Using ArcGIS Server for National Property Information System

Shota Chachkhunashvili (National Agency of Public Registry, Georgia)
Mikheil Tsiklauri (Geographic, Georgia)

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About us

National Agency of Public Registry, Georgia

Geographic LTD, International Distributor of ESRI in Georgia
Database Server – Oracle10g2r

Operating System – Windows 2003 Server

ArcGIS Server 9.2 Enterprise Standard – 1 license

Client – ArcEditor 9.2 - 31 licenses
ArcView 9.2 - 29 licenses
Web Browsers
Custom Application
System Design

Tbilisi Office
- Analytics
  - Web Browser
- Registrations
  - Web Browser
- Service ...
  - ArcView
- Operators
  - ArcEditor

Central Office
- Web Server
  - ArcGIS Server
  - SOM SOC
- Oracle SDE
- Oracle

District Office
- Registrations, Operators, Service

District Office
- Registrations, Operators, Service

District Office
- Registrations, Operators, Service

Web browser

Internet
Client Applications and Software

Registration Client Application – Delphi, Web Service

Cadastral Operator Group – ArcEditor, VBA Scripts, ArcObjects

Customer Service Application – ArcView, VBA Scripts, ArcObjects

Registration of Private Property

Step 1. Customer applies necessary documents

Step 2. Operator registers the application through the Registration Application and registration process starts
Registration of Private Property

Step 3. Cadastral operator group receives spatial data of target property object (Shp Files)

Step 4. Cadastral operator group inputs spatial data into SDE geodatabase
Step 5. VBA Scripts automatically gave to the parcel unique code and the status and generate cadastral map in pdf format

Step 6. Cadastral operator group uploads cadastral map to the database using custom web application
Registration of Private Property

Step 6. Registrar begins registration process using registration software and all necessary data.

Step 7. Registrar makes decision and gives status to the property. The status of the corresponding parcel will be automatically updated.
Registration of Private Property

Step 8. If documents fulfill all requirements, the registered parcel will appear in the web mapping application through the internet.

If any of the requirements are not fulfilled, registration process will start from the beginning.
During the registration process the customer can observe the status of his application on the web application.
New Application
Registration Application

Cadastral codes/address module
Registration Application

Cadastral Map Module
Client Application for Cadastral Operator Group

ArcGIS Desktop – ArcEditor License
Custom VBA scripts using ArcObject, easier working with orthophotos
Client Application for Cadastral Operator Group

Geodatabase History
Client Application for Service Operator Group

ArcGIS Desktop – ArcView License

Custom VBA scripts using ArcObject

Automatic Generation of Custom Cadastral Maps and Plans
Web mapping application

Tbilisi cadastral map with standard tools: Search, ZoomIn, ZoomOut, Pan, Identify, Measure, Back, MapView, Navigation.

public.reestri.gov.ge/cadmap
Web mapping application

Tbilisi cadastral map: Search system – Parcels, Streets, Buildings by address and parcel code

public.reestri.gov.ge/cadmap
Web mapping application

Tbilisi cadastral map: legal documents – cadastral extract and map

public.reestri.gov.ge/cadmap
Cadastral extract

Tbilisi cadastral map: Direct download legal documents via the internet

public.reestri.gov.ge/cadmap
Web mapping application

Tbilisi cadastral map:
1. Initial Authorization
2. Authorized User Name and Password check

public.reestri.gov.ge/cadmap
Web mapping application

Tbilisi cadastral map:
Buy spatial data through the web payment

public.reestri.gov.ge/cadmap
Tbilisi cadastral map: Web payment

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info.ipay@ipay.ge

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public.reestri.gov.ge/cadmap
Tbilisi cadastral map: data download

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public.reestri.gov.ge/cadmap
Current works:

Client Application for Cadastral Group
  – Will be developed using ArcEngine
  – Fully automated functionalities
  – High level of security
Thank you for your attention