

Community Interaction among Pupils

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ABC4Trust, 12th GM

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- Eurodocs
- The Swedish pilot
 - The pilot in brief
 - The use cases
 - The two rounds of the pilot
- Demonstration
- Q&A

- Eurodocs AB is developing new innovative digital identification and digital signature services.
- Our vision is to protect the identity, anonymity and privacy of Internet users at the same time.

Simplicata



CERTIFICATUM.COM

ABC⁴TRUST



NetOnBuy

Objectives of the Pilot



- To investigate how Privacy-ABCs can provide trusted identification while protecting anonymity and privacy of children in real life applications where this is desirable.
- Major tasks:
 - Investigate the deployment and operation of the pilot application
 - Provide feedback to the architecture and reference implementation WPs
 - Provide evaluation results to users, Identity Service Providers, and Application Providers

The Swedish pilot



- School internal community interaction among pupils, guardians and school personnel
- Main scenarios and features:
 - Chat communication
 - Political discussions
 - Counseling with health personnel
 - Document sharing and access

Chat Communication

- User(s) wants to chat with another user(s) (individual or group chats authenticated with specific attributes or identified by name)



- For some people the ability to express a political opinion anonymously is essential to discuss sensitive subjects.
 - Pupils prove that they belong to the school but can still remain anonymous



- Get help and advice from school personnel
 - Pupils will discuss, get help or get advice from authorized professionals regarding psychological, physical and other problems
 - The pupil proves to belong to the school but can still remain anonymous



Sharing Documents

- The school is producing many important documents (exam results, grades, individual development plans etc.) that need to be shared with and distributed to the pupil's and their parents.



Pilot Users and Roles

- Pupils 
- Parents/Guardians 
- School personnel 
 - Teachers
 - Counselors, welfare officers
 - Administrators
- School Inspection Board
- Inspector (The schoolmaster)

Approach



- Users were identified by smart cards they received from the school administration. The smart cards contained ABC software, credentials and attributes (e.g. name, class, date of birth, gender etc.)
- Pupils, guardians and school personnel used their smart cards to sign in to the school application (the Restricted Area Application)

Credentials (attributes)

- CredSchool (first name, last name, gender, school name, PUN=Pilot User Number, revocation handler)
- credSubject (subject)
- credClass (class)
- credChild (child)
- credGuardian (guardian)
- credRole (role)



