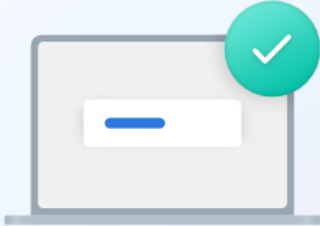


ADVANCED SOC - COMP 4078

Lab03

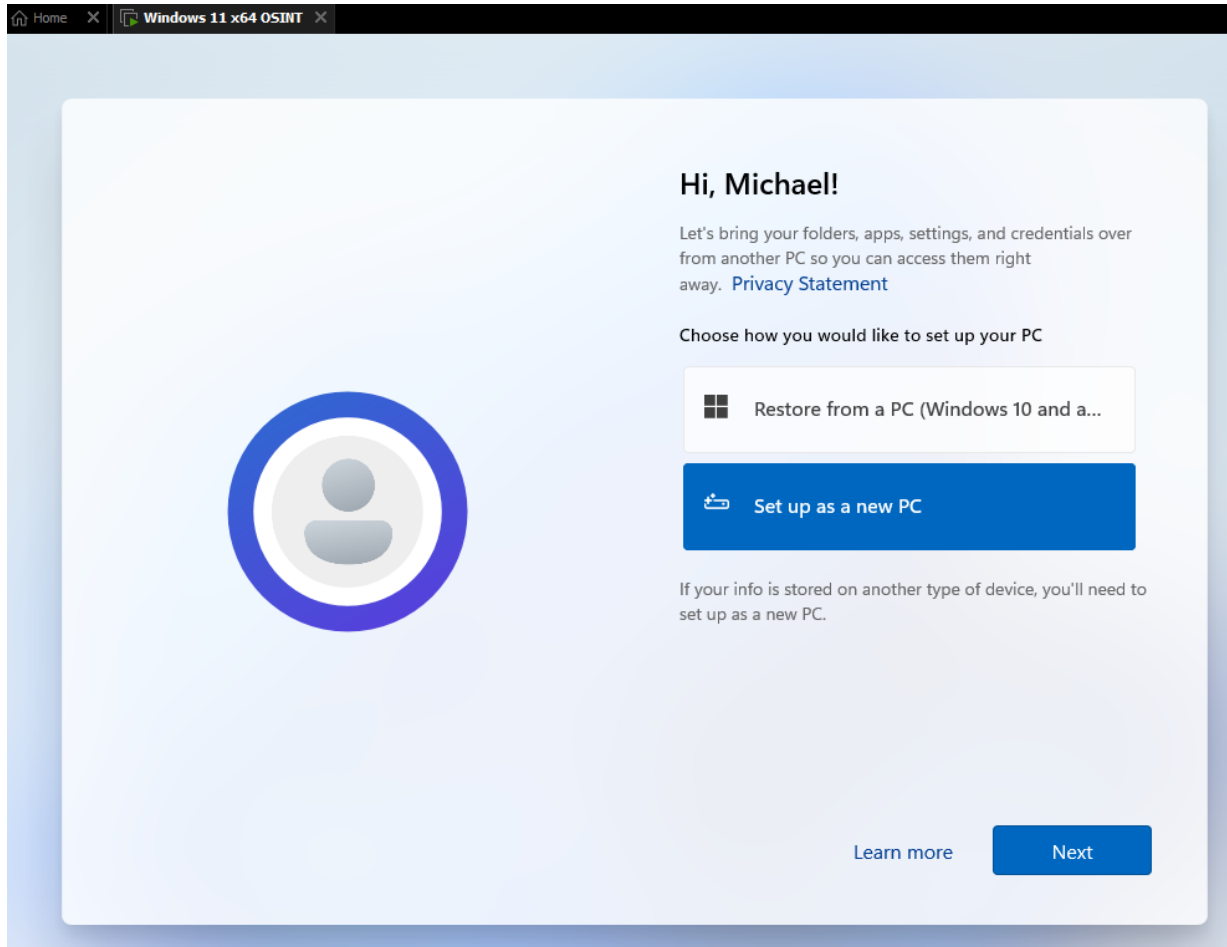


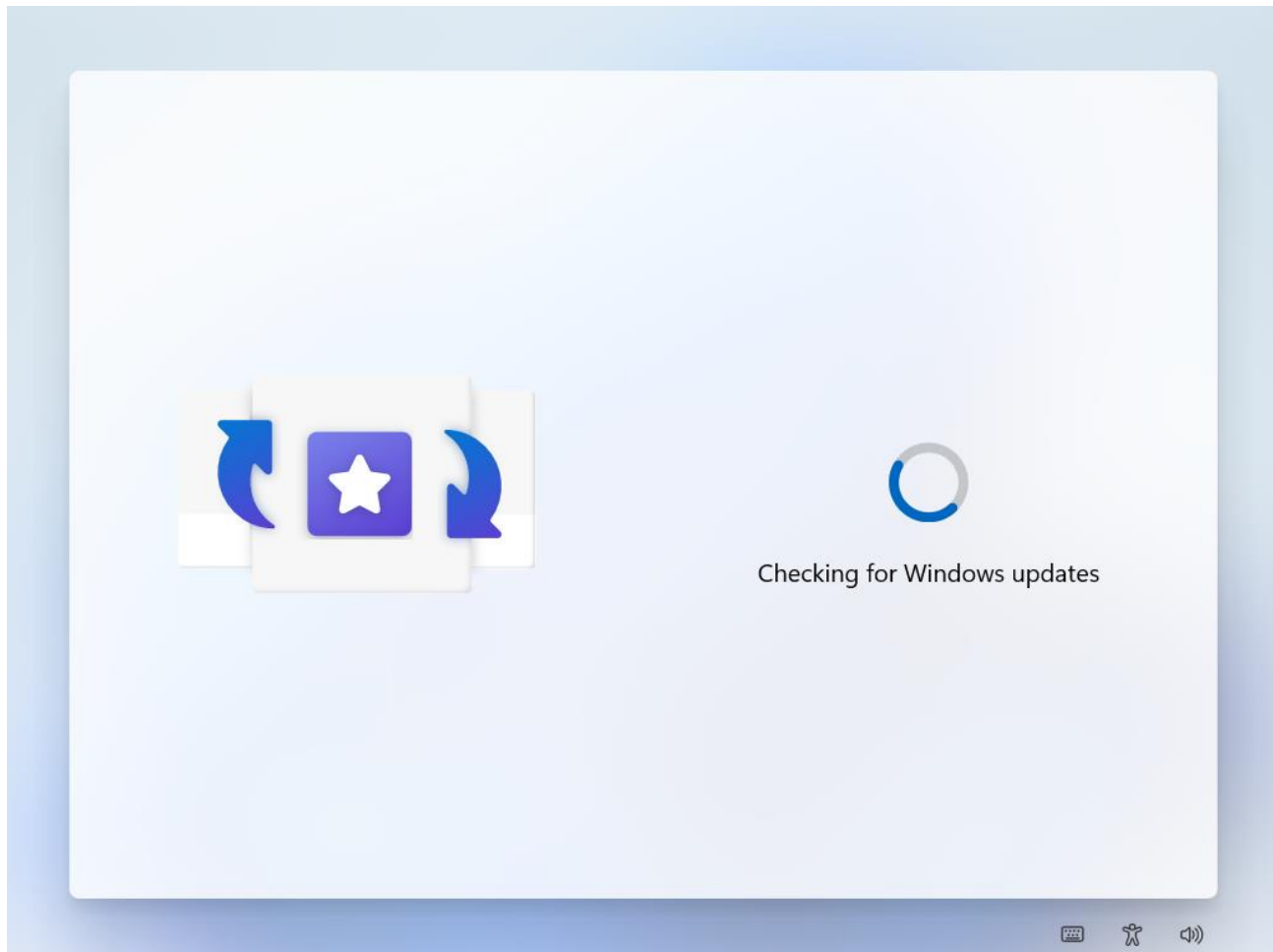
Let's name your device

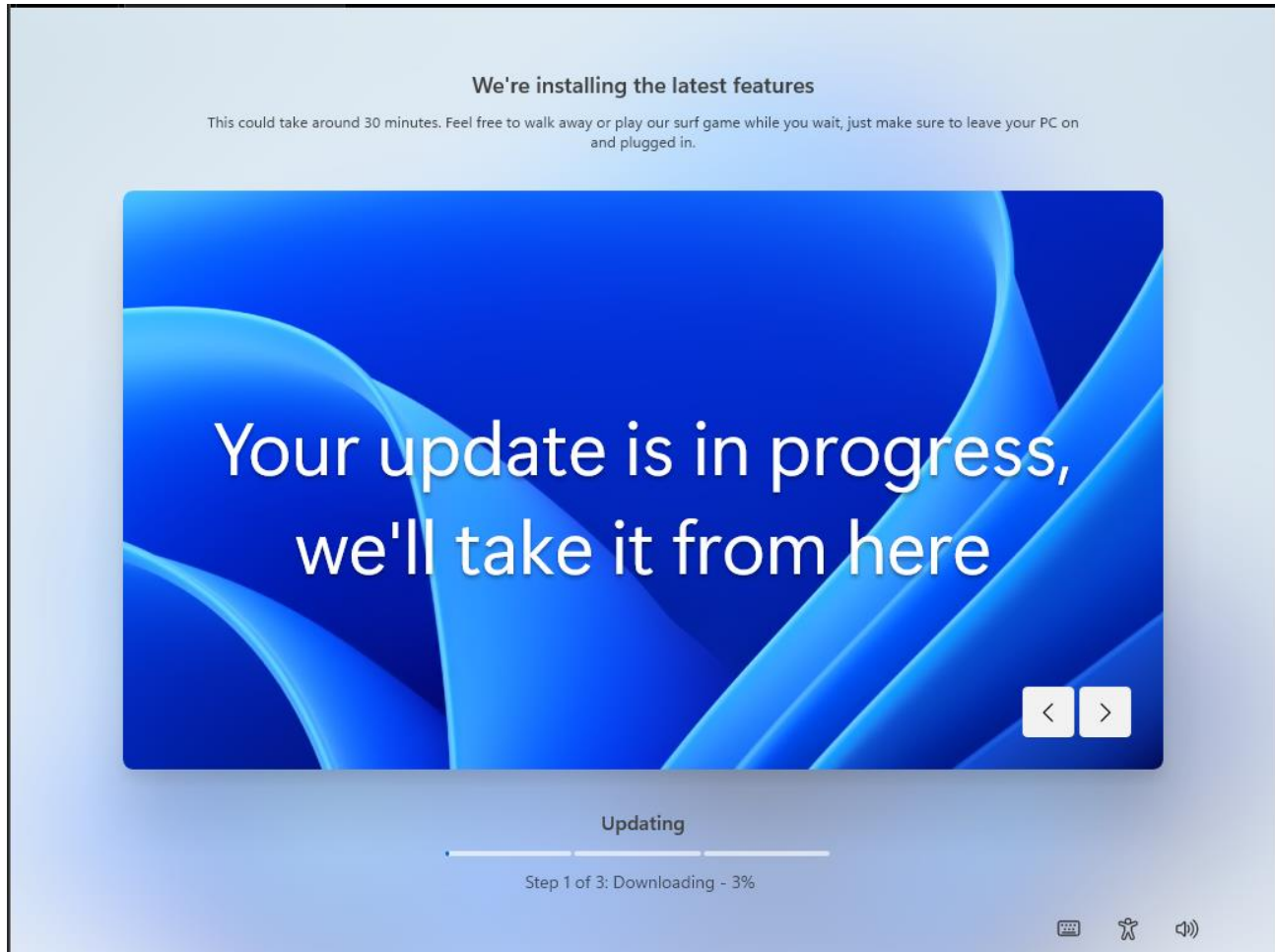
Make it yours with a unique name that's easy to recognize when connecting to it from other devices. Your device will restart after you name it.

