

# Introduction to Working Group Leadership: Chairs and Editors

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# Acknowledgements

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- Introduction
- Getting a WG started
- Steps in the WG process
- WG Chair/Editor Responsibilities
- Getting drafts published as RFCs
- Making WGs work for everyone
- Conclusion

# Goals

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- How to be an effective WG chair
- How to be an effective document editor
- What WG members should expect from you
- How chairs and editors can work together to make the process go smoothly

# Qualifications for a WG chair

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- You have to balance progress and fairness
  - If you aren't fair, you won't make real progress
  - If you don't make progress, fairness doesn't matter
- If you often insist on having your own way, don't chair a WG
- How willing are you to work through others?
  - How successful are you when you work with volunteers?
  - How successful are you when you work with competitors?

# Qualifications for a document editor

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- Written organization skills are important even on the shortest of documents
  - Can you organize a protocol as well as you can organize your code?
- Protocols live and die on document clarity
  - RFCs are written in English, but
  - are often read by English-as-Second-Language readers
- Fairness and working well with others are just as important for editors as they are for chairs

# Which will it be: chair or editor?

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- Some skills and motivations overlap
- Are you doing this for the fame and glory?
  - “The fleeting and often minor fame and glory?”
- How committed are you?
  - It will almost always take longer than you expected
  - Editing documents takes more work at peak times, but often less total time than being a WG chair
  - Sponsoring organization changes are commonplace
  - ADs may prefer not to have authors or technology proponents as chairs

# WG secretaries

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- Secretaries can be lifesavers for groups with lots of documents and/or lots of open issues
  - Mentioned but not officially defined in references
  - May take minutes, may track issues ...
  - Good minutes surprisingly important to getting consensus
  - Also surprising how few WGs have secretaries
- Chairs select WG secretaries
- Fairness is important for secretaries, too

# Becoming a Leader

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- You are more likely to be appointed to a leadership position for an activity if you have been participating in the IETF for some time and are well known in the area
- Read RFC 4144 “How to Gain Prominence and Influence in Standards Organizations”

# Critical references for WG leaders

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- RFC 2026: Internet standards process
  - This is the must-read document for everyone, see updates
- RFC 2418: WG guidelines and procedures
  - This is a must-read document for chairs and editors
  - RFC 3834: Mailing lists update
- RFC 4858: Document Shepherding from Working Group Last Call to Publication
  - Describes role of WG chairs in document review and approval
- For editors
  - RFC 2119: Key words
  - RFC 3552: Writing security considerations sections
  - RFC 2434: Writing IANA considerations sections
    - draft-narten-iana-considerations-rfc2434bis is now in -07
    - RFC 3692: Experimental & Testing Numbers, RFC 4020: Early Allocation

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# How we got here: the origins of Working Groups

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# Pre-WG Steps

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- Before chartering, WGs should have:
  - Well-understood problem
  - Clearly-defined goals
  - Community support (producers and consumers)
  - Involvement of experts from all affected areas
  - Active mailing list
- WGs may or may not start with a BoF
  - Not required, but most WGs do start with BoFs
  - Meet once or twice
  - IETF.ORG hosting BoF mailing lists now
  - BoF proposals have to be approved by ADs
  - See: [draft-narten-successful-bof... now -02](#)

# WG charter contents

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- Administrative information
  - Chair and AD e-mail addresses
  - WG e-mail info
- WG purpose, direction and objectives
- Description of WG work items
- Specific WG milestones

# WG charter approval

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- Contract between the WG and the IETF
  - Regarding scope of WG
  - Identifying specific work to be delivered
- Initially negotiated by WG organizers/chairs and ADs
  - Sent to the IETF community and IAB for comment
  - Approved by the IESG
  - Different ADs have varying views of whether or not new WGs are a good idea
- Re-charter as needed
  - Minor changes (milestones, nits) approved by AD
  - Substantive changes require IESG approval

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# The Working Group Process

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A quick overview

# Steps in the WG process

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- Initial Submission
- Author Refinement
- WG Acceptance
- Editor Selection
- WG Refinement
- WG Last Call
- WG Request to Publish

***“Who controls the document text?”***

# Steps in the WG process

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- Initial Submission
  - Original idea or issue is submitted to the WG
    - May be done via mailing list or at a meeting
    - Should become an Internet-Draft (or part of one)
  - Chairs will reject submissions that don't fit within the WG charter, in chair judgment
    - May refer submission to more appropriate groups or areas
  - Chairs should reject submissions that aren't relevant or don't meet minimal quality requirements
    - There is no admission control on IETF Internet-Drafts
  - Rejections can be appealed

