



The following provides an overview of how Microsoft's Windows Live Sender Reputation Data (SRD) is used in the Return Path Certification Program. Also included is a summary of Microsoft's Windows Live program that generates the data used for this performance measurement.

While the raw data being evaluated is provided to Return Path by the Microsoft Windows Live team, the analysis, modeling, acceptable thresholds, and enforcement of the data standard is solely determined and administered by Return Path. Questions regarding the data, its use or enforcement should be directed to the Return Path Certification Standards and Security Team at certification@returnpath.net.

Windows Live Sender Reputation Data and Return Path Certification

How is this data incorporated into the compliance model for Certification?

Return Path Certification uses data from Return Path's proprietary email reputation data network, in conjunction with data from MSN® Hotmail, IronPort SenderBase, and public blacklists to evaluate and ensure compliance with the program's Quantitative Requirements.

What program compliance actions will be taken if the acceptable thresholds are exceeded?

Where a sender's performance for this metric does not meet acceptable thresholds as determined by Return Path, suspensions can occur. The acceptable thresholds are described in more detail below. If either an individual IP address or an IP Group has exceeded acceptable thresholds, the associated IP addresses will be suspended. Suspensions result in the non-compliant IP addresses being removed from the Certified list, and may occur at any time.

In normal operation, the Certification Compliance Team reviews the Windows Live Sender Reputation Data each day. Unlike the existing data sources, there are two levels of compliance for this data source. The first is at the IP level (similar to existing sources), and the second is at the IP Group level.

IP Address Compliance

Compliance actions for individual IP addresses must meet the following condition:

- Any single certified IP must have a minimum volume of 5 messages seen for the Windows Live Sender Reputation Data source. A volume of 5 messages is representative of approximately 100,000 messages or more sent to MSN Hotmail/Windows Live Hotmail.
- Thresholds are subject to change in accordance with changes to trends in the data.

Where any individual IP address has generated a minimum of 5 messages, compliance action will be taken under the following circumstances:





- If the rate of mail classified as "junk" is greater than or equal to 50% for an individual IP, the IP is subject to suspension. Suspensions occur within 24 hours.
- A suspended IP will remain suspended until it becomes compliant with the standard.

IP Group Compliance

Compliance actions for an IP Group must meet the following condition:

- The IP Group must have a minimum volume of 30 messages seen for the Windows Live Sender Reputation Data source across all IP addresses in the Group. A volume of 30 messages is representative of approximately 500,000 messages or more sent to MSN Hotmail/Windows Live Hotmail.
- Thresholds are subject to change in accordance with changes to trends in the data.

Where the Group has generated a minimum of 30 messages for the Windows Live Sender Reputation Data source, compliance action will be taken under the following circumstances:

- If the total rate of mail classified as "junk" for all IP addresses is greater than or equal to 50% for the Group, all IP addresses in a sender's IP Group are subject to suspension. Suspensions occur within 24 hours.
- A group of IP addresses will remain suspended until the group becomes compliant with the standard.

When a Group or IP address is suspended due to violation of this data source, what actions are needed before the Group or IP address is reinstated in the Certified program?

As with violations for other data metrics, once a Group or IP address becomes compliant with the thresholds for this data source, any suspensions will be removed automatically by the Compliance Team.

How is this data reported to senders in the Certification program?

The Windows Live Sender Reputation Data will be reported via the Daily Performance Report along with the other data sources used to monitor sender compliance with standards

For each certified IP address, the Daily Performance Report will show:

- the number of messages presented to users for classification
- the number of messages that were classified as "junk"
- the percent or rate of mail classified as "junk"

Compliance with the IP Group standard can be tracked by referring to the IP Group Total row at the bottom of the report as seen in the screenshot below.

