

Introduction



Description

Solution for Open Land Administration (SOLA) Community Server (CS) is a web-application that hosts and maintains data collected in the field using the Open Tenure (OT) mobile application. It is an open source, developed by the Food and Agriculture Organization (FAO) and distributed free of charge under a “Modified BSD License”; It supports claims processing, dual printing maps and listings for public display, producing land parcel records, recording secondary changes to the already recorded land parcels claims and managing community areas.

SOLA Community server can be used as a stand-alone application, supporting initial, systematic or sporadic recording of information regarding land parcels and the legitimate tenure right holders or recording of secondary changes to the existing records; Open Tenure mobile application can be used solely in conjunction with SOLA Community server, using it for initialization and further uploading of collected claims. It is also possible to establish data exchange between Open Tenure and SOLA Registry or other official Land Information Systems (LIS), transferring data from a community server to a national level database, upon recognition of recorded rights.

Community
level



National
level



Other LIS

Detailed information can be found at FAO Website (<http://www.fao.org/tenure/activities/administration/recording-of-rights/software/en/>) and the source code repository (<https://github.com/SOLA-FAO/docs>).

Key features

- Fully open source, based on best practices and well-known platforms and tools.
- Multilingual – currently supports 10 languages (English, Arabic, French, Italian, Spanish, Khmer, Russian, Portuguese, Albanian, Vietnamese).
- Can be hosted in local environment or cloud.
- Supports Google Maps and any custom layers, sourced from map servers (e.g. GeoServer).
- Implements robust security model with clearly defined user roles.
- Bundles Web Admin module, allowing convenient management of various system settings.
- Integrates with JasperReports server, allowing for the addition of new reports without source code modifications.

- Contains a number of predefined reports for claims collection analysis.
- Implements workflows for claims processing and issuing legitimate tenure right certificates, including printing of public display lists and map.
- Applies simple post-registration transactions (e.g. legitimate tenure right transfer), allowing records maintenance after the first registration processes.
- Maintains full history of previous legitimate tenure rights.
- Allows configuration of dynamic forms – adding new data collection fields by the user.
- Provides capturing and editing land-related claims in the office.
- Applies claims uploading from the file.
- Maintains capturing community area boundaries in the office, reviewing, printing and approving them.
- Provides public access to the community map and collected records.
- Implements automatic email notifications of claim reorders and claimants if any change or action is made on their claims.

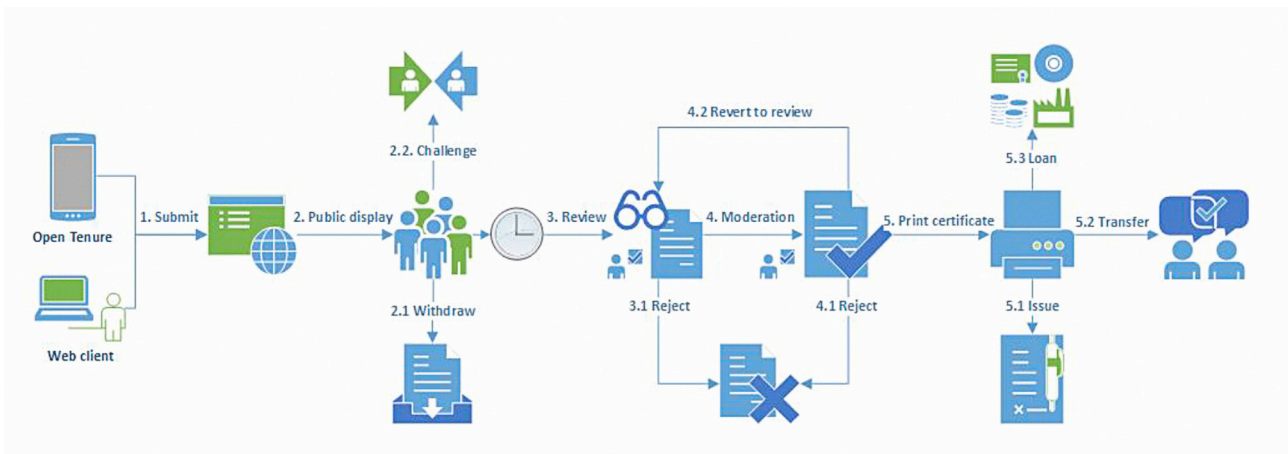
Requirements

Prerequisites

SOLA Community server should be accessible to Open Tenure mobile clients and external community users. In this regard, Open Tenure requires a reliable, dedicated server, with an uninterrupted power supply and Internet access. A good choice would be cloud hosting, but in some cases because of lack of financing or unreliable Internet connection, it might be a local server, connected to a Wi-Fi network, giving access to mobile devices.

Detailed system requirements and installation procedures can be found in the SOLA Community Server quick reference guide.

