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# **Mayan EDMS Documentation**

***Release 0.11.1***

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Open source, [Django](#) based document manager with custom metadata indexing, file serving integration and [OCR](#) capabilities.

**Website** <http://bit.ly/mayan-edms>

**Source** <http://github.com/rosarior/mayan>

**Video** <http://bit.ly/pADNXv>

**Issue tracker** <http://github.com/rosarior/mayan/issues>

**Mayan EDMS** started as a simple project whose only requirement was the storage of PDF files, from there it has grown into a complete electronic document management solution. **Mayan EDMS** can optimize an organization's bulk upload, storage and retrieval of documents. Documents are organized using document classes, user defined metadata fields as well as automatic document grouping and indexing. Documents can be retrieved from the document index or by means of full text searching. Users can search for terms in the document's metadata, properties or contents extracted from PDFs or transcribed by [OCR](#). **Mayan EDMS** is written in [Python](#) using the [Django](#) framework, which makes it very agile and fast, specially when compared with existing Java based solutions. Being based on patent free, [Open source](#) technologies, **Mayan EDMS** provides legal safety to users and organizations, as well as peace of mind as documents and all related information is stored in open source and transparent formats allowing portability and avoiding [vendor lock-in](#). Being written using [Python](#), **Mayan EDMS** runs on many POSIX compliant operating systems, this coupled with many configuration parameters, allows **Mayan EDMS** to be deployed on many hardware and software configurations such as single server based, clusters, virtualized and cloud based hosting giving adopters the choice of using the infrastructure of their choice. On hosting providers that support [Django](#) such as [DjangoZoom](#), **Mayan EDMS** can be deployed in under 2 minutes with just a few clicks of the mouse <sup>1</sup>.

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<sup>1</sup> "Deploying Mayan EDMS on DjangoZoom.com" @ Youtube (<http://bit.ly/mayan-djangozoom>)



# CONTENTS

## 1.1 Features

- Document versioning.
  - Store many versions of the same document, download or revert to a previous version.
- Electronic signature verification.
  - Check the authenticity of documents by verifying their embedded cryptographic signatures or upload detached signatures for document signed after they were stored.
- Collaboration tools.
  - Discuss documents, comment on new version of a document.
- Office document format support.
  - Word processing files? Spreadsheets? Sresentations? They are supported too.
- User defined metadata fields and meta data sets.
  - Metadata fields can be grouped into sets per technical, legal or structural requirements such as the [Dublin core](#)
- Dynamic default values for metadata.
  - Metadata fields can have an initial value which can be static or determined by an user provided Python code snipped.
- Filesystem integration.
  - If enabled, the document database index can be mirrored in the filesystem of the hosting computers and shared via [Samba](#) or any other method to clients computers on a network.
- User defined document unique identifier and checksum algorithms.
  - Users can alter the default method used to uniquely indentify documents.
- Documents can be uploaded from different sources.
  - Local file or server side file uploads.
- Batch upload many documents with the same metadata.
  - Clone a document's metadata for speedier uploads and eliminate repetitive data entry.
- Previews for a great deal of image formats, including PDF.
  - **Mayan EDMS** provides different file conversion backends with different levels of functionality and requirements to adapt to different deployment environments.

- Full text searching.
  - Document can be searched by their text content, their metadata or any other file attribute such as name, extension, etc.
- Configurable document grouping.
  - Automatic linking of documents based on metadata values or document properties.
- Roles support.
  - Users can created an unlimited amount of different roles and are not restricted to the traditional admin, operator, guest paradigm.
- Fine grained permissions system.
  - There is a permission for every atomic operation performed by users.
- Multi page document support.
  - Multiple page PDFs and TIFFs files supported.
- Distributed OCR processing.
  - The task of transcribing text from documents via OCR can be distributed among several physical or virtual computers to decrease load and increase availability.
- Multilingual user interface (English, Spanish, Portuguese, Russian).
  - **Mayan EDMS** is written using the [Django](#) framework which natively support Unicode, this coupled with the use of text templates allows **Mayan EDMS** to be translated to practically any language spoken in the world, by default four translations are provided: English, Spanish, Portuguese and Russian.
- Multilingual OCR support.
  - \*As supported by the OCR engine tesseract.
- Duplicated document search.
- Pluggable storage backends (File based and GridFS included).
  - Very easy to convert other 3rd party such as the ones available for Amazon EC2.
- Color coded tagging.
  - Labeled and color coded tags that are intuitive.
- Staging folders to receive scanned documents directly from network attached scanners.
  - Preview scanned files even before uploading them.

## 1.2 Requirements

**Mayan EDMS** supports various levels of functionality, because of this requirements can vary for each individual deployment.

### 1.2.1 Basic requirements

Python:

- [Django](#) - A high-level Python Web framework that encourages rapid development and clean, pragmatic design.
- `django-pagination`



- `django-filetransfers` - File upload/download abstraction
- `django-mptt` - Utilities for implementing a modified pre-order traversal tree in django
- `django-taggit` - Simple tagging for django
- `slate` - The simplest way to extract text from PDFs in Python

Execute `pip install -r requirements/production.txt` to install the python/django dependencies automatically.

Executables:

- `tesseract-ocr` - An OCR Engine that was developed at HP Labs between 1985 and 1995... and now at Google.
- `unpaper` - post-processing scanned and photocopied book pages
- `gpg` - The GNU Privacy Guard

## 1.2.2 Optional requirements

### To enable distributed OCR support

- `celery` - asynchronous task queue/job queue based on distributed message passing
- `django-celery` - celery integration for Django

### To store documents in a GridFS database

- `PyMongo` - the recommended way to work with MongoDB from Python
- `GridFS` - a storage specification for large objects in MongoDB
- `MongoDB` - a scalable, open source, document-oriented database

### Enhanced MIME detection

- `libmagic` - MIME detection library, if not installed **Mayan EDMS** will fall back to using python's simpler `mimetypes` built in library
- `python-magic` - A python wrapper for `libmagic`

### Image conversion backends

**Mayan EDMS** has the ability to switch between different image conversion backends, at the moment these three are supported:

- `ImageMagick` - Convert, Edit, Or Compose Bitmap Images.
- `GraphicMagick` - Robust collection of tools and libraries to read, write, and manipulate an image.
- `Python only` - Relies on `PIL` to support a limited set of the most common graphics formats.

By default the python backend is used.

## 1.3 Installation

### 1.3.1 Local or managed server

Mayan EDMS should be [deployed](#) like any other [Django](#) project and preferably using [virtualenv](#).

