

## Task Setup – “*myPILED*” PC Application

## 1. System requirements

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- USB stick driver or DALI Cockpit installed
- myPILED PC application installed
- Zigbee or DALI network created and light groups configured
- USB stick or DALI USB inserted
- myPILED application started
- Local USB or IP camera installed

At the moment the following type of IP camera is supported:

- Instar IN-6001HD camera setup (<https://www.instar.co.uk/wifi-ip-cameras/in-6001hd-black.html>)

For local USB cameras the relevant driver needs to be installed, than any camera can be used.

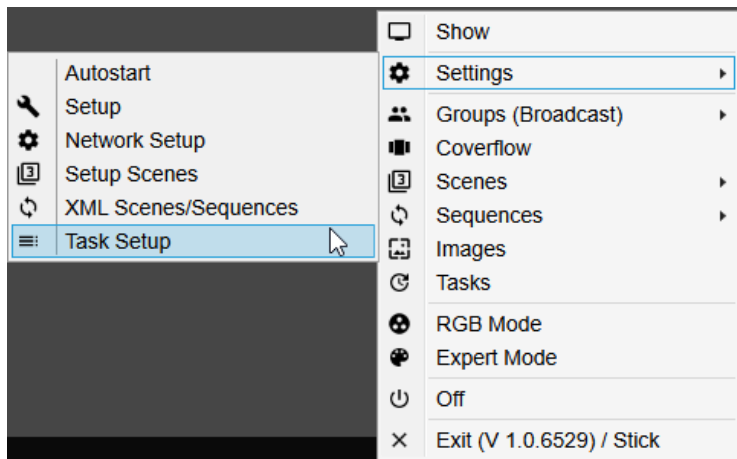
## 2. Features

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With this new functionality you can setup background tasks which make picture snapshots from locally connected USB cameras or remote IP cameras, define certain areas in the picture from which the optimum colour temperature is calculated and then this CCT is applied to defined light groups in order to present the goods in the best colour. The task can be set either to run at specific intervals (e.g. every 60 seconds) or at specific times (e.g. 11am, 13am).

- Select cameras from which to make image snapshots
- Define relevant areas in the picture from which to calculate the optimum colour temperature
- Assign light groups to this areas
- Define intervals or time of day when to apply new settings
- Graphical user interface for easy setup
- Settings are stored in a text file in json format for "expert" setup
- For one camera snapshot multiple areas can be selected
- To each area multiple light groups can be assigned

### 3. Task Setup Assistant

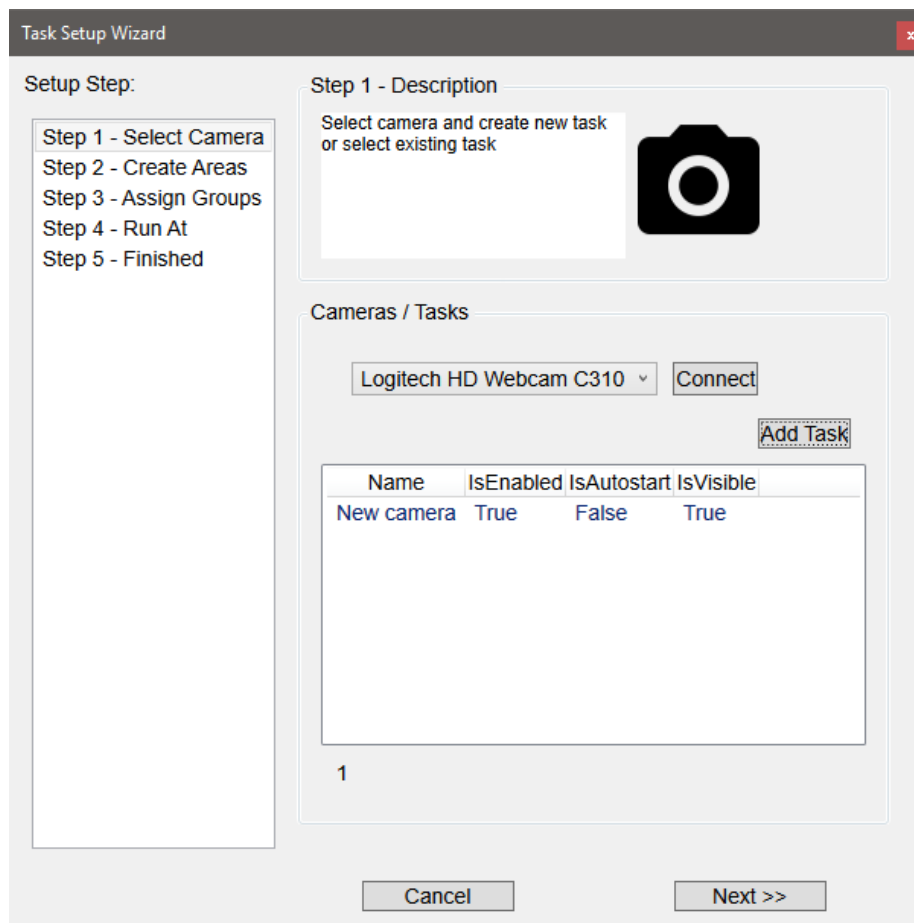


Select „Settings→Task Setup “to run the Task Setup Assistant.

