



FreeTDM

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Agenda

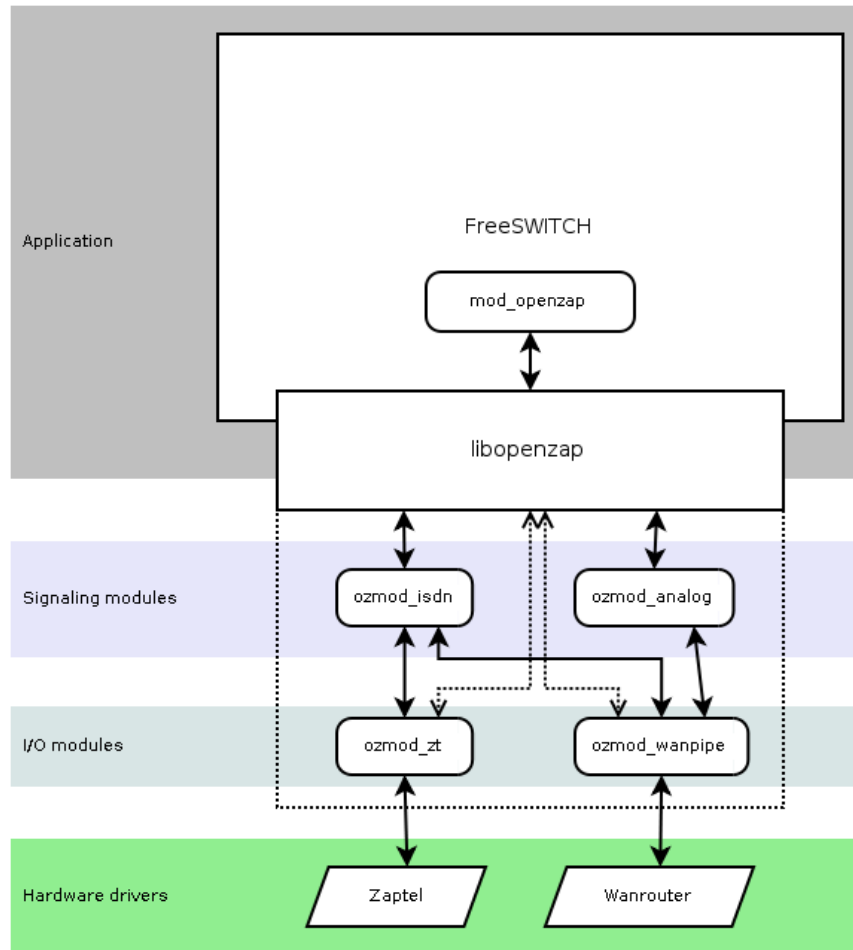
- **OpenZAP Architecture**
- **Sangoma stacks in OpenZAP (boost)**
- **FreeTDM.**

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.



