



Assignment Submitted By

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Subject: INT301

Assignment Submitted to

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**GitHub Link:** <https://github.com/Sabbir-Hasan-670/Windows-Missing-Security-With-OpenSource-Software>

**Question Number Allocated: 41**

**Question:** Using desired Open-Source Software list all the security updates missing in your Window OS. Also, list all free system information about the hardware and software installed.

# **1. Introduction:**

## **About Software I use:**

Belarc Advisor is a free and comprehensive system information tool that provides detailed information about the hardware and software installed on a computer. It is available for personal and commercial use, and it is compatible with all versions of Windows, including Windows 11.

Belarc Advisor generates a comprehensive system profile that includes information about the operating system, hardware components, installed software applications, security updates, and system vulnerabilities. The tool is easy to use and is useful for identifying potential security vulnerabilities, missing security updates, and hardware or software issues that could impact the performance and security of a computer.

The features of Belarc Advisor include:

1. Detailed hardware and software information - Belarc Advisor provides a detailed inventory of hardware components, such as CPU, memory, motherboard, hard drives, and peripherals, as well as software applications and versions.
2. System security status - Belarc Advisor checks for missing security updates, potential security vulnerabilities, and other security-related issues and provides recommendations to improve system security.
3. Licensing information - Belarc Advisor also provides licensing information for installed software applications, making it easy to manage software licenses.
4. Network information - Belarc Advisor can also scan and provide information about network devices, such as routers and switches, as well as IP addresses and network configurations.

Overall, Belarc Advisor is a powerful and useful tool for conducting a comprehensive system audit, optimizing system performance, and maintaining system security. It is easy to use and is an excellent choice for both home and business users.

## **1.1 Object of the Project:**

The main objective of the project with Belarc Advisor is to conduct a system audit to identify potential security vulnerabilities, missing security updates, and hardware or software issues that could impact the performance and security of the system. The project aims to generate a comprehensive system profile using Belarc Advisor to provide detailed information about the hardware and software installed on the system and to use this information to optimize system performance and maintain system security.

## **1.2 Project Description:**

The project involves conducting a comprehensive system audit using Belarc Advisor on an individual's own computer. The primary goal of the project is to identify any potential security vulnerabilities, missing security updates, and hardware or software issues that could impact the performance and security of the computer.

## **1.3 The scope of the project:**

The scope of the project for your own device would be to conduct a comprehensive system audit using Belarc Advisor to identify any potential security vulnerabilities, missing security updates, and hardware or software issues that could impact the device's performance. The project's objective is to improve the overall security and performance of your device.

**The project's objectives include the following:**

1. Install Belarc Advisor on the individual's own computer.
2. Conduct a system audit using Belarc Advisor to generate a comprehensive system profile.
3. Review the system profile to identify any potential security vulnerabilities, missing security updates, or hardware or software issues.
4. Address any identified vulnerabilities, missing security updates, or hardware or software issues.
5. Conduct periodic system audits to maintain optimal system performance and security.

The project aims to improve the overall security and performance of the individual's own computer, prevent potential data breaches and system downtime, and ensure that the system operates at peak performance. By conducting a system audit using Belarc Advisor, the project aims to provide a comprehensive overview of the computer's status and identify any potential issues that could impact system performance and security, allowing for remediation before any issues become critical.

