                    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.

Status of This Memo

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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 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 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

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   *   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
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   [RFC2418]   Bradner, S., "IETF Working Group Guidelines and
                Procedures", BCP 25, RFC 2418, September 1998.

   [RFC4858]   Levkowetz, H., Meyer, D., Eggert, L., and A. Mankin,
                "Document Shepherding 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,
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   [IESGIDSM]   "Diagram of Main I-D States", Web Application:
                https://datatracker.ietf.org/images/state_diagram.gif,
                October 21, 2002.

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                Tracker Extensions for Working Group Chairs", Work in
                Progress, February 2007.

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