Windows Live Sender Reputation Data - Frequently Asked Questions



From: compliance@senderscorecertified.com [mailto:compliance@senderscorecertified.com]
 Sent:
 To:
 Subject: Sender Score Certified Performance Report for

Summary Performance Statistics for containing 9 IP Addresses

✔ Good
 ⚠ Warning
 ✘ Bad

Complaint Data - IP Group #880246

IPs	Status	JNPT Allowed: 50%			Hotmail Complaints Allowed: 2.9%			SpamCop Complaints Allowed: 1 per million			Source A Complaints Allowed: 1%			Source B Complaints Allowed: 1.1%			Unknown Users Allowed: 10%			SpamCop Traps Allowed: 1 Hits	Use Re
		Vol	Comp	Rate	Vol	Comp	Rate	Vol	Comp	Rate	Vol	Comp	Rate	Vol	Users	Rate					
192.168.1.1	active	5	5	100.00%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.2	disabled	39	2	5.13%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.3	disabled	16	4	25.00%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.4	disabled	109	33	30.28%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.5	disabled	145	54	37.24%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.6	disabled	22	6	27.27%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.7	disabled	192	44	22.92%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.8	disabled	61	9	14.75%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
192.168.1.9	disabled	71	15	21.13%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	✔	0
IP Group Total:		660	172	26.06%	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0

This report indicates performance for your accredited IPs during the last 30 days.

The tables below detail measured performance results against the acceptable thresholds for each of your accredited IPs. Any IP that is over the allowed threshold may be disabled from the program.

Additional information on the [Email Sender Standards](#) and [Quantitative Requirements](#) is available.

A CSV file is also attached for your convenience. It contains the complete data for each individual IP address.

If you have any questions regarding this report, please contact your Return Path Account Director or compliance@senderscorecertified.com.

Your **allowable complaint rate** is based on the number of messages you **attempt to send** to either Source A, Source B, or Hotmail. Higher attempted mail volumes have lower allowable complaint rates. Your **attempted mail volume** includes all mail that you send to the receiver for processing and does not take into consideration bounces and other such reasons that mail is rejected.

Your **actual complaint rate** is calculated by dividing the number of complaints that your mail generates at the specific source (Source A, Source B, or Hotmail) by the number of mail messages that were **accepted for delivery** at the specific source (Source A, Source B, or Hotmail). Your **accepted mail volume** is determined by subtracting all bounces and other types of rejected mail from the volume of attempted mail to the specific receiver. The Volume reported for Source A, Source B, and Hotmail is the accepted mail volume at each of the sources.

If any of your IPs become suspended, they will be reactivated when that IP comes back into compliance. You do not need to contact us regarding reactivation.



Is information provided for suspended IP addresses?

Yes. When an IP address is suspended for any reason, including exceeding the thresholds for the Windows Live Sender Reputation Data, the Daily Performance Report will continue to report on this data source.





If a sender has been suspended because of non-compliance with the Windows Live Sender Reputation Data, does Return Path have recommendations about how to fix this problem?

Windows Live Sender Reputation Data is reflective of recipients voting that the mail they received is "junk" or "not junk". Understanding why your recipients consider your mail to be "junk" or complain about your mail can drive changes to your email program that reduce complaints overall. Return Path has the following recommendations for reducing complaints and complaint rates:

1. Sign-Up for Feedback Loops

- Return Path requires that senders are signed up for the Microsoft feedback loop, the JMR program, which is available at no cost to senders. Information is available at the following page:

[Helpful Information for Junk Mail Reporting Partner Program](#)

Return Path also recommends that senders sign up for and analyze complaint data from ISP feedback loops available from AOL, USA.net, and other ISPs. Data sources such as Microsoft's Smart Network Data Service (SNDS) and Return Path's Sender Score Reputation Monitor can also be invaluable in diagnosing the root cause of user complaints.

2. Reduce Volume of Mail Sent from Certified IP Addresses

A short-term solution to reducing Windows Live Sender Reputation Data rates may be to reduce the volume of mail being sent from certified IP addresses, remove the problematic IP addresses from the program, or segment the types of email being sent through separate IP addresses.

3. Make It Easier to Unsubscribe than to Complain

Always make it easier for recipients to unsubscribe than it is for them to "report spam" and block communication from you permanently. One benefit of being a Certified sender is that email sent over certified IP addresses will have an unsubscribe prompt within Hotmail, where you use a list unsubscribe header. You can find more information about implementing list unsubscribe at <http://www.list-unsubscribe.com>.

Placing unsubscribe instructions in an area where users are most likely to see it, allowing users to unsubscribe by offering a "one-click" mechanism, and providing multiple methods to unsubscribe (like a link to a simple web form or replying with "unsubscribe" in the subject line) are ways to promote unsubscribing rather than clicking on "report spam".

