

MicroServices

WHOAMI

- Tom Wilson (@twilson63)
- Lead Technologist for Jack Russell Software, A Tabula Rasa Healthcare Division
- <3 JavaScript/ES
- <3 NodeJS/IO.JS
- <3 CouchDB/PouchDB
- <3 Angular1/Mercury

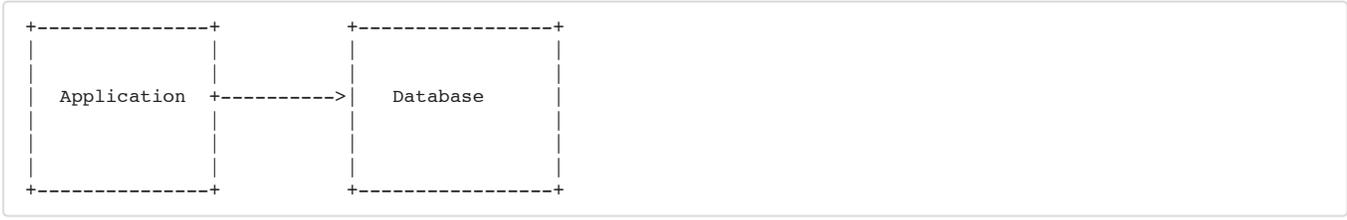
Terms

- Monolithic Application
- MicroServices

Monolithic Application

An application that is built as a single unit

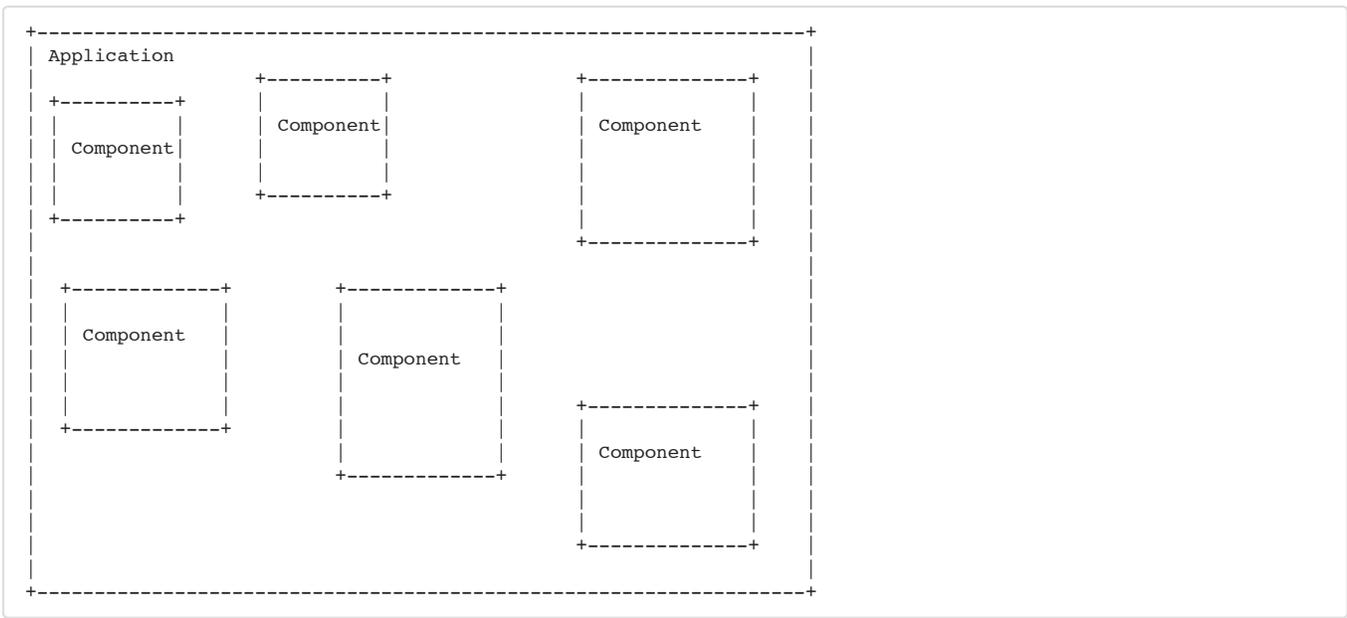
Monolithic Application



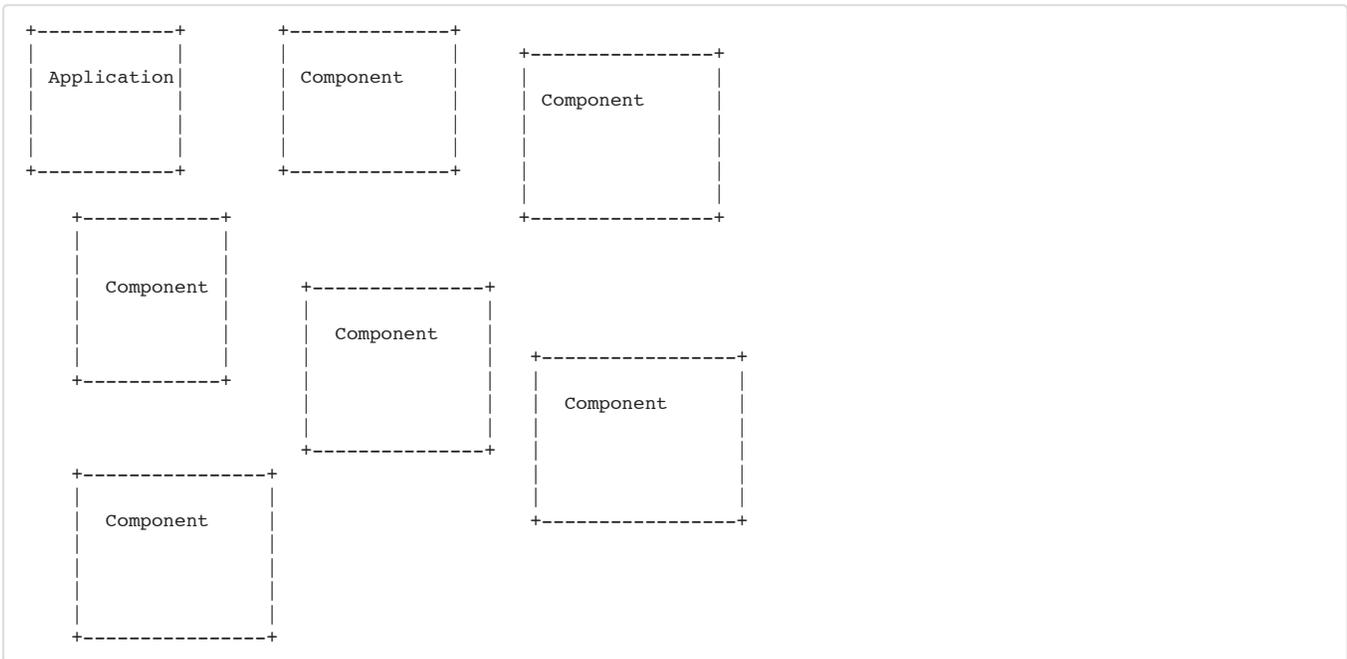
Monolithic Application



In Process Components



MicroServices

