



Membership Module Level Documentation





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Overview

Membership allows individuals to join committees aligned with their industry and interests, enabling them to contribute to the development of ASTM standards. Membership management and renewal processes are facilitated by ASTM staff through an Internal Application, along with backend systems like EBS and Magento. Members gain access to committee documents, voting on ballots, and registering work items, with privileges determined by their membership level.

Business Perspective

Membership fosters collaboration and engagement among industry stakeholders, ensuring that ASTM standards reflect both consensus and current market needs. A robust membership system enhances user satisfaction and retention while reinforcing ASTM's reputation as a trusted leader in developing standards that address the evolving demands of various industries.

List of applications involved in Membership

- Membership UI—End user can access accounts and perform required actions post membership purchase.
- Internal application—Handled by an internal staff to monitor and make required changes as needed and reflection can be verified to member accounts.
- MCS 1 UI—Internal application that allows staff to monitor work item and balloting related data.
- Magento—Internal application that allows ISS admin to create member accounts on behalf of users
- OKTA—Internal application that is user to verify integrated data flow of member details post purchase form web and manual
- MAE—Internal application this is used to verify member access & expiry details
- AVENTRI—Internal application which is the main source for Meeting creations and modifications
- RNE—Internal application which acts as the first level of hierarchy of data flow including templates, role types, membership types, etc
- DB- Storing, maintaining and accessing any sort of data.
- DMS- Document management system which acts as a warehouse for managing all the documents (Agenda, Minutes, Committee documents, vote attachments, ballot folders, ballot queue, ballot items, closing reports & collaboration area draft).

Membership purchase flows

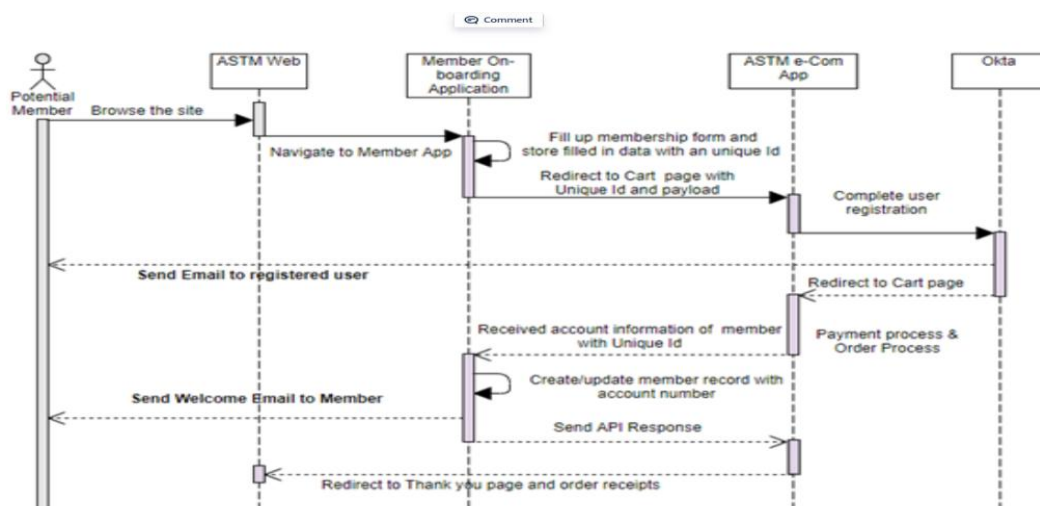
Web Order

Any member can be part of ASTM through membership purchase which helps member to be part of committees, participate in committee meetings.

Potential member: A member who is associated with ASTM with a public account but not as a member.

Test cases: [INT-519](#), [INT-520](#), [INT-524](#), [INT-526](#), [INT-4856](#), [INT-4849](#), [INT-4850](#), [INT-1474](#), [INT-3755](#), [INT-4615](#), [INT-4810](#), [INT-4811](#), [INT-4854](#), [INT-4855](#), [INT-5013](#), [INT-5014](#)

Systems integrated: Member application, IA, OKTA, MAE, Mail (Yopmail), Magento, EBS, Compass.

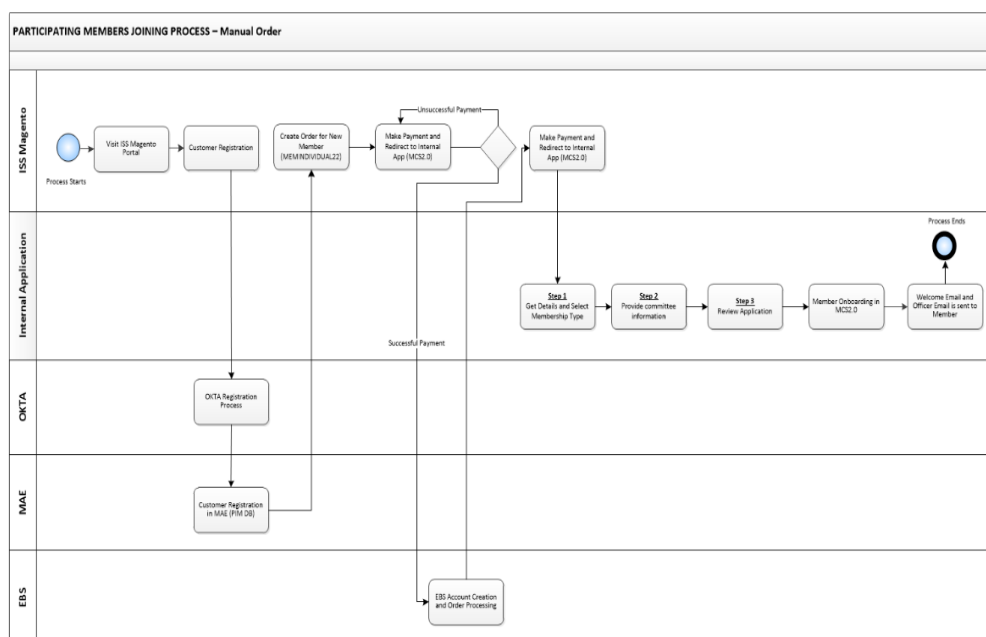


Manual order

Manual order flow is like web purchase, but this done on behalf of member by an ISS admin staff (internal staff) which helps user to access the member application post resetting the password from email.

