

# The power of whitelists

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The Global Leader in Email Intelligence

# A look Back...

# Email marketing







# Spam filter

#### Heuristics

"Speculative"

- Algorithm = Rule
- Result of applied rule = A
   Numerical Score
- The result of the final equation is known as the Spam Score.

#### Bayesian

"Learned"

- Bayesian spam filtering learns from both spam and from "good" mail.
- Are specifically trained (heuristic machine learning) making them highly effective and difficult to adapt to for spammers.
- Can continually and without much effort or manual analysis adapt to the spammers' latest tricks.



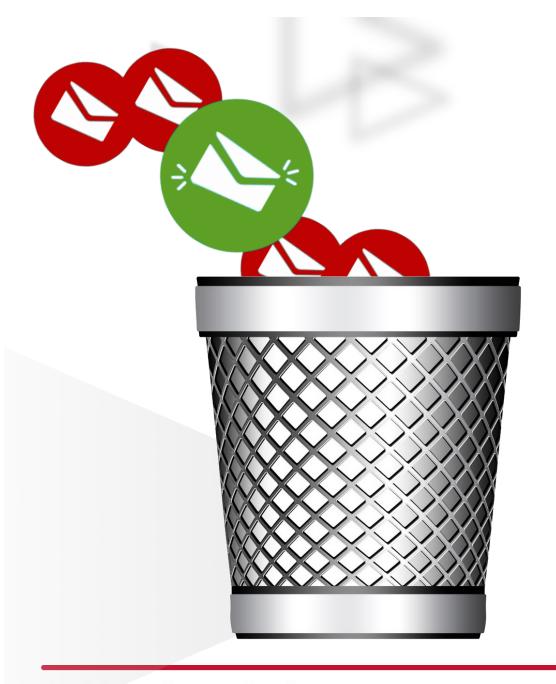
# Black



#### Blacklist

- Keep Spam out
- List of domains or IPs that are unwanted
- Blacklists can be both private In-house) and 3<sup>rd</sup> party solutions





- False Positives
- Wanted mail started to be filtered
- Bad user experience





**External Whitelists Internal Whitelists** 

# What ISPs manage their own whitelist

- AOL
- Yahoo (AT&T, Bellsouth)
- Netease (china)



#### **AOL**

#### Whitelist application:

http://postmaster.aol.com/cgi-bin/whitelist/whitelist\_guides.pl

- The whitelist at AOL bypasses some anti-spam rules but does not guarantee inbox delivery.
  - Will slow traffic if you are not on AOL's whitelist
  - AOL recommends that non-whitelisted IPs stay below 500 messages/hour.
- Not being on the whitelist can cause delivery issues from bulking to deferrals to blocking, even for IPs with a Good reputation (on AOL's reputation check tool)
  - Common error codes DYN:T1s and 4.x.x
- The first step in troubleshooting just about any delivery issue at AOL should be confirming that the IPs are whitelisted (by applying again).



- Only whitelist at AOL
- Strongly encourage senders to be part of the program
- Will increase sending limits is on whitelist
- For really good reputation, IPs can be added to the enhanced whitelist - images and URLs on



#### Yahoo

- Whitelist application: <a href="http://help.yahoo.com/l/us/yahoo/mail/postmaster/bulkv2.html">http://help.yahoo.com/l/us/yahoo/mail/postmaster/bulkv2.html</a>
- Yahoo has an internal whitelist that is available to any sender if they
  meet certain requirements set up by Yahoo.
- IPs on Yahoo whitelist are still subject to both user level filters (TIS and TINS) as well as some content filters.
  - Common error codes:TS01
- IPs on Yahoo whitelist can experience bulking, it is not a guarantee to inbox delivery.
- Whitelist benefits extend to all Yahoo Partners:
  - AT&T (Bellsouth and SBC)
  - Verizon
  - Rogers
  - Nokia
  - Frontier Communications



- Reputation bump
- Slightly higher send limits
  - Sending limits do vary based on reputation



## Netease (china) aka Trust Alliance

Whitelist Application:

http://chengxin.mail.163.com/

- Launched in November of 2012, Netease's Trust Alliance is a whitelist for Netease – 126.com, 163.com and yeah.net. Online signup is geared for Chinese senders but Netease allows non-Chinese senders to join only via trusted partners.
- As long as the sender maintains certain standards and best practices, they will receive a quota of "Commercial Messages" allowed into their network (Transactional Messages are exempt). Step-by-step instructions are located -

http://jingyan.baidu.com/article/ 4f7d5712a9e5641a20192711.html (Chinese only).



