django-fsfield Documentation

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CONTENTS

Scalable file storage fields for your Django models.

The files are stored on disk in a tree structure that ensures not too many files end up in the same directory, to maintain things fast when the number of files grows. The structure is as follows:

```
'~app_name/
  '~ModelName/
    '~N/
      '~W/
        '~o/
          '~Z/
            '~K/
              '~NWoZK3kTsExUV00Ywo1G5jlUKKs/
                |-field_name
                '-other_field_name
```

Where `NWoZK3kTsExUV00Ywo1G5jlUKKs` is a hash made from the model instance's primary key.

USAGE

Simply add `FileStorageField` to your models:

```python
from django.db import models
from fsfield import FileStorageField


class MyModel(models.Model):

    field = FileStorageField()
```

The field then acts as a `django.db.models.fields.TextField`:

```python
>>> obj = MyModel.objects.create()
>>> obj.field = "foo"
>>> obj.save()
>>> obj = MyModel.objects.get(pk=obj.pk)
>>> obj.field
'foo'
```

You can customize the way data is loaded and saved with the `load` and `dump` parameters:

```python
from django.db import models
from django.utils import simplejson as json
from fsfield import FileStorageField


class MyModel(models.Model):

    json_field = FileStorageField(load=json.load, dump=json.dump)
```

`json_field` can then be used to store JSON data directly:

```python
>>> obj = MyModel.objects.create()
>>> obj.json_field = {"data": 1}
>>> obj.json_field
{"data": 1}
```

FILESTORAGEFIELD REFERENCE

SETTINGS

FSFIELD_DEFAULT_STORAGE_CLASS A string containing the Python path of the `Storage` class to use. The default is `'django.core.files.storage.FileSystemStorage'`.

FSFIELD_DEFAULT_STORAGE_ARGS A tuple containing positional and keyword arguments passed to the storage class constructor. Default is `((), {})`.

FSFIELD_PATHS_DEPTH The number of sub paths used to distribute the files in directories.

> **Warning:** changing this setting will make old files unreachable. The default of 5 should be enough for most uses (average 93 files per directory for 100 billion files)