

[bss-openc5isr] 04

Installation & Deployment

Prerequisites, installation, environment configuration, deployment and upgrade procedures.
Edition: BSS — OpenC5ISR (openc5isr.bss.dev).

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Start Here

Start Here

Field	Value
Distribution	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	<code>openc5isr.bss.dev</code>
Source	<code>/srv/bss/releases/OpenC5ISR-v0.15.0-20app</code>
Evidence	Documentation structure and release scan
Source fingerprint	<code>93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee</code>
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
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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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	<code>openc5isr.bss.dev</code>
Source	<code>/srv/bss/releases/OpenC5ISR-v0.15.0-20app</code>
Evidence	Runtime manifests and file inventory
Source fingerprint	<code>93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee</code>
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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	openc5isr.bss.dev
Source	/srv/bss/releases/OpenC5ISR-v0.15.0-20app
Evidence	Release layout and container evidence
Source fingerprint	93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee
Status	Generated baseline — human review required

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Release layout

Property	Observed
Release path	/srv/bss/releases/OpenC5ISR-v0.15.0-20app
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 data : 17 ontology : 17 .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-iaa : 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	93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee

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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	<code>openc5isr.bss.dev</code>
Source	<code>/srv/bss/releases/OpenC5ISR-v0.15.0-20app</code>
Evidence	Static environment-reference scan; values redacted
Source fingerprint	<code>93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee</code>
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
<code>ADDRESS</code>	No	—	interpolation	<code>openrf/agent/functions/probe-n310.sh</code>
<code>AEGIS_SENTINEL_LABEL</code>	No	<code>COMPILED_DEPLOYMENT.aegisSentinelLabel).trim() COMPILED_DEPLOYMENT.aegisSentinelLabel</code>	process.env	<code>server.js</code> <code>tools/integrate_opensof_service_entries.py</code>

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/0ntoWiki/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.ai/iroapp.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_opens_of_service_entries.py

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

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_TIMEOUT_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_DIRECTORY	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_opens_of_service_entries.py
OPENLVC_PUBLIC_URL	No	—	process.env	tools/integrate_opens_of_service_entries.py
OPENLVC_RTI_SIDE CAR 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_opens_of_service_entries.py
OPENMAIL_PUBLIC_URL	No	—	process.env	tools/integrate_opens_of_service_entries.py
OPENMAIL_SERVICE_URL	No	—	process.env	server.js
OPENNWORKS_AGENT_SOCKET	No	/run/opennetworks/agent.sock	process.env	lib/opennetworks/agent-client.js modules/opennetworks/integration/native-server-example.js
OPENNWORKS_AGENT_TIMEOUT_MS	No	120000	process.env	lib/opennetworks/agent-client.js modules/opennetworks/integration/native-server-example.js
OPENNWORKS_BODY_LIMIT_BYTES	No	2 * 1024 * 1024	process.env	lib/opennetworks/index.js
OPENNWORKS_DATA_DIR	No	path.join(this.rootDir)	process.env	lib/opennetworks/service.js modules/opennetworks/integration/native-server-example.js
OPENNWORKS_EXECUTION_MODE	No	simulate	process.env	lib/opennetworks/service.js modules/opennetworks/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	<code>\$(getconf _NPROCESSORS_ONLN 2>/dev/null echo 2</code>	interpolation	<code>edge/openpnt- linuxptp/install- linuxptp.sh</code>
OPENPNT_CLOCK_STALE_A FTER_S	No	—	process.env	<code>lib/openpnt- timing.js</code>
OPENPNT_LINUXPTP_BIN DIR	No	—	os.getenv	<code>drivers/openpnt_agent .py drivers/openpnt_linux ptp.py</code>
OPENPNT_NODE_ID	No	—	os.getenv	<code>drivers/openpnt_agent .py drivers/openpnt_linux ptp.py</code>
OPENPNT_POLL_SECONDS	No	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENPNT_POSITION_MAX_ AGE_S	No	—	process.env	<code>lib/openpnt.js</code>
OPENPNT_PTP_CONFIG	No	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENPNT_PTP_INSTANCE	No	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENPNT_PTP_INTERFACE	No	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENPNT_SERVER	No	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENPNT_SPOOL_FILE	No	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENPNT_TAI_UTC_OFFSE T_S	No	—	process.env	<code>lib/openpnt.js</code>
OPENPNT_TDOA_MAX_UNCE RTAINTY_NS	No	—	process.env	<code>lib/openpnt- timing.js</code>
OPENPNT_TDOA_MIN_SENS ORS	No	—	process.env	<code>lib/openpnt- timing.js</code>
OPENPNT_TOKEN	Yes	—	os.getenv	<code>drivers/openpnt_agent .py</code>
OPENRF_5G_CORE_DIR	No	<code>\$HOME/5g/magic-core</code>	interpolation	<code>openrf/agent/function s/start-5g-core.sh openrf/agent/function s/status-5g-core.sh</code>
OPENRF_AGENT_OFFLINE_ SECONDS	No	<code>70</code>	process.env	<code>lib/openrf- controller/server.js</code>
OPENRF_AGENT_TOKEN	Yes	<code>[REDACTED]</code>	process.env, shell	<code>server.js lib/openrf- controller/server.js openrf/API.md</code>
OPENRF_BASE_PATH	No	<code>/open-rf</code>	process.env	<code>lib/openrf- controller/server.js</code>

