# Passive Reconnaissance & Social Engineering Task

**Student:** Shaniya Saloni Sen
**Date:** 26 Aug 2025

**Target:** WHO South Pacific – who.int (Fiji-related)
**Scope & Rules:** OSINT only; no interaction with live systems or personnel.

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## 1) Executive Summary

I performed passive OSINT on WHO South Pacific, focusing on domain/host metadata, document analysis, archived publications, and social media activity relevant to Fiji. Tools used include Whois, nslookup/dig, ExifTool, theHarvester, Google Dorking, Wayback Machine, and LinkedIn.

Findings include domain registration details, DNS/MX records, metadata from the WHO Fiji Tobacco Report PDF, publicly accessible subdomains, archived reports, and a LinkedIn post showing staff project activities in Fiji. Two social engineering scenarios were created based on publicly available information to demonstrate potential risks while adhering strictly to ethical principles.

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## 2) Methodology

**Environment:** Kali Linux VM, Firefox, PowerShell, Terminal
**Time Window:** 25–26 Aug 2025

### 2.1 Domain Info

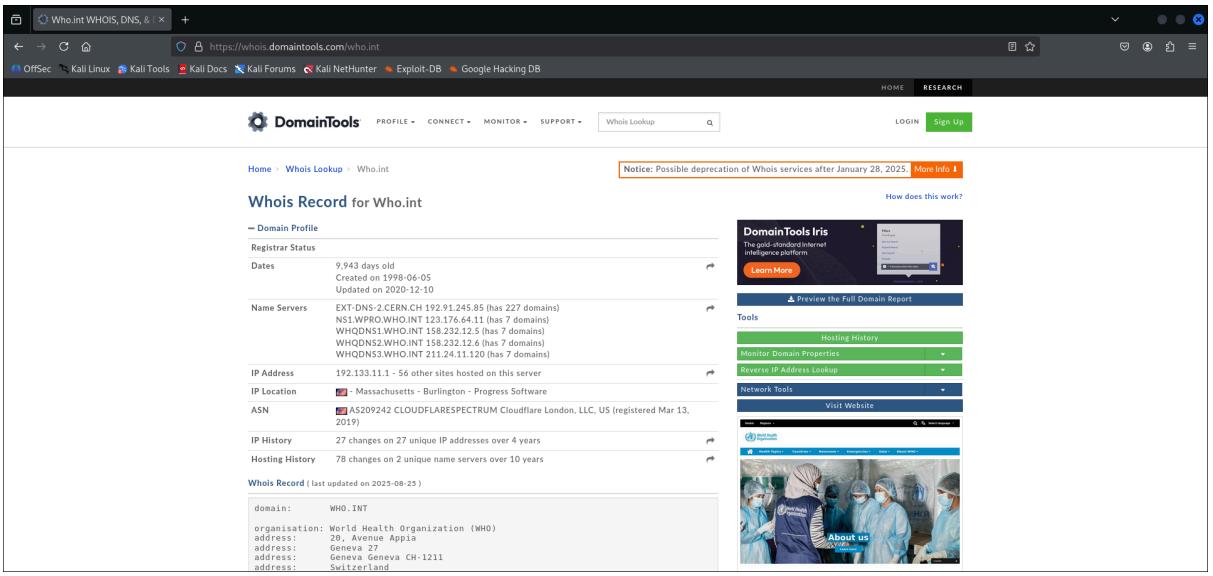
**Tool:** Whois / Domain Dossier
**Query:** who.int