If using a [Debian](#) or [Ubuntu](#) based Linux distribution getting the executable requirements is as easy as:

```
$ apt-get install tesseract-ocr unpaper python-virtualenv ghostscript -y
```

To initialize a [virtualenv](#) to deploy the project do:

```
$ virtualenv --no-site-packages mayan
```

[Download](#) and decompress the latest version of **Mayan EDMS**:

```
$ cd mayan
$ tar -xvzf mayan.tar.gz
```

Or clone the latest development version straight from [github](#):

```
$ cd mayan
$ git clone git://github.com/rosarior/mayan.git
```

To install the python dependencies `easy_install` can be used, however for easier retrieval a production dependencies file is included, to use it execute:

```
$ cd mayan
$ source ../bin/activate
$ pip install -r requirements/production.txt
```

Create the database that will hold the data. Install any corresponding python database drivers. Update the `settings.py` file with you database settings. If using the MySQL database manager, use the following commands:

```
$ apt-get install python-dev libmysqlclient-dev gcc -y
$ pip install MySQL-python
```

Populate the database with the project's schema doing:

```
$ ./manage.py syncdb
```

Collect the static files of the project into the `static` folder for serving via a webserver:

```
$ ./manage.py collectstatic
```

After that deploy it using the webserver of your preference. If your are using [Apache](#), a sample site file is included under the `contrib` directory.

### 1.3.2 Webfaction

To install **Mayan EDMS** on [Webfaction](#), follow these steps:

1. Create a new database:
  - Enter the following selections:
    - Type: \* Mysql
    - Name: \* <username>\_mayan

- Encoding:\* utf-8
  - Anotate the provided password.
- 2. Create a new app:
  - Enter the following in the textbox:
    - Name:\* mayan
    - App category:\* mod\_wsgi
    - App type:\* mod\_wsgi 3.3/Python 2.7
- 3. Login via ssh, and execute:

```
$ easy_install-2.7 virtualenv
$ cd ~/webapps/mayan_app
$ virtualenv --no-site-packages mayan
$ cd mayan
$ git clone git://github.com/rosarior/mayan.git
$ cd mayan
$ source ../bin/activate
$ pip install -r requirements/production.txt
```
- 4. Install the Python MySQL database driver:

```
$ pip install MySQL-python
```
- 5. Create a settings\_local.py file, and paste into it the following:

```
$ DATABASES = {
$     'default': {
$         'ENGINE': 'django.db.backends.mysql',
$         'NAME': '<username>_mayan',
$         'USER': '<username>_mayan',
$         'PASSWORD': '<database password from step 1>',
$         'HOST': '',
$         'PORT': '',
$     }
$ }
```
- 6. Create the database schema (during this step two errors will appears about failling to install indexes on documents.Document and documents.DocumentPage models, ignore them for now):

```
$ ./manage.py syncdb
```
- 7. Collect the static files of the apps:

```
$ ./manage.py collectstatic -l --noinput
```
- 8. Create a new app:
  - Enter the following:
    - Name:\* mayan\_static
    - App category:\* Symbolic link
    - App type:\* Symbolic link to static-only app
    - Extra info: /home/<username>/webapps/mayan\_app/mayan/mayan/static
- 9. Create the website:

- Name: `mayan_edms`
- Choose a subdomain
- Under Site apps: enter the following selections:
  - App #1
    - \* App: `mayan_app`
    - \* URL path (ex: `'/'` or `'/blog'`): `/'`
  - App #2
    - \* App: `mayan_static`
    - \* URL path (ex: `'/'` or `'/blog'`): `/mayan-static`

10. Edit the file `~/webapps/mayan_app/apache2/conf/httpd.conf`:

- Disable the `DirectoryIndex` line and the `DocumentRoot` line
- Add the following line:

```
WSGIScriptAlias / /home/<username>/webapps/mayan_app/mayan/mayan/wsgi/dispatch.wsgi
```

### 1.3.3 DjangoZoom

For instructions on how to deploy **Mayan EDMS** on DjangoZoom, watch the screencast:

“Deploying Mayan EDMS on DjangoZoom.net” available on [Youtube](#)

## 1.4 Settings

**Mayan EDMS** has many configuration options that make it very adaptable to different server configurations.

### 1.4.1 Documents

#### **DOCUMENTS\_CHECKSUM\_FUNCTION**

Default: `hashlib.sha256(x).hexdigest()`

#### **DOCUMENTS\_UUID\_FUNCTION**

Default: `unicode(uuid.uuid4())`

#### **DOCUMENTS\_STORAGE\_BACKEND**

Default: `FileBasedStorage` class

#### **DOCUMENTS\_PREVIEW\_SIZE**

Default: `640x480`

#### **DOCUMENTS\_PRINT\_SIZE**

Default: `1400`

#### **DOCUMENTS\_MULTIPAGE\_PREVIEW\_SIZE**

Default: `160x120`

#### **DOCUMENTS\_THUMBNAIL\_SIZE**

Default: `50x50`

**DOCUMENTS\_DISPLAY\_SIZE**

Default: 1200

**DOCUMENTS\_RECENT\_COUNT**

Default: 40

Maximum number of recent (created, edited, viewed) documents to remember per user.

**DOCUMENTS\_ZOOM\_PERCENT\_STEP**

Default: 50

Amount in percent zoom in or out a document page per user interaction.

**DOCUMENTS\_ZOOM\_MAX\_LEVEL**

Default: 200

Maximum amount in percent (%) to allow user to zoom in a document page interactively.

**DOCUMENTS\_ZOOM\_MIN\_LEVEL**

Default: 50

Minimum amount in percent (%) to allow user to zoom out a document page interactively.

**DOCUMENTS\_ROTATION\_STEP**

Default: 90

Amount in degrees to rotate a document page per user interaction.

**DOCUMENTS\_CACHE\_PATH**

Default: `image_cache` (relative to the installation path)

The path where the visual representations of the documents are stored for fast display.

## 1.4.2 Converter

**CONVERTER\_IM\_CONVERT\_PATH**

Default: `/usr/bin/convert`

File path to imagemagick's convert program.

**CONVERTER\_IM\_IDENTIFY\_PATH**

Default: `/usr/bin/identify`

File path to imagemagick's identify program.

**CONVERTER\_GM\_PATH**

Default: `/usr/bin/gm`

File path to graphicsmagick's program.

**CONVERTER\_GM\_SETTINGS**

Default: None

**CONVERTER\_GRAPHICS\_BACKEND**

Default: `converter.backends.python`

Graphics conversion backend to use. Options are: `converter.backends.imagemagick`, `converter.backends.graphicsmagick` and `converter.backends.python`.

Suggested options: `-limit files 1 -limit memory 1GB -limit map 2GB -density 200`

**CONVERTER\_UNOCONV\_PATH**

Default: `/usr/bin/unoconv`

Path to the unoconv program.

**CONVERTER\_UNOCONV\_USE\_PIPE**

Default: True

Use alternate method of connection to LibreOffice using a pipe, it is slower but less prone to segmentation faults.

### 1.4.3 Linking

**LINKING\_SHOW\_EMPTY\_SMART\_LINKS**

Default: True

Show smart links even when they don't return any documents.

### 1.4.4 Storage

**STORAGE\_GRIDFS\_HOST**

Default: localhost

**STORAGE\_GRIDFS\_PORT**

Default: 27017

**STORAGE\_GRIDFS\_DATABASE\_NAME**

Default: document\_storage

**STORAGE\_FILESTORAGE\_LOCATION**

Default: document\_storage

### 1.4.5 Job processor

**JOB\_PROCESSING\_BACKEND**

Default: None

Specified which job processing library to use, option are: None and celery.

