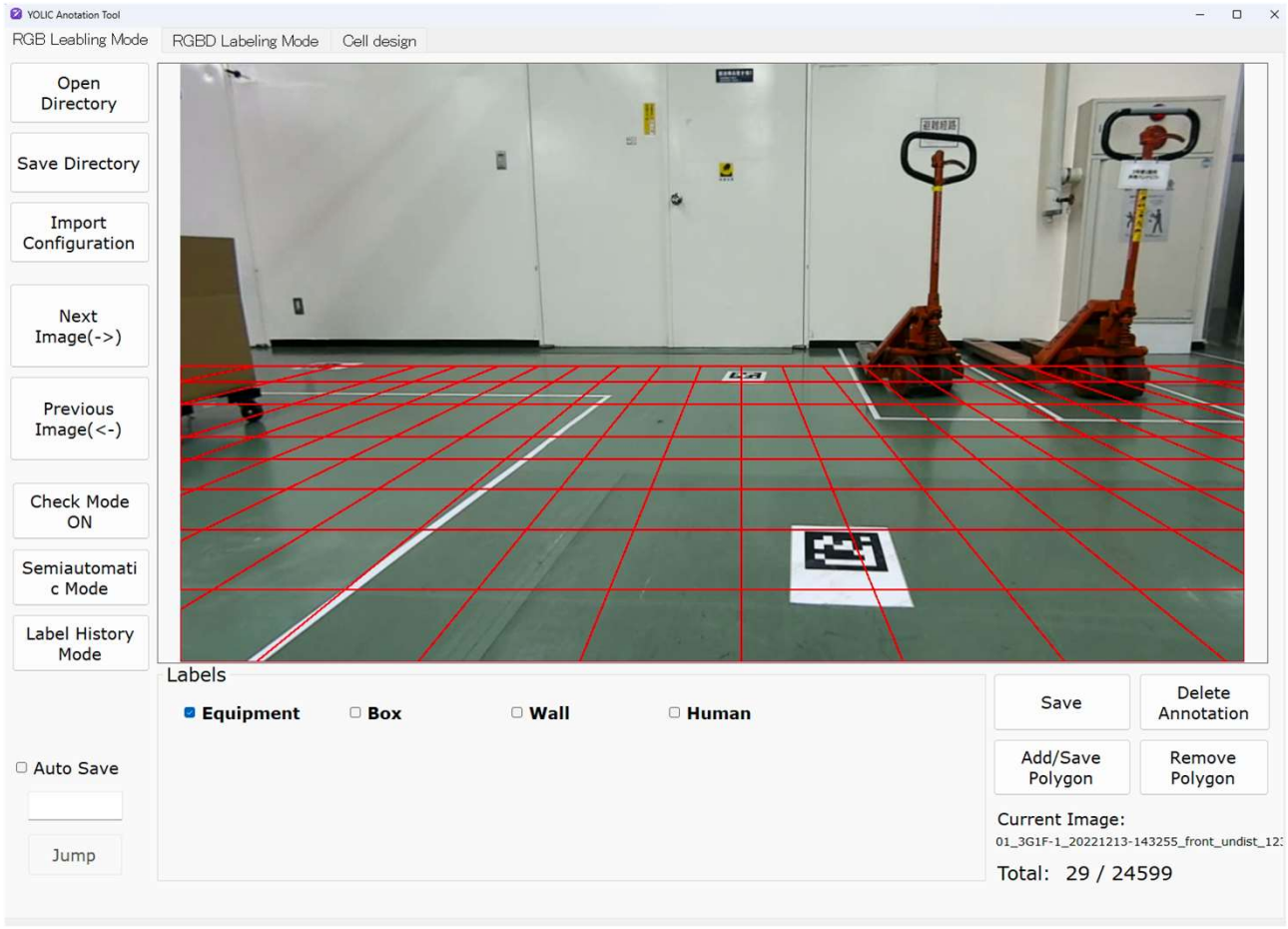
Usage of Image Annotation Tool

Overview

- YOLIC annotation tool is a graphical image annotation tool.
- It is written in C# and uses Windows Forms for its graphical interface.
- Annotations are saved as txt files in YOLIC output format. Moreover, we can also easily convert to any other format like VOC XML,COCO JSON.

