[wct-en] 04 Installation & Deployment

Prerequisites, installation, environment configuration, deployment and upgrade procedures.
Edition: WCT English — OpenC5ISR (openc5isr-en.wallacecorptech.com).

- Start Here
- Planning & Prerequisites
  - System Requirements
  - Deployment Architecture
- Deployment Configuration
  - Environment Variables
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  - Nginx Configuration
  - Ports and Network Bindings
- Installation & Lifecycle
  - Installation Procedure
  - Upgrade and Rollback

Start Here

Start Here

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Documentation structure and release scan
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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

This book turns the scanned release into a deployment baseline. Commands and configuration must still be verified against the active instance before being treated as authoritative operations guidance.

Contents

Section	What it contains

Planning & Prerequisites	Runtime, platform and dependency requirements inferred from the release.
Deployment Configuration	Environment variables, systemd, containers, Nginx and ports.
Installation & Lifecycle	Installation, verification, upgrade and rollback procedures.

How to maintain this book

Generated sections are replaced from release evidence on each run. Put reviewed corrections, deployment-specific facts, links and decisions in the Maintainer Notes area below the generated block. Mark pages as reviewed only after testing them against the named distribution and release.

Maintainer Notes

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

Planning & Prerequisites

Managed documentation for Planning & Prerequisites.

System Requirements

System Requirements

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Runtime manifests and file inventory
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
Status	Generated baseline — human review required

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Observed runtime profile

Property	Observed
Languages by source-file count	PHP: 165, JavaScript: 150, Python: 74, C: 63, Shell: 34, C++: 1
Framework indicators	—
Containerized	False
Node projects	2
Python requirement sets	0

Manifest evidence

Manifest	Project	Version	Runtime/base	Dependencies
`package.json`	opensof-integrated-suite	0.15.1	node	0
`edge/openssa-sensor/package.json`	openssa-mission-spectrum-console	0.5.0	node	0

Baseline host requirements

- A supported Linux host with accurate time synchronization and administrative access for service/proxy changes.
- The runtimes and package managers evidenced above, or an OCI container engine when container definitions are authoritative.
- Sufficient CPU, memory, disk and network for enabled modules; sensor/radio/AI workloads require separate capacity sizing.
- DNS and TLS certificates for public hostnames, plus firewall policy for public, management, backend and sensor interfaces.
- A backup destination outside the active release and tested access to required databases/artifact stores.

Maintainer Notes

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

Deployment Architecture

Deployment Architecture

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Release layout and container evidence
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Release layout

Property	Observed
Release path	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Version	0.15.1

Property	Observed
Top-level entries	`third_party`: 870 `edge`: 100 `public`: 68 `openrf`: 36 `lib`: 32 `drivers`: 27 `tests`: 24 `examples`: 20 `ontology`: 17 `data`: 14 `.opennetworks-backup-20260827T210646Z`: 13 `open-daa`: 12 `modules`: 9 `scenarios`: 9 `integrations`: 8 `open-lvc`: 5 `common`: 4 `open-rf`: 4 `open-ssa`: 4 `templates`: 4 `models`: 3 `open-aar-mr`: 3 `open-bus`: 3 `open-cop`: 3 `open-cybersec`: 3 `open-eyes`: 3 `open-iia`: 3 `open-knowledge`: 3 `open-pnt`: 3 `open-chat`: 2 `open-task`: 2 `open-track`: 2 `rocketchat`: 2 `standards`: 2 `tools`: 2 `API.md`: 1 `CHANGELOG.md`: 1 `DEPLOY-GODADDY.md`: 1 `EXTERNAL-SERVICES.md`: 1 `FIX-v0.15.1.md`: 1
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`

Container/service topology candidates

No Compose service was extracted; use the systemd and Nginx pages for other deployment evidence.

Recommended release pattern

```
/srv/<owner>/releases/<product>-vX.Y.Z/    immutable extracted release
/srv/<owner>/instances/<edition>/current  symlink to active release
/etc/<product>/<edition>/                 protected configuration and secrets
/var/lib/<product>/<edition>/             persistent state
/var/log/<product>/<edition>/             logs, when not solely in journald
```

Keep code/release artifacts immutable, configuration outside the release, persistent data outside the release, and activation as an atomic symlink/service switch. This makes rollback possible without reconstructing the prior state.

Maintainer Notes

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

Deployment Configuration

Managed documentation for Deployment Configuration.

Environment Variables

Environment Variables

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Static environment-reference scan; values redacted
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Observed variables

Variable	Secret-like	Observed default	Mechanism	Evidence
`ADDRESS`	No	—	interpolation	`openrf/agent/functions/probe-n310.sh`
`AEGIS_SENTINEL_LABEL`	No	`COMPILED_DEPLOYMENT.aegisSentinelLabel).trim() || COMPILED_DEPLOYMENT.aegisSentinelLabel`	process.env	`server.js` `tools/integrate_opensof_service_entries.py`

Variable	Secret-like	Observed default	Mechanism	Evidence
`ALT`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh`
`ANTHROPIC_API_KEY`	Yes	—	process.env	`server.js` `lib/openllm/agents.js` `lib/openllm/providers.js`
`API`	No	—	interpolation	`open-cybersec/app.js` `public/open-cybersec/app.js` `public/open-llm/app.js`
`API_BASE`	No	—	interpolation	`open-rf/app.js` `public/open-networks/app.js` `public/open-rf/app.js`
`BACKUP_ROOT`	No	—	shell	`modules/open-networks/integration/install-module-files.sh`
`BASE`	No	`http://127.0.0.1:3000`	shell, interpolation	`DEPLOY-GODADDY.md` `OPENCYBERSEC-QUICKSTART.md` `OPENCYBERSEC.md` `UPGRADE-v0.14.0.md` `rocketchat/outgoing-webhook-test.sh` `scenarios/run_demo_sequence.sh`
`BASE_PATH`	No	—	interpolation, shell	`open-rf/app.js` `public/open-rf/app.js` `third_party/ontowiki/application/scripts/travis/install-services.sh`
`BLAZEGRAPH`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`BUILD`	No	—	shell	`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`

Variable	Secret-like	Observed default	Mechanism	Evidence
`BUILDPATH`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`BUILD_DIR`	No	`$ENGINE/build`	interpolation	`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`	No	—	shell	`edge/openpnt-linuxptp/install-linuxptp.sh`
`CATALINA_BASE`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`CATALINA_HOME`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`CFG`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh`
`CONFIG`	No	—	shell	`drivers/install_openpnt_agent.sh` `edge/opencybersec/install.sh` `edge/openssa-sensor/install/check-sensor.sh` `edge/openssa-sensor/install/install-sensor.sh` `openrf/agent/functions/start-5g-ran-b210-50mhz.sh` `openrf/agent/functions/start-5g-ran-n78-n310.sh`
`CORE_DIR`	No	—	shell	`openrf/agent/functions/start-5g-core.sh` `openrf/agent/functions/status-5g-core.sh`
`CROSS_COMPILE`	No	—	interpolation	`third_party/openil_linuxptp/incdefs.sh`
`CURRENT`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`