## **2. System Description**

### **2.1 Target system description:**

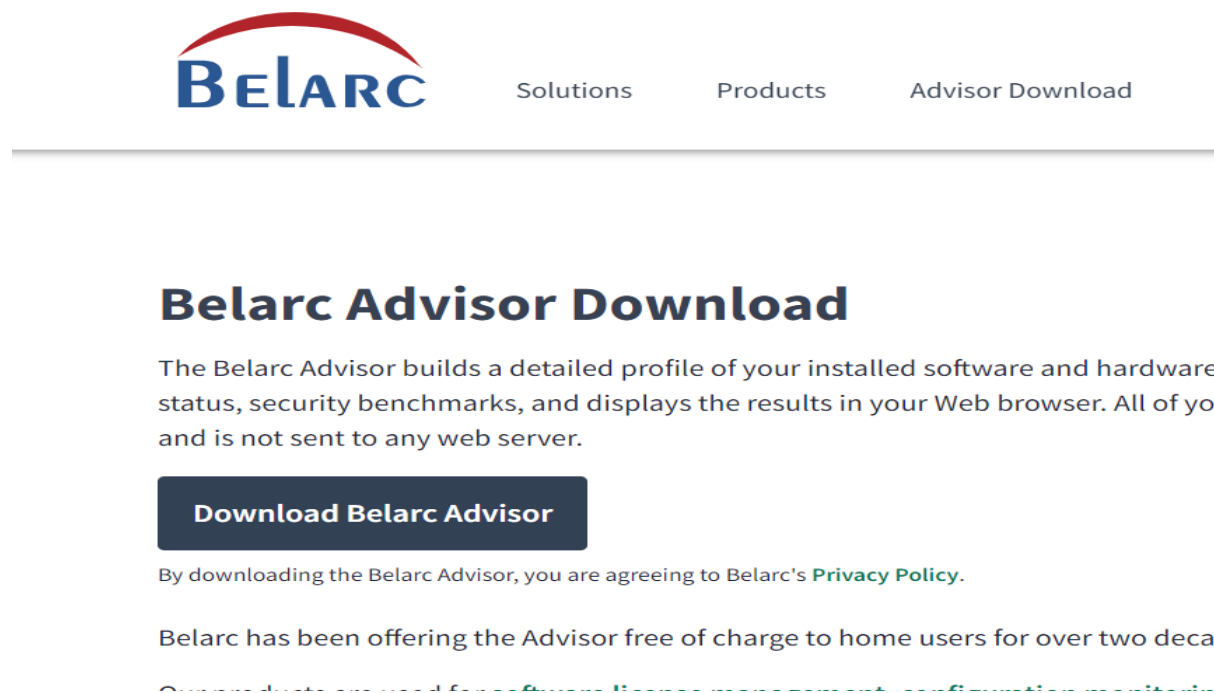
The target system for this project is a laptop computer running Windows 11 Pro. The laptop has a 64-bit processor, 16GB of RAM, a 1TB hard disk, and a 256GB solid-state drive (SSD). The laptop also has a dedicated NVIDIA GeForce GTX 1660Ti graphics processing unit (GPU) with 6GB of video RAM.

The laptop is used for personal or professional purposes and contains various applications and data. The operating system is regularly updated through Microsoft's update mechanism. The laptop is connected to the internet through a Wi-Fi Connection.

### 3. Analysis Report:

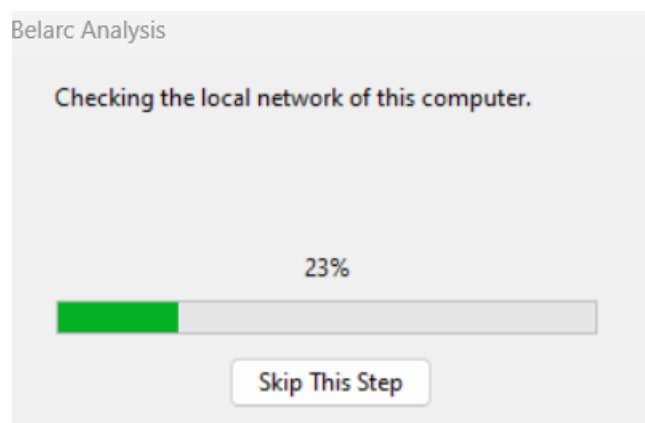
### 3.1 System snapshots and full analysis report:

For list all free system information about the hardware and software installed I used Belarc Advisor.