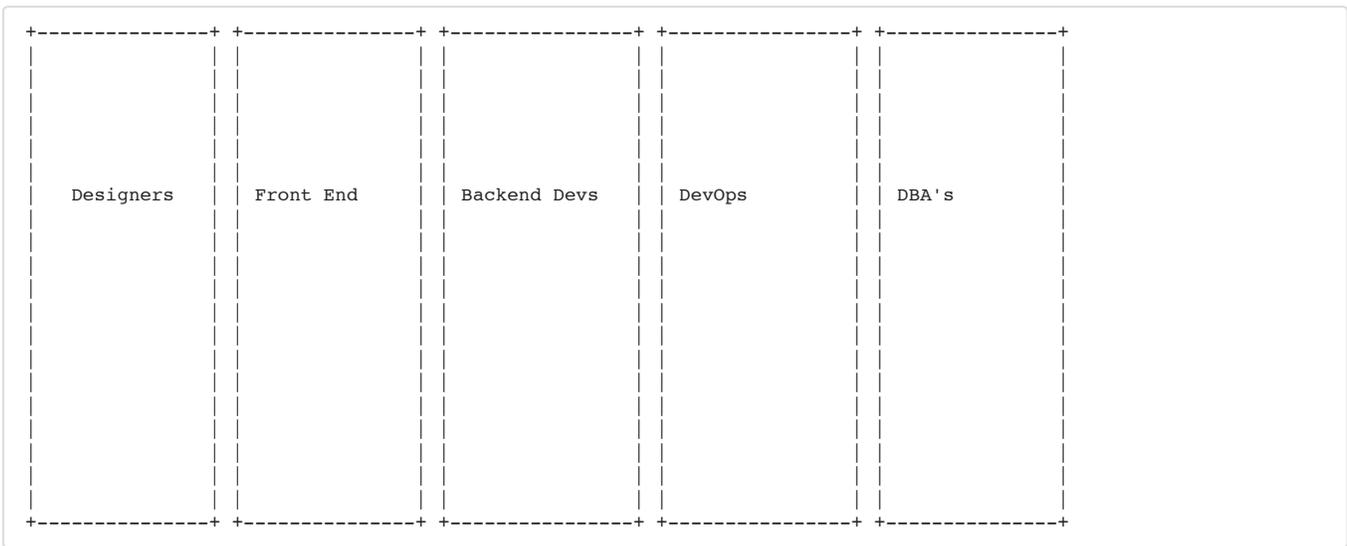


MicroServices is about Team Organization too

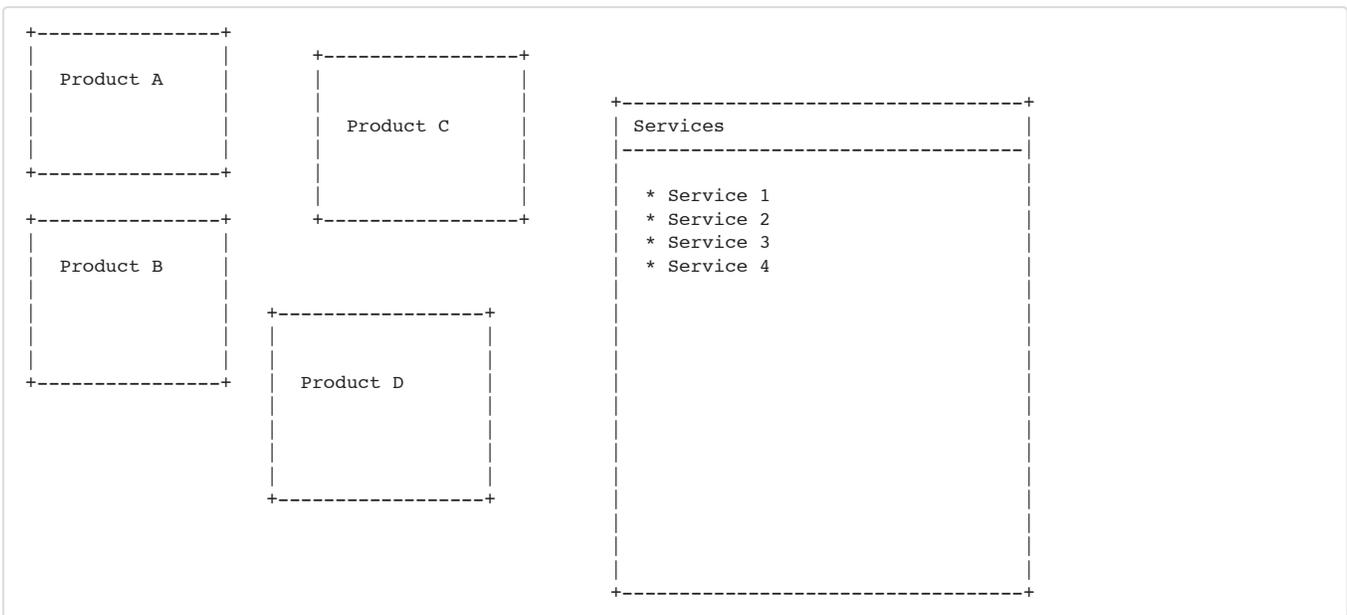
Conway's Law

Any organization that designs a system (defined broadly) will produce a design whose structure is a copy of the organization's communication structure.

Technical Domains



Business Domains

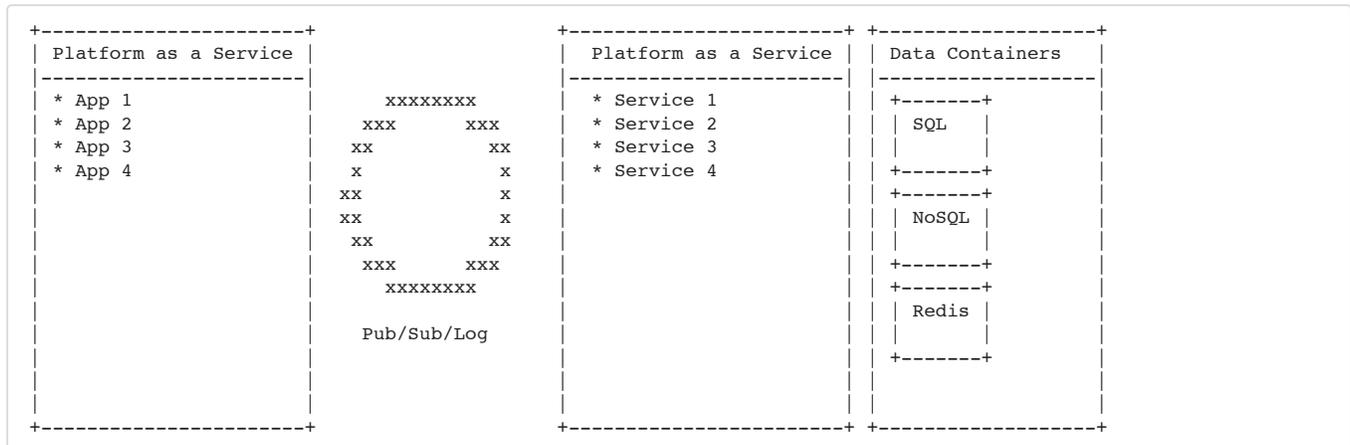


Addressing the Need for Complexity

<http://12factor.net/>

- Multiple Presentation Layers
- Cross-Functional Features
- Multiple Persistent Models
- Multi-Site Replication
- Central Logging
- Multiple Languages
- Feature Experimentation

MicroServices Platform



Pushes Complexity to Automation

- Components
- Services

**Product Based, not
Project Based**

Smart endpoints and dumb pipes

Decentralized Governance

Decentralized Data Management

Infrastructure Automation

Design for failure

Evolutionary Design

Resources

<http://martinfowler.com/articles/microservices.html>

<https://github.com/twilson63/palmettoflow>

Tom Wilson

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<http://jackrussellsoftware.com>