DRAFT ---- JCP Change Document, v0.4---- DRAFT

Situation Analysis

Recently certain needs have emerged among community members that appear difficult to address through the current set of rules and structure regarding the JCP. In the next two paragraphs this document summarizes these needs.

There are standardization efforts in the JCP and in other standard creation environments which are focused on creating technologies that facilitate interoperation between different platforms and systems. This includes, for example, technologies related to SOA and web services. Among several JCP members there is a business need to be able to apply these standardization efforts as they take place in the JCP in a Java context but also in non-Java contexts. The latter is currently not possible within the JCP.

As the use and appeal of the Java technology continues to expand from the language itself and core platform facilities, increasingly JCP members are motivated to bring existing technologies (either from products or created through other, collaborative, projects) into the JCP as foundations for new standardization efforts. The current JCP structure is experienced as too rigid with regards to allowing the members to manage the life cycle of the existing technology in the light of the progressing JSR and to migrate products and their customers over time to the new standard.

This document explores and proposes answers to these two scenarios while maintaining the JCP's mission of enabling the timely emergence of multi-vendor compatible implementations of the Java technology specifications. The document first looks at each scenario individually and then discusses a potential third scenario which would combine some of the needs of the previous two.

“Hybrid JSRs”

There will be a special class of JSRs known as "Hybrid JSRs". These JSRs are intended to allow external non-Java implementations of the technology created in the JSR in addition to the Java implementations. It is anticipated that these JSRs will be primarily used in situations where there is a need for interoperability between Java and non-Java implementations of a JSR.

The IP grants from the JSR are:

- (1) For use with the Java platform, the traditional JSPA terms. That is, an IP grant for use with compatible implementations only.
- (2) For use outside the Java platform, an IP grant based on the OASIS

"Royalty Free on Limited Terms" policy.

"Hybrid JSRs" attempts to strike the following balance:

- If you are a Java based implementation then you have to follow the tight compatibility rules and you get broad IP grants (including section 6).
- If you are not a Java based implementation then you get the same kinds of grants that you would at a group like OASIS. Typically these are broader but weaker than the Java IP grants. This means that you should lose nothing in using the JCP for "neutral" technologies.
- Expert Group members should feel safe that their IP rights are only being granted out the same bounded ways that they already accept at other standard groups.
- "Hybrid JSRs" must of course continue to provide for Java implementation: the creation and support of a Java-based RI and TCK.

For the Java implementations the existing compatibility rules will continue to apply ("fully implement the spec", "no sub-, supersetting of the namespace", "pass the TCK"). For the non-Java implementation the first rule will apply ("fully implement the spec") in order to provide reasonable balance between obligations for the Java implementation vs the non-Java implementation.

JSPA Section 6 will not be relevant to non-Java implementations. This helps the JCP's IP policy regarding non-Java implementations to be similar to the OASIS policy of only requiring the granting of rights of use to IP for standardization projects (in our case JSRs and their expert groups) that a member participates on.

It is envisioned that the IP flow within an expert group during the development of the JSR is the same as for any current JSR: Expert Group members (and other contributors) grant rights to their contributions to the Spec Lead for the purpose of creating draft specs and their early access implementations, the final spec and its final implementations. As now, these IP grants would not flow from EG contributors through the Spec Lead to implementers, whether Java or non-Java, until the specification goes final.

Sun would not anticipate using this flavor of JSR for core Java platform technology but would use it for interoperability JSRs such as JAX* or possibly also JBI.

A Hybrid JSR can become part of a platform.

"Hybrid JSRs" is an optional feature. The Spec Lead must declare this at submission of the JSR proposal.

“Transplant JSRs”

There will be a special class of JSRs known as "Transplant JSRs". These JSRs are intended to allow existing technology to migrate into the JCP and products based on the pre-existing technology to migrate over time to the final specification delivered by the JSR.

