Feature Service Syncing with Named Branch Versions

Gary MacDougall

2021 ESRI DEVELOPER SUMMIT

Overview

- **Discuss syncing with named branch versions**

- **Demo**
  - **Data preparation and publishing**
  - **Deploying and syncing with offline mobile editors**
  - **Scripts for managing replica versions**
  - **Help Resources**

Feature Service Syncing with Named Branch Versions

Feature Service Syncing with Named Branch Versions

- **New in ArcGIS Enterprise 10.8.1 / ArcGIS Pro 2.6**

- **Builds upon sync with branch versioned data on default (ArcGIS Enterprise 10.7)**

- **Similar to syncing named versions with traditional versioning**
    - **Has some key differences**

- **Supports the same clients as other sync workflows**

Branch Version Creation Options with Sync

- **Version Creation = None**
  - **Uses the default version (default)**
  - **Same behavior as in earlier releases**

Branch Versioned Sync
Version creation:
- ○ Create a version for each downloaded Map
- ● None

- **Version Creation = Version per downloaded map**
  - **Creates a version each time data is taken offline**
  - **New in ArcGIS Enterprise 10.8.1**

Branch Versioned Sync
Version creation:
- ● Create a version for each downloaded Map
- ○ None

- **NOTE: Separate from traditional versioning options**

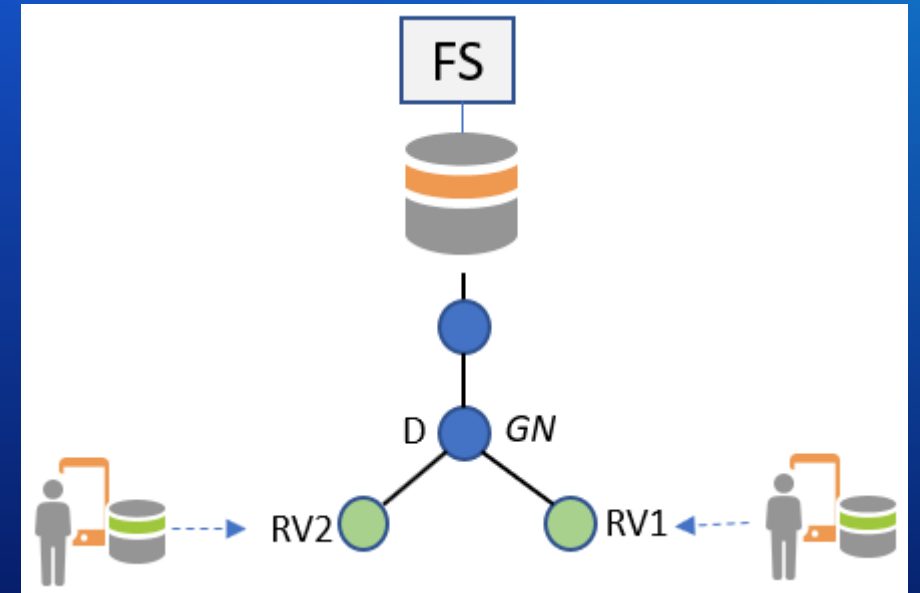*Feature Service Syncing with Named Branch Versions*

Version Creation = None

- **Syncs directly with the default branch version**

- **When to use**
  - **Mobile editing workflows**
    - **Requires default to be public / editable by mobile editors**
    - **Exception: Users with the manageVersions (new in 10.8.1) can sync protected default**
  - **Syncing with read-only clients**
    - **Syncs edits one way from default**