The Task configuration consists of 5 steps:

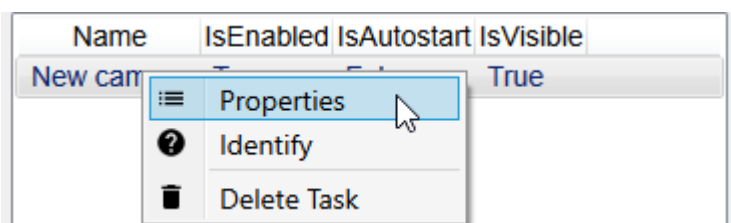
1. Choose camera device
2. Create image areas
3. Assign light groups
4. Define time to run or interval
5. Finish setup

### 3.1. Step 1 – Select Camera



In the “camera combobox” all available local USB cameras as well as IP cameras with in the network are displayed. To add a task you have to select a camera first and press the button <<Add Task>>.

- <<Cancel>> closes the Task Setup Assistant
- <<Next>> goes to next step of the setup
- <<Add Task>> adds a new task for the selected camera
- <<Connect>> connects to the camera device and displays the actual picture



Within the context menu of a task you can execute the following functions:

- <<Properties>> displays a dialog with the properties of the actual task (e.g. name, ...)
- <<Identify>> flashes the lights assigned to the task
- <<Delete Task >> deletes the actual task

The screenshot shows a dialog box titled "New camera" with a close button (X) in the top right corner. The main content area is titled "ImageCaptureTaskBase New camera" and contains a table of properties:

Name	New camera
Enabled	<input checked="" type="checkbox"/>
AutoStart	<input type="checkbox"/>
Visible	<input checked="" type="checkbox"/>
Interval	10
NeutralCCT	0

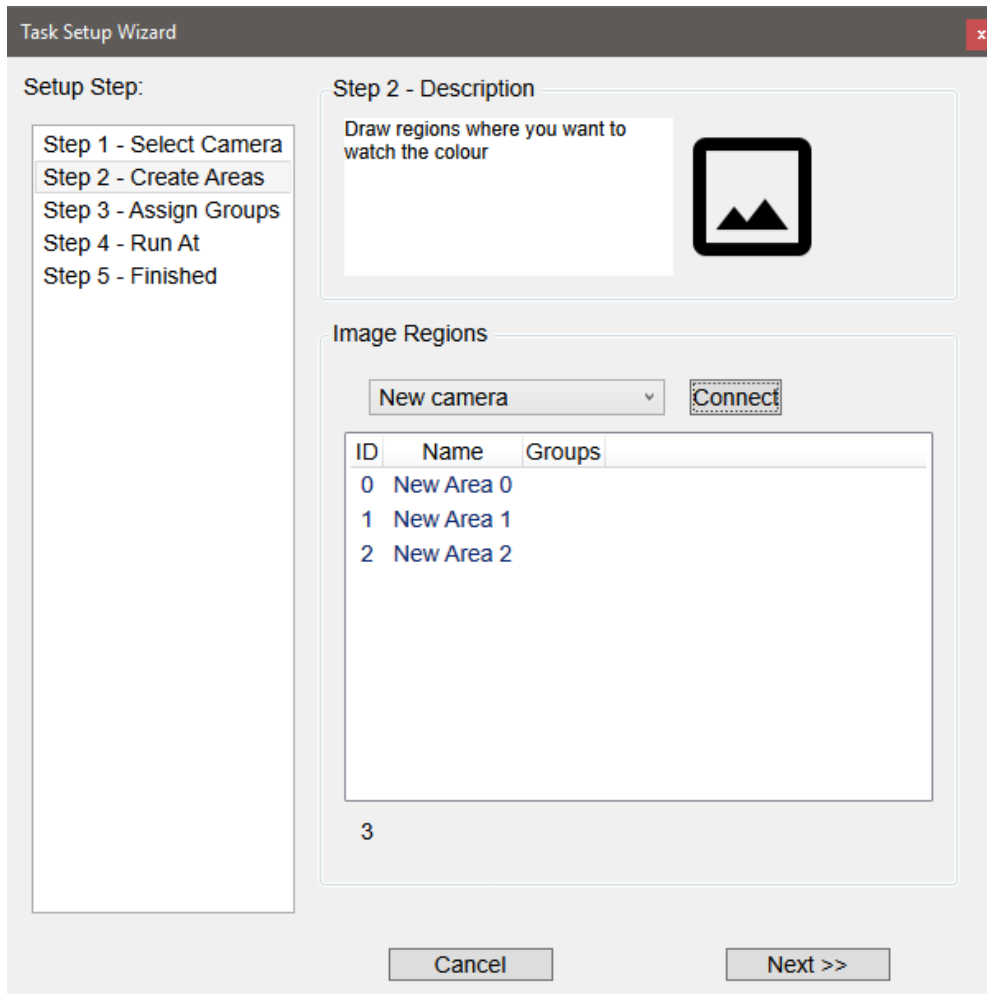
Below the table, there is a "Run At" section. It contains a text input field with the placeholder "hh:mm" and an "Add" button. Below the input field is a large empty rectangular area, likely for a list of scheduled times.

