Semantic Interoperability Workgroup Meeting

23rd October, 2008
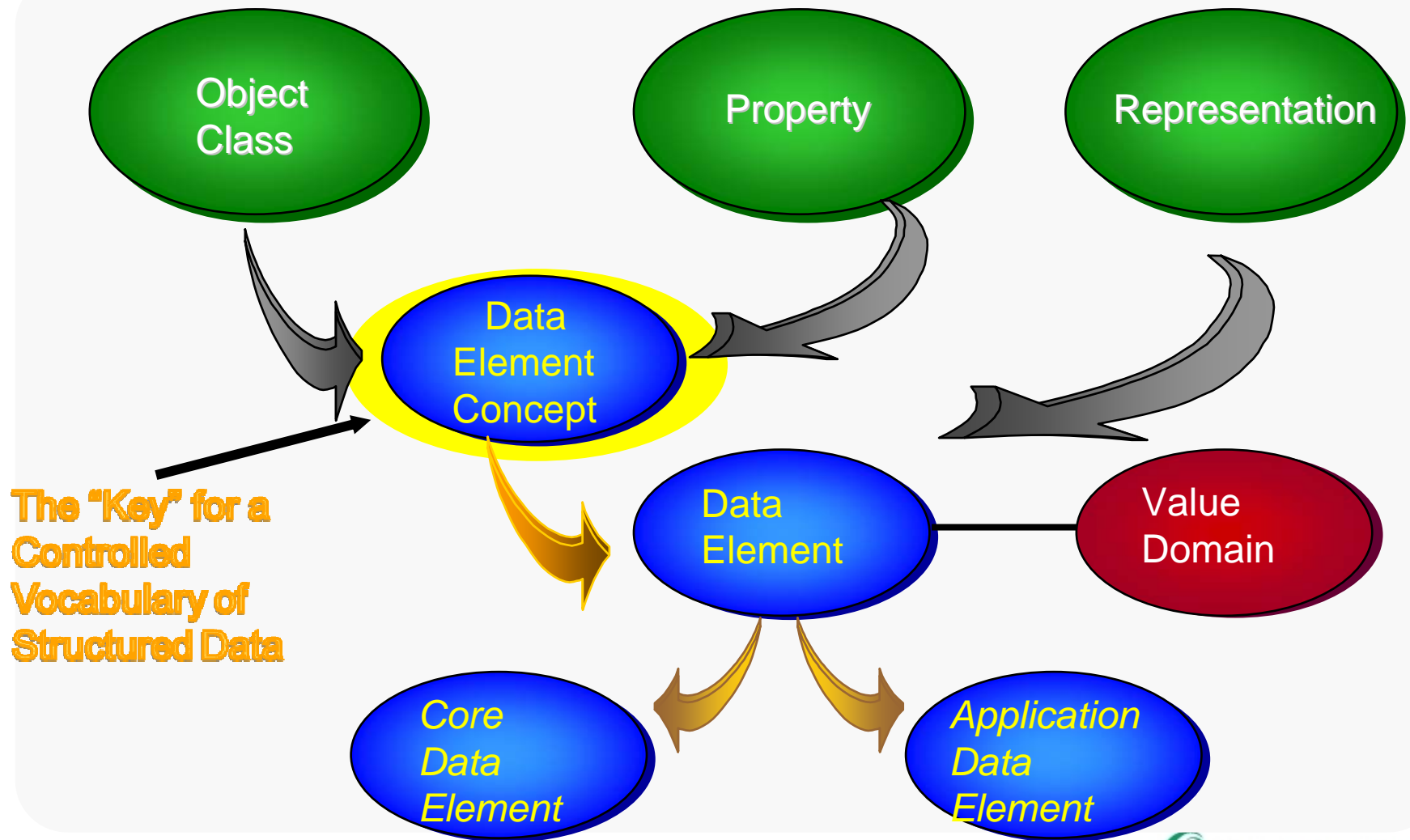
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Topics discussed

