

# Development of Tools for Neurophysiology Data Management and Sharing at G-Node

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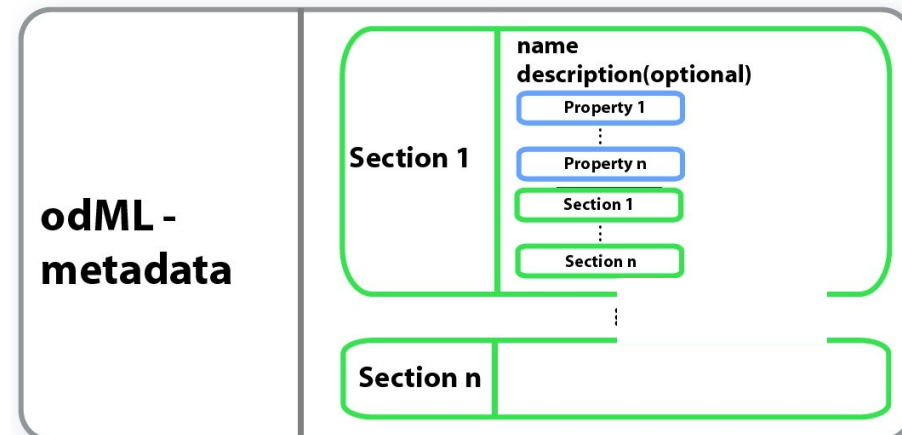
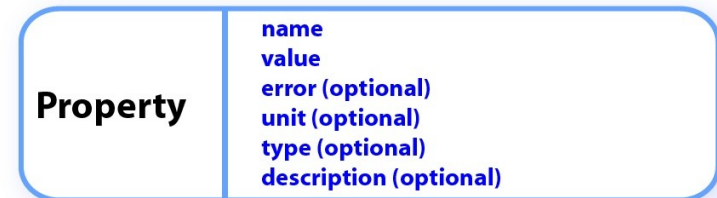
Federal Ministry  
of Education  
and Research

## Current Developments, Collaborations and Activities

### Format for Metadata Exchange



- simple, flexible, inherently extensible  
-> can be adapted to the specifics  
of the lab or experiment
- separation of format and content
- can carry any metadata  
-> no information is lost
- enables automated collection  
of metadata starting in  
the laboratory



<http://www.g-node.org/odml>

## odML: the XML Implementation



### A) Key - Value

CellType = pyramidal cell  
 CellBrainRegion = hippocampus  
 CellBrainSubregion = CA1  
 Layer = 4

### B) XML

```
<Cell>
  <CellType>pyramidal cell</CellType>
  <BrainRegion>hippocampus</BrainRegion>
  <BrainSubregion>CA1</BrainSubregion>
  <Layer>4</Layer>
</Cell>
```

### C) odML

```
<section name = "Cell">
  <property>
    <name>CellType</name>
    <value>pyramidal cell</value>
  </property>
  <property>
    <name>BrainRegion</name>
    <value>hippocampus</value>
  </property>
  <property>
    <name>BrainSubregion</name>
    <value>CA1</value>
  </property>
  <property>
    <name>Layer</name>
    <value>4</value>
  </property>
  <property>
    <name>ApicalDendriteLength</name>
    <value>342</value>
    <unit> $\mu$ m</unit>
  </property>
</section>
```

