

Scenario based applications

As mentioned for [the classic knowledge based applications](#), the necessity to have influence on the order in which input is requested and calculations are made has resulted in the [scenario](#) based approach.

The main idea in the [scenario](#) based approach is to use the reasoning mechanism to come to a solution, but with a sequence or scenario of input steps and intermediate calculation steps to come to the total result. Furthermore, special attention is paid to the coupling of the data set with the scenario solution. A user will always select a data container (call it a "Ship" or "Transport") in combination with the task to perform (which is the scenario for the process). All the input steps are stored in the data set and used for the calculations further in the scenario.

In other words, a user can prepare much of the required input for the calculations steps, without carrying out the calculations yet. Furthermore, this input can be requested in any layout and sequence you want (so no unexpected questions will be asked due to the reasoning process). And moreover, during calculation only missing information (input, choices) will be requested because for every scenario goal Quaestor is still working in the [classic](#) way.

For the [Knowledge Engineer](#) the approach means that the calculations steps can be developed in the normal way and the overall process can be defined using the [SCENARIO\\$](#) function.

The advantage of the approach is clear, you have better control over your total calculation process. There are however, also some disadvantages. The main disadvantage is that creating a smooth scenario requires effort using a number of special attributes and constraints. For this reason, Knowledge continued developing improved methods to achieve the same goals: combining the strength of reasoning with easy and flexible definition and control of the process. This has resulted in the [Taxonomy or model/process configuration based approach](#). Not going into technical details, the biggest difference of the Taxonomy or model/process configuration based applications is the ease of development and use.

Very powerful applications can be made on the basis of the scenario approach. Examples are Sea Trial Analysis program QSTAP of the STA-JIP and the speed-power prediction tool QDESP of MARIN. The QDESP knowledge base is also used on the internet as [Web based application](#).

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