# Steps For Schematics Database Changes

1. Prior to starting these steps, please ensure the latest version of EDER is installed on the machine that the Schematics installation is being performed from.
2. Copy the folder with the Python and Batch file to a local directory on your machine.

Location: [\\sfetgis-nas01\sfgispoc\_data\ApplicationDevelopment\IBM\_Delivery\SchematicsChangeDetection\Data\_Model\_Batch](file:///\\sfetgis-nas01\sfgispoc_data\ApplicationDevelopment\IBM_Delivery\SchematicsChangeDetection\Data_Model_Batch)

1. Edit the batch file in the Batch/ folder, changing the SCRIPT\_GDB\_LOCATION environment variable to the location of the SDE file that will be used.

File to edit: apply\_model\_changes.bat

1. Run batch script in a command prompt:
2. Copy paste the output text into a log and save it.
3. Copy the Schematics tables into the database
   1. Copy the changedetection\_tables\_fcs.gdb file geodatabase locally.
   2. Connect the folder in ArcCatalog that it is contained within.
   3. In the target database, delete the following object classes:
      1. EDGIS.PGE\_EDERChangeSetLine
      2. EDGIS.PGE\_EDERChangeSetPoint
      3. EDGIS.PGE\_EDERPostedSession
      4. EDGIS.PGE\_EDERSession0MapGrid
      5. EDGIS.PGE\_EDSCHEMGUIDTOTAL
      6. EDGIS.PGE\_SCHEMCHANGEDGRID
      7. EDGIS.PGE\_SCHEMGUIDTOTAL
      8. EDGIS.PGE\_VERSIONDELETELINE
      9. EDGIS.PGE\_VERSIONDELETEPOINT
   4. Select all object classes in the fgdb
   5. Right click and select Copy
   6. Right click the target database and click paste. You should not get a prompt to replace existing object classes.
4. Right click the feature class and select ‘Register as Versioned’:
   1. PGE\_VERSIONDELETEPOINT
   2. PGE\_VERSIONDELETELINE
5. Set permissions on new feature classes:
   1. PGE\_VERSIONDELETEPOINT
   2. PGE\_VERSIONDELETELINE
   3. PGE\_EDERChangeSetLine
   4. PGE\_EDERChangeSetPoint

|  |  |  |
| --- | --- | --- |
| Role | View | View & Edit |
| SDE\_EDITOR | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint |
| SDE\_VIEWER | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint |  |
| DAT\_EDITOR | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint |
| \*\*DATACONV | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint |
| GISINTERFACE | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint |
| GIS\_INTERFACE | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint | PGE\_VERSIONDELETEPOINT  PGE\_VERSIONDELETELINE  PGE\_EDERChangeSetLine  PGE\_EDERChangeSetPoint |
| **\*   = Except** EDGIS.\*\_BUILDERR & EDGIS.PGEDATAMODELVERSION  **\*\* = ONLY** QxQ & MxQ instances | | |

* 1. Set the Privileges in ArcCatalog for the new tables:
     1. EDGIS.PGE\_EDERPostedSession
     2. EDGIS.PGE\_EDERSession0MapGrid
     3. EDGIS.PGE\_EDSCHEMGUIDTOTAL
     4. EDGIS.PGE\_SCHEMCHANGEDGRID
     5. EDGIS.PGE\_SCHEMGUIDTOTAL
     6. GRANT VIEW and EDIT privledges to:
        1. gisinterface
        2. gis\_interface
        3. gis\_i
        4. sde\_editor
        5. dmsstaging
     7. Grant Read/View only privledges to:
        1. sde\_viewer
  2. We must access the sequence for the first time on the PGE\_EDSCHEMGUIDTOTAL so that the sql will be able to populate it later. This can be done with the following SQL process.
     1. Run the following as EDGIS and record the number:

select registration\_id from sde.table\_registry where table\_name='PGE\_EDSCHEMGUIDTOTAL';

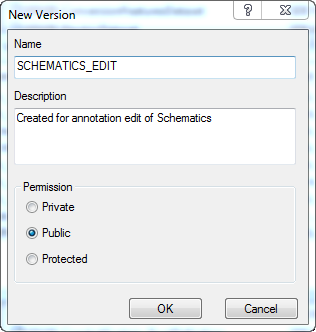
* + 1. Then use that number replacing the ##### below:

select R#####.nextval from dual;

example if 10728 is returned, the sql becomes: select R10728.nextval from dual;

1. Unregister the table PGE\_MODIFIEDMAPS as versioned.

Note: This stand alone table must be unversioned for the synch process of Schematics and EDER to correctly maintain a list of maps that have been changed and need to be updated.