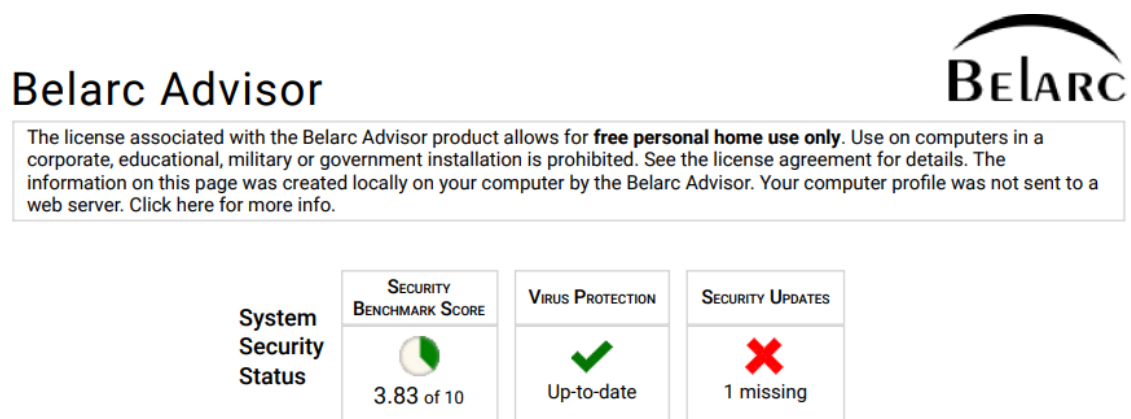


First Download and install the Belarc Advisor it give us the information about our software installed in our device and also missing update its show everything.

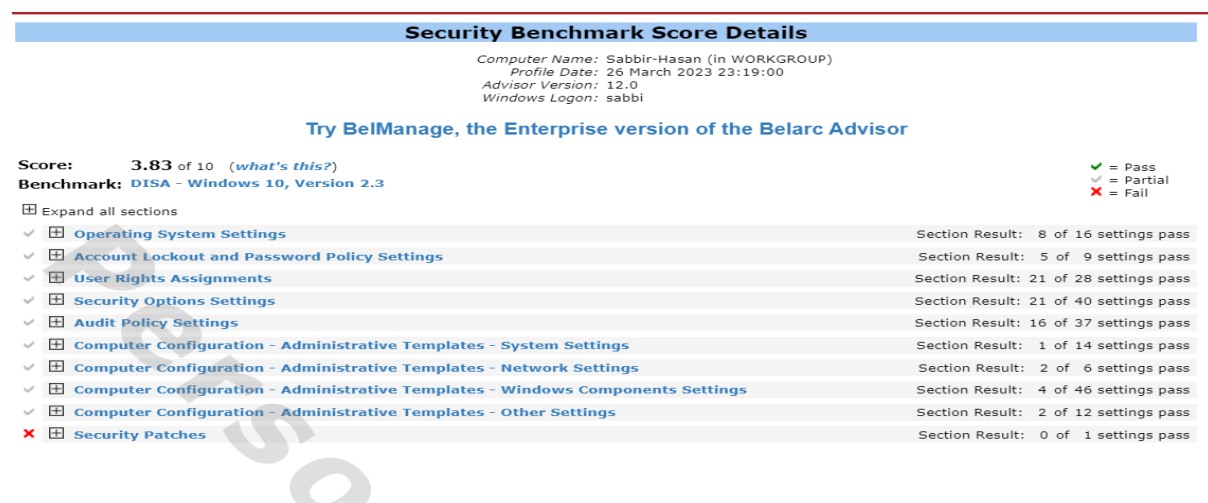
### Gathering Details from the Computer When I Run the software:



Belarc Advisor is a free system information tool that provides a detailed profile of your installed software, hardware, network inventory, missing Microsoft hotfixes, anti-virus status, security benchmarks, and displays the results in your web browser. Here is a report of Belarc Advisor:



## Security Benchmark Score of my device:



## My system details which are found by Belarc Advisor:

Understanding system details is crucial for maintaining the optimal performance and security of a computer. Knowing the system specifications and hardware components can help determine if a laptop meets the requirements for specific software applications or upgrades. Understanding the software applications installed on a laptop can also help troubleshoot software-related issues and identify potential security vulnerabilities.

