



Guideline UUID

Version 2.0



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1 introduction

The Northern European Subset (NES) group was established to enable interoperability of procurement data between users of the Universal Business Language (UBL). UBL is a royalty-free library of XML documents addressing the requirements of electronic procurement and international trade and transportation. Its second version (UBL 2.0) was released as an OASIS standard in December 2006. NES members contributed extensively to the development of this version of the standard.

The focus of NES is to define the specific use of UBL 2.0 electronic procurement documents domestically and between the member countries. The definition covers semantic interoperability within and between all business sectors, public and private.

This guideline is one of a series of documents describing the purpose and use of the business documents that comprise the NES subset of UBL 2.0.

All cardinalities shown in this document represent elements and associations at NES library level; see 'NES Information Model Architecture' for further information.

1.1 purpose

The purpose of this guideline is to specify the use of Universally Unique Identifiers (UUID).

1.2 summary

- UUID should be used whenever possible
- in NES, UUID may be stated at document level in library level documents
- UUID is an instance identifier and, if used, must be generated every time a document is generated or copied
- when used at line level, the UUID can identify a line across all document instances. This may be use, for example, in RDBMS where no double keys should be created in a line table, but instead only a primary key defined by UUIDs
- the recipient of a document with a UUID is obliged to detach the document's document level UUID
- the recipient of a document with a UUID at line level or deeper inside the document is not obligated to detach the UUID unless it is used as a reference to another document



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2 UUID classes and elements

Universally Unique Identifier (UUID) is contained in the element UUID at document level in the NES library level documents.

2.1 UUID

name	definition	cardinality
UUID	a universally unique identifier for an instance of a class	0..1

3 description

A document instance ID (UUID) is generated by a source business system.

In NES, UUIDs occur only at document level and only in library level documents; basic documents do not contain UUIDs.

If a document contains a UUID, other documents can refer directly to it as an exact instance without further qualification.

When sending copies of documents, new UUIDs must be generated for each copy instance.

When a document is reformatted or its storage location moved, its UUID must be transferred into the new format or destination without alteration.

3.1 algorithm

A UUID is a 128 bit number represented in hexadecimal. It is a standardized Unique ID which is described in the Internet Task Force RFC 4122. The formal specification of a UUID is (expressed in Barcus-Naur Format) as follows:

3.1.1 UUID algorithm

UUID	= time-low "-" time-mid "-" time-high-and-version "-" clock-seq-and-reserved clock-seq-low "-" node
time-low	= 4hexOctet
time-mid	= 2hexOctet
time-high-and-version	= 2hexOctet
clock-seq-and-reserved	= hexOctet
clock-seq-low	= hexOctet
node	= 6hexOctet
hexOctet	= hexDigit hexDigit
hexDigit =	"0" / "1" / "2" / "3" / "4" / "5" / "6" / "7" / "8" / "9" / "a" / "b" / "c" / "d" / "e" / "f" / "A" / "B" / "C" / "D" / "E" / "F"



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The "node" field is a number which the sender can make unique i.e. something that has been assigned to the sender by an organisation that guarantees unique IDs. The number must be 12 hexadecimal long, i.e. shorter than 16^{12} . An example could be a Mac address on a network card, or an EAN location number that is modified to match the format.

Further information about UUID is available at:

["http://www.ietf.org/rfc/rfc4122.txt"](http://www.ietf.org/rfc/rfc4122.txt)

3.2 UUID example

```
<cbc:UUID>6E09886B-DC6E-439F-82D1-7CCAC7F4E3B3</cbc:UUID>
```