

Task 6

🎯 Installing and Configuring Nessus on Kali Linux:

✅ Step 1: Download Nessus

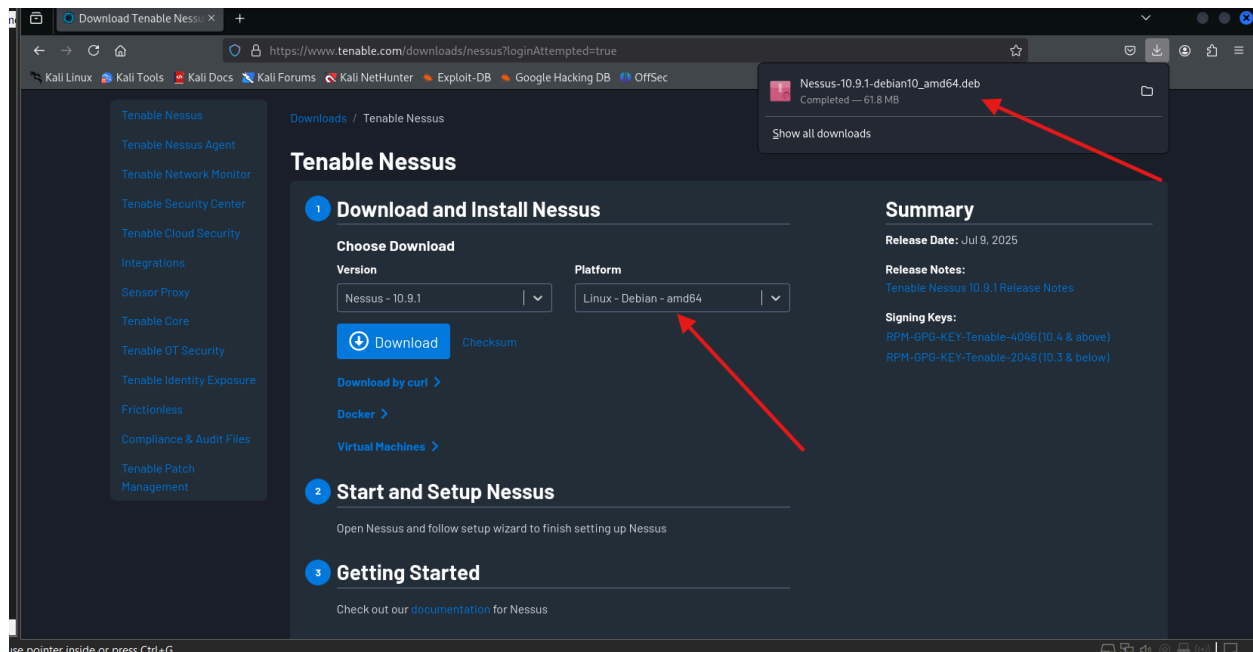
1-Go to the official Nessus download page:

👉 <https://www.tenable.com/downloads/nessus>

2-Under the **Linux** section, choose **Debian** (because Kali is Debian-based).

3-Click **Download** and wait for the **.deb** file to finish downloading.

Example file name: **Nessus-10.9.1-debian10_amd64.deb**



✓ Step 2: Install Nessus:

Once the file is downloaded, open your terminal and run:

👉 `sudo dpkg -i Nessus-10.9.1-debian10_amd64.deb`



```
File Actions Edit View Help
kali@kali: ~/Downloads
$ sudo dpkg -i Nessus-10.9.1-debian10_amd64.deb
[sudo] password for kali:
Selecting previously unselected package nessus.
(Reading database ... 444773 files and directories currently installed.)
Preparing to unpack Nessus-10.9.1-debian10_amd64.deb ...
Unpacking nessus (10.9.1) ...
Setting up nessus (10.9.1) ...
HMAC : (Module_Integrity) : Pass
SHA1 : (KAT_Digest) : Pass
SHA2 : (KAT_Digest) : Pass
SHA3 : (KAT_Digest) : Pass
TDES : (KAT_Cipher) : Pass
AES_GCM : (KAT_Cipher) : Pass
AES_ECB_Decrypt : (KAT_Cipher) : Pass
RSA : (KAT_Signature) : RNG : (Continuous_RNG_Test) : Pass
Pass
ECDSA : (PCT_Signature) : Pass
ECDSA : (PCT_Signature) : Pass
DSA : (PCT_Signature) : Pass
TLS13_KDF_EXTRACT : (KAT_KDF) : Pass
TLS13_KDF_EXPAND : (KAT_KDF) : Pass
TLS12_PRFF : (KAT_KDF) : Pass
PBKDF2 : (KAT_KDF) : Pass
SSHKDF : (KAT_KDF) : Pass
KBKDF : (KAT_KDF) : Pass
HKDF : (KAT_KDF) : Pass
SSKDF : (KAT_KDF) : Pass
X963KDF : (KAT_KDF) : Pass
X942KDF : (KAT_KDF) : Pass
HASH : (DRBG) : Pass
CTR : (DRBG) : Pass
HMAC : (DRBG) : Pass
DH : (KAT_KA) : Pass
ECDH : (KAT_KA) : Pass
RSA_Encrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
INSTALL PASSED
Unpacking Nessus Scanner Core Components...

- You can start Nessus Scanner by typing /bin/systemctl start nessusd.service
- Then go to https://NESSUS_HOSTNAME_OR_IP:8834/ to configure your scanner

kali@kali: ~/Downloads
```

✓ Step 3: Start Nessus Service:

To start the Nessus service, use:

👉 `sudo systemctl start nessusd`

To **check if Nessus is running**, use:

