

UNIFIED STATE PORTAL GOVERNMENT OF ASSAM

Functional Requirement Specifications for Document Management System (DMS)

Version 1.0
Web Development Cell

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Amendments

| Description | Section | Date |
|----------------------------|--|------------|
| New points have been added | 5 (a) Document Uploading | 17-11-2017 |
| New points have been added | 5 (c) Document Publishing | 17-11-2017 |
| New points have been added | 5 (e) Workflow for document publishing | 17-11-2017 |

Contents

| | |
|---|----|
| 1. Executive Summary..... | 6 |
| 2. Scope..... | 6 |
| 3. Assumptions..... | 6 |
| 4. User Requirements | 7 |
| 5. Functional Requirements..... | 7 |
| a) Document Creation | 7 |
| b) Document Uploading | 8 |
| c) Document Publishing..... | 8 |
| d) Document Sharing..... | 8 |
| e) Workflow for publishing a Document | 9 |
| f) Searching a document | 9 |
| g) Archiving Document | 10 |
| h) Recovering document from Archive | 10 |
| i) Expiry Date Management | 10 |
| j) Access control of document..... | 10 |
| k) Security of document | 10 |
| l) Version Control of document..... | 10 |
| m) Tagging of document | 10 |
| n) User Subscription for alert | 10 |
| o) Department User Registration for Alert..... | 11 |
| p) Notifying Department for new uploading | 11 |
| q) Audit trail | 11 |
| r) Alerts..... | 11 |
| s) Guidelines for users | 11 |
| 6. Non Functional Requirements | 12 |
| a) Document Uploading..... | 12 |
| b) Searching a document | 12 |

1. Executive Summary

In Government, document management provides the mechanism to provide accountability for decisions and actions taken. Documents provide evidence to justify government decisions.

In the present scenario, all documents published/preserved in offices of the Government of Assam are stored in manual files. Management, access and search for documents is done manually.

Document management systems facilitate efficiency, accountability and compliance and mitigates the risk associated with illegal loss of records and unauthorised access to sensitive information.

Along with the use of ICT tools in day to day work of the government, the need for digitally storing and preserving office documents and records has been felt so as to meet the challenges of faster access and searching from anywhere and at any time.

A document management system is expected to fulfill all these requirements and will be used by different levels of users from Departments to digitally record, store and publish official documents in an organized manner. Users from the public will in turn be able to search for documents stored in a central repository.

2. Scope

This document covers the requirements for Document Management System for building up a repository of all documents of the Government of Assam.

3. Assumptions

Users of the document management system may be of different types. One type of user or viewer may be common citizens and other Government users or viewers seeking data or documents. Further, the Government users or viewers could be from a State level department or could be from any district level office.

Another type of user would be Government users who will be involved in the building up of the document repository. These users could be from a State level department, any subordinate organization or any district or sub-district level office.

We may also assume that persons or users involved in the support or the building up of the document repository are aware of the key points to be kept in mind while sharing of documents.

4. User Requirements

A user may require uploading or publishing of documents from any office/site. The document may be shared to one or many destination sites.

| | Origin | Sharing |
|----------|-----------------------------|---------------------------------|
| State | Department | State portal |
| | | Own department |
| | | Sub-organisations |
| | | District Offices |
| District | Sub-organisation | State Portal |
| | | Parent Department |
| | Deputy Commissioners Office | State Portal |
| | | Certain state level departments |
| | District offices | Subordinate offices |
| | | Parent Department |
| | | State Portal |
| | Subdivisional offices | Parent office in district |
| | Block Offices | Parent office in district |

Viewers who have come to the site to search for documents may seek the information in a department site, sub-site or the State Portal. They may search for required documents using keywords or Meta data.

5. Functional Requirements

a) Document Creation

A document is a piece of written, printed, or electronic matter that provides information or evidence or that serves as an official record.

1. All government documents that are to be uploaded will have to be scanned. The allowed file types are pdf and TIFF. Other documents have to be converted to these formats (if the document that is to be uploaded has been created in Word, Excel, PPT, Text)
2. All documents created will have to be within the prescribed file size limit.

b) Document Uploading

1. The system should facilitate the upload of documents by authenticated users.
2. Documents should allow uploading documents in pdf format only.
3. Only documents within specified file size limits should be allowed to be uploaded.
4. The maximum file size limit should be configurable separately by the system Administrator for each category of the document so that it can be changed as and when required.
5. Standard Document categories and sub-categories to be specified when document is uploaded.
6. Users should be able to specify meta data like Owner(section/ branch), author, document date, expiry date, description, category, confidentiality status etc. while uploading. Context specific help to be available.
7. Uploaded documents may be saved using specific naming conventions. Document title standards to be applied
8. Document title to be sentence case.
9. User should be able to specify the target audience of the document.
10. The user should be able to specify/select department site/sites with which the document should be shared. Email/SMS/ website alert will be sent to the concerned department based on the selection of sites.
11. Bulk uploading of documents should be possible.
12. In case a wrong document has been uploaded, the user who has uploaded should have the option to delete it only if it is still in the 'unpublished' state.