Test cases: [INT-2575](#), [INT-2574](#), [INT-2571](#)

Systems integrated: Member application, IA, OKTA, MAE, Mail (Yopmail), Magento, EBS, Compass.



Member renewal & reinstatement process flow

The renewal process: User can extend their membership in ASTM through renewal process where user will be notified with a renewal widget in member application

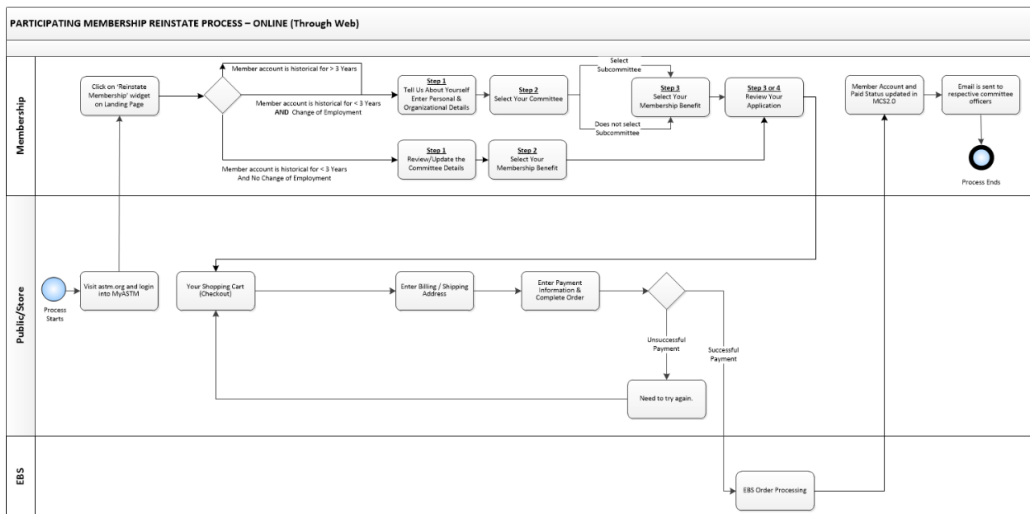
The reinstatement flow: This is a process used by member when the user's validity has expired and couldn't complete the renewal process and crossed more than 3 years, the user must complete the reinstatement process to again be part of ASTM.

Test cases: [INT-523](#), [INT-751](#), [INT-7145](#), [INT-4916](#)



Systems integrated: Member application, IA, OKTA, MAE, Mail (Yopmail), Magento, EBS, Compass.

