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E. Juskevicius
TrekAhead
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Requirements to Extend the Datatracker
for IETF Working Group Chairs and Authors

Abstract

This document specifies requirements for new functionality to be added to the IETF Datatracker tool to make it possible for Working Group (WG) Chairs and their Delegates to input and update the status of the Internet-Drafts (I-Ds) associated with their WGs. After these requirements are implemented, WG Chairs will be able to use the Datatracker to provide everyone with more information about the status and progression of WG I-Ds than is currently possible.

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Table of Contents

1. Introduction	3
2. Conventions Used in This Document	3
3. General Requirements	4
4. Privilege and Access Control Requirements	6
4.1. For Everyone	6
4.2. For IETF Working Group Chairs	6
4.3. For Delegates of IETF WG Chairs	8
4.4. For IETF WG Document Shepherds	8
4.5. For the Responsible Area Director	9
4.6. Role of the IETF Secretariat in Granting Permissions	9
5. Inputting and Updating WG Document Status Information	10
5.1. WG I-D States	10
5.2. WG I-D Status Annotation Tags	10
5.3. WG I-D Protocol Writeups	11
6. Special Requirements for Some WG I-D States and Conditions	12
6.1. Call for Adoption by WG Issued	12
6.2. Adopted by a WG	14
6.3. WG Document	14
6.4. Parked WG Document	16
6.5. Dead WG Document	16
6.6. In WG Last Call	16
6.7. WG Consensus: Waiting for Writeup	17
6.8. Submitted to IESG for Publication	18
6.9. Revised I-D Needed (Annotation Tag)	18
7. Automatic State Changes for I-Ds	19
8. WG I-D Status Change Reporting Requirements	19
9. WG I-D Status Reporting Requirements	20
10. Error Handling Requirements	21
11. Security Considerations	21
12. References	21
13. Acknowledgments	22

1. Introduction

The IETF Datatracker is a web-based system for managing information about Internet-Drafts (I-Ds) and RFCs, IPR disclosures, liaison statements, and several other important aspects of the IETF process [IDTRACKER].

The Datatracker can track and report on the status of every I-D that has been submitted to the IESG for evaluation and publication. In contrast, the tool currently has almost no ability to track the status of I-Ds that have not been submitted to the IESG. [RFC6174]

Document authors and others have asked for more visibility into the status and progression of IETF Working Group (WG) drafts.

This document specifies requirements to extend the Datatracker to enable status tracking and reporting for WG I-Ds. After these requirements are implemented, WG Chairs will be able to use the Datatracker to provide everyone with more information about the WG status of the I-Ds associated with their WGs than is currently possible.

2. Conventions Used in This Document

The terms "WG I-D", "WG document", and "WG draft" are used synonymously throughout this document. The same is true for the plural case of each term.

A "WG draft" is an I-D that has achieved consensus for adoption as a work item by a WG (compared to an individual submission I-D that has not, or has not yet, achieved consensus).

The terms "WG document" and "WG draft" are not intended to apply to any other document that may be reviewed, discussed, or produced by an IETF Working Group. WG meeting materials such as Blue Sheets, agendas, jabber logs, scribe's notes, minutes, and presentation slides are not to be considered "WG documents" or "WG drafts" in the context of this document.

The phrase "WG status of an I-D" refers to the WG state that an I-D is in per the definitions in Section 4.2 of [RFC6174]. This phrase does not refer to an I-D's availability status (e.g., "Expired", "Active", "Replaced by") as described in Section 3.1 of [RFC6174], or to any of the IESG states used by IETF Area Directors (ADs) to describe the status of I-Ds they may be evaluating. Note that this phrase encompasses all of the states that a WG I-D may be in, plus one more (viz. "Call for Adoption by WG Issued").

The phrase "I-D associated with a WG" is intended to describe two types of Internet-Drafts:

- I-Ds that have been accepted as WG drafts; and
- I-Ds that are being considered under the guidance of a WG Chair for adoption by a WG.

An I-D having a filename that contains the string 'draft-ietf-' followed by a WG acronym is almost always a WG draft and is to be interpreted as being an "I-D associated with a WG" for the purposes of this document.

An I-D having a filename that includes the author's name and a WG acronym but does not include the string '-ietf-' may be a candidate for adoption by a WG and, if so, is also to be interpreted as being an "I-D associated with a WG" for the purposes of this document.

The requirements specified in this document use English phrases ending with "(R-*nnn*)", where "*nnn*" is a unique requirement number.

When used in the context of the requirements in this document, the key words "MUST", "MUST NOT", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", and "MAY" are to be interpreted as described in RFC 2119 [RFC2119]. RFC 2119 defines the use of these key words to help make the intent of standards track documents as clear as possible. The same key words are used in this document to make the meaning of the requirements specified herein as clear as possible.

