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Technische Universiteit Eindhoven University of Technology

An authorization service for collaborative situation awareness

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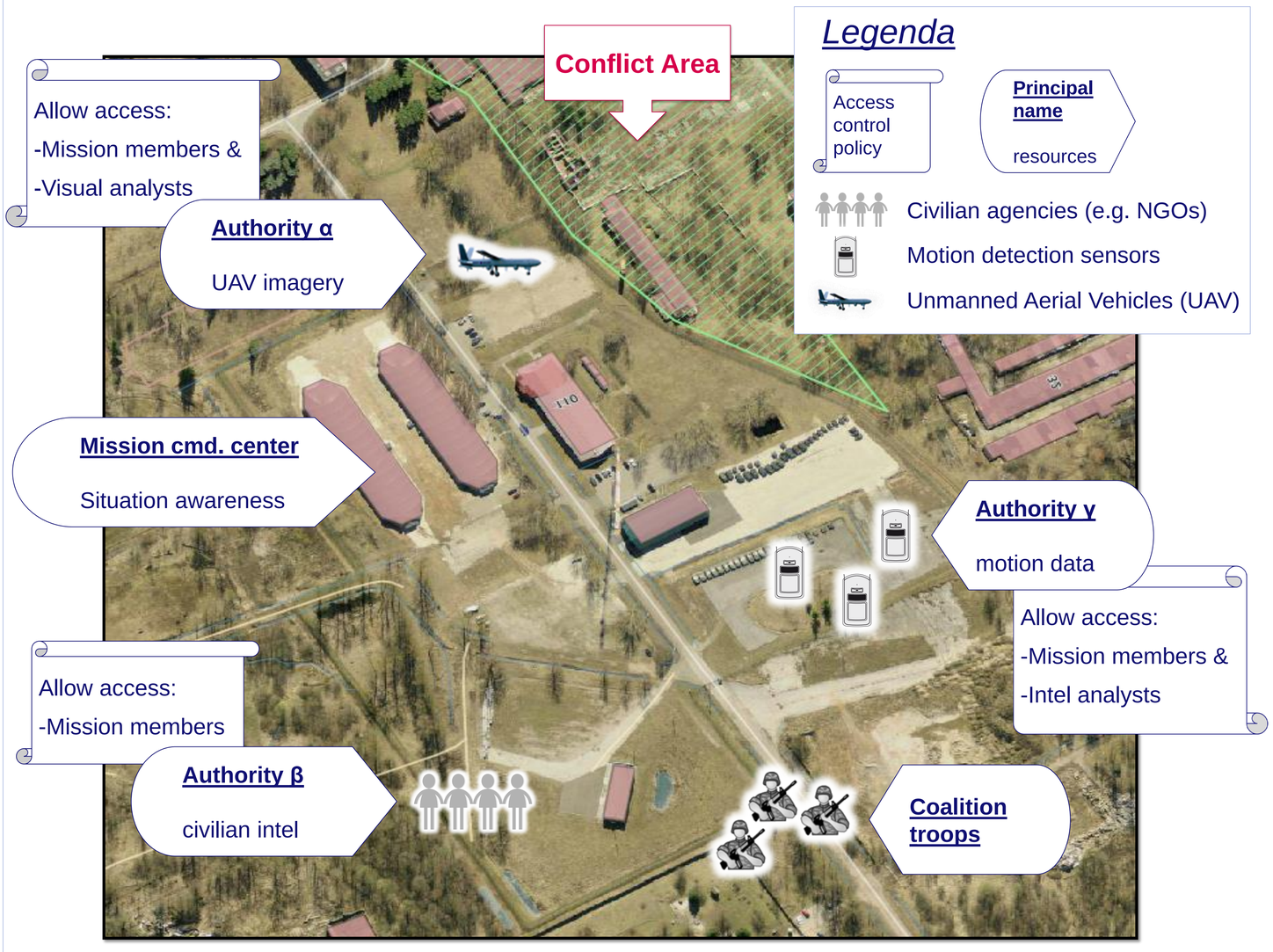
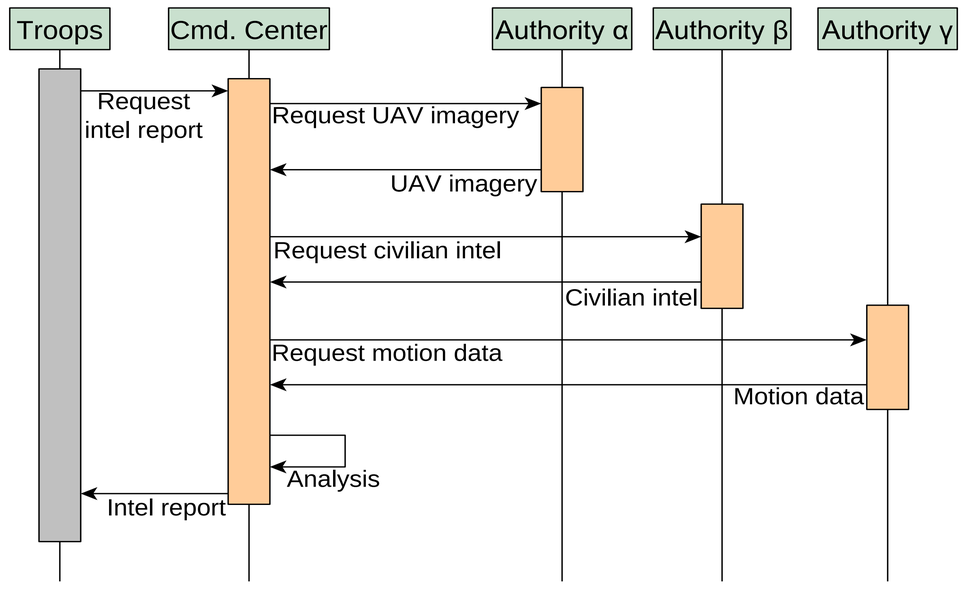
Scenario





