spamHINTS update

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Summary

• Best Practice Document

• Very early results from sFlow data

• Latest results from sFlow data

Sharing traffic data

- Want to encourage ISPs to share email log info about incoming spam & viruses
- Send report to host ISP indicating:
 - source IP address (and of course time)
 - source email address (probably forged)
 - destination email address
 - metadata (size, HELO message, filter results)
 - diagnosis of problem

Lawyers!

- Reporting is straightforward except...
- ... email addresses are personal data
 - Information Commissioner quite clear on this
- Much is of course forged, but amongst this may be some real email, and source/ destination details could be sensitive
 - so must meet legal obligations

Legitimate processing

- Asking another ISP to take action to prevent their user sending spam/virus traffic can be seen as legitimate processing
- So jump through correct hoops & all OK
 - inform customers of processing
 - (try to) inform senders of processing
 - ensure processing covered by privacy policy
 - address any promises of confidentiality

Best Practice document

• Would also be desirable for processing to be in line with industry Best Practice!

• Hence recent draft of:

Best Practice for reporting abuse issues based on traffic data

Components of Best Practice

- Reports based on traffic data must only be sent by prior agreement
- Reports should not be unduly repetitive
- The evidence on which the report is based must be clearly given (& accurately timed)
- Needs warning about personal data
- Must keep customers informed (as above)

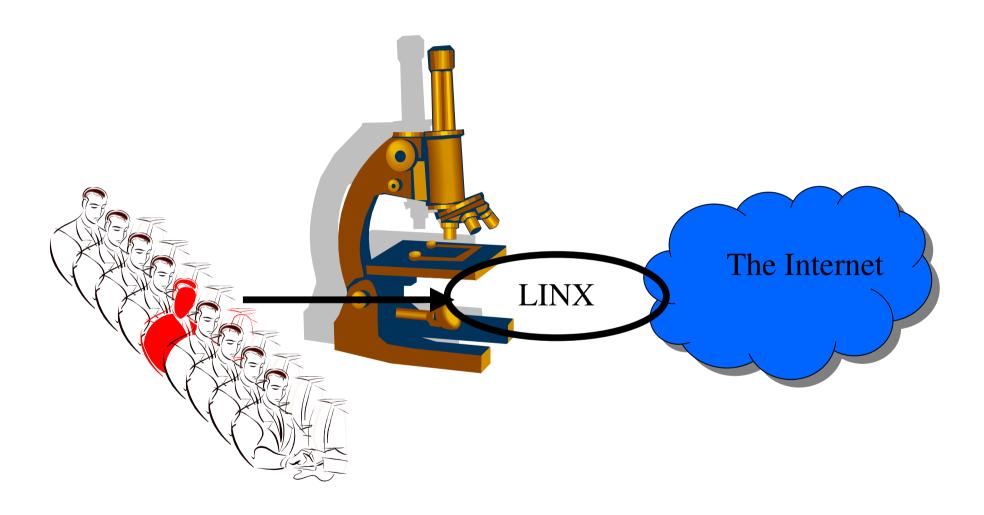
Approval of BCP?

- Document presented at LINX52
- Some relatively minor revisions
- No comments on mailing lists
- Don't believe it is controversial...

...so please could we approve it!

http://www.spamhints.org/TrafficDataBCP.pdf

spamHINTS @ LINX



Latest sFlow results

- Processed 25 hours of data from Foundry switches (Wednesday last week) thanks Ivan!
- Very limited analysis so far... (and note very carefully the caveats on coverage no Extreme data, no private peering data, no data where peering is at other IXPs!)
- Can get picture of who is sending email
- Can correlate with info from Demon logs

