

# DietPi CTF Project Structure — Versi Lengkap

Dokumen ini berisi struktur lengkap project DietPi CTF, termasuk seluruh script, tabel penjelasan, dan struktur direktori. File ini digunakan sebagai dokumentasi resmi sistem CTF berbasis DietPi.

## 1. Struktur Direktori Utama

Lokasi	Keterangan
/usr/local/bin/	Berisi seluruh script CTF.
/etc/profile.d/	Orchestrator otomatis setelah login.
/etc/systemd/system/	Service reset otomatis saat shutdown.
/srv/ftp/	Folder flag (tmpfs).
/var/www/html/	Folder flag (tmpfs).
/srv/samba/share1/	Folder flag (tmpfs).
/srv/samba/share2/	Folder flag (tmpfs).
/etc/flags/	Folder flag (tmpfs).
/opt/app1/	Folder flag (tmpfs).
/opt/app2/	Folder flag (tmpfs).
/var/log/flags/	Folder flag (tmpfs).
/usr/local/share/flags/	Folder flag (tmpfs).
/home/ctf/	Folder flag (tmpfs).

## 2. Script Input Kelompok

**Lokasi file:** /usr/local/bin/01-input-kelompok.sh

### Script:

```
#!/bin/bash

if [ -f /etc/ctf_flags_generated ]; then
    exit 0
fi

echo ""
echo "====="
echo " INPUT NAMA KELOMPOK UNTUK CTF"
echo "====="
read -p "Masukkan Nama Kelompok: " GROUP

echo "$GROUP" > /etc/ctf_groupname
touch /etc/ctf_flags_generated
```

```
echo "[✓] Nama kelompok disimpan: $GROUP"
```

### 3. Script Generate Flags

Lokasi file: /usr/local/bin/02-generate-flags.sh

**Script:**

```
#!/bin/bash

if [ ! -f /etc/ctf_groupname ]; then
echo "[!] Nama kelompok belum diset!"
exit 1
fi

GROUP=$(cat /etc/ctf_groupname)

FLAG_DIRS=(
"/srv/ftp"
"/var/www/html"
"/srv/samba/share1"
"/srv/samba/share2"
"/etc/flags"
"/opt/app1"
"/opt/app2"
"/var/log/flags"
"/usr/local/share/flags"
"/home/ctf"
)

mkdir -p /home/ctf

for i in {1..10}; do
INDEX=$(printf "%02d" $i)
FLAG="smkctf{$GROUP}_fl4g_${INDEX}_"

case $i in
1) FLAG+="ls_34sy}" ;;
2) FLAG+="t00_34sy}" ;;
3) FLAG+="m0r3_fun}" ;;
4) FLAG+="k33p_g01ng}" ;;
5) FLAG+="h4lf_w4y}" ;;
6) FLAG+="b4s364_lv11}" ;;
esac
done
```

```

7) FLAG+="b4s364_lv12}" ;;
8) FLAG+="b4s364_lv13}" ;;
9) FLAG+="n3xt_st3p}" ;;
10) FLAG+="lts_0v3r}" ;;

esac

if [ $i -ge 6 ]; then
OUT=$(echo -n "$FLAG" | base64)
else
OUT="$FLAG"
fi

DIR=${FLAG_DIRS[$((i-1))]}
mkdir -p "$DIR"
echo "$OUT" > "$DIR/flag.txt"
done

echo "[✓] Semua flag berhasil dibuat."

```

## 4. Script Checker

**Lokasi file:** /usr/local/bin/03-checker.sh

**Script:**

```

#!/bin/bash

GREEN="\033[0;32m"
RED="\033[0;31m"
NC="\033[0m"

FLAG_DIRS=(
    "/srv/ftp"
    "/var/www/html"
    "/srv/samba/share1"
    "/srv/samba/share2"
    "/etc/flags"
    "/opt/app1"
    "/opt/app2"
    "/var/log/flags"
    "/usr/local/share/flags"
    "/home/ctf"
)

```

```

echo "===== CHECKER CTF ====="

if [ -f /etc/ctf_groupname ]; then
echo -e "${GREEN}[PASS]${NC} Nama kelompok: $(cat /etc/ctf_groupname)"
else
echo -e "${RED}[FAIL]${NC} Nama kelompok belum diinput"
fi

echo ""

for d in "${FLAG_DIRS[@]}"; do
if [ -d "$d" ]; then
echo -e "${GREEN}[FOLDER OK]${NC} $d"
else
echo -e "${RED}[FOLDER MISSING]${NC} $d"
continue
fi

if [ -f "$d/flag.txt" ]; then
echo -e " ${GREEN}[FLAG OK]${NC} $d/flag.txt"
else
echo -e " ${RED}[FLAG MISSING]${NC} $d/flag.txt"
fi
done

echo "===== CHECK SELESAI ====="

```

## 5. Script Reset

**Lokasi file:** /usr/local/bin/04-reset.sh

**Script:**

```

#!/bin/bash

FLAG_DIRS=(
"/srv/ftp"
"/var/www/html"
"/srv/samba/share1"
"/srv/samba/share2"
"/etc/flags"
"/opt/app1"
"/opt/app2"

```

```

"/var/log/flags"
"/usr/local/share/flags"
"/home/ctf"
)

rm -f /etc/ctf_groupname
rm -f /etc/ctf_flags_generated

for d in "${FLAG_DIRS[@]}"; do
rm -f "$d/flag.txt"
done

echo "[✓] Semua flag & data kelompok telah dihapus."

```

## 6. Script Orchestrator

**Lokasi file:** /etc/profile.d/ctf\_auto.sh

**Script:**

```

#!/bin/bash

if [ -f /etc/ctf_flags_generated ]; then
return
fi

echo ""
echo "===== INPUT NAMA KELOMPOK UNTUK CTF ====="
echo "===== "
read -p "Masukkan Nama Kelompok: " GROUP

echo "$GROUP" > /etc/ctf_groupname
touch /etc/ctf_flags_generated

/usr/local/bin/02-generate-flags.sh
/usr/local/bin/03-checker.sh

echo "[✓] Selesai."

```

## 7. Systemd Shutdown Service

**Lokasi file:** /etc/systemd/system/ctf-reset.service

**Script:**

```
[Unit]
Description=Reset Flag CTF Saat Shutdown
DefaultDependencies=no
Before=shutdown.target reboot.target halt.target

[Service]
Type=oneshot
ExecStart=/usr/local/bin/04-reset.sh

[Install]
WantedBy=shutdown.target reboot.target halt.target
```