



Esri Forestry GIS Solutions Conference

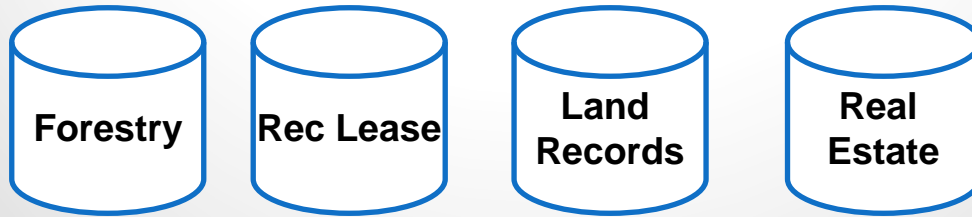
Hosted by the Esri Forestry Group | May 1–3, 2012

Replication to Create and Maintain a Centralized Data Warehouse

Duane Anderson, Plum Creek Timber



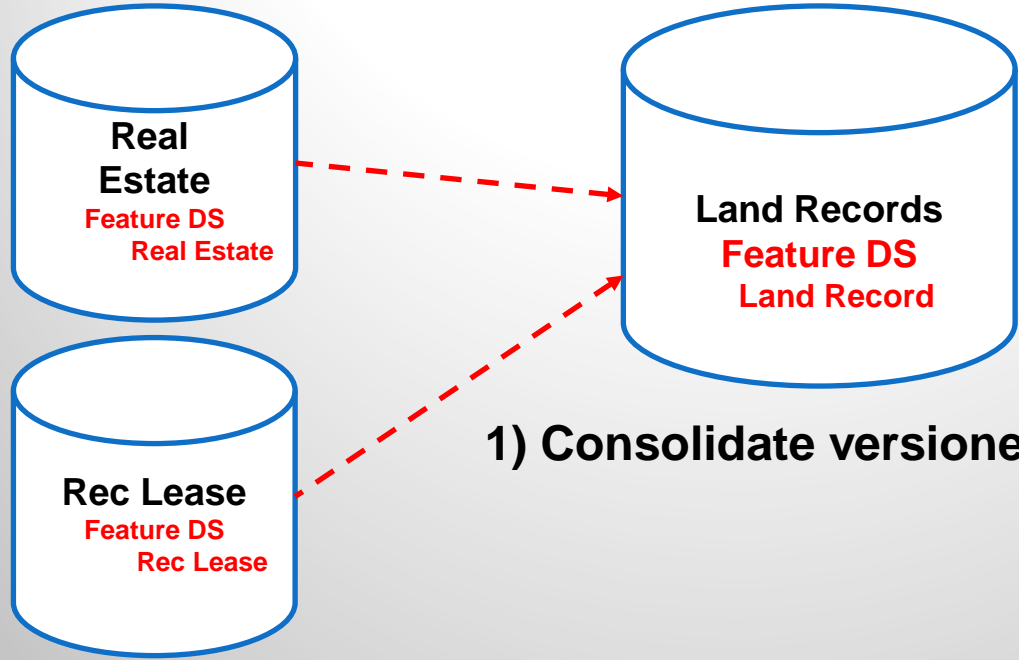
The Technical Problem – Multiple stand-alone systems for various business sectors



- Stand-alone systems ‘transactional’
- Stand alone systems very dynamic
- Spatial data managed in multiple places

The Business Opportunity – Increase data access, accelerate decision-making, and reduce data administration costs

The Solution part 1 – Consolidate spatial data mgmt.



