Designing Application Deployments in Various Environments

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Agenda

Application deployment models

Virtualization options

Introducing Docker
- Working with Dockerfiles
- Dockerizing our CRM app
- Bonus: docker-compose

Options for Application Deployments

Public cloud   **Private cloud**   **Hybrid cloud**   **Edge computing**

Cloud Wars: Public vs. Private

Public cloud

Consume/pay more as you grow

Infrastructure abstraction

"Where is your data, really?"

Unlimited scale

Private cloud

Utilize existing data center assets

More control means more responsibility

Tight watch over controlled data

Growth requires capital investment

Best of Both Worlds with Hybrid Cloud
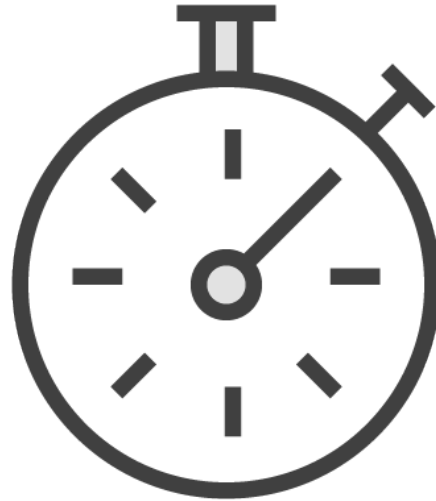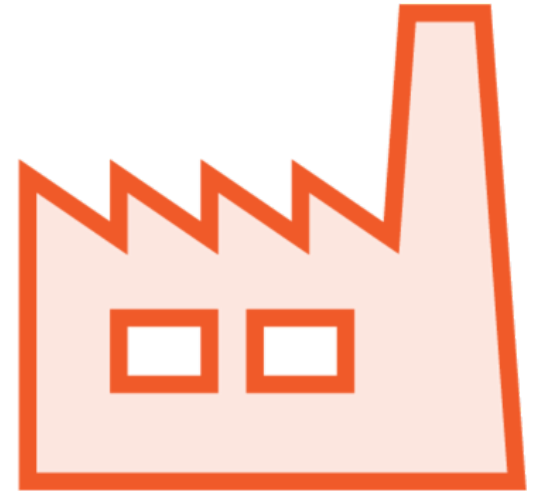
Cost effectiveness

New capabilities

Flexibility
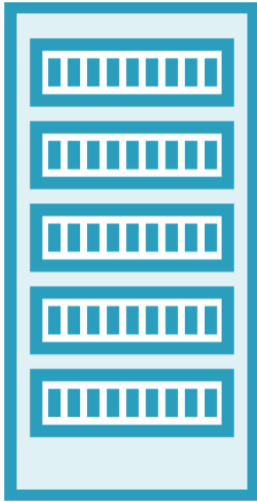
What Is Edge Computing, Anyway?

Distributed

Faster response

IoT applications

To Virtualize or Not?

Bare metal

Virtual machines

Containers

The Docker Architecture Stack

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Container engine (e.g. Docker)

Operating system (e.g. Linux)

Hardware platform
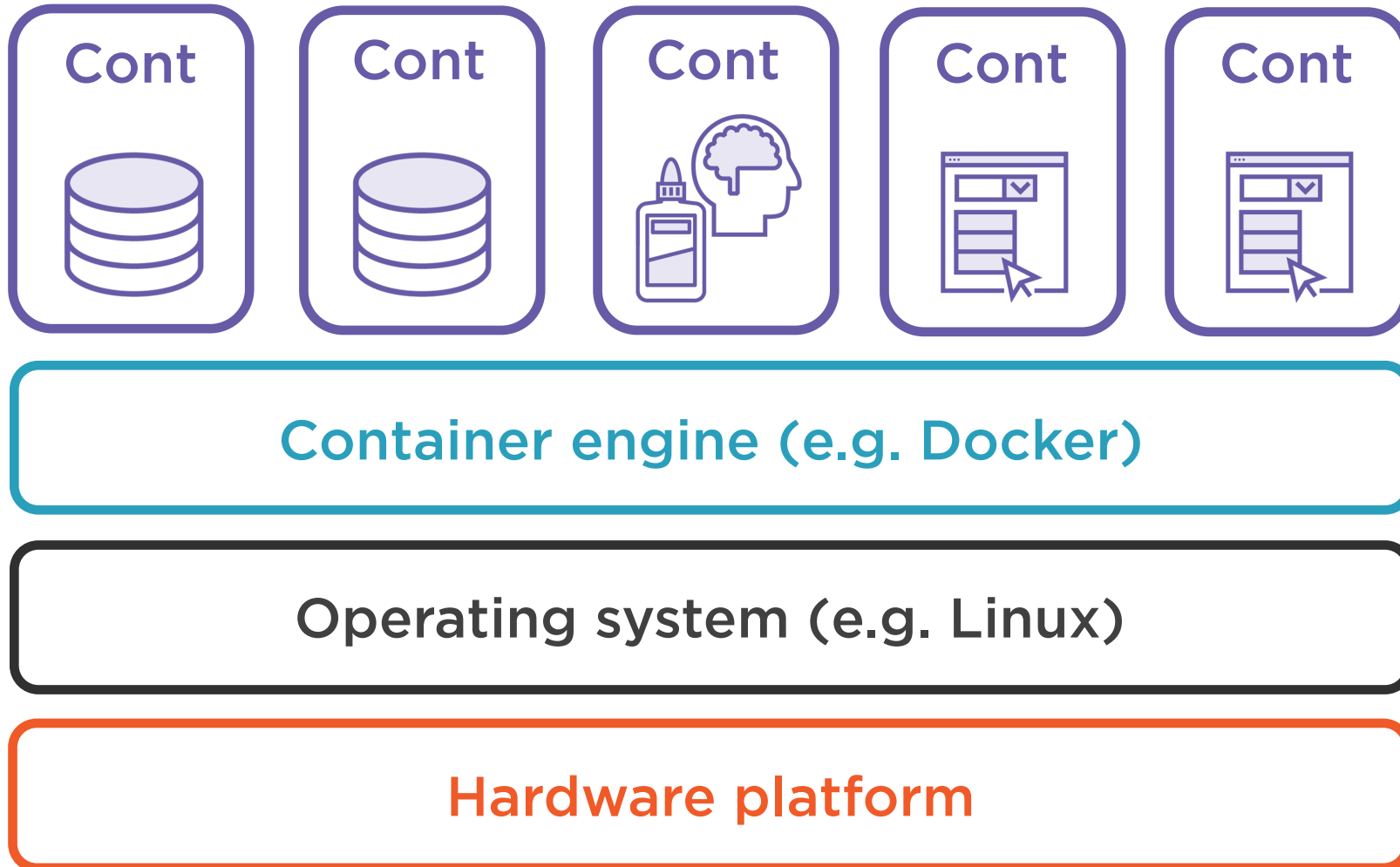
Demo

Installation and basic Dockerfiles

Demo

Building and running Docker images

Demo

Shortcuts with docker-compose

Summary

Application deployment strategies

Virtualization options

Lots of Docker!