

The Newsletter of Simulation

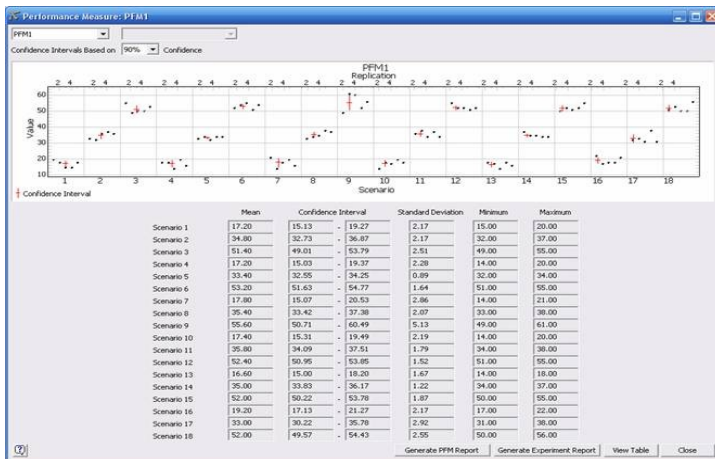
Anylogic 6.2.1 Released

The latest version of Anylogic has now been released and the Professional version is due to be released shortly. Anylogic 6 is a virtually new software development utilising an Eclipse based model development environment and a completely redesigned engine. This has enabled significant speed increases to be achieved with models running up to 20 times faster in Anylogic 6 than in previous versions. The redesign also means that the memory footprint of models is smaller allowing machines to run larger models (up to 4 million agents). As well as productivity improvements from the redesign, Anylogic has also strengthened its results and logic communications with an improved simulation manager / experimenter, Action Charts for graphical definition of decision and action logic and CAD layout import capability. To support the new version there are updated tutorials, a new support Wizard and a range of new models to demonstrate the use of the tool.

Flexsim 4.3

Flexsim now includes a variety of features to help the user when adapting standard triggers. Auto-completion hints now appear to give assistance to the user on the command that should be used to complete the trigger. Similarly when the user is referencing labels on items within the model, Flexsim will prompt the user with a list of labels that are present on the item or current object.

The performance tab of the experimenter has been redesigned to allow better interaction with the user. This allows easier presentation of the results of several scenarios. The performance report can be extracted as a HTML file allowing it to be easily incorporated into reports and distributed to non-Flexsim users.



Similarly, Model Documentation has been made easier and users are able to generate a useful model documentation file. Attributes of objects, including connections and trigger settings are able to be exported to a document which when combined with appropriate user documentation allows the user to be able to review their model easily.

Additionally, various new commands have been added and several other GUIs have been updated to provide continual advances in the ease of use of Flexsim!

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Questions or comments? E-mail us at imagine@sakersolutions.com or call +44 1789 762255

Newsletter Spotlight

Saker Sponsors SW08

Saker will once again be sponsoring the OR Society's Simulation Workshop which this year will be held in Red-ditch, Worcestershire so please feel free to come over to our stand and meet us.

WinterSim 2008

Will be held in Miami in December 2008. Saker will again be attending so please let us know if you plan to attend.

Forthcoming Training

Flexsim

Stage 1 Basic

31st March – 4th April

12th May – 16th May

16th June -20th June

Stage 2 Advanced

19th May – 23rd May

21st July – 25th July

Stage 3 Graphics

10th March – 13th March

14th April – 17th April

27th May – 30th May

7th June – 10th July

Simul8

17th March – 20th March

21st April – 24th April

2nd June – 5th June

Anylogic

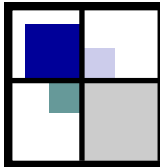
25th March – 28th March

6th May – 9th May

9th June – 12th June

Case Study News

BP Nerefco case study now available on the use of Witness at BP. The case study describes how Saker Solutions have helped BP to achieve Millions of Dollars in Savings. To get a copy email info@sakersolutions.com or visit the Saker Solutions Website



Hints & Tips

Flexsim Tip #1

Ever wanted to see what State an Operator is in?

Adding the code below to the Custom Draw Code for an Operator will automatically change the color of his shirt if he has a job to do

```
If (getstatenum(current)
==STATE_OFF_SHIFT) coloryellow(current);
```

```
else if (content(getvarnode
(current,"activetasksequence"))==0 )
    colorgreen(current);
```

```
else
    colored (current);
```

Flexsim Tip #2

When experimenting with a pool of labour where the user wishes to vary the number of operators being used by the model the following method maybe employed. Link all operators via a dispatcher (thus each process asks the dispatcher for resource rather than linking to specific operators). Within the reset code of the dispatcher (or on the reset of the Operators) closes the input ports of all labour which is exempt from the run. Flexsim's default pass to logic will only consider passing tasks to those resources which have open input ports.

Witness Tip #1

Some options within Witness menus are not readily available to change once the model is running; such as changing the capacity of a buffer or whether the buffer can accept parts from the front or the rear. This can make modelling some scenarios difficult, so in order to circumvent this the user can utilise the "SETINFO" command. SETINFO will allow the user to build "strings" of commands which in effect mimic the user typing in or changing menu options within the model whilst the model runs, this needs to be used with care as it can have undesired effects as these changes may override the usual Witness checks.

Contd.....

The example that follows shows how using this approach we are resetting the input position of a buffer from "Rear" to "Front". Firstly a string variable (runstring) is setup, then using Witness command strings the command is built, note "\n" must be used to denote a carriage return. The syntax MUST be exact, any errors in the syntax will result in the SETINFO command being ignored (with no errors reported to the user). Once the string has been created, the "SETINFO" command is issued passing in the correct string.

```
runstring =
"DETAIL\nSELECT\nbufferss\nINPUT POSI-
TION: Front;\nEND bufferss\nEND SE-
LECT\nEND DETAIL\n"
```

SETINFO (runstring)

General Tip #1

Looping through Queues.

Often the logic of a system requires that you scan through a complete queue and mark the labels on all (or specific items). The examples below show the basic syntax for achieving this in Simul8, Flexsim and Witness.

Simul8

```
IF Q1.Count Contents > 0
  LOOP 1 >>> Loop >>> Q1.Count Contents
    Select Current Work Item Q1 , Loop
  SET MyLabel = 1
```

Flexsim

```
forobjectlayerunder (current)
  setlabelnum(a,"MyLabel",1);
```

Witness

```
IF NPARTS (QUEUE1) > 0
  FOR Loop=1 to NPARTS(QUEUE1)
    QUEUE1@Loop:MyLabel = 1
  NEXT
ENDIF
```

Disclaimer

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