

# Custom Email Settings: SMTP, DKIM, & SPF Records

Effective October 1, 2022, [Microsoft Exchange Online](#) will begin to permanently disable [Basic authentication](#). SMTP functionality may be impacted by this change. The Alchemer technology team is currently investigating how to implement the new authentication mechanisms suggested in the announcement.

By default, all emails sent from Alchemer are sent from one of the following email addresses:

- [Send Email Actions](#) - [noreply@alchemer.com](mailto:noreply@alchemer.com)
- [Email Campaigns](#) - [invites@mailers.alchemer.com](mailto:invites@mailers.alchemer.com)
- Shared [Reports](#) and [Exports](#) - [reports@mailers.alchemer.com](mailto:reports@mailers.alchemer.com)

To enable the use of a custom **From Email** address in Email Actions and Email Campaigns (other than the above Alchemer defaults) you must either send from your own (or a third-party) SMTP server or configure your domain with SPF and DKIM records. *Custom From-Email-Addresses are not currently available when sharing reports and exports via email.*

Using "Send Test" with Email Campaigns in Alchemer does **NOT** use SMTP/DKIM/SPF settings, and will send from Alchemer's Servers (@surveygizmo.com).

## SPF & DKIM

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If you need to continue sending emails using Alchemer's email server, you will need to set up **SPF** and **DKIM** records on your domain in order to specify a custom email **From Address**.

## SMTP

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If you have your own mail server and wish to send your Alchemer emails via your server, you can set up an **SMTP** integration. This will allow you to provide a custom **From Email** address to use with Email Campaigns and Send Email Actions.

## What You Will Need Before You Get Started

You may need the assistance of an IT professional at your organization as they are the most likely to have administrative access to your domain (needed to configure DKIM & SPF records).

### Option 1: DKIM & SPF Records

Configuring DKIM and SPF records will allow you to customize your email **From Address** for [Email](#)

[Actions](#) and [Email Campaigns](#) while continuing to send these emails from Alchemer servers.

- Mail sent using Alchemer servers is subject to [Email Limits](#) and email address [requirements](#).
- Delivery/Bounce information will be available.

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DKIM (DomainKeys Identified Mail) is an Internet Standard that enables an email sender (person or organization) to associate a domain name with email messages that they are sending. This, essentially, serves as a method of claiming responsibility for a message.

DKIM is a means for confirming that the content of an email is not tampered with from the time it leaves Alchemer servers to the time it reaches the intended recipient. It is a system designed to detect email spoofing by allowing receiving mail exchanges to check that incoming mail from a domain is authorized by that domain's administrators.

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An SPF (Sender Policy Framework) record is an open standard created to stop forgery of from-email-addresses by spammers. An SPF record helps mail servers distinguish forgeries from real mail by making it possible for a domain owner to specify which mail servers they use to send mail from that domain.

Visit our [SPF Records](#) article for additional information.

## Setup DKIM & SPF Records

For expanded instructions on configuring DKIM & SPF records, click [here](#).

In order to configure your DKIM and SPF records, you will need to be a Alchemer [Account Administrator](#). You will also likely need access to your organization's domain administrator or IT Team (or direct access to your domain's DNS record settings).

The first four steps for setting up DKIM & SPF records are identical to the above-described SMTP setup.

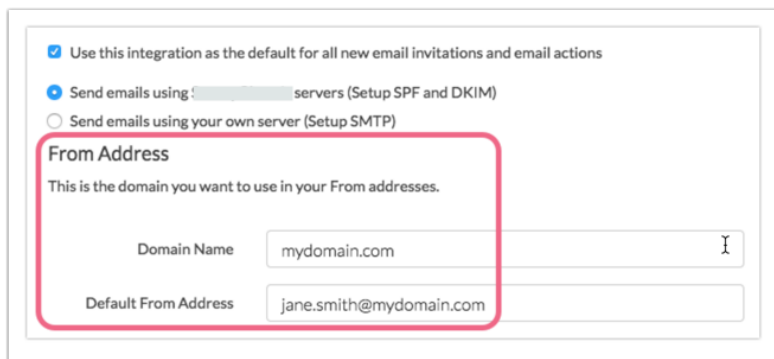
1. Go to **Integrations > Data Connectors**.
2. Scroll to the **Enterprise Level Integrations** page and locate the **Custom Email Settings** option. Click **Configure**.
3. Provide an **Integration Name**. This is the internal title that will be used to identify this integration in Email Actions and Email Campaigns. It is important to make this name something meaningful like *DKIM & SPF for alchemer.com*.
4. Determine whether you want this integration to serve as the default for any Email Actions and Email Campaigns that are created going forward.

