UC-SSF-0101: Vessel Login

> ⚠ **Warning**
>
> As we are currently in the planning phase, please be aware that there may be changes to the use cases. Adjustments or revisions may occur as the project progresses.

1. Use Case Description

This use case describes **the process where a small-scale fisher logs their vessel** into the Small Scale Fisheries Application. This method ensures that only authorized fishers associated with specific vessels can access the application. Vessel login is crucial for tracking vessel positions, tracking fishing activities and ensuring compliance,

1.1. Goal

This detailed use case covers the steps involved in logging a vessel into the Small Scale Fisheries Application, including handling scenarios where users encounter issues or decide to cancel the process.

1.2. Pre-conditions

1. Fisher must have a compatible mobile IOS or Android to install the SSF application.
2. The fisher has a mobile device with the **application installed.**
3. The mobile device has a **functioning internet** connection and is equipped with **integrated GPS system.**
4. **To register any user,** owner of the vessel should **communicate to FMC for list of users** to be associated with the vessel.
5. The user has the vessel details required for login (e.g., **CFR**).

1.3. Post-conditions

1. The user is **successfully authenticated** and logged into the application.
2. The user's **session is active**, allowing access to the application's features.

1.4. Trigger Event(s)

1.4.1. Primary Actor:

1. User

1.4.2. Secondary Actor(s):
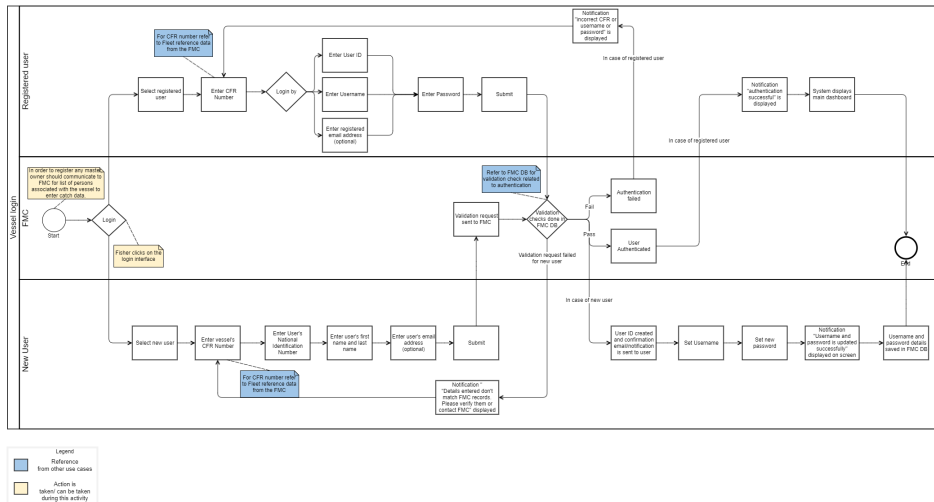
1. Application
2. FMC

2. Use Case Details

2.1. Activity Diagram

> ⓘ **In the activity diagram below:**
>
> References form other use cases are marked in "BLUE"
>
> Action is taken or can be taken during this activity are marked in "YELLOW"

Legend
Reference from other use cases
Action is taken/ can be taken during this activity

