**CT1406 – NETWORK SECURITY LAB**

**LAB # 1 – ETHICAL ISSUES IN NETWORK SECURITY**

**S T U D E N T**

**M A N U A L**



**PREPARE K SECURITY LAB**

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STEP 1 : LAB-PREPARATION

1. DOWNLOAD THE WINDOWS 7 VIRTUAL MACHINE FROM [HERE](https://developer.microsoft.com/en-us/microsoft-edge/tools/vms/)

2. DOWNLOAD THE WINDOWS 7 SERVICE PACK 1 FROM [HERE](https://www.microsoft.com/en-us/download/details.aspx?id=5842)

3. DOWNLOAD AND INSTALL ANY OF THE FOLLOWING VIRTUALIZATION SOFTWARE: [VMWARE WORKSTATION (](https://www.vmware.com/products/workstation.html)NEEDS REGISTRATION)

[ORACLE VIRTUAL BOX (F](https://www.virtualbox.org/wiki/Downloads)REEWARE)

4. EICAR VIRUS FROM [HERE](https://www.ikarussecurity.com/support/virus-info/test-viruses/)

5. MICROSOFT SECURITY ESSENTIALS FROM [HERE](https://support.microsoft.com/en-us/help/14210/security-essentials-download)

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STEP 2 : LAB-INSTRUCTIONS

1. INSTALL THE VMWARE WORKSTATION STEP BY STEP AS MENTIONED [HERE](https://www.vmware.com/support/ws5/doc/ws_install_winhost.html)

2. CONFIGURE THE WINDOWS VIRTUAL MACHINE IN VMWARE BY FOLLOWING THE STEPS [HERE](https://www.youtube.com/watch?v=CKovmpGKmQ0)

3. INFECT THE WINDOWS VIRTUAL MACHINE WITH EICAR VIRUS FOLLOWING THE INSTRUCTIONS [HERE](https://www.youtube.com/watch?v=gPo-NPvuqbs)

4. INSTALL MICROSOFT SECURITY ESSENTIALS FOLLOWING THE INSTRUCTIONS [HERE](https://www.youtube.com/watch?v=F-y_iQG-LRQ)

5. RESTART THE VIRTUAL MACHINE

6. TRY TO EXECUTE THE EICAR VIRUS EXECUTABLE FILE AGAIN.

Online free AES & RSA tools for encryption:

1. AES Encryption – Easily encrypt or decrypt strings or files. [HERE](http://aes.online-domain-tools.com/)

2. Online interface to Advanced Encryption Standard (AES), a standard used by US government that uses a specific variant of Rijndael algorithm. [HERE](http://rsatools.wforums.net/#intro)

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REPORT WORK:

• PREPARE A 2 PAGE REPORT ON RECENT RANSOMWARE ATTACKS

• WANNACRY

• PETYA

• WRITE IN BRIEF ABOUT ‘WHAT IS RANSOMWARE’? GIVE EXAMPLES.

• HOW IT WORKS? (PROCESS)

• COUNTERMEASURES FOR RANSOMWARE? (DIFFERENT SECURITY MEASURE THAT CAN BE USED)

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