Moving Data from Path Version 4.2 to ST-Sim Version 1.0

Leonardo Frid

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The development of ST-Sim required substantial architectural changes in order to support spatially explicit models, longer run times and larger landscapes. Because of these changes there is currently no automated way to convert a Path data set to ST-Sim. The following provides a simple set of instructions on how to manually migrate data from Path into the new spatially explicit ST-Sim format.

Note that ST-Sim (the State-and-Transition Simulation Model Framework) is a Module which runs within SyncroSim, a generic modeling framework which allows for other models to be "plugged in". To run ST-Sim, you will be running the SyncroSim *Application* with the ST-Sim *Module*, plugged in.

Steps to import your data from Path

1. Get your data into the latest version of Path (4.2.2) by downloading this version from the Apex website, installing it and opening your Path mdb project with the Path software. Note that in Path you can also import models from VDDT if you would like to upgrade your VDDT data set to ST-Sim.
2. Moving Project Definitions from Path to ST-Sim.
    a. In Path:
        i. Go to **File | Project Definitions | Strata**, right click on the top left corner of the grid and select **Export All…** from the context menu. Save the file to a folder of your choice noting the name and location (For example, My Documents\My Path Files\Path-Sample-Strata.xlsx).
        ii. Repeat the process for all three definitions tables in the **File | Project Definitions | States** tab and for the three tables in the **Transitions** tab.
        iii. If your Path data set includes attributes you will also need to export your **Attribute** definition tables.
    b. In ST-Sim:
        i. Open SyncroSim with the ST-Sim Module loaded and select **File | New Library** and create a new library (*.ssim) file with the name and location of your choice.
        ii. In the Library window of ST-Sim, right click on the library you just created and click on **New | Project…** Give the project a name of your choice.
        iii. Right click on the project you just created and select **Project Definitions…**
        iv. On the **Strata** tab right click on the table and click on **Export All…** and save the file at a location and name of your choice (For example, My Documents\My ST-Sim Files\ST-Sim-Sample-Strata.xlsx). This is a blank template.
        v. Copy records from the appropriate fields in the exported Path xlsx file for strata to the blank xlsx ST-Sim template. Note that the ID field can be left blank but if you are planning to do spatially explicit runs then you can provide ID's that will

be used to identify strata in the input raster files. Note also that there is no longer and Abbreviation field, only Name and Description. Save the xlsx file.

vi. Once the records have been copied over to the ST-Sim xlsx template you can return to the ST-Sim interface and right click on the Strata table to **Import…** the file that you just saved.

vii. Save your ST-Sim Library by clicking on the Save Icon in the ST-Sim toolbar.

viii. Repeat the process (steps iv to vii) for the remaining definitions in this order:
1. Cover Type
2. Structural Stage
3. State Class – Note that the Name field should be set with a formula to: **=B2&":"&C2**
4. Transition Group
5. Transition Type
6. Transition Types by Group – Note that the order of the fields is reversed. Note also that if you are planning to do spatially explicit simulations you will need to define which transition group/type relationships are **Secondary**. It is advisable to have only one **non-Secondary** relationship per transition type. Primary (non-Secondary) transition groups are used for simulation whereas **Secondary** groups are used for reporting, area targets and time since transition only.
7. Attribute Groups
8. Attribute Types – Note that the order of the fields has changed.

ix. Be sure to save the library after each import.

3. Moving Scenario Properties From Path to ST-Sim
   a. **In Path:**
      i. **Export** all of the properties of the Path Scenario by using the context menu on the project explorer and save the file with a name and location of your choice.
   b. **In ST-Sim**:
      i. Right click on the **Project** you created above and use the context menu to select **New Scenario…** Give the scenario a name of your choice.
      ii. Open the newly created scenario by double clicking on it and navigate to the property you want to import. Note that for importing transition pathways, you must import deterministic transitions before probabilistic transitions.
      iii. Right click on the property table and select **Export All…** to create a blank xlsx template.
      iv. From the xlsx file created in step 3.a.i above copy the records from the appropriate tab into the blank template created in step 3.b.iii. Be conscious that the number and order of the fields in some of the properties may have changed. Note also that the ScenarioID field is not required in ST-Sim.
      v. Repeat steps ii to iv for all of the properties you wish to import. Note that some properties that are non-tabular will need to be imported manually.