**8** 

Flask (Python framework) .csv (file extension) Python (programming language)

# How do I serve large CSV files using flask?



















# 2 Answers



Aaron Mefford, Software developer and systems architect. Answered Oct 4, 2017 · Upvoted by Sidharth Shah, Python Fanboy, been coding for 10+

The answer by Kristof Degros is spot on. The documentation is very good on how to do this but misses one point. Sometimes setting the Content-Type header alone to text/csv will not accomplish what you want, usually downloading and opening the file in Excel. Also, with only that header, when the file is saved, it will save with final part of the path as the filename.

# PATH INFO

You can work around the wrong filename by using PathInfo, and avoid it saving as csv\_generator.py or in flask it might just be csv\_generator or whatever your path is. By appending additional path information that you then ignore in Flask.

```
1 #Allow for a path like /csv_download/MonthlyReport-2017-10-04.csv
2 @app.route('/csv_download/<filename>')
3 def csv generator(filename):
       #filename is ignored here and only to aid saving the file
       pass
```

Common Gateway Interface - Wikipedia

PATH\_INFO- The Common Gateway Interface (CGI) Version 1.1

# **Content-Disposition Header**

Using the Content-Disposition header can also be effective, and may be easier to use than PATH\_INFO, particularly as your filename may need to be generated by code.

```
1 #Allow for a path like /csv_download/MonthlyReport-2017-10-04.csv
 2 @app.route('/report generator/<filename>')
   def large_csv_route_with_path_info(filename):
        return generate_monthly_report(filename)
 4
 5
 6
 7 @app.route('/monthly_report')
   def monthly_report_route():
 8
 9
        return generate_monthly_report(build_filename())
10
   def build_filename():
11
12
        return "MonthlyReport-{}.csv".format(
13
           datetime.date.today().isoformat()
14
15
16
   def generate large csv(filename)
17
       def generate():
```





#### **Related Questions**

Is it possible to convert an Excel file to a CSV file in Linux without using any external tools?

How do I upload files using Flask framework in Pvthon?

Should I learn Flask or Diango? I'm a beginner and I'm looking for simplicity and ease of learning.

How do I import a csv file in Python?

How do I read a .csv file and then use those fields to create an array structure in C?

How can I import a CSV file data to MongoDB using Python Flask?

What is flask framework used for in Python? How is it different from Django and why would you prefer it over Django?

How do I read multiple CSV files from multiple directories using Python?

How do I load CSV file into Oracle table using

How do I convert a HTML file to a CSV file format using PHP?

#### + Ask New Question

More Related Questions

Search Quora



Spaces

Notifications

Response Headers - Flask Documentation (0.12)

Answer

Headers - Werkzeug Documentation (0.12)

Home

# Other Headers

Many people list other headers as "required" for csv, but the only two that are really required are the Content-Type and Content-Disposition headers. Pragma, Expires, Cache-Control, should all be used as needed, but are not specific to transferring CSV files. I found one referencing Content-Description, which is not a valid Http header.

# Flask.send\_from\_directory and Flask.send\_file

If the files already exist on disk, or you otherwise have a filehandle for the contents of the file, you may want to consider using the flask.send\_from\_direcory method and let it do the heavy lifting for you. Additionally, if your web server handles it, the send\_file and send\_from\_directory methods can dispatch the task of serving the file to the web server, instead of serving the file in application code. This will free up your application container to do more involved work. This is supported by lighthttpd, mod\_xsendfile in Apache2 and Nginx.

```
1 import flask, re
2
3 CSV_DIR = '/var/tmp/csv_files/'
4 #Allow the filename to be included in the path
  @app.route('/risky_csv_sender/<filename>')
5
6
   def csv_sender(filename):
       #Make sure that they cannot request files outside of your CSV DIR
       if re.search(r'/',filename) or re.search(r'^\.',filename):
8
9
            return "Illegal Filename, File Not Found", 404
10
       full filename = CSV DIR + filename
11
12
       return flask.send file(full filename,
13
           mimetype='text/csv',
14
            as attachment=True,
15
            attachment filename=filename
16
17
  @app.route('/safer_faster_simpler_file_sender/<filename>')
19
   def safe csv sender(filename):
20
       return flask.send_from_dir(filename,
           mimetype='text/csv',
21
22
           as attachment=True,
23
            attachment filename=filename
```

Flask.send file - Flask Documentation (0.12)

# XSendfile | NGINX

Serving authenticated media with nginx





#### **Related Questions**

Is it possible to convert an Excel file to a CSV file in Linux without using any external tools?

Add Question

How do I upload files using Flask framework in Python?

Should I learn Flask or Django? I'm a beginner and I'm looking for simplicity and ease of learning.

How do I import a csv file in Python?

How do I read a .csv file and then use those fields to create an array structure in C?

How can I import a CSV file data to MongoDB using Python Flask?

What is flask framework used for in Python? How is it different from Django and why would you prefer it over Django?

How do I read multiple CSV files from multiple directories using Python?

How do I load CSV file into Oracle table using Python?

How do I convert a HTML file to a CSV file format using PHP?

+ Ask New Question









Search Quora



Add Question

to send if you enable HTTP compression. This will but additional load on your server, but often that is counterbalanced by the load of sending 10x as much data to the client.

In the ideal scenario, you would use the send\_from\_file method above with a supporting web server, that has gzip compression enabled for the files it sends. Often the gzip server module will even allow you to pre-compress the files, saving you the overhead of real-time compression and saving disk space as well.