### 1.4.6 Document indexing

**DOCUMENT\_INDEXING\_AVAILABLE\_INDEXING\_FUNCTIONS**

Default: proper\_name

**DOCUMENT\_INDEXING\_SUFFIX\_SEPARATOR**

Default: \_ (underscore)

**DOCUMENT\_INDEXING\_FILESYSTEM\_SLUGIFY\_PATHS**

Default: False

**DOCUMENT\_INDEXING\_FILESYSTEM\_MAX\_SUFFIX\_COUNT**

Default: 1000

**DOCUMENT\_INDEXING\_FILESYSTEM\_FILESERVING\_PATH**

Default: /tmp/mayan/documents

**DOCUMENT\_INDEXING\_FILESYSTEM\_FILESERVING\_ENABLE**

Default: True

### 1.4.7 OCR

**OCR\_TESSERACT\_PATH**

Default: /bin/tesseract

**OCR\_TESSERACT\_LANGUAGE**

Default: eng

**OCR\_REPLICATION\_DELAY**

Default: 0

Amount of seconds to delay OCR of documents to allow for the node's storage replication overhead.

**OCR\_NODE\_CONCURRENT\_EXECUTION**

Default: 1

Maximum amount of concurrent document OCRs a node can perform.

**OCR\_AUTOMATIC\_OCR**

Default: False

Automatically queue newly created documents for OCR.

**OCR\_QUEUE\_PROCESSING\_INTERVAL**

Default: 10

**OCR\_CACHE\_URI**

Default: None

URI in the form: "memcached://127.0.0.1:11211/" to specify a cache backend to use for locking. Multiple hosts can be specified separated by a semicolon.

**OCR\_UNPAPER\_PATH**

Default: /usr/bin/unpaper

File path to unpaper program.

### 1.4.8 Metadata

**METADATA\_AVAILABLE\_FUNCTIONS**

Default: current\_date

**METADATA\_AVAILABLE\_MODELS**

Default: User

### 1.4.9 Common

**COMMON\_TEMPORARY\_DIRECTORY**

Default: /tmp

Temporary directory used site wide to store thumbnails, previews and temporary files. If none is specified, one will be created using tempfile.mkdtemp()

**COMMON\_DEFAULT\_PAPER\_SIZE**

Default: Letter

**COMMON\_DEFAULT\_PAGE\_ORIENTATION**

Default: Portrait

**COMMON\_AUTO\_CREATE\_ADMIN**

Default: True

**COMMON\_AUTO\_ADMIN\_USERNAME**

Default: admin

**COMMON\_AUTO\_ADMIN\_PASSWORD**

Default: admin

**COMMON\_LOGIN\_METHOD**

Default: username

Controls the mechanism used to authenticated user. Options are: username, email

## 1.4.10 Search

**SEARCH\_LIMIT**

Default: 100

Maximum amount search hits to fetch and display.

**SEARCH\_RECENT\_COUNT**

Default: 5

Maximum number of search queries to remember per user.

## 1.4.11 Web theme

**WEB\_THEME\_THEME**

Default: activo

CSS theme to apply, options are: amro, bec, bec-green, blue, default, djime-cerulean, drastic-dark, kathleene, olive, orange, red, reidb-greenish and warehouse.

**WEB\_THEME\_VERBOSE\_LOGIN**

Default: True

Display extra information in the login screen.

## 1.4.12 Main

**MAIN\_SIDE\_BAR\_SEARCH**

Default: False

Controls whether the search functionality is provided by a sidebar widget or by a menu entry.

**MAIN\_DISABLE\_HOME\_VIEW**

Default: False

**MAIN\_DISABLE\_ICONS**

Default: False

## 1.4.13 User management

**ROLES\_DEFAULT\_ROLES**

Default: []

A list of existing roles that are automatically assigned to newly created users



### 1.4.14 Signatures

#### **SIGNATURES\_KEYSERVERS**

Default: ['pool.sks-keyservers.net']

List of keyservers to be queried for unknown keys.

## 1.5 Changelog

### 1.5.1 Version 0.11

- Support for signed documents verification added, embedded and detached signatures are supported. When verifying a document Mayan EDMS will try to fetch the public key from the list of keyservers provided in the configuration option SIGNATURES\_KEYSERVERS (which defaults to 'pool.sks-keyservers.net'). A public key management view has been added to the setup menu as well as a key query and fetching view to manually import keys from a keyserver.
- Added support for document versions. Users can upload unlimited amount of versions for a document using a very flexible document version numbering system, users can also revert to a previous document version.
- OCR queue processing improvements.
- Office documents handling improvements.
- Text extraction support for office documents.
- RTF text documents are now handled as office documents.
- Added a view to delete the document image cache, useful when switching converter backends or doing diagnostics.
- Added South to the requirements.
- Merged documents' filename and extension database fields into a single filename field, filename are store as uploaded not manipulation is done Users with existing data must install South and run the appropriate migrate commands:

```
$ pip install -r requirements/production.txt
$ ./manager syncdb
$ ./manage.py migrate documents 0001 --fake
$ ./manage.py migrate documents
```

- **Added new office document mimetype**
  - application/vnd.ms-office
- Fixed documents not saving the file encoding
- Removed extra slash in ajax-loader.gif URL fixes #15, thanks to IHLeanne for finding this one

### 1.5.2 Version 0.10.1

- Upgraded django-compressor to version 1.1.1, run:

```
$ pip install --upgrade -r requirements/production.txt
```

to upgrade

- `django-compressor` is now disabled by default, users must explicitly enable it adding `COMPRESS_ENABLED=True` to their `settings_local.py` file

### 1.5.3 Version 0.10

- Added a proper setup views for the document grouping functionality.
- Document grouping is now called smart linking as it relates better to how it actually works. The data base schema was changed and users must do the required:

```
$ ./manager syncdb
```

for the new tables to be created.

- Grappelli is no longer required as can be uninstalled.
- New smarter document preview widget that doesn't allow zooming or viewing unknown or invalid documents.
- New office document converter, requires:
  - LibreOffice (<https://www.libreoffice.org/>)
  - unoconv [version 0.5] (<https://github.com/dagwieers/unoconv>)
- The new office documents converter won't convert files with the extension `.docx` because these files are recognized as zip files instead. This is an issue of the libmagic library.
- New configuration option added `CONVERTER_UNOCONV_USE_PIPE` that controls how unoconv handles the communication with LibreOffice. The default of `True` causes unoconv to use **pipes**, this approach is slower than using **TCP/IP** ports but it is more stable.
- Initial *REST API* that exposes documents properties and one method, this new *API* is used by the new smart document widget and requires the package `djangoRESTframework`, users must issue a:

```
$ pip install -r requirements/production.txt
```

to install this new requirement.