Process Flow diagram of Web Order

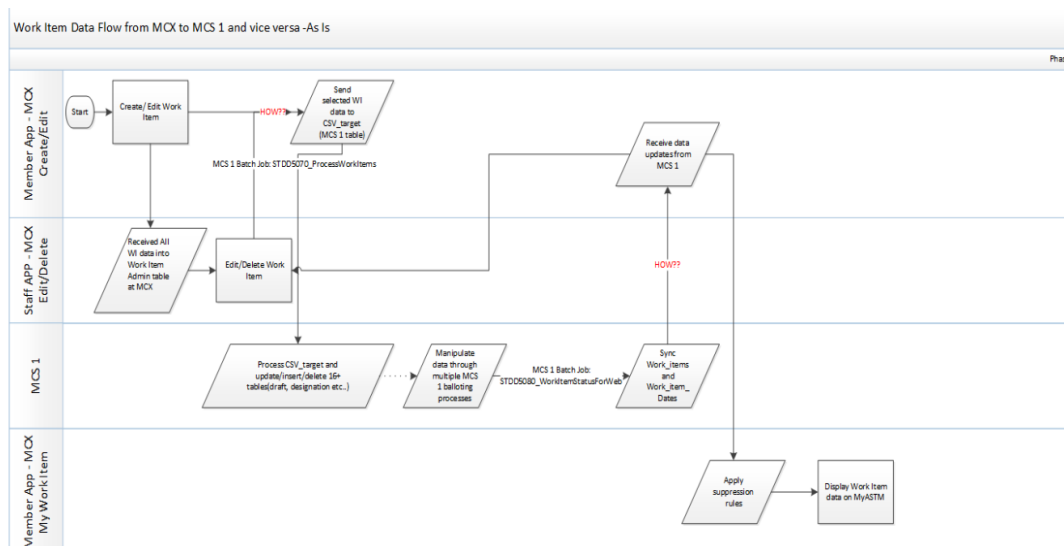


Work item data flow

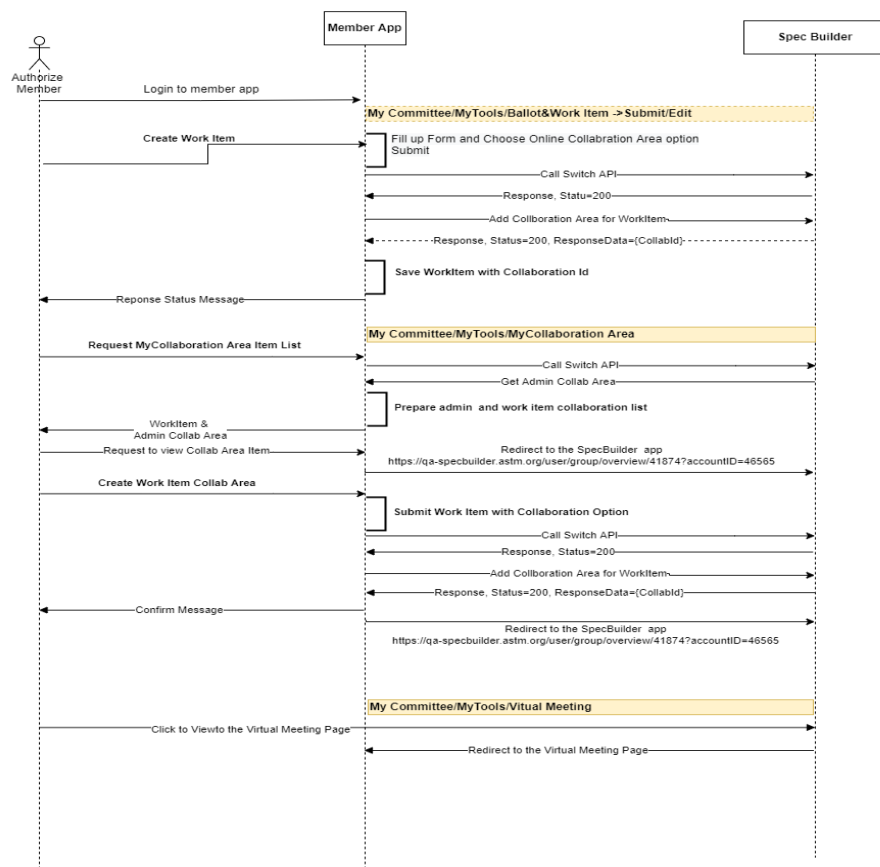
Member associated to a committee can create work items (New or revision) which can be further turned into standards post completion of balloting and closing process.

Test cases: [INT-919](#), [INT-1462](#), [INT-1427](#), [INT-2859](#), [INT-3762](#), [INT-4228](#), [INT-4859](#), [INT-4884](#), [INT-5283](#), [INT-1471](#), [INT-4888](#)

Systems integrated: Member application, IA, Public, MCS1 (legacy), Spec builder-for work item with collab area.



Member and SpecBuilder API Integration Flow

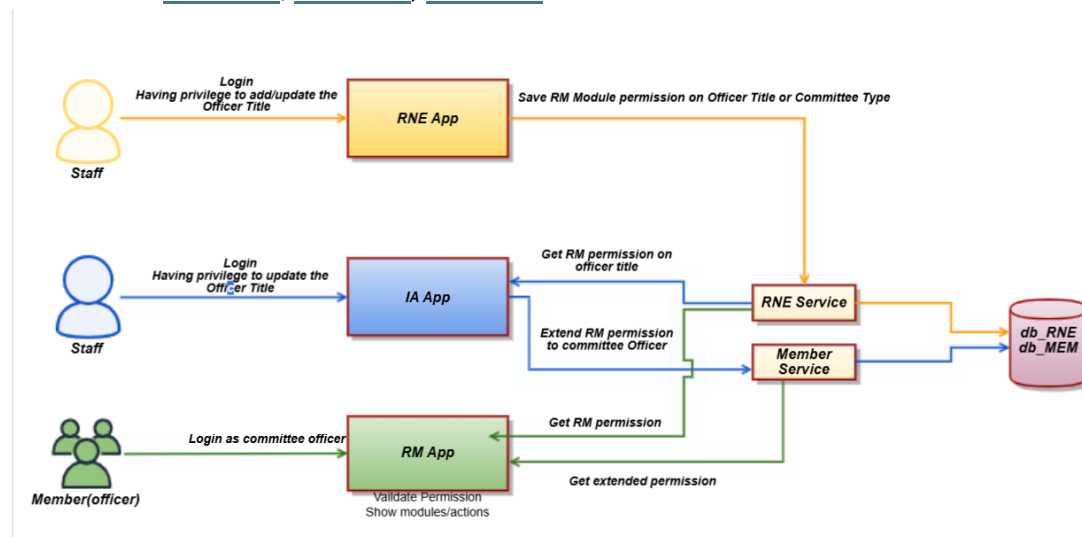


Roster Maintenance application

An application inside the member application that can be handled by a member who has the officer role privilege to a committee & help monitoring the classification and vote change updates for the members in the committee the way how internal staff does in Internal application.

Systems integrated: IA, RNE, Member app.

Test cases: [INT-4862](#), [INT-1470](#), [INT-4864](#)



RNE (Rules n Exceptions) & Committee flow

RNE acts as the main flow in the hierarchy which helps in the data flow of templates, officer titles, membership types & committee management types.

Systems integrated: IA, Member app

Test cases: [INT-4863](#), [INT-4961](#), [INT-4964](#), [INT-4965](#), [INT-4685](#), [INT-4783](#), [INT-4812](#), [INT-4963](#), [INT-4967](#), [INT-5016](#), [INT-5017](#), [INT-5023](#), [INT-7051](#), [INT-4966](#), [INT-7266](#)

- Membership Type Management
- Committee Management
- User Management

Internal application

The application that is completely handled by an internal staff to manage member details, committee roster management, Renewal cycles, Ballot admins, work item management & reports all the changes made will be reflect in the member application.

