

Tables for OMDoc 1.6

Michael Kohlhase

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Abstract

We propose a semantic representation scheme for OMDoc 1.6¹

EdNote(1)

1 Introduction

Tables are an important means for presenting data as well as functional dependencies in documents. They are used in the form of ledger sheets in accounting, to report the the results of experiments in scientific documents, and

2 Analysis

3 Representation

The simplest representation for the grids underlying tables it to consider them as (partial) functions from cell names to values. This representation is

4 RelaxNG Schema

```
# A RelaxNG schema for Open Mathematical documents (OMDoc 1.6) Module DOC
# $Id: omdocTAB.rnc 8002 2008-09-07 16:20:00Z clang $
# $HeadURL: https://svn.omdoc.org/repos/omdoc/trunk/doc/blue/tables/rnc/omdocTAB.rnc $
# See the documentation and examples at http://www.omdoc.org
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default namespace omdoc = "http://omdoc.org/ns"

start = table

id.attrib = attribute xml:id {xsd:ID}
name.attrib = attribute name {xsd:string}
range.attrib = attribute range {xsd:string}
header.attrib = attribute header {xsd:string}
```

¹EdNOTE: continue

```

tabrep = sparse

table = element table {id.attrib?,(block|function)*,tabrep}

sparse = element sparse {cell*}

cell = element cell {attribute idx {xsd:string},text}

block = element block {name.attrib?,range.attrib, header.attrib?}

function = element function {attribute args1 {xsd:string}?,
                             attribute args2 {xsd:string}?,
                             attribute vals {xsd:string}}

```

5 Caveats and Text Roadmap

This note is still in a very early stage, and is intended mainly as a vehicle for discussion between OMDOC developers. In particular, the element names are provisional and will probably evolve over time. At a later and more mature stage, part of the text might go into the OMDOC specification.

6 Acknowledgements

This proposal has been greatly influenced by discussions with Andrea Kohlhasse in the SACHS project at DFKI Bremen and is based on insights of our paper [KK08]

References

- [KK08] Andrea Kohlhasse and Michael Kohlhasse. Compensating the semantic bias of spreadsheets. In Joachim Baumeister and Martin Atzmüller, editors, *Wissens- und Erfahrungsmanagement LWA (Lernen, Wissensentdeckung und Adaptivität) Conference Proceedings*, volume 448, 2008.