NSW GOVERNMENT | Education

ITD INTEGRATION COMPETENCY CENTRE

Existing and Deleted SIF Objects – Representation and Validation

DELETED OBJECTS - REPRESENTATION

- An XML without any embedded elements, e.g.

  `<TeachingGroup RefId="tg5" />`

- Where are they used?

  1. queries with changesSinceMarker (already part of SIF infrastructure specification)

  2. (data model v3.4.3 RC) long running paged queries while some objects were deleted in-flight
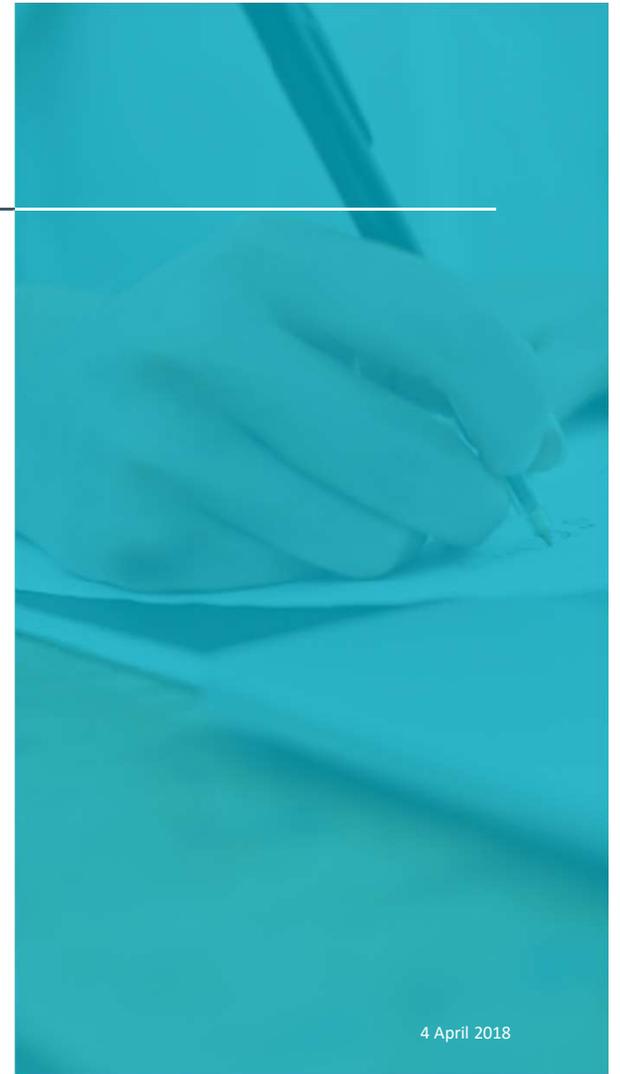
COLLECTION OF EXISTING & DELETED OBJECTS - REPRESENTATION

```
<TeachingGroups>
 <TeachingGroup RefId="tg4">
    …
  </TeachingGroup>
  <TeachingGroup RefId="tg5" />
  <TeachingGroup RefId="tg6">
    …
  </TeachingGroup>
</TeachingGroups>
```
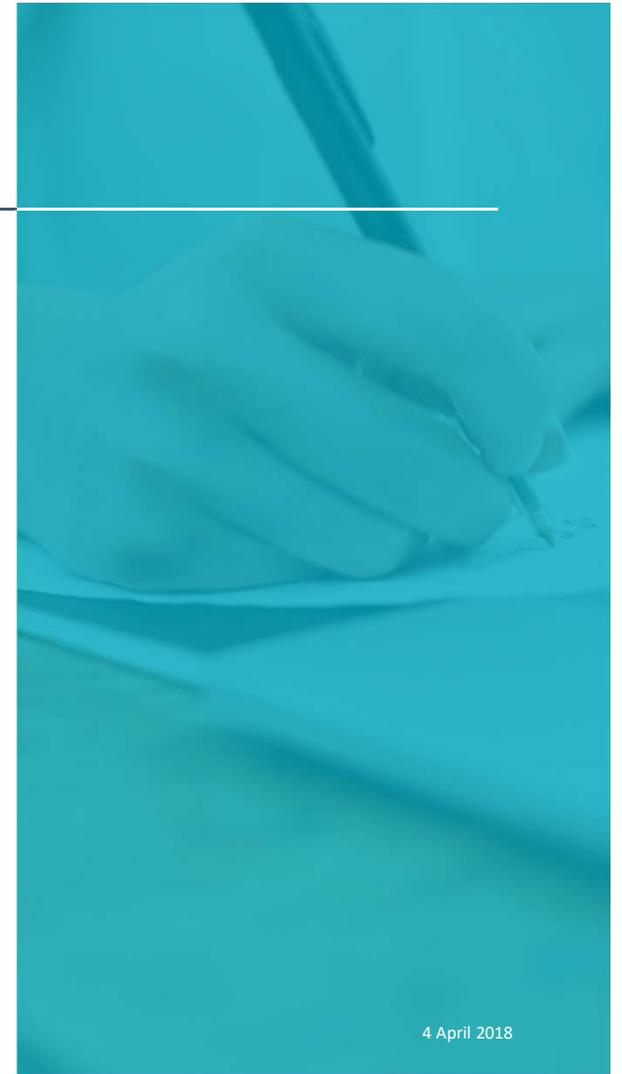
SIF DATA MODEL SCHEMA