Systems integrated: RNE, Member app, DMS

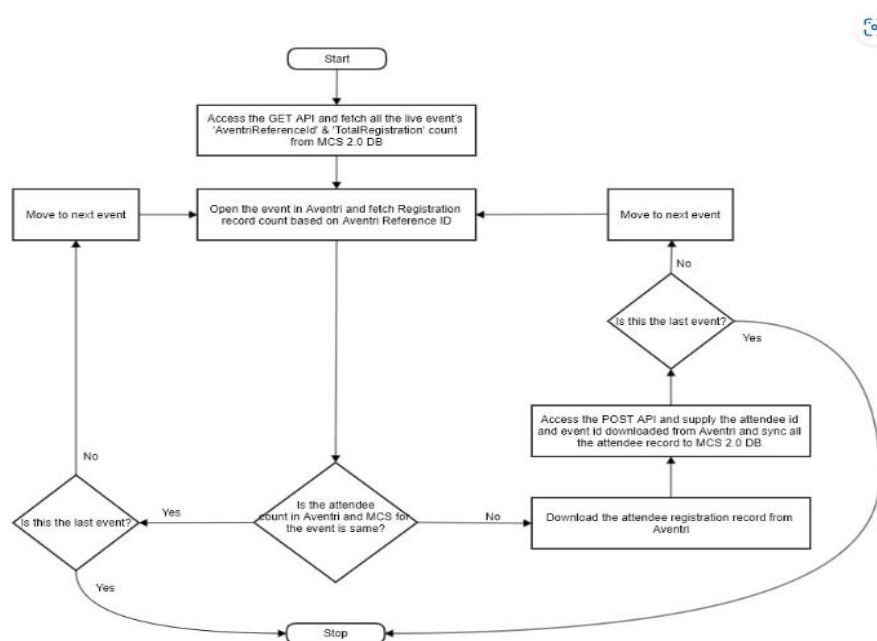
Test cases: [INT-4482](#), [INT-4665](#), [INT-4742](#), [INT-5284](#), [INT-5534](#), [INT-6127](#), [INT-7306](#), [INT-5318](#), [INT-5463](#), [INT-6819](#)

AVENTRI

AVENTRI has been configured to connect with the ASTM website to display the link for live events to enable redirection for members to initiate their journey on the ASTM website for any committee week, Individual events, or symposia, come to the AVENTRI platform to complete the registration.

Systems integrated: Member app, IA.

Test cases: [INT-4919](#), [INT-4920](#), [INT-4921](#), [INT-1823](#), [INT-2865](#), [INT-3783](#), [INT-4891](#), [INT-5024](#)

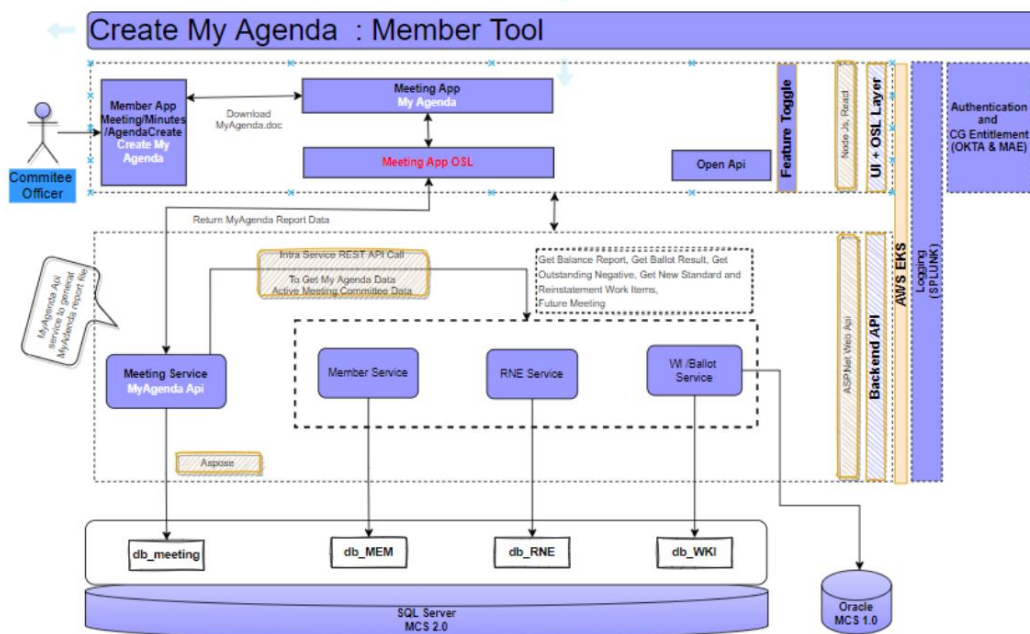


Meeting Apps

My Agenda App

The objective of this application is to provide the ability to committee officers to generate the agenda for a selected Subcommittee so that the agenda can be generated before the actual meeting to review the overall items to be covered.

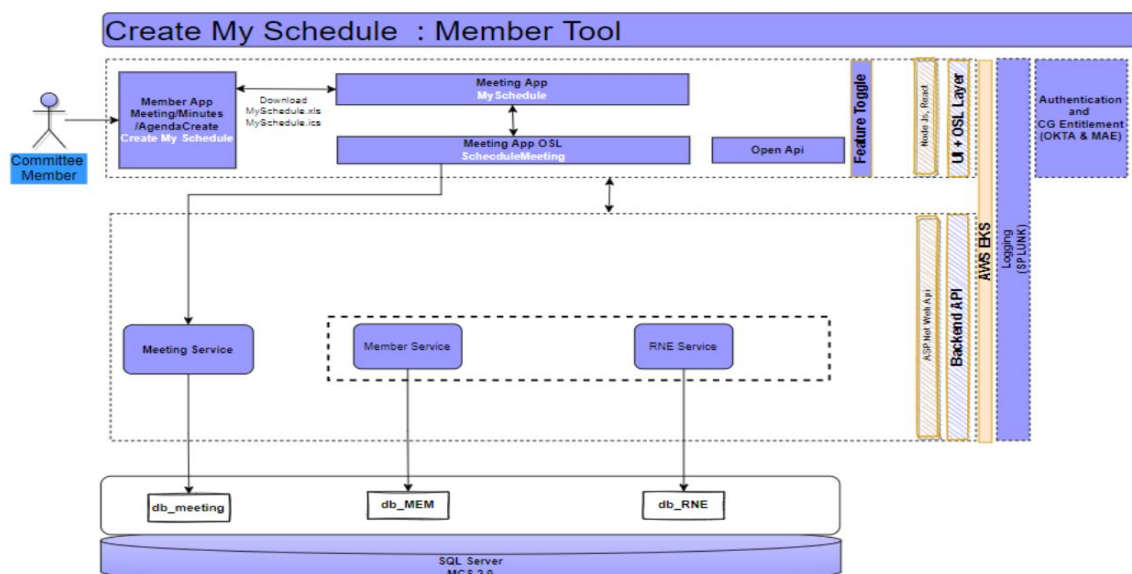
Test cases: [INT-3759](#), [INT-5784](#)

