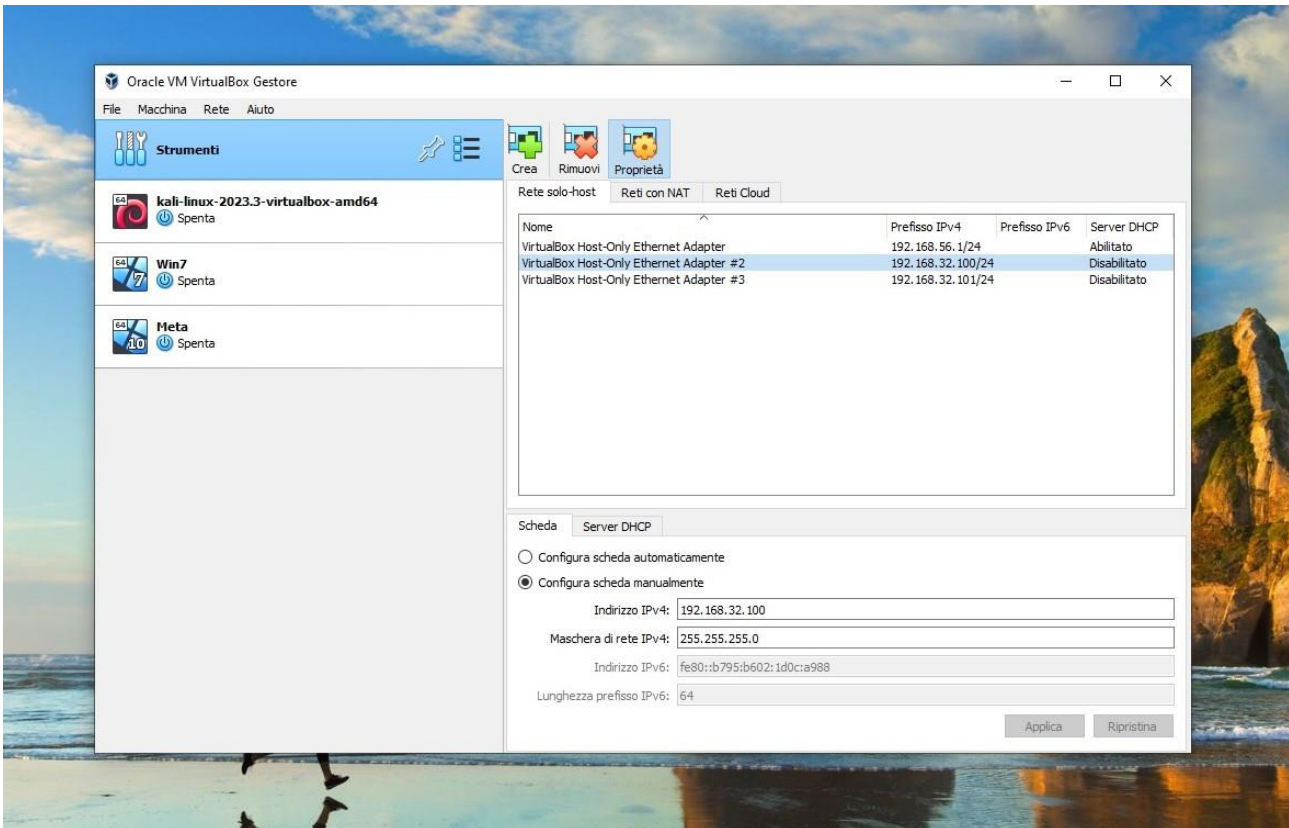
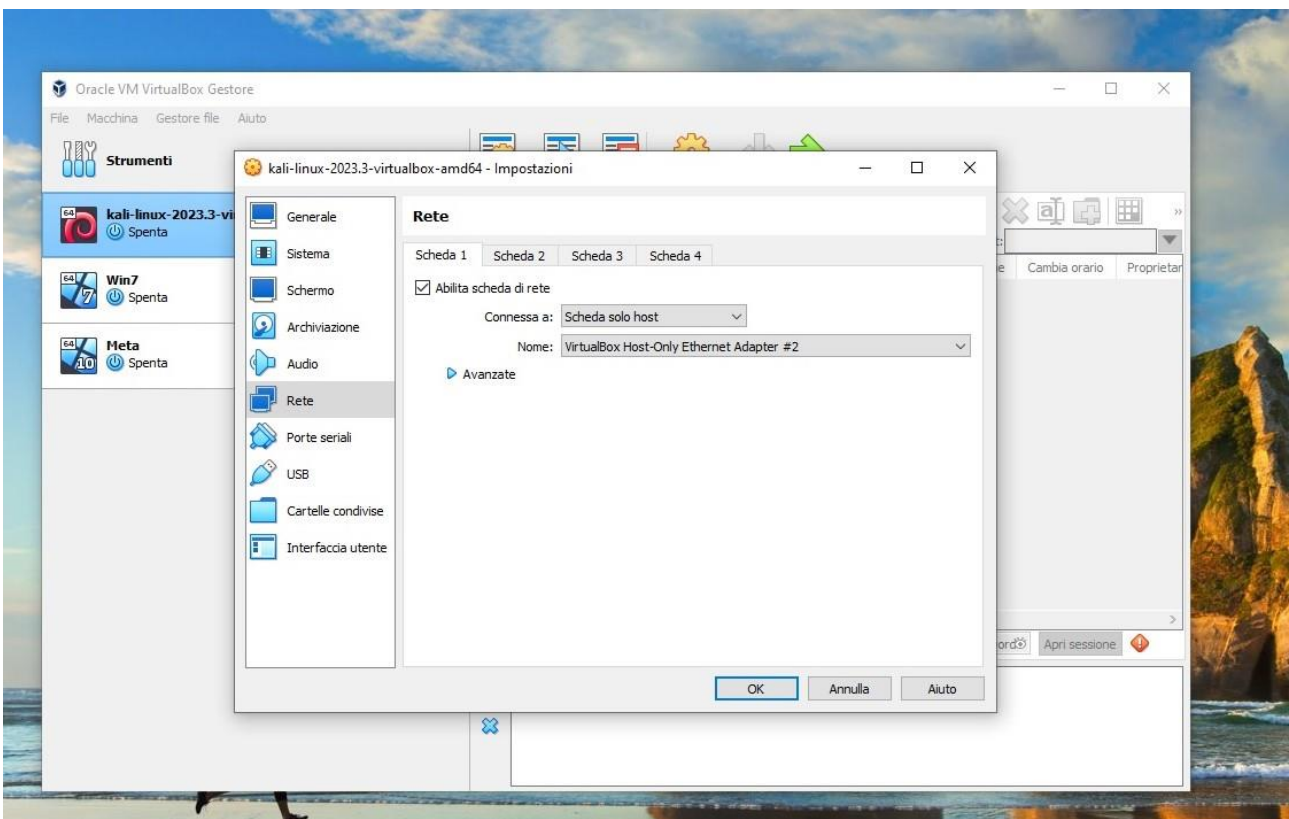