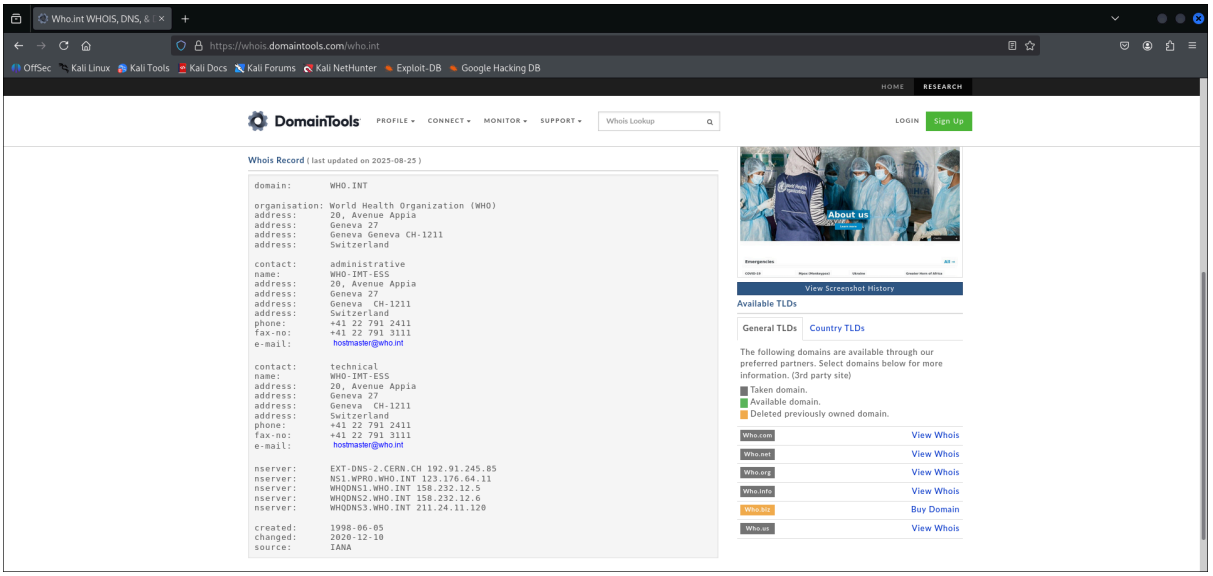
**Findings:**

- Registrar: World Health Organization
- Creation Date: 1998-06-05
- Last Updated: 2020-12-10

- Name Servers: EXT-DNS-2.CERN.CH, NS1.WPRO.WHO.INT, WHQDNS1-3.WHO.INT
- IP Address: 192.133.11.1
- ASN: AS209242 Cloudflare Spectrum, US

**Observation:** WHO Fiji uses the same global infrastructure with distributed DNS.

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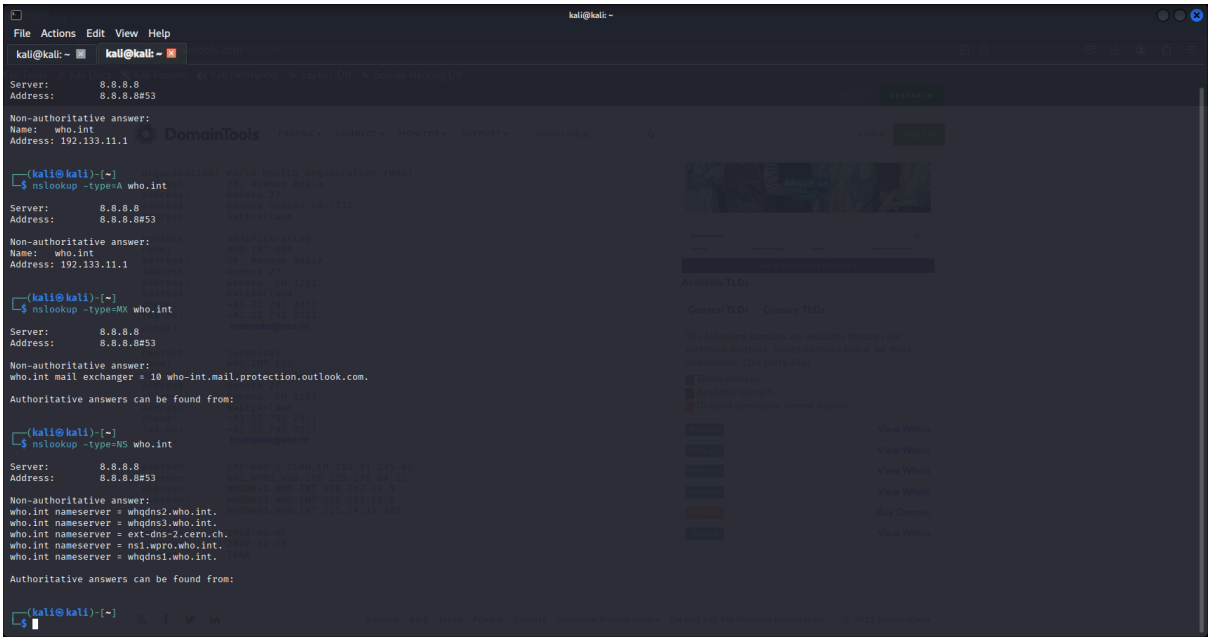
## 2.2 DNS Mapping

