with their activities; and their responsibilities in complying with agency policies and procedures designed to reduce these risks.

Office of Management and Budget (OMB) Circular A-130 requires:



- Provide foundational security and privacy training to information system users (including managers, senior executives, and contractors) and ensure that measures are in place to test the knowledge level of information system users.
- Establish rules of behavior, including consequences for violating rules of behavior, for employees that have access to Federal information or information systems, including those that create, collect, use, process, store, maintain, disseminate, disclose, or dispose of PII.
- Ensure that employees have read and agreed to abide by the rules of behavior for the Federal information and information systems for which they require access prior to being granted access.



Knowledge Check #1

Fill in the blank.

All of the following are important aspects of Information Systems Security, except ______.

- 1. Protecting information on government computer networks
- 2. Blocking unauthorized access to government computer networks
- 3. Preventing unauthorized digital modification to government computer networks
- 4. Specific written restrictions for the use of government computer networks

The correct answer can be found in the Appendix

Rules of Behavior – Acceptable Behavior and Penalties

Rules of Behavior establish expected and acceptable computing behaviors. Because written guidance cannot cover every contingency, users are also required to use sound judgment and the highest ethical standards in their decision making.

USDA will take corrective action and/or enforce the use of penalties against any user who violates any USDA or Federal system security policy, using any and/or all of the following:

- Corrective actions (taken in accordance with existing rules, regulations, and laws)
 include written reprimands, temporary suspension from duty, reassignment or demotion,
 and termination of Federal employment.
- Suspension of system privileges.
- Possible criminal prosecution.

What you should know

The following unofficial activities are prohibited on any information system owned or operated on behalf of USDA or any government-issued phones, tablets, and other devices. :

- Gambling.
- Intentionally visiting and downloading material from pornographic websites.
- Lobbying Congress or any government agency.
- Campaigning political activity.
- Any type of continuous audio or video streaming from commercial, private, news, or financial organizations, except as expressly authorized by management.
- Activities that are connected with any type of outside employment.
- Endorsement of any non-government products, services, or organizations.
- Apps such as: Confide, Signal, Telegram, WhatsApp, and Facebook Messenger.



Critical Infrastructure

Critical Infrastructure Protection, or CIP, is a national program established to protect our nation's critical infrastructures. Critical infrastructure refers to the physical and cyber-based systems essential to the minimum operations of the economy and government.

Sectors considered part of our nation's critical infrastructure include, but are not limited to, information technology and telecommunications, energy, banking and finance, transportation and border security, water, and emergency services. Many of the nation's critical infrastructures have historically been physically and logically separate systems that had little interdependence. However, these infrastructures have become increasingly automated and interlinked. Increased connectivity creates new vulnerabilities.

Critical Infrastructure – Threats

Equipment failures, human error, weather, as well as physical and cyber-attacks impacting one sector, could potentially impact our nation's entire critical infrastructure. For example, if the natural gas supply is disrupted by a computer virus, and electrical power is cut, computers and communications would shut down. Roads, air traffic, and rail transportation would be impacted. Emergency services would be hampered. An entire region can be debilitated because an element critical to our infrastructure has been attacked.

CIP was established to define and implement proactive measures to protect our critical infrastructure and respond to any attacks that occur.

Knowledge Check #2

Select the correct answer.

Which of the following systems would not be included in the national Critical Infrastructure Protection program?

- 1. Social Security
- 2. Electric Power
- 3. Elementary Schools
- 4. The Federal Reserve

The correct answer can be found in the Appendix



Destination 2: Overall Threats to Information Systems Security

It is important to understand the difference between threats and vulnerabilities and how they can affect your system.

A threat is any circumstance or event that can potentially harm an information system by destroying it, disclosing the information stored on the system, adversely modifying data, or making the system unavailable.

A vulnerability is a weakness in an information system or its components that could be exploited. Vulnerabilities exist when there is a flaw or weakness in hardware or software that could be exploited by hackers. Vulnerabilities are frequently the result of a flaw in the coding of software. To correct a vulnerability, a vendor would issue a fix in the form of a patch to the software.

Learning Objective

After completing this lesson, you should be able to:

• Differentiate between a threat and vulnerability, and identify the risks associated with each.

This lesson includes the following topics:

- Threat Categories
- Environmental Threats
- Internal vs. External Human Threats

Threat Categories

There are two types of threat categories: environmental and human threats.

Environmental Threats

Natural environmental events - including lightning, fires, hurricanes, tornadoes, or floods - pose threats to your system and information. A system's environment - including poor building wiring or insufficient cooling for the systems - can also cause harm to information systems.

How can you protect against environmental threats?

Rules of Behavior - Hardware/Environmental Threats

Users should do their best to protect computer equipment from damage, abuse, theft, and unauthorized use. Users shall protect computer equipment from hazards such as:

- Extreme temperatures;
- Electrical storms:



- Water and fire:
- Static electricity;
- Spills from food and drink;
- Dropped objects;
- Excessive dusty environments; and
- Combustible materials.

Internal vs. External Human Threats

Human threats can be internal or external. An internal threat can be a malicious or disgruntled user, a user in the employ of terrorist groups or foreign countries, or self-inflicted unintentional damage, such as an accident or bad habit.

An external threat can be hackers, terrorist groups, foreign countries, or protesters.

Let's look more closely at human threats to federal information systems. The greatest threats to federal information systems are internal - from people who have working knowledge of and access to their organization's computer resources.

An internal threat, or insider, is any person with legitimate physical or administrative access to the computer who can misuse or exploit weaknesses in the system. Others, due to a lack of training and awareness, can also cause damage. Although there are security programs to prevent unauthorized access to information systems, and employees undergo background investigations, certain life experiences can alter people's normal behavior and cause them to act illegally. Stress, divorce, financial problems, or frustrations with co-workers or the organization are some examples of what might turn a trusted user into an insider threat.

How can you protect against internal human threats?

Rules of Behavior – Internal Threats

Users shall:

- Keep an inventory of all equipment assigned to them.
- Only use equipment for which they have been granted authorization.
- Not leave computer equipment in a parked car or in an unsecured location where it might be stolen.
- Follow established procedures when removing equipment from USDA premises. This
 usually requires a property pass.
- Not install or use unauthorized software or hardware on the network, including personal laptop computers, pocket computers, or personal digital assistants and network enabled cellular phones, except as expressly authorized.



- Not alter the configuration, including installing software or peripherals, on government equipment unless authorized.
- Notify management before relocating computing resources.
- When possible, use physical locking devices for laptop computers and exercise additional care for other portable devices.

External Threats

External threats, or outsiders, are most commonly hackers. An outsider is an individual who does not have authorized access to an organization's computer system.

What you should know.

