

Tracing and DNS

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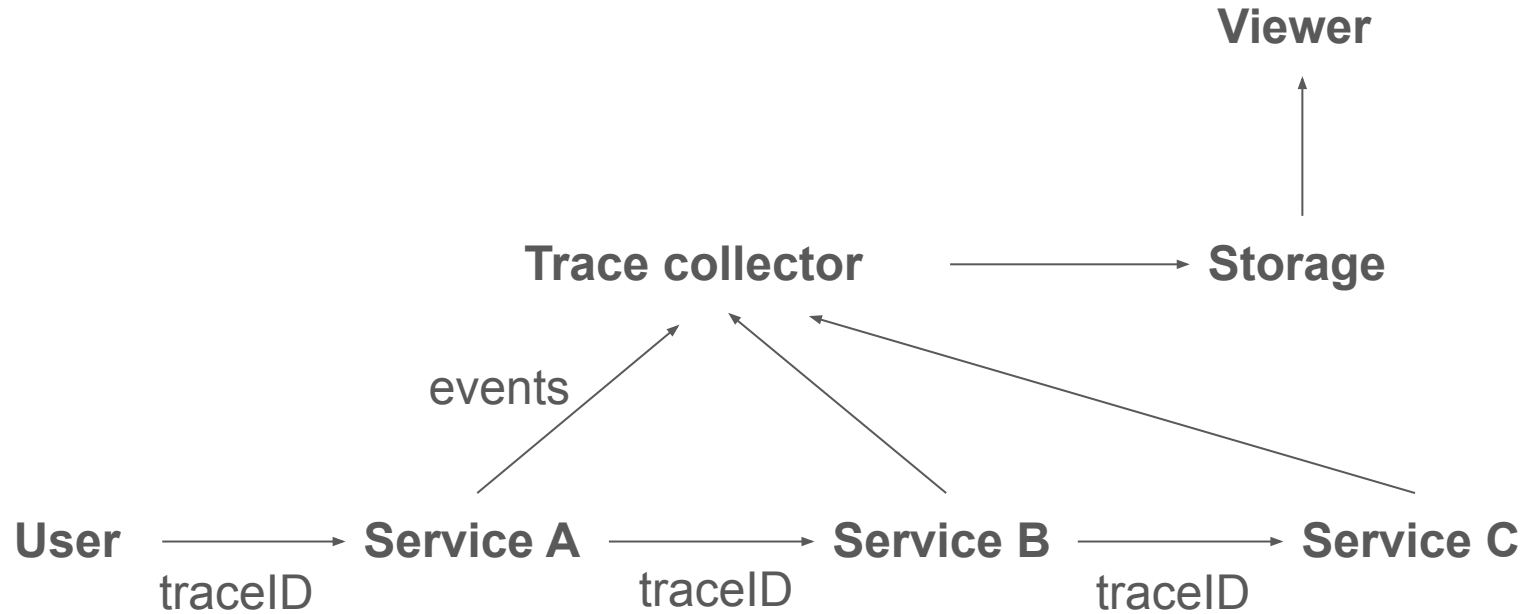
Problem

- Why did I get this answer?
- Why did my query fail?
- Why was my query slow?
- Why is my cache broken?
- What in the world is my resolver doing?



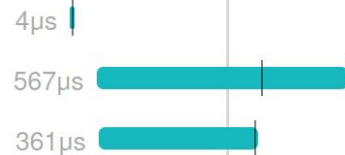
Tracing

What is (distributed) tracing?



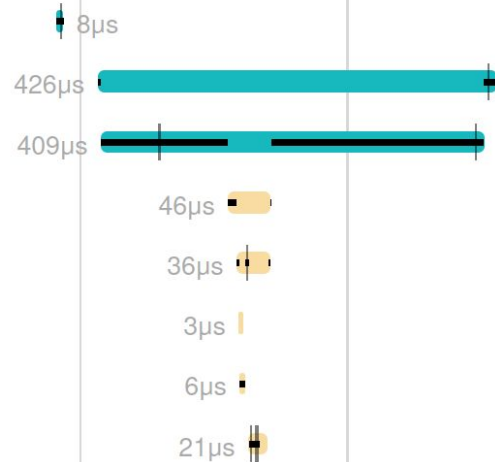
Before

- rrdns-origin-api selectUpstreams
- rrdns-origin-api query
- rrdns-origin-api udpQuery



