
CTI Work Product Process: Version 1.0

Working Draft 01

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Abstract:

This document defines the process for accepting modifications to existing standards track work products or accepting entirely new work products. It's scope is all current and future Committee Specifications produced by the Cyber Threat Intelligence Technical Committee (CTI TC).

Status:

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1 Introduction

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1.2 Terminology

The key words "**MUST**", "**MUST NOT**", "**REQUIRED**", "**SHALL**", "**SHALL NOT**", "**SHOULD**", "**SHOULD NOT**", "**RECOMMENDED**", "**NOT RECOMMENDED**", "**MAY**", and "**OPTIONAL**" in this document are to be interpreted as described in BCP 14 [[RFC2119](#)] [[RFC8174](#)] when, and only when, they appear in all capitals, as shown here.

1.3 Normative References

[**IEEE 754-2008**] "IEEE Standard for Floating-Point Arithmetic", IEEE 754-2008, August 2008. [Online]. Available: <http://ieeexplore.ieee.org/document/4610935/>

1.4 Definitions

CTI Leadership - The CTI TC standards development work is organized into several Subcommittees. Each Subcommittee has one or more Chairs, which together comprise the CTI TC Leadership. The CTI TC Leadership is responsible for technical management of all CTI TC activities and ensuring that all members of the CTI TC have the ability to share their opinions and suggestions and that every proposal is vetted through this defined process.

Editorial Changes - A non-material change such as fixing a typo, adding clarifying text, adding or fixing examples, or improving the readability, structure, or layout of the text and or content.

Minor Changes - A minor change, such as changing a property, adding a single property, or adding an entry to an already existing vocabulary.

Proposal - A request to add or change something. This can represent a change, a new concept, an enhancement, a new feature, or some new functionality.

Sponsor - A sponsor is an individual from an organization that is willing to back a proposal and put in time and effort to help drive the proposal to completion including producing specification text, creating interoperability tests, and creating (or sponsoring the creation) of working code. If the sponsor can not contribute code themselves, they are responsible for finding someone that can.

Feature - Any proposed change or addition to a CTI TC document. This includes but is not limited to the addition of new fields to existing STIX SDOs, new STIX SDOs, new STIX vocabularies, new STIX Cyber Observable Objects, new STIX Patterning operators, new features to TAXII, and new tests to interoperability.

Organization - A TC member organization. Members that join as an "Individual" count as a single organization.

2 Overview

This section describes the process for handling requests and proposals for new work products or changes, enhancements, additions, new features, or new functionality to existing work products. All proposals, other than Editorial Changes and Minor Changes, **MUST** follow this process.

2.1 Types of Authors

Proposal can be submitted from two types of authors, they are:

- TC Members - All of the authors are TC members
- Non-TC Members - One or more of the authors are non-TC members

A proposal that contains some TC members and some Non-TC members **MUST** be treated as a submission from Non-TC Members due to IPR requirements.

2.2 Request Tracking Summary

The following levels exist in this process:

1. **Notified** - The authors of a proposal have notified the TC of a potential **feature-draft**
2. **Received** - The TC has officially received the **feature-draft** from the authors
3. **Accepted** - The TC has officially accepted the proposed **feature-draft**
4. **Paused** - The TC has put further work on the proposal on hold
5. **Development** - The TC is working on the proposal
6. **Draft** - The proposal is waiting for CSD approval
7. **Approved** - The proposal can be found in a published CSD document
8. **Finished** - The proposal is considered finished and can be found in a published CS document

2.3 Editorial Changes

Editorial Changes which include adding clarification text, improving readability, making formatting changes, fixing typos and grammatical errors, etc. will follow a streamlined version of this process.

For all editorial changes except typos and grammatical changes the the editors will:

1. Create an issue in the official TC issue tracker
2. Discuss the changes during one or more meetings or over email
3. After the editors believe TC consensus has been achieved the editors will submit a one week call for unanimous consent to the TC's official email list
4. If no objections are received, the editors will make the change and close the issue

Several editorial issues **MAY** be discussed at one time and **MAY** be contained within a single issue. Typos and grammatical changes will not be recorded as an issue in the official issue tracker and will be made by the editors without prior discussion during a meeting or over email.

2.4 Minor Changes

A Minor Change as defined by the editors will follow a streamlined version of this process. For these changes the editors will:

1. Write a proposal or collect a proposal from a TC member (complete Phases 1, see [section 3](#))
2. Create an issue in the official TC issue tracker
3. Discuss the changes during one or more meetings or over email
4. After the editors believe TC consensus has been achieved the editors will submit a two week call for unanimous consent to the TC's official email list
5. If no objections are received, the editors will make the change and close the issue

2.5 Objections to Editorial or Minor Changes

If an editorial or minor change receives an objection during the call for unanimous consent the editors will:

1. Take the issue back and discuss during one or more meetings or over email in an attempt to resolve the objection
2. Once the editors believe consensus has been achieved again, the issue will be resubmitted to the TC's official email list with a call for unanimous consent with the same time windows as previously defined
3. If the objection can not be resolved after re-review during one or more meeting or over email, then the editors will ask the TC co-chairs to determine a way forward. If the TC co-chairs determine that there is actual consensus, but not unanimity, the TC co-chairs **MAY** instruct the editors to to make the change the close the issue.

