

# Improving E-mail Deliverability into MSN Hotmail and Windows Live Mail

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## INTRODUCTION

For companies that use e-mail to communicate with their customers, deliverability rates of less than 100% have a measurable impact on the business, making it very important to monitor and stay on top of the issue. This paper discusses how such senders can improve deliverability into MSN Hotmail or Windows Live Mail including:

**Understanding Deliverability Issues:** The factors that influence MSN Hotmail and Windows Live Mail e-mail deliverability.

**Deliverability Troubleshooting Guide:** Troubleshooting options.

## UNDERSTANDING DELIVERABILITY ISSUES

E-mail is no longer just a convenient person-to-person communication tool. Today e-mail is used to communicate vital business information, confirmation of e-commerce and deliver transactional e-mail from financial institutions and third parties. In addition, e-mail provides a valuable tactic for marketers and consumers alike, providing targeted offers and information that consumers want. However, with any Internet-based communication comes vulnerability, exploiting social engineering and the underlying internet architecture. Today's exploits include spoofed and forged e-mail, viruses and worms and crimeware. In an attempt to protect users from these threats, Internet Service Providers (ISPs) have implemented sophisticated message hygiene architectures to detect such deceptive and unwanted e-mail.

Spam or junk e-mail is unsolicited e-mail messages that are deemed inappropriate or unwanted by the intended recipient. Keep this definition of spam in mind when devising your communication strategies. Users that may have once signed up for e-mail solicitation may no longer want to receive e-mails or even remember signing up for the subscription. Thus, they may define even these e-mail messages as spam.

In an effort to fight spam, ISPs are making it easier for recipients to tag an e-mail as spam. If your company communicates with your customers via e-mail, keep these issues in mind to ensure you reach your customers and protect your reputation. To help keep your reputation in the receiver community intact and to help ensure that your e-mail is delivered into your customers' inboxes, you will need to follow strict guidelines and best practices.

For background information on best practices to follow, visit the following Microsoft and industry resources:

FTC Guidelines for Businesses: <http://www.ftc.gov/bcp/conline/edcams/spam/business.htm>

Sender ID: <http://www.microsoft.com/senderid>

Managing the Age of Your User Lists: [http://www.mail-abuse.com/an\\_listmgntgdlines.html](http://www.mail-abuse.com/an_listmgntgdlines.html)

Microsoft's Postmaster Site: <http://postmaster.msn.com>

Microsoft's Anti-Spam Policy: <http://privacy.microsoft.com/en-us/anti-spam.aspx>

Microsoft Safety Site: <http://www.microsoft.com/safety>

Authentication and Online Trust Alliance (AOTA): [www.emailauthentication.org](http://www.emailauthentication.org)

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High Level Overview of How to Improve Deliverability Performance

<http://www.returnpath.biz/resources/archives/whitepapers/index.php>

Email Senders Provider Coalition (ESPC): <http://www.espcalition.org/index.php>

The following chart provides a high-level view of the triggers that can cause e-mail to customers who use MSN Hotmail or Windows Live Mail to be rejected as spam:

| Triggers               | Possible Non-Delivery Causes |                   |                             |                      |            |
|------------------------|------------------------------|-------------------|-----------------------------|----------------------|------------|
|                        | Public Blacklist             | Private Blacklist | Message Layer-based Filters | Server Configuration | Volume Cap |
| User Complaints        | ✓                            | ✓                 | ✓                           |                      |            |
| Unknown User Rates     |                              | ✓                 |                             |                      |            |
| Spam Traps             | ✓                            | ✓                 | ✓                           |                      |            |
| Sending Infrastructure | ✓                            | ✓                 |                             | ✓                    | ✓          |
| "Spammy*" Content      |                              |                   | ✓                           |                      |            |

**Figure 1: High Level Triggers of E-Mail Rejection as Spam**

*\*Many content filters use machine-learning algorithms to detect potential spam. These usually include words or combinations of words that have a high probability of being SPAM.*

*Source: Return Path Inc.*

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## DELIVERABILITY TROUBLESHOOTING GUIDE

### How should you use this guide?

This paper is organized into two different scenarios:

**Scenario 1:** Your inbound e-mail to MSN Hotmail or Windows Live Mail users is not being delivered as expected.

**Scenario 2:** You are a Sender Score Certified Member and are experiencing delivery issues.

Each scenario has the following sections:

1. Symptoms
2. Checklist of common causes and recommended actions
3. Recommended actions
4. Escalation path

### Scenario 1: Your inbound e-mail to MSN Hotmail or Windows Live Mail users is not being delivered as expected

#### Symptoms

1. Your e-mail appears to be getting blocked by MSN Hotmail or Windows Live Mail.
2. Your e-mail is being delivered to recipients' Junk E-Mail Folders (JMF).
3. Your e-mail is bouncing.

#### Checklist of Common Causes

| Common Causes                                    | Recommended Actions                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Server Configuration                             | <ul style="list-style-type: none"><li>✓ Properly configure anti-virus software on your firewall or your SMTP gateway</li><li>✓ Configure your Domain Name Server ("DNS") server correctly</li><li>✓ Enable Reverse DNS Lookup</li><li>✓ Be aware of MSN Hotmail and Windows Live Mail Volume Caps</li><li>✓ Insure your outbound mail is Sender ID compliant by publishing an SPF record in your DNS.</li></ul>                                     |
| MSN Hotmail and Windows Live Mail Complaint Rate | <ul style="list-style-type: none"><li>✓ Check the age of your user lists</li><li>✓ Use Double Opt In when customers sign up to receive your e-mails</li><li>✓ Make the Unsubscribe option easy to find</li><li>✓ Monitor the frequency of your e-mail. Ask customers for feedback.</li><li>✓ Are customers receiving what they originally signed up for? Ask and take action if not.</li></ul>                                                      |
| Microsoft Blocklist                              | <ul style="list-style-type: none"><li>✓ If you believe your e-mail has been blocked by the Microsoft Blocklist, please e-mail MSN Hotmail and Windows Live Mail support at <a href="mailto:nocmail@microsoft.com">nocmail@microsoft.com</a></li><li>✓ Please note you will have to provide answers to the questions asked at: <a href="http://postmaster.msn.com/Troubleshooting.aspx">http://postmaster.msn.com/Troubleshooting.aspx</a></li></ul> |

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## Recommended Actions

### ***Cause 1: Server Configuration***

Certain server configurations, such as not having reverse-DNS set up on your servers, can cause your e-mail messages to be blocked. For more background information on Server Configuration, please refer to the following Request for Comments (RFC's)

<http://www.ietf.org/rfc/rfc2505.txt> and <http://www.ietf.org/rfc/rfc2920.txt>

#### *1. Are you running an anti-virus solution on your firewall or SMTP Server?*

Some deliverability issues are the result of sender-based software configurations. If you are running anti-virus software on your firewall or SMTP server, check for a setting such as "Internet E-mail Auto Protect" or "Internet E-mail Protection." If this setting is enabled, please disable it and try sending a test message again. If you are currently running Symantec Anti-Virus Corporate Edition 9.x on your server, please review the following article from Symantec Support:

<http://service1.symantec.com/SUPPORT/ent-security.nsf/docid/2004061009504348?Open&src=w>

#### *2. Confirm that your DNS is set up correctly.*

Try connecting to mail.hotmail.com via port 25. If you are unable to connect to mail.hotmail.com, try telneting over port 25 directly to the MSN Hotmail and Windows Live Mail e-mail servers (MTAs). You can find the current list of MTAs by querying "nslookup -q=mx hotmail.com" from a command prompt (this action should work on a variety of operating systems). Currently, the addresses for these servers are mx1.hotmail.com, mx2.hotmail.com, mx3.hotmail.com, mx4.hotmail.com. If that does not work, try connecting directly to the IP's. If you are able to connect directly to the IP and not mail.hotmail.com this probably means there is a problem with your DNS server.

Occasionally, some of the IP's in the MX record may be out of service. If you are connecting to one of these IP's your connection may timeout. For your tests, you should make sure you test all of our published IP's. In addition, you should configure your outbound e-mail server to do a round-robin DNS lookup for hotmail.com.

