FreeTDM

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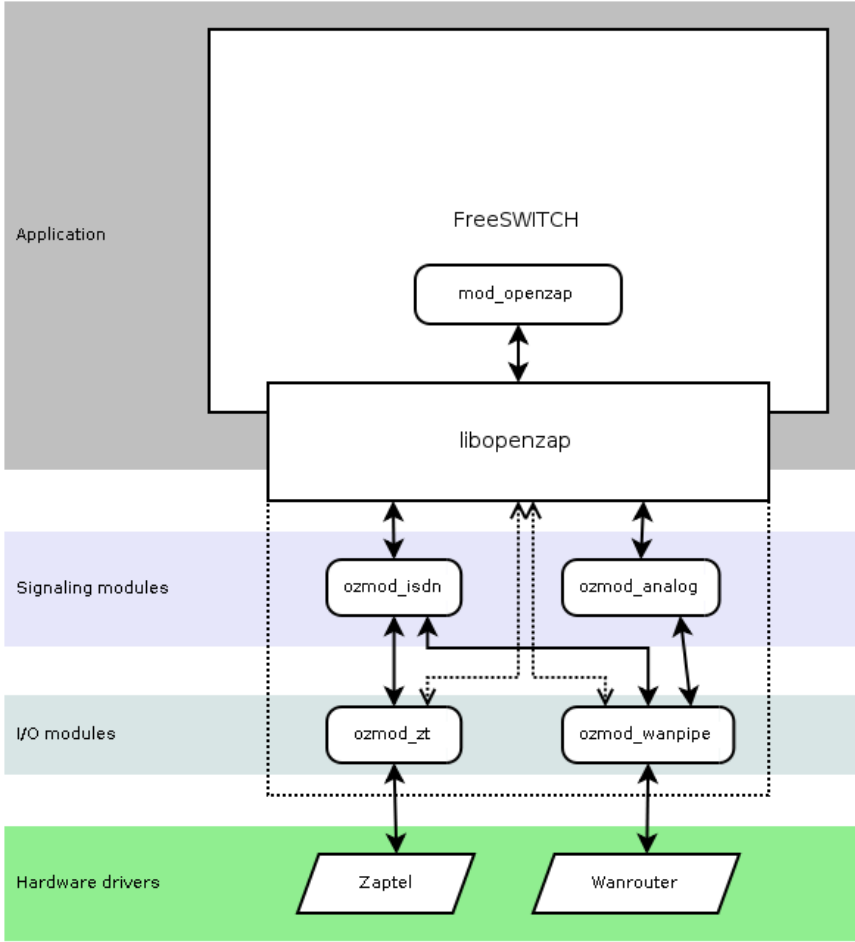
Agenda

