

Monitoring/debugging AWS Lambda applications

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Abstract

The way we develop and deploy software has changed dramatically in the last few years. This makes the ecosystems of our applications even more complicated than ever. In this session, we will go through the evolution and the monitoring challenges, while using the right tools to keep developer velocity. We'll discuss the monitoring challenges in serverless systems, explore existing solutions for monitoring and debugging serverless applications (mostly around AWS), and introduce modern tools which can help in this task. Intended tutorial: * Starting with an existing AWS serverless application, including Lambda, managed services (API Gateway, S3, SNS, DynamoDB, triggers), and external APIs (Auth0, Twilio). * I'll show how the application behaves and what business flows exist in it. * We'll discuss the potential risks and challenges in such an application - e.g. debugging a distributed flows, performance monitoring of user flow (as opposed to a single function), as well as the cost challenges due to the pay-per-use nature. * We'll demonstrate several solutions, including log aggregation, distributed tracing, and modern tools like Epsagon (see my blog for an idea). Target audience and prerequisites: The target audience should be familiar with AWS Lambda and hopefully, the CloudWatch console as well. No other prerequisite is needed.