

Simulating Large Complex Distributed Systems Architectures

Adrian Cockcroft <http://github.com/adrianco/spigo>

There are many monitoring tools, but few of them can make any sense of a typical entry level microservices architecture, let alone a real world deployment. Docker only make this problem worse. I will talk about ways to challenge tools builders to do better and I will introduce the problem by showing some valiant and failed attempts to visualize microservice architectures. The challenge is based on a new open source tool I have built (spigo) that generates large scale simulations of complex microservices, and which can be used to stress test monitoring tools without the expense and effort of standing up large test configurations.

The diagram below shows the dependency graph generated by spigo (in March 2015) for a fairly simple cloud native application that is deployed in three regions and three zones per region, using Cassandra (the blue dots) to pass data back and forth.

This work is progressing rapidly and much more interesting things should be ready to discuss by September.