You can ship an implementation of a non-final JSR in a final product provided:

- (1) The non-final implementation is delivered in a name space that is different from the name space for the final JSR. The name space must not be java.* or javax.*.
- (2) You receive IP grants to do this in products that are delivered no later than six months of the JSR going final, for a period up until twelve months after the JSR goes final.
- (3) You receive IP grants to continue doing this indefinitely provided you also deliver a fully compatible version of the final JSR in the same product.
- (4) These extra grants become available only if you make a royalty free grant of your own relevant rights.

The grants in (3) only apply if you had already been shipping a product under the the limits in (2). A sudden appearance of incompatible implementations much after the completion of a JSR should be avoided, discouraged.

The IP under (2) and (3) is expressly limited to be IP that is required to implement a draft version of the JSR and which provides functionality within the overall scope defined in the JSR proposal approved by the JCP EC.

The earliest draft that would be available for final implementation is the Early Draft Review document. Choosing this milestone rewards the Spec Lead, Expert Group and other interested parties with this freedom in return for delivering this milestone to the community.

The proposal aims to protect the java.* and javax.* name spaces in continuing to ensure that these name spaces are only used in either compliant implementations of the final specification or in early access, beta implementations of the draft specification. In the case where for example a pre-existing technology from another standards effort is used as the starting point for a Transplant JSR and the JSR plans to use the technology's pre-existing name space (which would be different than java.* and javax.*) then the Spec Lead may allow implementations of the JSR's draft specs in this name space.

“Transplant JSRs” is an optional feature. The Spec Lead must declare this at

submission of the JSR proposal.

Sun is not expecting to apply this to the JSRs it leads.

A Transplant JSR can become part of a platform.

"Hybrid and Transplant JSR"

It is recognized that there may be situations in which there is a desire to use existing, language neutral, technology as the basis for a new JSR and, due to nature of this technology, allow Java as well as non-Java implementations of the resulting specification. In this situation it would be appropriate for the Spec Lead to declare the JSR to be a combined Hybrid and Transplant JSR.

For these JSRs the collective of the rules outlined for Hybrid JSRs and for Transplant JSRs shall apply. For purposes of clarification the following elaborations are offered:

- The right to continue to ship a *Java* implementation of a non-final JSR is granted provided that a fully compatible *Java* implementation of the final spec is delivered with the outlined time frame.
- For non-Java implementations the OASIS-based IP grants would become available from the Spec Lead through the most current public draft of the Spec.

"Hybrid and Transplant JSRs" is an optional feature. The Spec Lead must declare this at submission of the JSR.

Sun is not expecting to apply this to the JSRs it leads.

A Hybrid and Transplant JSR can become part of a platform.

The road to implementation

Both proposals require changes to the JSPA and likely also to the JCP process document. These documents are changed by performing a so-called process changing JSR. Sun, through the position of the PMO, is the Spec Lead with the combined ECs as the Expert Group.

It is known that EC members may have additional or other unrelated topics that they wish a process change would address. The Chair acknowledges the presence and validity of such topics. However, in order to address the business needs identified in this document in a successful and timely manner, restraint and focus will need to be exercised by all parties involved (including Sun). The

Chair recognizes that even with this welcome and necessary focus the changing of the JSPA and its roll out will take time, and is motivated to implement with the support of the ECs a temporary structure whereby certain existing JSRs (currently 235, 236, 237 and 207) and possibly certain new JSRs can progress assuming these new rules while the process changing JSR is progressing through the JCP. In return, the Chair expects that these JSRs will migrate to the new JSPA once it is available.

As with previous JSPA changes, JSRs that are submitted after the new JSPA is available and that want to make use of either of the new options can only accept Expert Group members who have signed the new JSPA. Existing JSRs will be offered to migrate to the new JSPA. The sitting Expert Groups for these JSRs must unanimously agree to that migration. The PMO will actively encourage JCP members to sign the new agreement.