3. General Requirements

The enhancements to be made to the Datatracker described in this document MUST be implemented in a manner that provides WG Chairs and the people they designate to act as their Delegates with the option to input and update the WG status of some, all, or none of the I-Ds associated with their WGs using the WG I-D states and I-D status annotation tags defined in [RFC6174] (R-001). In other words, the implementation must not require that WG Chairs change their way of working, but only provide optional features. WG Chairs must have the flexibility to use the enhancements to the Datatracker to track the WG status of their I-Ds as is most appropriate for them.

To ensure that at least some WG status information is tracked for every I-D associated with a WG, the Datatracker must be enhanced to generate a few automatic state transitions for every WG I-D. The requirements for this feature are specified in Section 7 of this document.

Requirement R-001 SHALL NOT impair the ability of the Datatracker to track and display the availability state of any I-D (R-002). I-D availability states (e.g., "Active", "Expired", "Replaces") are described in Section 3.1 of [RFC6174].

The Datatracker SHALL NOT permit users other than a Working Group's Chairs (e.g., the Chairs of a different IETF WG) to update the WG status of a WG's documents through the regular Datatracker interface, unless the privileges to do so have been explicitly delegated to them by one of the WG's Chairs (R-003).

The user interface to be provided by the Datatracker to WG Chairs (and their Delegates) to input the WG status of the I-Ds associated with their WGs SHOULD have a look and feel that is similar to the interface currently used by ADs to identify the status of I-Ds under formal evaluation by the IESG (R-004).

Any new pages created to display the status of WG I-Ds SHOULD be designed to have a look and feel that is similar to the pages currently provided by the Datatracker to display the status of I-Ds under formal evaluation by the IESG (R-005).

New javascript user interface code and style sheets implemented to satisfy the requirements in this document SHOULD reuse or share existing code where practical so that when a change to the IESG status of an I-D is entered into the Datatracker, the WG status tracking for that I-D can benefit, and vice versa (R-006).

The Datatracker MUST date and timestamp every update to the WG status of an I-D that is associated with a WG and be able to use that information when it displays the status change history for the I-D (R-007). The WG status change history for an I-D MUST also identify the person or entity that updated the WG status of the I-D (e.g., one of the WG's Chairs, a Delegate, an AD, the System, the IETF Secretariat) and describe the change (e.g., "WG State changed from 'a' to 'b'", "WG Annotation Tag 'x' Set (or Reset)") (R-008).

The inputting or updating of the WG status of an I-D SHALL NOT overwrite any previously archived status change history information for the I-D; every update to the WG status of an I-D MUST be added to the status change history log for the I-D (R-009).

WG I-D status tracking MUST be implemented per-draft, not per-WG (R-010).

WG I-D status tracking SHOULD be implemented as a new front-end to the Datatracker's existing IESG state machine [IESGIDSM] (R-011).

The Datatracker SHALL permit authorized users (e.g., WG Chairs, Delegates) to change the WG state of a draft independently from the IESG state of the same I-D and vice versa (R-012).

4. Privilege and Access Control Requirements

4.1. For Everyone

Everyone needs to be able to view information about the WG status of an I-D without logging on to the Datatracker. Everyone SHALL be given 'read' access to WG I-D status information (R-013).

People who need to input, modify or update the WG status of an I-D (e.g., WG Chairs and their Delegates) need 'write' privileges; these users SHALL be required to log-on to the Datatracker using a personal user-id and password (e.g., an IETF tools password) in order to gain 'write' access (R-014).

4.2. For IETF Working Group Chairs

After successfully logging on to the Datatracker as specified in Requirement R-014, WG Chairs:

- SHALL be given full 'read' and 'write' privileges to input and update the WG status information for all of the I-Ds associated with their WGs (R-015).
- SHALL be able to choose from all of the WG I-D states and WG I-D status annotation tags defined in [RFC6174] to describe the current WG status of the I-Ds associated with their WGs (R-016).
- SHALL NOT be allowed to create new WG I-D states or state names (R-017).
- SHALL NOT be allowed to update or modify information that is not related to the WG status of an I-D (e.g., IANA status, RFC-Editor status, IESG status) (R-018).
- SHALL be able to designate a maximum of three people to act as their Delegates to input and update the WG status of the I-Ds associated with each of their WGs (R-019). A suitable way to specify a Delegate may be to use the individual's current e-mail address, but the delegation MUST be to the individual identified by the login credentials used by the Datatracker at any given time rather than to an e-mail address (R-020). Individuals must be able to update their e-mail addresses in the future without breaking the delegation specified in Requirement R-019.

