Datagram Congestion Control (DCCP) Design Review

All slides are available at
http://www.icir.org/kohler/dccp/ietf57

Mailing list:
http://www1.ietf.org/mailman/listinfo/dccp

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)

The Room

- **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**

WG Schedule

- 6/03   expert review for spec
- 6-8/03   implementations
- ietf-57   spec design review
- 9-11/03   incorporate review and implementation feedback into spec
- 10/03   collaborate with avt wg on API
- ietf-58   prepare for wg last call
- 11/03   wg last call for spec, CCIDs
- 12/03   wg last call on API

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