Context- and role-based dynamic access control in distributed healthcare information systems

Lillian Røstad
Lillian.Rostad@idi.ntnu.no/sintef.no

Access control in health care information systems

• Normal
• Exception
• Emergency

• What is "normal"?

“If they cannot access my system, they cannot hack it.”
Ross J. Anderson
Role-based access control (RBAC)

- State-of-the-art for "normal" access control in health care information systems

- A user is assigned zero or more roles
  - A user’s set of roles defines the permitted operations for this user on a set of objects (i.e. information)

- Reflects the organisation structure
  - Flexibility
  - Scalability

RBAC tailored to health care information systems

- Context-sensitive
  - What is context?
  - What attributes are relevant and useful?

- Dynamic
  - Role delegation
  - Intelligent access control systems