



Testing Large-Scale Distributed Applications in the Cloud

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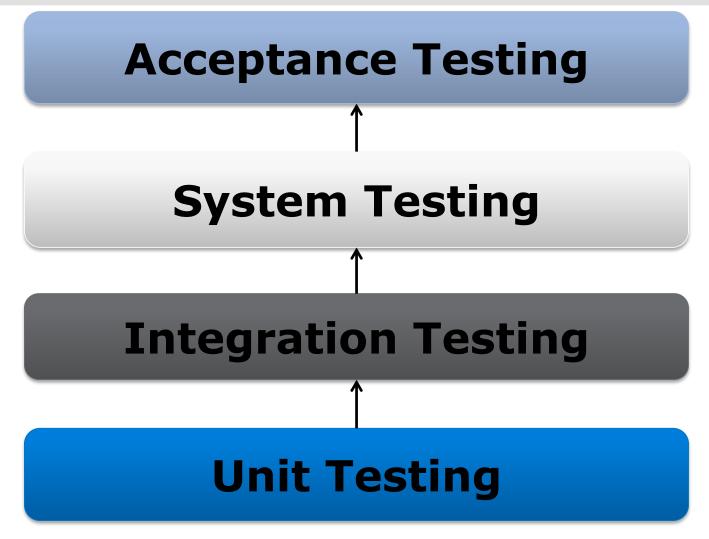
February, 2013





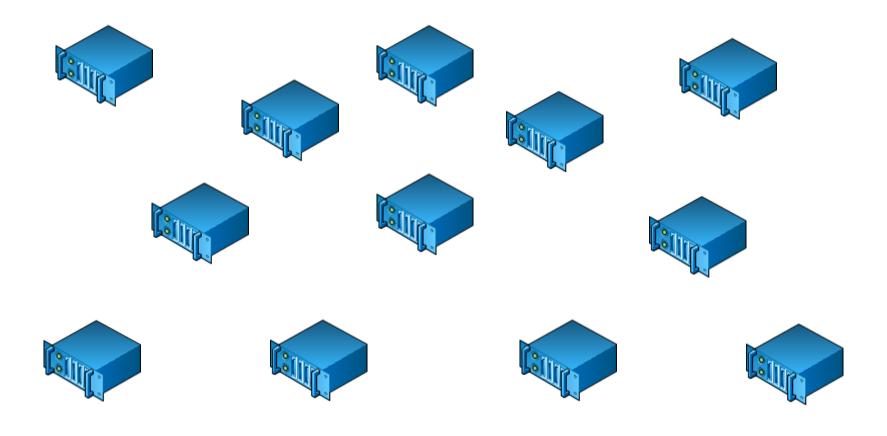
Testing Layers





How many dedicated machines?

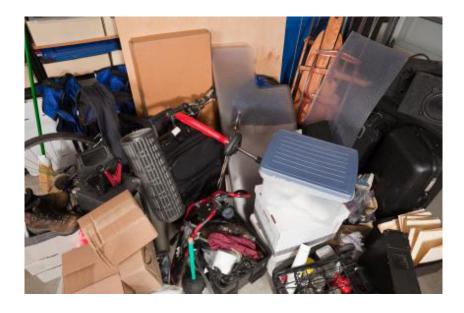




Clean vs Cluttered

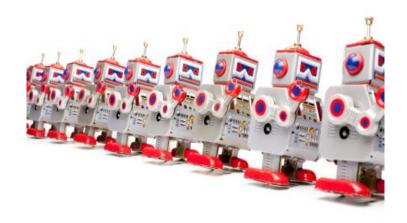






Automated vs Manual







Testing Environment ???