#### *3. Are you advertising yourself as a non-routable IP?*

MSN Hotmail and Windows Live Mail may not accept e-mail from senders who fail a reverse-DNS lookup. In some cases legitimate senders advertise themselves incorrectly as a non-internet routable IP when attempting to open a connection to MSN Hotmail or Windows Live Mail. IP addresses that are reserved for private (non-routable) networking are 192.168.0.0/16, 10.0.0.0/8, and 172.16.0.0/11 (or 192.168.0.0 - 192.168.255.255, 10.0.0.0 - 10.255.255.255, 172.16.0.0 - 172.31.255.255). The most common private network is 192.168.0.0.

#### *4. Are you maxing out the volume cap enforced by MSN Hotmail and Windows Live Mail?*

MSN Hotmail and Windows Live Mail allow up to five hundred (500) concurrent connections from a single server, but each message is limited to one hundred (100) recipients. This is threshold dictated by the following RFC: <http://www.faqs.org/rfcs/rfc821.html>.

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### ***Cause 2: MSN Hotmail and Windows Live Mail Complaint Rates***

Microsoft uses user complaint rates as another variable in determining if an e-mail is spam. These complaint rates are compiled from a database that stores IP addresses of e-mail senders that have been flagged by a portion of the user population as being spam. This process is called Junk E-Mail Reporting (JMR). The JMR database is used as an input into the filtering process an e-mail goes through on delivery.

Check the following:

1. *Is all of your marketing and corporate email Sender ID compliant?* Have you published your SPF record and included all of your IP's? (Note we highly recommend you do NOT include PTR or reverse look-ups in your SPF record). In addition, we recommend you segregate your marketing, corporate and transactional email by servers and respective SPF records.
2. *How many IP's are out of compliance? All IP's or just some?*
3. *If some, what is the type of e-mail sent from the IP's that is IN compliance?* This will help determine the content of e-mail that is being junked vs. the type of e-mail that recipients are judging as OK.
4. *Monitor your NDR (Non-Delivery Rate) a.k.a. bounce rates.* How many attempts do you make to deliver e-mail after receiving a hard or soft bounce (NDR) for a targeted recipient? Bounce rates are a function of frequency of e-mail and number of bounces. So, for example, a mailer who sends monthly, may set a hard and/or soft bounce rule of three (3) bounces in ninety (90) days; whereas, a mailer who mails weekly may set a hard and/or soft bounce rule of three (3) bounces in thirty (30) days. At a minimum, senders should have separate rules for hard and soft bounce processing, remove Unknown User or Invalid Address bounces immediately, and monitor actual bounce reasons to determine why the e-mail is not going through efficiently.
5. *Monitor the frequency of your marketing communications.* Asking your users how often they want marketing communications from you and honoring their requests is a good practice that should help reduce complaint rates.
6. *Check the average age of your user lists.* Are they older than three (3) months? If so, this could be causing spam trap or NDR issues.  
See [http://www.mail-abuse.com/an\\_listmgntgdlines.html](http://www.mail-abuse.com/an_listmgntgdlines.html) for more information.
7. *Ensure customers are receiving what they originally signed up for.* Setting clear expectations of what your users can expect with respect to both type of communication and frequency of communication at the point of sign up and throughout the relationship should help reduce complaint rates.
8. *Use separate servers for your marketing e-mail and your transactional e-mail.* Since MSN Hotmail and Windows Live Mail track complaint rates per IP addresses, one way of ensuring your most critical business communications reaches your intended recipients is to separate these out from your outbound marketing communications.
9. *Ensure that your communications and sign-up processes comply with CAN SPAM and related privacy legislation, ESPC and DMA best practices.*

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10. *Offer a clear, easy-to-find, and functional unsubscribe feature.* If so, do they use the “list unsubscribe” method? (Part of CAN SPAM compliance)  
<http://www.ftc.gov/bcp/online/pubs/alerts/remvalrt.htm>
  11. *Sign up for the Smart Network Data Services (SNDS) service* from <http://postmaster.msn.com> for a daily view of how close you are getting to the MSN Hotmail and Windows Live Mail internal threshold.
  12. *Sign up for the Junk E-Mail Reporting Program (JMRP)* to receive a report containing one hundred percent (100%) of data reported by customers for your IP addresses. For more details, see <http://postmaster.msn.com>.