The following properties of the task can be changed in this dialog:

- „Name“ of the task
- „Enabled“: Set task active or inactive
- „Autostart“: If enabled starts the task when the application starts
- „Visible“: if enabled the task is visible in the applications mainmenu
- „Interval“: defines the time in seconds when the task is run
- „NeutralCCT“: defines the CCT which is set before an actual snapshot is made (0 means not action)
- „RunAt“: defines the times when to run the task

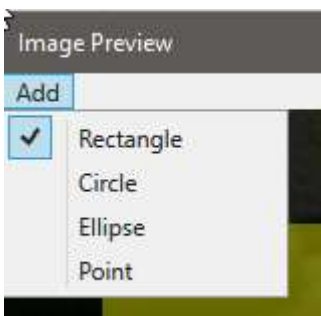
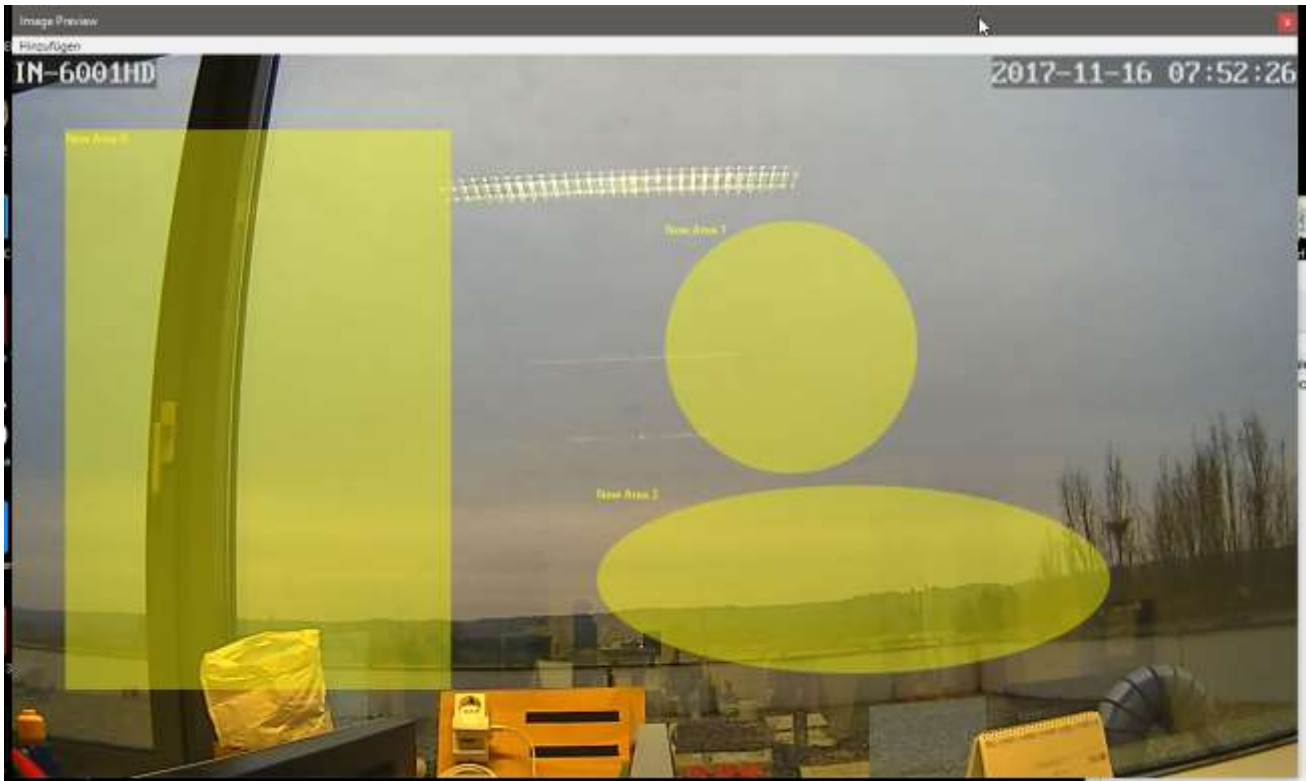
If “RunAt” times are specified the task is run at this times and not in intervals. If no time is specified the task is run regularly in intervals.