"Strict"

- Embedded elements/attributes declared as mandatory as required:

```
<xs:complexType name="TeachingGroupType">
  <xs:sequence>
    <xs:element
      name="LocalId"
      type="LocalIdType" />
```

"Lax"

Every element/attribute is declared as optional:

```
<xs:complexType name="TeachingGroupType">
  <xs:sequence>
    <xs:element
        name="LocalId"
        type="LocalIdType"
        minOccurs="0" />
```

http://specification.sifassociation.org/Implementation/AU/3.4.3/2/DataModel.html#PayloadValidation

COLLECTION OF EXISTING & DELETED OBJECTS – SIF PROVIDER SIDE

- v3.4.3
  - Use "lax" schema to generate outbound XML
  - Use "strict" schema to parse inbound XML (non-SIF events)
  - Use "lax" schema to parse inbound XML (SIF events)

- Beyond v3.4.3
  - Explore xs:nillable=true such that the "strict" schema can also be used for both outbound and inbound XML
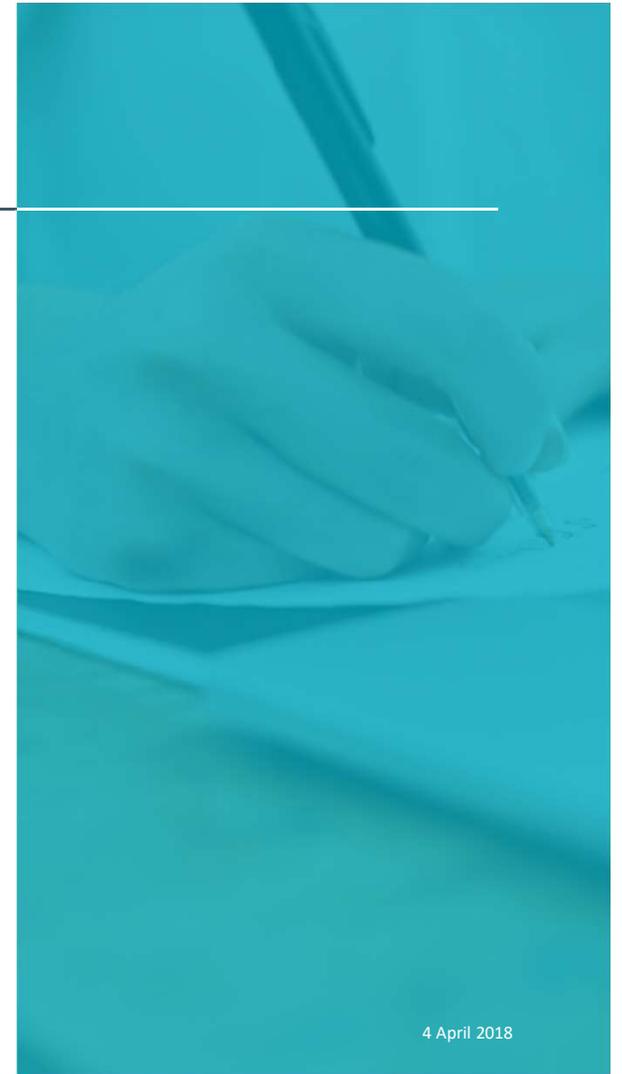
COLLECTION OF EXISTING & DELETED OBJECTS – SIF CONSUMER SIDE

