



# ExpertField

试验田与试验数据管理系统

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# Background

ExpertField 背景介绍



# Data Flow

ExpertField 数据流

## Into the Office

### -Web pages

- ▶ Add an Field
- ▶ Create an Experiment
- ▶ Add the Field to the Experiment
- ▶ Create QR code
- ▶ Review the uploaded data
- ▶ Replay the audio or Edit/Delete data

## Onto the Field

### -Android app

- ▶ Scan the QR code
- ▶ Select the Experiment
- ▶ Input data or Record a piece of audio
- ▶ Replay the audio or Save/Upload data



# Cloud

ExpertField 云端架构

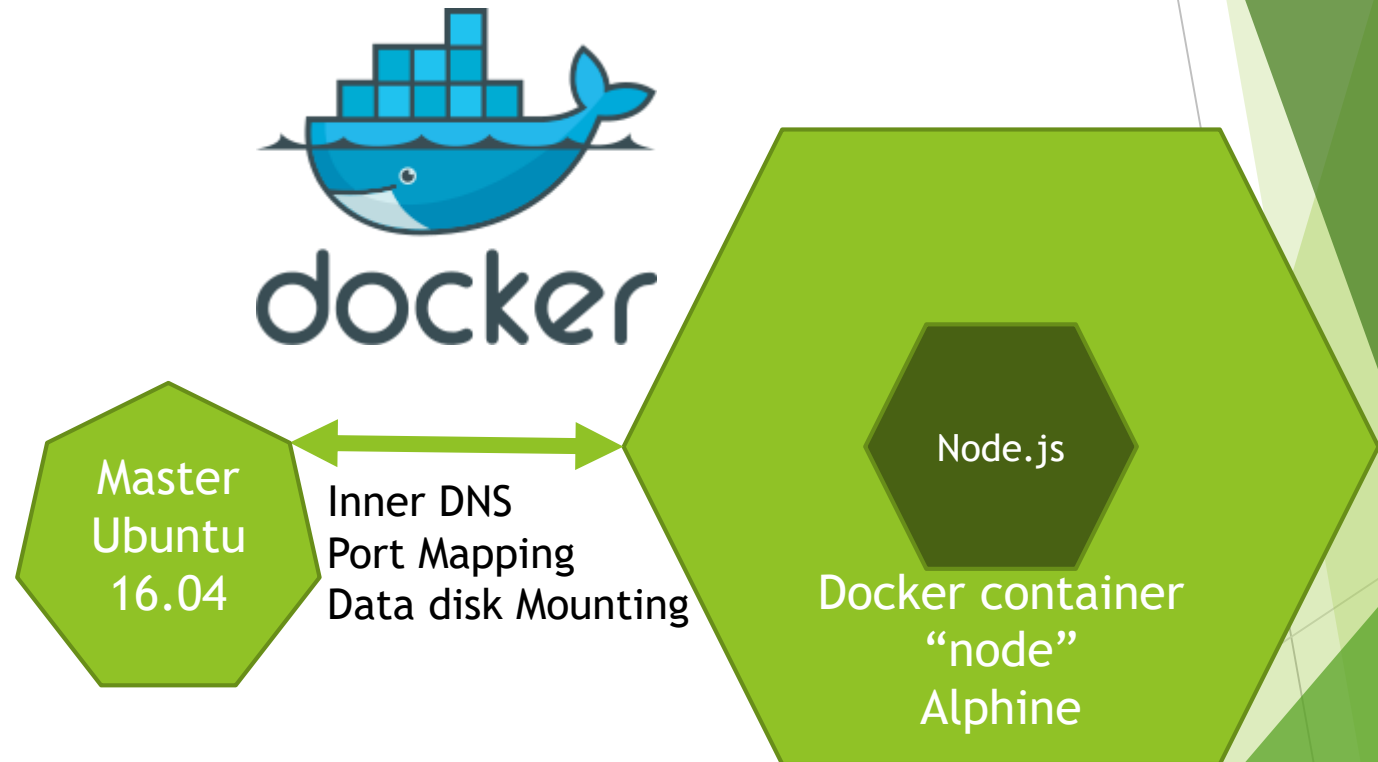
# App Backend — Node.js

- ▶ Node.js is a high performance network application framework, well optimized for high concurrent environments.
- ▶ Node.js uses an event-driven, non-blocking I/O model, which makes it lightweight.
- ▶ Everything inside Node.js runs in a single-thread.

