HR-XML CONSORTIUM

Identifier Types

Recommendation, 2003 February 26

This version:

IdentifierTypes.doc

Previous version:

N/A

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Abstract

A growing number of approved HR-XML specifications use a set of agreed-upon XML schema types to represent commonly used identifiers. The purpose of this recommendation is to document the use of these types and to formalize their adoption as Cross-Process Objects.

Status of this Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

Table of Contents

1 Overview

This document describes the usage of common identifiers developed for use in HR-XML specifications. Although additional identifiers may be developed, this document defines the following schemas:

- Internet domain name identifies Internet domains used within a particular organization.

- Entity reference may be used to specify the name and id of an entity.

- Duns number is used to define the pattern when the Dun & Bradstreet identifier is required. D&B D-U-N-S Number is a registered trademark.

- Entity id may be used to specify the id of an entity. It is fully described in a separate document. See Related Documents section.

2 Design Approach

The document provides XML schema types that HR-XML workgroups SHOULD incorporate within their schemas to support conformance of common identifier types. Values may be controlled by a pattern or an enumeration list. When enumerations are included, an extension mechanism is available to allow trading partners to add values.

Identifier schemas SHOULD be defined as a complex type, which may be referenced in other HR-XML Consortium schemas. When appropriate, an element name may also be defined using the complex type.

2.1 *InternetDomainNameType*

Organizations may own several different Internet domains that are associated with different arms of the business. There are often occasions when a particular "arm" of an organization is being referenced. The InternetDomainName element can be used to help identify the specific Organization or OrganizationalUnit. For example, the HR-XML consortium owns hr-xml.org and hrcertify.org. By using two instances of InternetDomainName, with the primary indicator with a "true" value on hrcertify.org, you can clarify that this transaction relates to the HR-XML's Certification group.

2.1.1 Schema Diagram
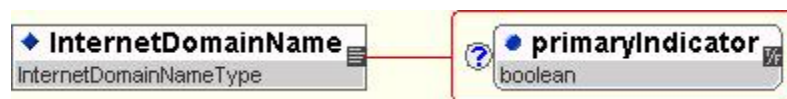
2.1.2   Supporting Schema

```xml
<!-- the InternetDomainNameType-->
<xsd:element name="InternetDomainName" type="InternetDomainNameType"/>
<xsd:complexType name="InternetDomainNameType">
    <xsd:simpleContent>
        <xsd:extension base="xsd:string">
            <xsd:attribute name="primaryIndicator" type="xsd:boolean" use="optional"/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

2.1.3   Schema Elements Explained

Component Name [Global types listed at the end of the table.]	ContentModel* Data type Occurrence: Sequence | Choice | All (minOccurs/maxOccurs) Attributes	Definition
/ **InternetDomainName**	- InternetDomainNameType - (1/1)	This is a domain name intended as a practical identifier for an entity. It is not intended as a web address (URL). It is a string that meets the requirements for domain names as described in the IETF's RFC 1035. Examples include "microsoft.com", "bund.de", "google.com".
Global complexTypes:		
/ **[InternetDomainNameType]**	xsd:extension **base:** xsd:string primaryIndicator - xsd:boolean - optional	Globally scoped data type. See element or attribute declaration for definition.
/ [InternetDomainNameType] / **primaryIndicator**	- xsd:boolean -	True/False. When multiple items are listed, this indicator specifies which one is primary in the context of the transaction.

2.1.4   Uses/Implementation Considerations

An HR-XML schema may define it's own element name and use the CPO utilities complex type.
For example:

```xml
<xsd:element name="OrganizationInternet" type="InternetDomainNameType" minOccurs="0" maxOccurs="unbounded"/>
```

Or a schema may use both the element name and CPO utilities complex type. For example:
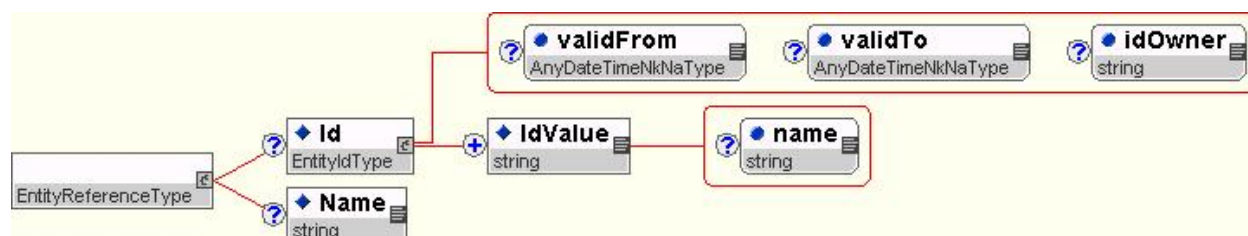
```xml
<xsd:element name="InternetDomainName" type="InternetDomainNameType" minOccurs="0" maxOccurs="unbounded"/>
```

2.2 *EntityReferenceType*

Many transactions require a method of identifying an entity, but do not need a full entity schema. For example, a screening transaction may need to exchange the name and Id of an organization but does not need the entire Organization schema. The EntityReferenceType provides for this requirement.

2.2.1 Schema Diagram

2.2.2 Supporting Schema