The option to **Use this integration as the default for all new email invitations and email actions**

will be automatically selected. Un-check the option if needed.

5. Select **Send emails using Alchemer's servers (Setup SPF and DKIM)** . This will expose additional fields for configuring this integration.
6. Within the **From Address** section, provide your **Domain Name** and **Default From Address**.

*This is the domain that you want to use as your From Address within Email Actions and Email Campaigns. The above Default From Address can be updated when configuring your Email Actions or Campaigns (the domain cannot be updated).*



Use this integration as the default for all new email invitations and email actions

Send emails using Alchemer's servers (Setup SPF and DKIM)

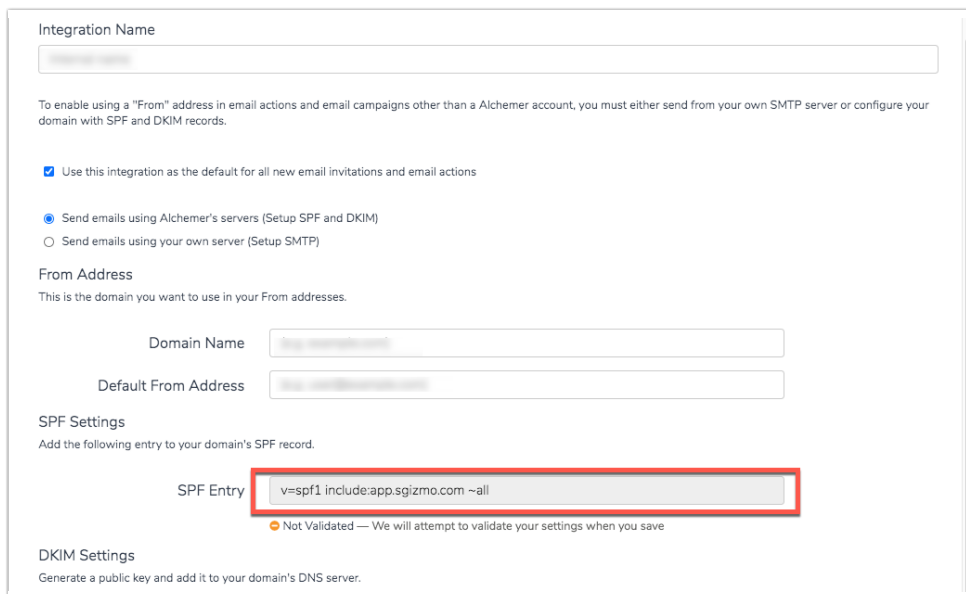
Send emails using your own server (Setup SMTP)

**From Address**  
This is the domain you want to use in your From addresses.

Domain Name

Default From Address

7. Next, the **SPF Settings** section provides users with the **SPF Entry** that needs to be added to your domain's SPF Record. Copy the SPF Entry from the provided field within the integration:



Integration Name

To enable using a "From" address in email actions and email campaigns other than a Alchemer account, you must either send from your own SMTP server or configure your domain with SPF and DKIM records.

