#### Requirement Statement: Auditing Functionality for Diameter

#### draft-bodin-dime-auditing-reqs-00.txt

avri doria ietf66

# **Background for request**

- Diameter is included in the work of other standards organizations
  - e.g. 3GPP, ITU-T
  - e.g. ETSI TISPAN service policy decision function (SPDF)
- and has become a key protocol in these and other architectures.
- Use includes setting and maintaining both hard and soft state.
  - There is often a need to query for information on active sessions for backup or synchronization purposes.

### **Use Hard State situations**

- Failover without replication
  - client nodes need a mechanism to audit their server for active sessions,
  - e.g. If diameter client node crashes, its backup needs to audit the server node for active sessions.
    - Needed for termination
- Failover with replication
  - Replication of data over several database instances done asynchronously to keep response times low.
    - Risk of getting out of sync and of having incorrect replication

### **Use in Soft State situations**

- After the refresh timeouts have expired the system can use auditing to get back in sync
  - e.g if a delayed refresh arrives after a session has already been deleted this could prevent requiring both systems to start from zero

Note: this requirement was not included in -00 but will be added to draft -01

## Proposal

- Since auditing function is useful if not, in fact, necessary
  - Add auditing as work item to the Dime charter
    - Review and verify requirements/use cases
    - Make changes/augment protocol to support auditing functionality
    - Coordinate with other SDOs on requirements and functionality
- Build on existing work
  - draft-calhoun-diameter-res-mgmt-08.txt (expired) provides a 2 step solution.
    - Good starting point

thank you