

Erasmus Without Papers

from a low level technical view

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Central ICT Services
University of Málaga

TERENA TF-EMC²
Outreach Activity

Chair person of the Groningen Declaration
Executive Committee

EUNIS 2013
Riga
June 10th, 2013

GIRALTGARCIA/V



ACP,15:15

IB8456,03FEB,N,18C,007

ISSUED BY TRANS WORLD AIRLINES, INC.			PASSENGER TICKET AND BAGGAGE CHECK			ORIGIN			DESTINATION			AIRLINE FORM			SERIAL NUMBER											
NAME OF PASSENGER Mrs CARLA CHESI						NOT TRANSFERABLE						CONTINUATION TICKETS						15:4370:513:334								
RESTRICTIONS/ENDORSEMENTS						TRADES IN EXCHANGE PER						DATE OF ISSUE						PASSENGER'S COUPON								
NOT VALID BEFORE			2			NOT VALID AFTER			3			ORIGINAL ISSUE CARRIER			FORM & SERIAL NO.			PLACE			DATE			AGENTS SCHEDULE CODE		
1			2			1			2			3			TICKET DESIGNATION			TWR CODE			17 JUL 2 4 33					
X/O NOT GOOD FOR PASSAGE						FARE BASIS		CARRIER		FLIGHT/CLASS		DATE		TIME		STATUS		ALLOW		FORM OF PAYMENT						
FROM ROME						TW		800		ATA		15		11:20		OK		LO		AGENCY DATE AND PLACE OF ISSUE						
TO TELAVIV						TW		891		MAT		3		6:00		OK		LO		FEE						
TO ROME						_____																				
TO VIA						PCB		UNCK		PCB		UNCK		PCB		UNCK		PCB		FORM OF PAYMENT						
BAGGAGE CHECKED						UNCHECKED		WT		WT		WT		WT		WT		WT								
TAX			CPN			TICKET NUMBER			CX																	
TOTAL			17																							

IT IS UNLAWFUL TO PURCHASE OR RESELL THIS TICKET FROM TO ANY ENTITY OTHER THAN TRANS WORLD AIRLINES OR ITS AUTHORIZED AGENTS

Flying without papers



Málaga (AGP)

Riga (RIX)

12/06/2013

13/06/2013

Ocultar herramientas ▾

[Alertas](#)

[Gráfica de tarifas](#)

[Matriz de aerolíneas](#)

Escalas

directo

1 escala 554 €

2+ escalas 608 €

Horarios

Saliendo Málaga

mié 0:30 - 22:30



112 de 751 vuelos [Ver todos](#)

Ordenar **Pre**

554 €
Tarifa Hacker[†]



Finnair /
Brussels Airlines

AGP 0:55 ▶ RIX 10:40 8h 45m
RIX 6:05 ▶ AGP 12:35 7h 30m

Elegir

Tarifa Hacker 554 €

Detalles

Tarifas

576 €



Air Berlin

AGP 10:45 ▶ RIX 22:10 10h 25m
RIX 9:50 ▶ AGP 18:50 10h 00m

Elegir

lastminute.co...	576 €	Travelgenio	577 €	Barceloviajes	583 €
Logitravel	588 €	Rumbo	589 €	Expedia	589 €

Detalles

Tarifas

<http://es.bestfares.amadeus.net/>

Flights from Europe/Middle East [\(Change\)](#)

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One Way [Round the World](#)

Hotels

Cars

Activities

From: London (Heathrow)

To:

Depart: May 2013 Fri 17

Return: May 2013 Fri 17

Flexible with dates

Adults: [Children](#) (2-11) [Infants](#) (<2)

See the best of Australia

From **London (Heathrow)**

Perth	£765* return
Sydney	£877* return
Cairns	£903* return

*Prices in GBP from...

Frequent Flyer

Membership No.

Last Name

PIN [Forgotten your PIN?](#)

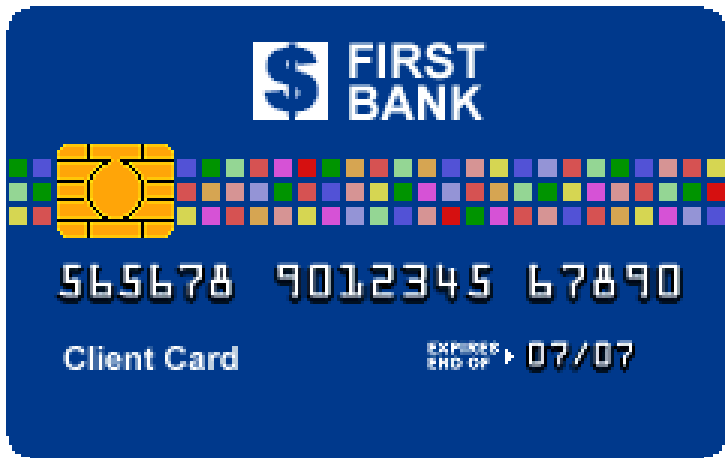
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Manage Your Booking

Online Check-in

<http://www.quantas.com.au/>



<http://commons.wikimedia.org/wiki/File:ClientCardSample.png>

You can check-in and select your seats from 24 hours up until 2 hours before your flight departure at qantas.com.*



Online Check-in

1. Retrieve your booking through [Manage Your Booking](#) or [Your Bookings](#), if you're a Qantas Frequent Flyer.
2. Click on the 'Online Check-in' button then follow 5 easy steps:



Ensure you take your printed Boarding Pass and your Qantas Booking Reference number with you to the airport.

