

DISTRIBUTED ODF APPLICATIONS

FOSDEM
FEB. 3, 2018

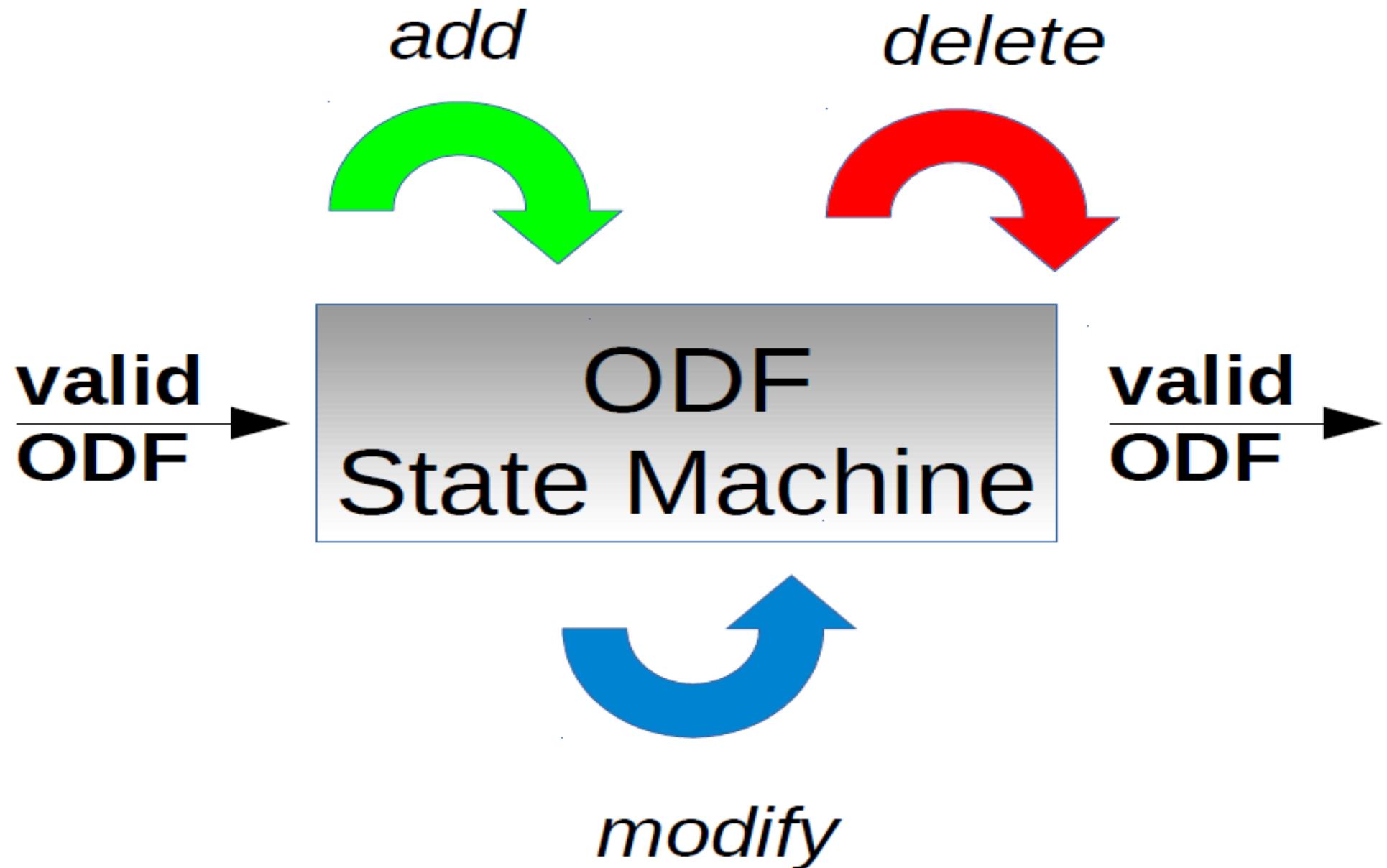
Svante.Schubert@cib.de



ODF APPLICATION

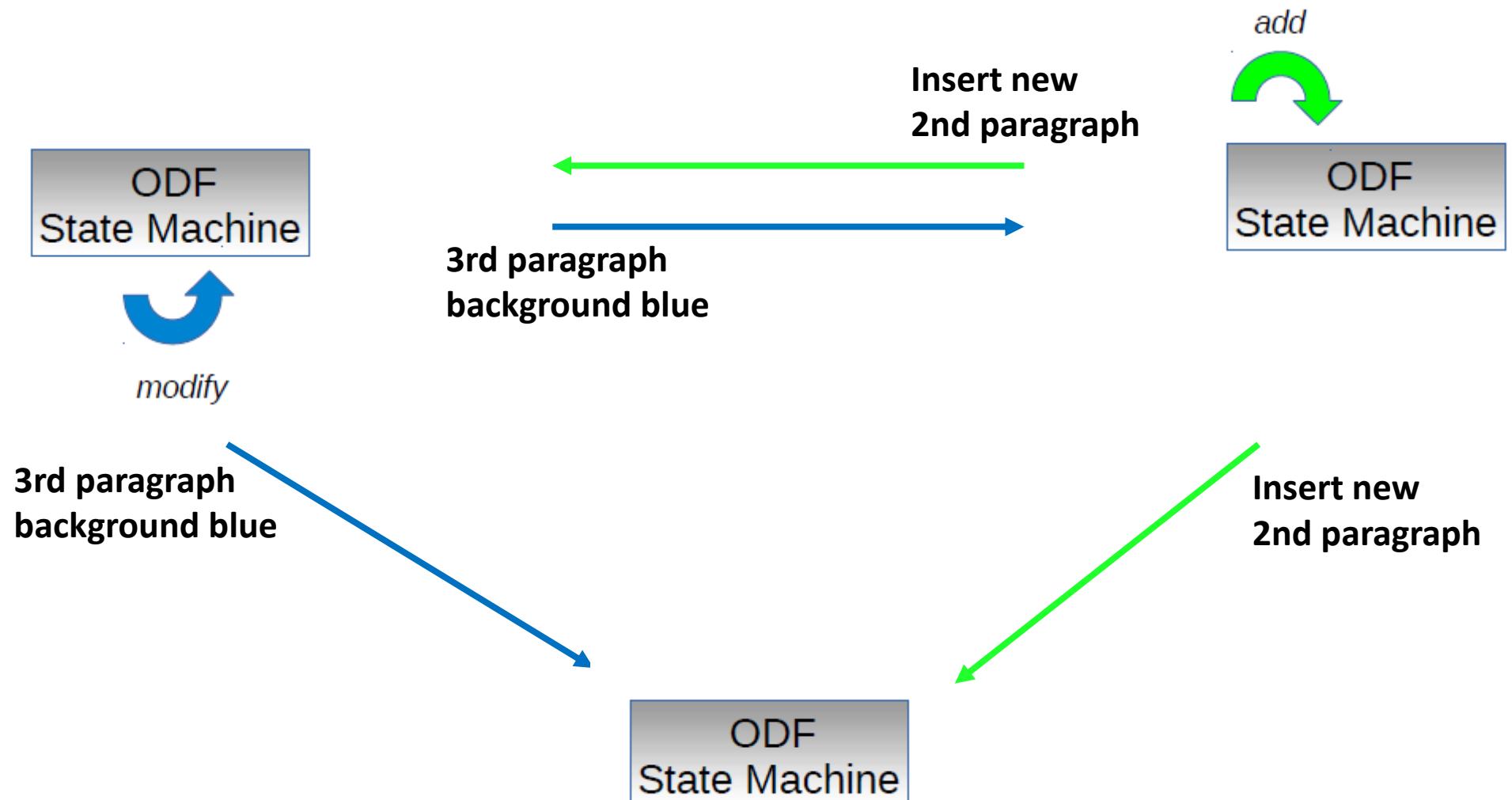
BIRD PERSPECTIVE

CIB[®]



ODF APPLICATIONS COLLABORATION

BIRD PERSPECTIVE



ODF XML GRAMMAR



```
<define name="table-table">
  <element name="table:table">
    <ref name="table-table-attlist"/>
    <optional>
      <ref name="table-title"/>
    </optional>
    <optional>
      <ref name="table-desc"/>
    </optional>
    <optional>
      <ref name="table-table-source"/>
    </optional>
    <optional>
      <ref name="office-dde-source"/>
    </optional>
    <optional>
      <ref name="table-scenario"/>
    </optional>
    <optional>
      <ref name="office-forms"/>
    </optional>
    <optional>
      <ref name="table-shapes"/>
    </optional>
    <ref name="table-columns-and-groups"/>
    <ref name="table-rows-and-groups"/>
    <optional>
      <ref name="table-named-expressions"/>
    </optional>
  </element>
</define>
<define name="table-columns-and-groups">
  <oneOrMore>
```