Esercitazione 29/09/2023

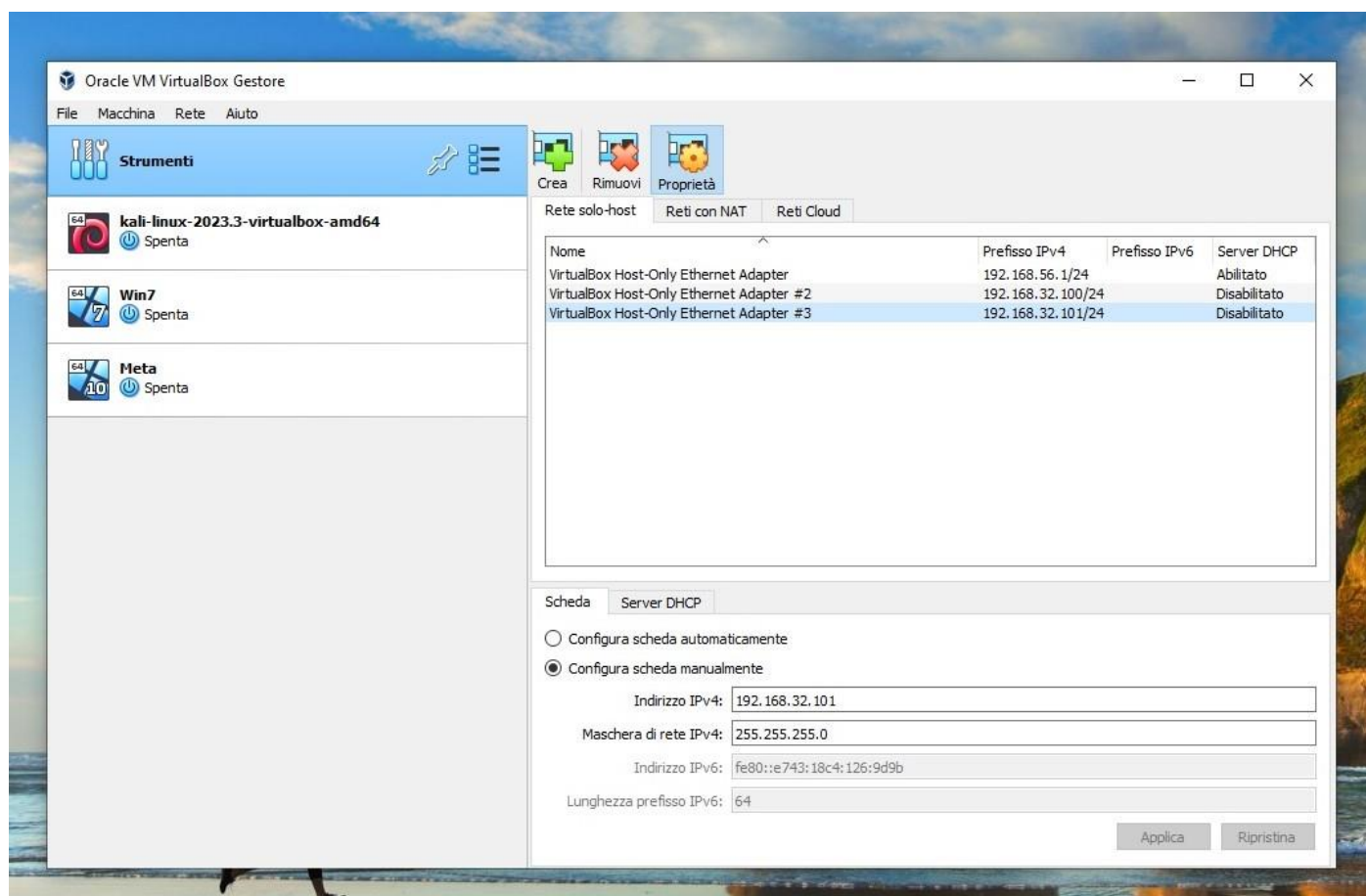
1 – Ho creato un nuovo indirizzo IP su Virtual Box tramite strumenti – gestore di rete tramite tasto “crea” (IP 192.168.32.100 come da esercitazione) denominato VirtualBox Host-Only Ethernet Adapter #2



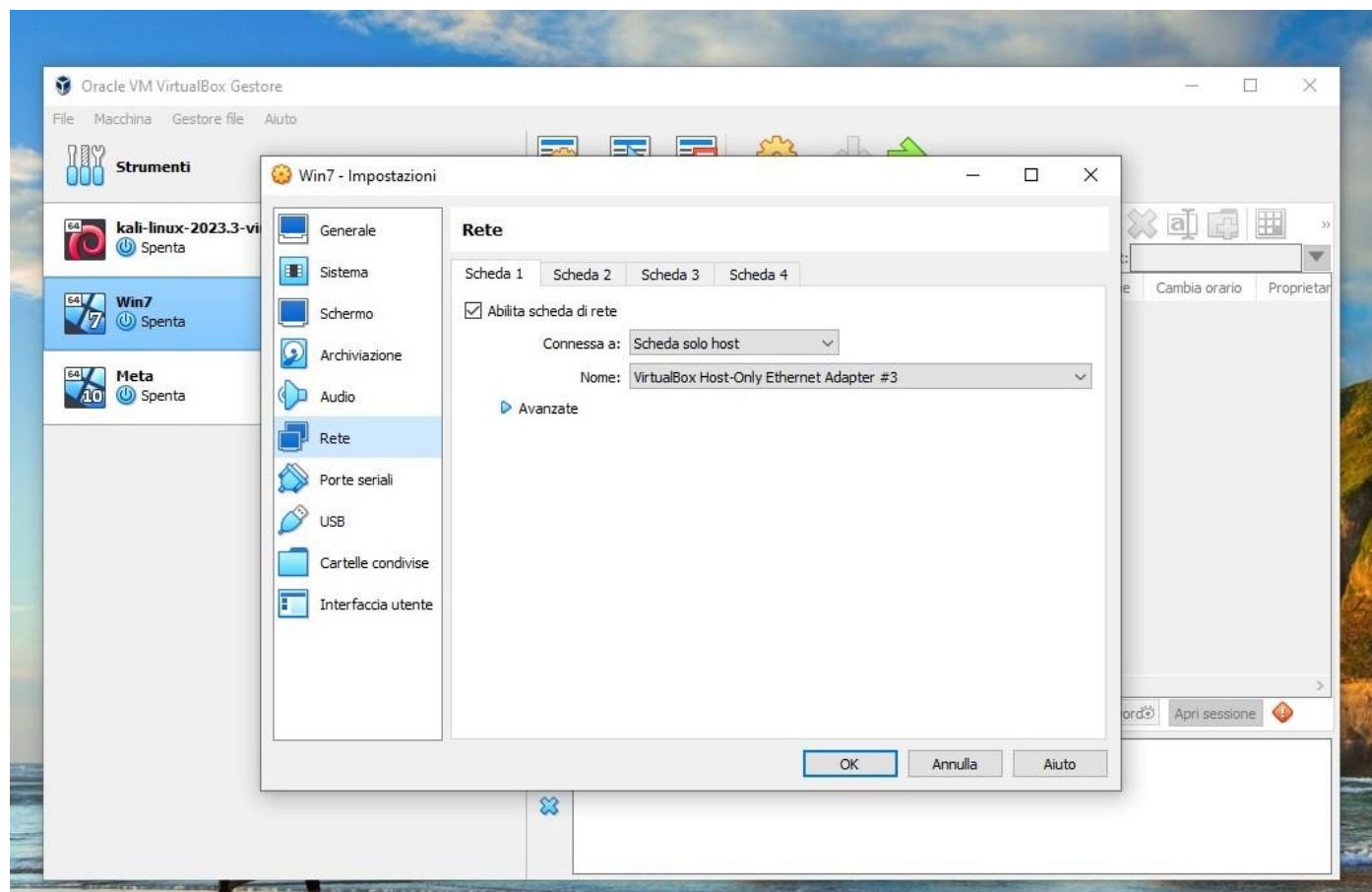
2 – Sono andata sulle impostazioni di rete di Kali e su “scheda1” ho convertito NAT con SOLO HOST immettendo la rete creata al punto 1