Variable	Secret-like	Observed default	Mechanism	Evidence
`DATA_DIR`	No	`path.join(ROOT`	interpolation, process.env	`OPENCYBERSEC-QUICKSTART.md` `OPENCYBERSEC.md` `RELEASE-MANIFEST-v0.14.0.json` `UPGRADE-v0.14.0.md` `server.js`
`DRIVER`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh` `edge/openssa-sensor/install/check-sensor.sh` `edge/openssa-sensor/install/install-ubuntu-deps.sh`
`EF_STORE_ADAPTER`	No	—	getenv, shell	`third_party/ontowiki/application/classes/OntoWiki/Test/IntegrationTestBootstrap.php`
`ENGINE`	No	—	shell	`edge/openssa-sensor/install/install-native-uhd.sh`
`ENV_FILE`	No	—	shell	`edge/opencybersec/install.sh`
`EOD_TECH_TARGET`	No	`@eodtech`	process.env	`server.js`
`EUID`	No	`$(id -u`	interpolation, shell	`drivers/install_openpnt_agent.sh` `edge/opencybersec/install.sh` `edge/opencybersec/uninstall.sh` `edge/openpnt-linuxptp/install-linuxptp.sh` `edge/openpnt-linuxptp/uninstall-linuxptp.sh` `openrf/agent/install.sh`
`E_UNREACHABLE`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`FG_ROOT`	No	—	shell	`edge/openlvc/flightgear/opensof-lvc.xml`
`FOURSTORE`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`