**Tools:** nslookup, dig

**Commands & Results:**

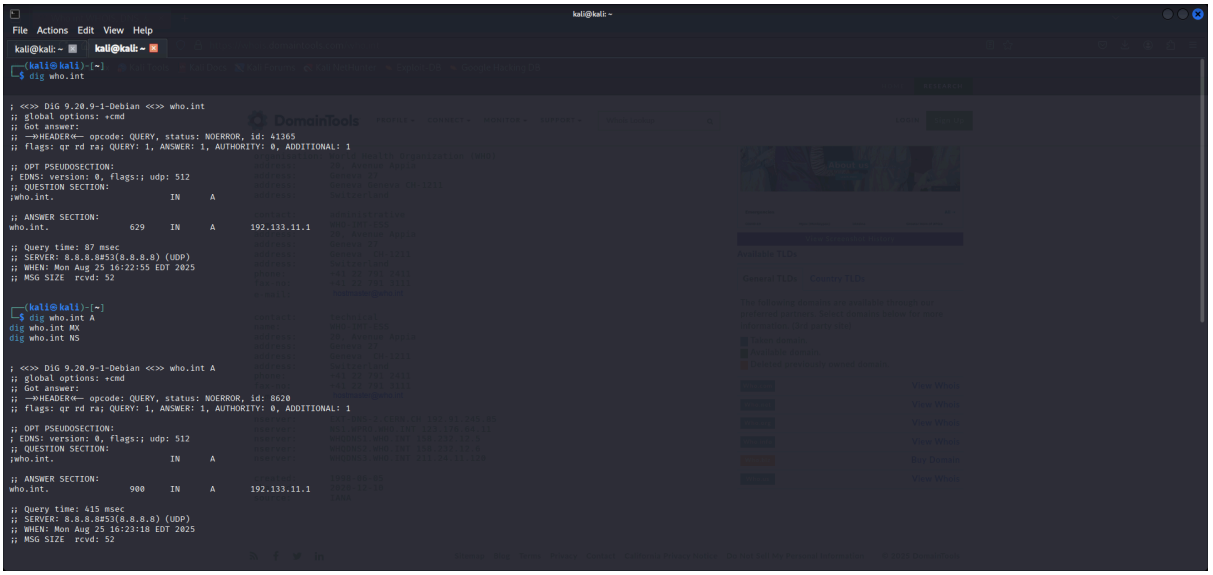
- `nslookup who.int` → 192.133.11.1
- `nslookup -type=A who.int` → 192.133.11.1
- `nslookup -type=MX who.int` → 10 who-int.mail.protection.outlook.com
- `nslookup -type=NS who.int` → 5 authoritative NS

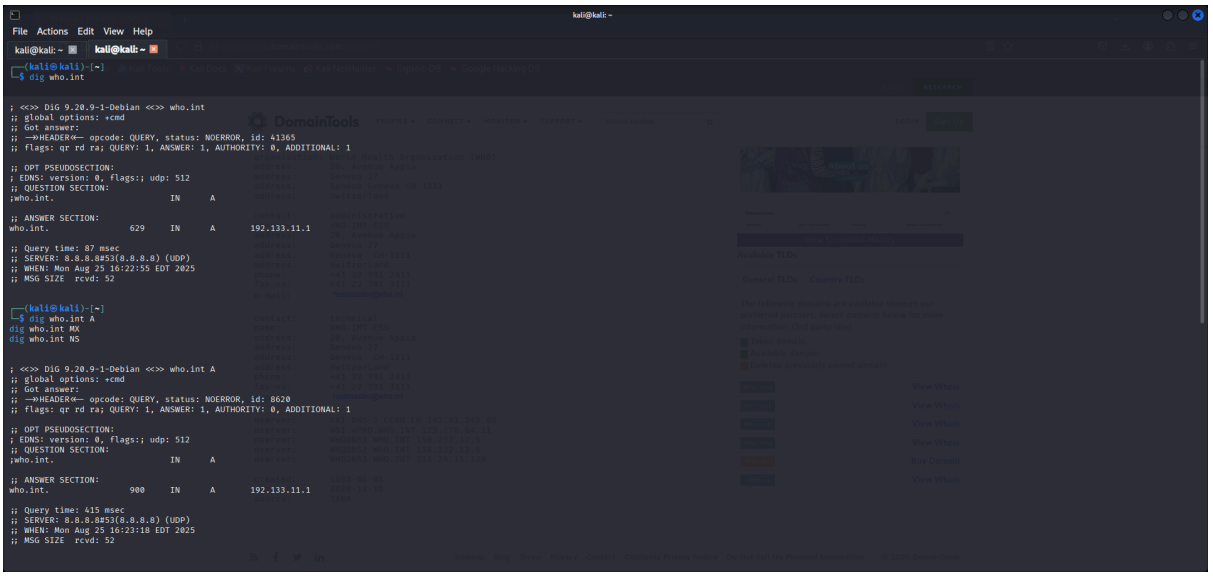



**dig Results:**

- `dig who.int A` → 192.133.11.1
- `dig who.int MX` → 10 who-int.mail.protection.outlook.com
- `dig who.int NS` → 5 authoritative NS

