

A user privacy-centric access control policy of data for intelligent transportation systems

Rémi Adelin

Eric Alata Vincent Migliore Vincent Nicomette

LAAS-CNRS, Université de Toulouse, CNRS, INSA, Toulouse, France

Problem & Solution

Problem : Loss of control of personal data by drivers



Solution : Access control policy

Key-Policy Attribute-Based Encryption (KP-ABE)

General principle

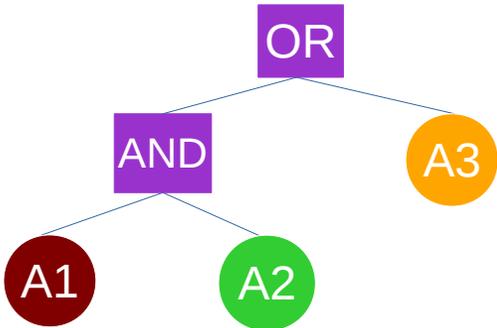
Decryption Key



Ciphertext



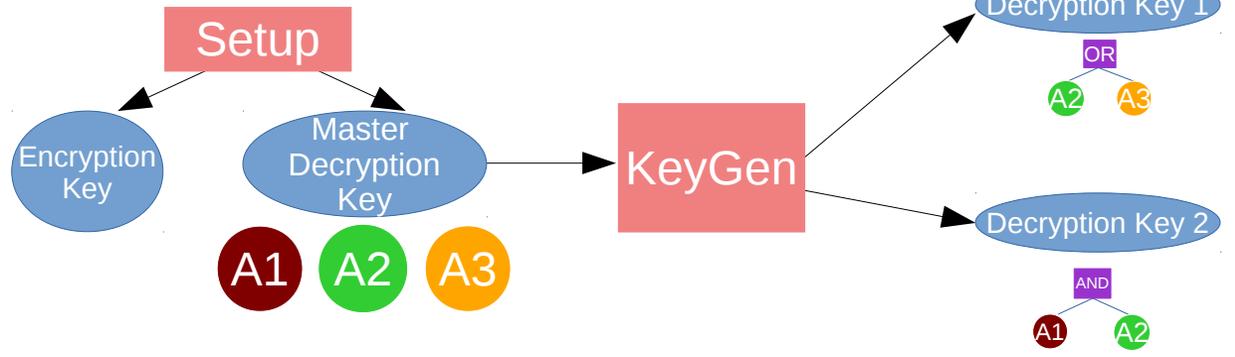
Access Tree



Attributes



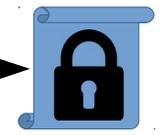
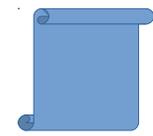
Scheme



Encryption Key

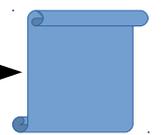
Attributes

Encrypt



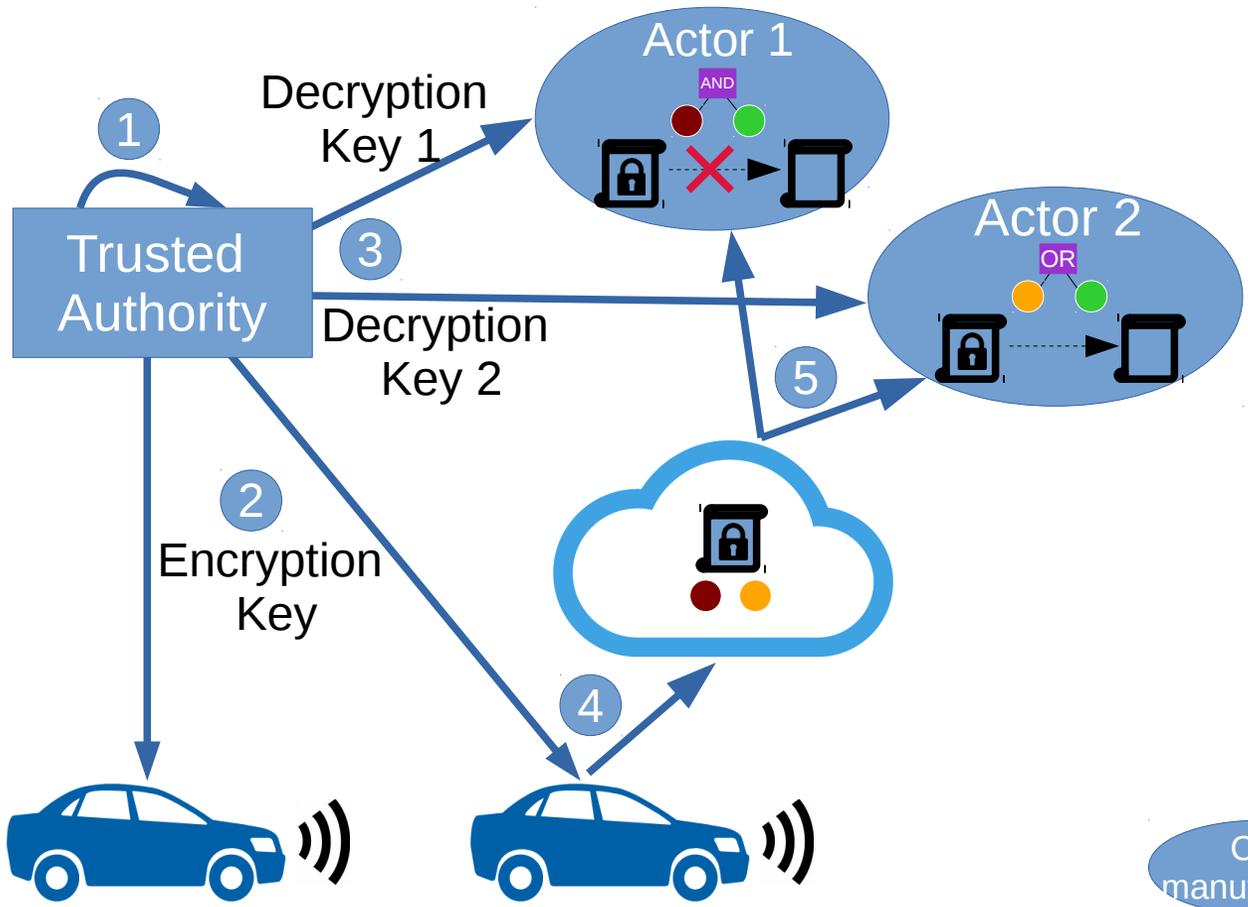
Decryption Key

Decrypt



Security Overview

Architecture



Attributes

- *Data type related*
- *Contextual information*
- *Role related*
- **Privacy related**

Access trees

