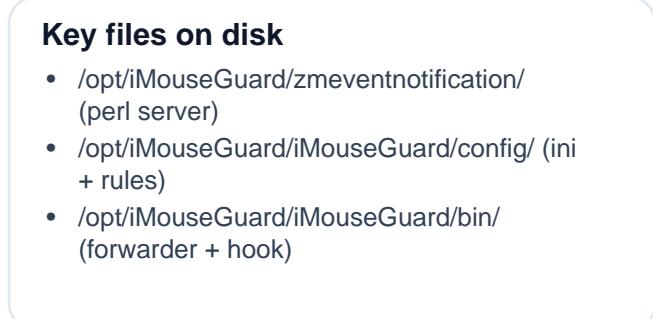
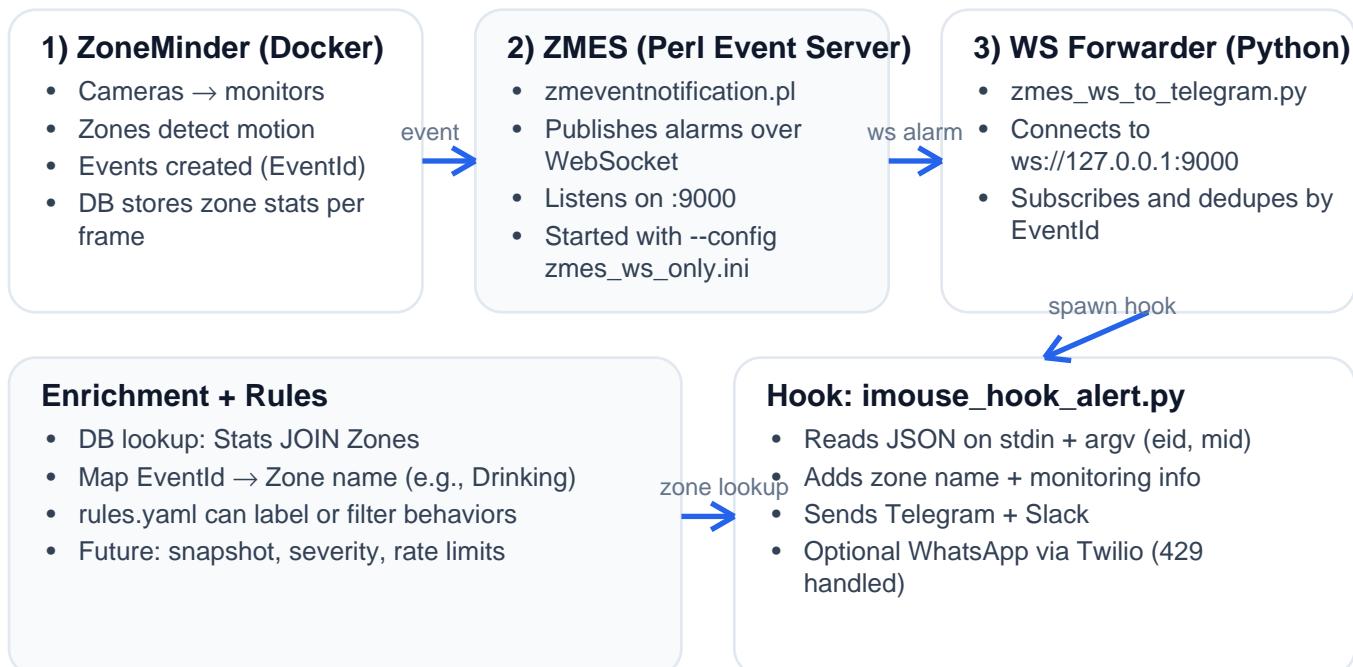


iMouseGuard Architecture

How ZoneMinder motion events become enriched alerts (Telegram, Slack, WhatsApp).



Operations Commands

Inside the ZoneMinder container: start/stop/status, logs, editing, zone debug.

Status checks

```
ps aux | egrep "zmeventnotification.pl|zmes_ws_to_telegram.py" | grep -v egrep  
ss -ltnp | grep ":9000" || echo "9000 not listening"  
tail -n 30 /opt/iMouseGuard/iMouseGuard/logs/zmes.log  
tail -n 30 /opt/iMouseGuard/iMouseGuard/logs/ws_forwarder.log
```

Stop services

```
pkill -f zmeventnotification.pl || true  
pkill -f zmes_ws_to_telegram.py || true  
sleep 1  
ps aux | egrep "zmeventnotification.pl|zmes_ws_to_telegram.py" | grep -v egrep || echo "stopped"
```

Start (recommended)

```
mkdir -p /opt/iMouseGuard/iMouseGuard/logs  
  
# 1) Start ZMES (WebSocket server)  
cd /opt/iMouseGuard/zmeventnotification  
nohup perl -T zmeventnotification.pl --config=/opt/iMouseGuard/iMouseGuard/config/zmes_ws_only.ini \  
    > /opt/iMouseGuard/iMouseGuard/logs/zmes.log  
    2>&1 &  
echo $! >  
/opt/iMouseGuard/iMouseGuard/logs/zmes.pid
```

Edit config / scripts

```
nano /opt/iMouseGuard/iMouseGuard/.env  
nano /opt/iMouseGuard/iMouseGuard/config/zmes_ws_only.ini  
nano /opt/iMouseGuard/iMouseGuard/bin/imouse_hook_alert.py  
  
# Python sanity check  
python -m py_compile /opt/iMouseGuard/iMouseGu
```

Zone name for an EventId (DB)

```
EID=988796  
mysql -h "$MYSQL_HOST" -u "$MYSQL_USER" -p"$MYSQL_PASSWORD" zm -e "  
SELECT z.Name, s.Score, s.AlarmPixels, s.Blobs  
FROM Stats s  
JOIN Zones z ON z.Id=s.ZoneId  
WHERE s.EventId=$EID  
ORDER BY s.Score DESC  
LIMIT 5;"
```