**CTI One Corporation**

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**Object Displacement**

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| --- | --- | --- | --- |
| Date | Description | Version | Created by |
| 10/31/2019 | Describe the scenario in detailed for Object Displacement testing on CAMSVR | v01 | Minh Duc Ong |

1. **How to run the program**

SStep1: On personal computer, open Terminal Window and ssh to the CAMSVR:

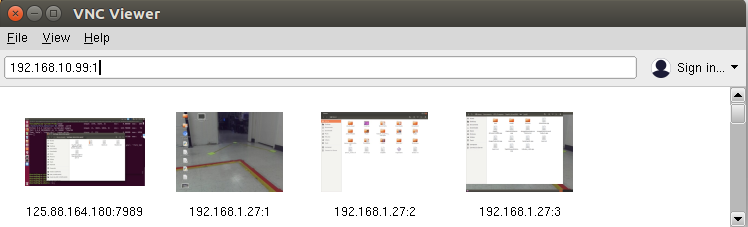
*ssh camsvr@192.168.10.99*

Password: Ctione2018

Step 2: Activate the VNC Server on the CAMSVR:

*vncserver :1*

Step 3: On the personal computer, open VNC Viewer to access to the CAMSVR



Input: *192.168.10.99:1*

Username: camsvr

Password: Ctione2018

Step 4: On CAMSVR, open Terminal Window and navigate to /home/CamSVR/Documents/AIV/Object\_Displacement by following command

*cd /home/camsvr/Documents/AIV/Object\_Displacement*

Step 5: Run the Garbage detection with the command:

*sudo python3 main\_Object\_Removal.py*

Step 6: Click 8 points around the object to define the gcreen boundary aroung the object. User can define up to 6 boundaries (as in Figure 3 and Figure 4).

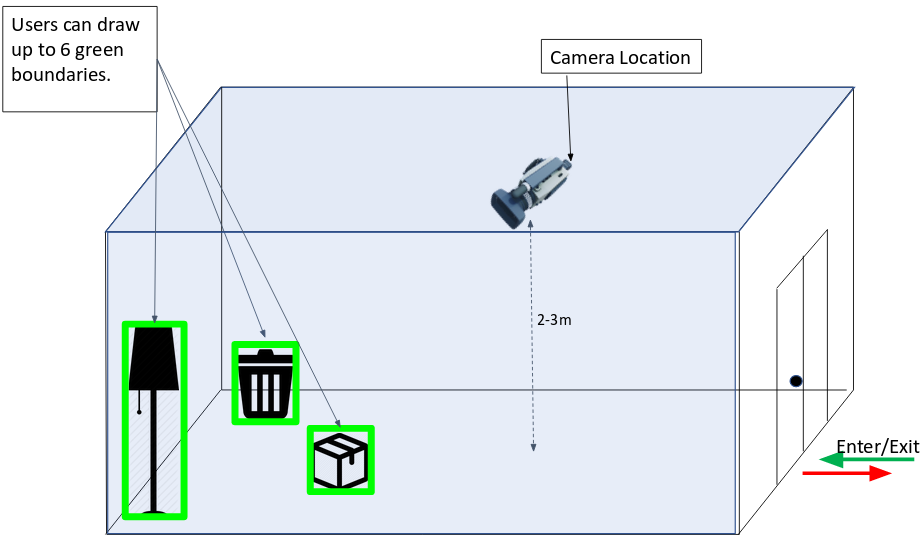


Figure 3. Draw multiples green boundaries

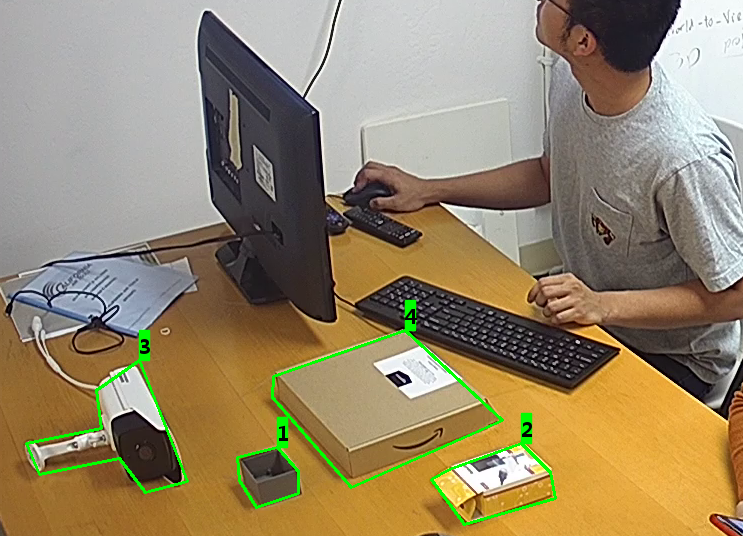


Figure 4. Draw multiples green boundaries

Step 7: When people walk by the object for a few seconds, system does not bring the alarm.

Step 8: Remove the object from their position, **wait for the time you defined in Step2**.