Features

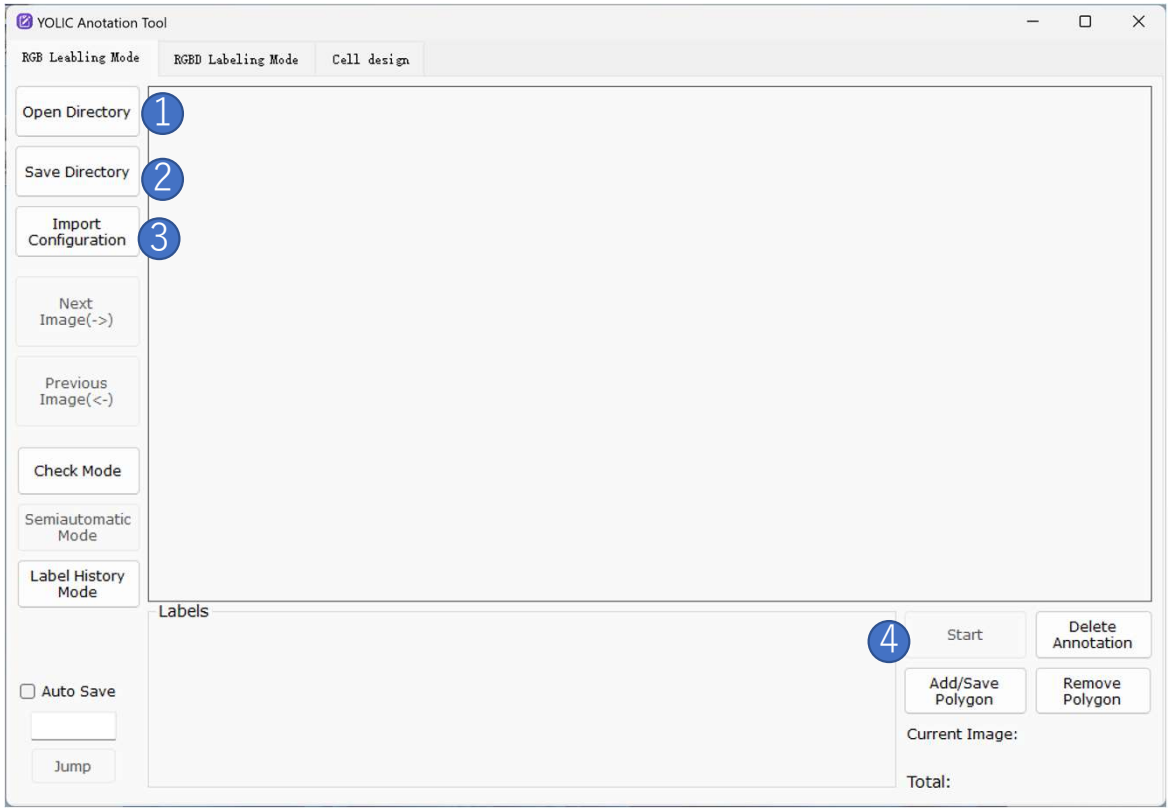
1. RGB Labeling Mode
2. Polygon Labeling
3. Check Mode
4. Semi-automatic Labeling Mode
5. Labeling History Retention Mode
6. Displaying the annotation results in real-time can be achieved (new)



Labelling Example (RGB mode)