Variable	Secret-like	Observed default	Mechanism	Evidence
`FUSEKI`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`GNB`	No	—	shell	`openrf/agent/functions/start-5g-ran-b210-50mhz.sh` `openrf/agent/functions/start-5g-ran-n78-n310.sh`
`HERE`	No	—	shell	`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` `examples/opencybersec/ingest-examples.sh` `scenarios/run_demo_sequence.sh`
`HOME`	No	`/tmp`	process.env, shell	`lib/openllm/pipeline-engine.js` `openrf/agent/functions/start-5g-core.sh` `openrf/agent/functions/status-5g-core.sh` `third_party/ontowiki/.travis.yml`
`HOST`	No	`0.0.0.0`	process.env, interpolation	`server.js` `lib/openrf-controller/server.js`
`INSTALL_DIR`	No	—	shell	`edge/opencybersec/install.sh`
`INSTANCE`	No	—	shell	`edge/openpnt-linuxptp/install-linuxptp.sh`
`ISQLFILE`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`JOBS`	No	—	shell	`edge/openpnt-linuxptp/install-linuxptp.sh`
`KBUILD_OUTPUT`	No	—	interpolation, shell	`third_party/openil_linuxptp/incdefs.sh`
`KNOWLEDGE_NS`	No	—	interpolation	`server.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`LANG`	No	`C.UTF-8`	process.env	`lib/openllm/pipeline-engine.js`
`LAT`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh`
`LON`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh`
`MISSION_KNOWLEDGE_NS`	No	—	interpolation	`server.js`
`MOUNT_PATH`	No	`COMPILED_DEPLOYMENT.mountPath`	process.env, interpolation	`server.js`
`NATIVE_SOURCE`	No	—	shell	`edge/openssa-sensor/install/install-sensor.sh` `edge/openssa-sensor/install/update-existing-sensor.sh`
`NODE_ID`	No	`COMPILED_DEPLOYMENT.nodeId`	process.env	`server.js` `edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`NS`	No	—	interpolation	`lib/openiia.js`
`OPENAAR_BATCH_SIZE`	No	`100`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_CLOCK_SOURCE`	No	`SYSTEM`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_MAX_SPOOL_MB`	No	`2048`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_NODE_ID`	No	`socket.gethostname(`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_RECONNECT_S`	No	`5`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_RECORDER_ID`	No	`f"EDGE-{socket.gethostname(`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_REPORT_INTERVAL_S`	No	`30`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_RUN_ID`	No	—	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_SERVER`	No	`http://127.0.0.1:3000`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_SIGNING_KEY`	Yes	`[REDACTED]`	process.env	`server.js`
`OPENAAR_SITE`	No	`FIELD`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_SNAPSHOT_EVERY_EVENTS`	No	`100`	process.env	`server.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENAAR_SNAPSHOT_INTERVAL_S`	No	`30`	process.env	`server.js`
`OPENAAR_SPOOL_DIR`	No	`/var/lib/openaar-edge`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_TIME_UNCERTAINTY_NS`	No	`0`	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_TOPICS`	No	—	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAAR_TYPES`	No	—	os.getenv	`drivers/openaar_edge_recorder.py`
`OPENAI_API_KEY`	Yes	—	process.env	`server.js` `lib/openllm/providers.js`
`OPENANALYTICS_CONNECTOR_TIMEOUT_MS`	No	`60000`	process.env	`server.js`
`OPENBUS_API_TOKEN`	Yes	`[REDACTED]`	shell, os.getenv, process.env, getenv, interpolation	`OPENKNOWLEDGE-OPENTASK.md` `OPENLVC-DEMO.md` `OPENLVC-RTI.md` `demo_simulator.py` `server.js` `drivers/openaar_edge_recorder.py`
`OPENBUS_MAX_HISTORY`	No	`500`	process.env	`server.js`
`OPENCHAT_DEFAULT_TARGET`	No	`#eod-ops`	process.env	`server.js`
`OPENCOP_TRACK_URL`	No	`https://opencop.c24.airoapp.ai/api/tracks`	process.env	`server.js`
`OPENCOP_UI_URL`	No	`BUILTIN_OPENCOP_UI_URL`	process.env	`server.js`
`OPENCYBERSEC_AGENT_TOKEN`	Yes	`[REDACTED]`	shell, process.env, interpolation	`OPENCYBERSEC-QUICKSTART.md` `OPENCYBERSEC.md` `server.js` `examples/opencybersec/ingest-examples.sh`
`OPENCYBERSEC_OPERATOR_TOKEN`	Yes	`[REDACTED]`	shell, process.env, interpolation	`OPENCYBERSEC-QUICKSTART.md` `OPENCYBERSEC.md` `server.js` `examples/opencybersec/ingest-examples.sh`
`OPENCYBERSEC_READ_TOKEN`	Yes	—	process.env	`server.js`
`OPENFILES_HEALTH_URL`	No	—	process.env	`server.js` `tools/integrate_opensof_service_entries.py`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENFILES_PUBLIC_URL`	No	—	process.env	`tools/integrate_opensof_service_entries.py`
`OPENFILES_SERVICE_URL`	No	—	process.env	`server.js`
`OPENIIA_MAX_EVIDENCE_BYTES`	No	`12000000`	process.env	`server.js`
`OPENISAC_HEALTH_URL`	No	—	process.env	`server.js` `tools/integrate_opensof_service_entries.py`
`OPENISAC_PUBLIC_URL`	No	`https://bss.dev/live/isac/`	process.env	`tools/integrate_opensof_service_entries.py`
`OPENISAC_SERVICE_URL`	No	—	process.env	`server.js`
`OPENKNOWLEDGE_EDITOR_TOKEN`	Yes	`[REDACTED]`	process.env	`server.js`
`OPENKNOWLEDGE_GRAPH`	No	`https://opensof.local/graph/core`	process.env	`server.js`
`OPENKNOWLEDGE_MODEL_FILE`	No	`path.join(DATA`	process.env	`server.js`
`OPENKNOWLEDGE_ONTOWIKI_URL`	No	—	process.env	`server.js`
`OPENKNOWLEDGE_SPARQL_ENDPOINT`	No	—	process.env	`server.js`
`OPENKNOWLEDGE_TIMEOUT_MS`	No	`8000`	process.env	`server.js`
`OPENLLM_AGENT_MAX_OUTPUT_BYTES`	No	—	process.env	`lib/openllm/agents.js`
`OPENLLM_AGENT_TIMEOUT_MS`	No	—	process.env	`lib/openllm/agents.js`
`OPENLLM_ALLOW_LOCAL_EXECUTION`	No	—	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_ANTHROPIC_API_KEY`	Yes	`[REDACTED]`	process.env	`server.js` `lib/openllm/providers.js`
`OPENLLM_ANTHROPIC_URL`	No	`https://api.anthropic.com/v1').replace(/\/+$/`	process.env	`lib/openllm/providers.js`
`OPENLLM_ANTHROPIC_VERSION`	No	`2023-06-01`	process.env	`lib/openllm/providers.js`
`OPENLLM_CLAUDE_BIN`	No	`claude`	process.env	`lib/openllm/agents.js`
`OPENLLM_CODEX_BIN`	No	`codex`	process.env	`lib/openllm/agents.js`
`OPENLLM_COMMAND_MODE`	No	`off').toLowerCase(`	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_FALLBACK_WRITE_MAX_BYTES`	No	—	process.env	`lib/openllm/pipeline-engine.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENLLM_HEALTH_TIMEOUT_MS`	No	—	process.env	`lib/openllm/providers.js`
`OPENLLM_MAX_AUDIT`	No	—	process.env	`lib/openllm.js`
`OPENLLM_MAX_RUNS`	No	—	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_MODEL_CACHE_TTL_MS`	No	—	process.env	`lib/openllm/providers.js`
`OPENLLM_OPENAI_API_KEY`	Yes	`[REDACTED]`	process.env	`server.js` `lib/openllm/providers.js`
`OPENLLM_OPENAI_URL`	No	`https://api.openai.com/v1').replace(/\/+$/`	process.env	`lib/openllm/providers.js`
`OPENLLM_OPENBUS_SCHEMA`	No	`opensof.openbus.event/1.0`	process.env	`lib/openllm.js`
`OPENLLM_OPENWEBUI_API_KEY`	Yes	`[REDACTED]`	process.env	`server.js` `lib/openllm/providers.js`
`OPENLLM_OPENWEBUI_CHAT_PATH`	No	`/api/chat/completions`	process.env	`lib/openllm/providers.js`
`OPENLLM_OPENWEBUI_HEALTH_PATH`	No	`/health`	process.env	`lib/openllm/providers.js`
`OPENLLM_OPENWEBUI_MODELS_PATH`	No	`/api/models`	process.env	`lib/openllm/providers.js`
`OPENLLM_OPENWEBUI_URL`	No	`process.env.OPENWEBUI_URL ||`	process.env	`server.js` `lib/openllm/providers.js`
`OPENLLM_OPERATOR_TOKEN`	Yes	`[REDACTED]`	process.env	`server.js` `lib/openllm.js`
`OPENLLM_PROVIDER_TIMEOUT_MS`	No	—	process.env	`lib/openllm/providers.js`
`OPENLLM_QWEN_BIN`	No	`qwen`	process.env	`lib/openllm/agents.js`
`OPENLLM_SANDBOX_CPUS`	No	`2`	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_SANDBOX_IMAGE`	No	`openc5isr-openllm-sandbox:0.1.0`	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_SANDBOX_MEMORY`	No	`2g`	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_SANDBOX_PIDS`	No	`256`	process.env	`lib/openllm/pipeline-engine.js`
`OPENLLM_WORKSPACES_DIR`	No	`path.join(ROOT`	process.env	`server.js`
`OPENLVC_FEDERATE`	No	—	interpolation	`edge/openlvc/systemd/openlvc-rti-gateway.service`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENLVC_FEDERATION`	No	—	interpolation	`edge/openlvc/systemd/openlvc-rti-gateway.service`
`OPENLVC_HEALTH_URL`	No	—	process.env	`server.js` `tools/integrate_opensof_service_entries.py`
`OPENLVC_PUBLIC_URL`	No	—	process.env	`tools/integrate_opensof_service_entries.py`
`OPENLVC_RTI_SIDECAR_COMMAND`	No	—	interpolation	`edge/openlvc/systemd/openlvc-rti-gateway.service`
`OPENLVC_SERVICE_URL`	No	—	process.env	`server.js`
`OPENMAIL_HEALTH_URL`	No	—	process.env	`server.js` `tools/integrate_opensof_service_entries.py`
`OPENMAIL_PUBLIC_URL`	No	—	process.env	`tools/integrate_opensof_service_entries.py`
`OPENMAIL_SERVICE_URL`	No	—	process.env	`server.js`
`OPENNETWORKS_AGENT_SOCKET`	No	`/run/opennetworks/agent.sock`	process.env	`lib/open-networks/agent-client.js` `modules/open-networks/integration/native-server-example.js`
`OPENNETWORKS_AGENT_TIMEOUT_MS`	No	`120000`	process.env	`lib/open-networks/agent-client.js` `modules/open-networks/integration/native-server-example.js`
`OPENNETWORKS_BODY_LIMIT_BYTES`	No	`2 * 1024 * 1024`	process.env	`lib/open-networks/index.js`
`OPENNETWORKS_DATA_DIR`	No	`path.join(this.rootDir`	process.env	`lib/open-networks/service.js` `modules/open-networks/integration/native-server-example.js`
`OPENNETWORKS_EXECUTION_MODE`	No	`simulate`	process.env	`lib/open-networks/service.js` `modules/open-networks/integration/native-server-example.js`
`OPENPNT_AGENT_TOKEN`	Yes	`[REDACTED]`	os.getenv, process.env	`drivers/openpnt_agent.py` `lib/openpnt.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENPNT_BUILD_JOBS`	No	`$(getconf _NPROCESSORS_ONLN 2>/dev/null || echo 2`	interpolation	`edge/openpnt-linuxptp/install-linuxptp.sh`
`OPENPNT_CLOCK_STALE_AFTER_S`	No	—	process.env	`lib/openpnt-timing.js`
`OPENPNT_LINUXPTP_BIN_DIR`	No	—	os.getenv	`drivers/openpnt_agent.py` `drivers/openpnt_linuxptp.py`
`OPENPNT_NODE_ID`	No	—	os.getenv	`drivers/openpnt_agent.py` `drivers/openpnt_linuxptp.py`
`OPENPNT_POLL_SECONDS`	No	—	os.getenv	`drivers/openpnt_agent.py`
`OPENPNT_POSITION_MAX_AGE_S`	No	—	process.env	`lib/openpnt.js`
`OPENPNT_PTP_CONFIG`	No	—	os.getenv	`drivers/openpnt_agent.py`
`OPENPNT_PTP_INSTANCE`	No	—	os.getenv	`drivers/openpnt_agent.py`
`OPENPNT_PTP_INTERFACE`	No	—	os.getenv	`drivers/openpnt_agent.py`
`OPENPNT_SERVER`	No	—	os.getenv	`drivers/openpnt_agent.py`
`OPENPNT_SPOOL_FILE`	No	—	os.getenv	`drivers/openpnt_agent.py`
`OPENPNT_TAI_UTC_OFFSET_S`	No	—	process.env	`lib/openpnt.js`
`OPENPNT_TDOA_MAX_UNCERTAINTY_NS`	No	—	process.env	`lib/openpnt-timing.js`
`OPENPNT_TDOA_MIN_SENSORS`	No	—	process.env	`lib/openpnt-timing.js`
`OPENPNT_TOKEN`	Yes	—	os.getenv	`drivers/openpnt_agent.py`
`OPENRF_5G_CORE_DIR`	No	`$HOME/5g/magic-core`	interpolation	`openrf/agent/functions/start-5g-core.sh` `openrf/agent/functions/status-5g-core.sh`
`OPENRF_AGENT_OFFLINE_SECONDS`	No	`70`	process.env	`lib/openrf-controller/server.js`
`OPENRF_AGENT_TOKEN`	Yes	`[REDACTED]`	process.env, shell	`server.js` `lib/openrf-controller/server.js` `openrf/API.md`
`OPENRF_BASE_PATH`	No	`/open-rf`	process.env	`lib/openrf-controller/server.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENRF_DATA_DIR`	No	`path.join(DATA`	process.env	`server.js` `lib/openrf-controller/server.js`
`OPENRF_DISPATCH_LEASE_SECONDS`	No	`90`	process.env	`lib/openrf-controller/server.js`
`OPENRF_OPERATOR_TOKEN`	Yes	`[REDACTED]`	process.env, shell	`server.js` `lib/openrf-controller/server.js` `openrf/API.md` `openrf/README-UPSTREAM-v0.3.0.md`
`OPENRF_PYTHON`	No	`/usr/bin/python3`	os.getenv	`openrf/agent/src/openrf_agent/util.py`
`OPENRF_RADIO_ADDRESS`	No	`192.168.20.2`	interpolation	`openrf/agent/functions/probe-n310.sh`
`OPENRF_RADIO_ID`	No	`N310-01`	interpolation	`openrf/agent/functions/start-5g-ran-n78-n310.sh`
`OPENRF_READ_TOKEN`	Yes	—	process.env, shell	`server.js` `lib/openrf-controller/server.js` `openrf/API.md`
`OPENSOF_BASE`	No	`http://127.0.0.1:3000`	os.getenv	`scenarios/run_openeyes_demo.py`
`OPENSOF_EVENT_URL`	No	`http://127.0.0.1:3000/api/event`	os.getenv	`demo_simulator.py`
`OPENSOF_ROOT`	No	`https://wallacecorptech.com/live/opensof`	interpolation	`examples/opencybersec/ingest-examples.sh`
`OPENSOF_URL`	No	`http://127.0.0.1:3000`	shell, os.getenv, getenv, interpolation	`OPENLVC-DEMO.md` `edge/openlvc/README.md` `edge/openlvc/dis_udp_bridge.py` `edge/openlvc/rti_openbus_gateway.py` `edge/openlvc/systemd/openlvc-ais-bridge.service` `edge/openlvc/systemd/openlvc-dis-bridge.service`
`OPENSSA_ACTIVE_TIMEOUT_S`	No	`900`	process.env	`server.js` `edge/openssa-sensor/SERVER_INTEGRATION.md` `edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPENSSA_EMITTER_HISTORY_LIMIT`	No	`2000`	process.env	`edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`OPENSSA_EMITTER_SIGHTING_LIMIT`	No	`500`	process.env	`edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`OPENSSA_GEOLOCATION_HISTORY_LIMIT`	No	`100`	process.env	`edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`OPENSSA_ITU_REGION`	No	`2`	process.env	`server.js` `edge/openssa-sensor/SERVER_INTEGRATION.md` `edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`OPENSSA_LOCATION_PROFILE`	No	—	os.getenv	`edge/openssa-sensor/drivers/ssa_sensor.py`
`OPENSSA_SENSOR_TOKEN`	Yes	`[REDACTED]`	process.env, os.getenv	`server.js` `edge/openssa-sensor/SERVER_INTEGRATION.md` `edge/openssa-sensor/local_server.js` `edge/openssa-sensor/demo/run_streaming_demo.py` `edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`OPENSSA_UHD_SPECTRUM_ENGINE`	No	—	os.getenv	`edge/openssa-sensor/drivers/ssa_sensor.py`
`OPENWEBUI_API_KEY`	Yes	`[REDACTED]`	process.env	`server.js` `lib/openllm/providers.js`
`OPENWEBUI_CHAT_PATH`	No	`/api/chat/completions`	process.env	`server.js`
`OPENWEBUI_DEFAULT_MODEL`	No	—	process.env	`server.js`
`OPENWEBUI_HEALTH_PATH`	No	`/health`	process.env	`server.js`
`OPENWEBUI_MODELS_PATH`	No	`/api/models`	process.env	`server.js`
`OPENWEBUI_URL`	No	`).replace(/\/+$/`	process.env	`server.js`
`OPEN_EYES_API_BASE`	No	—	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_EYES_ASSET_ID`	No	`ISAC-RASPBOT-01`	os.getenv	`drivers/raspbot_openeyes_agent.py`

