

Tie-RBAC

An application of RBAC to Social Networks

Antonio Tapiador
Diego Carrera
Joaquín Salvachúa



Departamento de Ingeniería de Sistemas Telemáticos

ETS de Ingenieros de Telecomunicación

Universidad Politécnica de Madrid

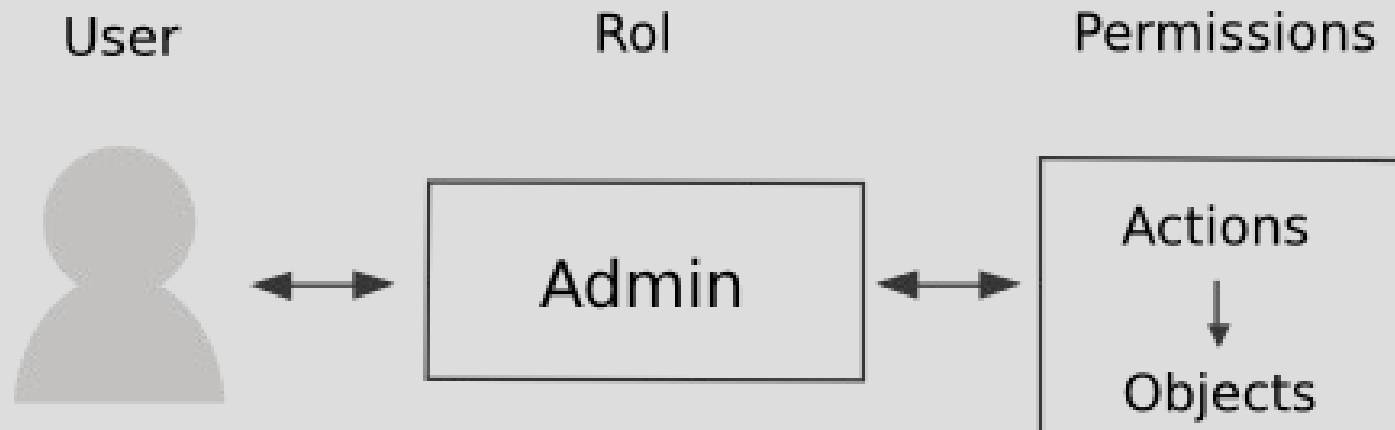


POLITÉCNICA

Access control models

- Discretionary Access Control
- Mandatory Access Control
- Role-based access Control
- Other (Task/workflows, etc)

RBAC



RBAC advantages

- Policy neutral
- Simplified security administration
- Administrative roles to manage other roles
- Separation of duties
- Least privilege

Social Network Analysis

- Understanding the linkages between social entities

Wasserman S, Faust K. Social network analysis: methods and applications. New York: Cambridge University Press. 1997.

