The next part of the app is scheduler. Without a doubt, its realization may be taken easily from almost every popular framework or toolkit but we have to build a little special one.

The main purpose of it is to maintain actual states or update the devices model according to our request. Checking states of devices, some event detection at regular intervals... the scheduler is responsible for all these tasks.

So, let's take a look at its diagram.

As you see, besides the scheduler interface and its implementation, the second most important element is a task. In execute method it contains the logic that must be performed in a given interval or at some time, may be with a certain delay. All these settings are defined inside related “TaskProperties” instance. Every task is "NetworkManager"-aware, by the way. It means that every task has access to the whole network and can manipulate and read devices.

“TaskExecutor” and its children define strategy, according to which the tasks will be executed. It may switched between a cycle-like and a queue-like execution strategy easily in application settings, which we’ll discuss in next articles.