

Land and Poverty Conference 2016

Scaling up Responsible Land Governance

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The Social Tenure Domain Model STDM-Online

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The Global Land Tool Network (GLTN)

The Global Land Tool Network (GLTN) is an alliance global regional and national partners.

- The main objective is to contribute to poverty alleviation through land reform, improved land management and security of tenure.
- UN-Habitat through GLTN works with partners including civil society organizations, finance institutions, research and training institutions, donors and professional bodies.

Most developing countries use conventional land administration systems which cover less than 30 per cent of the country, leaving up to 70 per cent of citizens looking to informal and/ or customary approaches for their tenure security.

STDM - The Social Tenure Domain Model

The Social Tenure Domain Model (STDM) is a pro poor land information tool following GLTN's core values and principles:

- Pro poor;
- Equitable;
- Sustainable;
- Affordable;
- Systematically large scale /scalable; and,
- Gender-sensitive

While taking into consideration:

- Good governance;
- Subsidiarity; and,
- The Continuum of Land Rights.

STDM - The Social Tenure Domain Model

The land information tool STDM focuses on three facets:

1. STDM as a Concept
2. STDM as a Model
3. STDM as an Information Tool



The STDM Concept

The concept of the Social Tenure Domain Model is to bridge this gap by providing a standard for representing 'people – land' relationships independent of the level of formality, legality and technical accuracy.

Bridging the Gap:

A Complimentary approach to customary and informal tenure.

The STDM Model

STDM is a 'specialization' of the ISO-approved Land Administration Domain Model (LADM). LADM development took place in parallel of the STDM concept and model development.

Bridging the Gap:

Any form of right, responsibility or restriction in a formal system is considered as a social tenure relationship in STDM.

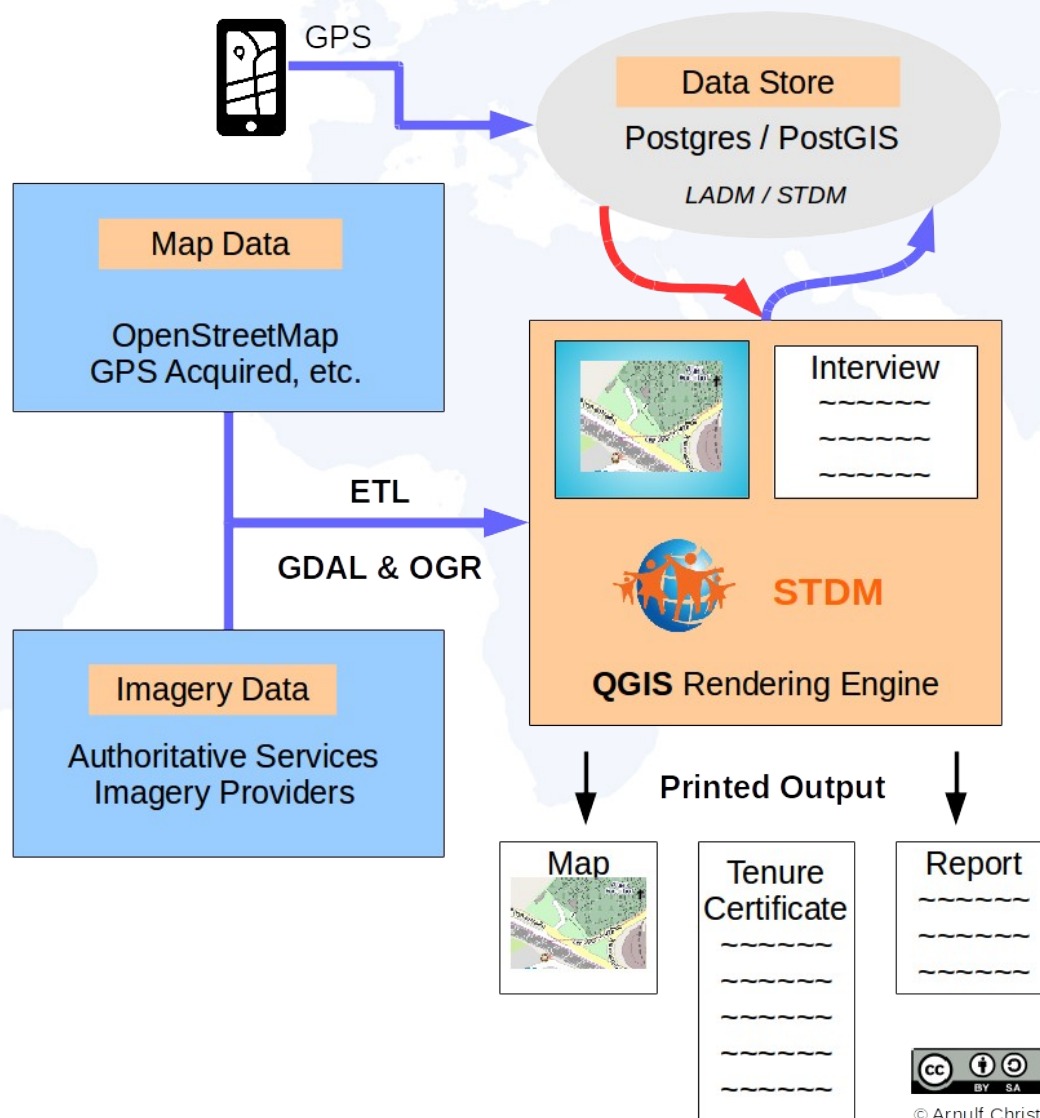
The Information Tool

STDM has been implemented based on proven Open Source software maintained by a broad community, business investment and the non-profit foundational and legal body of OSGeo.