Use this integration as the default for all new email invitations and email actions

Send emails using Alchemer's servers (Setup SPF and DKIM)

Send emails using your own server (Setup SMTP)

**From Address**  
This is the domain you want to use in your From addresses.

Domain Name

Default From Address

**SPF Settings**  
Add the following entry to your domain's SPF record.

SPF Entry

Not Validated — We will attempt to validate your settings when you save

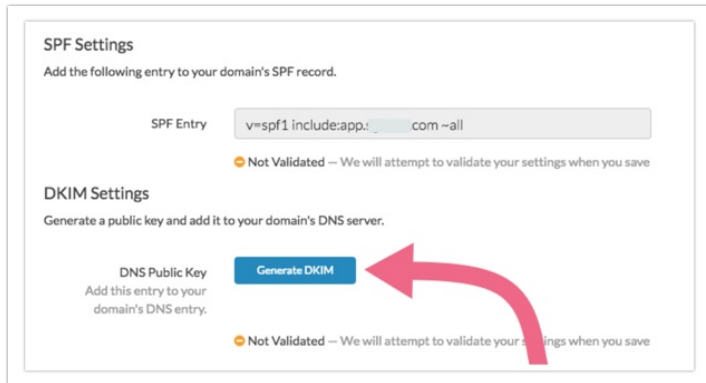
**DKIM Settings**  
Generate a public key and add it to your domain's DNS server.

Depending on the Data Center of the Alchemer account (**US, EU, CA**) users will see a different value in the SPF Entry record.

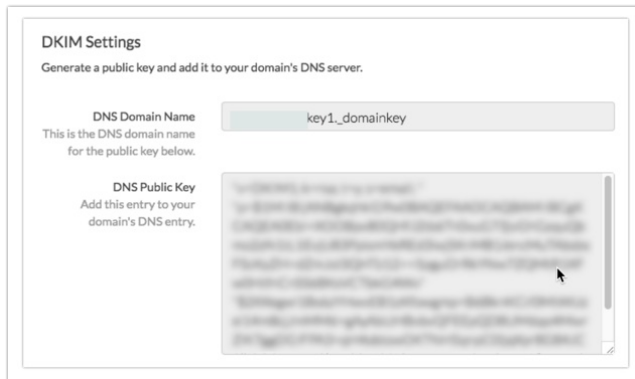
8. Last, under **DKIM Settings** you will need to generate a public key. This public key will then need

to be added to your domain's DNS Server.

- a. Click **Generate DKIM** to generate your public key.



- b. A **DNS Domain Name** (the DNS domain name for the public key), as well as the **DNS Public Key**, will be generated. Add the domain name and public key to your domain's DNS entry.



You will notice that both your SPF and DKIM Settings are not validated during setup. We will attempt to validate your settings when you **Save** your integration.

We perform this validation by sending a test email (to one of our servers) and reviewing the email headers of that test email.

Your DKIM & SPF Records will need to be verified before you can start using them in email sends. On the main **Integrations** page, look for the green check mark under the **Verified** column.

It can take 24-48 hours for DNS changes to propagate in some instances.

## Integrations

Current Integrations	Name	Status	Verified	
DKIM/SPF Server (yourdomain.com)	DKIM & SPF for yourdomain.com	Active	✔	<a href="#">Edit</a> <a href="#">Delete</a>
DKIM/SPF Server (company.com)	DKIM & SPF for company.com	Testing	✘	<a href="#">Edit</a> <a href="#">Delete</a>
DKIM/SPF Server (business.com)	DKIM & SPF for business.com	Disabled	○	<a href="#">Edit</a> <a href="#">Delete</a>

## Configure Email Actions to Use DKIM & SPF

Once your DKIM & SPF records are in place and verified, you will be able to customize the email **From Address** for Send Email Actions (as well as Email Campaigns) to use your domain.

For additional information on Send Email Actions (as well as setup instructions), visit our [tutorial](#).

