When you specify the “Algorithm” for a node, you establish its most fundamental property. In particular, you answer questions like: Does the node depend on other nodes? If so, is this a functional relationship or a statistical relationship? Does the node contain local values? If so, is this treated in the same way as the different global input values are?

Having selected the algorithm of the node, you proceed by specifying other properties such as “Operators”, “Local factor”, “Distribution”, and “Parameters”. Note however, that some of these may be either unavailable or ignored by the node depending on which algorithm you selected. Note also that because of the way DynRisk initialize the algorithm for a node, you typically do not need to set this property unless you need to correct a mistake.

DynRisk offers 5 different algorithms:

- Local only
- Global only
- Single
- Double
- Correlation

Local only

This algorithm is used for nodes that have no input edges, i.e., “Independent” nodes. Thus, if you select this option for a node that has input edges, all the input values will simply be ignored.

The output value of a node with “Local only” as algorithm is computed according to the following rule:

Output value = L R

where L is the local factor of the node, and R is a random number generated from the distribution of the node. Note, however, that if the node does not include stochastic values, the R-factor is skipped.

Whenever you create an “Independent” node, its algorithm is initialized to be “Local only”.