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# **python-sparkpost Documentation**

***Release 1.0.0***

## **Message Systems**

April 08, 2016



<b>1 Installation</b>	<b>3</b>
<b>2 Authorization</b>	<b>5</b>
<b>3 Resources</b>	<b>7</b>
<b>4 API reference</b>	<b>13</b>
<b>5 Using in Django</b>	<b>19</b>
<b>6 Additional documentation</b>	<b>21</b>
<b>7 Contribute</b>	<b>23</b>
<b>Python Module Index</b>	<b>25</b>



The super-mega-official Python package for using the SparkPost API.



## **Installation**

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Install from PyPI using pip:

```
$ pip install sparkpost
```



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## Authorization

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Go to [API & SMTP](#) in the SparkPost app and create an API key. We recommend using the SPARKPOST\_API\_KEY environment variable:

```
from sparkpost import SparkPost
sp = SparkPost() # uses environment variable
```

Alternatively, you can pass the API key to the SparkPost class:

```
from sparkpost import SparkPost
sp = SparkPost('YOUR API KEY')
```



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## Resources

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The following resources are available in python-sparkpost:

### 3.1 Metrics

#### 3.1.1 Retrieve a list of campaigns

```
from sparkpost import SparkPost

sp = SparkPost()

sp.metrics.campaigns.list()
```

#### 3.1.2 Retrieve a list of domains

```
from sparkpost import SparkPost

sp = SparkPost()

sp.metrics.domains.list()
```

#### 3.1.3 Additional documentation

See the [SparkPost Metrics API Reference](#).

### 3.2 Recipient Lists

Let's use the underlying recipient\_lists API to create a recipient list:

```
from sparkpost import SparkPost

sp = SparkPost()

response = sp.recipient_lists.create(
    id='UNIQUE_TEST_ID',
```

```
name='Test Recipient list',
recipients=[
    {
        'address': {
            'email': 'test1@test.com'
        }
    },
    {
        'address': {
            'email': 'test2@test.com'
        }
    },
    {
        'address': {
            'email': 'test3@test.com'
        }
    }
]

print response
# outputs {u'total_accepted_recipients': 3, u'id': u'UNIQUE_TEST_ID', u'total_rejected_recipients': 0}
```

### 3.2.1 Retrieve a recipient list

```
from sparkpost import SparkPost

sp = SparkPost()

sp.recipient_lists.get('my-list-id')
```

### 3.2.2 List all recipient lists

```
from sparkpost import SparkPost

sp = SparkPost()

sp.recipient_lists.list()
```

### 3.2.3 API reference

`sparkpost.recipient_lists`

### 3.2.4 Further examples

See the [python-sparkpost recipient\\_lists examples](#).

### 3.2.5 Additional documentation

See the [SparkPost Recipient Lists API Reference](#).

## 3.3 Suppression List

Let's use the underlying suppression\_list API to create a suppression entry:

```
from sparkpost import SparkPost

sp = SparkPost()

response = sp.suppression_list.create({
    "email": "test@test.com",
    "transactional": False,
    "non_transactional": True,
    "description": "User requested to not receive any non-transactional emails."
})

print response
# outputs {u'message': u'Recipient successfully created'}
```

### 3.3.1 Get a suppression entry

```
from sparkpost import SparkPost

sp = SparkPost()

sp.suppression_list.get('test@test.com')
```

### 3.3.2 List suppression entries

```
from sparkpost import SparkPost

sp = SparkPost()

sp.suppression_list.list()
```

### 3.3.3 API reference

`sparkpost.suppression_list`

### 3.3.4 Further examples

See the [python-sparkpost suppression\\_list examples](#).

### 3.3.5 Additional documentation

See the [SparkPost Suppression List API Reference](#).

