

Email Deliverability in WHM

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Overview

Use this interface to identify problems with your server's mail-related DNS records. The system uses these records to verify that other servers can trust it as a sender.

Note:

- Both DKIM and SPF authentication **require** that you use a DNS server for the domain name. For more information about your DNS servers, contact your service provider.
- The system modifies the DKIM and SPF records if it is authoritative for a domain's DNS records.
- For information about setting up your server's nameservers with your registrar, read our [How to Set Up Nameservers in a cPanel Environment](#) documentation.

Manage the Domain

This section of the interface displays the following information:

- *Domain* — The server's hostname.
- *Mail HELO* — The server's [HELO](#) configuration.

Note:

The *Mail HELO* information appears if the `/etc/mailhelo` file configuration and the domain do **not** match.

DKIM

This section allows you to manage the server's Domain Keys Identified Mail (DKIM) record. DKIM verifies the sender and the integrity of a message. In addition, it allows an email system to prove that spammers did not alter an incoming message while in transit. DKIM also verifies that the messages your server receives come from the specified domain.

If any problems exist with the current record, this section displays the properly-configured DKIM record values in the *Suggested "DKIM" (TXT) Record* section. It also allows you to copy the *Name* and *Value* records that the system provides in the *Suggested "DKIM" (TXT) Record* section.

- *Generate Local DKIM Key* — Generate a DKIM record, if one does not exist.
- *Copy* — Copy the *Name* and *Value* records that the system provides in the *Suggested "DKIM" (TXT) Record* section. If you do not possess the authority to edit your record, you can provide this information to the person responsible for the listed nameservers to fix it.
- *View* — Modify the *Value* field's displayed record:
 - *Full* — The record displays in its entirety. This option is for providers who automatically split their records.
 - *Split* — The record, divided into 255-character parts. This option is for providers who do not automatically split their records.
- *Download the Private Key* — Retrieve the suggested private key. The system directs you to the *Download the Private DKIM Key* interface.

Important:

Exposing your private DKIM key is a **security risk**. If others obtain your private DKIM key, they could sign emails and impersonate you as a sender. Make **certain** that you only provide your private DKIM key to a trusted user.

Note:

If you install the [DSO PHP](#) handler **without** [ModRuid2](#) or [MPM ITK](#), and you enable DKIM, emails that you send will display `nobody` as the sender. The system will **not** display any information in the `Return-Path`, `Reply-To`, or `From` fields in the email header.

To add these fields to the email headers, contact your hosting provider and request that they add the missing fields via the following PHP script:

```
<?php
$to      = 'nobody@example.com';
$subject = 'the subject';
$message = 'hello';
$headers = 'From: webmaster@example.com' . "\r\n" .
          'Return-Path: webmaster@example.com' . "\r\n" .
          'Reply-To: webmaster@example.com' . "\r\n" .
mail($to, $subject, $message, $headers);
?>
```

Warning:
cPanel, L.L.C. does **not** recommend this configuration.

SPF

This section allows you to manage your domain's Sender Policy Framework (SPF) record. SPF verifies that messages sent from your domain originate from an approved sender.

If any problems exist with the current record, a correct SPF record configuration will appear in the *Suggested "SPF" (TXT) Record* section. This section also allows you to perform the following actions:

- *Copy* — Copy the *Name* and *Value* records that the system provides in the *Suggested "SPF" (TXT) Record* section. If you do not possess the authority to edit your record, you can provide this information to the person responsible for the listed nameservers to fix it.

Note:

The *View* option allows you to modify the record displayed in the *Value* field:

- *Full* — The record displays in its entirety. This option is for providers who automatically split their records.
 - *Split* — The record is divided into 255-character parts. This option is for providers who do not automatically split their records.
- *View* — Modify the *Value* field's displayed record:
 - *Full* — The record displays in its entirety. This option is for providers who automatically split their records.
 - *Split* — The record is divided into 255-character parts. This option is for providers who do not automatically split their records.
 - *Customize* — Modify the suggested SPF record. This directs you to the *Customize an SPF Record* interface.

Customize an SPF Record

Use this interface to customize the system's recommended SPF record for a domain. The interface displays the domain's current SPF name and value in the *Current "SPF" (TXT) Record* section, if one exists, and the system's recommendations in the *Suggested "SPF" (TXT) Record* section.