Tie

Sender
Actor

Relation

Receiver
Actor

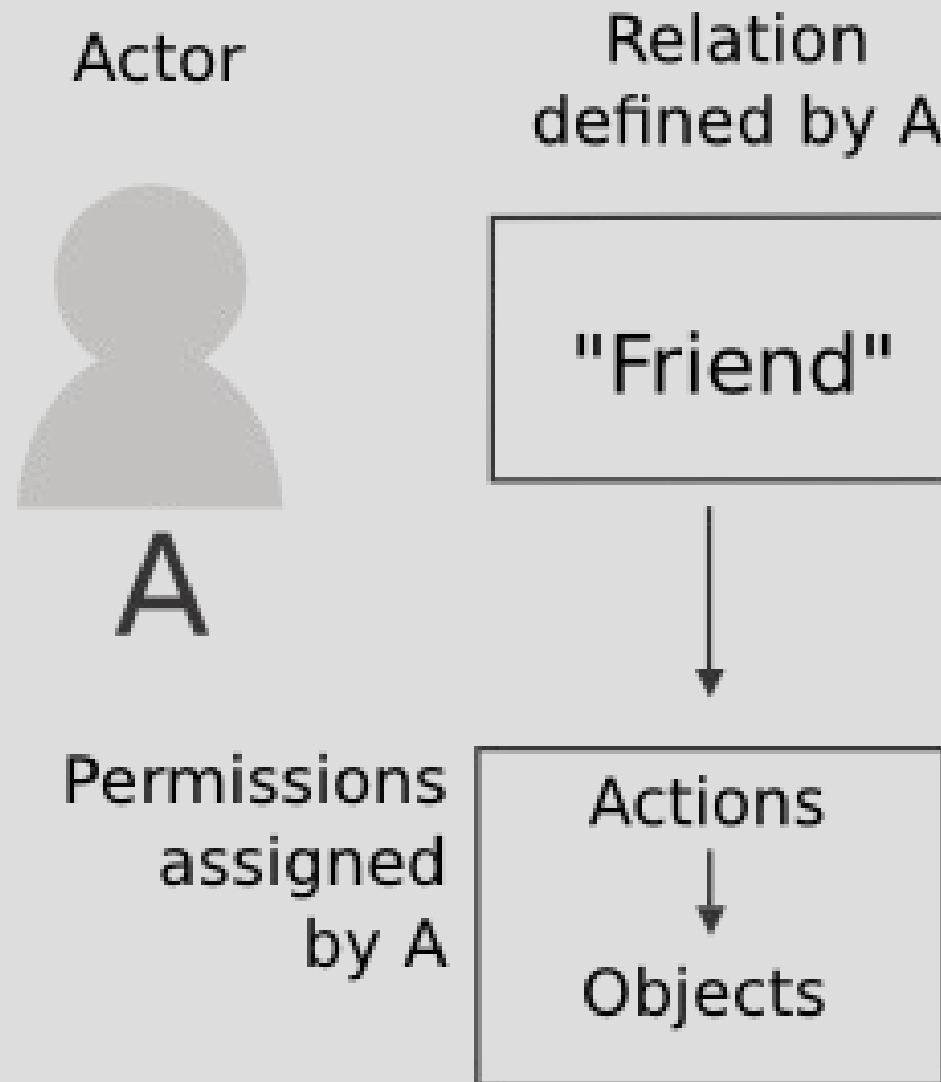


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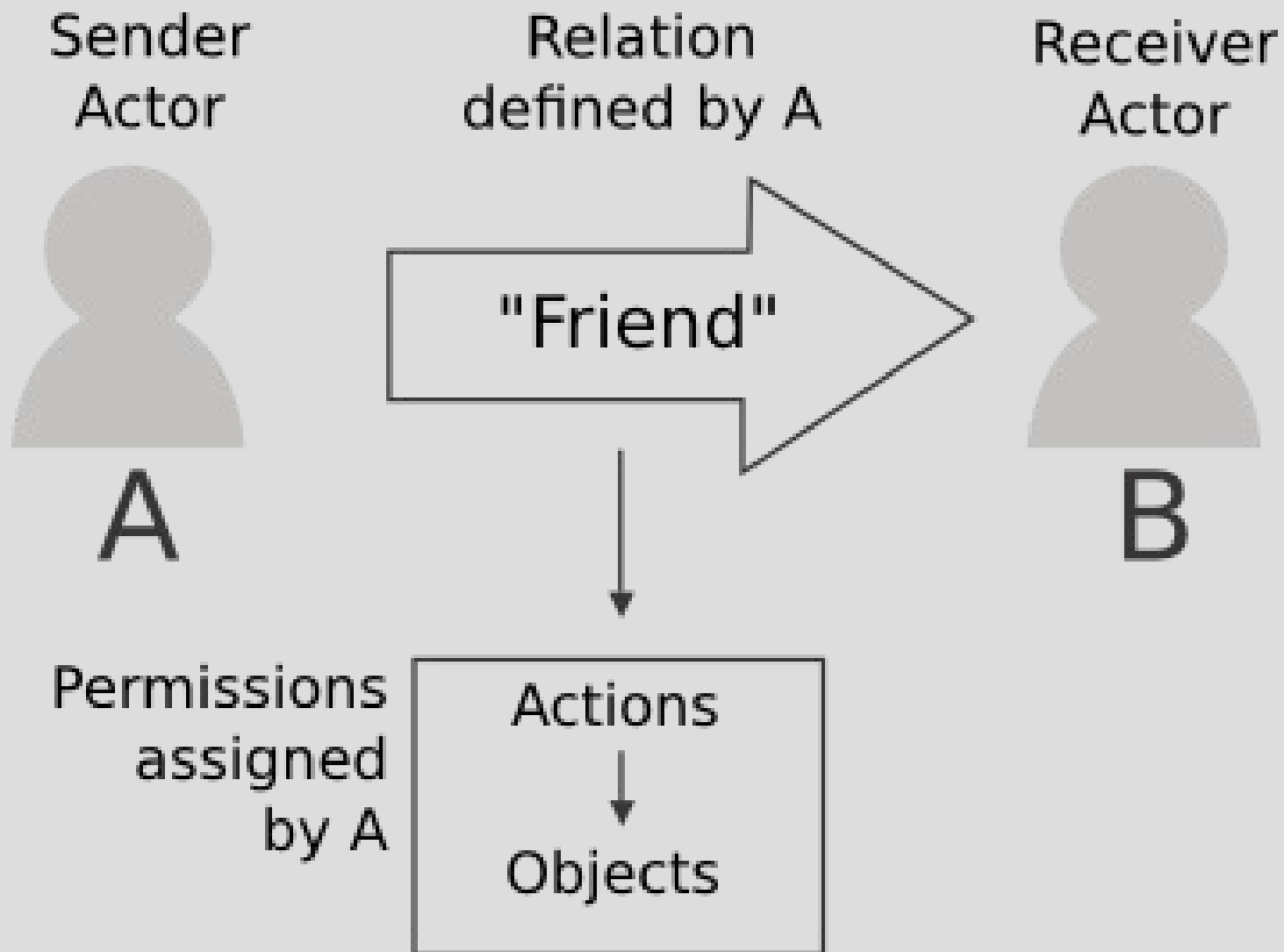


