

ECE 495/595 – Web Architectures/Cloud Computing

Module 5, Lecture 2: Web Application Security – Authentication

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What is Capistrano?

Capistrano is a distributed system management framework.

It supports:

- Distributed deployments.
- Command distribution.
- General large-scale system management.

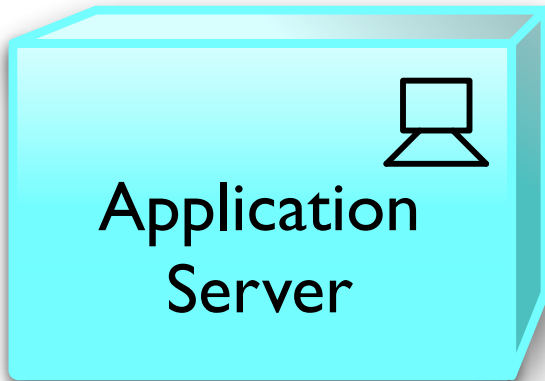
So what?

Starting out...

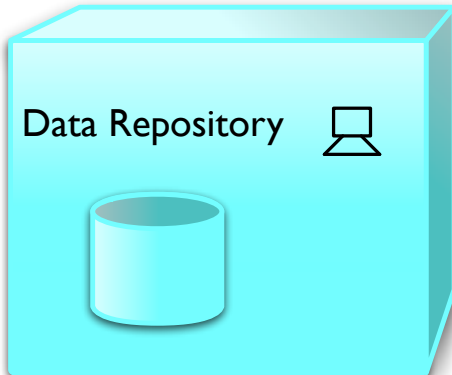


Application

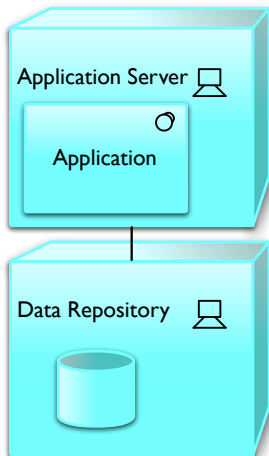
...where to put it?



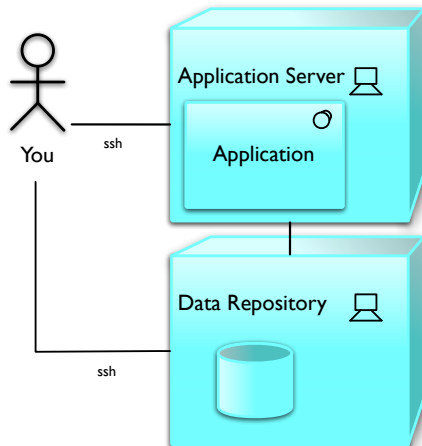
...and how to store stuff?



...now linking it together...



...and this is how you manage it.



Is this sufficient?

Well, probably okay for:

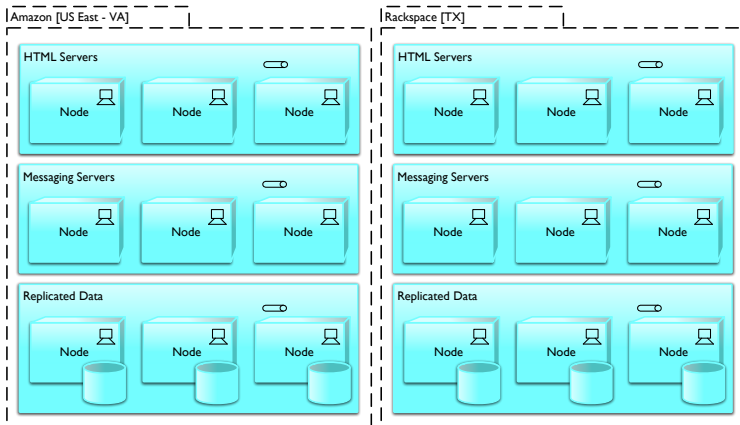
- School
- Departments
- Small organizations

But honestly, not very real world. Systems with any kind of availability requirements or volume usually have:

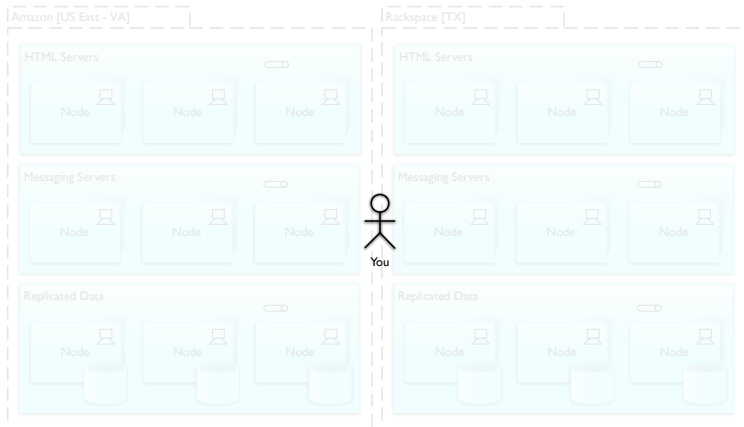
- More systems
- Specialized systems
- More providers

Really? Well, why not?

Typical small deployment...



...and you're responsible for it.



So how do you do it?

Well, you don't want to log into each system to administer manually. And why is that?

- **Scalability** You don't scale. Sorry.
- **Reproducibility** It's very difficult to recreate the same sequence of actions and configurations across multiple systems, so you'll generally script it. Which is what Capistrano does, in a distributed way.
- **Human Error** You make lots of mistakes too. If you can tell a machine what to do, it'll do a better job than you can.

**So figure out how to tell machines to configure themselves.
Or, use a system built by somebody else to tell machines to
configure themselves, like Capistrano.**