👉 `sudo systemctl status nessusd`

You should see something like **active (running)** in green.

```
File Actions Edit View Help
(kali㉿kali)-[~/Downloads]
$ sudo systemctl start nessusd
(kali㉿kali)-[~/Downloads]
$ sudo systemctl status nessusd
● nessusd.service - The Nessus Vulnerability Scanner
   Loaded: loaded (/usr/lib/systemd/system/nessusd.service; disabled; preset: disabled)
   Active: active (running) since Sat 2025-07-26 22:00:59 EDT; 13s ago
  Invocation: cd15861796624006a_5b5dd3143eb39
    Main PID: 19194 (nessus-service)
      Tasks: 14 (limit: 2197)
     Memory: 144M (peak: 149.3M)
        CPU: 13.778s
    CGroup: /system.slice/nessusd.service
            └─19194 /opt/nessus/sbin/nessus-service -q
              19195 nessusd -q

Jul 26 22:00:59 kali systemd[1]: Started nessusd.service - The Nessus Vulnerability Scanner.
Jul 26 22:00:59 kali nessus-service[19194]: nessus-service [19194][INFO] : Nessus 19.13.1 [build 20006] Started
(kali㉿kali)-[~/Downloads]
$
```

✓ Step 4: Get Activation Code (Registration):

1-Go to the Nessus Essentials registration page:

👉 <https://www.tenable.com/products/nessus/nessus-essentials>

* This page asks for a business email. If you don't have one, you can use a temporary email:

2- go to 👉 <https://temp-mail.org>

3-Enter the temporary email, then check your inbox at temp-mail.org to find:

"Your activation code for Nessus Essentials"

4-Save this code, you'll use it in the web interface.

Tenable Nessus® Essentials

Nessus Essentials is a free product from Tenable that provides high-speed, in-depth vulnerability scanning for up to 16 IP addresses per scanner.

Limitations: Nessus Essentials does not support unlimited scanning, compliance checks, content audits, Live Results, configurable reports, or the Nessus virtual appliance. For access to these features and more, [upgrade to Nessus Professional](#).

For Students & Educators: If you're using Nessus Essentials for education, register through the [Tenable for Education](#) program to get started.

Learn Nessus: Our on-demand Nessus Fundamentals course covers everything from asset discovery to compliance, helping you master Nessus for effective vulnerability assessment in various business use cases.

Register for an Activation Code

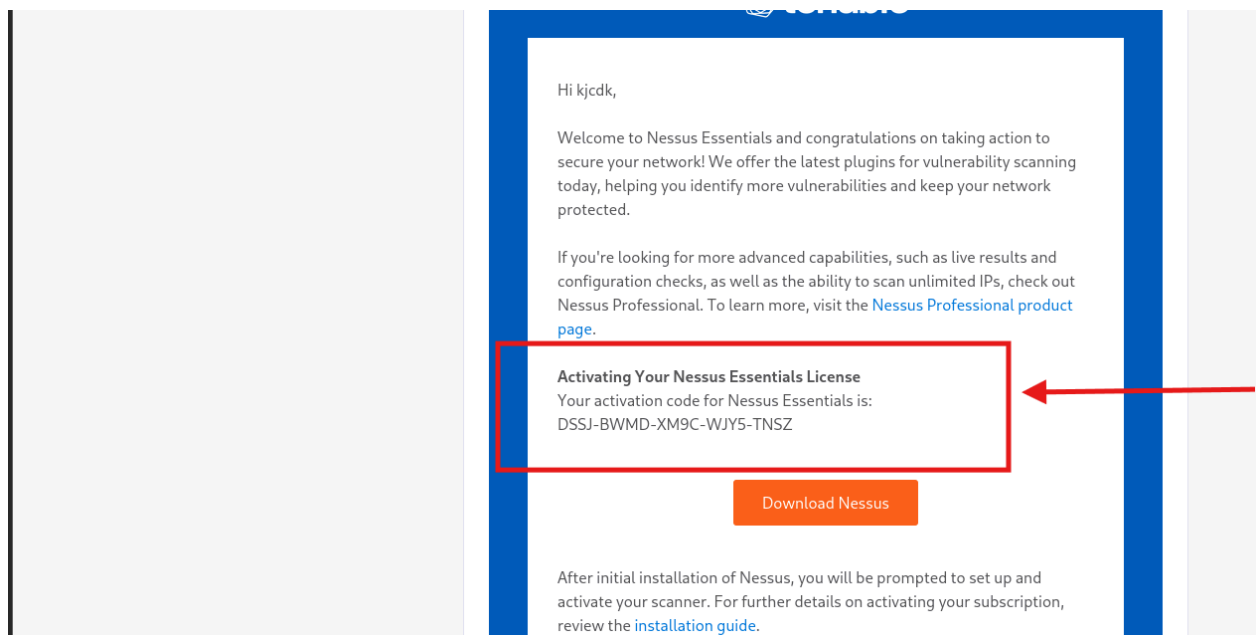
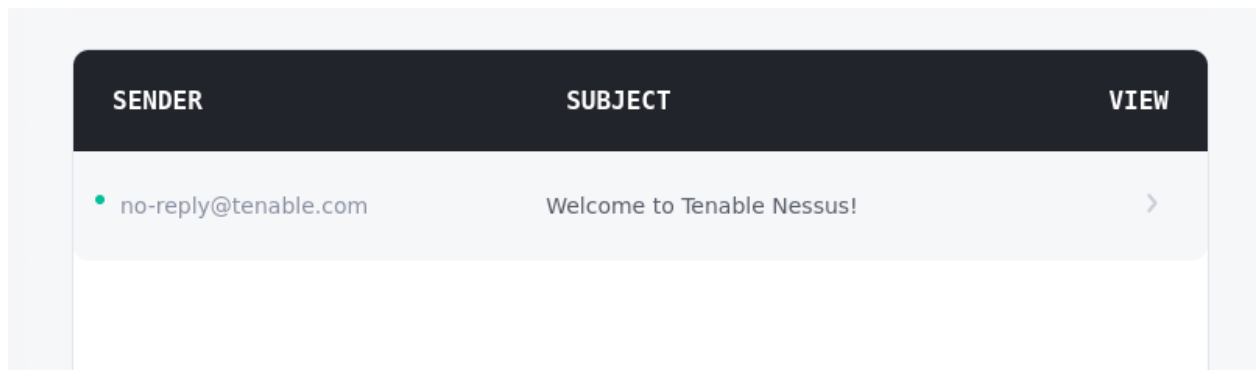
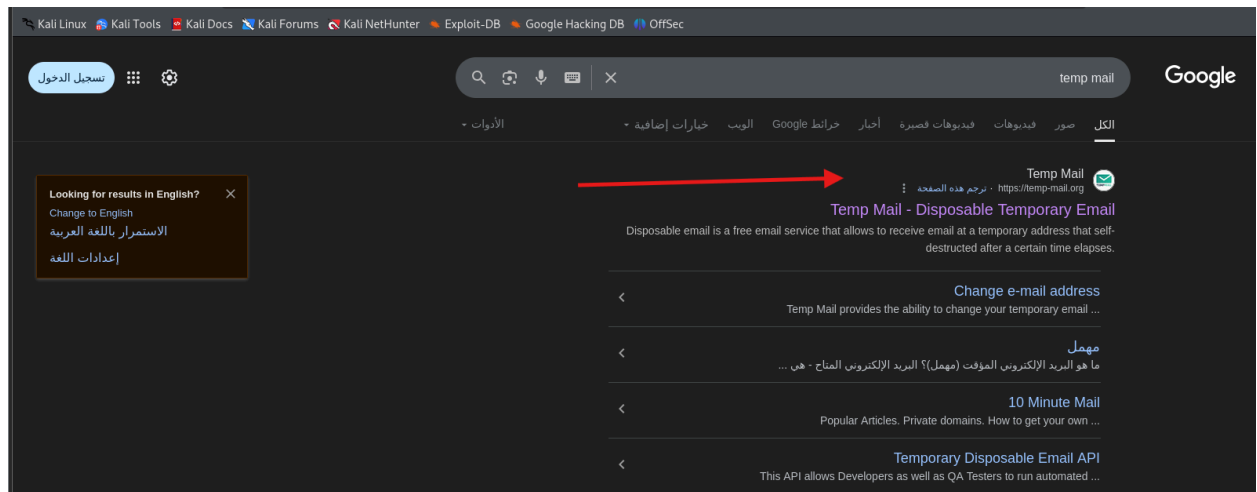
You are registering for a 1-year Nessus Essentials license.