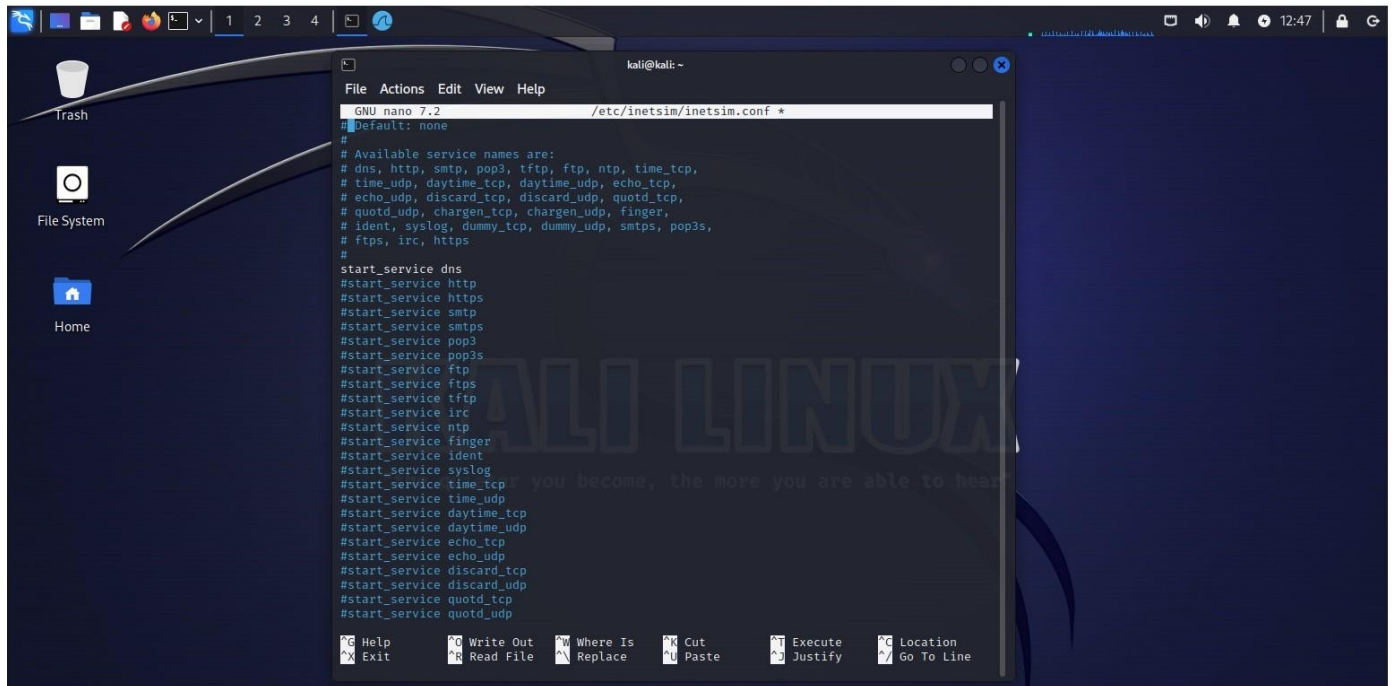
3 - Ho creato un nuovo indirizzo IP su Virtual Box tramite strumenti – gestore di rete tramite tasto “crea” (IP 192.168.32.101 come da esercitazione) denominato VirtualBox Host-Only Ethernet Adapter #3



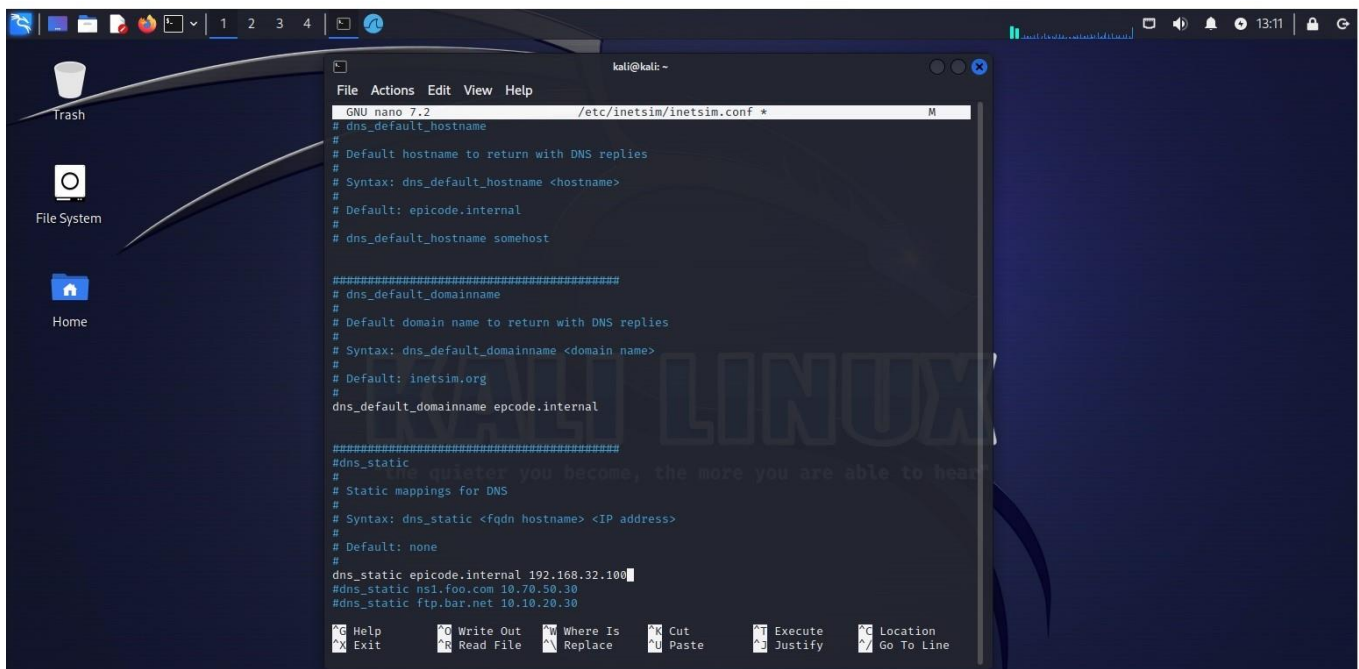
4 – Sono andata su impostazioni di rete di Win7 e su “scheda1” ho convertito NAT con SOLO HOST immettendo la rete creata al punto 3