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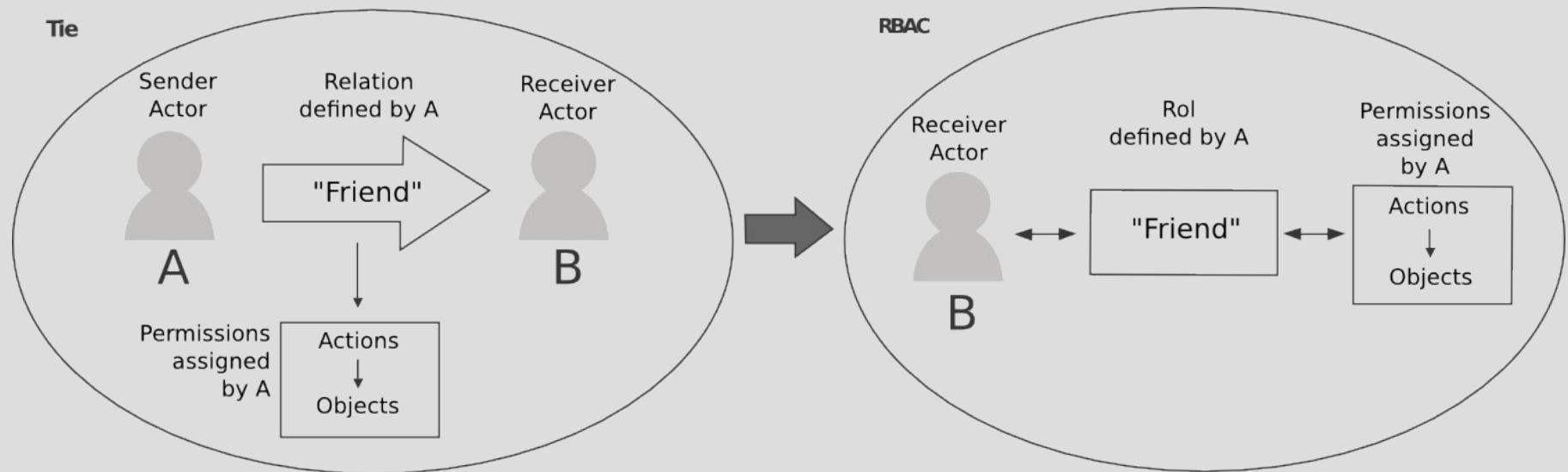
Tie-RBAC



Tie-RBAC



Tie-RBAC



Advantages from RBAC

- Policy neutral
- Simplified security administration
- Administrative roles to manage other roles