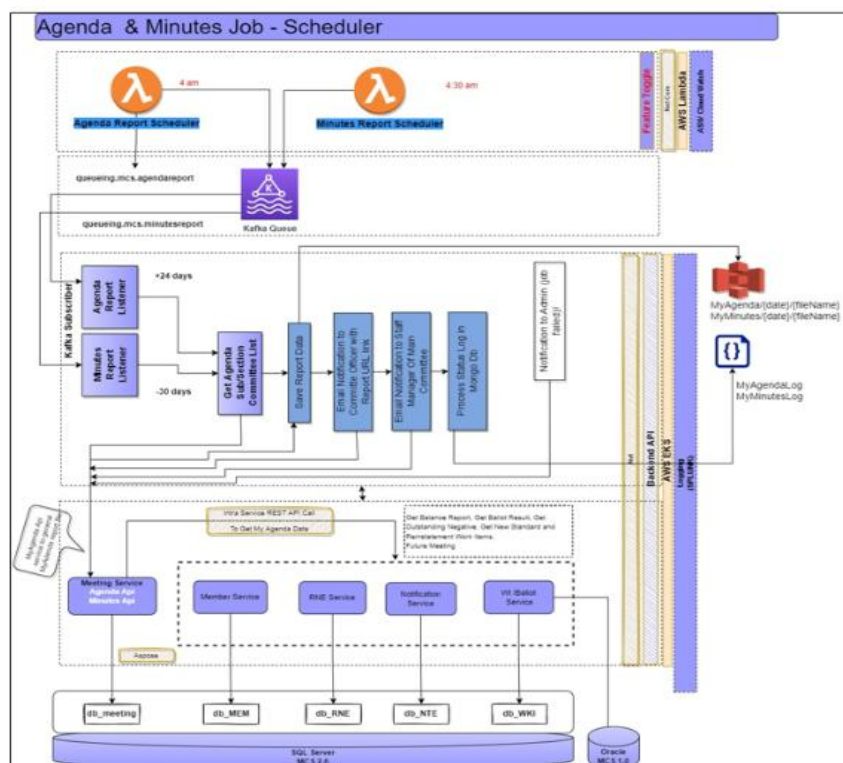
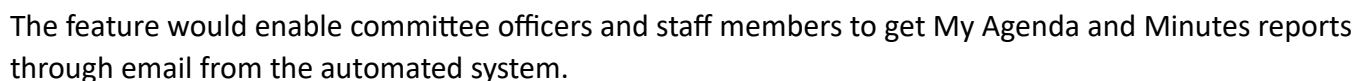


My Schedule App

The application enables committee members to choose the upcoming committee Events, and meetings and download the excel sheet or ICS files of scheduled meetings.

Test cases: [INT-3760](#), [INT-5113](#)

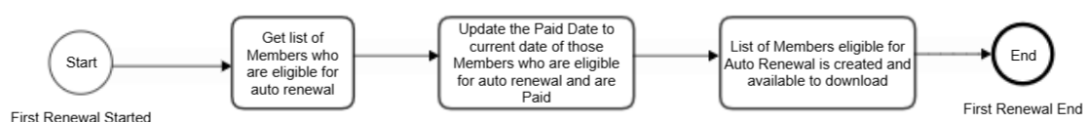




Auto renewals & Temporary Drop process

ASTM offers free membership to a few members categorized by Fee Groups every year when renewals are opened. These members get similar benefits, such as discounts, subscriptions to SN magazine etc, as other paid members.

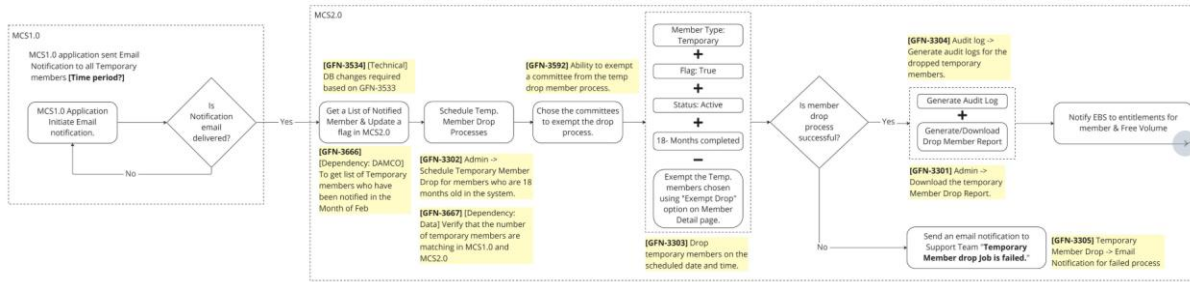
Test cases: INT-5281



Temporary Drop process

This feature would enable ASTM Staff to drop the temporary members in the System. This feature would provide to schedule Member Fee Drop Process to send email notifications to the temporary members who are 18 months old in the system.