### ***Cause 3: Microsoft BlockList***

Microsoft compiles its blocklist based on input from a third party. IP's that violate Microsoft's Spam policies are also put on the Microsoft Blocklist.

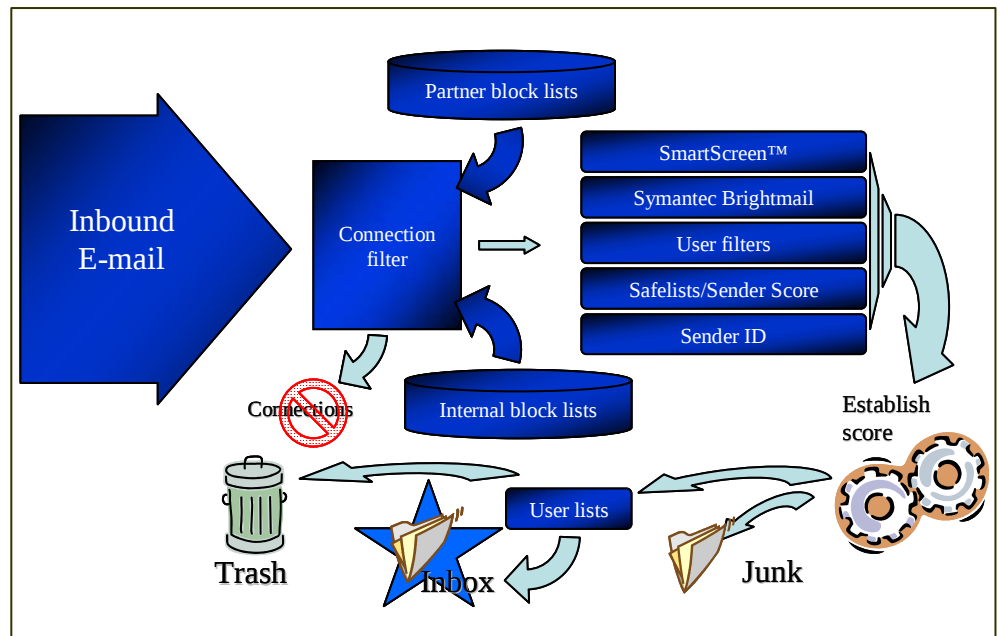
To reduce the chance that your e-mail messages will be placed on either Microsoft's or public blocklists:

1. Keep your unknown user rates low.
2. Avoid getting on Spam Trap lists. These lists are compiled using a passive e-mail account designed to receive spam to examine its content and origination. No e-mail is sent to or from the account, so all messages received in the account are unsolicited
3. Avoid common server configuration mistakes (outlined in the Server Configuration section above).

### ***Cause 4: Content Filtering***

MSN Hotmail and Windows Live Mail use “multiple layers” of message hygiene protection for spam and fraudulent e-mails (phishing).

Diagram 1 provides an overview of the sequence of the filtering process used in MSN Hotmail and Windows Live Mail.



**Diagram 1: Inbound e-mail filtering process**

Incoming e-mail goes through a number of filters before it is delivered to the recipient.

1. **Connection Filter:** MSN Hotmail and Windows Live Mail uses Microsoft's own blocklist in addition to blocklists from our partners to determine if an e-mail should be routed forward or the connection refused.
2. **SmartScreen™ Filter Technology:** If the e-mail passes the Connection Filter, it is then passed through a number of other filters. MSN Hotmail and Windows Live Mail use a layered approach to filter messages. When an external user sends e-mail messages to MSN Hotmail or Windows Live Mail, SmartScreen filter technology evaluates the textual content of the messages and assigns the message a rating based on the probability that the message is junk e-mail. This rating is stored as a message property called a spam confidence level (SCL) within the message itself. The SCL rating is persisted with the message as it is sent to other anti-spam protection layers within MSN Hotmail and Windows Live Mail.
3. **Rules inside MSN Hotmail and Windows Live Mail:** Rules are set to handle e-mail messages with various SCL ratings. If a message has an SCL rating lower than the threshold (believed to be spam), a rule then takes the action to delete the message rather than send the message to the users' junk e-mail folders. If the message has a higher SCL rating than the threshold, the e-mail is delivered to the user's junk e-mail folder rather than to the inbox.