## 3.2. Step 2 – Create Image Areas



With the <<Connect>> button the actual picture of the camera is displayed and you can define areas with the mouse inside the picture.

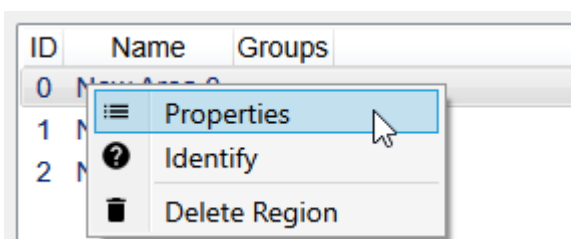
- <<Cancel>> closes the Task Setup Assistant
- <<Next>> goes to next step of the setup
- <<Connect>> connects to the camera device and displays the actual picture



You can select different shapes through the menu option <<Add>>

- Rectangle
- Circle
- Ellipse
- Point

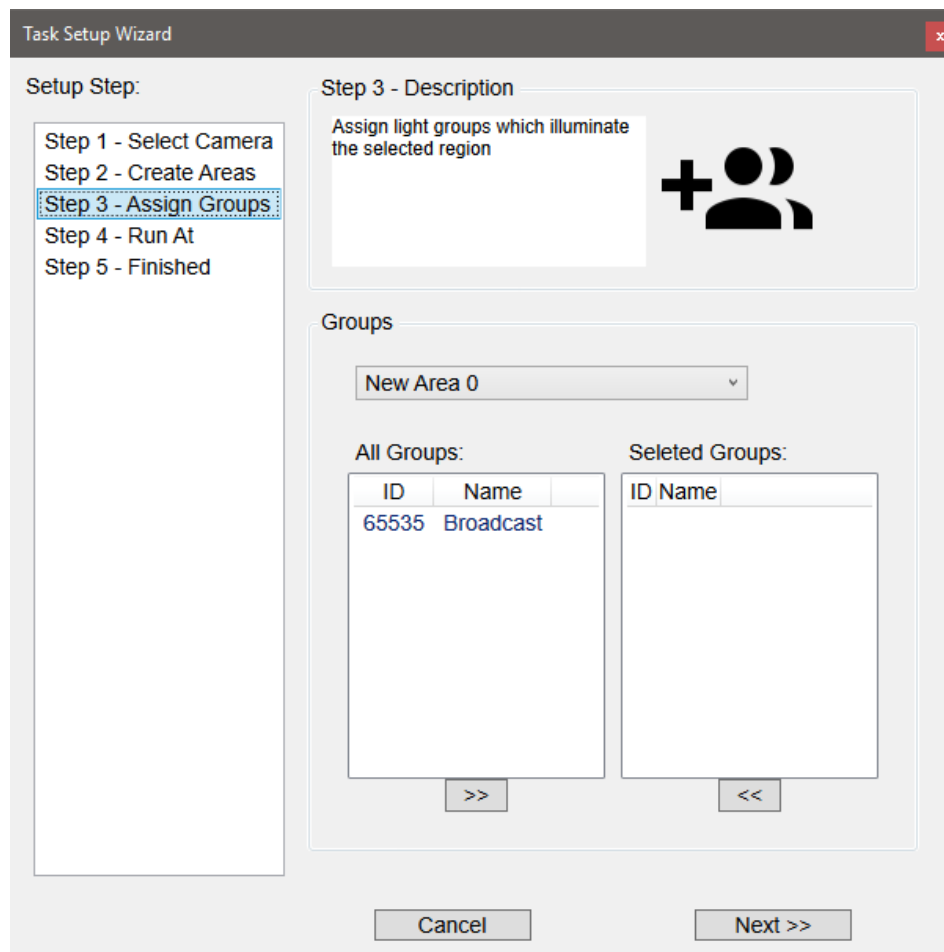
From the selected regions in the picture the colour will be calculated.



