

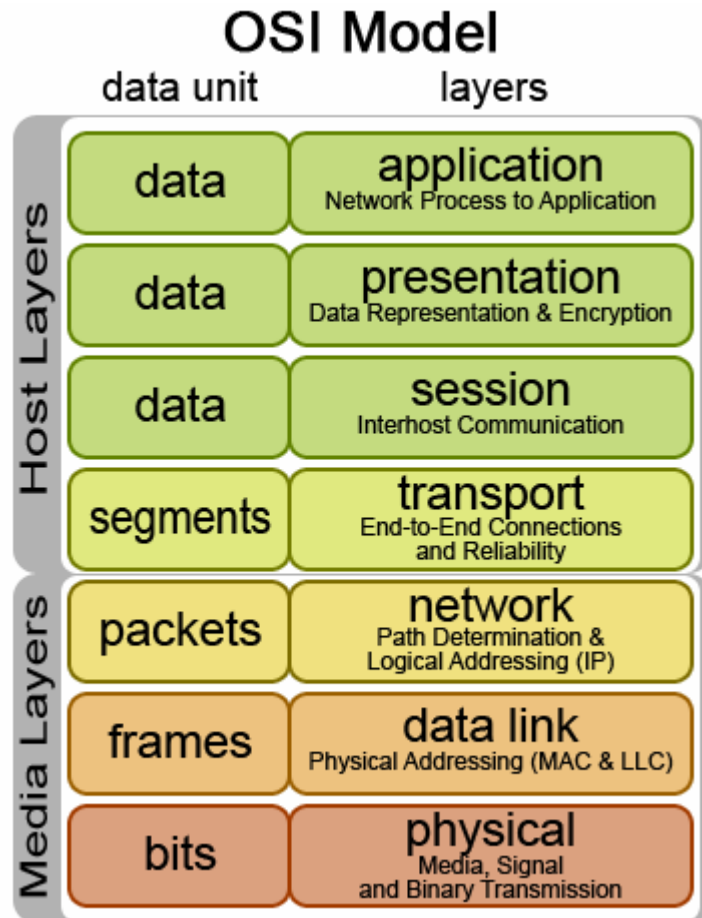


# DKIM Reputation Project

6th German Anti Spam Summit, 28.10.2008



## DKIM: Sender authentication on the application level



Source: [http://wiki.go6.net/index.php?title=OSI\\_model](http://wiki.go6.net/index.php?title=OSI_model)

Sender address based filtering by **domain names** or even **mailboxes [...]** on the application layer



