Cyber Security Instructional Guide

1. 

Introduction

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| What is the purpose of this guide? Introduce all the topics, processes and systems that the guide will cover.  Student should indicate the purpose of the guide. This guide is intended for the use of CBSA on setting up their devices. The guide must cover how to:   * monitor latest developments in digital security * encrypt two different types of devices * install and use a two-factor authentication app (Authy) * install, use and update anti-malware software (Avast One) * install and use a VPN (Avast One browser) to access company data when not in the office. |

How to Monitor Latest Developments in Digital Security

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| Describe where to look for this information and how to keep device software up to date.  The student must indicate where on the internet to find information on cyber security development. Monitoring sites like Kaspersky cyber threat map or Akami internet station or Fire eye threat map.  The student will describe how to keep their software up to date by:   * installing most recent patches * always updating software when prompted. |

Encrypt Different Devices

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| Describe and illustrate with screenshots, how to set up encryption on two different devices (e.g. phone, tablet or personal computer). Where possible, use built in operating system processes for this and where this is not possible, select suitable encryption software.  Include:   * an example of Android encryption * an example of Apple operating system encryption steps * an example of Windows operating system encryption steps.   Encryption of a device refers to the use of passwords or other authentication methods to restrict access to the device. Encryption also refers to operating systems that have built in encryption process that allow for the encryption of all the data on the device.  The student must demonstrate how to encrypt two unique devices. This includes the use of strong passwords to gain access to the device, and/or encrypt the entire device (where appropriate). The student is instructed to use native operating processes for this; however, they may select a third-party software for this purpose and must demonstrate clearly how to download and install and configure it. |
| Some examples of iOS encryption: |
| How to Encrypt Your DevicesAn examples of Android encryption: |
| An example of Apple operating system encryption steps: |
| An example of Windows operating system encryption steps: |

Download and set up Avast One Anti-malware Software

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| Visit [https://www.avast.com/en-au/index#pc](https://www.avast.com/en-au/index%23pc). Download and install the free version of this software. Describe and illustrate the download and installation steps using screenshots.  The student must provide a step-by-step explanation of how to download and set up the software using images similar to the ones below. |
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Set up and use Avast One Browser VPN

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| Visit [https://www.avast.com/en-au/index#pc](https://www.avast.com/en-au/index%23pc). Set up the VPN function on the Avast One browser. Describe how to use it and what its purpose is. Include screenshots as part of the instruction.  The student must describe the purpose of using a VPN and when to use it.   * In this case, to allow the company server to believe that the person accessing the server is in the correct location to gain access.   The student can describe when to use the VPN.   * When accessing company data from outside of the secure company servers.   Instructions on how to set up a VPN must include screenshots of the VPN client using the Avast Browser. |
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Creating Strong Passwords

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| Provide guidance on how to create strong passwords. Include advice on the use of different characters and choice or words or phrases to include/not include.  The student must describe the qualities of a strong password. Including the use of upper and lowercase letters, numbers and special characters. Instructions on not using easy to guess words or phrases or person’s name or date of birth. |

Install and use a Two-factor Authentication app (Authy)

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| Provide guidance on how to download, install and use Authy as a two-factor authenticator for at least one app. Use an app that you already have access to create this tutorial – Google or Gmail, Facebook, Xero, Microsoft, Pinterest or other.  The student must describe the purpose of using Authy as a means for two-factor authentication. The purpose is to provide an extra layer of security by attributing a six-digit access code that is input after the password has already been entered. This creates an added layer of protection in case passwords are hacked.  The student must describe how the software is installed and how it is used correctly.   * The software is downloaded from <https://authy.com/>. * Run the installation and link to the desired app (Gmail, Google, Xero or other). * Set up recovery password. * Run the authenticator by logging in to the third-party app (Gmail, Google, Xero or other) and input the six-digit authentication code.   Screenshots should be included. Examples are given below.  Set up and in use: | |
| Text  Description automatically generated |  |