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# From jES to jES OF

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From jES ...

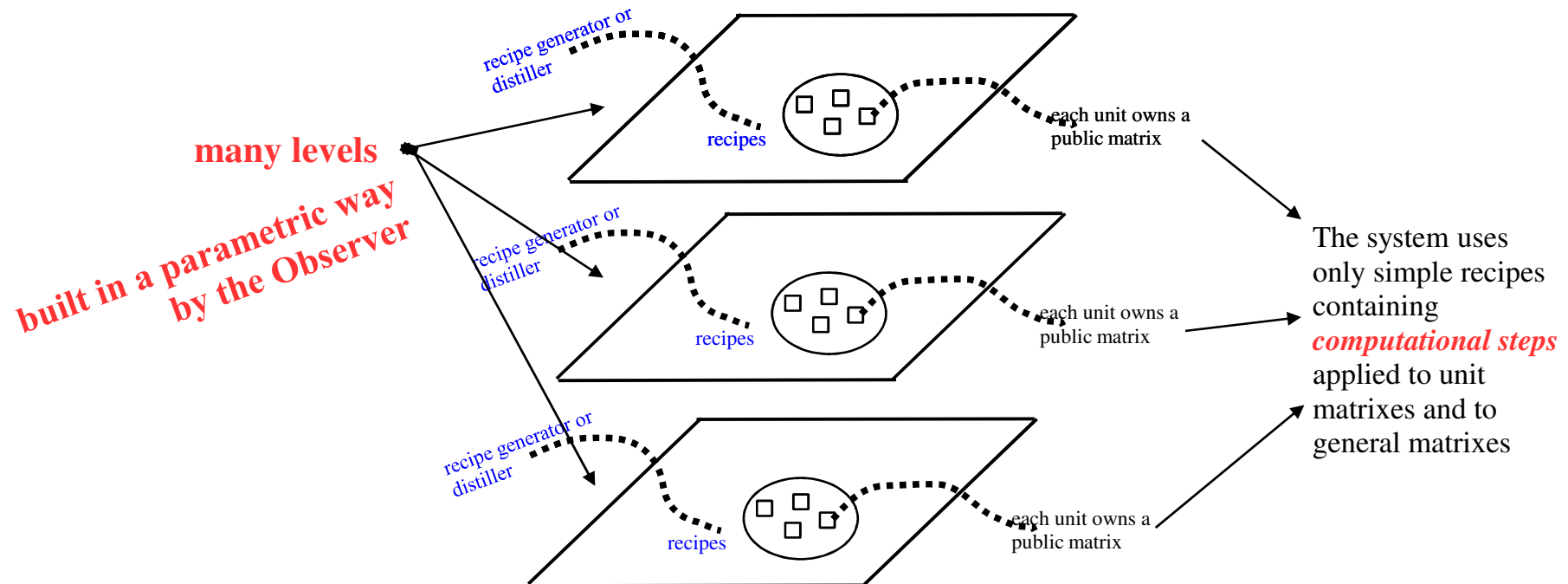
java Enterprise Simulator



<http://www.flightgear.org/>

... to jES Open Foundation to simulate  
multi-model frameworks of system of  
units or agents





Memory matrixes data are reported in a text file (unitData/memoryMatrixes.txt)

`number (from_0_ordered) _rows_cols`

0	2	3
1	3	5
2	4	1
3	3	1

Mandatory first line

memory matrixes

# Recipes with computations

time  
specification:

seconds

External format (remember: step, time specification, time):

step in  
recipe

1 s 1 c 1999 3 0 1 3 2 s 2 3 s 2

a step with computation: step 2, requiring 2 seconds, involves computation 1999 with 3 matrixes (those numbered 0, 1, 3 in the previous Figure)

time in  
seconds

1 s 1 c 1998 1 0 5 s 2

1 s 1 c 1998 1 1 6 s 2

a step with computation: step 7, requiring 2 seconds, involves computation 1998 with 1 matrix (that numbered 3 in the previous Figure)

1 s 1 c 1998 1 3 7 s 2

computational steps 1/2

Intermediate format (remember: each step is repeated for each unit of time):

**Computational steps**

## The Java Swarm code used by the recipes with the example code c 1998

```
/** computational operations with code -1998 (a code for the checking
 * phase of the program
 *
 * this computational code place a number in position 0,0 of the
 * unique received matrix and set the status to done
 */
public void c1998(){

    mm0=(MemoryMatrix) pendingComputationSpecificationSet.
        getMemoryMatrixAddress(0);
    layer=pendingComputationSpecificationSet.
        getOrderLayer();

    mm0.setValue(layer,0,0,1.0);
    mm0.print();

    done=true;
} // end c1998
```

computational steps 2/2

**Computational steps,  
Java code**