



Backup MX Servers

Help Documentation

Backup MX Servers

A Backup MX Server is a mail server that will store (spool) your incoming email if your primary mail server becomes unavailable. A mail server can become unavailable to receive incoming mail for a number of reasons. For example:

- Hardware or software failure
- Very busy and unable to receive new incoming connections, or emails
- Network connection is down or saturated
- Network routing issues can also cause your mail server to become unavailable

Case 1 - No Backup MX

If you do not have a Backup MX Server, the following conditions may occur:

- Email will be bounced (Returned to Sender).
- Your (inbound) email will cause a backup in the originating mail server's spool.
- Service Timeout. Depending on the Retry attempts by the originating mail server, your mailboxes may never receive their incoming email.
- Users do not understand bounce messages. To most users, bounce messages are unreadable, so when they can't send an email, they do not try to resend.

Case 2 - With a Backup MX

How Email works when a Backup MX Server is involved:

- User sends an email to 'user@example.com' (a mailbox hosted by your SmarterMail Server)
- Their mail server looks up the MX Records for 'example.com' and finds two:
 - IP: x.x.x.x Weight: 10
 - IP: y.y.y.y Weight: 20
- Their mail server first attempts to connect to: x.x.x.x
- Connection fails, which could be caused by any of the above conditions
- They try to connect to the secondary MX record: y.y.y.y
- They successfully connect to this server.
- Email transmission begins, and the Backup MX Server receives the email into its spool.
- Since there are no existing local domains on this server, SmarterMail stores this email in its spool.
- Based off of the Retry Attempts, SmarterMail will continue to try and make connections to your Primary Mail Server.

- SmarterMail will only make 4 retry attempts. It is recommended that you set the last attempt to a longer timeframe, i.e., 24 hours (1440 minutes)
- This way SmarterMail does not send a Bounce Message to the originator saying that it could not deliver the message, before your Primary Server is back online.
- If your Primary Mail Server comes back online before the final Retry Attempt, you can reset the Retry Counts on all messages in the spool. This will force the Backup MX Server to try forwarding all existing mail in the spool back to your Primary Mail Server.

Configuring a Backup MX Server

- Add a placeholder domain (called "example.com") to open up the port to listen on.
- Configure SmartHosting by adding the IP addresses to which delivery should be allowed.
- In general settings, change the delivery retry times to 10, 10, 10, and 1440.
- In DNS, add secondary MX records pointing to the new server's IP. Set the preference value higher than the main MX record.