

The LDAP Schema Registry

Schema-ng Bar BoF at the 57th IETF,
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Directory Applications
for Advanced Security
and Information Management



BoF-AGENDA

- 1.) short update on the TERENA Directory Schema Registry project
- 2.) collecting interests in schema listing/registry (sort of the "why are we here" question)
- 3.) discussion about what work should be done with the old and now resubmitted drafts
- 4.) discussion about if there is a need for schemaing which may include subjects like XML-S and RDF-S
- 5.) aob



TERENA DSR Project Aims

- to set up a LDAP schema registry with
 - an easy browsable and searchable Web interface
 - an LDAP interface for retrieval
 - an interface based on MIME types defined in RFC 2927 for submissions of new schema
- to define a policy defining the standards for inclusion into the registry
- to search for all schema definitions made within the IETF and include them into the registry
- to develop a business model to keep the registry alive after the end of the project.



Existing Project Documentation

- Project Proposal
- Deliverable B: Survey of previous work on directory schema registry related technologies and existing LDAP schema, version 0.91
- Deliverable B-2: Bibliography for the Directory Schema Registry Project, version 0.91
- Deliverable D: Definition of an incorporation and usage policy for a Directory Schema Registry, version, version 0.90
- Deliverable C: Definition of a metadata format and DIT structure for a Directory Schema Registry, version 0.92
- Deliverable E: Specification of an architecture and user interface for the Directory Schema Registry, version 0.90



Work that could be used

- IETF WG schema
 - provided specifications for a schema listing service for the directory technologies LDAP, Whois, Whois++ and Rwhois.
 - The idea was to provide a single point of discovery, to promote reuse, reduce duplication of effort and to promote interoperability.
 - This work is based on a document [RFC 2425] that defines a MIME Content-Type for holding directory information.



Schema WG docs

- Apple, C., "Directory Schema Listing File Names", <draft-ietf-schema-file-list-01.txt>, April 1998 (expired), <http://www.watersprings.org/pub/id/draft-ietf-schema-file-list-01.txt>
- Apple, C., "Directory Schema Listing Meta Data", <draft-ietf-schema-mime-metadata-01.txt>, April 1998, (expired), <http://www.watersprings.org/pub/id/draft-ietf-schema-mime-metadata-01.txt>
- Apple, C., "Directory Schema Listing Procedures", <draft-ietf-schema-proc-list-01.txt>, April 1998 (expired), <http://www.watersprings.org/pub/id/draft-ietf-schema-proc-list-01.txt>
- Apple, C., "Requirements for the Initial Release of a Directory Schema Listing Service", <draft-ietf-schema-rqmts-list-01.txt>, April 1998 (expired), <http://www.watersprings.org/pub/id/draft-ietf-schema-rqmts-list-01.txt>



What info will be stored in the DSR

- Metadata on specification document
- LDAP compliant definitions of the schema elements
- Single parts of schema element definitions, e.g., MUST attributes in Object Classes
- Metadata as specified by the IETF WG schema
- Separate OID tree
- Additional metadata