5 – Ho attivato DNS tramite Inetsim su Kali cambiando anche il nome del dominio e affiancandovi l'indirizzo IP impostato su Kali (che dovrà funzionare da Server)



```
GNU nano 7.2 /etc/inetsim/inetsim.conf *
# Default: none
#
# Available service names are:
# dns, http, smtp, pop3, tftp, ftp, ntp, time_tcp,
# time_udp, daytime_tcp, daytime_udp, echo_tcp,
# echo_udp, discard_tcp, discard_udp, quotd_tcp,
# quotd_udp, chargen_tcp, chargen_udp, finger,
# ident, syslog, dummy_tcp, dummy_udp, smtps, pop3s,
# ftps, irc, https
#
start_service dns
start_service http
start_service https
start_service smtp
start_service smtps
start_service pop3
start_service pop3s
start_service ftp
start_service ftps
start_service tftp
start_service irc
start_service ntp
start_service finger
start_service ident
start_service syslog
start_service time_tcp
start_service time_udp
start_service daytime_tcp
start_service daytime_udp
start_service echo_tcp
start_service echo_udp
start_service discard_tcp
start_service discard_udp
start_service quotd_tcp
start_service quotd_udp
```

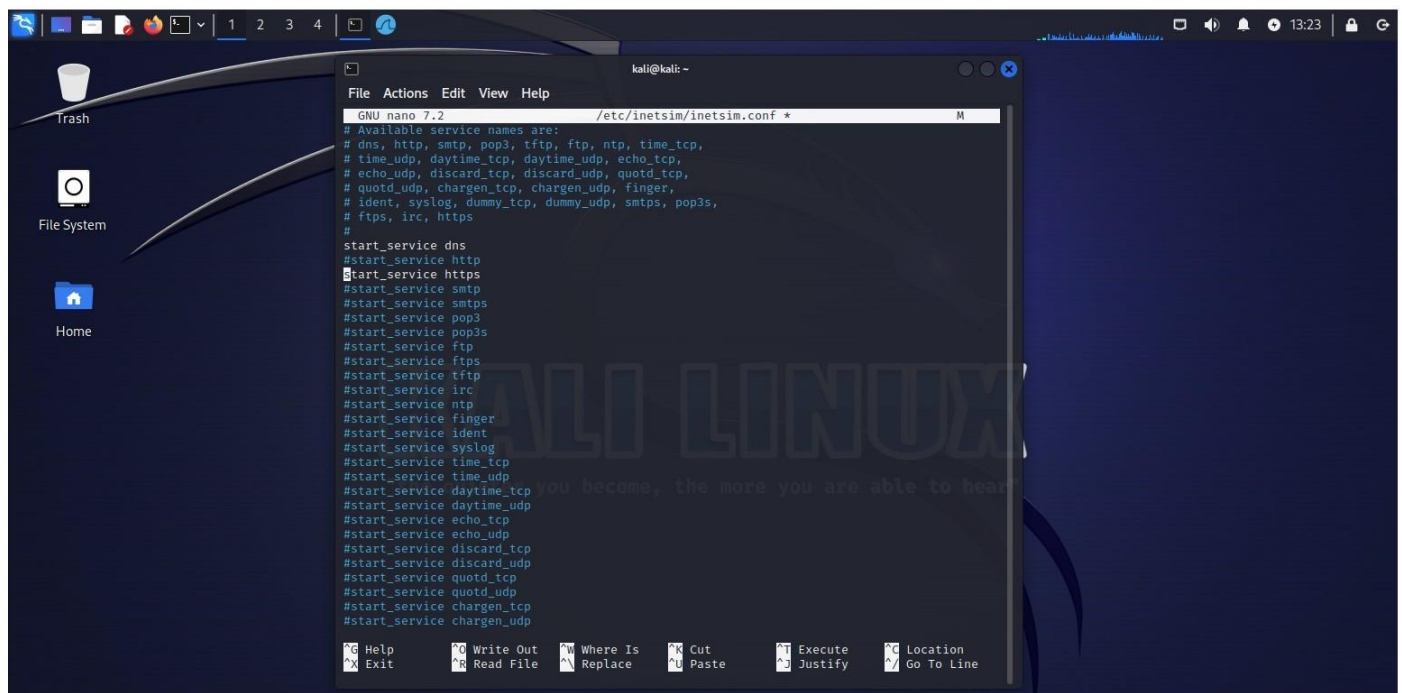


```
GNU nano 7.2 /etc/inetsim/inetsim.conf *
# dns_default_hostname
#
# Default hostname to return with DNS replies
#
# Syntax: dns_default_hostname <hostname>
#
# Default: epicode.internal
#
dns_default_hostname somehost

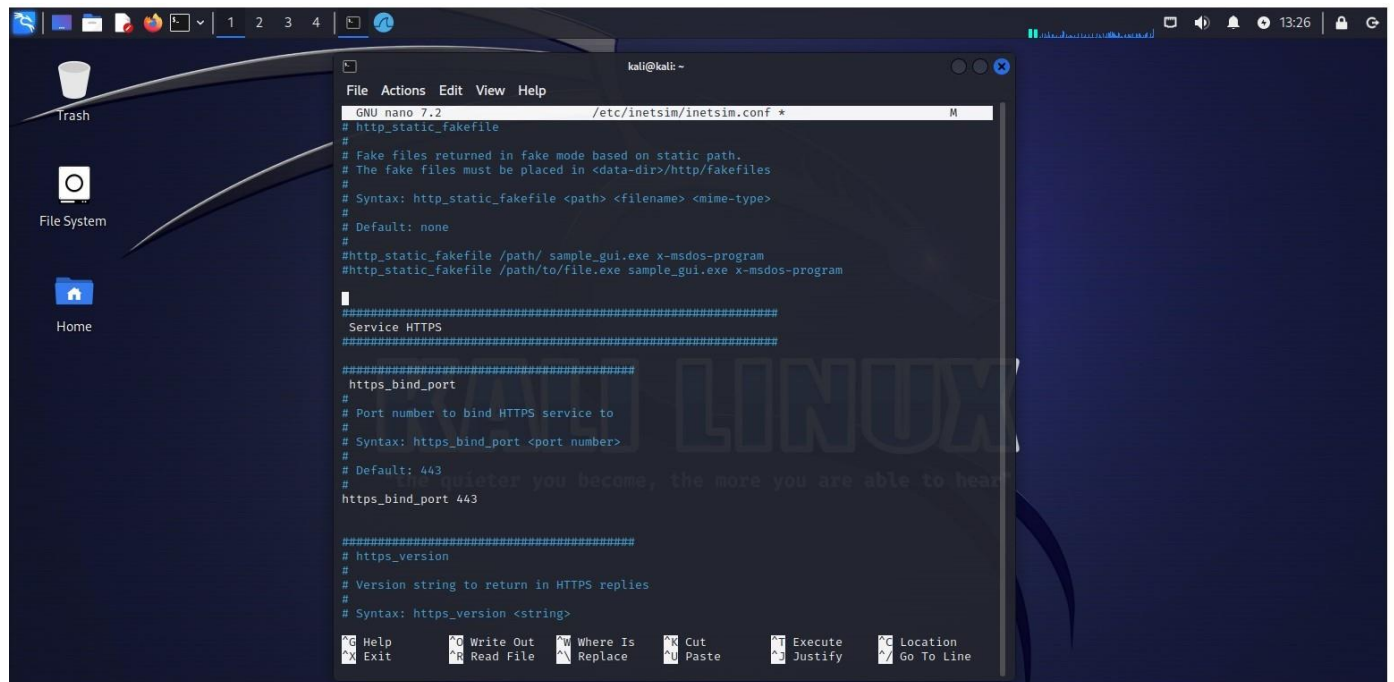
#####
# dns_default_domainname
#
# Default domain name to return with DNS replies
#
# Syntax: dns_default_domainname <domain name>
#
# Default: inetsim.org
dns_default_domainname epicode.internal

#####
# dns_static
#
# Static mappings for DNS
#
# Syntax: dns_static <fqdn hostname> <IP address>
#
# Default: none
#
dns_static epicode.internal 192.168.32.100
dns_static ns1.foo.com 10.70.50.30
dns_static ftp.bar.net 10.10.20.30
```