Feature Service Syncing with Named Branch Versions
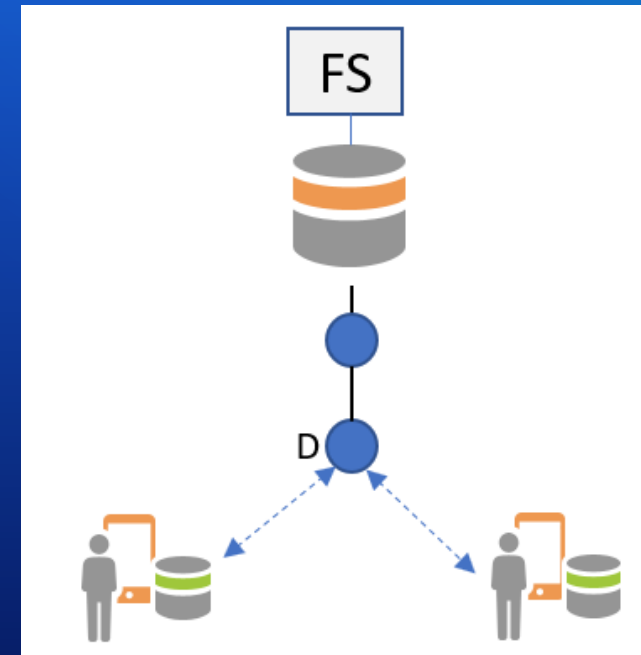
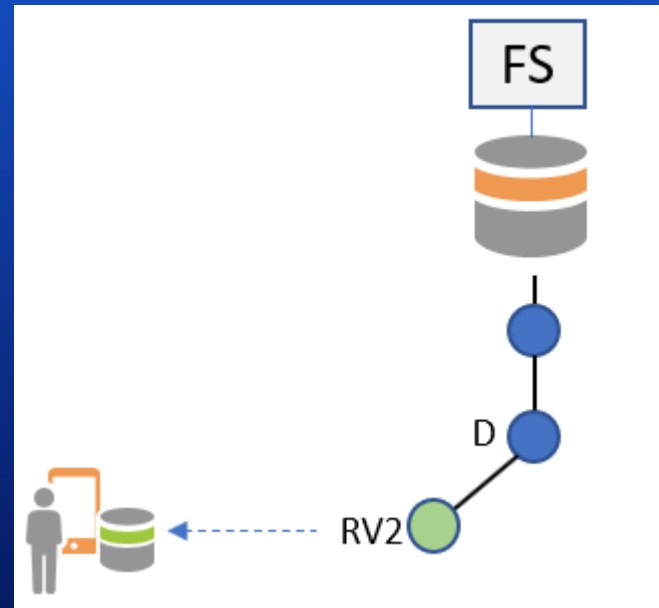# Version Creation = Version per downloaded map

- **Use for mobile editing workflows**
  - A branch version is created as each mobile editor takes data offline
    - Default can be protected
  - Sync
    - Edits uploaded to branch version
    - Edits downloaded form default
  - Edits uploaded to branch version can be reviewed before posting to default

- **Requires replica tracking (new in ArcGIS Pro 2.6 / ArcGIS Enterprise 10.8.1)**
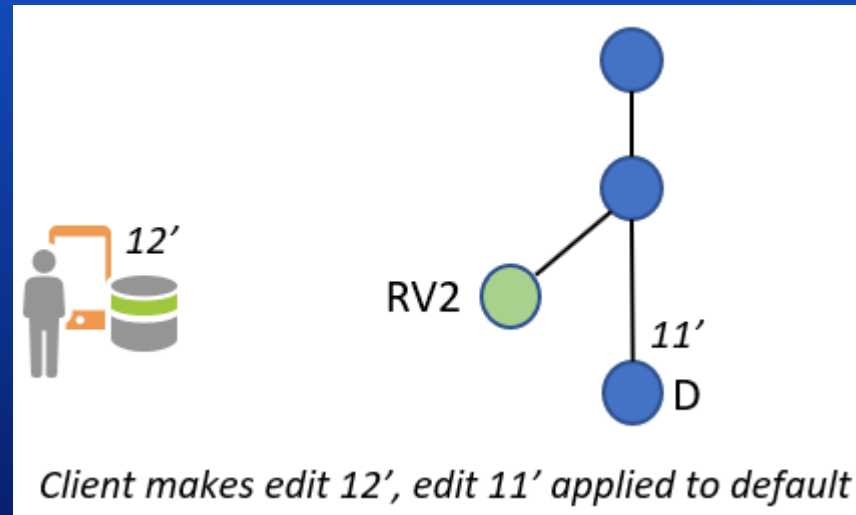
Feature Service Syncing with Named Branch Versions