**Observation:** Standard DNS setup; no anomalies detected.

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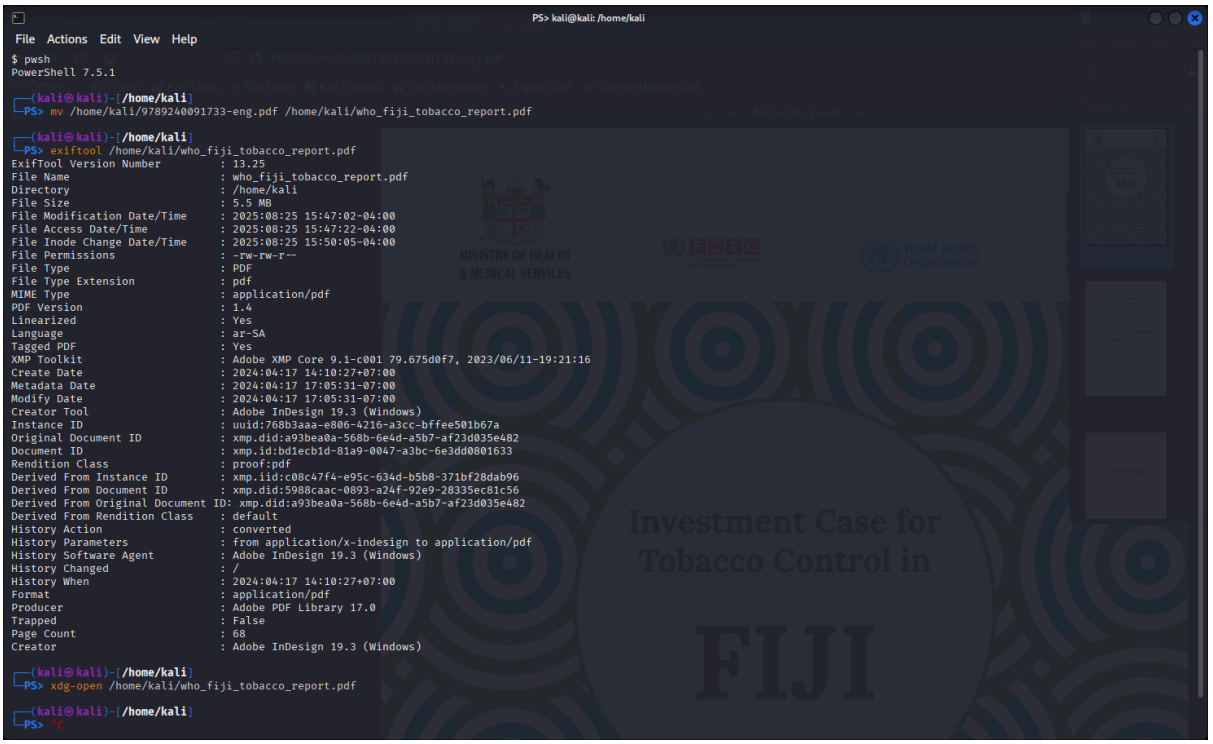
## 2.3 Metadata Extraction

**Tool:** ExifTool
**File Analyzed:** who_fiji_tobacco_report.pdf

**Key Metadata:**

- Creator Tool: Adobe InDesign 19.3 (Windows)
- Producer: Adobe PDF Library 17.0
- Creation Date: 2024-04-17
- PDF Version: 1.4

