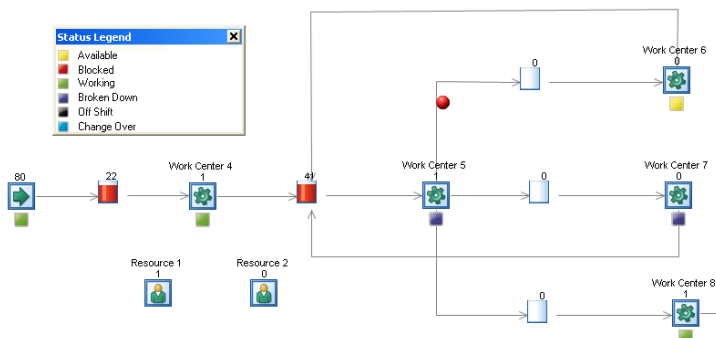


# The Newsletter of Simulation

## Simul8 2008 Launched

Simul8 2008 has now been launched and is now up to 30% faster than previous versions, which were already fast compared to other simulation tools.

Within this release, Simul8 have also incorporated a new Trials Manager which has resulted from research work undertaken in conjunction with Warwick University. This new facility advises the modeler on the number of replications to run for a given scenario. Other new features include Multi Dimensional arrays, ability to



show dynamic object states (illustrated), updated Results Manager and additional Resource capabilities. In addition, there are also some additional graphical enhancements, such as the ability to assign items to Layers and then select to only show certain Layers as well as various minor enhancements. For more information please visit our website at [www.sakersolutions.com](http://www.sakersolutions.com), or contact the Saker Solutions Helpdesk at 01789 762255.

## Saker Solutions Present Papers at SW08

Saker were proud to once again sponsor SW08, the Operational Research Society's Simulation Workshop conference, which was attended by around 100 people. At the event Mike Ellarby presented a paper entitled 'Are state of the art simulators moving the modelling goalposts?'. The paper looked at the impact of new simulation tools now on the market, and how the incorporation of significant advances in tool architecture allows the user to take simulation modelling to a new level and allow specifiers to request ever more detailed functionality, which until now was unavailable. Feel free to contact us if you want a copy of this paper. Shane Kite also sat as an invited member on the Panel Discussion: "Simulation optimisation: the best thing since sliced bread?", which discussed the merits of using optimisation in conjunction with simulation.

Saker exhibited at the event, showing delegates to the conference a range of simulation tools. Simon Taylor, co host of SW08 said 'It is really important to have the long term support of companies like Saker Solutions. Their attendance along with Simul8 and others is critical in enabling delegates to see the leading simulation tools available today'.

## Earlier Newsletters

If you have missed any of our earlier newsletters, please feel to either download them from our website or contact us and we will be delighted to send these out to you. Each newsletter has a selection of Hints & Tips together with various updates covering everything from new releases of simulation software to our move to new offices at Ragley Hall, Alcester

## Newsletter Spotlight

### Saker at Flexsimposium

Saker will be presenting at the 2008 Flexsimposium to be held in Salt Lake City in October. Let us know if you are interested in attending

### WinterSim 2008

This years event 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

8<sup>th</sup> Sept – 12<sup>th</sup> Sept  
6<sup>th</sup> Oct – 10<sup>th</sup> Oct  
10<sup>th</sup> Nov – 14<sup>th</sup> Nov  
15<sup>th</sup> Dec – 19<sup>th</sup> Dec

##### Stage 2 Advanced

21<sup>st</sup> July – 25<sup>th</sup> July  
15<sup>th</sup> Sept – 19<sup>th</sup> Sept  
17<sup>th</sup> Nov – 21<sup>st</sup> Nov

##### Stage 3 Graphics

22<sup>nd</sup> Sept – 25<sup>th</sup> Sept  
24<sup>th</sup> Nov – 27<sup>th</sup> Nov

#### Simul8

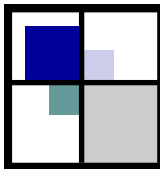
28<sup>th</sup> July - 31<sup>st</sup> July  
1<sup>st</sup> Sept – 4<sup>th</sup> Sept  
27<sup>th</sup> Oct – 30<sup>th</sup> Oct  
1<sup>st</sup> Dec – 4<sup>th</sup> Dec

