SCTP Socket API

Randall Stewart (rrs@cisco.com)

Michael Tüxen (tuexen@fh-muenster.de)

Supported RFCs

- Basic SCTP: RFC 4960.
- PR-SCTP extension: RFC 3758.
- SCTP-AUTH extension: RFC 4895.
- ADD-IP extension: RFC 5061.

Deployment

- FreeBSD 7.0
- Linux 2.6 kernel
- Solaris 10
- HP-UX
- AIX
- Mac OS X (NKE, based on FreeBSD code)
- socketapilib for sctplib

Status

- Set of functions is very stable.

- Support of generic functions widely available.

- Some SCTP specific functions are not yet always implemented.

- Not all socket options are available on all platforms.

- Last change of a function signature is a year old…

SCTP on FreeBSD

- Implements all functions.
- Supports almost all structures in the current form.
- Experience with applications stressing the API:
    - MPI implementations.
    - RSerPool implementation.
    - Sigtran implementation.

Upcoming Changes

- Based on the results of a discussion at the last SCTP Interop with participation of FreeBSD, Linux and Solaris implementers.

- Clarifications to some sections, removal of unused stuff.

- Changing to some C structures.