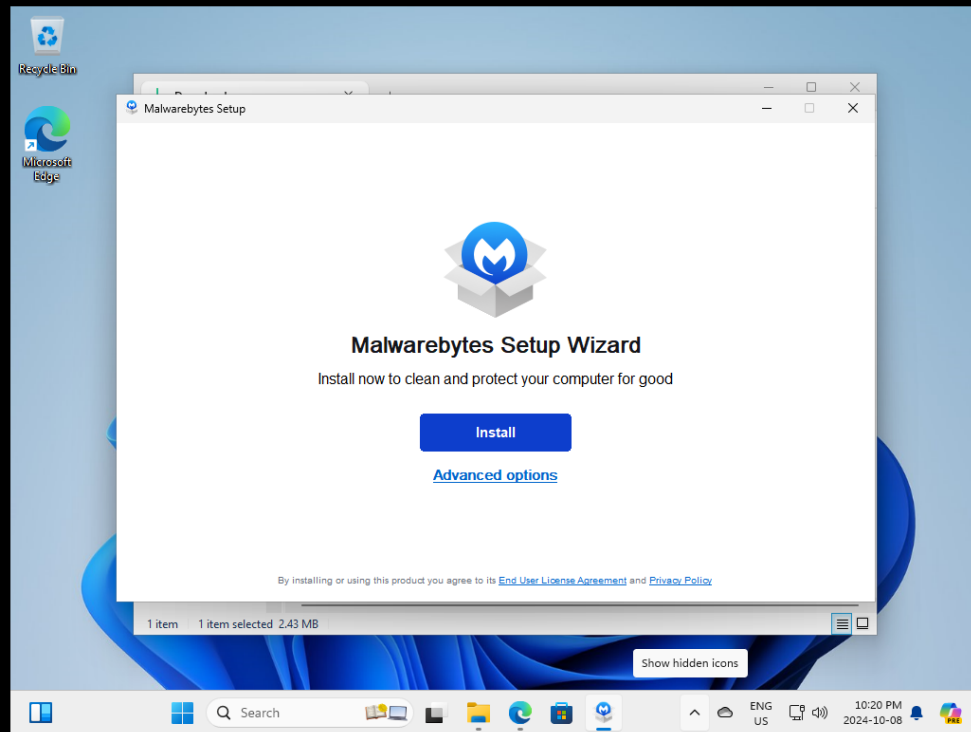
Can't contain only numbers
No more than 15 characters
No spaces or special characters other than hyphen (-), dashes (— and –), and underscore (_)

[Skip for now](#)[Next](#)

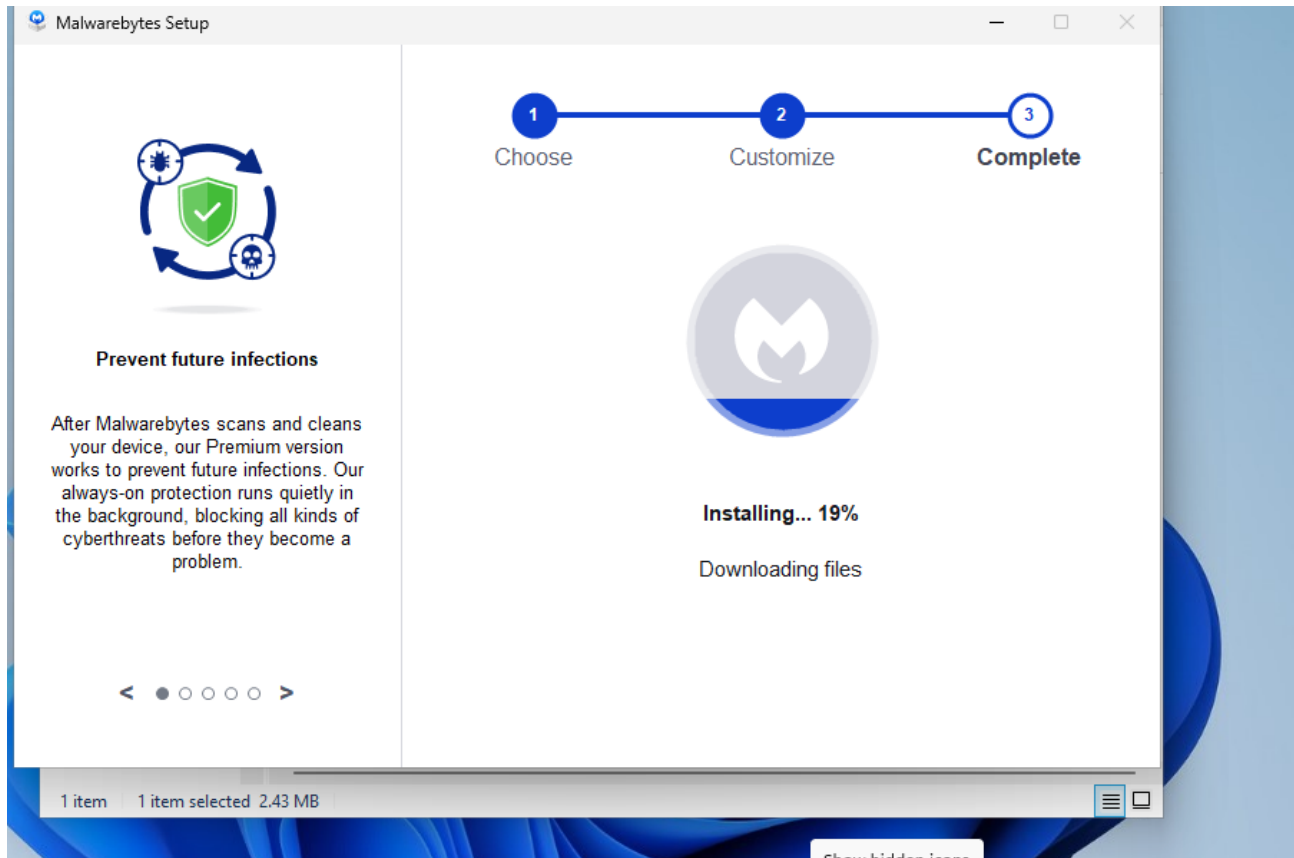




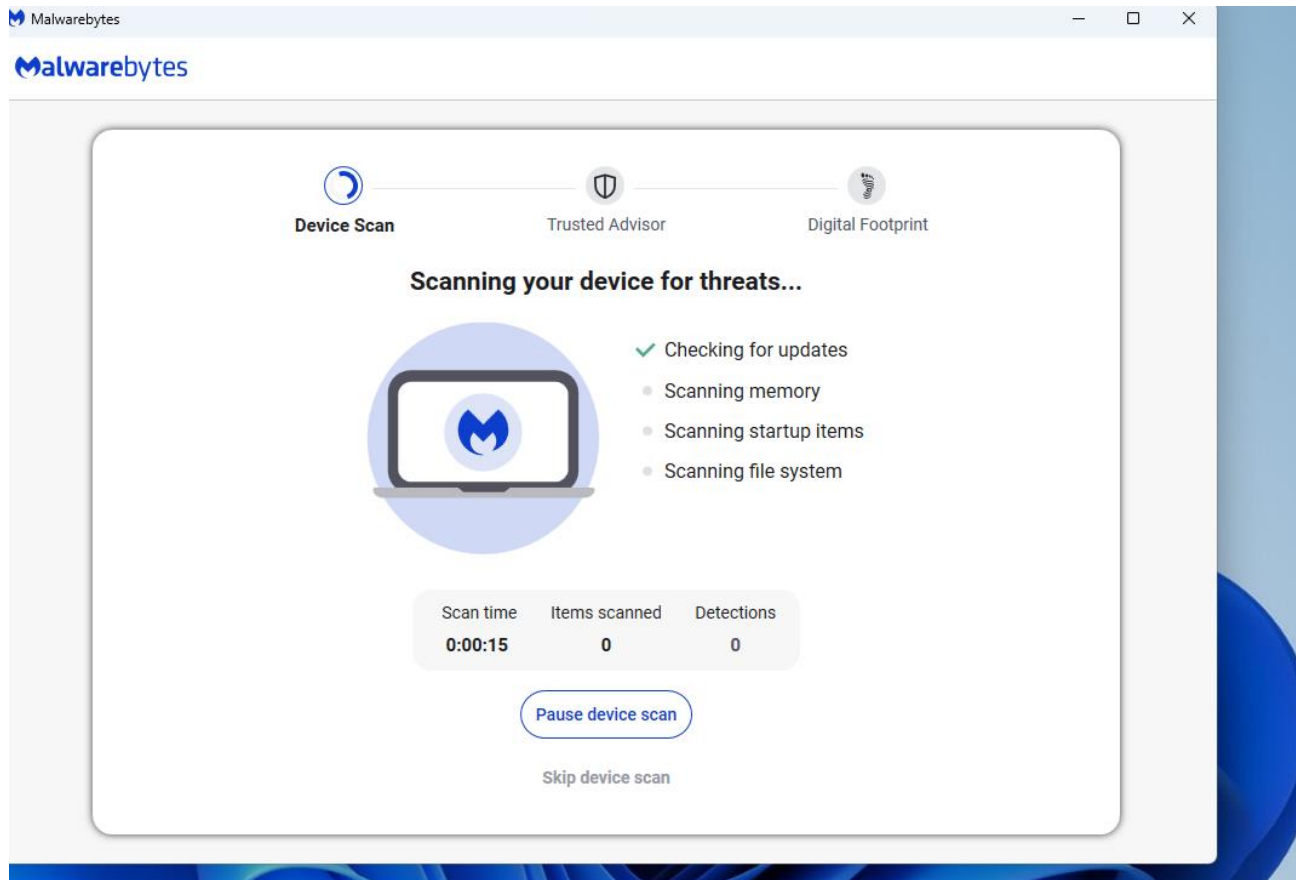




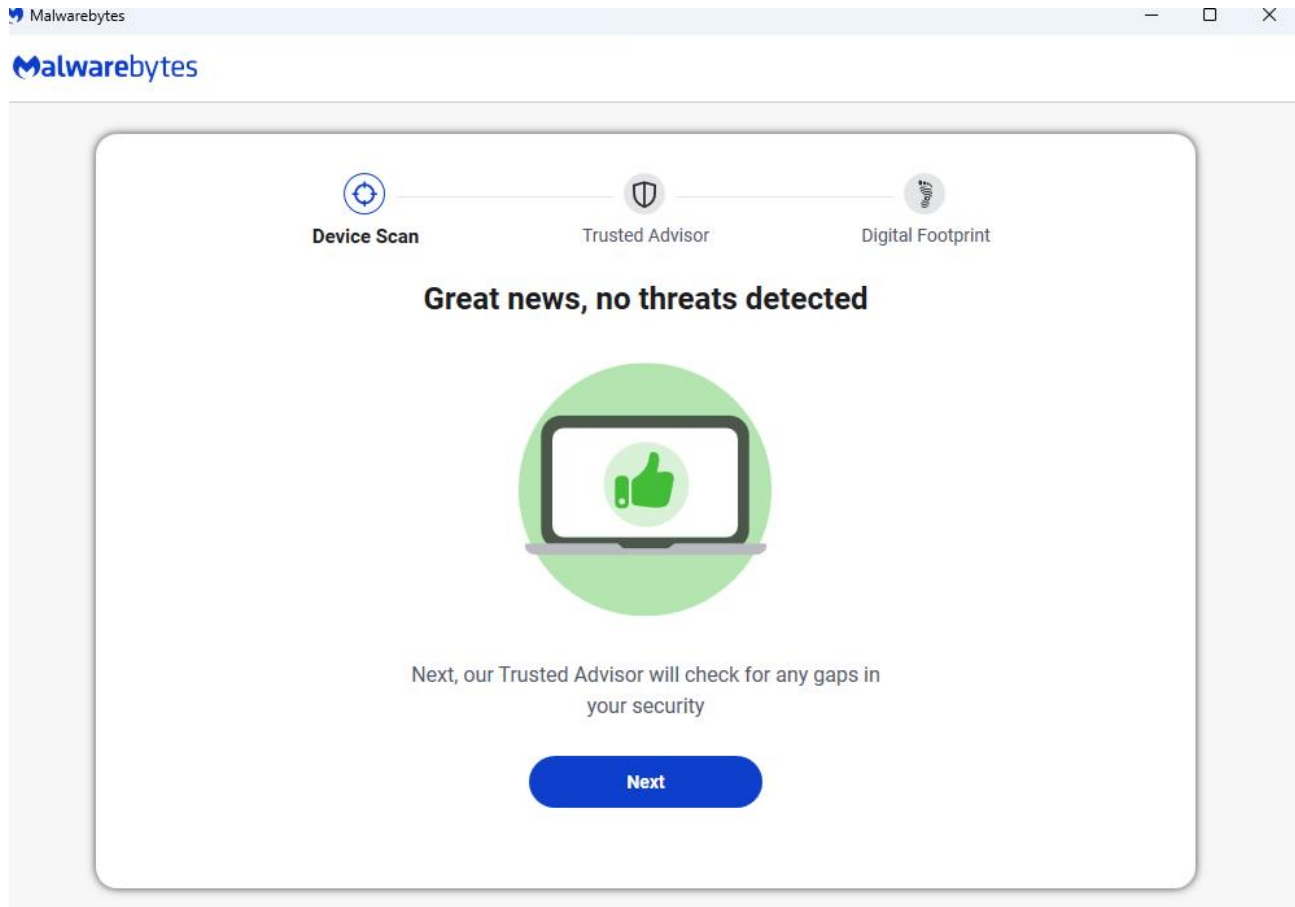
+Use Malwarebytes for Windows <https://www.malwarebytes.com/>



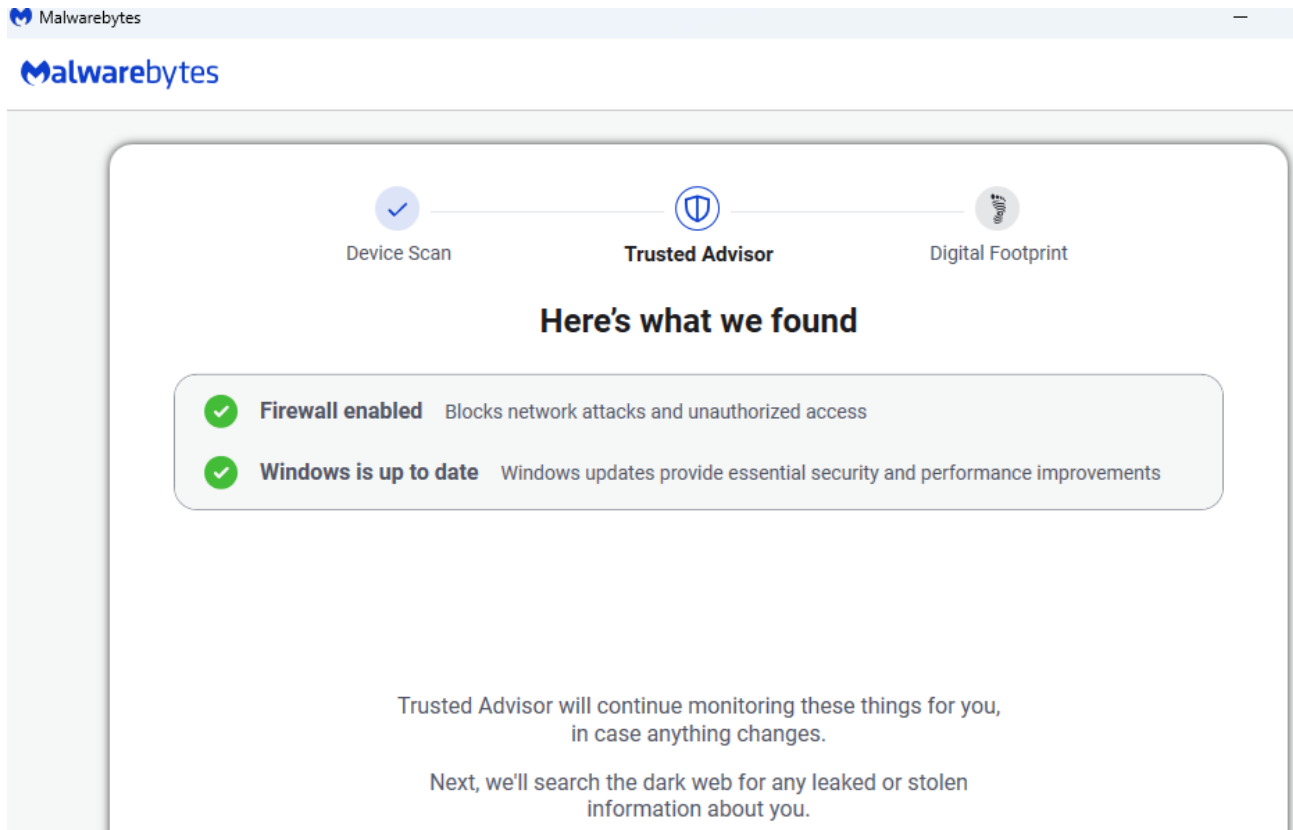
In the second step, the virtual machine is being configured as a new PC, following the setup process. The screenshot below shows the option to set up the machine as a new PC.



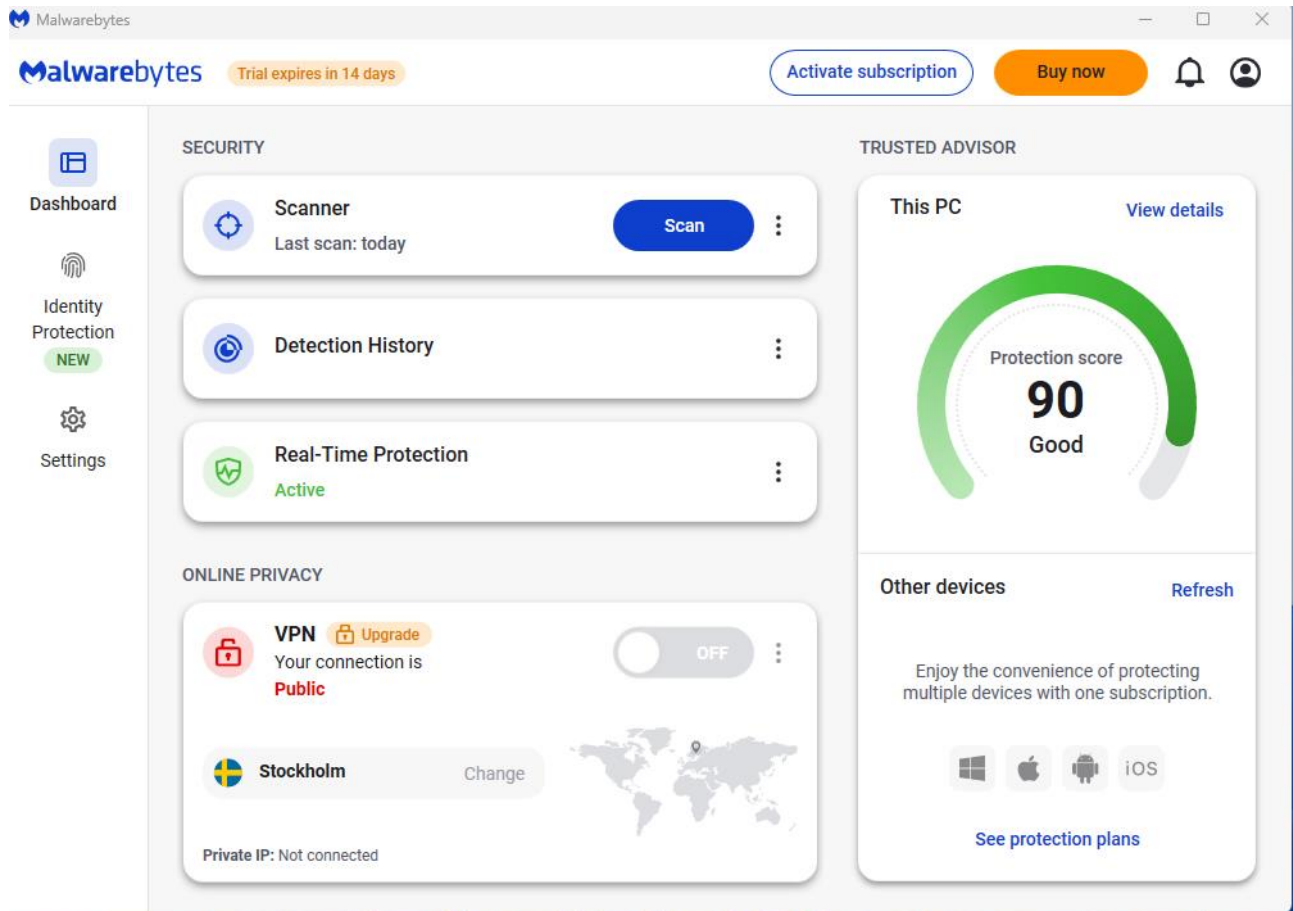
The second screenshot shows the VM setup as a new PC, which isolates the environment for safe and controlled OSINT operations. This clean setup is essential for conducting malware analysis without compromising the host machine.



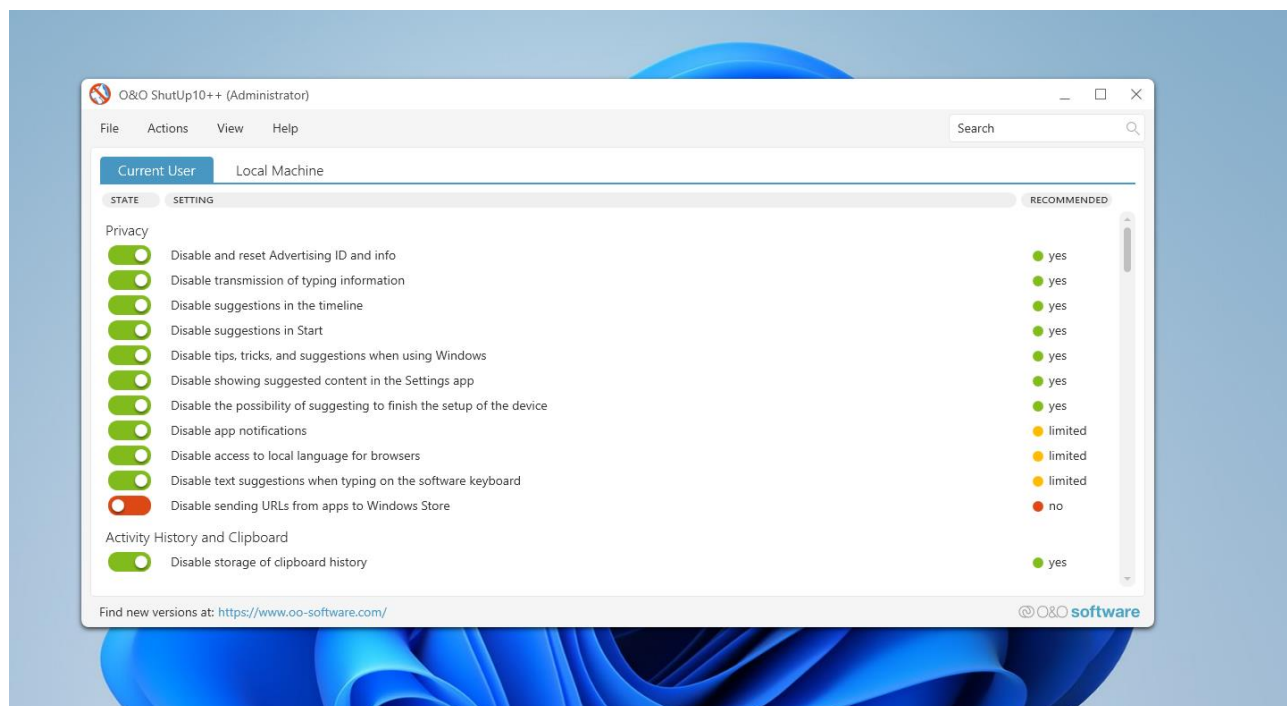
This step illustrates the process of checking for Windows updates on the virtual machine, ensuring that the latest security patches are applied



Here, Malwarebytes is shown actively scanning the system for any potential threats, ensuring that the system is secure before any further analysis is performed.

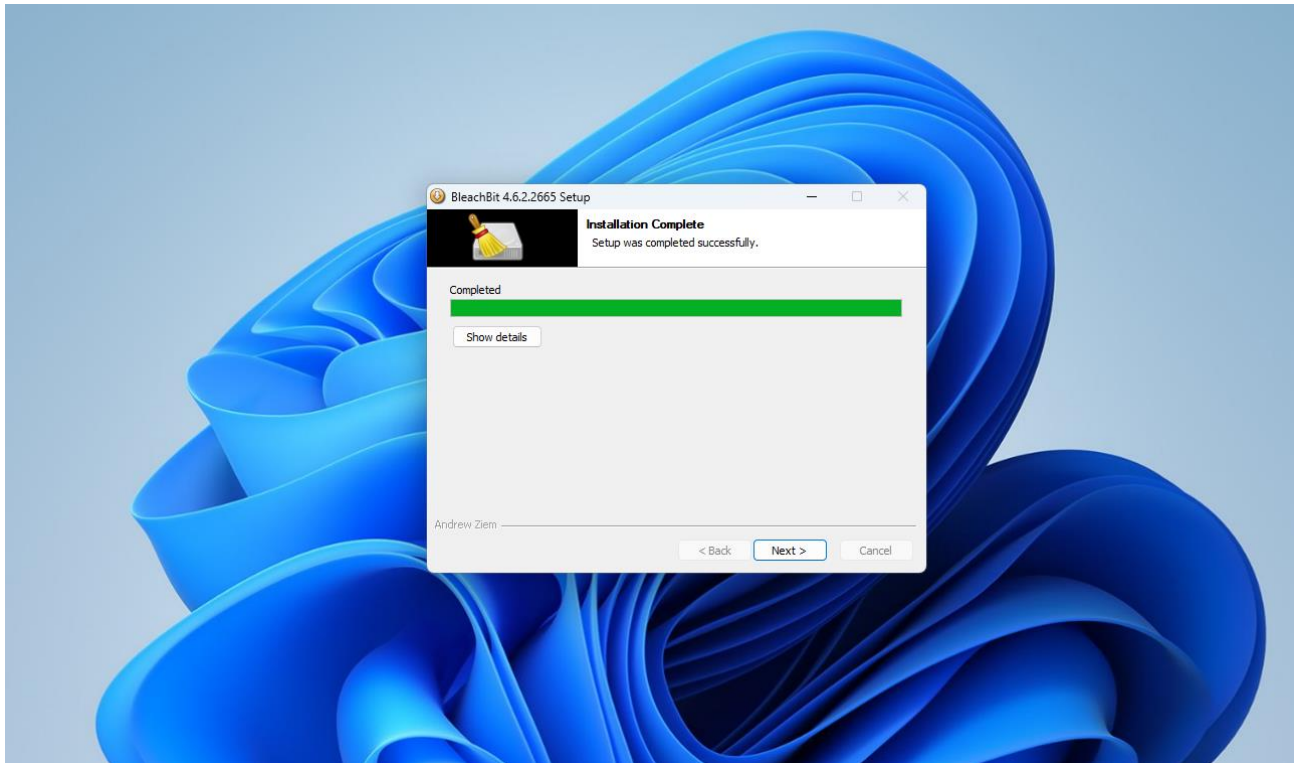


O&O Shut Up 10

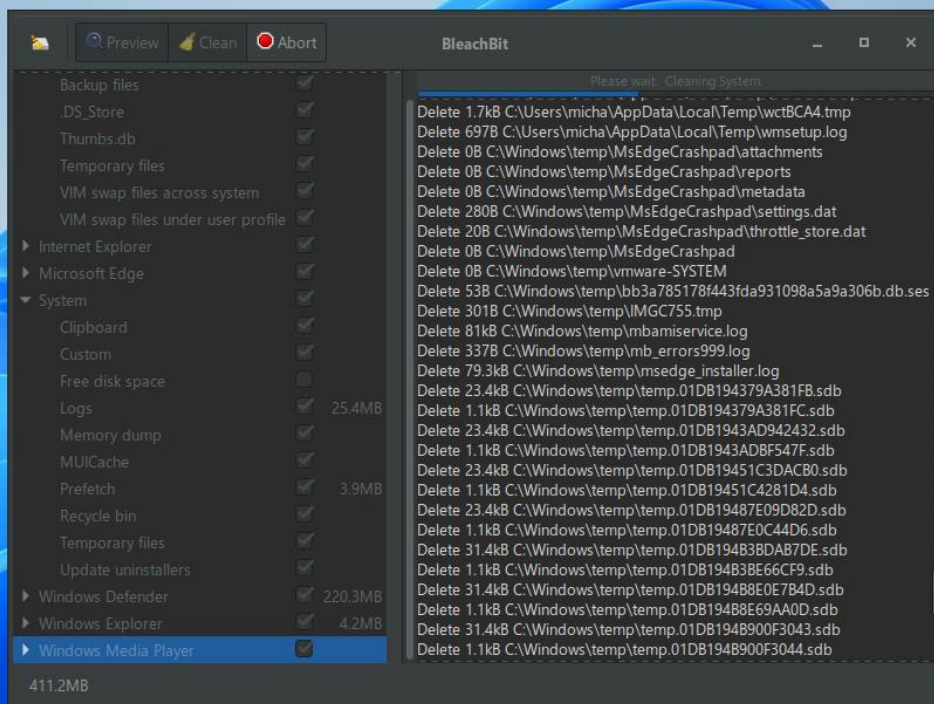
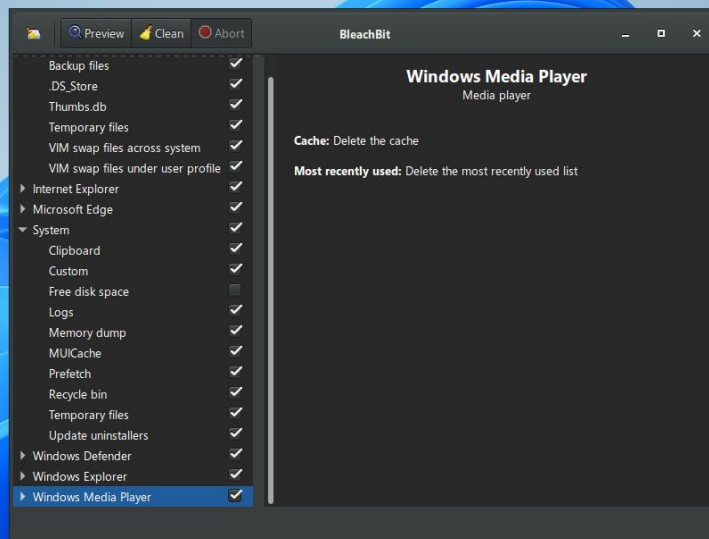


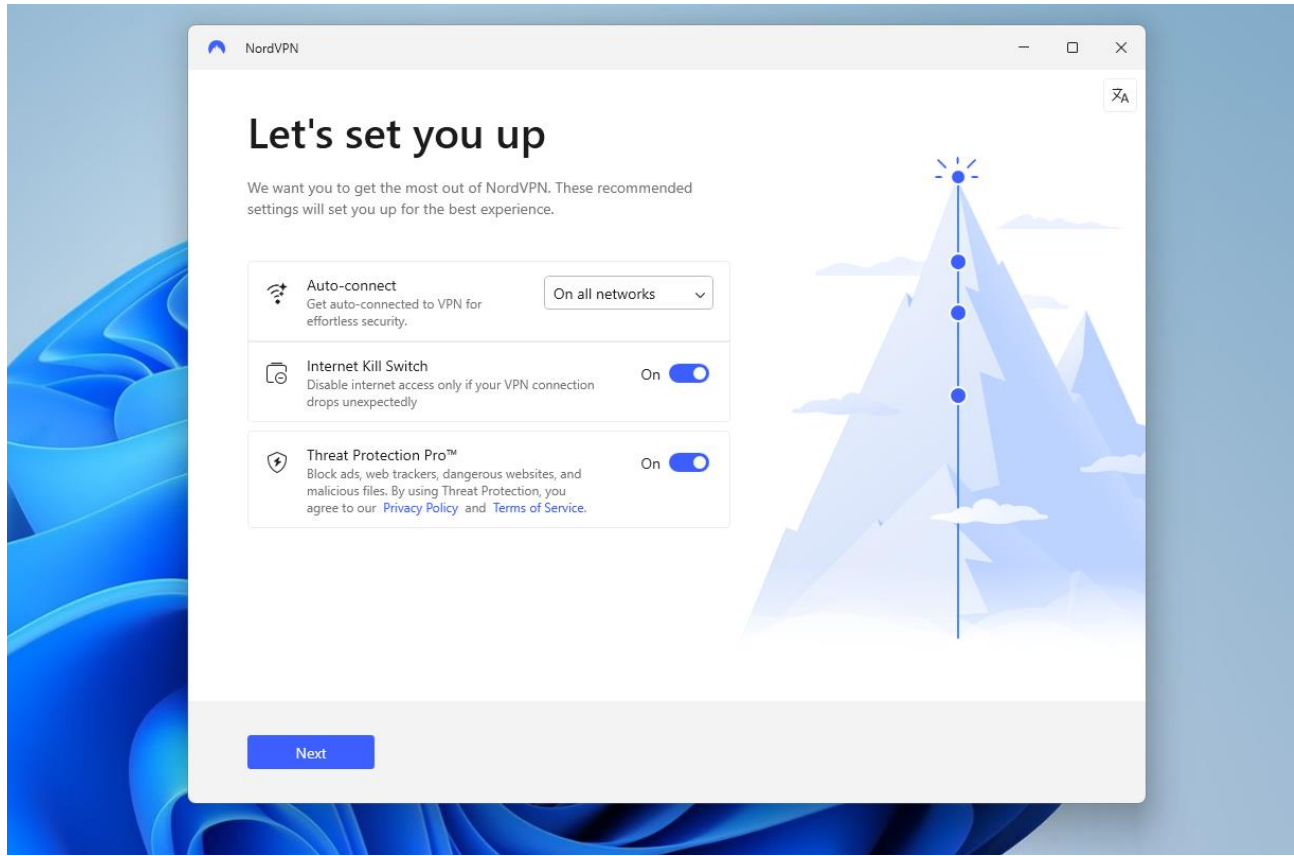
The next step involves configuring the necessary privacy settings using O&O Shut Up 10 and setting up other OSINT tools like BleachBit to ensure the environment is clean and secure.

O&O Shut Up 10 is shown in this screenshot, which disables Windows telemetry and other privacy-intrusive features. This setup ensures a minimal data footprint during the analysis

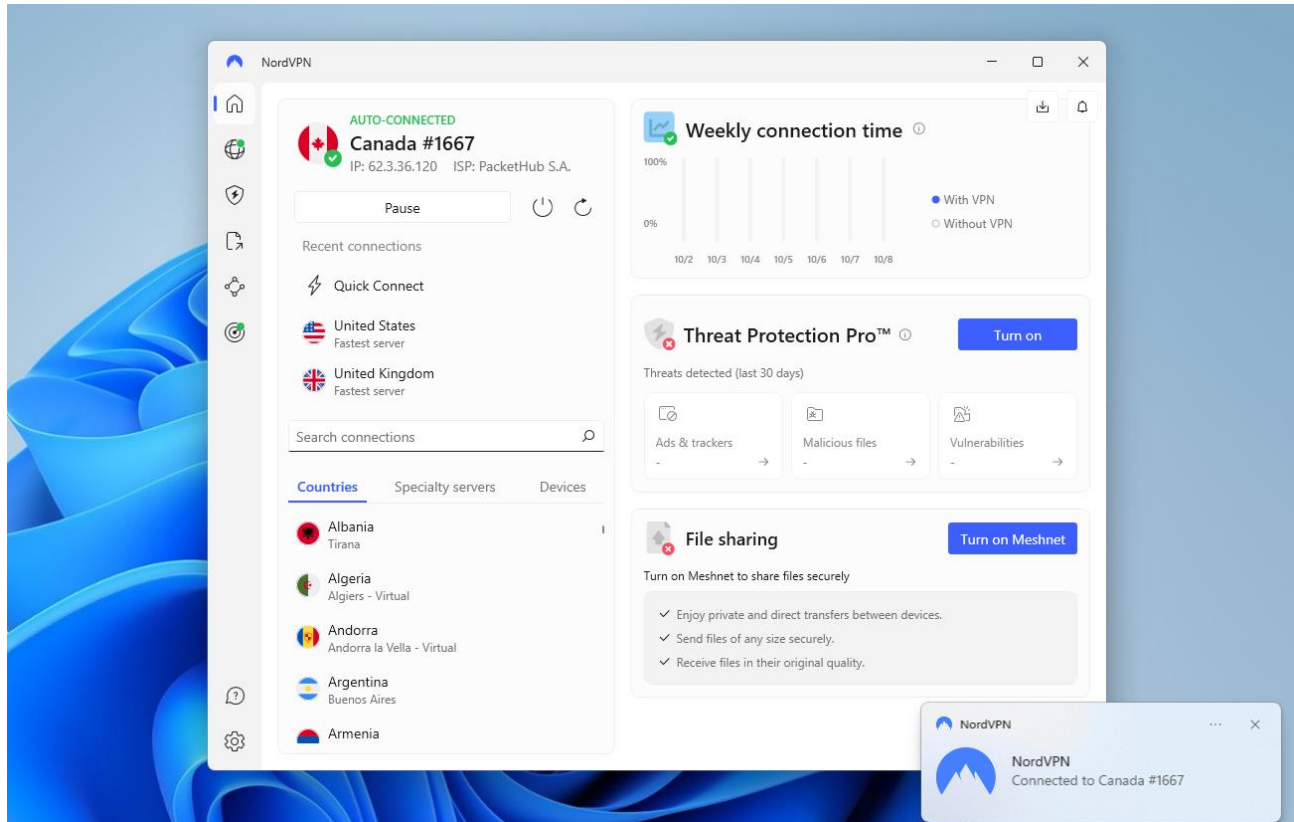


System Cleaner
(bleachbit.org).

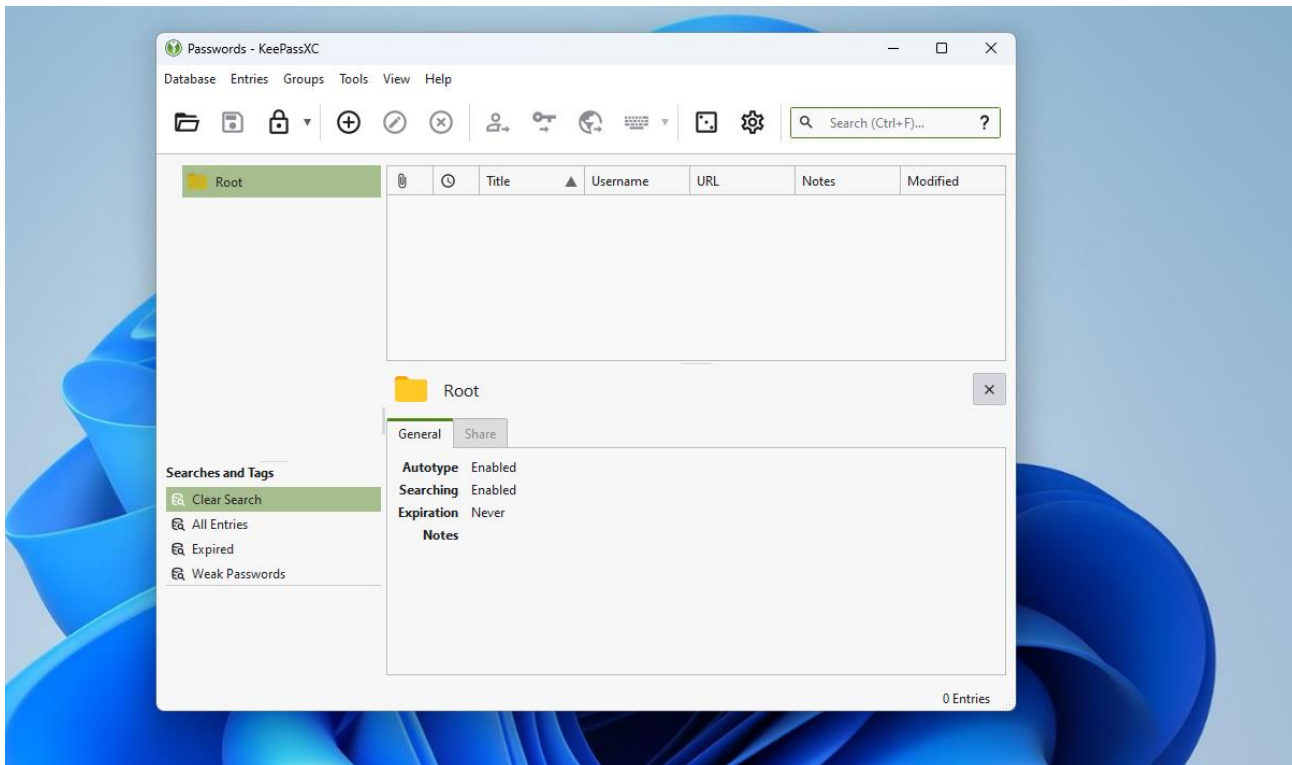
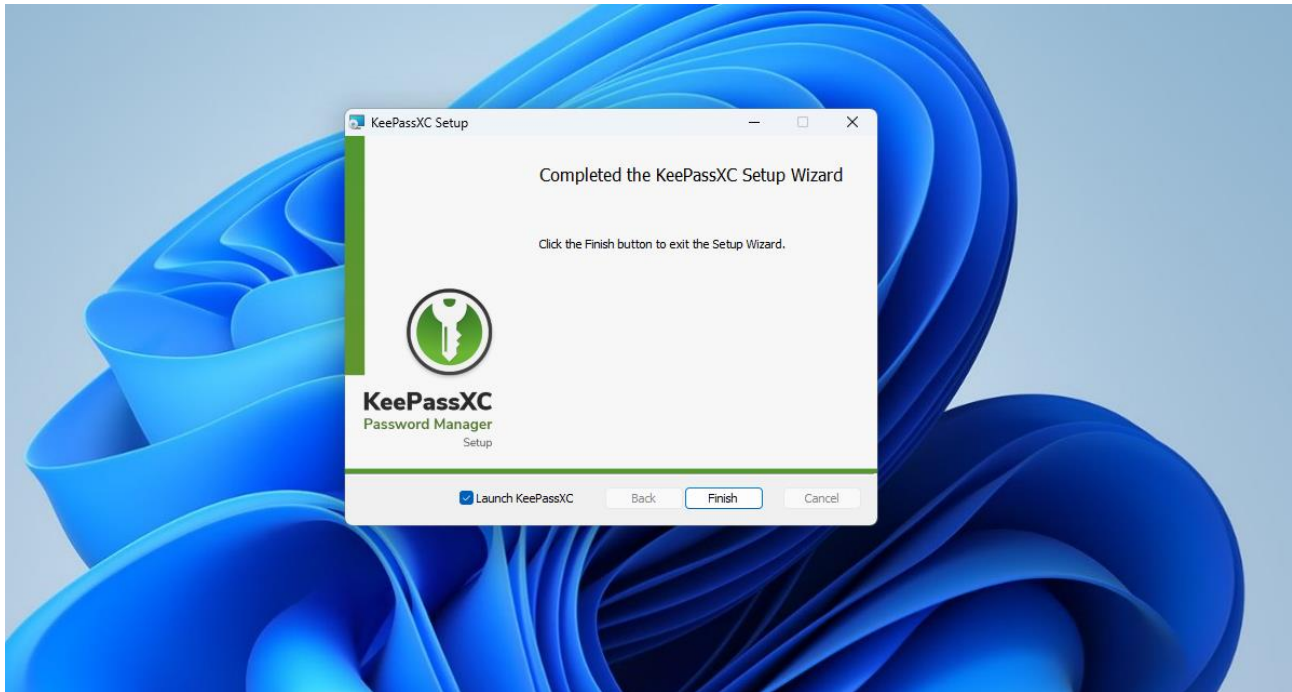




Here, the images show the setup of NordVPN, which provides secure and encrypted network access. Following the VPN configuration



KeePassXC is used for managing passwords securely.