4. Objectively Analyze Your Email Program for Reasons to Understand Why Your Subscribers Complain

The long-term solution is to address problems with your email program. To gain an understanding as to why recipients think mail is junk, examine the user experience, paying special attention to:

- Consent and Disclosure statements at Point of Collection of user email address
- Recipient expectation on content and delivery (do they expect to see 3rd-party offers? Are they clearly labeled as coming from you?)





- Clear, conspicuous, and functional unsubscribe process including your mail being RFC compliant.
 - Content relevancy
 - Content frequency
 - Age of user records and email addresses on your mailing list
 - Permission Practices / Privacy Policy
 - User preference centers
 - Data sources and data partner vetting and auditing
5. **Segment Mail Streams**
Another approach is to segment mail streams and deliver each mail stream over a separate IP address. For example, send transactional messages over one IP, third party marketing messages over another IP, and new data from partners over another IP. Monitor the complaints generated one each IP to gain additional knowledge about which program is driving high complaint rates.
6. **Resources**
Additional information about resolving complaint problems is available on the Return Path Certification site at <http://www.senderscorecertified.com/about/suspension.php>.

Additional information about Best Practices for Senders is available at:

- MAAWG Senders Best Communications Practices - http://www.maawg.org/about/MAAWG_Sender_BCP/
- [Improving Email Delivering into Hotmail & Windows Live Mail](http://www.microsoft.com/postmaster) [whitepaper](http://www.microsoft.com/postmaster)
- <http://www.microsoft.com/postmaster> or <http://postmaster.live.com>
- <http://www.microsoft.com/senderid>
- Sign up with DMA for online tutorials and webinars at <http://www.the-dma.org>
- Best Practices for Deliverability & Email Authentication at <http://www.aotalliance.org>

About Windows Live Sender Reputation Data

What is the Windows Live Sender Reputation Data?

Both Windows Live™ Hotmail and MSN® Hotmail services utilize Microsoft's patented SmartScreen anti-spam filtering technology. This technology uses a machine-learning approach to help protect users' inboxes from junk e-mail. SmartScreen technology learns from known spam and Phishing threats as well as from Windows Live Hotmail or MSN® Hotmail customers who have chosen to participate in the Feedback Loop Program (FBL).

The Windows Live Sender Reputation Data is a collection of non-biased responses from FBL participants over time. Along with other sources of reputation data such as the Junk e-Mail Reporting Program (JMRP), the Windows Live Sender Reputation Data helps to train and improve the way SmartScreen technology properly classifies messages based on email content and sender reputation.

How are participants selected for the program?

To ensure representative sampling across the e-mail user base:





- Participants for the program are selected at random for over 275 million active Windows Live users worldwide. Users cannot volunteer for this program.
- Participants represent multiple languages and multiple types of services (i.e. MSN® Hotmail, MSN® premium, and Windows Live Hotmail).
- Participants are selected from the pool of subscribers who have an account that is active and at least 6 months old with users added and removed each month, providing objectivity and increase responsiveness from program participants.

What is the current distribution of participants in this program?

- Active feedback loop members hail from over 200 countries.
- 60% of feedback loop members use a non-English localized Windows Live Hotmail UI.
- The average number of messages delivered to FBL users per day for classification typically varies between 200,000 and 300,000.
- Microsoft continually enlists new members and increases participation in the program.

How do participants provide feedback about the e-mail they have received?

Random samplings of email are extracted prior to any anti-spam technology which may subsequently filter out a particular piece of mail. This allows for the ability to learn from e-mail that otherwise may not have been delivered to the recipient.

Program participants are always presented e-mail for classification that was originally addressed to them. They are simply asked to classify the message as "not junk" or "junk". This is an important part of the program – users are only asked to comment on e-mail that was addressed to them, and they are never asked to comment on e-mail that was not addressed to them. Users must choose to classify the message either as "junk mail" or "not junk mail", and then are prompted to confirm their selection.

Is this data representative of all e-mail sent via Microsoft e-mail systems?

The program captures data for all senders delivering into MSN® Hotmail and Windows Live Hotmail. Return Path receives Windows Live Sender Reputation Data on the Sender Score Certified membership for use as a performance measurement for the program. Sender Score Certified members will see their measured data only.

How is participant feedback solicited on an on-going basis?

