

**School of Computer Science**  
**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**DEHRADUN, UTTARAKHAND**



## **PHYSICAL AND IT SECURITY LAB**

**Lab File  
(2023-2024)**

**for  
3<sup>rd</sup> Semester**

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# LAB EXPERIMENT – 1

## LOGS TABLE FOR WINDOWS

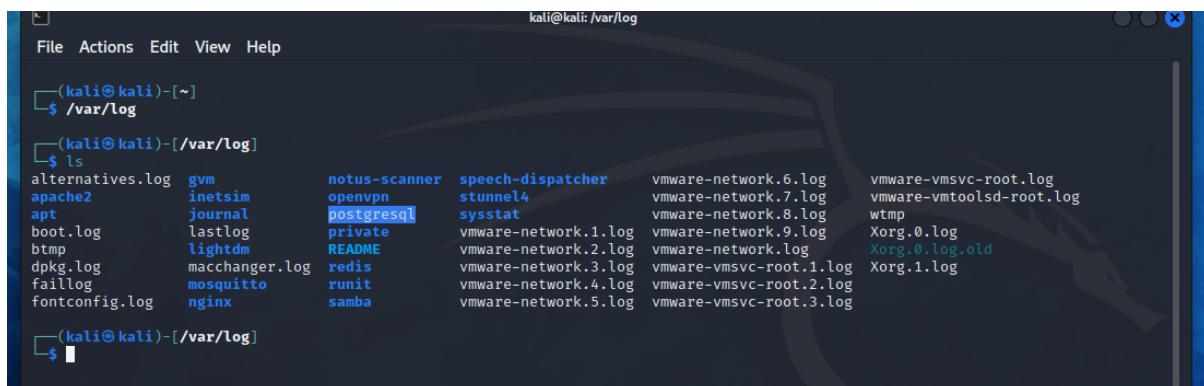
<b>Windows Log</b>	<b>Source</b>	<b>Event ID</b>	<b>General Info</b>	<b>Mitigation Steps</b>
Critical	<b>Kernel-Power</b>	<b>41</b>	The system has rebooted without cleanly shutting down first. This error could be caused if the system stopped responding, crashed, or lost power unexpectedly.	Basically, to get rid of this type of error is by outdated drivers installed on your devices, so kindly update the audio drivers if still didn't receive any fix, then you can go for all drivers updating process.
Critical	<b>WinREAgent</b>	<b>4502</b>	This problem occurs when a MicrosoftDNS container is created before a full replication of the application partition.	A supported hotfix is now available from Microsoft, but it is only intended to correct the problem. Only apply it to systems that are experiencing this specific problem. You do not have to restart your computer after you apply this hotfix.
Error	<b>BugCheck</b>	<b>1001</b>	This type of error usually occurs when third party antivirus software conflicts with windows security.	To resolve this type of event error you need to disable your third-party antivirus installed and even the firewall applications if you are not using antivirus software.
Error	<b>Service Control Manager</b>	<b>7024</b>	This issue is when the component that raises this event is not installed on your local computer or the installation is corrupted.	To resolve this kind of issues kindly install or repair the component on the local computer.
Error	<b>DistributedCOM</b>	<b>10010</b>	The server {A463FCB9-6B1C-4E0D-A80B-A2CA7999E25D} did not register with DCOM within the required timeout.	Some steps by which you can fix it are: - 1. Tweak Component Services 2. Enable Function Discovery Resource Publication service 3. Reset DCOM permissions 4. Use SFC Scan 5. Install the latest Windows update 6. Reset your PC
Error	<b>WindowsUpdateClient</b>	<b>20</b>	Installation Failure: Windows failed to install the following update with error 0x80073D02: 9NMPJ99VJBWV-Microsoft.YourPhone.	If updates are available but are not automatically downloaded then restart the system which can fix these issues.
Error	<b>Service Control Manager</b>	<b>7000</b>	The Steam Client Service failed to start due to the following error: The service did not respond to the start or control request in a timely fashion.	To fix this error you have to manually give a start to the SteamClient service in services pannel from the START menu.
Error	<b>NDIS</b>	<b>10317</b>	Miniport Microsoft Wi-Fi Direct Virtual Adapter #2, {1848adcf-46a9-4b89-8ee6-dbcd71e49c54}, had event Fatal error: The miniport has failed a power transition to operational power	This frequently occurs when the mobile broadband device was turned off and is restarting. If you are using router then I suggest you to reset the router and check if the issue persist otherwise reinstall the network drivers.

Error	<b>Service Control Manager</b>	<b>7023</b>	The NVIDIA LocalSystem Container service terminated with the following error: A generic command executable returned a result that indicates failure.	This is the service failed issue that can be resolved when you just have to restart the service from services from Start Menu.
Error	<b>volmgr</b>	<b>162</b>	Dump file generation succeeded. {Some files of the Windows 11 are corrupted}	This can be fixed by troubleshooting or repair of Windows 11 by a USB bootable pen drive.

## LOGS IN LINUX

**STEP 1: Use the command /var/log**

**STEP 2: Use the command ls to list the logs for the OS.**



```
kali@kali: /var/log
File Actions Edit View Help
[(kali㉿kali)-[~]]$ /var/log
[(kali㉿kali)-[~/var/log]]$ ls
alternatives.log      gvm          notus-scanner   speech-dispatcher   vmware-network.6.log    vmware-vmsvc-root.log
apache2                inetsim       openvpn        stunnel4           vmware-network.7.log    vmware-vmtoolsd-root.log
apt                   journal      postgresql     sysstat          vmware-network.8.log    wtmp
boot.log               lastlog      private       README            vmware-network.9.log    Xorg.0.log
btmp                  lightdm     redis         vmware-network.1.log  vmware-network.log    Xorg.0.log.old
dpkg.log               macchanger.log  runit        vmware-network.2.log  vmware-network.log    Xorg.1.log
faillog               mosquito    samba        vmware-network.3.log  vmware-vmsvc-root.1.log
fontconfig.log          nginx      samba        vmware-network.4.log  vmware-vmsvc-root.2.log
[(kali㉿kali)-[~/var/log]]$
```

**STEP 3: Use the command line ‘tail boot.log’ for few information of the log file to be displayed.**

## Step 4: Use the command line 'cat boot.log' for all the information of the individual log file to be displayed.

```
(kali㉿kali)-[~/var/log]
$ ls
alternatives.log  gvm      notus-scanner  speech-dispatcher  vmware-network.6.log   vmware-vmsvc-root.log
apache2          inetsim   openvpn       stunnel4        vmware-network.7.log   vmware-vmtoolsd-root.log
apt              journal   postgresql    sysstat        vmware-network.8.log   wtmp
boot.log         lastlog   private       README         vmware-network.9.log   Xorg.0.log
btmp             lightdm   redis        runit        vmware-network.1.log   vmware-network.log
dpkg.log         macchanger.log  redis       samba        vmware-network.2.log   Xorg.0.log.old
faillog          mosquitto  runit       samba        vmware-network.3.log   Xorg.1.log
fontconfig.log   nginx    samba        samba        vmware-network.4.log   vmware-vmsvc-root.1.log   Xorg.1.log.old
fontconfig.log   nginx    samba        samba        vmware-network.5.log   vmware-vmsvc-root.2.log   Xorg.1.log.old
fontconfig.log   nginx    samba        samba        vmware-network.6.log   vmware-vmsvc-root.3.log

(kali㉿kali)-[~/var/log]
$ sudo cat boot.log
Fri Sep 01 02:56:17 EDT 2023
root: clean, 446783/5251072 files, 3964604/20995837 blocks
[ OK ] Finished plymouth-read-write.service - Tell Plymouth To Write Out Runtime Data.
[ OK ] Finished systemd-tmpfiles-setup.service - Create Volatile Files and Directories.
[ OK ] Started haveged.service - Entropy Daemon based on the HAVEGE algorithm.
      Starting open-vm-tools.service - Service for virtual machines hosted on VMWare...
      Starting systemd-update-utmp.service - Record System Boot/Shutdown in UTMP...
[ OK ] Started open-vm-tools.service - Service for virtual machines hosted on VMWare.
[ OK ] Finished systemd-update-utmp.service - Record System Boot/Shutdown in UTMP.
[ OK ] Finished systemd-random-seed.service - Load/Save Random Seed.
[ OK ] Started systemd-udevd.service - Rule-based Manager for Device Events and Files.
      Starting plymouth-start.service - Show Plymouth Boot Screen ...
[ OK ] Started plymouth-start.service - Show Plymouth Boot Screen.
[ OK ] Started systemd-ask-password-plymouth.path - Forward Password Requests to Plymouth Directory Watch.
[ OK ] Reached target cryptsetup.target - Local Encrypted Volumes.
[ OK ] Reached target paths.target - Path Units.
      Mounting proc-sys-fs-binfmt_misc.mount - Arbitrary Executable File Formats File System ...
      Mounting run-rpc_pipefs.mount - RPC Pipe File System...
[ OK ] Finished networking.service - Raise network interfaces.
[ OK ] Mounted proc-sys-fs-binfmt_misc.mount - Arbitrary Executable File Formats File System.
[ OK ] Finished systemd-binfmt.service - Set Up Additional Binary Formats.
[ OK ] Reached target sysinit.target - System Initialization.
[ OK ] Started apt-daily.timer - Daily apt download activities.
[ OK ] Started apt-daily-upgrade.timer - Daily apt upgrade and clean activities.
[ OK ] Started dpkg-db-backup.timer - Daily dpkg database backup timer.
[ OK ] Started e2scrub_all.timer - Periodic ext4 Online Metadata Check for All Filesystems.
[ OK ] Started fstrim.timer - Discard unused blocks once a week.
[ OK ] Started logrotate.timer - Daily rotation of log files.
[ OK ] Started man-db.timer - Daily man-db regeneration.
[ OK ] Started ntpsec-rotate-stats.timer - Rotate ntpd stats daily.
[ OK ] Started phpsessionclean.timer - Clean PHP session files every 30 mins.
[ OK ] Started plocate-updatedb.timer - Update the plocate database daily.
[ OK ] Started systemd-tmpfiles-clean.timer - Daily Cleanup of Temporary Directories.
```

## STEP 5: Use the command line 'dmesg' shows entire log file contents.

```
(kali㉿kali)-[~/var/log]
$ dmesg
[ 0.000000] Linux version 6.1.0-kali9-amd64 (devel@kali.org) (gcc-12 (Debian 12.2.0-14) 12.2.0, GNU ld (GNU Binutils for Debian 2.40) #1 SMP PREEMPT_DYNAMIC Debian 6.1.27-1kali1 (2023-05-12)
[ 0.000000] Command line: BOOT_IMAGE=/boot/vmlinuz-6.1.0-kali9-amd64 root=UUID=b391398d-058a-4bfa-948f-f87a4452eed3 ro quiet splash
[ 0.000000] Disabled fast string operations
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x001: 'x87 floating point registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
[ 0.000000] x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
[ 0.000000] x86/fpu: Enabled xstate features 0x7, context size is 832 bytes, using 'standard' format.
[ 0.000000] signal: max sigframe size: 1776
[ 0.000000] BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: [mem 0x0000000000000000-0x0000000000000f3ff] usable
[ 0.000000] BIOS-e820: [mem 0x0000000000009f400-0x000000000009ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000dc000-0x00000000000ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000010000-0x00000000bfedffff] usable
[ 0.000000] BIOS-e820: [mem 0x000000000bf00000-0x000000000bfefeff] ACPI data
[ 0.000000] BIOS-e820: [mem 0x000000000bfeff000-0x000000000bfeffff] ACPI NVS
[ 0.000000] BIOS-e820: [mem 0x000000000bf00000-0x000000000bfffffff] usable
[ 0.000000] BIOS-e820: [mem 0x000000000f000000-0x000000000f7fffff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000fec0000-0x000000000fec0ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000fee0000-0x000000000fee00ff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000ffe0000-0x000000000ffe0ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000010000000-0x0000000023ffffff] usable
[ 0.000000] NX (Execute Disable) protection: active
[ 0.000000] SMBIOS 2.4 present.
[ 0.000000] DMI: VMware, Inc. VMware Virtual Platform/440BX Desktop Reference Platform, BIOS 6.00 11/12/2020
[ 0.000000] vmware: hypercall mode: 0x0
[ 0.000000] Hypervisor detected: VMware
[ 0.000000] vmware: TSC freq read from hypervisor : 2688.011 MHz
[ 0.000000] vmware: Host bus clock speed read from hypervisor : 66000000 Hz
[ 0.000000] vmware: using clock offset of 68476430434 ns
```

# INTRODUCTION

**Logging is a crucial aspect of managing and troubleshooting computer systems, applications, and networks. Different levels and categories of logs help you track events, errors, and activities. Here's an overview of important commands and log details for various levels and categories of logs, primarily focusing on Unix/Linux systems:**

## **Logging Levels:**

**DEBUG:** Detailed information, typically used for debugging purposes.

**INFO:** General information about the system or application.

**WARNING:** Indicates potential issues or anomalies that should be monitored.

**ERROR:** Denotes errors that need attention but don't cause system failure.

**CRITICAL:** Severe errors that may lead to system failure.

# LOG CATEGORIES

## **System Logs:**

**Command:** `dmesg` - Display kernel ring buffer.

Log File: /var/log/syslog (Ubuntu) or /var/log/messages (Red Hat).

Description: Contains kernel and system-related messages.

## **Authentication Logs:**

**Command:** `auth.log` (Ubuntu) or `secure` (Red Hat).

Log File: /var/log/auth.log (Ubuntu) or /var/log/secure (Red Hat).

Description: Records authentication-related events like login attempts.

## **Application Logs:**

**Command:** Varies by application (e.g., Apache, Nginx, MySQL).

Log Files: Typically, in /var/log or specified in application configuration.

Description: Contains information about specific applications' activities.

## **System Performance Logs:**

**Command:** `vmstat`, `iostat`, `top`, `sar`.

Log Files: Typically, not stored as logs but generated on-demand.

Description: Provides system performance metrics like CPU, memory, and disk usage.

## **Security Logs:**

**Command:** `auditd` (Audit daemon).

**Log File:** /var/log/audit/audit.log.

**Description:** Records security-related events for auditing purposes.

### **Common Log Commands:**

#### **View Log Contents:**

cat, less, more, tail, head.

Example: tail -f /var/log/syslog (real-time log updates).

#### **Search for Specific Entries:**

grep, egrep.

Example: grep "ERROR" /var/log/application.log.

#### **Rotate and Archive Logs:**

logrotate.

Configuration files located in /etc/logrotate.conf and /etc/logrotate.d/.

#### **Monitor Logs in Real-Time:**

tail -f, journalctl -f.

#### **Clear Log Files (Be cautious):**

echo > /var/log/file.log (Truncates the file).

truncate -s 0 /var/log/file.log (Zeroes the file).

#### **Analyze Log Files:**

Tools like awk, sed, and log analysis software (e.g., ELK Stack).

#### **Log Format:**

Logs typically follow a common format, which may include the following information:

**Timestamp:** When the event occurred.

**Hostname:** The name of the system generating the log.

**Application/Process Name:** The source of the log entry.

**Log Level:** The severity level (e.g., INFO, ERROR).

**Message:** A description of the event or error.

Remember to consult documentation and specific log sources for more details and customization options. Proper log management is essential for system troubleshooting, security analysis, and performance optimization.

# LAB EXPERIMENT – 2

## EMAIL HEADER ANALYSIS

S.NO.	SENDER'S DOMAIN	EMAIL PROTOCOL	DATE/TIME SENT	TIME ZONE	GEOLOCATION
1.	.ru	ESMPTS	06 Sep 2023, Wed 17:06:10	UTC+03:00	UN
2.	.org	SMPTS	22 Mar 2023, Wed 07:51:50	CDT-05:00	UN
3.	.com	SMTP	09 Jul 2023, 05:07:01	GMT +5:30	US
4.	.com	LSMTP	09 Aug 2023, 09:47:58	GMT +5:30	US
5.	.com	ESMPTS	18 Apr 2021, 05:22:09	GMT +5:30	France

## BONUS

**There are three methods of EMAIL AUTHENTICATION:**

- SPF (Sender Policy Framework) : It allows email senders to stipulate the IP addresses allowed to send mail for a specific domain. SPF helps to harden your DNS servers and limit those who use your domain to send emails.
- DKIM (DomainKeys Identified Mail) : It offers an encryption key and digital signature that confirms an email is authentic and not faked or modified.
- DMARC (Domain-based Message Authentication, Reporting, and Conformance): It offers directions on what the receiver should do if a message from a domain fails the authorization test. The email receiver can reject or junk such an email. Unlike SPF and DKIM that can be employed as stand-alone methods, DMARC depends on SPF or DKIM to offer authentication.

## ONLY SPF IS PASS IN EMAIL AUTHENTICATION

```
N1xSVSwYfmdvYYIZG8XVfzrX0Y567QSsqaQJrtxFqvoHsBxjIMqhgoHGH1zKpOXcUj3
FmKpjkk93e4g4mlzBXOEZej/tue230rcDbewzdHgECn30gEG8I9tZvRVxvB16nI5yWQ+
alcQ==
ARC-Authentication-Results: i=1; mx.google.com;
  spf=pass (google.com: domain of nginx@cs.rin.ru designates 185.100.87.208 as permitted sender) smtp.mailfrom=nginx@cs.rin.ru
Return-Path: <nginx@cs.rin.ru>
Received: from cs.rin.ru (cs.rin.ru. [185.100.87.208])
  by mx.google.com with ESMTPS id a21-2020a656415000000b0041d10a62bfcsi5255218pgv.392.2022.08.31.08.01.03
    for <akshatnegiarchit272003@gmail.com>
    (version=TLS1_3 cipher=TLS_AES_256_GCM_SHA384 bits=256/256);
  Wed, 31 Aug 2022 08:01:03 -0700 (PDT)
Received-SPF: pass (google.com: domain of nginx@cs.rin.ru designates 185.100.87.208 as permitted sender) client-ip=185.100.87.208;
Authentication-Results: mx.google.com;
  spf=pass (google.com: domain of nginx@cs.rin.ru designates 185.100.87.208 as permitted sender) smtp.mailfrom=nginx@cs.rin.ru
Received: by cs.rin.ru (Postfix, from userid 992) id CA99230BF749; Wed, 31 Aug 2022 18:01:01 +0300 (EEST)
To: AkshatNegiI27 <akshatnegiarchit272003@gmail.com>
Subject: New password activation
X-PHP-Originating-Script: 1000:functions_messenger.php
From: <noreply@cs.rin.ru>
Reply-To: <noreply@cs.rin.ru>
Sender: <noreplyv@cs.rin.ru>
```

---

In this **SPF, DKIM & DMARC** all three are passed fully Authenticated.

```
CP4A==
ARC-Authentication-Results: i=1; mx.google.com;
  dkim=pass header.i=@youtube.com header.s=s20230601 header.b=KVWqgt+;
  spf=pass (google.com: domain of 3oh3_zagle8c01-4r2ybb1767or.p1znxb.o1b.p14214n6v10tzny.p1z@scoutcamp.bounces.google.com designates 209.85.220.69 as permitted
  sender) smtp.mailfrom=3oh3_zagle8c01-4r2ybb1767or.p1znxb.o1b.p14214n6v10tzny.p1z@scoutcamp.bounces.google.com;
dmarc=pass (p=REJECT sp=REJECT dis=NONE) header.from=youtube.com
Return-Path: <>3oh3_zagle8c01-4r2ybb1767or.p1znxb.o1b.p14214n6v10tzny.p1z@scoutcamp.bounces.google.com>
Received: from mail-sor-f69.google.com (mail-sor-f69.google.com. [209.85.220.69])
  by mx.google.com with SMTPS id bq13-20020a056638468d0b000437bf37355sor1179421jab.12.2023.09.11.13.50.40
    for <aky.boy.corporation@gmail.com>
    (Google Transport Security);
  Mon, 11 Sep 2023 13:50:40 -0700 (PDT)
Received-SPF: pass (google.com: domain of 3oh3_zagle8c01-4r2ybb1767or.p1znxb.o1b.p14214n6v10tzny.p1z@scoutcamp.bounces.google.com designates 209.85.220.69 as
  permitted sender) client-ip=209.85.220.69;
Authentication-Results: mx.google.com;
  dkim=pass header.i=@youtube.com header.s=s20230601 header.b=KVWqgt+;
  spf=pass (google.com: domain of 3oh3_zagle8c01-4r2ybb1767or.p1znxb.o1b.p14214n6v10tzny.p1z@scoutcamp.bounces.google.com designates 209.85.220.69 as permitted
  sender) smtp.mailfrom=3oh3_zagle8c01-4r2ybb1767or.p1znxb.o1b.p14214n6v10tzny.p1z@scoutcamp.bounces.google.com;
dmarc=pass (p=REJECT sp=REJECT dis=NONE) header.from=youtube.com
```

---

# EMAIL 1

## GMAIL ORIGINAL HEADER VIEW

### Original Message

Message ID	<7b8746bfc3a28f56647d1967e8af2a30@cs.rin.ru>
Created at:	Wed, Sep 6, 2023 at 7:36 PM (Delivered after 1 second)
From:	noreply@cs.rin.ru Using phpBB3
To:	AkshatNegi27 <akshatnegiarchit272003@gmail.com>
Subject:	New private message has arrived
SPF:	PASS with IP 2a06:1700:0:3a:43:5352:494e:1337 <a href="#">Learn more</a>

[Download Original](#)[Copy to clipboard](#)

```
Delivered-To: akshatnegiarchit272003@gmail.com
Received: by 2002:a05:7022:3882:b0:6b:573e:d389 with SMTP id pm2csp697648dlb;
          Wed, 6 Sep 2023 07:06:12 -0700 (PDT)
X-Google-Smtp-Source:
AGHT+IFz00+SpKDmHbY+yfd10qk/BHj+MS9J+m7St54L/ccavGeGCN0Z5g1XVQ5Jph8TSfpKSw3k
X-Received: by 2002:a1f:c487:0:b0:48f:9778:2b9f with SMTP id u129-
20020a1fc48700000b0048f97782b9fmr2548015vkf.11.1694009171936;
          Wed, 06 Sep 2023 07:06:11 -0700 (PDT)
ARC-Seal: i=1; a=rsa-sha256; t=1694009171; cv=none;
          d=google.com; s=arc-20160816;
          b=xHwRVWGzYAK76hEtq0S81ITD3Y74DFrNPp+a4EH8hRY1LbtbGuCdxmkn5Gz4wisEei
          pqfQUGDHsGt+oERNwu4vSs8I1Q99j923Vu83MhYtapHuyv66/XLpe3+j50DumROYX8Ug
          NYUWc4hx1IfesZ2z1EsEjb5zENkYBnHC6WgFiimTnI1PtQAbBX8awc4yW8Z8fRvW/63d
          SWbr/VmEpkXhtf5Uv8ea3f+iMA3j3zggsSPTBC8iATFBh38Jpo2MREN9VnMZDn5CEm
          xPfv11T6QRYEvgXrvG85A+E7ZHpwfzLIizleDFQqgIgl0gAL6GqpPOCj4xVUTurbT4w8
          drsQ==
ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-
20160816;
          h=content-transfer-encoding:date:message-id:mime-version:sender
          :reply-to:from:subject:to;
          bh=1ztDCJsLu+B5+9+wXe8LWXnwxDxX1C6bviBuwmYBDX8=:
```

# <https://toolbox.googleapps.com/>

<b>MessageId</b>	7b8746bfc3a28f56647d1967e8af2a30@cs.rin.ru
<b>Created at:</b>	9/6/2023, 7:36:10 PM GMT+5:30 ( Delivered after 2 sec )
<b>From:</b>	<noreply@cs.rin.ru> Using phpBB3
<b>To:</b>	AkshatNegi27 <akshatnegiarchit272003@gmail.com>
<b>Subject:</b>	New private message has arrived
<b>SPF:</b>	pass with IP 2a06:1700:0:3a:43:5352:494e:1337 <a href="#">Learn more</a>

#	Delay	From *	To *	Protocol	Time received
0	1 sec	cs.rin.ru	→ [Google] mx.google.com	<a href="#">ESMTPS</a>	9/6/2023, 7:36:11 PM GMT+5:30
1			→ [Google] 2002:a1f:c487:0:b0:48f:9778:2b9f	<a href="#">SMTP</a>	9/6/2023, 7:36:11 PM GMT+5:30
2	1 sec		→ [Google] 2002:a05:7022:3882:b0:6b:573e:d389	<a href="#">SMTP</a>	9/6/2023, 7:36:12 PM GMT+5:30

# <https://whois.domaintools.com/>



Home > Whois Lookup > 2a06:1700:0:3a:43:5352:494e:1337

## IP Information for 2a06:1700:0:3a:43:5352:494e:1337

### — Quick Stats

Whois Server	whois.ripe.net
IP Address	2a06:1700:0:3a:43:5352:494e:1337

```
% Abuse contact for '2a06:1700::/48' is 'abuse@flokinet.is'  
  
inet6num: 2a06:1700::/48  
netname: IS-FLOKINET-20150515  
descr: FlokINET ehf  
country: RO  
admin-c: KW2732-RIPE  
tech-c: KW2732-RIPE  
mnt-by: sc-flokinet-ltd-1-mnt  
status: ASSIGNED  
created: 2015-06-11T09:55:46Z  
last-modified: 2019-08-28T22:53:39Z  
source: RIPE  
  
person: Kolja Weber  
address: Bel Ombre Rd. P.5057  
address: Beau Vallon  
address: Mahe  
address: SEYCHELLES  
phone: +358942458241  
nic-hdl: KW2732-RIPE  
mnt-by: sc-flokinet-ltd-1-mnt  
created: 2015-05-13T15:26:09Z  
last-modified: 2022-01-12T14:50:24Z  
source: RIPE  
  
route6: 2a06:1700::/56  
descr: FlokINET ehf  
origin: AS200651  
mnt-by: FlokINET  
created: 2015-06-09T14:28:36Z  
last-modified: 2015-06-09T14:28:36Z  
source: RIPE
```

# <https://mxtoolbox.com/>

Header Name	Header Value
Delivered-To	akshatnegiarchit272003@gmail.com
X-Google-Smtp-Source	AGHT+Ifz0O+SpKDmHbY+yfdl0qk/BHj+MS9J+m7St54L/ccavGeGCNoZ5g1XVQ5Jph8TSfpKSw3k
X-Received	by 2002:a1f:c487:0:b0:48f:9778:2b9f with SMTP id u129-20020a1fc487000000b0048f97782b9fmr2548015vkf.11.16 94009171936; Wed, 06 Sep 2023 07:06:11 -0700 (PDT)
ARC-Seal	i=1; a=rsa-sha256; t=1694009171; cv=none; d=google.com; s=arc-20160816; b=xHwRVWGzYAK76hEtqoS81TD3Y74 DFrNPp+a4EH8hRY1LbtGuCdxmkn5Gz4wisEei pqfQUGDHsGt+oERNwu4vSs81Q99j923Vu83MhYtapHuyv66/XLpe 3+j50DumROYX8Ug NYUWc4hx1feSz2zIeSjb5zENkYBnHC6WgFimTnl1PtQAbBX8awc4yW8Z8fRvW/63d SW0br/V mEpkXhtf5Uv8ea3f/iMA3j3zggsPTTBC8iATFBh38Jpo2MREN9VnMZDn5CEm xPfv1T6QRYEvgXrvG85A+E7ZHpwfz LliZleDFQqlgl0gAL6GqpPOCj4xVUTurbT4w8 drsQ==
ARC-Message-Signature	i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816; h=content-transfer-encoding:date:message-id:mime-version:sender:reply-to:from:subject:t; bh=1ztDCJslu+B5+9+wXe8LWXnwxDx1C6byiBuwmYBDX8=; fh=nFaHerUKMpYiFEnLIE6QoD8P/kUBTqNCTgRG+x/lqs=; b=j9SGOTbReaNSwMpgkxkdP6isGRDRrruzkFxGenat8V1xys rUHmVKAKlG7jWoU7b1t gBfVFHA8UszoFkVh6VMvvDoBWiewwaBVJAQc8bYYe/qeo0QTQGDKLSG8rt3i6Cqy/SWMc z5w +/mHCoOfWSFR+WYEjoa7498GJnHjK7FzYLnZRempBLIAuRWajoQ56vHIGeYqfrOU pgLJ4ceVb7XqtLxicAk1JlwHYy Jlc1b/DXUnQRTIEBnJWJttUmZ3Nh3fkzPe1i4gu8 Xmoa3A38biAi3uVV7mVnYuuv2b0ErhKeQFLxCDi9xx/rmJevSPM3 vKtr7/X1KPqDJVXS 19qw==
ARC-Authentication-Results	i=1; mx.google.com; spf=pass (google.com: domain of php-fpm-csrin@cs.rin.ru designates 2a06:1700:0:3a:43:535 2:494e:1337 as permitted sender) smtp.mailfrom=php-fpm-csrin@cs.rin.ru
Return-Path	<php-fpm-csrin@cs.rin.ru>
Received-SPF	pass (google.com: domain of php-fpm-csrin@cs.rin.ru designates 2a06:1700:0:3a:43:5352:494e:1337 as permitted sender) client-ip=2a06:1700:0:3a:43:5352:494e:1337;
Authentication-Results	mx.google.com; spf=pass (google.com: domain of php-fpm-csrin@cs.rin.ru designates 2a06:1700:0:3a:43:5352:49 4e:1337 as permitted sender) smtp.mailfrom=php-fpm-csrin@cs.rin.ru
To	AkshatNegl27 <akshatnegiarchit272003@gmail.com>
Subject	New private message has arrived
X-PHP-Originating-Script	1000:functions_messenger.php
From	<noreply@cs.rin.ru>
Reply-To	<noreply@cs.rin.ru>
Sender	<noreply@cs.rin.ru>
MIME-Version	1.0
Message-ID	<7b8746bfc3a28f56647d1967e8af2a30@cs.rin.ru>
Date	Wed, 06 Sep 2023 17:06:10 +0300
Content-Type	text/plain; charset=UTF-8

