



Eduroam MiniCAMP  
Nicosia, Cyprus  
January 15, 2007

Valentino Cavalli  
Deputy Chief Technical Officer  
cavalli@terena.org  
www.terena.org

## Bringing Middleware Technologies to the CAMPUS

### TERENA Activities and Overview of Middleware Activities in Europe



# Contents

- › What is TERENA
- › Middleware European updates
- › TERENA's support to middleware activities in Europe
  - › CAMP
  - › MiniCAMP



# What is TERENA

- › TERENA is an European association of research and education networking organisations
  - › not for profit organisation
- › 33 National Members (including CYNET)
- › [www.terena.nl/about/membermap.html](http://www.terena.nl/about/membermap.html)
- › 2 International Members: CERN, ESA
- › 10 Associate Members (including DANTE, NORDUnet, equipment vendors and telecommunications operators)



# TERENA Mission

- › TERENA's role is
  - › bringing together technical experts, managers and other people from the research networking community and assist them to work together on the things they are interested in
- › TERENA activities are open to everyone
  - › TERENA community is wider than the TERENA membership
  - › Activities span over different field
- › TERENA is in a good position to foster collaboration

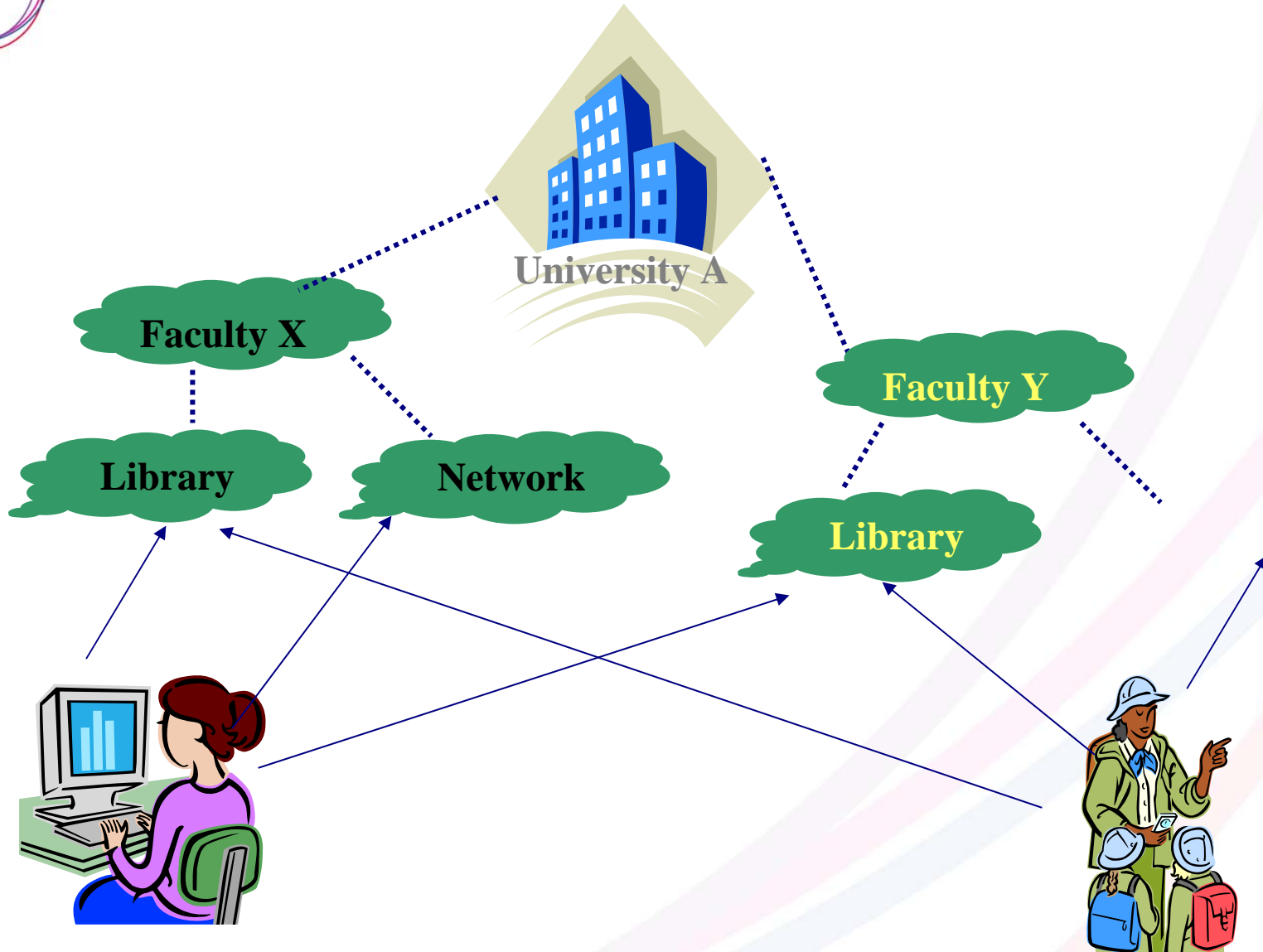


# Middleware Landscape in Europe - Background

- › In the beginning AAI
  - › infrastructure to allow users to access resources via digital Ids
- › Then users' needs increased
  - › Need to access resources distributed among different departments
  - › Need to access resources from different universities
  - › Mobility of the users
  - › Grids
- › Agreements between the parts involved needed