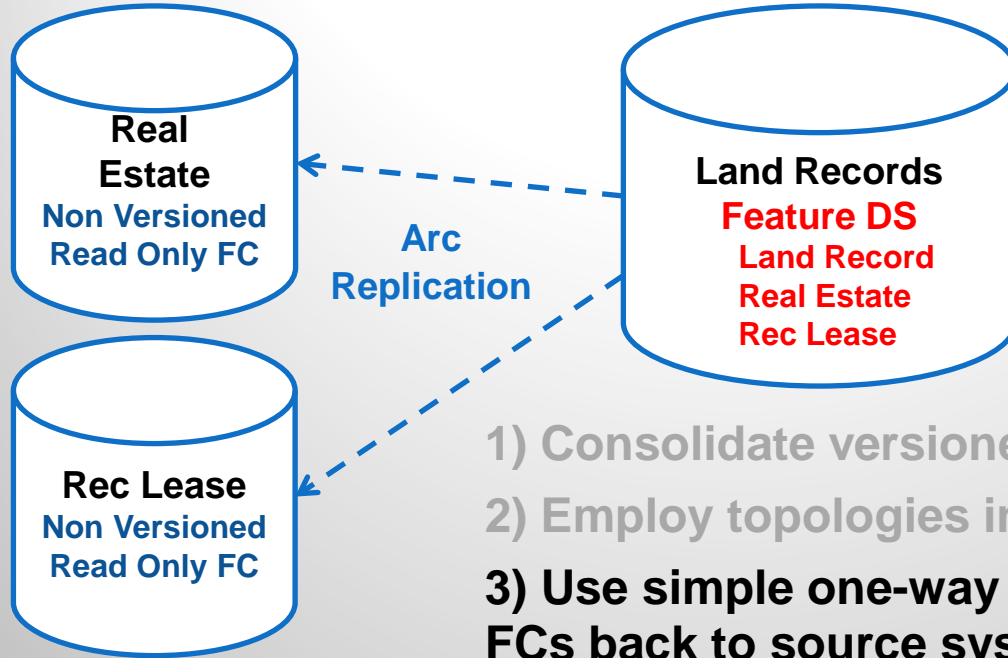
1) Consolidate versioned spatial data

The Solution part 1 – Consolidate spatial data mgmt.



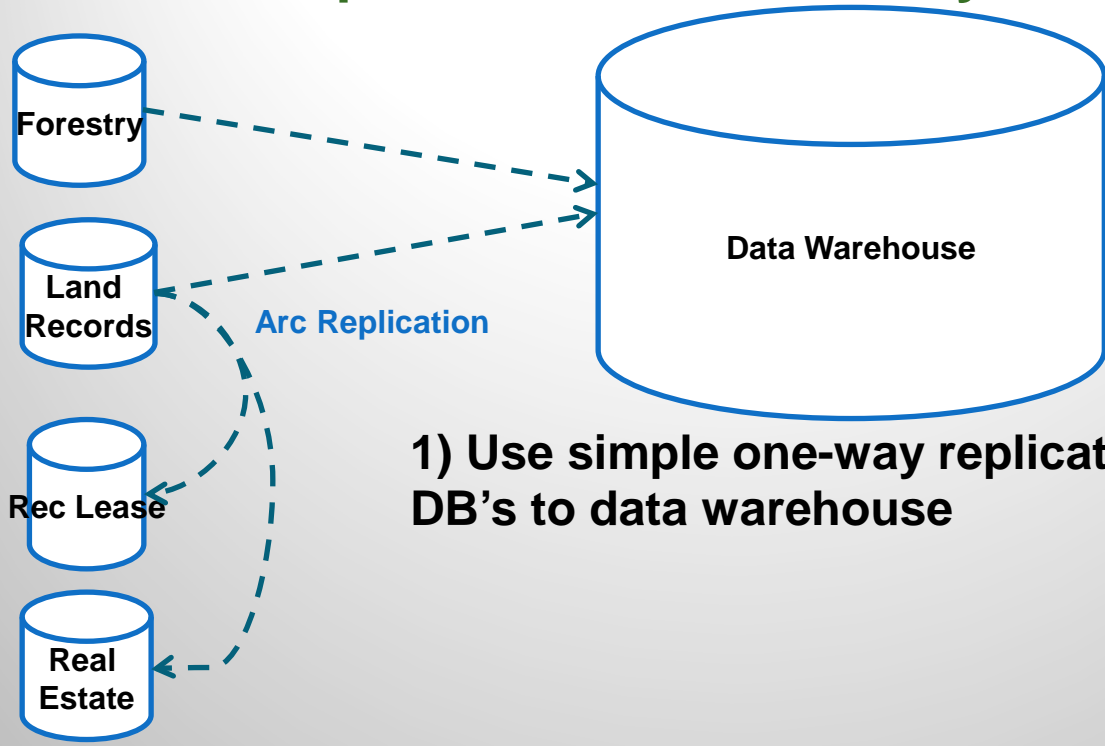
- 1) Consolidate versioned spatial data
- 2) Employ topologies in managed GDB

The Solution part 1 – Consolidate spatial data mgmt.