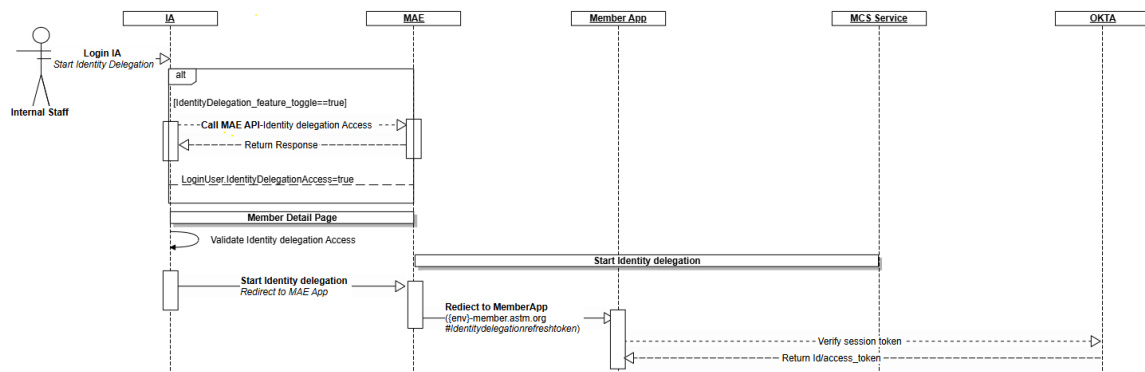
Test cases: INT-5276



Identity Delegation

User Identity delegation is a valuable tool in organizations for dealing with access issues. In ASTM, the objective of having an Identity delegation tool is to investigate problems by pretending as a member.

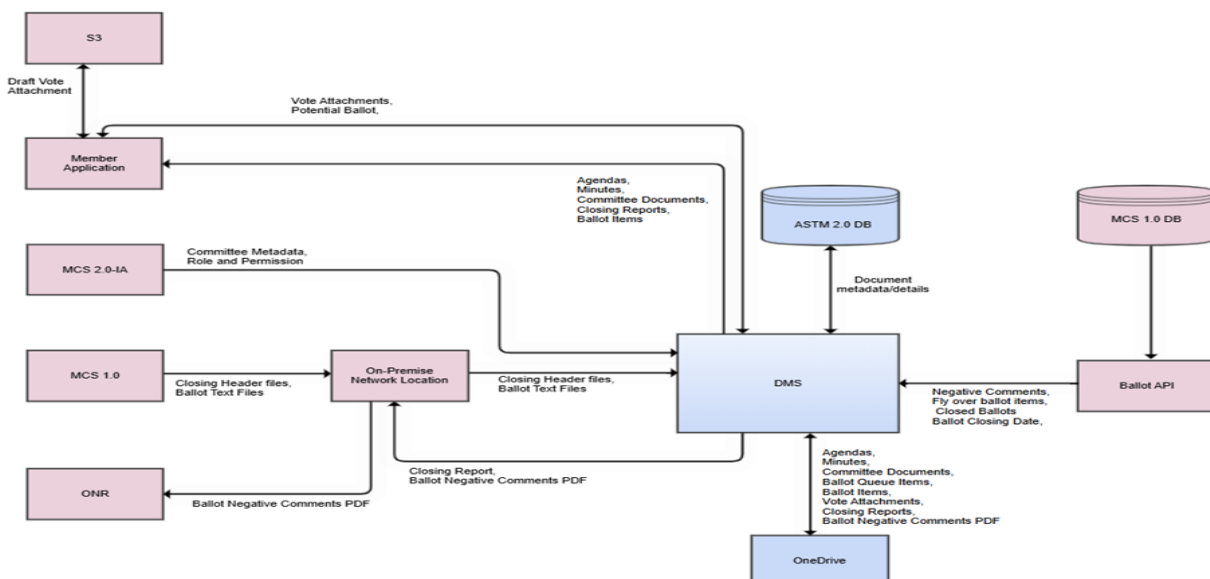
Test cases: [INT-6254](#), [INT-6577](#)



Balloting & DMS

DMS interacts with various internal and external systems, facilitating document uploads, modifications, and structured access control. It also supports document lifecycle management, including publishing, replacing, deleting, generating reports, and converting files to PDF format.

DMS over all flow:





List of applications integrated

Module/Application	Purpose of Integration
Member Application	Documents and reports should reflect in Member App.
Spec Builder	Drafts uploaded in Spec Builder should sync with DMS.
Internal Application (IA)	Internal staff application managing ballots and documents.
RNE Application	Manages user permissions for accessing DMS functionalities.
OneDrive	Stores uploaded documents.
Database	Storing, maintaining and accessing any sort of data.
Mongo DB	To verify the logs.
Network Location	Stores PDF conversions of documents.
MCS1 Application	Used by staff for creating/managing ballots, which will reflect in Member App.

Business-Critical Scenarios

1. **Document Reflection:** Uploaded documents should be reflected in the Member application (Agendas, Minutes, Committee Documents).
2. **Vote Attachments Sync:** Attachments should be reflected from Member App → DMS and should be in sync with MCS1.
3. **Closing Reports:** When a ballot is closed, the closing report should be generated in the Member App and DMS and should be stored in OneDrive.
4. **Storage & Accessibility:**
 - Documents should be stored in OneDrive & Database.
 - PDFs should be stored in a network folder (for individual vote attachments, consolidated vote attachments, and TXT files).
5. **Drafts from Spec Builder:**
 - Drafts uploaded in Spec Builder should appear in DMS (Collaboration Area Drafts).