- SHALL be able to designate a maximum of three different people to act as their Delegates in a different WG if a WG Chair is also responsible for the different WG (R-021).
- SHALL be able to designate people who have other roles in the IETF process (e.g., are Chairs of different WGs, are ADs in a different Area) to be their Delegates (R-022).
- SHALL be able to review and change their Delegates (R-023).
- SHALL be able to input or upload Document Shepherd protocol writeups for all of the I-Ds associated with their WGs (R-024).
- SHALL be able to designate themselves as the Document Shepherds for some or all of the I-Ds in their WGs (R-025).
- SHALL be able to designate other people to be Document Shepherds for one or more of their WG I-Ds if this role will not be performed by the WG Chairs (R-026). A suitable way to designate people to be the Document Shepherds may be to use their e-mail addresses, but the delegation MUST be to the individuals identified by the login credentials used by the Datatracker at the time, rather than to the e-mail addresses (R-027). The Datatracker MUST be able to maintain an individual's designation as a Delegate per R-026 in the event that the person changes their e-mail address in the future (R-028).
- SHALL be warned in real-time (e.g., via the Datatracker's regular user interface) if a person they try to designate as a Delegate or Document Shepherd does not have the necessary login credentials for the Datatracker (R-029). The Datatracker SHALL then allow the WG Chairs to confirm the original designee or to pick another (R-030).
- SHALL be able to review and change the people designated to be Document Shepherds for each of their WG I-Ds (R-031).
- SHOULD be able to access the same user interfaces the Datatracker provides to their Delegates and Document Shepherds in order to mentor or coach them on how to input and update WG I-D status information in the Datatracker (R-032).

4.3. For Delegates of IETF WG Chairs

After successfully logging on to the Datatracker, the Delegates of WG Chairs (e.g., WG Secretaries) SHALL have the same privileges as their WG Chairs to input WG I-D status information and Document Shepherd protocol writeups as specified in Requirements R-015 to R-018 inclusive, R-024, and R-025 (R-033).

The Datatracker SHALL send an e-mail to the Chairs of the WG, the IETF Secretariat, and to a newly designated Delegate if the newly designated Delegate does not have a personal user-id and password to log-on to the Datatracker (R-034). The purpose of the e-mail is to notify the WG Chairs that the person they designated to be a Delegate needs to take action to obtain a personal user-id and password, and to inform the Delegate that he/she needs to take action (e.g., to contact the IETF Secretariat) to obtain their own user-id and password for the Datatracker.

4.4. For IETF WG Document Shepherds

The IETF document shepherding process and the role of an IETF WG Document Shepherd is described in RFC 4858 [RFC4858].

The requirements in this Section describe the access privileges to be granted to a WG Document Shepherd who is not a WG Chair or a Delegate with the privileges specified in Section 4.3.

Per Requirement R-014, each person designated to be a Document Shepherd for a WG draft needs to have their own personal user-id and password to log-on to the Datatracker.

The Datatracker SHALL alert the WG Chairs, the IETF Secretariat, and the newly designated Document Shepherd (e.g., via e-mail) if a person newly designated as a Document Shepherd does not have a personal user-id and password to log-on to the Datatracker (R-035). The purpose of the e-mail is to notify the WG Chairs that the Document Shepherd needs to take action to obtain a personal user-id and password, and to inform the Document Shepherd that he/she needs to take action (e.g., to contact the IETF Secretariat) to obtain a personal user-id and password for the Datatracker.

Document Shepherds need to be able to upload or input protocol writeups into the Datatracker for the WG I-Ds assigned to them. They also need to be able to set and reset the WG I-D status annotation tag called "Doc Shepherd Followup Underway" as defined in Section 4.3.10 of [RFC6174] for I-Ds in the "WG Consensus: Waiting for Writeup" state.

After successfully logging on to the Datatracker, Document Shepherds SHALL have restricted 'write' privileges to upload or input protocol writeups for the WG I-Ds assigned to them when the I-Ds are in the "WG Consensus: Waiting for Writeup" state (R-036).

Document Shepherds SHALL also have the ability to set and reset the WG I-D status annotation tag called "Doc Shepherd Followup Underway" as defined in Section 4.3.10 of [RFC6174] (R-037).

The "Doc Shepherd Followup Underway" annotation tag should be set to indicate when the Document Shepherd has started work on a writeup for the document. The absence or resetting of this annotation tag may indicate the protocol writeup has not yet been started, or has been put on-hold for some reason, or has been completed. The log of set and reset operations performed on this annotation tag will provide insight into the status of the protocol writeup for a WG I-D.

Section 5.3 describes how Document Shepherds may input or upload protocol writeups to the Datatracker for the WG I-Ds assigned to them.

4.5. For the Responsible Area Director

After successfully logging on to the Datatracker, an AD SHALL have the same privileges as a WG Chair to input and update WG I-D status information, to designate Delegates and Document Shepherds (R-038). An AD SHALL have the privileges specified in Requirement R-038 for every WG in his or her Area (R-039). ADs MUST also retain their existing privileges to input and update the IESG status of the I-Ds for which they are responsible (R-040).

To minimize confusion, the Datatracker MUST make it easy for ADs to distinguish between their IESG-level privileges (to input or update the IESG status of an I-D) and the WG-level privileges they will obtain as a result of R-038 and R-039 for I-Ds associated with the WGs for which they are responsible (R-041).

4.6. Role of the IETF Secretariat in Granting Permissions

The IETF Secretariat is involved in granting permissions to people who need to log in to the Datatracker.