Delivery Details						
Host	Delay	From	By	With	Time (UTC)	Blacklisted
1	*	userid	cs.rin.ru		9/6/2023 2:06:10 PM	
2	1 Second	cs.rin.ru 2a06:1700:0:3a:43:5352:494e:1337	mx.google.com	ESMTPS	9/6/2023 2:06:11 PM	✓
3	1 Second		2002:a05:7022:3882:b0:6b:573e:d389	SMTP	9/6/2023 2:06:12 PM	

## **EMAIL 2**

### **GMAIL ORIGINAL HEADER VIEW**

Original Message

Message ID	<227155729.71199605.1679489510861@abmktmail-trigger1d.marketo.org>
Created at:	Wed, Mar 22, 2023 at 6:21 PM (Delivered after 2 seconds)
From:	IEEE Membership <deliver@deliver.ieee.org>
To:	akshatnegiarchit272003@gmail.com
Subject:	Collaborate with Minds Like Yours
SPF:	PASS with IP 192.28.153.162 <a href="#">Learn more</a>
DKIM:	'PASS' with domain deliver.ieee.org <a href="#">Learn more</a>
DMARC:	'PASS' <a href="#">Learn more</a>

[Download Original](#)

[Copy to clipboard](#)

```
Delivered-To: akshatnegiarchit272003@gmail.com
Received: by 2002:a05:7022:22:b0:5f:ad2c:a982 with SMTP id 34csp3036212dll;
      Wed, 22 Mar 2023 05:51:52 -0700 (PDT)
X-Google-Smtp-Source: AK7set8fyavYV43t5niY377cwLMZtXzBiw4cfK1Rxvkh7jsW8idmj2dwDex2IfbfKxv4oStL/hayb
X-Received: by 2002:a05:6214:2aa6:b0:5b6:fbc5fb43mr5022800qvb.30.1679489512126;
      Wed, 22 Mar 2023 05:51:52 -0700 (PDT)
ARC-Seal: i=1; a=rsa-sha256; t=1679489512; cv=none;
d=google.com; s=arc-20160816;
b=onYx9u7CE2Z5oTHCC1GPydhohIPExzbMUm8qDn8vzAMSDU53cTQJuIrDk1qToe2jtu
UwAoIUG+K/G39a4RF8feJXe2QTciGcv+zXRan3NHa8AWm8SPcAhcO9Y1tUhZ15oLY7b
gysz3CKIUCj0V7n12IqeW4JRLzglpxG+L63MiYMGJ89plrqNHgm+8fw+iwl+rDB5tpkw
bAgH2RYHxuHXMlHwDkbu3T1rKlcceQHVPiUY6330M1k+7a7Byb4+71XI6wPFxXyDw/h6s
GFeik2iLaPM9f2xn6Ftmxi5jrGmzu7hrz3fuCfxgS21Bpf525cvstLh63Uksm7Pfh/Y4
UV1g==

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816;
h=list-unsubscribe:mime-version:subject:message-id:id:to:reply-to:from
:date:dkim-signature:dkim-signature;
bh=G01g4XKh9Cgt015mvWTxrzWeDiqhsz5kn4eG/IEHC4g=;
b=YEvfU7BzzGwSMJ0+VsunnExezLGBh+7MTEKSadJ01tiqRGRa60y3FmFAi/2Z8YbNUl
```

# <https://toolbox.googleapps.com/>

≡ Google Admin Toolbox Messageheader Help

<b>MessageId</b>	227155729.71199605.1679489510861@abmktmail-trigger1d.marketo.org
<b>Created at:</b>	3/22/2023, 6:21:50 PM GMT+5:30 ( Delivered after 2 sec )
<b>From:</b>	IEEE Membership <deliver@deliver.ieee.org>
<b>To:</b>	akshatnegiarchit272003@gmail.com
<b>Subject:</b>	Collaborate with Minds Like Yours
<b>SPF:</b>	pass with IP 192.28.153.162 <a href="#">Learn more</a>
<b>DKIM:</b>	pass with domain deliver.ieee.org pass with domain mktdns.com <a href="#">Learn more</a>
<b>DMARC:</b>	pass <a href="#">Learn more</a>

#	Delay	From *	To *	Protocol	Time received
0	2 sec	deliver1.ieee.org	→ [Google] mx.google.com	ESMTPS	3/22/2023, 6:21:52 PM GMT+5:30
1			→ [Google] 2002:a05:6214:2aa6:b0:5b6:fbc5:fb43	SMTP	3/22/2023, 6:21:52 PM GMT+5:30
2			→ [Google] 2002:a05:7022:222:b0:5f:ad2c:a982	SMTP	3/22/2023, 6:21:52 PM GMT+5:30

# <https://whois.domaintools.com/>

The screenshot shows the DomainTools website interface. At the top, there is a navigation bar with links for PROFILE, CONNECT, MONITOR, SUPPORT, and Whois Lookup. A search bar is also present. Below the navigation bar, the URL "Home > Whois Lookup > 192.28.153.162" is displayed. The main content area is titled "IP Information" for the IP address 192.28.153.162. Under this title, there is a section titled "Quick Stats" which includes the following information:

IP Location	United States San Mateo Marketo Inc.
ASN	AS15224 OMNITURE, US (registered Apr 05, 2000)
Resolve Host	deliver1.ieee.org
Whois Server	whois.arin.net
IP Address	192.28.153.162

Below this, there is a large block of detailed IP registration information:

```
NetRange: 192.28.144.0 - 192.28.191.255
CIDR: 192.28.144.0/20, 192.28.160.0/19
NetName: MARKETO-CORE2
NetHandle: NET-192-28-144-0-1
Parent: NET192 (NET-192-0-0-0-0)
NetType: Direct Allocation
OriginAS:
Organization: MARKETO, Inc. (MARKE-120)
RegDate: 2014-02-27
Updated: 2014-03-06
Ref: https://rdap.arin.net/registry/ip/192.28.144.0

OrgName: MARKETO, Inc.
OrgId: MARKE-120
Address: 901 MARINERS ISLAND BL
Address: #200
City: San Mateo
StateProv: CA
PostalCode: 94404
Country: US
RegDate: 2010-02-09
Updated: 2022-01-04
Ref: https://rdap.arin.net/registry/entity/MARKE-120

OrgTechHandle: ASNE-ARIN
OrgTechName: Adobe SaaS Network Engineering
OrgTechPhone: +1-385-345-0000
OrgTechEmail: global-delivops-team@adobe.com
OrgTechRef: https://rdap.arin.net/registry/entity/ASNE-ARIN

OrgAbuseHandle: ABUSE2888-ARIN
OrgAbuseName: Abuse
OrgAbusePhone: +1-408-536-2800
```

# <https://mxtoolbox.com/>

## Headers Found

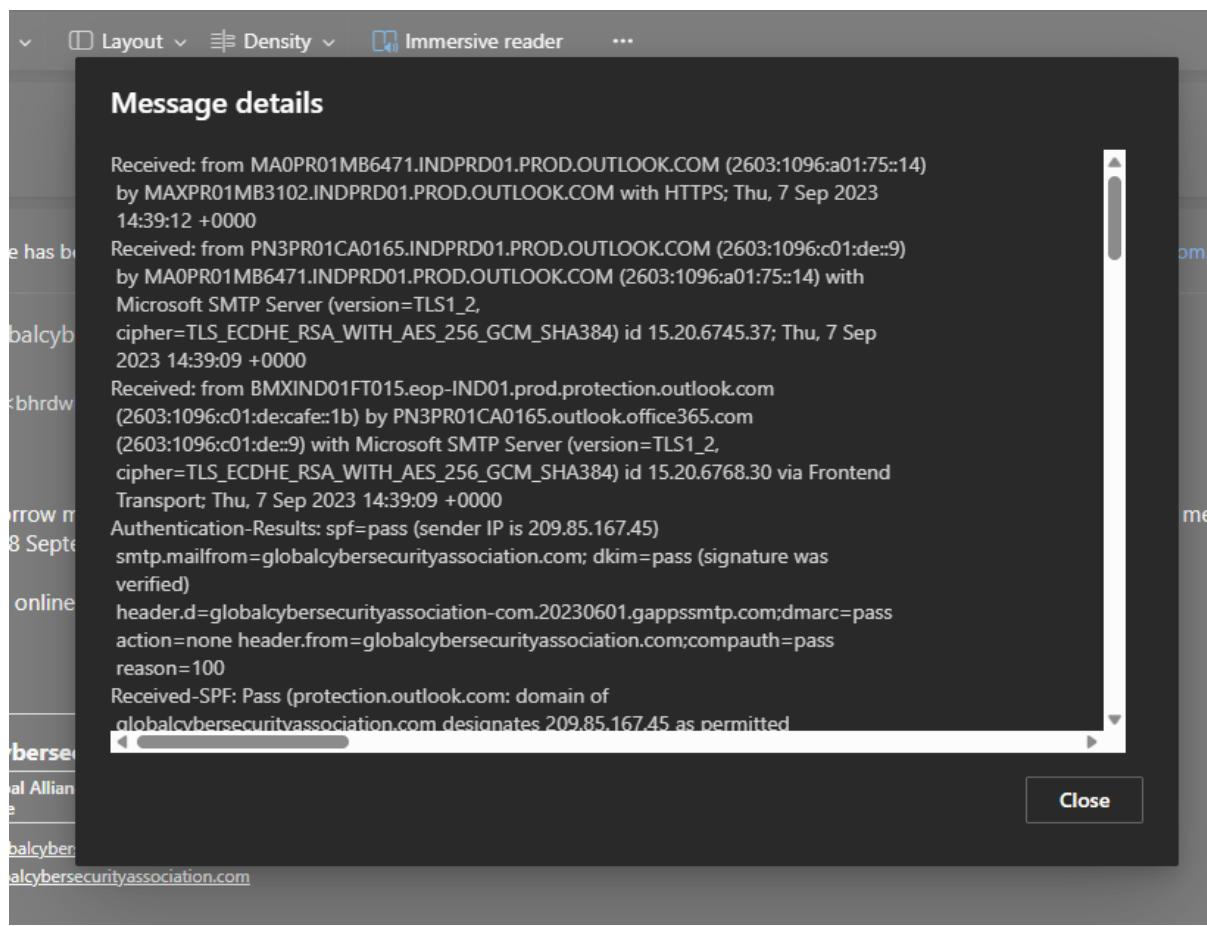
Header Name	Header Value
Delivered-To	akshatnegiarchit272003@gmail.com
X-Google-Smtp-Source	AK7set8fYaVY43t5niY377cwLMzTxzBiW4cfK1RxkVH7jsW8idmj2dwDex2lfbfkxv4oStL/hayb
X-Received	by 2002:a05:6214:2aa6:b0:5b6:fbc5:fb43 with SMTP id js6-20020a0562142aa600b005b6fb5fb43mr5022800qv.b.30.1679489512126; Wed, 22 Mar 2023 05:51:52 -0700 (PDT)
ARC-Seal	i=1; a=rsa-sha256; t=1679489512; cv=none; d=google.com; s=arc-20160816; b=onYx9u7CE2Z5oTHCCIGPydohpIPEzXWbMU8qDn8vzAMSDu53cTQJUlrDktqToe2jtuUwAoWUG+K/G39a4RFBfeJxe2QTciGcV-zxRan3Nhla8AWWOSpcAhcOs9YTUhZ15oLY7bgysz3CKIUcJOV7n1lqeW4JRLzglpxG+L63MiMGJ89plrqNHgm+bfw-iw1+rDB5tpkw bAgH2RYHxu-HXM-lwDkbu3T1rKlcceQHVPiUY6330M1k+7a7Byb4+71Xi6wPFxYD/w6s GfEiK2iLaPM9f2xn6Ftmxi5jrGmzu7hr3fuCfxgS2lBpf525cVsTLh6JUksm7PH/Y4 UY1g==
ARC-Message-Signature	i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816; h=list-unssubscribe;mime-version:subject:message-id:to:reply-to:from:date:dkim-signature:dkim-signature; bh=GO1g4XKh9CgT0l5mvWTxr2WeDiqhSzSkn4eG/IHC4g=; b=yEvfU7BzzGwSMJO+VSunnEXezLgbH+7MTEKSadJQ1tiqRGRa6Oy3FmFAi/2Z8YbNUI/d1/GNdnJIIFG6uzxQzptZWr8ZLpnly0jzirsvluPwf/D2imnBS45N6WMiUJcIE0okUMagzCXWyczaBN2A-V67tnNBnsfwrJHQ5w201cY8jpXoi9EK7cp106wuCujsLcsEsVabU5Ty4FuxHRWN4Ixv/m2AwSOB0TpDWthXJkqK6Ym+wwFeEu/NFwzWg8kkXaUGUxXlur44pRpgCeA2cdg5houERzWKCObmYjYCCvVmZouJBRGopy90Y98PVWlzx15oSFB5JBn wVOA==
ARC-Authentication-Results	i=1; mx.google.com; dkim=pass header.i=@deliver.ieee.org header.s=m1 header.b=MF6bNZv8; dkim=pass header.i=@mktdns.com header.s=m1 header.b=ZQ7hOyZ4; spf=pass (google.com: domain of 756-gph-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org designates 192.28.153.162 as permitted sender) smtp.mailfrom=756-GPH-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org; dmarc=pass (p=QUARANTINE sp=QUARANTINE dis=NONE) header.from=deliver.ieee.org
Return-Path	<756-GPH-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org>
Received-SPF	pass (google.com: domain of 756-gph-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org designates 192.28.153.162 as per permitted sender) client-ip=192.28.153.162;
Authentication-Results	mx.google.com; dkim=pass header.i=@deliver.ieee.org header.s=m1 header.b=MF6bNZv8; dkim=pass header.i=@mktdns.com header.s=m1 header.b=ZQ7hOyZ4; spf=pass (google.com: domain of 756-gph-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org designates 192.28.153.162 as permitted sender) smtp.mailfrom=756-GPH-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org; dmarc=pass (p=QUARANTINE sp=QUARANTINE dis=NONE) header.from=deliver.ieee.org
X-MSFBL	duTRVtLn4l3U2xs5AC1hVTM3SSmEfjhWMmu55vJUsE=leyJ1ljoNzU2LuQSCo 4OTk6MDoyNjE4MDo2MjU0NzowOjl4OTM2Ojk6MzA3Nzl6NTAzNDA5NDQtMSlsmc iOJiZyIhYmQtNzA1lwiYil6lmR2cCoxOTltMjgtMTUzLTE1MClslnliOjha3N oYXRuZWdpYXJjaGloMjcyMDAzQGdtYWlsLmNvbSJ9
DKIM-Signature	v=1; a=rsa-sha256; q=dns/txt; c=relaxed/relaxed; t=1679489510; s=m1; d=deliver.ieee.org; i=@deliver.ieee.org; h=Content-Type: MIME-Version:Subject:To:From:Date; bh=GO1g4XKh9CgT0l5mvWTxr2WeDiqhSzSkn4eG/IHC4g=; b=MF6bNZv86pRcwfUqMgibLRfsvNLXo06uRTR13UFvIghaW+G9aEU/k8iLaCF1DHln itw-HN3RHQmm750/Et6/0u2H1swGZAAKV5z0ftYRzoMNWSLuxy7ZCJmZ01TaOlyrq9dAcZ3wWIAHLz+5YEh+g7SR8BiajTofNFgTo5hWgpE=
Date	Wed, 22 Mar 2023 07:51:50 -0500 (CDT)
From	IEEE Membership <deliver@deliver.ieee.org>
Reply-To	no-reply@deliver.ieee.org

Date	Wed, 22 Mar 2023 07:51:50 -0500 (CDT)
From	IEEE Membership <deliver@deliver.ieee.org>
Reply-To	no-reply@deliver.ieee.org
To	akshatnegiarchit272003@gmail.com
Message-ID	<227155729.71199605.1679489510861@abmktrmail-trigger1d.marketo.org>
Subject	Collaborate with Minds Like Yours
MIME-Version	1.0
Content-Type	multipart/alternative; boundary="----_Part_71199604_607877396.1679489510860"
X-Binding	bg-abd-705
X-MarketID	756-GPH-899.0:26180:62547:0:28936:9:30772:50340944-1
X-Mailfrom	756-GPH-899.0.30772.0.0.28936.9.50340944-1@deliver.ieee.org
List-Unsubscribe	<mailto:KBREUT3XLJVFERDPMJMVO4CVLJIGGUUDOK5VTKVLIVLGY5KHGZXHMS2MGF2GCMCZKRZVCPI=.30772.28936.9@unsub-ab.mktoemail.com>
X-MktArchive	false
X-MSYS-API	{"options":{"open_tracking":false,"click_tracking":false}}
X-MktMailDKIM	true

Hop	Delay	From	By	With	Time (UTC)	Blacklist
1	*	deliver1.ieee.org 192.28.153.162	mx.google.com	ESMTPS	3/22/2023 12:51:52 PM	✖
2	0 seconds		2002:a05:7022:222:b0:5f:ad2c:a982	SMTP	3/22/2023 12:51:52 PM	

## **EMAIL 3**

### **OUTLOOK ORIGINAL HEADER VIEW**



# <https://toolbox.googleapps.com/>

≡ Google Admin Toolbox Messageheader Help

<b>MessageId</b>	CAGf6auXU7qmqcWh9mbhHt-w1bxSQZ9U4NioO2pJH=KNGG+0yw@mail.gmail.com
<b>Created at:</b>	9/7/2023, 5:07:01 AM GMT+5:30 ( Delivered after <b>15 hours</b> )
<b>From:</b>	GCA Team <team@globalcybersecurityassociation.com>
<b>To:</b>	akshat.106533@stu.upes.ac.in
<b>Subject:</b>	GCA Meeting
<b>SPF:</b>	<b>pass</b> with IP Unknown! <a href="#">Learn more</a>
<b>DKIM:</b>	<b>pass</b> with domain Unknown! <a href="#">Learn more</a>
<b>DMARC:</b>	<b>pass</b> <a href="#">Learn more</a>

#	Delay	From *	To *	Protocol	Time received
0	<b>15 hours</b>		→ 2002:a05:6512:b97:b0:500:d8d6:fbe4		9/7/2023, 8:09:
1	3 sec		→ [Google] mail-f1-f45.google.com	<b>SMTP</b>	9/7/2023, 8:09:
2		BMXIND01FT015.eop-IND01.prod.protection.outlook.com	→ PN3PR01CA0165.outlook.office365.com		9/7/2023, 8:09:
3	3 sec	MA0PR01MB6471.INDPRD01.PROD.OUTLOOK.COM	→ MAXPR01MB3102.INDPRD01.PROD.OUTLOOK.COM		9/7/2023, 8:09:

# <https://whois.domaintools.com/>

 **DomainTools** PROFILE ▾ CONNECT ▾ MONITOR ▾ SUPPORT Whois Lookup

---

## IP Information for 209.85.167.45

### Quick Stats

IP Location	 United States Mountain View Google
ASN	 AS15169 GOOGLE, US (registered Mar 30, 2000)
Resolve Host	mail-if1-f45.google.com
Whois Server	whois.arin.net
IP Address	209.85.167.45
Reverse IP	1 website uses this address.

NetRange: 209.85.128.0 - 209.85.255.255  
CIDR: 209.85.128.0/17  
NetName: GOOGLE  
NetHandle: NET-209-85-128-0-1  
Parent: NET209 (NET-209-0-0-0-0)  
NetType: Direct Allocation  
OriginAS:  
Organization: Google LLC (GOGL)  
RegDate: 2006-01-13  
Updated: 2012-02-24  
Ref: <https://rdap.arin.net/registry/ip/209.85.128.0>

OrgName: Google LLC  
OrgId: GOGL  
Address: 1600 Amphitheatre Parkway  
City: Mountain View  
StateProv: CA  
PostalCode: 94043  
Country: US  
RegDate: 2000-03-30  
Updated: 2019-10-31  
Comment: Please note that the recommended way to file abuse complaints are located in  
the following links.  
Comment: Comment: To report abuse and illegal activity: <https://www.google.com/contact/>  
Comment: Comment: For legal requests: <http://support.google.com/legal>  
Comment: Comment: Regards,  
Comment: Comment: The Google Team  
Ref: <https://rdap.arin.net/registry/entity/GOGL>

OrgTechHandle: ZG39-ARIN  
OrgTechName: Google LLC  
OrgTechPhone: +1-650-253-0000

# <https://mxtoolbox.com/>

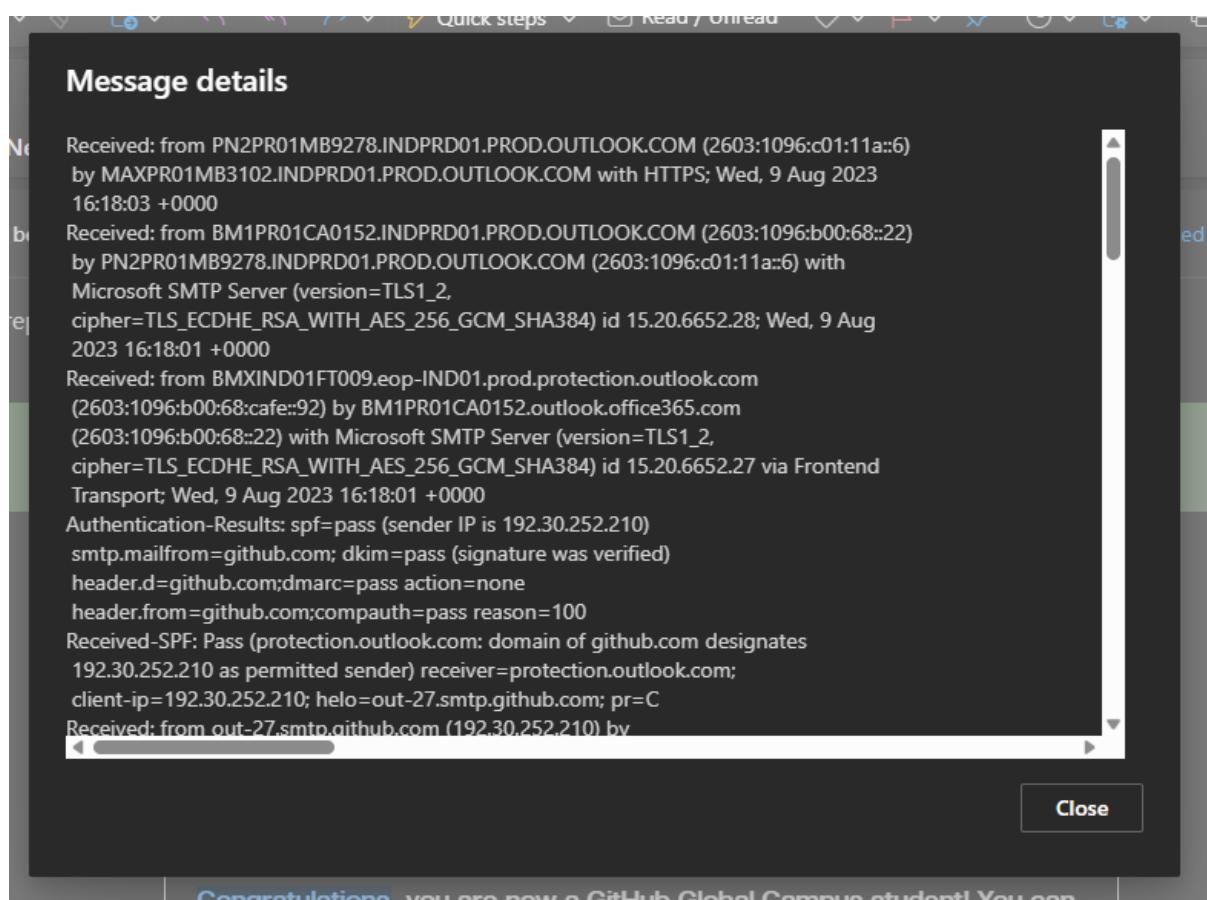
## Headers Found

Header Name	Header Value
Authentication-Results	spf=pass (sender IP is 209.85.167.45) smtp.mailfrom=globalcybersecurityassociation.com; dkim=pass (signature was verified) header.d=globalcybersecurityassociation-com.20230601.gappssmtplib.com; dmarc=pass action=none header.from=globalcybersecurityassociation.com; compauth=pass reason=100
Received-SPF	Pass (protection.outlook.com: domain of globalcybersecurityassociation.com designates 209.85.167.45 as permitted sender) receiver=protection.outlook.com; client-ip=209.85.167.45; helo=mail-lf1-f45.google.com; pr=C
DKIM-Signature	v=1; a=rsa-sha256; c=relaxed/relaxed; d=globalcybersecurityassociation-com.20230601.gappssmtplib.com; s=20230601; t=1694097546; x=1694702346; dmarc=stu.upes.ac.in; h=c:c:to:subject:message-id:date:from:mime-version:from:to:c c:subject:date:message-id:reply-to; bh=FuswQlhPM65tYJrgf49frYog6XtD5AoJk1JeXvupw=; b=bepMk8HVaedQmq vz/1BMdIlnbj3vXwzUCdWuFlJt3UvhWpsalsCa317Mo2WM8sHHMt Zhao+b+PBXJUxf7tiDqYJ1PTTrmxtQLe8HH5+eODQ NFQE0l3FWVFOm8ExYYNvOue/Zg vTfIdnZ3IE5tHqdBiQtp+iyOmzLFAj73gku4awUU+dhV47k53puv4UUULWQ2cS7!F16 WdXwGmkv-HQMnnUOlwCrmCaYHfMAMf78YKhfmrN9QUAwxAwxAihs4ztmliCb05W0ktDjUpj R4YhWff04ofhggyc8leJu5 M7rVa8qlk8pTNfmXsvL+Lp3lHeel7o32rnNm7a31hQh37Z MMug==
X-Google-DKIM-Signature	v=1; a=rsa-sha256; c=relaxed/relaxed; d=1e100.net; s=20221208; t=1694097546; x=1694702346; h=cc:to:subject:message-id:date:from:mime-version:x-gm-message-state :from:to:cc:subject:date:message-id:reply-to; bh=FuswQlhPM65tYJrgf49frYog6XtD5AoJk1JeXvupw=; b=kA5P0w2RDBLRXz9mAyFBLuaydL9JpOEubltA5DnKq70fFL8s/Mi6VmefW Wp4lrdaWowyEvoUU/8Zk1B0oo0m4VBL3WFA-wsXYymgN77FHogiR1ufELQTKAEKvWe9a3OGOTf ytUchpmulyS2h5njW REKAa9RFRIW48JSNs+qnMWLtkgrzzcWHleHdeIBXIMCdqlsyE YncLU/n38ICP9fHaOeXvaFoslVPjB+Q+t4nFI3m94tx7 spDOFNvxRSbcN1iYiyK5QNg /7S/kZmviDmSThVferMQ4ZjcWJdlaYST+7vvXeX1UPXkvztd55rAAPcMOLcyMePqvEu 7z +g==
X-Gm-Message-State	AOJu0Yw/jPYDqyal/TehMtTadQ3xer7XTAt6DHVvRxEzbEEAkYZ1pBq NtioP06zOyq/RSVtPIrlfDhOn6sTHA1rUCoY9uHD JAP+8r7XT28
X-Google-Smtp-Source	AGHT+IfA1rF3k4ADdMXtm+DkDKYhbYlsBsjax+qU/PwTrsDSEDEW5zfFP0KFjUN3yuvaFwOCe1jSigHMZanvdIwc=
X-Received	by 2002:a05:6512:b97:b0:500:d8d6:fbe4 with SMTP id b23-20020a0565120b9700b00500d8d6fbe4mr5906961fv.49. 1694097546120; Thu, 07 Sep 2023 07:39:06 -0700 (PDT)
MIME-Version	1.0
From	GCA Team <team@globalcybersecurityassociation.com>
Date	Wed, 6 Sep 2023 15:37:01 -0800
Message-ID	<CAGf6auXU7qmqcWh9mbhHtT-w1bxSQZ9U4NioO2pJH=KNGG+0yw@mail.gmail.com>
Subject	GCA Meeting
To	akshat.106533@stu.upes.ac.in
Cc	Akashdeep Bhardwaj <bhrdwh@yahoo.com>
Content-Type	multipart/alternative; boundary="00000000000073a8480604c5d22e"
Return-Path	team@globalcybersecurityassociation.com
X-MS-Exchange-Organization-	07 Sep 2023 14:39:09.4032 (UTC)