Version Per Downloaded Map: Data Flow Patterns

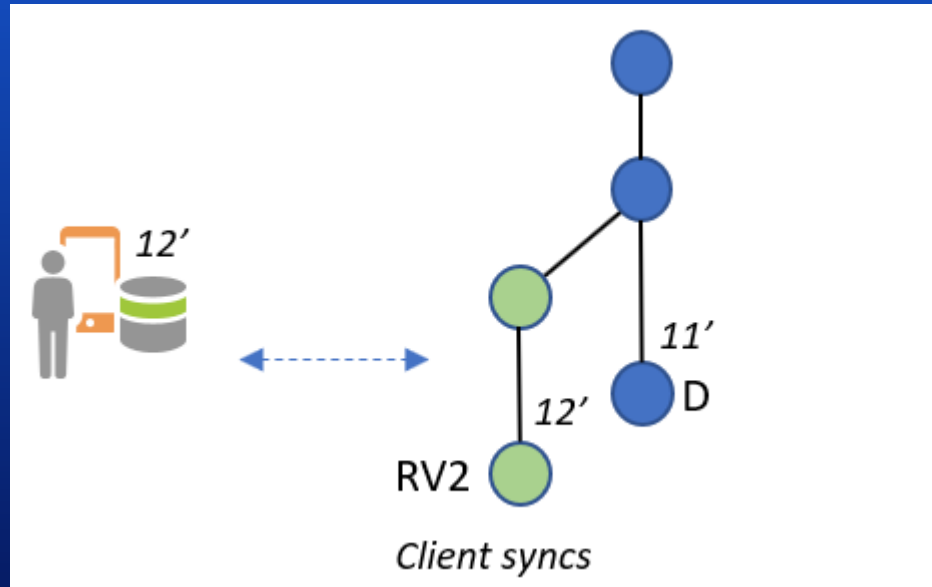- **Data flow 1 – Reconcile before sync to download edits**

Version Per Downloaded Map: Data Flow Patterns

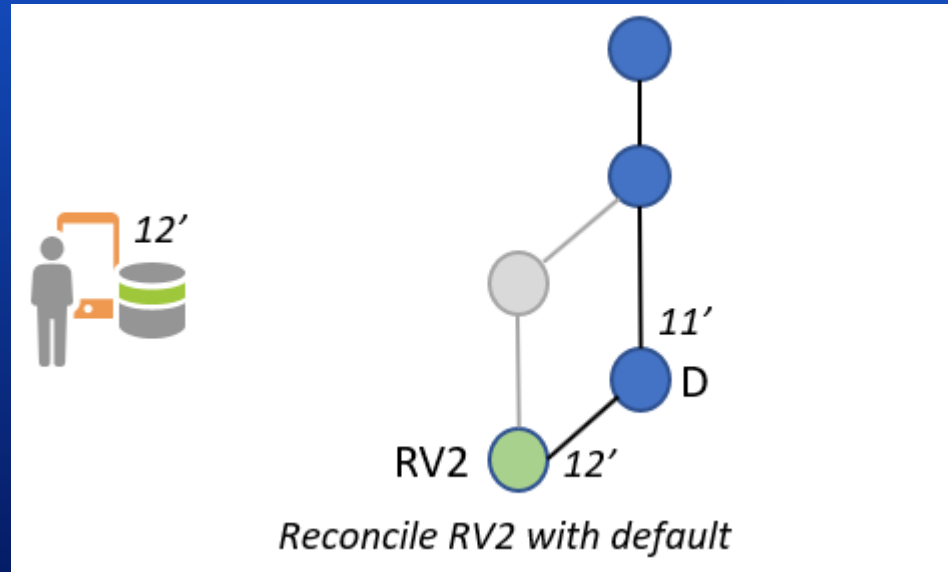- **Data flow 1 – Reconcile before sync to download edits**

