End-to-End Tracing: Adoption and Use Cases

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This document summarizes information about end-to-end tracing for 26 companies. The information was gathered from documents shared to the Distributed Tracing Workgroup [6] and through in-person conversations at tracing workshops [5]. To cite this document, use the following bibtex:

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Company	*Services*	*Engineers*	*Tools*	*Use Cases*
Allegro	250+	500	Zipkin[†*]	debugging; understanding service dependencies; network traffic analysis; latency monitoring
BBN Technologies (?)	30+	60	Zipkin[†]	understand service dependencies; performance and latency monitoring
Coursera	15+	60	Zipkin[†*]	dependency visualization; failure correlation and analysis
Etsy	—	200+	CrossStitch[†] [2]	latency monitoring; aggregated analysis
Facebook	—	—	FBTrace	mobile analysis; regression analysis
FINN.no	200	120	Zipkin[†]	
Google	—	—	Dapper [12], Census [7]	performance and resource monitoring; security auditing; root-cause analysis
Groupon	400+	1700	Zipkin[†]	performance improvements; architectural understanding; monitoring; SLA enforcement; anomaly detection; ad-hoc exploratory analysis
Hailo	200+	30	*In-House*[†] [1]	debugging; metric aggregation; architectural understanding; network traffic analysis; performance optimizations
Line	24+	200+	Brave, Zipkin[†]	latency monitoring; metrics monitoring
Lookout	15+	100	Zipkin[†]	statistics and metrics monitoring; deployment tooling; client whitelisting;
Lyft	—	—	zend[†] [8]	dependency analysis; latency analysis; mobile device correlations
Medidata Solutions	100	—	Zipkin[†]	system monitoring
Naver	100	2000	Naver Pinpoint[†]	architectural understanding; realtime monitoring; stacktrace sampling; batch analysis
Netflix	100+	1000+	Salp[†] [3]	dependency analysis; ad-hoc offline querying; realtime analysis; critical path analysis
Pinterest	—	—	PinTrace[†] [9]	latency analysis; architectural understanding; debugging; cost attribution; root-cause analysis
Prezi	50	100	Zipkin[†]	latency analysis; service dependency analysis
SmartThings	24+	35	Zipkin[†]	real-time analysis
SoundCloud	50	140	Zipkin[†]	architectural understanding, performance optimizations; latency analysis; batch analysis
Sourcegraph	—	—	Appdash[†]	debugging; performance and latency monitoring
Tracelytics	—	—	TraceView[§]	latency analysis; performance monitoring; realtime monitoring; metric aggregation
TomTom Maps	10+	100+	Brave, Zipkin[†]	statistical analysis and aggregation
Uber	2000+	2000+	Jaeger	architectural understanding, execution clustering; historical analysis; anomaly detection; inspect service dependencies; latency correlations; real-time aggregations
Yelp	300+	—	Zipkin[†] [4]	debugging; service dependency analysis; latency analysis
Zalando	100+	1000+	Zalando Tracer[§]	realtime and batch analysis
Zhihu	150+	80+	Zipkin[†]	architectural understanding; metric aggregation; dependency analysis; stack trace analysis; latency analysis

[*] with extensions or modifications [†] Dapper [12] derivative [§] X-Trace [10] derivative

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