

Cyber-Identity UNIVERSE®

UNique Identification and VERification SERVICE

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www.cyber-identity.com

UNIVERSE - What we want

- To provide a **UN**ique **I**dentification and **VER**ification **SE**rvice for business entities (documents, services, products)
 - In the World Wide Web of today
 - And to enhance future automatic business transactions based on machine readable formats (like XML)
- Search engines for finding information <-> UNIVERSE for verifying information – “Find with your favourite search-engine, verify with UNIVERSE”
- **We are convinced: Persistent worldwide unique identification is key to the further development of transactions in the electronic world, esp. w.r.t. business entities and documents**

UNIVERSE – it is **NOT** ...

...a substitution for a Public Key Infrastructure (PKI) or for another security technology

- On the contrary, it is complementary with / supportive to security technology, especially in an **open user group**
- Persistent worldwide unique identification is a prerequisite for a security infrastructure in an open user group (e.g. for PKI - you will find out sooner or later!)

UNIVERSE – has to do

- With TRUST
- TRUST is not equivalent to Security
- However Security without TRUST is like marmalade without bread
- Therefore Security is one component to build TRUST
- UNIVERSE is another important component to build TRUST

What it is about: Unique Identification

Basic structure of organisation identification schemes (ISO 6523)

scheme identifier

Identification of an organisation within an identification scheme

Identification of an organisation part

Example: EAN 13 Code

0088

76 10800

98288 3

refers to a specific type of bottle from **Coop**

Example: Zefix (Swiss Commercial Register) Nr.

