8. Behavior-Based Network Device Tracking

Michael Adam Polák
Faculty of Information Technology, Brno University of Technology, Czech republic
xpolak31@stud.fit.vutbr.cz

What is it?
- Identification of network devices based on their behavior
- Tracking devices with sparse availability of features
- Passive approach with low time and spatial complexity
- High accuracy compared to currently used methods

Is your device anonymous?
- Profile distribution created with t-SNE, illustrating the clustering of device profiles

Device Profile Similarity
- Similarity scores of devices with the same MAC addresses in blue and different MAC addresses in red
- Distinct separation of similarities between devices

Device Profile Distribution

Achieved Accuracy over Time
- Better Outlier Detection
- Parallelization

Further Improvements