Host	Delay	From	By	With	Time (UTC)	Blocked
1	*		mail-lf1-f45.google.com	SMTP	9/7/2023 2:3 9:09 PM	
2	0 sec onwards	mail-lf1-f45.google.com 209.85.167.45	BMXIND01FT015.mail.protection.outlook.co m 10.13.170.65	Microsoft SMTP Server (version=TLS1.2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)	9/7/2023 2:3 9:09 PM	✖
3	0 sec onwards	BMXIND01FT015.eop-IND01.prod.protection.out ok.com 2603:1096:c01:de:cafe::1b	PN4PR01CA0165.outlook.office365.com 26 03:1096:c01:de::9	Microsoft SMTP Server (version=TLS1.2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)	9/7/2023 2:3 9:09 PM	✓
4	0 sec onwards	PN4PR01CA0165.INDPRD01.PROD.OUTLOOK.CO M 2603:1096:c01:de::9	MAOPR01MB6471.INDPRD01.PROD.OUTLO OK.COM 2603:1096:a01:75::14	Microsoft SMTP Server (version=TLS1.2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)	9/7/2023 2:3 9:09 PM	✓
5	3 sec onwards	MAOPR01MB6471.INDPRD01.PROD.OUTLOOK.C OM 2603:1096:a01:75::14	MAXPR01MB3102.INDPRD01.PROD.OUTLO OK.COM	HTTPS	9/7/2023 2:3 9:12 PM	✓

## EMAIL 4

### OUTLOOK ORIGINAL HEADER VIEW



# <https://toolbox.googleapps.com/>

Google Admin Toolbox Messageheader [Help](#)

MessageId	64d3bc36cca55_14947d881871@worker-574c5d57b5-4b4wd.mail
Created at:	8/9/2023, 9:47:58 PM GMT+5:30 ( Delivered after 5 sec )
From:	Github Education <edu-noreply@github.com>
To:	akshat.106533@stu.upes.ac.in
Subject:	[GitHub Education] ❤️ @Akshat-Negi27
SPF:	pass with IP Unknown! <a href="#">Learn more</a>
DKIM:	pass with domain Unknown! <a href="#">Learn more</a>
DMARC:	pass <a href="#">Learn more</a>

---

#	Delay	From *	To *	Protocol	Time received
0		hubernetes-node-31e3240.ash1-iad.github.net	→ smtp.github.com	<a href="#">ESMTP</a>	8/9/2023, 9:47:58 PM GMT+5:30
1	3 sec	BMXIND01FT009.eop-IND01.prod.protection.outlook.com	→ BM1PR01CA0152.outlook.office365.com		8/9/2023, 9:48:01 PM GMT+5:30
2	2 sec	PN2PR01MB9278.INDPRD01.PROD.OUTLOOK.COM	→ MAXPR01MB3102.INDPRD01.PROD.OUTLOOK.COM		8/9/2023, 9:48:03 PM GMT+5:30

# <https://whois.domaintools.com/>

 **DomainTools** PROFILE ▾ CONNECT ▾ MONITOR ▾ SUPPORT Whois Lookup

---

## IP Information for 192.30.252.210

### — Quick Stats

IP Location	 United States San Francisco Github Inc.
ASN	 AS36459 GITHUB, US (registered Nov 13, 2012)
Resolve Host	out-27.smtp.github.com
Whois Server	whois.arin.net
IP Address	192.30.252.210

---

```
NetRange:      192.30.252.0 - 192.30.255.255
CIDR:         192.30.252.0/22
NetName:       GITHUB-NET4-1
NetHandle:     NET-192-30-252-0-1
Parent:        NET192 (NET-192-0-0-0-0)
NetType:       Direct Allocation
OriginAS:     AS36459
Organization: GitHub, Inc. (GITHU)
RegDate:      2012-11-15
Updated:       2021-12-14
Ref:          https://rdap.arin.net/registry/ip/192.30.252.0

OrgName:       GitHub, Inc.
OrgId:         GITHU
Address:       88 Colin P Kelly Jr Street
City:          San Francisco
StateProv:    CA
PostalCode:   94107
Country:      US
RegDate:      2012-10-22
Updated:       2021-05-20
Comment:       https://github.com
Comment:       Please contact us directly for matters pertaining to abuse.
Comment:       Urgent matters including DDoS are handled 24x7.
Ref:          https://rdap.arin.net/registry/entity/GITHU

OrgTechHandle: GITHU-ARIN
OrgTechName:   GitHub Ops
OrgTechPhone:  +1-415-735-4488
OrgTechEmail:  hostmaster@github.com
OrgTechRef:    https://rdap.arin.net/registry/entity/GITHU-ARIN

OrgAbuseHandle: GITHU1-ARIN
OrgAbuseName:  GitHub Abuse
OrgAbusePhone: +1-415-857-5430
OrgAbuseEmail: noc@github.com
OrgAbuseRef:   https://rdap.arin.net/registry/entity/GITHU1-ARIN
```

---

# <https://mxtoolbox.com/>

## Headers Found

Header Name	Header Value
Authentication-Results	spf=pass (sender IP is 192.30.252.210) smtp.mailfrom=github.com; dkim=pass (signature was verified) header.d=github.com; dmarc=pass action=none header.from=github.com;compauth=pass reason=100
Received-SPF	Pass (protection.outlook.com: domain of github.com designates 192.30.252.210 as permitted sender) receiver=protection.outlook.com; client-ip=192.30.252.210; helo=out-27.smtp.github.com; pr=C
DKIM-Signature	v=1; a=rsa-sha256; c=relaxed/relaxed; d=github.com; s=pf2023; t=1691597878; bh=5dPkDnlth6nsy3Guoy0Fov2lo/PWmrj/JLwdrlUxZbY=; h=Date:From:To:Subject:From; b=QlOaxU47ifApvsQfxymadwLwn7Zvh/lnKjxjXfb18uyp4UhVY2pp/dGe0fhkr vvoXo8uKHi3j-DS7U1OJbsDAP3aF6gE/2HvnP6tghBkKlfseGoZdtH7mNi5L/vjk5 0WbvmrQaQuCMWQQ8gFNszIDFne/M/HUVfqQsbMk=
Date	Wed, 09 Aug 2023 16:17:58 +0000
From	GitHub Education <edu-noreply@github.com>
To	akshat.106533@stu.upes.ac.in
Message-ID	<64d3bc36cca55.14947d881871@worker-574c5d57b5-4b4wd.mail>
Subject	=?UTF-8?Q?[GitHub_Education]_F0=9F=92=96 @Akshat-Negl27?=
Mime-Version	1.0
Content-Type	multipart/alternative; boundary="----_mimepart_64d3bc366db20.14947d8817fb"; charset=UTF-8
Content-Transfer-Encoding	7bit
Return-Path	edu-noreply@github.com
X-MS-Exchange-Organization-ExpirationStartTime	09 Aug 2023 16:18:00.7809 (UTC)
X-MS-Exchange-Organization-ExpirationStartTimeReason	OriginalSubmit
X-MS-Exchange-Organization-ExpirationInterval	1:00:00:00.0000000
X-MS-Exchange-Organization-ExpirationIntervalReason	OriginalSubmit
X-MS-Exchange-Organization-Network-Message-Id	d42a63ac-3717-4cd2-960b-08db98f43393
X-EOPAttributedMessage	0
X-EOPTenantAttributedMessage	91cc1fb6-1275-4acf-b3ea-c213ec16257b:0

Ho	Delay	From	By	With		Time (UTC)	Blacklist
				Priority	Protocol		
1	*	github.com 10.56.104.61	smtp.github.com	ESMTP		8/9/2023 4:17:58 PM	✓
2	2 seconds	out-27.smtp.github.com 192.30.252.210	BMXIND01FT009.mail.protection.outlook.com 10.13.170.79	Microsoft SMTP Server (version=TLS1.2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)		8/9/2023 4:18:00 PM	✗
3	1 Second	BMXIND01FT009.eep-IND01.prod.protection.outlook.com 2603:1096:b00:68::92	BM1PR01CA0152.outlook.office365.com 2603:1096:b00:68::22	Microsoft SMTP Server (version=TLS1.2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)		8/9/2023 4:18:01 PM	✓
4	0 seconds	BM1PR01CA0152.INDPRD01.PROD.OUTLOOK.COM 2603:1096:b00:68::22	PN2PR01MB9278.INDPRD01.PROD.OUTLOOK.COM 2603:1096:c01:11a::6	Microsoft SMTP Server (version=TLS1.2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384)		8/9/2023 4:18:01 PM	✓
5	2 seconds	PN2PR01MB9278.INDPRD01.PROD.OUTLOOK.COM 2603:1096:c01:11a::6	MAXPR01MB3102.INDPRD01.PROD.OUTLOOK.COM	HTTPS		8/9/2023 4:18:03 PM	✓

# EMAIL 5

## OUTLOOK ORIGINAL HEADER VIEW

Original Message

Message ID	<607c69ec.1c69fb81.4b54.137eSMTPIN_ADDED_MISSING@mx.google.com>
Created at:	Sun, Apr 18, 2021 at 5:22 PM (Delivered after 19587 seconds)
From:	Hackintosh <noreply@community.hackintoshshop.com>
To:	akshatnegiarchit272003@gmail.com
Subject:	Download Updated Hackintosh Big Sur
SPF:	PASS with IP 163.172.105.177 <a href="#">Learn more</a>
DKIM:	'PASS' with domain community.hackintoshshop.com <a href="#">Learn more</a>
DMARC:	'PASS' <a href="#">Learn more</a>

[Download Original](#)

[Copy to clipboard](#)

```
Delivered-To: akshatnegiarchit272003@gmail.com
Received: by 2002:ab4:a583:0:0:0:0 with SMTP id dq3csp2204167ecb;
      Sun, 18 Apr 2021 10:18:36 -0700 (PDT)
X-Google-Smtp-Source: ABdhPJziuL/kLZINQyu76TqVSDfhKHgyvdNDKrzajQE4TGrIFmjSOCfeujW4jAnnJMfmQEKhC2rO
X-Received: by 2002:a5d:4412:: with SMTP id z18mr10492681wrq.28.1618766316769;
      Sun, 18 Apr 2021 10:18:36 -0700 (PDT)
ARC-Seal: i=1; a=rsa-sha256; t=1618766316; cv=none;
d=google.com; s=arc-20160816;
b=Owilk/NXPotz6ZlctTz57tyUx0yZjYijnlFcI6cmYo6JxVYzkVDma/3vYAqR9d9SVB
G7G2+fjRMlGHmjmrjf2pEGmLLjr4ABgJhSyzkjlyzCS1mHUhkv8fv/D2yrS4zX6+jT
HppG7cERA0MW11/fqOHvKnmhg+z3dfvE2PfaTB1pVOA Ig6BCGg+5JxoXDYkd9T94ETzf
92UXU/ZsgMXAOclzSEqF+S6ZOsIXitoUZA1qfF+nbfNOfqQR3ds4jXVccScWeCoFO
dc/Ah9UqRMx9oyWU35Q2ortb1XE3IQRqCul2gfyrA2uB20yBYWDY4g9SYakMBN1I6JYz
5nLA==

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816;
h=list-unsubscribe:content-transfer-encoding:precedence
:auto-submitted:date:subject:from:to:mime-version:dkim-signature
:message-id;
```

# <https://toolbox.googleapps.com/>

Google Admin Toolbox Messageheader [Help](#)

MessageId	607c69ec.1c69fb81.4b54.137eSMTPIN_ADDED_MISSING@mx.google.com
Created at:	4/18/2021, 5:22:09 PM GMT+5:30 ( Delivered after <b>5 hours</b> )
From:	Hackintosh <noreply@community.hackintoshshop.com>
To:	akshatnegiarchit272003@gmail.com
Subject:	Download Updated Hackintosh Big Sur
SPF:	<b>pass</b> with IP 163.172.105.177 <a href="#">Learn more</a>
DKIM:	<b>pass</b> with domain community.hackintoshshop.com <a href="#">Learn more</a>
DMARC:	<b>pass</b> <a href="#">Learn more</a>

---

#	Delay	From *	To *	Protocol	Time received
0		[:1]	→ server.kingmaker.lk		4/18/2021, 5:22:09 PM GMT+5:30
1	<b>5 hours</b>	server.kingmaker.lk.	→ [Google] mx.google.com	<a href="#">ESMTPS</a>	4/18/2021, 10:48:36 PM GMT+5:30
2			→ [Google] 2002:a5d:4412::	<a href="#">SMTP</a>	4/18/2021, 10:48:36 PM GMT+5:30
3			→ [Google] 2002:ab4:a583:0:0:0:0	<a href="#">SMTP</a>	4/18/2021, 10:48:36 PM GMT+5:30

# <https://whois.domaintools.com/>



## IP Information for 163.172.105.177

### — Quick Stats

IP Location	France Paris Online Sas
ASN	AS12876 AS12876 SCALEWAY S.A.S., FR (registered Dec 20, 1999)
Resolve Host	163-172-105-177.rev.poneytelecom.eu
Whois Server	whois.ripe.net
IP Address	163.172.105.177

```
% Abuse contact for '163.172.0.0 - 163.172.255.255' is 'abuse@online.net'  
  
inetnum:          163.172.0.0 - 163.172.255.255  
status:           LEGACY  
mnt-routes:       MNT-TISCALIFR  
org:              ORG-ONLI1-RIPE  
netname:          SCALEWAY-DEDIBOX  
descr:            Scaleway Dedibox - Paris, France  
remarks:          Abuse reports : https://abuse.online.net  
/  
country:          FR  
admin-c:          MM42047-RIPE  
tech-c:           MM42047-RIPE  
mnt-by:           ONLINE-NET-MNT  
created:          2015-09-11T09:44:28Z  
last-modified:    2022-05-04T17:24:57Z  
source:           RIPE  
  
organisation:     ORG-ONLI1-RIPE  
mnt-ref:          MNT-TISCALIFR-B2B  
org-name:         Scaleway  
org-type:         OTHER  
address:          8 rue de la ville l'eveque 75008 PARIS  
e-mail:           noc+ripe@as12876.net  
abuse-c:          AR32851-RIPE  
mnt-ref:          ONLINE-NET-MNT  
mnt-by:           ONLINE-NET-MNT
```

# <https://mxtoolbox.com/>

Header Name	Header Value
Delivered-To	akshatnegiarchit272003@gmail.com
X-Google-Smtp-Source	ABdhPJziuL/kLZINQyu76TqVSDfhKhgyvdNDKrzajQE4TGrIFmjSOCfeujW4jAnnJMfmQEKHc2r0
X-Received	by 2002:a5d:4412:: with SMTP id z18mr10492681wrq.28.1618766316769; Sun, 18 Apr 2021 10:18:36 -0700 (PDT)
ARC-Seal	i=1; a=rsa-sha256; t=1618766316; cv=none; d=google.com; s=arc-20160816; b=OwiIK/NXPoIZ6ZlcTZs7tyUx0yZijnlFHcl6cmYo6JxVYzkVDma/3vYAqR9d9SVB G7G2+fjRMIGHNjmrfj2PeGLmLjr4aBgJhMsykjIzyCSimIHUhkV8f/D2yrS4zX6+jT HppG7cERA0MWh/fqOHvKnmg+zJdFvEv2PfaTb1pYOAlg6BCCg+5JxoXDYkd9T94ETZf 9ZUXU/Zs9MXAOclzSEqf+S6ZOsIXtoUZUAiqfT+nbFNOtqCQR3ds4jXVccScWecSoFO dc/ci19uqRMx9oyWU35Q2orb1XE3lQRqCuL2gfyRAu2B2oBYWDY4g9SYakMBNll6.Yz 5nLA ==
ARC-Message-Signature	i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816; h=list-unsubscribe:content-transfer-encoding:precedence :auto-submitted:date:subject:from:to: mime-version:dkim-signature:message-id; bh=7vFMAEcubcYhDqLSfCxx7a0lddcYt7DJCSo54xTo8/Q; b=AlnohdYGBY5XlgMnaWINGSPxMwoeKM2Vo5dcG6bQurCEYA fp3S/rzFm+V86b94fq VpstEHg5cYrNWSP781lKHsgG/WqOckdr7aKPt5Touk65f3ohGpQNs8KAUIGQsdWC /b+4+ED2mo7Z78p0j3ZccYLq+q-km79org5VaP/IQJhcMF VwnkClakolO05MGMI/0l+3 pMsx+qYP22IOZMqhB46/E+ekq5Wym712jm7Pbgpa6kRUyaOiw0siVEYZVO0ThLxbLU UfkNAFD50iQoxB4P9mN+Slp5kquvxE1RkQkAmutf Z-WFdAhROR3vc8HTFR/8cgXEPko 8+gg==
ARC-Authentication-Results	i=1; mx.google.com; dkim=pass header.i=@community.hackintoshshop.com header.s=default header.b=GdEVNvQy; spf=pass (google.com: domain of noreply@community.hackintoshshop.com designates 163.172.105.177 as permitted sender) smtp.mailfrom=noreply@community.hackintoshshop.com; dmarc=pass (p=NONE sp=NONE dis=NONE) header.from=community.hackintoshshop.com
Return-Path	<noreply@community.hackintoshshop.com>
Received-SPF	pass (google.com: domain of noreply@community.hackintoshshop.com designates 163.172.105.177 as permitted sender) client-ip=163.172.105.177;
Authentication-Results	mx.google.com; dkim=pass header.i=@community.hackintoshshop.com header.s=default header.b=GdEVNvQy; spf=pass (google.com: domain of noreply@community.hackintoshshop.com designates 163.172.105.177 as permitted sender) smtp.mailfrom=noreply@community.hackintoshshop.com; dmarc=pass (p=NONE sp=NONE dis=NONE) header.from=community.hackintoshshop.com
Message-ID	<607c69ec.1c69fb81.4b54.137eSMTPIN_ADDED_MISSING@mx.google.com>
DKIM-Signature	v=1; a=rsa-sha256; q=dns/bt; c=relaxed/relaxed; d=community.hackintoshshop.com; s=default; h=List-Unsubscribe: Content-Transfer-Encoding:Content-Type:Date:Subject:From:To:MIME-Version: Sender:Reply-To:Message-ID:Cc:Content-ID:Content-Description:Resent-Date: Resent-From:Resent-Sender:Resent-To:Resent-Cc:Resent-Message-ID:In-Reply-To: References:List-Id:List-Help:List-Subscribe:List-Post:List-Owner:List-Archive ; bh=7vFMAEcubcYhDqLSfCxx7a0lddcYt7DJCSo54xTo8/Q; b=GdEVNvQyEea8B+vtGYx03cC d9p12/b1OM/fzu9JucnNVY803nWkOr7JKM4WM3ZXSVLeQzH7olpt6LsOkmjyneMkTxoViEPZRF oXbgtfAy+N5exvVZDbltjGiYZINCWd/ke7xY09jSDr5hds5AlpIt5EUV88uZj4Xq72y9fKAka lf+MMWeYkkJ4wRF4hNtcZCK5oILQu5hmBknhkbgulp009DOtceLvqAWu36aUD6pE3elzJ4NxIBy 34nrwSto84Rog2iNEskHXjdZjIP24dcIs1HQzM6exQkqOluEdFORDBse4sdy2YsmwAReOjnq sAdCSYXutQ==;
MIME-Version	1.0
To	akshatnegiarchit272003@gmail.com
From	Hackintosh <noreply@community.hackintoshshop.com>
Subject	Download Updated Hackintosh Big Sur
Date	Sun, 18 Apr 2021 11:52:09 +0000
Auto-Submitted	auto-generated
Precedence	bulk
Content-Type	multipart/alternative; boundary="---_mimempart_515f6008709aeaf5983053b2ebec1fef"; charset=UTF-8

Ho p	Delay	From	By	With	Time (UTC)	Blacklis t
1	*	::1	server.kingmaker.lk	esmtmp (Exim 4.94) (envelope-from <noreply@community.hackintoshshop.co m>)	4/18/2021 11:52:09 AM	✗
2	5 hour	server.kingmaker.lk 163.172.105.1 77	mx.google.com	ESMTPS	4/18/2021 5:18:36 PM	✓
3	0 seconds		2002:ab4:a583:0:0:0:0	SMTP	4/18/2021 5:18:36 PM	

## **LAB EXPERIMENT – 3**

# **Understanding Vulnerabilities in Local Operating Systems**

### **Windows Vulnerability CHECK**

```
STEP-1    Python --version
STEP-2    pip3 install chardet
STEP-3    git clone https://github.com/bitsadmin/wesng.git
STEP-4    systeminfo
STEP-5    systeminfo > sysinfo.txt
STEP-6    cd wesng-master
STEP-7    dir
STEP-8    python wes.py ..\sysinfo.txt
STEP-9    python wes.py ..\sysinfo.txt -s critical
STEP-10   python wes.py ..\sysinfo.txt -s critical > critical.txt
```

Type of OS	Vulnerability	Vulnerability Details	Mitigation Steps
Windows 11	CVE-2023-24054	Elevation of privilege vulnerability in Windows Update Assistant	Install the latest security updates from Microsoft.
Windows 11	CVE-2023-21999	Remote code execution vulnerability in Microsoft Exchange Server	Install the latest security updates from Microsoft.
Windows 11	CVE-2023-21996	Denial-of-service vulnerability in Microsoft Exchange Server	Install the latest security updates from Microsoft.
Windows 11	CVE-2023-21995	Remote code execution vulnerability in Microsoft Exchange Server	Install the latest security updates from Microsoft.
Windows 11	CVE-2023-21985	Remote code execution vulnerability in Windows Print Spooler	Disable the Print Spooler service if not in use.
Kali Linux	CVE-2023-24056	Elevation of privilege vulnerability in OpenSSH	Upgrade to the latest version of OpenSSH.
Kali Linux	CVE-2023-24055	Remote code execution vulnerability in Samba	Upgrade to the latest version of Samba.
Kali Linux	CVE-2023-24053	Denial-of-service vulnerability in Apache HTTP Server	Upgrade to the latest version of Apache HTTP Server.
Kali Linux	CVE-2023-24052	Remote code execution vulnerability in BIND	Upgrade to the latest version of BIND.
Kali Linux	CVE-2023-24051	Remote code execution vulnerability in MySQL	Upgrade to the latest version of MySQL.

```
C:\WINDOWS\system32\cmd > + <

Affected product: Windows 11 for x64-based Systems
Affected component: Microsoft
Severity: Important
Impact: Elevation of Privilege
Exploit: n/a

Date: 20211216
CVE: CVE-2021-43883
KB: KB5008215
Title: Windows Installer Elevation of Privilege Vulnerability
Affected product: Windows 11 for x64-based Systems
Affected component: Microsoft
Severity: Important
Impact: Elevation of Privilege
Exploit: n/a

Date: 20211216
CVE: CVE-2021-43893
KB: KB5008215
Title: Windows Encrypting File System (EFS) Elevation of Privilege Vulnerability
Affected product: Windows 11 for x64-based Systems
Affected component: Microsoft
Severity: Important
Impact: Elevation of Privilege
Exploit: n/a

[-] Missing patches: 1
- KB5008215: patches 30 vulnerabilities
[I] KB with the most recent release date
- ID: KB5008215
- Release date: 20211216
[+] Done. Displaying 30 of the 30 vulnerabilities found.

C:\Users\AKY BOY\wesng-master>
```

```
C:\Windows\System32>sfc /scannow

Beginning system scan. This process will take some time.

Beginning verification phase of system scan.
Verification 100% complete.

Windows Resource Protection did not find any integrity violations.
```

```
Date: 20211215
CVE: CVE-2021-43217
KB: KB5008215
Title: Windows Encrypting File System (EFS) Remote Code Execution Vulnerability
Affected product: Windows 11 for x64-based Systems
Affected component: Microsoft
Severity: Critical
Impact: Remote Code Execution
Exploit: n/a
```

```
Date: 20211214
CVE: CVE-2021-43233
KB: KB5008215
Title: Remote Desktop Client Remote Code Execution Vulnerability
Affected product: Windows 11 for x64-based Systems
Affected component: Microsoft
Severity: Critical
Impact: Remote Code Execution
Exploit: n/a
```

```
[+] Missing patches: 1
- KB5008215: patches 2 vulnerabilities
[I] KB with the most recent release date
- ID: KB5008215
- Release date: 20211215
[+] Done. Displaying 2 of the 30 vulnerabilities found.
```

```
C:\Users\AKY BOY\wesng-master>
```

# USING LYNIS

- Install Lynis using command: **sudo apt install lynis**
- Check audit using: **lynis audit system --quick**

```
(kali㉿aky-boy-kali) - [~]
$ lynis audit system --quick

[ Lynis 3.0.8 ]

#####
Lynis comes with ABSOLUTELY NO WARRANTY. This is free software, and you are
welcome to redistribute it under the terms of the GNU General Public License.
See the LICENSE file for details about using this software.

2007-2021, CISOfy - https://ciscofy.com/lynis/
Enterprise support available (compliance, plugins, interface and tools)
#####

[+] Initializing program
-----
# # # # #
#   NON-PRIVILEGED SCAN MODE
# # # # #

NOTES:
-----
* Some tests will be skipped (as they require root permissions)
* Some tests might fail silently or give different results

- Detecting OS... [ DONE ]
- Checking profiles... [ DONE ]

-----
Program version: 3.0.8
Operating system: Linux
Operating system name: Kali Linux
Operating system version: Rolling release
Kernel version: 6.5.0
Hardware platform: x86_64
Hostname: aky-boy-kali

Profiles: /etc/lynis/default.prf
Log file: /home/kali/lynis.log
Report file: /home/kali/lynis-report.dat
Report version: 1.0
Plugin directory: /etc/lynis/plugins

-----
Auditor: [Not Specified]
Language: en
Test category: all
Test group: all
```

- Warnings and Suggestions by Lynis after detecting OS.

```
-[ Lynis 3.0.8 Results ]-
Warnings (1):
-----
! Couldn't find 2 responsive nameservers [NETW-2705]
  https://cisofy.com/lynis/controls/NETW-2705/

Suggestions (51):
-----
* This release is more than 4 months old. Check the website or GitHub to see if there is an update available. [LYNIS]
  https://cisofy.com/lynis/controls/LYNIS

* Install libpam-tmpdir to set $TMP and $TMPDIR for PAM sessions [DEB-0280]
  https://cisofy.com/lynis/controls/DEB-0280/

* Install apt-listbugs to display a list of critical bugs prior to each APT installation. [DEB-0810]
  https://cisofy.com/lynis/controls/DEB-0810/

* Install apt-listchanges to display any significant changes prior to any upgrade via APT. [DEB-0811]
  https://cisofy.com/lynis/controls/DEB-0811/

* Install needrestart, alternatively to debian-goodies, so that you can run needrestart after upgrades to determine which daemons are using old versions of libraries and need restarting. [DEB-0831]
  https://cisofy.com/lynis/controls/DEB-0831/

* Install fail2ban to automatically ban hosts that commit multiple authentication errors. [DEB-0880]
  https://cisofy.com/lynis/controls/DEB-0880/

* Set a password on GRUB boot loader to prevent altering boot configuration (e.g. boot in single user mode without password) [BOOT-5122]
  https://cisofy.com/lynis/controls/BOOT-5122/

* Consider hardening system services [BOOT-5264]
  - Details : Run '/usr/bin/systemd-analyze security SERVICE' for each service
  https://cisofy.com/lynis/controls/BOOT-5264/

* If not required, consider explicit disabling of core dump in /etc/security/limits.conf file [KRNL-580]
  https://cisofy.com/lynis/controls/KRNL-5820/

* Run pwck manually and correct any errors in the password file [AUTH-9228]
  https://cisofy.com/lynis/controls/AUTH-9228/
```

- To view all commands: **lynis show** and to view audit commands: **lynis show commands**

```
(kali㉿aky-boy-kali) - [~]
$ lynis show

Provide an additional argument

lynis show categories
lynis show changelog
lynis show commands
lynis show dbdir
lynis show details
lynis show environment
lynis show eol
lynis show groups
lynis show help
lynis show hostids
lynis show includedir
lynis show language
lynis show license
lynis show logfile
lynis show man
lynis show options
lynis show os
lynis show pidfile
lynis show plugindir
lynis show profiles
lynis show release
lynis show releasedate
lynis show report
lynis show settings
lynis show tests
lynis show version
lynis show workdir
```

```
(kali㉿aky-boy-kali) - [~]
$ lynis show commands

Commands:
lynis audit
lynis configure
lynis generate
lynis show
lynis update
lynis upload-only
```

- **Lynis show tests ACCT – 9626** to view particular test.

```
(kali㉿aky-boy-kali) - [~]
$ lynis show tests ACCT-9626
ACCT-9626
=====
Type: test

Description:
Check for sysstat accounting data

Category: security, Group: accounting

Test Execution:
Operating System: Yes (Linux only)
Profile: Yes (not configured)
```