After

- rrdns-origin-api selectUpstreams
- rrdns-origin-api query
 - rrdns-origin-api unixQuery
 - edgedns-orange stream-reader
 - edgedns-orange read-iteration
 - edgedns-orange read-next
 - edgedns-orange acquire-permit
 - edgedns-orange resolve-stream



edgedns	phase-upstream-query	19µs	
edgedns	upstream-exchange	1.07ms	
edgedns	phase-upstream-send	27µs	
edgedns	exchange-attempt	902µs	

exchange-attempt Service: edgedns

Tags

addr	[2001:500:a8::e]:53
busy_ns	508136
dns.answers	▼ []
dns.answers.count	0
dns.name	party
dns.rcode	NOERROR
dns.truncated	false
dns.type	A
duration	1.000014ms
expected_rtt	11ms

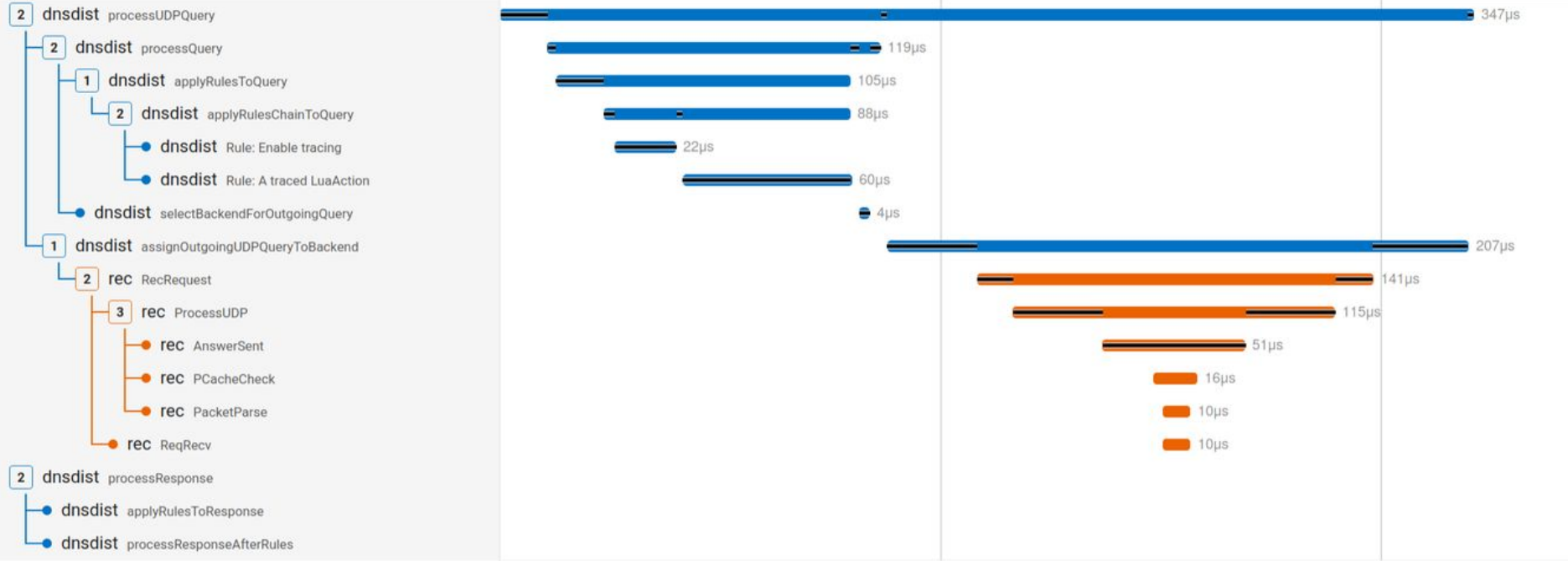
Trace Start **May 16 2026, 15:28:40.451** | Duration **628μs** | Services **2** | Depth **5** | Total Spans **17**



Service & Operation

Filter icons: funnel, down arrow, right arrow, down arrow with checkmark, right arrow with checkmark

0μs | 157μs | 314μs



No questions
(Implement tracing!)