Today, hackers may include representatives of foreign countries, terrorist groups, or organized crime. Today's hacker is also far more advanced in computer skills and has access to hacking software that provides the capability to quickly and easily identify a system's security weaknesses. Using tools available on the Internet, a hacker is capable of running automated attack applications against thousands of host computers at a time. Because of this, hackers pose a serious risk to the security of federal information systems.



Destination 3: Social Engineering Threats

Social engineering is a hacking technique that relies on human nature. This approach is used by many hackers to obtain information valuable to accessing a secure system.

Learning Objective

After completing this lesson, you should be able to:

- Understand the definition of Social Engineering
- Recognize examples of Social Engineering
- Understand your responsibilities for reporting incidents of Social Engineering
- Recount six (6) ways you can you can prevent social engineering threats

This lesson includes the following topics:

- Social Engineering
- Rules of Behavior Access
- Incident Reporting
- Phishing

Social Engineering Overview

When Kate answered the phone, the man on the other end sounded very authoritative. He said he was investigating a possible security incident on USDA's Web TA time and attendance information system and needed her to verify her password. Kate may have been the target of social engineering.

Rather than using software to identify security weaknesses, hackers attempt to trick an individual into revealing passwords and other information that can compromise your system security.

They use people's inherent nature to trust to learn passwords, logon IDs, server names, operating systems, or other sensitive information.

For example, a hacker may attempt to gain system information from an employee by posing as a service technician or system administrator with an urgent access problem.

Nobody should ever ask you for your passwords. This includes system administrators and help desk personnel.

Your Role in Social Engineering

Understanding social engineering behaviors will enable you to recognize them and avoid providing important security information to unauthorized sources.



Preventing social engineering:

- Verify identity.
- Do not give out passwords.
- Do not give out employee information.
- Do not follow commands from unverified sources.
- Do not distribute dial-in phone numbers to any computer system except to valid users.
- Do not participate in telephone surveys.

Reacting to social engineering:

- Use Caller ID to document phone number.
- Take detailed notes.
- Get person's name/position.
- Report incidents.

Rules of Behavior – Social Engineering

Users are responsible and accountable for any actions taken under their user ID.

What you should know.

Users shall:

- Protect passwords from access by other individuals.
- Never give a password to another person, including a supervisor or a computer support person.
- Not ask anyone for their password.
- Construct effective passwords by following USDA password policy for complex passwords.

Rules of Behavior - Access

Users shall access and use only information for which they have official authorization.

What you should know.

Users shall:

 Follow established procedures for accessing information, including use of user identification, user authentication, passwords, and other physical and logical safeguards.



- Follow established channels for requesting and disseminating information.
- Access only those files, directories, and applications for which access authorization by the system administrator has been granted.
- Use government equipment only for approved purposes.

In addition, users shall NOT:

- Give information to other employees or outside individuals who do not have access authority.
- Store sensitive or confidential information on a system unless access control safeguards (e.g., passwords, locked rooms, and protected local area network (LAN) storage areas) are used.
- Use their trusted position and access rights to exploit system controls or access data for any reason other than in the performance of official duties.
- Browse other users' files (i.e., what can be accessed).

Knowledge Check #3

Select the correct answer.

Kate got a phone call from a man who says he is investigating a possible security incident on USDA's Web TA time and attendance information system and needs her to verify her password. What can Kate do to prevent or discourage this from being a case of a hacker using social engineering?

- 1. Verify the caller's identity by getting his name and position.
- 2. Not give out her password.
- 3. Take detailed notes and report the call to her supervisor.
- 4. All of the above. All of the answers are methods for preventing computer hackers from using social engineering.

The correct answer can be found in the Appendix.



Incident Reporting

Each user is responsible for reporting any form of security violation, whether waste, fraud, or abuse through the USDA incident reporting mechanism.

What you need to know.

Users shall:

- Report security incidents, or any incidents of suspected fraud, waste, or misuse of USDA resources or release of USDA personally identifiable information (PII) to the USDA Help Desk (1-888-926-2373) or PII Hotline (1-877-PII-2-YOU), or to the appropriate agency IT Information Security Manager.
- Report security vulnerabilities and violations as quickly as possible to the USDA Help Desk (1-888-926-2373) or USDA PII Hotline (1-877-PII-2-YOU), or to the appropriate agency IT Information Security Manager so that corrective action can be taken.
- Take reasonable action immediately upon discovering a violation to prevent additional damage, such as logging out of a terminal or locking up property.
- Cooperate willingly with official action plans for dealing with security violations.

Phishing

Linda received an email from her bank that her debit card account may be at risk and she needs to verify her account and PIN numbers. Is someone "phishing" for Linda's private information?

A social engineering scam that you need to be aware of is phishing. Phishing is a high-tech scam that uses official looking email to deceive recipients into opening "official" attachments or clicking on spoofed links. When these web-pages are opened either malicious software is run on their PC or the individual is encouraged to disclose sensitive personal information like credit card numbers, PINs and/or passwords.

Phishers send an email or pop-up message that claims to be from a business or organization that a user deals with. For example, phishers often pose as a user's Internet online payment service, or even a government agency. The message usually says that the user needs to update or validate account information and may threaten some dire consequence if the user does not respond. The message directs the user to a website that looks just like a legitimate site but it is not affiliated with the organization in any way. The purpose of the bogus site is to trick the user into divulging personal information so the operators can steal the user's identity and run up bills or commit crimes in the user's name. The bogus site may also install malicious code on the user's system.



If you receive an email or pop-up message that asks for personal or financial information, do not reply or click on the link in the message.

Legitimate companies do not ask for this information via email. If you are concerned about your account, contact the organization identified in the email using a telephone number you know to be genuine. Be cautious if you receive an email regarding any financial transaction containing links to obtain more information or dispute a charge, even from vendors you regularly receive email from. Always hover over these links to make sure they go to a valid domain associated with this business. Do not click if you have any suspicions about a link. Ask for verification from this business via a good email address or their web portal.

Sample domains-

Valid https://www.amazon.com/gp/pdp/profile/...
Suspicious http:// www.amazon.com.suspicious.me/wp-...
http://suspicious.me/www.amazon.com/e4f6d23...

Recently US Government email mail recipients have received messages from external individuals in the same field of business. These messages were sent via well-known file delivery services like Dropbox.com, Box.com or Yousendit.com. The files that were available for download contained malicious code with extensions like .scr, .exe, and .doc. Had these files been opened remote access software would have been installed, which would have allowed external organizations access to US Government files and systems.

Caution on the part of our co-workers had them submit these to their agency's Information Security operations staff before they clicked on the links. Check with your IT service desk if your need directions how to make a submission like this.



Destination 4: Internet and Network Threats

Any network facilitates communication between individuals. A network can be everything from a small collection of devices at a given location to the global Internet. In either case, any network is often a target for malicious intent. By its sheer size, the Internet Of course the Internet is the source of innumerable threats against the Agency.

