New Spatial Technology for Cadastral Systems

Brent Jones, PE, PLS
bjones@esri.com

Elements of a Computing Platform
Trends in spatial technology

- Computation Infrastructure
- Purpose-built services
- Standards-based
- Device Independent
- Content
  - Ubiquitous – Imagery, basemaps, services, etc.
  - Specific
- Secure
- SDKs, Apps, Interfaces
- Portals
  - Access, Updating, Sharing

Flexible, Open, Easy . . .
Platforms Evolve
A New Architecture

New platforms, new opportunities.....

GIS has become a Platform
Expansion of GIS, not replacement.....

Driven by web services.
Modern Platform Deployment
Configure before code….

Enabling platform technology to speed deployment and lower cost….
A web service is a method of communication between two electronic devices over a network.

It is a software function provided at a network address over the web with the service always on.
Device Independency
Apps - Changing the way we think about computing

Rich Functionality
Viewing
Editing
Field Data Collection
One Map

Windows
iOS
Android

GIS

. . . Making Land Information Accessible Everywhere – Disconnected……

Collecting Data in the Platform
Add information on tenure....

Any device
Works disconnected

Land claims: Nadege
First name
Nadege
Last name
Lesmithe
Cell number
999-555-1211
Date of birth
4/4/65, 11:00 PM
Gender
Female
Marital status
Widowed
Gov’t ID
H121215

Open Maps and data models......
Managing Data in the Platform

On your phone, on your desktop, on the web....

Global Basemaps and Data

Normalized Commercial and Government Sources

Maps and Feature Services

. . . Providing a Foundation for Your Work
This Platform Integrates All Types of Information

Web Maps Normalize The Information . . .
. . . And Make It Accessible Widely

GeoPortals

Reliable Scalable Secure Hosted
Security, Trust, Privacy
New capabilities to support new activities...

- GeoTriggers
- Device Authentication
- Server Authentication
- ISP
- Time
- Metadata

Land Information Systems
GIS is the platform of land systems worldwide

- Tax Mapping
- Property Valuation
- Integrated Land Management
- Field Data Collection
- Transaction Analysis
- Resource Leases
- Address Systems
- National Data Portal
GIS is the Platform for Land Administration
A Comprehensive, Secure, Technology Platform

Apps & Applications
- Web
- Devices
- Desktop

Infrastructure
- Online
- Server

Content & Services

Cadastre
Planning
Valuation
Use
Development
Management

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