Once a user signs up to classify randomly selected messages, they periodically receive email that has a subject of "Junk Email Classification". Users only classify e-mail originally addressed to them. E-mail is presented for classification within 12 to 24 hours of the messages original receipt for delivery to them.

Examples of the invitation and classification email messages:





Example 1: Sample Invitation to MSN Hotmail Classic Member

From : "Hotmail Staff" <staff@hotmail.com>
To : ...@hotmail.com
Subject : Join the Junk Mail Protection Team
Date : Wed 02, Oct 2002

Reply Reply All Forward Delete Put in Folder... Printer Friendly Version



Dear MSN Hotmail Member,

We understand that junk mail is a growing problem. We, at MSN Hotmail, are committed to putting a stop to junk mail for you and the rest of our MSN Hotmail users. But, we need your help in categorizing mail that you want, or mail that you may have signed up to receive, versus mail that is junk.

With your permission we will begin to send you enclosed mails that were addressed to your account. This mail was always addressed to you and you may have already received it. You'll be asked to click on a button to categorize the mail either as mail that you want (including mail that you may have signed up to receive) or as mail that is junk. These mails that we want you to categorize can be easily identified by this special icon (✓✗). You agree that MSN Hotmail may save these mails, and your categorization responses, to help in its efforts against junk mail.

It's that simple! And you can quit at any time. So what are you waiting for? Everyone complains about junk mail, here is your chance to do something about it!

[Sign Me Up!](#)

Thank You,
MSN Hotmail Staff

As an MSN Hotmail member, you have received the e-mail to inform you of new services. Our policy has always been to send e-mail messages only to announce such information, and we'll continue to honor this policy.

Windows Live Sender Reputation Data - Frequently Asked Questions



Example 2: Sample Classification Email for MSN Hotmail Classic Member

From: "Hotmail Staff" Subject: Junk Mail Classification Message Content-Type: text/html; charset=iso-8859-1; Content-Transfer-Encoding: 8bit

Thanks for helping us put a stop to Junk Mail. Please choose how you would categorize the message that we have included below.

<input type="radio"/> Not Junk Mail	I expect to receive this and similar messages in my Inbox.
<input type="radio"/> Junk Mail	This message is Junk Mail, and I would not expect to receive it. Blocking it from ever showing up in my mailbox would be best.

You have received this e-mail message because you volunteered to help us stop junk mail. If you no longer want to participate, [click here](#). This is an unmonitored alias.



Example 3: Sample Classification Confirmation for MSN Hotmail Classic Member

The screenshot shows the MSN Hotmail interface. At the top, there are navigation links for MSN Home, My MSN, Hotmail, Search, Shopping, Money, and People & Chat. The MSN logo is prominently displayed. Below the navigation, there are tabs for Home, Inbox, Compose, and Contacts, along with Options and Help. A search bar is visible on the right side. The main content area displays a confirmation message: "Hotmail Anti-Spam - Confirmation" and "Your response has been recorded. Thanks for participating in the Hotmail Anti-Spam program!". An "OK" button is located at the bottom right of the message. On the right sidebar, there are promotional banners for "Fed up with spam?" and "Explore MSN".



Example 4: Sample Invitation to Windows Live Hotmail Member

The Windows Live Mail and MSN Hotmail team (preventjunk@live.com) 12:41 PM 2/10/06
To: @hotmail.com
Subject: Help us stop junk e-mail

We need your help!

We hate junk e-mail as much as you do. As part of our effort to fight junk e-mail, we're asking for a little help from our friends (that's you!).

If you sign up to help, here's what we'll do: Every once in a while, we will resend one of your e-mail messages and ask you to categorize it as either junk or not junk. That's it - one click and you're done!

This helps us fine-tune our junk e-mail filters and protect you better. The messages that we send are your real e-mail messages; they were addressed to you, and may already have been sent to you earlier.

Sign up with just one click. Fear of commitment? No worries. Once you sign up, you can quit any time.

Everyone complains about junk e-mail - here's your chance to do something about it!

