

Open-source component audit

Audit date: 2026-05-15

Scope: C++ service rssi-gatewayapi, Python submodule beaconlocd.service, build/provisioning scripts, and explicitly referenced external repositories. This is an engineering license-compliance analysis, not legal advice.

Component tables

C++ service rssi-gatewayapi

Component	How it is used in the project
ArduinoJson v6.21.5	FetchContent, header-only/link target ArduinoJson
Theengs Decoder v2.0.0	FetchContent, target_link_libraries(... decode ...), currently built into the main C++ service
Azure IoT SDK C	IoT Hub, DPS, MQTT transport, shared util targets
Parson	JSON parser, linked target parson
Eclipse Paho MQTT C++	PahoMqttCpp::paho-mqtttp3
Eclipse Paho MQTT C	Backend for Paho C++ / Debian packages
Boost / program_options	find_package(Boost ... program_options)
{fmt}	fmt::fmt
nlohmann/json	#include <nlohmann/json.hpp>
libcurl	CURL::libcurl, HTTP requests
OpenSSL	ssl, crypto, TLS
BlueZ / libbluetooth	HCI/Bluetooth API

rsbi-gatewayapi/inc/Experimental/mgmt.h	Vendored BlueZ header. The file remains under Experimental; current active-include scan show that production code no longer includes Experimental/pair_mgmt_modern.h. The active mgmt.h include remain only inside the experimental header
libcap	Linux capabilities / setcap
systemd / libudev / libsystemd	systemd units, udev, libudev
sdbus-c++	D-Bus C++ API
libuuid / util-linux	Linked uuid
SQLite	Runtime/dev package in provisioning
PostgreSQL libpq	Runtime libpq5, dependency path for libpqxx
libpqxx	Dev package in provisioning
libpcap	Dev package in provisioning
c-ares	Dev package in provisioning
standalone Asio	Dev package libasio-dev

Python submodule beaconlocd.service

beaconlocd.service/debian/rules creates a self-contained venv and installs dependencies from requirements.txt into the package. These dependencies are therefore redistributed as part of the product artifact.

Component	Version from requirements.txt	License	License URL
annotated-types	0.7.0	MIT	https://github.com/annotated-types
certifi	2025.11.12	MPL-2.0	https://github.com/certifi/certifi
charset-normalizer	3.4.4	MIT	https://github.com/jawahar-c

idna	3.11	BSD-3- Clause	https://github.com/kjd/idna
influxdb-client	1.49.0	MIT	https://github.com/influxdata/influxdb-client
numpy	2.2.4	BSD-3- Clause	https://numpy.org/about
pydantic	2.11.1	MIT	https://github.com/pydantic/pydantic
pydantic-core	2.33.0	MIT	https://github.com/pydantic/pydantic-core
python-dateutil	2.9.0.post0	Apache-2.0 / BSD-3- Clause dual	https://pypi.org/project/python-dateutil/
reactivex	4.1.0	MIT	https://pypi.org/project/reactivex/
requests	2.32.3	Apache-2.0	https://github.com/psf/requests
scipy	1.15.2	BSD-3- Clause	https://docs.scipy.org/doc/scipy-dev/index.html#licensing
six	1.17.0	MIT	https://github.com/benjaminp/six
typing-inspection	0.4.2	MIT	https://github.com/pydantic/pydantic-inspection
typing-extensions	4.15.0	PSF License	https://github.com/python/typing-extensions
urllib3	2.6.2	MIT	https://github.com/urllib3/urllib3

Provisioning, packaging and external tools

Component	Where it appears	Licens
InfluxDB OSS / Docker image influxdb:2.7	VPS/provisioning scripts	MIT/Apache-2.0 dependin on upstre generativ v2 historical MIT
Caddy caddy:2.8	Reverse proxy Docker image	Apache-2
Docker Engine / Moby	VPS cloud-init	Apache-2

Azure CLI	Provisioning scripts	MIT
Azure IoT CLI extension	Provisioning/scripts	MIT
Azure IoT Identity Service	aziot-identity-service	MIT
Device Update agent	deviceupdate-agent	MIT
PowerShell 7	Build/provisioning scripts	MIT
makeself	OTA .run bundle generation	GPL-2.0
Microsoft.Azure.Kusto.Tools / Kusto.Cli	scripts/adx_mgt/_kusto_tools	Microsoft Software License Terms / EULA
jq	Provisioning utility	MIT
chrony	Time sync	GPL-2.0
linuxptp	PTP time sync	GPL-2.0

Internal repositories

Repository/component	Current finding
Root repository rssi-gatewayapi-raspberry	No root LICENSE file was found during scan
Submodule beaconlocd.service	debian/copyright declares local source as MIT, but no root LICENSE file was found in the submodule