<http://www.qantas.com.au/travel/airlines/international-online-checkin/global/en>

GIRALTGARCIA/V



ACP,15:15

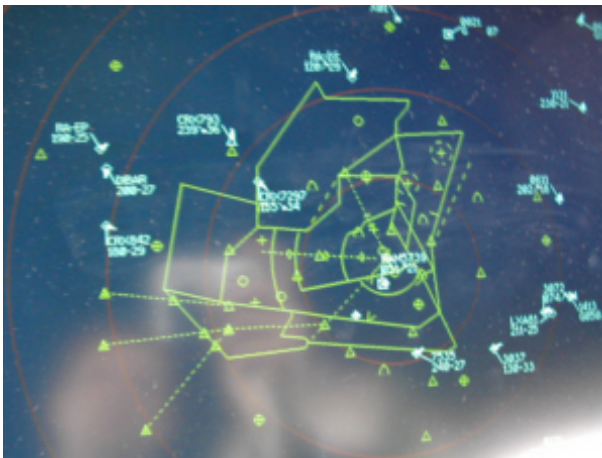
IB8456,03FEB,N,18C,007



http://commons.wikimedia.org/wiki/File:Malaga_aeropuerto.jpg



http://commons.wikimedia.org/wiki/File:SR_DC3.jpg



http://commons.wikimedia.org/wiki/File:ATC_approach_radar_screen.jpg



<http://commons.wikimedia.org/wiki/File:RIX3.jpg>

Standards Trust

Standards

TCP/IP BGP
SMTP HTTP IMAP XMPP
X.509 TLS SAML OAuth OpenID
SOAP XML ReST JSON
PDF ODF SCHAC
MLO ELM ELMO

Standards



<http://www.eid-stork.eu/>

Standards



<http://www.edugain.org/>

Standards



*The future of Digital Student Data
Portability*

<http://www.groningendeclaration.org/>

Behavioral trust

- person to person
- institution to institution
- person to institution
- reputation based
- supported by *feelings*

Technical trust

- institution to institution
- institution to *network*
- system to system
- procedure based
- supported by technology