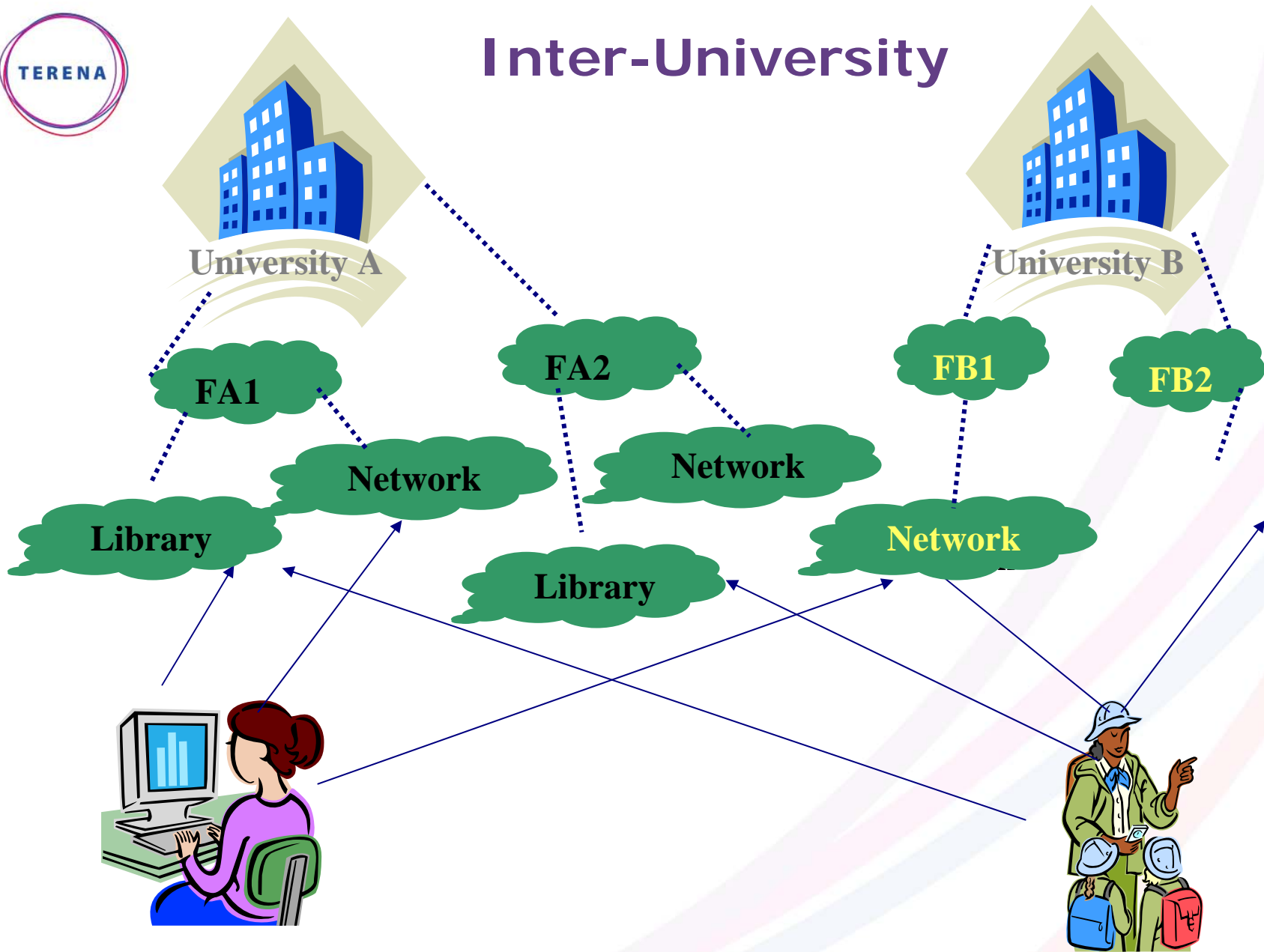


# Inter-Faculty



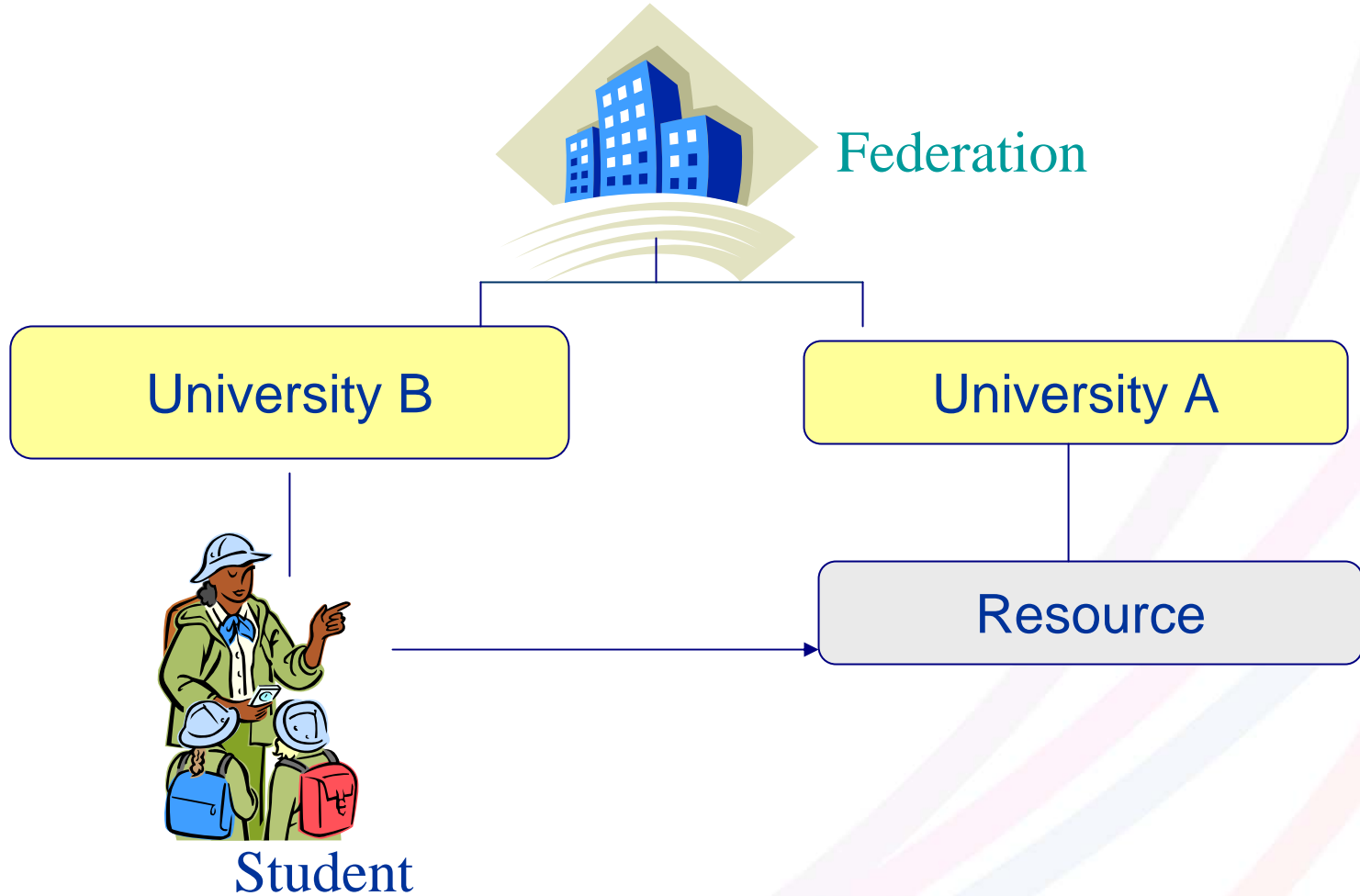


# Inter-University





# Federation







# What is a Federation?

- › Federation is a group subscribing to a common agreed policy to share/access resources
- › Joining a federation means
  - › joining a 'club' with known rules (policy)
  - › getting some privileges
    - › simplified access to shared resources
  - › agreeing on common technologies
    - › to allow for inter-operability



# Why do we Need Federations?

- › Enable the sharing of educational resources
  - › Network
  - › Applications
    - › Online learning systems
    - › Libraries
- › Allow to reduce the number of agreements



# Federated Application (Web) Access

- › Single Sign on Systems :
  - › Shibboleth (USA, Australia, Finland, Switzerland, UK etc.)
  - › PAPI (Spain, Poland)
  - › A-Select (Netherlands, Australia)
  - › FEIDE/Liberty Alliance (Norway)
- › Common language: SAML



# Federated Network Access

- › eduroam
  - › eduroam federations are established at national level
