

ABCD - Support #381

Change DateTimeISO to exclude impossible dates

11/16/2016 11:36 AM - B. Baltruschat

Status:	New	Start date:	11/16/2016
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	XML Schema	Estimated time:	0.00 hour
Target version:			

Description

via David Fichtmüller from ABCD Wiki (http://abcd.biowikifarm.net/wiki/Internal:ABCD_Corrections#Change_DateTimeISO_to_exclude_impossible_dates)

(Improvement not backward compatible Status: Suggested)

With the current definition of the DateTimeISO type it is valid to have impossible dates like 2012-04-31. The Regular Expression (RegEx) used to define the DateTimeISO type could be modified to exclude these types. Only checking for leap years is not possible with RegEx, so the 29th of February will be a valid day even for non-leap-years.

If all of the changes suggested above for the type DateTimeISO are accepted, the new RegEx would be

```
\d\d\d\d(\-((0[1-9]|1[012])|((0[13578]|1[02])\-((0[1-9]|1\d|2\d|3[01])|(0[469]|11)\-((0[1-9]|1\d|2\d|30)|(02)\-((0[1-9]|1\d|2\d)))(T(0\d|1\d|2[0-3])|(\:([0-5]\d){0,2}(\.d+)?(Z|[+\-](0\d|1[12])|(\:([0-5]\d)?)?))?)?)?
```

If you would like to test this RegEx, go to <http://gskinner.com/RegExr/>, type in ^()\$ and paste the RegEx in between these parentheses. Check the box "multiline" if you want to test more than one date. Here are a few examples that will work:

2012
2012-11
2013-10-15
2008-03-31T16
2008-03-31T16:31
2008-03-31T16:31:15
2008-01-31T16:31:15.13
2008-01-31T16:31:15.13+02:00
2008-01-31T16:31+02:00
2008-01-31T16+02:00
2008-01-31
2008-02-29
2008-03-31
2008-04-30
2008-05-31
2008-06-30
2008-07-31

2008-08-31

2008-09-30

2008-10-31

2008-11-30

2008-12-31

and here are some examples that will not work anymore:

2008-02-31

2008-02-30

2008-04-31

2008-06-31

2008-09-31

2008-11-31

--11

--11-15

---15

This will make dates less ambiguous and more error proof.

Effected Elements:

[/DataSets/DataSet/Units/Unit/Identifications/Identification/Date/ISODateTimeBegin](#)

[/DataSets/DataSet/Units/Unit/Identifications/Identification/Date/ISODateTimeEnd](#)

[/DataSets/DataSet/Units/Unit/SpecimenUnit/History/PreviousUnits/PreviousUnit/Date/ISODateTimeBegin](#)

[/DataSets/DataSet/Units/Unit/SpecimenUnit/History/PreviousUnits/PreviousUnit/Date/ISODateTimeEnd](#)

[/DataSets/DataSet/Units/Unit/Gathering/DateTime/ISODateTimeBegin](#)

[/DataSets/DataSet/Units/Unit/Gathering/DateTime/ISODateTimeEnd](#)

History

#1 - 01/24/2017 04:25 PM - D. Fichtmüller

- Project changed from ABCD 3.0 Project to ABCD
- Subject changed from Unit Extension: Change DateTimeISO to exclude impossible dates to Change DateTimeISO to exclude impossible dates
- Category set to XML Schema
- Parent task set to #476

#2 - 02/21/2017 01:23 PM - L. Lertsutham

- Description updated