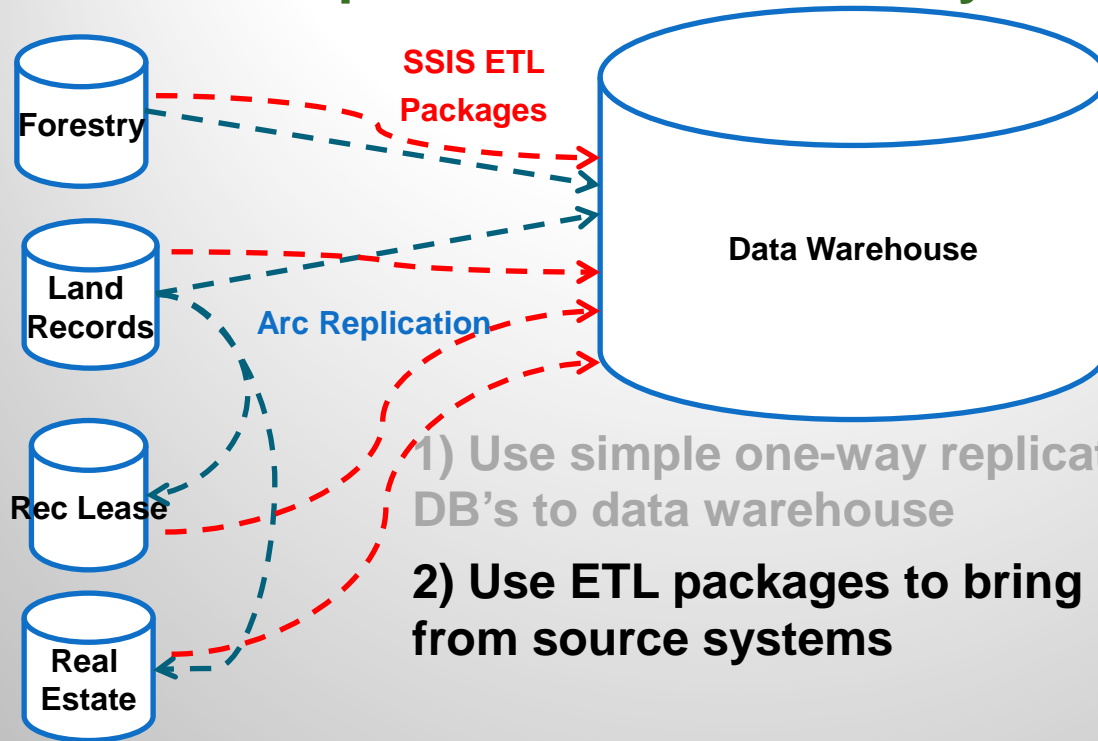
- 1) Consolidate versioned spatial data
- 2) Employ topologies in managed GDB
- 3) Use simple one-way replication to copy FCs back to source systems**

