



ForgeGIS Studio™

The Forge suite, operable on one host — on-premises, and air-gap capable.

ForgeGIS Studio is the operator surface for the Forge suite — the single interface through which an analyst runs GPU-accelerated geospatial pipelines, browses the data catalog, and directs a natural-language agent that acts on a live map. It is engineered for the environment defense and civil-works programs actually deploy into: a single host, reachable only from that host's own browser, with no external calls required for the core workflow. Studio is a demonstration and operator surface — not a general-purpose GIS desktop — and is built thin over the engines so it can be tailored to a program's workflow rapidly.

1 host

Whole suite runs on a single workstation —
loopback-bound, air-gap capable

Loopback by default

The server binds to 127.0.0.1. Other hosts on the network cannot reach it. Rebind outward and Studio warns every boot until hosted-deployment prerequisites — auth, CSRF, rate limiting, TLS, audit — are in place. The warning is deliberate.

3 engines

GPU compute, spatial catalog, and a
natural-language agent behind one surface

A mediated path perimeter

Every route accepting a caller-controlled path runs it through a sandbox. Uploads are confined and extension-checked; user-added roots are canonicalized and rejected if they reach sensitive locations; agent tool calls run operator-only.

R · V · M

Raster, vector & mixed pipelines — non-
linear DAGs authored and run in batch

A separate door for the agent

The browser session is safe only under loopback. The natural-language agent reaches the map through a distinct, token-validated bridge with an agent-key exchange — the stronger credential guards the ability to act on the map.

DEFENSE

Deploys where you work — and will scale

Because the whole suite is single-tenant and single-host by design today, Studio deploys on a workstation, an on-premises server, or inside a single-tenant container — with no multi-tenant control plane to stand up first. The most likely first environment is an unclassified on-premises network (NIPR-class), and Studio's loopback-bound, air-gap-friendly posture is built for exactly that. Shared-GPU and multi-GPU configurations for teams are a stated roadmap direction — with the scheduling, isolation, and hosted-security work named up front, not glossed over.

Refusal-by-construction, made visible

The suite's natural-language layer is built to refuse rather than guess: the language model is confined to intent and parameter extraction, while deterministic machinery owns structure, validation, and execution. Studio is where a program evaluator watches that discipline hold on their own data, on their own host.

PROOF POINTS

No network exposure. Whole suite on one host, reachable only from that host's browser; the agent drives the map through an authenticated bridge.

Bounded resources. Upload, pixel, and dimension caps plus a pre-dispatch VRAM gate bound the worst case a single workstation must absorb.

Rapidly tailorable. Thin surface over stable engines — the operator view, palette, and curated mission workflows re-cut to the program's task.

Channel-ready

Available to primes and integrators through Seaglass Foundry's channel partner. Origination, non-circumvention, and IP protection covered by signed agreement.

Evaluate on your terms

Run the whole suite on one evaluation host, disconnected if required, and exercise every part of it — compute, catalog, and agent — through one interface.

Evaluate the Forge suite — see it work on one machine. rich@seaglassfoundry.com

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