From the context menu of a region in the listbox the following functions can be executed:

- <<Properties>> display the properties of the image area
- <<Identify>> flashes the lights assigned to the task
- <<Delete Region >> deletes the actual region

### 3.3. Step 3 – Assign Light Groups



In this step the region will be assigned to light groups. To do this drag & drop the group from the left combobox to the right combobox.

- <<Cancel>> closes the Task Setup Assistant
- <<Next>> goes to next step of the setup



### 3.4. Step 4 - Define Times

**Task Setup Wizard**

**Setup Step:**

- Step 1 - Select Camera
- Step 2 - Create Areas
- Step 3 - Assign Groups
- Step 4 - Run At**
- Step 5 - Finished

**Step 4 - Description**

Enter times of day or an interval in seconds when to run the task and calculate a new colour for each of the regions

**Time of day or interval**

Task:

Interval:  seconds

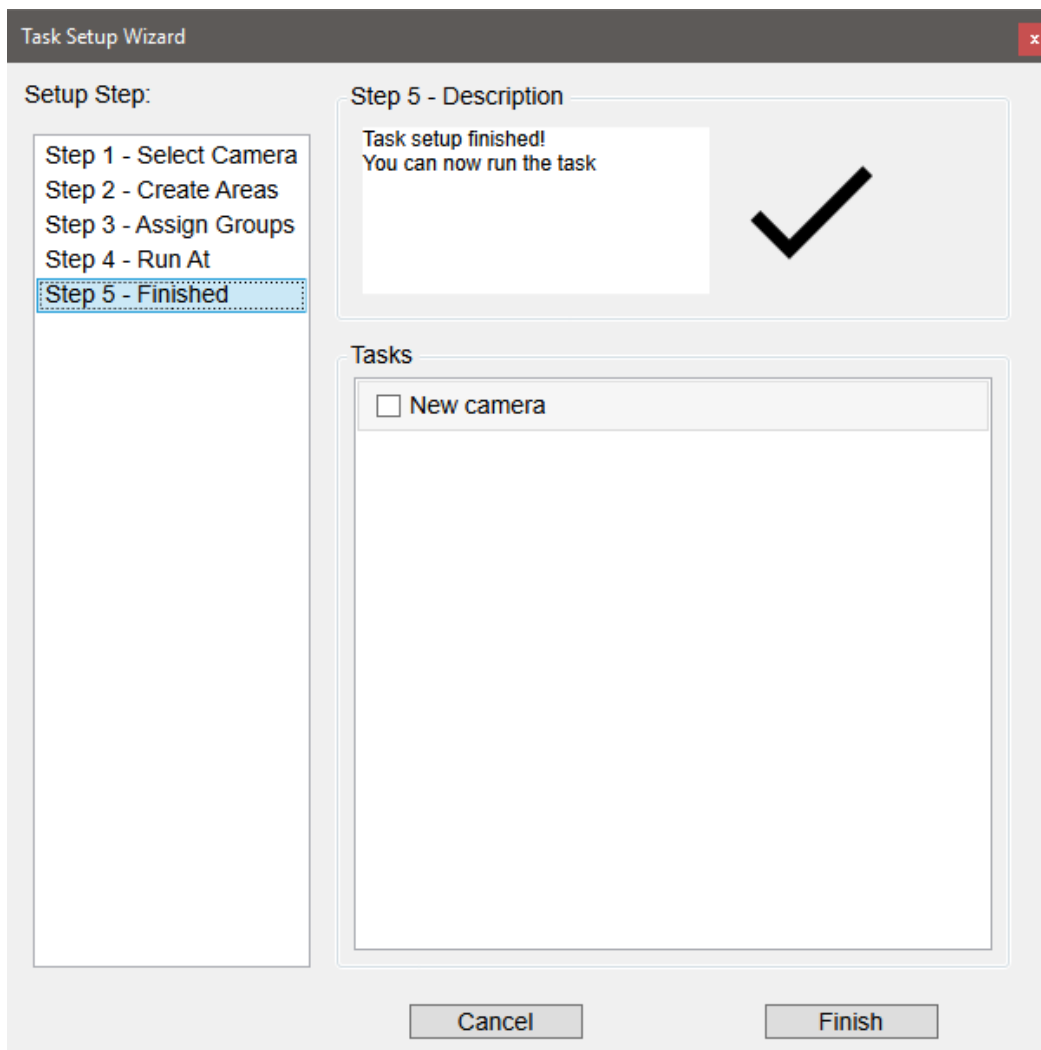
**Time of day**

The selected task will be run **either in intervals or at specific times**. If there are times specified in this dialog the task is started once at this time and not in intervals. Vice versa if there is no time specified the task is run in intervals (in seconds).

