



OnMap – Teranet's Parcel Modernization

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Teranet - Organization Overview

- Provider of Ontario's online property search and registration.
- Developed, own and operate the Ontario Electronic Land Registration System
- Own and operates The Property Registry in Manitoba
- **Esri user since...2010**

What is OnMap?

- **Facilitates Map Maintenance**
- **Manages work load**
- **Publishes data to other systems**

Why Modernize?

- **Old System Limits**
- **Old Data Model**
- **Modern Technology**
- **Data Security**
- **Market Drivers**

Needs of Parcel Mapping Users

Consistent and complete coverage across jurisdiction (local, regional, provincial, inter-provincial)

Currency – updates (changes only) as they occur

Content that reflects their business needs

Appropriate (not maximum) spatial accuracy

Referential Integrity

Easy, simple and flexible accessibility and usage (licensing and technical)

Minimal/predictable “movement” due to spatial adjustments

Simple, realistic and cost-effective licensing

Integrated life cycle approach

How?

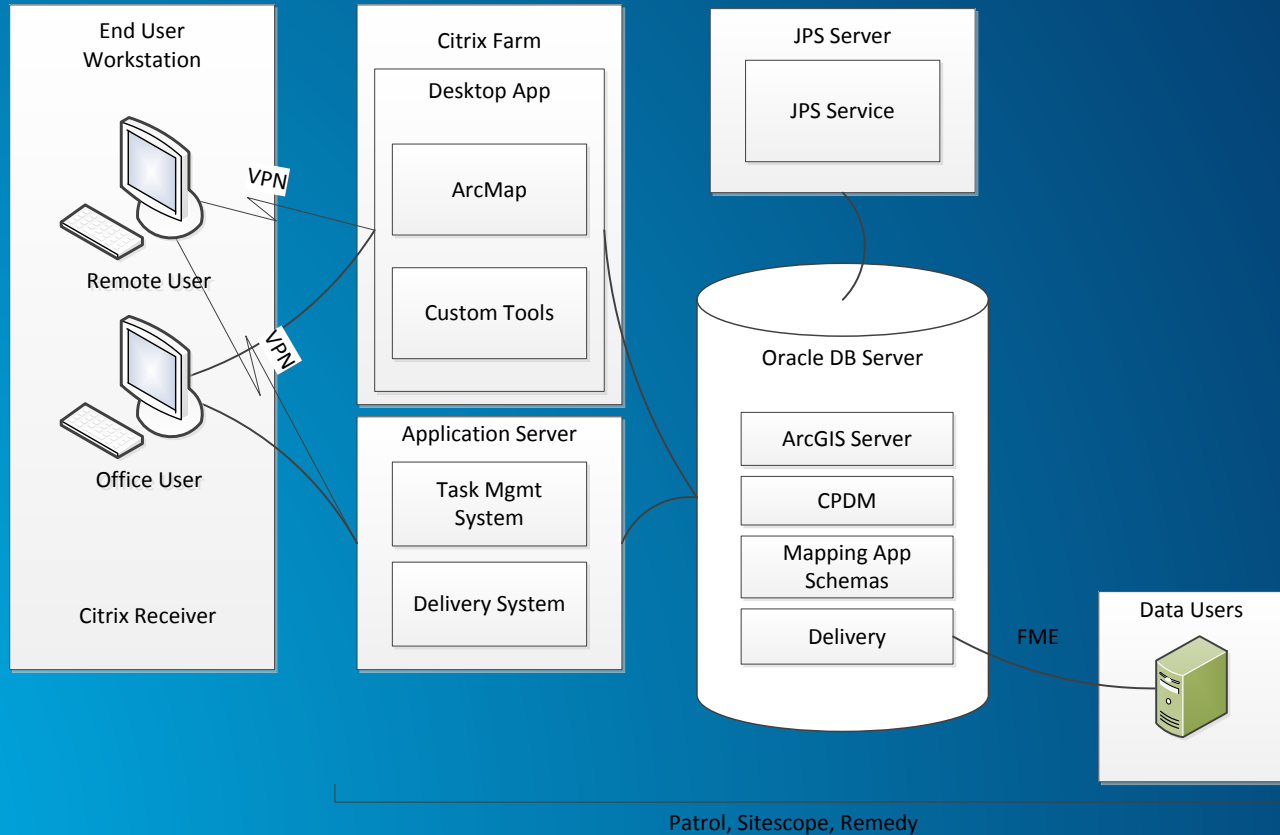
- **Leveraged prior relationship with ESRI**
- **Market Assessment**
- **Systems Development Life Cycle (SDLC)**
 - **Requirements Gathering**
 - **System Design**
 - **Development**
 - **Testing**
 - **Deployment**
- **Change Management Process**

How?