Variable	Secret-like	Observed default	Mechanism	Evidence
`OPEN_EYES_DEFAULT_ASSET`	No	`ISAC-RASPBOT-01`	process.env	`server.js`
`OPEN_EYES_HTTP_TIMEOUT`	No	`3`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_EYES_LOG_LEVEL`	No	`INFO`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_EYES_RECONNECT_DELAY`	No	`2`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_EYES_STATUS_INTERVAL`	No	`0.25`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_EYES_VERIFY_TLS`	No	`true`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_EYES_VIDEO_FPS`	No	`15`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`OPEN_SOF`	No	—	shell	`OPENKNOWLEDGE-OPENTASK.md`
`OWHG`	No	—	shell	`third_party/ontowiki/application/scripts/makeRelease.sh`
`PATH`	No	`/usr/sbin:/usr/bin:/sbin:/bin`	os.getenv, process.env, shell	`edge/opencybersec/opencybersec_agent.py` `lib/openllm/pipeline-engine.js` `lib/openllm/util.js` `tests/openpnt_agent_smoke_test.py` `tests/openpnt_linuxptp_wrapper_smoke_test.py` `third_party/ontowiki/application/scripts/travis/install-services.sh`
`PHPVERSION`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-extensions.sh`
`PHP_`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-extensions.sh`
`PORT`	No	`3000`	process.env, interpolation	`server.js` `edge/openssa-sensor/local_server.js` `lib/openrf-controller/server.js`
`PUBLIC_BASE_URL`	No	`COMPILED_DEPLOYMENT.publicBaseUrl).replace(/\/+$/`	process.env, interpolation	`server.js`