1. Create the SCHEMATICS\_EDIT version
   1. Log into ArcCatalog as EDGIS into the target database
   2. Right click the database and click “Versions…”
   3. Right click SDE.DEFAULT and click “New…”
   4. Match the following screen:  
      
   5. Click OK to create the version

Apply the following configuration properties:

## Configuration

### New Class Model Names

1. Creation of the following was already done in pre-prod as part of xml imports, please verify the following new class model names in the “PGE ED Object Class Model Name” domain:

|  |
| --- |
| ***Model Name*** |
| PGE\_ EDSCHEM\_CHANGEDETECTION |
| PGE\_ EDSCHEM\_VERSIONDELETEPOINT |
| PGE\_EDSCHEM\_VERSIONDELETELINE |

### New Field Model Names

1. Creation of the following was already done in pre-prod as part of xml imports, please verify the following new field model name in the “PGE ED Field Model Name” domain.

|  |
| --- |
| ***Model Name*** |
| PGE\_VERSIONNAME |

### Class Model Name Assignment

1. Assignment of most of the following class model names is already in place on pre-prod as it was in the original source properties delivered by IBM. You will need to assign model names for PGE\_VERSIONDELETEPOINT and PGE\_VERSIONDELETELINE. If you wish to confirm the others, they are listed here:

|  |  |
| --- | --- |
| ***Object Class*** | ***Model Name*** |
| CapacitorBank | PGE\_ EDSCHEM\_CHANGEDETECTION |
| DeviceGroup | PGE\_ EDSCHEM\_CHANGEDETECTION |
| DistBusBar | PGE\_ EDSCHEM\_CHANGEDETECTION |
| DynamicProtectiveDevice | PGE\_ EDSCHEM\_CHANGEDETECTION |
| ElectricStitchPoint | PGE\_ EDSCHEM\_CHANGEDETECTION |
| FaultIndicator | PGE\_ EDSCHEM\_CHANGEDETECTION |
| Fuse | PGE\_ EDSCHEM\_CHANGEDETECTION |
| OpenPoint | PGE\_ EDSCHEM\_CHANGEDETECTION |
| PrimaryGeneration | PGE\_ EDSCHEM\_CHANGEDETECTION |
| PrimaryRiser | PGE\_ EDSCHEM\_CHANGEDETECTION |
| PriOHConductor | PGE\_ EDSCHEM\_CHANGEDETECTION |
| PriUGConductor | PGE\_ EDSCHEM\_CHANGEDETECTION |
| Switch | PGE\_ EDSCHEM\_CHANGEDETECTION |
| Tie | PGE\_ EDSCHEM\_CHANGEDETECTION |
| Transformer | PGE\_ EDSCHEM\_CHANGEDETECTION |
| VoltageRegulator | PGE\_ EDSCHEM\_CHANGEDETECTION |
| PGE\_VERSIONDELETEPOINT | PGE\_ EDSCHEM\_VERSIONDELETEPOINT |
| PGE\_VERSIONDELETELINE | PGE\_ EDSCHEM\_VERSIONDELETELINE |

### Field Model Name Assignment

1. Assign the following field model name by running the embedded SQL as SDE:



Below is a list of what will be assigned.:

|  |  |  |
| --- | --- | --- |
| ***Object Class*** | ***Field Name*** | ***Model Name*** |
| CapacitorBank | VERSIONNAME | PGE\_VERSIONNAME |
| DeviceGroup | VERSIONNAME | PGE\_VERSIONNAME |
| DistBusBar | VERSIONNAME | PGE\_VERSIONNAME |
| DynamicProtectiveDevice | VERSIONNAME | PGE\_VERSIONNAME |
| ElectricStitchPoint | VERSIONNAME | PGE\_VERSIONNAME |
| FaultIndicator | VERSIONNAME | PGE\_VERSIONNAME |
| Fuse | VERSIONNAME | PGE\_VERSIONNAME |
| OpenPoint | VERSIONNAME | PGE\_VERSIONNAME |
| PrimaryGeneration | VERSIONNAME | PGE\_VERSIONNAME |
| PrimaryRiser | VERSIONNAME | PGE\_VERSIONNAME |
| PriOHConductor | VERSIONNAME | PGE\_VERSIONNAME |
| PriUGConductor | VERSIONNAME | PGE\_VERSIONNAME |
| Switch | VERSIONNAME | PGE\_VERSIONNAME |
| Tie | VERSIONNAME | PGE\_VERSIONNAME |
| Transformer | VERSIONNAME | PGE\_VERSIONNAME |
| VoltageRegulator | VERSIONNAME | PGE\_VERSIONNAME |