- Higher "commercial" email sending limits
  - These limits can vary based on reputation metrics



# External (3<sup>rd</sup> Party)

- Return Path Certification
- KISA (<u>Korea Internet Security Center</u>) Korea -
- CSA (<u>Certified Senders Alliance</u>) Germany (WEB.DE, GMX and 1&1)
- SuretyMail



## KISA (Korea Internet Security Center)

#### **Application:**

https://www.kisarbl.or.kr/english/whiteIP 03.jsp

- You must control the domain you are registering.
- The domain must have a Korean TLD .kr. (unconfirmed)
- The mailing domain SPF record must be set up and include all mailing domains and IP addresses. The record may not include any other content such as MX or A records... (this is unusual since this is allowed by the SPF spec). For example, they SPF record should look something like the following: "v=spf1 ip4:11.111.111.11 ip4:222.22.22.22.22"
- There needs to be at least two weeks of mailing history and have low indications of spamming behavior.



- Unclear
- No direct delivery benefits to this whitelist. It's a list of known senders that are not spammers.



# **CSA (Certified Senders Alliance)**

#### Application:

https://certified-senders.eu/csa html/en/266.htm

- All recipients of mails must have opted-in
- The retrieval of address data for third parties (such as through co sponsoring) should be transparent to the user
- IP must have a good reputation (determined by CSA)
- The sender must remove email addresses from the mailing list after three hard-bounces.
- Must be Authenticated with both SPF and DKIM.
- The email header must contain an "List-Unsubscribe".
- Must include a "X-CSA-Complaints"-header in every email-header.
- A "list ID" header must be included in the sent.



- Used by United Internet (GMX, Web.de and 1und1) They are the leading ISP members of CSA.
- Slight reputation benefit but driven by end user feedback



# SuretyMail

#### Not a whitelist but an accreditation service

Application:

http://www.isipp.com/email-accreditation/apply/

- SuretyMail is a product of ISIPP ("Institute for Social Internet Public Policy").
- SuretyMail will work with all ISPs on a client's behalf.
- SuretyMail costs no more than \$300 a month, and clients can pay on a month-to-month basis.



 Not clear, website indicates they receive benefits at the following

We work on your behalf directly with all of the top ISPs, including AOL, Yahoo, Hotmail, Earthlink, and more! In addition, dozens of other ISPs and spam filtering programs trust and deliver our SuretyMail accredited senders email, including:

Sprint
SBC
SpamAssassin
SpamCop
Outblaze
GoDaddy
SECNAP
Clearswift
Sonic
Snet
Mail Shell
SURBL
NavCom
ETRN

Declude
MessageGate
SprintLink
Vircom
Excedent
SpamBouncer
SpamCheck
ISP Services
CAS, Inc
PO Box
Abaca
IronBay
Biglist
Rahul
TriTech Assoc

Prolocation
MNGI
Pivotal Veracity
Openminds
Coast to Coast
Server Authority
WebPage Assoc.
Partan Labs
CECOM
Chagres Tech.
SCN Research
Reasonable Software
Hexamail
Saunalahti
Interactive Networks

Barnet
Siglan
Asarian
OpenMinds
OLS
Assoc. Nets
APANA
Pay 2 Send
GITK
ReadNotify
Clue
Taughannock
Uniwares
Bottomline

Wirtualna Pl.

#### **Return Path Certification**

#### **Application:**

http://www.returnpath.com/solution-content/certification/

- Largest whitelist
- Over 2.2 billion inboxes covered
- Over 70% of global inboxes
- 70+ mailbox provider relationships
- Bypass gateway filters, higher throttle limits





- Direct to inbox at Microsoft (only whitelist recognized by Microsoft)
- Bypass most gateway filters
- Increased throttled limits across most all ISPs that utilize the list
- Reputation bump and images on at Yahoo
- Insight to direct data from participating ISPs
- Benefit to all Cloudmark users



# **Return Path Threshold Guidelines**

Windows Live Sender Reputation Data					
SRD	6-10	11 – 19	20 – 39	40 – 99	99 +
Volume	100%	45%	40%	35%	30%

IP addresses are evaluated and enforced when at least six total votes are present. Group enforcement applies only to active IP addresses with at least 30 total votes present and IP groups with 20 or more IPs. Group enforcement will only apply to IP addresses with at least one SRD Junk Vote.

