

First International

TSP

Workshop

*Transport Sample Protocol*

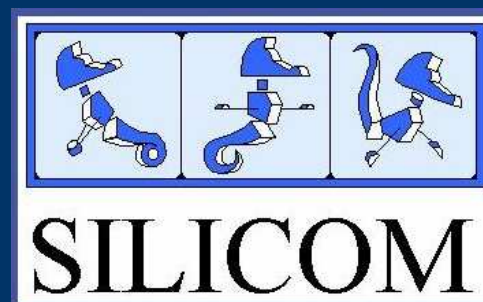


## *Silicom presentation*

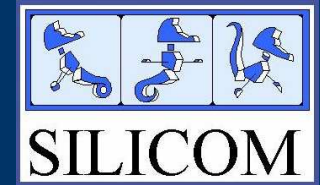


**Juzzle**

*Cyrille François*  
*Thomas Testasecca*



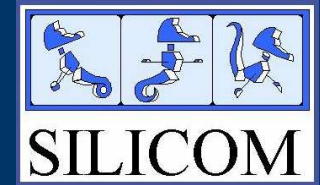
# *Blackboard / TSP usage*



- Alcatel DVB-RCS Hub
- Counters and Probes monitoring
- 1.000.000+ of published variables
- High sampling frequency @40 Hz



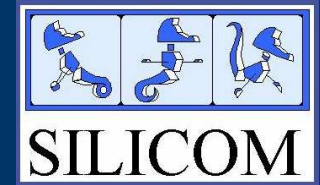
# Blackboard “Alias publish”



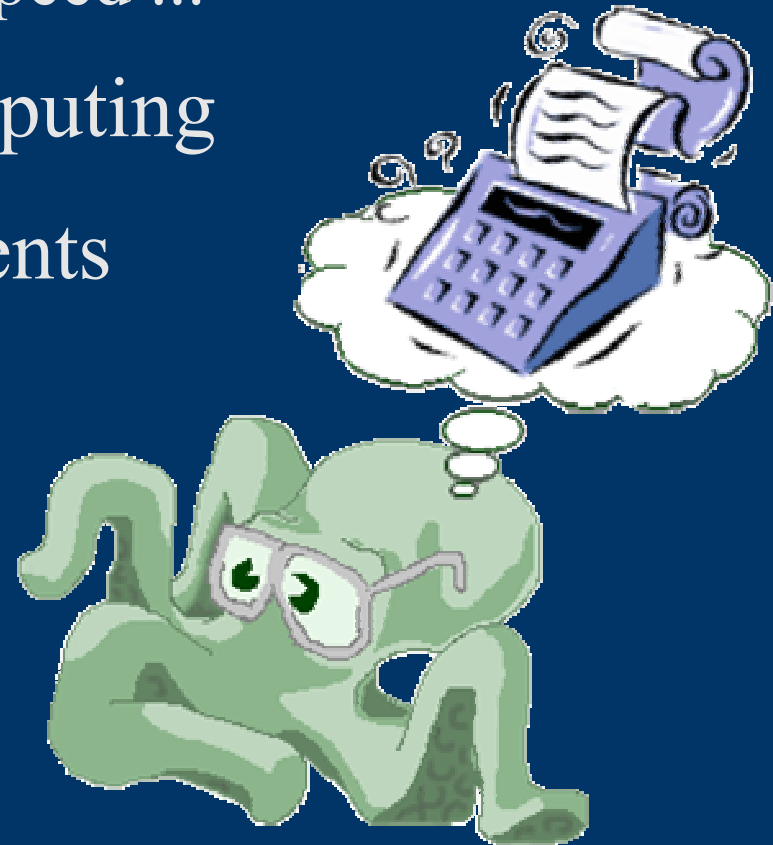
- Provides structured data publication
  - Struct of Arrays of Struct ...
- Offsets from “real” variables
- Usable as real variables
  - ex: `struct.array_of_struct[3].var`



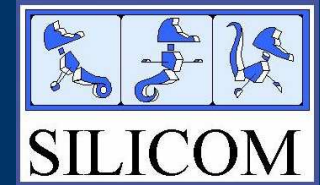
# Computing TSP provider



- Provides RT computation on variables
  - sliding mean, accumulator, speed ...
- On demand server side computing
- Usable by standard TSP clients
  - `mean%my_variable`
- Based on TSP 7.0