- MIME type detection and caching performance updates.
- Updated the included version of `jQuery` to 1.7
- Updated the included version of `jQueryAsynchImageLoader` to 0.9.7
- Document image serving response now specifies a MIME type for increased browser compatibility.
- Small change in the scheduler that increases stability.
- Russian translation updates ( [Sergey Glita])
- Improved and generalized the OCR queue locking mechanism, this should eliminate any possibility of race conditions between Mayan EDMS OCR nodes.
- Added support for signals to the OCR queue, this results in instant OCR processing upon submittal of a document to the OCR queue, this works in addition to the current polling processing which eliminates the possibility of stale documents in the OCR queue.
- Added multiple document OCR submit link
- Re enabled tesseract language specific OCR processing and added a one (1) time language neutral retry for failed language specific OCR

### 1.5.4 Version 0.9.1

- Added handling percent encoded unicode query strings in search URL, thanks to ( [Sergei Glita]) for reporting.
- Added a FAQ explaining how to fix MySQL collation related error when doing searches also thanks to ( [Sergei Glita]) for reporting this one.

### 1.5.5 Version 0.9.0

- Simplified getting mimetypes from files by merging 2 implementations (document based and file based)
- Updated python converter backend, document model and staging module to use the new get\_mimetype API
- Only allow clickable thumbnails for document and staging files with a valid image
- Removed tag count from the group document list widget to conserve vertical space
- Updated required Django version to 1.3.1
- Removed the included 3rd party module django-sendfile, now added to the requirement files.
  - User should do a pip install -r requirements/production.txt to update
- Changed to Semantic Versioning (<http://semver.org/>), with recommendations 7, 8 and 9 causing the most effect in the versioning number.
- Added Russian locale post OCR cleanup backend ( [Sergei Glita])
- Reduced severity of the messages displayed when no OCR cleanup backend is found for a language
- Complete Portuguese translation (Emerson Soares and Renata Oliveira)
- Complete Russian translation ( [Sergei Glita])
- Added animate.css to use CSS to animate flash messages with better fallback on non JS browsers
- The admin and sentry links are no longer hard-coded (Meurig Freeman)
- Improved appearance of the document tag widget (<https://p.twimg.com/Ac0Q0b-CAAE1IfA.png:large>)
- Added django\_compress and cssmin to the requirements files and enabled django\_compress for CSS and JS files
- Added granting and revoking permission methods to the permission model
- Correctly calculate the mimetype icons paths when on development mode
- Added a new more comprehensive method of passing multiple variables per item in multi item selection views
- Used new multi parameter passing method to improve the usability of the grant/revoke permission view, thanks to Cezar Jenkins (<https://twitter.com/#!/emperorcezar>) for the suggestion
- Added step to the documentation explaining how to install Mayan EDMS on Webfaction
- Added an entry in the documentation to the screencast explaining how to install Mayan EDMS on DjangoZoom
- Added required changes to add Mayan EDMS to Transifex.com
- Fixed the apache contrib file static file directory name
- Added improved documentation

### 1.5.6 Version 0.8.3

- Added a Contributors file under the docs directory
- Moved the document grouping subtemplate windows into a document information tab
- Change the mode the setup options are shown, opting to use a more of a dashboard style now
- Changed the tool menu to use the same button layout of the setup menu
- Moved OCR related handling to the tools main menu
- Improved the metadata type and metadata set selection widget during the document upload wizard
- Added a view to the about menu to read the LICENSE file included with Mayan
- Added converter backend agnostic image file format descriptions
- Disable whitelist and blacklist temporarily, removed document\_type field from interactive sources
- Fully disabled watch folders until they are working correctly
- Updated the project title to 'Mayan EDMS'
- If ghostscript is installed add PDF and PS to the list of file formats by the python converter backend
- Use Pillow (<http://pypi.python.org/pypi/Pillow>) instead of PIL
  - Pillow is a fork of PIL with several updates including better jpeg and png library detection
  - Users must uninstall PIL before installing Pillow
- Updated the static media url in the login exempt url list
- Added remediation code to sidestep issue #10 caused by DjangoZoom's deployment script executing the collectstatic command before creating the database structure with syncdb. Thanks to Joost Cassee (<https://github.com/jcassee>) for reporting this one.
- Perform extra validation of the image cache directory and fallback to creating a temporary directory on validation failure
- Fixed a source creation bug, that caused invalid links to a non existing source transformation to appear on the sidebar

### 1.5.7 Version 0.8.2

- Moved code to Django 1.3
  - Users have to use the collectstatic management command:

```
$ ./manage.py collectstatic
```
  - The site\_media directory is no more, users must update the media serving directives in current deployments and point them to the static directory instead
- The changelog is now available under the about main menu
- Grappelli no longer bundled with Mayan
  - Users must install Grappelli or execute:

```
$ pip install --upgrade -r requirements/production.txt
```
- Even easier UI language switching

- Added email login method, to enable it, set:

```
AUTHENTICATION_BACKENDS = ('common.auth.email_auth_backend.EmailAuthBackend',)
COMMON_LOGIN_METHOD = 'email'
```

### 1.5.8 Version 0.8.1

- Tags can now also be created from the main menu
- Added item count column to index instance list view
- Updated document indexing widget to show different icon for indexes or indexes that contain documents
- Replaced the Textarea widget with the TextAreaDiv widget on document and document page detail views
  - This change will allow highlighting search terms in the future
- Unknown document file format page count now defaults to 1
  - When uploading documents which the selected converted backend doesn't understand, the total page count will fallback to 1 page to at least show some data, and a comment will be automatically added to the document description
- Added new `MAIN_DISABLE_ICONS` to turn off all icons
  - This options works very well when using the `default` theme
- The default theme is now `activo`
- Improved document page views and document page transformation views navigation
- Added OCR queue document transformations
  - Use this for doing resizing or rotation fixes to improve OCR results
- Added reset view link to the document page view to reset the zoom level and page rotation
- Staging files now show a thumbnail preview instead of preview link

### 1.5.9 Version 0.8.0

- Distributed OCR queue processing via celery is disabled for the time being
- Added support for local scheduling of jobs
  - This addition removes celery beat requirement, and make is optional
- Improve link highlighting
- Navigation improvements
- Documents with an unknown file format now display a mime type place holder icon instead of a error icon
- Mayan now does pre caching of document visual representation improving overall thumbnail, preview and display speed
  - Page image rotation and zooming is faster too with this update
- Removed all `QUALITY` related settings
- `COMMON_TEMPORARY_DIRECTORY` is now validated when Mayan starts and if not valid falls back to creating it's own temporary folder
- Added PDF file support to the python converter backend via ghostscript