Module ngx\_http\_gzip\_module

Apache HTTP Server Version 2.4

Docs ModCompress - Lighttpd - lighty labs

However, if you are generating the CSV in real-time or for some other reason cannot pre-compress or dispatch the data to the web server for compression, then you can do the compression in your flask application code.

```
1 import re, zlib
 2 import brotli # pip install brotlipy
 3 from cStringIO import StringIO
 5
   def gzip wrapper(iterable):
 6
       #This will trigger a gzip header from zlib
 7
        return zlib_wrapper(iterable,zlib.MAX_WBITS+16)
 8
 9
   def zlib_wrapper(iterable,wbits=zlib.MAX_WBITS):
        compressor = zlib.compressobj(
10
            zlib.Z DEFAULT COMPRESSION, zlib.DEFLATED, wbits
11
12
13
        return compressor_wrapper(iterable,compressor)
14
15
   def compressor wrapper(iterable,compressor):
16
        for data in iterable:
17
            yield compressor.compress(data)
18
       yield compressor.flush()
19
       #For brotli
        if hasattr(compressor, 'finish'):
20
            yield compressor.finish()
21
22
23
   encoders = [
24
        ('gzip', gzip_wrapper),
        ('deflate', zlib_wrapper)
25
26
27
28
   trv:
29
        import brotli
30
        def brotli wrapper(iterable):
            compressor = brotli.Compressor()
31
32
            return compressor_wrapper(iterable,compressor)
        encoders.insert(0,('br',brotli wrapper))
33
34
   except ImportError as e:
        print "brotli module is not installed, disabling 'br' support"
35
36
37
   def generate():
        for row in iter all rows():
```

#### 



#### **Related Questions**

Is it possible to convert an Excel file to a CSV file in Linux without using any external tools?

How do I upload files using Flask framework in Python?

Should I learn Flask or Django? I'm a beginner and I'm looking for simplicity and ease of learning.

How do I import a csv file in Python?

How do I read a .csv file and then use those fields to create an array structure in C?

How can I import a CSV file data to MongoDB using Python Flask?

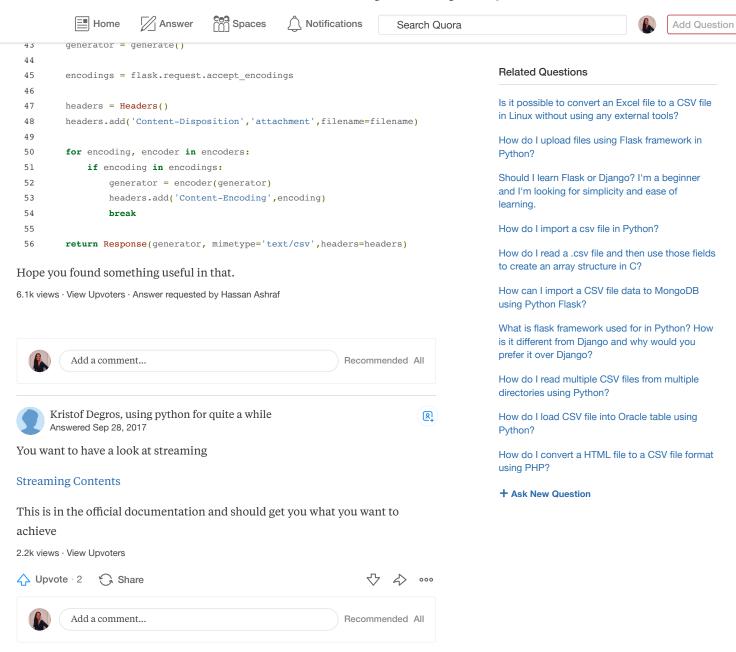
What is flask framework used for in Python? How is it different from Django and why would you prefer it over Django?

How do I read multiple CSV files from multiple directories using Python?

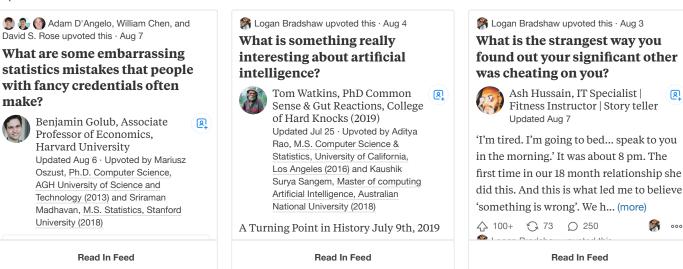
How do I load CSV file into Oracle table using Python?

How do I convert a HTML file to a CSV file format using PHP?

+ Ask New Question



# Top Stories from Your Feed





\(\bigcap\) Notifications

Search Quora



Add Question

# **Related Questions**

Is it possible to convert an Excel file to a CSV file in Linux without using any external tools?

How do I upload files using Flask framework in Python?

Should I learn Flask or Django? I'm a beginner and I'm looking for simplicity and ease of learning.

How do I import a csv file in Python?

How do I read a .csv file and then use those fields to create an array structure in C?

How can I import a CSV file data to MongoDB using Python Flask?

What is flask framework used for in Python? How is it different from Django and why would you prefer it over Django?

How do I read multiple CSV files from multiple directories using Python?

How do I load CSV file into Oracle table using Python?

How do I convert a HTML file to a CSV file format using PHP?

+ Ask New Question