Variable	Secret-like	Observed default	Mechanism	Evidence
`PWD`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`PYTHONUNBUFFERED`	No	`1`	systemd	`openrf/agent/systemd/openrf-agent.service`
`RASPBOT_BROWSER_WS_URL`	No	—	process.env	`server.js`
`RASPBOT_CONTROL_URL`	No	—	process.env	`server.js`
`RASPBOT_LOCAL_URL`	No	`http://127.0.0.1:6001`	os.getenv	`drivers/raspbot_openeyes_agent.py`
`RASPBOT_STREAM_URL`	No	—	process.env	`server.js`
`RASPBOT_WS_URL`	No	—	os.getenv	`drivers/raspbot_openeyes_agent.py`
`RES`	No	—	interpolation	`lib/openiia.js`
`RESULTFILE`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`ROCKETCHAT_AUTH_TOKEN`	Yes	`[REDACTED]`	process.env	`server.js`
`ROCKETCHAT_BOT_USERNAME`	No	`openc5.bot`	process.env	`server.js`
`ROCKETCHAT_EMBED_URL`	No	—	process.env	`server.js`
`ROCKETCHAT_INCOMING_WEBHOOK_URL`	No	—	process.env	`server.js`
`ROCKETCHAT_OUTGOING_TOKEN`	Yes	`[REDACTED]`	process.env, interpolation	`server.js` `rocketchat/outgoing-webhook-test.sh`
`ROCKETCHAT_PUBLIC_URL`	No	`ROCKETCHAT_URL || '').replace(/\/+$/`	process.env	`server.js`
`ROCKETCHAT_URL`	No	`).replace(/\/+$/`	process.env, interpolation	`server.js`
`ROCKETCHAT_USER_ID`	No	—	process.env	`server.js`
`ROLE`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh`

Variable	Secret-like	Observed default	Mechanism	Evidence
`ROOT`	No	—	shell	`edge/opencybersec/install.sh` `edge/openpnt-linuxptp/SELF-TEST.sh` `edge/openpnt-linuxptp/install-linuxptp.sh` `edge/openssa-sensor/install-demo-sensor.sh` `edge/openssa-sensor/install/install-native-uhd.sh` `edge/openssa-sensor/install/install-sensor.sh`
`RUN_GROUP`	No	—	shell	`openrf/agent/install.sh`
`RUN_ID`	No	—	shell	`OPENCYBERSEC.md`
`RUN_USER`	No	—	shell	`openrf/agent/install.sh`
`SERVICE`	No	—	shell	`edge/opencybersec/install.sh`
`SERVICE_GROUP`	No	—	shell	`edge/openssa-sensor/install/install-sensor.sh` `edge/openssa-sensor/install/update-existing-sensor.sh`
`SERVICE_USER`	No	—	shell	`edge/openssa-sensor/install/install-sensor.sh` `edge/openssa-sensor/install/update-existing-sensor.sh`
`SESAME`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`SITE_ID`	No	`COMPILED_DEPLOYMENT.siteId`	process.env	`server.js` `edge/openssa-sensor/lib/openssa.js` `lib/openssa.js`
`SOURCE`	No	—	shell	`edge/openpnt-linuxptp/install-linuxptp.sh`
`SOURCE_ROOT`	No	—	shell	`modules/open-networks/integration/install-module-files.sh`
`SRC`	No	—	shell	`drivers/install_openpnt_agent.sh`

Variable	Secret-like	Observed default	Mechanism	Evidence
`SSA_API`	No	—	interpolation	`edge/openssa-sensor/public/open-ssa/app.js` `open-ssa/app.js` `public/open-ssa/app.js`
`STAMP`	No	—	shell	`modules/open-networks/integration/install-module-files.sh`
`STICKER`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`STICKERBEGIN`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`SUDO_USER`	No	`$USER`	interpolation	`edge/openssa-sensor/install/install-sensor.sh` `edge/openssa-sensor/install/update-existing-sensor.sh` `openrf/agent/install.sh`
`SUITE_VERSION`	No	—	interpolation	`server.js` `tools/integrate_opensof_service_entries.py`
`TARGET_ROOT`	No	—	shell	`modules/open-networks/integration/install-module-files.sh`
`TASK`	No	—	shell	`rocketchat/outgoing-webhook-test.sh`
`TOKEN`	Yes	—	shell	`edge/openssa-sensor/install-demo-sensor.sh` `rocketchat/outgoing-webhook-test.sh`
`TOMCAT_VERSION`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`TRACK_API`	No	—	interpolation	`integrations/opencop-openeyes/patched-static/map.js`
`TRAVIS_PHP_VERSION`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-extensions.sh` `third_party/ontowiki/application/scripts/travis/install-services.sh`

Variable	Secret-like	Observed default	Mechanism	Evidence
`UHD_INCLUDE_DIRS`	No	—	interpolation	`edge/openssa-sensor/native/uhd_spectrum_engine/CMakeLists.txt`
`UHD_LIBRARIES`	No	—	interpolation	`edge/openssa-sensor/native/uhd_spectrum_engine/CMakeLists.txt`
`USER`	No	—	shell	`edge/openssa-sensor/SENSOR_INSTALL.md` `edge/openssa-sensor/install-demo-sensor.sh` `edge/openssa-sensor/install/install-sensor.sh` `edge/openssa-sensor/install/update-existing-sensor.sh` `openrf/README-UPSTREAM-v0.3.0.md` `third_party/ontowiki/application/scripts/travis/install-services.sh`
`VIRTTMP`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`VIRTUOSO`	No	—	shell	`third_party/ontowiki/application/scripts/travis/install-services.sh`
`VIRTUOSO_T`	No	—	shell	`third_party/ontowiki/application/scripts/vad/prepare.sh`
`WORK`	No	—	shell	`edge/openssa-sensor/install-demo-sensor.sh`

Configuration policy

- Store edition-specific configuration outside the immutable release directory.
- Do not store passwords, tokens, private keys or complete credentials in BookStack, source control, command history or URLs.
- Document variable purpose, valid values, default behavior, reload/restart requirement and owning service.
- Use separate secrets per distribution/instance and rotate them through a recorded procedure.