- To view all test together: **Lynis show tests**

```
(kali㉿aky-boy-kali) - [~]
$ lynis show tests
# Test      OS          Description
# =====
ACCT-2754 FreeBSD    Check for available FreeBSD accounting information (security)
ACCT-2760 OpenBSD    Check for available OpenBSD accounting information (security)
ACCT-9622 Linux      Check for available Linux accounting information (security)
ACCT-9626 Linux      Check for sysstat accounting data (security)
ACCT-9628 Linux      Check for auditd (security)
ACCT-9630 Linux      Check for auditd rules (security)
ACCT-9632 Linux      Check for auditd configuration file (security)
ACCT-9634 Linux      Check for auditd log file (security)
ACCT-9636 Linux      Check for Snoopy wrapper and logger (security)
ACCT-9650 Solaris   Check Solaris audit daemon (security)
ACCT-9652 Solaris   Check auditd SMF status (security)
ACCT-9654 Solaris   Check BSM auditing in /etc/system (security)
ACCT-9656 Solaris   Check BSM auditing in module list (security)
ACCT-9660 Solaris   Check location of audit events (security)
ACCT-9662 Solaris   Check Solaris auditing stats (security)
ACCT-9670 Linux     Check for cmd tooling (security)
ACCT-9672 Linux     Check cmd configuration file (security)
AUTH-9204           Check users with an UID of zero (security)
AUTH-9208           Check non-unique accounts in passwd file (security)
AUTH-9212           Test group file (security)
AUTH-9216           Check group and shadow group files (security)
AUTH-9218 FreeBSD   Check harmful login shells (security)
AUTH-9222           Check for non unique groups (security)
AUTH-9226           Check non unique group names (security)
AUTH-9228           Check password file consistency with pwck (security)
AUTH-9229           Check password hashing methods (security)
AUTH-9230           Check group password hashing rounds (security)
AUTH-9234           Query user accounts (security)
AUTH-9240           Query NIS+ authentication support (security)
AUTH-9242           Query NIS authentication support (security)
AUTH-9250           Checking sudoers file (security)
AUTH-9252           Check sudoers file (security)
AUTH-9254 Solaris   Solaris passwordless accounts (security)
AUTH-9262           Checking presence password strength testing tools (PAM) (security)
AUTH-9264           Checking presence pam.conf (security)
AUTH-9266           Checking presence pam.d files (security)
AUTH-9268           Checking presence pam.d files (security)
AUTH-9278           Checking LDAP pam status (security)
```

- Some individual details of particular tests.

```
(kali㉿aky-boy-kali) - [~]
$ lynis show details CORE-1000
2023-10-03 04:16:05 Performing test ID CORE-1000 (Check all system binaries)
2023-10-03 04:16:05 Status: Starting binary scan...
2023-10-03 04:16:05 Test: Checking binaries in directory /home/kali/.dotnet/tools
2023-10-03 04:16:05 Result: Directory /home/kali/.dotnet/tools does NOT exist
2023-10-03 04:16:05 Test: Checking binaries in directory /usr/games
2023-10-03 04:16:05 Directory /usr/games exists. Starting directory scanning...
2023-10-03 04:16:05 Test: Checking binaries in directory /usr/local/games
2023-10-03 04:16:05 Directory /usr/local/games exists. Starting directory scanning...
2023-10-03 04:16:05 Test: Checking binaries in directory /bin
2023-10-03 04:16:05 Result: directory exists, but is actually a symlink
2023-10-03 04:16:05 Action: checking symlink for file /bin
2023-10-03 04:16:05 Setting temporary readlinkbinary variable
2023-10-03 04:16:05 Note: Using real readlink binary to determine symlink on /bin
2023-10-03 04:16:05 Result: readlink shows /usr/bin as output
2023-10-03 04:16:05 Result: symlink found, pointing to directory /usr/bin
2023-10-03 04:16:05 Result: found the path behind this symlink (/bin --> /usr/bin)
2023-10-03 04:16:05 Directory /usr/bin exists. Starting directory scanning...
2023-10-03 04:16:05 Found known binary: apt (package manager) - /usr/bin/apt
2023-10-03 04:16:05 Found known binary: as (compiler) - /usr/bin/as
2023-10-03 04:16:05 Found known binary: awk (string tool) - /usr/bin/awk
```

```
(kali㉿aky-boy-kali) - [~]
$ lynis show details BOOT-5184
2023-10-03 04:18:15 Performing test ID BOOT-5184 (Check permissions for boot files/scripts)
2023-10-03 04:18:15 Result: checking /etc/init.d scripts for writable bit
2023-10-03 04:18:15 Test: checking if directory /etc/init.d exists
2023-10-03 04:18:15 Result: directory /etc/init.d found
2023-10-03 04:18:15 Test: checking for available files in directory
2023-10-03 04:18:15 Result: found files in directory, checking permissions now
2023-10-03 04:18:15 Test: checking permissions of file /etc/init.d/apache-htcacheclean
2023-10-03 04:18:15 Result: good, file /etc/init.d/apache-htcacheclean not world writable
2023-10-03 04:18:15 Test: checking permissions of file /etc/init.d/apache2
2023-10-03 04:18:15 Result: good, file /etc/init.d/apache2 not world writable
2023-10-03 04:18:15 Test: checking permissions of file /etc/init.d/apparmor
2023-10-03 04:18:15 Result: good, file /etc/init.d/apparmor not world writable
2023-10-03 04:18:15 Test: checking permissions of file /etc/init.d/atftpd
```

## USING TRIPWIRE

- Install tripwire using: **sudo apt install tripwire** and do the configuration using same password.
- **Sudo tripwire --init**

```
(kali㉿aky-boy-kali) - [~/Desktop]
$ sudo tripwire --init
[sudo] password for kali:
Please enter your local passphrase:
Parsing policy file: /etc/tripwire/tw.pol
Generating the database...
*** Processing Unix File System ***
### Warning: File system error.
### Filename: /etc/rc.boot
### No such file or directory
### Continuing...
### Warning: File system error.
### Filename: /root/mail
### No such file or directory
### Continuing...
### Warning: File system error.
### Filename: /root/Mail
### No such file or directory
### Continuing...
### Warning: File system error.
### Filename: /root/.xsession-errors
### No such file or directory
### Continuing...
### Warning: File system error.
### Filename: /root/.xauth
### No such file or directory
### Continuing...
### Warning: File system error.
```

- Table below is the Integrity report generated by Tripwire.
- **Sudo apt tripwire –check > tripwire.txt**

Open Source Tripwire(R) 2.4.3.7 Integrity Check Report				
Report generated by:	root			
Report created on:	Tue 03 Oct 2023 05:39:24 AM EDT			
Database last updated on:	Never			
<hr/>				
Report Summary:				
<hr/>				
Host name:	aky-boy-kali			
Host IP address:	192.168.230.128			
Host ID:	None			
Policy file used:	/etc/tripwire/tw.pol			
Configuration file used:	/etc/tripwire/tw.cfg			
Database file used:	/var/lib/tripwire/aky-boy-kali.twd			
Command line used:	tripwire --check			
<hr/>				
Rule Summary:				
<hr/>				
<hr/>				
Section: Unix File System				
<hr/>				
Rule Name	Severity Level	Added	Removed	Modified
*	-----	-----	-----	-----
* Other binaries	66	9	6	1384
Tripwire Binaries	100	0	0	0
* Other libraries	66	6604	410	26864
Root file-system executables	100	0	0	0
Tripwire Data Files	100	0	0	0
* System boot changes	100	28	0	14
Root file-system libraries (/lib)	100	0	0	0
* Critical system boot files	100	4961	0	12
* Other configuration files (/etc)	66	25	16	386
* Boot Scripts	100	0	0	2
* Security Control	66	0	0	2
* Root config files	100	1	0	2
* Devices & Kernel information	100	154655	125741	31361
Invariant Directories	66	0	0	0

## **BONUS: Crontab Scheduling**

- To view the number of Crontabs: **crontab -l**



```
kali@aky-boy-kali: ~
GNU nano 7.2
/tmp/crontab.96df8Q/crontab *
30 7 * * * /usr/sbin/tripwire --check | tee ~/Desktop/tripwire_check.txt
```

- To install or schedule new crontab using the nano editor: **crontab -e**

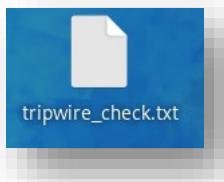


```
(kali㉿aky-boy-kali) - [~]
$ crontab -e
crontab: installing new crontab

(kali㉿aky-boy-kali) - [~]
$ crontab -l
30 7 * * * /usr/sbin/tripwire --check | tee ~/Desktop/tripwire_check.txt

(kali㉿aky-boy-kali) - [~]
$
```

- File auto-generated at 7:30 according to 24hr clock with the Integrity Report using Tripwire.



# **LAB EXPERIMENT – 4**

## **Vulnerabilities in Live IOT devices on Internet**

<b>IP Address</b>	<b>Device</b>	<b>Open Ports</b>	<b>Geolocation</b>	<b>Mode/Make</b>	<b>Product Version</b>	<b>Admin Password</b>
123.208.5.80	Webcam	554, <b>8085</b> ,2123,9000	Sydney, Australia	Telstra Internet	v0.1.2	Not found
182.138.139.41	Webcam	<b>8081</b>	China, Chengdu	CHINANET Sichuan province network	V0.1.1	Not Found
81.174.128.10	webserver	<b>4444</b>	United Kingdom, Pontypridd	British Telecommunications PLC	v0.1	Admin page found
124.246.151.142	MJPG-Streamer	<b>9000</b>	Japan, Chino	LCV Corporation	v0.2	Not Found
90.187.8.29	MJPG-Streamer	443,22,80,1900,5353, <b>8080</b> ,8081	Germany, Hamburg	Vodafone Deutschland GmbH	v 0.2	Admin Page

# DEVICE 1

**MJPG-Streamer**  
**Demo Pages**  
a resource-friendly  
streaming application

[Home](#)  
[Static](#)

**Stream**

[Java](#)  
[Javascript](#)  
[VideoLAN](#)  
[Control](#)

**Version info:**  
v0.1 (Okt 22, 2007)

# Stream

## Display the stream

### Hints

This example shows a stream. It works with a few browsers like Firefox for example. To see a simple example click [here](#). You may have to reload this page by pressing F5 one or more times.

### Source snippet

```

```



© The [MJPG-streamer team](#) | Design by [Andreas Viklund](#)

← → C Not secure | 123.208.5.80:8085

YouTube Gmail Movies Sft & Games PS Blackboard Learn Amazon.in » All Bookmarks

## MJPEG-Streamer Demo Pages

a resource-friendly streaming application

Home  
Static  
Stream  
Java  
Javascript  
VideoLAN  
Control

**Version info:**  
v0.1 (Okt 22, 2007)

# About

## Details about the M-JPEG streamer

### Congratulations

You successfully managed to install this streaming webserver. If you can see this page, you can also access the stream of JPGs, which can originate from your webcam for example. This installation consists of these example pages and you may customize the look and content.



The reason for developing this software was the need of a simple and resource friendly streaming application for Linux-UVC compatible webcams. The predecessor *uvc-streamer* is working well, but I wanted to implement a few more ideas. For instance, plugins can be used to process the images. One input plugin copies images to a global variable, multiple output plugins can access those images. For example this webpage is served by the *output\_http.so* plugin.

The image displayed here was grabbed by the input plugin. The HTTP request contains the GET parameters *action=snapshot*. This requests one single picture from the image-input. To display another example, just click on the picture.

### About the examples

To view the stream with any browser you may try the *javascript* or *java* subpages. Firefox is able to display the M-JPEG-stream directly.

**SHODAN** Search... 🔍

**123.208.5.80** Regular View Raw Data MapTiles Satellite © MapTiler © OpenStreetMap contribu

// LAST SEEN: 2023-09-26

### General Information

Hostnames	cpe-123-208-5-80.dyn. <b>belong.com.au</b>
Domains	<b>BELONG.COM.AU</b>
Country	<b>Australia</b>
City	<b>Sydney</b>
Organization	<b>Telstra Internet</b>
ISP	<b>Belong (Telstra Corporation)</b>
ASN	<b>AS135887</b>

### Open Ports

554 8085 8123 9000

// 554 / TCP 2049175649 | 2023-09-26T23:06:33.10481

```
RTSP/1.0 200 OK
CSeq: 1
Server: Rtsp Server
Public: OPTIONS, DESCRIBE, SETUP, PLAY, RECORD, TEARDOWN, ANNOUNCE, SET_PARAMETER, GET_PARAMETER
Date: Wed, 27 Sep 2023 09:06:32 GMT
```

// 8085 / TCP -2096710376 | 2023-09-26T23:42:28.47981

```
HTTP/1.0 200 OK
Content-type: text/html
Connection: close
Server: MJPG-Streamer/0.2
Cache-Control: no-store, no-cache, must-revalidate, pre-check=0, post-check=0, max-age=0
```

**123.208.5.80** ↗

2023-09-26T23:42:28.479817

cpe-123-208-5 HTTP/1.0 200 OK  
-80.dyn.belon Content-type: text/html  
g.com.au Connection: close  
**Telstra Internet** Server: MJPG-Streamer/0.2  
Australia, Sydney Cache-Control: no-store, no-cache, must-revalidate, pre-check=0, post-check  
Pragma: no-cache  
Expires: Mon, 3 Jan 2000 12:34:56 GMT

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"  
"http://www...



```
C:\Windows\System32>tracert 123.208.5.80
```

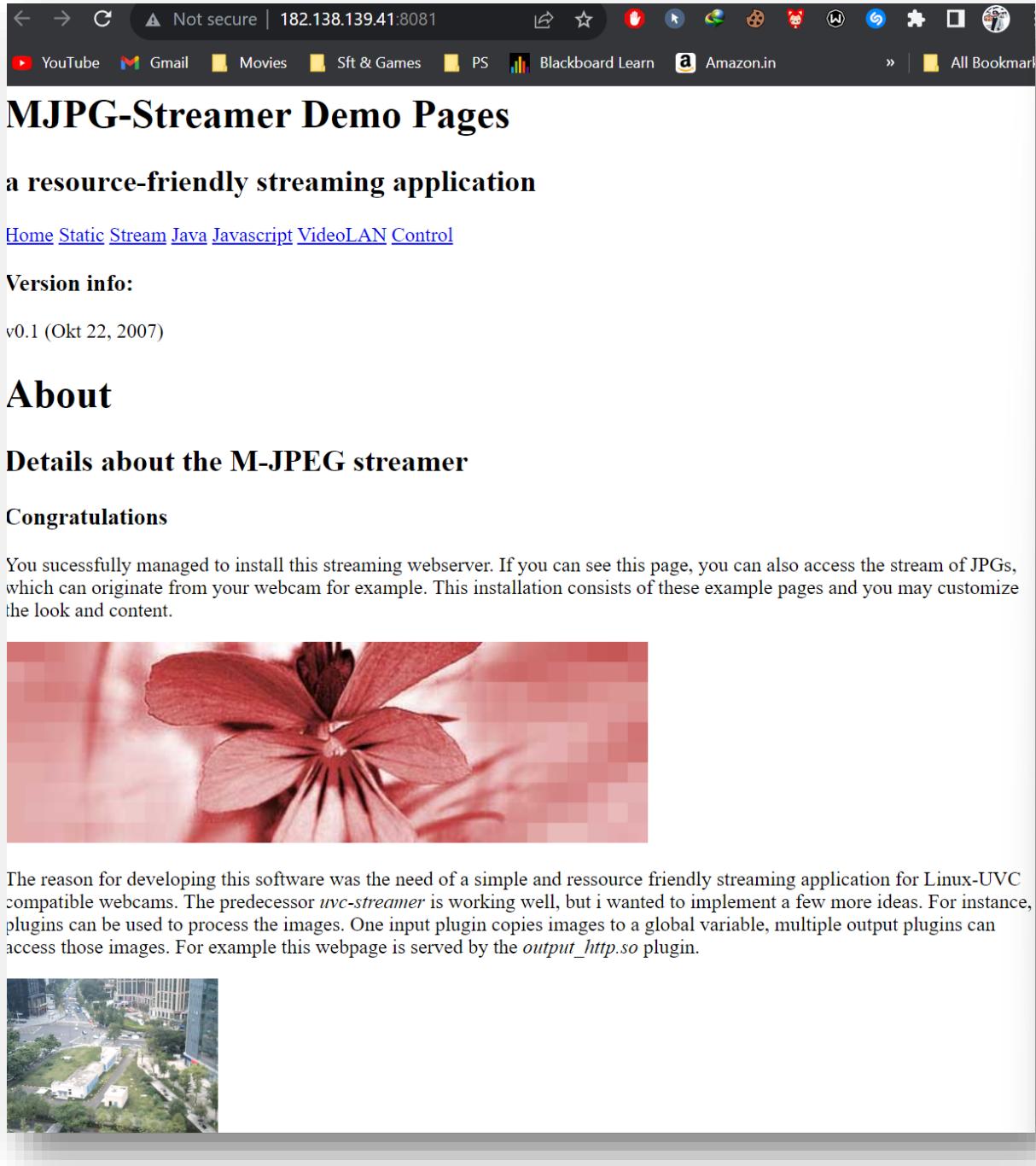
```
Tracing route to 123.208.5.80 over a maximum of 30 hops
```

1	*	*	*	Request timed out.
2	*	*	*	Request timed out.
3	*	*	*	Request timed out.
4	*	*	*	Request timed out.
5	*	*	*	Request timed out.
6	*	143 ms	203 ms	182.79.135.22
7	892 ms	154 ms	321 ms	unknown.telstraglobal.net [202.127.73.101]
8	143 ms	139 ms	127 ms	i-91.sgcn-core01.telstraglobal.net [202.84.224.198]
9	1714 ms	157 ms	200 ms	i-91.sgcn-core01.telstraglobal.net [202.84.224.198]
10	762 ms	221 ms	205 ms	i-25451.pthw-core02.telstraglobal.net [202.84.141.238]
11	187 ms	217 ms	187 ms	bundle-ether5.wel-core10.perth.telstra.net [203.50.9.5]
12	295 ms	208 ms	240 ms	bundle-ether3.fli-core10.adelaide.telstra.net [203.50.6.232]
13	379 ms	242 ms	207 ms	bundle-ether5.win-core30.melbourne.telstra.net [203.50.6.229]
14	246 ms	561 ms	281 ms	bundle-ether3.stl-core30.sydney.telstra.net [203.50.13.130]
15	339 ms	259 ms	290 ms	bundle-ether1.chw-edge903.sydney.telstra.net [203.50.11.177]
16	270 ms	236 ms	223 ms	tel4013070.lnk.telstra.net [61.8.24.198]
17	*	*	*	Request timed out.
18	269 ms	256 ms	260 ms	58.162.27.80
19	*	*	*	Request timed out.
20	*	*	*	Request timed out.
21	*	*	*	Request timed out.
22	*	*	*	Request timed out.
23	*	*	*	Request timed out.
24	*	*	*	Request timed out.
25	*	*	*	Request timed out.
26	*	*	*	Request timed out.
27	*	*	*	Request timed out.
28	*	*	*	Request timed out.
29	*	*	*	Request timed out.
30	*	*	*	Request timed out.

```
Trace complete.
```

```
C:\Windows\System32>
```

# DEVICE 2



The screenshot shows a web browser window with the following details:

- Address bar: Not secure | 182.138.139.41:8081
- Toolbar icons: YouTube, Gmail, Movies, Sft & Games, PS, Blackboard Learn, Amazon.in, etc.
- Page title: MJPG-Streamer Demo Pages
- Page content:
  - a resource-friendly streaming application**
  - [Home](#) [Static Stream](#) [Java](#) [Javascript](#) [VideoLAN](#) [Control](#)
  - Version info:**  
v0.1 (Okt 22, 2007)
  - ## About

### Details about the M-JPEG streamer

#### Congratulations

You sucessfully managed to install this streaming webserver. If you can see this page, you can also access the stream of JPGs, which can originate from your webcam for example. This installation consists of these example pages and you may customize the look and content.


  - 

**182.138.139.41**

Regular View | Raw Data | Satellite | © MapTiler © OpenStreetMap contributor

// LAST SEEN: 2023-09-26

### General Information

Country	<b>China</b>
City	<b>Chengdu</b>
Organization	<b>CHINANET Sichuan province network</b>
ISP	<b>CHINANET-BACKBONE</b>
ASN	<b>AS4134</b>

### Open Ports

**8081**

// 8081 / TCP - 2096710376 | 2023-09-26T23:04:50.078430

```
HTTP/1.0 200 OK
Content-type: text/html
Connection: close
Server: MJPG-Streamer/0.2
Cache-Control: no-store, no-cache, must-revalidate, pre-check=0, post-check=0, max-age=0
Pragma: no-cache
Expires: Mon, 3 Jan 2000 12:34:56 GMT

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
<title>MJPG-streamer</title>
<meta http-equiv="content-type" content="text/html; charset=iso-8859-1" />
<link rel="stylesheet" href="style.css" type="text/css" />
```

shodan.io/search?query=webcams

YouTube Gmail Movies Sft & Games PS Blackboard Learn Amazon.in All Bookmarks

**182.138.139.41**

CHINANET  
Sichuan province network  
China, Chengdu

HTTP/1.0 200 OK  
Content-type: text/html  
Connection: close  
Server: MJPG-Streamer/0.2  
Cache-Control: no-store, no-cache, must-revalidate, pre-check=0, post-check=0  
Pragma: no-cache  
Expires: Mon, 3 Jan 2000 12:34:56 GMT

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"  
"http://www...



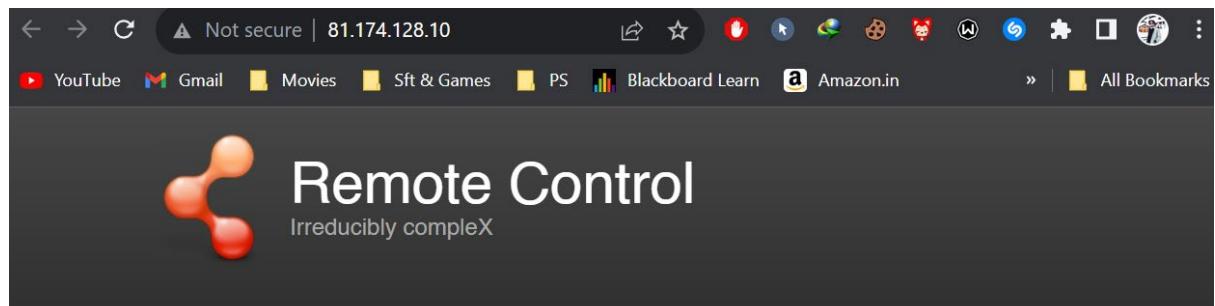
```
C:\Windows\System32>tracert 182.138.139.41

Tracing route to 182.138.139.41 over a maximum of 30 hops

 1  4 ms    3 ms    8 ms  192.168.153.182
 2  *       174 ms   153 ms  10.206.17.17
 3  *       *       *       Request timed out.
 4  *       *       84 ms   10.206.248.177
 5  74 ms   72 ms   78 ms   125.16.168.245
 6  188 ms  185 ms  293 ms  116.119.57.144
 7  241 ms  158 ms  151 ms  unknown.telstraglobal.net [202.127.73.101]
 8  *       *       *       Request timed out.
 9  *       *       *       Request timed out.
10  *       *       *       Request timed out.
11  *       *       *       Request timed out.
12  *       *       *       Request timed out.
13  *       Transmit error: code 1232.

Trace complete.
```

# Device 3 & BONUS



Username  Password



# NETCRAFT

## Site report for <http://cs.rin.ru>

► [Look up another site?](#)

Share:

### Background

Site title	CS.RIN.RU - Steam Underground Community	Date first seen	February 2004
Site rank	6203	Netcraft Risk Rating	0/10
Description	CS.RIN.RU - Steam Underground Community	Primary language	Russian

### Network

Site	Domain	
Netblock Owner	FlokiNET Ltd	Nameserver
Hosting company	FlokiNet	Domain registrar
Hosting country	RO	Nameserver organisation
IPv4 address	185.100.87.208 ( <a href="#">VirusTotal</a> )	Organisation
IPv4 autonomous systems	AS200651	DNS admin

### Web Browser Targeting

Web browser targeting enables software applications to make use of specific functions of the browser as well as optimizing the application for specific browser versions.

Technology	Description	Popular sites using this technology
X-Content-Type-Options	Browser MIME type sniffing is disabled	<a href="#">www.linkedin.com</a> , <a href="#">www.arco.co.uk</a> , <a href="#">www.facebook.com</a>
X-Frame-Options Deny	Prevents the web page being embedded in a frame	<a href="#">www.instagram.com</a> , <a href="#">www.bbc.co.uk</a> , <a href="#">www.geeksforgeeks.org</a>
Strict Transport Security	Web security policy mechanism whereby a web server declares that complying user agents are to interact with it using only secure HTTP connections	<a href="#">www.amazon.com</a> , <a href="#">mail-redir.mention.com</a> , <a href="#">facebook.com</a>
Strict-Transport-Security (preload)	No description	<a href="#">www.canva.com</a> , <a href="#">www.amazon.de</a> , <a href="#">www.amazon.co.uk</a>
Referrer Policy	Restrict referrer information included in subsequent requests	<a href="#">www.binance.com</a> , <a href="#">www.udemy.com</a> , <a href="#">www.tiktok.com</a>
Stylesheet with SRI	No description	<a href="#">www.cvedetails.com</a> , <a href="#">www.pdfdrive.com</a> , <a href="#">www.politico.com</a>
X-XSS-Protection Block	Block pages on which cross-site scripting is detected	<a href="#">www.ebay.com</a> , <a href="#">teams.microsoft.com</a> , <a href="#">discord.com</a>
Content Security Policy	Detect and mitigate attacks in the browser	<a href="#">arco.okta.com</a>

# **LAB EXPERIMENT – 4**

Type of Target	Information Obtained
E.g. Website / Domain	<ul style="list-style-type: none"><li>• IP Address - 91.201.40.166</li><li>• Geolocation - Moskva - Moskva - Llc Ruweb</li><li>• Hosted by - Private Person</li><li>• Physical address - Russia</li><li>• Services provided – Pirated Games</li><li>• Server names - MILES.NS.CLOUDFLARE.COM JOAN.NS.CLOUDFLARE.COM</li><li>• Server OS - Linux</li><li>• Top Management - None</li></ul>
E.g. Person	<ul style="list-style-type: none"><li>• Name - Palak Singhla</li><li>• Location – Himachal Pradesh</li><li>• Phone – No Info</li><li>• Office Address – CU, Chandigarh</li><li>• Home Address - Solan, Himachal Pradesh</li><li>• Role – Twitter Friend</li><li>• Credit Card – No Info</li><li>• Hobbies – Chatting and Gossips</li><li>• Buying Habits – No Habits at all</li><li>• Friends – Aditi, Shreya, Ananya</li></ul>

## **Perform Internet Footprinting Internet**

	<ul style="list-style-type: none"> <li>• Social Media Posts → 6 Pictures Captured</li> <li>• Twitter / Facebook - palak 016</li> </ul>

Used Grabify and got the ip using social engineering on Instagram.

Link Used – <https://grabify.link>

Original URL - <https://www.upes.ac.in/>

Geo Location - [https://www.google.com/intl/en\\_in/earth/about/](https://www.google.com/intl/en_in/earth/about/)

Website Information - <https://whois.domaintools.com/rin.ru>

## Target 1

**Young Teen**

Source – Instagram

Method – Social Engineering

IP - 43.251.191.199

Coordinates - 28.666775, 77.216681 (28°40'0"N 77°13'0"E)

Geo Location – Delhi, India

ISP – Dnetworks Internet Services Pvt. Ltd.

Device – Real ME 7 Pro

Advanced Log	
Date/Time	2023-10-02 15:06:34 UTC
IP Address	43.251.191.199
Country <small>?</small>	India, Delhi
Browser	Instagram App (302.1.0.36.111)
Operating System	Android 12
Device	Realme 7
User Agent	Mozilla/5.0 (Linux; Android 12; RMX2151 Build/SP1A.210812.016; wv) AppleWebKit/537.36 (KHTML, like Gecko) Version/4.0 Chrome/117.0.0.0 Mobile Safari/537.36 Instagram 302.1.0.36.111 Android (31/12; 480dpi; 1080x2161; realme; RMX2151; RMX2151L1; mt6785; en_IN; 520702295)
Referring URL	<a href="https://l.instagram.com/">https://l.instagram.com/</a>
Host Name	43.251.191.199
ISP	Dnetworks Internet Services Pvt. Ltd.