The following section describes each of the content filters outlined in Diagram 1 in more detail.

#### *Microsoft SmartScreen™*

To help reduce the negative impact of junk e-mail, Windows Live Mail and MSN Hotmail include junk e-mail protection using patented SmartScreen technology, which screens e-mail

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to help identify and separate junk e-mail from legitimate e-mail. Based on Microsoft Research's patented machine-learning technology, SmartScreen content filter learns from known spam and phishing threats as well as from MSN Hotmail or Windows Live Mail customers who have opted in to be part of the Feedback Loop program (FBL). Both types of data help train SmartScreen on characteristics of legitimate e-mail and junk e-mail. Machine learning refers to the probability-based algorithms that are used to distinguish between legitimate and junk e-mail. Ongoing feedback from the Feedback Loop program customers helps ensure that the SmartScreen technology is continually improved.

#### *Symantec Brightmail™*

In addition to SmartScreen technology, incoming e-mail is also evaluated by Symantec's Brightmail anti-spam content filter. Leveraging the "Probe Network", a collection of more than two hundred thousand (200,000) e-mail addresses designed to attract junk e-mail; Symantec's patented technology identifies and eliminates junk e-mail before it reaches a MSN Hotmail or Windows Live Mail user's inbox. Symantec's proven solution provides protection against unsolicited junk e-mail by offering a dynamic technology that keeps pace with constantly evolving junk e-mail. To learn more about this technology, please visit <http://www.symantec.com>

#### *Customer User Lists*

In addition to the anti-spam filtering technologies, MSN Hotmail and Windows Live Mail also enables each user the ability to set filter levels to further improve the delivery of e-mail to their account. Users can easily add a sender or domain name to the *Allowed Sender List* so that e-mail from that sender or domain is never treated as junk e-mail regardless of the content of the message. Users can configure the settings to accept only messages from *Contacts* and *Safe Senders List*, giving total control over which messages are received.

E-mail messages from a certain e-mail address or domain name can also easily be blocked by adding the sender to a user's *Blocked Senders List*. In addition, each time a message is reported as junk e-mail, using the "report and delete" function, messages from those senders or domains are automatically added to a user's *Blocked Senders List*. Once a user adds a sender to their personal *Block Senders List*, e-mail from that sender will always be treated as junk e-mail from that point on, regardless of the content of the message.

To learn more about this technology, please visit <http://www.microsoft.com/presspass/features/2003/nov03/11-17spamfilter.asp>

#### *Sender Score Certified*

"False positives" occur when a legitimate, requested e-mail is inadvertently blocked or placed in a bulk folder by a spam filter. The result is that consumers do not receive wanted e-mail, legitimate senders cannot deliver their messages and e-mail senders lose the goodwill of their customers. One of MSN Hotmail and Windows Live Mail's solutions for addressing this issue is the Sender Score Certified program, formerly known as the Bonded Sender Program. Sender Score Certified - from Return Path, Inc. - identifies legitimate senders of e-mail based on their past sending behavior and their adherence to strict program standards.

To qualify for Sender Score Certified, participants must meet a set of practices for sending commercial e-mail. In addition, once they are certified, senders undergo TRUSTe monitoring of compliance with program standards and quantitative requirements. Any IP that exceeds any of the allowed thresholds may be suspended from the program. Senders are required to

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maintain high quality e-mail programs with low complaint rates in order to remain in the program. Participation helps avoid false positives but does not guarantee delivery; Microsoft's terms of use and guidelines must still be honored.

For more information about Sender Score Certified, please visit [www.senderscorecertified.com](http://www.senderscorecertified.com).

To apply to be a Sender Score Certified Member, please visit [www.senderscorecertified.com/register/](http://www.senderscorecertified.com/register/).

