# Analysis and Design Document for OPAL

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#### Introduction

The primary goal is create a framework that helps the users to realize the tunning task following the schema

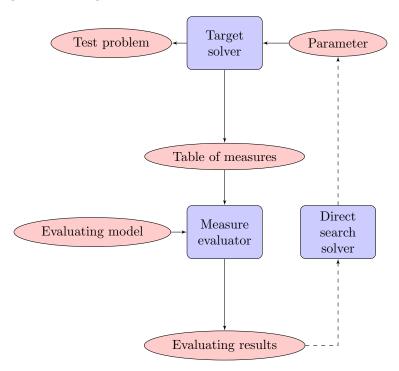


Figure 1.1: General schema of parameter tunning

## Backgrounds

The principles are built basing on the observations:

- There are main entities Information and Information Manipulator
  - 1. Information is in fact set of elements with the methods set and get value. The set is organized in the different structure like a scalar, a vector or a matrix ...
  - 2. Information Manipulator represent for the processes manipulate the input information to get the other information as output
- Any process is formulated by the interaction between these entities
- An Information Manipulator is characterized by Input, Parameters and Output.
  - 1. Input includes the Information and set of Manipulators that may be a empty set. If this set is empty, the Manipulator is called Evaluator, otherwise it is called Solver.
  - 2. Parameter is actually Information, it is used to generallized a class of Manipulator. Each time the parameters are set to the specific values, we have a manipulator.
  - 3. Output is Information represents for the results of manipulation.

System analysis

System design