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# Learning OpenTelemetry

Setting Up and Operating  
a Modern Observability System



Ted Young & Austin Parker

# Learning OpenTelemetry

OpenTelemetry is a revolution in observability data. Instead of multiple disconnected systems, OpenTelemetry combines tracing, metrics, and logs into a single integrated stream of data, providing valuable and accurate correlations that were previously unavailable. This practical guide shows you how to set up, operate, and troubleshoot the OpenTelemetry observability system.

Authors Ted Young and Austin Parker, leaders and founding contributors of the OpenTelemetry project, cover every OpenTelemetry component, as well as observability best practices for many popular cloud, platform, and data services such as Kubernetes and AWS Lambda. You'll learn how OpenTelemetry enables OSS libraries and services to provide their own native instrumentation—a first in the industry.

Ideal for application developers, OSS maintainers, operators and infrastructure teams, and managers and team leaders, this book guides you through:

- The principles of modern observability
- All OpenTelemetry components and how they fit together
- A practical approach to instrumenting platforms and applications
- Methods for installing, operating, and troubleshooting an OpenTelemetry-based observability solution
- Ways to roll out and maintain end-to-end observability across a large organization
- How to write and maintain consistent, high-quality instrumentation without a lot of work

**"Ted and Austin live and breathe OpenTelemetry. If you're looking for a book to understand not only the how, but also the why of this emerging standard for cloud native observability, look no further."**

**—Daniel Gomez Blanco**  
Principal Software Engineer,  
Skyscanner

**Ted Young** is one of the cofounders of the OpenTelemetry project. Over the past 20 years, he has designed and built a variety of large-scale distributed systems, including visual FX pipelines and container scheduling systems.

**Austin Parker**, director of open source at honeycomb.io, is a cofounder of the OpenTelemetry project and a member of the OpenTelemetry Governance Committee. In addition, Austin is an author of *Distributed Tracing in Practice* (O'Reilly).

OBSERVABILITY

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by Ted Young and Austin Parker

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