#### *Sender ID Framework (SIDF)*

Sender ID is:

- A cost and resource effective authentication technology that has been adopted by thousands of organizations around the world
- Leverages SPF (Sender of Policy Framework) records which have been published by over 3.5M domains in the world
- An easy to set up service, detailed instructions for setup available from Microsoft

Sender ID is an e-mail industry initiative and approved IETF RFC, which has championed by Microsoft and other industry leaders including AOL, Cisco, VeriSign, Sendmail and dozens of other industry and business leaders. SIDF has been designed to verify that each e-mail message originates from the Internet domain from which it claims to come based on the sender's SMTP server IP address. Eliminating domain spoofing will help legitimate senders protect their domain names and reputation, and help recipients more effectively identify and filter junk e-mail and phishing frauds.

Sender ID further helps prevent unwanted mailbox phishing and spoofing schemes by verifying the IP address of the e-mail sender against the reported owner of the sending domain. Spoofing attacks refer to domain spoofing which is the use of someone else's domain name when sending an e-mail, and is part of the larger problem of spoofing (the practice of forging the sender's address on e-mail messages). Domain spoofing can also be used by malicious individuals in phishing frauds, which try to lure consumers into divulging sensitive personal information by pretending the e-mail is from a trusted source, such as a financial institution or online service. Disclosure of such information can lead to identity theft and other online consumer fraud.

Today SIDF is providing proven business and technical value to senders. Today over 4 million domains send SIDF compliant e-mail into MSN Hotmail and Windows Live Mail have earned a positive reputation, and are enjoying a significantly lower false positive rate while also realizing an 80% reduction in false negatives. As a no-cost implementation for senders including no requirement for software updates of performance, SIDF is provide a superior value, improving e-mail deliverability and open rates while also protecting domain holders and corporate brands from phishing.

To learn more about this technology and how to easily deploy it, please visit <http://www.microsoft.com/senderid>.

To assist domain holders and mailers, Microsoft has created a simple wizard to create your SPF record for DNS posting. For more information visit [www.microsoft.com/senderid/wizard](http://www.microsoft.com/senderid/wizard)

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## Next Steps and Escalation Path

We hope that the previous section has helped you understand how to resolve deliverability issues to MSN Hotmail and Windows Live Mail. If you require assistance, the table below describes the best resources to help you further.

| Action                                                                                 | Contact and Required Information                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sign up for Microsoft Monitoring Services: JMRP and Smart Network Data Services (SNDS) | <b>Contact:</b> <a href="http://postmaster.msn.com">http://postmaster.msn.com</a><br><b>Required:</b><br>For JMR: <a href="http://postmaster.msn.com/Services.aspx#JMRPP">http://postmaster.msn.com/Services.aspx#JMRPP</a><br>For SNDS: <a href="http://postmaster.msn.com/snds/">http://postmaster.msn.com/snds/</a>                                                         |
| Sign up for Return Path's Sender Score Certified Program                               | <b>Contact:</b> <a href="http://www.senderscorecertified.com/register/">http://www.senderscorecertified.com/register/</a><br><b>Required:</b><br>Senders must meet Program Standards for practices and reputation metrics, which can be found at:<br><a href="http://www.senderscorecertified.com/info_center.html">http://www.senderscorecertified.com/info_center.html</a> . |
| Work with Microsoft Support to troubleshoot delivery issues                            | <b>E-mail contact:</b> <a href="mailto:nocmail@microsoft.com">nocmail@microsoft.com</a><br><b>Required:</b><br>Answers to questions posted at:<br><a href="http://postmaster.msn.com/Troubleshooting.aspx">http://postmaster.msn.com/Troubleshooting.aspx</a>                                                                                                                  |
| Sign up for E-mail Delivery Consulting Services                                        | <b>Services are available from a broad set of third party service providers.</b> For more information visit <a href="http://www.espcalition.org/">http://www.espcalition.org/</a>                                                                                                                                                                                              |

## Scenario 2: You are a Sender Score Certified Member and have delivery issues

### Symptoms

1. You have received a suspension notice from Return Path due to non-compliance with program standards or quantitative requirements.
2. Your Sender Score Certified Compliance Report shows a problem meeting quantitative requirements.