Learning Objective

After completing this lesson, you should be able to:

- Understand eight (8) threats to ISA associated with networks and the Internet.
- Be able to identify three (3) or more Peer-to-Peer threats.
- Identify your responsibilities and the "Rules of Behavior" related to Internet and Network based threats.

This lesson includes the following topics:

- Cookies
- Mobile Code
- Peer-to-Peer and File Sharing Software
- General Software
- Malicious Code
- Email and Attachments
- Hoaxes

Cookies

There are several security risks associated with browsing the Internet. One common risk is known as cookies.

A cookie is a text file that a web server stores on your hard drive when you visit a website. The web server retrieves the cookie whenever you revisit that website. When you return, the cookie recognizes you, saving you the trouble of re-registering.

The most serious security problem with cookies has occurred when the cookie has 'saved' unencrypted personal information, such as credit card numbers or Social Security numbers, in order to facilitate future business with that site. Another problem with cookies is that the site can potentially track your activities on the web.

To reduce the risk associated with cookies, and better protect your system, your browser should be set up not to accept cookies.



Mobile Code

Mike wants to see a funny website his friend told him about, but first he has to load and run an application to see the website. If Mike runs the application, he may be vulnerable to malicious Mobile Code.

Mobile code, such as ActiveX and Java, are scripting languages used for Internet applications.

Mobile code embedded in a web page can recognize and respond to user events such as mouse clicks, form input, and page navigation. It can also play audio clips.

However, it does introduce some security risks. Mobile code can automatically run hostile programs on your computer without your knowledge simply because you visited a web site. The downloaded program could try to access or damage the data on your machine or insert a virus.

Review your agency's policies for specific guidance or restrictions on the use of mobile code.

Knowledge Check #4

Fill in the blank.

Linda received an email from her bank asking her to verify her account and PIN numbers to prevent identity theft. This could be a form of information security risk known as

- 1. a hoax
- 2. Phishing
- 3. Email engineering
- 4. Stealing cookies

The correct answer can be found in the Appendix.

Peer-to-Peer (P2P)

Peer-to-peer (P2P) file sharing technology is a way to share files, play games, and facilitate online telephone conversations. The technology enables computers using the same or compatible P2P programs to form a network and share files directly with other computers in a network. P2P file sharing programs allow people to download files and make them available to other users on the network. P2P users can designate the drives and folders from which files can be shared. In turn, other users can download and view any files stored in these designated areas. ⁱ

File sync and sharing

<u>Cloud-based file syncing and sharing</u> services implement automated file transfers by updating files from a dedicated sharing directory on each user's networked devices. Files placed in this folder also are typically accessible through a website and mobile app, and can be easily shared with other users for viewing or collaboration. Such services have become popular via consumer-oriented <u>file hosting services</u> such as <u>Dropbox</u> and <u>Google Drive</u>.ⁱⁱ



P2P Vulnerabilities

People who use P2P file sharing software can inadvertently share files. They might accidentally choose to share drives or folders that contain sensitive information, or they could save a private file to a shared drive or folder by mistake, making that private file available to others.

In addition, viruses and other malware can change the drives or folders designated for sharing, putting private files at risk.ⁱⁱⁱ Peer-to-peer connections are a common avenue for the spread of computer viruses and spyware. Obtaining copyrighted files at no cost raises not only ethical concerns, but could result in criminal or civil liability.

The installation and use of unauthorized peer-to-peer applications can also result in significant vulnerabilities to your agency's networks, including exposure to unauthorized access of information and compromise of network configurations.

The following list provides examples of some P2P software divided by category.

Instant Messaging/Telephonyiv:

- iMessage
- QQ
- Line
- eBuddy
- Windows Live Messenger
- WeChat
- Facebook Messenger
- Whatsapp

File Sharing^v:

- BitTorrent
- Gnutella
- Kazaa
- WinMX
- Napster
- PC Anywhere
- eDonkey
- Morpheus
- eMule



- LimeWire
- BearShare
- Timbuktu

Rules of Behavior - P2P File Sharing

Users are prohibited from using peer-to-peer (P2P) file sharing unless specifically approved by management in writing.

The Office of Management and Budget (OMB) requires all Agencies to develop guidance on the use of peer-to-peer applications.

Contact your security point of contact for further information on your specific policy regarding the use of peer-to-peer applications.

General Software Use

Users shall not install unauthorized, standard, public domain, or shareware software on their computer without approval from the appropriate management official. Computer users must protect USDA owned software and equipment from malicious software.

Rules of Behavior - General Software

Users shall NOT:

- Use USDA purchased software on personally owned or non-USDA computers unless authorized.
- Alter the configuration, including install or uninstall software or peripherals, on government computer equipment unless authorized.
- Download, install, or run security programs or utilities that might reveal weaknesses in the security measures or access privileges of any system unless otherwise expressly authorized.

In addition, users shall:

• Comply with all software licensing agreements and Federal copyright laws.

Knowledge Check #5

Fill in the blank.

Mike wants to check out the link to a funny website his friend told him about, but needs to install and run an ActiveX application first. ActiveX is a form of Mobile Code. All of the following are functions of Mobile Code, except ______.

- 1. Plays audio clips.
- 2. Inserts a computer virus.



- 3. Enables encrypted cell phone communication.
- 4. Controls webpage navigation.

The correct answer can be found in the Appendix.

Malicious Code/Malware

Malware is short for "malicious software," malware refers to software programs designed to damage or do other unwanted actions on a computer system. Common examples of malware include viruses, worms, Trojan Horses, and spyware.

Malicious software or firmware intended to perform an unauthorized process that will have adverse impact on the confidentiality, integrity, or availability of an information system.

It is designed with the intent to deny, destroy, modify, or impede system configurations, programs, or data files.

The most common methods for the spread of malicious code are through email attachments and downloading files from the Internet, but you can also receive malicious code just by visiting an infected web site.

Email and Attachments

Email messages and email attachments provide a common route to transfer malicious code.

Always be cautious when opening email attachments – they may contain malicious code that could corrupt files, erase your hard drive, or enable a hacker to gain access to your computer.

We quarantine all files with these extensions plus more. Files to be cautious of include: .html, .lnk, .pdf, .url, .doc(x), .xls(x), or .rtf and any file extension that the sender asks you to change to a different extension (i.e. .xxx to .exe).

Don't assume that an attachment is safe because a friend or coworker sent it. Some malicious code is activated by merely opening the message. Save the attachment to your hard drive and scan it with up-to-date anti-virus software before opening it.

Never click on suspicious links in email messages, even if it appears to be from someone you are familiar with.



Knowledge Check #6

Select the correct answer.

Which is a type of Malware:

- (A) Adware
- (B) Spyware
- (C) Rootkit
- (D) Trojan Horse
- (E Keyloggers
- (F) All of the above

The correct answer can be found in the Appendix.

What you need to know.