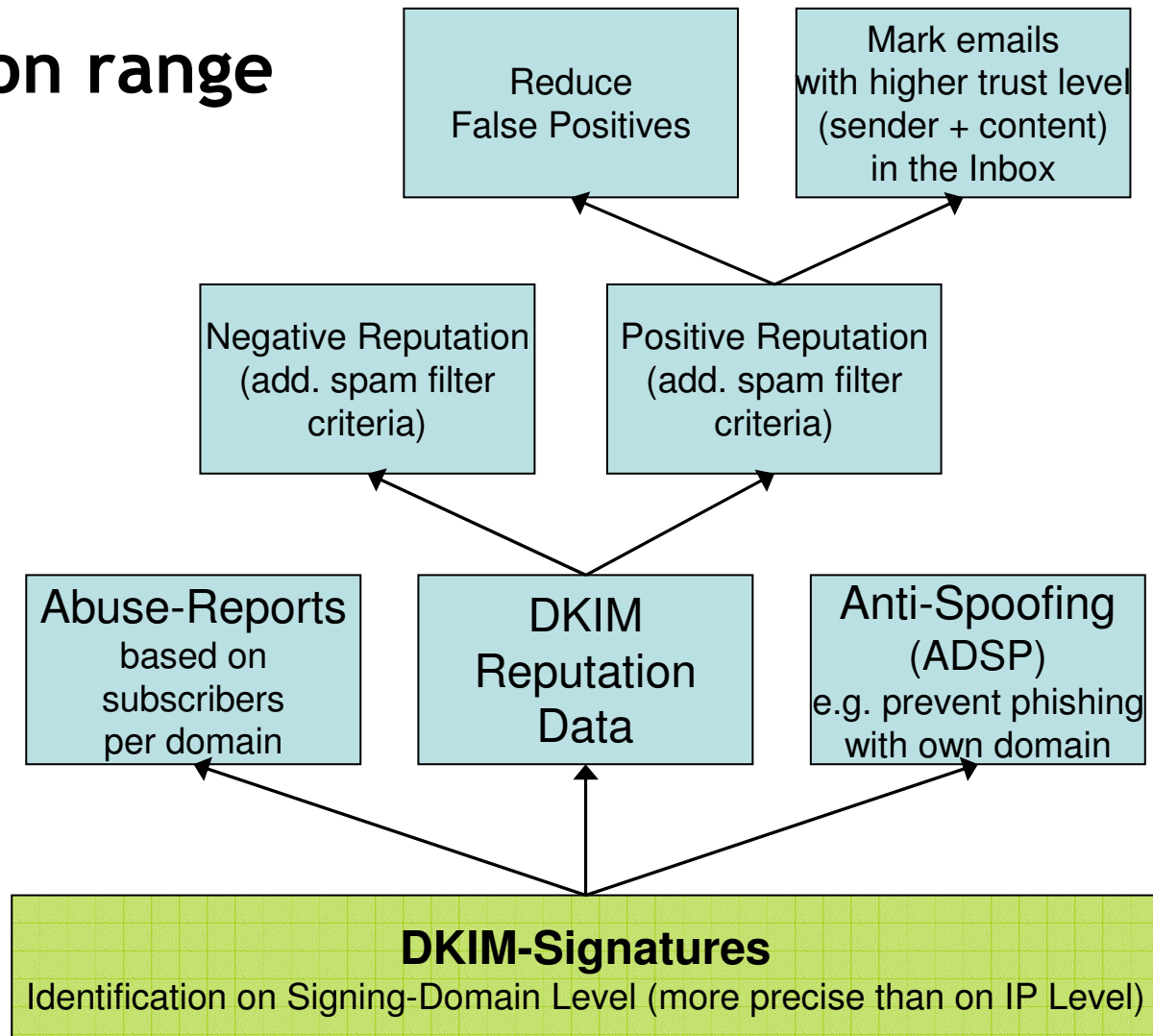
DKIM provides the precondition for a filter criteria with

- a) higher precision
- b) longer lifetime

if available (DKIM PASS!!!)