## **Target 2**

**Student at CU**

Source – Instagram

Method – Social Engineering

IP - 103.41.26.231

Coordinates - 32.039330, 75.403180 (32°2'22"N 75°24'11"E)

Geo Location – Gurdaspur, Punjab, India

ISP – Fastway Transmission Private Limited

Device – Vivo Y20G (2021)

Date/Time	2023-10-02 15:29:15 UTC
IP Address	103.41.26.231
Country 	India, Bhiwani
Browser	Instagram App (302.1.0.36.111)
Operating System	Android 10
Device	Vivo Y20G (2021)
User Agent	Mozilla/5.0 (Linux; Android 10; V2065 Build/QP1A.190711.020; wv) AppleWebKit/537.36 (KHTML, like Gecko) Version/4.0 Chrome/117.0.0.0 Mobile Safari/537.36 Instagram 302.1.0.36.111 Android (29/10; 300dpi; 720x1475; vivo; V2065; 2026; mt6765; en_US; 520702291)
Referring URL	<a href="http://instagram.com/">http://instagram.com/</a>
Host Name	231.26.41.103.netplus.co.in
ISP	Netplus Broadband Services Private Limited

<input checked="" type="checkbox"/> IP Address	103.41.26.231
<input checked="" type="checkbox"/> Country	 India [IN]
<input type="checkbox"/> Region	Punjab
<input type="checkbox"/> City	Gurdaspur
<input type="checkbox"/> Coordinates of City 	32.039330, 75.403180 (32°2'22"N 75°24'11"E)
<input type="checkbox"/> ISP	Fastway Transmission Private Limited
<input type="checkbox"/> Local Time	02 Oct, 2023 09:04 PM (UTC +05:30)
<input type="checkbox"/> Domain	fastway.in
<input type="checkbox"/> Net Speed	(DSL) Broadband/Cable/Fiber/Mobile
<input type="checkbox"/> IDD & Area Code	(91) 080
<input type="checkbox"/> ZIP Code	143515
<input type="checkbox"/> Weather Station	Batala (INXX0015)



## Target 3

**Student at CU's Friend at Home**

Source – Instagram

Method – Social Engineering

IP - 223.187.100.126

Coordinates - 30.916670, 77.116670 (30°55'0"N 77°7'0"E)

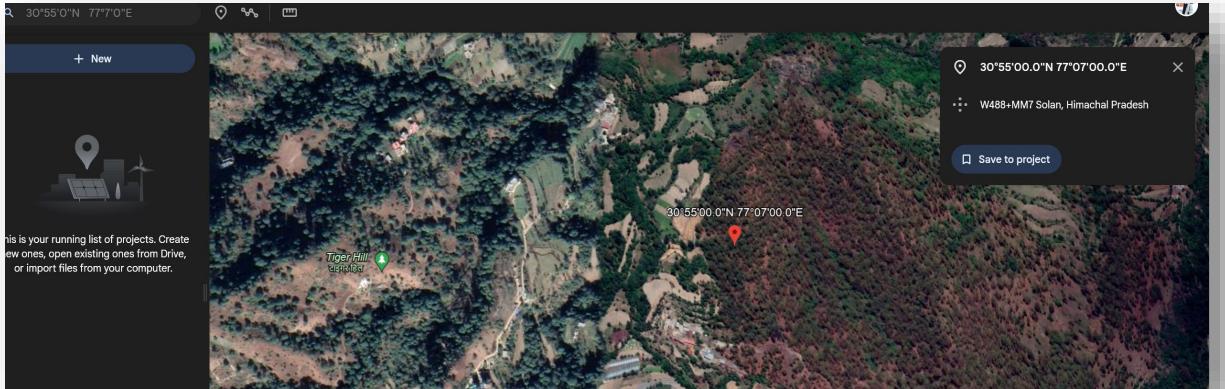
Geo Location – Solan, Himachal Pradesh, India

ISP – Bharti Airtel Ltd.

Device – Apple iPhone (iOS 12.3.1)

Date/Time	2023-10-02 15:35:26 UTC
IP Address	223.187.100.126
Country 	India, Delhi
Browser	Mobile Safari (12.1.1)
Operating System	iOS 12.3.1
Device	Apple iPhone
User Agent	Mozilla/5.0 (iPhone; CPU iPhone OS 12_3_1 like Mac OS X) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/12.1.1 Mobile/15E148 Safari/604.1
Referring URL	<i>no referrer</i>
Host Name	223.187.100.126
ISP	Bharti Airtel Ltd. AS for GPRS Service

<input checked="" type="checkbox"/> <b>IP Address</b>	223.187.100.126
<input checked="" type="checkbox"/> <b>Country</b>	 India [IN]
<input type="checkbox"/> <b>Region</b>	Himachal Pradesh
<input type="checkbox"/> <b>City</b>	Solan
<input type="checkbox"/> <b>Coordinates of City </b>	30.916670, 77.116670 (30°55'0"N 77°7'0"E)
<input type="checkbox"/> <b>ISP</b>	Bharti Airtel Ltd.
<input type="checkbox"/> <b>Local Time</b>	02 Oct, 2023 09:08 PM (UTC +05:30)
<input type="checkbox"/> <b>Domain</b>	airtel.in
<input type="checkbox"/> <b>Net Speed</b>	(DSL) Broadband/Cable/Fiber/Mobile
<input type="checkbox"/> <b>IDD &amp; Area Code</b>	(91) 098
<input type="checkbox"/> <b>ZIP Code</b>	173210
<input type="checkbox"/> <b>Weather Station</b>	Shimla (INXX0195)
<input type="checkbox"/> <b>Mobile Carrier</b>	AirTel
<input type="checkbox"/> <b>Mobile Country Code - MCC</b>	404
<input type="checkbox"/> <b>Mobile Network Code - MNC</b>	02/03/10/16/31/40/45/49/70/90/92/93/94/95/96/97/98/51/52/53/54/56
<input type="checkbox"/> <b>Elevation</b>	1378m



## **Target – Website**

## Whois Record for Rin.ru

### — Domain Profile

Registrar	RU-CENTER-RU IANA ID: — URL: <a href="https://www.nic.ru/whois">https://www.nic.ru/whois</a> Whois Server: —
Registrar Status	REGISTERED,
Dates	8,662 days old Created on 2000-01-14 Expires on 2024-01-31
Name Servers	JOAN.NS.CLOUDFLARE.COM. (has 25,220,938 domains) MILES.NS.CLOUDFLARE.COM. (has 25,220,938 domains)
IP Address	91.201.40.166 - 1 other site is hosted on this server
IP Location	 - Moskva - Moskva - Llc Ruweb
ASN	 AS210079 EUROBYTE EuroByte LLC, RU (registered Oct 11, 2018)
Hosting History	6 changes on 6 unique name servers over 10 years

### Whois Record ( last updated on 2023-10-02 )

```
domain:      RIN.RU
nserver:     joan.ns.cloudflare.com.
nserver:     miles.ns.cloudflare.com.
state:       REGISTERED, DELEGATED, VERIFIED
person:      Private Person
registrar:   RU-CENTER-RU
admin-contact: https://www.nic.ru/whois
created:    2000-01-14T16:01:52Z
paid-till:   2024-01-31T21:00:00Z
free-date:  2024-03-03
source:     TCI
```

# **LAB EXPERIMENT – 6**

## **Hack using Search Engines**

Akshat site:upesac.in intitle:

Intitle

Intext

Inurl

The screenshot shows a Google search results page with the query "site:upes.ac.in inurl:admin" entered into the search bar. The results are displayed in a dark-themed interface.

**Result 1:** upes.ac.in  
https://preregistration.upes.ac.in › admin › SAPData ...  
[Admin Dashboard Download SAP Data](#)  
Admin Dashboard Download SAP Data · Download SAP Data · Recent Activity · Tasks Progress · General Settings.

**Result 2:** upes.ac.in  
https://preregistration.upes.ac.in › admin ...  
[ADMIN | Dashboard](#)  
Admin Dashboard Upload Student SAPID · Upload Student SAPID · Note · Recent Activity · Tasks Progress · General Settings.

**Result 3:** upes.ac.in  
https://preregistration.upes.ac.in › admin › login ...  
[Admin | Log in](#)  
AdminPanel. Sign in to start your session. Remember Me. I forgot my password. Register a new membership.

← → C [preregistration.upes.ac.in/admin/SAPData.aspx](https://preregistration.upes.ac.in/admin/SAPData.aspx)

YouTube Gmail Movies Sft & Games PS Amazon.in Twitter

## Dashboard


Online

HEADER

- [Dashboard](#)
- [Upload SAP ID](#)
- [Reports](#)

## Admin Dashboard

Download SAP Data

Download SAP Data

Export Fee DATA

SI No.	Gender	Title	First Name	Middle Name	Last Name	Application No.	Date of Birth	Nationality	Communication Lang.	Marital Status	University	Building
1	Female	3	Vanya		kalra	102205608	12.04.2005	IN	EN	0	UPES	Opp. Mbd mall ludhiana
2	Female	3	Janhvi	Vikram	Mayee	102205658	25.02.2006	IN	EN	0	UPES	B1/404, Parkwoods, Behind DMart, Ghodbunder Road, Kavesar
3	Female	3	Meghna		Chaturvedi	102205679	25.05.2005	IN	EN	0	UPES	South Bopal
4	Female	3	anika		goyal	102205713	17.04.2005	IN	EN	0	UPES	sector 12 mahavir drishti c204
5	Female	3	Vani		Gupta	102205769	23.09.2005	IN	EN	0	UPES	126, Satya Niketan, Moti Bagh 2, New Delhi 110021
6	Male	1	SAMYAK	ASHOKKUMAR	GADHIRE	102205770	31.10.2005	IN	EN	0	UPES	ALLURE BEGONIA CHS, NEHRU NAGAR
7	Female	3	ADYA		BHARGAVA	102205772	19.12.2004	IN	EN	0	UPES	RAJPUR ROAD
8	Male	1	Uday		Grover	102205775	11.04.2005	IN	EN	0	UPES	Vasant Kunj
9	Male	1	Shashank	Rajaneesh	Hebbar	102205776	17.01.2005	IN	EN	0	UPES	BRIGADE METROPOLIS, WHITEFIELD MAIN ROAD
10	Female	3	Mrunal	Nilesh	Aitawadekar	102205786	27.01.2005	IN	EN	0	UPES	G1, Shivdatta Ratna apt, 100 ft road, Vishrambagh, Sangli
11	Male	1	Ashmit	Mohit	Nand	102205790	24.06.2005	IN	EN	0	UPES	Gachibowli, Hyderabad
12	Female	3	Vishaka	Vishal	Ghumbre	102205816	01.05.2005	IN	EN	0	UPES	A 1402 arihant anaya sec 35G kharghar navi mumbai
13	Female	3	Divyanshi		Singh	102205818	26.10.2004	IN	EN	0	UPES	Near Kanchan kaya yoga center,
14	Female	3	Dia	Amitkumar	Gosar	102205847	15.10.2005	IN	EN	0	UPES	A703, Jay Balaji, CHS
15	Female	3	Devishi		Wahi	102205865	08.04.2005	IN	EN	0	UPES	Delhi road
16	Male	1	Ayush		NAIR	102205891	01.12.2005	IN	EN	0	UPES	C3/1003, Lotus Pond Apt
17	Female	3	Mahak	Avinash	Zawar	102205892	10.07.2005	IN	EN	0	UPES	18,ASHISH,ANAND NAGAR GULMOHAR ROAD, AHMEDNAGAR
18	Male	1	Nitai		Gandhar	102205895	10.08.2005	IN	EN	0	UPES	57, sec 7, Urban Estate, Gurugram, Haryana
19	Female	3	Ashna		Das	102205908	23.06.2004	IN	EN	0	UPES	Shivoham Gardenia
20	Female	3	Neha	Ganesh	Kumbhar	102205909	21.05.2005	FO	EN	0	UPES	
21	Male	1	DHAIRYA		TIWARI	102205919	26.10.2005	IN	EN	0	UPES	MEDIA TIMES APARTMENT, ABHAY KHAND4, INDIRAPURAM, GHAZIABAD
22	Female	3	Shagal		Maheshwari	102205921	05.11.2005	IN	EN	0	UPES	gumasta nagar
23	Female	3	Nayanika		Tyagi	102205924	06.12.2005	IN	EN	0	UPES	
24	Female	3	Tanvi		Gupta	102205925	01.03.2005	IN	EN	0	UPES	Chandrakala Colony
25	Female	3	Reetika		Madan	102205936	21.12.2004	IN	EN	0	UPES	B5, Dhawalgiri Apartment
26	Female	3	Muskaan		Mehra	102205951	02.04.2004	IN	EN	0	UPES	29 ba Basant avenue backside of adlakha hospital
27	Male	1	Hanskumar	Sachin	Gala	102205953	26.01.2005	IN	EN	0	UPES	garodia nagar
28	Female	3	Ananya	Gurunath	Borkar	102205956	29.09.2005	IN	EN	0	UPES	RESTAURANT GOREGAON E
29	Female	3	Ananya		Udasi	102205957	14.12.2005	IN	EN	0	UPES	Survey No. 148, Golden Mile Road
30	Female	3	VIDHI	VIPUL	AMBADE	102205964	20.06.2003	IN	EN	0	UPES	BEHIND HOTEL ASHOK, AATHI RASTA SQUARE,
31	Female	3	Ishita		Jauhari	102205976	14.05.2005	IN	EN	0	UPES	4E Peach, SFS Cyberpalms
32	Female	3	Amoldeep	Kaur	Sandhu	102205986	07.08.2005	IN	EN	0	UPES	57a Subhash colony ambala cantt
33	Female	3	Anshika		Pundir	102205992	04.03.2006	IN	EN	0	UPES	Kahna green city
34	Female	3	Reva	Rohit	Rajgariah	102205999	25.04.2004	IN	EN	0	UPES	vasant nagri
35	Female	3	Aditi		Madhavan	102206008	03.03.2005	IN	EN	0	UPES	Salarpuria Magnificia
36	Female	3	NANDINI		CHADHA	102206013	10.08.2005	IN	EN	0	UPES	CH/KG 20,KAVI NAGAR G BLOCK GHAZIABAD
37	Female	3	Miya	Martha	Sanooj	102206087	19.02.2005	IN	EN	0	UPES	ElectraPark Apartment,

# inurl:pastebin "Windows 10 Product Keys\*"

The screenshot shows a Pastebin page with a dark theme. At the top, there is a navigation bar with links for API, TOOLS, FAQ, and a green 'paste' button. A search bar and a magnifying glass icon are also present. The main content area contains a list of 29 Windows 10 product keys, each preceded by a number from 1 to 29. The keys are listed in two columns: the product version and the key itself.

	WINDOWS 10 VERSION	PRODUCT KEY
1.	Windows 10 Enterprise N	4CPRK-NM3K3-X6XXQ-RXX86-WXCHW
2.	Windows 10 Professional N	VK7JG-NPHTM-C97JM-9MPGT-3V66T
3.	Windows 10 Enterprise 2018 LTSB	YTMG3-N6DKC-DKB77-7M9GH-8HVX7
4.	Windows 10 Enterprise 2018 LTSB N	DXG7C-N36C4-C4HTG-X4T3X-2YV77
5.	Windows 10 Enterprise 2018 LTSB N	WYPNQ-8C467-V2W6J-TX4WX-WT2RQ
6.	Windows 10 Home Single Language	YNMGQ-8RYV3-4PGQ3-C8XTP-7CFBY
7.	Windows 10 Enterprise 2016 LTSB	84NGF-MHBT6-FXBX8-QWJK7-DRR8H
8.	Windows 10 Home Single Language	8PTT6-RNW4C-6V7J2-C2D3X-MHPB8
9.	Windows 10 S	GJTYN-HDMQY-FRR76-HVGC7-QPF8P
10.	Windows 10 Education N	XGVPP-NMH47-7THJ-W3FW7-8HV2C
11.	Windows 10 Home + Office 2016 Professional	MNXKQ-WY2CT-JWBJ2-T68TQ-YBH2V
12.	Windows 10 Pro + Office 2016 Professional	MNXKQ-WY2CT-JWBJ2-T68TQ-YBH2V
13.	Windows 10 Education	WYPNQ-8C467-V2W6J-TX4WX-WT2RQ
14.	Windows 10 Enterprise	84NGF-MHBT6-FXBX8-QWJK7-DRR8H
15.	Windows 10 Pro	VK7JG-NPHTM-C97JM-9MPGT-3V66T
16.	Windows 10 Home N	AKJUS-WY2CT-JWBJ2-T68TQ-YBH2V
17.	Windows 10 Pro for Workstations	AKSIU-WY2CT-JWBJ2-T68TQ-YBH2V
18.	Windows 10 Pro Education	AJUYS-8C467-V2W6J-TX4WX-WT2RQ
19.	Windows 10 Enterprise Key	ALSOI-MHBT6-FXBX8-QWJK7-DRR8H
20.	Windows 10 Enterprise G N	AJSUY-NPHTM-C97JM-9MPGT-3V66T
21.	Windows 10 Enterprise	QFFDN-GRT3P-VKWWX-X7T3R-8B639
22.	Windows 10 Education	DCPHK-NFMTC-H88MJ-PFHGY-QJ4BJ
23.	Windows 10 Home Key	2F77B-TNFGY-69QQF-B8YKP-D69TJ
24.	Windows 10 Professional	WNMTR-4C88C-JK8YV-HQ7T2-76DF9
25.	Windows 10 Enterprise G	DPH2V-TTNVB-4X9Q3-TJR4H-KHJW4
26.	Windows 10 Pro	44RPN-FTY23-9VTTB-MP9BX-T84FV
27.	Windows Pro N for Workstations	NW6C2-QMPVW-D7KKK-3GKT6-VCFB2

intitle:"Index of" "WhatsApp Images"

## Index of /hacked\_team/m.romeo/WhatsApp/WhatsApp Images

<a href="#">Name</a>	<a href="#">Last modified</a>	<a href="#">Size</a>	<a href="#">Description</a>
 <a href="#">Parent Directory</a>		-	
 <a href="#">IMG-20131026-WA0000.jpg</a>	2020-05-23 21:50	52K	
 <a href="#">IMG-20131027-WA0000.jpg</a>	2020-05-23 21:50	76K	
 <a href="#">IMG-20131027-WA0001.jpg</a>	2020-05-23 21:50	65K	
 <a href="#">IMG-20131029-WA0000.jpg</a>	2020-05-23 21:50	49K	
 <a href="#">IMG-20131031-WA0000.jpg</a>	2020-05-23 21:50	57K	
 <a href="#">IMG-20131031-WA0001.jpg</a>	2020-05-23 21:50	33K	
 <a href="#">IMG-20131031-WA0002.jpg</a>	2020-05-23 21:50	84K	
 <a href="#">IMG-20131031-WA0003.jpg</a>	2020-05-23 21:50	69K	
 <a href="#">IMG-20131031-WA0004.jpg</a>	2020-05-23 21:50	44K	
 <a href="#">IMG-20131031-WA0005.jpg</a>	2020-05-23 21:50	35K	
 <a href="#">IMG-20131031-WA0006.jpg</a>	2020-05-23 21:50	68K	
 <a href="#">IMG-20131031-WA0007.jpg</a>	2020-05-23 21:50	46K	
 <a href="#">IMG-20131102-WA0000.jpg</a>	2020-05-23 21:50	88K	
 <a href="#">IMG-20131102-WA0001.jpg</a>	2020-05-23 21:50	47K	
 <a href="#">IMG-20131104-WA0001.jpg</a>	2020-05-23 21:50	69K	
 <a href="#">IMG-20131105-WA0000.jpg</a>	2020-05-23 21:50	54K	
 <a href="#">IMG-20131106-WA0001.jpg</a>	2020-05-23 21:50	55K	
 <a href="#">IMG-20131107-WA0000.jpg</a>	2020-05-23 21:50	81K	
 <a href="#">IMG-20131108-WA0000.jpg</a>	2020-05-23 21:50	58K	
 <a href="#">IMG-20131109-WA0001.jpg</a>	2020-05-23 21:50	78K	
 <a href="#">IMG-20131109-WA0002.jpg</a>	2020-05-23 21:50	112K	
 <a href="#">IMG-20131110-WA0000.jpg</a>	2020-05-23 21:50	73K	
 <a href="#">IMG-20131111-WA0001.jpg</a>	2020-05-23 21:50	55K	

"authentication failure"; logname= filetype:log

The screenshot shows a Google search results page with the query "authentication failure"; logname= filetype:log. The results are displayed in a dark mode theme.

**Florida State University**  
http://www.cs.fsu.edu › ~langley › 2015-01-logs-test › a... ::

**auth.log**

... **logname= uid=0 euid=0 tty=ssh ruser= rhost=43.255.190.175 user=root** Apr 5 07:25:04  
(none) sshd[13536]: pam\_unix(sshd:auth): **authentication failure; logname ...**

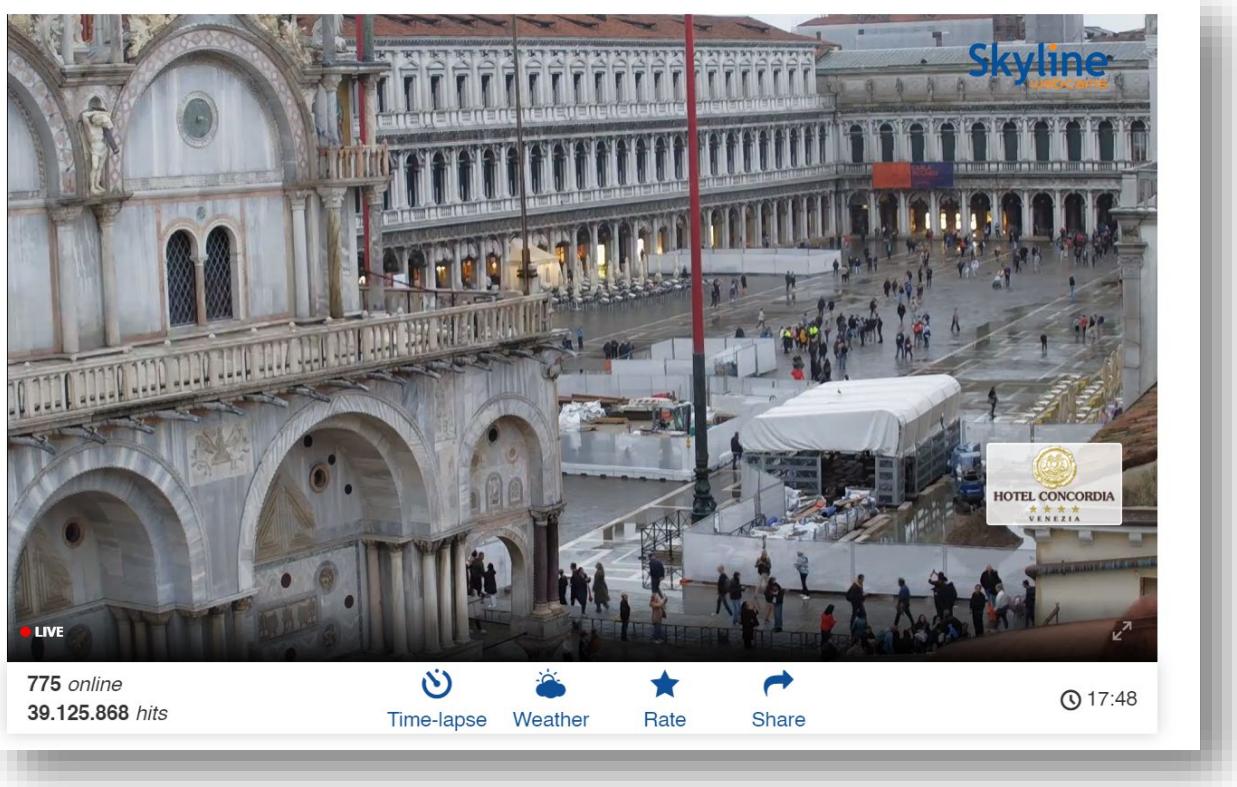
**Duke University**  
https://people.duke.edu › ~tkb13 › courses › homework ::

**auth.log**

... **logname= uid=0 euid=0 tty=ssh ruser= rhost=115.238.245.2 user=root** Aug 12 16:22:25  
dlsprod sshd[21434]: pam\_unix(sshd:auth): **authentication failure; logname ...**

```
-- Logs begin at Sat 2020-09-19 17:06:29 UTC. --
Nov 13 22:08:17 test-server su[25225]: pam_unix(su:session): session closed for user balena
Nov 13 22:08:27 test-server sshd[25307]: Invalid user dc from 42.194.204.223 port 33450
Nov 13 22:08:27 test-server sshd[25307]: pam_unix(sshd:auth): check pass; user unknown
Nov 13 22:08:27 test-server sshd[25307]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=s
Nov 13 22:08:28 test-server sshd[25304]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=s
Nov 13 22:08:30 test-server sshd[25307]: Failed password for invalid user dc from 42.194.204.223 port 33450 ssh2
Nov 13 22:08:30 test-server sshd[25306]: Invalid user ok from 101.36.179.145 port 35294
Nov 13 22:08:30 test-server sshd[25306]: pam_unix(sshd:auth): check pass; user unknown
Nov 13 22:08:30 test-server sshd[25306]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=s
Nov 13 22:08:30 test-server sshd[25307]: Received disconnect from 42.194.204.223 port 33450:11: Bye Bye [preauth]
Nov 13 22:08:30 test-server sshd[25307]: Disconnected from invalid user dc 42.194.204.223 port 33450 [preauth]
Nov 13 22:08:31 test-server sshd[25304]: Failed password for root from 112.85.42.98 port 12620 ssh2
Nov 13 22:08:31 test-server sshd[25306]: Failed password for invalid user ok from 101.36.179.145 port 35294 ssh2
Nov 13 22:08:32 test-server sshd[25306]: Received disconnect from 101.36.179.145 port 35294:11: Bye Bye [preauth]
Nov 13 22:08:32 test-server sshd[25306]: Disconnected from invalid user ok 101.36.179.145 port 35294 [preauth]
Nov 13 22:08:34 test-server sshd[25304]: Failed password for root from 112.85.42.98 port 12620 ssh2
Nov 13 22:08:35 test-server sshd[25321]: Invalid user database from 123.207.100.182 port 50836
Nov 13 22:08:35 test-server sshd[25321]: pam_unix(sshd:auth): check pass; user unknown
Nov 13 22:08:35 test-server sshd[25321]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=s
Nov 13 22:08:36 test-server sshd[25323]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=s
Nov 13 22:08:37 test-server sshd[25321]: Failed password for invalid user database from 123.207.100.182 port 50836
Nov 13 22:08:37 test-server sshd[25321]: Received disconnect from 123.207.100.182 port 50836:11: Bye Bye [preauth]
Nov 13 22:08:37 test-server sshd[25321]: Disconnected from invalid user database 123.207.100.182 port 50836 [prea
Nov 13 22:08:37 test-server sshd[25304]: Failed password for root from 112.85.42.98 port 12620 ssh2
Nov 13 22:08:37 test-server sshd[25323]: Failed password for root from 61.177.172.158 port 40796 ssh2
Nov 13 22:08:39 test-server sshd[25323]: Failed password for root from 61.177.172.158 port 40796 ssh2
Nov 13 22:08:41 test-server sshd[25304]: Failed password for root from 112.85.42.98 port 12620 ssh2
Nov 13 22:08:42 test-server sshd[25323]: Failed password for root from 61.177.172.158 port 40796 ssh2
Nov 13 22:08:42 test-server sshd[25323]: Received disconnect from 61.177.172.158 port 40796:11: [preauth]
Nov 13 22:08:42 test-server sshd[25323]: Disconnected from authenticating user root 61.177.172.158 port 40796 [pr
Nov 13 22:08:42 test-server sshd[25304]: PAM 2 more authentication failures; logname= uid=0 euid=0 tty=ssh ruser=
Nov 13 22:08:44 test-server sshd[25304]: Failed password for root from 112.85.42.98 port 12620 ssh2
```

<https://www.skylinewebcams.com/en/webcam/italia/veneto/venezia/piazza-san-marco.html>



intitle:"Weather Wing WS-2"

## ***Weather Wing* WS-2**

Checking...





185.230.194

<http://185.230.194.209> ::

## Weather Wing WS-2



No-IP

<http://rubizzano.hopto.org> > ... ::

## Weather Wing WS-2



88.147.94

<http://88.147.94.223> ::

## Weather Wing WS-2



No-IP

<http://rubizzano.hopto.org> ::

## Weather Wing WS-2

Weather Wing WS-2. Checking... Weather Wing. [Temp] 14.2 °C [Hum] 86 % [Bar] 1018.5 hPa  
[Rain] 0.0 mm [ WS ] 0.4 m/s [ WD ] SSW. 23/09/28 04:16.



89.150.61

<http://89.150.61.163> ::

## Weather Wing WS-2



ns0.it

<http://stazionemeteoloro.ns0.it> ::

## Weather Wing WS-2



82.49.87

<http://82.49.87.239> ::

## Weather Wing WS-2

# **Ways to Prevent Yourself from Google Dork Method**

## **1. Securely configure web applications:**

Ensure that your web applications are properly secured, following industry best practices. This includes implementing strong authentication mechanisms, input validation, and access controls to prevent unauthorized access or leakage of sensitive information.

## **2. Limit search engine indexing:**

Use robots.txt or meta tags to instruct search engines not to index certain parts of your website or specific files. This can help prevent sensitive information from being exposed through search engine results.

## **3. Implement access controls:**

Control access to sensitive information by implementing proper authorization mechanisms. Ensure that only authorized users can access sensitive data or perform sensitive actions.

## **4. Regularly review and update security configurations:**

Regularly review and update security configurations for your web applications, content management systems (CMS), and any other platforms you use. This includes keeping software up to date, applying security patches, and following vendor recommendations.

## **5. Avoid storing sensitive information in plain text:**

Do not store sensitive information, such as passwords, API keys, or database credentials, in plain text within your web applications or configuration files. Utilize encryption and secure storage mechanisms to protect sensitive data.