- **OpenZAP Architecture**

- **Sangoma stacks in OpenZAP (boost)**

- **FreeTDM.**

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OpenZAP Architecture

- **libopenzap.**
  - Generic library providing unified API for I/O and signaling.
- **Modular architecture.**
- **I/O modules.**
  - Sangoma, DAHDI, PIKA.
- **Signaling modules.**
  - isdn, libpri, openr2, boost.
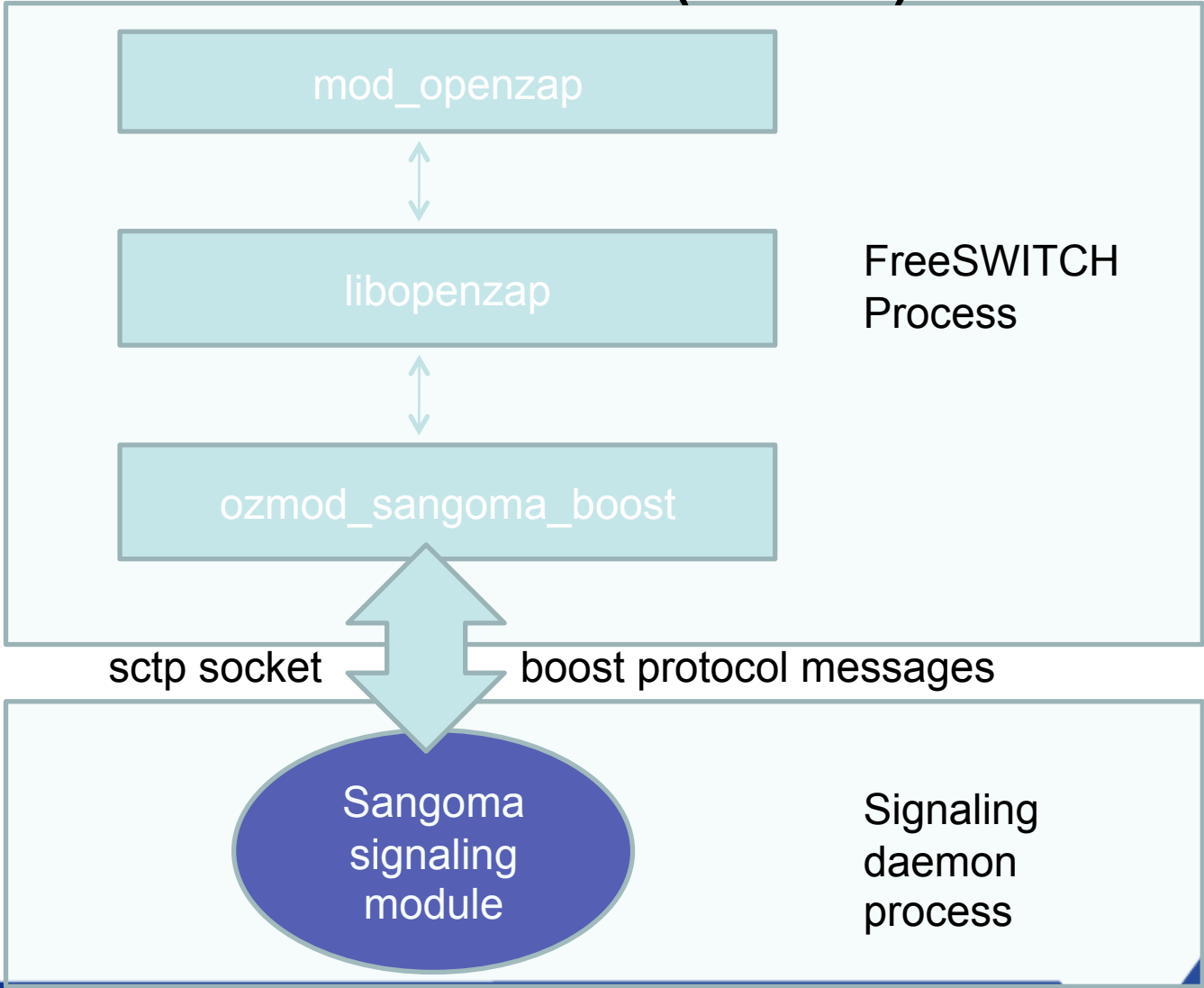- **Mod_openzap.**
  - Interface to FreeSWITCH.

OpenZAP Architecture

Sangoma stacks architecture (boost).

- Sangoma offers commercial (and sometimes free) telco-grade stacks for use in Sangoma cards.

- BRI stack.

- PRI stack.

- SS7 stack.

- All protocols are used through the boost protocol.

- Boost is a small signaling abstraction protocol.

