Known Issues

Spring Dynamic Modules for OSGi Service Platforms

1.0-rc1

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Preface iii
1. Known Issues 1
1.1. CGLIB proxying fails with NPE from time to time 1
1.2. Support for cyclic imports, listener references 1
1.3. Using `classpath` prefix on the root classpath (`/`) fails 1
1.4. Publishing prototypes as OSGi services 1
1.5. Service proxy/object equality 1
1.6. Invalid service references during unregistration on Knopflerfish 2
1.7. `AbstractOsgiTest` depends on internal interface 2

Preface

This document describes known issues (and possible work-arounds). Each issue mentions the section of the reference documentation that explain the behaviour along with the associated JIRA entry which provides an estimate on when it will be solved. As a rule, the next release Spring Dynamic Modules aims to solve most, if not all of them.

Chapter 1. Known Issues

As a side note, it worth pointing out that the issues below are not really bugs but rather improvements.

1.1. CGLIB proxying fails with NPE from time to time

During our tests, we have encountered a strange cglib behaviour; when trying to proxy `java.*` classes the process fails with a NullPointerException. Further more, the bug cannot be reproduce constantly, depending a lot on the number of runs and JVM platform used. We believe the cause is a `Weak` reference - see this discussion.

See OSGI-110

1.2. Support for cyclic imports, listener references

Currently there is no support for importer/listener cyclic references. While this is not a bug, it is a powerful feature to be able to declare nested listeners that have a reference to the importer bean dependencies.

As a work around, do not create cycles between bean definition references.

See OSGI-167

1.3. Using `classpath` prefix on the root classpath (`/`) fails

Calling `getResource()/getResources()` from a Bundle, on the root folder (`/`) fails. Currently, only Equinox supports this behaviour. The issue has been reported to Felix and Knopflerfish projects and work in underway to resolve the problem. At the moment of writing this document, Felix provides support for this in the upcoming 1.1.0 release while KF aims for 2.0.3

See OSGI-210

1.4. Publishing prototypes as OSGi services

Due to the way OSGi platform deals with OSGi services (it caches the instance and returns it every time), prototypes are not fully supported. Spring-DM publishes a proxy that on each call, delegates back to the target application context for retrieving the instance. While with other beans this works, in case of prototypes, this results in one-instance-per-invocation which is incorrect. Additional functionality needs to be added to fully support prototypes even though, as pointed out, this involves a knowledge between Client/Server regarding the publication contract.

See OSGI-237

1.5. Service proxy/object equality

Since Spring-DM uses run-time proxies, equality between objects that rely on private field comparison tends to fail. The problem becomes more apparent when dealing with sets that use service rather then service reference equality. Since the proxy does only method interception it does not seem to exist any practical solution at the

moment. As a workaround, consider modifying your equality method or relying on the reference equality.

See OSGI-245

1.6. Invalid service references during unregistration on Knopflerfish

On KF, during unregistration, the service becomes unavailable before the even tis propagated. After investigation it seems that to support this behaviour, property "org.knopflerfish.servicereference.valid.during.unregistering" needs should be set to "true". However, with this enabled, we found strange behaviour in the framework such as unregistration events not being propagated while registration events being propagated twice (on 2.0.2). In 2.0.1, a NPE is thrown during unregistration. The problem has been reported to KF team and we hope that the upcoming 2.0.3 will address this issue.

See OSGI-291

1.7. `AbstractOsgiTest` depends on internal interface

`AbstractOsgiTest` depends on `org.springframework.osgi.test.internal.OsgiJUnitTest`. This will be fixed in the next release - please do not rely on any methods published by `OsgiJUnitTest` since they will be removed in the next release.

See OSGI-292