Mission

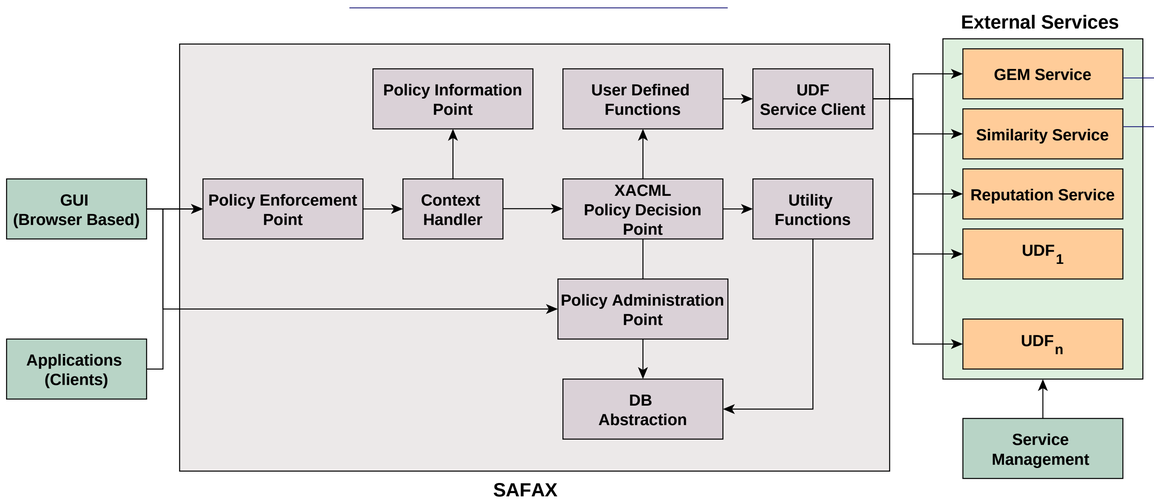
- Coalition troops escort NGO representatives to the conflict area
- The command center coordinates the mission
- Intel is gathered from:
  - UAV imagery (Authority α): birds-eye view
  - Civilians (Authority β): information from locals
  - Motion data (Authority γ): automatic detection of movement

