

Finch

The Minimal Observability Infrastructure

What is Observability?

- The process of making a system's internal state more transparent.
- Based on four pillars
 - Logs
 - Metrics
 - Traces
 - Continuous Profiling

Why Observability?

- Quick debugging of production issues.
- Transparency in how requests flow.
- Performance bottlenecks identification.
- Resource usage optimization.

What is Finch?

- **Finch** is an open-source infrastructure designed to provide essential tools for observability.
- Targets to be lightweight and easy-to-adopt.
- Focuses on core observability features.
- Aims to empower to understand and improve applications.

Why Finch?

- Simplifies the setup of observability infrastructure.
- Reduces overhead and complexity.
- Provides a solid foundation for a ready-to-use observability stack.
- Encourages best practices in observability.

How does Finch work?

- Two main components:
 - **Finch**: The backend services.
<https://github.com/tschaefer/finch>
 - **Finchctl**: The command-line interface tool.
<https://github.com/tschaefer/finchctl>

How does Finch work?

- Finch:
 - Backend services in Go (97.7%).
 - A small but crucial footprint in Makefile and Dockerfile (2.3% combined).
 - Manages observability agents and configurations.




How does Finch work?

- **Finchctl:**
 - Command-line interface tool in Go (95%).
 - Shell scripting (3.4%) for operational flexibility.
 - Deploys and manages service infrastructure.
 - Registers, enrolls and manages agents.

How does Finch work?

- Docker-based deployment for easy setup.
- Reverse proxy for routing, TLS termination and authorization.
- Multiple Grafana observability services.
- Provisioned dashboards for logs, metrics, and profiling.
- Communication via SSH and gRPC.

You need more info?

-  [gh/tschaefer](https://github.com/tschaefer)
-  [in/tschaefer-org](https://www.linkedin.com/company/tschaefer-org)
-  blog.tschaefer.org