z2-Environment - Bug #1491

Every Java-Re-compile must lead to new Java component revision

29.08.2013 17:45 - Henning Blohm

Status:	Resolved		**Start date:**	29.08.2013
Priority:	Normal		**Due date:**	
Assignee:	Henning Blohm		**% Done:**	0%
Category:	z2-core		**Estimated time:**	0.00 hour
Target version:	2.7			
origin:				

Description

Problem

Currently there are two ways recompiles are triggered without updating the component revision:

- due to updated includes
- due to updated dependency components.

The side effect of these are problematic:

- compiled resources may be used by several z2 processes (incl. embedded in hadoop for example).
- jar caches (intentional / unintentional) stop functioning, once the files get overwritten without eviction from the cache
- on windows, overwrite due to the previous bullet point may even be prohibited.

Suggestion

This is not actually about the revision (which is compiled from the repository and can be introspected regardless of the component type), but rather about making sure we have cleanly separated gen generations. So here is the proposal:

1. We introduce an instance concept: At startup a z2 home or an embedded z2 determines an instance number of 00 to 99 and locks it for as long as the process is up.
2. This is the instance number of the z2 runtime and can be used as an additional runtime separating dimension
3. For Java component resources this is used as follows:
    1. We leave the original resource folder for the revision untouched. The build process prepares an instance specific resource folder as sibling to the original resource folder. I.e. rev A has an instance folder A_00 and so on.
    2. The "runtime resources" folder holds a copy of all original resources and may subsequently be modified by the compilation process.
    3. The "runtime resources" folder is available from the IJavaComponent API.

Doing these changes has some non-trivial impact on all tools that access java component generation resources. To this end, enhance the IJavaComponent to provide the latest gen generation folder.

Updates required in:

- JarRetriever
- Distribution Exporter
- Eclipsoid

Related issues:

Related to z2-Environment - Bug #1481: java.privateIncludes: changed librarie...	**Resolved**	**13.08.2013**
Is duplicate of z2-Environment - Bug #869: Java component usage not safe in c...	**Closed**	

History

#1 - 29.08.2013 17:46 - Henning Blohm

- Subject changed from Java includes broken to Java include handling broken

#2 - 29.08.2013 17:53 - Henning Blohm

- Subject changed from Java include handling broken to Every Java-Re-compile must lead to new Java component revision

#3 - 29.08.2013 17:53 - Henning Blohm

- Description updated

#4 - 29.08.2013 17:54 - Henning Blohm

- Description updated

#5 - 29.08.2013 18:01 - Henning Blohm

- Status changed from New to In Progress

#6 - 29.08.2013 18:04 - Henning Blohm

- Target version changed from 14 to 2.3

#7 - 29.08.2013 18:16 - Henning Blohm

- Category set to z2-core

- Assignee set to Henning Blohm

#8 - 29.08.2013 18:31 - Henning Blohm

- Description updated

#9 - 11.04.2014 12:02 - Henning Blohm

- Target version changed from 2.3 to 3.0

#10 - 10.06.2018 14:46 - Henning Blohm

- Status changed from In Progress to Closed

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#11 - 03.09.2018 17:06 - Henning Blohm

- Status changed from Closed to In Progress

#12 - 03.09.2018 17:06 - Henning Blohm

- Target version changed from 3.0 to 2.7

#13 - 28.01.2019 23:45 - Henning Blohm

- Description updated

#14 - 28.01.2019 23:49 - Henning Blohm

- Description updated

#15 - 03.02.2019 23:02 - Henning Blohm

- Description updated

#16 - 06.02.2019 07:47 - Henning Blohm

- Status changed from In Progress to Resolved