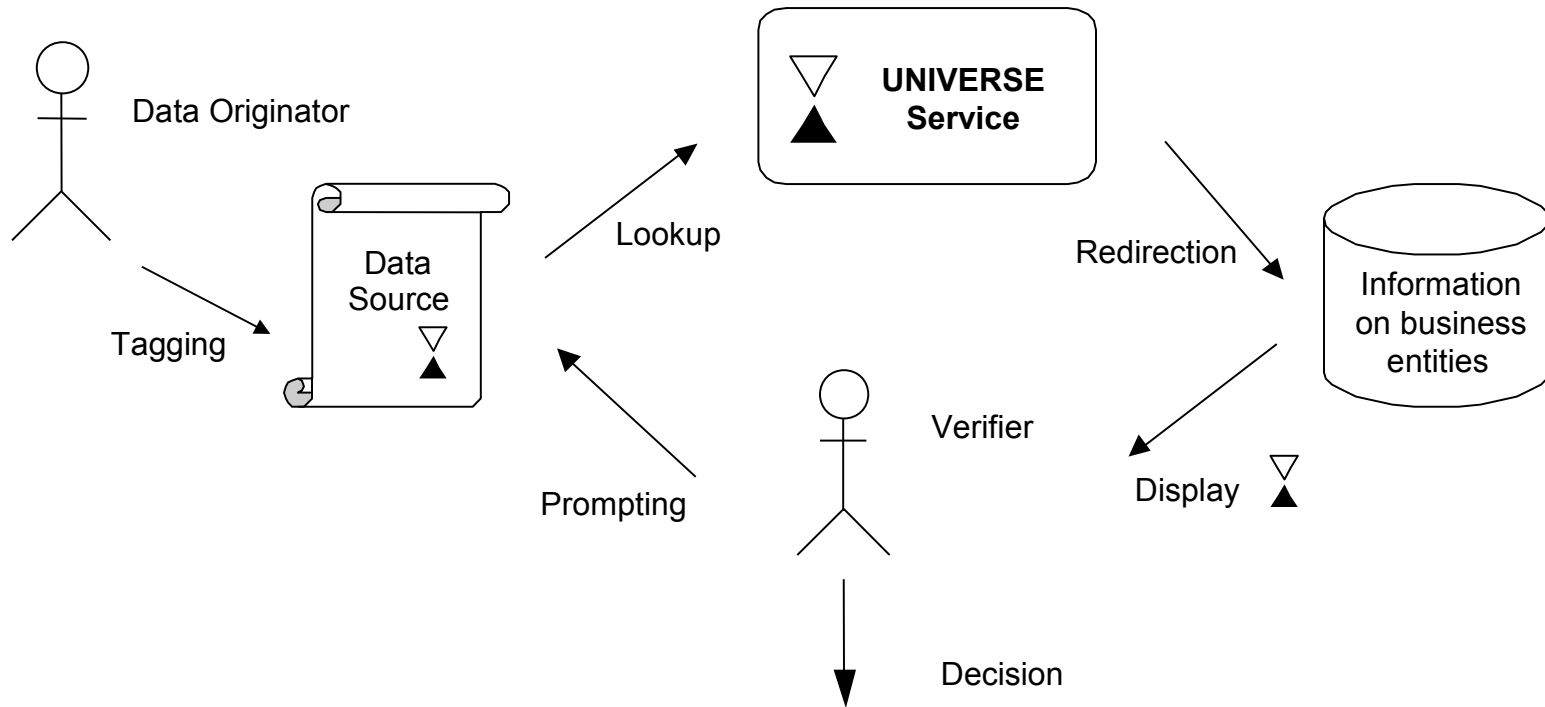
0169

CH-020.3.900.058-8

refers to ABB Ltd.

What it is about: Verification

A Trusted Third Party!!!



What it is about: Unique Identification AND Verification

Unique Identification **REQUIRES** Verification of the **originator** of the identified entity

Example: EAN 13 Code

0088

76 10800

Click here

98288 3

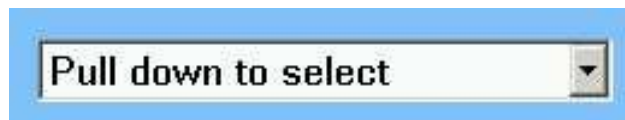
Purpose

- Unique identification of business entities
AND
- Verification of an identified entity
- A CYBER-IDENTITY UNIVERSE[®] is a **META service** for Verification of identifiers of business entities.

Federation

However, perhaps as a verifier I don't know the *Ticino Chamber of Commerce and Industry (cciati.ch)*:

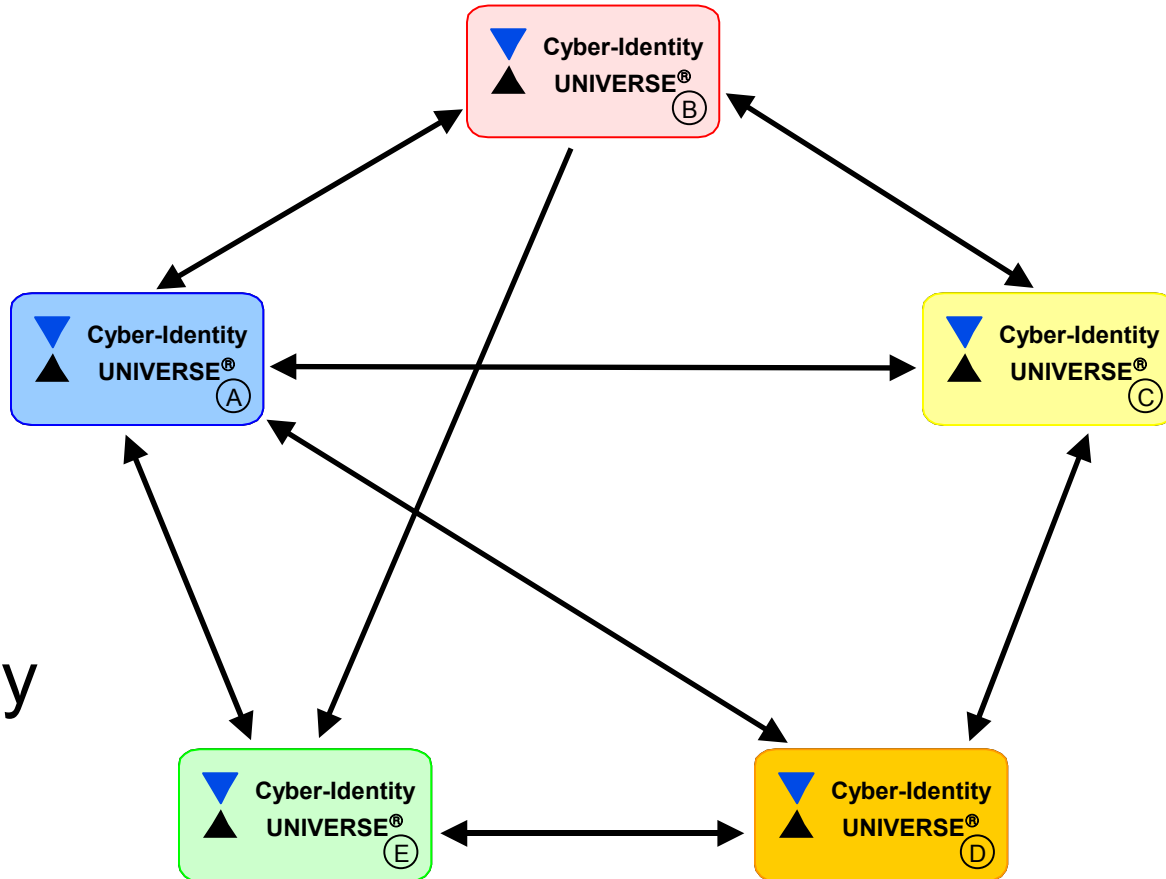
- I check if I can find my own Cyber-Identity UNIVERSE[®] provider in the dropdown list in the blue box