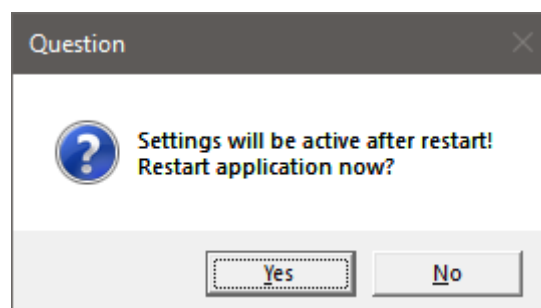
- <<Add>> adds a time when the task will be run(Format hh:mm)
- <<Cancel>> closes the Task Setup Assistant
- <<Next>> goes to next step of the setup

	<p>To delete a time open the context menu and choose &lt;&lt;Delete&gt;&gt; or &lt;&lt;Clear all&gt;&gt;</p>
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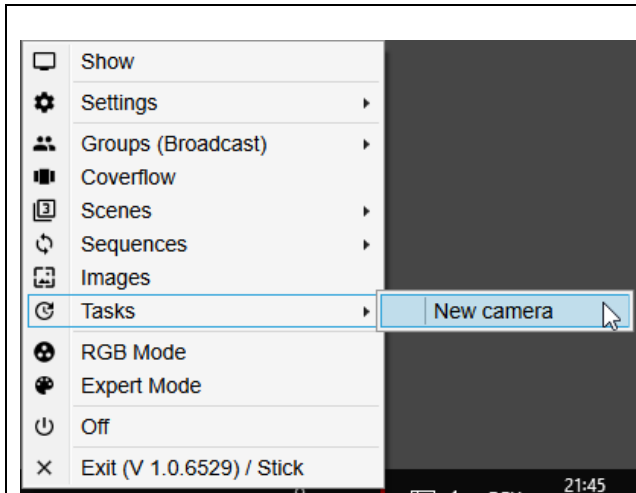
### 3.5. Step 5 – Task Setup Finished



The task setup is now finished. The task can now be started, new settings will only be valid after restart of the application