[Sign up to help](#)

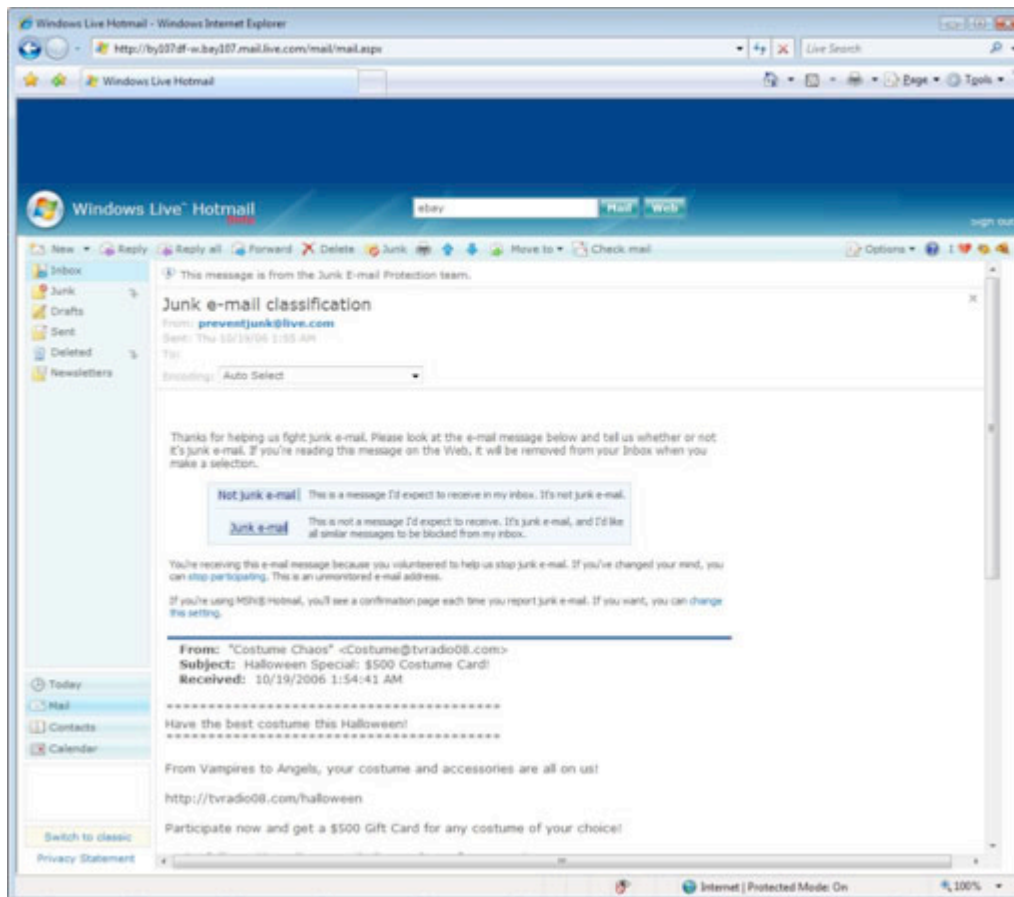
Thanks,
The Windows Live Mail and MSN Hotmail team

By clicking Sign up to help, you agree to allow Microsoft to save your e-mail messages with your categorization responses, to help in Microsoft's efforts to stop junk e-mail.

To stop receiving messages about this program, [unsubscribe here](#). Please don't reply to this message. This is an unmonitored e-mail address.



Example 5: Sample Classification Email for Windows Live Hotmail Member



Does Microsoft determine the use of this data for Return Path Certification?

While the raw data is provided by Microsoft Windows Live team to Return Path, the analysis of the data, determination of acceptable thresholds for compliance with the data, and enforcement of the data standard is strictly and solely determined by and administered by Return Path.

Questions regarding the use and enforcement of the data should be directed to the Return Path Certification Compliance Team at compliance@senderscorecertified.com.

Isn't the presentation in the message requesting classification biased?

No. Members are sent e-mail classification request for **email that was addressed only to them**. Messages being classified may have been previously delivered to the inbox or intended to be delivered but either routed to the junk folder or deleted by the junk mail filter. Participants are then asked in a non-biased and objective manner how they would classify the message.





Isn't the program skewed toward participants who would want to only vote mail as Junk?

No. Participants are selected at random from over 200 countries without any bias or consideration for their previous voting record. Reports from one user alone cannot create junk status and requires additional feedback. Combining feedback alone with other sources of reputation data allows for junk or not-junk status to be applied.

Is the sampling really random? Is there ever any intentional selection for a particular IP address or sending domain?

E-mail is selected for classification at random without any consideration of any particular sender, IP Address, or sending domain.