

OpenKnowledge and Semantic Layer

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Field	Value
Distribution	BSS — OpenSOF
Product	OpenSOF
Release	0.15.1
Deployment	<code>opensof.bss.dev</code>
Source	<code>/srv/bss/releases/OpenSOF-v0.15.0-20app</code>
Evidence	Catalog architecture and semantic file scan
Source fingerprint	<code>cda583b42f2a0d296b268ab5b174932a378c8be6fb52ffa1af14af896e990f6e</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.

Role

OpenKnowledge provides the shared semantic representation for entities, relationships, observations, tasks, capabilities, effects and evidence. RDF/OWL/SHACL assets and SPARQL endpoints can make that representation queryable and governable across applications.

Why semantics belong in the core

Without a shared meaning layer, integration stops at syntax: two systems may exchange JSON yet disagree on what an entity, position, confidence, task or observation means. Semantic identifiers and constraints let automation select valid actions, let analytics combine compatible data, and give AI a bounded operational vocabulary.

Observed semantic evidence

Measure	Observed
Semantic files	22
Files	.opennetworks-backup-20260827T210646Z/ontology/openaar-mr.ttl .opennetworks-backup-20260827T210646Z/ontology/opencybersec.ttl .opennetworks-backup-20260827T210646Z/ontology/opendaa-openanalytics.ttl .opennetworks-backup-20260827T210646Z/ontology/opendaa-opendata.ttl .opennetworks-backup-20260827T210646Z/ontology/openiia.ttl .opennetworks-backup-20260827T210646Z/ontology/opensof-applications.ttl .opennetworks-backup-20260827T210646Z/ontology/opensof-core.ttl .opennetworks-backup-20260827T210646Z/ontology/opensof-ontology.ttl ontology/openaar-mr.ttl ontology/opencybersec.ttl ontology/opendaa-openanalytics.ttl ontology/opendaa-opendata.ttl ontology/openiia.ttl ontology/opennetworks.ttl ontology/opensof-applications.ttl ontology/opensof-core.ttl ontology/opensof-ontology.ttl third_party/ontowiki/application/config/SysBase.rdf third_party/ontowiki/extensions/community/insert.sparql third_party/ontowiki/extensions/datagathering/SyncSchema.rdf third_party/ontowiki/extensions/exconf/resources/Examples.rdf third_party/ontowiki/extensions/exconf/resources/PluginRepository.rdf
Term indicators	RDF: 4239, OWL: 2287, ontology: 2031, provenance: 271, SPARQL: 258, SHACL: 143, JSON-LD: 18

Governance checklist

- Assign stable URIs to core entity, relationship, observation, task and effect types.
 - Version ontologies and record compatibility/migration rules.
 - Validate critical payloads with SHACL or equivalent constraints.
 - Record provenance and source confidence separately from asserted facts.
 - Protect write access to production knowledge while allowing broad governed query access.
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Maintainer Notes

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

Revision #1

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