To use your DKIM & SPF records integration within your Email Actions, follow the below steps:

1. Create a Send Email Action (or edit an existing one) and access the **Primary Setup** tab to locate the **From Address** field. If you configured your DKIM & SPF integration as the default for all actions and campaigns, you will see a pre-populated **From Address**.
2. If your desired from address is not pre-populated, click the domain dropdown menu and select your DKIM & SPF integration. Each integration will be identified by the domain and internal title that was provided during setup. *Make sure your titles are unique and meaningful to simplify the selection process.*

The screenshot shows the 'Name' configuration form for an email action. The 'From Address' field is populated with 'jane.smith'. A dropdown menu is open, showing options for domain selection: '@exampledomain.com', '.com (default)', 'yourdomain.com', and 'exampledomain.com'. A red arrow points from the dropdown to the 'From Address' field. A red box highlights the dropdown options, and a red arrow points from the dropdown to the 'From Address' field.

3. After selecting your DKIM & SPF integration, you will see the **From Address** populated with the **Default From Address** (entered during setup).

*Unlike the SMTP integration, you can customize the portion of the email address before the @ symbol. The domain portion of the email address cannot be customized without selecting another integration.*

You can also choose to use the **alchemer.com (default)** option, which will result in the

*noreply@alchemer.com* address being used as the **From Address**.

4. Make sure you **Save Action** to finish setting up your Email Action.

## Configure Email Campaigns to Use DKIM & SPF

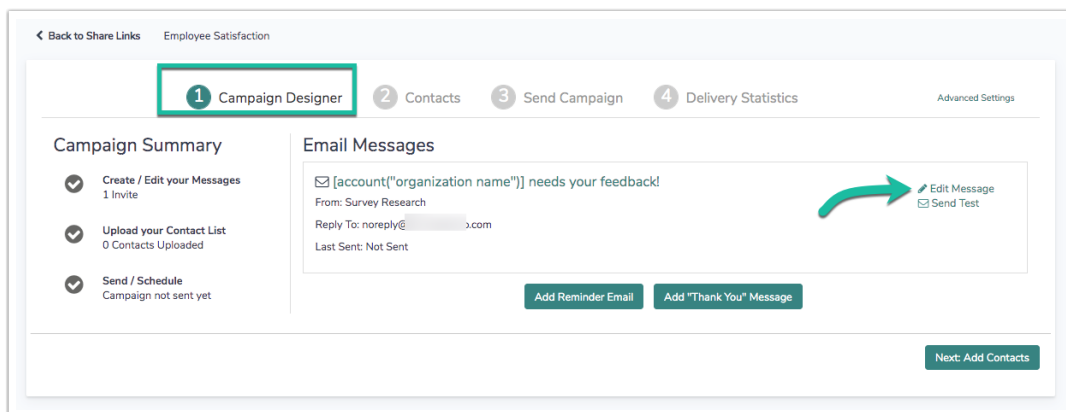
Once your DKIM & SPF records are in place and verified, you will be able to customize the email **From Address** for Email Campaigns (as well as Send Email Actions) to use your domain.

When sending your Email Campaign messages via your DKIM & SPF integration, you are subject to Alchemer's [Email Limits](#) as well as email address [requirements](#).

For additional information on Email Campaigns (as well as setup instructions), visit our [tutorial](#).

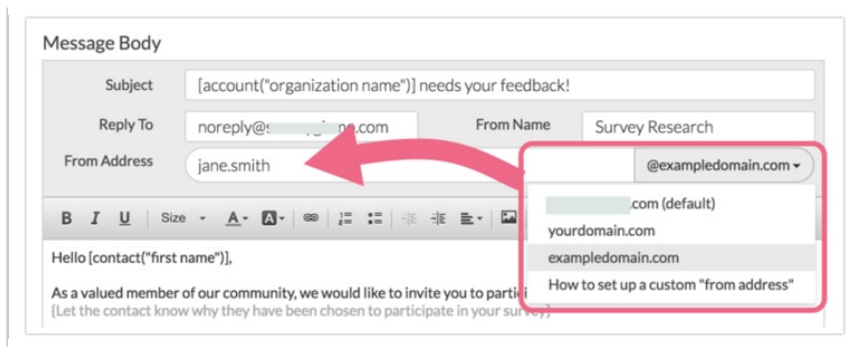
To use your DKIM & SPF records integration within your Email Campaigns, follow the below steps:

1. Create or access your Email Campaign via your **Share** tab and on the **Campaign Designer** page, click the **Edit Message** link.