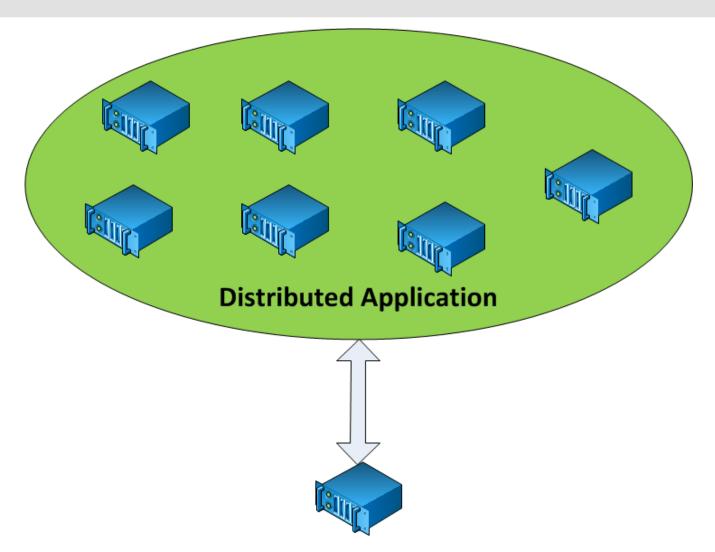


Feel like this?







