

# Erasmus Without Papers

from a low level technical view

Victoriano Giralt

Chair person of the Groningen Declaration  
Executive Committee

Central ICT Services  
University of Málaga

ERACON  
Poznań  
May 16th, 2013

GIRALTGARCIA/V



ACP,15:15

IB8456,03FEB,N,18C,007

ISSUED BY <b>TRANS WORLD AIRLINES, INC.</b>			PASSENGER TICKET AND BAGGAGE CHECK			ORIGIN			DESTINATION			AIRLINE FORM			SERIAL NUMBER								
NAME OF PASSENGER <b>Mrs CARLA CHESI</b>						NOT TRANSFERABLE						CONTINUATION TICKETS											
RESTRICTIONS/ENDORSEMENTS						TRADES IN EXCHANGE PER						DATE OF ISSUE											
NOT VALID BEFORE			ORIGINAL ISSUE CARRIER			FORM & SERIAL NO.			PLACE			DATE			AGENTS NUMBER CODE								
NOT VALID AFTER			TICKET DESIGNATION			TWR CODE																	
1 2 3						1 2 3						17 06 72 4732											
FROM <b>ROME</b>						FARE BASIS <b>TW 800</b>						CARRIER <b>ATA</b>						FLIGHT/CLASS <b>15</b>					
TO <b>TELAVIV</b>						CARRIER <b>TW 891</b>						DATE <b>MAY 3</b>						TIME <b>6:00</b>					
TO <b>ROME</b>						STATUS <b>OK</b>						ALLOW <b>LO</b>											
TO <b>VIA</b>						DATE AND PLACE OF ISSUE						FEE											
FORM OF PAYMENT						BAGGAGE CHECKED						UNCHECKED						FORM OF PAYMENT					
TICKET NUMBER						CPN						CK											
TAX						TOTAL						17											

015:4370:513:334

TWA

ROME TELAVIV

17 06 72

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



**Ocultar herramientas** ▾

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[Gráfica de tarifas](#)

[Matriz de aerolíneas](#)

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**Escalas**

directo

2+ escalas 1233 €

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**Horarios**

**Saliendo Málaga**  
lun 0:30 - 15:30

**Saliendo Poznan**  
vie 5:30 - 21:00

[Mostrar horarios de aterrizaje](#)

---

**Clase**

Turista 1233 €

Negocios 2473 €

Mix 1665 €

**33 de 195 vuelos** [Ver todos](#) Ordenar **Precio - Menor a mayor** ▾

---

**1233 €** **Elegir**

**Varias aerolíneas** Turista [!](#)

	AGP 14:00 ▶ POZ 23:50	9h 50m	2 stops (TXL...)
	POZ 12:55 ▶ AGP 18:50	5h 55m	1 stop (DUS)

Detalles
Tarifas

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**1665 €** **Elegir**

**Varias aerolíneas / Lufthansa** Mixta [!](#)

	AGP 15:20 ▶ POZ 23:50	8h 30m	2 stops (BRU...)
	POZ 5:55 ▶ AGP 12:25	6h 30m	1 stop (MUC)

Detalles
Tarifas

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**1677 €** **Elegir**

**Varias aerolíneas** Mixta [!](#)

	AGP 10:25 ▶ POZ 23:00	12h 35m	2 stops (VIE...)
	POZ 12:55 ▶ AGP 18:50	5h 55m	1 stop (DUS)

Detalles
Tarifas

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**1691 €** **Elegir**

**Varias aerolíneas / Lufthansa** Mixta [!](#)

	AGP 10:45 ▶ POZ 23:00	12h 15m	2 stops (LIS...)
	POZ 5:55 ▶ AGP 12:25	6h 30m	1 stop (MUC)

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



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**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)**\*

<b>Perth</b>	<b>£765*</b> return
<b>Sydney</b>	<b>£877*</b> return
<b>Cairns</b>	<b>£903*</b> return

\*Prices in GBP from...

### Frequent Flyer

Membership No.