## 3.4 Templates

Let's use the underlying templates API to create a template:

```
from sparkpost import SparkPost

sp = SparkPost()

response = sp.templates.create(
    id='TEST_ID',
    name='Test Template',
    from_email='test@test.com',
    subject='Test email template!',
    html='<b>This is a test email template!</b>'
)

print response
# outputs {u'id': u'TEST_ID'}
```

### 3.4.1 Retrieve a template

```
from sparkpost import SparkPost

sp = SparkPost()

sp.templates.get('my-template-id')
```

### 3.4.2 List all templates

```
from sparkpost import SparkPost

sp = SparkPost()

sp.templates.list()
```

### 3.4.3 API reference

`sparkpost.templates`

### 3.4.4 Further examples

See the [python-sparkpost templates examples](#).

### 3.4.5 Additional documentation

See the [SparkPost Templates API Reference](#).

## 3.5 Transmissions

Here at SparkPost, our messages are known as transmissions. Let's use the underlying transmissions API to send a friendly test message:

```
from sparkpost import SparkPost

sp = SparkPost()

response = sp.transmission.send(
    recipients=['someone@somedomain.com'],
    html='<p>Hello world</p>',
    from_email='test@sparkpostbox.com',
    subject='Hello from python-sparkpost',
    trackOpens=True,
    trackClicks=True
)

print response
# outputs {u'total_accepted_recipients': 1, u'id': u'47960765679942446', u'total_rejected_recipients': 0}
```

### 3.5.1 Send a transmission

There are several ways to send a transmission:

- Using inline templates and/or recipients
- Using a stored template
- Using a stored recipient list

#### Using inline templates and/or recipients

```
from sparkpost import SparkPost

sp = SparkPost()

sp.transmission.send(
    recipients=['someone@somedomain.com'],
    text="Hello world",
    html='<p>Hello world</p>',
    from_email='test@sparkpostbox.com',
    subject='Hello from python-sparkpost',
    trackOpens=True,
    trackClicks=True
)
```

#### Using a stored template

```
from sparkpost import SparkPost

sp = SparkPost()

sp.transmission.send(
```

```
    recipients=['someone@somedomain.com'],
    template='my-template-id'
)
```

### Using a stored recipient list

```
from sparkpost import SparkPost

sp = SparkPost()

sp.transmission.send(
    recipient_list='my-recipient-list',
    template='my-template-id'
)
```

### 3.5.2 Retrieve a transmission

```
from sparkpost import SparkPost

sp = SparkPost()

sp.transmission.get('my-transmission-id')
```

### 3.5.3 List all transmissions

```
from sparkpost import SparkPost

sp = SparkPost()

sp.transmission.list()
```

### 3.5.4 API reference

sparkpost.transmissions

### 3.5.5 Further examples

See the [python-sparkpost transmissions examples](#).

### 3.5.6 Additional documentation

See the [SparkPost Transmissions API Reference](#).

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## API reference

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Auto-generated API reference for python-sparkpost:

## 4.1 API Documentation

A complete API reference to the `sparkpost` module.

### 4.1.1 `sparkpost.recipient_lists`

`class sparkpost.recipient_lists.RecipientLists(base_uri, api_key)`

RecipientLists class used to create, update, delete, list and get recipient lists. For detailed request and response formats, see the [Recipient Lists API documentation](#).

`create(**kwargs)`

Create a recipient list based on the supplied parameters

#### Parameters

- `id (str)` – ID used to reference the recipient list
- `name (str)` – Editable display name
- `description (str)` – Detailed description of the recipient list
- `attributes (dict)` – Arbitrary metadata related to the list
- `recipients (list)` – Array of recipient dicts

**Returns** a dict with the ID, name, and number of accepted and rejected recipients

**Raises** `SparkPostAPIException` if API call fails

`delete(list_id)`

Delete a recipient list by ID

**Parameters** `list_id (str)` – ID of the recipient list you want to delete

**Returns** empty dict

**Raises** `SparkPostAPIException` if recipient list is not found or if recipient list is in use

`get(list_id, show_recipients=None)`

Get a recipient list by ID

#### Parameters

- **list\_id** (*str*) – ID of the recipient list you want to retrieve
- **show\_recipients** (*bool*) – If True, returns attributes for all recipients