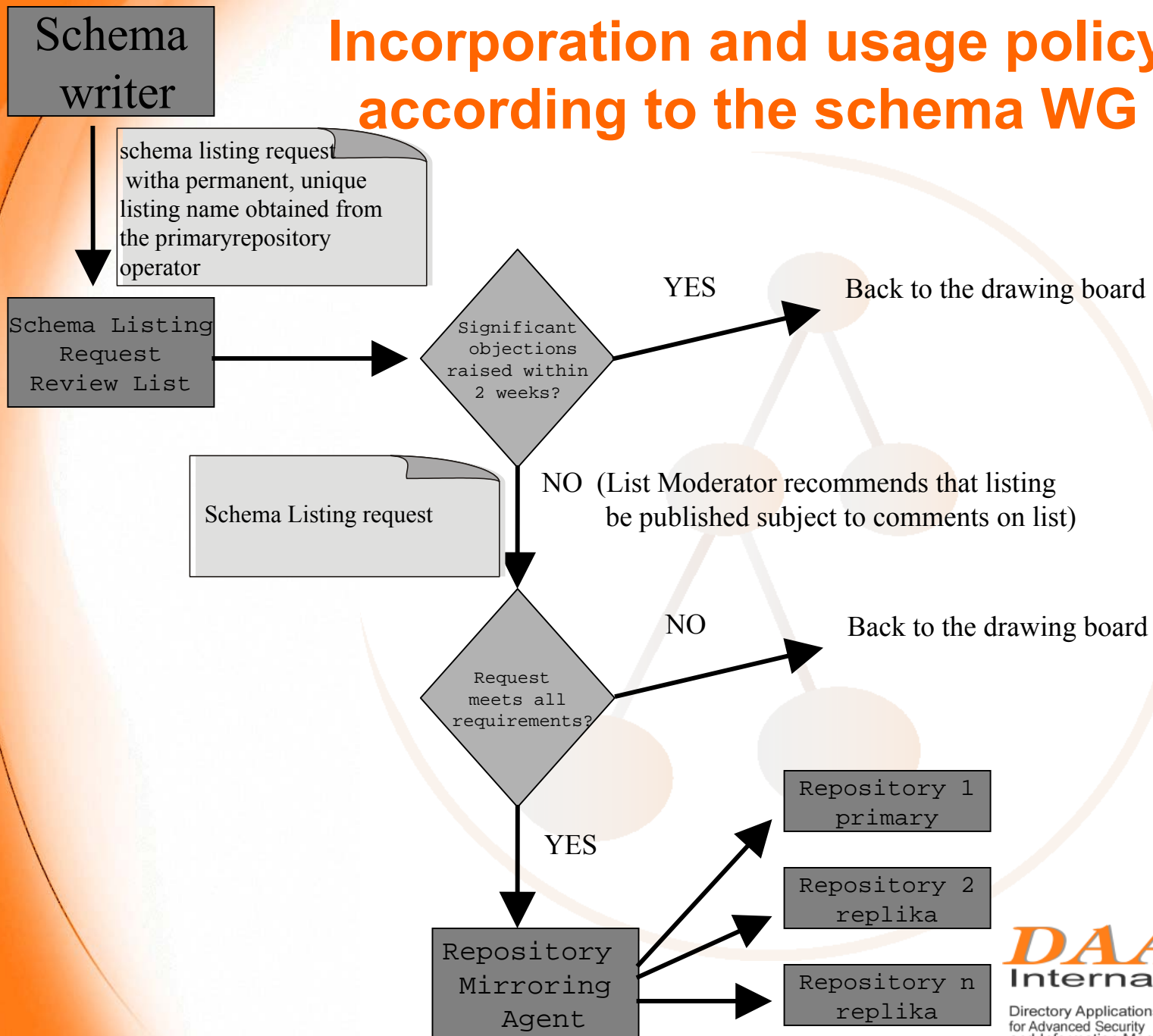


LDAP Schema specified

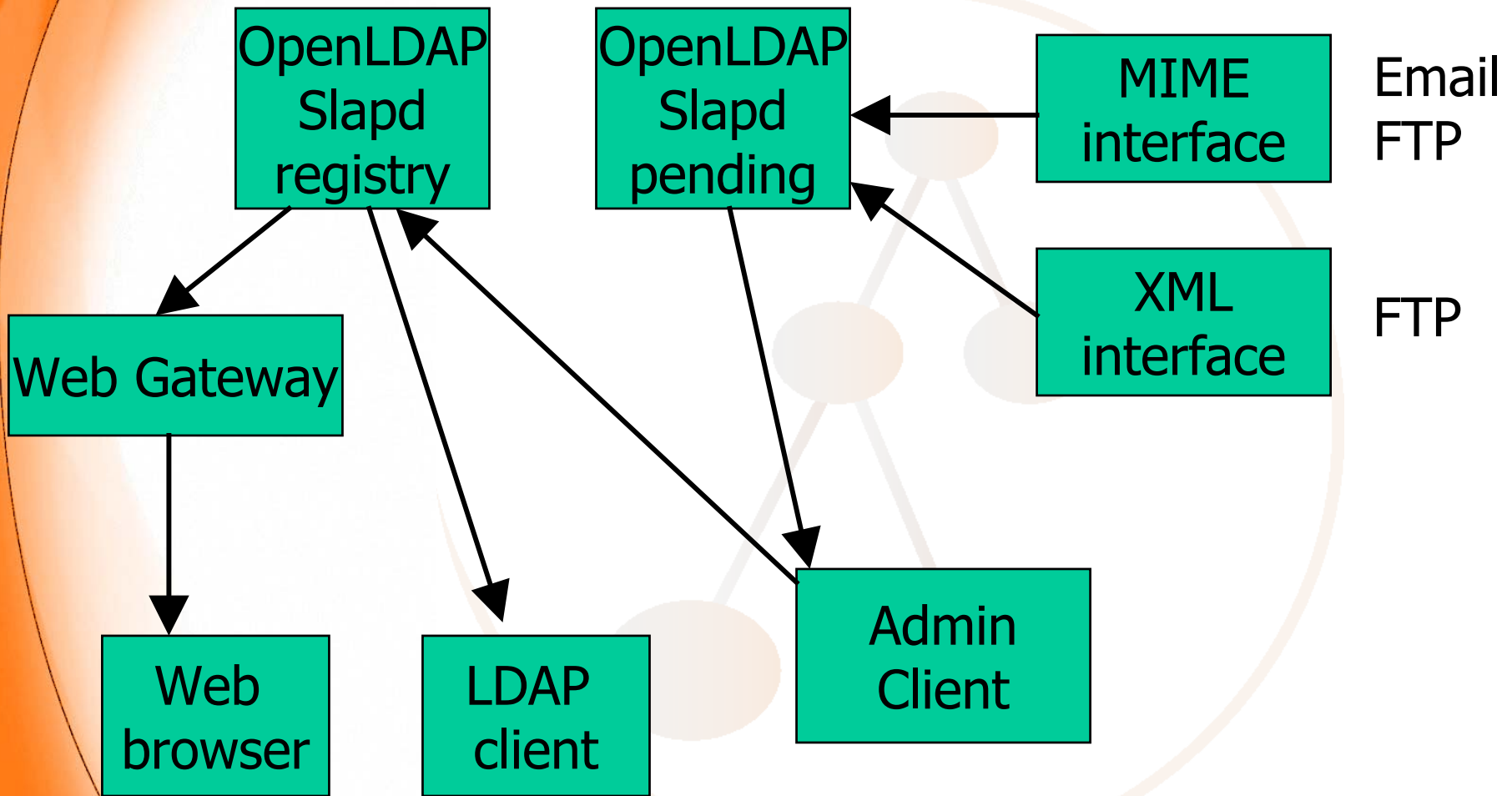
- Metadata for bibliographical references
 - The Dublin Core Metadata set and its LDAP representation
 - Additional schema for person information
 - The front matter elements of RFC 2629
- Metadata specified by the IETF schema WG
 - MIME types for schema metadata and their LDAP representation (draft-ietf-schema-mime-metadata-01.txt)
 - MIME types for LDAP schema elements and their LDAP representation (RFC 2927)
- Additional schema for the DSR
 - Schema for additional schema elements not specified in RFC 2927
 - Schema for storing an OID tree
 - Schema for storing the single parts of schema element definitions
 - Schema for additional metadata



