
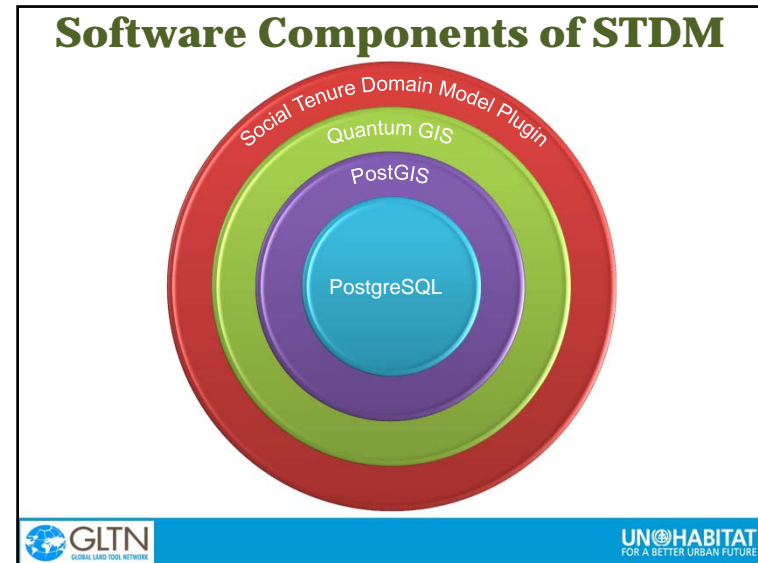



STDM Technical Context and Roadmap

Innovations in Land Administration Workshop
9th July 2013


Approach to System Modeling

- Based on FOSS - Free and Open Source Software
- STDM represents basic concepts for software development
- Client application needs tools to support creation and maintenance of spatial entities out-of-the-box
- Additional functionality required to keep track of historical versions of land parcels
- Application should provide basic data entity management as well as document digitization and georeferencing



Open Source Software

Component	Software
Relational Database Management System	PostgreSQL
Spatial Data Engine	PostGIS
Desktop GIS Framework	Quantum GIS v1.8
Application and UI Framework	PyQt
Programming Language	Python
Operating System Test bed	Windows XP, Windows 7, Windows 8



Core Functionality

- Data from a variety of sources can be imported into the system
- Vectorise raster data
- Record, store and manage all types of source documents
- Record info on data collectors
- Link spatial and administrative data
- Record household profiles
- Integration of personal unique identifiers and scanned images
- Analysis through reporting capabilities



Roadmap

- Provide basic workflow and event-driven tools
- Provide a web-based version of STDM
- Release source code to the general public for testing, enhancing, customization, etc.
- Build an active community of STDM users and contributors in order to provide a collaborative platform for exchange of ideas thereby promote its widespread use
- Identify a suitable sustainability framework
- Customize the model for use in different application areas – land held under customary/group rights, natural resource management



Priorities for Development

- Manage history – introduce time stamps for all objects. This allows to “look back” in time
- Incorporate more advanced auditing and security features
- Customize STDM for post-conflict/disaster and land/property taxation scenarios
- Further simplify the documentation – user, extension point and API documentation
- Integration with GeoTools



Proprietary vs. Open Source Development Models