The three laws of crypto

- Confidentiality
- Integrity
- Non repudiation

Actors



Student

Actors



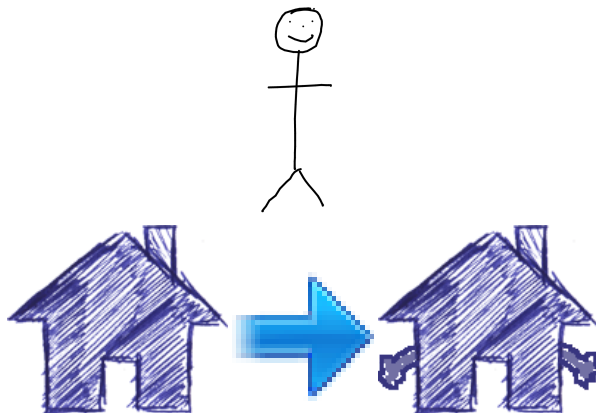
Home Institution

Actors



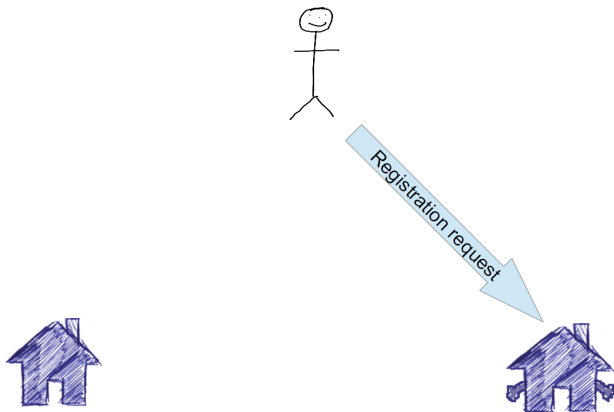
Receiving Institution

Plot

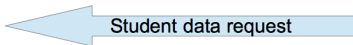


student wants to go from home to receiving institution

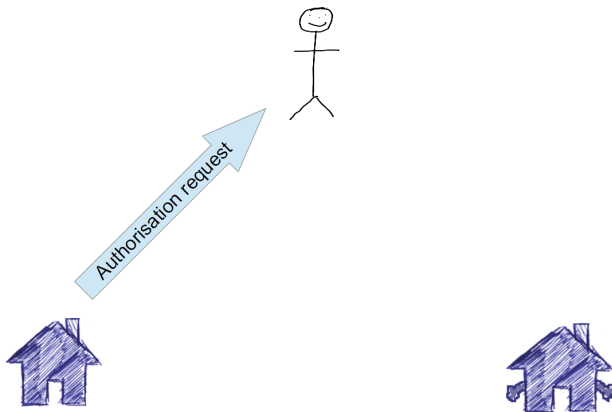
Plot



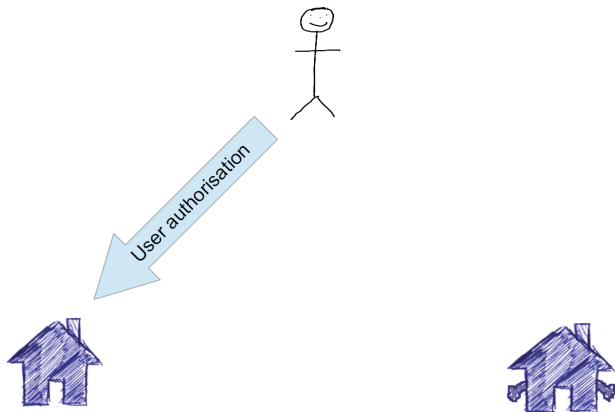
Plot



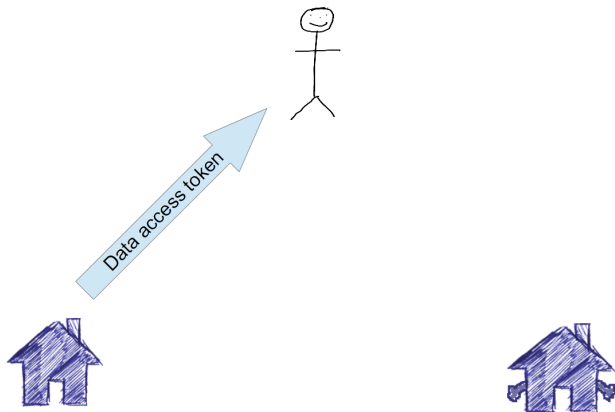
Plot



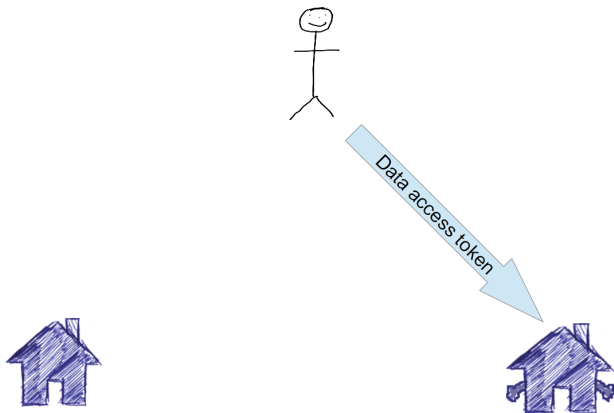
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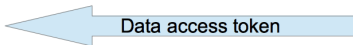
Plot



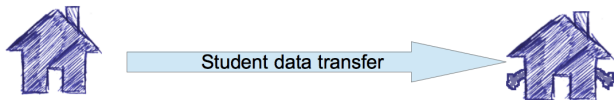
Plot



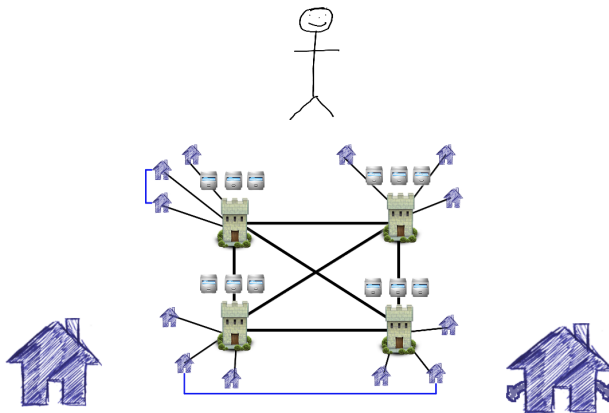
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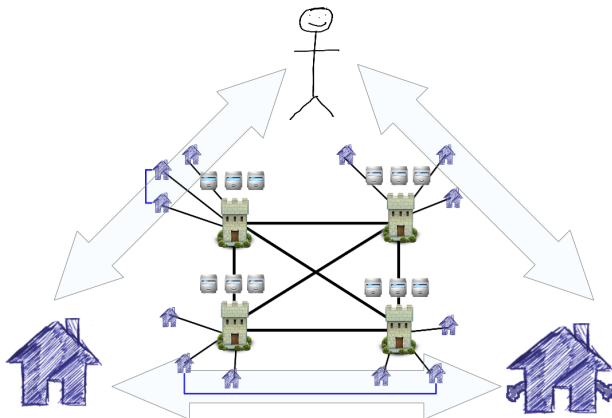
Plot



Plot



Plot



Erasmus without papers

Erasmus without papers?

Remember

Remember

All your documents are born digital

Tom Black @stanford.edu

Thank you



SSEDC Programme Partner



Thank you

Questions?

answers not assured



SSEDC Programme Partner

