OpenPNT

OpenPNT

Field	Value
Distribution	BSS — OpenSOF
Product	OpenSOF
Release	0.15.1
Deployment	`opensof.bss.dev`
Source	`/srv/bss/releases/OpenSOF-v0.15.0-20app`
Evidence	Catalog intent plus component-scoped static evidence
Source fingerprint	`cda583b42f2a0d296b268ab5b174932a378c8be6fb52ffa1af14af896e990f6e`
Status	Generated baseline — human review required

> **Verification boundary:** This page combines platform design guidance with static evidence from the release. It does not prove that every detected interface is enabled, reachable, secure, or operational in the deployed environment.

Purpose

The positioning, navigation and timing layer for registering clocks, spatial reference frames, sensor geometry and time-quality information.

Operational value

Lets observations from radios, robots, simulations and distributed sensors be correlated in a common time and spatial frame.

Differentiators

Precision timing and reference-frame metadata are treated as first-class operational data, including NTP, PTP and White Rabbit paths where available.

Platform connections

- OpenRF
- OpenSSA
- OpenEyes
- OpenTrack
- OpenLVC

Release detection

Status	Score	Evidence items
detected	209	12

Evidence type	Source	Match
path	`OPENPNT.md`	`openpnt`
path	`drivers/README-OPENPNT-EDGE.md`	`openpnt`
path	`drivers/install_openpnt_agent.sh`	`openpnt`
path	`drivers/openpnt-agent.env.example`	`openpnt`
path	`drivers/openpnt-agent.service.example`	`openpnt`
content	`API.md`	`openpnt`
content	`CHANGELOG.md`	`openpnt`
content	`DEPLOY-GODADDY.md`	`openpnt`
content	`FIX-v0.15.1.md`	`openpnt`
content	`MERGE-v0.13.1.md`	`openpnt`
path	`open-pnt/app.js`	`open-pnt`
path	`open-pnt/index.html`	`open-pnt`

Candidate REST/API interfaces

No component-specific REST route was associated by the scanner.

Candidate real-time interfaces

No component-specific WebSocket endpoint was associated by the scanner.

Configuration candidates

Variable	Default	Evidence
`BASE`	http://127.0.0.1:3000	DEPLOY-GODADDY.md, OPENCYBERSEC-QUICKSTART.md, OPENCYBERSEC.md, UPGRADE-v0.14.0.md
`BUILD`	—	edge/openpnt-linuxptp/SELF-TEST.sh, edge/openssa-sensor/install/install-native-uhd.sh, edge/openssa-sensor/native/uhd_spectrum_engine/build-simulation.sh, edge/openssa-sensor/native/uhd_spectrum_engine/build.sh
`BUILD_ROOT`	—	edge/openpnt-linuxptp/install-linuxptp.sh
`CONFIG`	—	drivers/install_openpnt_agent.sh, edge/opencybersec/install.sh, edge/openssa-sensor/install/check-sensor.sh, edge/openssa-sensor/install/install-sensor.sh
`CROSS_COMPILE`	—	third_party/openil_linuxptp/incdefs.sh
`EUID`	$(id -u	drivers/install_openpnt_agent.sh, edge/opencybersec/install.sh, edge/opencybersec/uninstall.sh, edge/openpnt-linuxptp/install-linuxptp.sh