Before granting permissions to update WG I-D status settings to a person who does not have them, the IETF Secretariat should verify that the person requesting the permissions is a WG Chair or an AD, or has been delegated the authority to update WG I-D status information by one of the WG's Chairs or a Responsible AD. The e-mails to be generated and sent by the Datatracker per Requirements R-034 and

R-035 will alert the Secretariat that the granting of permissions to some new people will be needed.

5. Inputting and Updating WG Document Status Information

5.1. WG I-D States

Requirements R-001, R-016, and R017 specify that the WG state of an I-D may only be described using the states defined in Section 4 of [RFC6174].

When a WG Chair or Delegate logs on to the Datatracker to input or change the WG state of an I-D, the Datatracker SHOULD display the current state of the I-D, the length of time the document has been in its current state, the amount of time the I-D may continue to remain in its current state if this information is available (viz. per Requirements R-064 and R-083), and the most likely next WG state (or states) for the I-D (R-042). The Datatracker MAY use the WG I-D state machine illustrated in Section 4.1 of [RFC6174] to identify the 'most likely next state' (or states) for an I-D that is associated with a WG (R-043).

After displaying the information required by R-042, the Datatracker SHALL make it easy for the WG Chair or Delegate to select a next state for the I-D and to enter some text to explain the state change for the I-D's status change history (R-044). The Datatracker SHALL encourage the person who updates or changes the WG state of an I-D to provide some context for the status change by entering text to describe the change in the I-D's status change history log (R-045).

The Datatracker SHALL allow a WG Chair (or Delegate) to select the next state for an I-D from the 'most likely' next states described by Requirement R-043, or from any of the other WG I-D states (per Requirement R-016) if a different state change is required (R-046).

5.2. WG I-D Status Annotation Tags

WG I-D status annotation tags may be used to describe a condition that is affecting a document (e.g., why a WG I-D is in the state it is in) or to indicate an action needed to progress the document; however, annotation tags do not change the state of WG I-Ds.

Section 4.3 of [RFC6174] defines the meaning and usage of the WG I-D status annotation tags to be added to the Datatracker.

The Datatracker SHALL allow WG Chairs and their Delegates to set and reset each of the WG I-D status annotation tags defined in Section 4.3 of [RFC6174] for every I-D associated with their WGs (R-047).

WG I-D status annotation tags SHALL be able to be used individually or in combination with other annotation tags to describe the status of any I-D associated with a WG (R-048).

When a WG Chair, Delegate, or Document Shepherd logs in to the Datatracker to set or reset one or more WG I-D status annotation tags for the I-Ds they are responsible for, the Datatracker SHOULD display a summary of all annotation tag set/reset operations to date for those WG I-Ds, from the present time backwards, split by pages, and then guide the user to select one (or more) annotation tags to be set or reset (R-049). Note that Document Shepherds who are not WG Chairs may only set and reset the annotation tag called "Doc Shepherd Followup Underway" per Requirement R-037.

The summary of annotation tag set/reset operations (required by R-049) SHALL also indicate when each annotation tag attached to the current state of each I-D was set or reset and the identity of the person or entity that set or reset each I-D status annotation tag (R-050).

The Datatracker SHALL allow more than one annotation tag to be set or reset per logon, and the Datatracker SHALL encourage the user to input some text to explain why each annotation tag is being set or reset (R-051).

5.3. WG I-D Protocol Writeups

The IESG currently requires a protocol writeup for every WG I-D before the I-D is submitted to the IESG for evaluation.

When a user (e.g., WG Chair, Document Shepherd) logs in to the Datatracker to input or upload a protocol writeup for an I-D, the Datatracker SHOULD make it easy for the user to understand the current status of the protocol writeup for every I-D for which he/she is responsible (R-052). The Datatracker SHOULD indicate at least the date when the most recent protocol writeup was uploaded or inputted for each I-D and the identity of the person or entity that performed the upload or input operation (R-053).

After displaying the information required by R-053, the Datatracker SHALL provide the user with an interface to input or upload a protocol writeup for the I-Ds that he/she is responsible for, and to set or reset the "Doc Shepherd Followup Underway" annotation tag for I-Ds (R-054). The Datatracker SHALL encourage the user to set or reset the "Document Shepherd Followup Underway" annotation tag before the end of each protocol writeup uploading or inputting session and to input some descriptive text (for context) to be stored in I-D's status change history log (R-055).

Per Requirement R-100, the Datatracker will send an e-mail to the author of a WG draft (and carbon copy (CC) the WG Chairs and Delegates) when the protocol writeup for the I-D is loaded into the Datatracker. A copy of the e-mail SHALL also be sent to the Document Shepherd if he/she is not the WG Chair (or Delegate) as notification that the protocol writeup for the I-D was successfully loaded into the Datatracker (R-056).

Recall that WG Chairs and their Delegates shall be able to input a protocol writeup for any of their WG drafts at any time per Requirements R-024 and R-033.