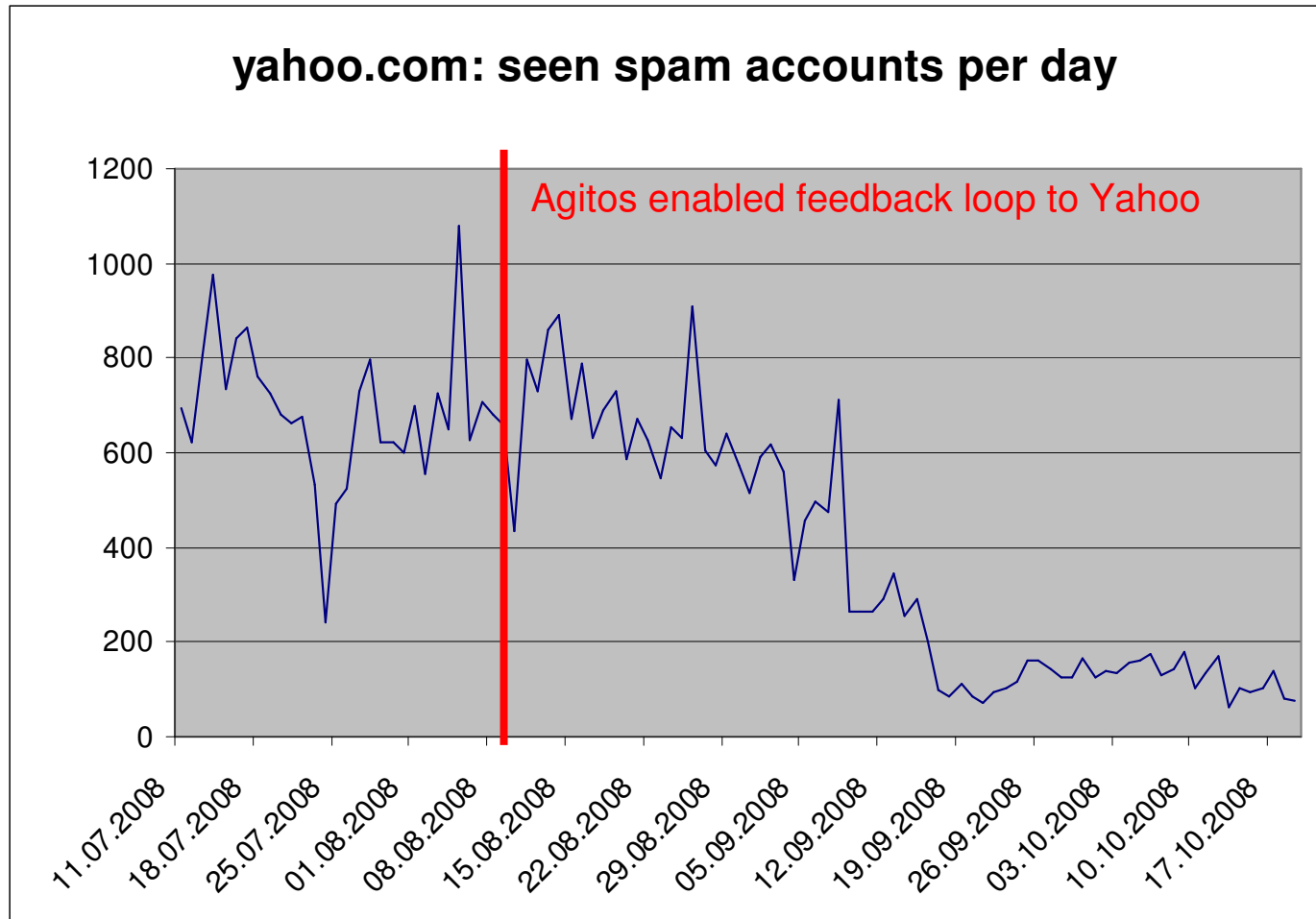
Sender address based filtering by **IPs** on the network layer