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_opens of_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
<code>UHD_INCLUDE_DIRS</code>	No	—	interpolation	<code>edge/openssa-sensor/native/uhd_spectrum_engine/CMakeLists.txt</code>
<code>UHD_LIBRARIES</code>	No	—	interpolation	<code>edge/openssa-sensor/native/uhd_spectrum_engine/CMakeLists.txt</code>
<code>USER</code>	No	—	shell	<code>edge/openssa-sensor/SENSOR_INSTALL.md</code> <code>edge/openssa-sensor/install-demo-sensor.sh</code> <code>edge/openssa-sensor/install/install-sensor.sh</code> <code>edge/openssa-sensor/install/update-existing-sensor.sh</code> <code>openrf/README-UPSTREAM-v0.3.0.md</code> <code>third_party/ontowiki/application/scripts/travis/install-services.sh</code>
<code>VIRTTMP</code>	No	—	shell	<code>third_party/ontowiki/application/scripts/vad/prepare.sh</code>
<code>VIRTUOSO</code>	No	—	shell	<code>third_party/ontowiki/application/scripts/travis/install-services.sh</code>
<code>VIRTUOSO_T</code>	No	—	shell	<code>third_party/ontowiki/application/scripts/vad/prepare.sh</code>
<code>WORK</code>	No	—	shell	<code>edge/openssa-sensor/install-demo-sensor.sh</code>

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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	openc5isr.bss.dev
Source	/srv/bss/releases/OpenC5ISR-v0.15.0-20app
Evidence	Release and readable host service definitions
Source fingerprint	93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee
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_FEDERATION} --sidecar-command \${OPENLVC_RTI_SIDE CAR_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-ntp4l@.service	OpenPNT linuxptp ntp4l instance %i	root	–	/opt/openpnt/bin/openpnt-linuxptp run ntp4l --instance /etc/openpnt/linuxptp/instances/%i.json --bin-dir /opt/openpnt/linuxptp/bin	on-failure	edge/openpnt-linuxptp/systemd/openpnt-ntp4l@.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-bss.service	OpenC5ISR - openc5isr.bss.dev	bss-ops	/srv/bss/instances/openc5isr/current	/usr/local/bin/npm start	on-failure	/etc/systemd/system/openc5isr-bss.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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	openc5isr.bss.dev
Source	/srv/bss/releases/OpenC5ISR-v0.15.0-20app
Evidence	Release and readable host Nginx configuration
Source fingerprint	93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee
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.bss.dev	openc5isr.bss.dev openc5isr.bss.dev	443 ssl [::]:443 ssl 80 [::]:80	/ws/raspbot /	http://127.0.0.1:8096 /ws/raspbot http://127.0.0.1:3202 /

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.bss.dev/
```

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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	openc5isr.bss.dev
Source	/srv/bss/releases/OpenC5ISR-v0.15.0-20app
Evidence	Static numeric port extraction
Source fingerprint	93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee
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 11	data/openssa.json
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
14	tcp	port mapping to 53	data/openssa.json
15	tcp	port mapping to 04	data/openssa.json
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

Port	Protocol	Evidence	Source
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
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

Port	Protocol	Evidence	Source
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
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

Port	Protocol	Evidence	Source
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
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

Port	Protocol	Evidence	Source
8088	tcp	URL	<code>third_party/ontowiki/application/scripts/travis/README.md</code>
8095	tcp	URL	<code>openrf/API.md</code>
8800	tcp	URL	<code>drivers/mock_rocketchat.py</code>
8888	tcp	URL	<code>drivers/openanalytics-agent.json.example</code>
8888	tcp	URL	<code>open-daa/open-analytics/app.js</code>
8888	tcp	URL	<code>public/open-daa/open-analytics/app.js</code>
8890	tcp	URL	<code>third_party/ontowiki/application/scripts/travis/README.md</code>
8890	tcp	URL	<code>third_party/ontowiki/application/scripts/vad/vad.ini</code>
9000	tcp	URL	<code>open-lvc/app.js</code>
9999	tcp	URL	<code>third_party/ontowiki/application/scripts/travis/install-services.sh</code>
10110	tcp	command argument	<code>edge/openlvc/README.md</code>
10110	tcp	command argument	<code>edge/openlvc/systemd/openlvc-ais-bridge.service</code>
18782	tcp	URL	<code>tests/compiled_deployment_smoke_test.py</code>

Port governance

A numeric occurrence is only a candidate. Confirm the owning process with `ss -ltnup`, 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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	<code>openc5isr.bss.dev</code>
Source	<code>/srv/bss/releases/OpenC5ISR-v0.15.0-20app</code>
Evidence	Release manifests plus controlled deployment pattern
Source fingerprint	<code>93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee</code>
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
<code>package.json</code>	<code>npm run start</code>	<code>npm run verify:startup && node server.js</code>

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/raspbots_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	BSS — OpenC5ISR
Product	OpenC5ISR
Release	0.15.1
Deployment	<code>openc5isr.bss.dev</code>
Source	<code>/srv/bss/releases/OpenC5ISR-v0.15.0-20app</code>
Evidence	Lifecycle pattern and optional release comparison
Source fingerprint	<code>93926e8c834f1ed79c9017a4096f70c76d73ce4f870f104fbd0cf54b2bed50ee</code>
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.