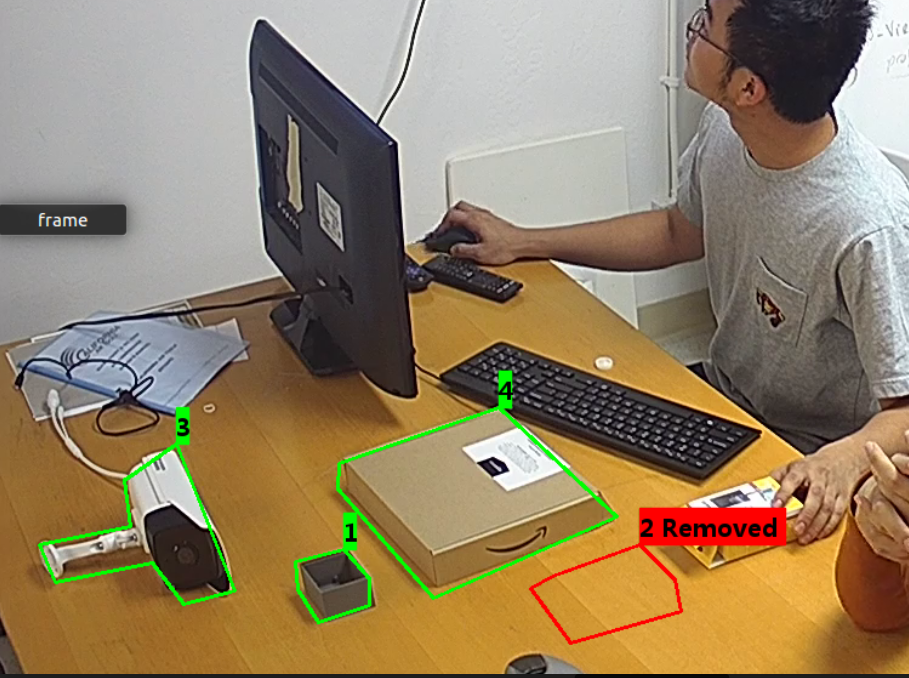


Figure 5. Objects have been removed

**Result:** Detected object 2 have been removed. Snapshots of the object before and after removal action are stored in “Snapshot” folder. Left part of the snapshots are objects before any removal action, right half of the snapshots are objects after any removal action.

Step 9: People put the object back, object is still detected as it was removed.

Step 10: Administrator click the buttons “1” to “6” respected to the object ID to clear the red indication (as in Figure 6 and Figure 7)

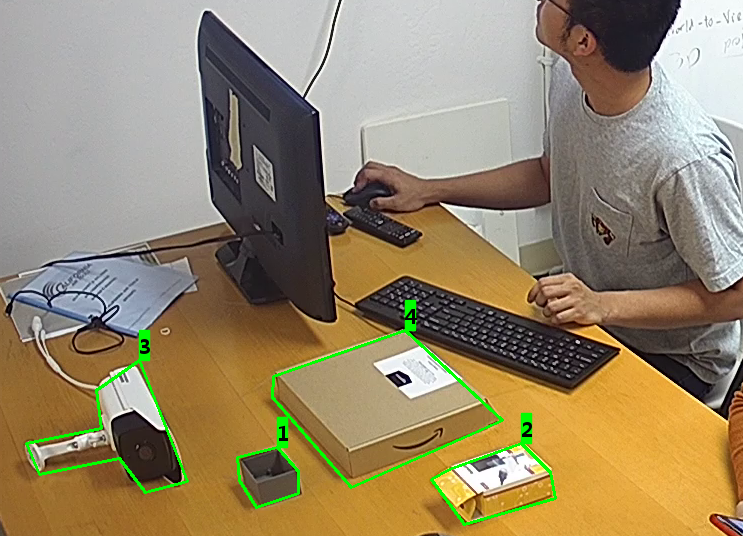


Figure 6. Reset Object 1 by clicking “2”

Step 11: To clear the boundary, user can click SHIFT + [number]. For example, to clear the ‘1’ boundary, click SHIFT 1 (as in Figure 7)

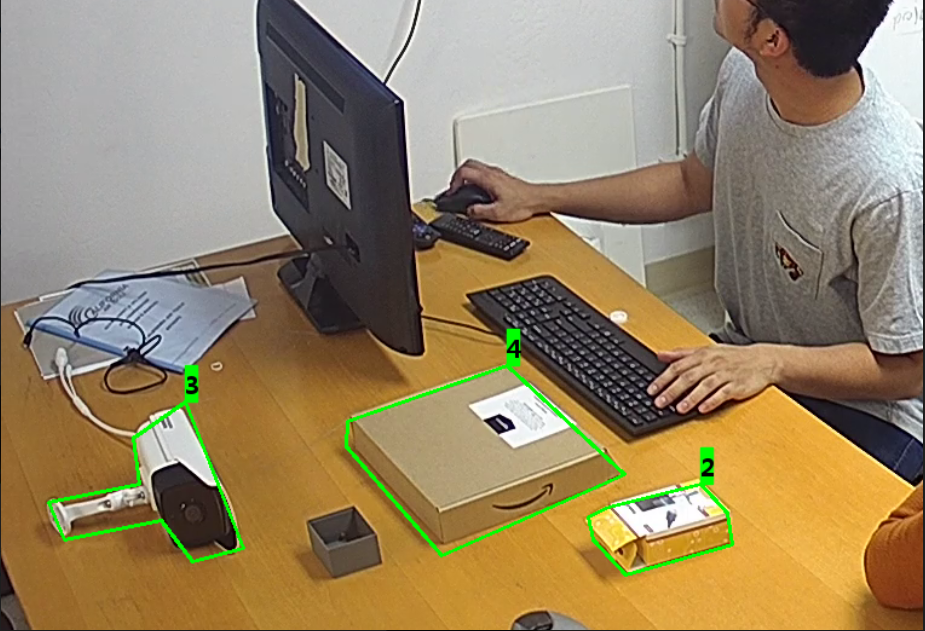


Figure 7. Clear Object 1 by clicking “SHIFT 1”

Step 12: click ‘q’ button to stop the program.