Groningen Declaration
the future of academic data digital portability

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Chairperson
Groningen Declaration Network

Credentials Work Group Conference call
November 18th, 2014
Diploma mill

http://www.uma.es/servicio-central-de-informatica/info/7785/museo_impresion/

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Groningen Declaration
“All your documents are born digital”
Thomas C. Black, @stanford.edu
Digital Diploma Deposits

Aims

- Fraud prevention
- Friction reduction
- Loss recovery
Digital Diploma Deposits

What's all this about? What has identity to do with it?

- Data ownership
- Privacy rights
- Identification
- Access
- Comparability
- Compatibility
- Aceptation
- Recognition

(Groningen Declaration)
Information
in electronic form, our main character

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Information
in electronic form, our main character
Information
in electronic form, our main character

+ Easy to transport

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Groningen Declaration
Information
in electronic form, our main character

+ Easy to transport
+ Easy to store
Information
in electronic form, our main character

- Easy to transport
- Easy to store
- Easy to process
Information in electronic form, our main character

+ Easy to transport
+ Easy to store
+ Easy to process
+ Easy to retrieve
Information in electronic form, our main character

+ Easy to transport
+ Easy to store
+ Easy to process
+ Easy to retrieve
+ Easy to create

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Groningen Declaration
Information in electronic form, our main character

+ Easy to transport
+ Easy to store
+ Easy to process
+ Easy to retrieve
+ Easy to create
+ Easy for the environment

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Groningen Declaration
The big tree killer
bad for the environment

CC-BY-SA 2.0 M J Richardson <http://www.geograph.org.uk/photo/510110>
The big tree killer
bad for the environment
The big tree killer
bad for information freedom

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Groningen Declaration
Information caught in the paper jail as soon as it gets printed
freedom lost in the paper jail
freedom lost in the paper jail

- Difficult to transport
freedom lost in the paper jail

- Difficult to transport
- Difficult to preserve
freedom lost in the paper jail

- Difficult to transport
- Difficult to preserve
- Difficult to retrieve

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Groningen Declaration
freedom lost in the paper jail

- Difficult to transport
- Difficult to preserve
- Difficult to retrieve
- Too easy to create
freedom lost in the paper jail

- Difficult to transport
- Difficult to preserve
- Difficult to retrieve
- Too easy to create
- Bad for the environment
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/

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Groningen Declaration
Standards

http://www.edugain.org/
Standards

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
Trust

The three laws of crypto

- Confidentiality
- Integrity
- Non repudiation
Actors

Student
Actors

Home Institution
Receiving Institution
Actors

National Digital Deposit
Trust Fabric
student wants to go from home to receiving institution
Plot

Student data request
Plot

Authorisation request
Plot

User authorisation

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Groningen Declaration
Plot

Data access token
Plot

Data access token
Plot

Student data transfer
Plot