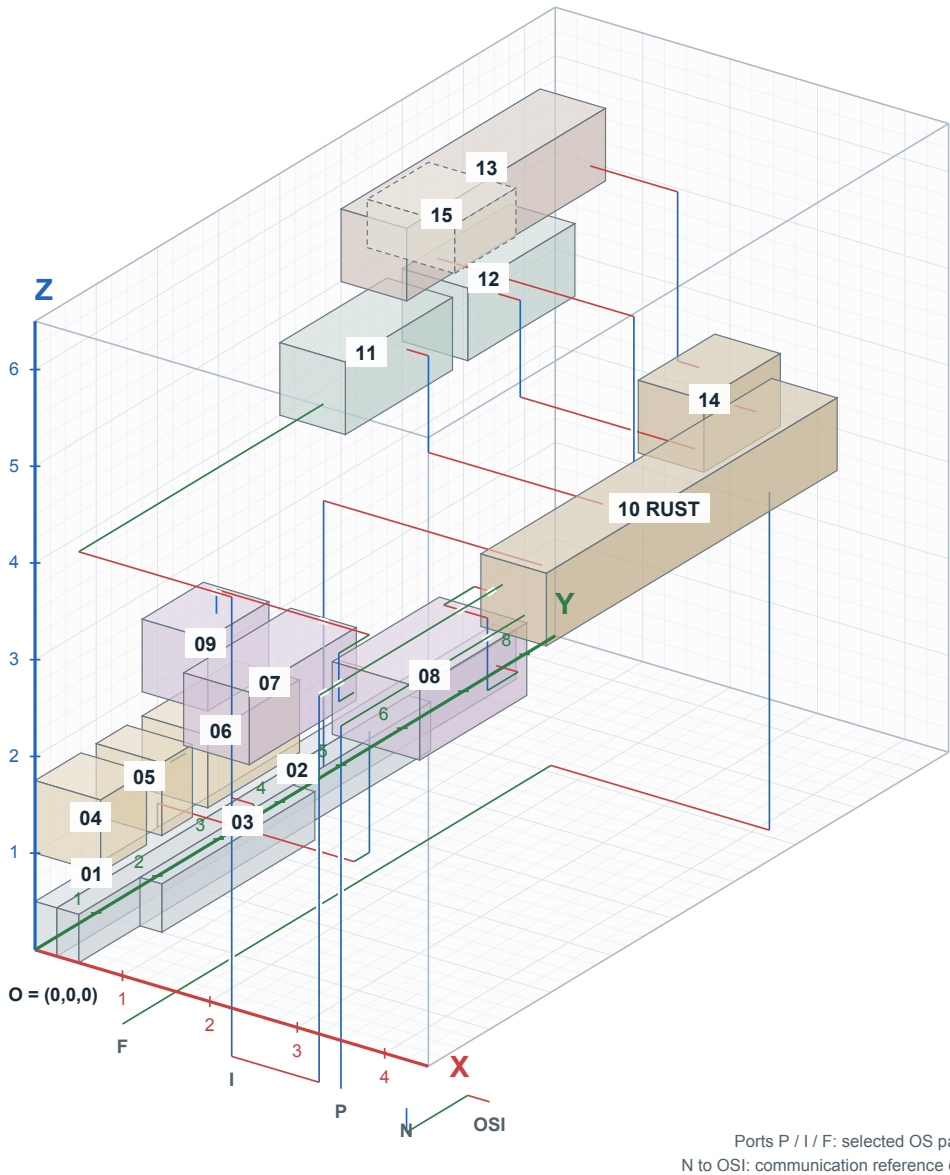


XYZ Architecture Space

Position = architectural role Volume = responsibility coverage Connections = governed interaction



X AUTHORITY / CONTROL

- X0 Observe Only
- X1 Scoped
- X2 Authorized
- X3 Bound / Enforced
- X4 Autonomous Within Policy

Y WORK LIFECYCLE

- Y0 Understand
- Y1 Prepare
- Y2 Authorize
- Y3 Bind
- Y4 Execute
- Y5 Observe
- Y6 Verify
- Y7 Close
- Y8 Recover

Z SYSTEM PLANE

- Z0 Interfaces
- Z1 Architecture / Integration
- Z2 Policy & Authority
- Z3 Runtime / Execution
- Z4 Observation
- Z5 Evidence & Trust
- Z6 External Effect

Red / green / blue identify the direction of each line segment, never its business meaning.

Orthographic camera. Uniform 0.25 grid; integer semantic ticks. Coordinates are role envelopes, not runtime privilege levels.

X4 deliberately unoccupied. External Systems is a typical envelope; exact support depends on the integration.

Target categories: cloud / on-prem, databases, enterprise apps, industrial systems, devices / IoT. Categories do not establish supported connectors.

COMPONENT KEY

- | | |
|------------------------|--------------------------|
| 01 Human Interface | 06 SDK Engine |
| 02 Agent Interface | 07 Policy Manager* |
| 03 Developer Interface | 08 Authority Controller* |
| 04 GAPE | 09 Risk Analyzer* |
| 05 Integration Helper | 10 Packr Engine (Rust) |

* Functional projections share the protected Rust owner; they do not imply separate deployed services. GAPE grants no new authority. SDK API surface exists; generated/workflow SDK scope is not proven.

Fill = primary Z plane. Dashed box = typical responsibility envelope.

- 11 Observer
- 12 Verifier*
- 13 ETS*
- 14 Recovery Manager*
- 15 External Systems

OS CHANNEL FABRIC

System interaction channels | reference families

P PROCESS & RUNTIME

process / thread / signal
credentials / namespace / cgroup
runtime state

F FILESYSTEM & STORAGE

file / directory / file descriptor
mount / volume / durable state
temporary / cache state

D DEVICE & PLATFORM

device / driver / GPU / accelerator
VM / hypervisor / hardware
platform API

I IPC & COMMUNICATION

stdin / stdout / stderr / pipe
Unix Domain Socket / named pipe
shared memory

N NETWORK & CONNECTIVITY

socket / TCP / UDP / QUIC
interface / route / loopback / VPN
proxy / firewall

K OS / KERNEL SERVICES

syscall / scheduler / resource control
security / identity / audit / trace

NETWORK / OSI SUBSTRATE

Communication reference model

L7 Application

HTTP / gRPC / API / app protocols

L6 Presentation

encoding / serialization / encryption representation

L5 Session

session / connection state (where applicable)

L4 Transport

TCP / UDP / QUIC (cross-layer behavior)

L3 Network

IP / routing

L2 Data Link

Ethernet / Wi-Fi / VLAN / switching

L1 Physical

physical / virtual network link

Only network channels map to OSI. Protocol mappings are approximate, not exclusive. Catalogs do not certify product support.

Capability ≠ Authority • Observation ≠ Enforcement • Verification ≠ Authority
Evidence ≠ Execution • Recoverability ≠ Authority • Human remains in control.

Configuration may be delegated. Governance is not.