

Linkerd Production Readiness Pre-Launch Checklist

1. Installation and GitOps: No pets allowed!

Install and managed Linkerd via Helm with all configuration stored in Git and applied through a GitOps workflow (Argo CD, Flux, or Terraform with Helm)
Document a rollback procedure and regularly tested it (if you don't test it, it's not actually a procedure!)

2. Certificates and identity: This is your security boundary

Create the trust anchor and issuer certificates outside the CLI, and their keys are under proper control
Ensure cert-manager, or an equivalent CA workflow, issues and automatically rotates the issuer certificate
Document and test procedure for both issuer and trust anchor rotation, including restarting the control plane and workloads where required

3. Control plane high availability: Design for failure

Run Linkerd in High Availability mode
Set resource requests and limits for all control plane pods, and monitor these values and adjust them as the cluster grows
Monitor the Linkerd components to observe their health over time

4. Proxy and workload tuning: Respect the edge cases

Identify high-traffic, latency-sensitive, or stateful workloads, such as databases, Kafka, or large monoliths, and reviewed their proxy requirements
Increase CPU and memory for proxies using global or per-workload overrides where necessary
Mark ports that carry application-level TLS or mutual TLS as opaque or skipped so Linkerd does not attempt to inspect or interfere
Explicitly configure protocols such as gRPC so you get correct metrics and behavior rather than relying solely on protocol detection

5. Observability and alerts: One pane for when it hurts

Feed a working metrics pipeline (e.g., Prometheus) into a visualization tool like Grafana
Centrally aggregate logs from both applications and proxies centrally and searchable by service, namespace, and pod

Create a single incident dashboard that shows control plane status, overall success rate and latency, and the health of your most important workloads

Configure basic alerts for control plane availability, mesh success rate and latency, and upcoming certificate expirations

6. Process and environment parity: Practice before it counts

Use the same Helm and GitOps workflow across dev, staging, and prod for Linkerd installs and upgrades

Practice at least one control plane upgrade and one issuer rotation in a lower environment, including rolling workloads and validating behavior

Keep any DR or secondary clusters reasonably in sync in terms of versions, configuration, and certificates, and you have run at least a basic failover or smoke test

Explicitly include developer-facing or internal environments in your production definition where other teams depend on your platform