Variable	Default	Evidence
`HERE`	—	edge/openpnt-linuxptp/SELF-TEST.sh, edge/openpnt-linuxptp/install-linuxptp.sh, edge/openssa-sensor/native/uhd_spectrum_engine/build-simulation.sh, edge/openssa-sensor/native/uhd_spectrum_engine/build.sh
`INSTANCE`	—	edge/openpnt-linuxptp/install-linuxptp.sh
`JOBS`	—	edge/openpnt-linuxptp/install-linuxptp.sh
`KBUILD_OUTPUT`	—	third_party/openil_linuxptp/incdefs.sh
`OPENBUS_API_TOKEN`	[REDACTED]	OPENKNOWLEDGE-OPENTASK.md, OPENLVC-DEMO.md, OPENLVC-RTI.md, demo_simulator.py
`OPENPNT_AGENT_TOKEN`	[REDACTED]	drivers/openpnt_agent.py, lib/openpnt.js
`OPENPNT_BUILD_JOBS`	$(getconf _NPROCESSORS_ONLN 2>/dev/null || echo 2	edge/openpnt-linuxptp/install-linuxptp.sh
`OPENPNT_CLOCK_STALE_AFTER_S`	—	lib/openpnt-timing.js
`OPENPNT_LINUXPTP_BIN_DIR`	—	drivers/openpnt_agent.py, drivers/openpnt_linuxptp.py
`OPENPNT_NODE_ID`	—	drivers/openpnt_agent.py, drivers/openpnt_linuxptp.py
`OPENPNT_POLL_SECONDS`	—	drivers/openpnt_agent.py
`OPENPNT_POSITION_MAX_AGE_S`	—	lib/openpnt.js
`OPENPNT_PTP_CONFIG`	—	drivers/openpnt_agent.py
`OPENPNT_PTP_INSTANCE`	—	drivers/openpnt_agent.py
`OPENPNT_PTP_INTERFACE`	—	drivers/openpnt_agent.py
`OPENPNT_SERVER`	—	drivers/openpnt_agent.py
`OPENPNT_SPOOL_FILE`	—	drivers/openpnt_agent.py
`OPENPNT_TAI_UTC_OFFSET_S`	—	lib/openpnt.js
`OPENPNT_TDOA_MAX_UNCERTAINTY_NS`	—	lib/openpnt-timing.js
`OPENPNT_TDOA_MIN_SENSORS`	—	lib/openpnt-timing.js
`OPENPNT_TOKEN`	—	drivers/openpnt_agent.py

Variable	Default	Evidence
`PATH`	/usr/sbin:/usr/bin:/sbin:/bin	edge/opencybersec/opencybersec_agent.py, lib/openllm/pipeline-engine.js, lib/openllm/util.js, tests/openpnt_agent_smoke_test.py
`ROOT`	—	edge/opencybersec/install.sh, edge/openpnt-linuxptp/SELF-TEST.sh, edge/openpnt-linuxptp/install-linuxptp.sh, edge/openssa-sensor/install-demo-sensor.sh
`SOURCE`	—	edge/openpnt-linuxptp/install-linuxptp.sh
`SRC`	—	drivers/install_openpnt_agent.sh

Service candidates

Service	ExecStart	Source
openpnt-phc2sys@.service	`/opt/openpnt/bin/openpnt-linuxptp run phc2sys --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin`	`edge/openpnt-linuxptp/systemd/openpnt-phc2sys@.service`
openpnt-ptp4l@.service	`/opt/openpnt/bin/openpnt-linuxptp run ptp4l --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin`	`edge/openpnt-linuxptp/systemd/openpnt-ptp4l@.service`
openpnt-ts2phc@.service	`/opt/openpnt/bin/openpnt-linuxptp run ts2phc --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin`	`edge/openpnt-linuxptp/systemd/openpnt-ts2phc@.service`

External dependencies/endpoints

Host	URL	Source
example.invalid	`https://example.invalid/opensof`	`tests/openpnt_agent_smoke_test.py`
loammhpng4.c36.airoapp.ai	`https://loammhpng4.c36.airoapp.ai/`	`API.md`
loammhpng4.c36.airoapp.ai	`https://loammhpng4.c36.airoapp.ai/`	`CHANGELOG.md`
loammhpng4.c36.airoapp.ai	`https://loammhpng4.c36.airoapp.ai/api/pnt/positioning/POS-RASPBOT-LAB`	`drivers/openpnt_raspbot_client.py`
loammhpng4.c36.airoapp.ai	`https://loammhpng4.c36.airoapp.ai/api/pnt/positioning/POS-RASPBOT-LAB`	`drivers/openpnt_raspbot_guidance.py`

Host	URL	Source
opensof.local	`https://opensof.local/ontology`	`lib/openpnt-timing.js`
opensof.local	`https://opensof.local/ontology`	`lib/openpnt.js`
opensof.local	`https://opensof.local/resource/${id}`	`lib/openpnt-timing.js`
opensof.local	`https://opensof.local/resource/${id}`	`lib/openpnt.js`
opensof.local	`https://opensof.local/resource/${o}`	`lib/openpnt.js`
opensof.local	`https://opensof.local/resource/${s}`	`lib/openpnt.js`

Verification checklist

- Confirm the component is included and enabled in this edition/release.
- Record its authoritative service, process/container, port, base URL and health endpoint.
- Exercise its primary operator workflow and capture expected versus actual results.
- Verify authentication, authorization, audit, error behavior and data handling policy.
- Verify OpenBus/OpenKnowledge relationships and time/provenance metadata where applicable.
- Document known limitations and the release in which they are corrected.

Maintainer Notes

Add human-reviewed deployment notes, corrections, decisions, screenshots, and links here. Content outside the generated block is preserved on future runs.

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