STORM (STORage Maintenance) BOF

IETF San Francisco
March 26, 2009
David L. Black, EMC

Note Well (1 of 2)

- 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,
    - any IETF working group or portion thereof,
    - the IESG or any member thereof on behalf of the IESG,
    - the IAB or any member thereof on behalf of the IAB,
    - any IETF mailing list, including the IETF list itself, any working group or design team list, or any other list functioning under IETF auspices,
    - 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).

Note Well (2 of 2)

- 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.

Purpose of BOF

- Question #1: Should a STORM (STORage Maintenance) Working Group be formed?
  - Good Discussion: Whether specific technical work should be done.
  - Think Twice Before Discussing: How to do specific technical work
    - OK for scope and/or work items of proposed WG
    - Detailed design discussions are not OK

- BOF Goal: Answer Question #1
  - Working group is not required to meet during IETF meeting weeks (e.g., if travel is a concern)

Agenda (for Bashing)

- (see agenda file)

Draft Charter (for more bashing)

- (see charter file)

iSCSI Consolidation and Draft Standard RFC

- Is the following work worth doing? :
  - iSCSI RFC consolidation into one document
  - Interop survey for Draft Standard RFC Status
- Considerations:
  - iSCSI seems to interoperate well
    - Implementers seem to know what not to implement
  - These tasks are a *lot* of work
    - Haven't seen any enthusiasm for doing them
- If this work is not done, may have some minor updates/clarifications
  - CmdSN window size reduction
  - Initiator behavior wrt inaccessible target portals

iSCSI and SAM-4

- (See separate slides)

FC related work

- Obsolete iFCP address translation mode
  - SHOULD NOT be implemented as specified in RFC 4172 (FC IDs in ELS payloads)
  - Has not been implemented
    - Known iFCP implementations do not support address translation
  - Is not used
    - iFCP inter-switch links: Address transparent mode

- Possible return of IP Protocol Number for FC(IP)
  - Investigate and determine whether to do this

MPA Startup Change for MPI

- MPA: TCP-style handshake "open"
  - Passive side has to enter RDMA mode first
- MPI Applications: Parallel startup
  - No control over who goes first
- Work item: Fix this mismatch
  - Has been designed
  - Has been or will be prototyped

iSER Implementation Updates

- Add ability to negotiate AHS size limit
  - Needed for sizing of pre-posted buffers
- iSER Hello and Reply messages not implemented in practice
- Data transfer implementation concerns:
  - Solicited vs. unsolicited WRITE data (what does WSTAG cover?)
  - Non-zero virtual start address for data transfer
- Padding (to 4-byte boundary) behavior?
- Discovery: iSER/RDMA vs. iSCSI/TCP
- Additional minor text clarifications

Any other work items of interest?

- ???

Draft Charter (for even more bashing)

- (see separate charter file)

Back to Question #1

- Question #1: Should a STORM (STORage Maintenance) Working Group be formed?
  - Good Discussion: Whether specific technical work should be done.
  - Think Twice Before Discussing: How to do specific technical work
    - OK for scope and/or work items of proposed WG
    - Detailed design discussions are not OK

- BOF Goal: Answer Question #1
  - Working group is not required to meet during IETF meeting weeks (e.g., if travel is a concern)

Question #1.5: Mailing List

- If STORM effort goes forward, which mailing list(s) should be used:
  - Existing IPS and RDDP mailing lists?
  - New STORM mailing list?
  - Should cease cc:'ing imss mailing list
- Majority of work likely to be handled on mailing lists
- If existing mailing lists used, may be ok to use ips and rddp acronyms in draft names