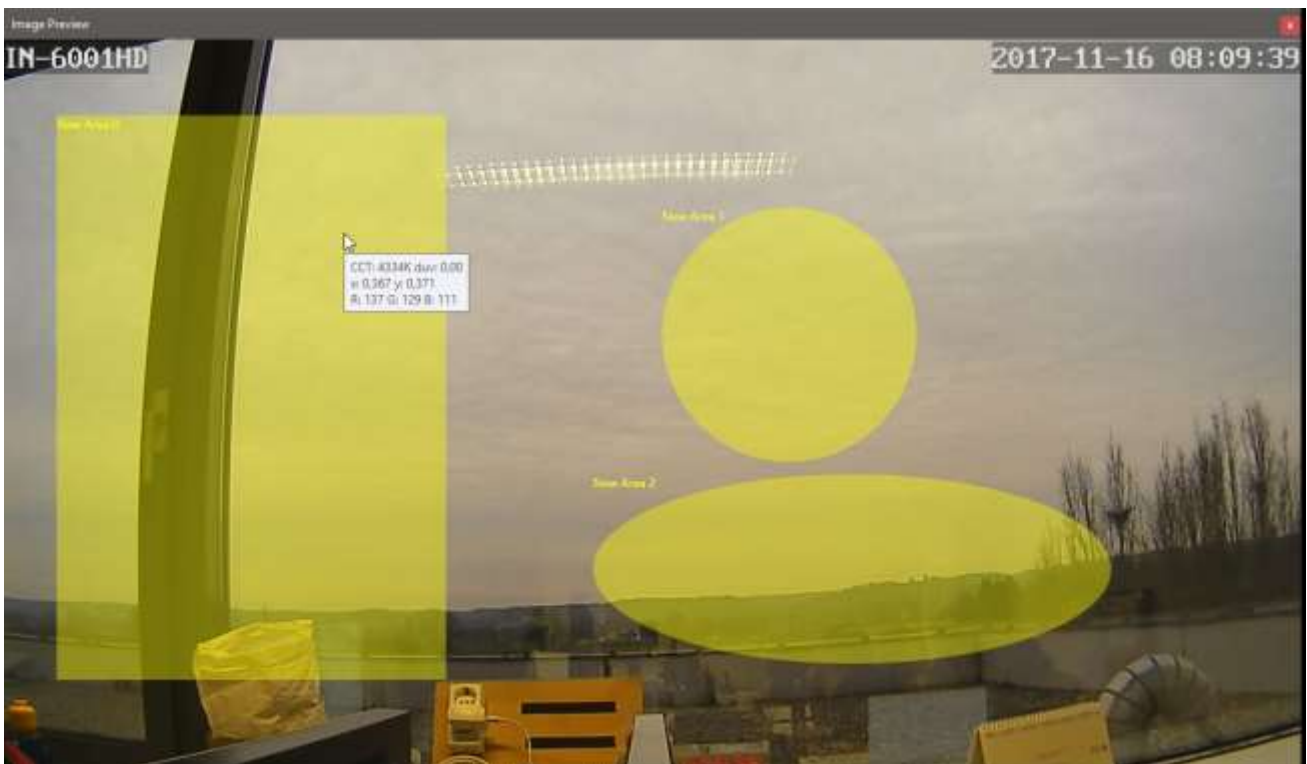


## 4. Start/Stop Tasks



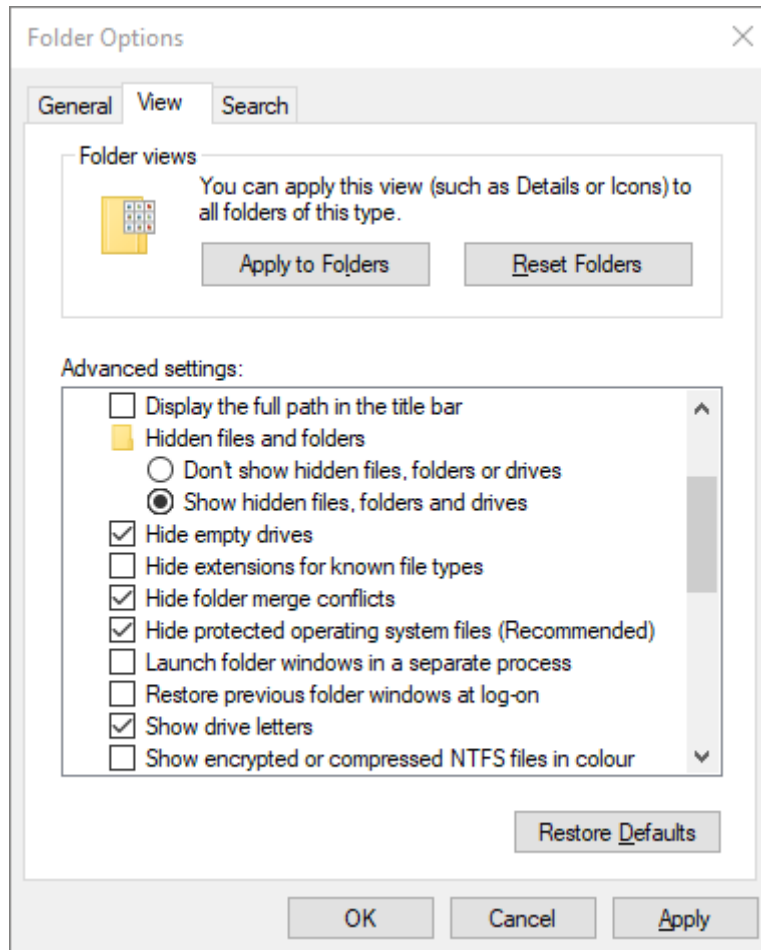
Configured Task can be started or stopped through the mainmenu "Tasks→(Taskname)"

If a task is started an actual picture of the camera with the defined image regions is displayed. When closing this preview window the task will be executed in the background. If the mouse pointer is moved into a region the actual calculated colour is displayed.



## 5. Task Setup – AsyncTask.json File

The task settings of the myPILED application are stored in the folder `C:\ProgramData\myPILED\`. This folder is usually a hidden folder in Windows. To show it you have to open the Windows Explorer go to “View→Options”, open the “Folder Options Dialog”, choose tab “View” and enable “Show hidden files, folders and drives”.



The "AsyncTask.json" can be opened and modified with a „normal“ text editor. The application must be restarted in order that the changes take effect.

Attention!