Client makes edit 12', edit 11' applied to default

Version Per Downloaded Map: Data Flow Patterns

- **Data flow 1 – Reconcile before sync to download edits**

Version Per Downloaded Map: Data Flow Patterns

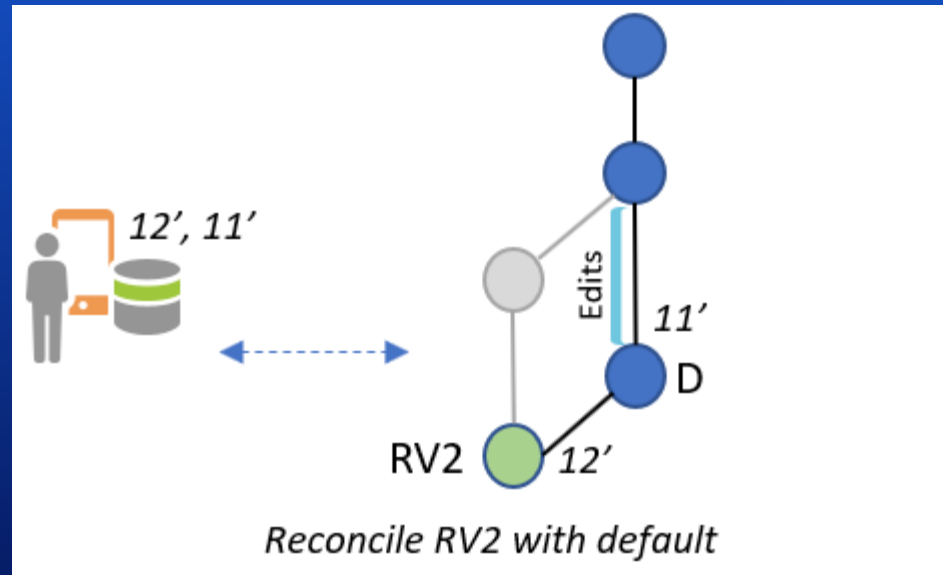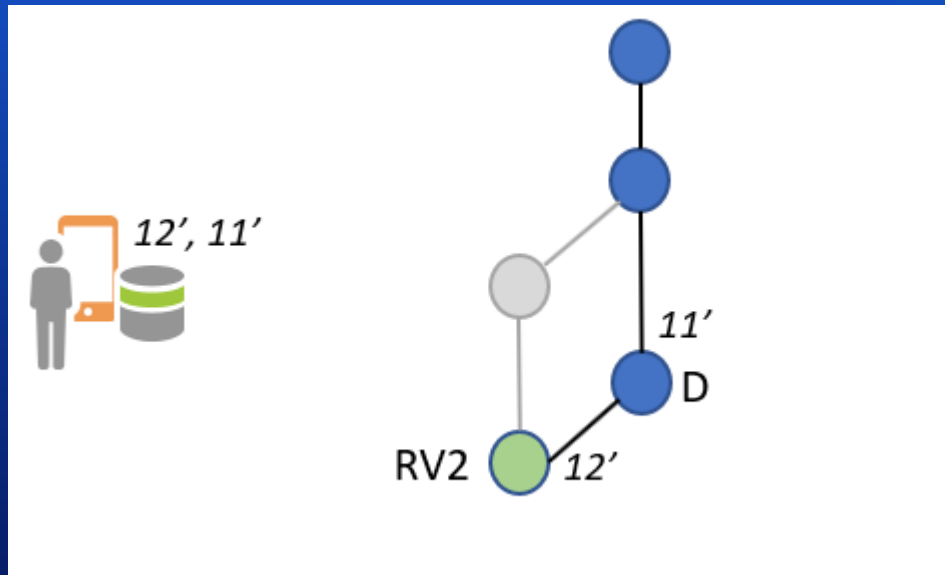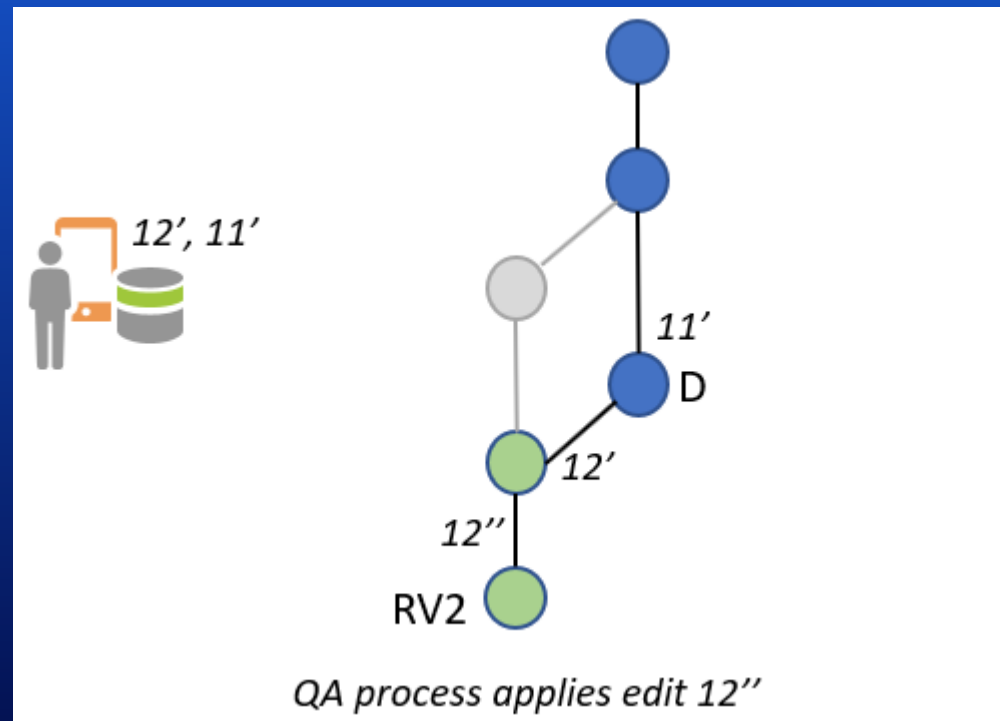- **Data flow 1 – Reconcile before sync to download edits**