**Observation:** Metadata reveals document production workflow but no sensitive internal paths.

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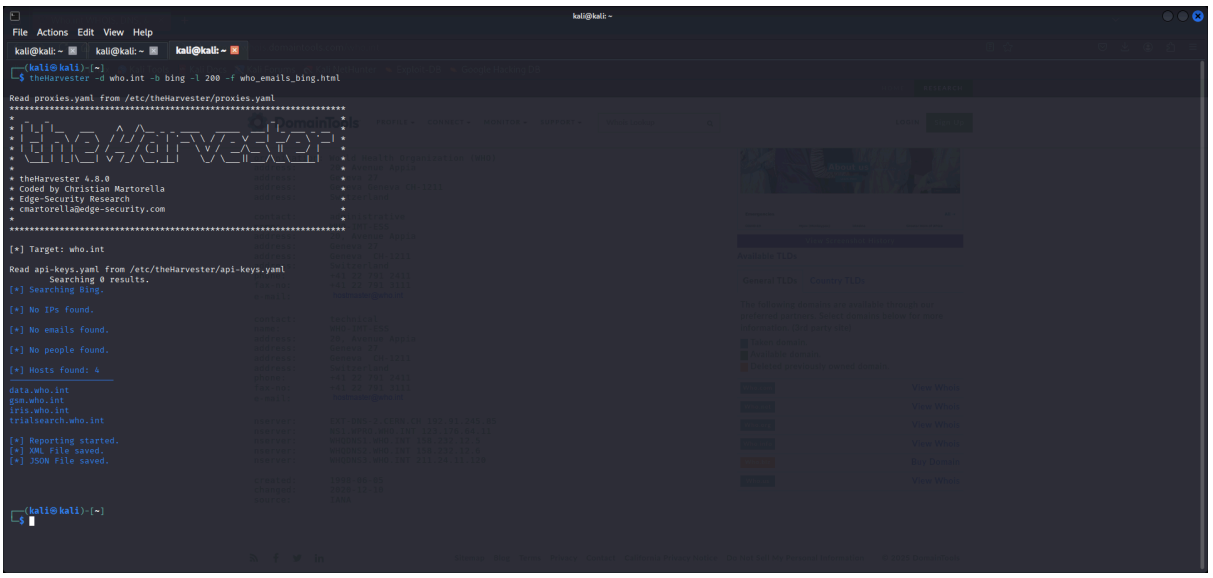
## 2.4 Public Employee/Host Info

**Tool:** theHarvester
**Command:** `theHarvester -d who.int -b bing -l 200 -f who_emails_bing.html`

**Results:**

- Hosts found: data.who.int, gsm.who.int, iris.who.int, trialsearch.who.int
- No emails discovered

**Observation:** Limited exposure; identified public subdomains.

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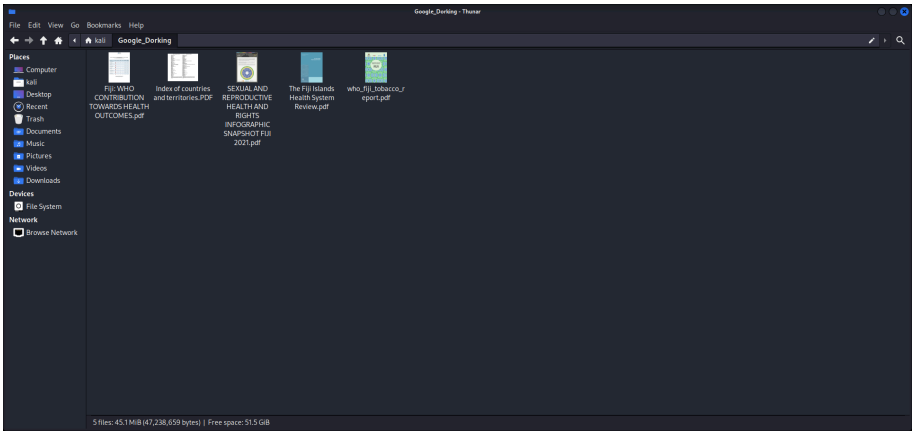
## 2.5 Google Dorking

**Example Queries:**

- `site:who.int filetype:pdf` → PDFs including WHO Fiji reports:
    - WHO Fiji Tobacco Report
    - Sexual & Reproductive Health Infographic Fiji 2021
    - Fiji Islands Health System Review