# Steps in the WG process

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- Author Refinement
  - Idea is more fully documented or refined based on feedback
    - May be done by the person who originally submitted the idea/issue, or by others
    - May be done by individual, ad hoc group or more formal design team
  - Change control lies with author(s) during this phase

# Steps in the WG process

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- WG Acceptance
  - For a document to become a WG work item, it must:
    - Fit within the WG charter (in the opinion of the chairs)
    - Have significant support from the working group, including:
      - People with expertise in all applicable areas who are willing to invest time to review the document, provide feedback, etc.
      - Current or probable implementers, if applicable
    - Be accepted as a work item by a rough consensus of the WG
      - Should reflect WG belief that the document is taking the correct approach and would be a good starting place for a WG product
    - Have corresponding goals/milestones in the charter
      - Goals/milestones approved by the Area Directors
      - Adopting a specific draft is not approved by Area Directors

# Steps in the WG process

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- Editor Selection
  - Editor(s) will be selected by the WG chairs
    - Usually one or more of the original authors – but not always
    - Must be willing to set aside personal technical agendas and change the document based solely on WG consensus
    - Must have the time and interest to drive the work to completion in a timely manner
  - Make this decision explicitly, not by default!
    - Some people are concept people, some are detail people
    - Some people start strong, some people finish strong
    - Some people have changes in life circumstances

# Steps in the WG process

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- WG Refinement
  - Document updated based on WG consensus
    - All technical issues and proposed technical changes MUST be openly discussed on the list and/or in meetings
    - All significant changes must be proposed to the mailing list
      - Complex changes should be proposed in separate IDs
    - The WG has change control during this phase
      - Changes are only made based on WG consensus
      - During this phase, silence will often indicate consent

# Steps in the WG process

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- WG Last Call
  - Generally the final check that the WG has rough consensus to advance the document to the IESG
    - The WG believes that this document is technically sound
    - The WG believes that this document is useful
    - The WG believes that this document is ready to go to the IESG
  - A disturbingly large number of people wait until WGLC to read drafts!

# Steps in the WG process

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- WG Last Call
  - The document must be reviewed and actively supported by a significant number of people, including experts in all applicable areas
    - ... or it should not be sent to the IESG
  - Silence does NOT indicate consent during this phase
  - Why would we want to waste IESG time on a document that we can't be bothered to review ourselves?

# Has anyone else read the draft?

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- Standards-track documents reflect IETF views
  - Not just a working group’s view
- Standards-track protocols run on the Internet
- Avoid the group-think trap
  - Ask “who else should be reading this draft?”
  - Your ADs are good sources of potential reviewers
- Don’t wait until the last minute to share
  - Prevent the “last-minute surprise”
- Some “last minute surprise” examples
  - Discovering that no one plans to implement the new spec
  - Discovering that the security mechanism does not meet current requirements
  - Learning that work overlaps or conflicts with work in other WGs

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# Working Group Chair/ Working Group Editor Responsibilities

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# Responsibilities

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- Now that you have seen how the process is supposed to go, we look at who does what
- Feel free to refer back to the references

# WG Chair responsibilities

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- **Determine WG consensus at many steps**
  - Taking in new work
  - Disagreements in the proposals
  - Determining when a document is done
- **Negotiate charter and charter updates with ADs**
  - Keep milestones up-to-date (with AD approval)
- **Select and manage the editors and the WG to produce high quality, relevant output**
- **Schedule and run meetings**
  - Provide initial agendas, make sure minutes are kept
- **Shepherd WG document during approval process**
  - See PROTO process (RFC 4858) for details
- **Keep the process open, fair, moving forward**

# WG Co-Chairs

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- Just as sole ADs gave way to co-ADs, WG co-chairs are becoming more common
- May have different strengths: technical / administrative
- Can cover for each other if one can't make a meeting
- One can run the meeting while the other makes a presentation or participates in discussions
- If a co-chair ends up on the author list for a WG document (generally not a good idea), the other can make consensus calls and act as shepherd

# Editor responsibilities

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- **Produce a specification**
  - that reflects WG consensus
  - and meets IETF editorial requirements
- **Raise issues at meetings or on the list for discussion and resolution**
  - If there is contention, the chair sniffs out consensus
- **Track document issues and resolutions**
  - Some type of issue tracking software or tools are recommended, but not required
  - A secretary can help with this

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# Getting drafts published as RFCs

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Getting your excellent specifications published

# Getting drafts published as RFCs

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- Start with a well-formed Internet Draft
  - <http://www.ietf.org/ietf/1id-guidelines.txt>
- Instructions to Request for Comments (RFC) Authors: [draft-rfc-editor-rfc2223bis... currently -08](#)
- Check for process issues early
- Automatic checking tool at
  - <http://www1.tools.ietf.org/tools/idnits/>
- IESG review
  - <http://www.ietf.org/ID-Checklist.html>