- Principles
  - Overall and distributed UDEF
- White paper
  - Context of UDEF and relation to other standards
- Vendor specific datamodel pre-integration
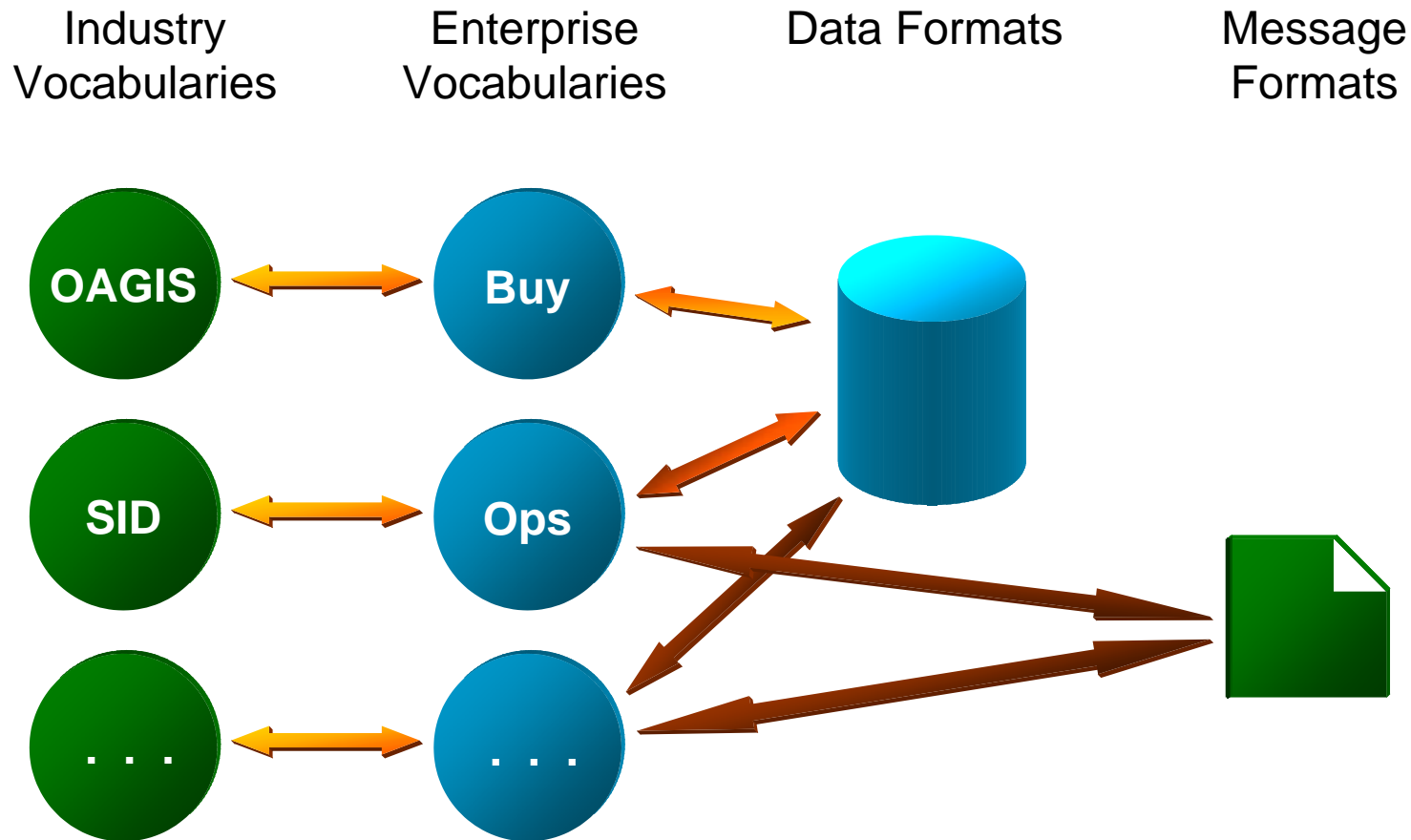- Charter of distributed UDEF working group