**Returns** the requested recipient list if found

**Raises** SparkPostAPIException if recipient list is not found

#### **list()**

Get a list of your recipient lists

**Returns** list of recipient lists

**Raises** SparkPostAPIException if API call fails

#### **update(list\_id, \*\*kwargs)**

Update a recipient list by ID based on the supplied parameters

##### **Parameters**

- **list\_id** (*str*) – ID of the recipient list you want to update
- **name** (*str*) – Editable display name
- **description** (*str*) – Detailed description of the recipient list
- **attributes** (*dict*) – Arbitrary metadata related to the list
- **recipients** (*list*) – Array of recipient dicts

**Returns** a dict with the ID, name, and number of accepted and rejected recipients

**Raises** SparkPostAPIException if API call fails

## 4.1.2 sparkpost.suppression\_list

### class sparkpost.suppression\_list.**SuppressionList** (base\_uri, api\_key)

SuppressionList class used to search, get and modify suppression status. For detailed request and response formats, see the [Suppresion List API documentation](#).

#### **create(entry)**

Create a suppression list entry.

**Parameters** **status** (*dict/list*) – If dict it is a single entry to create { 'email': 'test@test.com', 'transactional': True, 'non\_transactional': True, 'description': 'Test description' }, if list it is multiple entries to create

**Returns** a dict with a message

**Raises** SparkPostAPIException if API call fails

#### **delete(email)**

Delete the suppression status for a specific recipient by email

**Parameters** **email** (*str*) – Email of the recipient whose status you want to remove

**Returns** TODO

**Raises** SparkPostAPIException if API call fails

#### **get(email)**

Retrieve a suppression list entry for a specific recipient by email

**Parameters** **email** (*str*) – Email of the recipient whose status you want to check\_status

**Returns** a suppression list entry

**Raises** SparkPostAPIException if API call fails

**list** (\*\*kwargs)

List suppression list entries based on the supplied parameters

**Parameters**

- **from\_date** (datetime) – DateTime to start listing
- **to\_date** (datetime) – DateTime to end listing
- **types** (list) – Types of entries to return
- **limit** (int) – Maximum number of entries to return

**Returns** a list of entries

**Raises** SparkPostAPIException if API call fails

**update** (entry)

Update a suppression list entry.

**Parameters** **status** (dict/list) – If dict it is a single entry to update { 'email': 'test@test.com', 'transactional': True, 'non\_transactional': True, 'description': 'Test description' }, if list it is multiple entries to update

**Returns** a dict with a message

**Raises** SparkPostAPIException if API call fails

### 4.1.3 sparkpost.templates

**class** sparkpost.templates.Templates (base\_uri, api\_key)

Templates class used to create, update, delete, list and get templates. For detailed request and response formats, see the [Templates API documentation](#).

**create** (\*\*kwargs)

Create a template based on the supplied parameters

**Parameters**

- **id** (str) – ID used to reference the template
- **name** (str) – Editable display name
- **description** (str) – Detailed description of the template
- **published** (bool) – Defaults to False. Whether the template is a published or draft version
- **trackOpens** (bool) – Defaults to transmission level setting. Used to track opens of transmission
- **trackClicks** (bool) – Defaults to transmission level setting. Used to track clicks of transmission
- **isTransactional** (bool) – Defaults to transmission level setting. Distinguishes between transactional and non-transactional messages for unsubscribe and suppression purposes
- **html** (str) – HTML part of template

- **text** (*str*) – Text part of template
- **subject** (*str*) – Subject of template
- **from\_email** (*str*) – Friendly from of template, domain must be a verified sending domain to your account or template create will fail
- **reply\_to** (*str*) – Reply to of template
- **custom\_headers** (*dict*) – Used to set any headers associated with template

**Returns** a dict with the ID

**Raises** SparkPostAPIException if template uses an unverified sending domain or there's a syntax error in the content

#### **delete** (*template\_id*)

Delete a template by ID

**Parameters** **template\_id** (*str*) – ID of the template you want to delete

**Returns** TODO

**Raises** SparkPostAPIException if template is not found or if template is in use

#### **get** (*template\_id*, *draft=None*)

Get a template by ID

**Parameters**

- **template\_id** (*str*) – ID of the template you want to retrieve
- **draft** (*bool*) – Defaults to None. If True, returns the most recent draft template. If False, returns the most recent published template. If None, returns the most recent template version regardless of draft or published.