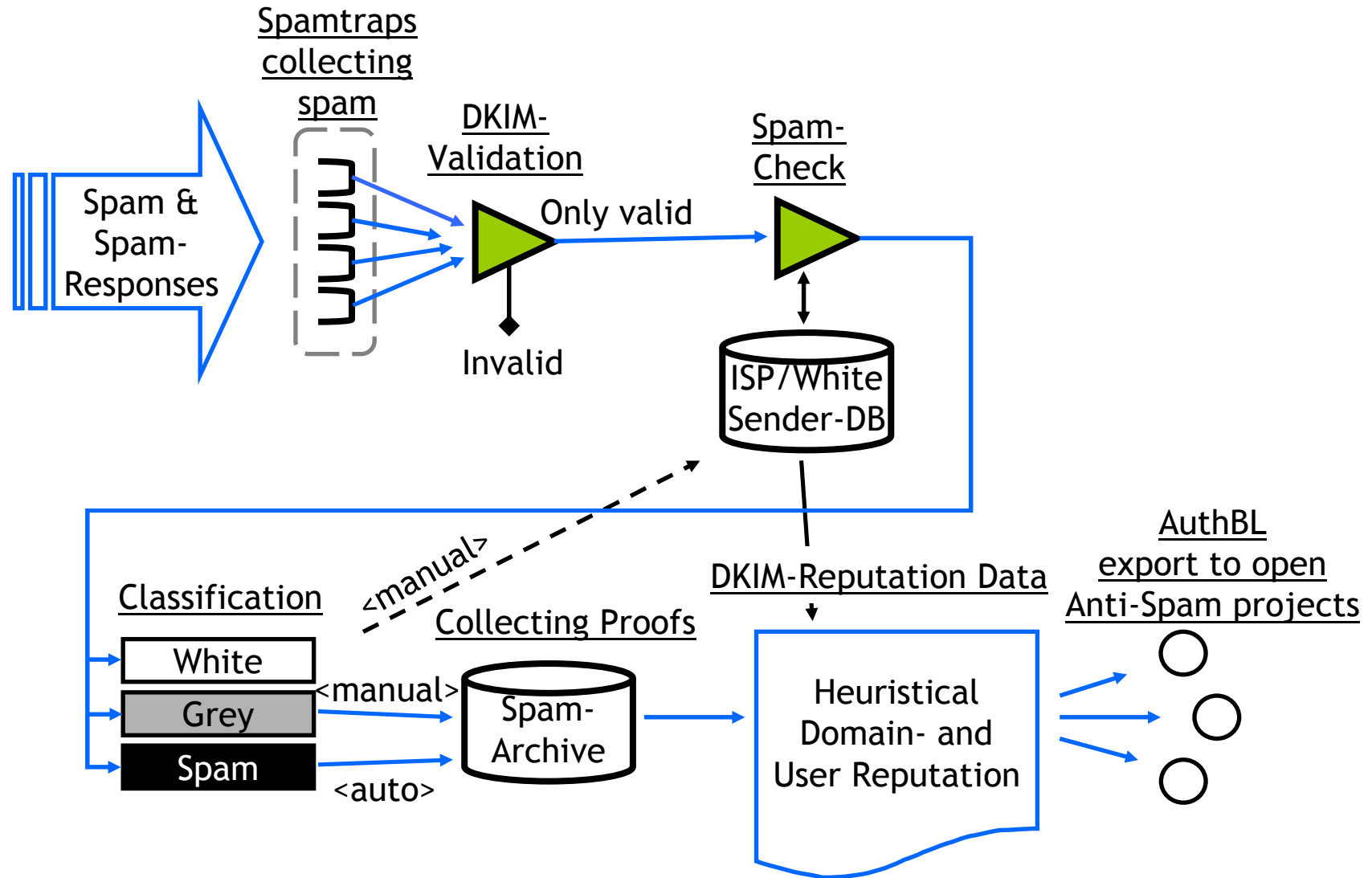
## DKIM application range





## Success of FBLs: spam reduction by factor 10 at Yahoo!





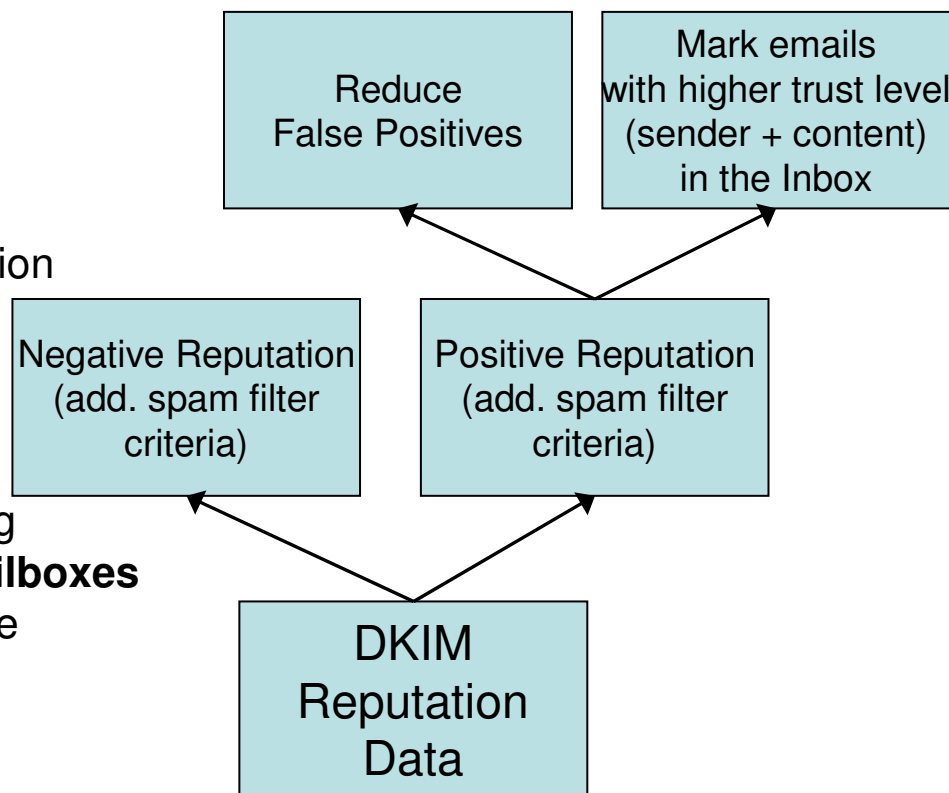
## Benefits of the project

### DKIM Spam:

**(1) 14% False  
Negatives**

→ significantly improved filtering with DKIM reputation

**(2) DKIM Spam coming from signing ISPs:**  
Systematic filtering of **spamming mailboxes** at the receiver side



### DKIM Ham:

Improve the filter scores for esp. server-side generated mails to incr. the delivery rate (order confirmation mails, legal newsletters, mails from mailing lists ...)

### Case:

→ Content-filtering fails  
→ Positive DKIM reputation could improve the filter result

## How you can use the DKIM Reputation Project:

Go to [www.dkim-reputation.org](http://www.dkim-reputation.org) :

- Use DNS Data (see documentation)
- Download Spamassassin-Plugin  $\geq$  version 3.1.2
- Subscribe to regular DKIM checks for your signing domains
- Subscribe to feedback loops for your signing domains (ARF)

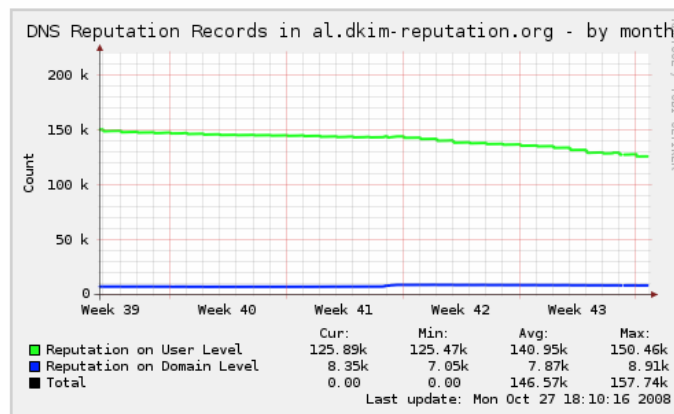


- Home
- Mission
- How To Use
- Statistics

## DNS Reputation Records

# DNS Reputation Records in Zone al.dkim-reputation.org: 144571

Last update: 10/27/2008 18:00:01



## Public Results: Domains sending valid DKIM signed Spam

Relative results for domains with most spam hits in the time period 06/29/2008 to 10/27/2008 (updated daily)

