

# How to Prevent Spam with Mail Limiting Features

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## Overview

### Total emails sent by a domain per hour options

Max hourly emails per domain

Count mailman deliveries towards a domain's Max hourly emails

The percentage of email messages (above the account's hourly maximum) to queue and retry for delivery

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## Overview

The [Mail](#) section of WHM's [Tweak Settings](#) interface ([Home](#) >> [Server Configuration](#) >> [Tweak Settings](#)) contains five options that allow you to limit outgoing mail. The limits that these options set apply to all domains on the server. Use the options to help limit bandwidth consumption and prevent potential spammers.

## Total emails sent by a domain per hour options

The following options apply to the total number of outgoing messages that a domain sends per hour.

### Max hourly emails per domain

The *Max hourly emails per domain* option limits the number of messages that a domain can send per hour.

The following table contains the option's attributes:

| Entry in the /var/cpanel/cpanel.config file | Default value        | Minimum value | Maximum value        | Permissions   |
|---|----------------------|---------------|----------------------|---|
| maxemailsperhour                            | Unlimited (no value) | 1             | Unlimited (no value) | A user with either of the following permissions can access this option: <ul style="list-style-type: none"><li>A reseller account, if you enable the <i>Allow Creation of Packages with non-default Email Limits</i> option in WHM's <a href="#">Edit Reseller Nameservers and Privileges</a> interface (<a href="#">Home</a> &gt;&gt; <a href="#">Resellers</a> &gt;&gt; <a href="#">Edit Reseller Nameservers and Privileges</a>)</li><li>A user with root-level privileges.</li></ul> |

#### Note:

- To define a maximum number of emails that the server allows for an account package, use WHM's [Edit a Package](#) interface ([Home](#) >> [Packages](#) >> [Edit a Package](#)).
- To define a maximum number of emails that the server allows for an individual cPanel account, use WHM's [Modify an Account](#) interface ([Home](#) >> [Accounts](#) >> [Modify an Account](#)).

### Count mailman deliveries towards a domain's Max hourly emails

This setting allows you to specify whether to count messages sent to Mailman mailing lists against an account's *Max hourly emails per domain* limit.

- Set this option's value to *On* to include Mailman deliveries in the total value that a domain's *Max hourly emails per domain* option uses.
- Set this option's value to *Off* to exclude Mailman deliveries from the total value.

The following table contains the option's attributes:

| Entry in the /var/cpanel/cpanel.config file | Default selection | Permissions |
|---|-------------------|-------------|
|---|-------------------|-------------|

email\_send\_limits\_count\_mailman

Off

A user with root-level permissions can access this option.

## The percentage of email messages (above the account's hourly maximum) to queue and retry for delivery

This option defines how the mail server handles outgoing messages for a domain that reaches the value of the *Max hourly emails per domain* option. The mail server will attempt to deliver any queued messages in the next hour, by default.

- To discard all additional outgoing messages for a domain after the domain reaches the value of the *Max hourly emails per domain* option, enter 100 in the *The percentage of email messages (above the account's hourly maximum) to queue and retry for delivery* text box.
- To queue outgoing messages for a domain after the domain reaches the value of the *Max hourly emails per domain* option, enter a value larger than 100 in the *The percentage of email messages (above the account's hourly maximum) to queue and retry for delivery* text box.

### Important:

The mail server evaluates the value that you enter in the *The percentage of email messages (above the account's hourly maximum) to queue and retry for delivery* text box as a percentage of the value that you set for the *Max hourly emails per domain* option.

The following table contains the option's attributes:

| Entry in the<br>/var/cpanel/cpanel.config file | Default<br>value | Minimum<br>value | Maximum<br>value | Permissions  |
|--|------------------|------------------|------------------|--|
| email_send_limits_defer_cutoff                 | 125              | 100              | 10000            | A user with root-level permissions can access this option. |

### Example

You set the *Max hourly emails per domain* option to 100, and you set the *The percentage of email messages (above the account's hourly maximum) to queue and retry for delivery* option to 200. The mail server applies the following rules to the outgoing messages from each domain:

- The mail server sends the first 100 outgoing messages from the domain.
- The mail server queues the next 100 outgoing messages from the domain.
- The mail server discards any additional outgoing messages from the domain.
- In the following hour, the mail server attempts to send all queued outgoing messages from the domain.

## Failed and deferred outgoing message options

The *Maximum percentage of failed or deferred messages a domain may send per hour* option and the *Number of failed or deferred messages a domain may send before protections can be triggered* option specify when the server will temporarily block outgoing mail from a domain. The system examines all outgoing and local mail over the previous hour to determine whether these conditions are true.

### Important:

Your server will temporarily block outgoing mail from a domain if **both** of the following conditions are true:

- The percentage of failed or deferred messages, out of the total number of messages that the domain sent, is **equal to or greater than** the percentage that you specify for the *Maximum percentage of failed or deferred messages a domain may send per hour* option.
- The domain has sent **at least** the number of failed or deferred messages that you specify for the *Number of failed or deferred messages a domain may send before protections can be triggered* option.