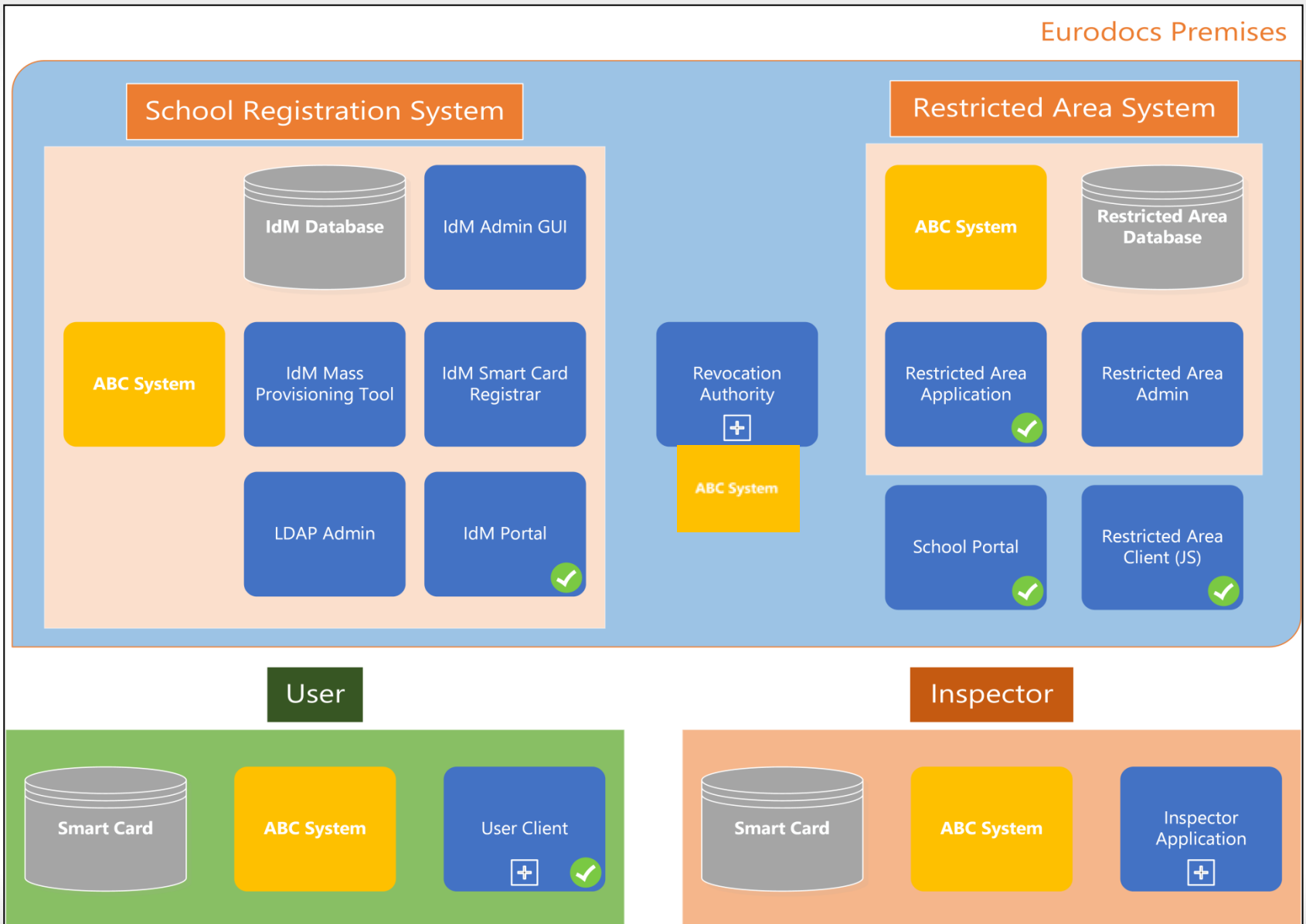
Benefits!