Principles

- UDEF is a key enabler for SOA

- UDEF is a key enabler for Business Intelligence

- Horizontal functions should be addressed in the global UDEF

- Vertical functions can be addressed in domain specific extensions

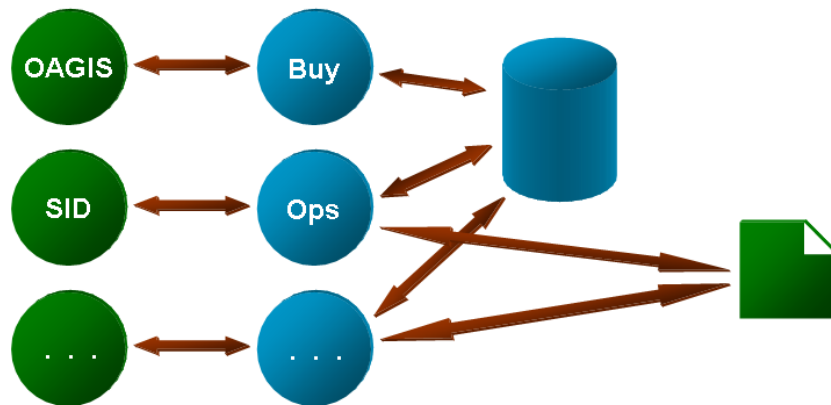# ISO/IEC 11179 – Key Terminology

Vocabularies in the Enterprise

Industry Vocabularies   Enterprise Vocabularies   Data Formats   Message Formats

OAGIS

Buy

SID

Ops

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The Potential of the UDEF

- Organize enterprise vocabularies
- Define links
  - To industry vocabularies
  - Between enterprise vocabularies
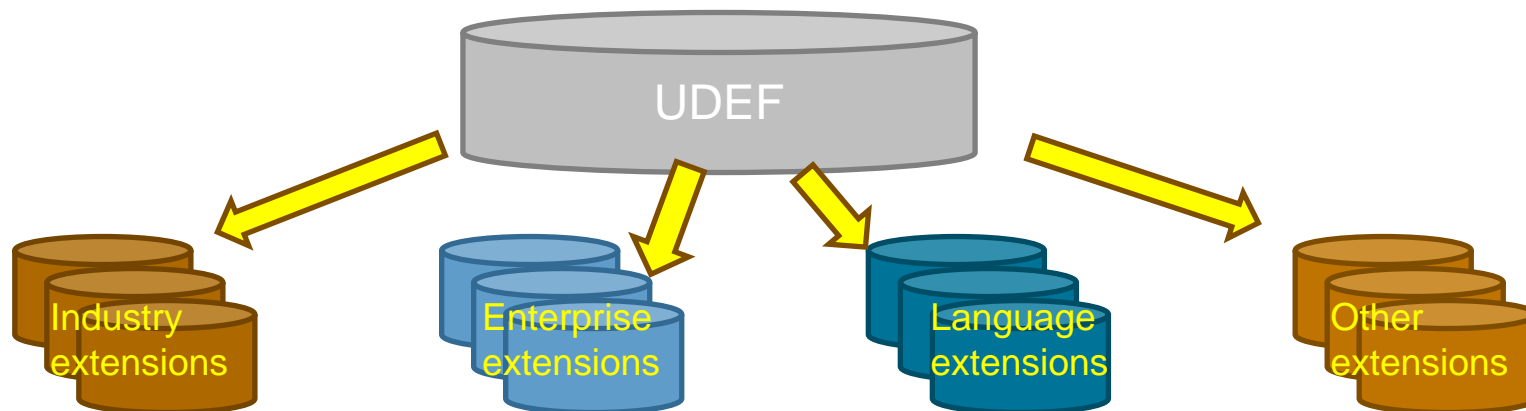 - To enterprise message and formats