If you configured your DKIM & SPF integration as the default for all actions and campaigns, you will see it pre-populated in the **From Address** field.

2. If no default is selected, locate the **From Address** field and click the domain dropdown menu to select your DKIM & SPF integration. Each integration will be identified by the domain and internal title that was provided during setup. *Make sure your titles are unique and meaningful to simplify this process.*



3. Select your DKIM & SPF integration and see the **From Address** populated with the **Default From Address** (entered during setup).

Unlike the SMTP integration, you can customize the portion of the email address before the @ symbol. The domain portion of the email address cannot be customized without selecting another integration.

You can also choose to use the **alchemer.com (default)** option, which will result in the *noreply@alchemer.com* address being used as the **From Address**.

4. When you have finished with your **From Address** customization, make sure to **Save Message**.

## Option 2: Send Email Using SMTP

SMTP (Simple Mail Transfer Protocol) allows you to send your Alchemer emails from your own email server (or a third party provider e.g., SendGrid). This generally results in improved deliverability and will help your email avoid recipients' spam/junk folders.

- SMTP servers are TLS-only. Self-signed certificates are not supported.
- Alchemer is not responsible for the deliverability of email sent via your SMTP server.
- Alchemer cannot report on delivery/bounce rates for emails sent via your SMTP server.
- Sending via SMTP is not subject to Alchemer's [Email Limits](#) but *is subject to Limits* of of your SMTP server.
- Sending via SMTP is not subject to Alchemer's *group email requirements* (*make sure to check with your Email Service Provider to make sure that sending to group email addresses is supported*).
- Sending via SMTP does not alter the process in which contacts are *unsubscribed* from your campaigns. [Learn more!](#)

When using SMTP users are limited to the parameters of the email server in use. For example, SendGrid allows for 5,000 sends per connection. Always check the limitations of the email server being used to send emails before scheduling sends in Alchemer. We **strongly** recommend adhering to the limitations of the SMTP server in place.

Your SMTP endpoint must allow Auth Login to ensure a successful integration. Alchemer does not

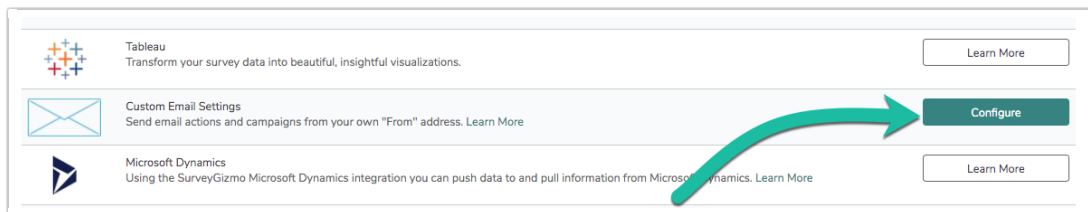
support unauthenticated SMTP integrations.

## Set Up SMTP

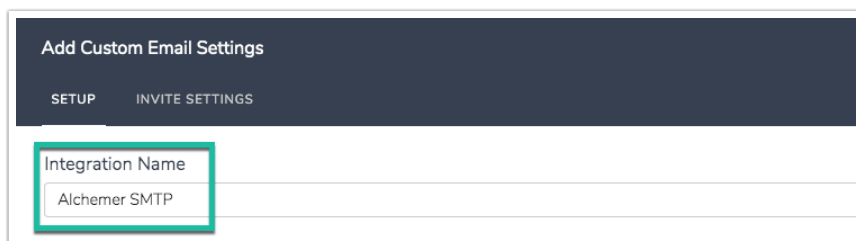
In order to configure your **SMTP** integration, you will need to be a Alchemer Account Administrator. You will also likely need to loop in your organization's IT Team to gather the information regarding your organization's SMTP server.