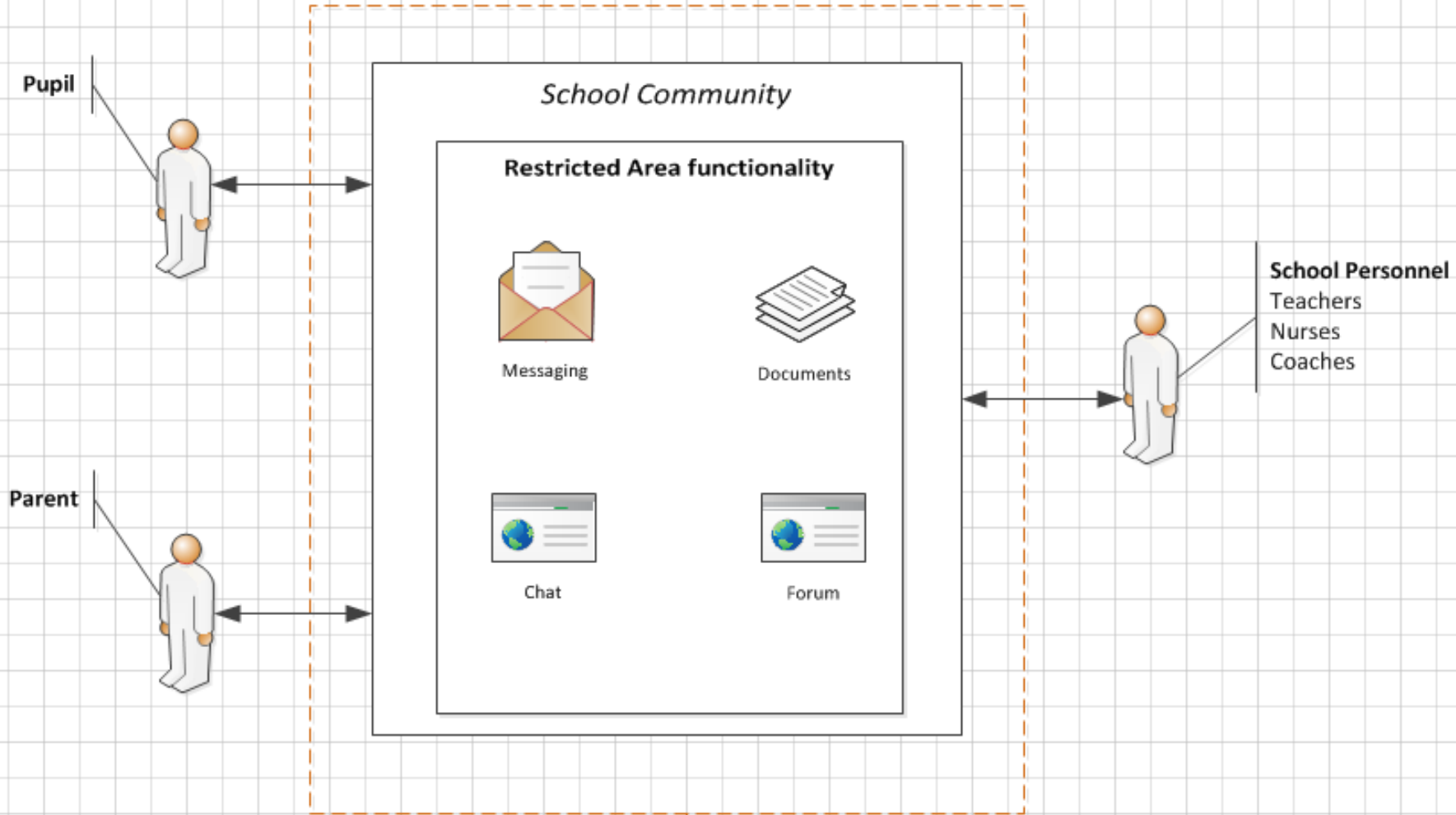
- Students are in charge and can choose to ...
 - Remain anonymous/pseudonymous
 - Be uniquely Identified
“Claudia Hugosson”
 - Be partially identified
“Girl”, “Age 9-12” or “A girl, age 10-11”
- This can be done at any time and can be different from time to time.
- Students can choose what attributes they want to prove and to whom.

High Level Architecture

Eurodocs Premises



Restricted Area (RA)



