

Technology

- The Occupancy Analytics Model utilises a Discrete Event Simulation engine.
- A Health Activity Model (HAM) database is the method data storage.
- Health Activity Model datasheets for data capture.

Data Management

- The HAM database utilises data from Clinical Information Systems, Operational Policies and Estate Management systems.
- The HAM database schema recognises the following concepts:
 - People type
 - Resource type
 - Process type
 - Accommodation type
- Data is organised within these types in a heirarcial structure of databases entities.
- Processing of HAM data in the DES model accords to process constraints and variables assimilated from Operational Policies.

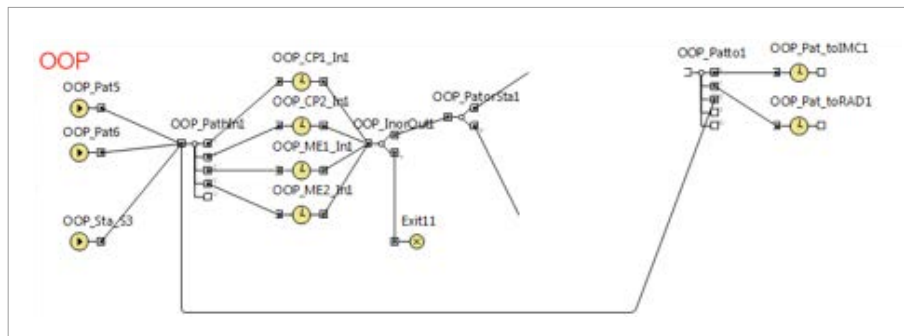
Reporting

- The Output from the DES model is in the form of a CSV file of raw data. This is then post-processed using our own algorithms.
- Typical post-processing functions include:
 - Statistical analysis
 - Stochastic methods
 - Variability analysis to support 'What-if' scenarios.

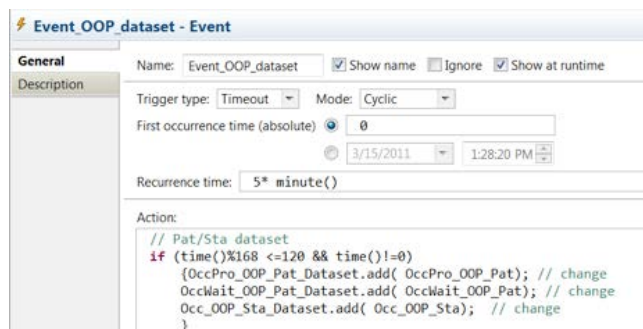
Integration

- Data from the Occupancy Model is used within a unique thermal simulation model to analyse the impacts of working practices on energy and carbon emissions.

Illustrations



The Conclude Consultancy Limited believes that their Health Activity Model is unique. Others that have attempted to simulate health care processes have usually relied upon theoretical models of people movement, whereas Conclude has developed a process framework to provide an accurate basis for process optimisation.



```

// Pat/Sta dataset
if (time()%168 <=120 && time() !=0)
{OccPro_OOP_Pat_Dataset.add( OccPro_OOP_Pat); // change
OccWait_OOP_Pat_Dataset.add( OccWait_OOP_Pat); // change
Occ_OOP_Sta_Dataset.add( Occ_OOP_Sta); // change
}
  
```

Sophisticated post-processing routines enable Conclude to run many scenario variations to support 'What-if' analysis. An applet has been developed that also enables parts of the OA model to be run in workshop type situations, should this be necessary.