

Privacy (&Security) With RoSI

Christiane

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



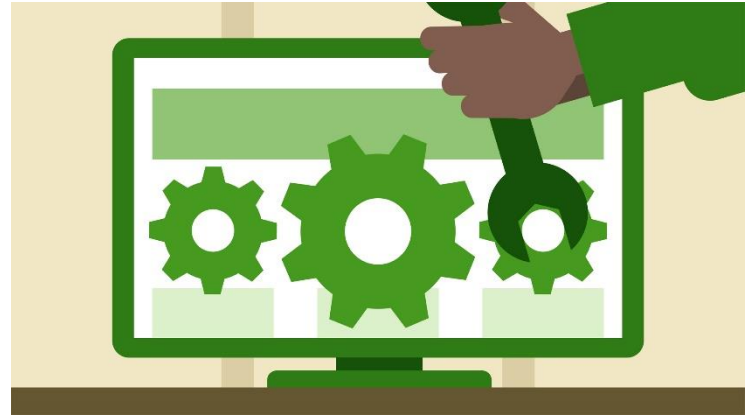
Context-Dependent Privacy

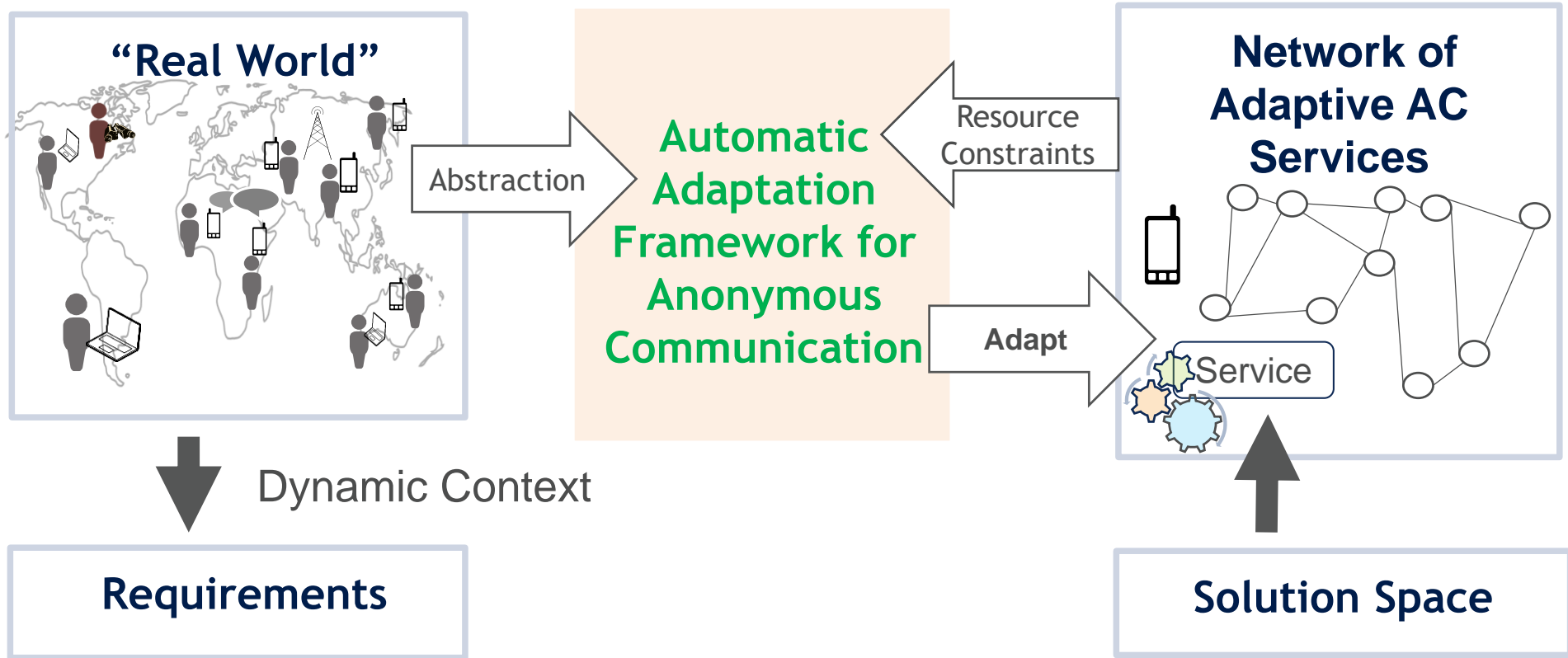
ADVANTAGE:

- Able to dynamically adapt the privacy enhancing techniques and settings

USE CASES:

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





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