- This requires the installation of:
  - \* ghostscript python package
  - \* ghostscript system binaries and libraries
- Added PDF text parsing support to the python converter backend
  - This requires the installation of:
    - \* pdfminer python package
- Added PDF page count support to the python converter backend
- Added python only converter backend supporting resizing, zooming and rotation
  - This backend required the installation of the python image library (PIL)
  - This backend is useful when Graphicsmagick or Imagemagick can not be installed for some reason
  - If understand fewer file format than the other 2 backends
- Added default tranformation support to document sources
- Removed `DOCUMENT_DEFAULT_TRANSFORMATIONS` setup options
- Document sources are now defined via a series of view under the setup main menu
- This removes all the `DOCUMENT_STAGING` related setup options
  - Two document source types are supported local (via a web form), and staging
  - However multiple document sources can be defined each with their own set of transformations and default metadata selection
- Use `python-magic` to determine a document's mimetype otherwise fallback to use python's `mimetypes` library
- Remove the included sources for `python-magic` instead it is now fetched from github by pip
- Removed the document subtemplates and changed to a tabbed style
- Added link to document index content view to navigate the tree upwards
- Added new option `MAIN_DISABLE_HOME_VIEW` to disable the home main menu tab and save some space
- Added new option to the web theme app, `WEB_THEME_VERBOSE_LOGIN` that display a more information on the login screen (version, copyright, logos)
- Added a confirmation dialog to the document tag removal view

### 1.5.10 Version 0.7.6

- Added recent searches per user support
  - The ammount of searches stored is controlled by the setup option `SEARCH_RECENT_COUNT`
- The document page zoom button are now disabled when reaching the minimum or maximum zoom level
- The document page navigation links are now disabled when view the first and last page of a document
- Document page title now displays the current page vs the total page count
- Document page title now displays the current zoom level and rotation degrees
- Added means set the expansion compressed files during document creation, via web interface removing the need for the configuration options: `UNCOMPRESS_COMPRESSED_LOCAL_FILES` and `UNCOMPRESS_COMPRESSED_STAGING_FILES`

- Added 'search again' button to the advances search results view
- Implementes an advanced search feature, which allows for individual field terms
  - Search fields supported: document type, MIME type, filename, extension, metadata values, content, description, tags, comments

### 1.5.11 Version 0.7.5

- Added a help messages to the sidebar of some views
- Renamed some forms submit button to more intuitive one
  - 'Search' on the submit button of the search form
  - 'Next step' on the document creation wizard
- Added view to list supported file formats and reported by the converter backend
- Added redirection support to multi object action views
- Renamed 'document list' link to 'all documents' and 'recent document list' to 'recent documents'
- Removed 'change password' link next to the current user's name and added a few views to handle the current user's password, details and details editing

### 1.5.12 Version 0.7.4

- Renamed 'secondary actions' to 'secondary menu'
- Added document type setup views to the setup menu
- Added document type file name editing views to the setup menu
- Fixed document queue properties sidebar template not showing

### 1.5.13 Version 0.7.3

- Refactored main menu navigation and converted all apps to this new system
- Multi item links are now displayed on top of generic lists as well as on the bottom
- Spanish translation updates
- Updated requirements to use the latest development version of django-mptt
- Improved user folder document removal views
- Added ability to specify default metadata or metadataset per document type
- Converted filename handling to use os.path library for improved portability
- Added edit source object attribute difference detection and logging to history app
- Missing metadata type in a document during a multi document editing doesn't raise errors anymore.
  - This allows for multi document heterogeneous metadata editing in a single step.
- Added document multi item links in search results
  - Direct editing can be done from the search result list
- Permissions are now grouped and assigned a group name

- Improved role management views
- Document type is now an optional document property
  - Documents can be created without an explicit document type
- Added support for per user staging directories
- Updated logos

#### 1.5.14 Version 0.7

- Added confirmation dialogs icons
- Added comment app with support for adding and deleting comments to and from documents
- Updated requirements files as per issue #9
- Show tagged item count in the tag list view
- Show tagged document link in the tags subtemplate of documents
- Made comment sorted by oldest first, made comment subtemplate scrollable
- Rename comments app to document\_comment to avoid conflict with Django's comment app
- Made document comments searchable

#### 1.5.15 Version 0.5.1

- Applied initial merge of the new subtemplate renderer
- Fixed tag removal logic
- Initial commit to support document comments
- Updated so that loading spinner is displayed always
- Exclude tags from the local document upload form
- Added document tagging support
  - Requires installing `django-taggit` and doing a `sync-db`

#### 1.5.16 Version 0.5

- Added tag list view and global tag delete support
- Added tag editing view and listing documents with an specific tag
- Changed the previewing and deleting staging files views to required `DOCUMENT_CREATE` permission
- Added no-parent-history class to document page links so that iframe clicking doesn't affect the parent window history
  - Fixes back button issue on Chrome 9 & 10
- Added per app version display tag
- Added loading spinner animation
- Messages tweaks and translation updates
- Converter app cleanups, document pre-cache, magic number removal



- Added OCR view displaying all active OCR tasks from all cluster nodes
- Disabled `CELERY_DISABLE_RATE_LIMITS` by default
- Implement local task locking using Django locmem cache backend
- Added doc extension to office document format list
- Removed redundant transformation calculation
- Make sure OCR in processing documents cannot be deleted
- PEP8, pylint cleanups and removal of relative imports
- Removed the obsolete `DOCUMENTS_GROUP_MAX_RESULTS` setting option
- Improved visual appearance of messages by displaying them outside the main form
- Added link to close all notifications with one click
- Made the queue processing interval configurable by means of a new setting: `OCR_QUEUE_PROCESSING_INTERVAL`
- Added detection and reset of orphaned ocr documents being left as 'processing' when celery dies
- Improved unknown format detection in the graphicsmagick backend
- Improved document conversion API
- Added initial support for converting office documents (only ods and docx tested)
- Added sample configuration files for supervisor and apache under contrib/
- Avoid duplicates in recent document list
- Added the configuration option `CONVERTER_GM_SETTINGS` to pass GraphicsMagicks specific commands the the GM backend
- Lower image conversion quality if the format is jpg
- Inverted the rotation button, more intuitive this way
- Merged and reduced the document page zoom and rotation views
- Increased permissions app permission's label field size
  - DB Update required
- Added support for metadata group actions
- Reduced the document pages widget size
- Display the metadata group numeric total in the metadata group form title
- Reorganized page detail icons
- Added first & last page navigation links to document page view
- Added interactive zoom support to document page detail view
- Spanish translation updates
- Added `DOCUMENTS_ZOOM_PERCENT_STEP`, `DOCUMENTS_ZOOM_MAX_LEVEL`, `DOCUMENTS_ZOOM_MIN_LEVEL` configuration options to allow detailed zoom control
- Added interactive document page view rotation support
- Changed the side bar document grouping with carousel style document grouping form widget

