Replication on a Budget: Synchronizing field edits with Model Builder and Python scripting...and without ArcSDE!!!
tool background

-> origins of this tool

-> who might use this tool?
model data flow

User: Field work (edit inspection data)

User: kicks the tool off

Tool: verifies input data

Tool: backs up replica database

Tool: synchs light table

Tool: synchs poles table

Tool: synchs modules table

Tool: STOP & message box with error

Tool: synchs underground structures table

Tool: compacts the replica table

Tool: deletes the backed up replica database

Tool: success & message box

Tool: synchs pad mounts table

Tool: synchs switch modules table
table synch workflow

Create table views of the replica table and its corresponding enterprise table

Loop through each record in the replica table view and select its matching record in the enterprise table view

Compare the values in the field “Timestamp” in the selected records in the field and enterprise table views

Field inspection/repair record newer?

Write the values of the replica record into its matching enterprise record

Enterprise inspection/repair record newer?

Pass (don’t write the replica values to the enterprise record)

More records?

No more records?
issues along the way

->establishing efficiency in the model and the tools and scripts within the model
->building in minimal user input
->incorporating error checking and data safeguarding (backup and restore)
tool demo
- Access Runtime edits the GIS tables directly, not recommended practice.
- There is no real conflict resolution...if the criteria is met then the edit overwrites whatever is in the enterprise.