You can configure the following settings:

Domain Settings

This section allows you to define the hosts or MX servers allowed to send mail from your domain.

Setting	Description
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<i>Additional Hosts</i>	<p>Additional hosts that the system allows to send mail from your domain. The system automatically includes the primary mail exchanger and other servers for which you created an MX record.</p> <ul style="list-style-type: none"> Click <i>Add A New "Host (+a)" Item</i> to add a new host to the domain's SPF record.
<i>Additional MX Servers</i>	<p>The MX entries allowed to send mail from your domain.</p> <ul style="list-style-type: none"> Click <i>Add A New "+mx" Item</i> to add a new MX entry to the domain's SPF record.

IP Address Settings

This section allows you to add additional IP Address blocks to the domain's SPF record. The system automatically includes your server's main IPv4 or IPv6 addresses in these lists.

Note:

You can use [CIDR notation](#) (for example 10.0.0.0/8 for IPv4, or 2001:db8:1a34:56cf::/64 for IPv6).

Additional Settings

This section allows you to modify additional SPF record settings.

Setting	Description
<i>Include List (INCLUDE)</i>	<p>Additional domains to include in your SPF settings. Use this setting, for example, when you send email through another service, such as Mailchimp®.</p> <ul style="list-style-type: none"> Click <i>Add A New "+include" Item</i> to add a new domain approved to send mail from your domain.
<i>Exclude All Other Hosts ("-all" Entry)</i>	<p>Exclude any hosts that the other SPF mechanisms do not allow.</p> <div style="border: 1px solid #f0e68c; padding: 10px; margin-top: 10px;"> <p>Note:</p> <ul style="list-style-type: none"> If you enable this setting, the SPF feature causes hosts that you do not define to fail. By default, the system recommends the <code>~a</code> authorization. </div>

Preview of the Updated Record

This section displays what the updated SPF record will look like, based on its current modifications. Click *Install a Customized SPF Record* to install the new record.

Note:

If you do **not** possess the authority to update a domain's SPF record, the system **disables** the *Install a Customized SPF Record* option. Use the *Copy* option to copy the provided record in the text box to your computer's clipboard. Email this information to the person responsible for the nameservers and request that they update the SPF record on the authoritative nameserver.

Reverse DNS (PTR)

This section allows you to view and verify a domain's current pointer record (PTR). A PTR record is a DNS record that resolves an IP address to a domain or host name. The server uses this record to perform a reverse DNS (rDNS) lookup to retrieve the associated domain or host name. A PTR record requires an associated A record.

The interface provides information when a problem exists with this record. It also provides instructions for how to fix your PTR record.

Note:

- You **must** have the authority to update a domain's PTR record. If you do not, contact the owner of the IP address. For example, the IP address's data center or your service provider.
- If **smarthosting** exists on the server, it will **not** display this section. When the system relays mail through a smarthost, your server does **not** deliver the mail. Instead, the configured smarthost delivers your server's mail.
- You can configure your system's smarthost settings in WHM's *Exim Configuration Manager - Basic Editor* interface (*WHM >> Home >> Service Configuration >> Exim Configuration Manager*).

Additional documentation

Suggested documentation [For cPanel users](#) [For WHM users](#) [For developers](#)

- [Email Deliverability in WHM](#)
- [The SPF and DKIM Global Settings Script](#)
- [Enable DKIM SPF Globally](#)
- [Create a New Account - DNS Settings](#)
- [The spf_installer Script](#)

- [Email Deliverability in cPanel](#)
- [Archive](#)
- [Autoresponders](#)
- [Default Address](#)
- [Track Delivery](#)

- [Email Deliverability in WHM](#)
- [How to Keep your Email Out of the Spam Folder](#)
- [The SPF and DKIM Global Settings Script](#)
- [Enable DKIM SPF Globally](#)
- [Create a New Account - DNS Settings](#)

- [cPanel API 2 Functions - SPFUI::load_current_values](#)
- [cPanel API 2 Functions - DKIMUI::install](#)
- [cPanel API 2 Functions - DKIMUI::available](#)
- [cPanel API 2 Functions - DKIMUI::getrecords](#)
- [cPanel API 2 Functions - DKIMUI::uninstall](#)