- Removed the obsolete `DOCUMENTS_TRANSFORMATION_PREVIEW_SIZE` and `DOCUMENTS_GROUP_SHOW_THUMBNAIL` setting options
- Improved double submit prevention
- Added a direct rename field to the local update and staging upload forms
- Separated document page detail view into document text and document image views
- Added grab-scroll to document page view
- Disabled submit buttons and any buttons when during a form submit
- Updated the page preview widget to display a infinite-style horizontal carousel of page previews
- Added support user document folders
  - Must do a `syncdb` to add the new tables
- Added support for listing the most recent accessed documents per user
- Added document page navigation
- Fixed diagnostics url resolution
- Added confirmation dialog to document's find missing document file diagnostic
- Added a document page edit view
- Added support for the command line program `pdftotext` from the `poppler-utils` packages to extract text from PDF documents without doing OCR
- Fixed document description editing
- Replaced page break text with page number when displaying document content
- Implemented detail form readonly fields the correct way, this fixes copy & paste issues with Firefox
- New document page view
- Added view to add or remove user to a specific role
- Updated the jQuery packages with the `web_theme` app to version 1.5.2
- Made `AVAILABLE_INDEXING_FUNCTION` setting a setting of the documents app instead of the `filesystem_serving` app
- Fixed document download in FireFox for documents containing spaces in the filename
- If mime detection fails set mime type to `''` instead of `'unknown'`
- Use document MIME type when downloading otherwise use `'application/octet-stream'` if none
- Changed the way document page count is parsed from the graphics backend, fixing issue #7
- Optimized document metadata query and display
- Implemented OCR output cleanups for English and Spanish
- Redirect user to the website entry point if already logged and lands in the login template
- Changed from using `SimpleUploadedFile` class to stream file to the simpler `File` class wrapper
- Updated staging files previews to use `sendfile` instead of `serve_file`
- Moved staging file preview creation logic from `documents.views` to `staging.py`
- When deleting staging file, it's cached preview is also deleted
- Added a new setup option:

- `FILESYSTEM_INDEXING_AVAILABLE_FUNCTIONS` - a dictionary to allow users to add custom functions
- Made automatic OCR a function of the OCR app and not of Documents app (via signals)
  - Renamed setup option `DOCUMENT_AUTOMATIC_OCR` to `OCR_AUTOMATIC_OCR`
- Clear node name when requeueing a document for OCR
- Added support for editing the metadata of multiple documents at the same time
- Added Graphics magick support by means of user selectable graphic conversion backends
  - Some settings renamed to support this change:
    - \* `CONVERTER_CONVERT_PATH` is now `CONVERTER_IM_CONVERT_PATH`
    - \* `CONVERTER_IDENTIFY_PATH` is now `CONVERTER_IM_IDENTIFY_PATH`
  - Added options:
    - \* `CONVERTER_GM_PATH` - File path to graphicsmagick's program.
    - \* `CONVERTER_GRAPHICS_BACKEND` - Backend to use: ImageMagick or GraphicMagick
- Raise ImportError and notify user when specifying a non existant converter graphics backend
- Fixed issue #4, avoid circular import in permissions/\_\_init\_\_.py
- Add a user to a default role only when the user is created
- Added total page count to statistics view
- Added support to disable the default scrolling JS code included in web\_theme app, saving some KBs in transfer
- Clear last ocr results when requeueing a document
- Removed the 'exists' column in document list view, diagnostics superceded this
- Added 3rd party sendfile app (support apache's X-sendfile)
- Updated the get\_document\_image view to use the new sendfile app
- Fixed the issue of the strip spaces middleware conflicting with downloads
- Removed custom IE9 tags
- Closed Issue #6
- Allow deletion of non existing documents from OCR queue
- Allow OCR requeue of pending documents
- Invalid page numbers now raise Http404, not found instead of error
- Added an additional check to lower the chance of OCR race conditions between nodes
- Introduce a random delay to each node to further reduce the chance of a race condition, until row locking can be implemented or is implemented by Django
- Moved navigation code to its own app
- Reimplemented OCR delay code, only delay new document Added a new field: delay, update your database schema accordingly
- Made the concurrent ocr code more granular, per node, every node can handle different amounts of concurrent ocr tasks Added a new field: node\_name, update your database schema accordingly
- Reduced default ocr delay time

- Added a new diagnostics tab under the tools menu
- Added a new option `OCR_REPLICATION_DELAY` to allow the storage some time for replication before attempting to do OCR to a document
- Added OCR multi document re-queue and delete support
- Added simple statistics page (total used storage, total docs, etc)
- Implemented form based and button based multi item actions (button based by default)
- Added multi document delete
- Fixed a few HTML validation errors
- Issues are now tracked using github
- Added indexing flags to ocr model
- Small optimization in document list view
- Small search optimization
- Display “DEBUG mode” string in title if `DEBUG` variable is set to `True`
- Added the fix-permissions bash script under misc/ folder
- Plugged another file descriptor leak
- Show class name in config settings view
- Added missing config option from the setup menu
- Close file descriptor to avoid leaks
- Don’t allow duplicate documents in queues
- Don’t raise `PermissionDenied` exception in `PermissionDenied` middleware, even while debugging
- Fixed page number detection
- Created ‘simple document’ for non technical users with all of a document pages content
- Use document preview code for staging file also
- Error picture literal name removal
- Spanish translation updates
- Show document file path in regards of its storage
- Added new setting: side bar search box
- Implemented new `PermissioDenied` exception middleware handler
- Permissions app api now returns a `PermissionDenied` exception instead of a custom one
- Added new 403 error template
- Updated the 404 template to display only a not found message
- Moved the login required middleware to the common app
- Fixed search app’s `model.objects.filter` indentation, improved result count calculation
- Added dynamic comparison types to search app
- Separated search code from view code
- Correctly calculate show result count for multi model searches

- Fixed OCR queue list showing wrong thumbnail
- Fixed staging file preview
- Show current metadata in document upload view sidebar
- Show sentry login for admin users
- Do not reinitialize document queue and/or queued document on reentry
- Try extra hard not to assign same uuid to two documents
- Added new transformation preview size setting
- Renamed document queue state links
- Changed ocr status display sidebar from form based to text based
- Added document action to clear all the document's page transformations
- Allow search across related fields
- Optimized search for speed and memory footprint
- Added `LIMIT` setting to search
- Show search elapsed time on result page
- Converter now differentiates between unknown file format and convert errors
- Close file descriptors when executing external programs to prevent/reduce file descriptor leaks
- Improved exception handling of external programs
- Show document thumbnail in document ocr queue list
- Make ocr document date submitted column non breakable
- Fix permissions, directories set to mode 755 and files to mode 644
- Try to fix issue #2, "random ORM field error on search while doing OCR"
- Added configurable location setting for file based storage
- Prepend storage name to differentiate config options
- Fixed duplicated document search
- Optimized document duplicate search
- Added locale middleware, menu bar language switching works now
- Only show language selection list if localemiddleware is active
- Spanish translation updates
- Added links, views and permissions to disable or enable an OCR queue
- Enabled Django's template caching
- Added document queue property side bar window to the document queue list view
- Added HTML spaceless middleware to remove whitespace in HTML code
- If current user is superuser or staff show thumbnail & preview generation error messages
- Added a setting to show document thumbnail in metadata group list
- Started adding configurations setting descriptions
- Initial GridFS storage support