Protect Your Computer System

- Scan email attachments and outside files using anti-virus software that has current updates.
- Ensure system is scanned daily.
- Delete email from unknown or unexpected sources.
- Turn off email software option to automatically download attachments.

Respond to Virus Attack

- Do not email a copy of the infected file.
- Contact your agency help desk or security contact.

Knowledge Check #7

Select the correct answer.

Which is a sign of malware:

- (A) Slowness
- (B) Running out of Hard Drive Space
- (C) Suspicious Hard Drive Activity
- (D) Crashes
- (E)Pop-ups
- (F) All of the above

Hoaxes

An email Phyllis gets from a good friend includes a warning about a serious computer virus. Her friend says to tell everyone she knows. If Phyllis forwards the email to her office email group, is she helping or promoting an "Internet Hoax?"

Internet hoaxes are email messages designed to influence you to forward them to everyone you know.



Hoaxes encourage you to forward email messages by warning of new viruses, promoting moneymaking schemes, or citing a fictitious cause. By encouraging mass distribution, hoaxes clog networks and slow down Internet and email service for computer users.

If you receive an email message requesting that you forward it to all your friends and coworkers, do not forward the email.

Knowledge Check #8

Select the correct answer.

Phyllis receives an email from her cell phone provider. It contains information indicating that the amount she owes is different than what she expects it to be. What steps should Phyllis *not* take before clicking on any link in this email message?

- 1. Since the email is from her phone company, it's okay to click any links.
- 2. Check to see if there is a reference to her account number or mobile number.
- 3. Hover over all links in the message to make sure they go to valid domains.
- 4. Call the provider's customer service, or log into their website by typing in their domain, to verify this email message.

The correct answer can be found in the Appendix.



Destination 5: Media Devices and Mobile Security

Threats to information security come from a variety of sources. This destination discusses threats from devices such as thumb drives, cell phones, smart phones, and wireless networks.

In addition to discussing the threats, this Destination provides tips on keeping your mobile device secure and what you should do if you lose your phone.

Learning Objectives

After completing this lesson, you should be able to:

- Understand the threats to ISA from areas such as media devices (e.g. thumb drives), mobile devices, wireless networks.
- Know what to do if you lose your cellphone with respect to ISA
- Understand the rules of behavior for wireless network access.

This lesson includes the following topics:

- Media Devices
- Cellular (dumb) and PDA Devices
- Mobile Device Security
- Laptops and Fax Machines
- Wireless Networks
- Personal Identifiable Information

Media Devices

Be extremely careful when using cell phones, smart phones, laptop and tablet computers, fax machines, and wireless networks. You need to be as vigilant about security on these devices as you are with your computer at work.

Cell (Dumb) Phones & PDA Devices

If you use a cell phone anyone with the right equipment could potentially listen to your conversation. Cell phones are merely transmitters.

Use a landline for more privacy, and never discuss sensitive information on an unsecured phone.

PDAs pose an additional security threat for a number of reasons.

Their small size and relatively low cost make them easy to obtain and difficult to control.

All PDAs connecting to government systems should be in compliance with your agency's policy and OMB guidance.



Mobile Device Security Basics

The same characteristics that make smartphones and tablets popular also make them an ideal target for thieves. Follow the security basics detailed below to protect both your mobile devices and the information they contain.

Smart Phones and Tablets are Computers NOT Cell Phones

Today, mobile devices have many of the same features as traditional computers; they also face many of the same threats. To keep your mobile device secure, you should follow computer security best practices.

For example:

- To prevent unauthorized access to your phone or tablet, set a personal identification number (PIN) or password.
- Turn off networking (e.g., Bluetooth) and tracking (e.g., GPS) features when not needed.
- Do not open unsolicited email messages.
- Don't follow links in unsolicited email messages or open attachments.
- Do not open or follow links in unsolicited text messages.
- Do not store sensitive emails, photos or documents on the mobile device.
- Keep your mobile device updated and patched to the latest revisions.
- Backup and secure your data frequently

Don't Jailbreak the Mobile Device

Mobile devices should be treated like computers; however, there is one major way that a mobile device differs from a computer that requires special attention. Smart phones and tablets can be jail-broken.

Unlocking a smart phone removes built in security protections that protect the device from malicious applications.

What you should know.

It is very important that you don't modify your smart phone's security settings for convenience. Tampering with a smart phone's factory settings, jail-breaking, or rooting a USDA smart phone undermines the built-in security features offered by USDA, the wireless service provider, and the smart phone manufacturer, while making it more susceptible to unauthorized access.

Use Caution When Downloading Applications

Mobile devices can be quickly customized with a range of applications. Unfortunately, downloading new applications can sometimes be too easy. Malicious applications can cause



performance issues, compromise the confidentiality or integrity of USDA information, or even take control of the device.

Use the following tips when selecting and installing applications for USDA mobile devices:

- Only download applications from vendors approved application store when authorized.
- Don't be afraid to choose "Don't Allow" when configuring applications. If an application
 is asking for access to information or capabilities like GPS tracking on a mobile device
 that does not seem related to its intended use, choose the "Don't Allow" when
 prompted.

Keep Your USDA Mobile Devices Physically Secure

Because mobile devices are commonly lost or stolen, it's important to secure and keep track of them. If someone picks up your mobile device, they may try to use it to access your account or information.

To help keep your mobile device physically secure, follow <u>US-CERT's tips</u>: http://www.us-cert.gov/cas/tips/ST04-017.html

Immediately Report a Lost or Stolen Mobile Device

If a USDA mobile device is lost or stolen, you should report it immediately. Lost or stolen USDA devices should be reported to:

- The 24-hour stolen equipment hotline (888-926-2373)
- The local authorities (if stolen)
- Any other personnel required by your agency's chain of command

After a mobile device is reported as lost, USDA will make sure that the device is turned off and electronically wiped clean. This prevents an unauthorized person from using the found or stolen device to access USDA resources.

While the cost of the replacement mobile device is minimal, the loss or exposure of USDA data is priceless.

Backup the Mobile Device Regularly

Information stored locally on the mobile device cannot be recovered if you do not manually backup your mobile device.

Backups are quick and easy – create a backup routine that is easy to remember and follow.

Learn More!

Run through the <u>Smartphone Security Checker</u>, an online tool to help consumer's secure mobile devices, by visiting the site and selecting the mobile operating system.

The tool will provide 10 customized steps and tips to protect the device.



Laptops & Fax Machines

The convenience of laptops makes them extremely vulnerable to theft or security breaches.

User logon information should always be password protected.

Be careful what you display on the screen when it is visible to others, especially in close quarters, such as on airplanes.

Maintain possession of the laptop at all times when traveling. When you reach your destination, be sure that the laptop is properly secured when left unattended. If the laptop has wireless capability, ensure that security features are properly configured IAW your agency's wireless policy. When not in use, laptop wireless should be turned "off" or, if this is not possible, it should be configured to connect to recognize Internet access points, not ad hoc networks.