- Validate required variables before service start and fail clearly instead of silently selecting unsafe defaults.

Maintainer Notes

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

systemd Services

systemd Services

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Release and readable host service definitions
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Observed service units

Unit	Description	User	Working directory	ExecStart	Restart	Evidence
opencybersec-agent.service	OpenCyberSec Defensive Edge Sensor Agent	opencybersec	`–`	`/opt/opencybersec-agent/opencybersec_agent.py --config /etc/opencybersec-agent.json`	on-failure	`edge/opencybersec/systemd/opencybersec-agent.service`

Unit	Description	User	Working directory	ExecStart	Restart	Evidence
openlvc-ais-bridge.service	OpenLVC AIS NMEA Bridge	rocketman	`/opt/opensof/edge/openlvc`	`/usr/bin/python3 /opt/opensof/edge/openlvc/ais_nmea_bridge.py --opensof ${OPENSOF_URL} --token [REDACTED] --bind 0.0.0.0 --port 10110`	on-failure	`edge/openlvc/systemd/openlvc-ais-bridge.service`
openlvc-dis-bridge.service	OpenLVC IEEE DIS UDP Bridge	rocketman	`/opt/opensof/edge/openlvc`	`/usr/bin/python3 /opt/opensof/edge/openlvc/dis_udp_bridge.py --opensof ${OPENSOF_URL} --token [REDACTED] --bind 0.0.0.0 --port 3000`	on-failure	`edge/openlvc/systemd/openlvc-dis-bridge.service`
openlvc-flightgear-bridge.service	OpenLVC FlightGear UDP Bridge	rocketman	`/opt/opensof/edge/openlvc`	`/usr/bin/python3 /opt/opensof/edge/openlvc/flightgear_bridge.py --opensof ${OPENSOF_URL} --token [REDACTED] --bind 0.0.0.0 --port 5505`	on-failure	`edge/openlvc/systemd/openlvc-flightgear-bridge.service`
openlvc-rti-gateway.service	OpenLVC OpenBus to HLA RTI Gateway	rocketman	`/opt/opensof/edge/openlvc`	`/usr/bin/python3 /opt/opensof/edge/openlvc/rti_openbus_gateway.py --opensof ${OPENSOF_URL} --token [REDACTED] --federation ${OPENLVC_FEDERATION} --federate ${OPENLVC_FEDERATE} --sidecar-command ${OPENLVC_RTI_SIDECAR_COMMAND}`	on-failure	`edge/openlvc/systemd/openlvc-rti-gateway.service`

Unit	Description	User	Working directory	ExecStart	Restart	Evidence
openpnt-phc2sys@.service	OpenPNT linuxptp phc2sys instance %i	root	–	`/opt/openpnt/bin/openpnt-linuxptp run phc2sys --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin`	on-failure	`edge/openpnt-linuxptp/systemd/openpnt-phc2sys@.service`
openpnt-ptp4l@.service	OpenPNT linuxptp ptp4l instance %i	root	–	`/opt/openpnt/bin/openpnt-linuxptp run ptp4l --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin`	on-failure	`edge/openpnt-linuxptp/systemd/openpnt-ptp4l@.service`
openpnt-ts2phc@.service	OpenPNT linuxptp ts2phc instance %i	root	–	`/opt/openpnt/bin/openpnt-linuxptp run ts2phc --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin`	on-failure	`edge/openpnt-linuxptp/systemd/openpnt-ts2phc@.service`
openrf-agent.service	OpenRF Radio Agent	**OPENRF_USER**	`/opt/openrf-agent`	`/usr/local/bin/openrf-agent --config /etc/openrf/openrf-agent.json`	always	`openrf/agent/systemd/openrf-agent.service`
openc5isr-wct-en.service	OpenC5ISR WCT English Node.js Server	wct-ops	`/srv/wct/instances/openc5isr-en/current`	`/usr/local/bin/npm start`	on-failure	`/etc/systemd/system/openc5isr-wct-en.service`

Authoritative deployment checklist

- Copy unit files to /etc/systemd/system only from a reviewed release/deployment source.
- Run systemctl daemon-reload after unit changes, then enable/start the intended instance.
- Use a dedicated non-login service account with read-only release access and only required persistent-state permissions.
- Set WorkingDirectory and absolute ExecStart paths; do not depend on an interactive shell profile.

- Add health-aware dependencies and restart limits so a bad backend does not create a restart storm.

Verification commands

```
systemctl cat <unit>.service
systemctl status <unit>.service --no-pager
systemctl show <unit>.service -p User -p Group -p WorkingDirectory -p ExecStart
journalctl -u <unit>.service -n 200 --no-pager
```

Maintainer Notes

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

Nginx Configuration

Nginx Configuration

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Release and readable host Nginx configuration
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Observed proxy configuration

Evidence	server_name	listen	location	proxy_pass
`/etc/nginx/sites-available/openc5isr-en.wallacecorptech.com`	openc5isr-en.wallacecorptech.com openc5isr-en.wallacecorptech.com	443 ssl [::]:443 ssl ipv6only=on 80 [::]:80	/	`http://127.0.0.1:3101/`

Proxy requirements

- Terminate TLS with a valid certificate and redirect clear-text HTTP to HTTPS.
- Preserve Host, X-Real-IP, X-Forwarded-For and X-Forwarded-Proto headers.
- Configure WebSocket upgrade headers on real-time routes.
- Set upload/body/time limits deliberately for imagery, video, files and long-running analytics.
- Keep each distribution hostname mapped to its intended service/port; test routing after every release.
- Run nginx -t before reload and retain the last-known-good configuration.

Verification commands

```
sudo nginx -t
sudo systemctl reload nginx
curl -I https://openc5isr-en.wallacecorptech.com/
```

Maintainer Notes

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

Ports and Network Bindings

Ports and Network Bindings

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Static numeric port extraction
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Observed port candidates

Port	Protocol	Evidence	Source
1	tcp	port mapping to 30	`public/open-lvc/index.html`
1	tcp	port mapping to 80	`third_party/openil_linuxptp/config.c`
1	tcp	port mapping to 80	`third_party/openil_linuxptp/configs/G.8275.1.cfg`
1	tcp	port mapping to 80	`third_party/openil_linuxptp/configs/automotive-master.cfg`