<http://universe.cciati.ch/urn/?urn=urn:iso6523:0085:02801737>

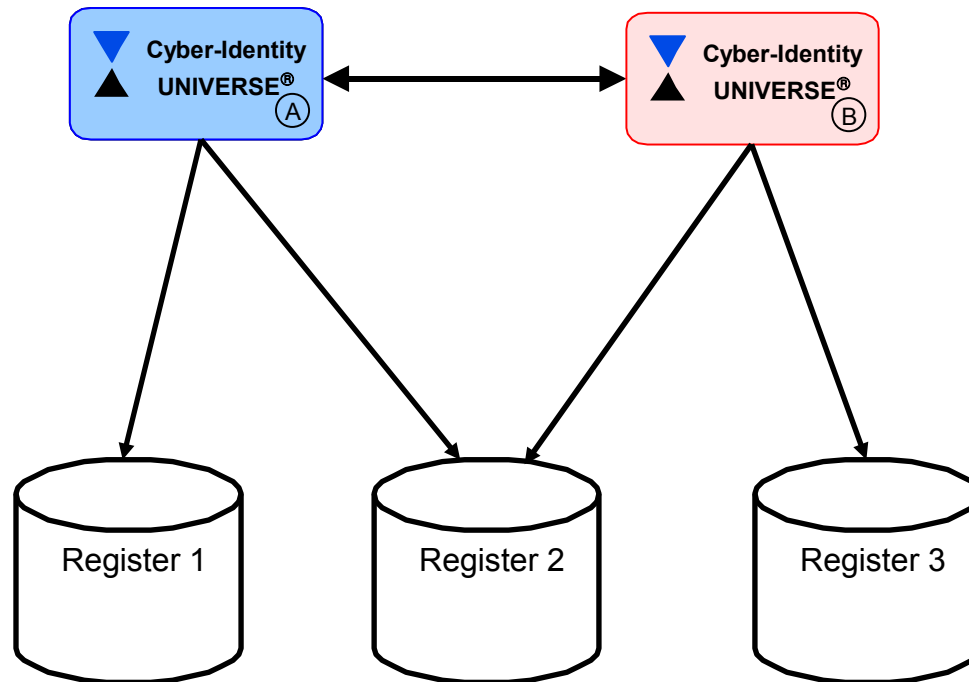
- This concept of redirection to another service provider is a “**FEDERATION**” approach