Claim lifecycle

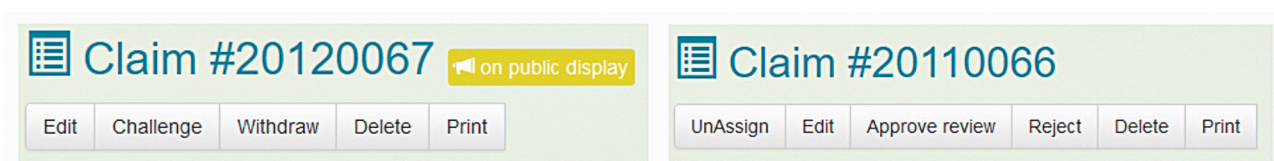


Each claim goes through the following workflow steps, maintained by SOLA Community Server:

- 1 Claim is first captured in the field or created in the office, submitted to SOLA Community Server.
- 2 Claim then enters public display phase, available for public review. It can be edited at this stage by claim **Recorder** or **Reviewer** role.
 - 2.1 Claimant can ask for a withdrawal.
 - 2.2 Others can challenge this claim (dispute).
- 3 Once public display has expired, claim can be further reviewed by the reviewer role, it must be self-assigned first. Reviewer can edit the claim and if all is well, Reviewer then approves review phase and signs out of the claim.
 - 3.1 Claim can be rejected based on a variety of reasons.


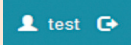
- 4 Claim is available for moderation, which is performed by the Moderator role and must be self-assigned first. The Moderator can perform further edits if required. The Moderator then makes final approval, registering a claim which is then recognized by the community.
 - 4.1 Claim can be rejected for various reasons.
 - 4.2 It also can be reverted to the reviewing stage for additional corrections.
- 5 After moderation approval, claim certificate can be printed.
 - 5.1 Additionally, a claim can be issued, which means a scanned copy of the legitimate tenure rights certificate attached to the claim and printed version is handed over to the claimant.
 - 5.2 Over time, the claim can be transferred as the result of a change in its legitimate tenure rights.
 - 5.3 A loan can be registered as well.

All actions, over the existing claims, mentioned in the workflow are triggered from the claim form, using buttons on the toolbar. Depending on the user role and claim status, this toolbar will display accordingly. Below are examples of the toolbar of 2 different claims. Claim #20120067 is on public display and Claim #20110066 is at the review stage, assigned to one of the Reviewer users.



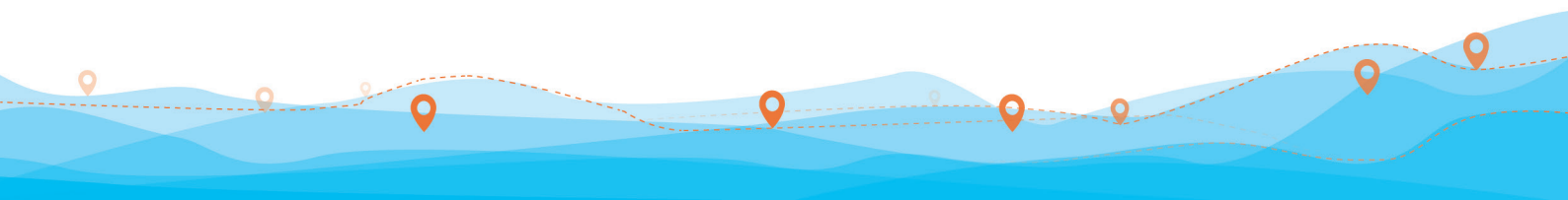
Structure

The following table describes the main pages of the application.

Name	Description	How to access
Home	Home page with general information about SOLA Community server and links to registration and login page.	Opens by default when accessing the Community server. Can be also accessed from main menu " Home ".
Registration	Allows self-registration of new users.	Available on the home page for unauthenticated users, from the main menu " Registration > New registration ".
Login	Login page for user authentication.	Link is available on the home page in the description text or page header on the right side, next to the language bar. 
Logout	Logs out current user and redirects to the login page.	Logout is an icon, located on all pages in the header on the right side, next to the user name. 
Dashboard	Main page, listing the following claims in different tabs: <ul style="list-style-type: none"> > My claims (created by user). > Assigned to me (assigned to the current user). > For review (claims available for reviewing). > For moderation (claims available for moderation). Claims can be searched and ordered. Availability of listed tabs depends on the user's role(s).	Dashboard is the default page after login. It can be also accessed from the main menu " Dashboard ".