Operating System				System Model			
Windows 11 Professional (x64) Version 22H2 (build 22621.1413) Install Language: English (United States) System Locale: English (United States) Installed: 17-01-2023 18:03:14 Servicing Branch: Current Branch (CB) Boot Mode: UEFI with successful Secure Boot				Acer Predator PH315-52 V1.12 System Serial Number: NHQ53SI0139240B4572600 Enclosure Type: Notebook			
Processor <sup>a</sup>				Main Circuit Board <sup>b</sup>			
2.40 gigahertz Intel Core i5-9300H 256 kilobyte primary memory cache 1 megabyte secondary memory cache 8 megabyte tertiary memory cache 64-bit ready Multi-core (4 total) Hyper-threaded (8 total)				Board: CFL Covini_CFS V1.12 Serial Number: NBQ53110039240006A2600 Bus Clock: 100 megahertz UEFI: Insyde Corp. V1.12 07/28/2020			
Local Storage				Memory <sup>c,d</sup>			
1.26 Terabytes Usable Local Storage Capacity 491.60 Gigabytes Local Storage Free Space				15.85 Gigabytes Usable Installed Memory			
Internal Drives		Size	Type	Serial Number	D:		
NVMe WDC PC SN720 SDA ST1000LM049-2GH172		256.05 GB	NVMe	184654804331	Slot 'ChannelA-DIMM0' has 16 GB (serial number 644EB1B1) Slot 'ChannelB-DIMM0' is Empty 32 Gigabytes Maximum System Memory Capacity		
* Status reported only for SMART enabled drives				Local Storage Volumes			
				c: (NTFS on drive 1) * 255.30 GB 126.72 GB free			
				d: (NTFS on drive 0) 536.75 GB 143.61 GB free			
				e: (NTFS on drive 0) 463.33 GB 221.27 GB free			
				* Operating System is installed on c:			
				Network Storage Volumes			
				None detected			
				Printers			
local user accounts		last login		Microsoft Print To PDF		on PORTPROMPT:	
sabbi		20-03-2023 20:25:47 (admin)		Microsoft Shared Fax Driver		on SHRFX:	
local system accounts				Microsoft XPS Document Writer v4		on PORTPROMPT:	
X Administrator		never		Send to Microsoft OneNote 16 Driver		on nul:	
X DefaultAccount		never					
X Guest		never					
X WDAGUtilityAccount		never					
X Marks a disabled account;							
L Marks a locked account							

## Missing Security update on my device:

This report provides an overview of the missing updates identified by Belarc Advisor during system audit of my laptop. The primary objective of the audit was to identify potential security vulnerabilities and missing updates that could impact system performance and security.

## I have only one missing update found on my device. And here it is:

Hotfixes from Windows Update (agent version 923.203.111.0) install automatically. Last install: 25-03-2023 18:09:23, check: 26-03-2023 15:28:28. These security updates apply to this computer but are not currently installed (using Advisor definitions version 2023.3.15.1), according to the 03/14/2023 Microsoft Security Bulletin Summary and bulletins from other vendors. Note: Security benchmarks require that Critical and Important severity security updates must be installed.

Missing Security Updates - for Adobe, Apple, Java, Microsoft and more			
Hotfixes from Windows Update (agent version 923.203.111.0) install automatically. Last install: 25-03-2023 18:09:23, check: 26-03-2023 15:28:28.			
These security updates apply to this computer but are not currently installed (using Advisor definitions version 2023.3.15.1), according to the 03/14/2023 Microsoft Security Bulletin Summary and bulletins from other vendors. Note: Security benchmarks require that Critical and Important severity security updates must be installed.			
Hotfix Id Q5023286	Severity Important	Description (click to see security bulletin) <a href="#">Microsoft security update (KB5023286)</a>	

## After Update:

### Missing Security Updates

Hotfixes from Windows Update (agent version 923.308.111.0) install automatically.  
Last install: 03-04-2023 22:33:27, check: 03-04-2023 13:05:11.

These security updates apply to this computer but are not currently installed (using Advisor definitions version 2023.3.15.1), according to the 03/14/2023 Microsoft Security Bulletin Summary and bulletins from other vendors. Note: Security benchmarks require that *Critical* and *Important* severity security updates **must be installed**.

