Online Documents Management System

Proposed features
Draft version 0.1

Contents

1. Roles

1.1 Administrator

Short name: Admin. The role operates on Front- and backend.

Main operation:

- Creates backend users or approves them
- Sets roles of backend users
- Supervises all the processes
- Sees all logging
- May block any user (front- or backend)

1.2 User

The role operates on frontend.

Main operations:

- Profile settings
- Documents upload, viewing, labeling, organizing, editing
- Payment plan selection
- Additional Mailed documents quota request
- Online payment

1.3 Guest

The role operates on frontend.

Main operations:

- Service overview
- Registration (Trial and Paid)
- Online payment

1.4 Documents manager

Short name: DM. The role operates on backend.

Main operations:

- Supervising backend processes
- backend logs viewing
- Approval or rejection of all pending backend operations
- Creation of backend users (DO and MDP) (?)
- Different MDP and DO may be "assigned" to one DM automatically using geo position, workload or any other criteria. This assignment may be also performed manually by Administrator.
- Monitoring tasks processing. Reassigns a task to a DO of her choice if task's deadline is missed. This operation should be done in some specific time after deadline is missed.
- Verification of processed tasks (scanned documents quality and any other parameters)
- Approval or rejection of a task accomplishment request made by DO. If rejected, this DO and Administrator are notified. The task is partly or fully reassigned to this or other DO

1.5 Documents officer

Short name: DO. The role operates on backend.

Main operations:

- Scanning of mailed documents according to "scanning tasks" created by MDP
- OCR of scanned documents
- Other tasks (?)

1.6 Mailed documents parser

Short name: MDP. The role operates on backend.

Main operations:

- Performing primary filtering of mailed documents
- Addition of scanning tasks (ST)
- Addition of other tasks (?)

1.7 Content manager

Short name: CM. The role has specific privileges on both front- and backend: all pages mockups are visible but really no operations are performed during the interface use.

Main operations:

- Adding new languages
- Editing texts of the frontend and backend (?) for any language
- Editing email templates, errors and any other system messages templates
- Skins management (?)

2. Scanning and other (?) tasks assignment

The system may assign tasks to DO automatically according to:

- DO workload
- DO individually assigned to specific User
- Geo position of User or DO

If the task isn't assigned to a DO for some reason it is available in a pool of unassigned tasks and DO may take it manually

3. Documents input

- Uploaded by User
- Scanned by User directly in the system (?)
- E-mailed to User's email in the system
- Mailed. All mailed documents are processed by backend staff and inputted in the system:
  - Processed away from the system and uploaded to it
  - Directly scanned using backend scanning feature of the system (?)

4. Processing of mailed documents

- Mailed documents are parsed by MDP and added as scanning tasks
- Scanning tasks are processed by DO and added to the system. Tasks may be organized and filtered by User, DM, assignment date, deadline date.

- Each task contains documents being processed. One document may be connected to more than one task.
- Possible non-scanning tasks (?):
  - OCR and correcting
  - Editing and design of documents
  - Edition (publication) in specified format and sending back
  - High quality printing of photographic or any other material and sending back
- Tasks accomplishment control:
  - Deadline for each task
  - Recommended number of tasks to accomplish in a time period by a DO

5. Logging
- All operations (frontend and backend) are logged
- Log viewing of a limited list of operations is available on the frontend
- Adjustable log viewing on the backend is differently limited for different roles (full for the Administrator)

6. Payment plans
- Created and adjustable by Administrator
- Available differently for a User using next criteria:
  - Specific User
  - Geo position
  - Discount for large amount or long term client

7. Online payment systems
- PayPal
- Moneybookers (?)
- Other (?)

8. Trash
- Frontend trash for User's documents: documents may be restored or deleted permanently from it.
- Backend trash for processed documents: is available for DO and may be used to temporarily store failed scans for example. This trash is task specific.

9. Skinable interface (?)
- Skins added by CM to a common skins list available to all Users
- Skins added by User and available to this User only (?)

10. Notifications
Text templates will be used for mail notifications and all system messages like warnings and errors. Texts will be adjusted by CM.