Last Name

PIN  [Forgotten your PIN?](#)

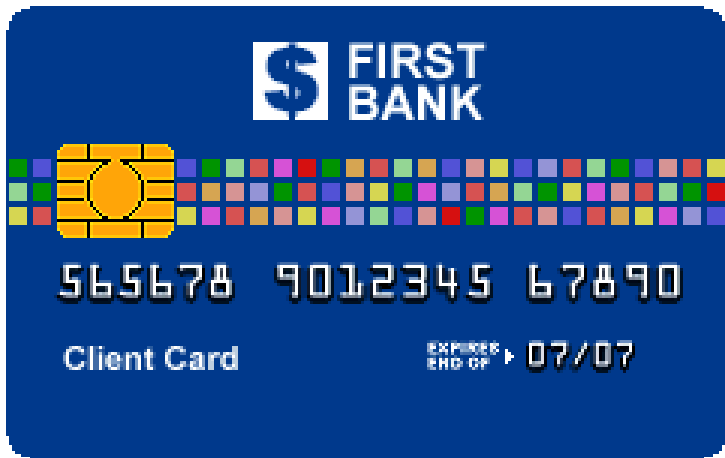
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**Online Check-in**

<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](http://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>

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# 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

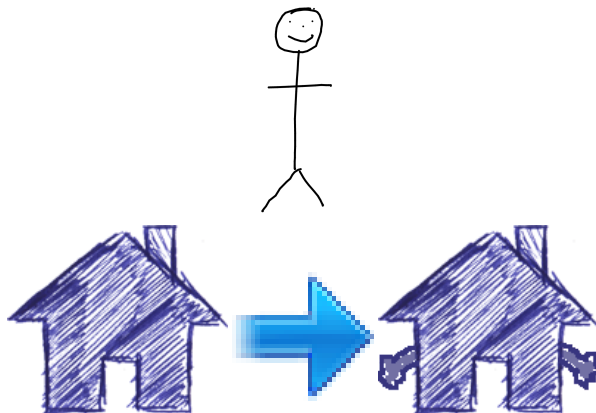


# Actors



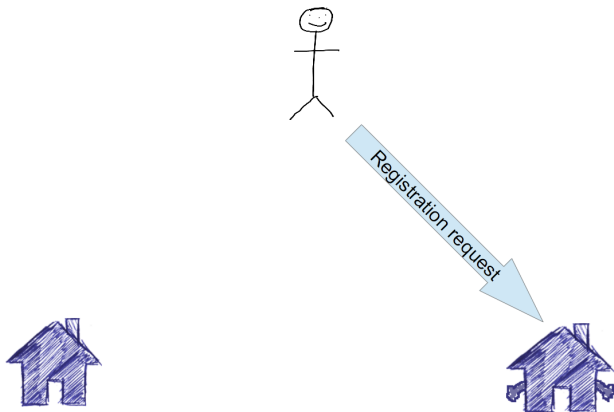
Receiving Institution

# Plot

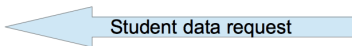


student wants to go from home to receiving institution