Feature Service Syncing with Named Branch Versions

Version Per Downloaded Map: Data Flow Patterns

- **Data flow 1 – Reconcile before sync to download edits**

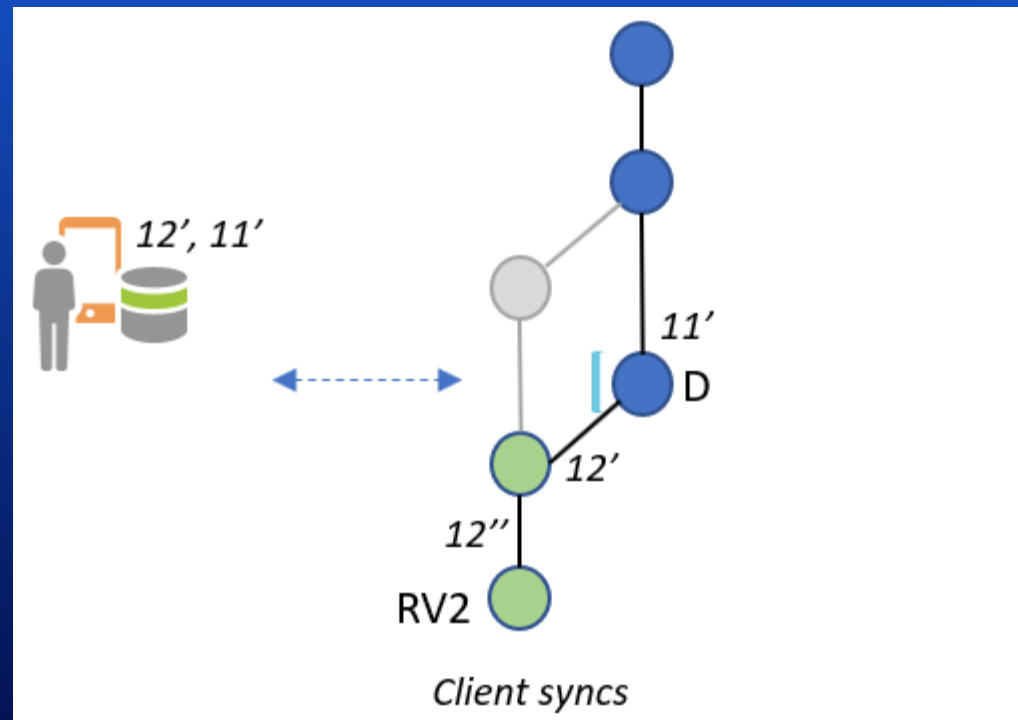*Feature Service Syncing with Named Branch Versions*