Assumptions

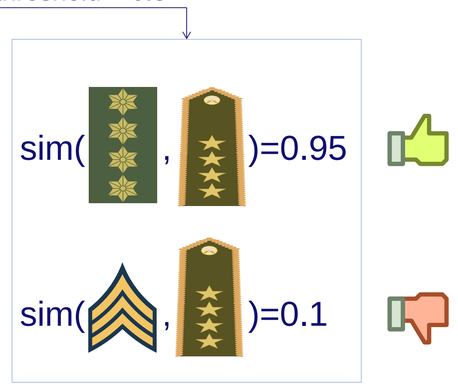
- Each authority employs its own authorization solution
- Each authority defines its own policies to protect its sensitive data
- Policies of an authority can refer to other authorities' policies

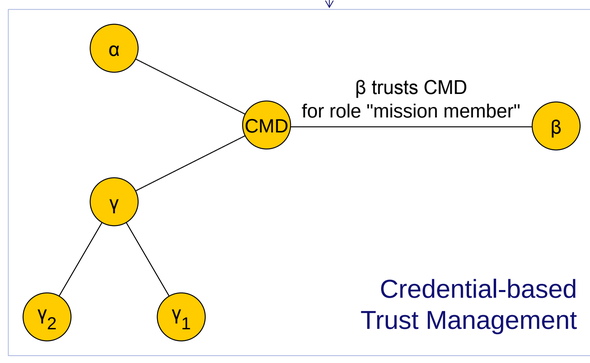
Architecture

Authorization service

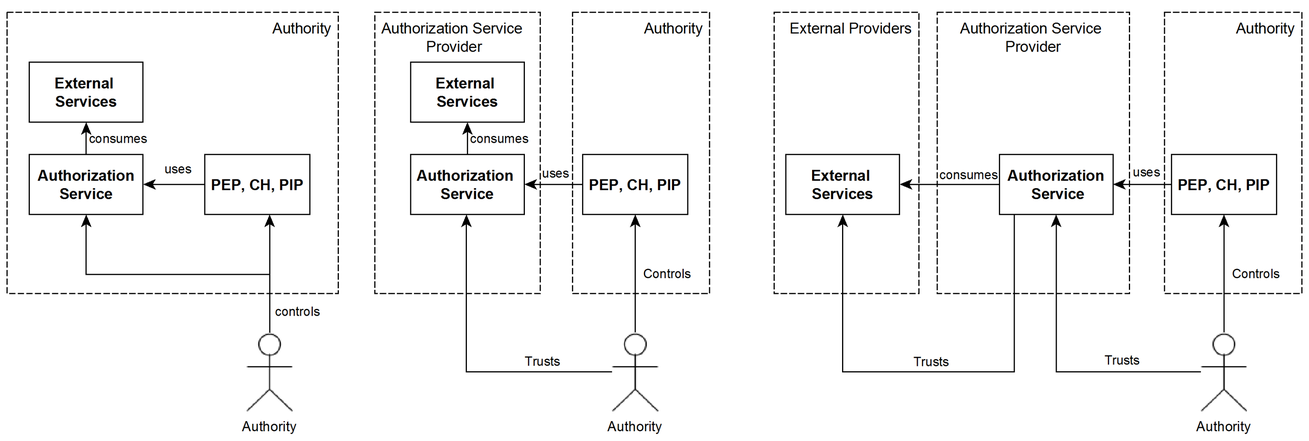


External services





Deployment models



a) Centralized Trust Model

b) Distributed Trust Model

c) Distributed and Delegated Trust Model

Highlights

- SAFAX adheres to the XACML standard
- Authorization components implemented as loosely-coupled services
- User Defined Functions (UDF) decoupled from the Policy Decision Point
- Several deployment models supported

SAFAX is available at http://security1.win.tue.nl/safax/

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