- FreeSWITCH /OpenZAP talks to Sangoma signaling daemon
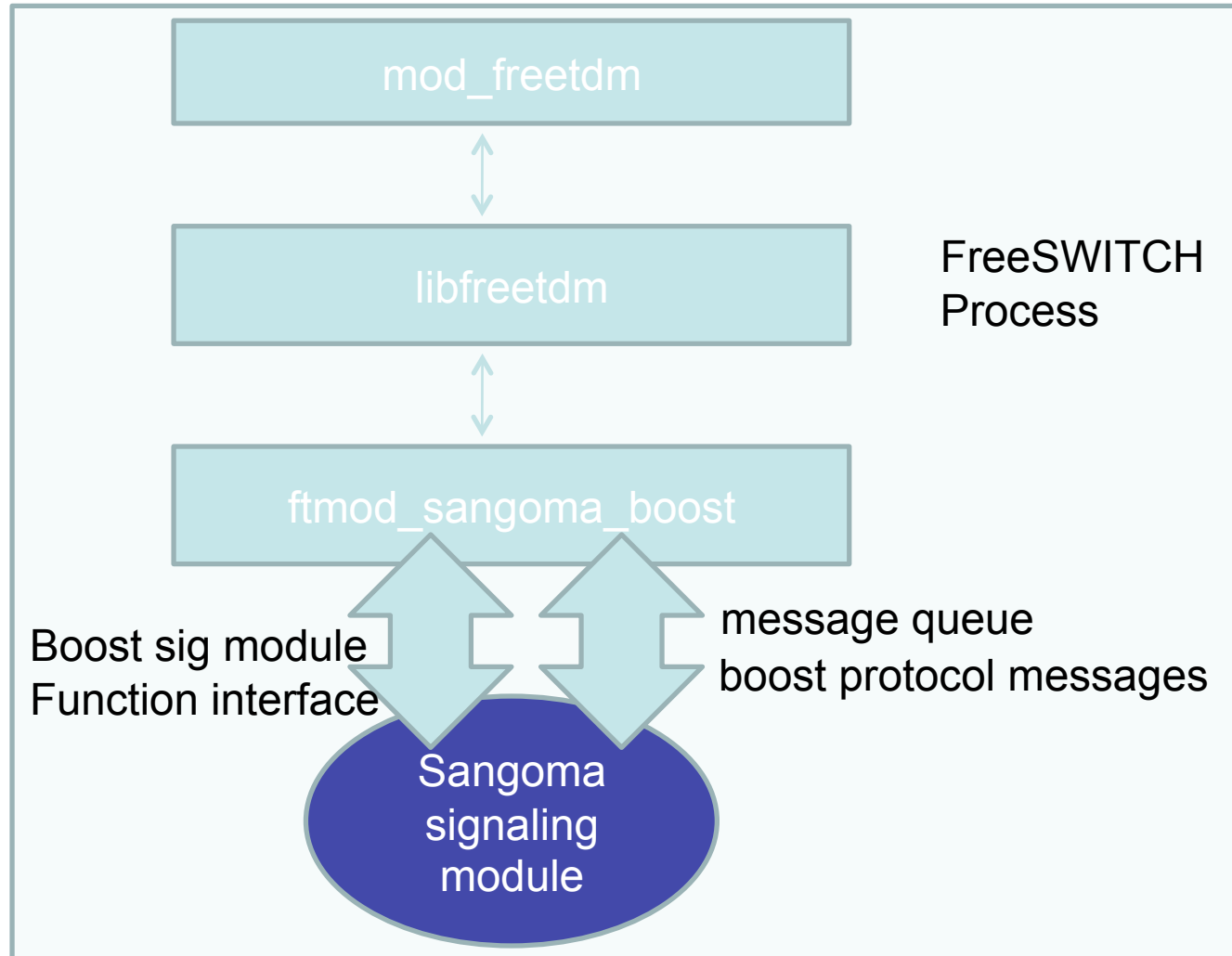
  through an SCTP socket using the boost protocol.

Sangoma stacks architecture (boost).

mod_openzap

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libopenzap

↕

ozmod_sangoma_boost

FreeSWITCH
Process

sctp socket ⇕ boost protocol messages

**Sangoma
signaling
module**

Signaling
daemon
process

SANGOMA

FreeTDM

- **Started as a branch for a new boost apprach within openzap.**

- **Boost signaling modules now are loaded as shared objects.**

- **It is possible now to query statistics and other information from boost signaling modules.**

- **BRI, PRI now work on Windows too.**

- **Socket mode is still present but deprecated.**

- **Other improvements were added to the code:**
  - More OS abstractions (queues, interrupt objects etc).
  - Fixed alarm handling and notification.
  - Implemented gain tweaking in software.
  - Implemented channel groups, not just spans.
  - Cleaner user API (work in progress).

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FreeTDM with boost in queue mode.

Conclusion.

- **FreeTDM is the new name of OpenZAP.**

- **FreeTDM introduces new features and better integration with Sangoma signaling stacks.**

- **Sangoma is committed to support FreeTDM and use it as its own signaling and I/O high level API.**

References

- http://wiki.freeswitch.org/wiki/OpenZAP
- http://wiki.sangoma.com/wanpipe-api-freetdm
- http://wiki.sangoma.com/wanpipe-freeswitch

Thank You!

Questions and Comments?

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