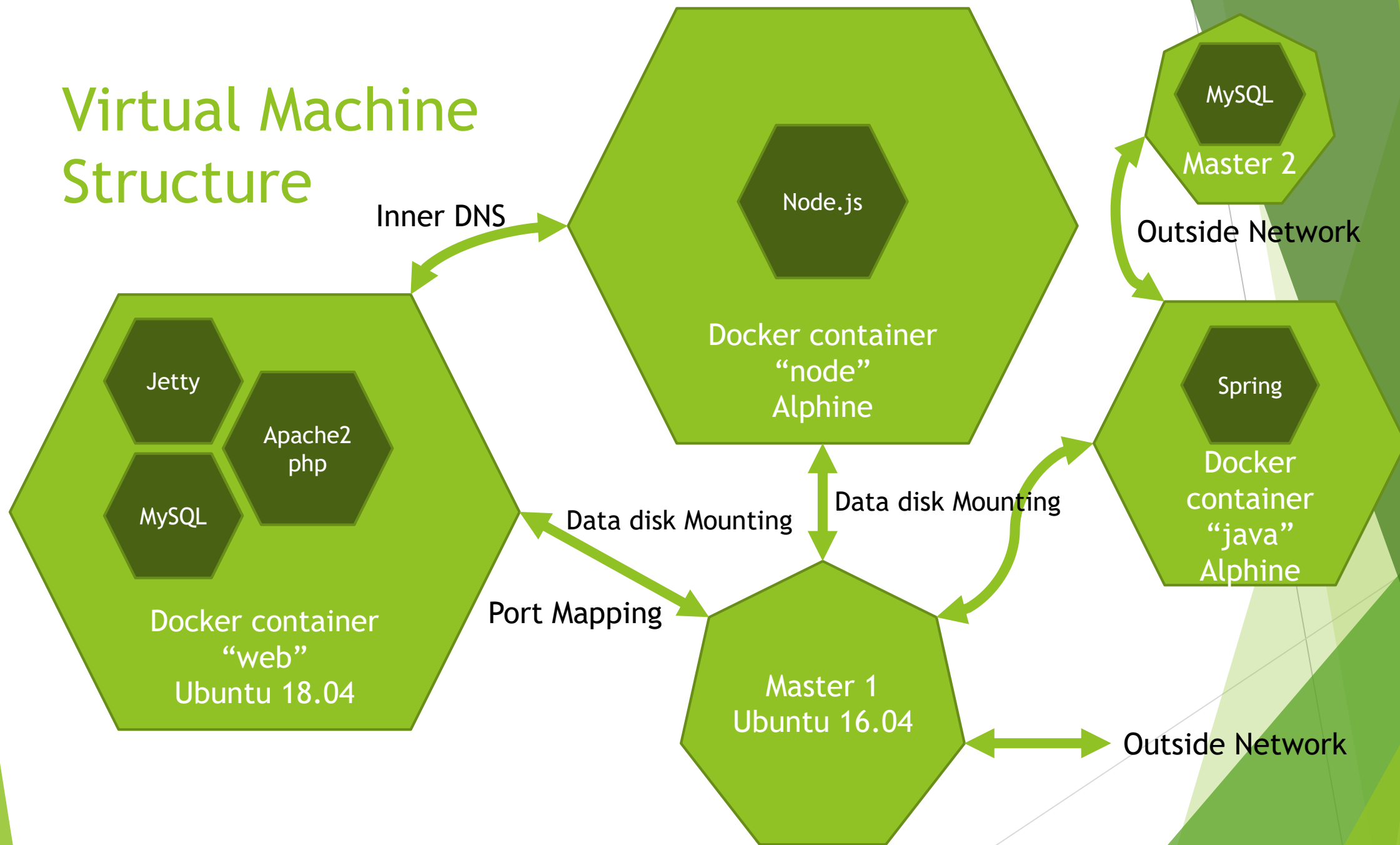
# Docker

## Build, Ship, and Run Any App, Anywhere

- ▶ Combined Microservice
- ▶ Alpine
- ▶ Image, Container, Swarm