When setting up Alchemer to send emails from an SMTP server, ensure that the email routing setting is set to be "local" as opposed to "remote" on the SMTP Provider. For more information on email routing, check out this article [here](#).

1. In Alchemer from the Left Hand Navigation menu select **Integrations > Data Connectors**.
2. Scroll down to the **Enterprise Level Integrations** section and locate the **Custom Email Settings** option. Click **Configure** to get started.



3. On the **Setup** tab, provide an **Integration Name**. This is the internal title that will be used to identify this integration in Email Actions and Email Campaigns. It is important to make this name something meaningful like *SMTP for alchemer.com*. If you set up multiple Custom Email Integrations, make sure your names are unique to avoid confusion down the road.

A screenshot of the 'Add Custom Email Settings' form. The 'SETUP' tab is selected. The 'Integration Name' field is highlighted with a green box and contains the text 'Alchemer SMTP'. There is also an 'INVITE SETTINGS' tab.

4. Determine whether you want this integration to serve as the **default** SMTP server for any Email Actions and Email Campaigns that are created going forward. Only one Custom Email Integration can be set as default (you can always change this setting later).

The option to **Use this integration as the default for all new email invitations and email actions** will be selected automatically. Feel free to un-check the box if needed.

5. Select **Send emails using your own server (Setup SMTP)**. This will expose the **SMTP Settings** where you will provide the information necessary to finish the setup.



Use this integration as the default for all new email invitations and email actions

Send emails using Alchemer's servers (Setup SPF and DKIM)

Send emails using your own server (Setup SMTP)

**SMTP Settings**

It is highly recommended that you read the [setup documentation](#) before completing this.

6. Input your **SMTP Host**, **Port**, **Send From Address**, **Username**, and **Password**. The following ports are supported ([learn more](#)):

- o **465** - While this port is supported it is technically deprecated for secure SMTP and is only available for backward compatibility with older systems. If you use 465, double check that your server supports starttls.
- o **587** (recommended) - used by modern email servers for secure submission of email for delivery. We recommend using port 587 with TLS enabled to ensure that emails are encrypted during transmission.
- o The **Send From Address** field serves as the email **From Address** for all Email Action and Email campaigns that are sent via this integration. The Email Address **must** be a valid email address.
- o The Username and Password are the values that exist within the SMTP Host. Populate with the SMTP Host Username and Password.
- o

Send emails using your own server (Setup SMTP)

**SMTP Settings**

It is highly recommended that you read the [setup documentation](#) before completing this.

SMTP Host   
Only a-z, A-Z, 0-9, periods, and hyphens are allowed. At least one period is required.

Port

Send From Address   
Note: This will be the address used for all emails using this integration.

Username   
Only valid UTF-8 characters without spaces are allowed

Password

*Important! The email address input via the **Send From Address** field will serve as the email **From Address** for all **Email Actions** and **Email Campaigns** that are sent via this integration. It must be a real email address.*

7. (Optional) Next, you have the option to configure **Custom Headers** for use in your **Email Campaign messages only**. To do so, click on the **Invite Settings** tab during setup. You may

include up to 10 custom headers in key-value pairs (combined character limit of 79).

- a. Click the **Add Header** button and provide the name of the header.
  - Your header name must be pre-fixed by an X, for example X-Survey-ID.
  - Hyphens are the only special characters allowed in this field.

The screenshot shows the 'Add Custom Email Settings' interface. At the top, there are tabs for 'Setup' and 'Invite Settings'. Below the tabs, a message states: 'Custom Headers will only be included in Email Campaign sends.' Underneath, there is a section labeled 'Custom Headers'. It contains a text input field with 'X-Survey-ID', a dropdown menu with 'Survey ID', and a red trash icon. Below this is a button that says '+ Click to Add Header'.