The Solution part 2 – Build read-only data warehouse



1) Use simple one-way replication from source DB's to data warehouse

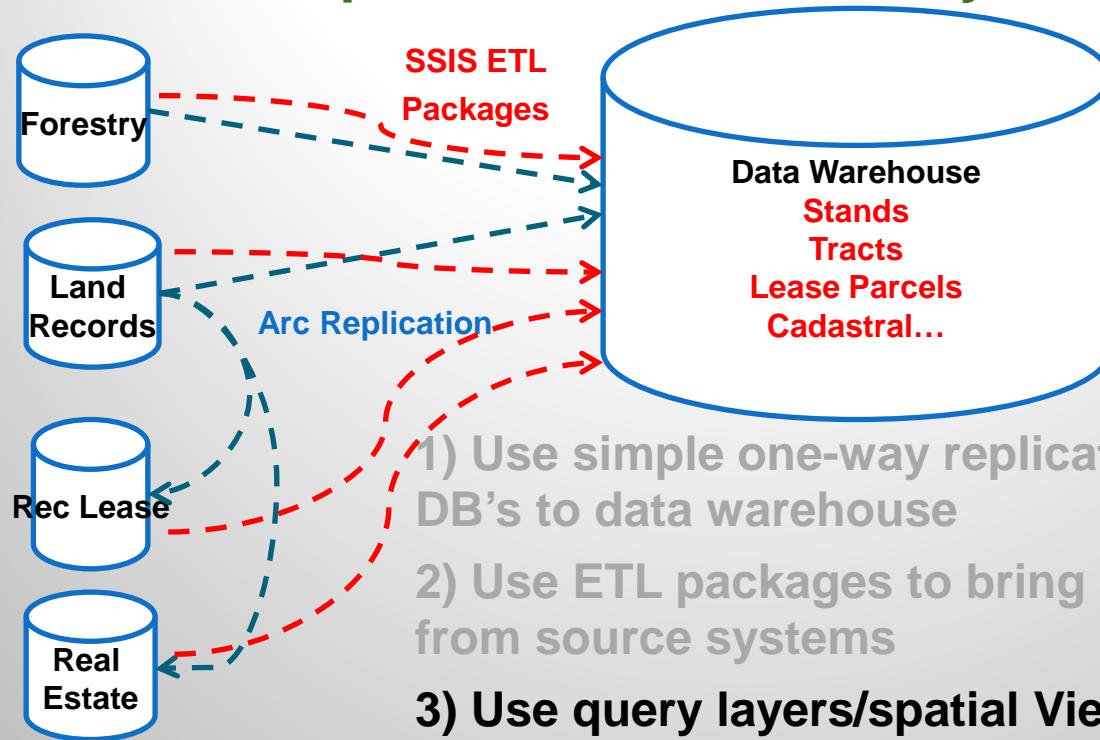
The Solution part 2 – Build read-only data warehouse



1) Use simple one-way replication from source DB's to data warehouse

2) Use ETL packages to bring in attribute data from source systems

The Solution part 2 – Build read-only data warehouse

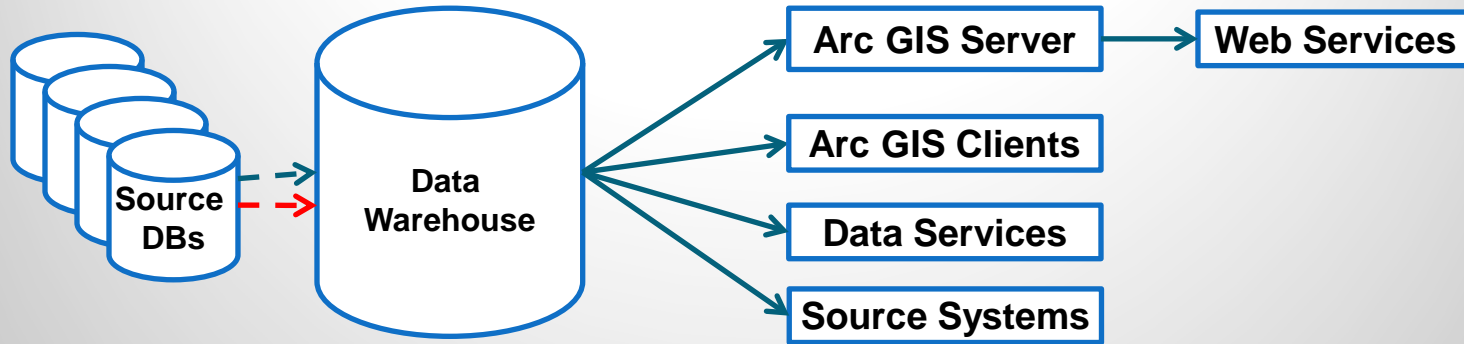


1) Use simple one-way replication from source DB's to data warehouse

2) Use ETL packages to bring in attribute data from source systems

3) Use query layers/spatial Views to build FC views using source FC and business tables

The Solution part 2 – Build read-only data warehouse



- Extensive data integration possible, especially using GIS
- ETL processes summarize data for high performance
- Daily ‘snapshot’ of data is persistent during business day
- One source of ‘the truth’ for all clients
- Spatial data managed collectively where possible

A topographic map showing green and yellow contour lines, with a small '5074' elevation marker visible.

Replication to Create and Maintain a Centralized Data Warehouse

Duane Anderson, Manager, GIS Services

Plum Creek Timber

Columbia Falls, MT

duane.anderson@plumcreek.com



esri