Scenarios being covered

Ballot End-to-End (E2E) Process

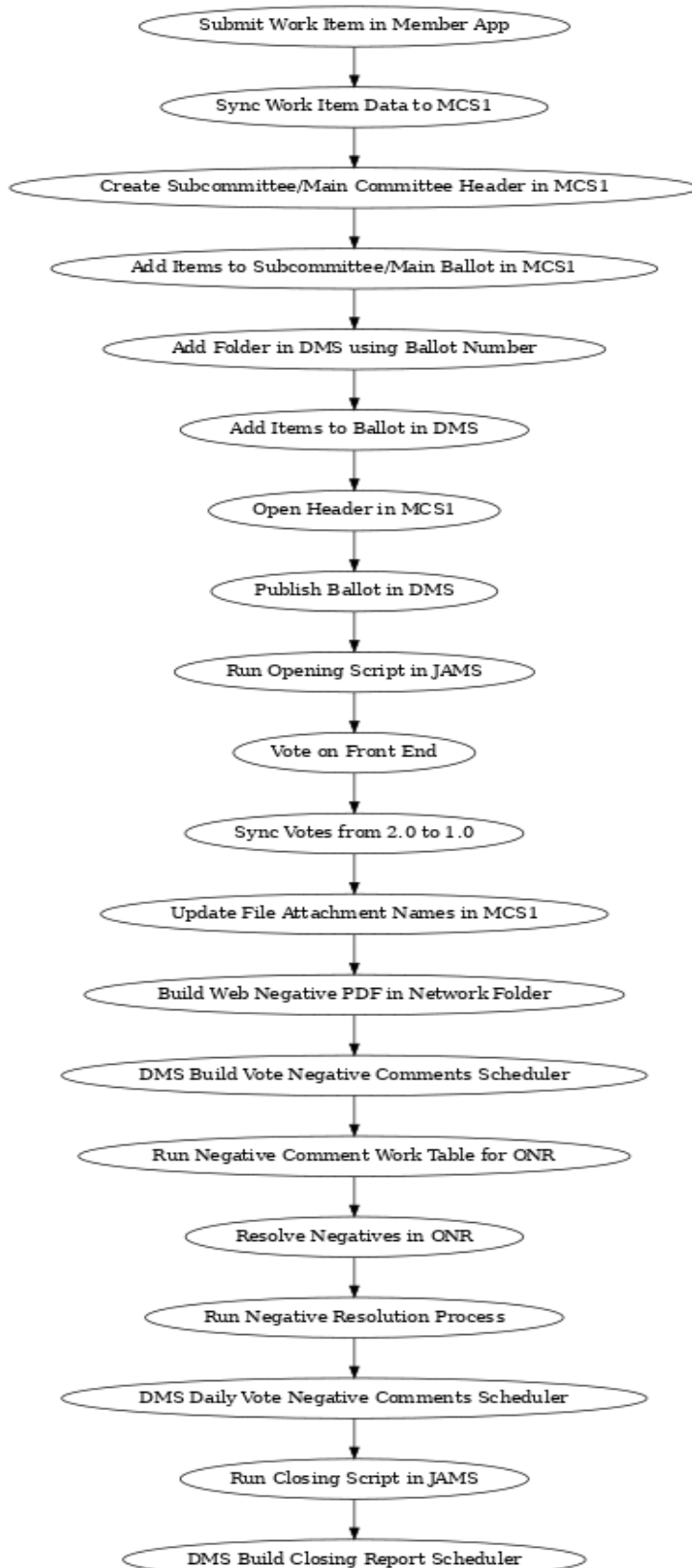
Any committee can conduct a ballot process in ASTM, ensuring structured decision-making and voting. Test cases being covered: [1467,5625,5627,1422](#), [INT-5485](#), [INT-5486](#), [INT-5555](#), [INT-5626](#), [INT-5664](#), [INT-5714](#)

Preconditions:

- Committee must be a Technical Committee in IA.



Flow diagram:



Agendas, Minutes, and Committee Documents End-to-End (E2E) Process

Agendas, Minutes, and Committee Documents managed in DMS are reflected in the Member App, ensuring



seamless access for committee members.

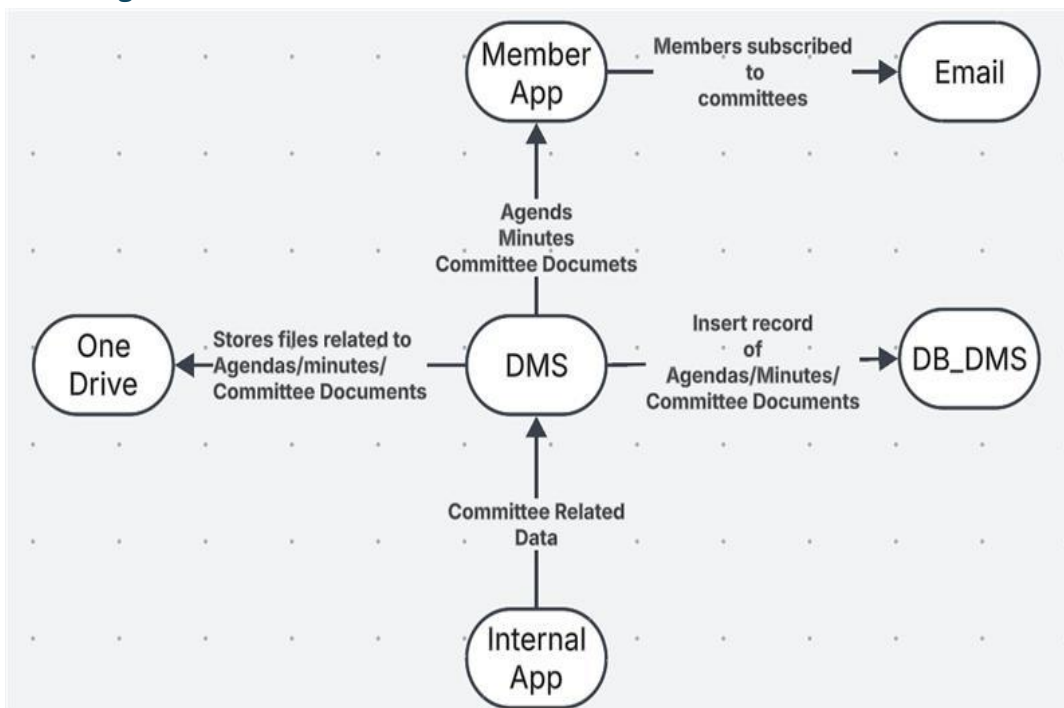
Members subscribed to the committee receive an **email notification** whenever changes are made.