| | |
|-----------------------------------------|--------------------|
| First Name kjcdk | Last Name asjhc |
| Business Email yarane9862@balncs.com | |

☒ Check to receive updates from Tenable
Tenable will only process your personal data in accordance with its [Privacy Policy](#)

Get Started

🔔 Have any questions about Tenable Nessus®? I'm here to help!



✅ Step 5: Access the Nessus Web Interface:

Open your browser and go to:

👉 <https://localhost:8834>

You may get a **warning about SSL**, click **"Advanced"** → **Proceed anyway**.

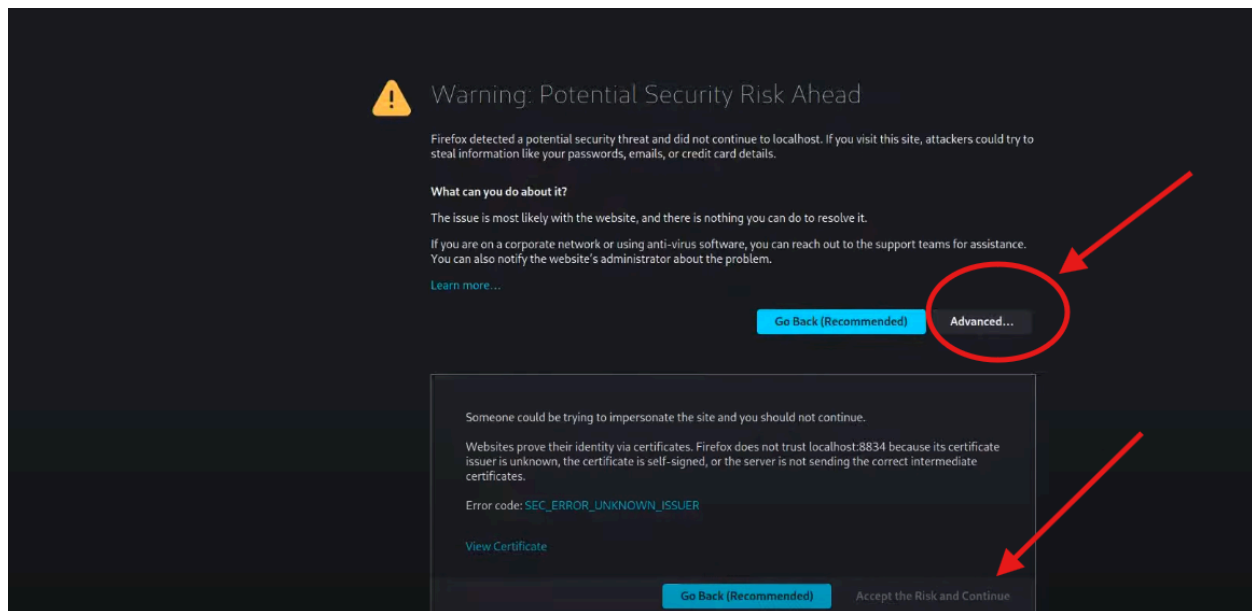
Choose **Nessus Essentials** as the product.