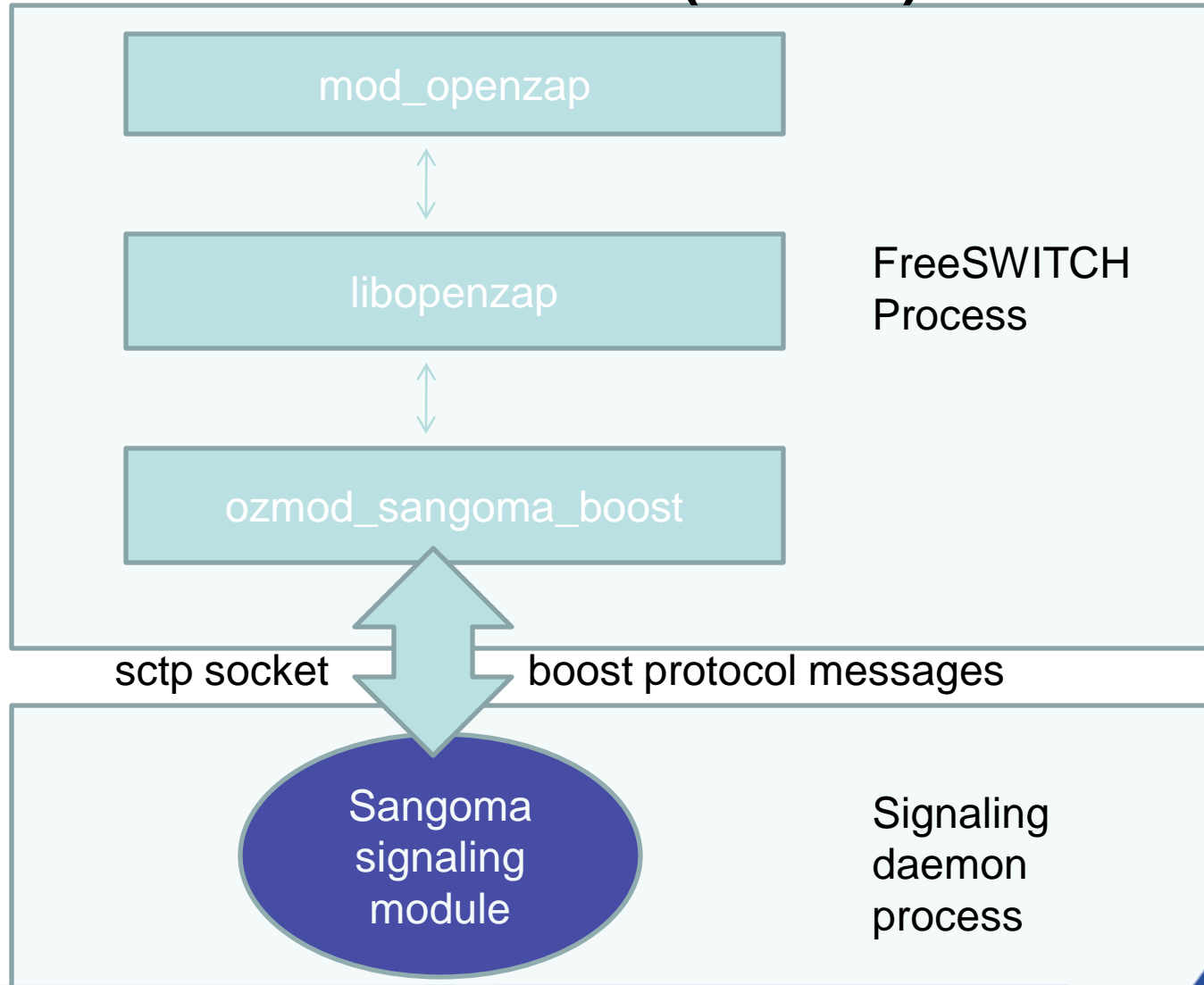
OpenZAP Architecture



Sangoma stacks architecture (boost).

- Sangoma offers commercial (and sometimes free) telco-grade stacks.
- BRI stack from Netbricks.
- PRI stack from Telesoft International.
- Custom 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.

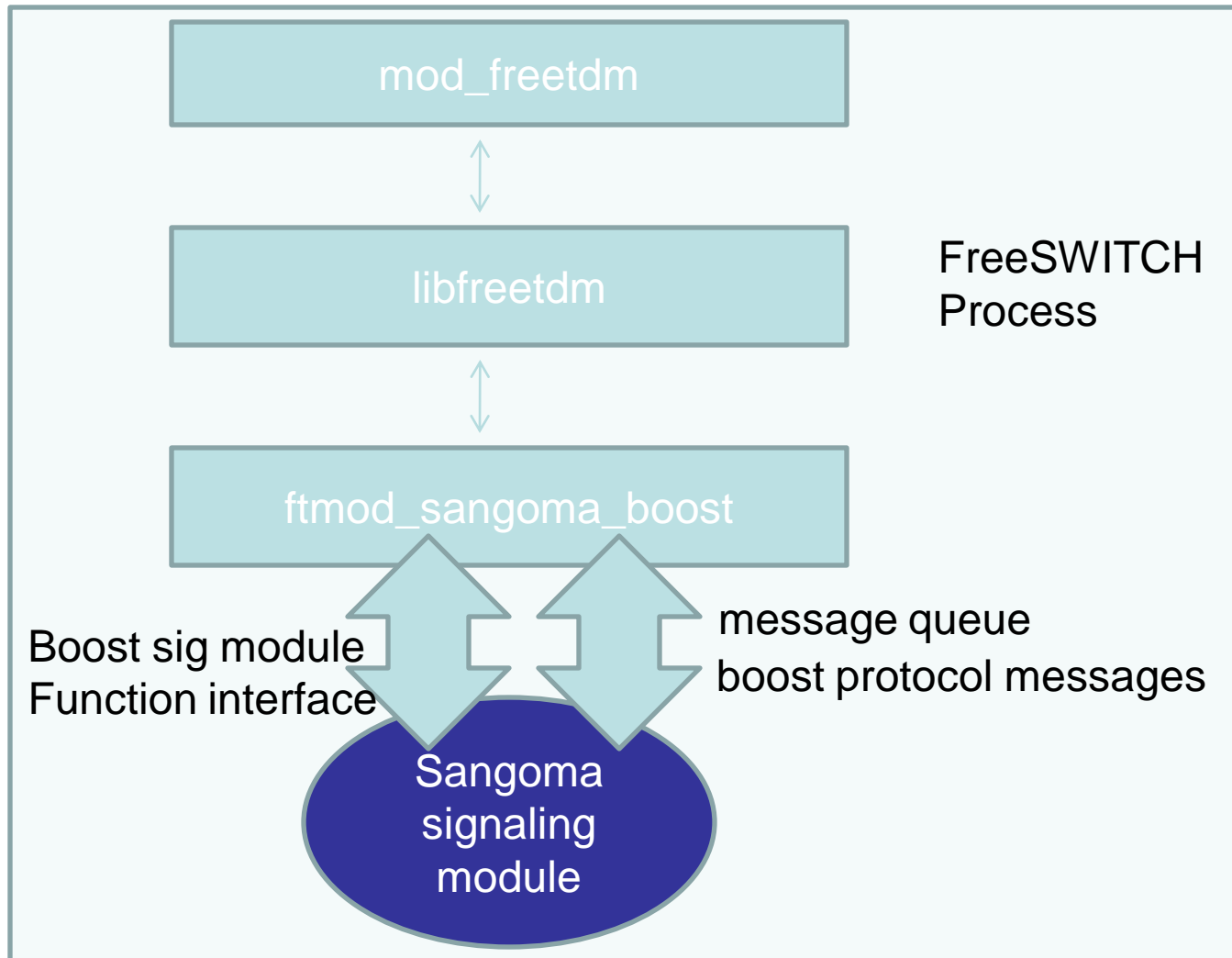
Sangoma stacks architecture (boost).



FreeTDM

- **Started as a branch for a new boost approach 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).

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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