Datagram Congestion Control (DCCP)

Design Review (a new thing)
**Pointers**

- All slides are available at
  - [http://www.icir.irg/kohler/dccp/ietf57](http://www.icir.irg/kohler/dccp/ietf57)

- Mailing list:
Meeting Format & Ground Rules

Or, how does this thing work?
**Background**

- DCCP spec is settling, but not finished
- Written review of spec (nearly) completed on mailing list
- Implementations happening this summer
- Plan WGLC this fall
- We probably should have had this review a little earlier
  - But it’s not too late to make significant changes
What are we doing?

- This is a technical design review
- Want to surface issues from a cross-disciplinary audience
Look for

- Faulty assumptions
  - Particularly in apps/upper layers
- Poor design decisions
- Unnecessary functions or complexity
- Implementation, deployment risks
Design Review Agenda

- Meeting Objectives & Rules  5 min
- Charter Review  5 min
- Spec Review  40 min
- Expert Reviewer Comments  10 min
- Discussion  45 min
- Reviewer Feedback  10 min
- Closeout – Next steps  5 min
Who’s Who?

Several roles interplay
Quick definitions follow
Running the meeting

- WG chair (Aaron) & AD (Allison)
  - Tracking time
  - Monitoring process
  - Making sure comments are heard and captured
Presenting the spec

Spec authors
(Eddie assisted by Sally & Mark)

- Giving quick run-through of the spec for non-experts
- Clarifying intent
Design Reviewers

- Magnus Westerlund *(multimedia)*
- Steve Bellovin *(security)*
- Rob Austein *(architecture)*

- Evaluating spec
- Considering feedback from room
- Making (written & verbal) recommendation:
  What must be done for the spec to proceed?
Expert Reviewers

- Greg Minshall (*transport*)
- Eric Rescorla (*security*)
- Jonathan Rosenberg (*multimedia*)

- Conducting detailed written spec review (sent to list)
You

- Provide feedback on protocol
- Is it clear?
- Is it implementable?
Meeting Scope

- **In Scope**
  - Questions of clarification
  - Suggestions of error, poor design choice

- **Out of Scope**
  - WG charter
  - Problem statement, e.g., macro goals of the protocol
Ground Rules

- Only reviewers ask questions during spec walkthrough
  - in the interest of time

- If you raise a substantive issue, please follow-up with a short note to the list
  - to ensure correct capture of name & issue

- If you think an issue is a showstopper, say so
  - note it, don’t fix it in this meeting
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DCCP Charter Review

What are we trying to accomplish?
Protocol Objectives

- Establishment, teardown & maintenance of un-reliable packet flow
- Congestion control for that flow
Charter Guidance

- Minimize packet overhead
- Be simple, avoid unnecessary higher layer functions
- Enable other functions to be layered on top
Scope

- IPv4 and IPv6
- Non-cryptographic mechanisms for DoS protection
- Multi-homing/Mobility
Deliverables

- Publish Protocol and CCID Spec as Standards-track RFCs
- Publish Example API as Informational RFC
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/03</td>
<td>expert review for spec</td>
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<tr>
<td>6-8/03</td>
<td>implementations</td>
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<tr>
<td>ietf-57</td>
<td>spec design review</td>
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<tr>
<td>9-11/03</td>
<td>incorporate review and implementation feedback into spec</td>
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<tr>
<td>10/03</td>
<td>collaborate with avt wg on API</td>
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<td>ietf-58</td>
<td>prepare for wg last call</td>
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<tr>
<td>11/03</td>
<td>wg last call for spec, CCIDs</td>
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<tr>
<td>12/03</td>
<td>wg last call on API</td>
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