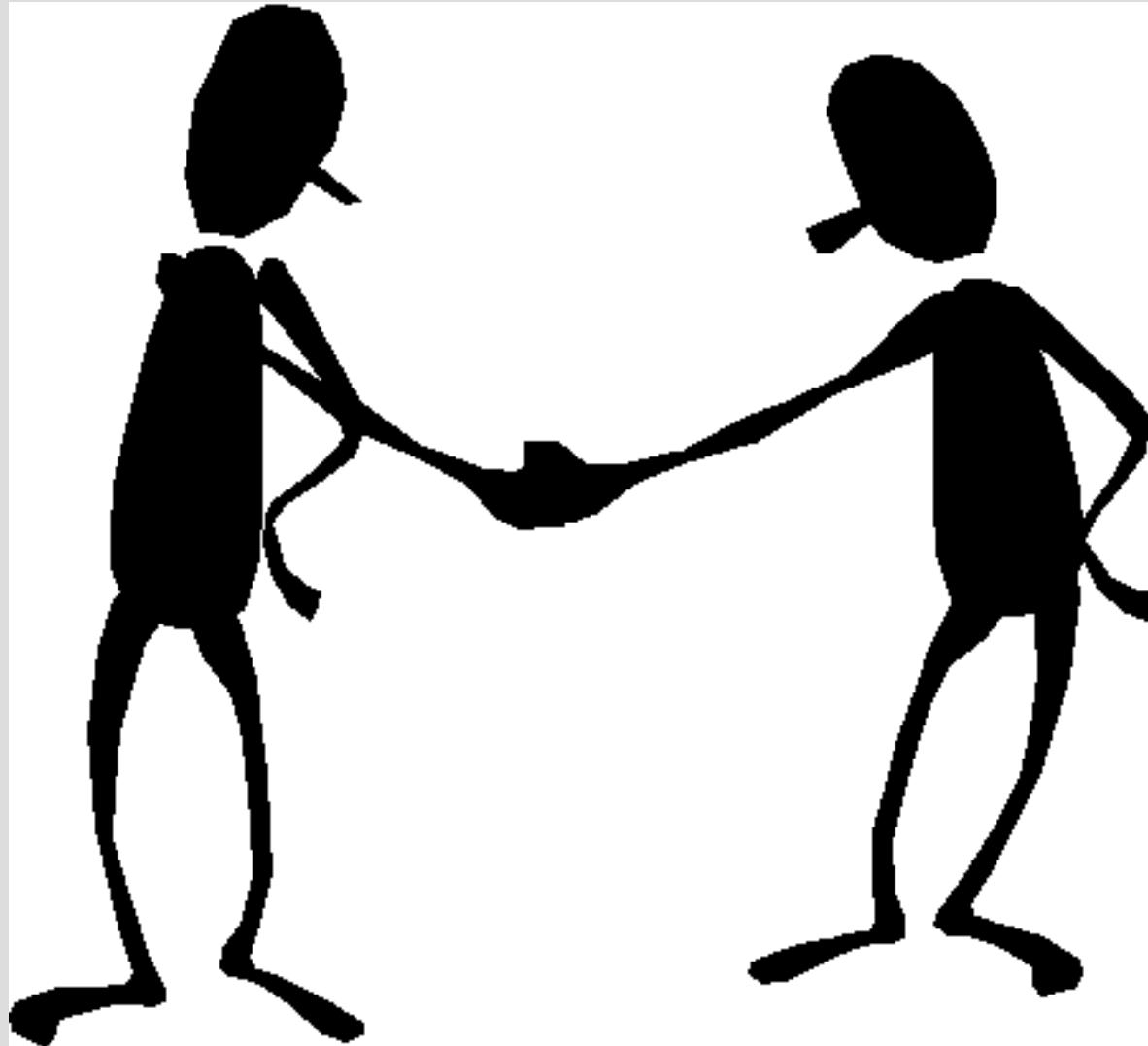
Tie-RBAC advantages

- Relations are similar to roles
- Managing security while building the network

Implementation: Social Stream

- Core for building social network websites
- Ruby on Rails plug-in
- User, groups, post and comments
- Free / open source
- <http://social-stream.dit.upm.es/>

Looking for scholar visit!



Questions?

atapiador@dit.upm.es