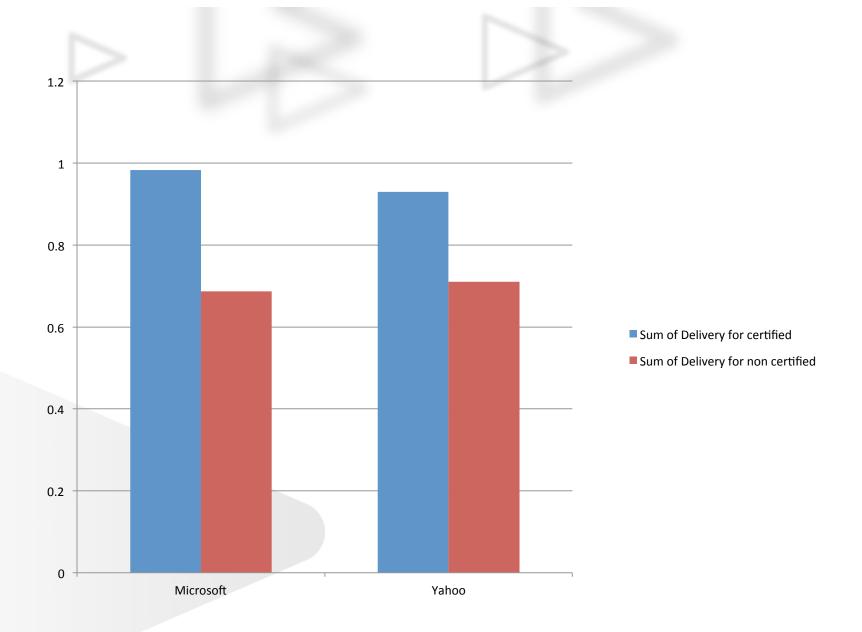
Microsoft – Hotmail: Complaint Rate (30 Day Average)	All Sending Volumes ≥ 0.4%	
Yahoo: Inbox Complaint Rate (30 Day Average)	All Sending Volumes ≥ 0.7%	
Comcast: Complaint Rate (30 Day Average)	All Sending Volumes ≥ 0.3%	
Unknown User Rate (30 Day Average)	10%	
Spam Traps (30 Day Cumulative)	3 Critical Trap Hits 5 Significant Trap Hits	
RP Trap Network 1 & 2 (30 Day Cumulative)	150 Trap Hits (Enforcement Date: December 10, 2013) 100 Trap Hits (Enforcement Date: January 21, 2014)	
Blacklists (Current Listing)	1 Critical Listing 2 Significant Listings	

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Return Path Threshold Guideline Reference







# Case Study



#### Challenge

• 1 billion messages = Extensive throttling

#### Solution

A/B testing, one cert one not

#### Results

- 2% increase in open rates
- 6% increase in click through
- Certified IPs 40% faster than non-certified IPs



#### **Customer Feedback**

"In just 48 hours, the test paid for the investment in Return Path Certification for the entire year. Because our internal research shows that delivering our deals to the inbox between 6am and 9am increases open rates and clicks, sending our mail through Return Path Certified IPs allows us to know 98%+ of our emails are being delivered to inboxes on time. And knowing our images are enabled helps build and maintain our brand. There is no question in our mind - Return Path Certification is an investment with a significant return for our business."

- John Becvar, Sr. Director Relationship Management, Groupon





#### Challenge

Difficulty distinguishing between spam and legitimate mail

#### Solution

 Return Path Certification whitelist helped to identify good senders

#### Results

- Stricter filters to catch real spam
- ISPs better accuracy of spam filtering
- Reduce False positive, increase end user confidence



#### **Customer Feedback**

"Return Path Certification contributes to the accuracy of Cloudmark's spam filtering of commercial emails. Together, Cloudmark and Return Path are helping senders maintain appropriate email behavior—and that benefits everyone with an inbox."

- Neil Cook, CTO, Cloudmark





THANK YOU

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