### Checklist of Common Causes

| Common Causes                                                                                                                                                                                                                    | Recommended Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Complaint Rate is not compliant with Program requirements for any of the following sources:<br><br>MSN Hotmail and Windows Live Mail Complaint Rate<br>Source A Complaint Rate<br>Source B Complaint Rate<br>Spam Cop Complaints | <ul style="list-style-type: none"><li>✓ Check the age of your user lists.</li><li>✓ Use Double Opt In when customers sign up to receive e-mails.</li><li>✓ Make Unsubscribe easy to find on your e-mails.</li><li>✓ Monitor the frequency of the e-mail. Ask users if the frequency is ok and take action if not.</li><li>✓ Are users receiving what they originally signed up for? Ask users and take action if not.</li><li>✓ Add new IP to "IP group" and start tracking reputation on that new IP. This could help with overall reputation.</li><li>✓ Is Sender ID applied to all IP's? If not, apply Sender ID to all IP's.</li><li>✓ How many IP's are OUT of compliance? All IP's or just some?</li><li>✓ If some, what is the type of e-mail sent from the IP's that are IN compliance? (This will help determine the content of e-mail that is being junked vs. the type of e-mail that recipients are judging as OK.)</li><li>✓ If possible, add additional IP's to partition types of mailing campaigns. (I.e. transactional vs. promotional/subscription marketing communications).</li><li>✓ Sign up for the JMRP and any other ISP Feedback Loops to monitor complaint rates and analyze subscribers who complain.</li><li>✓ Refer to Return Path's guide to addressing complaints found at <a href="http://www.senderscorecertified.com/suspension.html">http://www.senderscorecertified.com/suspension.html</a>.</li></ul> |
| Unknown User Rate is not compliant with Program requirements                                                                                                                                                                     | <ul style="list-style-type: none"><li>✓ Review your bounce processes to ensure that you are aggressively removing bad or inactive addresses.</li><li>✓ Review your data collection and maintenance practices to identify areas that allow collection of erroneous address or retention of addresses that are aged and/or inactive.</li><li>✓ If you get data from data partners, affiliates, or list services, review their data collection practices as well.</li><li>✓ Refer to Return Path's guide to addressing Unknown Users found at <a href="http://www.senderscorecertified.com/suspension.html">http://www.senderscorecertified.com/suspension.html</a>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Unsubscribe Score is not compliant with Program requirements                                                                                                                                                                     | <ul style="list-style-type: none"><li>✓ Review your unsubscribe practices to make sure that it is easy to use.</li><li>✓ Review your unsubscribe process to make sure that it results in the removal of addresses in a timely manner.</li><li>✓ Refer to Return Path's guide to addressing Unsubscribe Functionality found at <a href="http://www.senderscorecertified.com/suspension.html">http://www.senderscorecertified.com/suspension.html</a>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| SpamCop Spam Trap                                                                                                                                                                                                                | <ul style="list-style-type: none"><li>✓ Review your data collection practices for areas that might allow the</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hits are not compliant with Program requirements               | <p>collection of spam trap addresses.</p> <ul style="list-style-type: none"> <li>✓ Review your data hygiene and bounce processing practices for areas that might allow the retention of aged and inactive records.</li> <li>✓ Refer to Return Path's guide to addressing Spam Trap problems found at <a href="http://www.senderscorecertified.com/suspension.html">http://www.senderscorecertified.com/suspension.html</a>.</li> </ul> |
| Blacklist Listings are not compliant with Program requirements | <ul style="list-style-type: none"> <li>✓ Review the listings and make appropriate corrections to practices or infrastructure.</li> </ul>                                                                                                                                                                                                                                                                                               |

Further information about the common causes listed above can be found on the Return Path Web site.

- Detailed information about the E-mail Sender Standards for senders enrolled in the program can be found at <http://www.senderscorecertified.com/standards.html>.
- Detailed information about the quantitative requirements and thresholds for senders enrolled in the program can be found at: [www.senderscorecertified.com/quant\\_req.html](http://www.senderscorecertified.com/quant_req.html).
- In order to gauge compliance with the quantitative requirements, all senders in the Sender Score Certified Program receive a daily compliance report via e-mail that shows compliance with the quantitative requirements. An example of this report can be found at: [http://www.senderscorecertified.com/compliance/sample\\_report.html](http://www.senderscorecertified.com/compliance/sample_report.html).