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To Fulfil the Potential, the UDEF Must

❑ Include a way of integrating industry vocabularies

❑ Become enterprise-extensible

❑ Be part of a standard vocabulary representation

❑ Be part of

  ▪ Standard schema representations, or

  ▪ Standard vocabulary-schema link representations

❑ Have a clearly valuable role in relation to other standards, including SQL, XML and RDF

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Limitations of current UDEF

- ☒ Many industry specific concepts not modeled
  - ☞ Open Group lacks in depth expertise in many industry domains
  - ☞ Open Group only models "vendor neutral" data element concepts
- ☒ Many enterprise specific concepts not modeled
  - ☞ Individual enterprises would want to model certain areas differently
- ☒ Governance process not agile due to quality procedures
  - ❖ Some required extensions do not exist in other languages
  - ❖ Enterprises want to try some extensions now

Our solution: Distributed UDEF

UDEF

Industry extensions

Enterprise extensions

Language extensions

Other extensions

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The vision of a distributed registry

The Vision:

The UDEF- registry will be a distributed set of registries (like in the DNS) each managed by its own registrar, using common standards and common governance processes.

The root UDEF-registry is managed and maintained by the Open Group, who as well has the authority to assign registrars of descendant registries and the authority to define the governance processes.

Every system owner can freely use the UDEF on a royalty free basis

Future extensions of the UDEF trees, including the descendant registries will enable all systems around the world the exchange data on a semantically consistant way, without requirements for system managers to make any prior arrangements beyond being UDEF-compliant.

National language versions of UDEF extend this vision across language barriers

Registry linkage visualised

UDEF-tree

Descendant tree

connectors

Descendant tree

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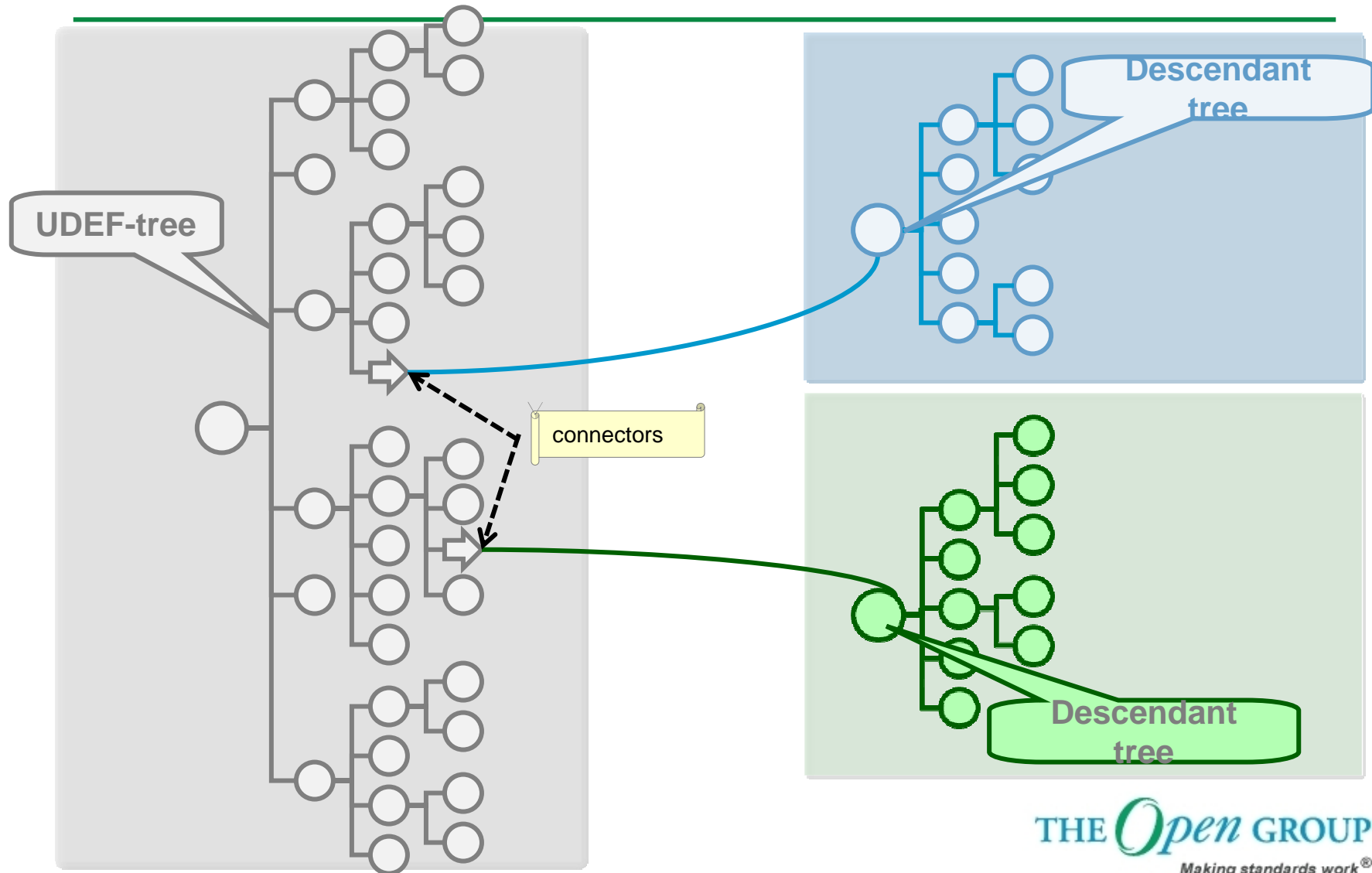
New terminology

- DDEF -
  - All distributed data element framework registries
- SDEF
  - Specific data element framework for a vertical domain
- PDEF
  - Private data element framework for a closed enterprise

Registry switching architecture
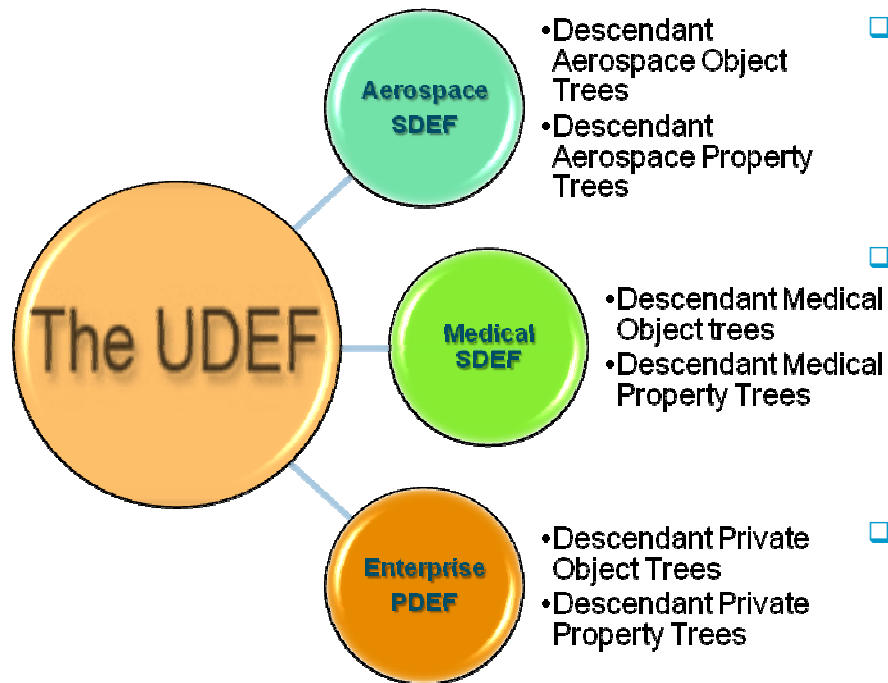
- Some potential object trees have been identified:
- Aerospace:
  - Aircraft-Product
  - Spacecraft-Equipment
  - Test-setup
  - Configuration
- Medical:
  - Medical-Equipment
  - Medical-Supplies
  - Medical-Observation
  - Medical-Substrate
  - Medical-Susceptibility
- Private:
  - Employee
  - Customer
  - Model
  - Recipe
  - Bill-of-Material

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SDEF examples

The following are just a few examples of data element concepts that might be applicable to an airline industry.

B737-300.Commercial.Aircraft.Asset_Available.Quantity a.UDEF-S.b.o.1_2.11
B737-500.Commercial.Aircraft.Asset_Available.Quantity b.UDEF-S.b.o.1_2.11
B777-200.Commercial.Aircraft.Asset_Available.Quantity c.UDEF-S.b.o.1_2.11
A320.Commercial.Aircraft.Asset_Available.Quantity d.UDEF-S.b.o.1_2.11
A319.Commercial.Aircraft.Asset_Available.Quantity e.UDEF-S.b.o.1_2.11
B737-300.Commercial.Aircraft.Asset_Status.Code a.UDEF-S.b.o.1_9.4
B737-500.Commercial.Aircraft.Asset_Status.Code b.UDEF-S.b.o.1_9.4
B777-200.Commercial.Aircraft.Asset_Status.Code c.UDEF-S.b.o.1_9.4
A320.Commercial.Aircraft.Asset_Status.Code d.UDEF-S.b.o.1_9.4
A319.Commercial.Aircraft.Asset_Status.Code e.UDEF-S.b.o.1_9.4
Tail-ID-1234.Aircraft.Asset_Airline.Assigned.Flight.Identifier a.UDEF-S.o.1_1.1.6.8
Tail-ID-1235.Aircraft.Asset_Airline.Assigned.Flight.Identifier b.UDEF-S.o.1_1.1.6.8
Tail-ID-1234.Aircraft.Asset_Flight.Passenger.Count.Quantity a.UDEF-S.o.1_1.1.1.11
Tail-ID-1235.Aircraft.Asset_Flight.Passenger.Count.Quantity b.UDEF-S.o.1_1.1.1.11

Workgroup charter: objectives

- To define a roadmap towards the establishment of a future UDEF version (e.g. v 1.5) that will include the registry switching concept
- To define the governance model for DDEFs (in relation to UDEF)
- To setup a set of principles for DDEFs in general and for SDEF and PDEF in particular
- To define a set of principles for identifying organizations that should get delegated control of a DDEF
- To define an initial set of trees for DDEFs by example of Aerospace SDEF, Medical SDEF and PDEF
- To define initial candidate connection points in UDEF for DDEF trees by example of PDEF and Aerospace SDEF, Medical SDEF
- To define interface standards for distributed UDEF registries
- To conduct one or more pilots with distributed UDEF registries

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Conference call feedback

- How to link to the UMLS as maintained by NIH
- The registry interface definitions to be developed in parallel with the pilots
- The use of UDEF as an enabler for MDM and PDM should be focused on
- UDEF is not only about messaging but also for enterprise datamodelling and normalisation
- There will be biweekly teleconferences to take this initiative further
- Chris will poll participants and schedule accordingly

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How to participate

➤ If you are not yet a member of the UDEF interested parties group, you can join by selfsubscribing at: http://www.opengroup.org/sophocles2/create_user.tpl?name=udef

➤ You will then receive a password within 30 minutes

➤ You can then join the new workgroup about registry switching at https://www.opengroup.org/projects/udef/protected/mailinglists.tpl?CALLER=index.tpl

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