**Assignment 6: Tuning and Application Support**

This week’s assignment focus on safely manipulating the Windows Registry and looking at your System Maintenance and security using tools such as the Event Viewer, Action Center and Firewall. We will also investigate system backup and recovery options as well as the requirements for a disaster recovery plan.

**Required Resources**

* Windows 10 workstation created in Assignment 1.

**Additional Information**

Professional Documentation - All documentation must be done in a *professional style*. It must include:

* Title page
* Updateable Table of Contents
* Document introduction
* Section introductions and summary (description)
* Graphics or screenshots must include introduction and descriptions
* Document summary
* ALL sources and graphics used MUST be properly cited (APA) or credited.
* **NO** embedded, zipped or compressed files. **1 Professional Document ONLY.**

\*\* All scripts must be converted to text before including them in your documentation. \*\*

*NB: Citations – Remember that citations MUST be provided for any code, script, test or image copied from another source or used as a resource. Not attributing appropriately (Plagiarism) or using illegal or unlicensed copies (copy write breach) are serious academic offenses. If you have any doubt as to when or how to cite, consult with your instructor and the resources provided by the college.*

<http://www.nscc.ca/docs/about-nscc/policies-procedures/policy-studentcodeofconduct.pdf>

<https://www.nscc.ca/docs/about-nscc/policies-procedures/policy-academicintegrity.pdf>

**Evaluation:**

This assignment is worth a total of **55 Marks** as per the Rubric on Brightspace (marks will be deducted for deviating from Requirements). You may be asked to demonstrate some of your assignment to show your comprehension of the material.

**Marking and Assignment Notes:**

* **Documentation (Task 1,2,3,4,5)** must be submitted to Brightspace by 5pm on the due date assigned in Brightspace
* **Automatic mark of 0 - Assignment not submitted or work not original.**
* **Rubric** can be found on Brightspace at the bottom right of the assignment page under ‘Assessment’ or via Assessments 🡪 Rubric

**Task 1 (submit on Brightspace) - The Registry**

**Part 1** – Create a professional style document (details on page 1). Copy or create the following Registry Summary Table and complete.

|  |  |  |
| --- | --- | --- |
| **Registry Key** | **Applies to** | **Contains what type of information** |
| HKEY\_CLASSES\_ROOT |  |  |
| HKEY\_CURRENT\_USER |  |  |
| HKEY\_LOCAL\_MACHINE |  |  |
| HKEY\_USERS |  |  |
| HKEY\_CURRENT\_CONFIG |  |  |

**Part 2**– Before attempting any registry navigation it is always good practice to do a complete backup of the registry.

* Create a folder on the root of C: called SysBackups
* Open your registry editor through Start > Run > regedit.exe
* Exporting the full registry hierarchy to “C:\SysBackups\RegBkNov2019.reg”
* Navigate through HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\ and find the wuauserv subkey.
* Identify the “Start” DWord Key and confirm it has a value of 4 (it might be 3 if Windows has re-enabled your updates – if so then leave it as is)
* Export just the **wuauserv** subkey to C:\SysBackups\wuauserv1.reg
* **Question 1:** What arethe value ‘base’ options for the “Start” DWord key in wuauserv subkey and what do they mean?
* **Question 2:** What are the keys named ‘S-I-5…’ shown under HKEY\_USERS in regedit? What do they represent?
* **Question 3:** What are the steps you would use to import your wuauserv subkey back into your registry (Do **NOT** actually import).

**Task 2 (submit on Brightspace) – System Events**

Update your documentation to include the information required below.

* Add the Event Viewer snap-in (local computer) to your Custom Console1
* In the Summary of Administrative Events pane, expand Error.
* In the Action Pane on the right, under Error and select View All Instances of this Event.
* **Record** the Number of events displayed using a screenshot and include in your documentation.
* Select any error with an ID other than Event ID 10 and note the entries in the bottom General Pane.
* Select the Details Tab in this pane. Toggle between Friendly and XML views
* From the Action Pane to the right, select Copy -> Copy Details as Text
* Minimize the MMC on screen. Start Notepad++ and paste the details in to a new document.Save text document as C:\SysBackups\Errors.txt and add a copy of Errors.txt in your documentation.
* Use the **Event ID** from your Errors.txt to research your error and answer the following questions. \*Remember to cite your resources.
  + What is a symptom of this error?
  + What is a possible cause?
  + What is a possible solution?

**Task 3 (submit on Brightspace) - The Action Center**

* Open the “Security and Maintenance” Action Center (use your search function if required)
* Expand the Maintenance option
* **Note** – if there are current system issues, you will see a message indicating this under Maintenance. **Talk to your instructor before proceeding if you have unresolved system issues.**
* Select “View reliability history” and review any recorded problems, issues or events. HINT: You may need to select a particular day.
* **Record** the details for one of the problems, issues or events noted. Your research MUST include:
  + Source
  + Summary
  + Date
  + Action
  + Description
* Research the Reliability Monitor and **Record** the 5 areas for which reliability data is collected (eg. Application Failures).
* Return to the main “Security and Maintenance” window and select “Change maintenance settings”
* Review the description of “Automatic Maintenance” and **Record** the current Automatic Maintenance settings.
* In order to support the auto updates settings we set in assignment 4 modify your Automatic Maintenance to run at the same time as our windows updates.
* Capture a **screenshot** to show your new setting.

**Task 4 (submit on Brightspace) – File Backup and Recovery**

* Open the “Update & Security” settings page (use your search function if required)
* Click on the ‘Backup’ tab
* Select the ‘Add a drive’ option under the ‘Back up using File History’ section
* Set your data to be saved to the **S: drive** created in Assignment 3.
* Check the folders being backed up to ensure your E:\CompanyInc folder is being backed up
* Now customize your backups by selecting “More options”.
  + Set your backups to **Daily**
  + Keep your saved versions for **3 months**
* File History will automatically start backing up all files on that drive – if not then select ‘Back up now’
* When completed, navigate to your E:\Company Inc\Management\ABruce Files
* Check the folder’s **Previous Version** to confirm your Folder History is working.
* Now let’s test our File History by deleting the cmd.exe from our E:\Company Inc\Management\ABruce Files folder.
* Record the steps required to recover the cmd.exe fie you just deleted. **\*\* NOTE: Do NOT recover the entire folder just the deleted file.**

**Task 5 (submit on Brightspace) – Change Management Log and document professionalism**

* Add all required information to your professional documentation. (\*\*make sure to include your scripts, reports and research information)
* Update your Change Management Log and add to your documentation.
* **Confirm your document meets all professionalism requirements identified on Page 1 of this assignment.**