3 Create Proposal (Phase 1)

The first phase to submitting a new proposal requires that one or more authors produce a **feature-draft**.

A **feature-draft** is a written document that contains the requested feature or change and can vary in length based on the complexity of the request. While a **feature-draft** can be as short as a few paragraphs it **MUST** include at a minimum sections 1 and 2 and **SHOULD** include sections 3 and 4.

- Section 1: Description (what is being requested)
- Section 2: Use cases (why it is being requested)
- Section 3: Specification language including proposed normative and non-normative text, property tables (if applicable), and examples that illustrate how the proposal could be used.
- Section 4: A list of interoperability testing requirements along with which personas are expected to utilize the proposal.

3.1 Notifying the TC

At any point the authors of the proposal **MAY** inform the TC about the work they are doing through emailing the TC's official email list or CTI public comment list (if one or more of the authors is a non-TC member). Once the TC has been notified, the co-chairs will list the proposal in the appropriate document roadmap with a status of **Notified**. If the proposal has not advanced within 185 days (6 months) the notification of the proposal will expire and will be removed from the list. The authors are welcome to restart the process by once again emailing the TC's official email list or TC's public comment email list.

If one or more of the authors is not a TC member, then the notification **MUST** be done through TC's public comment email list.

At any point during this phase the authors **MAY** request that the TC remove their proposal from the roadmap. When the TC receives this request the TC co-chairs will remove the entry within one calendar week.

3.2 Requesting a Mini-Group (Official TC Members Only)

Once the TC has been notified about the proposal, and if all of the authors are TC members, the authors **MAY** request additional volunteers from the entire TC membership by sending an email to the TC's official email list.

If three or more individuals, besides the authors, agree to help work on the proposal the TC co-chairs **MAY** consider standing up a temporary subcommittee group (mini-group) to work on the proposal and its **feature-draft**. If a mini-group is established, then the original authors of the proposal will chair that group. This mini-group has 185 days from formation to advance the proposal to phase 2. Once the time window has expired or the proposal has been submitted to phase 2, the mini-group is dissolved.

4 Submitting a Proposal (Phase 2)

The second phase to formally accepting a new proposal requires that the authors of the proposal formally submit their **feature-draft** to the TC via email.

4.1 Requirements

- All submissions **MUST** include both a PDF version and an editable version (txt, Word, Google Doc, etc) of the document.
- Authors that are all TC Members **MUST** submit their proposal by emailing the TC's official email list.
- Authors that are not all TC Members **MUST** submit their proposal by emailing the TC's official public comment email list.

4.2 Processing the Submission

Once the TC has received the proposal the TC co-chairs will update the appropriate document roadmap to contain the name of the proposal (unless it was already listed from a notification) and set its status to **Received**.

A **feature-draft** has a limited lifetime and will expire if not accepted by the TC in exactly 185 days (6 months) from the date it was submitted to the TC. At any point during this phase the authors **MAY** request that the TC remove their proposal and delete its entry from the roadmap. When the TC receives this request the TC co-chairs will remove the entry within one calendar week.

When a **feature-draft** is proposed there are 2 options where it could have overlap.

- Overlap #A: it overlaps with an existing feature already adopted in the standard
- Overlap #B: It overlaps with another in-progress **feature-draft**.

The TC process for removing the conflicts will be:

Overlap #A:

TC will review the new proposal and decide by a simple majority vote in a quorate meeting to either accept or reject the proposed work. This ballot will determine if the request warrants a change compared to leaving the currently adopted standard as is. The results of this ballot will be logged as an issue in the official TC issue tracker with an explanation and any additional details.

Overlap #B:

TC will review both proposals and decide by simple majority vote in a quorate meeting on which proposal should be pursued. The reject proposal will be immediately removed from the road map by the TC co-chairs. The results of this ballot will be logged as an issue in the official TC issue tracker with an explanation and any additional details.

5 Accept and Develop Work Item (Phase 3)

The third phase to formally accepting a new proposal requires that the TC to accept the proposed **feature-draft** as an official work item.

5.1 Accepted Work Item

Before a **feature-draft** can be accepted as an official work item it **MUST** have at least two sponsors from the TC's membership who are from different organizations (an OASIS "individual member" counts as a unique organization). Sponsors are responsible for creating proof-of-concept code and creating test cases in the interoperability document. Organizations that want to see new features added but cannot create proof-of-concept code or test cases should work with the TC community to find supporters who can.