Two Pilot Rounds

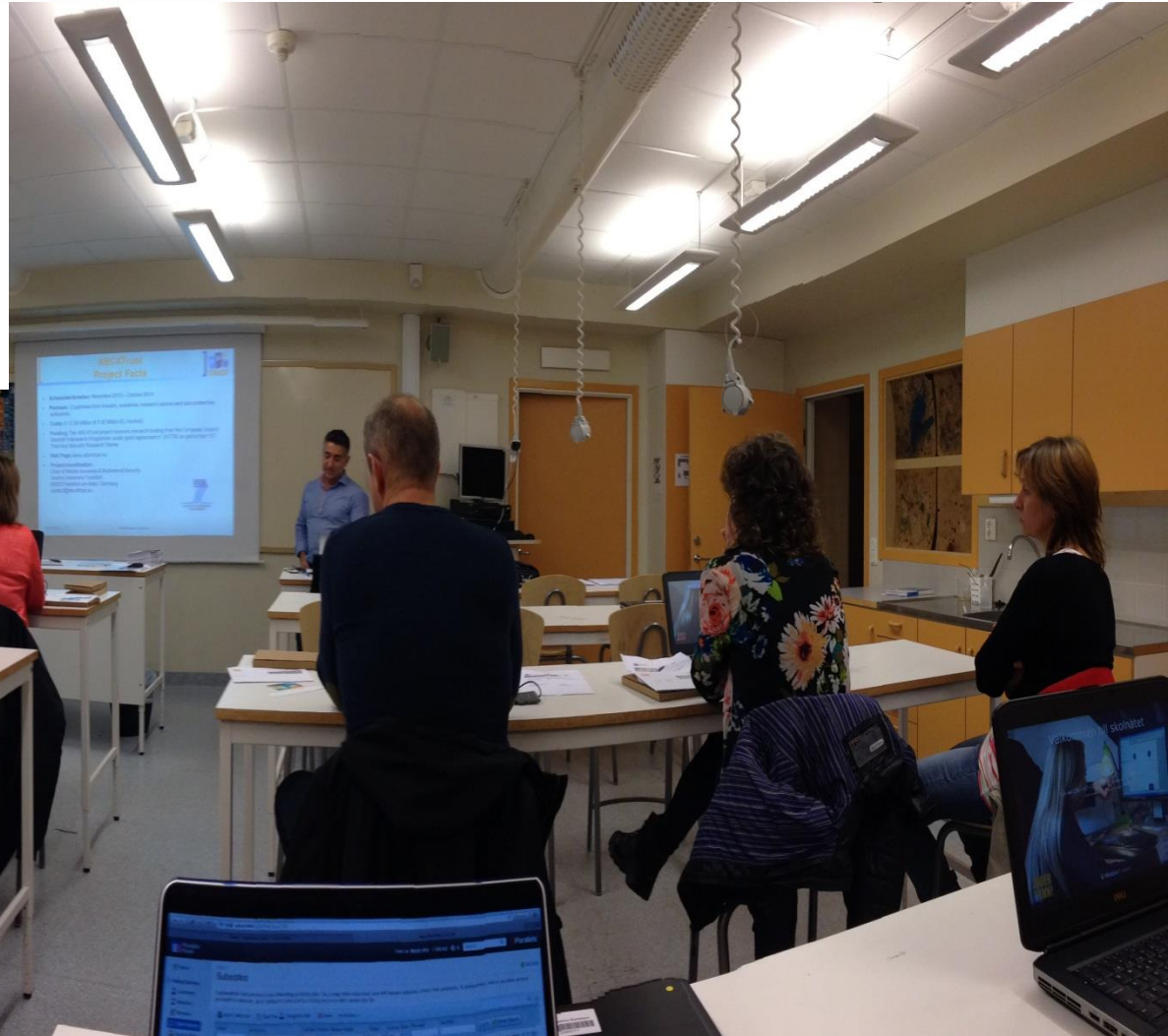


- 1st round of the pilot successfully performed May-Jun 2013.
 - 24 participating pupils were educated in the Privacy ABCs concept
 - 22 performed tasks and 15 completed a questionnaire
- 2nd round successfully performed Nov 2013-Feb 2014
 - 381 cards are issued to pupils, guardians and teachers
 - Improvements based on the results from Round 1
 - Adaptation of the Revocation and Inspection functionality
 - Altogether 91 persons participated in the questionnaire

Round 2

- 381 cards

- 53 School personnel
- 123 Pupils
- 203 Parents
- 2 Admins



Demo features



- Help and downloads
 - User Client, User manual and credentials
- The RA system
 - The menu (My dashboard, official RAs)
 - Alias selector
 - Enter an RA, post a message into the chat
 - Open private chat
 - Show “Report content” controls
 - Counselling
- The User Client
 - Manage credentials, revocation check, change PIN etc.

Demo

- RA system (select alias, chat, report content, counseling etc.)
- User Client - browser plugin menu



Questions?



Thank You

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- Dashboard
- Alias selector
 - Alias saved on Smart Card
- Access Policy
 - Access Policy Editor
 - Dynamic Access Policy Generator
- Inspection
- Revocation
- Civic Reg. Number -> Pilot User Number
 - 640512-3875 -> 640512- 1023