Federation



Highest
autonomy
of each
provider

Trusting Registers



Applications

Outset: Usage as a Trust Label

- The “Swiss Chambers of Commerce ID: [02801737](#)” provides an **assured** link to the register of the Swiss CCIs. Other schemes like D&B, GS1, commercial registers are also available.
Example: [offerSpecimen.pdf](#)
- “*Ticino Chamber of Commerce and Industry*” offers this “Trust Label” service to its customers / members; slogan: Find with your search-engine - verify with UNIVERSE.

Application: compliance with legal requirements

Starting position: (Electronic) business documents have to be tagged with Identifiers

- ✓ E.g. Swiss Code of Obligations Art. 936a (← Law on Mergers SR 221.301):
 - ✓ Stipulates for registered Companies to be identified with an official identifier of the Commercial Register
 - ✓ This identifier is immutable during the whole lifetime of the company
- ✓ E.g. EU directive 2000/31/EC on electronic commerce: Information required on the document
Art. 5(d) where the service provider is registered in a trade or similar public register, the trade register in which the service provider is entered and his registration number,
- **CYBER-IDENTITY UNIVERSE® is a service implementation to comply with these requirements.**

Applications – Future extensions

- Automated electronic business services
 - E.g. ebXML: electronic business using eXtensible Markup Language, for B2B document exchange
- RFID (**R**adio **F**requency **I**Dentification) chips containing unique item identifiers for processing such items, e.g. a product, transport unit
 - A UNIVERSE allows to check an organisation connected with the tagged element

Based on Standards

- Using the common Internet standards HTTP, URLs, HTML, URNs
- Using International Code Designator (ICD) values according to standard ISO 6523
 - ICD values are meta-identifiers
 - Example: 0085 is the ICD value of the Swiss Chambers of Commerce Scheme
- BSI (British Standards Institution) is the registration authority for allocating ICD values

Why using UNIVERSE? – the main stakeholders

- **Data originator (mainly SMEs):**
 - To have a trust label from a recognized organisation (register) which
 - provides trust not only in terms of „*who you are*“ but also in terms of „*what you are*“ and „*how good you are*“
 - offers on the WWW „*find with your favorite search-engine – verify with UNIVERSE*“
 - To participate in the Federation Network of the UNIVERSE provider
 - To tag electronic documents with unique identifiers to enhance their authenticity (probative force) w.r.t. Basel II, SOX, laws on account books, eAuditing
 - (Future) to cope with the same issues in automated business services (ebXML) and Radio Frequency Identification (RFID)
- **Verifier (any person):**
 - To receive free information for verifying a data source by a secure link from a specific UNIVERSE provider or from a federated UNIVERSE provider which the verifier trusts
 - Thus the information about the sender is reliable

Why using UNIVERSE? – the providers

- UNIVERSE provider (e.g. Ticino Chamber of Commerce):
 - To offer a new service to the members (in cooperation with the information providers)
 - To enlarge the membership base
- Information provider (e.g. Swissfirms):
 - To offer a new service to their members (in cooperation with the UNIVERSE provider)
 - To enhance the visibility of the registry
 - To enlarge the membership base
- System provider:
 - To provide a new service according to its business model

Summary

- Unique identification of entities
- Verification of „owner“ of an entity
- Federation of UNIVERSE providers = „trust anchors“
- A UNIVERSE provider is an authority to recognise registration schemes and the according directories

0088

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Click here

Conclusion

We are convinced: Persistent worldwide unique identification is key to the further development of transactions in the electronic world, esp. w.r.t. business entities and documents.

Swiss Chambers / Swissfirms ID:	02801737
Swiss Commercial Registers/ZEFIX Nr:	CH-020.1.021.491-5
D&B D-U-N-S® Nr:	481453301
Swissguide Nr:	932950

Thank you!