If a Document Shepherd who is not a WG Chair or other Delegate attempts to upload or input a protocol writeup for an I-D that is not in the WG state called "WG Consensus: Waiting for Writeup", the Datatracker SHOULD warn the Document Shepherd that it may be too early to input a writeup, and then direct the Document Shepherd to contact one of the WG's Chairs for guidance (R-057). The WG Chair may decide to move the I-D into the "WG Consensus: Waiting for Writeup" state to enable the Document Shepherd to upload his/her protocol writeup, or the WG Chair may upload the protocol writeup as specified in Requirement R-024.

Requirement R-032 specifies that WG Chairs should be able to access the Document Shepherd user interface and call up a display of the same WG document protocol writeup status information that the Datatracker provides to each of a WG Chair's designated Document Shepherds. This is to enable each WG Chair (or Delegate) to be able to mentor new Document Shepherds and to review the workload assigned to each Document Shepherd. WG Chairs (and their Delegates) who are logged in to the Datatracker with their normal privileges SHALL be able to access the Document Shepherd user interface without having to logout and log back in to the Datatracker (R-058).

6. Special Requirements for Some WG I-D States and Conditions

6.1. Call for Adoption by WG Issued

The "Call for Adoption by WG Issued" state may be used to describe a draft that is being considered for adoption by an IETF WG. An I-D in this state has not yet achieved consensus, preference, or selection in a working group.

This state may be used to describe an I-D that someone has asked a WG to consider for adoption if the WG Chair has agreed with the request. This state may also be used to identify an I-D that a WG Chair asked

an author to write specifically for consideration as a candidate WG item, and/or an I-D that is listed as a 'candidate draft' in the WG's charter. [RFC6174]

The Datatracker SHALL allow a WG Chair or Delegate to move an I-D into the "Call for Adoption by WG Issued" state in her or his WG if the I-D is not currently being considered for adoption in any other WG, is not yet adopted by any other WG, is not expired, and has not been withdrawn (R-059). An I-D can only be in the "Call for Adoption by WG Issued" state in one WG at a time.

The Datatracker SHALL NOT change the WG status of an I-D that is in the "Call for Adoption by WG Issued" state until the I-D expires, until the WG Chair (or Delegate) moves the I-D into a different state, or until it is decided that the WG will not adopt the I-D, whichever comes first (R-060). In case a WG decides not to adopt an I-D that is in the "Call for Adoption by WG Issued" state, the Datatracker SHALL allow the WG Chairs (and Delegates) to cancel their interest in the I-D (R-061).

The Datatracker SHALL transition the state of an I-D that expires or is not adopted (per Requirement R-061) from the "Call for Adoption by A WG" state into a "NULL" state with respect to the WG state machine and then update the status change history log of the I-D accordingly (R-062). An I-D that is not adopted by a WG may revert back to having no stream-specific state in the Datatracker.

If a different WG Chair (or Delegate) attempts to move an I-D into the "Call for Adoption by WG Issued" state in while the I-D is associated with another WG, the Datatracker will not allow the attempted state change to occur because of Requirement R-059. In this case, the Datatracker SHALL inform the WG Chair or Delegate in real-time (via the user interface that he/she is logged in to) that the I-D is currently associated with a different WG and that the state change they requested cannot be made at this time (R-063).

A WG Chair (or Delegate) who moves an I-D into the "Call For Adoption By WG Issued" state SHALL be able to, but is not required to, specify a length of time the I-D may remain in this state (R-064). It SHALL be possible to specify the maximum length of time as a "number of weeks"; however, the maximum length MUST NOT be allowed to extend beyond the expiry date of the I-D (R-065). Other ways to specify this length of time MAY optionally be provided (R-066).

If an I-D is still in the "Call for Adoption by WG Issued" state when the length of time specified in R-064 runs out, the Datatracker SHALL send an e-mail to inform the WG Chairs and Delegates that the time has run out and that the I-D is still in "Call for Adoption by WG

Issued" state (R-067). The purpose of this message is to remind the WG Chairs and Delegates that they had planned to make a decision on adopting the I-D by now.

6.2. Adopted by a WG

The "Adopted by a WG" state describes an individual submission I-D that an IETF WG has agreed to adopt as one of its WG drafts.

An individual submission I-D that is adopted by a WG may take weeks or months to be resubmitted by the author as a new (version-00) WG draft.

WG Chairs who use this state will be able to clearly indicate when their WG has adopted an individual submission I-D. This will facilitate the Datatracker's ability to correctly capture "Replaces" information for WG drafts and "Replaced by" information for the individual submissions I-Ds that are replaced by WG drafts.

The Datatracker shall allow an individual submission I-D to be moved into the "Adopted by a WG" state if the I-D is not expired and it has not been withdrawn, been 'replaced by' another I-D, or been adopted by another IETF WG (R-068). When a WG Chair or Delegate moves an I-D into the "Adopted by a WG" state, the Datatracker SHALL confirm this state change via e-mail to the author of the I-D and to the Chairs and Delegates or the WG that adopted the I-D (per Requirement R-100).