*Certain values are prohibited from being used as Custom Headers. View the list in the [FAQ section](#).*

- b. Next, use the **Select a custom header** dropdown menu to choose from four available options:
  - **Survey ID** - The unique ID for the survey
  - **Contact SGUID** - The unique sguid value for the contact
  - **Campaign ID** - The unique ID for the email campaign
  - **Text Field** - Use the text field to pass in a value to the custom headers, for example, the survey's name. The Text Field supports JSON format as well as the following merge codes to pull in Survey ID, Campaign ID, and the Contact SGUID information:
    - **Survey ID:** `[survey('id')]`
    - **Contact ID:** `[contact('sguid')]`
    - **Campaign ID:** `[campaign('id')]`

The screenshot shows the 'Add Custom Email Settings' interface with four custom headers configured. Each header has a text input field for the name and a dropdown menu for the value. The headers are: X-Survey-ID (Survey ID), X-Contact-ID (Contact SGUID), X-Campaign-ID (Campaign ID), and X-SMTP-API (Text Field). Below the headers is a text area containing a JSON object: 

```
{
  "unique_args": {
    "survey_id": "[survey('id')]",
    "contact_id": "[contact('sguid')]",
    "campaign_id": "[campaign('id')]"
  }
}
```

 At the bottom is a button that says '+ Click to Add Header'.

- 8. Make sure to **Save** your integration once you have provided the necessary information. Upon saving the integration, a *confirmation email* will be triggered to the email address associated with your Alchemer user.

The confirmation email may take up to 20 minutes to arrive in your inbox. *This email is triggered each time you save your integration.*

Once the email arrives, click on the *confirmation link* to finalize your SMTP integration (the confirmation link will not expire).

Now, your integration is ready to use in Email Actions and Email Campaigns!

## Configure Email Actions to Use SMTP

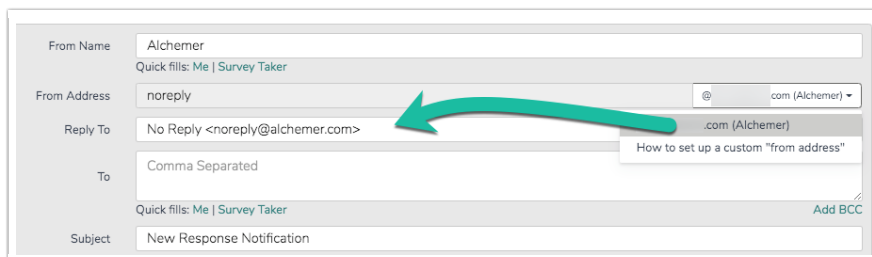
Once your SMTP Integration is configured (and you have verified this via the confirmation email), the email address entered into your SMTP **Send From Address** field will be ready for use as the email **From Address** for Send Email Actions. (as well as Email Campaigns).

For additional information on Send Email Actions (including setup instructions), visit our [tutorial](#).

To use your SMTP integration to send your Email Actions, follow the below steps:

1. Create a Send Email Action (or edit an existing one) and access the **Primary Setup** tab to locate the **From Address** field.
2. If you have elected for your SMTP integration to be the default for all new Email Actions, it will be pre-populated in the **From Address** field.

If no default has been set, click the domain dropdown menu and select your desired SMTP integration. Each integration will be identified by the domain and internal title that was provided during setup. *Make sure your titles are unique and meaningful to simplify this process.*



The screenshot shows an email configuration form with the following fields:

- From Name:** Alchemer
- Quick fills:** Me | Survey Taker
- From Address:** noreply
- Reply To:** No Reply <noreply@alchemer.com>
- To:** Comma Separated
- Subject:** New Response Notification

A green arrow points to the domain dropdown menu in the 'From Address' field, which is currently set to '.com (Alchemer)'. A tooltip below the dropdown reads 'How to set up a custom "from address"'. There is also an 'Add BCC' link in the bottom right corner of the form.

3. Select your SMTP integration and see the **From Address** populated with the associated email address (this is pulled from the integration's **Send From Address** field and cannot be updated here). You can also choose to use the **alchemer.com (default)** option, which will result in the **noreply@alchemer.com** address being used as the **From Address**.
4. Make sure you **Save Action** to finish setting up your Email Action.

