**z2-Environment - Feature #1991**

**Java 9 Support**

01.01.2018 14:41 - Henning Blohm

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|---|---|---|---|---|
| **Status:** | Resolved | | **Start date:** | 29.08.2017 |
| **Priority:** | Normal | | **Due date:** | |
| **Assignee:** | Henning Blohm | | **% Done:** | 100% |
| **Category:** | z2-core | | **Estimated time:** | 0.00 hour |
| **Target version:** | 2.6 | | | |
| **origin:** | | | | |

**Description**

See Java9_Support.

# Java 9 Support (#1991)

## Supporting the Java 9 Language

We integrate ECJ version 4.7.2 from the download link below. Java 9 is fully supported since 4.7.1a (New and Noteworthy 4.7.1a)

- JDT Core 4.7.2
- New and Noteworthy 4.7.1a
- JDT Core Git
- JDT Core main
- Oxygen help

We support a new LangLevel.JAVA9 and derive all compiler settings accordingly.

Unfortunately using Java 9 actually requires an updated Jetty version (Jetty9_4_support).

## Supporting the Module System

Note: There will be no particular support for Java 9 modules in v2.6

The Java 9 module system provides for module level package exports and cross-module dependencies. As such it does not contradict the class loading delegation model but rather adds that dimension to the module system as *Layers*.

The module system has migration tools, such as the unnamed module (of the classloader) and automatic modules.

From a Z2 perspective it is almost a binary decision to either:

a) Automatically / semi-automatically modularize all Z2 modules by typically generated module-info data and declarations that support to add legacy modules are automatic modules, or
b) go for completely automatic modules by default.
c) Ignore the Java 9 module layer and stay with unnamed modules and the existing class loader separation

As the module system adds very little value to a Z2 modularized environment and it is currently not clear how forceful other frameworks will adapt module-info data, a first release may opt for c)

References

- State of the module system
- Project Jigsaw
- Jigsaw delivered

**Subtasks:**

| | |
|---|---|
| Feature # 1978: Support Java 9 module system | **Closed** |
| Feature # 1977: Support and document use of Java 9 | **Resolved** |
| Feature # 1992: Support Java 9 Language Level | **Resolved** |

**Related issues:**

| | | |
|---|---|---|
| Related to z2-Environment - Improvement #1995: Upgrade Spring addon to v 5.0.... | **Resolved** | **06.01.2018** |
| Related to z2-Environment - Feature #2016: Java 10 support | **Resolved** | **01.09.2018** |
| Blocked by z2-Environment - Feature #1993: Upgrade to Jetty 9.4.8 | **Resolved** | **18.04.2018** |

## History

**#1 - 01.01.2018 15:16 - Henning Blohm**

*- Blocked by Feature #1993: Upgrade to Jetty 9.4.8 added*

**#2 - 06.01.2018 21:42 - Henning Blohm**

*- Related to Improvement #1995: Upgrade Spring addon to v 5.0.6 and Spring security to 5.0.5 added*

**#3 - 14.05.2018 15:34 - Henning Blohm**

*- Status changed from In Progress to To Be Documented*

**#4 - 01.09.2018 19:58 - Henning Blohm**

*- Related to Feature #2016: Java 10 support added*

**#5 - 17.09.2018 10:39 - Henning Blohm**

*- Status changed from To Be Documented to Resolved*