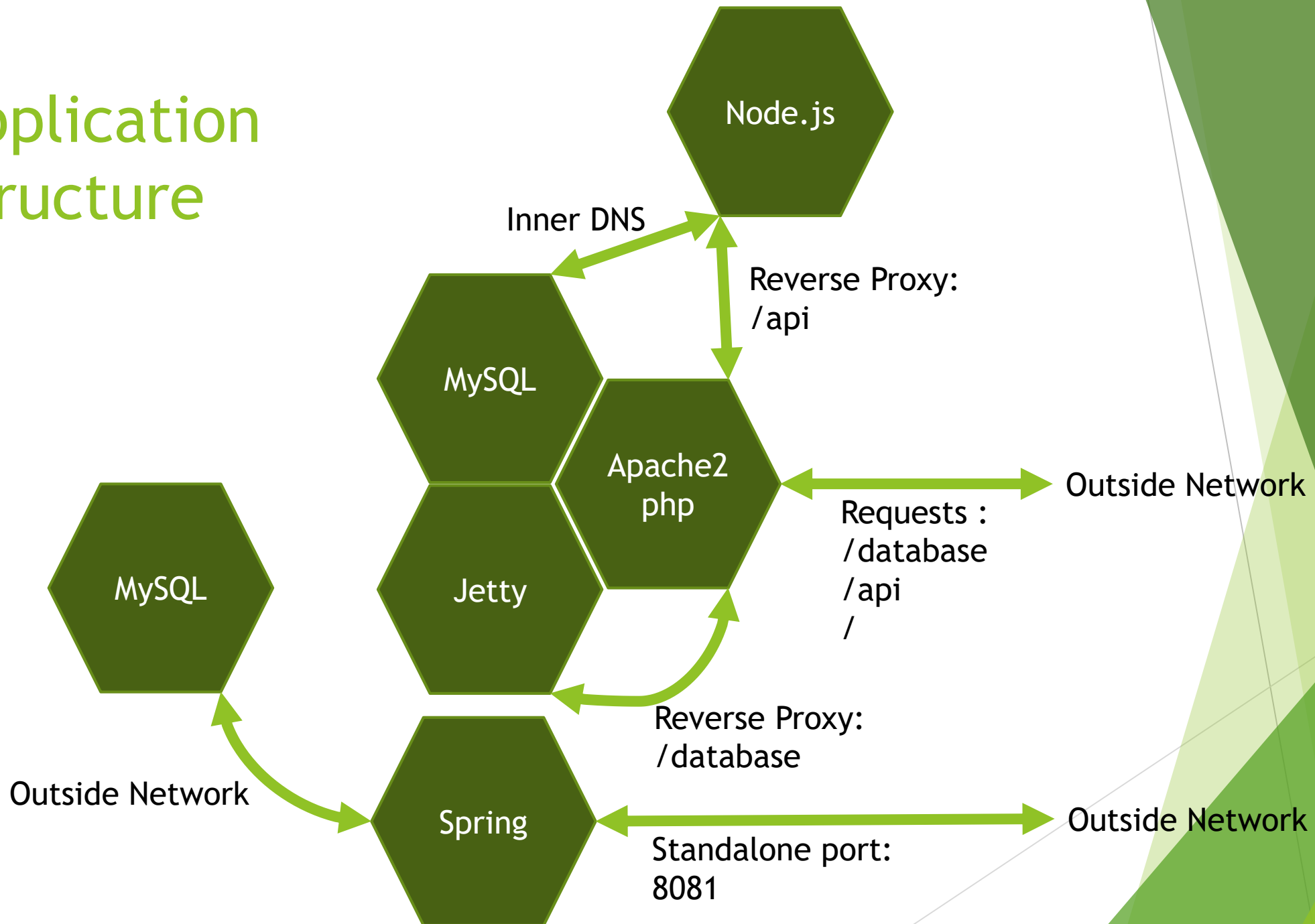


# Virtual Machine Structure





# Application Structure



Thank you!

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