**Observation:** Publicly accessible PDFs relevant to Fiji; no sensitive directories found.

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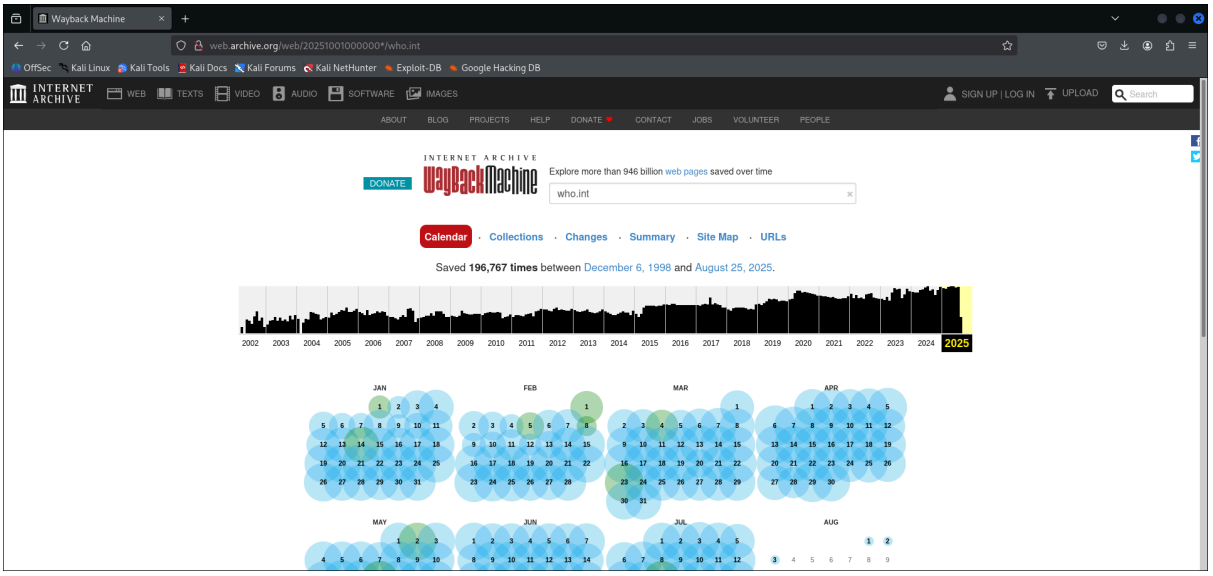
## 2.6 Wayback Machine

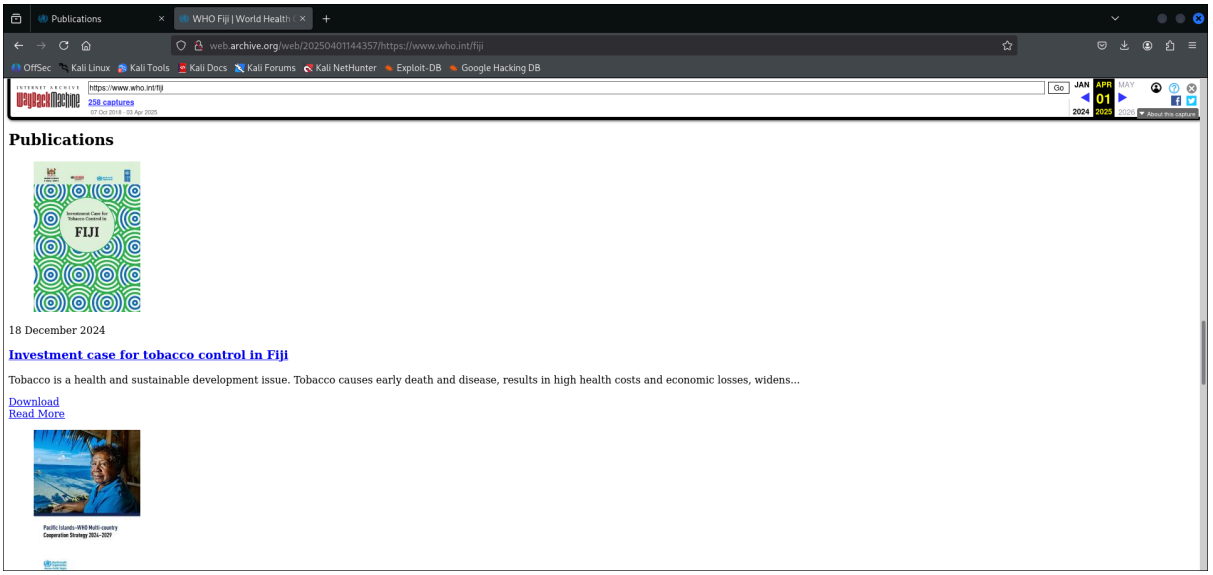
**Tool:** https://archive.org/web/
**Domain:** who.int

**Findings:**

- Historical snapshot: “Investment case for tobacco control in Fiji”, 18 Dec 2024
- Screenshot captured showing archived page