- Implemented size and delete methods for GridFS
- Implement GridFS storage user settings
- Added document link in the OCR document queue list
- Link to manually re queue failed OCR
- Don't separate links (enclose object list links with white-space: nowrap;)
- Added document description to the field search list
- Sort OCR queued documents according to submitted date & time
- Document filesystem serving is now a separate app
  - Steps to update (Some warnings may be returned, but these are not fatal as they might be related to missing metadata in some documents):
    - \* rename the following settings:
      - DOCUMENTS\_FILESYSTEM\_FILESERVING\_ENABLE to FILESYSTEM\_FILESERVING\_ENABLE
      - DOCUMENTS\_FILESYSTEM\_FILESERVING\_PATH to FILESYSTEM\_FILESERVING\_PATH
      - DOCUMENTS\_FILESYSTEM\_SLUGIFY\_PATHS to FILESYSTEM\_SLUGIFY\_PATHS
      - DOCUMENTS\_FILESYSTEM\_MAX\_RENAME\_COUNT to FILESYSTEM\_MAX\_RENAME\_COUNT
    - \* Do a ./manage.py syncdb
    - \* Execute 'Recreate index links' locate in the tools menu
    - \* Wait a few minutes
- Added per document duplicate search and a tools menu option to search all duplicated documents
- Added document tool that deletes and re-creates all documents filesystem links
- Increased document's and document metadata index filename field's size to 255 characters
- Added sentry to monitor and store error for later debugging
- Zip files can now be uncompressed in memory and their content uploaded individually in one step
- Added support for concurrent, queued OCR processing using celery
- Apply default transformations to document before OCR
- Added unpaper to the OCR conversion pipe
- Added views to create, edit and grant/revoke permissions to roles
- Added multipage documents support (only tested on pdfs)
  - To update a previous database do: [d.update\_page\_count() for d in Document.objects.all()]
- Added support for document page transformation (no GUI yet)
- Added permissions and roles support
- Added python-magic for smarter MIME type detection (<https://github.com/ahupp/python-magic>).
- Added a new Document model field: file\_mime\_encoding.
- Show only document metadata in document list view.
- If one document type exists, the create document wizard skips the first step.
- Changed to a liquid css grid

- Added the ability to group documents by their metadata
- New abstracted options to adjust document conversion quality (default, low, high)

## 1.6 Development

**Mayan EDMS** is under active development, and contributions are welcome.

If you have a feature request, suggestion, or bug reports, please open a new issue on the [GitHub issue tracker](#). To submit patches, please send a pull request on [GitHub](#). Contributors are credited accordingly on the [Contributors](#) section.

### 1.6.1 Source Control

**Mayan EDMS** source is controlled with [Git](#)

The project is publicly accessible, hosted and can be cloned from **GitHub** using:

```
$ git clone git://github.com/rosarior/mayan.git
```

#### Git branch structure

**Mayan EDMS** follows the model layout by Vincent Driessen in his [Successful Git Branching Model](#) blog post. [Git-flow](#) is a great tool for managing the repository in this way.

**develop** The “next release” branch, likely unstable.

**master** Current production release (0.11.1).

**feature/** Unfinished/unmerged feature.

Each release is tagged and available for download on the [Downloads](#) section of the **Mayan EDMS** repository on [GitHub](#)

When submitting patches, please place your feature/change in its own branch prior to opening a pull request on [GitHub](#). To familiarize yourself with the technical details of the project read the *internals* section.

### 1.6.2 Documentation

The documentation is written in [reStructured Text](#) format.

The documentation lives in the `docs` directory. In order to build it, you will first need to install [Sphinx](#).

```
$ pip install sphinx
```

Then, to build an HTML version of the documentation, simply run the following from the **docs** directory:

```
$ make html
```

Your `docs/_build/html` directory will then contain an HTML version of the documentation, ready for publication on most web servers.

You can also generate the documentation in format other than HTML.

### 1.6.3 Translations

Translations are now being handled online via the **Transifex** website: <https://www.transifex.net/projects/p/mayan-edms/>

## 1.7 Contributors

### 1.7.1 How to contribute?

You can help further the development of **Mayan EDMS** by reporting bugs, submitting documentation, patches, with monetary or hardware donations.

### 1.7.2 Bug fixes

- Aziz M. Bookwala (<https://github.com/azizmb>)
- IHLeanne (<https://github.com/IHLeanne>)
- [Sergey Glita] ([s.v.glita@gmail.com](mailto:s.v.glita@gmail.com))
- Meurig Freeman (<https://github.com/meurig>)

### 1.7.3 Bug reports

- Aziz M. Bookwala (<https://github.com/azizmb>)
- tightwork (<https://github.com/tightwork>)
- Joost Cassee ([joost@cassee.net](mailto:joost@cassee.net), <https://github.com/jcassee>)
- Brian Huxley
- dAnjou (<https://github.com/dAnjou>)
- [Sergey Glita] ([s.v.glita@gmail.com](mailto:s.v.glita@gmail.com))
- IHLeanne (<https://github.com/IHLeanne>)

### 1.7.4 Patches

- Meurig Freeman (<https://github.com/meurig>)
- [Sergey Glita] ([s.v.glita@gmail.com](mailto:s.v.glita@gmail.com))

### 1.7.5 Suggestions

- Cezar Jenkins (<https://twitter.com/#!/emperorcezar>)
- [Sergey Glita] ([s.v.glita@gmail.com](mailto:s.v.glita@gmail.com))



### 1.7.6 Translations

- Emerson Soares (<http://emersonsoares.com>)
- Renata Oliveira (<https://twitter.com/#!/rnataoliveira>)
- [Sergey Glita] ([s.v.glita@gmail.com](mailto:s.v.glita@gmail.com))

## 1.8 Credits

- **Python**
  - Copyright (c) 2001-2010 Python Software Foundation.
  - Copyright (c) 2000 BeOpen.com.
  - Copyright (c) 1995-2001 Corporation for National Research Initiatives.
  - Copyright (c) 1991-1995 Stichting Mathematisch Centrum, Amsterdam.
- **Django - A high-level Python Web framework that encourages rapid development and clean, pragmatic design.**
  - Copyright Django Software Foundation
  - <http://www.djangoproject.com/>
- **django-pagination**
  - Copyright Eric Florenzano ([floguy@gmail.com](mailto:floguy@gmail.com))
  - <http://django-pagination.googlecode.com/>
- **Web App Theme**
  - Copyright Andrea Franz (<http://gravityblast.com>)
  - [git://github.com/pilu/web-app-theme.git](https://github.com/pilu/web-app-theme.git)
- **Imagemagick - Convert, Edit, Or Compose Bitmap Images**
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- **django-rosetta - A Django application that eases the translation of Django projects**
  - Copyright Marco Bonetti ([mbonetti@gmail.com](mailto:mbonetti@gmail.com))