**Returns** the requested template if found

**Raises** SparkPostAPIException if template is not found

#### **list** ()

Get a list of your templates

**Returns** list of templates

**Raises** SparkPostAPIException if API call fails

#### **preview** (*template\_id*, *substitution\_data*, *draft=None*)

Get a preivew of your template by ID with the provided substitution\_data

**Parameters**

- **template\_id** (*str*) – ID of the template you want to retrieve
- **substitution\_data** (*dict*) – data to be substituted in the template content
- **draft** (*bool*) – Defaults to None. If True, previews the most recent draft template. If False, previews the most recent published template. If None, previews the most recent template version regardless of draft or published.

**Returns** the requested template if found with content expanded using substitution data provided

**Raises** SparkPostAPIException if API call fails

#### **update** (*template\_id*, *\*\*kwargs*)

Update a template by ID based on the supplied parameters

**Parameters**

- **template\_id** (*str*) – ID of the template you want to retrieve
- **name** (*str*) – Editable display name
- **description** (*str*) – Detailed description of the template
- **published** (*bool*) – Defaults to False. Whether the template is a published or draft version
- **track.opens** (*bool*) – Defaults to transmission level setting. Used to track opens of transmission
- **track.clicks** (*bool*) – Defaults to transmission level setting. Used to track clicks of transmission
- **is\_transactional** (*bool*) – Defaults to transmission level setting. Distinguishes between transactional and non-transactional messages for unsubscribe and suppression purposes
- **html** (*str*) – HTML part of template
- **text** (*str*) – Text part of template
- **subject** (*str*) – Subject of template
- **from\_email** (*str*) – Friendly from of template, domain must be a verified sending domain to your account or template create will fail
- **reply\_to** (*str*) – Reply to of template
- **custom\_headers** (*dict*) – Used to set any headers associated with template

**Returns** TODO

**Raises** SparkPostAPIException if template is not found

#### 4.1.4 sparkpost.transmissions

```
class sparkpost.transmissions.Transmissions(base_uri, api_key)
```

Transmission class used to send, list and get transmissions. For detailed request and response formats, see the [Transmissions API documentation](#).

```
get(transmission_id)
```

Get a transmission by ID

**Parameters** **transmission\_id** (*str*) – ID of the transmission you want to retrieve

**Returns** the requested transmission if found

**Raises** SparkPostAPIException if transmission is not found

```
list()
```

Get a list of your transmissions

**Returns** list of transmissions

**Raises** SparkPostAPIException if API call fails

```
send(**kwargs)
```

Send a transmission based on the supplied parameters

**Parameters**

- **recipients** (*list/dict*) – If list it is an array of email addresses, if dict {'address': {'name': 'Name', 'email': 'me'}}}

- **recipient\_list** (*str*) – ID of recipient list, if set recipients above will be ignored
- **template** (*str*) – ID of template. If set HTML or text will not be used
- **use\_draft\_template** (*bool*) – Default to False. Set to true if you want to send a template that is a draft
- **html** (*str*) – HTML part of transmission
- **text** (*str*) – Text part of transmission
- **subject** (*str*) – Subject of transmission
- **from\_email** (*str*) – Friendly from of transmission, domain must be a verified sending domain to your account or transmission will fail
- **reply\_to** (*str*) – Reply to of transmission
- **description** (*str*) – Description of transmission
- **campaign** (*str*) – Campaign of transmission
- **metadata** (*dict*) – Any data you want to send along with transmission, used in Web-Hooks
- **substitution\_data** (*dict*) – Corresponds to substitutions in html/text content. See substitutions reference.
- **start\_time** (*str*) – Delay generation of messages until this datetime. Format YYYY-MM-DDTHH:MM:SS+-HH:MM. Example: ‘2015-02-11T08:00:00-04:00’.
- **track\_opens** (*bool*) – Defaults to True. Used to track opens of transmission
- **track\_clicks** (*bool*) – Defaults to True. Used to track clicks of transmission
- **use\_sandbox** (*bool*) – Flag must be set to use sandbox domain instead of verified sending domain. Limited to a lifetime of 50 transmissions with this domain
- **transactional** (*bool*) – Whether message is transactional or non-transactional for unsubscribe and suppression purposes
- **skip\_suppression** (*bool*) – Whether or not to ignore customer suppression rules, for this transmission only. Only applicable if your configuration supports this parameter. (SparkPost Elite only)
- **custom\_headers** (*dict*) – Used to set any headers associated with transmission