Port	Protocol	Evidence	Source
1	tcp	port mapping to 80	`third_party/openil_linuxptp/configs/automotive-slave.cfg`
1	tcp	port mapping to 80	`third_party/openil_linuxptp/configs/default.cfg`
1	tcp	port mapping to 80	`third_party/openil_linuxptp/configs/gPTP.cfg`
2	tcp	port mapping to 00	`tests/openpnt_agent_smoke_test.py`
10	tcp	port mapping to 150	`third_party/ontowiki/extensions/datagathering/scripts/jquery.autocomplete.js`
11	tcp	port mapping to 43	`third_party/ontowiki/extensions/themes/silverblue/scripts/libraries/jquery.dimensions.js`
11	tcp	port mapping to 20	`third_party/ontowiki/extensions/translations/ru/core.csv`
12	tcp	port mapping to 00	`third_party/ontowiki/extensions/exconf/Archive.php`
13	tcp	port mapping to 15	`third_party/ontowiki/application/config/SysBase.rdf`
13	tcp	port mapping to 59	`third_party/ontowiki/application/scripts/vad/ow_vad_sticker_template.xml`
13	tcp	port mapping to 29	`third_party/ontowiki/extensions/themes/silverblue/scripts/libraries/jquery.simplemodal.js`
18	tcp	port mapping to 30	`third_party/ontowiki/extensions/datagathering/scripts/jquery.autocomplete.js`
19	tcp	port mapping to 29	`third_party/ontowiki/extensions/exconf/resources/exconf.css`
19	tcp	port mapping to 08	`third_party/ontowiki/extensions/filter/resources/jquery.treeview.js`
20	tcp	command argument	`UPGRADE-v0.11.0.md`
21	tcp	port mapping to 01	`third_party/ontowiki/extensions/exconf/pclzip.lib.php`
21	tcp	port mapping to 39	`third_party/ontowiki/extensions/exconf/resources/togglebutton.css`
30	tcp	port mapping to 10	`edge/openssa-sensor/lib/openssa.js`
30	tcp	port mapping to 10	`lib/openssa.js`

Port	Protocol	Evidence	Source
80	tcp	port mapping to 443	`third_party/ontowiki/extensions/themes/silverblue/scripts/libraries/jquery-1.9.1.js`
200	tcp	port mapping to 404	`edge/openssa-sensor/lib/openssa.js`
200	tcp	port mapping to 422	`lib/open-networks/service.js`
200	tcp	port mapping to 404	`lib/openllm.js`
200	tcp	port mapping to 404	`lib/openssa.js`
200	tcp	port mapping to 404	`third_party/ontowiki/extensions/themes/silverblue/scripts/libraries/jquery-1.9.1.js`
201	tcp	port mapping to 200	`lib/openrf-controller/server.js`
319	tcp	command argument	`third_party/openil_linuxptp/udp.c`
319	tcp	command argument	`third_party/openil_linuxptp/udp6.c`
320	tcp	command argument	`third_party/openil_linuxptp/udp.c`
320	tcp	command argument	`third_party/openil_linuxptp/udp6.c`
401	tcp	port mapping to 400	`lib/openrf-controller/server.js`
413	tcp	port mapping to 400	`lib/open-networks/index.js`
443	tcp	port mapping to 80	`server.js`
1000	tcp	port mapping to 20	`public/open-networks/app.js`
1000	tcp	port mapping to 200	`third_party/ontowiki/extensions/themes/silverblue/scripts/libraries/jquery-ui-1.8.22.js`
3000	tcp	URL	`OPENCYBERSEC-QUICKSTART.md`
3000	tcp	URL	`OPENLVC-RTI.md`
3000	tcp	URL	`README-OPENEYES.md`
3000	tcp	URL	`SCENARIOS.md`
3000	tcp	URL	`demo_simulator.py`
3000	tcp	URL	`drivers/eod_technician_agent.py`
3000	tcp	URL	`drivers/n310_sensor_agent.py`

Port	Protocol	Evidence	Source
3000	tcp	URL	`drivers/openaar_edge_recorder.py`
3000	tcp	URL	`drivers/openanalytics-agent.env.example`
3000	tcp	URL	`drivers/raspbot_task_agent.py`
3000	tcp	URL	`drivers/sse_to_udp_task_bridge.py`
3000	tcp	command argument	`edge/openlvc/README.md`
3000	tcp	URL	`edge/openlvc/ais_nmea_bridge.py`
3000	tcp	URL	`edge/openlvc/dis_udp_bridge.py`
3000	tcp	URL	`edge/openlvc/flightgear_bridge.py`
3000	tcp	URL	`edge/openlvc/rti_openbus_gateway.py`
3000	tcp	command argument	`edge/openlvc/systemd/openlvc-dis-bridge.service`
3000	tcp	URL	`edge/openssa-sensor/QUICKSTART-B210.md`
3000	tcp	URL	`edge/openssa-sensor/README.md`
3000	tcp	URL	`edge/openssa-sensor/config/ssa-sensor-simulation.json`
3000	tcp	URL	`edge/openssa-sensor/config/ssa-sensor-uhd-b210-local.json`
3000	tcp	URL	`edge/openssa-sensor/demo/run_streaming_demo.py`
3000	tcp	URL	`lib/openllm/providers.js`
3000	tcp	URL	`open-daa/open-analytics/app.js`
3000	tcp	URL	`rocketchat/outgoing-webhook-test.sh`
3000	tcp	URL	`scenarios/run_demo_sequence.sh`
3000	tcp	URL	`scenarios/run_eod_floor_mission.py`
3000	tcp	URL	`scenarios/run_follow_mission.py`
3000	tcp	URL	`scenarios/run_fusion_demo.py`

Port	Protocol	Evidence	Source
3000	tcp	URL	`scenarios/run_openeyes_demo.py`
3000	tcp	URL	`scenarios/send_eod_message.py`
3000	tcp	URL	`server.js`
3030	tcp	command argument	`third_party/ontowiki/application/scripts/travis/README.md`
3600	tcp	configuration directive	`server.js`
5505	tcp	command argument	`OPENLVC-DEMO.md`
5505	tcp	command argument	`edge/openlvc/README.md`
5505	tcp	command argument	`edge/openlvc/systemd/openlvc-flightgear-bridge.service`
6001	tcp	URL	`README-OPENEYES.md`
6001	tcp	command argument	`drivers/README-RASPBOT-OPENEYES.txt`
6001	tcp	URL	`drivers/openpnt_raspbot_guidance.py`
6001	tcp	URL	`drivers/raspbot-openeyes.env.example`
6001	tcp	URL	`drivers/raspbot_openeyes_agent.py`
7101	tcp	command argument	`SCENARIOS.md`
8075	tcp	command argument	`openrf/README-UPSTREAM-v0.3.0.md`
8075	tcp	URL	`openrf/agent/config/openrf-agent.json`
8080	tcp	URL	`third_party/ontowiki/application/scripts/travis/README.md`
8080	tcp	URL	`third_party/ontowiki/application/scripts/travis/install-services.sh`
8088	tcp	URL	`third_party/ontowiki/application/scripts/travis/README.md`
8095	tcp	URL	`openrf/API.md`
8800	tcp	URL	`drivers/mock_rocketchat.py`
8888	tcp	URL	`drivers/openanalytics-agent.json.example`
8888	tcp	URL	`open-daa/open-analytics/app.js`

Port	Protocol	Evidence	Source
8888	tcp	URL	`public/open-daa/open-analytics/app.js`
8890	tcp	URL	`third_party/ontowiki/application/scripts/travis/README.md`
8890	tcp	URL	`third_party/ontowiki/application/scripts/vad/vad.ini`
9000	tcp	URL	`open-lvc/app.js`
9999	tcp	URL	`third_party/ontowiki/application/scripts/travis/install-services.sh`
10110	tcp	command argument	`edge/openlvc/README.md`
10110	tcp	command argument	`edge/openlvc/systemd/openlvc-ais-bridge.service`
18782	tcp	URL	`tests/compiled_deployment_smoke_test.py`

Port governance

A numeric occurrence is only a candidate. Confirm the owning process with `ss -lntup`, the service with `systemctl`, the container mapping with `docker compose ps`, and the public route with Nginx. Document whether each port binds to loopback, a management interface, an operational network or all interfaces.