## **6. Use secure coding practices:**

Adhere to secure coding practices, such as input validation, output encoding, and proper handling of user-supplied data. These practices can help prevent common vulnerabilities like SQL injection, cross-site scripting (XSS), and command injection.

## **7. Implement web application firewalls (WAF):**

Consider implementing a WAF to provide an additional layer of protection against attacks targeting your web applications. WAFs can help detect and block suspicious or malicious requests, including those generated by Google dorks.

## **8. Regularly monitor and audit your web applications:**

Implement monitoring and auditing mechanisms to detect and respond to potential security incidents or unauthorized access attempts. This can include log monitoring, intrusion detection systems (IDS), or security information and event management (SIEM) solutions.

## **9. Educate users and developers:**

Provide security awareness training to users and developers to help them understand the risks associated with Google dorks and the importance of following secure coding practices. Encourage them to report any suspicious activities or potential vulnerabilities they encounter.

10. Stay informed about security vulnerabilities:

Stay up to date with security news and vulnerabilities related to the software and platforms you use. Subscribe to security mailing lists, follow security blogs, and apply security patches promptly to mitigate known vulnerabilities.

# LAB EXPERIMENT – 7

## LAN KALI LINUX

IP CONFIG to check the IP for the Device.

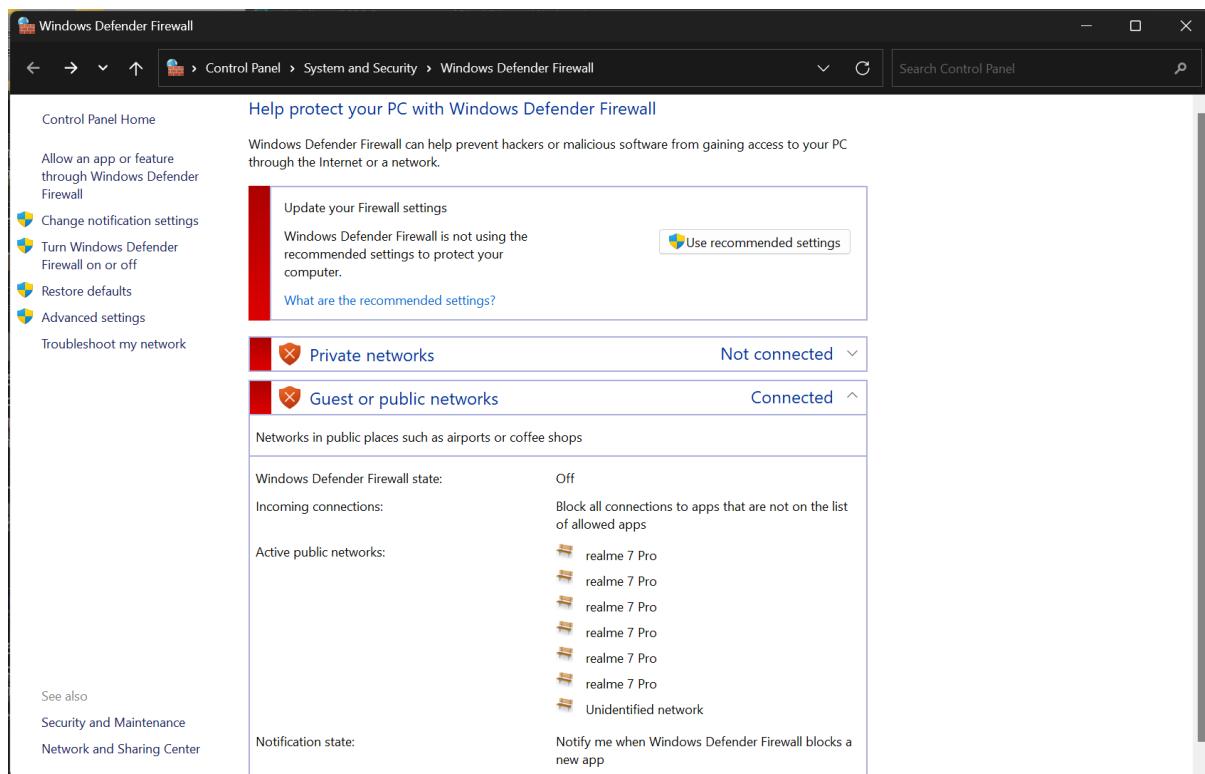
```
C:\WINDOWS\system32\CMD + ▾

Subnet Mask . . . . . 255.255.255.0
Default Gateway . . . . .
Wireless LAN adapter Local Area Connection 1:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . .
Wireless LAN adapter Local Area Connection 2:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . .
Ethernet adapter VMware Network Adapter VMnet8:
    AE PRESETS . . .
    Connection-specific DNS Suffix . . .
    Link-local IPv6 Address . . . . . fe80::e8a9:abb:4803%21
    IPv4 Address . . . . . : 192.168.27.99
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . .
Wireless LAN adapter Wi-Fi:
    INYLO
    Connection-specific DNS Suffix . . .
    Link-local IPv6 Address . . . . . fe80::953:a1c0%2435:401%6
    IPv4 Address . . . . . : 192.168.27.20
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . .

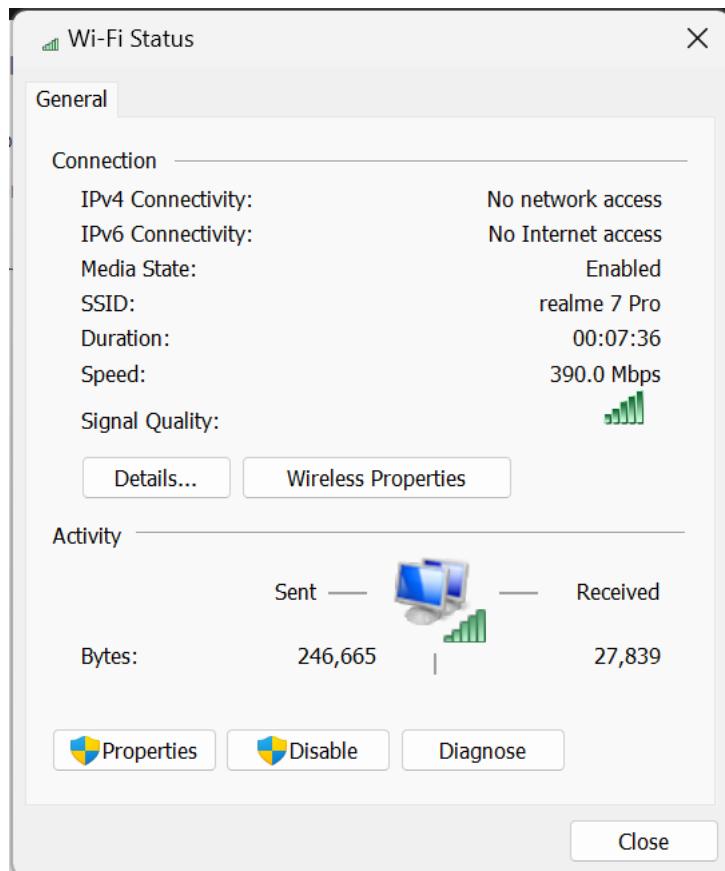
C:\Users\AKY BOY>
```

# CONFIGURATION IP

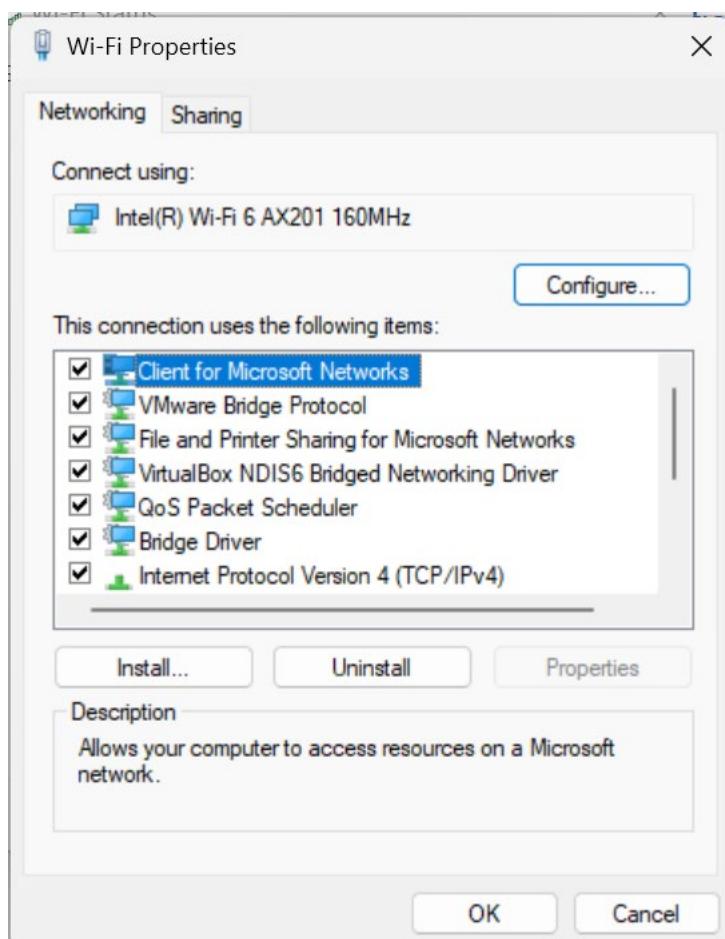
Turn off the Firewall for the both the devices.



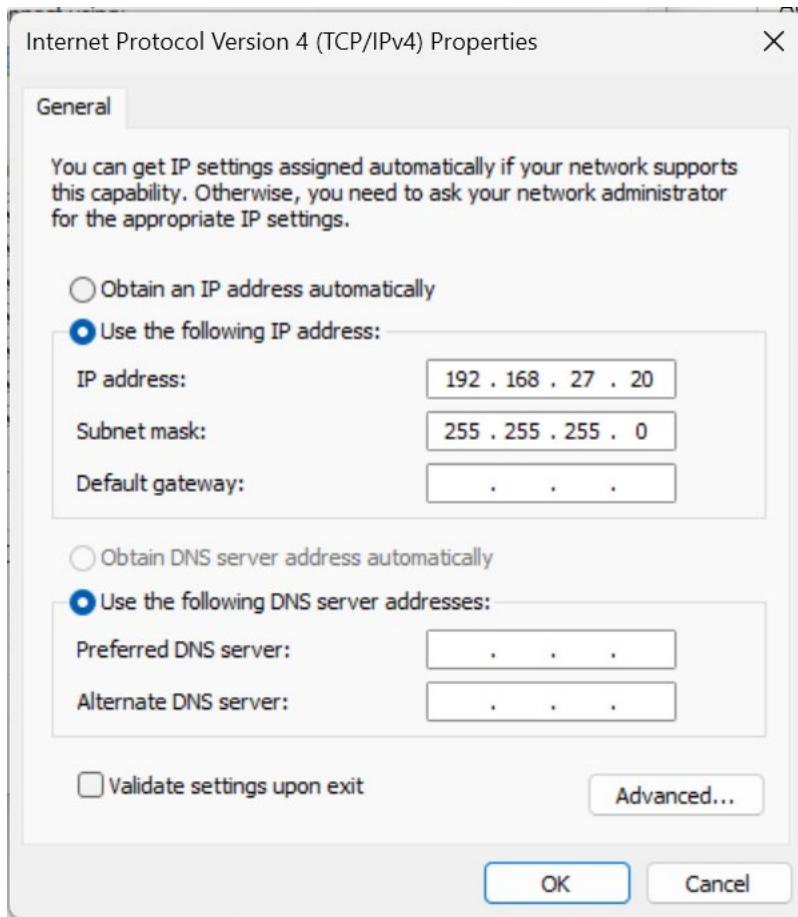
## Go for the Properties



## Go for the IPV4 to configure the custom Static IP for your device.



IP for my device is **192.168.27.20**

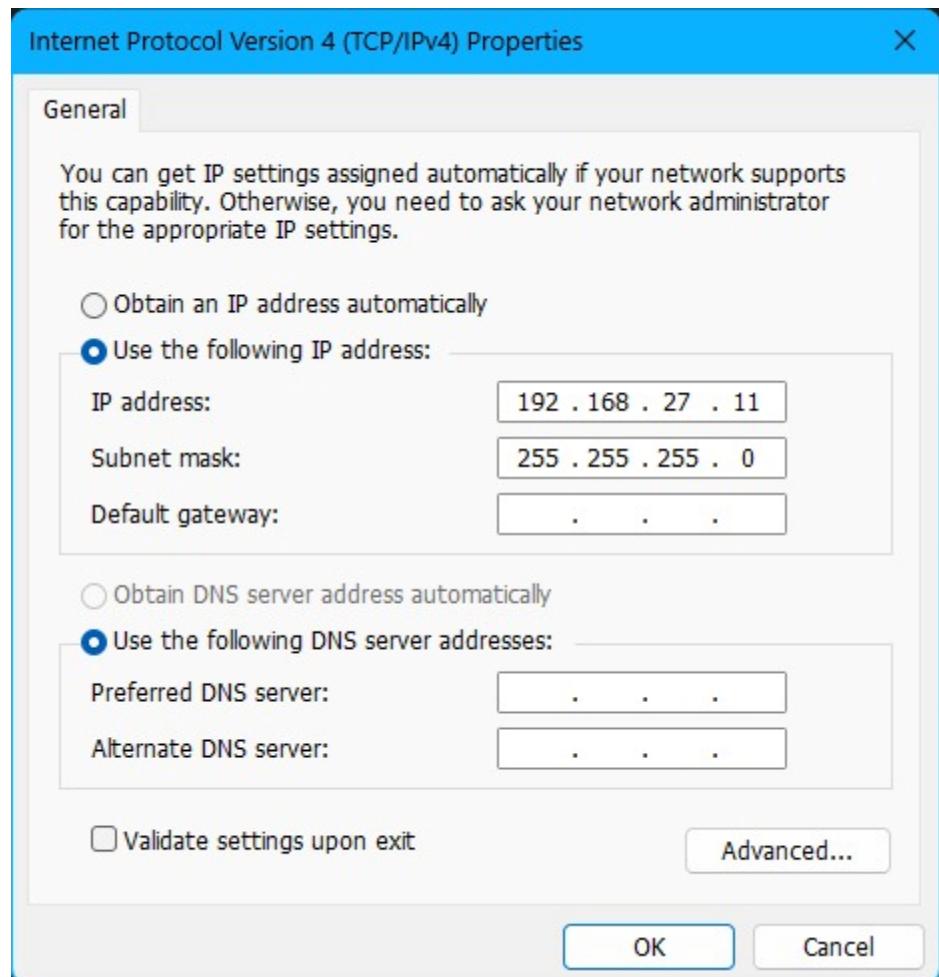


**2<sup>nd</sup> DEVICE IP – 192.168.27.10**

**3<sup>rd</sup> Device IP – 192.168.27.11**

**4<sup>th</sup> Device IP – 192.168.27.12**

## 3<sup>rd</sup> DEVICE



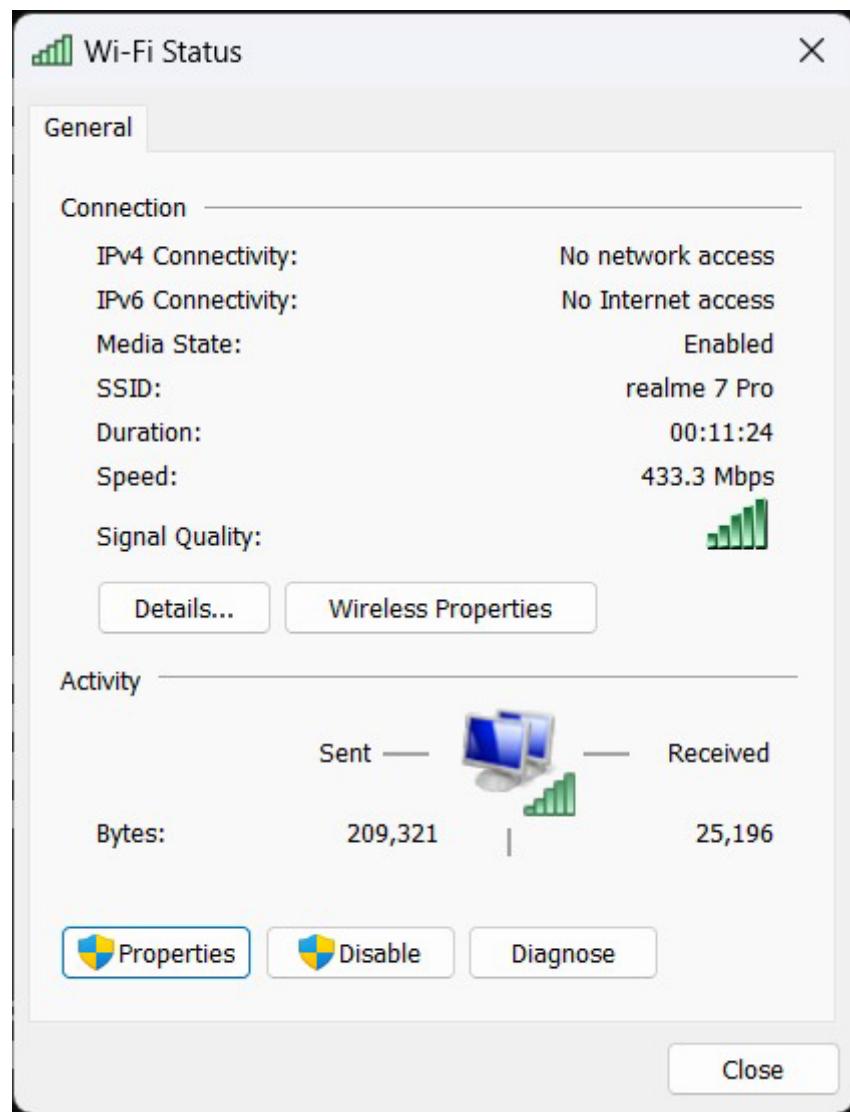
```
C:\WINDOWS\system32\cmd > Microsoft Windows [Version 10.0.22621.2506]
(c) Microsoft Corporation. All rights reserved.

C:\Users\AKY BOY>ping 192.168.27.11

Pinging 192.168.27.11 with 32 bytes of data:
Reply from 192.168.27.11: bytes=32 time=54ms TTL=128
Reply from 192.168.27.11: bytes=32 time=51ms TTL=128
Reply from 192.168.27.11: bytes=32 time=52ms TTL=128
Reply from 192.168.27.11: bytes=32 time=54ms TTL=128

Ping statistics for 192.168.27.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 51ms, Maximum = 54ms, Average = 52ms
```

## 2<sup>nd</sup> DEVICE

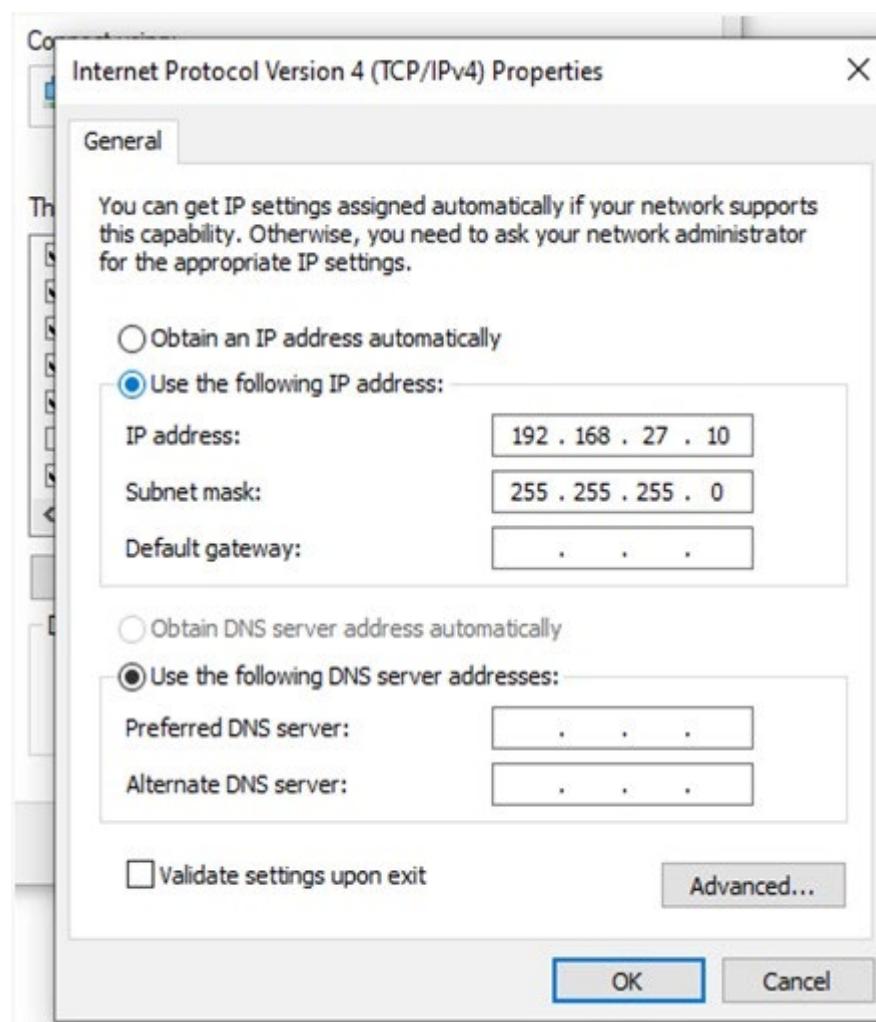


```
C:\WINDOWS\system32\cmd + v
C:\Users\AKY BOY>ping 192.168.27.12

Pinging 192.168.27.12 with 32 bytes of data:
Reply from 192.168.27.12: bytes=32 time=207ms TTL=128
Reply from 192.168.27.12: bytes=32 time=110ms TTL=128
Reply from 192.168.27.12: bytes=32 time=101ms TTL=128
Reply from 192.168.27.12: bytes=32 time=135ms TTL=128

Ping statistics for 192.168.27.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 101ms, Maximum = 207ms, Average = 138ms
```

## 4<sup>th</sup> DEVICE



```
C:\WINDOWS\system32\CMD > ping 192.168.27.10

Pinging 192.168.27.10 with 32 bytes of data:
Reply from 192.168.27.10: bytes=32 time=110ms TTL=128
Reply from 192.168.27.10: bytes=32 time=48ms TTL=128
Reply from 192.168.27.10: bytes=32 time=51ms TTL=128
Reply from 192.168.27.10: bytes=32 time=52ms TTL=128

Ping statistics for 192.168.27.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 110ms, Average = 65ms
```

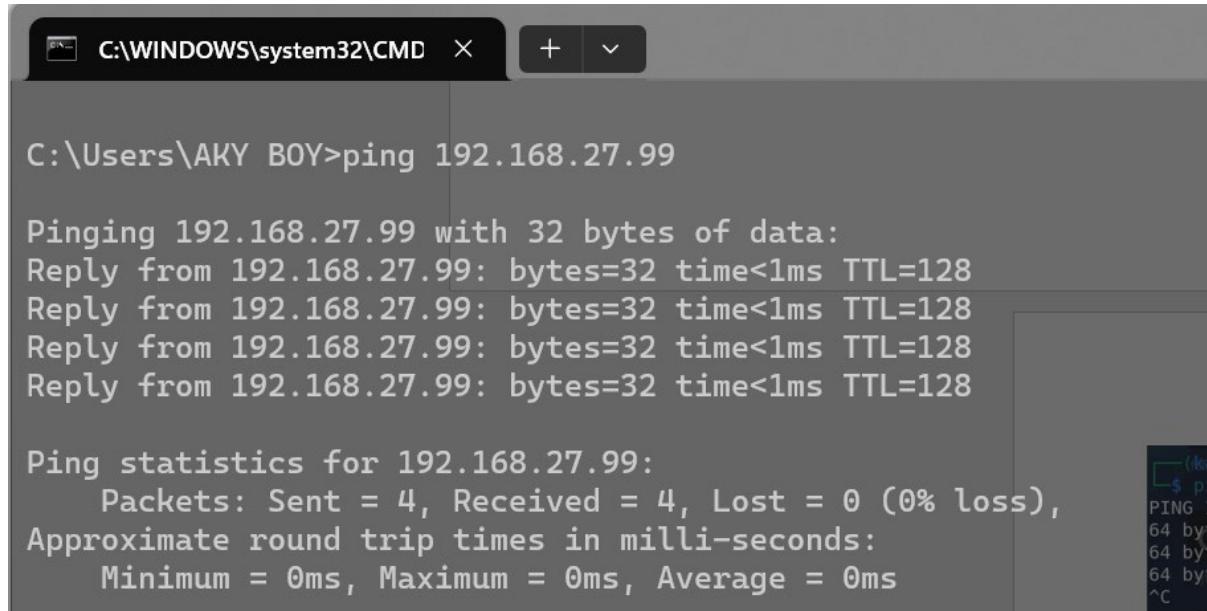
## SELF VM TO OTHER DEVICE WINDOWS

```
(kali㉿aky-boy-kali) ~]$ ping 192.168.27.10
PING 192.168.27.10 (192.168.27.10) 56(84) bytes of data.
64 bytes from 192.168.27.10: icmp_seq=1 ttl=128 time=59.4 ms
64 bytes from 192.168.27.10: icmp_seq=2 ttl=128 time=57.2 ms
64 bytes from 192.168.27.10: icmp_seq=3 ttl=128 time=54.7 ms
^C
--- 192.168.27.10 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2059ms
rtt min/avg/max/mdev = 54.734/57.117/59.394/1.903 ms
```

## PING FROM VM TO SELF DEVICE

```
kali@aky-boy-kali: ~]$ ping 192.168.27.20
PING 192.168.27.20 (192.168.27.20) 56(84) bytes of data.
64 bytes from 192.168.27.20: icmp_seq=1 ttl=128 time=0.792 ms
64 bytes from 192.168.27.20: icmp_seq=2 ttl=128 time=0.573 ms
64 bytes from 192.168.27.20: icmp_seq=3 ttl=128 time=0.668 ms
64 bytes from 192.168.27.20: icmp_seq=4 ttl=128 time=1.30 ms
64 bytes from 192.168.27.20: icmp_seq=5 ttl=128 time=0.440 ms
64 bytes from 192.168.27.20: icmp_seq=6 ttl=128 time=0.504 ms
64 bytes from 192.168.27.20: icmp_seq=7 ttl=128 time=0.677 ms
64 bytes from 192.168.27.20: icmp_seq=8 ttl=128 time=0.611 ms
64 bytes from 192.168.27.20: icmp_seq=9 ttl=128 time=0.746 ms
64 bytes from 192.168.27.20: icmp_seq=10 ttl=128 time=0.696 ms
64 bytes from 192.168.27.20: icmp_seq=11 ttl=128 time=1.29 ms
64 bytes from 192.168.27.20: icmp_seq=12 ttl=128 time=1.60 ms
64 bytes from 192.168.27.20: icmp_seq=13 ttl=128 time=0.385 ms
64 bytes from 192.168.27.20: icmp_seq=14 ttl=128 time=0.624 ms
64 bytes from 192.168.27.20: icmp_seq=15 ttl=128 time=0.477 ms
64 bytes from 192.168.27.20: icmp_seq=16 ttl=128 time=1.13 ms
64 bytes from 192.168.27.20: icmp_seq=17 ttl=128 time=1.82 ms
64 bytes from 192.168.27.20: icmp_seq=18 ttl=128 time=1.25 ms
64 bytes from 192.168.27.20: icmp_seq=19 ttl=128 time=0.346 ms
64 bytes from 192.168.27.20: icmp_seq=20 ttl=128 time=0.365 ms
```

## PING FROM WINDOWS TO SELF VM



C:\Users\AKY BOY>ping 192.168.27.99

Pinging 192.168.27.99 with 32 bytes of data:

Reply from 192.168.27.99: bytes=32 time<1ms TTL=128  
Reply from 192.168.27.99: bytes=32 time<1ms TTL=128  
Reply from 192.168.27.99: bytes=32 time<1ms TTL=128  
Reply from 192.168.27.99: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.27.99:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 0ms, Maximum = 0ms, Average = 0ms