- **Training**
 - **Map Maintenance**
 - **Information Services**
 - **Developers**

- **Workflows**
 - **Champions involvement**
 - **Hands-on, real world scenarios**
 - **Streamlined with Parcel Editor toolset**

What?



What?

Canadian Parcel Data Model (CPDM)

Standard Parcel Model for Canada

- **Standard parcel editing model**
- **Standard parcel publishing model**

Leverages LGIM parcel model

- **“Canadian-izes” survey legal descriptions**
- **Optional parcel dimension annotation**

First implementation in Oxford County

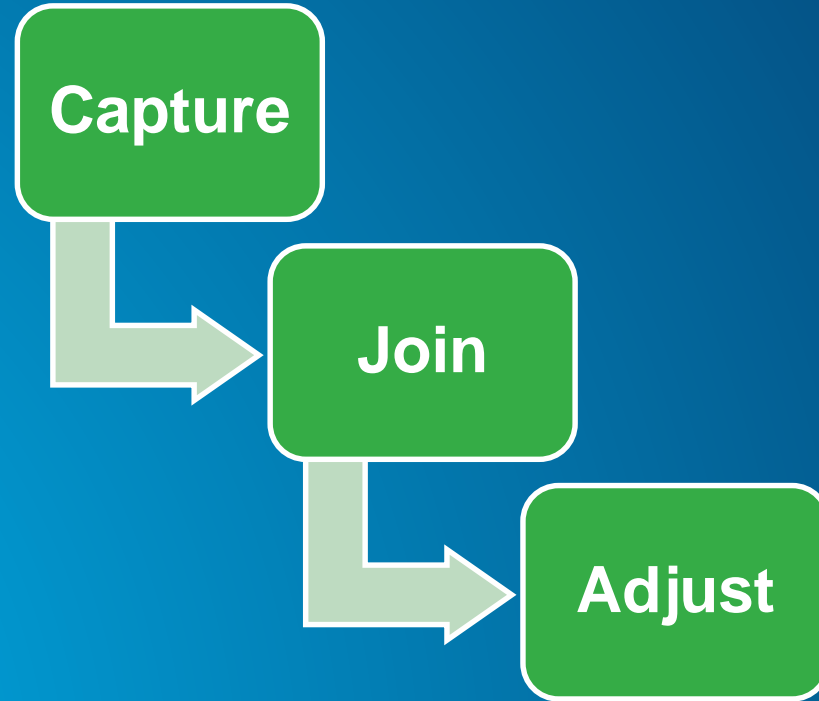
- **Survey, ownership, assessment and easement parcels**
- **Condominium units as spatial entities**
- **Survey plan image mosaic**

Conventional Update Process

- Paper survey plan
- COGO and CAD editing
- Issues
 - Incomplete information
 - Time consuming and error prone
 - Large shift requires warping or remapping
 - New (better) plan often warped to (worse) fabric
 - Source information discarded after input



Esri Parcel Mapping Approach



Parcel Fabric Update Process

- **Capture**

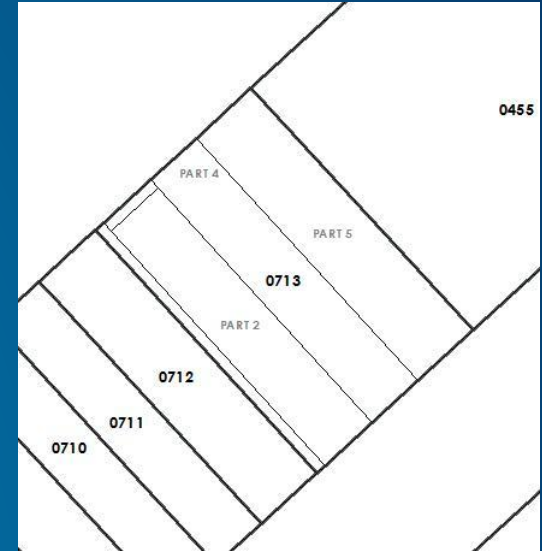
- Capture the survey information (COGO)
- All plan information is captured and retained (parcel descriptions, plan bearings and distances, control, confidence, source)
- Can use digital plan submission (CAD)

- **Join**

- Connect common points into the fabric
- No need to make final decisions on the placement of the parcel

- **Adjust**

- Fabric can be readjusted from source (Lease Squares Adjustment)
- Computed confidence level



Future?

- Early Days
- Data Intelligence  New Product Possibilities
- Standardized, robust platform  Advanced Capabilities

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