  - › eduroam is in fact a federation of federations
    - › confederation
  - › more to come later 😊



# TERENA Middleware Activities

- › TERENA provides support for the middleware activities
  - › Via Task Forces (open to anybody)
    - › TF-Mobility
    - › TF-EMC2
  
- › Via services such as
  - › Server Certificate Service (SCS)
  - › Schema HARmonisation Committee (SCHAC)
  - › TERENA Academic CA Repository (TACAR)
  
- › Workshops
  - › EuroCAMP (18-19 October, Malaga)
  - › NREN-Grids



# SCS

- › What is it about?
  - › Service...of course ;-) in short SCS
- › To issue server certificates
  - › popup free
  - › unlimited number
  - › Very low price
  - › (price is not per certificate)
- › For whom?
  - › For the National Research and Education Network community in Europe
- › 11 NRENs + TERENA involved



# EuroCAMP

- › Workshops to promote the use of middleware technologies in the Campuses
- › Four workshops – Fifth April 2007
  - › IdM systems
  - › Federations
- › MiniCAMPs
  - › organised as part of GEANT2/NA4 project
  - › focus on eduroam so far



# Conclusions

- › Federations are the future
  - › Campuses/universities need to be involved
  - › setting up IdMs is the first step to make life easier
  - › Campuses need to talk to their NRENs
- › TERENA wants to promote cooperation and help the campuses





# Links

- › TF-Mobility
  - › [www.terena.nl/activities/tf-mobility](http://www.terena.nl/activities/tf-mobility)
  
- › eduroam
  - › [www.eduroam.org](http://www.eduroam.org)
  
- › TF-EMC2
  - › [www.terena.nl/activities/tf-emc2](http://www.terena.nl/activities/tf-emc2)
  - › [www.terena.nl/activities/eurocamp/](http://www.terena.nl/activities/eurocamp/)
  - › [www.terena.nl/activities/nrens-n-grids/workshop-03/](http://www.terena.nl/activities/nrens-n-grids/workshop-03/)
  
- › TACAR
  - › [www.tacar.org](http://www.tacar.org)
  
- › SCHAC
  - › [www.terena.nl/activities/tf-emc2/schac.html](http://www.terena.nl/activities/tf-emc2/schac.html)
  
- › SCS
  - › [www.terena.nl/activities/tf-emc2/scs.html](http://www.terena.nl/activities/tf-emc2/scs.html)
  
- › GÉANT2/JRA5
  - › [www.geant2.net/](http://www.geant2.net/) (click on research)