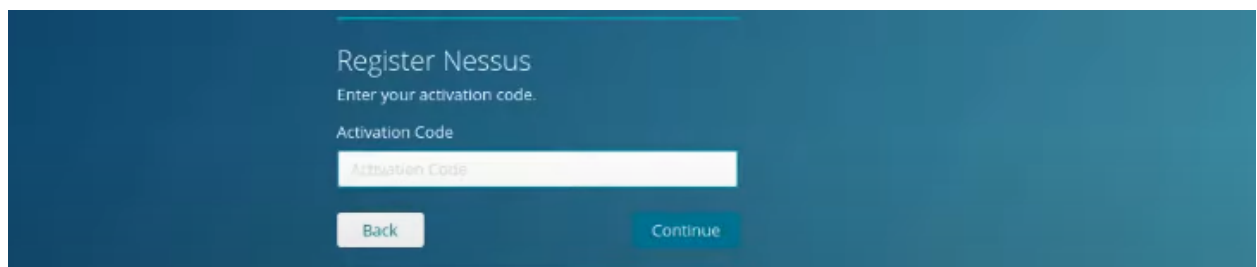
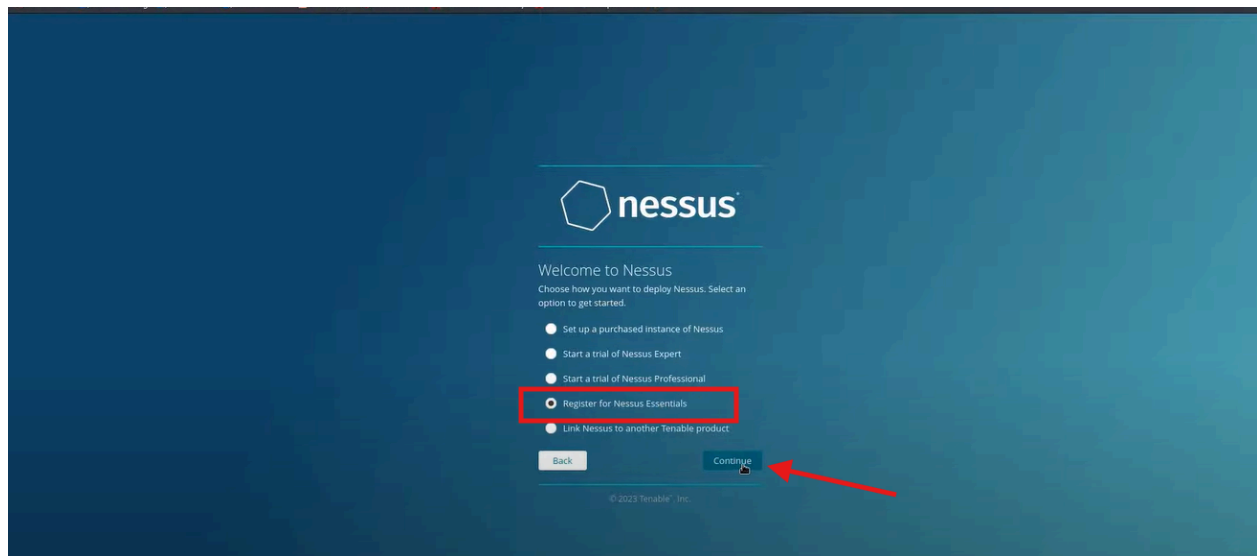
Enter the **activation code** from earlier.

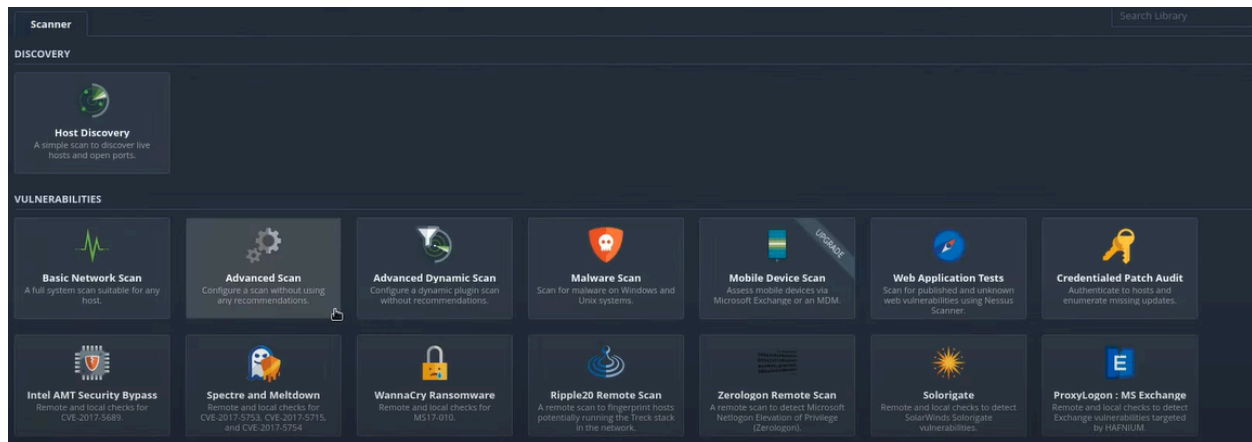
Create a username and password for your Nessus login.

Nessus will now download and configure necessary plugins — this may take 20–40 minutes.

Be patient!







🎉 Final Step: Start Scanning and Exploiting Metasploitable2

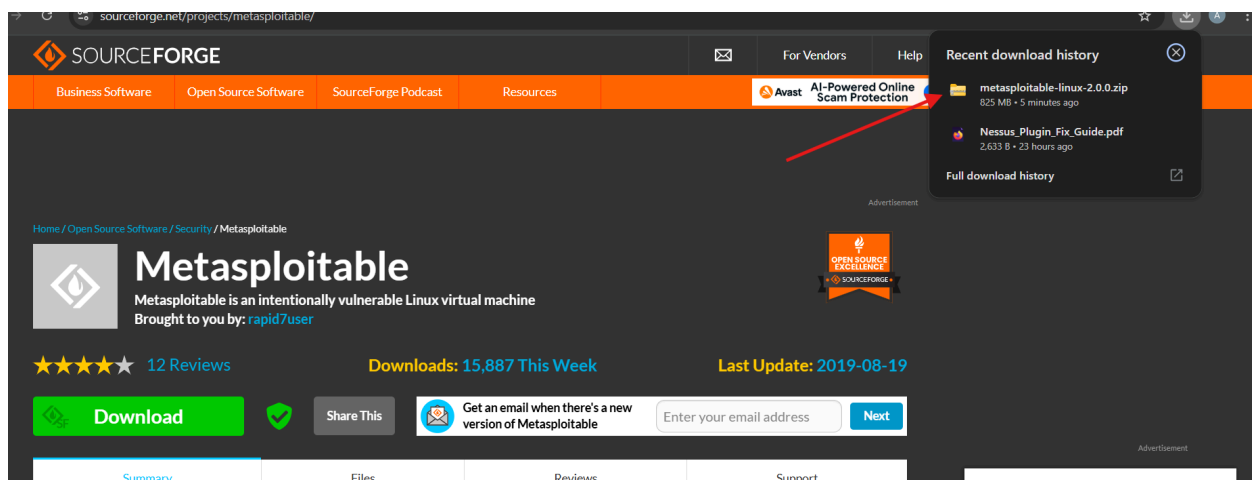
✅ Step 1: Download Metasploitable2:

1-Go to this link to download Metasploitable2:

👉 <https://sourceforge.net/projects/metasploitable/>

2-After downloading the ZIP file:

- Extract the VM files.
- Open the VM using **VMware** or **VirtualBox**.



✓ Step 2: Check the Metasploitable2 IP Address:

Login using:

Username: msfadmin

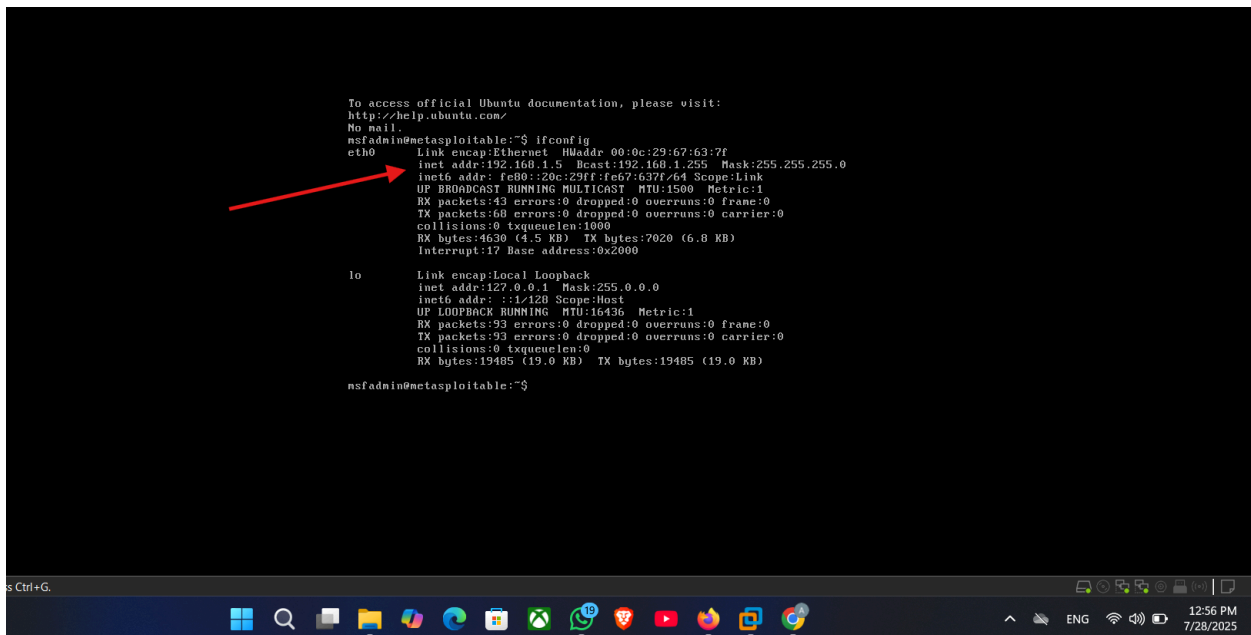
Password: msfadmin

Run this command to get the IP: 👉 **ifconfig**

Make sure the **IP address** is in the **same subnet** as your Kali Linux machine (e.g., 192.168.x.x).

From Kali, ping the Metasploitable2 machine to confirm it's reachable:

👉 **ping <target-ip>**



```
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0c:29:67:63:7f
          inet addr:192.168.1.5  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe67:637f/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:49 errors:0 dropped:0 overruns:0 frame:0
          TX packets:60 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:4630 (4.5 KB)  TX bytes:7020 (6.8 KB)
          Interrupt:17 Base address:0x2000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:93 errors:0 dropped:0 overruns:0 frame:0
          TX packets:93 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:19485 (19.0 KB)  TX bytes:19485 (19.0 KB)

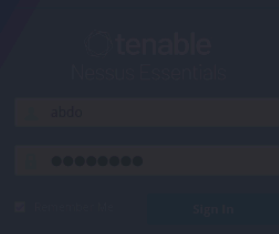
msfadmin@metasploitable:~$
```



```
(kali㉿kali)-[~]
$ hostname -I
192.168.1.7

(kali㉿kali)-[~]
$ ping 192.168.1.5
PING 192.168.1.5 (192.168.1.5) 56(84) bytes of data.
64 bytes from 192.168.1.5: icmp_seq=1 ttl=64 time=0.317 ms
64 bytes from 192.168.1.5: icmp_seq=2 ttl=64 time=1.11 ms
64 bytes from 192.168.1.5: icmp_seq=3 ttl=64 time=1.02 ms
64 bytes from 192.168.1.5: icmp_seq=4 ttl=64 time=1.06 ms
^Z
zsh: suspended ping 192.168.1.5

(kali㉿kali)-[~]
$
```

The image shows a Metasploit Essentials login interface. It features the 'tenable' logo at the top, followed by the text 'Metasploit Essentials'. Below this, there are two input fields: one for 'Username' containing the text 'abada' and another for 'Password' filled with dots. At the bottom, there are two buttons: 'Log In' and 'Sign Up'.