Notification types:

- Welcome letters for new users (front- and backend)
- Failed login attempts
- Change password link
- Password changed
- Roles set changed
- Blocked/Unblocked
- Payment plan expiring soon (?)
- New features available
- Mailed documents processed. Other services are accomplished (?)
- Digital documents printed
- Digital documents processed
- New task assigned (sent to DO)
- Low tasks accomplishment level (sent to DO and DM)
- Task deadline is approaching (sent to DO)
- Task deadline missed (sent to DO and DM)
- Task not reassigned after its deadline missed (sent to DM and Administrator)
- Task non-accomplishable/failed/refused for some reason. Is initiated by DO and sent to DM
- Incorrect document (wrong sender info, any license violation, unreadable content, empty content etc.), initiated by MDP, sent to DM. Resent by DM to Administrator if unable to take decision
- Accomplished task rejection. Initiated by DM, sent to DO and Administrator

11. Scanning service ordering

- User may select a payment plan already including some amount of scanning service
- Additionally to this plan User may order additional scanning or other (?) service

12. Multilingual support

- Site frontend supports different languages that the User selects in his preferences.
- New languages are added by CM
- All frontend texts are editable for any language by CM
- Email notifications, errors and any other messages are editable for any language by CM

13. User Scanning (?)

A client side module allows communicating with a scanner using TWAIN for example and sends scanned documents directly to the system

14. Emailing

- Each User has an email in the system that may be used to send documents directly to his profile
- Spam control:
  - The system has a common spam filter that has a list of blacklisted emails. This list is filled automatically using a set of criteria.
  - Each User has her own spam filter that is manually adjusted
  - The system spam filter may collect information from personal filters and add blacklisted emails to his list using a set of criteria
- Contacts book: each User has a contacts book with a set of emails. An option like "add emails from my groups" is possible.

- Security options:
    - Get emails from my contacts book only
    - Get emails from my groups Users only
    - Get emails from Users only
    - Get emails from everybody

15. Users interaction

- Search of users using different criteria
- Invitation to groups (send/accept/reject). By default each user has one group
- Sharing of a document to a group or a specific user
- Sharing access level: read only, read-write (for example add annotations or labels or even edit document content).

16. Collaboration and version control (?)

- Modifying operations on a document are done by a user having rw sharing access
- These operations may be approved or rejected by the original author
- All intermediate versions are saved and may be downloaded/rolled back
- The document may be deleted only by the original author

17. Help

- Help
- Feedback: contact us, ask a question.
- Forum

18. Supported formats

- pdf, doc, docx, ppt, xls, xlsx, odt, ods, odg, odp, txt, rtf, html, tiff, png, gif and jpg
- Image formats representing text are recognized and corrected by DO before being added to the User's space. This is a separate paid service (?)
- Mailed documents are first scanned, recognized (?) and added to User's space
- Text formats are directly added

19. Documents Ordering

- Folders
- Labels
- Favorite
- Searching inside a text document using different criteria:
    - Folder/document name
    - Label name
    - Annotations
    - Document content
    - Date
    - Shared with
    - Favorite

20. Documents View
- Folders tree-view
- List view of a folder content
- one document view

21. Document Operations
These operations are available in document view (dv) and also partly in tree/list view (tlv).

Operations list:

- Print (dv, tlv)
- Annotation (dv)
- Delete (dv, tlv):
    - Permanently
    - To Trash
- Favorite (dv, tlv)
- Edit (?)(dv, tlv):
    - On site for some formats
    - Downloaded and edited locally and when saved uploaded automatically (?)
- Share (dv, tlv):
    - With a User
    - With a Group
    - With a set of Users or Groups
- Label (dv, tlv)
- Download (dv, tlv):
    - last
    - original
    - any version (?)
- drag and drop documents between folders (tlv)

22. Supported platforms
The application is web based. Supported browsers/platforms:

- IE
- Safari
- iPhone
- Google chrome (?)
- Firefox (?)
- Opera (?)

23. Widget embedding (?)
A document may be embedded into any site using a unique script generated for the document. Only read access to the document is available.

24. User's settings and option
- Personal info and payment options are viewable/changeable

- Preferences:
  - notification settings (on/off list of available notifications)
  - Skin selection/addition (?)

25. Groups

Each user will be able to create different groups and invite other users to them. This feature is used to control documents sharing access.

26. Duplicates control

Hashing is used for that. Names and dates may be also used to make advice about duplicates.

27. Documents sorting in list view

Sorting may me ascending/descending. Sorting options:

- Date
- Favorite
- Popularity (most viewed)
- Name
- Shared with
- Label

28. Digital signature (?)

The document may be signed by its owner. For that each User gets a key pair: a private key securely stored on the client's side and a certificate stored in the system. After the document is signed by the owner using the private key the signature may be viewed and verified by all Users that have any type of access to this document. This verification validates 2 properties:

- document content wasn't modified
- The owner is really the source of the document