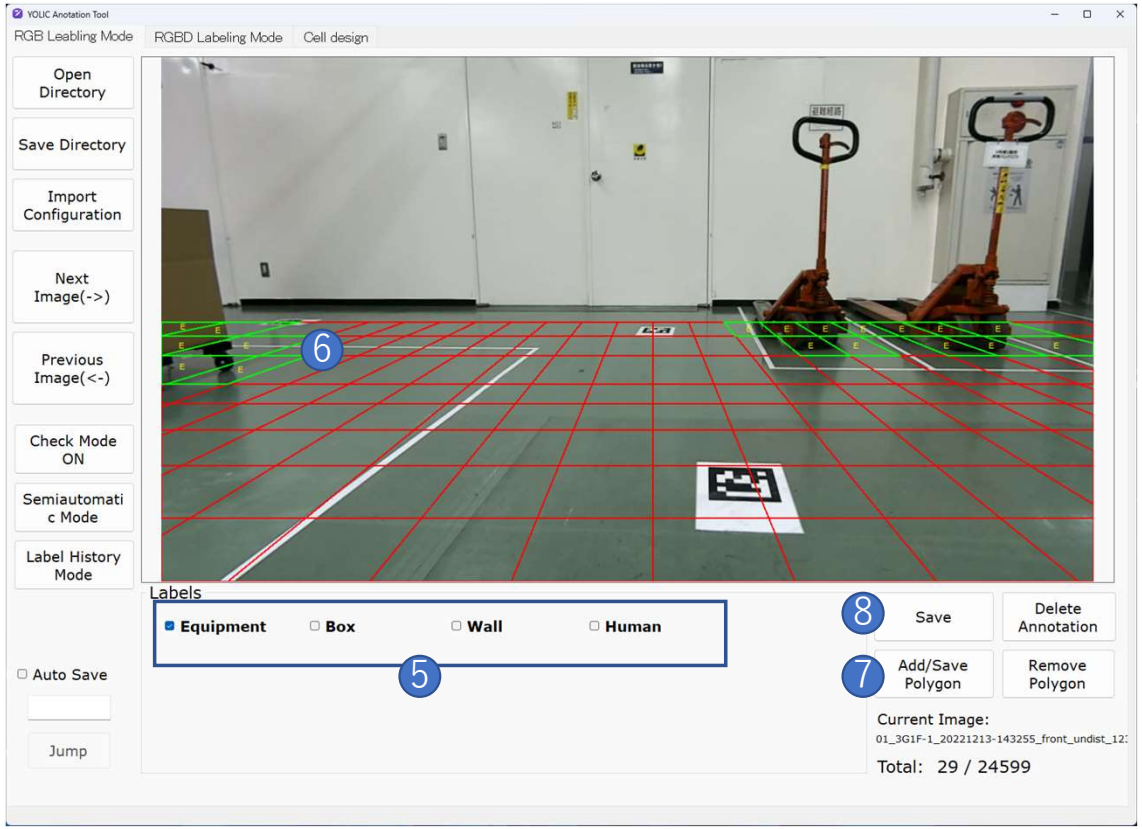
- Step 1: Open the RGB image folder.
- Step 2: Select your desired folder for saving annotation data.
- Step 3: Select labeling configuration data (cells of interest and predefined classes).
- Step4: Start labeling the imported images.

A .txt file with the same name will be created for each image file in the selected save directory.



Labelling Example (RGB mode)

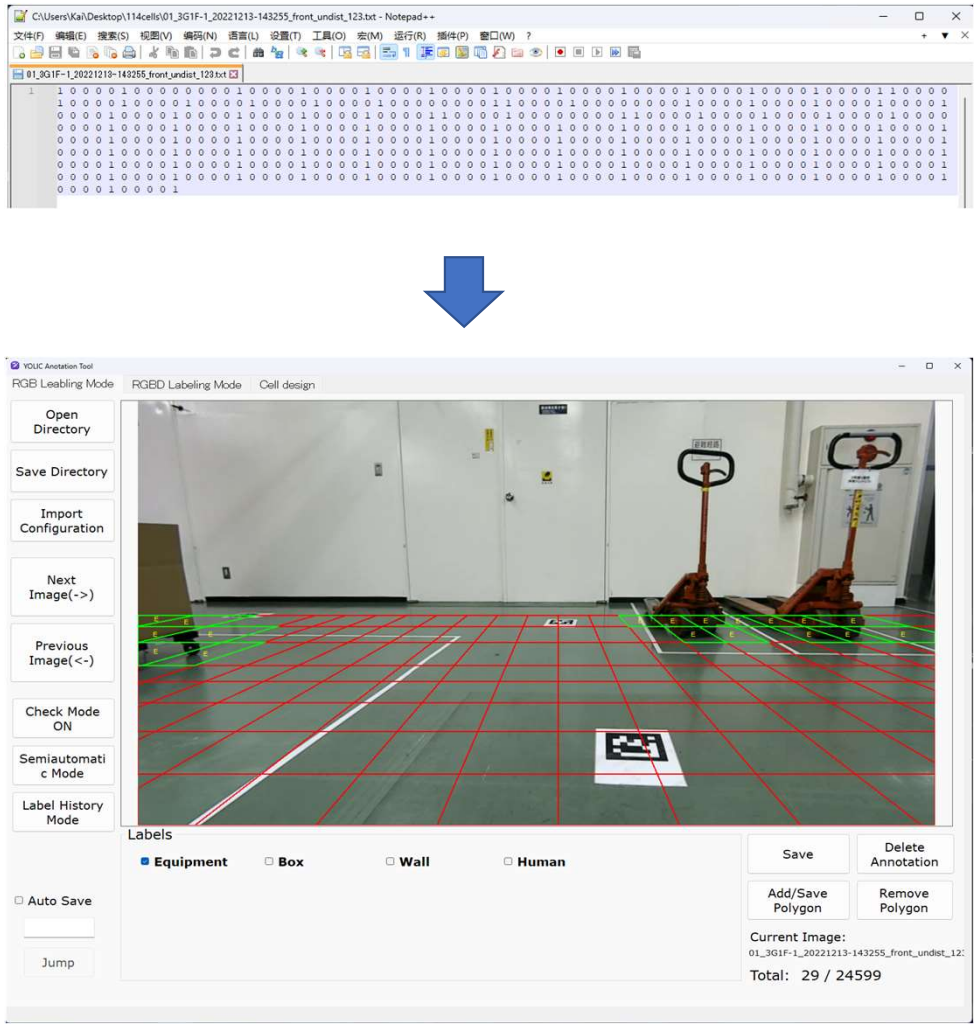
- Step 5: Select the object label to in the label list.
- Step 6: Use polygon to frame the target object area(left click).
- Step 7: Click “add/save polygon” button or double left click to save current polygon.
- Step 8: Click the “Save Annotation” button if all objects appearing in the area of interest are marked
- Step 9: Check the created annotation data.