### PGE Record Version AU Assignment

1. Assignment of the PGE Record Version AU to the following object classes is already in place on pre-prod as it was in the original source properties delivered by IBM. If you wish to confirm them, they are listed here:

|  |  |  |  |
| --- | --- | --- | --- |
| ***Object Class*** | ***On Create*** | ***On Update*** | ***On Delete*** |
| CapacitorBank | Yes | Yes | Yes |
| DeviceGroup | Yes | Yes | Yes |
| DistBusBar | Yes | Yes | Yes |
| DynamicProtectiveDevice | Yes | Yes | Yes |
| ElectricStitchPoint | Yes | Yes | Yes |
| FaultIndicator | Yes | Yes | Yes |
| Fuse | Yes | Yes | Yes |
| OpenPoint | Yes | Yes | Yes |
| PrimaryGeneration | Yes | Yes | Yes |
| PrimaryRiser | Yes | Yes | Yes |
| PriOHConductor | Yes | Yes | Yes |
| PriUGConductor | Yes | Yes | Yes |
| Switch | Yes | Yes | Yes |
| Tie | Yes | Yes | Yes |
| Transformer | Yes | Yes | Yes |
| VoltageRegulator | Yes | Yes | Yes |

## Data Design, Datamodel Changes

## Field Changes

1. Verify the following fields have been added to their respective feature classes:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Object Class Name*** | ***Action*** | ***FieldName*** | ***Datatype(Length)*** | ***Domain*** | ***Action*** |
| CapacitorBank | Modify | VersionName | Text(64) |  | Add |
| DeviceGroup | Modify | VersionName | Text(64) |  | Add |
| DynamicProtectiveDevice | Modify | VersionName | Text(64) |  | Add |
| DistBusBar | Modify | VersionName | Text(64) |  | Add |
| ElectricStitchPoint | Modify | VersionName | Text(64) |  | Add |
| FaultIndicator | Modify | VersionName | Text(64) |  | Add |
| Fuse | Modify | VersionName | Text(64) |  | Add |
| OpenPoint | Modify | VersionName | Text(64) |  | Add |
| PrimaryGeneration | Modify | VersionName | Text(64) |  | Add |
| PrimaryRiser | Modify | VersionName | Text(64) |  | Add |
| PriOHConductor | Modify | VersionName | Text(64) |  | Add |
| PriUGConductor | Modify | VersionName | Text(64) |  | Add |
| Switch | Modify | VersionName | Text(64) |  | Add |
| Tie | Modify | VersionName | Text(64) |  | Add |
| Transformer | Modify | VersionName | Text(64) |  | Add |
| VoltageRegulator | Modify | VersionName | Text(64) |  | Add |

### 

### Object Class Changes

1. Verify that the following object classes have been created with the following fields and the following properties:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***FeatureclassName*** | ***PGE\_VERSIONDELETEPOINT*** | | | | |
| ***FieldName*** |  | ***Nullable*** | ***Datatype(Length)*** | ***Domain*** | ***Comment*** |
| OBJECTID |  | No | Long Integer |  | Automatic |
| FEATURECLASSID |  | No | Long Integer |  |  |
| FEATUREGUID |  | No | Guid |  |  |
| VERSIONNAME |  | No | Text(64) |  | Index |
| DATEDELETED |  | No | Date |  |  |
| CIRCUITID |  | Yes | Text(9) |  |  |
| INSTALLJOBNUMBER |  | Yes | Text(14) |  |  |
| SHAPE |  | No | Geometry |  | Point |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***FeatureclassName*** | ***PGE\_VERSIONDELETELINE*** | | | | |
| ***FieldName*** |  | ***Nullable*** | ***Datatype(Length)*** | ***Domain*** | ***Comment*** |
| OBJECTID |  | No | Long Integer |  | Automatic |
| FEATURECLASSID |  | No | Long Integer |  |  |
| FEATUREGUID |  | No | Guid |  |  |
| VERSIONNAME |  | No | Text(64) |  | Index |
| DATEDELETED |  | No | Date |  |  |
| CIRCUITID |  | Yes | Text(9) |  |  |
| INSTALLJOBNUMBER |  | Yes | Text(14) |  |  |
| SHAPE |  | No | Geometry |  | Line |

## Data Changes

Rows need to be inserted into the ***GDBM\_No\_Reconcile\_Versions*** table.

1) Stop GDBM (if it is running)

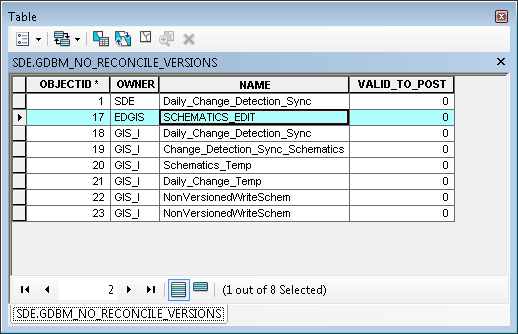
2) Open ArcMap Connect to the geodatabase as sde

3) Drag SDE.GDBM\_No\_Reconcile\_Versions table into ArcMap

4) Editor > Options. Uncheck the “Edit a version of the database…” checkbox. Click OK

5) Start Editing

6) Amend the data as per this picture (don’t worry about OBJECTID)



***Also add the following row: OWNER: EDGIS, NAME: “SCHEMATICS\_EDIT”, VALID\_TO\_POST: 0***

***7) Save Edits***

***8) Restart GDBM***