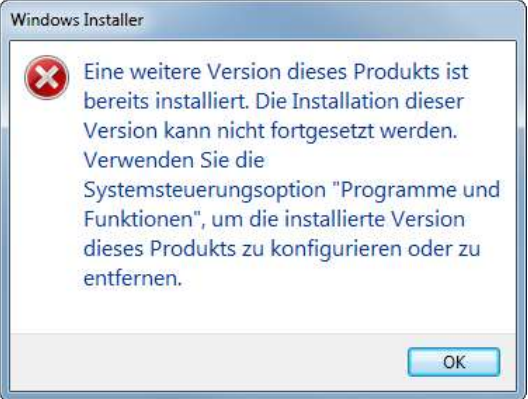

The correct formatting (like opening and closing brackets) is very important, because otherwise the application is not able to read the file correctly.

```
[
  {
    "Typename": "PILEDClient.ImageCaptureTaskBase",
    "Name": "New camera",
    "Interval": 10,
    "RunAt": [
      "2000-01-01T13:00:00",
      "2000-01-01T14:00:00"
    ],
    "Autostart": false,
    "Enabled": true,
    "Visible": true,
    "data": {
      "USBMonikerString": "",
      "Url": "http://192.168.4.192/tmpfs/snap.jpg?usr=admin&pwd=instar",
      "NeutralCCT": 0,
      "GroupData": [
        {
          "ID": 0,
          "Name": "New Area 0",
          "Algorithm": 0,
          "PILEDMode": 2,
          "Brightness": 255,
          "Groups": [
            0
          ],
          "Rect": "53, 75, 384, 557",
          "RandPoints": 0
        },
        {
          "ID": 1,
          "Name": "New Area 1",
          "Algorithm": 1,
          "PILEDMode": 2,
          "Brightness": 255,
          "Groups": [
            0
          ],
          "Rect": "650, 166, 251, 251",
          "RandPoints": 0
        },
        {
          "ID": 2,
          "Name": "New Area 2",
          "Algorithm": 2,
          "PILEDMode": 2,
          "Brightness": 255,
          "Groups": [],
          "Rect": "582, 429, 511, 187",
          "RandPoints": 0
        }
      ]
    }
  }
]
```

The meaning of the entries are as follows: (please maintain **upper/lowercase**)

Nr	Entry	Meaning
1	Typename	"PILEDClient. ImageCaptureTaskBase" <b>Fixed, do not change.</b>
2	Name	Name of the Task as displayed in the menu of the myPILED Application
3	Interval	Interval in seconds. The task is run every xx seconds when it is started
4	RunAt	Times of day when to run the task, when it is started. Can be a list of multiple timestamps.
5	Autostart	If the myPILED Application is started, and "Autostart" is set to true, the task starts automatically as well.
6	Enabled	If set to true the task can be selected, otherwise it is greyed out
7	Visible	If set to "true" the task is visible in the myPILED → Tasks submenu
8	data	Substructure:
8.1	Url	The snapshot URL of the IP camera
8.2	USBMonikerString	The "moniker String" of the USB camera.
8.3	Neutralcct	If set to >0, this cct is set to the light groups before each image capture (this might lead to unwanted "blinking" if the interval is set very short)
8.4	GroupData	Array of substructure which defines the area in the snapshot, the assigned light group and various other parameters (see below)
8.4.1	ID	Unique number identifying the entry
8.4.2	Name	Name of the group as displayed in Setup Dialog
8.4.3	Algorithm	Possible values: <ul style="list-style-type: none"> <li>• "0" (RECT): select a <b>rectangular</b> image area.</li> <li>• "1" (CIRCLE): select a <b>circular</b> image area.</li> <li>• "2" (ELLIPSE): select an <b>elliptical</b> image area.</li> <li>• "3" (POINT): selects a <b>single point</b>.</li> </ul>
8.4.4	Piledmode	One of these values: <ul style="list-style-type: none"> <li>• "2" (CCT): the lights are set acc. To the calculated <b>CCT</b></li> <li>• "3"(RGB): the lights are set to the <b>rgb</b> values calculated from the image</li> <li>• "4"(XY): the lights are set to the <b>xy coordinates</b> calculated from the image</li> </ul> <p>Other values are irrelevant (like NONE, BRIGHTNESS, CCT_BRIGHTNESS)</p>
8.4.5	Brightness	Brightness of the lights to be set when changing CCT. Value from 0 to 255
8.4.6	Groups	Array of Group ID of lights to be changed (comma separated list in square brackets)
8.4.7	Rect	Related to algorithm="RECT", "CIRCLE", "ELLIPSE" and "POINT" "RECT": left, top, width, height of the defined rectangle "CIRCLE": left, top, width, height of the rectangle where the circle is included "POINT": left, top coordinates in the image of the defined point
8.4.8	Randpoints	Not used

## 6. Troubleshooting

Problem	Action
<p>The following dialogue appears during installation:</p> 	<p>The downloaded program version is already installed.</p> <p>To install this version again, you must uninstall the current version manually (see point 4) and run the set-up file (myPILED.msi) again.</p>
<p>The following dialogue will appear:</p> 	<p>The .Net Framework version &gt; 4.5.2 must be installed.</p> <p>Manually download the framework from the Microsoft website.</p>

## 7. Contact

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