Maintainer Notes

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

Installation & Lifecycle

Managed documentation for Installation & Lifecycle.

Installation Procedure

Installation Procedure

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Release manifests plus controlled deployment pattern
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Candidate build/install entry points

Evidence	Invocation	Declared action
`package.json`	`npm run start`	`npm run verify:startup && node server.js`

Evidence	Invocation	Declared action
`package.json`	`npm run test`	`python3 tests/integrated_smoke_test.py && python3 tests/openknowledge_opentask_ontology_smoke_test.py && python3 tests/opendaa_opendata_smoke_test.py && python3 tests/opendaa_openanalytics_smoke_test.py && python3 tests/opencop_smoke_test.py && python3 tests/smoke_test.py && python3 tests/openeyes_smoke_test.py && python3 tests/raspbot_agent_smoke_test.py && python3 tests/openpnt_smoke_test.py && python3 tests/openpnt_linuxptp_wrapper_smoke_test.py && python3 tests/openpnt_agent_smoke_test.py && python3 tests/external_integrations_smoke_test.py && python3 tests/compiled_deployment_smoke_test.py && node tests/openssa/test_openssa.js && python3 tests/openssa/test_sensor.py && python3 tests/openssa_opensof_smoke_test.py && python3 tests/openrf_opensof_smoke_test.py && python3 tests/openlvc_edge_gateway_test.py && python3 tests/openlvc_smoke_test.py && python3 tests/opencybersec_smoke_test.py && python3 tests/opencybersec_agent_smoke_test.py && python3 tests/openiia_smoke_test.py && python3 tests/openaar_mr_smoke_test.py`
`package.json`	`npm run verify:startup`	`node -e "require('./lib/openpnt-timing'); require('./lib/openpnt'); console.log('startup dependencies OK')"`
`edge/openssa-sensor/package.json`	`npm run start`	`node local_server.js 3000`
`edge/openssa-sensor/package.json`	`npm run check`	`node --check lib/openssa.js && node --check public/open-ssa/app.js && node --check local_server.js && python3 -m py_compile drivers/ssa_sensor.py tools/*.py demo/run_streaming_demo.py tests/*.py`
`edge/openssa-sensor/package.json`	`npm run test`	`npm run check && node tests/test_openssa.js && python3 -m unittest discover -s tests -v`
`third_party/ontowiki/Makefile`	`make clean`	Make target
`third_party/ontowiki/Makefile`	`make codebeautifier`	Make target
`third_party/ontowiki/Makefile`	`make codesniffer`	Make target

Evidence	Invocation	Declared action
`third_party/ontowiki/Makefile`	`make composer-install`	Make target
`third_party/ontowiki/Makefile`	`make debianize`	Make target
`third_party/ontowiki/Makefile`	`make default`	Make target
`third_party/ontowiki/Makefile`	`make deploy`	Make target
`third_party/ontowiki/Makefile`	`make devenv`	Make target
`third_party/ontowiki/Makefile`	`make directories`	Make target
`third_party/ontowiki/Makefile`	`make getcomposer`	Make target
`third_party/ontowiki/Makefile`	`make help`	Make target
`third_party/ontowiki/Makefile`	`make help-cs`	Make target
`third_party/ontowiki/Makefile`	`make help-test`	Make target
`third_party/ontowiki/Makefile`	`make install`	Make target
`third_party/ontowiki/Makefile`	`make list-events`	Make target
`third_party/ontowiki/Makefile`	`make odbctest`	Make target
`third_party/ontowiki/Makefile`	`make test`	Make target
`third_party/ontowiki/Makefile`	`make test-directories`	Make target
`third_party/ontowiki/Makefile`	`make test-extensions`	Make target
`third_party/ontowiki/Makefile`	`make test-integration-mysql`	Make target
`third_party/ontowiki/Makefile`	`make test-integration-virtuoso`	Make target
`third_party/ontowiki/Makefile`	`make test-unit`	Make target
`third_party/ontowiki/debian/Makefile/Makefile`	`make clean`	Make target
`third_party/ontowiki/debian/Makefile/Makefile`	`make default`	Make target
`third_party/ontowiki/debian/Makefile/Makefile`	`make package`	Make target
`third_party/ontowiki/debian/Makefile/Makefile`	`make prepare`	Make target

Controlled installation procedure

1. Record the release artifact name, version, checksum, source and approval.
2. Back up configuration, persistent data, database state and the active proxy/service definitions.

3. Extract the release into a new immutable version directory; do not overwrite the active release.
4. Install dependencies using the release manifests and pinned lock files. Review install scripts before executing them as a privileged user.
5. Create/update edition-specific configuration and secrets outside the release directory.
6. Run unit/static tests and a local health check before switching production traffic.
7. Activate atomically through the current symlink/container tag/service definition, then restart only affected services.
8. Validate process state, local endpoints, Nginx routing, WebSockets, login, primary workflow and logs.
9. Record actual results and keep the previous release until the acceptance window completes.

Do not assume

The generator deliberately does not invent an install command when the release does not provide enough evidence. Promote a command into this page only after it has been executed successfully on a clean or controlled target.

Maintainer Notes

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

Upgrade and Rollback

Upgrade and Rollback

Field	Value
Distribution	WCT English — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	`openc5isr-en.wallacecorptech.com`
Source	`/srv/wct/releases/OpenC5ISR-v0.15.0`
Evidence	Lifecycle pattern and optional release comparison
Source fingerprint	`63d2b1097707e25d666401cdc6362e395968600a40a08690210cd8c0b75fbf50`
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.

Pre-upgrade gate

- Previous release path and rollback command are known and tested.
- Database/configuration migrations are identified, backed up and reversible or explicitly irreversible.
- External interfaces and dependent modules have compatibility expectations recorded.
- A maintenance/communications plan exists for user-visible interruption.
- Acceptance tests and responsible reviewer are assigned.

Upgrade sequence

```
backup → stage new release → install/validate dependencies → migrate if required
→ switch active release → restart affected services → smoke/acceptance tests
→ observe → approve or roll back
```

Rollback sequence

```
stop traffic/affected service → restore compatible data/config if required
→ repoint active release → restart → validate local/public endpoints
→ record incident and preserve failed-release evidence
```

Release-specific comparison

No previous release was supplied. Run with `--compare /path/to/previous-release` to generate a static change inventory.

Maintainer Notes

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