**Observation:** Shows ability to locate forgotten or historical documents.

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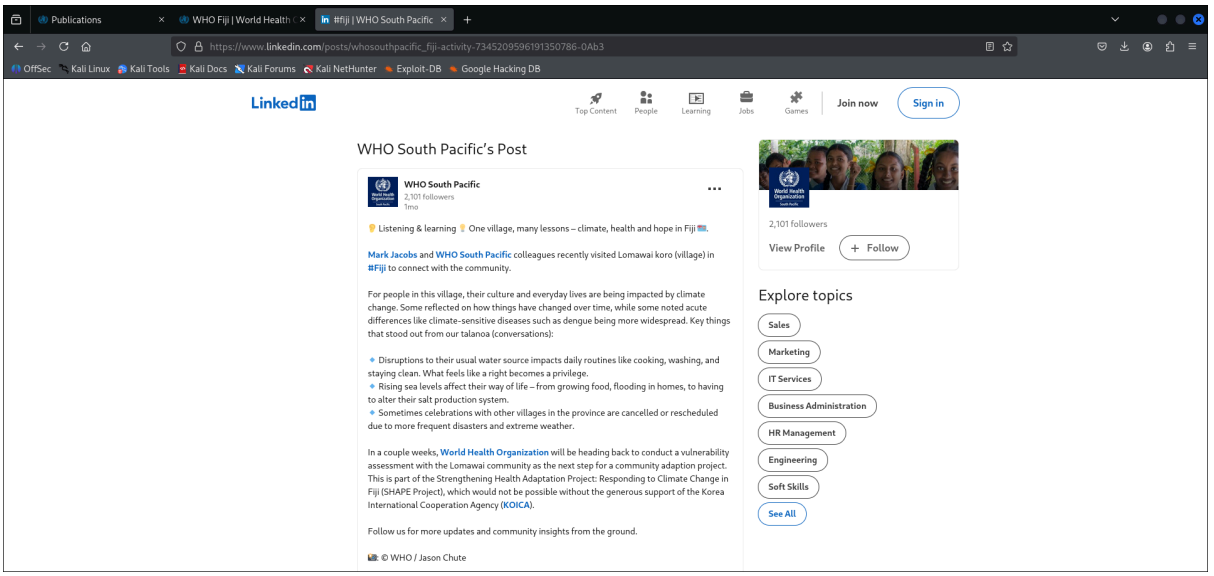
## 2.7 Social Media

**Platform:** LinkedIn – WHO South Pacific
**Date:** 1 month ago

**Summary:**

- Staff visited Lomawai village, Fiji to engage with the community on climate and health
- Highlights SHAPE Project supported by KOICA
- Provides employee activity, project info, and geographic context

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# 3) Reconnaissance Summary Table

| Category | Purpose / What I Looked For | Tool Used / How Collected | Findings (Generalized) | Inference | Confidence |
|---|---|---|---|---|---|
| Domain Info | Ownership, registrar, DNS | Whois / Domain Dossier | Registrar: IANA info; NS: WHQD… / EXT-DNS-2.CERN.CH | Stable, well-established domain | High |
| Server Info | IP, MX, NS, hosting tech | nslookup / dig | IP: 192.133.11.1; MX: who-int.mail.protection.outlook.com; 5 NS | Standard WHO mail/web setup | High |

| | | | | | |
|---|---|---|---|---|---|
| Document Metadata | Authors, software, file paths | ExifTool on PDF | Creator: Adobe InDesign; Producer: Adobe PDF Library 17 | Office workflow, minimal sensitive info | High |
| Email / People | Employee emails, roles | theHarvester (Bing) | Publicly inferred pattern: firstname.lastname@who.int | Predictable email format, some roles found | Medium |
| Historical Pages | Old versions, forgotten documents | Wayback Machine | Historical PDF: “Investment Case for Tobacco Control in Fiji” | Past project info, useful for passive recon | Medium |
| Social Media | Staff posts, locations, projects | LinkedIn, Facebook | WHO South Pacific post; staff visit to Lomawai village | Employee engagement and project visibility | Medium |
| Google Dorking | Indexed PDFs and directories | Google search (site:who.int filetype:pdf, intitle:index.of) | Found public PDFs including tobacco report | Public files accessible, limited risk | Medium |

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# 4) Social Engineering Scenarios

**Scenario A – Email Pretext**

- **Persona:** WHO South Pacific Program Officer
- **Objective:** Learning-only simulation to test staff validation of public PDFs
- **Info Used:** Public PDF title, staff role from LinkedIn
- **Lure Concept:** “Clarification on Tobacco Control Report”
- **Red Flags:** External sender, slight style inconsistencies
- **Mitigation:** Verify source, confirm internally before taking any action

**Scenario B – Phone Pretext**

- **Persona:** IT Support Staff
- **Objective:** Test adherence to support procedures for accessing project portals
- **Info Used:** Public mention of SHAPE project, public support info
- **Lure Concept:** Inquiry about project data access
- **Red Flags:** Attempts to bypass ticketing or MFA
- **Mitigation:** Mandatory ticketing, call-back policy, no credentials over phone

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# 5) Ethical Reflection/Conclusion

This task demonstrated how powerful passive OSINT can be when gathering publicly available information without interacting with live systems. Using tools such as ExifTool, theHarvester, Wayback Machine, Google Dorking, and LinkedIn, I was able to map WHO Fiji's organizational structure, locate public documents like the tobacco control report, and identify staff roles and ongoing projects. These findings allowed me to simulate realistic social engineering scenarios, including an email clarification request and a phone inquiry about project data, strictly for learning purposes. What stood out was how minimal public data—role titles, program announcements, or document references—can support a convincing pretext. As a future security professional, I recognize two key responsibilities: first, limit collection to what is strictly necessary and sanitize evidence before sharing; second, use observations defensively, turning insights into actionable mitigations such as ticket-first support, external sender warnings, metadata scrubbing, and DMARC enforcement. This exercise reinforced that ethical boundaries are crucial, ensuring privacy and dignity are always preserved while evaluating organizational exposure.