Test cases being covered: Test cases being covered: [INT-1521](#), [5334](#), [5335](#), [5343](#), [INT-5488](#), [INT-5539](#)

Management Process:

- Upload – Documents sync to OneDrive, appear in Member App, and update in DB.
- Replace – Latest version updates in OneDrive, DB, and Member App.
- Delete – Documents are removed from OneDrive, Member App, and logs captured in DB.
- Active/Inactive– Status change reflects in Member App, with logs updated in DB.

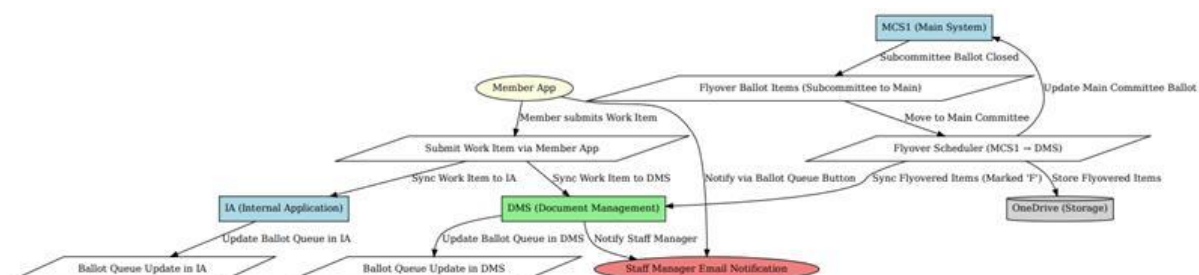
Flow Diagram:



Ballot Queue

The Ballot Queue in DMS tracks Flyovered Ballot Items and Work Items from the Member App. Flyovered items move from Subcommittee to Main Committee Ballot via MCS1 and a scheduler, marked with "F" in DMS. Work Items appear in DMS & IA, notifying the Staff Manager through email and ballot queue button in member app. Data is stored in OneDrive.

Test cases being covered: [INT-4058](#), [INT-5786](#)



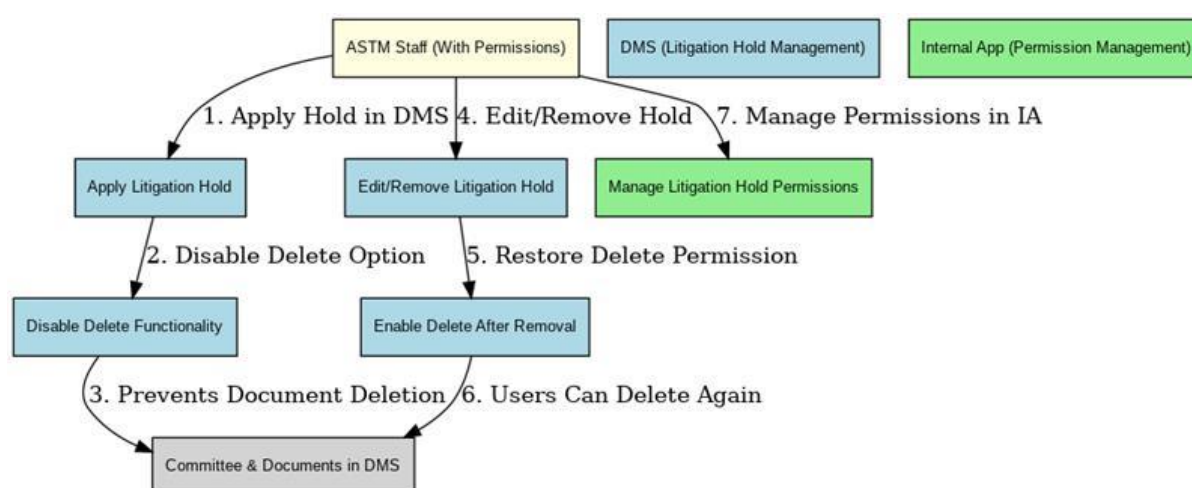


Litigation Hold End-to-End (E2E) Flow

Litigation Hold in DMS, managed solely by authorized ASTM Staff, automatically applies to all Subcommittees and Sections under a Main Committee, disables document deletion for all users, including Admins and Staff, until the issue is resolved, after which ASTM Staff can remove the hold, restoring delete permissions, while integration with other applications ensures permission settings in the Internal Application, enforcement in DMS, and no direct impact on the Member App.

Test cases being covered: [INT-6086](#)

Flow Diagram:



Collaboration Area Draft – End-to-End Flow

Draft Creation & Storage

- User creates a draft in Spec Builder.
- The draft is assigned a Collaboration ID and linked to a Committee & Work Item (if applicable).
- The document is stored in OneDrive, while metadata is stored in the DMS Database.

Document & Metadata in DMS

- DMS stores both the document and metadata, including:
 - Draft Name
 - Collaboration ID
 - Committee
 - Work Item Number (if applicable)
 - Modified & Creation Date
 - Business Metadata (JSON format: Group ID, Business Record ID, etc.)
- Metadata is logged in the DMS Database for tracking and reference.

Editing, Replace & Delete

- When a user updates the draft in Spec Builder:
 - The document in DMS and OneDrive is updated with a new version (replacing the old one).



- Metadata changes are synced and stored in the DMS Database.

Test cases being covered: [INT-6258](#)

Flow Diagram:

