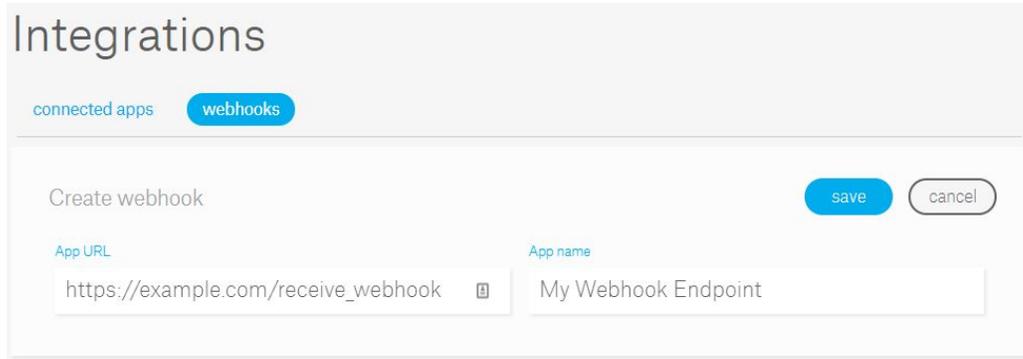**1Centre Webhook Documentation**

Receiving and parsing webhook from 1Centre

1. Create a custom *POST* endpoint in your application. Take note of the *URL* and use this when creating a Webhook.

2. A *Signing Secret* will be generated when a Webhook is created. Use this secret key later on in your application to validate messages. You can view the Signing Secret by clicking the "*edit*" button from the webhook list.
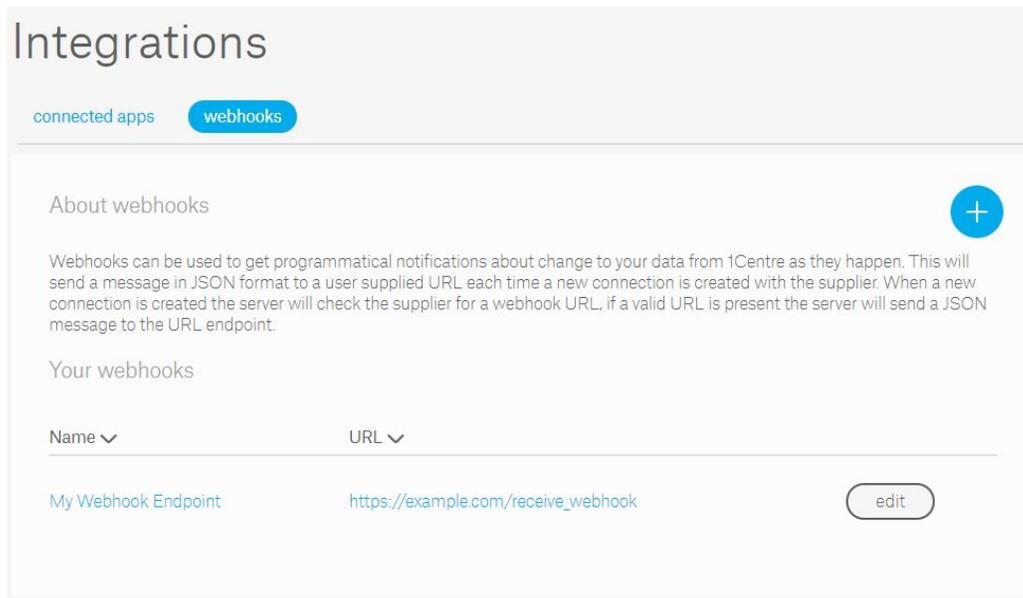
In the Edit webhook page, hit "*click to reveal secret*" button to view the whole Signing Secret.

3. In your application's endpoint, do the following:
   a. grab the following data from the request:
      i. `Header['X-Hook-Signature']` - unique secret key to validate the authenticity of the message
      ii. Raw Post Data - contains the JSON data from 1Centre
   b. Generate a signature by using SHA1 encoded HMAC based from Signing Secret and Raw Post Data.
   c. Validate `Header['X-Hook-Signature']` (3.a.i) by matching it with your generated signature (3.b). Note: Validation is an optional step however to ensure security, do this step and do not proceed if signatures do not match
   d. Parse and consume the JSON data from 1Centre
4. In 1Centre Webhook edit page, click "*send a test message*" button to test your endpoints

Example using Ruby on Rails:
1. Domain: `https://example.com`
   POST Endpoint: `receive_webhook`
   URL: `https://example.com/receive_webhook`
2. Routes and Controllers
```ruby
# routes.rb
Rails.application.routes.draw do
  # Your other routes
  post 'receive_webhook' => 'receive_webhook#create'

  # Your other routes
end

# receive_webhook_controller.rb
class ReceiveWebhookController < ActionController::Base
  def create
    # Do awesome code here
  end
end
```

3. Get request signature and post data. Validate request and consume JSON data

```ruby
# receive_webhook_controller.rb
class ReceiveWebhookController < ActionController::Base
  def create
    request_signature = request.headers['X-Hook-Signature']
    application_body = request.raw_post
    generated_signature = generate_signature(application_body)

    if signatures_match?(request_signature, generated_signature)
      data = JSON.parse(application_body)
      # Do something with the data
      # i.e. data['company_name'] to get the Company Name
    else
      # Do not proceed
    end
  end

  def generate_signature(application_body)
    secret = 'secret_key' # This is the Signing Secret from 1Centre Webhook page
    OpenSSL::HMAC.hexdigest(OpenSSL::Digest.new('sha1'), secret, application_body)
  end

  def signatures_match?(request_signature, generated_signature)
    request_signature == generated_signature
  end
end
```