The TC has 185 days from the day it was **Received** to accept the proposal as an official work item. If the TC does not accept the proposal as an official work item within that time, it will expire. The authors of the proposal can re-submit the **feature-draft** for consideration, once it has expired. If the TC rejected the proposal, the authors **MUST** wait at least 185 days from the date it was rejected before they can submit the same proposal. Authors can make substantive changes and resubmit as a new proposal at any time.

Before the **feature-draft** can be accepted by the TC the authors (if they are all TC members) **MUST** present their proposal during a full TC meeting. To schedule time during a full TC meeting, authors **MUST** submit a request to the official TC email list at least 14 days before the meeting.

Following the presentation, a call for objections will be sent to the email list, by the appropriate sub-committee chairs, along with a copy of the **feature-draft**. The TC will be given 2 weeks to initially review the **feature-draft** and voice their support or objections. Any TC member **MAY** request an additional 2 weeks or up to the next full TC meeting to review by sending email to the official TC email list. The TC will decide by simple majority vote in a quorate meeting (with no more than 25% of members attending voting no) if this **feature-draft** will be accepted. If the vote passes, then the **feature-draft** will be considered accepted by the TC as an official work item.

Once a **feature-draft** has been accepted by the TC, it will be listed in the appropriate document roadmap with a status of **Accepted**. At this stage the work has been accepted by TC but has not yet begun active development.

5.2 Paused Work

At any time during the development phase the authors or the TC may decide to put a specific proposal on hold. When this happens all active development on working calls will be stopped. Individual members and the original authors can still continue to work on the proposal, however, it will not be discussed on official working calls, at a face to face meeting, or during full TC meetings. When a feature or concept is put on hold, it will have a status of **Paused** in the appropriate document roadmap. The authors can make a request to the TC co-chairs at any time to restart development. It is up to the co-chairs to schedule a new kick-off meeting to restart development.

5.3 Active Development

In order to start active development, the TC co-chairs will schedule time on a weekly working call and make a request of those in attendance to start active work. If no one objects to start work, then the proposal is considered in active development and can be discussed on the email list and future working calls.

Once the TC begins to work on the proposal during working calls or over email, the proposal is said to be under active development. Proposals under active development will stay in active development until consensus can be achieved on working calls or the proposal is put on hold. When a feature or concept is in active development it will have a status of **Development** in the appropriate document roadmap.

5.4 TC Review

Once the TC has achieved working consensus on a proposal and the document editors have reviewed it for document consistence, the completed proposal **MUST** be presented to the TC for final review during a full TC meeting. This final proposal **MUST** have all specification language, normative and non-normative text, property tables (if applicable), examples, and interop test definitions to be considered complete.

Once the proposal has been presented to the monthly full TC meeting it is considered in final review and it will have a status of **Review** in the appropriate document roadmap and a call for unanimous consent for including this proposal in a specific Committee Specification Draft will be sent to the official TC email list, along with a copy of the proposal.

The TC will be given two weeks to review all documents and voice their approval or objection. If one or more TC members objects to this proposal, the proposal will taken to an official ballot. If no one objects then the proposal will be considered approved by the TC to be included in the official specification documents in the next CSD.

5.5 Draft Text

Once a proposal has been merged into the final specification documents of a particular Committee Specification Draft or a new Committee Specification Draft has been created and the interop test definitions have been merged into the appropriate interop documents, the proposal will have a status of **Draft** in the appropriate document roadmap. At this stage the proposal is waiting for an official CSD ballot to be generated and approved.

6 Obtain CSD Approval (Phase 4)

When all editorial work is done for a given working draft and the TC decides that the working draft should be released as a CSD, the editors will make a motion via the official TC email list. That motion will ask that the TC open a two week ballot to approve that working draft as a CSD. The process for accepting and rejecting a ballot for a CSD is defined by OASIS.

7 Obtain CS Approval (Phase 5)

When a proposal has been approved as part of a CSD, it has exactly 185 days (6 months) from the date the CSD ballot closed to meet the requirements, as defined below, to be included in the next Committee Specification. If the proposal does not meeting these requirements, it will be removed from the current working Committee Specification Draft and will be given a status of **Approved** in the appropriate document roadmap.

The requirements for inclusion in a Committee Specification Draft are as follows:

- The features is supported by at least 2 independent organizations
- The feature is running in at least 2 separate code bases running at least proof of concept level code with real or semi-real data that can interoperate.
- The feature is covered by one or more interoperability tests
- The 2 POC implementations can pass the interoperability tests.

Once a proposal has met all of the requirements to be included in the next Committee Specification, and that CS specification has been approved by the TC, the proposal will be marked with a status of **Finished** in the appropriate document roadmap. If a proposal has not met the requirements to be included in the next Committee Specification then it will be pushed to a future CS release.

Appendix A. Acknowledgments

Participants:

The following individuals were members of the OASIS CTI Technical Committee during the creation of this specification and their contributions are gratefully acknowledged:

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Sourabh Satish, Phantom
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Appendix B. Revision History

Revision	Date	Editor(s)	Changes Made
01	2018-09-05	Bret Jordan	Initial Version