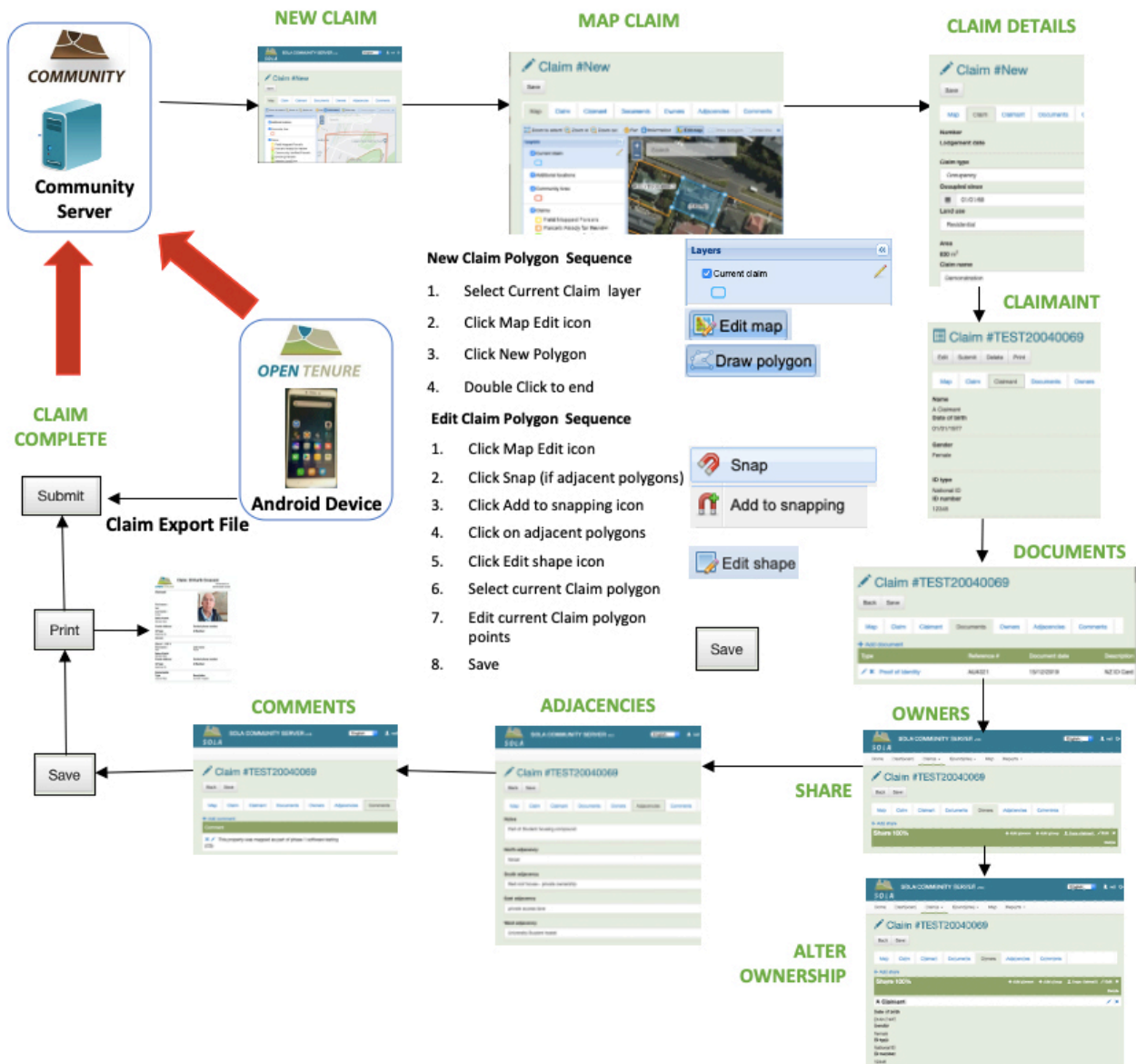
Name	Description	How to access
Claim view	Claim page, displaying full details of a claim and containing various action buttons to process it. Action button's availability depends on claim status and user role(s).	Claim viewing form can be accessed by clicking the claim number in the list of claims on the dashboard page or claim search results.
Claim search	Allows claims searching using various criteria.	Main menu " Claims > Search ".
New claim	Allows creation of a new claim, if the user has appropriate role(s).	Main menu " Claims > New ".
Claim upload	Allows uploading a new claim from the archive file. User should have appropriate role(s).	Main menu " Claims > Upload ".
Public display map	Allows generation of a public display map, showing captured claims.	Main menu " Claims > Public display (Map) ".
Public display list	Allows generation of legitimate tenure right holders list for public display events.	Main menu " Claims > Public display (owners¹) ".
Community area list	Contains a list of community areas.	Main menu " Community areas > List ".
View community area	Displays full details of community area, including its boundary.	Community area name should be clicked from the community area list.
New community area	Allows creation of a new community area.	Main menu " Community areas > New ".
Map	Displays interactive community map, with all the claims on it, allowing users navigate it, search on the map and check quick information on the claim by using information tool.	Main menu " Map ".
Reports	Contains various reports, published on the Reports server. Default ones are: <ul style="list-style-type: none"> > Claims by gender > Claims by land use > Claims by status > Claims by type > Claims list by claimant > Claims list by number > Claims summary 	Main menu " Reports ".
Admin	Admin is a separate module, bundled with SOLA Community Map to manage users, map layers, data dictionaries and other system settings.	Admin module should be accessed by adding "admin" to the URL of SOLA Community server. For instance: http://my-server:8080/admin

¹ Note that wherever the label Owner is used it is referred to legitimate tenure right holder.



Capture new claim

The following diagram shows general steps in creating a new claim using the SOLA Community server interface.



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