Requirement R-009 specifies that changes to the WG status of an I-D shall not overwrite any previously archived I-D status history information for the I-D. All status change history information for an I-D needs to be preserved, including when an I-D is revised and subsequently approved for posting as a new version-00 "WG Document" having a different filename (viz. a filename that includes the string 'draft-ietf-' followed by a WG acronym).

6.3. WG Document

The "WG Document" state describes an I-D that has been adopted by an IETF WG and is being actively developed.

WG Chairs and their Delegates SHALL be allowed to move an I-D that is not associated with any other WG into the "WG Document" state in their WG unless the I-D has expired, been withdrawn, or 'replaced by' another I-D or RFC (R-069).

Alternatively, WG Chairs may rely on the functionality specified in Requirement R-070 to automatically move a version-00 draft into the "WG Document" state.

The Datatracker SHALL automatically place a new version-00 I-D into the "WG Document" state if a WG Chair approves the submission of the I-D for posting in the IETF document repository and if the filename of the I-D includes the string 'draft-ietf-wgname-' (R-070).

The Datatracker SHOULD encourage the WG Chair to input, confirm, or correct the filename of the individual submission I-D that is being 'replaced' (if any) by a new version-00 WG draft at the time that the WG Chair approves the posting of the new I-D (R-071).

The WG Chair (or Delegate) who approves or moves an I-D into the "WG Document" state for the first time SHALL be encouraged to input an "Intended Maturity Level" for the I-D as defined in Section 5 of [RFC6174] if the Datatracker cannot automatically determine this information for some reason (R-072). The Datatracker SHALL allow the "Intended Maturity Level" to be changed after first being set, and the Datatracker SHALL allow a WG Chair or Delegate to enter this information at a later time if the "Intended Maturity Level" for an I-D could not be identified when the I-D was initially moved into the "WG Document" state (R-073).

The Datatracker SHALL allow WG Chairs and their Delegates to move an I-D into the "WG Document" state from any other WG I-D state (e.g., per Sections 3.2 and 4.1 of [RFC6174]) if the I-D has not expired, been withdrawn, or been 'replaced by' another I-D or RFC (R-074).

Under normal conditions, it should not be possible for an I-D to be in the "WG Document" state in more than one IETF WG at a time. The Datatracker SHALL NOT allow a WG Chair or Delegate to move an I-D into the "WG Document" state in their WG if the I-D is already in some WG I-D state in a different WG (R-075).

An I-D that is in the "WG Document" state may be transferred from one WG to a different WG by a Responsible AD. The Datatracker SHALL allow a Responsible AD to transfer an I-D from one WG to a different WG, and it SHALL encourage the AD to input some text for the status change history log of the I-D to provide context for the transfer (R-076). If an AD transfers an I-D, the Datatracker SHALL send an e-mail to the author of the I-D and CC the Chairs, their Delegates, and the Responsible ADs (for the WGs affected by the transfer) to inform them that the I-D has been transferred (R-077).

6.4. Parked WG Document

A "Parked WG Document" is an I-D that has lost its author or editor, is waiting for another document to be written or for a review to be completed, or cannot be progressed by the working group for some other reason.

The Datatracker SHALL allow a Responsible AD to transfer a "Parked WG Document" that is not expired from one WG to a different WG, and it SHALL encourage the AD to input some text to provide context for the transfer in the status change history log of the I-D (R-078).

If an AD transfers an I-D, the Datatracker SHALL send an e-mail to author of the I-D, to the WG Chairs and their Delegates, and to the Responsible ADs (of the WGs affected by the transfer of an I-D) to inform them that the I-D has been transferred to a different WG (R-079).

6.5. Dead WG Document

A "Dead WG Document" is an I-D that has been abandoned. Note that 'Dead' is not always a final state for a WG I-D. If consensus is subsequently achieved, a "Dead WG Document" may be resurrected; however, a "Dead WG Document" that is not resurrected will eventually expire.

The Datatracker SHALL allow a Responsible AD to transfer an I-D that is not expired from being in the "Dead WG Document" state in one WG to a non-dead state in different WG, and the Datatracker SHALL encourage the AD to input some text to provide context for the transfer in the status change history log of the I-D (R-080).

If an AD transfers an I-D under the conditions specified by Requirement R-080, the Datatracker SHALL send an e-mail to the author of the I-D, the WG Chairs, the Delegates, and the Responsible ADs (for the WGs affected by the transfer) to inform them that the I-D has been transferred to a different WG (R-081).

6.6. In WG Last Call

A document that is in the "In WG Last Call" state is an I-D for which a Working Group Last Call (WGLC) has been issued and is in progress. Note that WG Last Calls are an optional part of the IETF WG process, per Section 7.4 of RFC 2418 [RFC2418].

A WG Chair who decides to conduct a WGLC on an I-D may use the "In WG Last Call" state to track the progress of the WGLC.

A WG Chair (or Delegate) SHALL be able to configure the Datatracker to send a WGLC message to one or more mailing lists when he/she moves a WG draft into the "In WG Last Call" state and be able to select a different set of mailing lists for each I-D because some documents may need coordination with other WGs (R-082).

The Datatracker also needs to be able to send an e-mail, after a specified period of time, to remind or 'nudge' a WG Chair to conclude a WGLC and to determine a next state for the I-D.

The WG Chair (or Delegate) who moves an I-D into the "In WG Last Call" state SHALL be required to specify a length of time for the WGLC (R-083). The amount of time SHALL be able to be expressed as a "number of weeks", but it SHALL NOT be allowed to extend beyond the expiry date of the I-D (R-084). Other measures of time (e.g., "until a specific date in the future") MAY optionally be supported (R-085). The amount of time MUST be able to be changed after first being set (R-086).

If an I-D is still in the "In WG Last Call" state when the amount of time specified in R-084 or R-085 runs out, the Datatracker SHALL send an e-mail to inform the WG Chairs and Delegates that the I-D is still in the "In WG Last Call" state, and to remind them they had planned to conclude the WGLC by now (R-087).

Note that a WGLC may lead directly back into another WGLC for the same document. For example, an I-D that completed a WGLC as an "Informational" document may need another WGLC if a decision is taken to convert the I-D into a Standards Track document. The Datatracker MUST allow this to occur. (R-088)

6.7. WG Consensus: Waiting for Writeup

A document in the "WG Consensus: Waiting for Writeup" state has essentially completed its development within the WG, and is nearly ready to be sent to the IESG for publication. The last thing to be done is the preparation of a protocol writeup by the Document Shepherd. The IESG requires that a protocol writeup be completed before publication of an I-D is requested.

An I-D in the "WG Consensus: Waiting for Writeup" state SHALL remain in this state until the WG Chair (or Delegate) moves the document to a different state (R-089).

The Datatracker SHOULD be configurable to send an e-mail to a WG's Chairs and Delegates after a specified period of time to remind or 'nudge' them to check the status of the Document Shepherd's writeup for an I-D (R-090). This feature SHOULD look and feel similar to the way that Requirements R-064 to R-067 inclusive are implemented (R-091).

6.8. Submitted to IESG for Publication

This state describes a WG document that has been submitted to the IESG for publication and that has not been sent back to the WG for revision. An I-D in this state may be under review by the IESG, or it may have been approved and be in the RFC Editor's queue, or it may have been published as an RFC. Other possibilities exist too. The document may be "Dead" (in the IESG state machine) or in a "Do Not Publish" state.

The Datatracker SHOULD look for the presence of WG I-D status annotation tags when a WG draft is moved into this state. If there are any tags that have not been cleared or reset, the Datatracker SHOULD encourage the WG Chairs (or Delegates) in real-time to reset or clear any extraneous annotation tags (R-092).

6.9. Revised I-D Needed (Annotation Tag)

After an I-D is submitted to the IESG, it may be judged as needing revision before it can be published as an RFC. An AD or the IESG as a whole may return a document to a WG for revision.

An I-D that needs revision may be identified when the Responsible AD appends the "Revised I-D Needed" annotation tag to the IESG state of the I-D.

If an AD or the IESG as a whole sends an I-D back to a WG for revision (e.g., as described in Section 3.2 of [RFC6174]), the WG's Chairs may decide to change the WG state of the I-D from "Submitted to IESG for Publication" to a different state and to append one or more WG I-D status annotation tags to the I-D (e.g., per Sections 4.3.8 or 4.3.9 of [RFC6174]).

The Datatracker SHALL allow, but not require, the WG Chair or Delegate who attaches a "Revised I-D Needed" annotation tag to the WG status of an I-D to indicate the number of weeks they expect it will take for a revised document to be produced (R-093). The Datatracker should also prompt the user to consider changing the WG state of the I-D from "Submitted to IESG for Publication" to something else (e.g., Parked WG Document, WG Document, Waiting for WG Chair Go-Ahead) (R-094).

If a revised version of the I-D is not submitted to the WG before the time specified in R-093 elapses, the Datatracker SHALL send an e-mail to the WG's Chairs and Delegates to remind or 'nudge' them to followup on the revisions to the document (R-095).

The Datatracker SHALL automatically reset or clear the "Revised I-D Needed" annotation tag attached to the WG status of an I-D when a revised version of that I-D is posted (R-096).

7. Automatic State Changes for I-Ds

To reduce the amount of information that WG Chairs and Delegates need to input to the Datatracker, the tool must automatically generate the following WG state transitions:

- The Datatracker will move a version-00 I-D into the "WG Document" state when a WG Chair approves the posting of an I-D that includes the string '-ietf-' in its filename (as specified in Requirement R-070; and
- The Datatracker SHALL transition a draft into the WG state called "Submitted To IESG For Publication" at the same time that the I-D is moved into the "Publication Requested" state in the IESG state machine by an AD or the IETF Secretariat (R-097).