An Office of Management and Budget (OMB) memorandum states: All sensitive data stored on laptops should be encrypted. Ensure that you follow both your agencies and OMB's guidance on encryption of sensitive data on laptops.

When transmitting sensitive information over a fax machine, ensure that the recipient will be present to pick up the fax immediately. Contact the recipient directly to confirm receipt of the fax. Never transmit classified information via an unsecured fax machine.

Always use a cover sheet so that the content of your fax isn't immediately visible.

Wireless Networks

Wireless networks operate by using radio signals, instead of traditional computer cables, to transmit and receive data.

Unauthorized users with a receiver can intercept your communications and access your network.

This is dangerous because unauthorized users may be able to capture not only the data you are transmitting, but also any data stored on your network.

Rules of Behavior - Wireless Networks

- Employees are prohibited from connecting unauthorized devices to USDA networks.
- Employees must obtain permission to connect their personal or third-party-controlled device to a USDA "guest" network.
- Employees must disable wireless protocols on USDA provided devices when not in use.
- Employees, when using USDA devices outside of USDA facilities, should protect the passwords and sensitive information from people not unauthorized to see or hear the information.



Ensure you are in compliance with your agency's policy regarding the use of wireless technologies.



Destination 6: Physical Security & Classified Information

This Destination focuses on physical security related to Information Security, treatment of Classified Data and Personally Identifiable Information. Physical security is the first line of defense of information security and consists of everything from how you access your work environment to protecting your passwords to being track of what equipment has been issued to you.

Learning Objectives

After completing this lesson, you should be able to:

- Recognize what makes up physical security of information systems
- Understand effective password creation and management
- Understand the difference between Unclassified and Classified Information
- Define "spillage" with respect to ISA.
- Recall reporting requirements for a breach of personally identifiable information

This lesson includes the following topics:

- Physical Security Essentials
- Inventory Control
- Classified and Unclassified Information
- Spillage
- Handling Personally Identifiable Information (PII)

Physical Security

Protecting federal information systems and the information they contain starts with physical security.

Physical security includes protection of the entire facility, from the outside perimeter to the offices inside the building, including all the information systems and infrastructure.

You are responsible for knowing your organization's physical security policies and following them. Your organization should have procedures for gaining entry, procedures for securing your work area at night, and emergency procedures.

These may include:

- The use of a badge or key code for entry;
- Locking your cubicle;
- Undocking your laptop and storing it in a separate location;



 Securing data storage devices, such as hard drives and USB drives during emergency procedures.

Physical Security – Proactive Approach

You should also make sure others follow your organization's physical security policies and challenge people who don't. Don't allow people to gain entrance to a building or office by following someone else instead of using their own badge or key code.

Challenge people who do not display badges or passes. If you are the last person to leave in the evening, make sure that others have secured their equipment properly.

Finally, you are responsible for reporting any suspicious activity that you see.



Inventory Control

Part of physical security includes controlling the inventory of equipment that stores federal information. When government laptops are lost or stolen, so is the information that is on them. In recent years, federal inventory control procedures have been tightened in response to the loss of thousands of government laptop computers.

Federal agencies are responsible for controlling their inventory of office and computer equipment, including phones, computers, printers, faxes, monitors, and USB drives.

When you receive government property, you should sign for it. Once it has been signed out to you, you are then responsible for that equipment and taking the necessary precautions to ensure that it doesn't get lost or stolen.

To remove equipment from the building, or bring equipment into the building, your organization may require you to have a property pass signed by the property manager.

If that property is lost or stolen, follow your organization's procedures for reporting the loss. In addition to reporting the loss of the equipment itself, you must report the loss of the information that was on the equipment, and the significance of that lost information.

Telework Procedures

Telework, also known as telecommuting, is emerging as a viable option for many employees. Advances in computer and telecommunications capabilities make telework increasingly practical.

There are risks associated with remote access to your government computer network.

If you have received approval for teleworking, you are required to satisfy the requirements in your agency's policies and guidelines.

Classified and Unclassified Information

All federal information, combined with the right conditions and circumstances, could provide an adversary insight into our capabilities and intentions. In addition, the aggregation of unclassified information can elevate the sensitivity level of information.

Thus, even unclassified information, if compromised, could impact the safety of our personnel and systems.

All federal unclassified information not specifically cleared for public release requires some level of security protection. At a minimum, it must be reviewed before it is released, in any form, outside the U.S. government. Each agency has its own unclassified information policy. Contact your security point of contact for additional information on your agency's policy.

What you need to know.



Unclassified Information

- Unclassified information includes "For Official Use Only" or FOUO; "Controlled Unclassified Information" or CUI; and "Sensitive But Unclassified" or SBU.
- Examples are personnel, financial, payroll, medical, operational, and Privacy Act information.
- CUI must be stored in a locked drawer or secure container. When it is no longer needed, it should be destroyed.

Classified Information

- Classified information includes "Confidential," "Secret," or "Top Secret."
- The specific level of classification is determined by the original classification authority.
- Classified information must be used in an area that has been approved and cleared for the appropriate classification level.
- When not in use, classified information must be stored in a General Services Administration (GSA) approved vault or container.

Spillage

Spillage, also referred to as contamination, is when information of a higher classification level is introduced to a network at a lower classification level. It is the improper storage, transmission, or processing of classified information on an unclassified system.

An example would be when information classified as Secret is introduced to an unclassified network. Any user who identifies or suspects that a spillage has occurred should immediately notify his or her security point of contact.

Cleaning up after a spillage is a resource intensive process. It can take roughly three weeks to contain and clean an affected information system. Be aware that spillages can greatly impact the security of federal information.



Helpful hints:

- Check all emails for possible classified information.
- Mark and store all removable media properly.
- Ensure all file names and subject headers reveal the sensitivity of the information.

Personally Identifiable Information (PII)

The Privacy Act, signed into law in 1975, requires the government to safeguard information about individuals that is processed by Federal agencies or contractor computer systems. The Act also requires the government to provide access to the information by the individual and to amend the information if it is not accurate, timely, complete, or relevant.

What you should know.

New guidance concerning greater measures for protection of Personally Identifiable Information (PII) is outlined in several OMB memoranda.

For example, OMB requires that lost or stolen PII be reported within one hour to the U.S. Computer Emergency Response Team, or CERT.

Each agency has its own policies to implement OMB's guidance. Check with your security point of contact for additional PII requirements.

As an authorized user, you should ensure that PII is protected on Federal computer systems.

Knowledge Check #9

Fill in the blank.

USDA Employee Kyle is working at his desk when he realizes his wallet containing his government identification card is missing. OMB guidance for protection of Personally Identifiable Information requires Kyle to report the missing wallet to the Computer Emergency Response Team ______.