6 – Ho attivato HTTPS

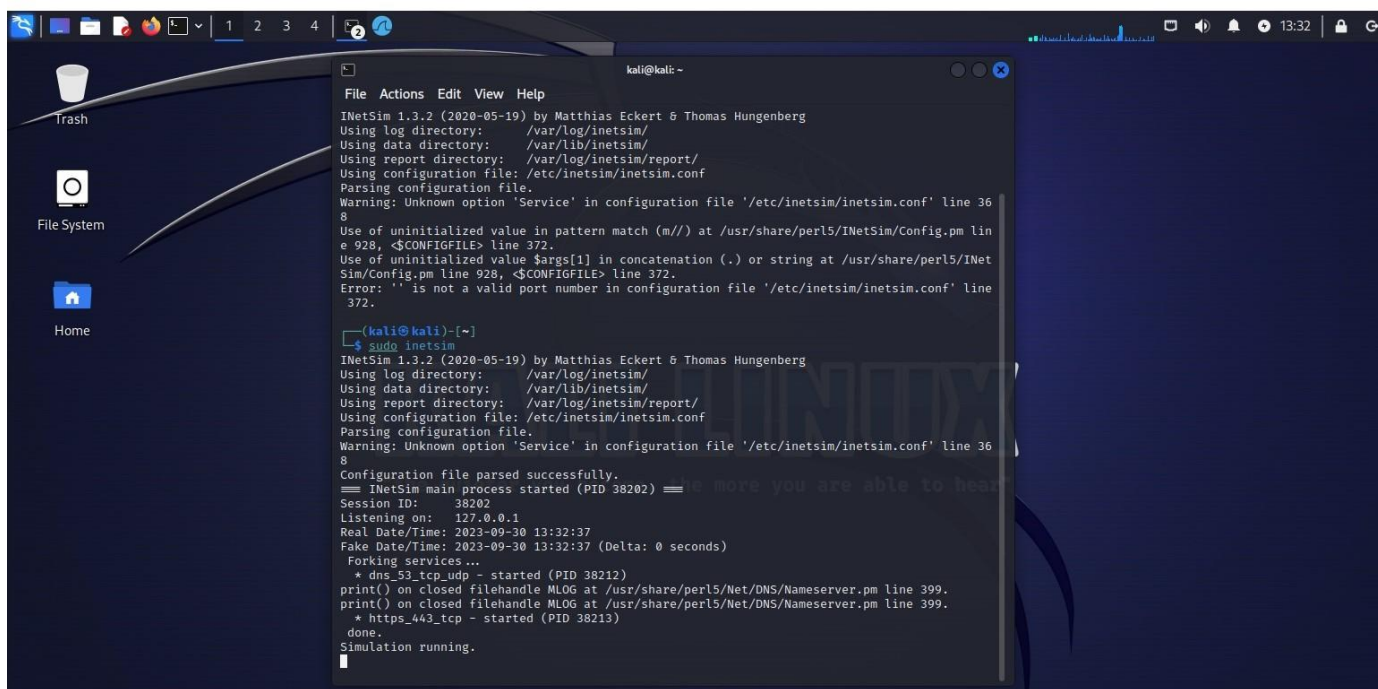


```
GNU nano 7.2 /etc/inetsim/inetsim.conf *
# Available service names are:
# dns, http, smtp, pop3, tftp, ftp, ntp, time_tcp,
# time_udp, daytime_tcp, daytime_udp, echo_tcp,
# echo_udp, discard_tcp, discard_udp, quotd_tcp,
# quotd_udp, chargin_tcp, chargin_udp, finger,
# ident, syslog, dummy_tcp, dummy_udp, smtps, pop3s,
# ftps, irc, https
#
start_service dns
start_service http
start_service https
start_service smtp
start_service smtps
start_service pop3
start_service pop3s
start_service ftp
start_service ftps
start_service tftp
start_service irc
start_service ntp
start_service finger
start_service ident
start_service syslog
start_service time_tcp
start_service time_udp
start_service daytime_tcp
start_service daytime_udp
start_service echo_tcp
start_service echo_udp
start_service discard_tcp
start_service discard_udp
start_service quotd_tcp
start_service quotd_udp
start_service chargin_tcp
start_service chargin_udp
```



```
GNU nano 7.2 /etc/inetsim/inetsim.conf *
# http_static_fakefile
#
# Fake files returned in fake mode based on static path.
# The fake files must be placed in <data-dir>/http/fakefiles
#
# Syntax: http_static_fakefile <path> <filename> <mime-type>
#
# Default: none
#
#http_static_fakefile /path/ sample_gui.exe x-msdos-program
#http_static_fakefile /path/to/file.exe sample_gui.exe x-msdos-program
#
#####
Service HTTPS
#####
#####
https_bind_port
#
# Port number to bind HTTPS service to
# Syntax: https_bind_port <port number>
#
# Default: 443
https_bind_port 443
#####
# https_version
#
# Version string to return in HTTPS replies
# Syntax: https_version <string>
```

7 – Ho verificato l'attivazione tramite comando “sudo inetsim” con il risultato di “Simulation Running”