✓ Step 3: Start a New Scan:

1- Choose Basic Network Scan

2- Set the Target IP to the IP of the Metasploitable2 machine

Under **Credentials**:

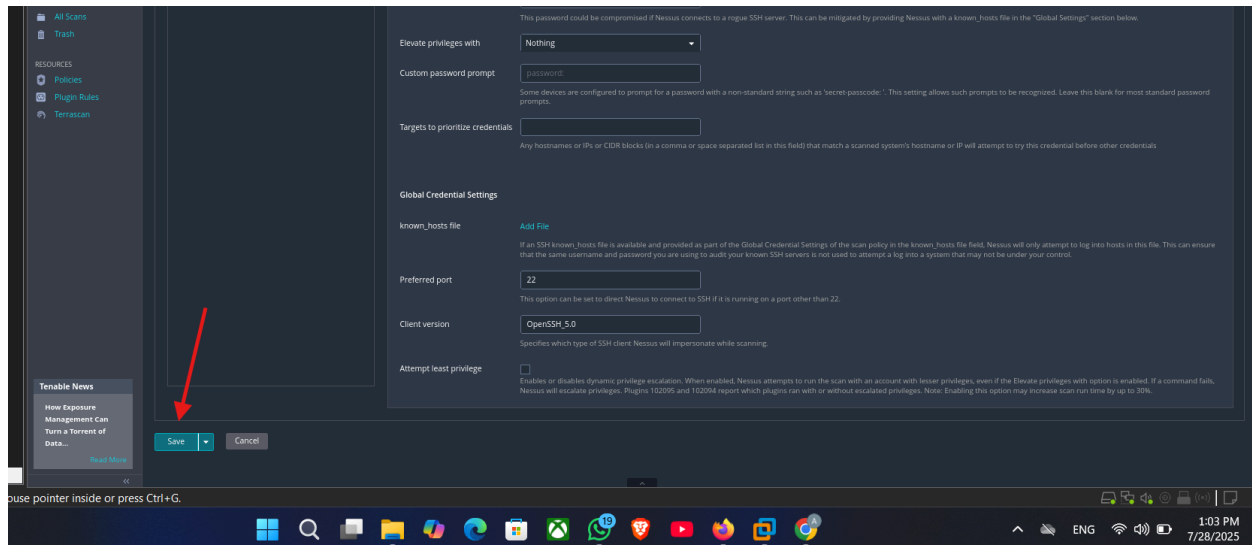
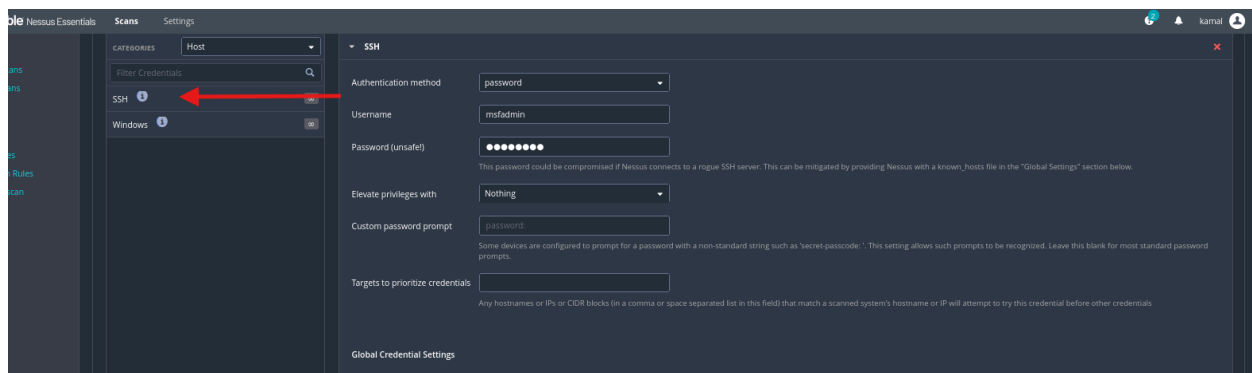
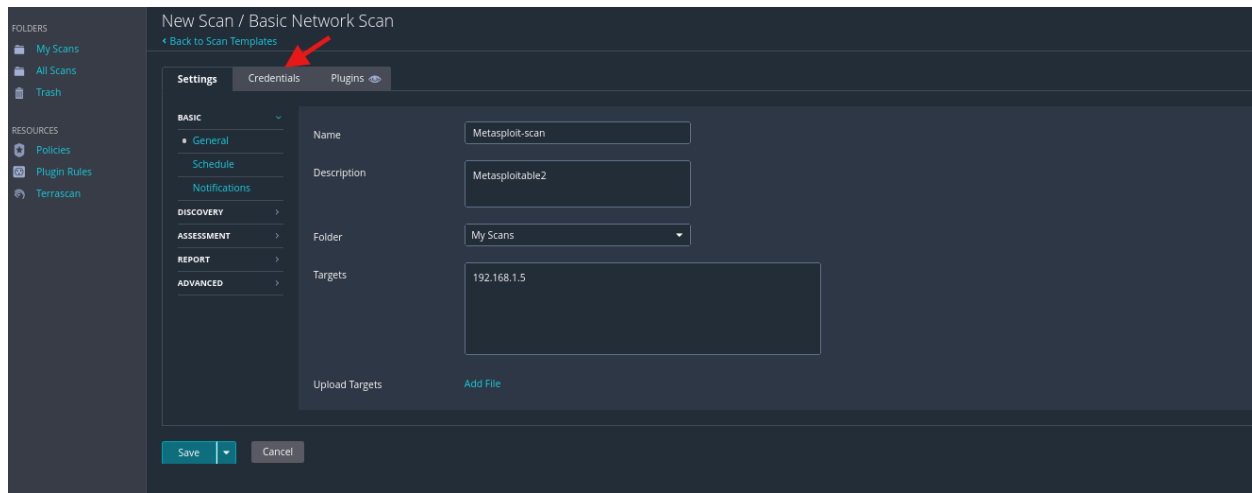
👉 Choose **SSH**