# LAB EXPERIMENT – 8

## Network Scanning Tool - NMAP

```
kali@kali: ~
└─(kali㉿kali)-[~]
$ nmap -sV itsecgames.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 13:37 EST
Nmap scan report for itsecgames.com (31.3.96.40)
Host is up (0.23s latency).
rDNS record for 31.3.96.40: web.mmebvba.com
Not shown: 997 filtered tcp ports (no-response)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 6.7p1 (protocol 2.0)
80/tcp    open  http     Apache httpd
443/tcp   open  ssl/http Apache httpd

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 38.27 seconds
```

```
kali@kali: ~
└─(kali㉿kali)-[~]
$ nmap -sV scanme.nmap.org
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 13:41 EST
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.28s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
Not shown: 990 closed tcp ports (conn-refused)
PORT      STATE SERVICE      VERSION
22/tcp    open  ssh          OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.13 (Ubuntu Linux; protocol 2.0)
25/tcp    filtered  smtp
80/tcp    open  http         Apache httpd 2.4.7 ((Ubuntu))
135/tcp   filtered  msrpc
139/tcp   filtered  netbios-ssn
179/tcp   filtered  bgp
445/tcp   filtered  microsoft-ds
646/tcp   filtered  ldp
9929/tcp  open  nping-echo  Nping echo
31337/tcp open  tcpwrapped
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 33.00 seconds
```

```
(kali㉿kali)-[~]
$ nmap -sV webscantest.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 13:40 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.25s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com
Not shown: 987 closed tcp ports (conn-refused)
PORT      STATE     SERVICE          VERSION
25/tcp    filtered  smtp
80/tcp    open       http            Apache httpd 2.4.7
135/tcp   filtered  msrpc
139/tcp   filtered  netbios-ssn
179/tcp   filtered  bgp
443/tcp   open       ssl/http        Apache httpd 2.4.7
445/tcp   filtered  microsoft-ds
646/tcp   filtered  ldp
2601/tcp  open       zebra           Quagga routing software
2605/tcp  open       zebra           Quagga routing software
8081/tcp  open       blackice-icecap?
8082/tcp  open       blackice-alerts?
8086/tcp  open       d-s-n?
3 services unrecognized despite returning data. If you know the service/version, please submit the following fingerprints at
https://nmap.org/cgi-bin/submit.cgi?new-service :
=====
=====NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)=====
SF-Port8081-TCP:V=7.94SVN%I=7%D=11/7%Time=654A8513%P=x86_64-pc-linux-gnu%r
SF:(GetRequest,E9,"HTTP/1.1\x20503\x20Service\x20Unavailable\r\ncontent-l
SF:ength:\x20107\r\ncache-control:\x20no-cache\r\ncontent-type:\x20text/ht
SF:\r\nconnection:\x20close\r\n\r\nhtml>hedus<h1>503</h1>Service\x20Unava
SF:ble\r\nContent-Type:\x20text/html\r\nContent-Length:\x20107\r\n\r\n<h1>503</h1>
```

```
kali@kali: ~      kali@kali: ~      kali@kali: ~      kali@kali: ~      kali@kali: ~  
└─(kali㉿kali)-[~]  
$ nmap -sV speedtest.tele2.net  
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 13:46 EST  
Nmap scan report for speedtest.tele2.net (90.130.70.73)  
Host is up (0.23s latency).  
Other addresses for speedtest.tele2.net (not scanned): 2a00:800:1010::1  
rDNS record for 90.130.70.73: d90-130-70-73.cust.tele2.se  
Not shown: 969 filtered tcp ports (no-response), 8 filtered tcp ports (host-unreach)  
PORT      STATE SERVICE      VERSION  
20/tcp    closed  ftp-data  
21/tcp    open   ftp          vsftpd 2.0.8 or later  
80/tcp    open   http         nginx  
443/tcp   closed https  
5001/tcp  closed commplex-link  
5060/tcp  open   ssl/sip?  
8080/tcp  open   ssl/http-proxy  
21571/tcp closed unknown  
22939/tcp closed unknown  
23502/tcp closed unknown  
24444/tcp closed unknown  
24800/tcp closed unknown  
25734/tcp closed unknown  
25735/tcp closed unknown  
26214/tcp closed unknown  
27000/tcp closed flexlm0  
27352/tcp closed unknown  
27353/tcp closed unknown  
27355/tcp closed unknown  
27356/tcp closed unknown  
27715/tcp closed unknown  
28201/tcp closed unknown  
30000/tcp closed ndmps  
2 services unrecognized despite returning data. If you know the service/version, please submit  
https://nmap.org/cgi-bin/submit.cgi?new-service :  
=====NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)=====
```

SE\_Port5060\_TCP\_V=7.94SVN%T\_SSL%T\_7%D\_11%7%Time\_654A8644%P\_x86\_64\_pc\_linux

# Traceroute port 80 using nmap

```
(kali㉿kali)-[~]
$ sudo tcptraceroute scan.nmap.org 80
[sudo] password for kali:
Running:
    traceroute -T -0 info -p 80 scan.nmap.org
traceroute to scan.nmap.org (45.33.49.119), 30 hops max, 60 byte packets
 1 AKY-BOY-LAPTOP.mshome.net (172.18.176.1)  0.265 ms  0.252 ms  0.248 ms
 2 reliance.reliance (192.168.29.1)  7.043 ms  7.040 ms  7.036 ms
 3 10.35.96.1 (10.35.96.1)  7.401 ms  7.398 ms *
 4 172.16.28.1 (172.16.28.1)  19.250 ms * *
 5 * * *
 6 * * *
 7 * * *
 8 * * *
 9 * * *
10 * * *
11 * * *
12 * * *
13 * * 103.198.140.176 (103.198.140.176)  54.449 ms
14 * 103.198.140.215 (103.198.140.215)  238.917 ms *
15 * * 103.198.140.56 (103.198.140.56)  350.614 ms
16 103.198.140.45 (103.198.140.45)  352.986 ms * *
17 * * *
18 * * *
19 * * *
20 * * *
21 * * *
22 * * *
23 * * *
24 * * *
25 * * *
26 ack.nmap.org (45.33.49.119) <syn,ack>  281.585 ms * *
```

**To run the scans faster if you have faster internet use -T4 and for normal scan you can use -T3 or it's the default way.**

```
(kali㉿kali)-[~]
$ sudo nmap -sT webscantest.com -T4
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:29 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.24s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com
Not shown: 987 closed tcp ports (conn-refused)
PORT      STATE    SERVICE
25/tcp    filtered smtp
80/tcp    open     http
135/tcp   filtered msrpc
139/tcp   filtered netbios-ssn
179/tcp   filtered bgp
443/tcp   open     https
445/tcp   filtered microsoft-ds
646/tcp   filtered ldp
2601/tcp  open     zebra
2605/tcp  open     bgpd
8081/tcp  open     blackice-icecap
8082/tcp  open     blackice-alerts
8086/tcp  open     d-s-n

Nmap done: 1 IP address (1 host up) scanned in 21.28 seconds
```

To show the top ports from ranges 20.

And to show all the 65535 ports use -p-

```
(kali㉿kali)-[~]
└─$ sudo nmap webscantest.com --top-ports 20
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:16 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.26s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com

PORT      STATE    SERVICE
21/tcp    closed   ftp
22/tcp    closed   ssh
23/tcp    closed   telnet
25/tcp    filtered smtp
53/tcp    closed   domain
80/tcp    open     http
110/tcp   closed   pop3
111/tcp   closed   rpcbind
135/tcp   filtered msrpc
139/tcp   filtered netbios-ssn
143/tcp   closed   imap
443/tcp   open     https
445/tcp   filtered 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

Nmap done: 1 IP address (1 host up) scanned in 2.66 seconds
```

## Specific Protocol Type filtered SCAN

```
(kali㉿kali)-[~]
$ sudo nmap webscantest.com -p http
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:11 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.29s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com

PORT      STATE SERVICE
80/tcp    open  http
8008/tcp  closed http

Nmap done: 1 IP address (1 host up) scanned in 0.77 seconds
```

## Specific Port Type filtered SCAN

```
(kali㉿kali)-[~]
$ sudo nmap webscantest.com -p 80
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:11 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.24s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com

PORT      STATE SERVICE
80/tcp    open  http

Nmap done: 1 IP address (1 host up) scanned in 0.65 seconds
```

## For OS Detection on particular domain, we use -O

```
(kali㉿kali)-[~]
$ sudo nmap -O webscantest.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:41 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.24s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com
Not shown: 987 closed tcp ports (reset)
PORT      STATE    SERVICE
25/tcp    filtered  smtp
80/tcp    open     http
135/tcp   filtered msrpc
139/tcp   filtered netbios-ssn
179/tcp   filtered bgp
443/tcp   open     https
445/tcp   filtered microsoft-ds
646/tcp   filtered ldp
2601/tcp  open     zebra
2605/tcp  open     bgpd
8081/tcp  open     blackice-icecap
8082/tcp  open     blackice-alerts
8086/tcp  open     d-s-n
Aggressive OS guesses: Linux 2.6.32 (92%), Linux 2.6.32 or 3.10 (92%), Linux 4.4 (92%), Linux 2.6.32 - 2.6.35 (91%), Linux 2.6.32 - 2.6.39 (90%), Linux 4.0 (90%), Linux 5.0 - 5.4 (89%), Linux 3.11 - 4.1 (89%), Linux 3.2 - 3.8 (89%), Linux 2.6.18 (89%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 20 hops

OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 17.82 seconds
```

## WARNING

This command is basically the mixture of all the commands and functionality of the nmap that is the -A which tells you about the Service Version + OS Detection + Scanning Ports + TraceRoute

```
(kali㉿kali)-[~]
$ sudo nmap -A webscantest.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:44 EST
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.25s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com
Not shown: 987 closed tcp ports (reset)
PORT      STATE     SERVICE      VERSION
25/tcp    filtered  smtp
80/tcp    open      http        Apache httpd 2.4.7
|_http-title: 403 Forbidden
|_http-server-header: Apache/2.4.7 (Ubuntu)
135/tcp   filtered  msrpc
139/tcp   filtered  netbios-ssn
179/tcp   filtered  bgp
443/tcp   open      ssl/http    Apache httpd 2.4.7
|_ssl-cert: Subject: commonName=webscantest.com
| Subject Alternative Name: DNS:webscantest.com, DNS:www.webscantest.com
| Not valid before: 2020-07-29T14:58:35
| Not valid after:  2021-04-26T13:49:45
|_ssl-date: TLS randomness does not represent time
|_http-server-header: Apache/2.4.7 (Ubuntu)
|_http-title: 403 Forbidden
445/tcp   filtered  microsoft-ds
646/tcp   filtered  ldp
2601/tcp  open      zebra       Quagga routing software
2605/tcp  open      zebra       Quagga routing software
8081/tcp  open      blackice-icecap?
| fingerprint-strings:
| FourOhFourRequest, GetRequest, HTTPOptions, RTSPRequest:
|   HTTP/1.1 503 Service Unavailable
|   content-length: 107
|   cache-control: no-cache
|   content-type: text/html
|   connection: close
```

## This command shows you the live data, just like verbosity that is -v

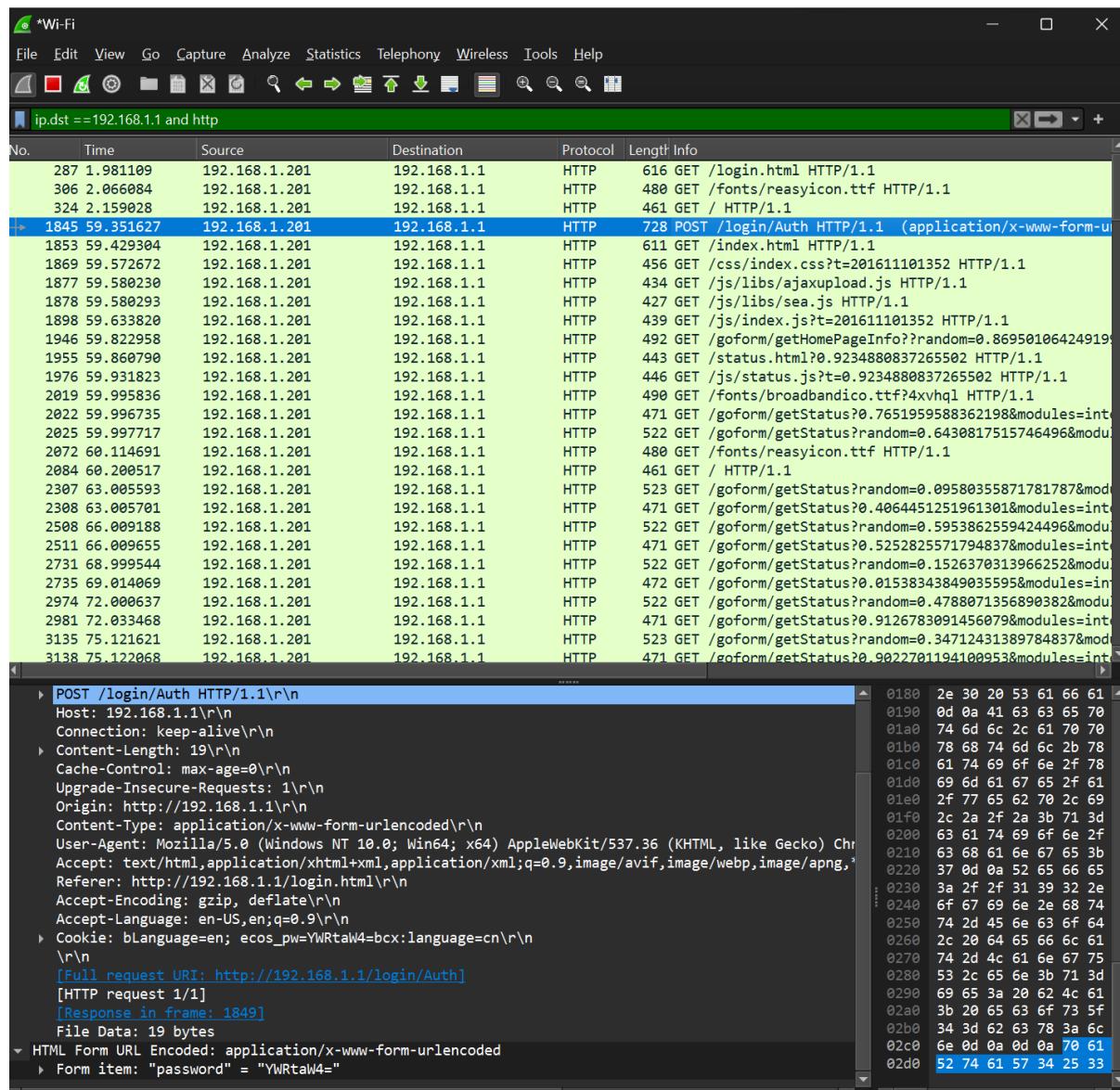
```
(kali㉿kali)-[~]
$ sudo nmap -v webscantest.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-07 14:49 EST
Initiating Ping Scan at 14:49
Scanning webscantest.com (69.164.223.208) [4 ports]
Completed Ping Scan at 14:49, 0.26s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 14:49
Completed Parallel DNS resolution of 1 host. at 14:49, 0.00s elapsed
Initiating SYN Stealth Scan at 14:49
Scanning webscantest.com (69.164.223.208) [1000 ports]
Discovered open port 80/tcp on 69.164.223.208
Discovered open port 443/tcp on 69.164.223.208
Discovered open port 8082/tcp on 69.164.223.208
Discovered open port 2605/tcp on 69.164.223.208
Discovered open port 8086/tcp on 69.164.223.208
Discovered open port 8081/tcp on 69.164.223.208
Discovered open port 2601/tcp on 69.164.223.208
Completed SYN Stealth Scan at 14:49, 14.16s elapsed (1000 total ports)
Nmap scan report for webscantest.com (69.164.223.208)
Host is up (0.24s latency).
rDNS record for 69.164.223.208: nb-69-164-223-208.nac.nodebalancer.linode.com
Not shown: 987 closed tcp ports (reset)
PORT      STATE     SERVICE
25/tcp    filtered  smtp
80/tcp    open      http
135/tcp   filtered msrpc
139/tcp   filtered netbios-ssn
179/tcp   filtered bgp
443/tcp   open      https
445/tcp   filtered microsoft-ds
646/tcp   filtered ldp
2601/tcp  open      zebra
2605/tcp  open      bgpd
8081/tcp  open      blackice-icecap
8082/tcp  open      blackice-alerts
8086/tcp  open      d-s-n

Read data files from: /usr/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 14.56 seconds
Raw packets sent: 1036 (45.560KB) | Rcvd: 1015 (40.616KB)
```

# LAB EXPERIMENT – 9

## Network Traffic Sniffing – Wireshark

### Own Router Traffic Analysis



Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.dst == 192.168.1.1 and http

No.	Time	Source	Destination	Protocol	Length Info
287	1.981189	192.168.1.201	192.168.1.1	HTTP	618 GET /Login.html HTTP/1.1
306	2.066084	192.168.1.201	192.168.1.1	HTTP	480 GET /fonts/reasyicon.ttf HTTP/1.1
324	2.159028	192.168.1.201	192.168.1.1	HTTP	461 GET / HTTP/1.1
1845	59.351627	192.168.1.201	192.168.1.1	HTTP	728 POST /login/Auth HTTP/1.1 (application/x-www-form-urlencoded)
1853	59.429304	192.168.1.201	192.168.1.1	HTTP	611 GET /index.html HTTP/1.1
1869	59.572672	192.168.1.201	192.168.1.1	HTTP	456 GET /css/index.css?t=201611011352 HTTP/1.1
1877	59.580230	192.168.1.201	192.168.1.1	HTTP	434 GET /js/libs/ajaxupload.js HTTP/1.1
1878	59.580293	192.168.1.201	192.168.1.1	HTTP	427 GET /js/libs/sea.js HTTP/1.1
1898	59.633820	192.168.1.201	192.168.1.1	HTTP	439 GET /js/index.js?t=201611011352 HTTP/1.1
1946	59.822958	192.168.1.201	192.168.1.1	HTTP	492 GET /goform/getHomePageInfo?random=0.8695010642491996&modules=loginAuth%2CwifiRelay HTTP/1.1
1955	59.860796	192.168.1.201	192.168.1.1	HTTP	443 GET /status.html?0.923480837265582 HTTP/1.1
1976	59.931823	192.168.1.201	192.168.1.1	HTTP	446 GET /js/status.js?t=0.923480837265582 HTTP/1.1
2019	59.995836	192.168.1.201	192.168.1.1	HTTP	490 GET /fonts/broadbandico.ttf?avxhqf HTTP/1.1
2022	59.996735	192.168.1.201	192.168.1.1	HTTP	471 GET /goform/getStatus?0.7651955838362198&modules=internetStatus HTTP/1.1
2025	59.997717	192.168.1.201	192.168.1.1	HTTP	522 GET /goform/getStatus?random=0.6430817515746496&modules=internetStatus%2CdeviceStatistics%2Csys
2073	60.114691	192.168.1.201	192.168.1.1	HTTP	484 GET /fonts/reasyicon.ttf HTTP/1.1
2084	60.200517	192.168.1.201	192.168.1.1	HTTP	461 GET / HTTP/1.1
2307	63.005593	192.168.1.201	192.168.1.1	HTTP	523 GET /goform/getStatus?random=0.09580355871781787&modules=internetStatus%2CdeviceStatistics%2Csys
2308	63.005701	192.168.1.201	192.168.1.1	HTTP	471 GET /goform/getStatus?random=0.4064451251961301&modules=internetStatus HTTP/1.1
2508	66.009188	192.168.1.201	192.168.1.1	HTTP	522 GET /goform/getStatus?random=0.5953862559424496&modules=internetStatus%2CdeviceStatistics%2Csys
2511	66.009655	192.168.1.201	192.168.1.1	HTTP	471 GET /goform/getStatus?0.5252825571794837&modules=internetStatus HTTP/1.1
2731	68.999544	192.168.1.201	192.168.1.1	HTTP	522 GET /goform/getStatus?random=0.15263703139662528&modules=internetStatus%2CdeviceStatistics%2Csys
2735	69.014669	192.168.1.201	192.168.1.1	HTTP	472 GET /goform/getStatus?0.01538343849035595&modules=internetStatus HTTP/1.1
2974	72.000637	192.168.1.201	192.168.1.1	HTTP	522 GET /goform/getStatus?random=0.4788071356890382&modules=internetStatus%2CdeviceStatistics%2Csys
2981	72.033468	192.168.1.201	192.168.1.1	HTTP	471 GET /goform/getStatus?0.9126783091456079&modules=internetStatus HTTP/1.1
3135	75.121621	192.168.1.201	192.168.1.1	HTTP	523 GET /goform/getStatus?random=0.34712431389784837&modules=internetStatus%2CdeviceStatistics%2Csys
3138	75.122668	192.168.1.201	192.168.1.1	HTTP	471 GET /goform/getStatus?0.90227011941089538&modules=internetStatus HTTP/1.1

```

Connection: keep-alive\r\n
> Content-Length: 19\r\n
Cache-Control: max-age=0\r\n
Upgrade-Insecure-Requests: 1\r\n
Origin: http://192.168.1.1\r\n
Content-Type: application/x-www-form-urlencoded\r\n
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/119.0.0.0 Safari/537.36\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exch
Referrer: http://192.168.1.1/login.html\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: en-US,en;q=0.9\r\n
> Cookie: blanguage=en; ecos_pw=YWRtaW4=bcx:language=cn\r\n
\r\n
[Full request URL: http://192.168.1.1/login/Auth]
[HTTP request in frame 1849]
[Response in frame 1849]
File Data: 19 bytes
HTML Form URL Encoded: application/x-www-form-urlencoded
Form item: "password" = "YWRtaW4="
Key: password
Value: YWRtaW4=

```

Key (urlencoded-form.key), 8 bytes

Packets: 15301 - Displayed: 132 (0.9%)

Profile: Default

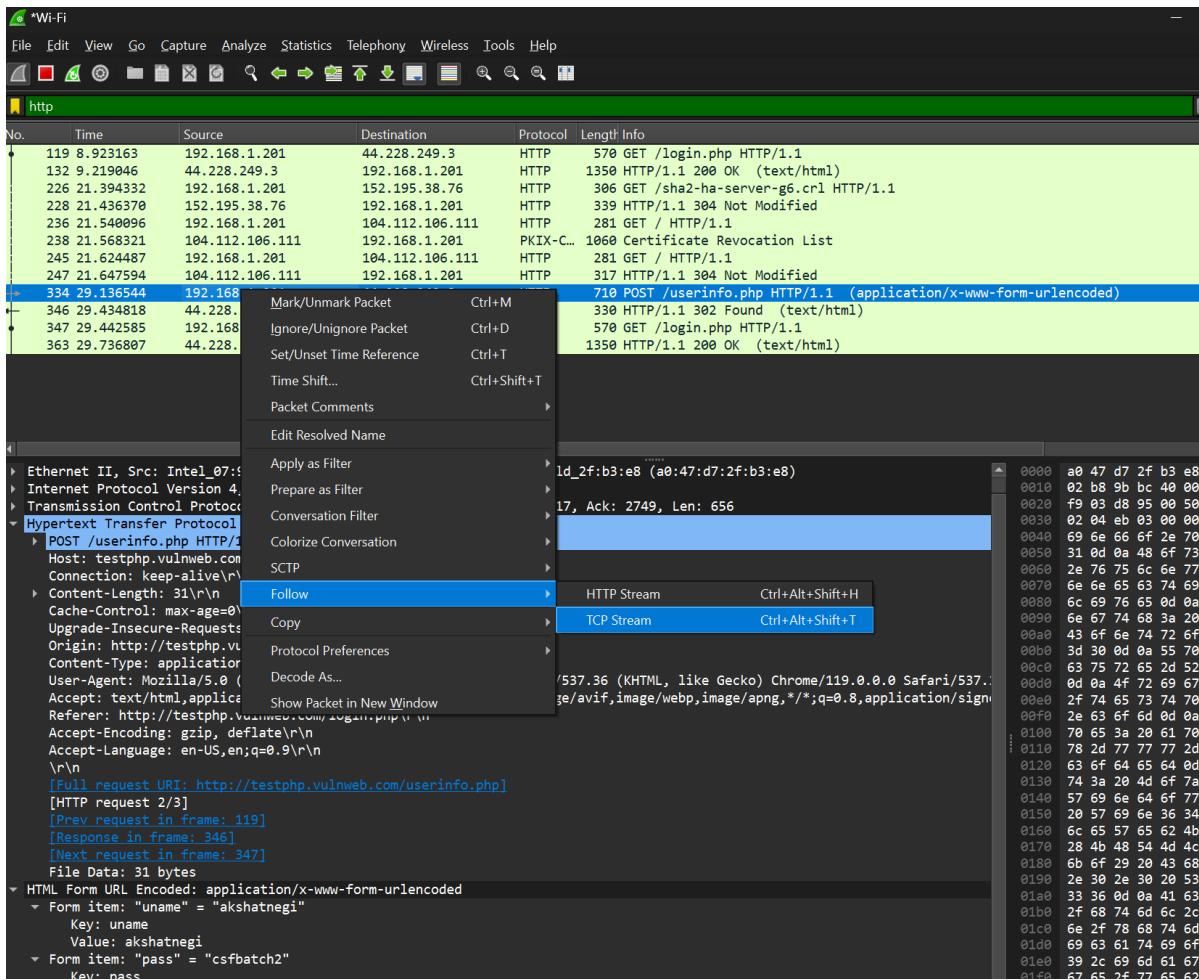
# Information Gathering from the following website:

<http://testphp.vulnweb.com/login.php>

Gathered the username and password using the HyperTEXT Transfer Protocol

The screenshot shows a Wireshark capture of network traffic. The top part displays a list of captured frames, with frame 334 highlighted in yellow. Frame 334 is a POST request to 'userinfo.php' with a length of 710 bytes. The bottom part shows the detailed content of this frame, which includes the HTTP request headers and the form data being posted. The form data shows two fields: 'uname' with value 'akshatnegi' and 'pass' with value 'csfbatch2'. The packet details pane shows the raw hex and ASCII data for the captured frames.

```
POST /userinfo.php HTTP/1.1\r\nHost: testphp.vulnweb.com\r\nConnection: keep-alive\r\nContent-Length: 31\r\nCache-Control: max-age=0\r\nUpgrade-Insecure-Requests: 1\r\nOrigin: http://testphp.vulnweb.com\r\nContent-Type: application/x-www-form-urlencoded\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/119.0.0.0 Safari/537.36\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/*,*;q=0.8,application/signed-exchange;v=b3;q=1\r\nReferer: http://testphp.vulnweb.com/login.php\r\nAccept-Encoding: gzip, deflate\r\nAccept-Language: en-US,en;q=0.9\r\n\r\n[Full request URI: http://testphp.vulnweb.com/userinfo.php]\r\n[HTTP request 2/3]\r\n[Prev request in frame: 119]\r\n[Response in frame: 346]\r\n[Next request in frame: 347]\r\nFile Data: 31 bytes\r\nHTML Form URL Encoded: application/x-www-form-urlencoded\r\nForm item: "uname" = "akshatnegi"\r\n  Key: uname\r\n  Value: akshatnegi\r\nForm item: "pass" = "csfbatch2"\r\n  Key: pass\r\n  Value: csfbatch2
```



Wireshark · Follow TCP Stream (tcp.stream eq 3) · Wi-Fi

```
..3.*....;.(t..v?.....R.....|q.uho]...u^v..b!..`gd..I..c+.....H.....~.+  
.u.A...*..  
"..ox...sk..Zk...g#j.....: *a.k V .p..z..M..t...gZ....6.  
t.....V...../.....v....]....F....\..t0|rg....?C..V...'[.]..=m..Xo..?t.'  
.-.F4.b.s.....#W...].}..}.8!u.....U.t;N..S.<.P.....F..  
..c.T....q.....$.&J"t.....J.....$..  
..[nV....(..../.=E.Dhx.&..u.k.].~....y...(%P6T.].Q.).\4.a^a...]..<.8;...\\..a>._.  
....._x.....G..f5.p.9.5pb!...i.....|!..3D2...)..t..l.....<;|v.....Q...  
.?9A.....x.4.j!..C/|.....[1.[.*\)...z..<..q..6/....B.....;..h..(x6....o...  
7Z..a.Lo;S.....1^3....l.q.4.4.'..~N\$t....u.....e\{|..Ah....<...>3.a.....?3  
4Z.x...../..B2.vI1.VV.....v.9..@.1.?U.:=:F..'.k.6..  
..F...2.?..j."vhc..U.....  
1&....a.Q....).....hx.....yD....Y.....o;...:l.mf..\\....I6...R...je.....K  
<r|7..  
N/2..e)..nK.....  
1.&L\..&a.-1.`.....<..x...@.....>:7..FC..s^..J|.)P9+.`V.Z+m.L...0S9k..<.+V ..j.  
..... .....&.CiI4'....X%..V....F>..J...<H....([U..1F..# ..a..o.....P  
.3V..1p+....X.l.....g....//.H....._....9....W.3;...>.l.....C....{..3.....  
0
```

POST /userinfo.php HTTP/1.1  
Host: testphp.vulnweb.com  
Connection: keep-alive  
Content-Length: 31  
Cache-Control: max-age=0  
Upgrade-Insecure-Requests: 1  
Origin: http://testphp.vulnweb.com  
Content-Type: application/x-www-form-urlencoded  
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/119.0.0.0 Safari/537.36  
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,\*/\*;q=0.8,application/signed-exchange;v=b3;q=0.7  
Referer: http://testphp.vulnweb.com/login.php  
Accept-Encoding: gzip, deflate  
Accept-Language: en-US,en;q=0.9