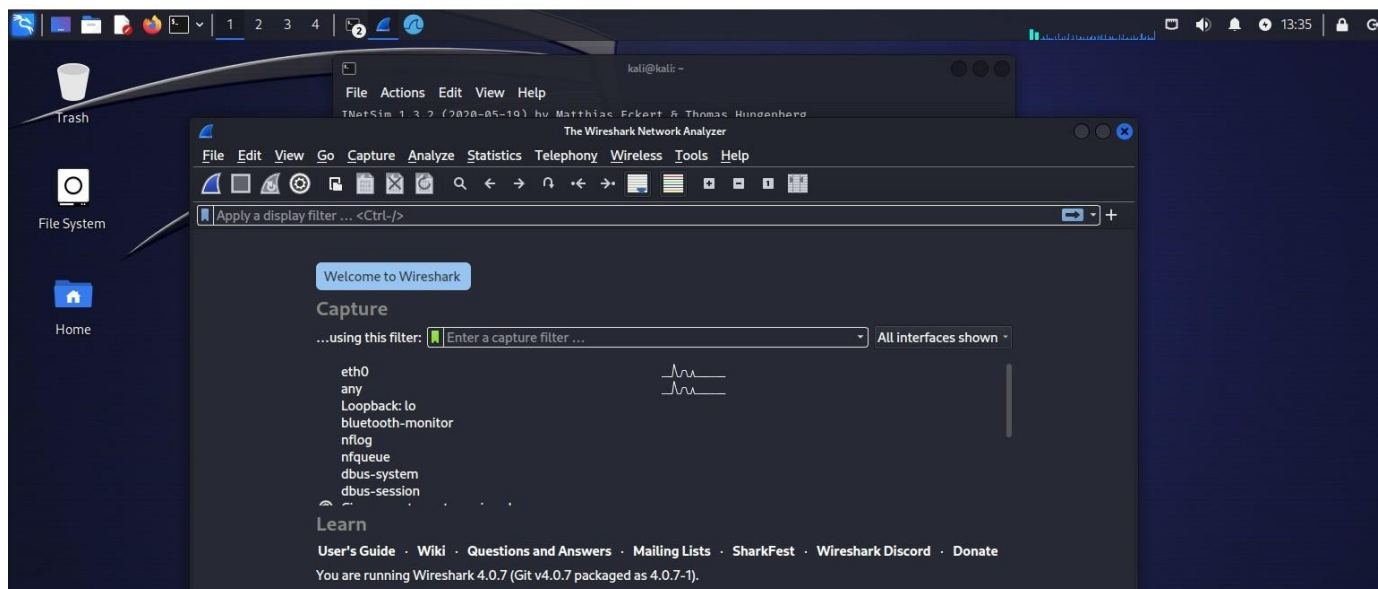


The screenshot shows a Kali Linux desktop environment with a terminal window open. The terminal displays the output of the 'sudo inetsim' command. The output includes version information, directory paths, and a warning about an unknown option 'Service' in the configuration file. It then shows the successful parsing of the configuration file and the start of the INetSim main process (PID 38202). The process is listening on 127.0.0.1 and has forked services for dns_53_tcp_udp (PID 38212) and https_443_tcp (PID 38213). The final status is 'Simulation running.'

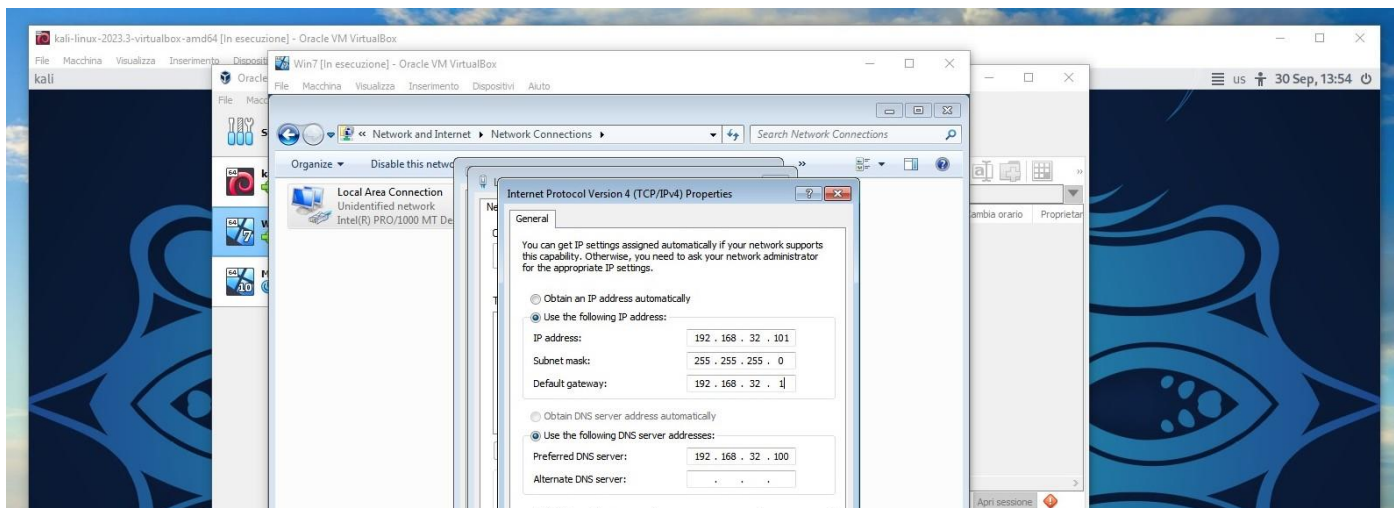
```
kali@kali:~$ sudo inetsim
INetSim 1.3.2 (2020-05-19) by Matthias Eckert & Thomas Hungenberg
Using log directory: /var/log/inetsim/
Using data directory: /var/lib/inetsim/
Using report directory: /var/log/inetsim/report/
Using configuration file: /etc/inetsim/inetsim.conf
Parsing configuration file.
Warning: Unknown option 'Service' in configuration file '/etc/inetsim/inetsim.conf' line 36
8
Use of uninitialized value in pattern match (m//) at /usr/share/perl5/INetSim/Config.pm line 928, <$CONFIGFILE> line 372.
Use of uninitialized value $args[1] in concatenation (.) or string at /usr/share/perl5/INetSim/Config.pm line 928, <$CONFIGFILE> line 372.
Error: '' is not a valid port number in configuration file '/etc/inetsim/inetsim.conf' line 372.

(kali@kali)-[~]
$ sudo inetsim
INetSim 1.3.2 (2020-05-19) by Matthias Eckert & Thomas Hungenberg
Using log directory: /var/log/inetsim/
Using data directory: /var/lib/inetsim/
Using report directory: /var/log/inetsim/report/
Using configuration file: /etc/inetsim/inetsim.conf
Parsing configuration file.
Warning: Unknown option 'Service' in configuration file '/etc/inetsim/inetsim.conf' line 36
8
Configuration file parsed successfully.
== INetSim main process started (PID 38202) ==
Session ID: 38202
Listening on: 127.0.0.1
Real Date/Time: 2023-09-30 13:32:37
Fake Date/Time: 2023-09-30 13:32:37 (Delta: 0 seconds)
Forking services ...
 * dns_53_tcp_udp - started (PID 38212)
print() on closed filehandle MLOG at /usr/share/perl5/Net/DNS/Nameserver.pm line 399.
print() on closed filehandle MLOG at /usr/share/perl5/Net/DNS/Nameserver.pm line 399.
 * https_443_tcp - started (PID 38213)
done.
Simulation running.
```