- yahoo.com: 19.05% Domainreputation: ++
- yahoo.co.in: 14.31% Domainreputation: ++
- yahoo.co.uk: 11.46% Domainreputation: ++
- bighip.com: 4.92% Domainreputation: --
- emn-quizrocket.com: 2.3% Domainreputation: --
- emn-consumerpromotioncenter.com: 1.79% Domainreputation: --
- freelotto.com: 1.76% Domainreputation: --
- emn-myrewardsavings.com: 1.73% Domainreputation: --
- youtube.com: 1.29% Domainreputation: ++
- gmail.com: 1.24% Domainreputation: ++
- emn-musthavefreegifts.com: 1.02% Domainreputation: --
- emn-mysavingsnow.net: 1.01% Domainreputation: --



## How you can support the DKIM Reputation Project:

- 1) Send your spam traffic to us (^DKIM-Signature: )
- 2) Provide DNS mirroring; hardware sponsor is required
- 3) Join the measurement of biggest mail domains:  
<http://www.agitos.de/pub/ReportDomainHit.pm>
- 4) Join the discussion about the use of positive reputation data:
  - Build an association of supporting ISPs (on the receiver side only!) with focus on anti-spam
  - How to increase costs for spamming with keeping costs low for good senders: bonds that are deducted if a sender sends spam?
  - Improve detection of spammers who gained positive reputation



Trustworthy senders should sign their mails  
with DKIM.

[www.dkim-reputation.org](http://www.dkim-reputation.org)