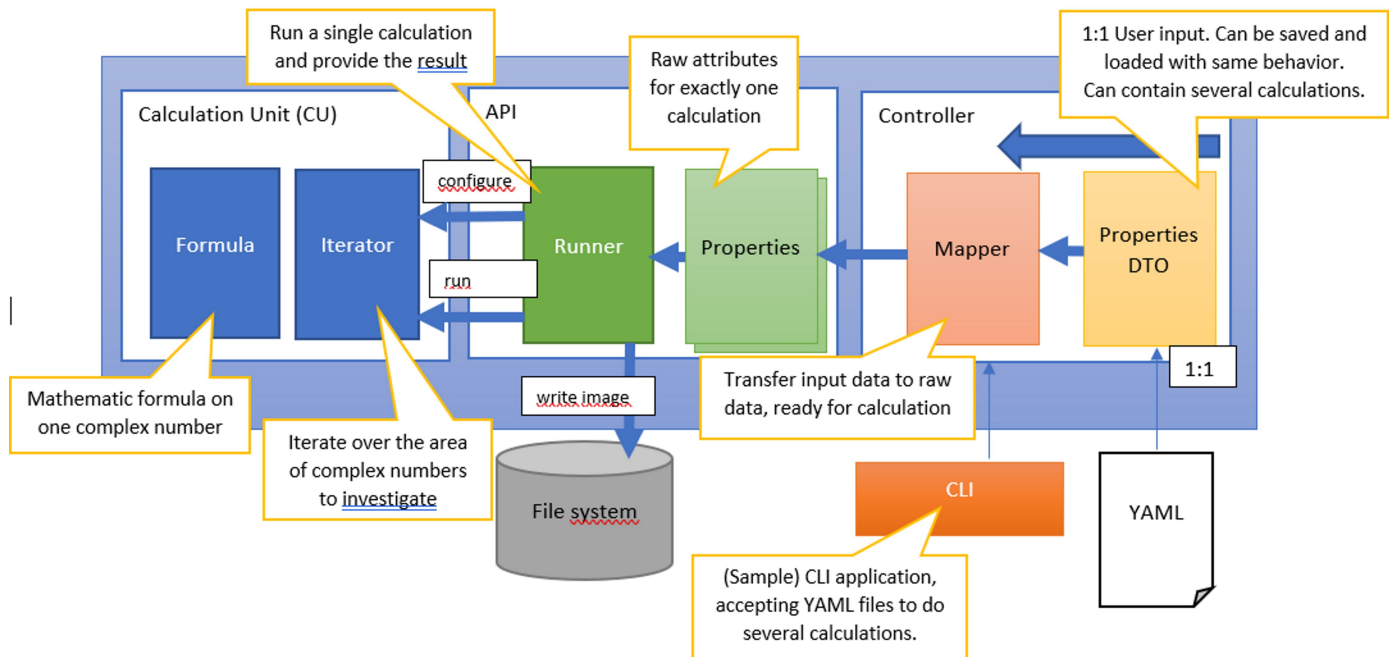# Component Diagram

Freitag, 30. April 2021   15:04

Calculation Unit
- Combines alle elements, used to do the mathematic calculation

Formula
- Calculation for one complex number

Iterator
- Iterates over the image area

API
- Calculation can be accessed by the elements in the API

Runner
- Configures the Calculation Unit
- Starts the calculations
- Writes the image to the file system
- Can either do a single calculation or a numer of calculations in a batch

Properties
- The raw model of the parameters, used to calculate, to define the dimensions of the image and more
- Does always contain all attributes, needed.
- Describes always exactly one calculation.
- In case of a batch, a list of Properties is needed.

Controller
- Combines all elements, used to start the calculation

PropertiesDTO
- A 1:1 model of the configuration
- Not necassarily type safe, due to the need of interpreting the input.
- Can contain several calculations to be done.
- Must than be translated in a list of Properties

Mapper
- Translates the input from PropertiesDTO to Properties

CLI
- CLI (Demo) aaplication to run a Mandelbrot set calculation