#### Anylogic

5<sup>th</sup> August – 8<sup>th</sup> August  
29<sup>th</sup> Sept – 2<sup>nd</sup> Oct  
8<sup>th</sup> Dec – 11<sup>th</sup> Dec

### New Starter

Mark Gormley is the latest recruit to Saker Solutions as part of the Consulting team. Mark has a Masters degree in Computer Engineering, with specific interests in 3D modelling, having just completed a project developing a spatial awareness trainer for underwater recovery operations. Patsy Dunton has joined our Accounts team, having previously worked at Intier Automotive Ltd.



# Hints & Tips

## Flexsim Tip #1

When looking to change the speed of a conveyor, the command 'changeconveyspeed (current)' should be used as opposed to the command setvarnum(current, "speed"). This will ensure that all flowitems on the conveyor are updated with the new speed of the target conveyor.

## Flexsim Tip #2

The order of definition of objects should always be considered when developing a model; although in the majority of situations this may not be an issue, the tree is traversed when resetting the model. Hence if you attempt to reset one object's characteristics from another, then if the object you are attempting to reset is further down the tree then that object's own reset code will fire AFTER the object which has just performed its actions. Its obvious when you think about it but it is easily missed;

Eg if we have three objects

- SourceA
- ProcessorB
- ConveyorC

And we want Processor B and Conveyor C to close their inputs as directed by Source A on reset. Then;

If on reset SourceA closes input ports on ProcessorB and ConveyorC then these ports will be re-opened when the default ProcessorB and ConveyorC reset code fires. If however, the objects are ordered in the following way;

- ProcessorB
- ConveyorC
- SourceA

SourceA will fire its reset code AFTER the ProcessorB and ConveyorC's reset triggers and the model will work as expected.

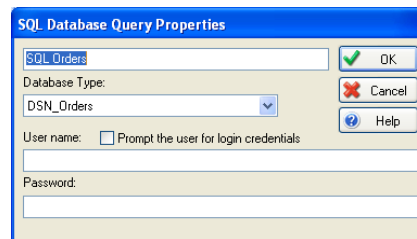
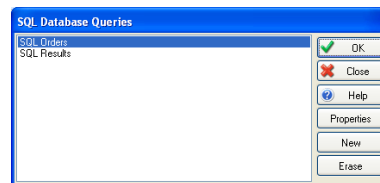
## Witness Tip #1

Witness does not have an entry point to execute actions on reset to time zero, the user needs to use actions on initialize which only execute when the model is actually run. However, if you create a function containing the desired code and use this function as the machine priority then this WILL be evaluated before the model starts. This is not documented functionality but has been used on various models without issue.

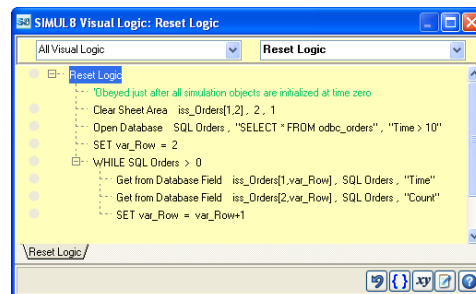
## Simul8 Tip #1

Fed up with importing the same input data each time regardless of the model's initialisation settings? Tired of using dated Commands such as 'File to Sheet' and 'Get from EXCEL'?

If so, you can use SQL Queries to Filter the relevant Records from a Database. SQL Database Queries can be set up via the Objects menu or the Professional menu. See screenshots below:



The code shown in the following screenshot displays is then required to Query a Database based on the specified Filter (Time > 10 in this case) and populate the Information Store Spreadsheet "iss\_Orders" with the qualifying records.



### Disclaimer

We make every effort to ensure the accuracy of the Hints and Tips in this document along with other information published in this newsletter. However Saker does not warrant the accuracy of such information . If you have any feedback on this newsletter please do not hesitate to contact us.