- 1. as soon as possible
- 2. within one hour
- 3. by the close of the business day
- 4. within 24 hours

The correct answer can be found in the Appendix.

Knowledge Check #10

Multiple Choice (Select all that apply)

What is **not** PII?

1. Name and other names used



- 2. Social Security Number full and truncated
- 3. Home and personal cell telephone numbers
- 4. Office location
- 5. Law Enforcement information

The correct answer can be found in the Appendix.

Destination 7: User Roles and Responsibilities

As an authorized user of federal information systems, you have certain responsibilities and need to remember your right to privacy is limited when using a government computer.

Any activity conducted on a government system can be monitored. Each time you log on to a government system, you consent to being monitored. You should use your computer for government business only.

Avoid government computer misuse. Examples of computer misuse are: viewing or downloading pornography, gambling on the Internet, conducting private commercial business activities or profit-making ventures, loading personal software, or making unauthorized configuration changes.

Learning Objectives

After completing this lesson, you should be able to:

- Recognize the classification levels for federal information and identify what you must do
 to help protect federal information.
- Identify your responsibilities and the "Rules of Behavior" that govern the use of USDA IT resources.

This lesson includes the following topics:

- Basic User Guidelines
- Privilege User Guidelines
- Rules of Behavior Accountability
- Rules of Behavior Appropriate Email Use
- Public Key Infrastructure
- Tips for Password Creation
- Backups, Storage and Labeling

Basic User Guidelines

There are eight basic generally accepted ethical guidelines that should govern your actions when using a government computer system.



Ethical guidelines

- Do not use computer for harm.
- Do not interfere with others work.
- Do not snoop in other's files.
- Do not use a computer to commit crimes.
- Do not use or copy unlicensed software.
- Do not steal intellectual property.
- Do not use a computer to pose as someone else.
- Do not use computer resources without approval.

Privilege User Guidelines

- Abide by the provisions of the USDA IT/IS Rules of Behavior for General Users except those variations required to perform authorized privileged user activities.
- Limit the performance of privileged user activities to privileged user account(s).
- Consent to monitoring and search of any IT/IS equipment used while in or brought into or removed from USDA owned, controlled, or leased facilities.
- Complete Information Security Training.
- Successfully complete any specialized training required by USDA that is related to competent and secure operation of IT and IS for which I have privileged user status.
- Submit to additional investigation and monitoring of my privileged user activities as required to ensure integrity of my privileged user activities.
- Immediately report any anomalous incident, including errors and oversights related to
 my privileged user activities, to my Information System Security Officer (ISSO),
 Information System Security Manager (ISSM), or Chief Security Officer (CSO)
 according to the appropriate USDA Incident Response Plan.
- Use my privileged user role and access to perform only authorized privileged user activities for the benefit of the USDA.
- Protect my "root" or "super user" account including passwords and privileges at the highest level of data that it secures.
- Change my privileged user account password every ninety (90) days or as required for security reasons.
- Protect all output whether hard-copy, electronic, or optical according to USDA policy.
- Perform virus and integrity scanning of any media that is to be used to transfer information into an USDA system.
- Notify the ISSO when my privileged user access to the system is no longer needed (e.g. transfer, termination, leave of absence, or for any period of extended non-use). If I am an ISSO, then I will notify my CSO when my privileged user access is no longer needed.



Expressly Prohibited Behavior: Unless required as part of my official duties as a Privileged User of USDA IT/IS, I will not:

- Share my privileged user access or privileges with any unauthorized person.
- Use my privileged user access or privileges to "hack" any IT/IS (networked or non-networked).
- Attempt to gain access to data for which I am not specifically authorized, to include email and users files in their home directories.
- Use my privileged user access for non-Government business.
- Introduce any software or hardware that has not been approved through Change Management Process into USDA IT/IS, systems or networks.
- Use any USDA communications, transmission, processing, or storage components for unauthorized purposes.
- Disclose, without authorization, any personally identifying information (PII) that I access or learn as a result of my privileged user duties and activities.
- Disclose, without authorization, any sensitive, classified, or compartmented USDA information that I access or learn as a result of my privileged user duties and activities.

Rules of Behavior – Accountability

In addition to adhering to ethical guidelines, all users are accountable for actions related to information resources entrusted to them.

Users shall:

- Behave in an ethically, informed, and trustworthy manner when using systems.
- Be alert to threats and vulnerabilities such as malicious programs and viruses.
- Participate in IT security training and awareness programs.
- Not install or use unauthorized software on USDA equipment.
- Comply with all software licensing agreements and not violate Federal copyright laws.
- Know that your system may be monitored and that there is no expectation of privacy on USDA IT resources.

In addition, users shall prevent others from using their accounts by:

- Logging out or locking the screen when leaving the vicinity of their terminals or PCs.
- Setting a password on automatic screen savers.
- Helping to remedy security breaches, regardless of who is at fault.
- Immediately notifying the system administrator whenever there is a change in role, assignment, or employment status and/or when access to the system is no longer required.
- Complying with a system's rules of behavior when accessing external systems.



Reading and understanding banner pages and end user licensing agreements.

Rules of Behavior – Integrity

Users must protect the integrity and quality of information. This includes, but is not limited to:

- Reviewing quality of information as it is collected, generated, and used to ensure that it is accurate, complete, and up-to-date.
- Taking appropriate training before using a system to learn how to correctly enter and change data.
- Protecting information against viruses and similar malicious code by:
 - Applying security updates as required, and using up-to-date anti-virus software, if not controlled at the agency/enterprise level.
 - Avoiding use of unapproved software, such as shareware and public domain software.
 - Discontinuing use of a system at the first sign of virus infection.
- Never knowingly entering unauthorized, inaccurate, or false information into a system.



Select the correct answer.

Peggy is the office computer guru and often solves her coworkers' computer issues before IT can help. Peggy frequently finds that she can get her own work done faster by downloading free shareware tools than with the software provided with her office computer. Which of the following policies is Peggy violating?

- 1. Basic Ethical Guidelines
- 2. Accountability Rules of Behavior
- 3. Integrity Rules of Behavior
- 4. All of the above

The correct answer can be found in the Appendix.

Rules of Behavior - Email: Appropriate Email Use

The following rules apply regarding email activity:

- Automatic filters will be in place to help prevent inappropriate and offensive messages from passing through USDA email gateways.
- Any email on a government email system is the property of the government and may become an official record.
- The use of IT resources constitutes consent to possible monitoring and security testing. Monitoring and security testing ensures proper security procedures and appropriate usage are being observed for USDA IT resources.
- Monitoring of email and other IT resources by management will be done only in accordance with established USDA policy and guidelines.
- Users are prohibited from using USDA IT resources to send, receive, retain, or proliferate any messages or material that is fraudulent, inappropriate, offensive, harassing, or is of a sexual nature.

Email is also for official business. Your organization may permit some incidental and casual email use.

