Distributed training and testing of a video-detection system

Siqura B.V. is located in Gouda and provides advanced video surveillance solutions. These solutions include IP cameras, video encoders, network video recorders, fiber equipment, video management and video-content analysis (VCA) software. Siqura currently provides a number of video-analysis algorithms for surveillance including perimeter intrusion detection, left-luggage detection and people counting.

The VCA team develops algorithms to automatically detect objects-of-interest from video streams. To test these algorithms, we execute the algorithms on several terabytes of video data. Furthermore, to automatically optimize the parameters of the algorithms, we implemented training procedures. Both training and testing require several hours of processing on a single computer.

**Goals**

- Develop a distributed computing and storage system which we can use to train and test our video-content analysis algorithms.

**Tasks**

- Make an overview of distributed processing software packages which suit our requirements.
- Install one or more of these software packages in a small pool of CPUs to demonstrate their applicability.

**Keywords and -technologies**

- Distributed processing, HTCondor, Hadoop, Linux
- Pattern recognition and machine learning

**Contact information**

You are invited to send your CV to Anne van Vossen (a.vanvossen@tkhsecurity.com) and Julien Vijverberg (j.vijverberg@tkhsecurity.com).