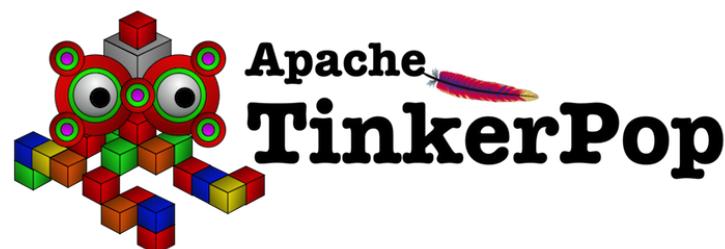
ODF 1.2 documents:

- 598 XML Elements
- 1300 XML Attributes

ODF XML ANALYSIS

CIB

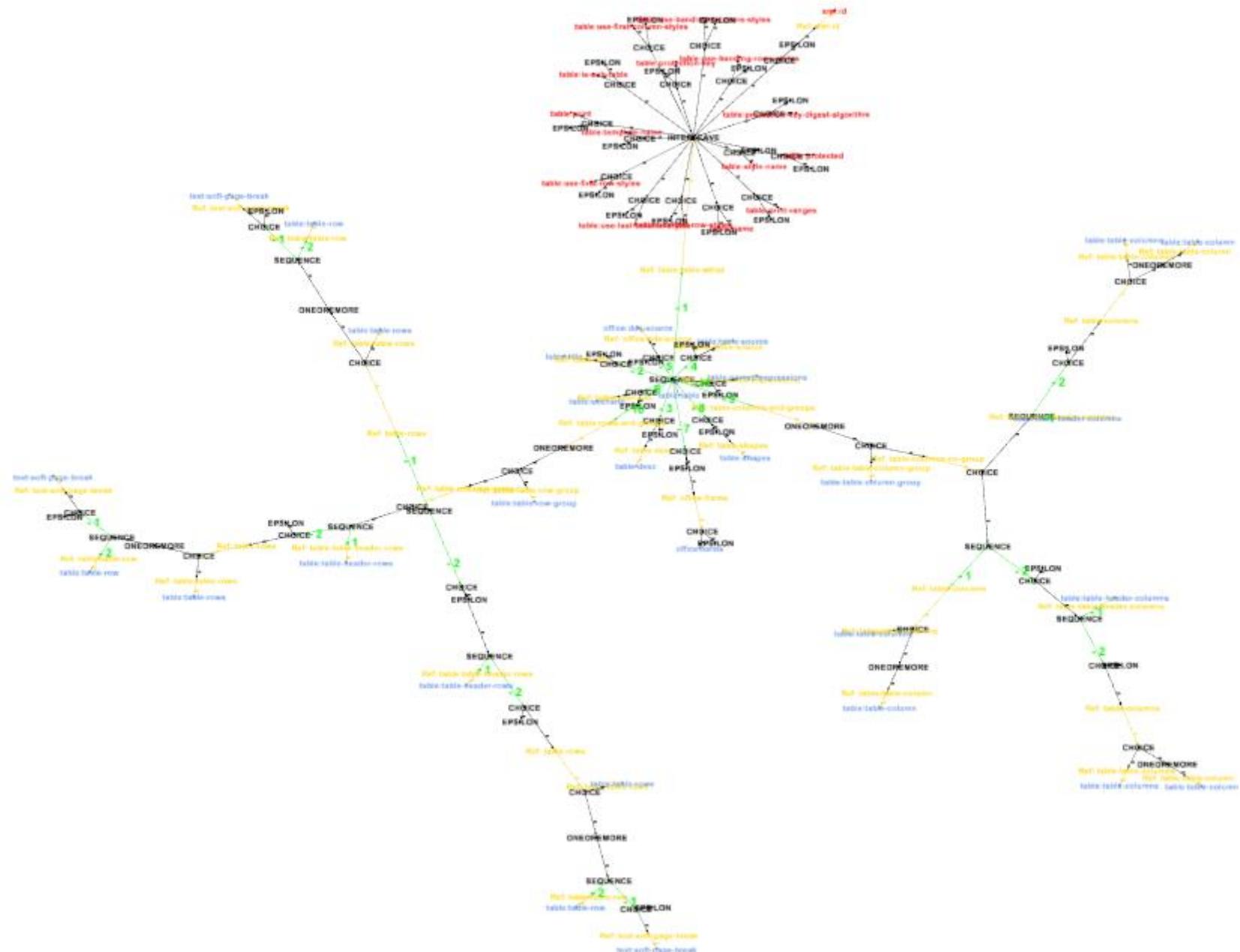
- Mapping ODF grammar into GraphDB
- Insight in ODF structure
 - Grammar for ODT only
 - Minimal allowed ODT, ODS, ... document
 - Paragraph (...) nested?
 - Does feature test files cover all XML feature nodes?
- Using Apache TinkerPop GraphDB abstraction