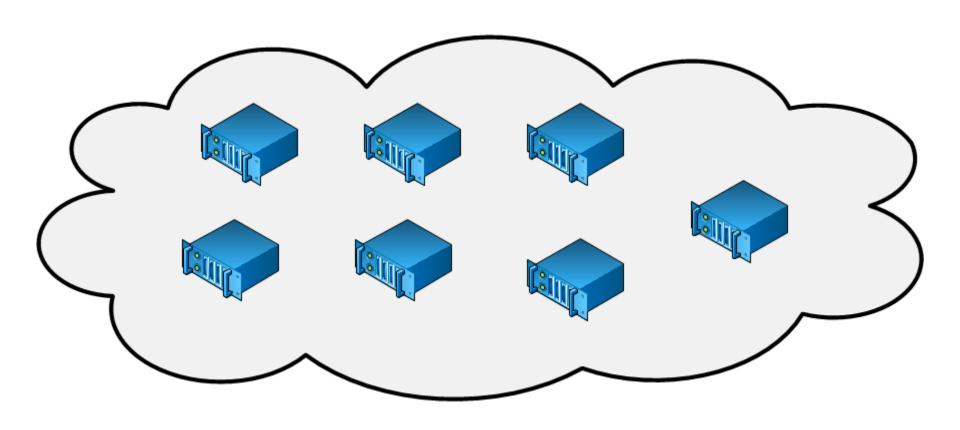


AWS

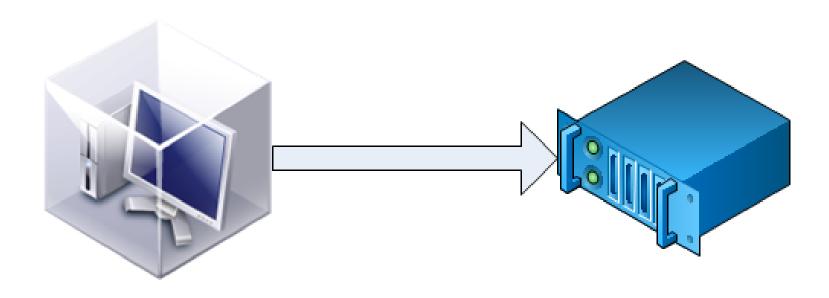


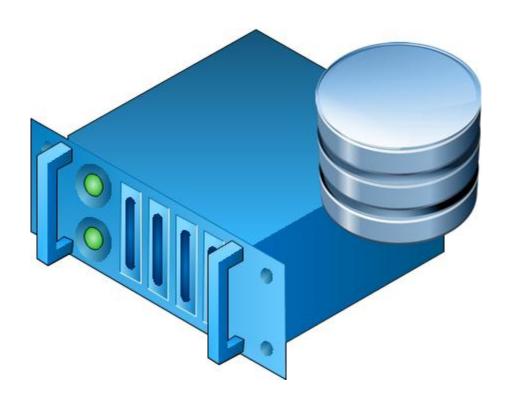












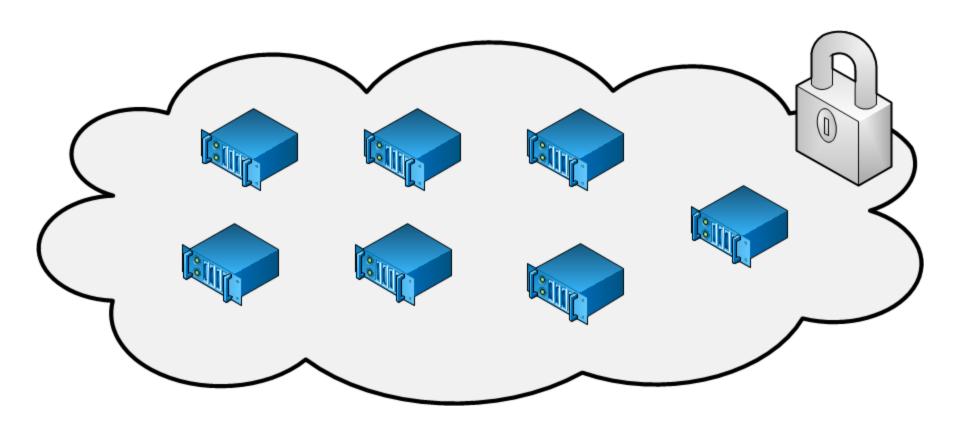
EBS vs Instance Storage

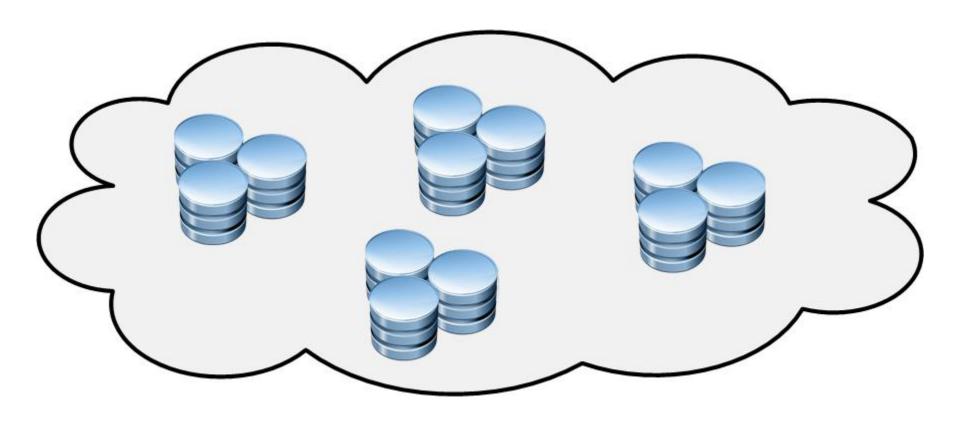


EBS	Instance Storage
Persistant	Non-Persistant
Slow (Raid helps)	Fast (SSD option)
Network Storage	Machine Storage