## Configure Email Campaigns to Use SMTP

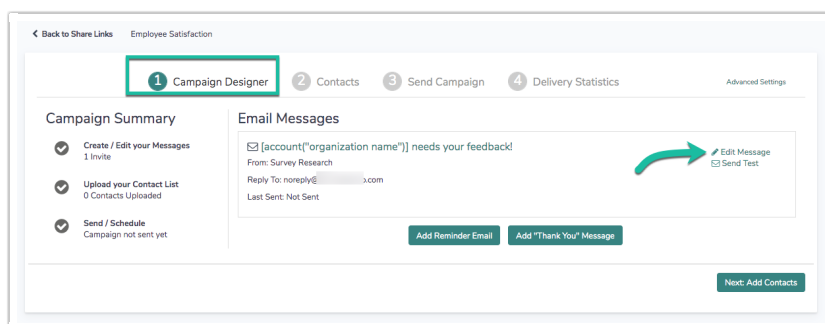
Once your SMTP Integration is configured (and you have verified this via the confirmation email), the email address entered into your SMTP **Send From Address** field will be ready for use as the **From Address** within Email Campaigns (as well as Send Email Actions). *For additional information on Email Campaigns (as well as setup instructions), visit our [tutorial](#).*

When sending your Email Campaign messages via your SMTP email server, you are not subject to Alchemer's [Email Limits](#) or limitations concerning sending to [group emails](#) (we recommend checking with your Email Service Provider (ESP) to make sure that they don't have their own restrictions). In addition, Alchemer is not responsible for the deliverability of your emails when sent via your server.

To use your SMTP integration to send your Email Campaigns, follow the below steps:

As a best practice, we recommend configuring SMTP on email campaigns that you have not yet sent out from Alchemer. If you have already sent an initial invite via Alchemer, configuring that campaign to use SMTP for reminders, etc. will result in not being able to use the campaign statistics.

1. Access your Email Campaign (or create a new one) via your **Share** tab and on the **Campaign Designer** page, click the **Edit Message** link.



2. If you configured your SMTP integration as the default for all new email actions and campaigns, you will see it pre-populated in the **From Address** field.

If no default is selected, locate the **From Address** field and click the domain dropdown menu to select your SMTP integration. Each integration will be identified by the domain and internal title that was provided during setup. *Make sure your titles are unique and meaningful to simplify the selection process.*

From Name	Alchemer
	Quick fills: Me   Survey Taker
From Address	noreply @ .com (Alchemer)
Reply To	No Reply <noreply@alchemer.com>
To	Comma Separated
	Quick fills: Me   Survey Taker <span>Add BCC</span>
Subject	New Response Notification

3. Select your SMTP integration and see the **From Address** populated with the associated email address (this is pulled from the **Send From Address** field in your integration and cannot be updated here). You can also choose to use the **alchemer.com (default)** option, which will result in the *noreply@alchemer.com* address being used as the **From Address**.

## FAQs

- + Why did Alchemer implement SMTP and DKIM/SPF?
- + Do I need to use SMTP or DKIM/SPF to send email from Alchemer?
- + My SMTP password has changed, can I update it in Alchemer?
- + Can I set up multiple Custom Email integrations, is there a limit?
- + What port should I use for SMTP?
- + Can I use my SMTP or DKIM/SPF integration when emailing Reports or Exports?
- + Can I use both SMTP and DKIM/SPF Integrations at the same time?
- + I'm not receiving the email to confirm my SMTP integration.
- + If I want to use multiple/different from addresses, do I need multiple integrations?
- + How are unsubscribed contacts handled when using a Custom Email Integration?
- + Are you using Gmail SMTP and having authentication problems?
- + Can I include Custom Headers in my emails using SMTP?
- + Are there values that cannot be placed in Custom Headers?

## Known Issues

In order to ensure proper functionality, make sure that the user used to set up the SMTP endpoint has two-factor/multi factor authentication disabled. A common approach is to use an “app” or “api” user that is configured without the use of two factor/multi-factor authentication.

Related Articles