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- **Werkzeug - The Swiss Army knife of Python web development**
  - Copyright Armin Ronacher ([armin.ronacher@active-4.com](mailto:armin.ronacher@active-4.com))
  - <http://werkzeug.pocoo.org/>
- **BoundFormWizard - A subclass of Django's FormWizard that handled FormSets.**
  - Matthew Flanagan (<http://www.blogger.com/profile/15093905875465763876>)
  - <http://code.google.com/p/wadofstuff/>
- **django-filetransfers - File upload/download abstraction**
  - Waldemar Kornewald
  - <http://www.allbuttonspressed.com/projects/django-filetransfers>
- **tesseract - An OCR Engine that was developed at HP Labs between 1985 and 1995... and now at Google.**
  - <http://code.google.com/p/tesseract-ocr/>
- **Image file 1068504\_92921456 “Mayan piramid” (Stock Exchange)**
  - Andres Ojeda ([http://www.sxc.hu/profile/andres\\_ol](http://www.sxc.hu/profile/andres_ol))
- **Image 1297211435\_error**
  - <http://kde-look.org/usermanager/search.php?username=InFeRnODeMoN>
- **Fat cow icon set**
  - <http://www.fatcow.com/free-icons>
- **Python-magic - python-magic is a simple wrapper for libmagic**
  - Adam Hupp <[adam@hupp.org](mailto:adam@hupp.org)>
  - <https://github.com/ahupp/python-magic>
- **Fancybox - FancyBox is a tool for displaying images, html content and multi-media in a Mac-style “lightbox” that floats o**
  - <http://fancybox.net>
- **unpaper - post-processing scanned and photocopied book pages**
  - Jens Gulden 2005-2007 - [unpaper@jensgulden.de](mailto:unpaper@jensgulden.de).
  - <http://unpaper.berlios.de/>
- **celery - Celery is an open source asynchronous task queue/job queue based on distributed message passing. It is focused o**
  - Copyright 2009-2011, Ask Solem & contributors
  - <http://ask.github.com/celery/getting-started/introduction.html>
- **django-celery - django-celery provides Celery integration for Django**
  - Copyright Ask Solem & contributors
  - <http://github.com/ask/django-celery/>
- **favicon**
  - [http://www.iconfinder.com/icondetails/21581/24/draw\\_pyramid\\_icon](http://www.iconfinder.com/icondetails/21581/24/draw_pyramid_icon)

- Gnome Project
- **MongoDB** - (from “humongous”) is a scalable, high-performance, open source, document-oriented database.
  - Copyright 10gen
  - <http://www.mongodb.org/>
- **PyMongo** - is a Python distribution containing tools for working with MongoDB, and is the recommended way to work with MongoDB.
  - Copyright 2009, Michael Dirolf
  - <http://api.mongodb.org/python/>
- **GridFS** - is a storage specification for large objects in MongoDB
  - Copyright 10gen
  - <http://www.mongodb.org/display/DOCS/GridFS+Specification>
- **django-sendfile** - This is a wrapper around web-server specific methods for sending files to web clients.
  - johnsensible (John Montgomery)
  - <https://github.com/johnsensible/django-sendfile>
- **jQuery-Jail - JQuery Asynchronous Image Loader (JAIL)**
  - Sebastiano Armeli-Battana ([contact@sebarmeli.com](mailto:contact@sebarmeli.com))
  - <http://www.sebastianoarmelibattana.com/projects/jail>
- **django-taggit** - is a reusable Django application for simple tagging
  - Alex Gaynor ([alex.gaynor@gmail.com](mailto:alex.gaynor@gmail.com))
  - <http://pypi.python.org/pypi/django-taggit>
- Image 392336\_7079 (stock exchange)
- `djangoRESTframework`
- `South`
- `python-gnupg`
- `python-hkp`

## 1.9 FAQ

Frequently asked questions and solutions

### 1.9.1 `_mysql_exceptions.OperationalError: (1267, “Illegal mix of collations (latin1_swedish_ci,IMPLICIT) and (utf8_general_ci,COERCIBLE) for operation ‘=’”)`

- Solution:

```
$ manage.py shell
```

```
>>> from django.db import connection
>>> cursor = connection.cursor()
>>> cursor.execute('SHOW TABLES')
>>> results=[]
>>> for row in cursor.fetchall(): results.append(row)
>>> for row in results: cursor.execute('ALTER TABLE %s CONVERT TO CHARACTER SET utf8 COLLATE utf8_general_ci')
```

- References:

- <http://www.djangoshmango.com/?p=99>
- <http://stackoverflow.com/questions/1073295/django-character-set-with-mysql-weirdness>

## 1.9.2 Incorrect string value: '\xE2\x80\x95rs6...' for column 'content' at row 1

When using MySQL and doing OCR on languages other than English

- Solution:

- Use utf-8 collation on MySQL server, or at least in table 'documents\_documentpage', 'content' field
- Ref: 1- [http://groups.google.com/group/django-users/browse\\_thread/thread/429447086fca6412](http://groups.google.com/group/django-users/browse_thread/thread/429447086fca6412)
- Ref: 2- <http://markmail.org/message/bqajx2utvmtriixi>

## 1.9.3 File system links not showing when serving content with Samba

- Solution:

- Disable unix extensions in the [global] section and enable wide links for the file serving share
- Example:

```
[global]
    unix extensions = no

...

[digitalizacion]
    path = /var/local/mayan
    guest ok = yes
    read only = yes
    wide links = yes
    follow symlinks = yes
```

- Ref: 1- <http://www.samba.org/samba/docs/man/manpages-3/smb.conf.5.html>

## 1.9.4 How to store documents outside of Mayan EDMS's path

- Sub class Django's FileSystemStorage class:

- Create a file called customstorage.py:

```
from django.core.files.storage import FileSystemStorage

class CustomStorage(FileSystemStorage):
    def __init__(self, *args, **kwargs):
```

```
super(CustomStorage, self).__init__(*args, **kwargs)
self.location='/new/path/to/documents/'
self.base_url='document_storage'
```

- In the settings.py add:

```
from customstorage import CustomStorage
DOCUMENTS_STORAGE_BACKEND = CustomStorage
```

## 1.9.5 How to enable the GridFS storage backend

- Solution:

- Add the following lines to settings.py:

```
from storage.backends.gridfsstorage import GridFSStorage
DOCUMENTS_STORAGE_BACKEND = GridFSStorage
```

- Filesystem metadata indexing will not work with this storage backend as the files are inside a MongoDB database and can't be linked (at least for now)

## 1.9.6 Site search is slow

- Add indexes to the following fields:

- documents\_document - description, recommended size: 160
- documents\_documentmetadata - value, recommended size: 80
- documents\_documentpage - content, recommended size: 3000

## 1.9.7 How to enable x-sendfile support for Apache

- Add the following line to your settings.py file:

```
SENDFILE_BACKEND = 'sendfile.backends.xsendfile'
```

- On your apache configuration file add:

```
XSendFile on
XSendFileAllowAbove on
```

## 1.9.8 The included version of unoconv in my distribution is too old

- Only the file 'unoconv' file from <https://github.com/dagwieers/unoconv> is needed. Put it in a user designated directory for binaries such as /usr/local/bin and setup Mayan's configuration option in your settings\_local.py file like this:

```
CONVERTER_UNOCONV_PATH = '/usr/local/bin/unoconv'
```

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