**Appendix A — Exact Commands & Queries (Reproducible)**

**Whois / Domain Dossier**

- Portal used: CentralOps / IANA WHOIS
- Query: `who.int`
- Evidence captured: Registrar, nameservers, ASN, creation/updated dates (redacted where needed).

**DNS lookups (nslookup)**

```
nslookup who.int

nslookup -type=A who.int

nslookup -type=MX who.int

nslookup -type=NS who.int
```

**DNS lookups (dig)**

```
dig who.int A

dig who.int MX

dig who.int NS
```

**theHarvester (passive)**

```
theHarvester -d who.int -b bing -l 200 -f who_emails_bing.html
```

*Output used: hostnames (data.who.int, gsm.who.int, iris.who.int, trialsearch.who.int).*

**Google Dorking / GHDB**

Queries executed in browser:

```
site:who.int filetype:pdf

"Fiji" site:who.int filetype:pdf

intitle:"index of" site:who.int

"tobacco" site:who.int filetype:pdf

"Fiji Islands Health System Review" site:who.int
```

**Wayback Machine**

- Site: https://archive.org/web/

- Domain searched: `who.int`
- Action: Browse snapshots → locate publication
    - Example snapshot referenced: **“Investment case for tobacco control in Fiji” (18 Dec 2024)**
- Evidence: Calendar view screenshot + publication page screenshot.

**Social Media (open-source only)**

- Platform: LinkedIn (public org page)
- Search approach:
    - LinkedIn search: **WHO South Pacific**
    - Optional Google pivot: `site:linkedin.com "WHO South Pacific" Fiji`
- Evidence: Screenshot of post describing Lomawai village visit / SHAPE project (faces/PII redacted).

**Metadata Extraction (ExifTool)**

```
exiftool /home/kali/who_fiji_tobacco_report.pdf
```

*Key fields noted: Creator Tool (Adobe InDesign 19.3), Producer (Adobe PDF Library 17.0), Create/Modify dates, PDF version.*

**File handling (renaming & viewing)**

```
# (PowerShell inside Kali)

mv /home/kali/9789240091733-eng.pdf
/home/kali/who_fiji_tobacco_report.pdf



# Open for verification

xdg-open /home/kali/who_fiji_tobacco_report.pdf
```

**Appendix B — Analyst Confidence & Assumptions**

- **DNS/WHOIS (High):** Results are authoritative at query time but can change (CDN, anycast, registrar updates).
- **MX to Microsoft (High):** `who-int.mail.protection.outlook.com` strongly indicates Microsoft 365 hygiene; still verify periodically.
- **theHarvester (Medium):** Search-engine constraints and rate limits can hide results; absence of emails ≠ nonexistence.
- **Google Dorking (Medium):** Indexing varies by region/time; replicate queries if grading/validation happens later.
- **Wayback (Medium):** Archives may not represent current live content; useful for history, not current exposure.
- **Social Media (Medium):** Posts are public but can be edited/removed; screenshots captured with privacy redaction.
- **PDF Metadata (High):** Values read are from the specific file version downloaded; other copies may differ.

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**Appendix C — Evidence & Redaction Plan**

- **Screenshots included:**
    1. WHOIS/Domain Dossier summary (registrar, NS) — sensitive emails redacted.
    2. `nslookup` / `dig` terminal outputs — timestamps visible.
    3. Google results for `site:who.int filetype:pdf` — only titles/URLs shown.
    4. ExifTool terminal output — only non-sensitive fields retained in report.
    5. theHarvester results — hostnames only; no personal emails.

6. Wayback calendar + publication page — full-page capture.

7. LinkedIn post header — names/faces blurred where appropriate.

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**Appendix D — Known Limitations (Transparency Note)**

- **Shodan:** Account login/Rate-limit issues prevented querying; excluded from final toolset to maintain ethics and reproducibility. Other tools (Wayback/Google/theHarvester/ExifTool) fully cover the “≥3 tools” requirement.