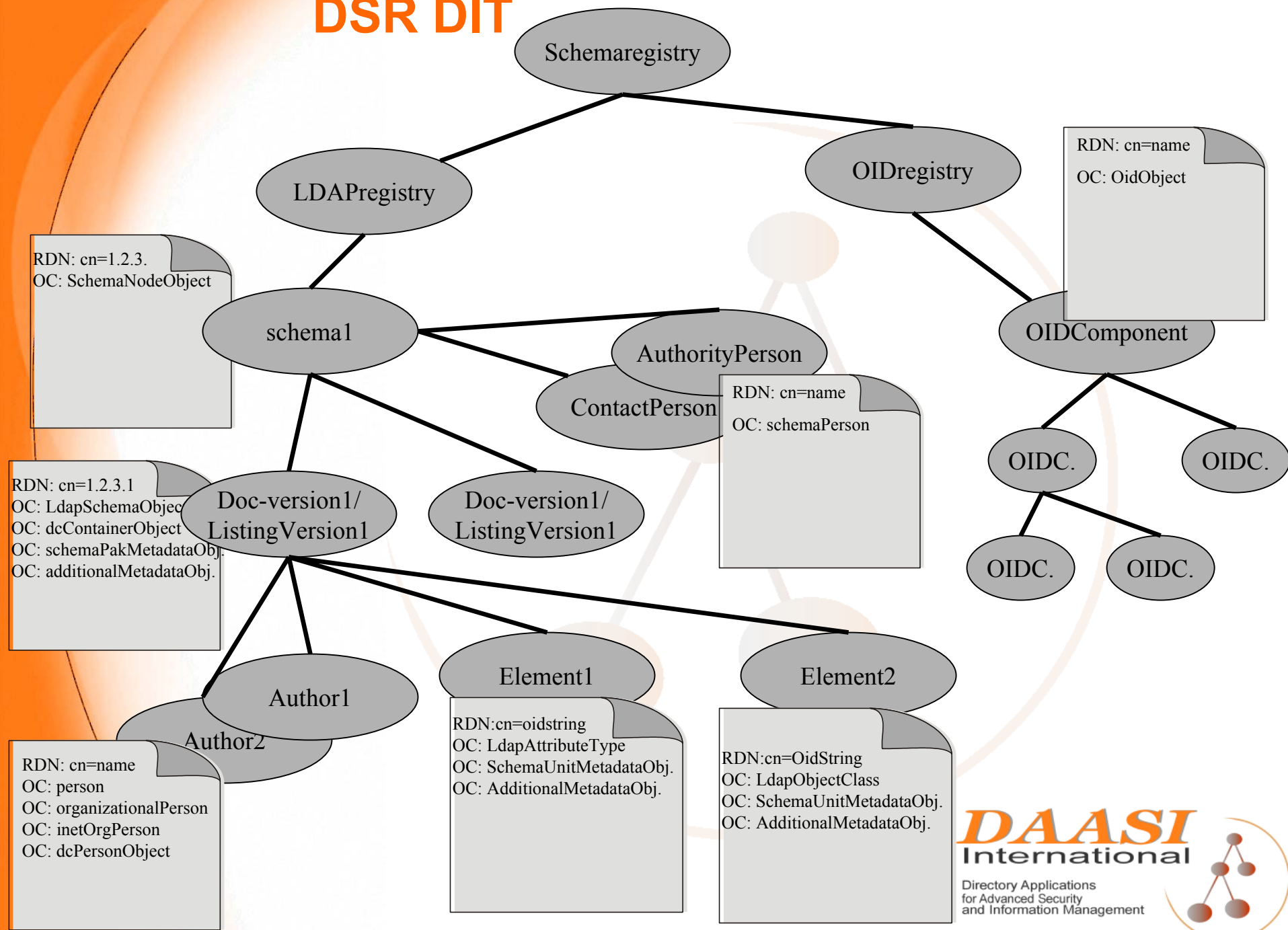
Incorporation and usage policy according to the schema WG



Architecture simplified



DSR DIT



My problems with the current drafts

- Currently two levels of granularity is:
 - Schema-pak (whole schema for a specific application)
 - Schema-unit (whois template, LDAP object class)
- I'd rather have
 - A more finegraded level of schema element (attribute type, syntax, object class, etc.) instead of the current schema-unit



MORE PROBLEMS

- RFC 2927 is not interoperable with the other schema documents,
 - there is for example no way specified to connect metadata to LDAP schema submissions
- Nowadays XML gets more and more important
 - draft on an IANA registry for URN Namespaces, XML DTDs, XML Schemas, and RDF Schemas (draft-mealling-iana-xmlns-registry-04.txt).
 - I think it would be worth while to think about enhancing the metadata based listing service with search facility, to those schema types.



What to do?

- since 1998 a lot has changed
- Why not setup a new WG (schema-ng?) to reflect these changes



Questions?

- More information at:
 - <http://www.schemareg.org>
 - peter.gietz@daasi.de

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