2.2. Primary Path

Step ID	Actor	Action / Typical behavior	Notes and References
PF-1		The process starts when details of all vessel users are submitted to the Fisheries Monitoring Center (FMC).	
PF-2	Fisher	The fisher clicks the login option to begin the process.	
PF-3	Application	The application **displays the login interface** and prompts the fisher to indicate whether they are a new or registered user.	**AF-1: Registered user**
PF-4	Fisher	The fisher selects **"new user"** to proceed with registration.	
PF-5	Application	The application requests the fisher to enter the vessel's **CFR number**.	Refers to **FLEET reference data** for verifying registered vessels.
PF-6	Fisher	The fisher enters the CFR number.	
PF-7	Application	The application prompts the fisher to provide their **national identification number** issued by the Member State (MS).	
PF-8	Fisher	Fisher enters the national identification number issued by the MS.	
PF-9	Application	Application asks to **enter the name** of the fisher.	
PF-10	Fisher	The fisher provides their name.	
PF-11	Application	The application prompts the fisher to enter their **date of birth,** displaying a calendar for easy selection.	
PF-12	Fisher	Fisher enters the date of birth.	
PF-13	Fisher	The fisher clicks "validate" to proceed.	
PF-14	Application	The application sends a validation request to the FMC to confirm the fisher's identity (cross-checking with the FMC database).	**Refer to FMC DB for validation check related to authentication** **EF-1: Validation failed for new user.**
PF-15	FMC	**FMC validates the request** and confirms that the user is authenticated.	
PF-16	Application	**Application creates the user ID** and sends a confirmation email with an activation link.	
PF-17	Application	The fisher clicks the link in the email, and the system prompts them to open it in a web browser.	
PF-18	Application	The application asks the fisher to **create a unique username.**	

PF-19	Fisher	Fisher enters their desired username.	
PF-20	Application	Application asks to **set new password** for login (providing guidelines for password creation.).	
PF-21	Fisher	Fisher enters new password and confirms it.	
PF-22	Application	Notification "**username and password is updated successfully**" is displayed and email is received by the fisher.	
PF-23	Application	The username and password details are securely saved in the FMC database for future authentication purposes. This completes the primary path.	

2.3. Alternative Path(s)

2.3.1 AF-1: Registered user

Step ID	Actor	Action	Notes and References
AF-A1		The entry point is PF-3 of the primary flow.	
AF-A2	Fisher	This alternative flow is executed if fisher is already a user and selects registered user.	
AF-A3	Application	Application ask to **enter CFR number**.	**Refer to FLEET reference data for registered vessels.**
AF-A4	Fisher	Fisher enters the CFR number.	
AF-A5	Application	Application ask the fisher to **enter username**.	
AF-A6	Fisher	Fisher enters the username.	
AF-A7	Application	Application asks to **enter password for login**.	
AF-A8	Fisher	Fisher enters password and clicks on validate.	
AF-A9	Application	The **validation request goes to FMC** and verifies the identity of the registered fisher..	**EF-2: Validation failed for registered user.**
AF-A10	FMC	FMC does the validation checks in DB, the details matches with registered user and the system authenticates it.	
AF-A11	Application	Notification of "**authentication successful**" is displayed on the screen.	
AF-A12	Application	Application prompts to display the main dashboard. This ends the alternative path.	

2.4. Exception Path(s)

2.4.1 EF-1: Validation failed for new user.

Step ID	Actor	Action	Notes and References
EF-A1		The entry point is PF-14 of the primary path.	
EF-A2	Application	This exception path is executed when FMC does the validation checks in DB, the **details does not matches with new user** and the **system fails authentication**.	
EF-A3	Application	The application displays an error message indicating "**input details mismatch**".	
EF-A4	Fisher	Fisher attempts to **enter the details again** and clicks on try again.	
EF-A5	Application	Then application returns to PF-5 of primary path and all the steps till PF-23 is followed. This ends the exception flow.	**Return to PF-5 of primary path.**

2.4.2 EF-2: Validation failed for registered user.

Step ID	Actor	Action	Notes and References
EF-A1		The entry point is AF-A9 of the alternate path.	
EF-A2	Fisher	This exception path is executed when FMC does the validation checks in DB, the details does not matches with registered user and the system fails authentication.	

EF-A3	Application	The application displays an error message indicating **incorrect username or password or incorrect CFR**.	
EF-A4	Fisher	Fisher attempts to log in again and clicks on try again.	
EF-A5	Application	Then application returns to AF-A3 of alternate path and all the steps till AF-A12 is followed. This ends the exception flow.	**Return to AF-A3 of alternate path.**

3. **Use Case Realisation**

> ⊘ **Warning**
>
> Under Progress

3.1 Data attributes

Column Name/Attributes	Type	Short Description	Notes	Comments

3.2 Data Model

3.3 Pseudocode

3.4 User Interface

4. **Impact and Risks**

4.1. Impact

4.2. Risks

5. **Test Cases**