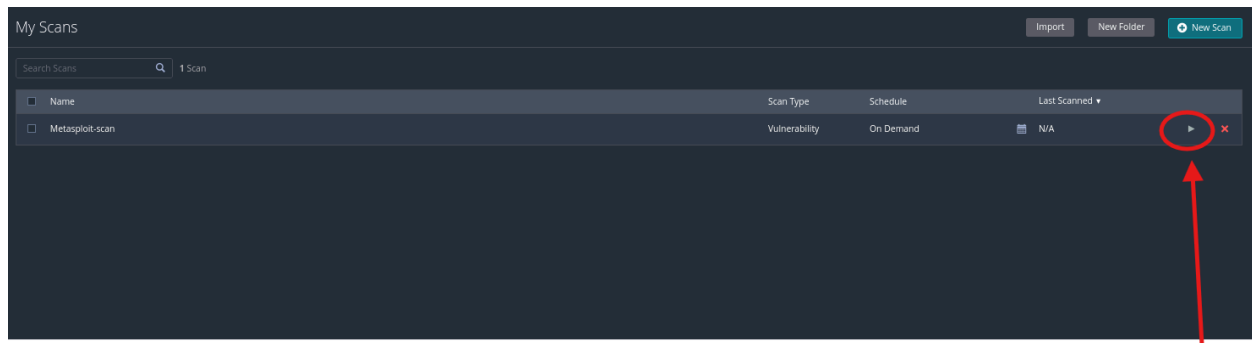
Enter:

👉 **Username:** msfadmin

👉 **Password:** msfadmin

Click **Save**, then **Launch the scan**.

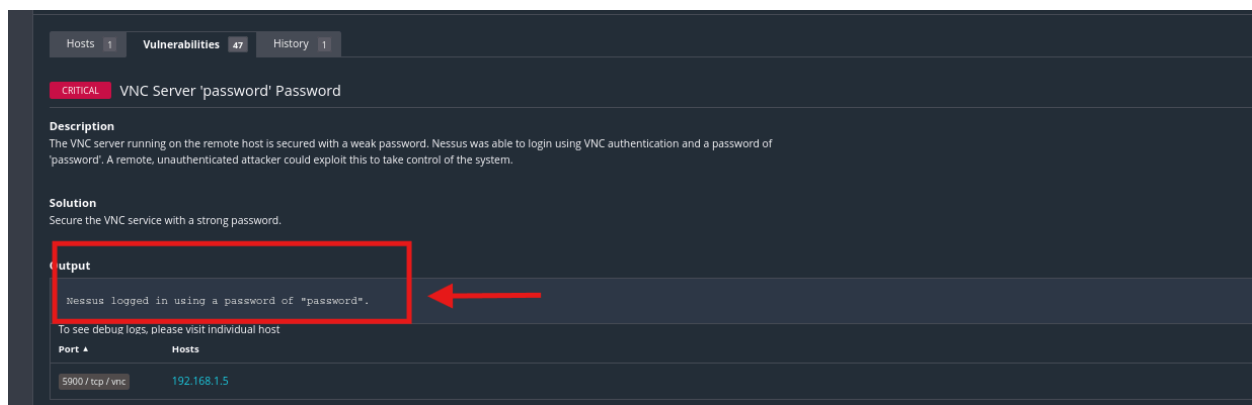




✓ Step 4: Identify the Critical Vulnerability:

Once the scan finishes, Nessus will list vulnerabilities.

The VNC server has a weak or default password. **Password:** password .



✓ Step 5: Exploit the VNC Vulnerability Using Remmina:

Step A: Install Remmina (if not already installed)

👉 **sudo apt install remmina -y**

Step B: Launch Remmina:

👉 **remmina &**

```
(kali@kali)-[~]
$ sudo apt install remmina -y
Installing:
remmina

Installing dependencies:
libavahi-ui-gtk3-0 libvncclient1 remmina-common remmina-plugin-rdp remmina-plugin-secret remmina-plugin-vnc

Suggested packages:
remmina-plugin-exec remmina-plugin-kwallet remmina-plugin-python remmina-plugin-spice remmina-plugin-ssh remmina-plugin-x2go

Summary:
Upgrading: 0, Installing: 7, Removing: 0, Not Upgrading: 82
Download size: 1,287 kB
Space needed: 6,184 kB / 50.6 GB available

Get:1 http://kali.download/kali kali-rolling/main amd64 libavahi-ui-gtk3-0 amd64 0.8-16 [40.4 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 libvncclient1 amd64 0.9.15+dfsg-1 [196 kB]
Get:3 http://kali.download/kali kali-rolling/main amd64 remmina-common all 1.4.39+dfsg-1 [713 kB]
Get:4 http://kali.download/kali kali-rolling/main amd64 remmina amd64 1.4.39+dfsg-1 [236 kB]
Get:5 http://kali.download/kali kali-rolling/main amd64 remmina-plugin-rdp amd64 1.4.39+dfsg-1 [57.6 kB]
Get:6 http://kali.download/kali kali-rolling/main amd64 remmina-plugin-secret amd64 1.4.39+dfsg-1 [14.3 kB]
Get:7 http://kali.download/kali kali-rolling/main amd64 remmina-plugin-vnc amd64 1.4.39+dfsg-1 [28.2 kB]
Fetched 1,287 kB in 1s (1,728 kB/s)
Selecting previously unselected package libavahi-ui-gtk3-0:amd64.
(Reading database ... 429104 files and directories currently installed.)
Preparing to unpack .../0-libavahi-ui-gtk3-0_0.8-16_amd64.deb ...
Unpacking libavahi-ui-gtk3-0:amd64 (0.8-16) ...
Selecting previously unselected package libvncclient1:amd64.
Preparing to unpack .../1-libvncclient1_0.9.15+dfsg-1_amd64.deb ...
Unpacking libvncclient1:amd64 (0.9.15+dfsg-1) ...
Selecting previously unselected package remmina-common.
Preparing to unpack .../2-remmina-common_1.4.39+dfsg-1_all.deb ...
Unpacking remmina-common (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina.
Preparing to unpack .../3-remmina_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina-plugin-rdp:amd64.
Preparing to unpack .../4-remmina-plugin-rdp_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina-plugin-rdp:amd64 (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina-plugin-secret:amd64.
Preparing to unpack .../5-remmina-plugin-secret_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina-plugin-secret:amd64 (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina-plugin-vnc:amd64.
Preparing to unpack .../6-remmina-plugin-vnc_1.4.39+dfsg-1_amd64.deb ...
```

```
Preparing to unpack .../1-libvncclient1_0.9.15+dfsg-1_amd64.deb ...
Unpacking libvncclient1:amd64 (0.9.15+dfsg-1) ...
Selecting previously unselected package remmina-common.
Preparing to unpack .../2-remmina-common_1.4.39+dfsg-1_all.deb ...
Unpacking remmina-common (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina.
Preparing to unpack .../3-remmina_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina-plugin-rdp:amd64.
Preparing to unpack .../4-remmina-plugin-rdp_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina-plugin-rdp:amd64 (1.4.39+dfsg-1) ...
Selecting previously unselected package remmina-plugin-secret:amd64.
Preparing to unpack .../5-remmina-plugin-secret_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina-plugin-secret:amd64 (1.4.39+dfsg-1) ...
Preparing to unpack .../6-remmina-plugin-vnc_1.4.39+dfsg-1_amd64.deb ...
Unpacking remmina-plugin-vnc:amd64 (1.4.39+dfsg-1) ...
Setting up remmina-common (1.4.39+dfsg-1) ...
Setting up libvncclient1:amd64 (0.9.15+dfsg-1) ...
Setting up libavahi-ui-gtk3-0:amd64 (0.8-16) ...
Setting up remmina (1.4.39+dfsg-1) ...
Setting up remmina-plugin-rdp:amd64 (1.4.39+dfsg-1) ...
Setting up remmina-plugin-vnc:amd64 (1.4.39+dfsg-1) ...
Setting up remmina-plugin-secret:amd64 (1.4.39+dfsg-1) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for shared-mime-info (2.4-5+b2) ...
Processing triggers for mailcap (3.74) ...
Processing triggers for kali-menu (2025.3.0) ...
Processing triggers for desktop-file-utils (0.28-1) ...
Processing triggers for hicolor-icon-theme (0.18-2) ...
Processing triggers for libc-bin (2.41-9) ...

(kali@kali)-[~]
$ remmina &
[2] 53595

(kali@kali)-[~]
$ remmina -Message: 06:17:05.601: Remmina does not log all output statements. Turn on more verbose output by using "G_MESSAGES_DEBUG=remmina" as an environment variable.
More info available on the Remmina wiki at:
https://gitlab.com/Remmina/Remmina/-/wikis/Usage/Remmina-debugging

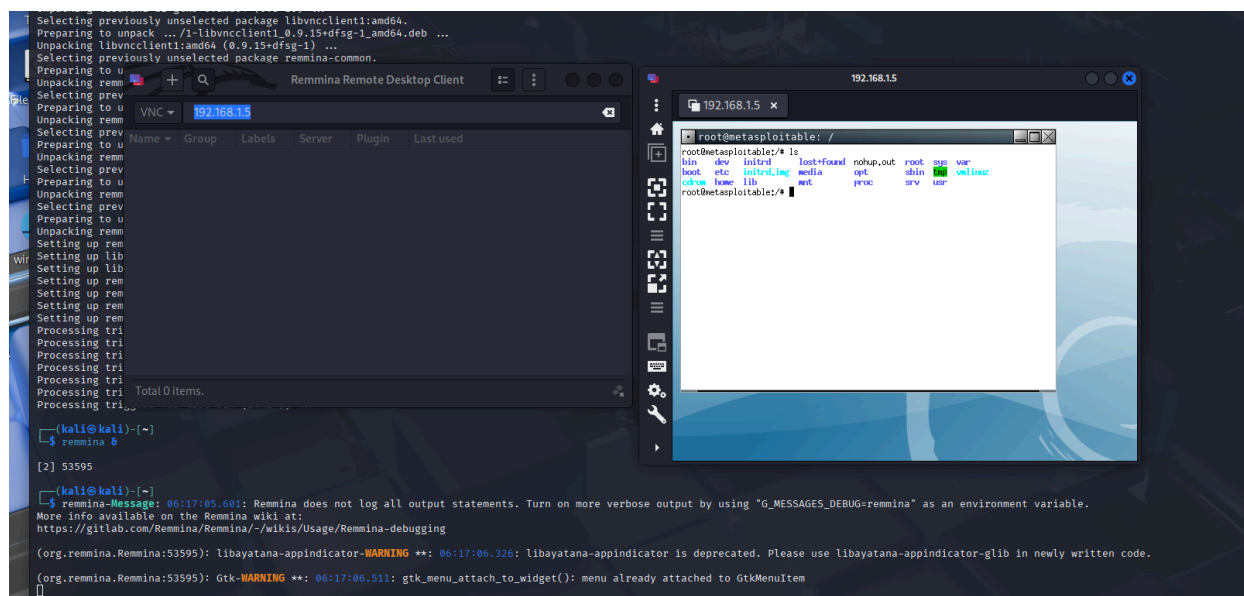
(org.remmina.Remmina:53595): libayatana-appindicator-WARNING **: 06:17:06.326: libayatana-appindicator is deprecated. Please use libayatana-appindicator-glib in newly written code.

(org.remmina.Remmina:53595): Gtk-WARNING **: 06:17:06.511: gtk_menu_attach_to_widget(): menu already attached to GtkMenuItem
[1]
```

Step C: Connect to the Vulnerable VNC Server (Metasploitable2)

In Remmina:

👉 **Protocol:** VNC 👉 **Server/IP:** Use the Metasploitable2 IP 👉 **Password:** password



 **Task Complete!**