Hotfix Id	Severity	Description
Q5023286	Important	Microsoft security update (KB5023286)

## Impact of Missing Updates:

Missing updates can have a significant impact on the performance and security of a computer. Security updates are crucial for protecting a computer against potential cyber threats, such as malware and viruses. Missing updates can leave the system vulnerable to cyber-attacks and data breaches, compromising personal and sensitive information.

## Network details on my device:

This report provides an overview of the network details identified by Belarc Advisor during system audit of my laptop. The audit was to identify network devices, IP addresses, and network configurations.

Here are my all-network details which is found by this software:

Network Map			
IP	Device Type	Device Details	Device Roles
192.168.18.1	Router	Huawei	DHCP Server, Gateway, Domain Name Server, Web Server
192.168.18.3		Physical Address FA:BB:5A:93:F0:99	
192.168.18.7		Xiaomi	
192.168.18.8	Windows 10 Workstation	Apple	
192.168.18.9		Sabbir-hasan (in WORKGROUP), Intel	

## Impact of Network Details:

Understanding network details is crucial for maintaining the optimal performance and security of a computer. Knowing the network devices and their configurations can help troubleshoot network issues and optimize network performance. Understanding the network's IP addresses and configurations can also help identify potential security vulnerabilities and prevent cyber threats.

## List of Software installed and their version:

**Software Licenses**

Belarc - Advisor	040c4413
McAfee - AP	VSC22.12
Microsoft - 365 Apps for enterprise	00202-53565-98604-AA578 (Key: none activated)
Microsoft - Internet Explorer	00330-80000-00000-AA149 (Key: VK7JG-NPHTM-C97JM-9MPGT-3V6GT)
Microsoft - PowerShell	89383-100-0001260-04309
Microsoft - Windows 10 Pro (prior license)	00330-80000-00000-AA938 (Key: VK7JG-NPHTM-C97JM-9MPGT-3V6GT)
Microsoft - Windows 11 Professional (x64)	00330-80000-00000-AA149 (Key: VK7JG-NPHTM-C97JM-9MPGT-3V6GT)
VMware - Workstation	4A4RR-813DK-M81A9-4U35H-06KND

Find unused software and reduce licensing costs...  
Try BelManage, the Enterprise version of the Belarc Advisor

