



## Detect-It Net Builder/Net Runner version 3.0.0 Release Notes

### New Features

#### Multi-Net Capability

- We now have the ability to run more than one net on any given feed

#### MQTT Client Support

- We can now connect to a MQTT client and push Detection data and "Birth Certificates" Images with Detection Images and without

#### PTZ Camera Dock ToolPath

- Now has a way to create a "Tool Path" to control the camera Through script
- Windows Net Deployment
- Users are now able to deploy to a different windows machine through our Net Deployer

#### Added more REST calls

- PTZ Camera
- Added call to re-calibrate camera
- Decision Label Count
- Added call to get an average detections over 10 frames by camera ID range
- Added call to get an average detections over 10 frames by camera IP range
- Added call to get an average detections over 10 frames by Net name
- Added call to get an overall detection average over 10 frames from all cameras
- Decision Service
- Added call to get single frame detections by a range of Nets names
- Added call to get single frame detections by a range of IPs
- Added call to get single frame detections by a range of camera numbers
- Added a call to get single frame detections for one camera by Net name
- Added a call to get single frame detections for one camera by camera IP
- Added a call to get single frame detections for one camera by camera id
- Added a call to get image files with detections and without by range of Net names
- Add a call to get image files with detections and without detections by range of camera IPs



- Added a call to get image files with detections and without detections by range of camera numbers
- Added call to get image files with detections and without detections of all camera feeds
- Added call to get image files with detections and without detections of a single camera by Net name
- Added call to get image files with detections and without detections of a single camera by camera IP
- Added call to get image files with detections and without detections of a single camera by camera number
- Added call to force image file names with detections and without detections by camera IP
- Added call to force image file names with detections and without detections by camera id

#### Added Script Log Dock

- User will now be able to see script logs within the GUI interface and not the terminal in which the program is running

#### Added a new type of tracker within Labeler

- Anchor tracker is a tracker that will apply the same box to the following frame unless told to stop

#### Added in selection zoom

- Within Labeler to allow the user to label small details in images

#### Added a GUI to look up Script API

- Within Script Editor we now have a section that shows all of the functions that are available to script

#### Changed the default detection threshold

- The default threshold has changed from 50 to 80

#### Improved training times

- Moved the act of training to more than one thread

#### Improved Runner performance

- Re-worked Runners back-end

14251 11 Mile Road

Oak Park, MI 48237

248-548-7050

[www.detect-it.us](http://www.detect-it.us)



Script see what nets are running

- Added a GUI within Script Editor to show what nets are currently running
- Added a button to copy the Net name

Script see what labels are in nets

- Added a GUI within Script Editor to show the label names and the label id

Auto reconnect for IP cameras

- When Runner is connected to an IP camera and the signal is lost it will attempt to reconnect

Loading popups when running heavy database work

- Added in loading popups when accessing internal databases to keep program looking alive

Hotkey window

- Added a Hotkey window within Labeler that shows all of the hotkeys used during the labeling process

Runner camera feed zoom

- Added zoom functionality into Runner

Runner camera feed mirror

- Added mirror functionality into Runner

Flip option inside of Trainer

- Added a flip option inside of trainer configuration which will allow the user to add the flip variable inside of the training config file without the need to manually add it in themselves

Increased the speed of exporting out projects

- Archiver when exporting now takes a fraction of the time to export a project

Math functions within script language

- Added math functions inside of Script to support SIN COS TAN

Line in script language

- Added Line function inside of script to draw a line from two given coordinates

On boot loading

- Added the ability to have Detect-It Runner to be launched on boot of system and load into a layout

14251 11 Mile Road

Oak Park, MI 48237

248-548-7050

[www.detect-it.us](http://www.detect-it.us)



#### Auto Teach Configuration

- When setting up a new teach you no longer need to go into the configuration portion.
- We now generate the configuration for you
- By default we are doing 2000 iterations per label, ex 2 labels = 4000 iterations
- The iteration value can still be adjusted

#### Script API file generation

- Added a generation of a Script API file on launch of program
- This file will be updated with all changes made to the script engine

#### Bug Fixes

Fixed bug with Ctrl + Z within Script Editor that hangs program Fixed

Fixed bug within windows where the program crashes when it tries to get remaining disk space

Fixed bug when playing video

- When playing a video within runner if it got to the end of the video Detect-It Runner used to crash

Fixed bug when teaching and teaching fails

- Detect-It Builder used to get stuck if teaching fails

Fixed bug when canceling a train

- Detect-It Builder used to get stuck when attempting to cancel an ongoing training

