Managing your Distributed Data

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Overview

Why Distribute Data

Geodatabase Replication

Sync Engine (Offline Editing for Mobile Apps)
Why Distribute Data

Production GDB

Central hub
- Contractor
- Field work
- Publish to web

Replica tree

National

State

County
Geodatabase Replication Overview

- Distribute data across 2 or more geodatabases
- Replica Pair
- Geodatabases are edited independently
- Synchronize edits
Three types of replication

- **Two-way**
  - PARENT
  - CHILD
  - Sync both directions

- **One-way**
  - PARENT
  - CHILD
  - Sync one direction

- **Checkout/check-in**
  - PARENT
  - CHILD
  - Checkout once
  - Check-in once
Replication Demo
Schema Changes

1. Compare schemas
2. Export changes
3. Import changes
Disconnected replication

1. Edit made to sender

2. Data change message exported and sent to receiver

3. Data change message imported to receiver

4. Export acknowledgment message and send to sender

5. Import acknowledgment message

Data sender

Data receiver
How does a geodata service work?
Replication using a Geodata Service Demo
Webmaps the user has permissions to

- Toggle between all maps and maps saved to your device
- Cloud with down arrow indicates web map is offline capable
- Cloud with arrows going up and down indicate map is downloaded to device
- Cloud with a value in red indicates edits have been made and are available for syncing