[Click here to view an extended example...](#)

### Extended example


If you set the following values, the server functions in the manner that the table below describes:

- Maximum percentage of failed or deferred messages a domain may send per hour* — 55%
- Number of failed or deferred messages a domain may send before protections can be triggered* — 7

| Deferred or failed (past hour) | Successful (past hour) | % deferred or failed | Domain's outgoing mail status  |
|--------------------------------|------------------------|----------------------|--|
| 1                              | 0                      | 100%                 | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 2                              | 0                      | 100%                 | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |

| Deferred or failed (past hour) | Successful (past hour) | % deferred or failed | Domain's outgoing mail status  |
|--------------------------------|------------------------|----------------------|--|
| 2                              | 1                      | 67%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 2                              | 2                      | 50%                  | OK — The domain did not reach either condition.  |
| 3                              | 2                      | 60%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 4                              | 2                      | 67%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 5                              | 2                      | 71%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 6                              | 2                      | 75%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 6                              | 3                      | 67%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 6                              | 4                      | 60%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 6                              | 5                      | 55%                  | OK — The domain reached the <b>percentage</b> of failed or deferred messages, but did <b>not</b> reach the <b>number</b> of failed or deferred messages. |
| 6                              | 6                      | 50%                  | OK — The domain did not reach either condition.  |
| 6                              | 7                      | 46%                  | OK — The domain did not reach either condition.  |
| 7                              | 7                      | 50%                  | OK — The domain reached the <b>number</b> of failed or deferred messages, but did <b>not</b> reach the <b>percentage</b> of failed or deferred messages. |
| 8                              | 7                      | 53%                  | OK — The domain reached the <b>number</b> of failed or deferred messages, but did <b>not</b> reach the <b>percentage</b> of failed or deferred messages. |
| 9                              | 7                      | 56%                  | <b>OUTGOING MAIL BLOCKED</b> — The domain reached both conditions.   |

## Number of failed or deferred messages a domain may send before protections can be triggered


 **Remember:** Use the *Number of failed or deferred messages a domain may send before protections can be triggered* option with the *Maximum percentage of failed or deferred messages a domain may send per hour* option. Your server does **not** temporarily block outgoing mail from a domain until the domain reaches **both** limits.

This option defines how many failed or deferred messages that a domain can send before the mail server checks whether the *Maximum percentage of failed or deferred messages a domain may send per hour* value was met.

The following table contains the option's attributes:

| Entry in the /var/cpanel/cpanel.config file            | Default value | Minimum value | Maximum value       | Permissions  |
|--|---------------|---------------|---------------------|--|
| email_send_limits_min_defer_fail_to_trigger_protection | 5             | 1             | 1000000000000000000 | A user with root permissions can access this option. |

## Maximum percentage of failed or deferred messages a domain may send per hour

 **Remember:** Use the *Maximum percentage of failed or deferred messages a domain may send per hour* option with the *Number of failed or deferred messages a domain may send before protections can be triggered* option. Your server does **not** temporarily block outgoing mail from a domain until the domain reaches **both** limits.

This option specifies the maximum percentage of failed or deferred messages that a domain may send per hour. This option **only** applies after the number of failed or deferred messages reaches the *Number of failed or deferred messages a domain may send before protections can be triggered* option's value.

The following table contains the option's attributes:

| Entry in the <code>/var/cpanel/cpanel.config</code> file | Default value | Minimum value | Maximum value | Permissions  |
|--|---------------|---------------|---------------|--|
| <code>email_send_limits_max_defer_fail_percentage</code> | Unlimited     | 1             | Unlimited     | A user with root permissions can access this option. |

## Error message

If a domain reaches the limits set in the *Maximum percentage of failed or deferred messages a domain may send per hour* and *Number of failed or deferred messages a domain may send before protections can be triggered* options set, then your error log will contain entries that resemble the following example:

```
R=enforce_mail_permissions: Domain example.com has exceeded the max defers and failures per hour (7/5 (20%))
```

The number of failed and deferred outgoing messages affect the values in the error message in the following ways:

| Value | Description  |
|-------|--|
| 7     | The number of failed or deferred outgoing messages from the domain in the hour.  |
| 5     | The number of failed or deferred messages the mail server allows the domain to send in an hour, before it checks the percentage of failed or deferred outgoing messages that the mail server allows the domain to send.<br><br>To set this value, use the <i>Number of failed or deferred messages a domain may send before protections can be triggered</i> option. |
| 20    | The current percentage of deferred or failed outgoing messages for the domain. This percentage is based on the total messages sent compared to the number of failed or deferred outgoing messages per hour for the domain.   |

## Additional documentation

|   |                                  |                               |                                |
|---|----------------------------------|-------------------------------|--------------------------------|
| <a href="#">Suggested documentation</a> | <a href="#">For cPanel users</a> | <a href="#">For WHM users</a> | <a href="#">For developers</a> |
|---|----------------------------------|-------------------------------|--------------------------------|

 [How to Prevent Spam with Mail Limiting Features](#)

 [How to Keep your Email out of the Spam Folder](#)

 [PCI Compliance and Software Versions](#)

 [How to Set Email Send Limits](#)

 [AutoConfig and Autodiscover](#)

 [How to Create Mail Filter Rules For Mailing Lists](#)

 [How to Log in to the Sent and Spam Mail Folders Directly](#)

 [How to Create a Spam Email Filter](#)

 [How to Configure Mail Filters](#)

 [The BlackBerry FastMail Service](#)

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 [cPanel API 2 Functions - Email::get\\_archiving\\_types](#)

 [cPanel API 2 Functions - Email::listlists](#)

 [cPanel API 2 Functions - Email::set\\_archiving\\_default\\_configuration](#)

 [UAPI Functions - Email::list\\_lists](#)

 [UAPI Functions - Email::delete\\_list](#)

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