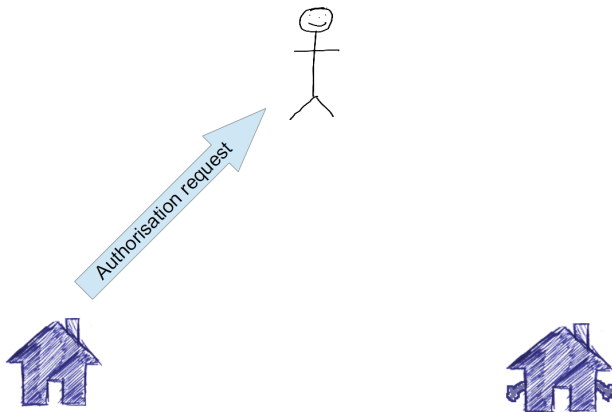
# Plot



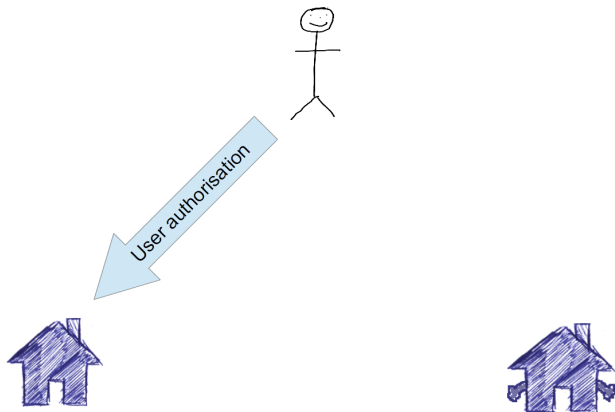
# Plot



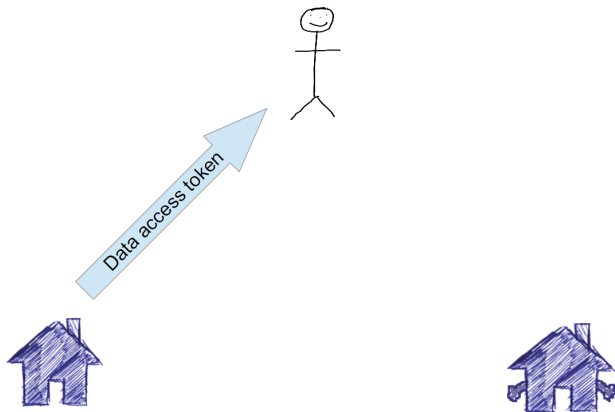
# Plot



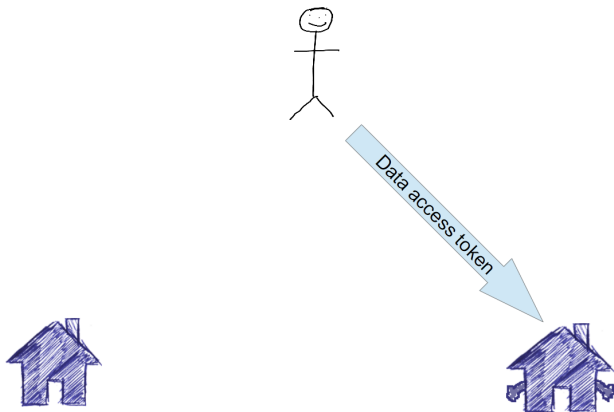
# Plot



# Plot

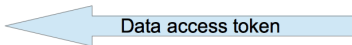


# Plot

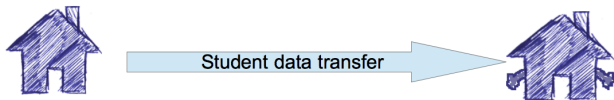




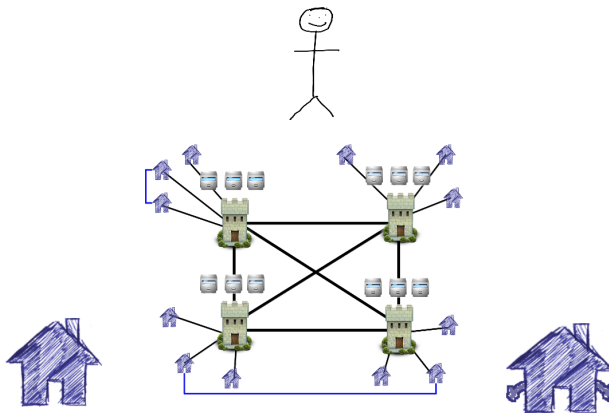
# Plot



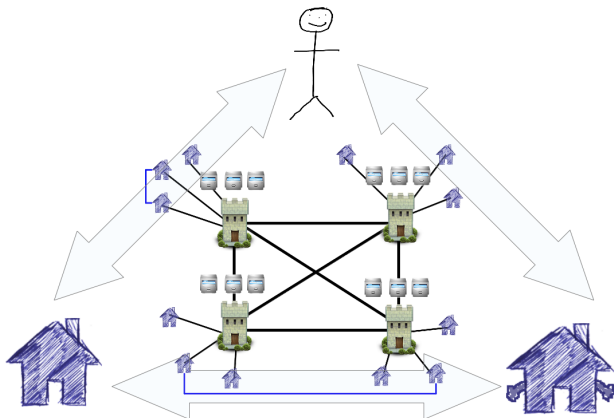
# Plot



# Plot



# Plot



# Erasmus without papers

# Erasmus without papers?

# Remember

# Remember

## All your documents are born digital

Tom Black @stanford.edu



# Thank you



# Thank you

## Questions?

answers not assured