Firefox is configured with secure browsing settings to prevent tracking and ensure privacy during browsing sessions. The following placeholders show the various configurations made to enhance privacy and security.

Browsing

- ☐ Use autoscrolling
- ☒ Use smooth scrolling
- ☐ Always show scrollbars
- ☐ Always use the cursor key to navigate within pages
- ☐ Always underline links
- ☐ Search for text when you start typing
- ☒ Enable picture-in-picture video controls [Learn more](#)
- ☒ Control media via keyboard, headset, or virtual interface [Learn more](#)
- ☐ Recommend extensions as you browse [Learn more](#)
- ☐ Recommend features as you browse [Learn more](#)

Network Settings

Home

[Restore Defaults](#)

New Windows and Tabs

Choose what you see when you open your homepage, new windows, and new tabs.

Homepage and new windows

Blank Page



New tabs

Blank Page



Firefox Home Content

Choose what content you want on your Firefox Home screen.

☐ Web Search

☐ Shortcuts

Sites you save or visit

1 row

☒ Sponsored shortcuts

☐ Recommended stories [How it works](#)

Exceptional content curated by the Firefox family

☒ Sponsored stories

☐ Recent activity

A selection of recent sites and content

1 row

☒ Visited pages

☒ Bookmarks

Security

Mozilla

Themes

Firefox will

Calculating site data and cache size... [Learn more](#)

☒ Delete cookies and site data when Firefox is closed

Passwords

☐ Ask to save passwords

☒ Fill usernames and passwords automatically

☒ Suggest strong passwords

☒ Suggest Firefox Relay email masks to protect your email address [Learn more](#)

☐ Show alerts about passwords for breached websites [Learn more](#)

☐ Use a Primary Password [Learn more](#)
Formerly known as Master Password

Autofill

☐ Save and fill addresses [Learn more](#)

☐ Save and fill payment methods [Learn more](#)
Includes credit and debit cards

History

Firefox will

Use custom settings for history

☐ Always use private browsing mode

Find in Settings

Clear Data...

Manage Data...

Manage Exceptions...

Exceptions...

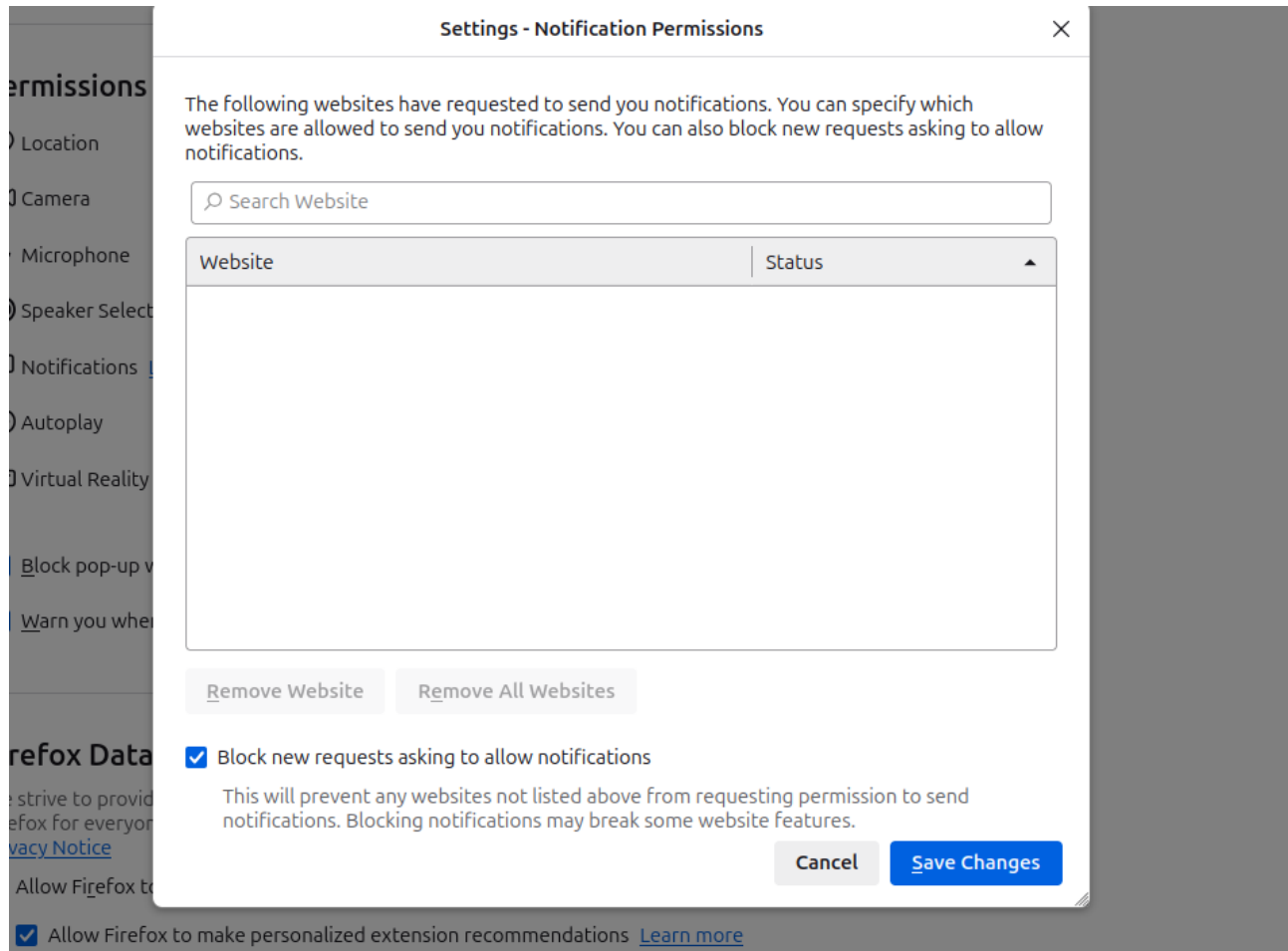
Saved passwords

Change Primary Password...

Saved addresses

Saved payment methods

Clear History...



Firefox Data Collection and Use

We strive to provide you with choices and collect only what we need to provide and improve Firefox for everyone. We always ask permission before receiving personal information. [Privacy Notice](#)

① You're no longer allowing Mozilla to capture technical and interaction data. All past data will be deleted within 30 days. [Learn more](#)

- ☐ Allow Firefox to send technical and interaction data to Mozilla [Learn more](#)
- ☐ Allow Firefox to make personalized extension recommendations [Learn more](#)
- ☐ Allow Firefox to install and run studies [View Firefox studies](#)
- ☐ Allow Firefox to send backlogged crash reports on your behalf [Learn more](#)

Website Advertising Preferences

Search Results

Deceptive Content and Dangerous Software Protection

- ☐ Block dangerous and **deceptive** content [Learn more](#)
- ☐ Block dangerous downloads
- ☐ Warn you about unwanted and uncommon software

ity

zilla

Recommended Add-ons:

- **Firefox Containers:** Isolates websites in separate tabs.
- **uBlock Origin:** Blocks unwanted scripts.
- **DownThemAll:** Downloads bulk media.
- **Bulk Media Downloader:** Downloads bulk media.
- **VideoDownloadHelper:** Downloads media with one click.
- **FireShot:** Takes screenshots of web pages.
- **Nimbus:** Captures large web pages.
- **SingleFile:** Saves web pages as HTML files.

I've installed all these add-ons, as shown in your screenshot.

Find more add-ons

Recommendations

Extensions

Themes

Plugins

Languages

Settings

Support

Manage Your Extensions

Enabled

- AWS SSO Containers**  Automatically places AWS SSO calls into containers.  
- Bulk Media Downloader**  Grab and download media (image and video) sources by monitoring network (like FlashGot)  
- DownThemAll!**  The Mass Downloader for your browser  
- Nimbus Screen Capture: Screenshots, Annotate**  Screen Capture FULL Web page or any part. Edit screenshots. Upload to Nimbus, Slack, Goo...  
- SingleFile**  Save a complete page into a single HTML file  
- Take Webpage Screenshots Entirely - FireShot**  Take FULL webpage screenshots. Capture, edit and save them to PDF/JPEG/GIF/PNG, uploa...  
- uBlock Origin**  Finally, an efficient blocker. Easy on CPU and memory.  
- Video DownloadHelper**   

Find more add-ons

Recommendations

Extensions

Themes

Plugins

Languages

Firefox Settings

Add-ons Support

Manage Your Extensions

Enabled

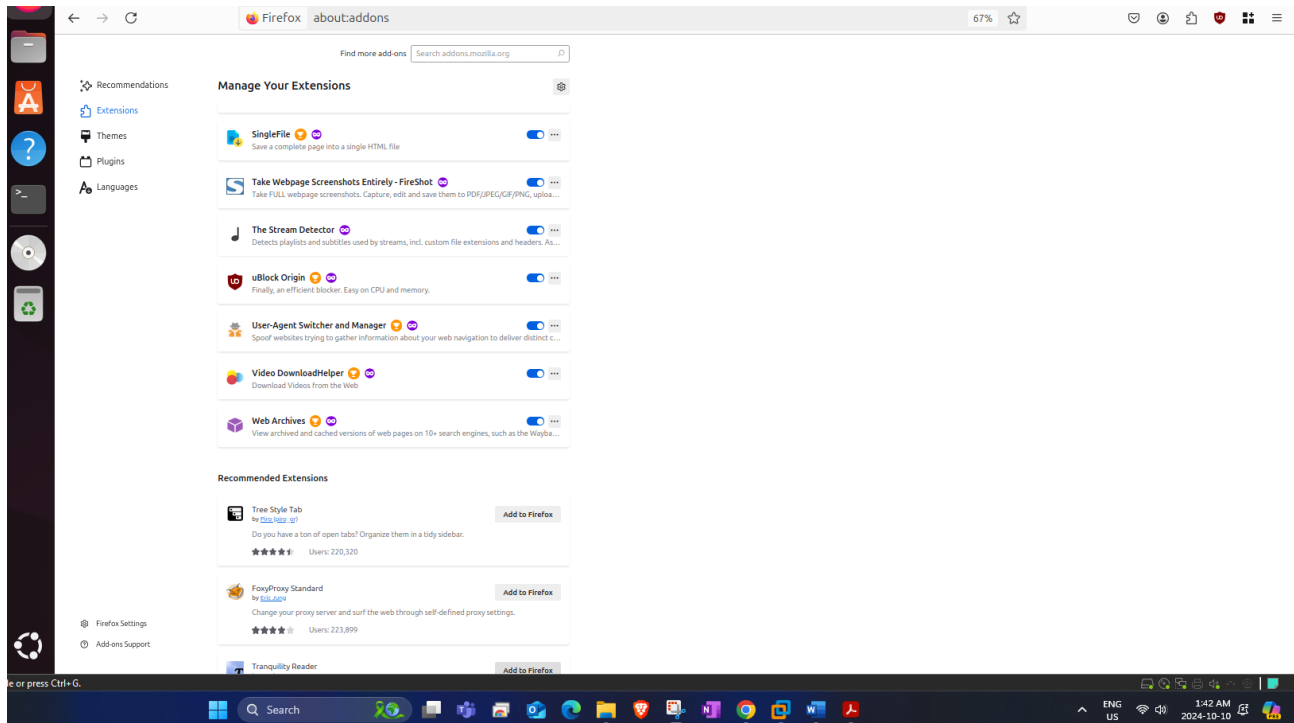
- Bulk Media Downloader**  Grab and download media (image and video) sources by monitoring network (like FlashGot)  
- Copy Selected Links**  Right-click selected text to copy the URL of any links it contains.  
- DownThemAll!**  The Mass Downloader for your browser  
- Exif Viewer**  Displays the EXIF and IPTC metadata stored in JPEG files.  
- Firefox Multi-Account Containers**  Multi-Account Containers helps you keep all the parts of your online life contained in differ...  
- Image Search Options**  Customizable Image Search right-click context options  
- Nimbus Screen Capture: Screenshots, Annotate**  Screen Capture FULL Web page or any part. Edit screenshots. Upload to Nimbus, Slack, Goo...  
- OneTab**  Save up to 90% memory and reduce tab clutter  
- Resurrect Pages**  Resurrect dead pages, by finding their ghosts.  
- Search by Image**  A powerful reverse image search tool, with support for various search engines, such as Goo...  
- SingleFile**  Save a complete page into a single HTML file  
- Take Webpage Screenshots Entirely - FireShot**  Take FULL webpage screenshots. Capture, edit and save them to PDF/JPEG/GIF/PNG, uploa...  

or press Ctrl+G.

