

TYPO3.TYPO3CR - Bug # 1620

Status:	Resolved	Priority:	Must have
Author:	Robert Lemke	Category:	FLOW3 Persistence
Created:	2008-10-01	Assigned To:	Karsten Dambekalns
Updated:	2011-05-05	Due date:	
Subject:	Reference array keys are discarded during persistence without a warning		
Description	<p>@reference properties of type array (ie. references to other objects) are persisted - but only the values. The keys of this array are discarded. Either implement support for persisting these keys as well (would be very cool) or at least throw a warning in the meantime if the array keys are something else than integers.</p>		

Associated revisions

Revision f172bffa - 2008-11-12 13:53 - Karsten Dambekalns

FLOW3, TYPO3CR:

- the persistence framework no longer needs the @reference annotation, fixes #1620

TYPO3:

- removed @reference annotations

Revision 61aa7621 - 2008-12-05 21:28 - Karsten Dambekalns

FLOW3, TYPO3CR:

- Persistence: rewrote the way object trees are stored in the CR, fixes #1883, fixes #1882

TYPO3CR:

- Persistence: array keys are now preserved when persisting, fixes #1620
- Persistence: fixed error when persisting DateTime properties, fixes #2195
- changed the way properties are added to the Lucene index, fixes #1623, refs #1886
- fixed storage backend to enable use of namespaced nodetype names

Lucene, TYPO3CR:

- moved the KeywordAnalyser here from TYPO3CR

History

#1 - 2008-10-28 12:58 - Karsten Dambekalns

- Priority changed from *Should have* to *Must have*
- Target version set to *1.0 alpha 1*

#2 - 2008-11-11 12:22 - Karsten Dambekalns

- Status changed from *New* to *Accepted*

#3 - 2008-11-11 20:05 - Karsten Dambekalns

A warning is probably not be what people would like to see...

Anyway, JSR-283 (as well as JSR-170) only support array-like multi-valued properties, and arrays simply do not have "named keys" in Java; a hashmap is used for that instead. Thus we need to store those "associative arrays" differently. One way could be:

```
N flow3:someobjectinstance [flow:]
  P name = cool
  P foo = bar
```

P scores = [1, 3, 2, 6, 1, 1]
N members [AssociativeMultiValuedProperty]
P foo = bar
P lame = duck
P another = item

Legend: N = node, P = property, [something] = node type

for an object having two simple properties, one numerically indexed array and one associative array.

There is still an open question: what about numerically indexed arrays whose keys are "used", i.e. carry meaning? It is impossible to detect those, so maybe we need another annotation (e.g. @preservekeys)?

#4 - 2008-11-12 09:19 - Robert Lemke

Karsten Dambekalns wrote:

There is still an open question: what about numerically indexed arrays whose keys are "used", i.e. carry meaning? It is impossible to detect those, so maybe we need another annotation (e.g. @preservekeys)?

That's difficult ... If in doubt I would look at what the user would expect to happen: If she doesn't know about the special annotation, she would be surprised to find out that all keys are gone.

BTW, interesting in this regard is also the planned SplFastArray: <http://www.colder.ch/news/06-07-2008/33/splfastarray-to-speed-up-.html>

#5 - 2008-11-12 11:53 - Karsten Dambekalns

If people would jump on the SplFastArray wagon, that would make life easier. We could store SplFastArray as simple multi-valued properties, and regular arrays using the more complicated construct proposed above.

Still I would like to avoid using that construct more than needed, as it smells of performance loss. Hm, I guess I should try that and actually measure...

#6 - 2008-11-12 13:55 - Karsten Dambekalns

- Status changed from Accepted to Resolved
- % Done changed from 0 to 100

Applied in changeset r1500.

#7 - 2008-11-12 14:03 - Karsten Dambekalns

- Status changed from Resolved to Accepted
- % Done changed from 100 to 0

Used the wrong issue number in the commit message...

#8 - 2008-11-26 13:28 - Karsten Dambekalns

- *Project changed from TYPO3.Flow to TYPO3.TYPO3CR*
- *Category deleted (Persistence)*
- *Target version deleted (1.0 alpha 1)*

#9 - 2008-11-26 13:32 - Karsten Dambekalns

- *Category set to FLOW3 Persistence*
- *Target version set to 197*

#10 - 2008-11-26 15:12 - Karsten Dambekalns

- *% Done changed from 0 to 70*

Locally I have now implemented storing all arrays as nodes (of nodetype flow3:arrayProxyNode), this will solve the issue and make array keys "first class citizens" again.

This will be committed into SVN as soon as the related changes for #1883 are stabilized.

#11 - 2008-11-26 17:39 - Karsten Dambekalns

- *File Nodetree-from-objects.png added*

#12 - 2008-12-05 21:30 - Karsten Dambekalns

- *Status changed from Accepted to Resolved*
- *% Done changed from 70 to 100*

Applied in changeset r1565.

#13 - 2011-05-05 17:12 - Robert Lemke

- *Target version deleted (197)*

Files

Nodetree-from-objects.png	43.1 kB	2008-11-26	Karsten Dambekalns
---------------------------	---------	------------	--------------------