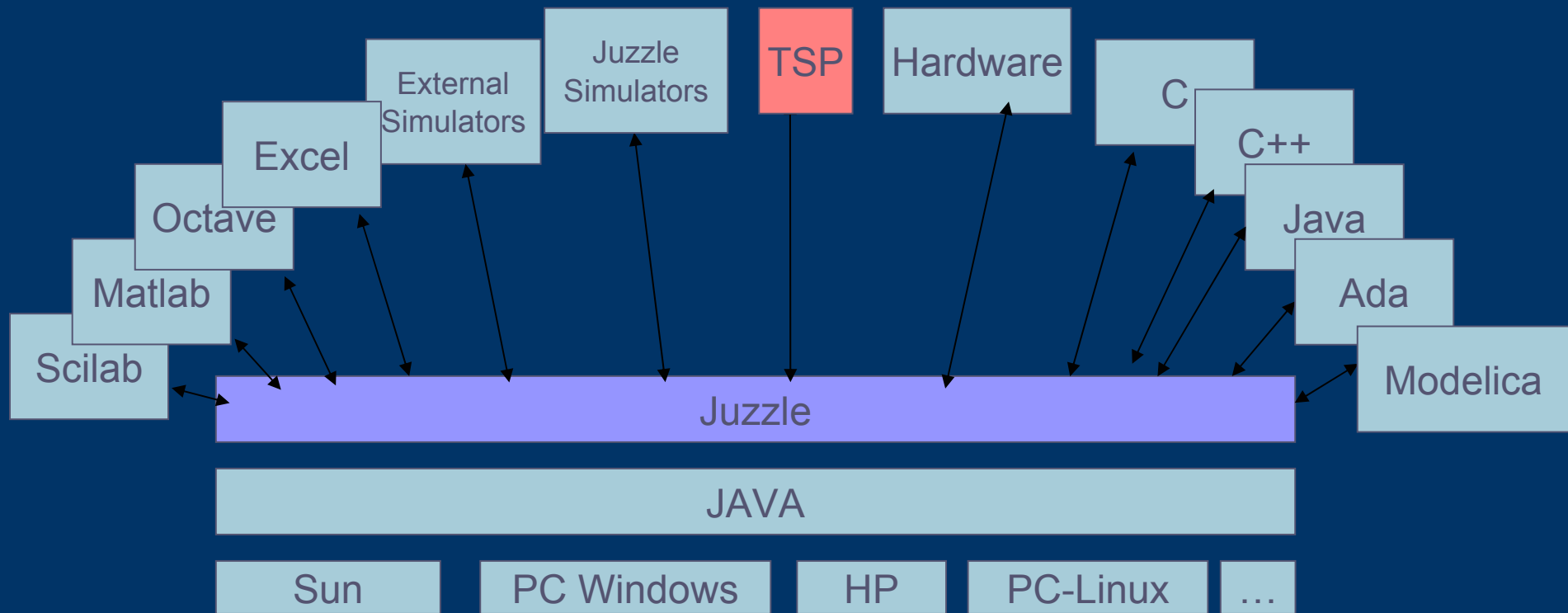
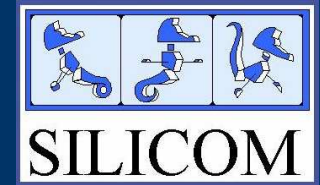
# *Juzzle generalities*



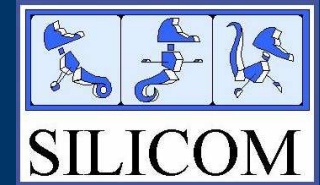
- Heterogeneous simulation tool
- Open framework build on top of Java
- Reusable platform for specific development
- Fast and easy application prototyping
- Provides distributed grid computing
- CPL licence ([www.juzzle.org](http://www.juzzle.org))



# Juzzle = Java + Puzzle

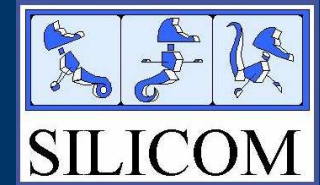


# *Juzzle TSP plugin*



- Complete jTSP integration into Juzzle
- Allows Juzzle component reusability
  - Real time monitoring at high sampling rate
  - Storage to disk
  - Export to external application
  - Usage as input data for simulation
- Work in progress





*Demonstration :*

*Juzzle TSP plugin*



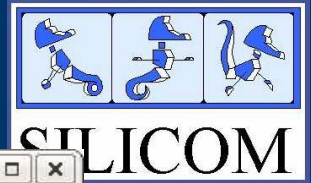
**Juzzle**

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# TSP/Juzzle : Probe selection



The screenshot shows the Testbed software interface with a 'TSP sampling source selection' dialog box open. The dialog box has two main panes: 'Available symbols' on the left and 'Selected symbols' on the right. The 'Available symbols' list includes:

- bb\_simu\_display\_level
- bb\_simu\_int8[1]
- bb\_simu\_uint8[1]
- bb\_simu\_1\_Toto[0]
- bb\_simu\_1\_Toto[2]
- bb\_simu\_1\_Titi
- bb\_simu\_1\_Tata[1]
- bb\_simu\_1\_Tata[4]
- bb\_simu\_1\_Tata[5]
- bb\_simu\_1\_Tata[6]
- bb\_simu\_1\_Tata[7]
- bb\_simu\_1\_Tata[8]
- bb\_simu\_1\_HugeArray[0]
- bb\_simu\_1\_HugeArray[1]
- bb\_simu\_1\_HugeArray[2]
- bb\_simu\_1\_HugeArray[3]
- bb\_simu\_1\_HugeArray[4]