Fixed bug when deleting frames

- Detect-It Builder Labeler when deleting a frame that has bounding boxes on it used to leave a blank frame with a hanging bounding box

Fixed bug with continuing teaching

- Detect-It Builder Trainer used to ask to add more iterations even though the training hasn't completed

Fixed bug when duplicating clip

- Detect-It Builder Labeler used to duplicate trackers when a clip was duplicated

Fixed bug when deleting tracker/bounding box on a duplicated clip

- Detect-It Builder Labeler used to make it so that trackers/bounding boxes would not be able to be deleted when editing a duplicated clip

14251 11 Mile Road

Oak Park, MI 48237

248-548-7050

[www.detect-it.us](http://www.detect-it.us)



Fixed bug when trying to copy the first frame

- Detect-It Builder Capture/Labeler used to not let you paste a copied frame from the first frame

Fixed bug when editing a train where it won't recall what weight file to start from

- Detect-It Builder Trainer used to not look up what starting weight file when editing a project training

Fixed bug when selecting multiple project data sets when editing training configuration

- Detect-It Builder Trainer used to not refresh the selected project data when editing a training configuration

Fixed bug when selecting all frames and only deleting a single frame

- Detect-It Builder Labeler/Capture used to only delete a single frame when you click select all and delete frame/s

Fixed bug when using scroll wheel over a bounding box/tracker and the box gets unselected

- Detect-It Builder used to un-select the bounding box/tracker when using the scroll wheel to resize a bounding box/tracker

Fixed bug when collecting data where the add data button would be grayed out after adding in frames

- Detect-It Builder Collector/Labeler used to have the add frames button gray out in some instances so then the user is forced to restart the program to be able to add more frames

Fixed bug when trying to connect to an IP camera that is no longer on the network

- Detect-It Runner used to hang for a considerable amount of time when it tries to connect to an IP camera that no longer exists

Fixed bug when exporting a project

- Detect-It Builder used to fail to export a large sized project

Fixed bug when importing a project

- Detect-It Builder used to fail to import a large sized project

Fixed bug when search has special characters

- Detect-It Runner within Script Editor when searching a phrase with any special characters used to crash Detect-It Runner

14251 11 Mile Road

Oak Park, MI 48237

248-548-7050

[www.detect-it.us](http://www.detect-it.us)



Fixed bug when middle mouse moving a tracker/bounding box on the first frame

- Detect-It Builder Labeler used to create duplicate bounding boxes/trackers when moving a bounding box/tracker on the first frame

Fixed bug where we flipped Red and Blue within scripts

- Detect-It Runner within Script Editor used to have the values of Red and Blue flipped

Fixed bug where saving a layout when another the current run was loaded with a layout

- Detect-It Runner used to crash when you would attempt to save a new layout from a loaded layout

Fixed bug when deleting a tracker the tracker tree doesn't update the change

- Detect-It Builder Labeler used to not update the tree when a tracker was deleted

Fixed bug when labeling the label tree

- Detect-It Builder Labeler used to refresh the label list making so the selected label isn't visible unless you where to scroll the window down

Fixed bug when moving to next bounding box

- Detect-It Builder Labeler used to not update the current frame number when you click on the label and click "go to next bounding box"

Fixed bug when saving a layout and the script isn't saved with it

- Detect-It Runner when saving a layout there was times where the script not saved with the layout

Fixed bug with detection label size and orientation

- Detect-It Runner on windows the Label size and orientation on the screen was not set to the right value

Fixed bug when collecting data over and over again crash

- Detect-It Builder used to crash if a user were to collect data 2-3 times in a row from a USB camera

Fixed bug when launching Detect-It Runner from Detect-It Builder

- Detect-It Builder when clicking the Runner button from the launch screen used to launch Detect-It Runner but Detect-It Builder would be frozen

14251 11 Mile Road

Oak Park, MI 48237

248-548-7050

[www.detect-it.us](http://www.detect-it.us)



## **Interface**

Removed the login screen if not needed

- If the `api_endpoints.conf` file is empty or is only set for localhost (127.0.0.1) the login screen will not show up

Updated icons on launch screen on Runner and Builder

Updated banner on launch screen

Updated the look of Capture/Labeler

Updated the look of Trainer

Smoothed the process of deploying a net

- Made to feel more linear

Updated the Icons on Detect-It Runner launch screen

Updated the banner on Detect-It Runner launch screen

Using a different font for detections inside of Detect-It Runner