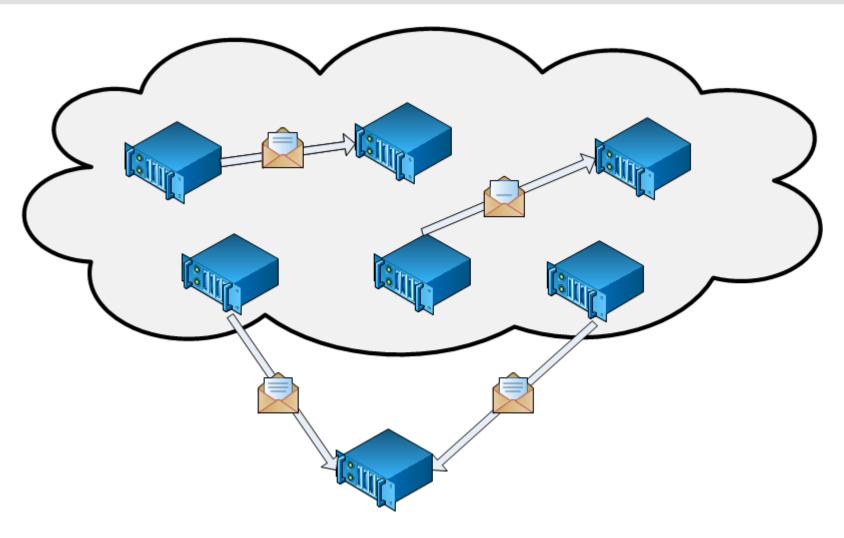
VPC





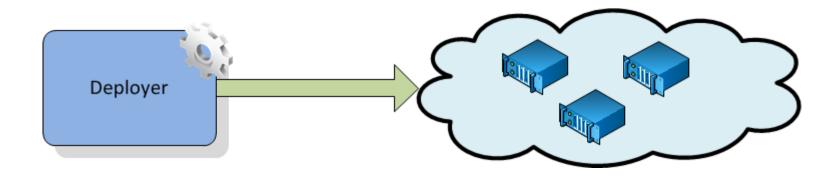






Deployer





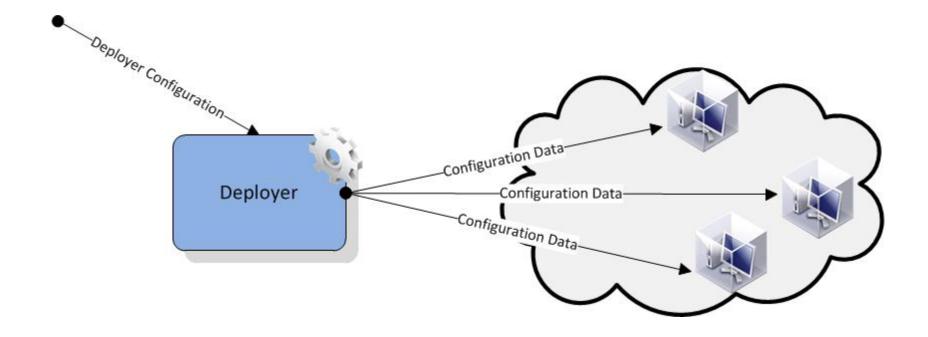
Bootstrap





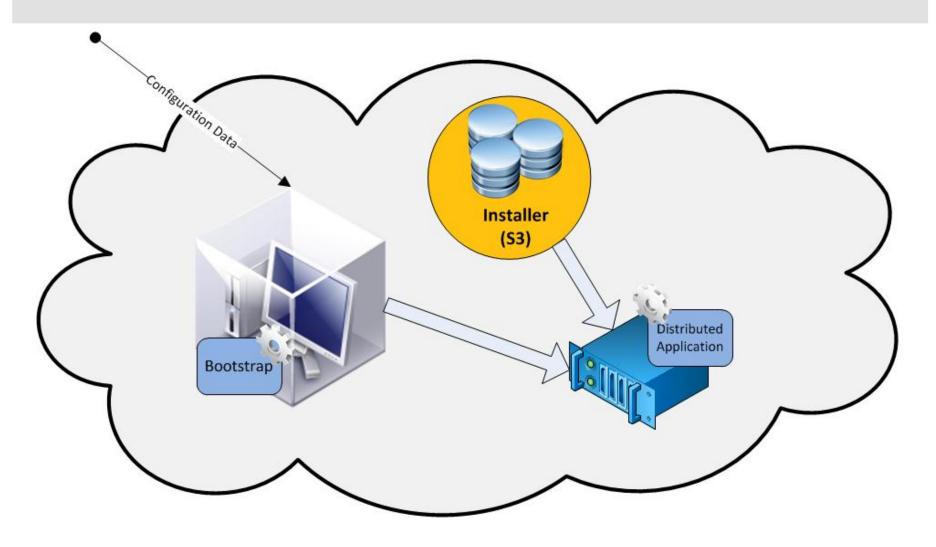
Deployer





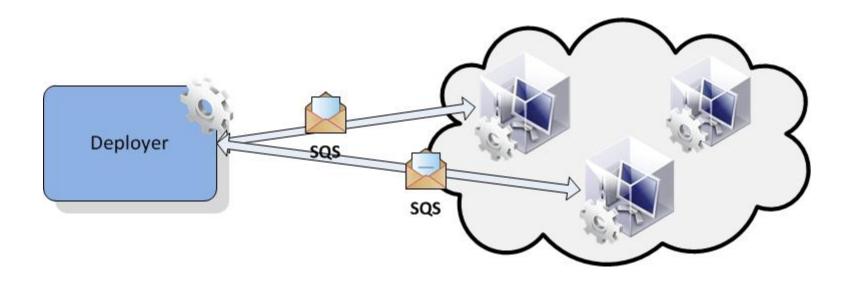
Bootstrap





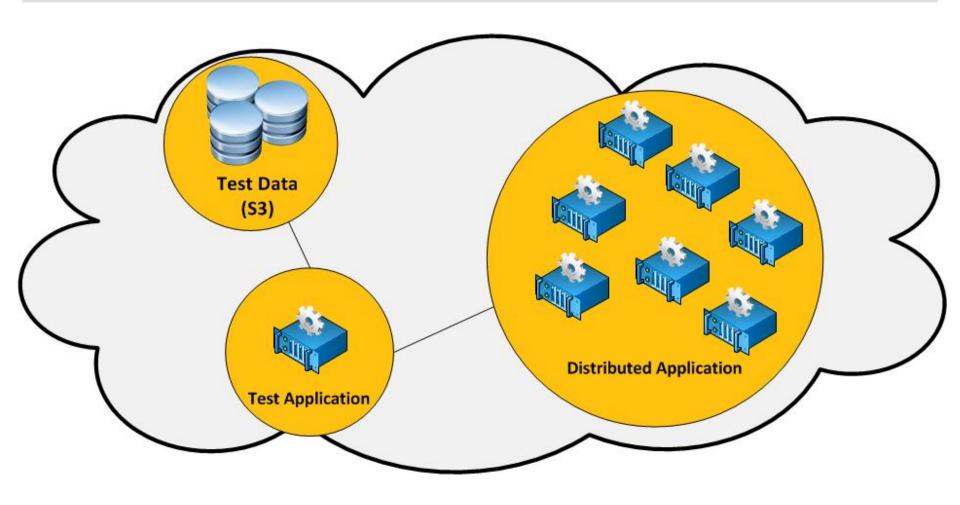
Communication





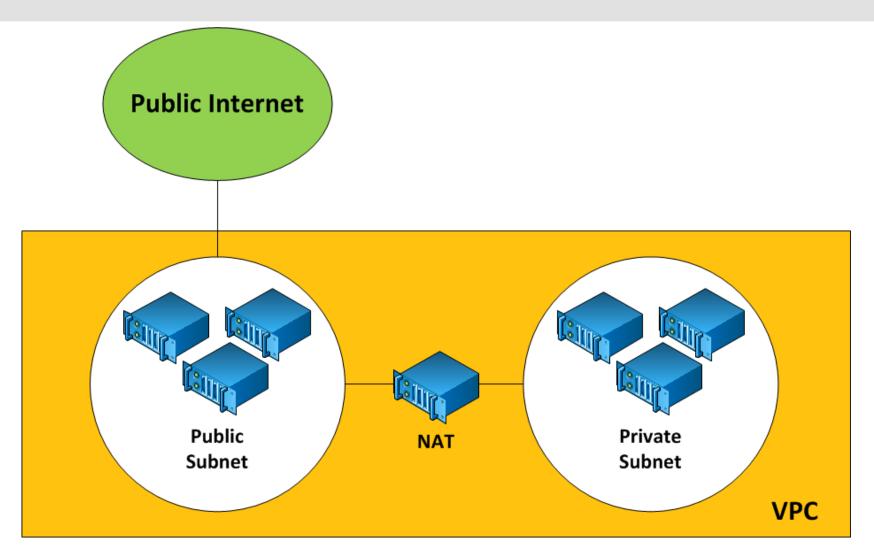
Testing





Security





Benefits



- Distributed tests possible
- Test at scale
- Test if applications scales linearly
- Flexible testing possibilities
- Find performance bottlenecks
- Quick setup and teardown
- Develop best practices for customers
- Keep costs in check



Caution



- Watch costs
- Not real machine
- EBS ≠ SSD
- NAT bottleneck
- Virtual server stability
- Limited instances
- Unreliable network measurements
- Security

