



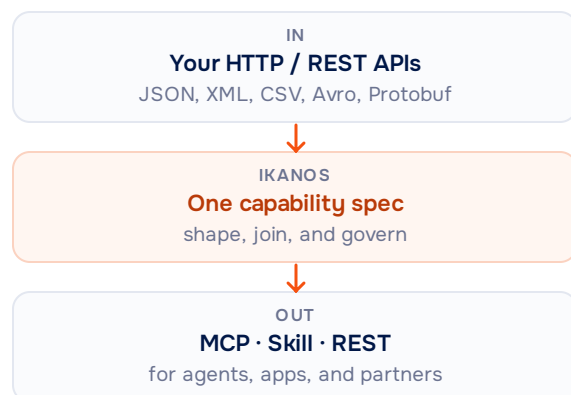
OPEN SOURCE CAPABILITY ENGINE
APACHE 2.0 · CREATED BY **NAFTIKO**

Spec-driven integration for **AI agents** and apps

Turn the APIs you already own into governed capabilities.

Describe a capability in **one YAML file**. Ikanos
calls your existing APIs, keeps only the fields that
matter, and serves the result as **MCP**, **Skill**, and
REST.

No code to write or compile.



```
$ curl -fsSL naftiko.github.io/ikanos/install.sh | sh
# or run 'docker pull ghcr.io/naftiko/ikanos:latest'

$ cat shipyard.yml

capability:
  consumes:           # APIs you already have
  - namespace: registry
    baseUrl: "https://api.example.com"
  exposes:           # what agents see
  - type: mcp
    tools:
      get-ship:
        call: registry.get-ship
        outputParameters: # only these reach the model
          name: { mapping: "$.vessel_name" }
          status: { mapping: "$.operational_status" }

$ ikanos validate shipyard.yml # check before it runs
$ ikanos serve shipyard.yml   # MCP server is live
```

● AI agent using the capability

Is ship IMO-9321483 in service?

```
tool call get-ship({ "imo": "IMO-9321483" })
```

```
{ "imo": "IMO-9321483", "name": "Northern Star", "type": "cargo",
  "flag": "NO", "status": "active" }
```

Yes. **Northern Star** is a Norwegian-flagged cargo ship and is currently active.

Features

Spec-driven

Declare the whole capability in YAML.
No Java, no handlers, no glue code.

Composable

Chain and join calls across APIs into
one clean, task-shaped tool.

Multi-protocol

One spec serves MCP, Skill, and REST
from a single deployment.

OpenAPI-friendly

Import Swagger or OAS 3.x, and
export REST adapters as OpenAPI.

Right-sized context

Shape and filter responses so agents
get only the fields a task needs.

Cloud native

One Docker image with OpenTelemetry
tracing and Prometheus metrics.



Try Ikanos in the Playground

shipyard.naftiko.io/playground

Docs at shipyard.naftiko.io/ikanos · Code at github.com/naftiko/ikanos

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