Distributed Processing Program

Prerequisite

1. java >1.8
2. Make sure that java and javac is in path
3. Tensor flow (if want to run with simulation off)

Build

1. Run `build.bat`

Install Tensor flow models

One of the service provided is to run Tensor Flow Object Detection. This will require the tensor flow pre-trained models and labels. To download them run `download_models.ps1`. To save time, you can also turn on simulation so that the it does not actually run the tensor flow command but return a hard coded value. See configuration below to find out how to turn it on.

Configuration

If a configuration file is not found. First startup will create default config file.

Tracker

File: tracker.config.properties

Config	Definition	Default
rmi_registry_port	Tracker RMI Port	1099

Server

File: server.config.properties

Config	Definition	Default
image_analytics_simulate	Turn simulate on or off see Install Tensor flow models	0
services	Services that this server will provide. Split by comma (,)	VideoAnalytics,VideoSplit,ImageAnalytics,ImageAnalyticsGraph
image_analytics_label	The label file for tensor flow. Not needed if simulation is 1. Or if the server is not providing ImageAnalyticsService.	labels/mscoco_label_map.pbtxt
image_analytics_model_dir	The model directory for tensor flow. Not needed if simulation is 1. Or if the server is not providing ImageAnalyticsService.	models/ssd_inception_v2_coco_2017_11_17/saved_model

Config	Definition	Default
tracker	The tracker server	localhost:1099
rmi_registry_port	The server rmi registry port	1000
rmi_registry_host	The server rmi registry host/IP	localhost

Client

File: server.config.properties

Config	Definition	Default
rmi_registry_port	Callback RMI Registry Port	1088
rmi_registry_host	Callback RMI Registry Host/IP	localhost
trackers	Tracker servers to find servers. Comma seperated (,)	localhost:1099

Run

Run Tracker

Go to `bin\tracker` and run `java -jar tracker.jar` in command line / terminal

Go to `bin\server` and run `java -cp server.jar;xchart-3.5.2.jar Server` for windows in command line. Run `java -cp server.jar:xchart-3.5.2.jar Server` for linux in terminal

Go to `bin\client` and run `java -jar client.jar` in command line / terminal