Check Mode

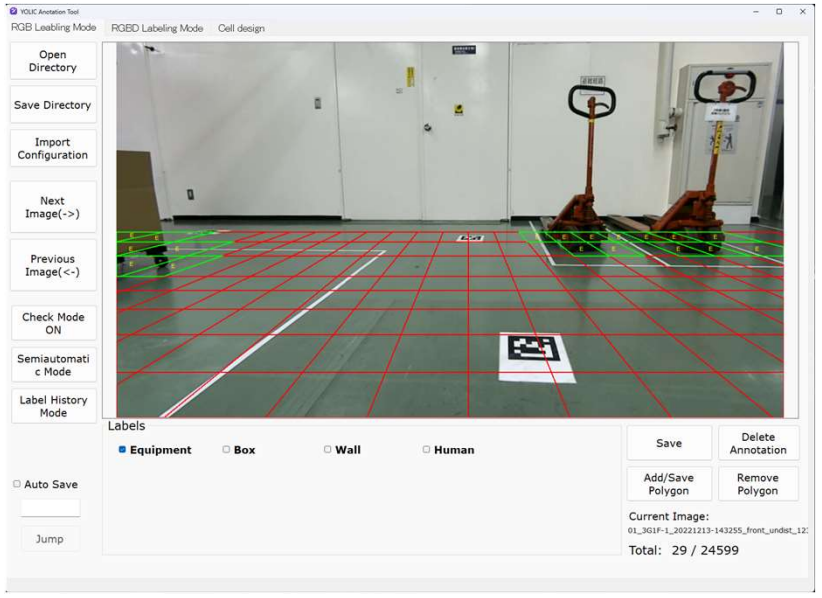
- Check Mode is a feature in image annotation tools that allows users to easily review previously annotated images. When in Check Mode, the tool can automatically show the annotations for an image if a corresponding label file exists.
- This allows users to quickly review and verify their annotations without having to manually search for and open the label file.

Check Mode is particularly useful when working with large datasets, as it allows users to easily verify their annotations and ensure that they are accurate and consistent. This feature can help reduce errors and improve the overall quality of annotations.



Semiautomatic Mode

- Semiautomatic Mode is a feature in image annotation tools that uses a pre-trained model to help speed up the annotation process.
- To use the semiautomatic mode, the user needs to train a detection model using a corresponding configuration file with a certain amount of labeled data. The output of this model can be used as a reliable starting point for labeling instead of starting from scratch.
- By leveraging the model's output, the labeling process becomes more efficient, especially when dealing with large amounts of data.



Label History

- The "Label History" function is a feature that allows users to preserve and load previously labeled information on the next image.
- This feature is especially useful in situations where the consecutive images are very similar or closely related. It allows users to adjust their annotations based on the labels from the previous image, which can save time and improve efficiency when labeling new images.