**Returns** a dict with the ID and number of accepted and rejected recipients

**Raises** SparkPostAPIException if transmission cannot be sent

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## Using in Django

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Configure Django to use SparkPost email backend

### 5.1 Django Email Backend

The SparkPost python library comes with an email backend for Django.

#### 5.1.1 Configure Django

To configure Django to use SparkPost, put the following configuration in *settings.py* file.

```
SPARKPOST_API_KEY = 'API_KEY'  
EMAIL_BACKEND = 'sparkpost.django.email_backend.SparkPostEmailBackend'
```

Replace *API\_KEY* with an actual API key.

#### 5.1.2 Sending an email

Django is now configured to use the SparkPost email backend. You can now send mail using Django's *send\_mail* method:

```
from django.core.mail import send_mail  
  
send_mail(  
    subject='hello from sparkpost',  
    message='Hello Rock stars!',  
    from_email='from@yourdomain.com',  
    recipient_list=['to@friendsdomain.com'],  
    html_message='<p>Hello Rock stars!</p>',  
)
```

#### 5.1.3 Supported version

SparkPost will support all versions of Django that are within extended support period. Refer to [Django Supported\\_Version](#).

**Current supported versions are:**

- 1.7

- 1.8
- 1.9b1

#### **5.1.4 Additional documentation**

See our [Using SparkPost with Django](#) in support article.

## **Additional documentation**

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The underlying SparkPost API is documented at the official [SparkPost API Reference](#).



## Contribute

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1. Check for open issues or open a fresh issue to start a discussion around a feature idea or a bug.
2. Fork [the repository](#) on GitHub and make your changes in a branch on your fork
3. Write a test which shows that the bug was fixed or that the feature works as expected.
4. Send a pull request. Make sure to add yourself to AUTHORS.



**S**

`sparkpost.recipient_lists`, 13  
`sparkpost.suppression_list`, 14  
`sparkpost.templates`, 15  
`sparkpost.transmissions`, 17



## C

create() (sparkpost.recipient\_lists.RecipientLists method), 13  
create() (sparkpost.suppression\_list.SuppressionList method), 14  
create() (sparkpost.templates.Templates method), 15

## D

delete() (sparkpost.recipient\_lists.RecipientLists method), 13  
delete() (sparkpost.suppression\_list.SuppressionList method), 14  
delete() (sparkpost.templates.Templates method), 16

## G

get() (sparkpost.recipient\_lists.RecipientLists method), 13  
get() (sparkpost.suppression\_list.SuppressionList method), 14  
get() (sparkpost.templates.Templates method), 16  
get() (sparkpost.transmissions.Transmissions method), 17

## L

list() (sparkpost.recipient\_lists.RecipientLists method), 14  
list() (sparkpost.suppression\_list.SuppressionList method), 15  
list() (sparkpost.templates.Templates method), 16  
list() (sparkpost.transmissions.Transmissions method), 17

## P

preview() (sparkpost.templates.Templates method), 16

## R

RecipientLists (class in sparkpost.recipient\_lists), 13

## S

send() (sparkpost.transmissions.Transmissions method), 17

sparkpost.recipient\_lists (module), 13  
sparkpost.suppression\_list (module), 14  
sparkpost.templates (module), 15  
sparkpost.transmissions (module), 17  
SuppressionList (class in sparkpost.suppression\_list), 14

## T

Templates (class in sparkpost.templates), 15  
Transmissions (class in sparkpost.transmissions), 17

## U

update() (sparkpost.recipient\_lists.RecipientLists method), 14  
update() (sparkpost.suppression\_list.SuppressionList method), 15  
update() (sparkpost.templates.Templates method), 16