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PAS Explanatory Report for

OpenChain Specification

PAS Submitter: Joint Development Foundation

2020-04-09

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ISO/IEC JTC 1 Common Strategic Characteristics

PAS Originators/Submitters are invited to explicitly reference the JTC 1 common strategic characteristics (interoperability, portability, cultural and linguistic adaptability, and accessibility) when submitting their PAS Submitter application or any PAS for transposition.

ORGANIZATION CRITERIA (SD9 7.3)

JDF was approved as a PAS Submitter effective <DATE> (JTC 1 N14327). Since attaining PAS Submitter status there have been no significant changes to JDF at an organizational level. Additionally, there have been no changes to the organization criteria as submitted in the PAS submitter application JTC 1 N14327.

DOCUMENT RELATED CRITERIA (SD9 7.4)

The OpenChain Specification provides a framework for consistent process management inside organizations and more broadly throughout the supply chain. This allows companies to provide consistent, portable compliance information a manner that is suitable for interoperability with manual or automated workflows. This specification addresses a specific challenge faced by companies in the appropriate, effective management of open source software copyright compliance by codifying knowledge based on real-world experience across multiple industries.

This submission addresses the document related criteria specified in SD 9 clause 7.4 as follows:

7.4.1 Quality

Within its scope the specification shall completely describe the functionality (in terms of interfaces, protocols, formats, etc.) necessary for an implementation of the submission. If it is based on a product, it shall include all the functionality necessary to achieve the stated level of compatibility or interoperability in a product independent manner.

7.4.1.1 Completeness (M)

a) *How well are all interfaces specified?*

> The OpenChain Specification outlines process, policy and training inflection points that ensure the key requirements of a quality open source compliance program are implemented. These inflection points are fully defined while preserving the ability of different companies in different sectors to apply different specific processes at these inflection points.

b) How easily can implementation take place without need of additional descriptions?

> The Specification is self-contained and references are the key descriptions needed for implementation.

c) What proof exists for successful implementations (e.g. availability of test results for media standards)?

> The Specification has been successfully adopted by multiple organizations across multiple sectors. A current list of organizations that have announced their OpenChain conformance is

available at https://www.openchainproject.org/ and includes, among others, ARM, Fujitsu, GE Digital, Google, Harman, Infosys, LF, Microsoft, NextCloud, Qualcomm, Siemens, Sony, and Uber.

7.4.1.2 Clarity

a) What means are used to provide definitive descriptions beyond straight text?

The text was designed to be self-contained and includes detailed definitions and explanatory text.

b) What tables, figures and reference materials are used to remove ambiguity?

The primary means of providing clarity in the Specification are through the Definitions and the Rationale descriptions for each specific section of the Specification.

c) What contextual material is provided to educate the reader?

Beyond there the Definitions and the Rationale descriptions in the Specification itself there is extensive additional reference material available at the Project website: https://www.openchainproject.org/. This material includes infographics, high level overviews, case studies, best practices, eBooks, and reference material.

7.4.1.3 Testability (M)

The extent, use, and availability of conformance/interoperability tests or means of implementation verification (e.g. availability of reference material for magnetic media) shall be described, as well as the provisions the specification has for testability.

The specification shall have had sufficient review over an extended time period to characterise it as being stable.

The Specification is a software license compliance specification rather than a software code specification and for this reason does not have a testability element.

7.4.1.4 Stability (M)

a) How long has the specification existed, unchanged, since some form of verification (e.g. prototype testing, paper analysis, full interoperability tests) has been achieved?

The Specification has existed in production since October 2016. The current version of the Specification, version 2.0, has existed in production since April 2019.

b) To what extent and for how long have products been implemented using the specification?

The Specification outlines the key requirements of a quality open source compliance program. A list of the entities adopting the Specification can be found at the Project website: https://www.openchainproject.org/

Implementation/Adoption is on-going, with conformance announcements by companies happening on a schedule of one to two months. Formal adoption began in October 2016 with the official release of version 1.0 of the Specification.

c) What mechanisms are in place to track versions, fixes and addenda?

The Specification review process occurs primarily through the Project mailing lists with all formal suggestions/comments received and accepted through a dedicated specification editing mailing list. The collection of comments is facilitated (a) directly to this mailing list, (b) via Project telephone calls and (c) via direct mail.

The review period of the Specification follows a multi-step request for comments. The first stage includes regular calls for comments via the mailing lists and Project telephone calls. These are public and all parties are welcome. The second stage seems the draft Specification update disseminated to other public mailing lists, such as specialized lists for Open Source Program Offices or Open Source Legal Professions. The final stage includes a one to two month "freeze" and restatement to all the previously outlined locations.

Release versions of the Specification are made available on GitHub (https://github.com/OpenChain-Project/Specification) and the main OpenChain Project website (https://www.openchainproject.org).

7.4.1.5 Availability (M)

a) Where is the specification available (e.g. one source, multinational locations, what types of distributors)?

The Specification is available at the Project website: https://www.openchainproject.org/

This links to the GitHub repository where the Specification is housed. There is a single location to get the Specification.

b) How long has the specification been available?

The first release of the Specification was in October 2016. The current version of the Specification has been available since April 2019.

c) Has the distribution been widespread or restricted? (describe the situation)

The Specification is available to all interested parties via a download link on the OpenChainProject.org website without restriction.

d) What are the costs associated with specification availability?

The Specification is available without cost.