Version Per Downloaded Map: Data Flow Patterns

- **Data flow 2 – Post to share edits**

Version Per Downloaded Map: Data Flow Patterns
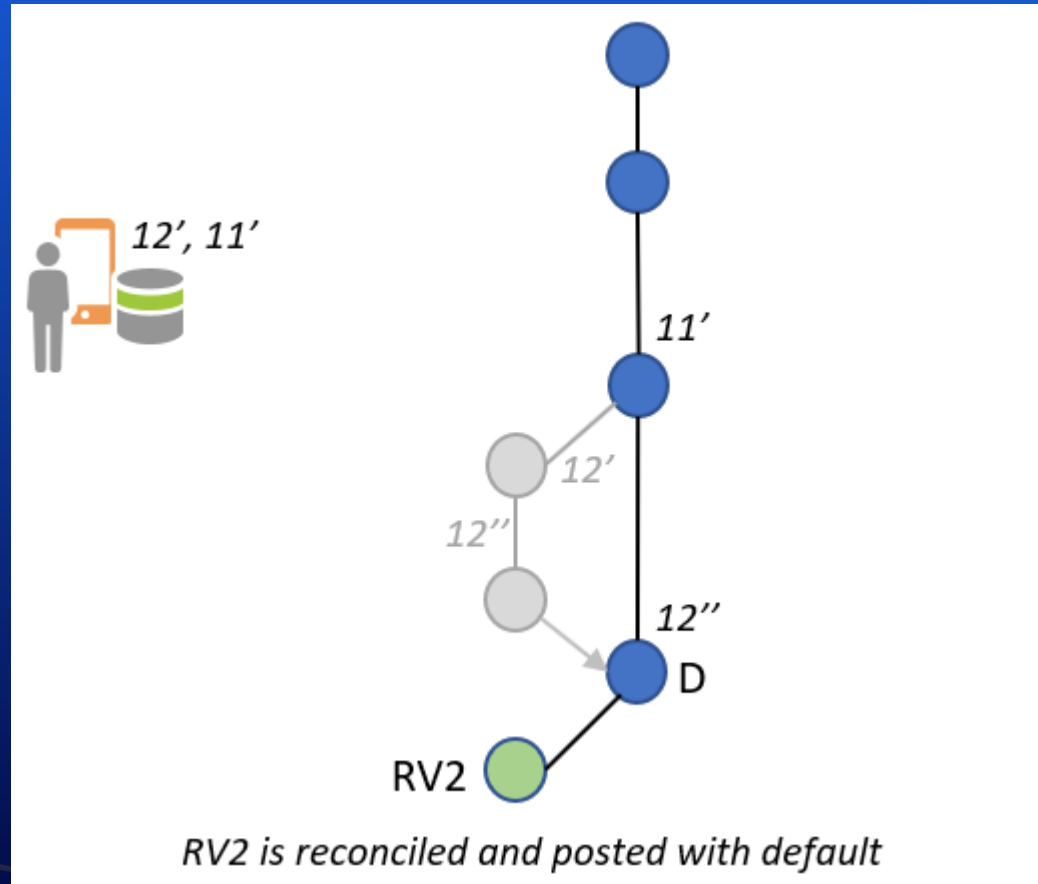
- **Data flow 2 – Post to share edits**

