

A Just-in-Time Instrumentation Framework for Diagnosing Performance Problems in Distributed Applications

One minute lightning talk

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Can we automate performance debugging for distributed systems?



- A distributed system is comprised of various components (fig 1).
- When debugging a problem, it is often hard to pinpoint the exact problematic area.
- Software developers have to manually and repeatedly instrument the codebase or enable more logging.
- Use "signals" as feedback in a loop to automate the "zoom in" process (fig 2).

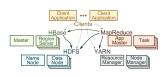


Fig 1: Components in Hadoop.

Components (Pythia in red)
Control Flant:
Control Signal
Control Signal
Control Signal
Analysis Engine
Reconstructor
Reconstructor
NOVA
NEUTRON

Fig 2: Arch. of a just-in-time instrumentation framework.

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