Privacy (&Security) With RoSI

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Restricting Access to Certain Information

- Role-Based Access Control (RBAC)

Enrich RBAC with behavior, context etc. (Some work exists)
Vision

**AT DESIGN TIME**

**AT RUN TIME**
Privacy “by design“

**ADVANTAGE:**
- Developer delimits thoughts to behavior (common collaboration of department)

**VISION:**
- Developers model conditions for information exchange in (extended version of) CROM
Context-Dependend Privacy

ADVANTAGE:

- Able to dynamically adapt the privacy enhancing techniques and settings

USE CASES:

- Location tracking
- Anonymous communication
- User privacy settings by detecting their intentions
Vision

“Real World”

Abstraction

Automatic Adaptation Framework for Anonymous Communication

Resource Constraints

Adapt

Service

Network of Adaptive AC Services

Dynamic Context

Requirements

Solution Space
Approach

**PARTS:**
- Detecting user requirements (Jan: using activity traces)
- Combining/adapting anonymous communication techniques
- Optimizing

**SHORT TERM:**
- Define building blocks of anonymous communication techniques
- Analyze their privacy and performance

**MID TERM:**
- Prove privacy and performance of combinations of building blocks

**LONG TERM:**
- Design optimization, improve detection of user requirements, combine
 Note

DO OUR NEW MODELS, DESIGNS AND SYSTEMS ALLOW FOR NEW ATTACKS?

THANKS