ODF GRAPH – TABLE

GEPHI VIEWER

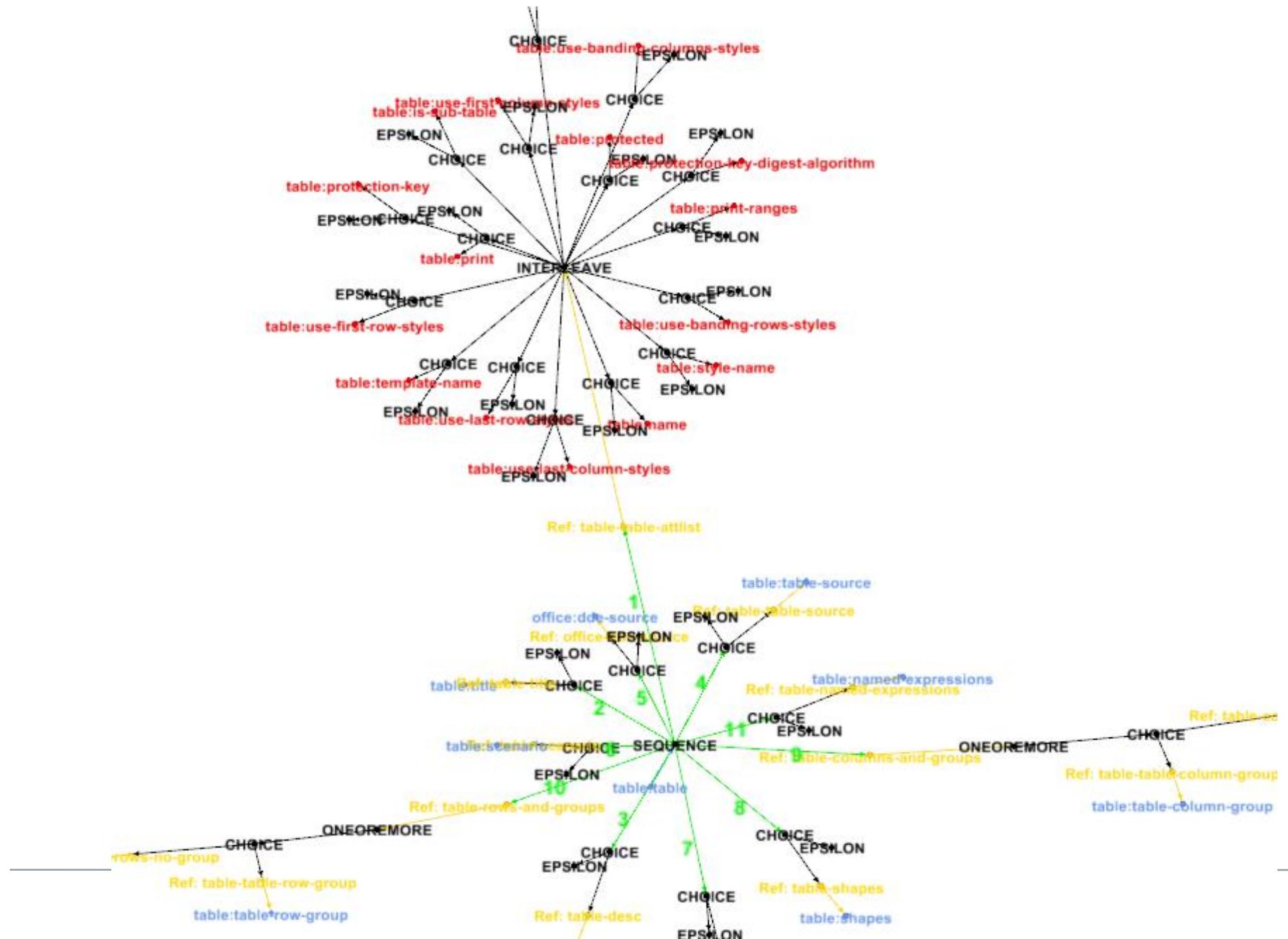
CIB



ODF GRAPH – TABLE

GEPHI VIEWER

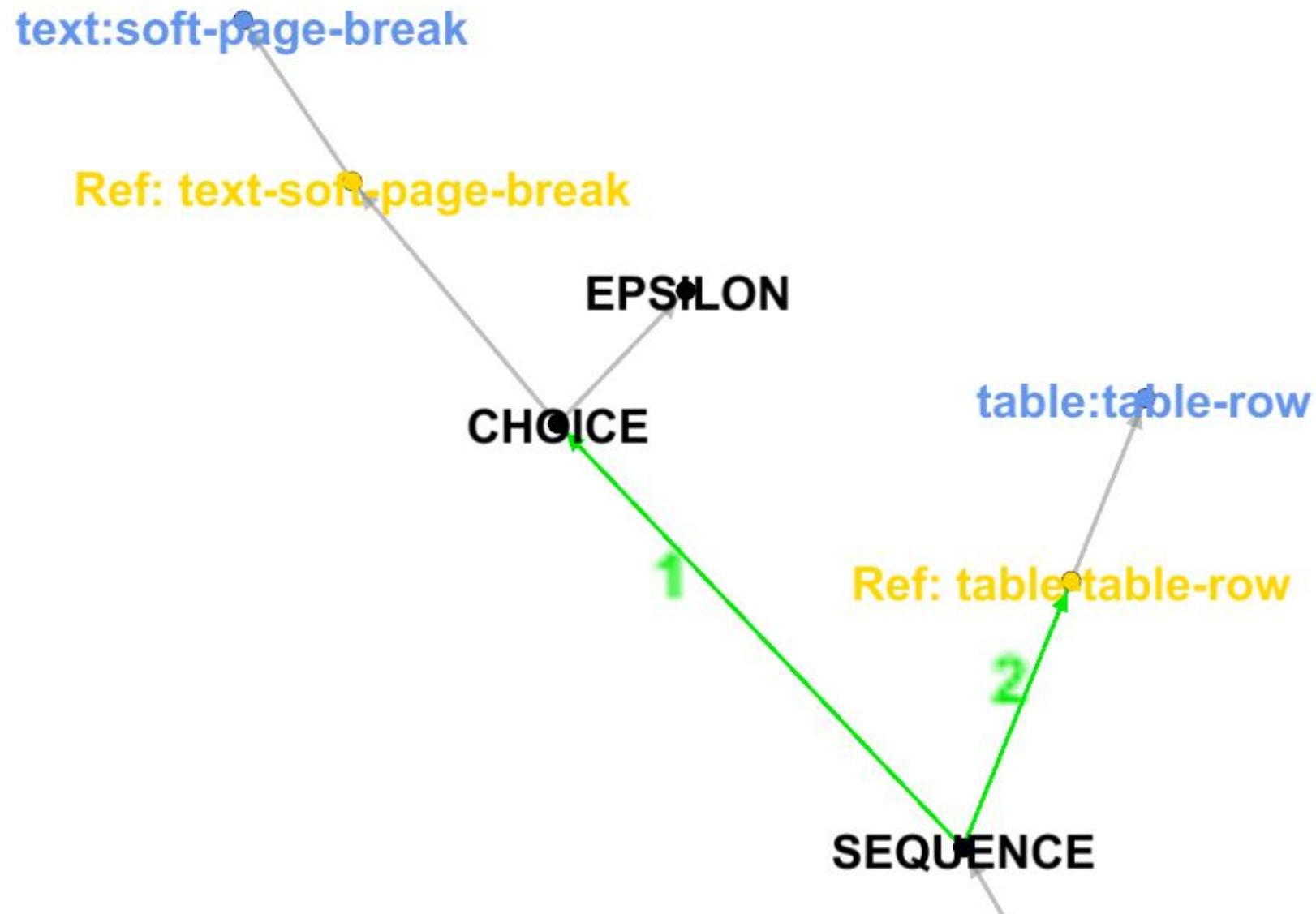
CIB



ODF GRAPH – TABLE

GEPHI VIEWER – REFACTORIZING / SIMPLIFYING

CIB



ODF USER CHANGE

ADDING TO ODF GRAMMAR?



- **User changes** implicitly a de-facto standard
 - User expectation of changes across office apps
 - Adding missing information to ODF XML grammar?