*NOTE: The numbers referenced in the above documents are a rolling 30-day average. Return Path tracks this data on an IP basis, but the threshold cutoff that is applied is by IP group.*

*For instance if the volume of the total e-mail sent from your bond group is two to four (2-4) million, then the threshold applied is for that category even though each IP address may send more or less e-mail than that number. This is done to ensure that the threshold applied is for the entire volume of e-mail sent by a specific customer, not by any given IP.*

## Recommended Actions

Here are some initial questions to ask when troubleshooting the issue:

1. *Is all of your marketing and corporate email Sender ID compliant? Have you published your SPF record and included all of your IP's?*
2. *How many IP's are out of compliance? All IP's or just some?*
3. *If some, what is the type of e-mail sent from the IP's that is IN compliance? This will help determine the content of e-mail that is being junked vs. the type of e-mail that recipients are judging as OK.*

## MSN Hotmail and Windows Live Mail Complaint Rates

Refer to the troubleshooting options outlined in the previous section: **MSN Hotmail and Windows Live Mail Complaint Rates**.

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### Other Quantitative Requirements

Further troubleshooting information based on which Return Path specific measure is out of compliance can be found at: [www.senderscorecertified.com/suspension.html](http://www.senderscorecertified.com/suspension.html).

IP's not compliant with any of the quantitative requirements are subject to suspension. Excessive suspension can result in removal of all of a sender's IP's from the program. Violations of the qualitative standards are subject to removal of the sender from the program as well.

Taking action to correct a compliance problem is not sufficient for reinstatement. Suspended IP's will be reinstated when measured values have returned to levels of good standing. IP's will be monitored while suspended, and IP's that have come back into compliance will be enabled following a review of the data.

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*NOTE: Since Return Path uses the MSN Hotmail and Windows Live Mail JMR feed as input, bypassing the Sender Score Certified program and sending the same e-mail campaign directly through MSN Hotmail or Windows Live Mail will not alleviate the issue. MSN Hotmail and Windows Live Mail deliverability will be consistent with the deliverability through the Sender Score Certified program.*

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### Next Steps and Escalation Path

| Action                                                                          | Contact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Determine next steps for getting back into compliance                           | <a href="http://www.senderscorecertified.com/suspension.html">www.senderscorecertified.com/suspension.html</a><br><a href="http://www.senderscorecertified.com/fags/standards.html">www.senderscorecertified.com/fags/standards.html</a><br><br>Note: Disabled/suspended IP's will be reinstated when measured values have returned to levels of good standing. IP's will be monitored while suspended, and IP's that have come back into compliance will be enabled following a review of the data. |
| Authenticate your outbound e-mail via the Sender ID Framework                   | <a href="http://www.microsoft.com/senderid">www.microsoft.com/senderid</a> and <a href="http://www.emailauthentication.org">www.emailauthentication.org</a>                                                                                                                                                                                                                                                                                                                                          |
| Sign up for Microsoft Monitoring Services                                       | <a href="http://postmaster.msn.com">http://postmaster.msn.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Sign up for E-Mail Delivery Monitoring and Consulting Services from Return Path | <a href="http://www.senderscore.com">www.senderscore.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Apply to be a Sender Score Certified Member                                     | <a href="http://www.senderscorecertified.com/register/">www.senderscorecertified.com/register/</a><br><a href="http://www.senderscorecertified.com/suspension.html">http://www.senderscorecertified.com/suspension.html</a>                                                                                                                                                                                                                                                                          |

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## CONCLUSION

E-mail abuse, junk e-mail, and phishing e-mails continue to negatively impact the entire e-mail ecosystem. To help build back consumer trust in the use of e-mail, Microsoft has put in place various policies and technologies to help protect consumers. However, Microsoft understands that e-mail senders that “play by the rules” should not be negatively affected.

Working with our partners Microsoft has established a suite of services to help senders improve their deliverability to MSN Hotmail and Windows Live Mail consumers. While Microsoft does not guarantee e-mail delivery for senders, this paper has outlined guidelines and services to help you understand what causes deliverability issues and how best to structure your e-mail programs to ensure greater deliverability.