```
<!-- EntityReferenceType-->
<xsd:complexType name="EntityReferenceType">
    <xsd:choice>
        <xsd:element name="Id" type="EntityIdType" minOccurs="0"/>
        <xsd:element name="Name" type="xsd:string" minOccurs="0"/>
    </xsd:choice>
</xsd:complexType>
```

2.2.3 Uses/Implementation Considerations

This schema should be used when an Id and/or Name is required. Examples might include the identifier for an organization, organizational unit, benefits plan, or stock plan. If the name of a person is needed, the consortium RECOMMENDS the use of PersonName schema.

2.3 *DunsNumberType*

2.3.1 Supporting Schema

```
<xsd:element name="DunsNumber" type="DunsNumberType"/>
<xsd:simpleType name="DunsNumberBaseType">
    <xsd:restriction base="xsd:integer">
        <xsd:pattern value="\d{9}"/>
    </xsd:restriction>
</xsd:simpleType>
<xsd:complexType name="DunsNumberType">
    <xsd:simpleContent>
        <xsd:extension base="DunsNumberBaseType">
            <xsd:attribute name="dunsNumberType" use="required">
                <xsd:simpleType>
                    <xsd:restriction base="xsd:string">
                        <xsd:enumeration value="standard Duns"/>
                        <xsd:enumeration value="global ultimate"/>
                        <xsd:enumeration value="domestic ultimate"/>
                    </xsd:restriction>
                </xsd:simpleType>
```

```
            </xsd:attribute>
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
```

2.3.2   Dun and Bradstreet (D&B) Definition

The D&B describe the D-U-N-S Number as "a unique nine-digit identification sequence, which provides unique identifiers of single business entities, while linking corporate family structures together. D&B links the D&B D-U-N-S Numbers of parents, subsidiaries, headquarters and branches on more than 64 million corporate family members around the world. Used by the world's most influential standards-setting organizations, it is recognized, recommended and/or required by more than 50 global, industry and trade associations, including the United Nations, the U.S. Federal Government, the Australian Government and the European Commission. In today's global economy, the D&B D-U-N-S Number has become the standard for keeping track of the world's businesses."

2.3.3   Uses/Implementation Considerations

This schema should be used when exchanging the Dun and Bradstreet identifier. The pattern with dashes (999-999-9999) has been deprecated since it was primarily used for presentation purposes.

2.4 *EntityIdType*

An entity is a discrete object of some kind. Thus it is largely a reference to a particular noun, - "a person", "an employee", "a purchase order", "a staffing request", "an invoice", etc. EntityIdType provides a means of uniquely identifying a particular employee, staffing request, or the like.

EntityIdType is intended only to contain unique identifiers of the entities being passed in the transaction. If a data element is intended to allow a system to match an entity to data previously sent, or to reply with data about the entity and have it be matched, use the EntityIdType. For additional information, see EntityIdentifiers document in Related Documents section.

3 Data Privacy

Human resources data, by its very nature, is personal data. The laws of many jurisdictions as well as codes of fair information practice require organizations to handle personal data in a way that protects individuals from loss of privacy.

The data exchange specifications developed by the HR-XML Consortium are designed to be useful across many jurisdictions and within a variety of business contexts. It is not feasible for the HR-XML Consortium to develop specific privacy guidance for every jurisdiction or business context in which the Consortium's specifications might be implemented. When implementing data exchanges using the HR-XML Consortium's data definitions (or, for that matter, any data exchange mechanism), organizations are advised to examine the privacy protections that may be required under applicable law or codes of fair information practice.

For information on protecting personal data, general references include: European Union Data Protection Directive (95/46/EC); the Association Computing Machinery Code of Ethics (1992); Canadian Standards Association Model Code for the Protection of Personal Information (1995 -- PIPEDA); U.S.-EU Safe Harbor Principles and FAQs (2000).

4 Appendix A - Document Version History

Version	Date	Description
1.0	2003-01-06	Draft
1.0	2003-02-10	Replaced D&B pattern with 9 digit integer.
1.0	2003-02-26	Approved recommendation by HR-XML Consortium. The default and targetNamespaces of all HR-XML schemas have been standardized to "http://ns.hr-xml.org". This recommendation is available as part of the HR-XML 2_0 architecture.

5 Appendix B – Related Documents

Reference	Link
EntityIdentifiers	http://ns.hr-xml.org/2_0/HR-XML-2_0/CPO/EntityIdentifiers.pdf