8. WG I-D Status Change Reporting Requirements

Everyone with 'write' access to WG I-D status information SHALL be able to obtain a summary display of all status changes made to the WG I-Ds that *they* are responsible for, from the present time backwards, split by pages, after successfully logging on to the Datatracker (R-098).

The Datatracker SHOULD provide a convenient way for WG Chairs to obtain a summary of all WG I-D status changes made on their behalf by their Delegates, from the present time backwards, split by pages (R-099).

The Datatracker SHALL send an e-mail message to the authors of an I-D and to the Chairs and Delegates of the WG to which the I-D is associated whenever the WG status of the I-D is updated; the contents of the e-mail SHALL provide details about the change in the WG status of the document (e.g., the new state the I-D has been moved to and/or the names of any newly set or reset I-D status annotation tags), the date of the change in status, and an indication of who (or which entity) caused the change to the WG status of the I-D (R-100).

9. WG I-D Status Reporting Requirements

The Datatracker SHALL provide everyone with a convenient way to query the status of every document in an IETF WG and to see a display of the current status of some or all of the documents in the WG, including the Document Shepherd protocol writeups for I-Ds that have been submitted to the IESG and the names of the Document Shepherds (R-101).

The Datatracker SHALL also provide everyone with the ability to search for the status of documents written by a specific author, or I-Ds in a specific WG I-D state or having a specific "Intended Maturity Level", or having a specific annotation tag attached (R-102).

The Datatracker's existing I-D status display pages SHOULD be modified to display at least the metadata and status information for an I-D that is associated with a WG as shown in the following example (R-103):

```

-----
Document stream:          IETF
I-D availability status:  Active / Expired / Withdrawn / RFC
                        Replaces / Replaced by I-D or RFC
                        (if applicable)
Last updated:            year-mm-dd (e.g. 2010-11-18)
IETF WG status: *        Applicable WG state & name of WG or WGs
Intended RFC status: **  Informational / Experimental / etc.
Document shepherd: ***   Name of Document Shepherd (if assigned)
IESG status: ****        Name of applicable IESG state
Responsible AD:          Name of the Responsible AD
-----

```

- * The "IETF WG status" SHALL display the current WG state of the I-D and the WG that the I-D is associated with, and any I-D status annotation tags that are currently set (R-104).
- ** The "Intended RFC status" for I-Ds in the WG state called "Adopted for WG Info Only" SHOULD be displayed as "None" (R-105).
- ** The field called "Intended RFC status" SHOULD be renamed to "RFC status" when the Datatracker displays the status of a document that has been published as an RFC (R-106).

- *** This field SHOULD display the name of the person (or e-mail address of the person) designated as the Document Shepherd for the I-D, or be left blank if a Document Shepherd has not yet been designated (R-107).
- **** This field SHALL display the current IESG status of the document or the word "None" for documents that are not yet being tracked by the IESG (R-108).

10. Error Handling Requirements

Errors with respect to inputting or updating the status of a WG document are possible.

Per Requirement R-009, the creation of new or updated status information cannot erase, overwrite, or cause the deletion of any previously entered document status change history information.

Errors in data entry by a WG Chair or Delegate should be corrected by a WG Chair or Delegate taking action to update any erroneous status information in the Datatracker with correct information, so that the correct status of the I-D is displayed. For example, a document that was accidentally placed into the wrong state can be moved into the correct state by the WG Chair (or Delegate), and a comment should be entered into the document's status change history log to explain what happened.

11. Security Considerations

This document does not propose any new Internet mechanisms and has no security implications for the Internet.

However, this document contains specific requirements to add features to the IETF Datatracker to make it possible for a greater number of users to input and/or update status information about I-Ds associated with IETF WGs. Enhancing the Datatracker may create an opening for new denial-of-service (DoS) attacks and/or attempts by malicious users to corrupt the information in the WG document status database.

This document does not propose any specific requirements to mitigate DoS attacks on the Datatracker.

12. References

12.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

- [RFC2418] Bradner, S., "IETF Working Group Guidelines and Procedures", BCP 25, RFC 2418, September 1998.
- [RFC4858] Levkowitz, H., Meyer, D., Eggert, L., and A. Mankin, "Document Shepherd from Working Group Last Call to Publication", RFC 4858, May 2007.
- [RFC6174] Juskevicius, E., "Definition of IETF Working Group Document States", RFC 6174, March 2011.

12.2. Informative References

- [IDTRACKER] "The IETF Datatracker tool", Web Application:
<https://datatracker.ietf.org/>, Version 3.12, February 2, 2011.
- [IESGIDSM] "Diagram of Main I-D States", Web Application:
https://datatracker.ietf.org/images/state_diagram.gif,
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- [TRCKREQTS] Levkowitz, H. and Mankin, A., "Requirements on I-D Tracker Extensions for Working Group Chairs", Work in Progress, February 2007.

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Author's Address

Ed Juskevicius
TrekAhead
PO Box 491, Carp, ON
CANADA

EEmail: edj.etc@gmail.com