ARMD

IETF 80

30 March 2011
Note Well

Any submission to the IETF intended by the Contributor for publication as all or part of an IETF Internet-Draft or RFC and any statement made within the context of an IETF activity is considered an "IETF Contribution". Such statements include oral statements in IETF sessions, as well as written and electronic communications made at any time or place, which are addressed to:

• The IETF plenary session
• The IESG, or any member thereof on behalf of the IESG
• Any IETF mailing list, including the IETF list itself, any working group or design team list, or any other list functioning under IETF auspices
• Any IETF working group or portion thereof
• The IAB or any member thereof on behalf of the IAB
• The RFC Editor or the Internet-Drafts function

All IETF Contributions are subject to the rules of RFC 5378 and RFC 3979 (updated by RFC 4879). Statements made outside of an IETF session, mailing list or other function, that are clearly not intended to be input to an IETF activity, group or function, are not IETF Contributions in the context of this notice.

Please consult RFC 5378 and RFC 3979 for details.

A participant in any IETF activity is deemed to accept all IETF rules of process, as documented in Best Current Practices RFCs and IESG Statements.

A participant in any IETF activity acknowledges that written, audio and video records of meetings may be made and may be available to the public.
WG Info

• Web: http://tools.ietf.org/wg/armd/

• Jabber: armd@jabber.ietf.org

• Mailing List: https://www.ietf.org/mailman/listinfo/armd
Thanks!

- Notes: Shoaib Rao
- Jabber: Scott Mansfield
- Blue Sheets: You
CHARTER DISCUSSION
Charter

1. For many reasons, we need massive L2 in data centers.
   -- The reasons are out of scope – context only.

2. ARP/ND may have scale issues in massive L2.
   -- This is our area of investigation – define this.

3. We will rely on existing work: IEEE, other IETF WGs, etc.
   -- We are not chartered to develop solutions.
Objectives

1. Document ARP/ND behavior
   – What are the attributes of deployed ARP/ND?
   – How does it scale?
2. Recommend best practices, identify gaps
Solutions are Out of Scope

• We are an Ops Area working group.
• If we identify solution gaps, then we can
  – create requirements
  – recharter
  – etc
• But for now: we focus on describing the problem and characterizing behaviors
Ephemeral Drafts

• Managed/Edited by your WG chairs

• References “Bucket”
  – Container for capturing references to other work

• Recommendations “Bucket”
  – Sort of a “pre-Recommendations Document” holding cell
PROBLEM STATEMENT
ARMD: Problem Statement Outline

• Context: we are using massive L2
  – Define massive: density, span, etc?
  – Multiple dimensions of “massive”

• What problems are caused by ARP/ND?
  – What exactly is the problem?
    • Bandwidth, Host Processing, Switch Learning, etc?
  – Are the ARP and ND problems identical?
  – Where and When is the problem?
Problem Statement: Next Steps

• Chairs propose:
  – New WG draft
  – Editor of draft needed
    • Please Volunteer!
  – Contributors, make yourselves known
    • Existing text may be considered for inclusion
CALL FOR INVESTIGATION
Call for Investigation (ARMD: The Facts)

• Data, Statistics, and Analysis – Operator Input
• Survey of Existing Implementations
• Survey of Security