Guidelines on the types of personal email use that may or may not be authorized are as follows:

- Email use may not adversely affect the performance of official duties.
- Email use must not reflect poorly on the government.
- You may not use government email to send pornographic, racist, sexist, or otherwise offensive emails, send chain letters, or sell anything.
- Email use must not overburden the system, as happens when you send mass emails.



- To keep networks open and running efficiently, don't forward jokes, pictures, or inspirational stories.
- Similarly, avoid using "Reply All" unless it is absolutely necessary.
- Personal email use may be authorized if it is of reasonable duration and frequency, preferably on employees' personal time, such as on a lunch break.

Email is also permissible when it serves a legitimate public interest, such as allowing employees to search for a job in response to federal government downsizing.

Public Key Infrastructure

Federal information systems identify and authenticate each user either through a smart card login or user ID and password.

The preferred method of access to information systems is through the use of public key infrastructure, or PKI, which enables your agency to issue electronic keys, called digital certificates, to authorized users.

PKI allows users to encrypt and digitally sign emails and documents.

Tips for Creating a Secure Password

John thinks having to change passwords frequently and memorize them is complicated and inconvenient. So he writes them down and leaves them under his computer keyboard. Maybe John just needs some tips for creating secure passwords that he can remember?

Many federal information systems still identify and authenticate users by his or her user ID and password. The user ID and password determines the user's right to access the system.

Remember, it is your responsibility to ensure that all activity performed under your user ID is appropriate use of federal information systems resources.

What you need to know.

It is important to create a complex password in order to protect government information systems from being compromised.

- Combine letters, numbers, and special characters. (ex: !,@,#,\$)
- Use alphanumeric combinations or phrase associations. (ex: P@\$\$w0rd T1p\$)
- Avoid words or phrases that can be found in the dictionary.
- Avoid using personal information. (ex: birthday, home address, phone number)
- Memorize password and refrain from writing it down.
- Change passwords regularly.

Backups, Storage, and Labeling



A large amount of federal information is stored on removable media such as CDs, USB drives, or removable hard drives and you need to take extra precaution to protect them from loss or theft.

Important files MUST be backed up regularly and stored in a secure location to minimize the loss of data if your hard drive crashes or is infected by a virus.

Store all removable media in solid storage containers, such as metal cabinets, to protect against fire and water damage.

It is very important to label all removable media, including backups, and the contents of the media, to reflect the classification or sensitivity level of the information the media contains.

Removable media must be properly marked and stored according to the security classification of information it contains.

When you no longer need the information, you should not erase, or "sanitize" it. Removable media must be degaussed or destroyed if it is not reused at the same or higher classification level of the system in which it was used.

Follow your agency's policies regarding handling, storage, labeling, and destruction of removable media.

Rules of Behavior - Backups, Storage, and Labeling

Computer systems and media must be protected from environmental hazards such as fire, water, heat, and food spills. They must also be protected from theft, unauthorized alteration, and careless handling.

What you need to know.

Users shall:

- Use physical and logical protective measures such as the following to prevent loss of availability of information and systems.
 - Ensure that there are backups of information for which they are responsible.
 - Protect systems and media where information is stored.
 - Store media in protective jackets.
- Keep media away from devices that produce magnetic fields (such as phones, radios, and magnets).
- Follow contingency plans.

Knowledge Check #12



Fill in the blank.

John is trying to do a better job with password security. All of the following are guidelines for creating a secure password, except ______.

- 1. John replaces some of the letters in his passwords with special characters like @ and \$.
- 2. John uses the name the street he lives on as his password so he can remember it easily.
- 3. John uses alphanumeric combinations and phrase associations, like \$m311y C@tat0nic, to make his passwords more complex.
- 4. Now that he's gotten into the habit, John changes his passwords every couple of weeks.

The correct answer can be found in the Appendix

Knowledge Check #13

Select the correct answer.

David wants to use some newly published administrative guidelines for his agency as an example for a paper he is writing for a business class. There are no markings on the guidelines indicating their security classification. David should:

- 1. Assume the guidelines are not classified and go ahead and use them for his assignment.
- 2. Review the guidelines for any personal information about other USDA employees, and use a black marker to hide that information before using the guidelines for his assignment.
- 3. Contact his agency's security point of contact to seek permission to use the guidelines for his assignment.
- 4. Remove all references to his agency from the guidelines document before using it for his assignment.

The correct answer can be found in the Appendix



Destination: Finish Line

Your Responsibility

Information is a critical asset to the U.S. government. It is your responsibility to protect government sensitive and classified information that has been entrusted to you.

Please contact your security point of contact for more information about classification or handling of information.

Acknowledgment of USDA Rules of Behavior and Next Steps

Congratulations!

You have almost completed the "FY2018 USDA Information Security Awareness and Rules of Behavior" training course. However, USDA is required by law to ensure that anyone who utilizes USDA Information Technology (IT) and Information System (IS) resources is aware of his or her responsibilities, and complies and acknowledges those responsibilities as outlined in this training, USDA policies, and system specific rules by signing either electronically or printing and signing below, signed acknowledgement must be submitted to the agency ISSPM to be maintained on file.

I understand being allowed to forego reading the ISA mandatory training materials if I take and pass the ISA Pre-Exam does not exempt me from my responsibility to know and follow USDA and agency Security policies, procedures and RoB at all times."

This confirms that I have read and understand the Rules of Behavior as identified in this training, and understand that this may not address all RoB contained in USDA and agency policies, procedures and system specific rules, I further understand that completion of this training does not exempt me from my responsibility to know and follow all USDA and agency policies, and procedures for RoB at all times.

I understand that once USDA has issued my LincPass or AltLinc card it is my responsibility to use the card to access the USDA or agency network and systems at all times and report any problems with the use of the LincPass or AltLinc to my designated LincPass/AltLinc coordinator, I also understand that I must return my LincPass card to my designated LincPass coordinator or designated person as outlined by agency policy when no longer needed.

Signature:	 	
Date:		

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Appendix – Assessment Answers:

Knowledge Check #1

Fill in the blank.

All of the following are important aspects of Information Systems Security, except .

- 1. Protecting information on government computer networks
- 2. Blocking unauthorized access to government computer networks
- 3. Preventing unauthorized digital modification to government computer networks
- 4. Specific written restrictions for the use of government computer networks

The correct answer to Knowledge Check #1 is: Specific written restrictions for the use of government computer networks. Written guidance cannot cover every possible scenario for the use of a government computer.

Knowledge Check #2

Select the correct answer.

Which of the following systems would not be included in the national Critical Infrastructure Protection program?

- 1. Social Security
- 2. Electric Power
- 3. Elementary Schools
- 4. The Federal Reserve

The correct answer to Knowledge Check #2 is: Elementary Schools. Critical infrastructure refers to the physical and cyber-based systems essential to the minimum operations of the economy and government.