c) Document Publishing

1. Once document is published the document should be visible in the website.
2. The documents which are not published should not be visible in the website.
3. Documents published in the website should show the department/sub department as publisher and not the name of the user/person who has uploaded it.
4. System should not allow deletion of any published document.
5. In case a wrong document is uploaded and published, the system should have a mechanism to unpublish the document.

d) Document Sharing

1. The users of Unified portal and other department portals of Govt. of Assam should be able to select existing documents of Unified portal for sharing (if required) instead of having to upload afresh.
2. Documents may be shared from State Portal to departments. Also, documents may be shared from departments with the State portal.

e) Workflow for publishing a Document

1. System to have specific steps from document creation to publishing.
2. System to enforce workflow steps/rules according to role assigned.
3. System to have creator, reviewer, publisher roles
4. System to allow selection of any one/combination of any of these.
5. System should allow roles for different states of a document to be set by the system administrator.
6. Reviewer should be allowed to suggest changes in document properties, meta data, uploaded document (whether the correct document has been uploaded) etc.
7. Reviewer should be able to approve the uploaded document if it is correct in all respects.
8. Publisher to be able to suggest/make changes in document properties, Meta data.
9. Publisher should be able to publish the documents approved by the reviewer if it is correct in all respects.
10. Publisher should be able to 'unpublish' a document if the need arises.

f) Searching a document

1. User should be able to use keywords for searching. Minimum three letters should be mandatory for search.
2. User also should be able to search document by typing the text of any of the Meta data
3. Text search to be possible. Users should be able to search document by typing a word or part of the text of the document subject or of document body.
4. Should search all sites, i.e Unified portal, department/ sub-department portals, by default.
5. Facility for user to select site(s) to search. (District, department and state portal)
6. Facility to select category/sub category within which to search
7. Search results could optionally display related/tagged documents.
8. Search should display most relevant documents
9. Search results should not include documents to which viewing is restricted.
10. System should have user friendly listing of search results.
11. Further, the system should enable the user to list search results by chronological order (document date), alphabetically, by date of last update.
12. User should know where he/she is in the site ('you are here')
13. Search result document to open in a new tab. Closing the tab should take the user back to where he/she started from.

g) Archiving Document

1. Archival policy to be formulated after discussion with State Govt.

h) Recovering document from Archive

i) Expiry Date Management

1. System to have mechanism to allow authorised users to view documents expiring after (specified time)
2. Only users authorised to make changes to document properties to be allowed to change/modify expiry date.

j) Access control of document

1. Access control mechanism to allow viewing of certain documents by authorised persons only.
2. Not to allow access to certain documents except to users with privileges
3. Not to allow deletion of documents in archive.
4. System to allow access to documents in archive only after permission.

k) Security of document

1. System to encrypt important documents sent/received if required.
2. System should have a mechanism to define who can view a document.
3. System to have provision to control downloads of documents. Some documents may not be downloadable.

l) Version Control of document

1. There may be more than one version of a document. Facility for document versioning to be available.
2. User should be able to see/track all versions of a document available.

m) Tagging of document

1. When a document is uploaded, the system should have a mechanism to allow user to tag relevant documents which are already present in the system.

n) User Subscription for alert

1. System to have provision for user subscription

2. Alerts (email/SMS) to users whenever new documents are published.

o) Department User Registration for Alert

1. System to have provision for department user registration.
2. Alerts (email/SMS) to users whenever new documents are published.

p) Notifying Department for new uploading

1. System to have provision to issue alerts through email, sms, etc. to departments whenever a document is shared by another department.

q) Audit trail

1. System to automatically store information about the user creating a document (who/when)
2. System to automatically keep track of who modified and when
3. System to keep track of who uploaded/published and when
4. System to keep track of who deleted and when.
5. All audit trail records to be unalterable.

r) Alerts

1. System to issue alerts when any of the predefined parameters (file extension, file size) are not met.
2. System should have a mechanism to issue alerts to department HOD informing how many documents have been uploaded from the department within a time frame.
3. Text used in alerts to be standardised.

s) Guidelines for users

1. System to have a standard set of guidelines for the user when any additional requirement (file size, document category, document sub-category etc.) arises.

6. Non Functional Requirements

a) Document Uploading

1. The interface used for publishing or uploading a document should be made simple and intuitive.
2. System should allow easy and fast selection of files to be uploaded.
3. Allowed file format and maximum file size should be clearly mentioned.
4. System should clearly indicate what is to be done, whom to be contacted in case documents to be published/uploaded exceed allowed file size limits
5. All mandatory fields should be pre-filled to the extent possible.
6. User should easily be able to fill in the required fields.
7. Context Help should be available for each field.
8. Tooltips to be made available for each field
9. Maximum filesize, allowed file format to be clearly specified so that user is aware before uploading/publishing.
10. System should clearly indicate what is to be done, who to contact in case documents to be published/uploaded exceed allowed file size limits.
11. Date, language should be default
12. Concurrent users should be able to upload documents.
13. The system should indicate if a document is already available at the time the user seeks to upload/publish. System should not allow duplication.
14. User should be able to easily select available Standard Document categories and sub-categories.
15. System should indicate who is to be contacted/what is to be done in case a category/subcategory is required but not available.

b) Searching a document

1. User should be able to download documents fast. (speed of download)
2. Should search all sites under the department by default.
3. Minimum keywords should make search results available
4. User friendly interface for searching.

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