



openMnE





Follow the *getting started*  
guide

OpenMOLE runs your own  
program, whatever the  
language. Java, Binary exe,  
NetLogo, R, SciLab, C++,  
Python, etc.

OpenMOLE has been developed since 2008 as a **free and open-source** platform. It offers tools to run, explore, diagnose and optimize your numerical model, taking advantage of distributed computing environments. With OpenMOLE you can **explore your already developed model**, in any language (Java, Binary exe, NetLogo, R, SciLab, Python, C++, etc.)

OpenMOLE comes with a graphical user interface (GUI) to write **scripts around your model**. These scripts will use OpenMOLE methods to **explore** your model and **distribute** its executions on High Performing

**SCALE**



Explore spaces of parameters,  
optimize, test the sensitivity of  
your model through innovative  
methods.

Read the full  
documentation

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your model through innovative  
methods.

Try the demonstration  
website







Download OpenMole on  
your computer



**RUN**







**EXPLORE**

**SCALE**

blog!

Simulation models can be abstracted as a program (or function) that transforms a set of **inputs** into a set of **outputs**.

Inputs are various: parameters , pictures, CSV files, DB connections, etc., most of the time, modelers are interested in **parameters space exploration** for sensitivity analysis or calibration.

Likewise, outputs can be values are most of times **measures**, computed on the dynamics produced by a simulation run (e.g. fitness or error functions).

In the following, we will refer to **input space** and **output space**.























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OpenMOLE comes with a graphical user interface (GUI) to write **scripts around your model**. These scripts will use OpenMOLE methods to **explore** your model and **distribute** its executions on High Performing Computing (HPC) environments, with only a few lines of code!

OpenMOLE is the tool you need if you want to carry out Real sensitivity analysis, Calibration on mono or multi criterion, Pattern diversity research in model dynamics, Custom design of experiments, Data processing.

openMODEL

Read the full  
documentation



Get started

Scale up your experimentations  
with no effort on servers,  
clusters, grids, clouds, etc.



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In the following, we will refer to **input space** and **output space**. OpenMOLE provides methods to conveniently explore these spaces and help you answer original questions about your model.

The resulting output of a simulation, for a given input, will sometimes be referred to as the **image** of the input. Likewise, the parameters corresponding to an image are called **origins** or **ancestors**.

**RUN**



