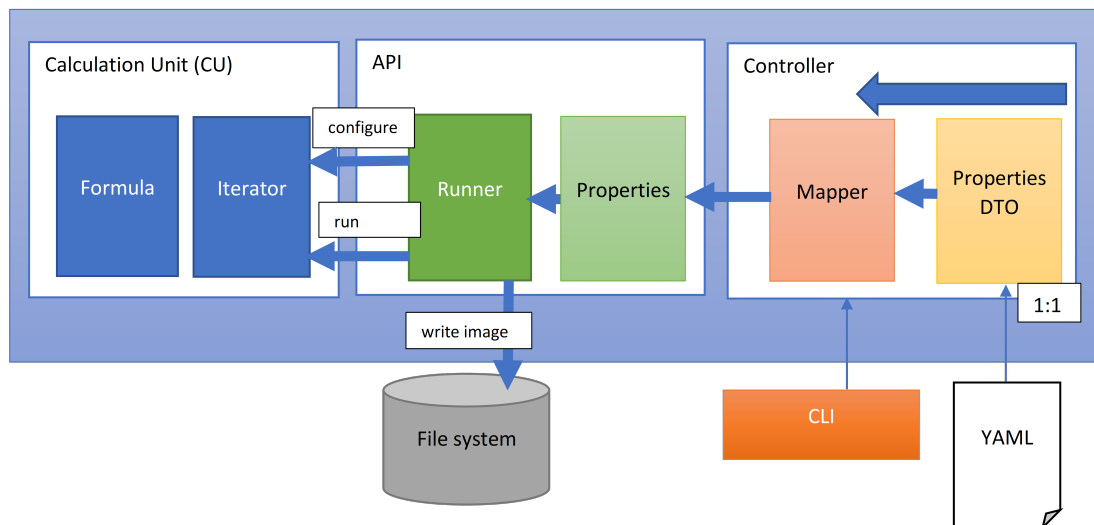


Component Diagram

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 number of calculations in a batch

Properties

- The 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 necessarily type safe, due to the need of interpreting the input.
- Can contain a number of calculations to be done.
- Must than be translated in a list of Properties

Mapper

- Translates the input from PropertiesDTO to Properties

CLI

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