- Create invocation
  - Use "strict" to create XML to provider

- Update invocation
  - Use "strict" to create XML to provider

- Update using SIF events
  - Use "lax" to create XML to provider
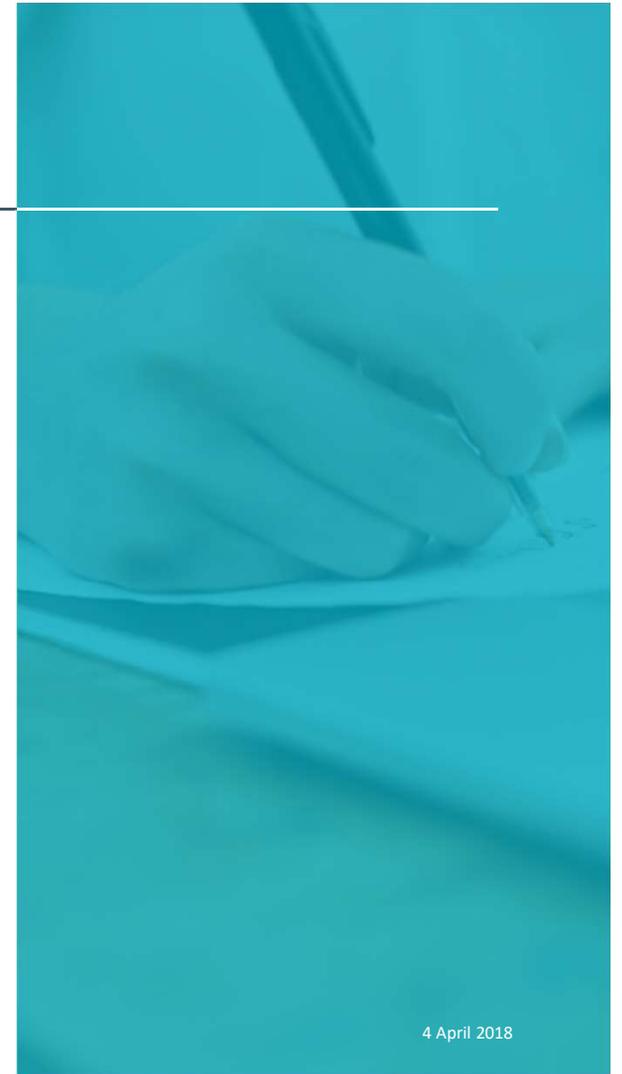
COLLECTION OF EXISTING & DELETED OBJECTS – SIF CONSUMER SIDE

- Get (deleted objects not expected)
  - Use "strict" to parse XML from provider

- Get (deleted objects expected)
  - No single schema to parse both existing and deleted objects in the same collection XML
  - 3.4.3: use "lax" schema to parse collection XML
    - All mandatory elements/attributes must be checked after XML parsing
  - Beyond 3.4.3: explore xs:nillable=true
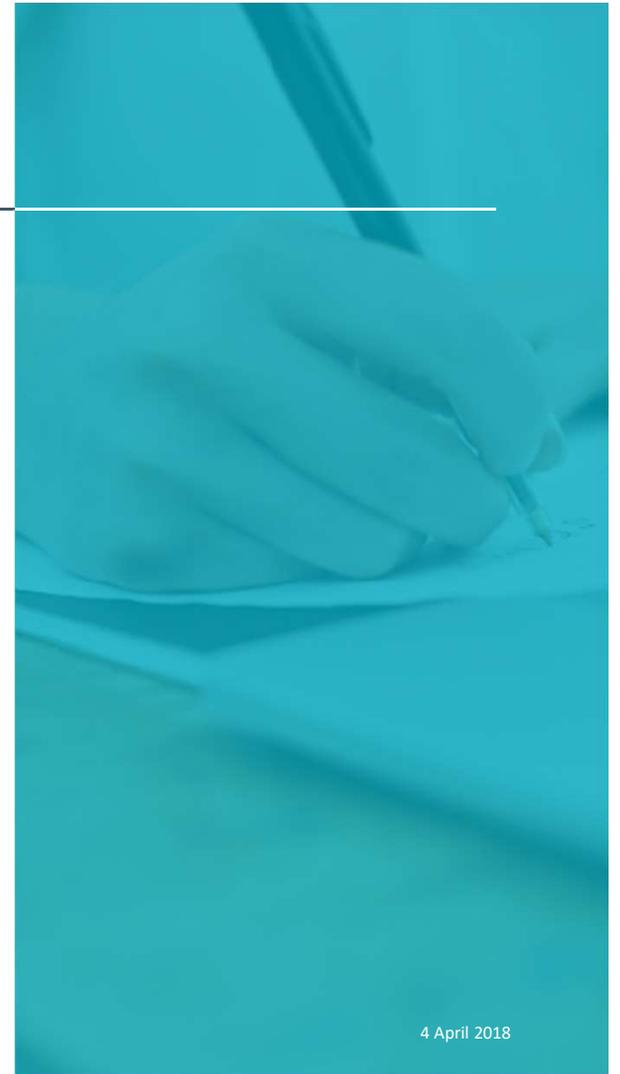
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