Search

ENG 115

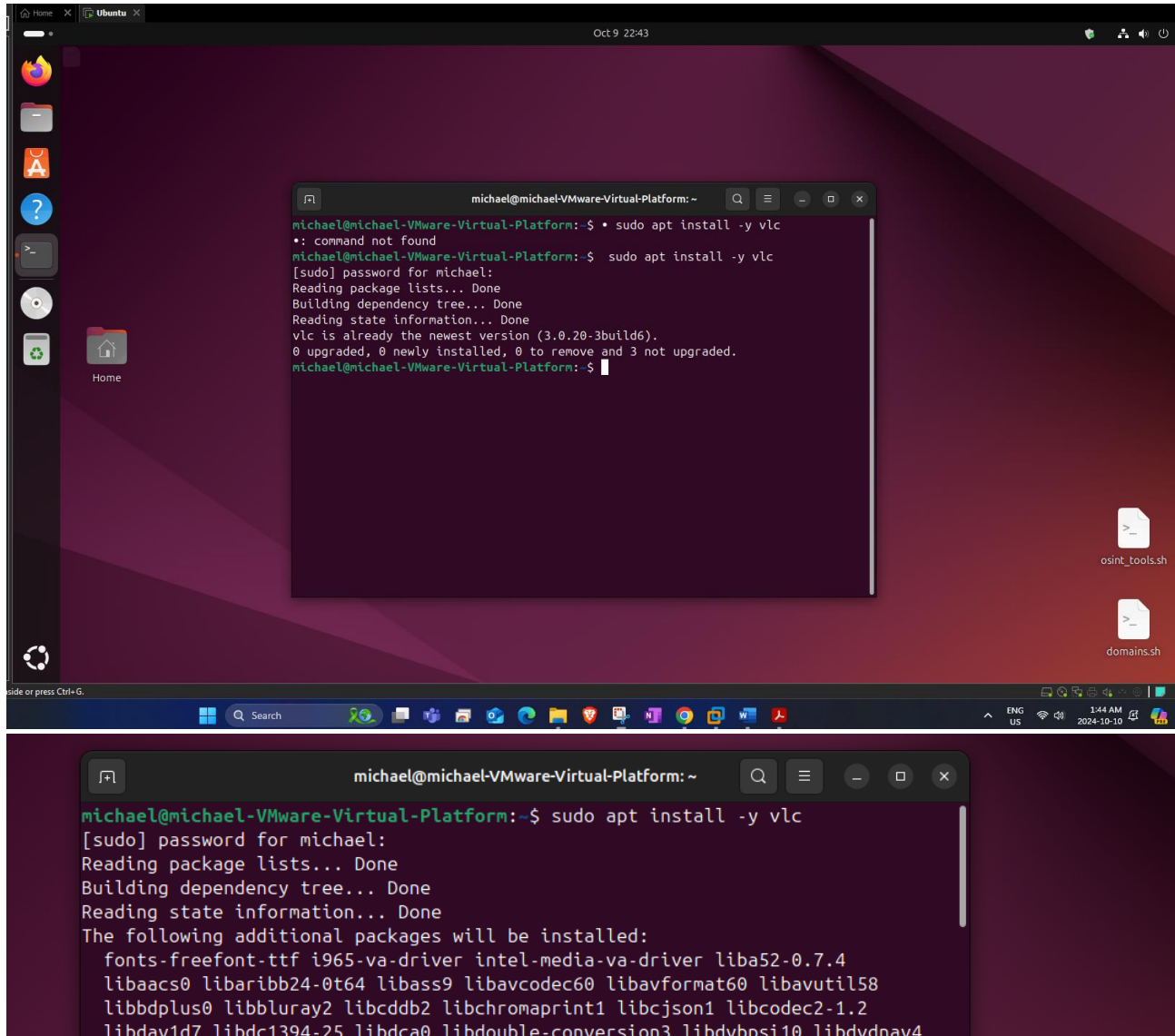
1:42 AM 2024-10-10



Applications for OSINT on Linux OS

VLC Media Player:

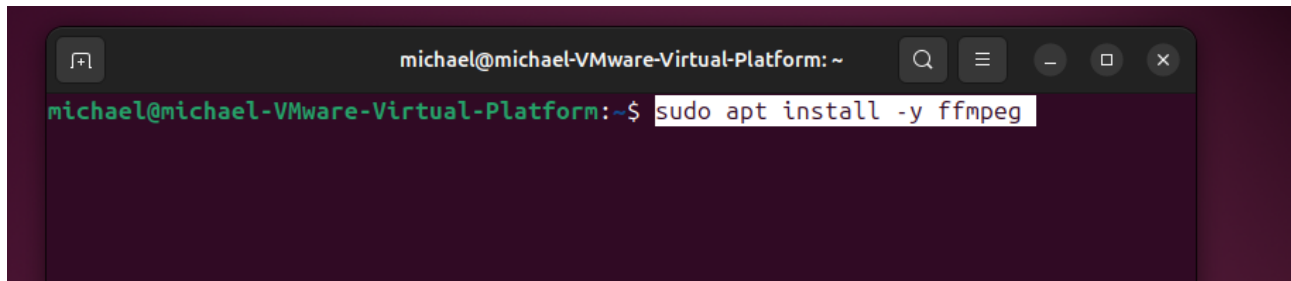
Purpose: VLC is a powerful, cross-platform multimedia player that supports a wide variety of audio and video formats, including streams, DVDs, and Blu-Rays. It's a key tool for OSINT because it can open and play almost any type of media file you may encounter during investigations.



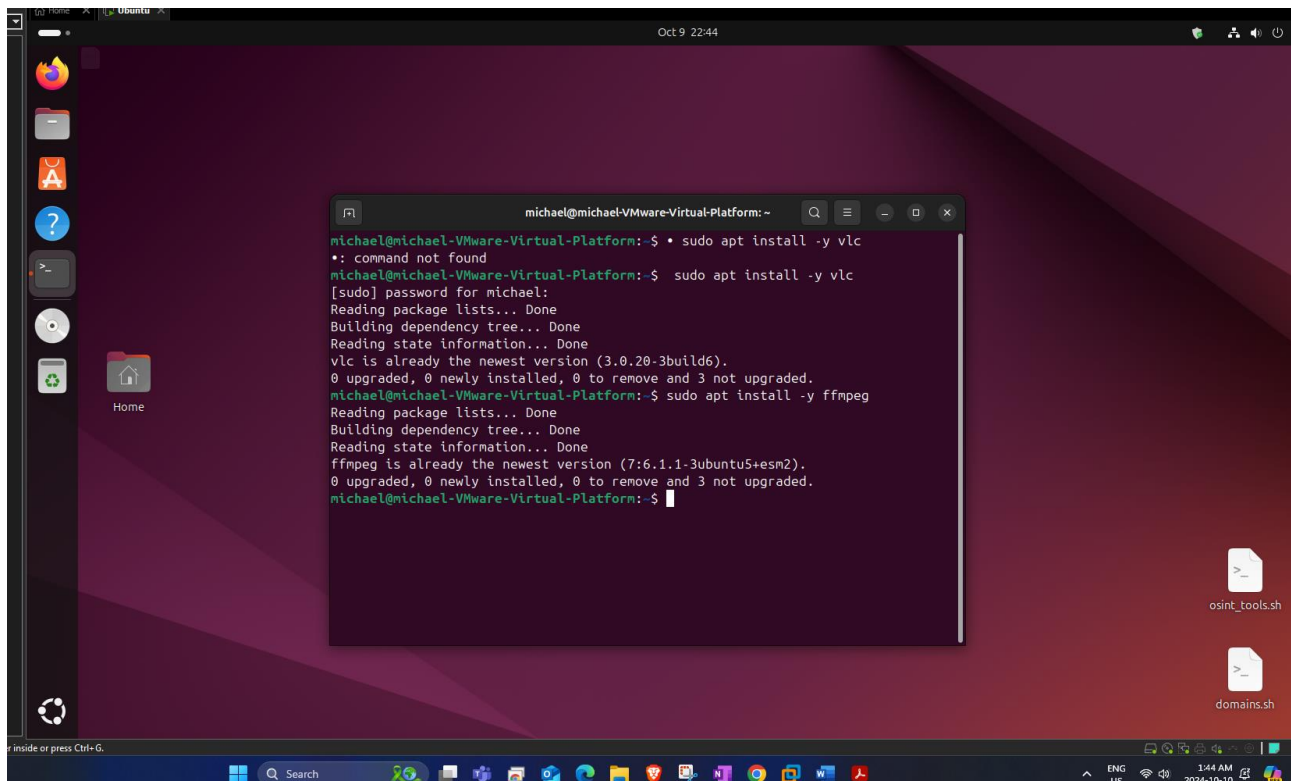
```
michael@michael-VMware-Virtual-Platform: ~  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y vlc  
*: command not found  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y vlc  
[sudo] password for michael:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
vlc is already the newest version (3.0.20-3build6).  
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.  
michael@michael-VMware-Virtual-Platform:~$  
  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y vlc  
[sudo] password for michael:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  fonts-freefont-ttf i965-vb-driver intel-media-vb-driver liba52-0.7.4  
  libaacs0 libaribb24-0t64 libass9 libavcodec60 libavformat60 libavutil58  
  libbdplus0 libbluray2 libcdcb2 libchromaprint1 libcjson1 libcodec2-1.2  
  libdavid7 libdc1394-25 libdca0 libdouble-conversion3 libdvbpsi10 libdvbnav4
```

FFmpeg:

Purpose: FFmpeg is a command-line tool used to convert multimedia files between formats. It's particularly useful in OSINT when you need to manipulate, extract, or transcode video and audio files for further analysis. FFmpeg provides powerful features like converting, recording, and streaming video and audio.



```
michael@michael-VMware-Virtual-Platform: ~  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y ffmpeg
```



```
michael@michael-VMware-Virtual-Platform: ~  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y vlc  
*: command not found  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y vlc  
[sudo] password for michael:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
vlc is already the newest version (3.0.20-3build6).  
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y ffmpeg  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
ffmpeg is already the newest version (7:6.1.1-3ubuntu5+esm2).  
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.  
michael@michael-VMware-Virtual-Platform:~$
```