Feature Service Syncing with Named Branch Versions

Version Per Downloaded Map: Data Flow Patterns

- **Data flow 2 – Post to share edits**

Feature Service Syncing with Named Branch Versions

Version Per Downloaded Map: Data Flow Patterns

- **Data flow 2 – Post to share edits**

RV2 is reconciled and posted with default

Version Per Downloaded Map: Data Flow Patterns

- **Data flow 2 – Post to share edits**

Feature Service Syncing with Named Branch Versions
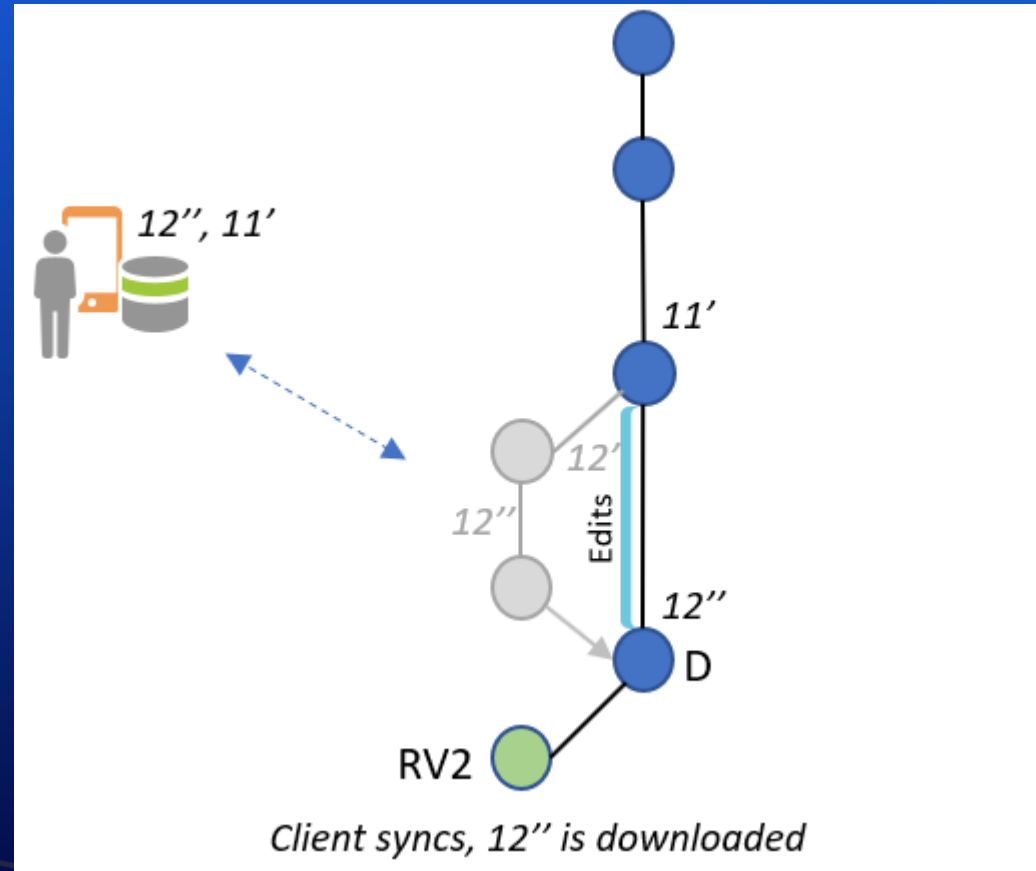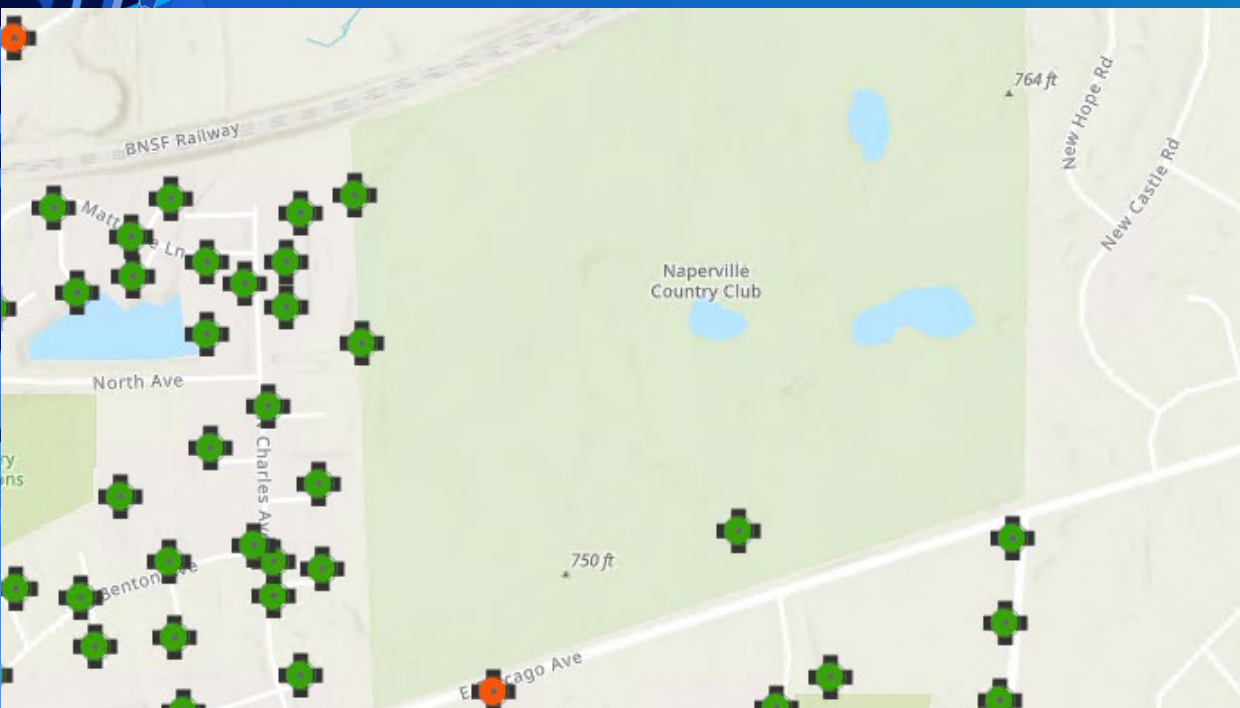
Version Per Downloaded Map Demo

Automate reconcile and post operations for sync-enabled branch versioned data

Portal administrators and version administrators can use Python scripting to automate a scheduled reconciliation of replica versions after field workers have synchronized edits to data included in branch versioning.

This workflow is applicable for managing replica versions that were created using a sync-enabled feature service with branch versioned data.

Learn more about working with offline maps with branch versioned data

Automate Reconcile and Post Operations Demo

Help Resources

- **Feature Service help**
  - https://enterprise.arcgis.com/en/server/latest/publish-services/windows/what-is-a-feature-service-.htm

- **Highlighted topics were added / updated with 10.8.1**

Feature services

| Feature services |
| Prepare data to publish a feature service |
| Prepare data for offline use |
| Author maps to publish feature services |
| Publish a feature service |
| Feature services and client applications |
| Work with offline maps and branch versioned data |
| Offline maps and traditional versioned data |
| Configure default z-values for editable feature services |
| Configure editable feature services that contain m-enabled layers |
| > Feature service permissions and editor tracking |

Feature Service Syncing with Named Branch Versions

esri | THE SCIENCE OF WHERE®