

Data Security

Secure Data Management
Secure Web Use

LEARNING OBJECTIVES

1. Recognize ways of ensuring physical security of devices.
 2. Recognize the importance of having a back-up procedure, and restore backed up data.
 3. Distinguish between deleting and permanently destroying data.
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LEARNING OBJECTIVES

1. Protect yourself when online
 - a. Pharming
 - b. Digital Certificate
 - c. One-Time Password
 - d. Cookies
 2. Delete Private Data
 3. Content Control Software
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PHYSICAL SECURITY OF DEVICES

- ❑ Security of data and information is not just an electronic function.
- ❑ Equipment and devices have to be locked away securely, with proper access control in place.
- ❑ Different ways of physical security of devices include the following:
 - **Log Equipment**
 - **Cable Locks**
 - **Access Control**



BACK-UP PROCEDURE

- ❑ A proper backup procedure is essential, for both business & personal users.
 - ❑ It is best to schedule backups frequently.
 - ❑ **Incremental backup** means only backing up files that have been modified since the last **full backup**.
 - ❑ There are numerous methods of backups:
 - **Back-up to a device**
 - **Remote Backup Service (AKA Cloud Backup)**
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PERMANENTLY DELETING DATA

- Deleting data from devices or drives means to remove it permanently.
- There are two main reasons for deleting data:
 - **Save Space**
 - **Security**

DELETING AND PERMANENTLY DESTROYING DATA

- When data is deleted it is moved to the Recycle Bin, once the Recycle Bin is emptied, the files are permanently deleted
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COMMON METHODS OF PERMANENTLY DESTROYING DATA

- For security purposes, it is best to completely destroy data to ensure it can never be retrieved.
 - Shredding
 - Drive/ Media Destruction
 - Degaussing
 - Data Destruction Utilities
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PROTECT YOURSELF WHEN ONLINE

- It is important to ensure that all online purchases and financial transactions should be taken on secure websites. If not, anybody with criminal intent can see the transaction, credit card, and personal details.
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SECURE WEBSITES

- “Secure” sites are set to prevent unauthorized people from seeing the information that is sent to or from those sites.
 - A secure website can be identified in more than one way:
 - In the URL of the website, an s directly after the letters http.
 - Example: <https://signin.ebay.com/>
 - A lock icon is displayed either on the Status bar or on the Address bar
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SECURE WEBSITES



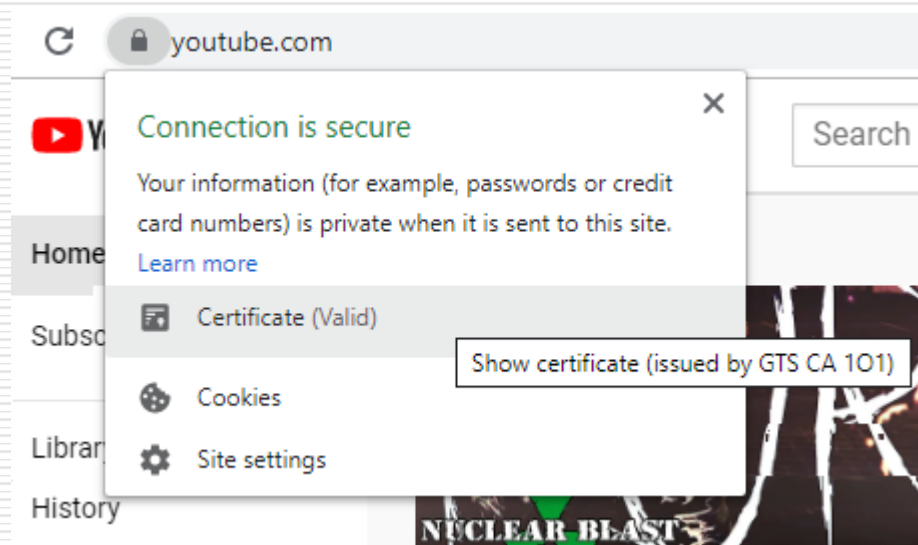
PHARMING

- Is a scamming concept in which malicious code is installed on a computer or server through hacking, misdirecting users to fraudulent and fake websites.



DIGITAL CERTIFICATES

- A digital certificate is an electronic identity card that establishes your credentials when doing business or other transactions on the Web.



ONE-TIME PASSWORD (OTP)

- ❑ Unique and time-sensitive password used as added security to sensitive information.
 - ❑ Valid for only one login session or transaction and must be used within a specific time period.
 - ❑ Does not replace the original username and password, it only provide a second layer of security.
 - ❑ The password will usually be sent to the user via SMS or email.
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COOKIES

- ❑ A cookie is the term used to describe a type of message that is given to a web browser by a web server.
 - ❑ The main purpose of a cookie is to identify users and possibly prepare customized web pages or to save site login information.
 - ❑ Cookies contain a record of the pages looked at within a site, to help the site customize the view for the next time you visit.
 - ❑ There are several types of cookies
 - A **session cookie**, stored in temporary memory and is erased when the user close the browser.
 - A **permanent cookie**, stored on the hard drive until expiry (set with expiration dates) or until deleted.
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CONTENT-CONTROL SOFTWARE

- AKA Censorware or Content-Blocking software
 - Is a software designed for controlling what content is allowed to be viewed by a user and the amount of time to be spent using the Internet and computer activities.
 - **Internet Filtering Software**, is specifically focused to limit or restrict what a user can view on the Internet.
 - **Parental Control Software**, is used to restrict children as to what can be viewed on the Internet, time spent on the computer and what programs and files can be accessed.
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