Requirements for Tracking Drafts in the IETF Datatracker

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Overview

• Introduce the topic as a whole
• Introduce major parts of draft-ietf-genarea-datatracker-community-01
• Get feedback
  – In fact, feedback is welcome during the presentation as long as it looks like we will finish in two hours
High-level goal: let people keep track of changes in Internet Drafts

- You want to know when a particular draft has a new version
- You probably want to know when it changes state (goes into WG last call, is sent to the IESG, is sent to the RFC Editor, ...)
- You follow a lot of drafts
- How do you keep track of everything?
Requirements for proposed additions to the Datatracker

• The IAOC wants to explore extending the IETF Datatracker to help users track documents
• It needs to get a set of requirements from the community
• If the requirements look good, the IAOC will put the proposal out for bid to contractors who already work on the Datatracker
• The requirements-collecting work was put out as an RFP about a month ago, and the bid awarded recently
Preliminaries

• The goal is a list of requirements, not a fully-fleshed out UI
• This work is at a very early stage
• The eventual tool will need to appeal to a wide audience: ADs, WG chairs, experts, novices, folks who barely understand the IETF
• This is more adventurous than most other Datatracker revisions
Statement of work (1)

• Ability to create one or more (possibly large) lists of I-Ds that they want to follow
• Ability to get notifications when individual drafts from a list changes state
• Ability to see all of the state changes that have occurred on all the drafts in a list over a specified range of dates
Statement of work (2)

• Ability to set the granularity of the changes (such as “every change”, “just approvals and publication”, and so on)
• Ability to organize the views of a list in many fashions that would be useful to different types of community members
• Ability to share and merge lists with other community members
Should we be doing this work at all?

- One proposal to skip most of the project and focus only on making granular Atom feeds for draft changes
- Leaves display and sorting and updating to the users RSS reader
High-level operation

• A user (anyone, really) creates a new empty list of drafts
• They populate the list with individual drafts or groups of drafts by attribute
• They view the list in the Datatracker at any time
• They get updates
  – by looking at the Datatracker
  – by viewing their optional Atom feed
  – by reading the optional mail stream
List creation

• Anyone can create one or more lists
  – Would be normal for someone to have multiple lists for different needs
• Once a list is created, adding to it and changing the contents should be easy
• Lists can dynamically contain other lists
List maintenance

- Lists with attribute-fed groups (such as “all drafts in the Xyz WG”) need to be updated often, such as every hour
- If someone stops using the list, it takes up some space on the IETF server, but not much
- Need a method for deleting long-unused lists, also maybe need a method for letting a user delete a list
Adding drafts to a list needs to be simple

• Easy to add an individual draft (from a list, by typing full name, etc.)
• Adding groups of drafts
  – All drafts in a WG, all WGs in an Area
  – All drafts with a particular responsible AD, author, document shepherd
  – All drafts that have a reference to a particular RFC, a particular draft
  – All drafts that are referenced by a particular RFC, a particular draft
  – All drafts that contain a particular text string
Lists should be able to be private

• Lots of reasons why someone would not want someone else to know which drafts they are following
• These aren’t secret, but the IETF should make a reasonable effort for privacy
• However: some lists need to be public
  – For example, a WG chair might create one that everyone in the group would want to follow
Ideas for making private lists

• Password-protected
  – Similar to things most people are familiar with
  – Susceptible to password-guessing

• Allocate URLs from a large \((2^{128})\) namespace
  – Relies on copy-and-paste
  – If someone forgets their list name, they can just create a new one
  – Maybe send reminders (if email addresses are even kept)
Some lists should be public

- It would be nice to be able to let others get the benefit out of an interesting list you created (“all drafts on v6 transition strategies”, etc.)
- Maybe have mirrors of private lists
- You don’t want to just expose the private list because then others can modify its contents
Once you have a list: tracking changes to your drafts

• Three options defined:
  – Look in the Datatracker (with some options for sorting and columns shown)
  – Get the Atom feed, follow it in your favorite RSS reader
  – Get the mail stream

• Are there others that should be offered?
Automatic notifications

• Atom feeds and mail streams
• Each change for every draft in a list
• Type of change is marked so that the user can filter
• Two levels of granularity: every change (new versions and all states) and “significant changes” (not drafts, but major state changes)
Atom feed

- We can structure the XML messages however we want
- The IETF still has a lot of Atom experts who follow other drafts, so getting their help should not be difficult
Mail stream

• We can structure the subject and body however we want
• Maybe interesting MIME
• Maybe XML / JSON / tab-separated body text
• Maybe them all
Display in the Datatracker

• Need to be able to see “changes since nnn days”, “changes since dd/mm/yy”, and so on
• Can sort the rows in many ways (alphabetical or date)
• Can display only particular columns
File output

• When visiting a list page in the Datatracker, the user can download a file that has all the data in it
• Format to be determined
• Maybe offer in multiple formats, but maybe just one with pointers to code samples for parsers
Open issues

• Add your own!
• Here are some that have appeared so far, but there are probably others
• Bringing new ones up early will help spark other ideas
Known open issues (1)

- A way to say “tell me if this draft does not change state in the next nnn days”. This gives a “dashboard” style capability.
- Better coverage of the states of non-IETF streams (IRTF, IAB, ISE). Also, need definitions of “significant change in status” for the three non-IETF streams.
- Difficult interplay between privacy and sharing lists. If someone shares a list, that person doesn’t want anyone modifying the contents of the list. So, there might need to be “sharing a shadow list” or something similar.
Known open issues (2)

- There may be legal issues with keeping user data private if we use login accounts.
- Is there a formal definition for “drafts associated with a particular WG”?
- When an AD agrees to sponsor an individual submission, does the Datatracker consider that draft associated with the AD?
- Thought: add a button in the normal Datatracker output to add a particular draft to a particular list.
Known open issues (3)

• Should the file output be in all the interesting formats (XML and JSON and tab-separated text) or just one?
• How prescriptive do we want to be? Should this say things like “JavaScript pop-up” and “CSS” and such?
• Should paging be supported for long lists in the HTML display?
• Does the user need to be able to specify a date range, or just a range that ends in now?
And now...

- You!