Raw statistics

• 9,672,926 SMTP packets detected

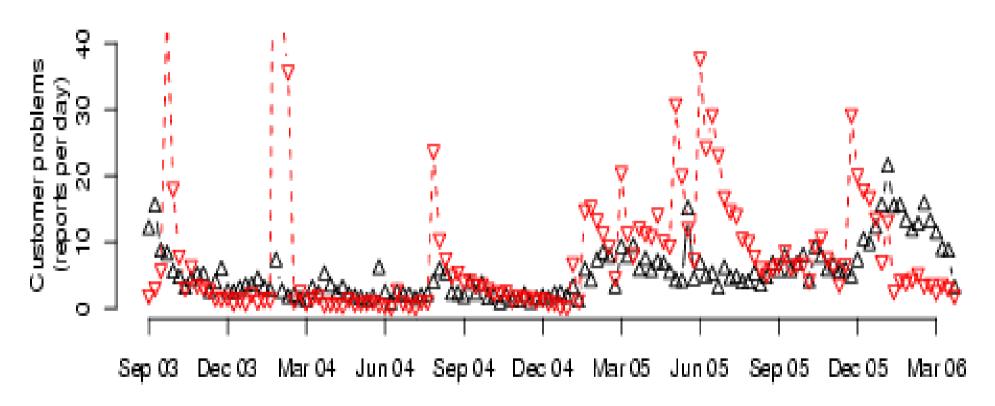
```
SYN 413,902 (4.2%)
SYN/ACK 194,649 (2.0%)
RST 72,235 (0.7%)
FIN 387,433 (4.0%)
```

• 611,563 unique IP addresses involved

```
    - 378,457 client only
    - 170,648 server only
    - 62,458 both client & server
```

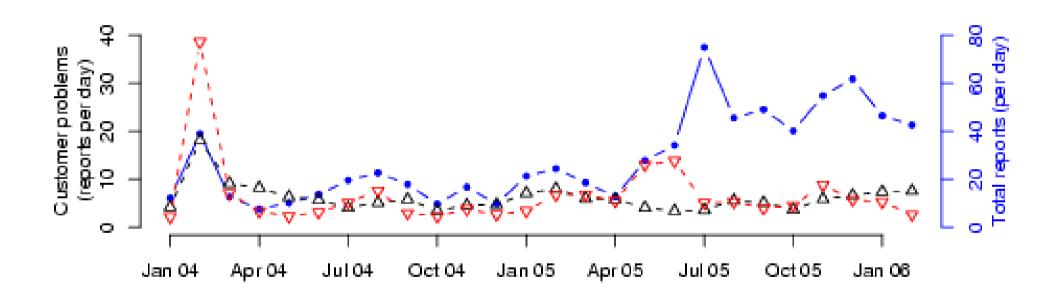
18,794 17,724 16,558 11,248 10,731 9,897 7,701 6,092 5,854	646 5,867 1,556 1,239 1,871 866 489 594 979	296 2,905 407 420 409 196 64 404 526	Turkey UK Korea Spain Italy Korea France Portugal UK	Client AS "top 30"
5,258	105	130	India	1
4,982	966	185	Germany	columns are:
4,503	569	416	Middle East	clients
4,416	36	2	China	
4,200	137	63	India	servers
4,072	420	161	France	both
3,814	742	467	UK	oon
3,737	477	232	Malasia	
3,480	5,183	3,422	UK	
3,291	7,123	1,296	USA	NB: 100 th place
3,267	125	45	Vietnam	•
3,188	171	10	Brazil	has 855 clients
3,185	10	4 654	India	
2,975 2,825	1,224 160	654 29	Ireland Africa	
2,750	467	455	UK	
2,719	752	47	Europe	
2,683	407	122	Israel	
2,618	1,328	311	Germany	
2,604	24	5	India	
2,586	425	113	Israel	