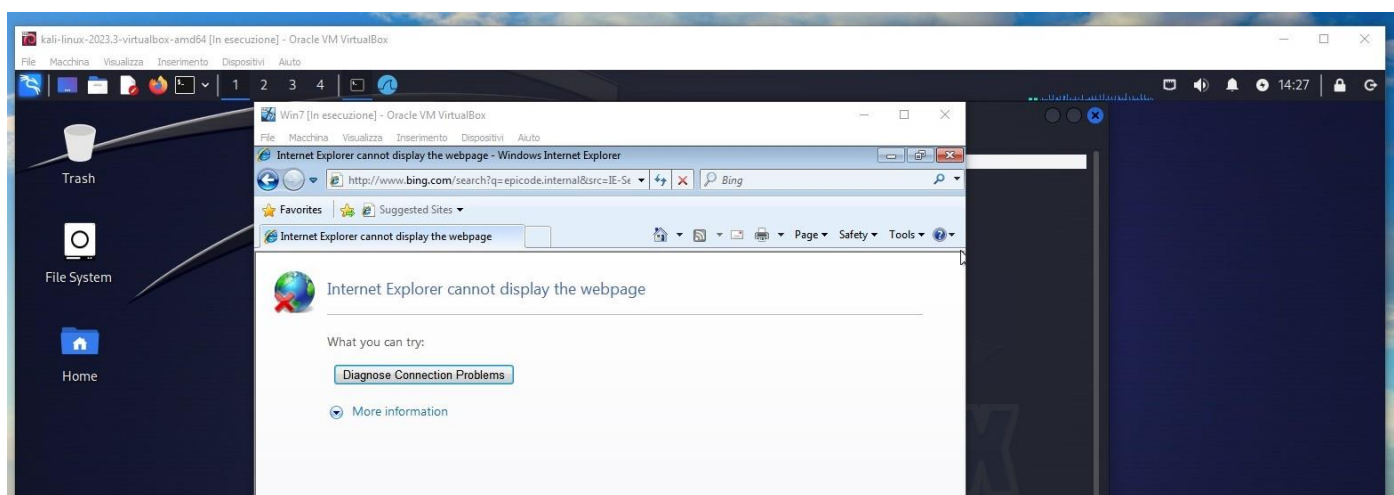
8 – Ho verificato la rete su Wireshark



9 – Ho modificato l'indirizzo IP su Win7 con le impostazioni come da istruzioni e ho assegnato al DNS l'indirizzo IP della rete di Kali



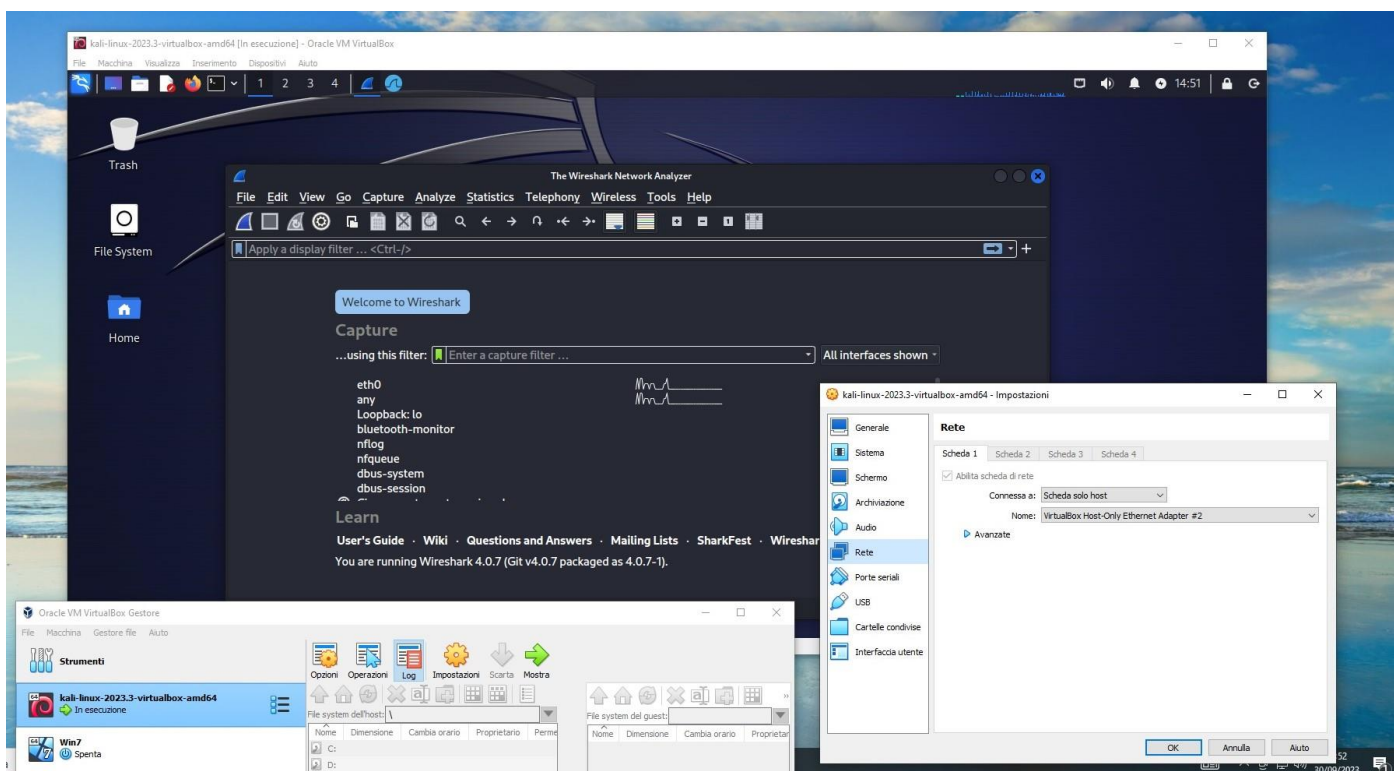
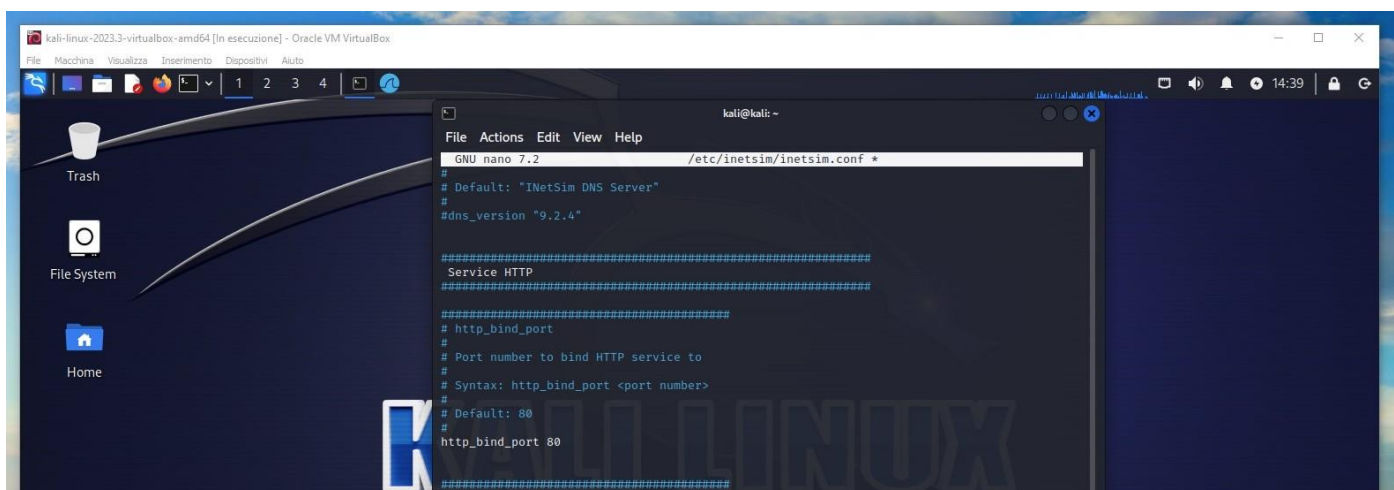
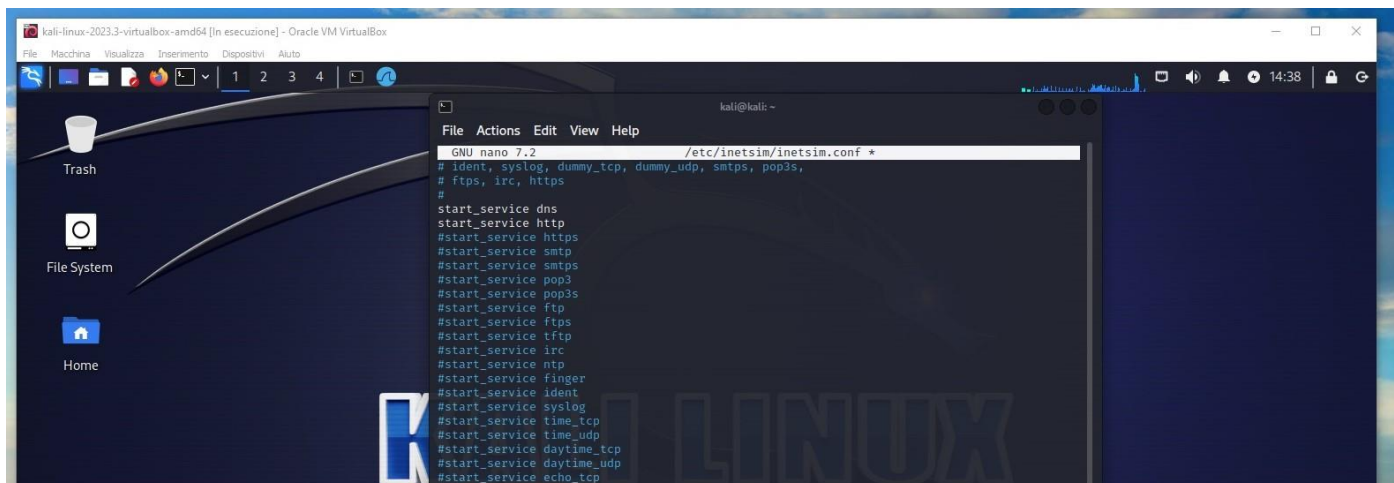
10 – Ho provato, immesse dunque tutte le impostazioni, a raggiungere l'URL "epicode.internal" ma continua a non darmi la rete che gli ho fornito, ho riprovato quindi con NAT (su Kali) reimpostando ovviamente tutti gli IP ma non ha funzionato ugualmente