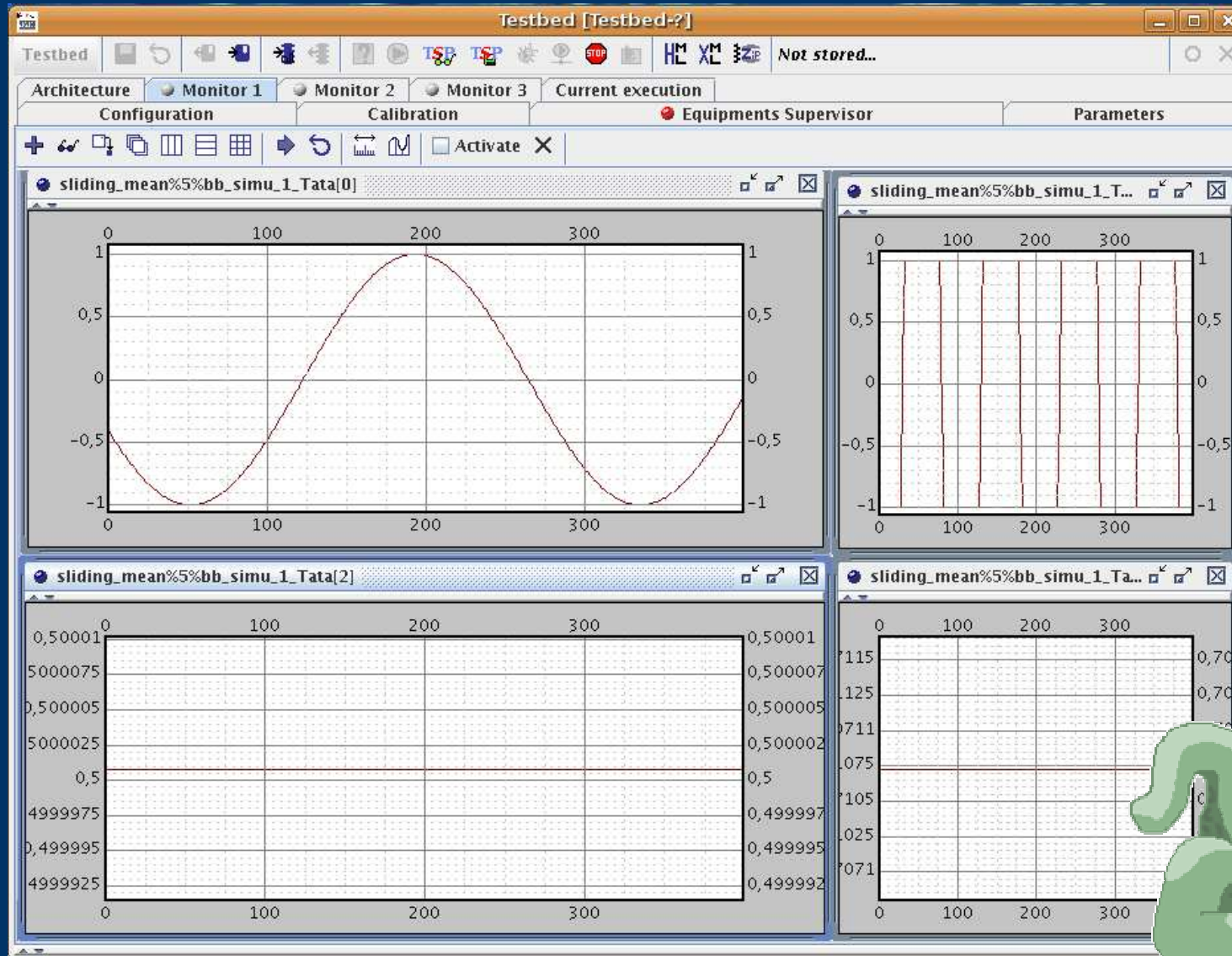
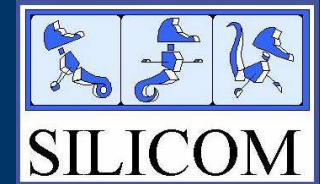
The 'Selected symbols' list includes:

- sliding\_mean%5%bb\_simu\_int8[0]
- sliding\_mean%5%bb\_simu\_uint8[0]
- sliding\_mean%5%bb\_simu\_1\_Toto[1]
- sliding\_mean%5%bb\_simu\_1\_Tata[0]
- sliding\_mean%5%bb\_simu\_1\_Tata[2]
- sliding\_mean%5%bb\_simu\_1\_Tata[3]

Below the panes, there is a 'Filter symbols' section with a text input field labeled 'Filter:'. At the bottom, there is a 'Computed functions' section with a dropdown menu set to 'sliding\_mean' and a 'Window size' input field set to '5'. 'OK' and 'Cancel' buttons are located at the bottom right of the dialog box.



# TSP/Juzzle : RT monitoring





*The end*



**Juzzle**