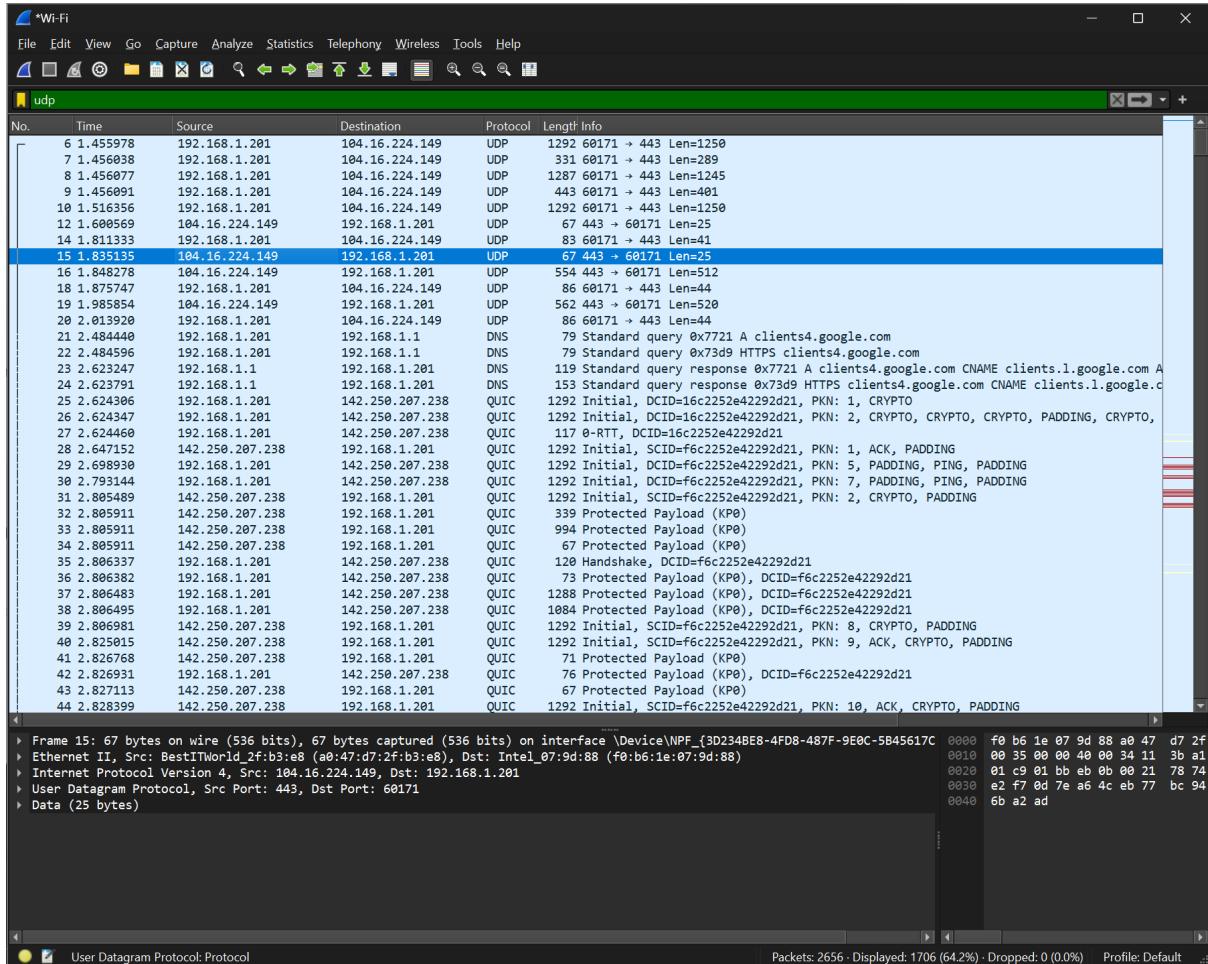
uname=akshatnegi&pass=csfbatch2 HTTP/1.1 302 Found  
Server: nginx/1.19.0  
Date: Tue, 21 Nov 2023 20:08:34 GMT  
Content-Type: text/html; charset=UTF-8  
Transfer-Encoding: chunked  
Connection: keep-alive  
X-Powered-By: PHP/5.6.40-38+ubuntu20.04.1+deb.sury.org+1  
Location: login.php

e  
you must login  
0

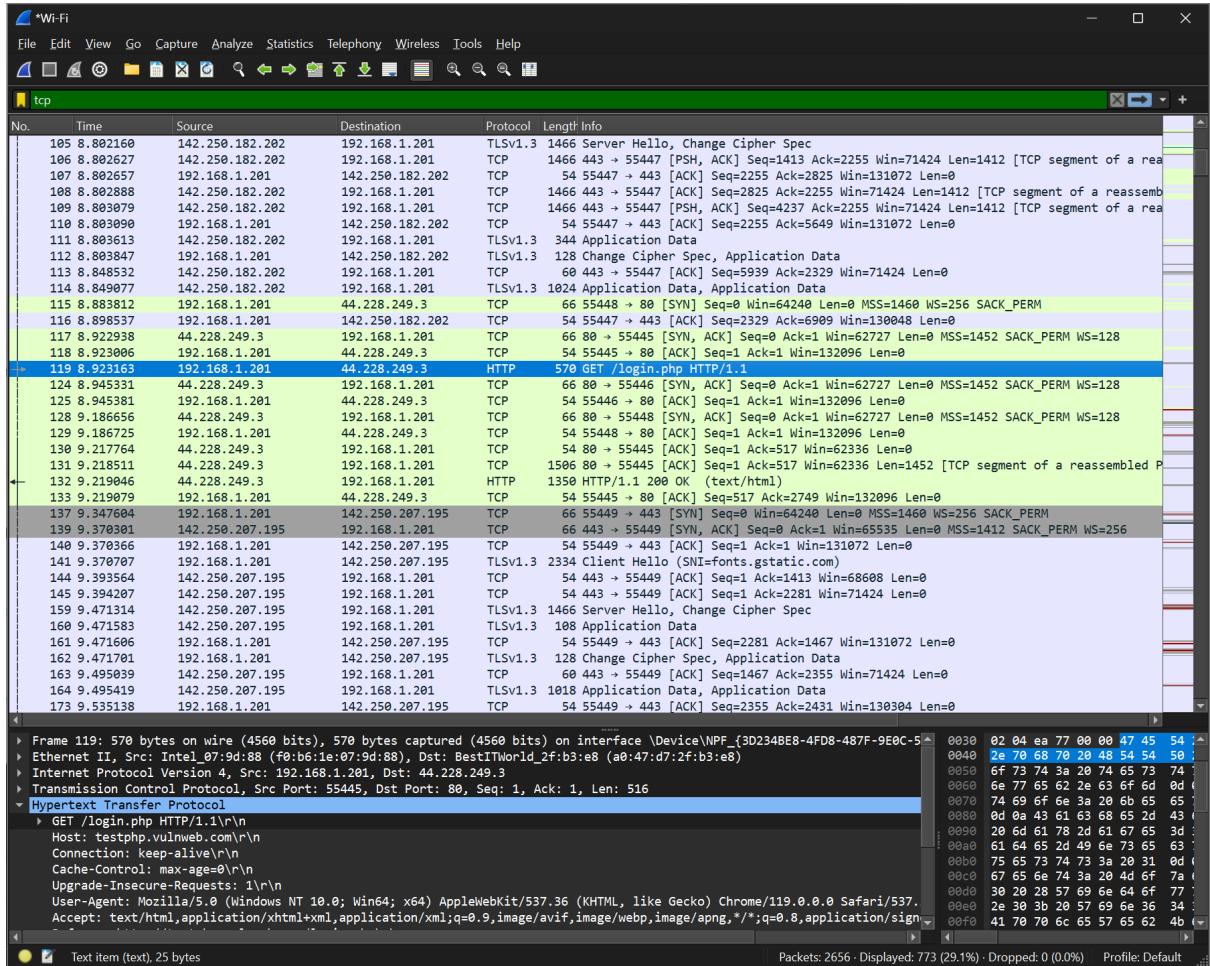
GET /login.nhn HTTP/1.1  
3 client pkts, 5 server pkts, 5 turns.

Entire conversation (7460 bytes) Show data as ASCII Stream 3

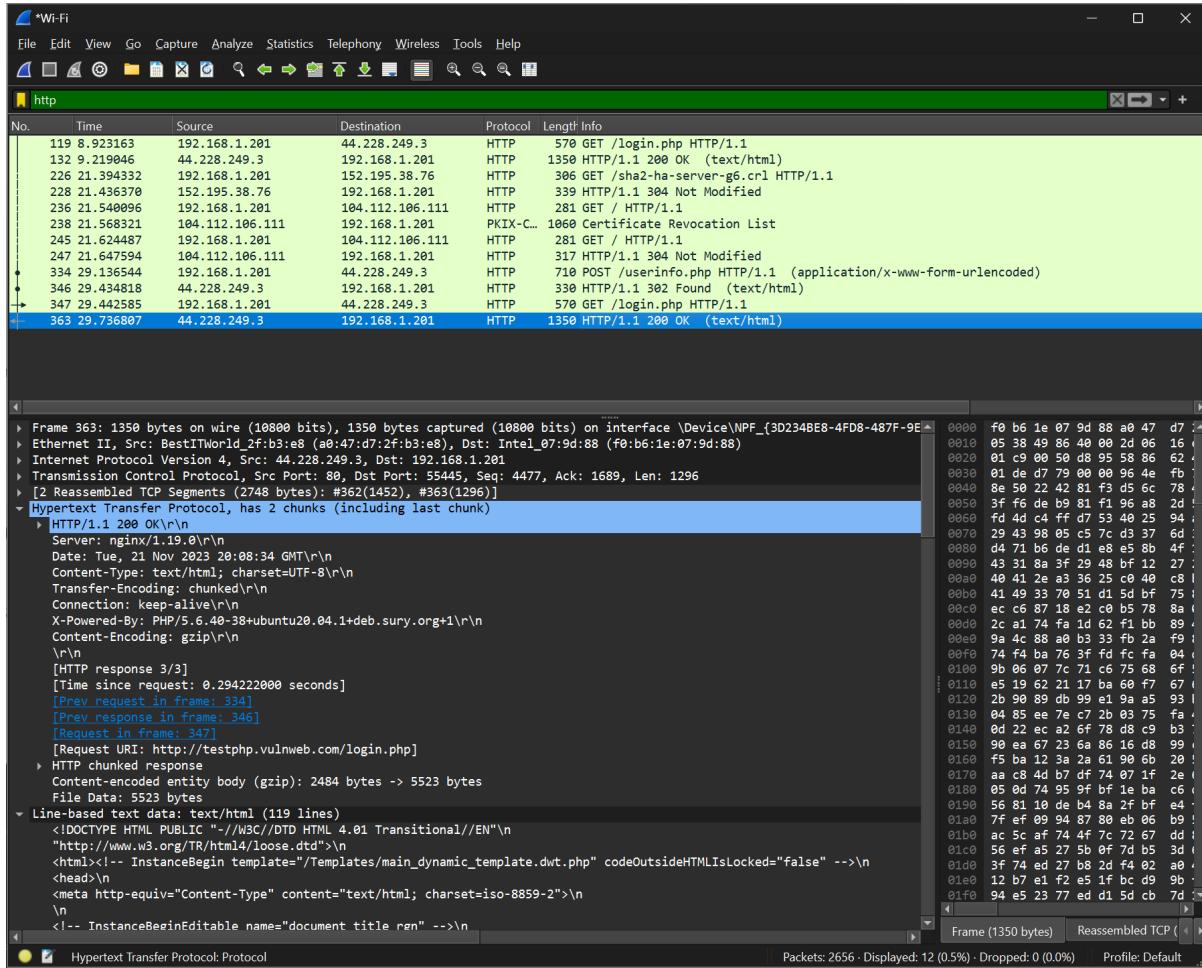
# UDP Filter



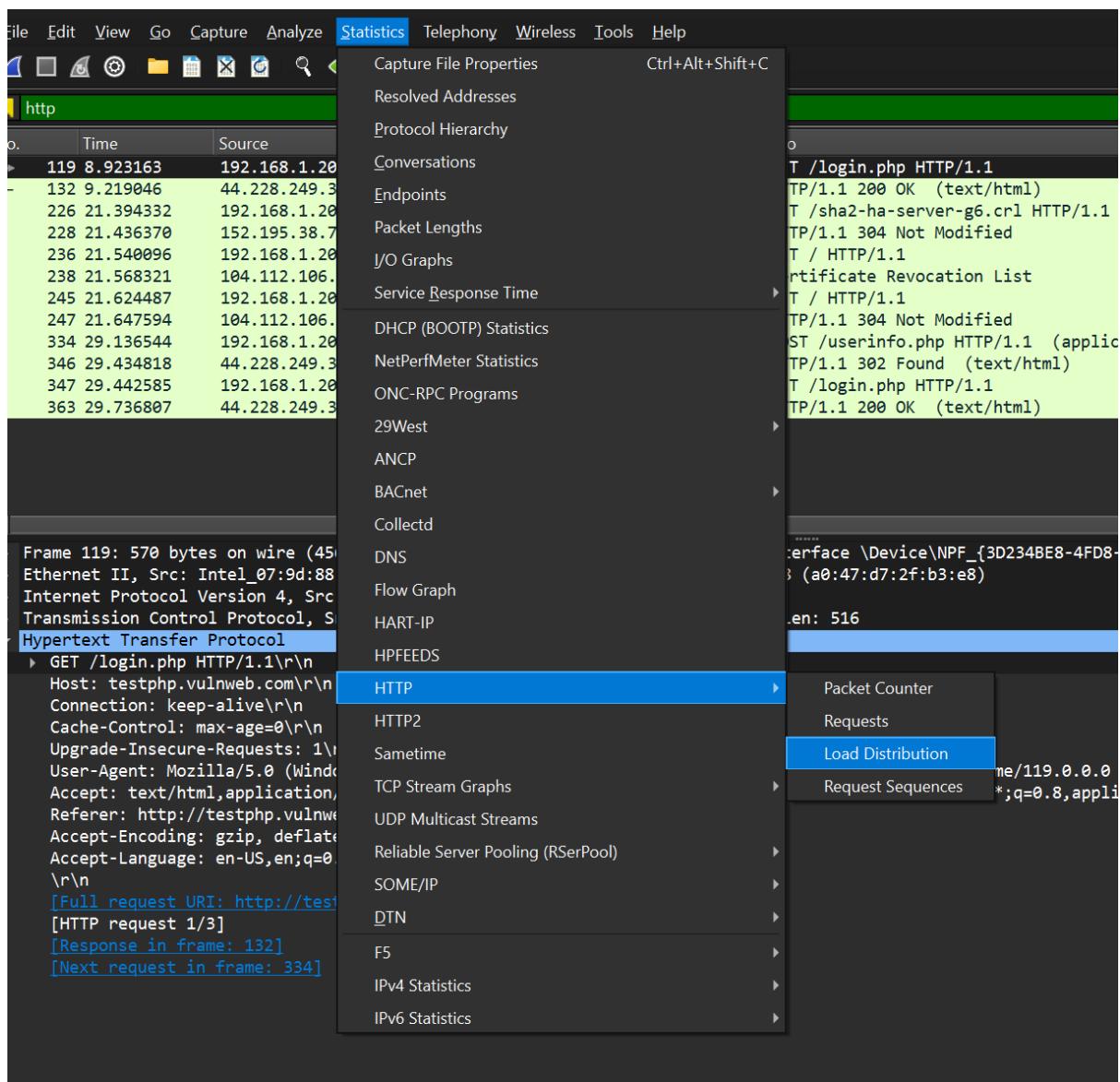
# TCP Filter

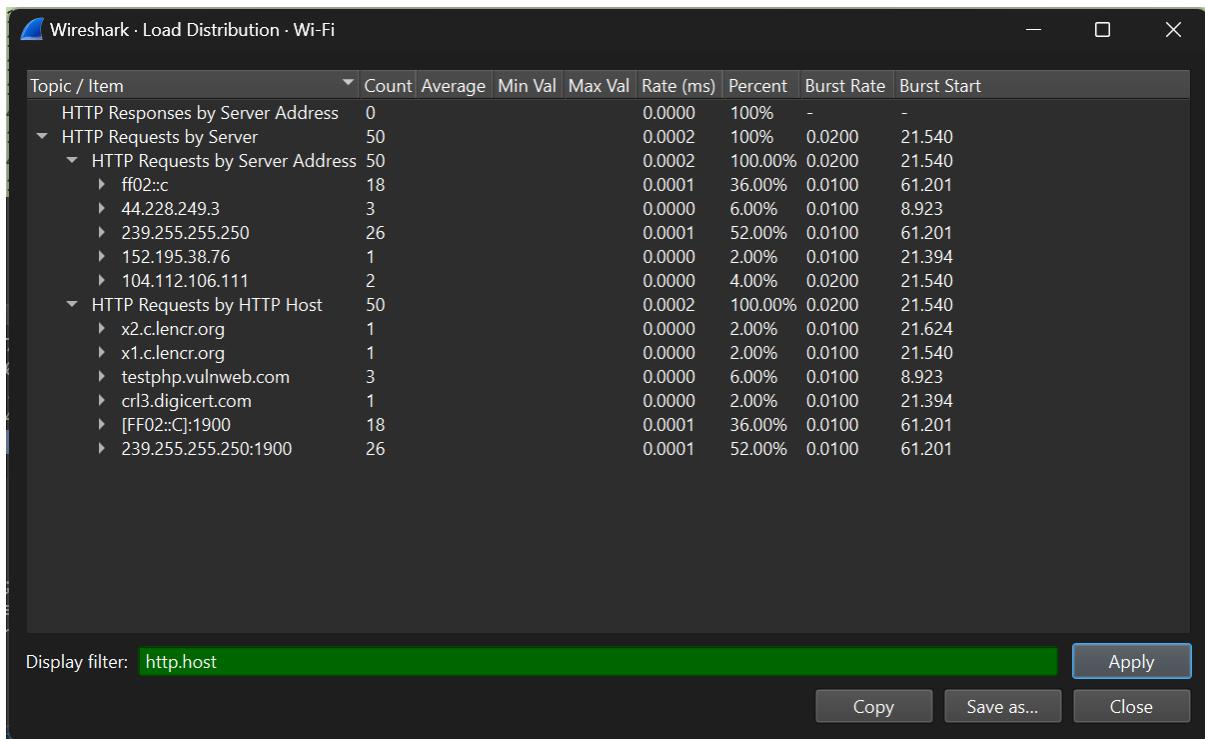


# HTTP Filtered



# To check which websites are surfed on a network (only http websites)





# LAB EXPERIMENT – 10

## Nessus Essentials for Vulnerability Scanning

### **LAB PRACTICE:**

#### **Which company created Nessus?**

Nessus was created by Tenable, Inc. Tenable is a cybersecurity company that provides various security products and services.

#### **Under Scan Templates in Nessus, there is a scan for what type of Ransomware?**

Nessus does not specifically have a predefined scan template for a particular type of ransomware. Scan templates in Nessus are generally designed to identify vulnerabilities and security issues in systems rather than specific malware types.

#### **When creating a new Plugin Rule, what 4 fields do you need to enter?**

When creating a new Plugin Rule in Nessus, you typically need to enter the following four fields:

Name: A descriptive name for the rule.

Rule: The rule itself, specifying the conditions that trigger the rule.

Action: The action to be taken when the rule is triggered (e.g., alert, log, block).

Severity: The severity level assigned to the rule.

#### **Is there a scan template specifically designed for mobile devices?**

Yes, Nessus has scan templates that are specifically designed for mobile devices. These templates are tailored to assess the security of mobile operating systems and applications. Mobile device scan templates typically include checks for vulnerabilities and misconfigurations relevant to platforms such as Android and iOS.

# Vulnerabilities by Host

## Advance Dynamic Scan

127.0.0.1



### Vulnerabilities

Total: 20

Severity	CVSS V3.0	VPR Score	Plugin	Name
INFO	N/A	-	141394	Apache HTTP Server Installed (Linux)
INFO	N/A	-	142640	Apache HTTP Server Site Enumeration
INFO	N/A	-	182774	Curl Installed (Linux / Unix)
INFO	N/A	-	10107	HTTP Server Type and Version
INFO	N/A	-	84047	Hyper-V Virtual Machine Detection
INFO	N/A	-	24260	HyperText Transfer Protocol (HTTP) Information
INFO	N/A	-	147817	Java Detection and Identification (Linux / Unix)
INFO	N/A	-	151883	Libgcrypt Installed (Linux/UNIX)
INFO	N/A	-	19506	Nessus Scan Information
INFO	N/A	-	10147	Nessus Server Detection
INFO	N/A	-	14272	Netstat Portscanner (SSH)
INFO	N/A	-	11936	OS Identification
INFO	N/A	-	148373	OpenJDK Java Detection (Linux / Unix)
INFO	N/A	-	168007	OpenSSL Installed (Linux)
INFO	N/A	-	130024	PostgreSQL Client/Server Installed (Linux)
INFO	N/A	-	174788	SQLite Local Detection (Linux)
INFO	N/A	-	42822	Strict Transport Security (STS) Detection
INFO	N/A	-	163326	Tenable Nessus Installed (Linux)
INFO	N/A	-	182848	libcurl Installed (Linux / Unix)

127.0.0.1

4

## Vulnerabilities by Host

# Basic Network Scan

127.0.0.1



Vulnerabilities Total: 56

Severity	CVSS V3.0	VPR Score	Plugin Name
MEDIUM	6.5	-	<a href="#">51192</a> SSL Certificate Cannot Be Trusted
INFO	N/A	-	<a href="#">141394</a> Apache HTTP Server Installed (Linux)
INFO	N/A	-	<a href="#">142640</a> Apache HTTP Server Site Enumeration
INFO	N/A	-	<a href="#">45590</a> Common Platform Enumeration (CPE)
INFO	N/A	-	<a href="#">182774</a> Curl Installed (Linux / Unix)
INFO	N/A	-	<a href="#">55472</a> Device Hostname
INFO	N/A	-	<a href="#">54615</a> Device Type
INFO	N/A	-	<a href="#">159273</a> Dockerfile Detection for Linux/UNIX
INFO	N/A	-	<a href="#">25203</a> Enumerate IPv4 Interfaces via SSH
INFO	N/A	-	<a href="#">25202</a> Enumerate IPv6 Interfaces via SSH
INFO	N/A	-	<a href="#">33276</a> Enumerate MAC Addresses via SSH
INFO	N/A	-	<a href="#">170170</a> Enumerate the Network Interface configuration via SSH
INFO	N/A	-	<a href="#">179200</a> Enumerate the Network Routing configuration via SSH
INFO	N/A	-	<a href="#">168980</a> Enumerate the PATH Variables
INFO	N/A	-	<a href="#">35716</a> Ethernet Card Manufacturer Detection
INFO	N/A	-	<a href="#">86420</a> Ethernet MAC Addresses
INFO	N/A	-	<a href="#">168982</a> Filepaths contain Dangerous characters (Linux)
INFO	N/A	-	<a href="#">10107</a> HTTP Server Type and Version
INFO	N/A	-	<a href="#">12053</a> Host Fully Qualified Domain Name (FQDN) Resolution

## 127.0.0.1



### Scan Information

Start time: Tue Dec 5 10:31:24 2023  
End time: Tue Dec 5 10:46:42 2023

### Host Information

IP: 127.0.0.1  
MAC Address: 00:15:5D:1B:63:01  
OS: Linux Kernel 6.5.0-kali3-amd64

### Vulnerabilities

#### 51192 - SSL Certificate Cannot Be Trusted

##### Synopsis

The SSL certificate for this service cannot be trusted.

##### Description

The server's X.509 certificate cannot be trusted. This situation can occur in three different ways, in which the chain of trust can be broken, as stated below :

- First, the top of the certificate chain sent by the server might not be descended from a known public certificate authority. This can occur either when the top of the chain is an unrecognized, self-signed certificate, or when intermediate certificates are missing that would connect the top of the certificate chain to a known public certificate authority.
- Second, the certificate chain may contain a certificate that is not valid at the time of the scan. This can occur either when the scan occurs before one of the certificate's 'notBefore' dates, or after one of the certificate's 'notAfter' dates.
- Third, the certificate chain may contain a signature that either didn't match the certificate's information or could not be verified. Bad signatures can be fixed by getting the certificate with the bad signature to be re-signed by its issuer. Signatures that could not be verified are the result of the certificate's issuer using a signing algorithm that Nessus either does not support or does not recognize.

If the remote host is a public host in production, any break in the chain makes it more difficult for users to verify the authenticity and identity of the web server. This could make it easier to carry out man-in-the-middle attacks against the remote host.

## See Also

---

<https://www.itu.int/rec/T-REC-X.509/en>

<https://en.wikipedia.org/wiki/X.509>

## Solution

---

Purchase or generate a proper SSL certificate for this service.

## Risk Factor

---

Medium

## CVSS v3.0 Base Score

---

6.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:N)

## CVSS v2.0 Base Score

---

6.4 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:N)

## Plugin Information

---

Published: 2010/12/15, Modified: 2020/04/27

## Plugin Output

---

<tcp/8834/www>

```
The following certificate was at the top of the certificate  
chain sent by the remote host, but it is signed by an unknown  
certificate authority :
```

```
| -Subject : O=Nessus Users United/OU=Nessus Server/L>New York/C=US/ST=NY/CN=kali  
| -Issuer : O=Nessus Users United/OU=Nessus Certification Authority/L>New York/C=US/ST=NY/CN=Nessus  
Certification Authority
```

```
kali@kali: ~/Downloads
└─$ sudo apt dkpg -i "Nessus-10.6.3-ubuntu1404_amd64.deb"
E: Command line option 'i' [from -i] is not understood in combination with the other options.

└─$ sudo dkpg -i "Nessus-10.6.3-ubuntu1404_amd64.deb"
sudo: dkpg: command not found

└─$ sudo dpkg -i "Nessus-10.6.3-ubuntu1404_amd64.deb"
Selecting previously unselected package nessus.
(Reading database ... 476173 files and directories currently installed.)
Preparing to unpack Nessus-10.6.3-ubuntu1404_amd64.deb ...
Unpacking nessus (10.6.3) ...
Setting up nessus (10.6.3) ...
HMAC : (Module_Integrity) : Pass
SHA1 : (KAT_Digest) : Pass
SHA2 : (KAT_Digest) : Pass
SHA3 : (KAT_Digest) : Pass
TDES : (KAT_Cipher) : Pass
AES_GCM : (KAT_Cipher) : Pass
AES_ECB_Decrypt : (KAT_Cipher) : Pass
RSA : (KAT_Signature) : RNG : (Continuous_RNG_Test) : Pass
Pass
ECDSA : (PCT_Signature) : Pass
ECDSA : (PCT_Signature) : Pass
DSA : (PCT_Signature) : Pass
TLS13_KDF_EXTRACT : (KAT_KDF) : Pass
TLS13_KDF_EXPAND : (KAT_KDF) : Pass
TLS12_PRF : (KAT_KDF) : Pass
PBKDF2 : (KAT_KDF) : Pass
SSH_KDF : (KAT_KDF) : Pass

RSA_Encrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
INSTALL PASSED
Unpacking Nessus Scanner Core Components...

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

└─$ /bin/systemctl start nessusd.service
```

# Welcome To Nessus Essentials

Welcome to Nessus Essentials and congratulations on taking action to secure your network! We offer the latest plugins for vulnerability scanning today, helping you identify more vulnerabilities and keep your network protected.

If you're looking for more advanced capabilities, such as live results and configuration checks – as well as the ability to scan unlimited IPs, check out Nessus Professional. To learn more view the [Nessus Professional datasheet](#).

## Activating Your Nessus Essentials License

Your activation code for Nessus Essentials is:

7TDJ-GSFS-LNGE-JFMT-7FP2

[Download Nessus](#)

This is a one-time code. If you uninstall and then reinstall you will need to register the scanner again and receive another activation code.

After initial installation of Nessus you will be prompted to set up and activate your scanner. For further details on activating your subscription review the [installation guide](#).

My Scans

Import New Folder + New Scan

Search Scans 2 Scans

Name	Schedule	Last Scanned
advance dynamic scan	On Demand	✓ Today at 10:47 AM ▶ ✖
Basic Network Scan	On Demand	✓ Today at 10:46 AM ▶ ✖

⚠ Not secure | <https://kali:8834/#/scans/reports/5/hosts/2/vulnerabilities/group/51192>

YouTube Maps News Translate

Nessus Essentials Scans Settings

Basic Network Scan / 127.0.0.1 / SSL (Multiple Issues)

[Configure](#) [Audit Trail](#) [Launch](#) [Report](#) [Export](#)

Vulnerabilities 45

Search Vulnerabilities 5 Vulnerabilities

Sev	CVSS	VPR	Name	Family	Count	⋮
MEDIUM	6.5		SSL Certificate Cannot Be Trusted	General	1	🔗
INFO			SSL Certificate 'commonName' Mismatch	General	1	🔗
INFO			SSL Certificate Information	General	1	🔗
INFO			SSL Cipher Suites Supported	General	1	🔗
INFO			SSL Perfect Forward Secrecy Cipher Suites Supp...	General	1	🔗

Scan Details

- Policy: Basic Network Scan
- Status: Completed
- Severity Base: CVSS v3.0
- Scanner: Local Scanner
- Start: Today at 10:31 AM
- End: Today at 10:46 AM
- Elapsed: 15 minutes

Vulnerabilities

Critical  
High  
Medium  
Low  
Info