

## Notes from NeXus Tech VC 17/12/2008

Present: Freddie Akeroyd (FAA), Peter Peterson (PFP), Mark Koennecke (MK), Pete Jemian (PJ), Stuart Campbell (SIC)

The following matters were discussed:

### NXDL

PJ raised the issue of that in NXdetector we have something along the lines of

```
<group type="NXdata">  
<field name="efficiency" />  
</group>
```

i.e. specifying the contents of an NXdata in the NXDL. How should this be translated into schema?

FAA suggested this could be done by creating a new type via the XSLT – PJ will look into this.

PJ also raised the issue of

```
<group type="NXnote" name="name1">  
<group type="NXnote" name="name2">
```

Currently this creates schema

```
<xsd:element name="name1" type="NXnote"> <xsd:element name="name2" type="NXnote">
```

But this does not reflect the nexus XML format. Unfortunately we cannot have two `<xsd:element name="NXnote"/>` with the "name" attribute of NXnote constrained as this creates two data types for NXnote. FAA suggested this could be done by using a pattern match on the "name" attribute or an enumeration e.g.

```
<xs:element name="NXnote">  
  <xs:complexType>  
    <xs:attribute name="name">  
      <xs:simpleType>  
        <xs:restriction base="xs:string">  
          <xs:enumeration value="name1"/>  
          <xs:enumeration value="name2"/>  
        </xs:restriction>  
      </xs:simpleType>  
    </xs:attribute>  
  </xs:complexType>  
</xs:element>
```

PFP raised the issue of inheritance and dimensions – MK suggested that the two are related and that the dimensions issue will sort itself out better with inheritance e.g. having a separate TOFdetector removes the problem of an optional axis in NXdetector This work is ongoing.

NeXus.xsd and nxdl.xsd were discussed. FAA suggested that they should remain separate and non-dependant files as their roles are different: nxsl validates just nxdl files and NeXus.xsd is aware of the format of XML instance files. In a NeXus XML instance we have NAPIttype attributes and NX\_FLOAT32, NX\_FLOAT64 etc whereas in NXDL there is no NAPIttype attribute and NX\_FLOAT is used to represent all floats. FAA and PJ will discuss offline

The repository layout was discussed and the agreement was for:  
NeXus.xsd and nxdl.xsd to be at the top level Base\_classes, application and contrib directories directly off of this Empty schema directory ... xslt scripts will create files here, but they will not be version controlled

## Documentation

PFP will contact Nick Hauser re the status of wiki -> docbook translation

## API 4.2

FAA raised the issue of nexus headers .. currently they install to /usr/include but we now have more with the C++ interface so should we look at /usr/include/nexus instead? MK suggested checking out Linux Standard Base (LSB) for guidance – FAA will do this.

MK has tested on MAC, SL5 and ubuntu - all OK

FAA has tested 4.2 RC2 will windows XP and will post results to wiki - will also check Vista

SIC will check FC10

SIC / MK will check IDL issues

MK will post note to the NeXus mailing list asking about which platforms people are using so we know what we need to test on

Looking at January for 4.2rc3

## Next meeting

January 14th 2009, same times