- Postgres
- PostGIS
- QGIS
- Geraldo Reports
- ...and many more

STDM Desktop

STDM has been implemented based on proven Open Source software maintained by a broad community, business investment and the non-profit foundational and legal body of OSGeo.



Future Development

Future development of STDM is to add a file based option for the data store (GeoPackage) and an Online service component.

The work to get there entails three main aspects:

- Adjust data store and data model
- Add security and privacy layers
- Add online components

Data and Data Model

The data model has to be sturdy and simple and easy to import and export:

- Keep aligned with LADM
- Support [OpenStreetMap](#)
- Open Data Licenses

Going Online...

Security and Privacy

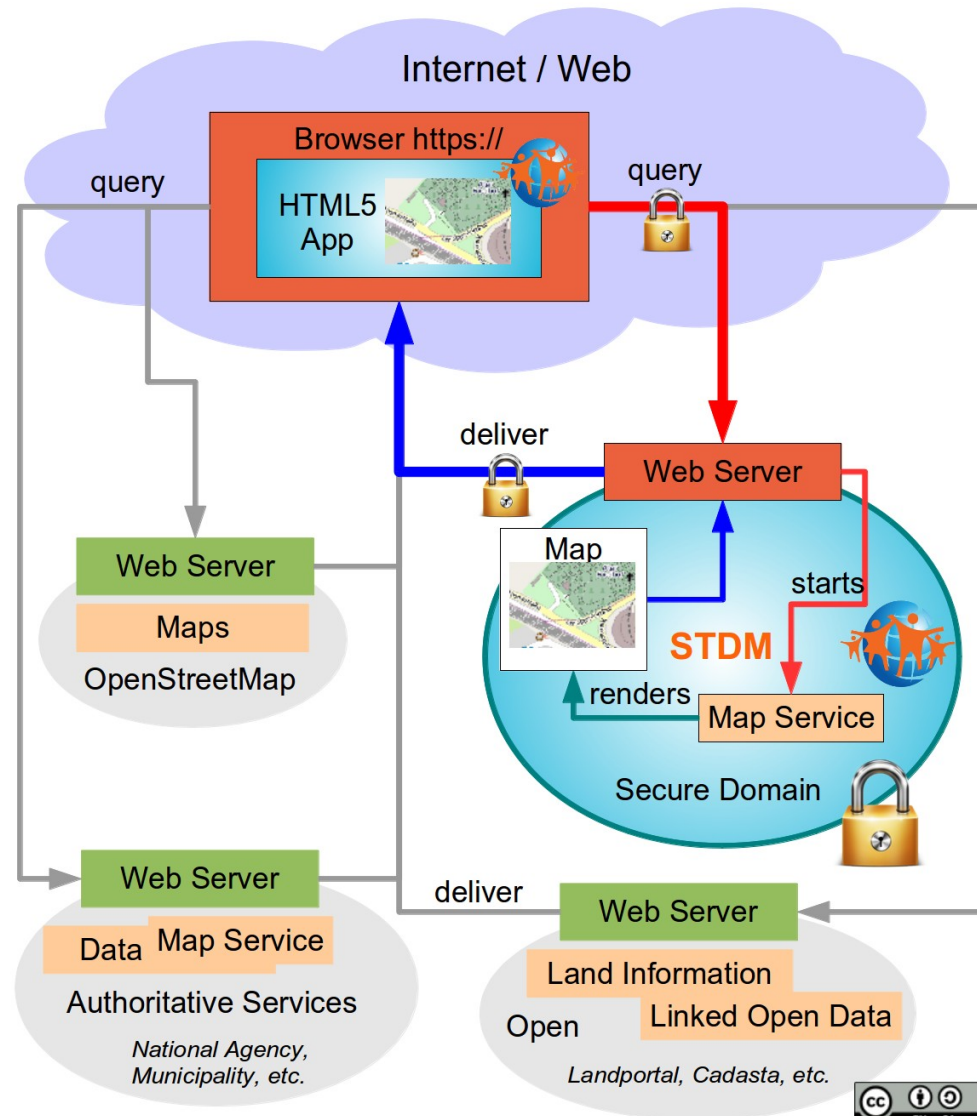
Exposing the data on the Web requires a highly secure environment, transparent policies and good governance.

- Secure Architecture
- Open Governance
- Transparent Terms of Service

Going Online...

Online Architecture

The code system is not changed. Connectivity is adapted to suit the requirements of an Online system. Web service software and security components are added as needed.



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Software and Standards

The system is based on Open Source Software components including (besides others):

- Postgres / PostGIS
- QGIS + MapServer
- + OpenLayers
- + Apache, etc.

Open Standards help to keep the infrastructure open, including (besides others)

- OGC SFS (Data format)
- ISO LADM (Data Content)
- OGC WMS (map content)
- OGC GeoPackage (transport)

Open, Secure and Sustainable

Online interfaces

Use state of the art technology, minimize web traffic, support older hardware and any platform.

- Record Household Information
- Mapping components
- Report Generation
- Anonymized Open Data Server

Going Online... (Prototype launch in 2016)

Conclusions

The Open Source development model has proven to be the right choice for STDM. Standards help to build a sustainable and open system which is:

- Easy to Use
- with Powerful Functionality
- Extendable and Customizable
- Interoperable and Standardized
- Transparent and Secure

Community Adoption is in Progress

Welcome to Germany - Building Bridges

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2016

24th - 26th AUGUST

**The global OSGeo conference on
Open Source Geospatial Software**

<http://2016.foss4g.org>

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