# Text formatting tools

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- List at <http://www.rfc-editor.org/formatting.html>
- xml2rfc
  - This has rapidly become the most common because it creates the correct template information automatically
- nroff
- Microsoft Word templates
- LaTeX

# Document structure & recommendations

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- Recommendations
  - Don't have excessively broad document titles
  - If you have a group of documents, use common naming structure
  - Expand all abbreviations - except for the most well known (such as IP, TCP ...)
  - Etc., see <http://www.rfc-editor.org/policy.html>
- Some sections are mandatory, including order
- Reference section
  - Distinguish between normative and informative
  - Use of URLs in references strongly discouraged

# Authors list

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- Limited to lead authors or editors
  - While not strictly limited, you need a very good reason to list more than five
  - Others can (should!) be included in contributor and acknowledgment sections
- Authors address section should provide unambiguous contact points
- All “authors” in the header are contacted during final pre-publication review
  - “Missing In Action” author = “hard stop for 2 weeks”

# Big document issues for chairs and editors

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- The following two topics nail at least 80% of all Working Groups
  - What are the MUSTs and SHOULDs for the specs?
  - Intellectual property rights (IPR)

# MUSTs and SHOULDs: RFC 2119

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- Defines use of words in standards
  - MUST, MUST NOT (REQUIRED, SHALL)
  - SHOULD, SHOULD NOT (RECOMMENDED)
  - MAY, MAY NOT (OPTIONAL)
- Gives guidance on the use of the imperatives
  - Use sparingly
  - Needed for interoperation/avoiding harmful behavior
  - Do not use to impose methods on implementers
    - Generally speaking, the IETF standardized bits on the wire
  - Limited significance in non-standards-track documents
- If it's a SHOULD/SHOULD NOT
  - Tell us WHY it's not a MUST/MUST NOT

# IPR (intellectual property rights)

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- WG chairs – please pay attention to IPR!
- **Participants' duty:**
  - To disclose IPR they personally know about
- Talk to your ADs early, and particularly if there is any whiff of IPR issues
- Patent issues
- Copyright issues
- Even trademark issues
- Don't play armchair lawyer
  - And try to prevent those in your WG from doing so

# IPR documents

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- Guidelines for Working Groups on Intellectual Property Issues (RFC 3669)
- IETF Rights in Contributions (RFC 3978)
- Intellectual Property Rights in IETF Technology (RFC 3979)
- If the WG starts to talk about IPR, point them to these documents
- If the WG start to talk about how badly the IETF does IPR, point them to the IPR WG

# WG Last Call

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- Called by WG chair
- First one usually lasts for at least two weeks
- Goal is intensive document review
  - Within the WG
  - ... and outside the WG, even in other areas

# Last WG Last Call

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- Substantive changes to the document may warrant a second WG Last Call
- Any WG Last Call is a WG chair decision
  - Second WG Last Call can be shorter
  - Can be restricted to issues raised at previous last call
  - ... but be careful about ignoring technical issues

# Document Shepherding

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- Must be one Shepherd for every draft to be published
  - Usually a WG chair for a WG document
- Provide the PROTO write up as the request to your AD for publication
  - RFC 4858: Document Shepherding from Working Group Last Call to Publication
- During AD evaluation, manage discussion between editors, WG, and AD
- During IETF Last Call, follow up on feedback and comments
- During IESG review, follow up on all IESG feedback
- Follow up on all IANA and RFC Editor requests

# IESG review, early steps

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- First, your AD must approve the document
  - Sometimes the AD asks for a revision to clear his/her own objections
- Your AD will probably want a “shepherd” statement
  - RFC 4858
  - Requires a more intensive write-up than the old days
- IETF Last Call for Standards Track and BCP
  - (and sometimes Experimental and Informational)
  - Usually two weeks, but can be longer

# IESG review, later steps

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- RFC Editor Review
  - See if guidelines have been met
- Preliminary IANA Review
  - Looks at IANA Considerations to start figuring out the namespaces that will need to be IANA managed and/or additional entries in existing namespaces
- General Area Review Team (Gen-ART)
  - Generalist review provided to IETF chair
  - Usually assigned at IETF Last Call time
- Security Directorate Review
  - Other directorates...

# IESG cross-discipline review

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- Takes IETF Last Call comments into account
- Can decide to pass document on for publication
- Decides on track for document
- Can reject a document for a variety of reasons
- Can send document back to WG with comments and “DISCUSS” issues which must be resolved before the document proceeds to RFC
  - <http://www.ietf.org/u/ietfchair/discuss-criteria.html>
- If you negotiated significant changes with the IESG, please show them to your WG before RFC publication!

