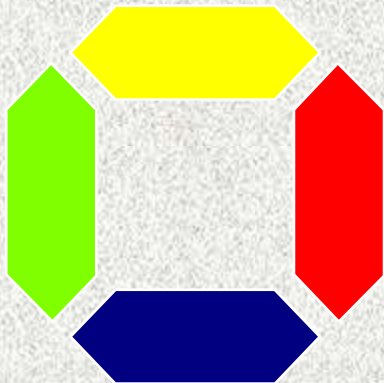


draft-ietf-rserpool-mib-01.txt

Management Information Base Definition for Reliable Server Pooling



Thomas Dreibholz

Institute for Experimental Mathematics

University of Duisburg-Essen, Germany

dreibh@exp-math.uni-essen.de

<http://www.exp-math.uni-essen.de/~dreibh>

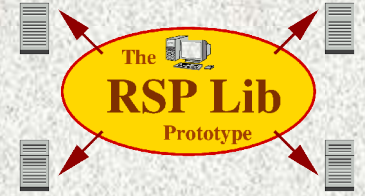
Table of Contents



- RSerPool MIB Change Log
- The ENRP Server MIB Nesting Structure
- The Pool Element MIB Nesting Structure
- The Pool User MIB Nesting Structure
- Conclusions and Outlook

Thomas Dreibholz's Reliable Server Pooling Page
<http://tdrwww.exp-math.uni-essen.de/dreibholz/rserpool/>

RSerPool MIB Change Log



■ Updates in Version 01

- Update of MIB Definition to current ASAP and ENRP status:
 - Support of IPv6 Addresses
 - a transport endpoint may have IPv4 and/or IPv6 addresses
 - PEs also have ASAP Endpoint Definition
 - necessary for ENRP Server Takeover Procedure:
 - to send ASAP Endpoint Keep-Alive to with Home-Bit set
 - Policy Information
 - Support of all policies in draft-ietf-rserpool-policies-01.txt
- Multiple ENRP servers **on one node**
 - e.g. different ENRP servers for **different operation scopes**

The ENRP Server MIB Nesting Structure



■ enrpServerTable

- poolTable
 - poolElementTable
 - asapTransportAddrListTable
 - userTransportAddrListTable
- enrpAddrListTable
- peerTable
 - peerAddrListTable

List of ENRP servers

Pools for each ENRP server

PEs of each pool

ASAP addrs. for each PE

Application addrs. for each PE

ENRP addrs. of each ENRP srv.

Peer list of each ENRP srv.

ENRP addrs of each peer

To Do:

Add statistics counters for ASAP and ENRP communication
(e.g. amount of registrations, endpoint unreachable, takeovers, ...)

The Pool Element MIB Nesting Structure



■ poolTable

- poolElementTable
 - asapTransportAddrListTable
 - userTransportAddrListTable

Pools on this node

PEs of each pool

ASAP addrs. for each PE

Application addrs. for each PE

■ Idea: Reuse structures from ENRP server MIB:

- PEs on a node can be presented by table of pools with certain PE entries

To Do:

Add statistics counters for ASAP communication

(e.g. amount of registrations, server hunts, endpoint keep-alives, ...)

The Pool User MIB Nesting Structure



■ poolUserTable

PU's on this node

■ Contents of a PU entry:

- PH of the pool
- Local application endpoint address(es)
 - Or should this better be part of the application protocol MIB?
- RSerPool statistics (server hunts, handle resolutions, failovers, ...)

To Do:

Define the PU information to be included.

Anything missing?
Your ideas are welcome!

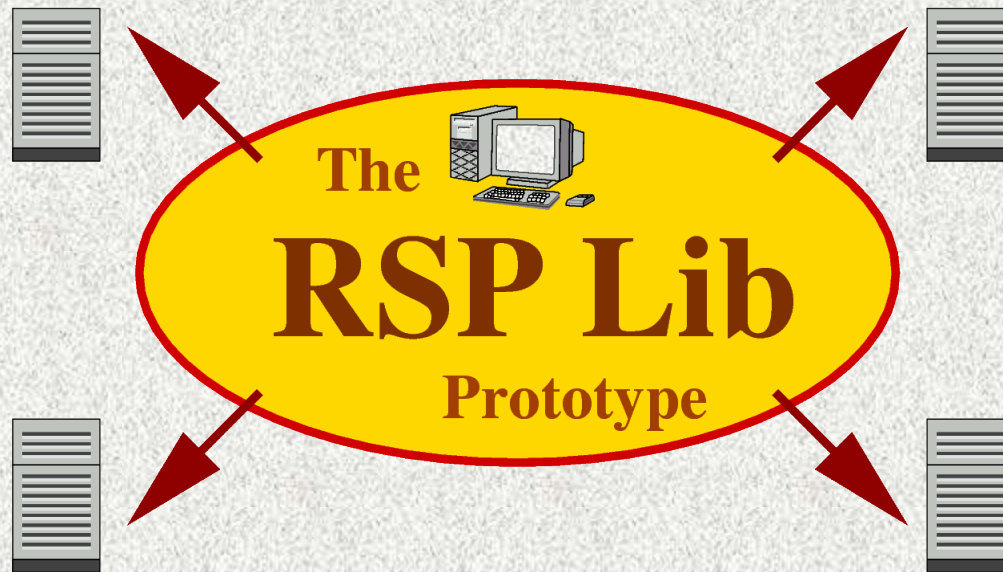


- Is anything missing?
- Does your implementation have special requirements?

Do not hesitate to contact us!

We are always interested in improvements!

Any Questions?



Project Homepage:

<http://tdrwww.exp-math.uni-essen.de/dreibholz/rserpool/>

Thomas Dreibholz, dreibh@exp-math.uni-essen.de