7.4.2 Consensus (M)

The accompanying report shall describe the extent of (inter)national consensus that the document has already achieved.

7.4.2.1 Development Consensus

a) Describe the process by which the specification was developed.

The Specification is developed primarily via regular bi-weekly telephone calls and the project mailing lists. Each formal revision is codified via a dedicated Specification mailing list and subject to further dissemination via regular bi-weekly telephone calls and the project mailing lists. After a certain period a date is set for comments before a release candidate is locked down. This release candidate is then publicized via channels in addition to those of the project, physical meetings, conferences, other public mailing lists, such as specialized lists for Open Source Program Offices or Open Source Legal Professions, Slack channels, social media (Facebook, Twitter, LinkedIn) and telephone conferences.

b) Describe the process by which the specification was approved.

The final release candidate of the Specification is placed before a Steering Committee for a vote. This Steering Committee consists of one voting member from each Governing Board entity, and the chairs of the Specification, Conformance and Curriculum work groups, each with a vote. Any other party is invited to observe the meeting and the voting process.

c) What "levels" of approval have been obtained?

The Specification has been (a) reviewed by the project members via regular calls and the mailing lists, (b) it has been reviewed by the general public via the methods of dissemination outlined above and (c) it has been subject to a final formal review and vote of approval by the Project Steering Committee.

7.4.2.2 Response to User Requirements

a) How and when were user requirements considered and utilized?

User requirements are solicited via the regular Project calls and the mailing lists, including feedback received by the general public on an ongoing basis. This feedback is directly utilized in drafting each subsequent revision of the Specification.

b) To what extent have users demonstrated satisfaction?

The steady growth of the Project audience in terms of the mailing list, regional work groups and global work groups indicates growing interest and general satisfaction, as does the growing number of organizations announcing conformance to the Specification.

7.4.2.3 Market Acceptance

a) How widespread is the market acceptance today? Anticipated?

There is a growing community of conformance to the Specification, with a broad range of companies having announced conformance. OpenChain communities and working groups are active in North America, Asia, and Europe.

b) What evidence is there of market acceptance in the literature?

The primary sources of market acceptance are the growth of the conformance and the growth of the regional and global work groups and mailing lists. This information is available at the Project website: https://www.openchainproject.org/.

7.4.2.4 Credibility

a) What is the extent and use of conformance tests or means of implementation verification?

There are three ways that organizations are demonstrating their adherence to the Specification:

1. Self-Certification either via the Project's online conformance web app or "offline" via freely available checklists
2. Independent Compliance Assessment provided by OpenChain Partner organizations.
3. Third Party Certification as currently provided by PwC and TUV SUD, with other certifiers expected to be announced throughout 2020. The activity by PwC is outlined in detail on their website (https://www.pwc.de/en/opensource/certification) and the activity by TUV SUD is outlined here (https://www.tuvsud.com/en/press-and-media/2019/march/tuv-sud-certificate-confirms-compliance-with-foss-licences).

b) What provisions does the specification have for testability?

Testability is primarily determined via the conformance options described above.

7.4.3 Alignment

The specification should be aligned with existing JTC 1 standards or ongoing work and thus complement existing standards, architectures and style guides. Any conflicts with existing standards, architectures and style guides should be made clear and justified.

7.4.3.1 Relationship to Existing Standards

a) What International Standards are closely related to the specification and how?

OpenChain is designed to define quality open source management programs in order to build trust in the open source supply chain, and thus reducing friction in transactions that include open source software. In this light, OpenChain shares attributes with the ISO 9000 family of standards, which helps organizations implement quality management systems for the development of products.

b) To what International Standards is the proposed specification a natural extension?

Because OpenChain is focused on the open source supply chain, we do not believe it is a natural extension to any existing International Standard.

c) How the specification is related to emerging and ongoing JTC 1 projects?

The Specification can align with existing SC WG activity such as those related to process management or data management and interchange.

7.4.3.2 Adaptability and Migration

a) What adaptations (migrations) of either the specification or International Standards would improve the relationship between the specification and International Standards?

N/A

b) How much flexibility does the PAS Submitter have?

N/A

c) What are the longer-range plans for new/evolving specifications?

OpenChain strives for stability in its specification. OpenChain does, however, work actively with its communities to evolve the specification to meet the needs of its community on a long-term basis.

7.4.3.3 Substitution and Replacement

a) What needs exist, if any, to replace an existing International Standard? Rationale?

As there are no International Standards that address the open source supply chain, there is no need to replace an existing International Standard.

b) What is the need and feasibility of using only a portion of the specification as an International Standard?

OpenChain is an integrated standard that defines the overall elements believed necessary to develop and operate a quality open source program. As such, we believe that it is no feasible to use only a portion of the Specification.

c) What portions, if any, of the specification do not belong in an International Standard (e.g. too implementation-specific)?

OpenChain was carefully designed to describe requirements of a quality open source program and does not include any proprietary or implementation specific requirements.

7.4.3.4 Document Format and Style

a) What plans, if any, exist to conform to JTC 1 document styles?

This specification conforms to ISO/IEC Directives Part 2, and OpenChain has conformed with JTC1 document styles.

7.4.4 Maintenance (M)

a) Have changes occurred on the subject of maintenance since the PAS Submitter application or renewal, or for a Fast Track, since the most recent submission of the standard? (This is the place to mention any particular agreement reached with a JTC 1 subgroup).

No.