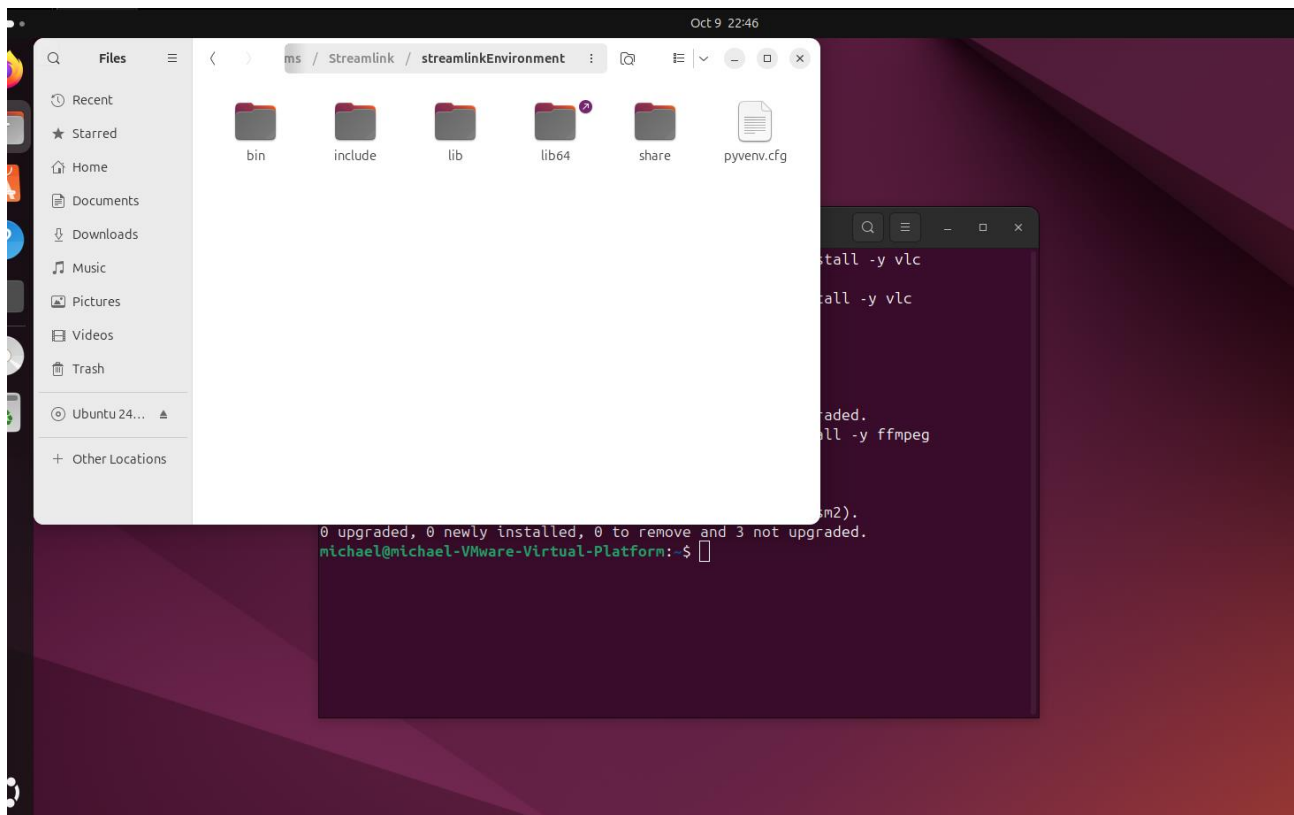
Video Download Tool:

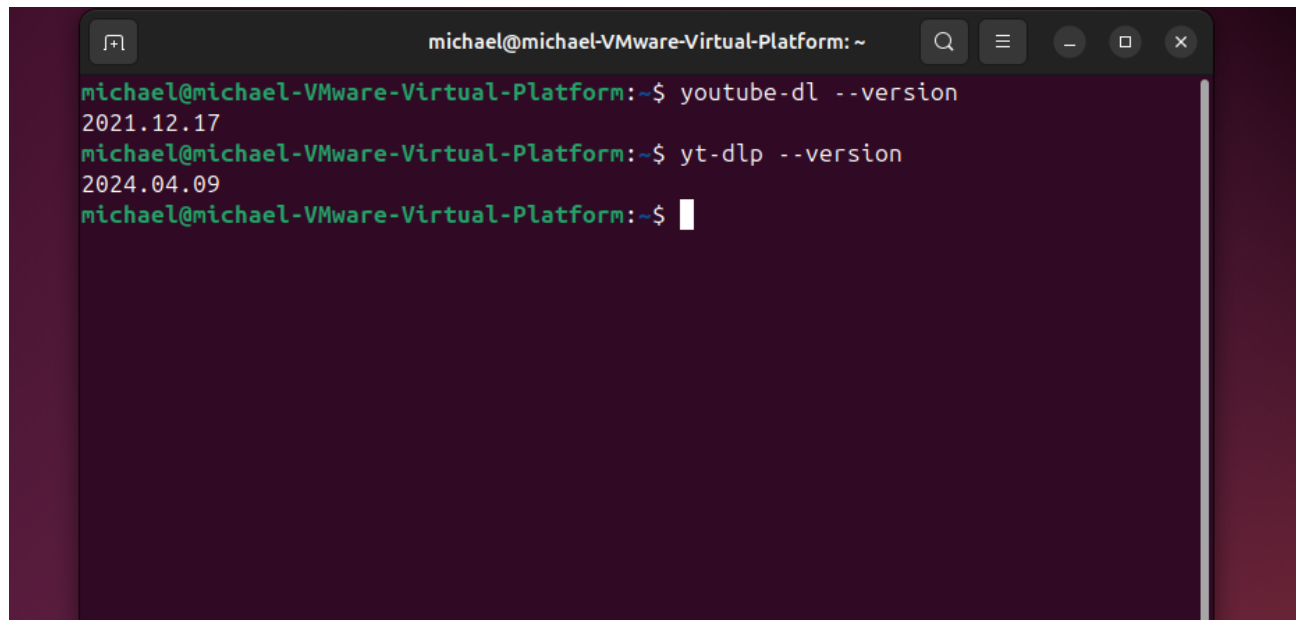
YouTube-DL

- **Purpose:** YouTube-DL is a command-line program that helps you download videos from YouTube and many other websites. It's an essential OSINT tool for downloading videos in bulk from online sources for offline analysis or archival. It is often used when you need quick and efficient video downloading.

```
michael@michael-VMware-Virtual-Platform: ~  
michael@michael-VMware-Virtual-Platform:~$ sudo apt install -y python3-pip
```

```
michael@michael-VMware-Virtual-Platform:~$ source myenv/bin/activate  
(myenv) michael@michael-VMware-Virtual-Platform:~$ pip install youtube_dl  
Collecting youtube_dl  
  Downloading youtube_dl-2021.12.17-py2.py3-none-any.whl.metadata (1.5 kB)  
  Downloading youtube_dl-2021.12.17-py2.py3-none-any.whl (1.9 MB)  
    1.9/1.9 MB 1.2 MB/s eta 0:00:00  
Installing collected packages: youtube_dl  
Successfully installed youtube_dl-2021.12.17  
(myenv) michael@michael-VMware-Virtual-Platform:~$
```



A terminal window with a dark purple background and a title bar that reads "michael@michael-VMware-Virtual-Platform: ~". The terminal shows the following commands and their outputs:

```
michael@michael-VMware-Virtual-Platform:~$ youtube-dl --version
2021.12.17
michael@michael-VMware-Virtual-Platform:~$ yt-dlp --version
2024.04.09
michael@michael-VMware-Virtual-Platform:~$
```

```

michael@michael-VMware-Virtual-Platform: ~/Downloads/Programs/Stream...
126.3/126.3 kB 18.5 MB/s eta 0:00:00
Downloading websocket_client-1.8.0-py3-none-any.whl (58 kB)
58.8/58.8 kB 8.9 MB/s eta 0:00:00
Downloading isodate-0.7.2-py3-none-any.whl (22 kB)
Downloading pycountry-24.6.1-py3-none-any.whl (6.3 MB)
6.3/6.3 MB 1.6 MB/s eta 0:00:00
Downloading attrs-24.2.0-py3-none-any.whl (63 kB)
63.0/63.0 kB 10.2 MB/s eta 0:00:00
Downloading charset_normalizer-3.4.0-cp312-cp312-manylinux_2_17_x86_64.manylinux
2014_x86_64.whl (143 kB)
143.8/143.8 kB 17.2 MB/s eta 0:00:00
Downloading idna-3.10-py3-none-any.whl (70 kB)
70.4/70.4 kB 11.6 MB/s eta 0:00:00
Downloading sniffio-1.3.1-py3-none-any.whl (10 kB)
Downloading wsproto-1.2.0-py3-none-any.whl (24 kB)
Downloading outcome-1.3.0.post0-py2.py3-none-any.whl (10 kB)
Downloading sortedcontainers-2.4.0-py2.py3-none-any.whl (29 kB)
Downloading h11-0.14.0-py3-none-any.whl (58 kB)
58.3/58.3 kB 8.8 MB/s eta 0:00:00
Installing collected packages: sortedcontainers, websocket-client, urllib3, typi
ng-extensions, sniffio, PySocks, pycryptodome, pycountry, lxml, isodate, idna, h
11, charset-normalizer, certifi, attrs, wsproto, requests, outcome, trio, trio-w
ebsocket, streamlink
Successfully installed PySocks-1.7.1 attrs-24.2.0 certifi-2024.8.30 charset-norm
alizer-3.4.0 h11-0.14.0 idna-3.10 isodate-0.7.2 lxml-5.3.0 outcome-1.3.0.post0 p
ycountry-24.6.1 pycryptodome-3.21.0 requests-2.32.3 sniffio-1.3.1 sortedcontaine
rs-2.4.0 streamlink-6.11.0 trio-0.26.2 trio-websocket-0.11.1 typing-extensions-4
.12.2 urllib3-2.2.3 websocket-client-1.8.0 wsproto-1.2.0
(streamlinkEnvironment) michael@michael-VMware-Virtual-Platform:~/Downloads/Prog
rams/Streamlink$

```

```

(stream_env) michael@michael-VMware-Virtual-Platform:~$ streamlink https://www.youtube.com/
watch?v=07VWtFtDvRg&list=PLW8bTPfXNGdAY3AfCNtm120gzryfs7Ket best
[1] 20913
Command 'best' not found, did you mean:
  command 'beet' from snap beets (1.4.9)
  command 'jest' from deb jest (29.6.2~ds1+~cs73.45.28-5)
  command 'test' from deb coreutils (9.4-2ubuntu2)
  command 'beet' from deb beets (1.6.0-7)
  command 'btest' from deb btest (0.72-1)
  command 'bst' from deb buildstream (1.6.9-1)
See 'snap info <snapname>' for additional versions.
(stream_env) michael@michael-VMware-Virtual-Platform:~$ [cli][info] Found matching plugin y
outube for URL https://www.youtube.com/watch?v=07VWtFtDvRg
error: This plugin does not support VOD content, try yt-dlp instead

```

