uoml draft sample document

abstract

this document consists of four part:

0)current part, the abstract

1)objective

2)structure of uoml draft document

3) three sample

objective

This document gives a structure of uoml draft and three sample of uoml instruction/object. We provide this as a start point for further discussion, any comment or question is welcome.

structure of uoml draft

1   cover page

title

document   url

version history

tc, related staff: chair, editor

misc: related work, xml namespace

abstract

status

notice(copyright, other declaration, eg, intellectual property)

2 table of content

3 introduction

introduction or   background

notation

namespace

concept definition

conformance and compatibility requirement

4 document   structure

docbase

doclist

doc

shared data at doc level

    font   definition

    embedded   font data

    image   data

metadata

page set

page

shared data at page level

    font definition

    embedded font data

    image data

initial graphics status

layer set

layer

viewstream

    command

    viewable objects

        line

        rect

        arc

        bezier curve

        text

        image

        vector path

5 security

6 document manipulation instruction

uoml_open

uoml_close

uoml_get

uoml_set

uoml_insert

uoml_delete

uoml_use

uoml_system

uoml_query

uoml_ret

samples

uoml_ret

1 schema

```
<xs:element name="UOML_RET">

    <xs:annotation>

        <xs:documentation>return value of operation</xs:documentation>

    </xs:annotation>

    <xs:complexType>

        <xs:choice minOccurs="0" maxOccurs="unbounded">

            <xs:element name="intVal" type="UOMLT_INT"/>

            <xs:element name="floatVal" type="UOMLT_DOUBLE"/>
```

```
                    <xs:element  name="timeVal"  type="UOMLT_TIME"/>

                    <xs:element  name="dateVal"  type="UOMLT_DATE"/>

                    <xs:element                     name="dateTimeVal"
type="UOMLT_DATETIME"/>

                    <xs:element  name="durationVal"  type="UOMLT_DURATION"/>

                    <xs:element  name="stringVal"  type="UOMLT_STRING"/>

                    <xs:element  name="binaryVal"  type="UOMLT_BINARY"/>

                    <xs:element                     name="compoundVal"
type="UOMLT_COMPOUND"/>

                    <xs:element  name="boolVal"  type="UOMLT_BOOL"/>

             </xs:choice>

         </xs:complexType>

     </xs:element>
```
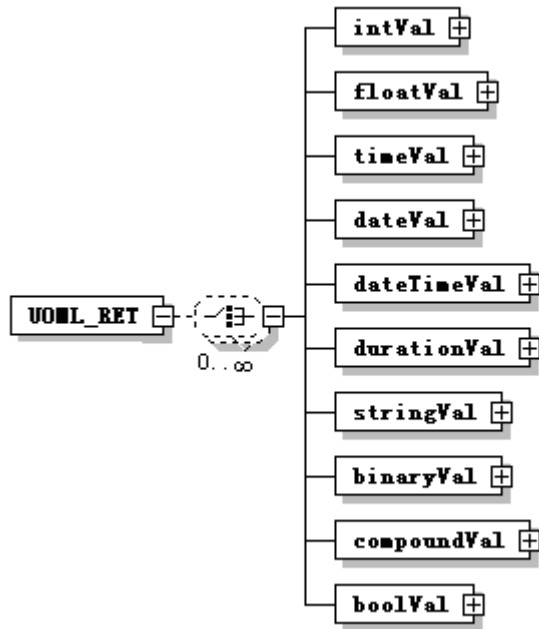
2 function

uoml_ret element is used to represent the return value of other uoml
instructions. this element can contain zero to unlimited number of return
values.

3 convention

in general, uoml_ret element contains at least one "boolVal" sub element.
the value of the sub element's "name" attribute is "SUCCESS", its "val"
attribute describes whether the previous operation succeeds. in case of
failure condition, uoml_ret also contains another "stringVal" sub element,
value of its "name" attribute is "ERR_INFO", and its "val" attribute
describes the specific error condition. in case of success condition, besides
the fixed "boolVal" sub element, other sub elements is determined by

specific uoml instructions.

4 diagram

uoml_open

1 schema

```
<xs:element name="UOML_OPEN">

    <xs:annotation>

        <xs:documentation>uoml open</xs:documentation>

    </xs:annotation>

    <xs:complexType>

        <xs:sequence>

            <xs:element name="path" type="UOMLT_STRING"/>

        </xs:sequence>
```

```
          <xs:attribute name="create" type="xs:boolean"/>

     </xs:complexType>

</xs:element>
```
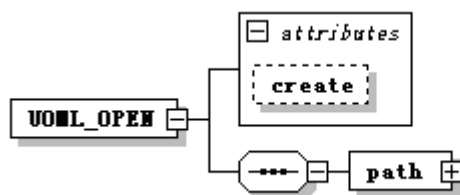
2 function and parameter

uoml_open is used to open or create docbase. sub element "path" will
contain the location of the docbase, it can be local file system path or
URL(universal resource locator). attribute "create" determines whether
creating the docbase or not.

3 return values

in case of success, the returned uoml_ret element will contain one
"stringVal" sub element. value of the sub element's "name" attribute is
"HANDLE", its "val" attribute is an opaque string value representing the
docbase opened or created.

4 diagram

uomlo_text

1 schema

<xs:complexType name="UOMLO_TEXT">

    <xs:annotation>

        <xs:documentation>text</xs:documentation>

    </xs:annotation>

    <xs:sequence>

        <xs:element name="txtPos" type="UOMLO_RECT"/>

    </xs:sequence>

    <xs:attribute name="txtEncoding" type="xs:string" use="required"/>

    <xs:attribute name="txtData" type="xs:string" use="required"/>

    <xs:attribute name="txtCharSpacingList" type="xs:string"/>

</xs:complexType>

2 semantic

uomlo_text is a ComplexType defined in uoml schema, it's used to represent texts. uomlo_text has three attributes : txtEncoding, txtData, txtCharSpacingList, and one sub element : txtPos. txtEncoding is a string describes the text's encoding(or charset). txtData is a string contains the text's data. txtCharSpacingList is also a string, it describes the distance between adjacent characters, it contains numbers separated by commas, theses numbers defines distance between adjacent characters. txtPos's type is UOMLO_RECT, is a rectangle defines left-top and bottom-right point of the text's external border.

3 diagram