**Software Versions and Usage**

<ul style="list-style-type: none"> <li>   Acer - PredatorSense version 3.0.3136.0 (64-bit)</li> <li>   Acer - PredatorSense_V30 version 3.0.3136.0 (64-bit)</li> <li>   Alexander Roshal - WinRAR version 6.21.0 (64-bit)</li> <li>   Belarc - Advisor version 12.0</li> <li>   CloudMosa - PuffinSecureBrowser version 10.1.0.593</li> <li>   CPUID - CPU-Z Application version 2, 0, 5, 1 (64-bit)</li> <li>   Discord - https://discord.com/ version 1.0.9005</li> <li>   Discord - Discord version 1.0.9011</li> <li>   Eclipse Adoptium - OpenJDK Platform 17.0.6 version 17.0.6.0 (64-bit)</li> <li>   FineShare - FineCam Lanuch App version 1.5.0.0 (64-bit)</li> <li>   FineShare - FineVoiceLaunch version 1.0.0.0</li> <li>   GitHub - Desktop version 3.2.0</li> <li>   GitHub - Update version 1.1.1.0</li> <li>   Google - Chrome version 111.0.5563.111 (64-bit)</li> <li>   Google - Update version 1.3.36.151</li> <li>   Intel - Common User Interface version 6.15.101.2111 (64-bit)</li> <li>   Intel - Extreme Tuning Utility version 6.4.1.25</li> <li>   Intel - HD Graphics Drivers for Windows version 31.0.101.2111 (64-bit)</li> <li>   Intel - IGCC Service version 1.0.3962.0 (64-bit)</li> <li>   INTEL - Intel Graphics Command Center version 1.100.4628.0 (64-bit)</li> <li>   Intel - IntelCpHeciSvc Executable version 9.2.01.0920 (64-bit)</li> <li>   ITW Creative Works - Restart Manager version 0.0.17.0 (64-bit)</li> <li>   ITW Creative Works - Somiibo version 1.2.21.0 (64-bit)</li> <li>   Kakao - PotPlayer version 0, 0, 0, 0 (64-bit)</li> <li>   McAfee - Cloud Services Platform version 5.5.107.0</li> </ul>	<ul style="list-style-type: none"> <li>   Microsoft - SharePoint version 23.048.0305.0002 (64-bit)</li> <li>   Microsoft - Snipping Tool version 11.2302.20.0 (64-bit)</li> <li>   Microsoft - Sticky Notes version 4.5.9.0 (64-bit)</li> <li>   Microsoft - Store version 22301.1401.6.0 (64-bit)</li> <li>   Microsoft - Store Experience Host version 12301.1401.8.0 (64-bit)</li> <li>   Microsoft - Teams version 1.5.00.4689</li> <li>   Microsoft - Teams version 1.6.00.376 (64-bit)</li> <li>   Microsoft - Teams version 23062.1103.1944.2725 (64-bit)</li> <li>   Microsoft - Teams version 3.3.0.0</li> <li>   Microsoft - Tips version 10.2210.3.0 (64-bit)</li> <li>   Microsoft - To Do version 0.92.6741.0 (64-bit)</li> <li>   Microsoft - Visual Studio Code version 1.76.1 (64-bit)</li> <li>   Microsoft - VP9 Video Extensions version 1.0.52781.0 (64-bit)</li> <li>   Microsoft - Web Media Extensions version 1.0.42192.0 (64-bit)</li> <li>   Microsoft - Webp Image Extensions version 1.0.52351.0 (64-bit)</li> <li>   Microsoft - Windows Calculator version 11.2210.0.0 (64-bit)</li> <li>   Microsoft - Windows Clock version 11.2212.2.0 (64-bit)</li> <li>   Microsoft - Windows Installer - Unicode version 5.0.22621.1 (32/64-bit)</li> <li>   Microsoft - Windows Maps version 11.2210.6.0 (64-bit)</li> <li>   Microsoft - Windows Media Player version 11.2301.27.0 (64-bit)</li> <li>   Microsoft - Windows Media Player version</li> </ul>
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## After Install Some Software:

Try BelManage, the Enterprise version of the Belarc Advisor

**Software Versions and Usage**

<ul style="list-style-type: none"> <li>   AccessData Group - FTK Imager version 4.7.1.2 (64-bit)</li> <li>   Acer - PredatorSense version 3.0.3136.0 (64-bit)</li> <li>   Acer - PredatorSense_V30 version 3.0.3136.0 (64-bit)</li> <li>   Alexander Roshal - WinRAR version 6.21.0 (64-bit)</li> <li>   Belarc - Advisor version 12.0</li> </ul>	<ul style="list-style-type: none"> <li>   Microsoft - Snipping Tool version 11.2302.20.0 (64-bit)</li> <li>   Microsoft - Sticky Notes version 4.5.9.0 (64-bit)</li> <li>   Microsoft - Store version 22301.1401.15.0 (64-bit)</li> <li>   Microsoft - Store Experience Host version 12301.1401.8.0 (64-bit)</li> </ul>
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## Conclusion:

In conclusion, conducting a system audit using Belarc Advisor is an effective way to identify potential security vulnerabilities, missing security updates, and hardware or software issues that could impact system performance. By installing and using Belarc Advisor, you can generate a comprehensive system profile that provides detailed information about the hardware and software installed on your device and system security status.

The scope of the project for your own device includes the installation of Belarc Advisor, conducting a system audit, reviewing the system profile, addressing any identified vulnerabilities or issues, and conducting periodic system audits to maintain the device's security and performance.

Using Belarc Advisor as a tool for conducting a system audit is a proactive step towards improving the overall security and performance of your device, and it can help you to avoid potential issues that could lead to data breaches, system downtime, and other problems.

## 4 Reference/ Bibliography

Belarc Advisor: <https://www.belarc.com/products/belarc-advisor>