Select the correct answer.

Kate got a phone call from a man who says he is investigating a possible security incident on USDA's Web TA time and attendance information system and needs her to verify her password. What can Kate do to prevent or discourage this from being a case of a hacker using social engineering?

- 1. Verify the caller's identity by getting his name and position.
- 2. Not give out her password.
- 3. Take detailed notes and report the call to her supervisor.
- 4. All of the above. All of the answers are methods for preventing computer hackers from using social engineering.

The correct answer for Knowledge Check #3 is: All of the above. All of the answers are methods for preventing computer hackers from using social engineering.

Knowledge Check #4

Fill in the blank.

Linda received an email from her bank asking her to verify her account and PIN numbers to prevent identity theft. This could be a form of information security risk known as

- 1. a hoax
- 2. Phishing
- 3. Email engineering
- 4. Stealing cookies

The correct answer for Knowledge Check #4 is: Phishing. Phishing is a high-tech scam that uses email or websites to deceive users into disclosing credit card numbers, bank account information, social security number, passwords, or other sensitive information.



Fill in the blank.

Mike wants to check out the link to a funny website his friend told him about, but needs to install and run an ActiveX application first. ActiveX is a form of Mobile Code. All of the following are functions of Mobile Code, except ______.

- 1. Plays audio clips.
- 2. Inserts a computer virus.
- 3. Enables encrypted cell phone communication.
- 4. Controls webpage navigation.

The correct answer for Knowledge Check #5 is: Enables encrypted cell phone communication. Mobile code embedded in a web page can recognize and respond to user events such as mouse clicks, controls page navigation, plays audio clips, and can run hostile programs on your computer.

Knowledge Check #6

Which is a type of Malware:

- (A) Adware
- (B) Spyware
- (C) Rootkit
- (D) Trojan Horse
- (E Keyloggers
- (F) All of the above

The correct answer for Knowledge Check #6 is: (F) All of the above. Yes, Malware/Malicious code is known by many different names.

Knowledge Check #7

Which is a sign of malware:

- (A) Slowness
- (B) Running out of Hard Drive Space
- (C) Suspicious Hard Drive Activity
- (D) Crashes
- (E)Pop-ups
- (F) All of the above

The correct answer for Knowledge Check #7 is: (F) All of the above. Malware/Malicious code does show up in a variety of ways.

Knowledge Check #8



Select the correct answer.

Phyllis receives an email from her cell phone provider. It contains information indicating that the amount she owes is different than what she expects it to be. What steps should Phyllis *not* take before clicking on any link in this email message?

- 1. Since the email is from her phone company, it's okay to click any links.
- 2. Check to see if there is a reference to her account number or mobile number.
- 3. Hover over all links in the message to make sure they go to valid domains.
- 4. Call the provider's customer service, or log into their website by typing in their domain, to verify this email message.

The correct answer for Knowledge Check #8 is: Clicking a link before attempting to verify that it is legitimate is not recommended. Phyllis should first hover over any links in the message to make sure they go to valid domains.

Knowledge Check #9

Fill in the blank.

USDA Employee Kyle is working at his desk when he realizes his wallet containing his government identification card is missing. OMB guidance for protection of Personally Identifiable Information requires Kyle to report the missing wallet to the Computer Emergency Response Team ______.

- 1. as soon as possible
- 2. within one hour
- 3. by the close of the business day
- 4. within 24 hours

The correct answer to Knowledge Check #10: within one hour. OMB requires that lost or stolen PII be reported to CERT within one hour

Knowledge Check #10

Multiple Choice (Select all that apply)

What is not PII?

- 1) Name and other names used
- 2) Social Security Number full and truncated
- 3) Home and personal cell telephone numbers
- 4) Office location
- 5) Law Enforcement information

The correct answer to Knowledge Check #11: Office location is generally not considered personally identifiable information.



Select the correct answer.

Peggy is the office computer guru and often solves her coworkers' computer issues before IT can help. Peggy frequently finds that she can get her own work done faster by downloading free shareware tools than with the software provided with her office computer. Which of the following policies is Peggy violating?

- 1. Basic Ethical Guidelines
- 2. Accountability Rules of Behavior
- 3. Integrity Rules of Behavior
- 4. All of the above

The correct answer for Knowledge Check #12 is: All of the above. Installing any unapproved software on a government computer violates basic user ethical guidelines, and rules of behavior for both accountability and integrity.

Knowledge Check #12

Fill in the blank.

John is trying to do a better job with password security. All of the following are guidelines for creating a secure password, except ______.

- 1. John replaces some of the letters in his passwords with special characters like @ and \$.
- 2. John uses the name the street he lives on as his password so he can remember it easily.
- 3. John uses alphanumeric combinations and phrase associations, like \$m311y C@t, to make his passwords more complex.
- 4. Now that he's gotten into the habit, John changes his passwords every couple of weeks.

The correct answer for Knowledge Check #9 is: John uses the name the street he lives on as his password so he can remember it easily. John should avoid using personal information for his passwords. Instead, he should be using recognizable phase associations.

Knowledge Check #13

Select the correct answer.

David wants to use some newly published administrative guidelines for his agency as an example for a paper he is writing for a business class. There are no markings on the guidelines indicating their security classification. David should:



- 1. Assume the guidelines are not classified and go ahead and use them for his assignment.
- 2. Review the guidelines for any personal information about other USDA employees, and use a black marker to hide that information before using the guidelines for his assignment.
- 3. Contact his agency's security point of contact to seek permission to use the guidelines for his assignment.
- 4. Remove all references to his agency from the guidelines document before using it for his assignment.

The correct answer for Knowledge Check #13 is: Contact his agency's security point of contact to seek permission to use the guidelines for his assignment. Since David can't tell if the information has been cleared for public release, he should contact his agency's security point of contact and seek permission to use the guidelines.

ⁱ "Peer-to-Peer File Sharing: A Guide for Business," January 2010, Accessed July 11, 2017, https://www.ftc.gov/tips-advice/business-center/guidance/peer-peer-file-sharing-guide-business#Whatis.

[&]quot;File Sharing" Wikipedia Foundation, July 8, 2017, Accessed July 11, 2017, https://en.wikipedia.org/wiki/File_sharing.

[&]quot;Peer-to-Peer File Sharing: A Guide for Business," January 2010, Accessed July 11, 2017, https://www.ftc.gov/tips-advice/business-center/guidance/peer-peer-file-sharing-guide-business#Whatis.

^{iv} "Instant Messaging," Wikipedia Foundation, June 25, 2017, Accessed July 14, 2017, https://en.wikipedia.org/wiki/Instant_messaging.

^v "Comparison of file sharing applications," Wikipedia Foundation, July 4, 2017, Accessed July 11, 2017, https://en.wikipedia.org/wiki/Comparison_of_file_sharing_applications.