Email log processing @ Demon



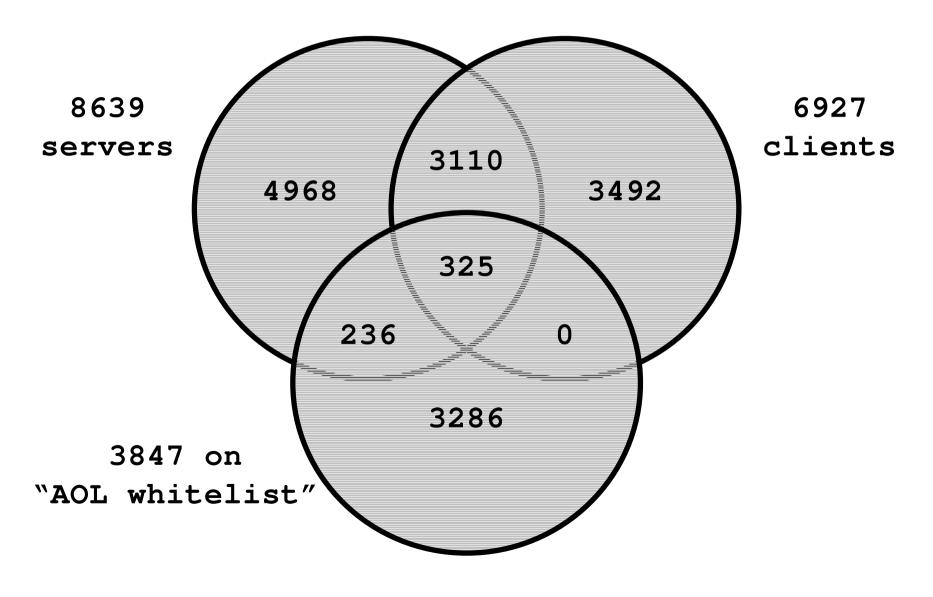
Detection of spam (black) and viruses (red)

Incoming reports (all sources)



spam (black), viruses (red), reports (blue)

sFlow Results: Demon customers



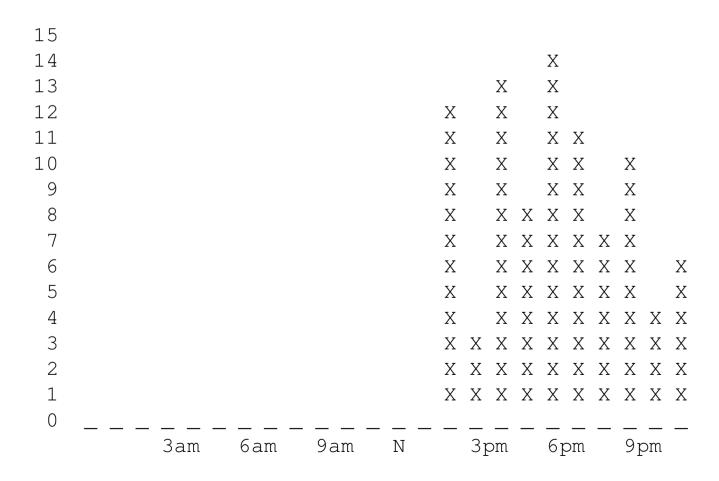
What does it mean?

- New detection methods pick up problems that were previously missed
- Spend money on your abuse team & soon reach a steady state (virus outbreaks excepted)
- Email log processing currently picks up 10 customers per day on average
- sFlow data suggests 3400+ more to go ???

Known "open server"

```
13
12
             ХХ
11
             ХХ
10
             ХХ
 9
             ХХ
                    Χ
             ХХ
                    Χ
                          ХХ
             ХХ
                          ХХ
             ХХ
                          ХХ
           X X X
                    ХХ
                          ХХ
           X \quad X \quad X
                   X \quad X \quad X \quad X \quad X
         X X X X
                   X \quad X \quad X \quad X \quad X
      X X X X X
                    X X X X X
    0
           3am
               6am 9am N
                                  3pm
                                          6pm
                                                   9pm
```

Another known "open server"



Work continues...

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www.spamhints.org