

# Taxonomy or model/process configuration based applications

As mentioned for the [classic knowledge based applications](#) and [scenario based applications](#), during development and use of the applications over the years, the necessity to allow Quaestor to represent knowledge about the sequence of computational process was recognised and the [Taxonomy concept](#) was introduced. The term Taxonomy has been borrowed from biology and describes the hierarchy of life on earth. In Quaestor a Taxonomy is a hierarchic structure of Entities/Objects (see also [\[wikipedia\]](#)).

The Taxonomy-Entity concept is now used as paradigm for the development of all new knowledge systems and provides important benefits, both for the Knowledge Engineer and the users of the knowledge systems. It facilitates the communication between knowledge engineer and users and results in more simple and maintainable solutions. However, please note that it should be seen as an addition to the technology as used for [classic applications](#).

Typical applications that can be developed very easily based on the [Taxonomy concept](#), are the [configuration type](#) of applications. Note that we have discovered that this is valid for numerous processes or products in both analysis, design and engineering.

By dividing a product or process into several types of entities (see [ENTITY#\(\)](#) function for all facilitated types), as a developer you can generically define what a product or process can look like and what order is required to come to a solution. For the user, as with the reasoning in [classic applications](#), Quaestor will provide the functionality to ask questions, place or remove entities, give color feedback, etc. in order to develop products or go through processes in the most convenient way. Realize that, for parts of the models in this network of entities, the reasoning mechanism will still be used. In this way the advantages of both the [Taxonomy](#) concept and the [classic approach](#) is very well combined.

The Taxonomy approach is already used for a broad field of domains, such as streamlining pre- and post-processing around frequently used CFD tools, configuration of ship concepts varying from offshore vessels to naval designs and configuration and analysis of pile transportation in the offshore.

For more about the examples go to [Taxonomy examples](#).