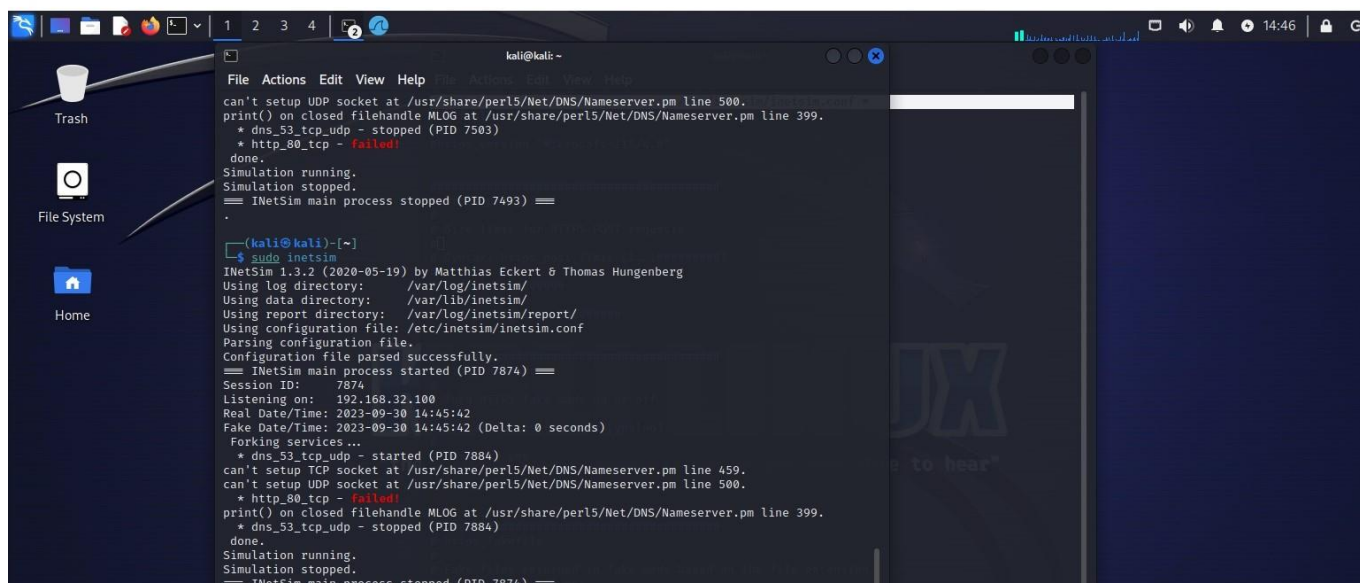
11 – Ho provato, per mia curiosità, il funzionamento della rete su Kali (con IP 192.168.32.100) ma mi dice che non c'è connessione



12 – Ho provato ad attivare HTTP su Kali tornando alla rete 192.168.32.100 che, pare, funzionasse nuovamente



13 – Ho verificato l’attivazione tramite comando “sudo inetsim” ma questa volta con il risultato di “Failed”, ho tentato più volte di correggere tutti gli errori sulle linee indicate ma non ci sono riuscita



```
kali@kali: ~  
File Actions Edit View Help  
can't setup UDP socket at /usr/share/perl5/Net/DNS/Nameserver.pm line 500.  
print() on closed filehandle MLOG at /usr/share/perl5/Net/DNS/Nameserver.pm line 399.  
* dns_53_tcp_udp - stopped (PID 7503)  
* http_80_tcp - failed!  
done.  
Simulation running.  
Simulation stopped.  
== INetSim main process stopped (PID 7493) ==  
.  
  
(kali@kali)-[~]  
└─$ sudo inetsim  
INetSim 1.3.2 (2020-05-19) by Matthias Eckert & Thomas Hungenberg  
Using log directory: /var/log/inetsim/  
Using data directory: /var/lib/inetsim/  
Using report directory: /var/log/inetsim/report/  
Using configuration file: /etc/inetsim/inetsim.conf  
Parsing configuration file.  
Configuration file parsed successfully.  
== INetSim main process started (PID 7874) ==  
Session ID: 7874  
Listening on: 192.168.32.100  
Real Date/Time: 2023-09-30 14:45:42  
Fake Date/Time: 2023-09-30 14:45:42 (Delta: 0 seconds)  
Forking services ...  
* dns_53_tcp_udp - started (PID 7884)  
can't setup TCP socket at /usr/share/perl5/Net/DNS/Nameserver.pm line 459.  
can't setup UDP socket at /usr/share/perl5/Net/DNS/Nameserver.pm line 500.  
* http_80_tcp - failed!  
print() on closed filehandle MLOG at /usr/share/perl5/Net/DNS/Nameserver.pm line 399.  
* dns_53_tcp_udp - stopped (PID 7884)  
done.  
Simulation running.  
Simulation stopped.  
== INetSim main process stopped (PID 7874) ==
```

14 – Ho provato a raggiungere l’URL di “epicode.internal”, ovviamente con esito negativo poiché continuo a non avere rete