# Final process

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- Editor(s)
  - Should also send the RFC Editor your nroff or XML source
  - Must send the RFC Editor any updates, especially editor contact info and known editorial changes
- RFC Editor
  - Create final nroff source
  - Works with editors on any issues (format, language, ...)
  - Assigns an RFC number
- IANA review
  - Creation of IANA registries and/or entries

# Editor's review of pre-RFC text

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- Historically called “48-hour review” (AUTH48), but currently averaging about a month, because ...
- ... All editors must sign off on final document
  - Be prepared to help the RFC Editor find other editors
- It is critical that editors take this review seriously
  - Review the entire document, not just the diffs
- Last minute changes are allowed as long as they are not technically substantive
- This is your last (ever!) chance for changes

# It gets published!

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- Announcement is sent out
- Some people read it for the first time
  - And some think that now is a good time to make corrections or bring objections
  - And this is not a bad thing – it means people are starting to use your specifications

# And later... the errata

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- RFC Editor keeps set of errata for both technical and editorial errors in RFCs
- IESG and editors verify errata
- <http://www.rfc-editor.org/errata.html>

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# Making WGs work for everyone

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# Making WGs work for everyone

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- Consensus
  - “We reject kings, presidents and voting. We believe in rough consensus and running code.”
- Openness and accessibility
- Getting a quality specification published
- Getting a timely specification published

# Consensus

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- Clearly dominant agreement
- Does not have to be unanimous
- Judging consensus can be hard without voting
  - show of hands (sort of like voting but ...)
  - hum
- Even harder on a mailing list
  - ask for opinions and provide list/summary at the end?
- May discard parts to get consensus on the rest

# Consensus (cont.)

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- Only matters if there is disagreement
- Other processes have been defined but not used
  - RFC 3929: Alternative Decision Making Processes for Consensus-Blocked Decisions in the IETF
- Consensus rulings can be appealed
  - Sometimes this is better than arguing about how to determine consensus

# Appeal process

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- Process and/or technical appeal to WG chair
- Process and/or technical appeal to AD
- Process and/or technical appeal to IESG
  - via email to IESG list
- Process and/or technical appeal to IAB
  - via email to IAB list
- Standards process appeal to ISOC BoT
  - via email to ISOC president
  - But ONLY for appeals of process violation

# If someone appeals a decision

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- They need to do this in writing
- They make clear, concise statement of problem
  - With separate backup documentation
- They make it clear that this is an appeal
- They make specific suggestions for remedy
- They do not try to jump the steps in the process
  - Wait for specific response for each step
- Avoid personal attacks (in either direction!)

# AD & WG chair authority

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- Chair can replace document editors
  - Editor replacement is painful but may be required
  - Should have the backing of AD
- AD can recommend document editor replacement
  - If the editor is getting in the way of process or progress
  - AD can **strongly** recommend ...
- AD can replace chair
  - Happens rarely but this option is used
- AD can close the WG
  - Happens rarely but this option is used

# Openness and accessibility

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- WG should be open to any participant
  - In person or via mailing list only
  - You can give preference to the opinions of those who have read the drafts but not to those whose opinions you happen to agree with
- Can't make final decisions in face-to-face meetings
  - Can be good for reaching/judging consensus on complex issues, but...
  - Consensus must be confirmed on the mailing list
- Not all people participate the same way
  - Be aware of cultural differences, language issues
  - Quiet doesn't always mean "no opinion", and loud doesn't always mean "I care a lot"
- You are responsible for openness and fairness

# Structured discussion slides

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- Recommend use of slides for structured discussion and consensus calls
  - Written consensus questions result in higher quality and more credible responses
  - Get all the alternatives out, then take the hums on each
  - “Openness” includes accessibility to non-native English speakers, hearing-impaired people, etc.
  - If your minute-taker isn’t sure what the question was, “consensus” will be problematic!

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# Almost done: Helpful Web pages

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- WG Chairs web page
  - <http://www.ietf.org/IESG/wgchairs.html>
- IESG web page
  - <http://www.ietf.org/iesg.html>
- ID-Tracker
  - <https://datatracker.ietf.org/public/pidtracker.cgi>
- RFC Editors web page
  - <http://www.rfc-editor.org/>
- A dozen important process mailing addresses
  - <http://www.ietf.org/secretariat.html>

# Feedback on Session?

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- The EDU Team is responsible for IETF educational programs like this one
  - Intended to improve the effectiveness of IETF leaders and participants
- Voice your opinions about
  - This session & other current sessions
  - Needs for education within the IETF
  - What the EDU Team should do in the future
- Volunteer to help!
- <http://edu.ietf.org>

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# Questions?