

Splitting the Monolith

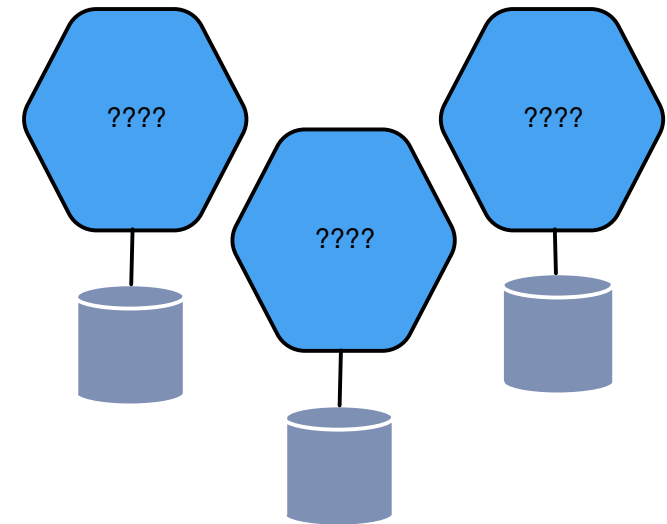
Session 04

Breaking SpringTrader apart

- Data domain
- Data decomposition

Polyglot persistence

- Decomposition allows polyglot persistence
 - Data stores are chosen based on data shape and read/write patterns.

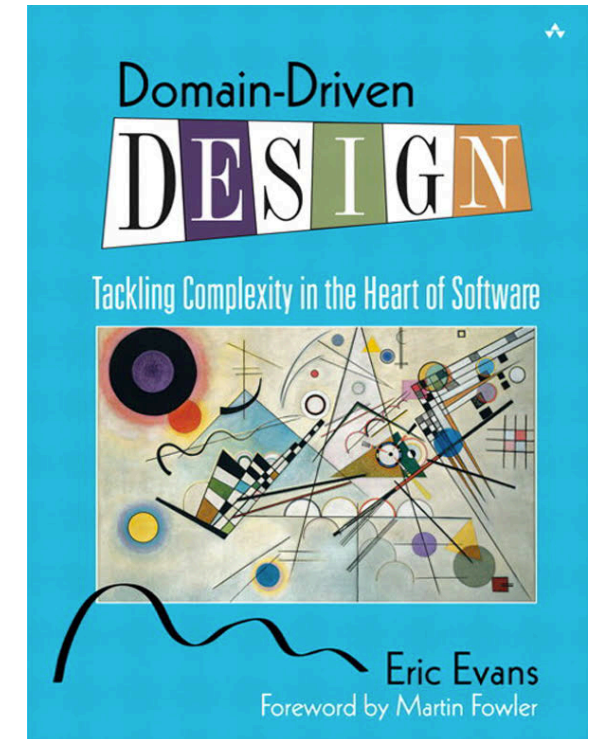


Decomposition recipes

- **DON'T DECOMPOSE THE MONOLITH!! (at least immediately)**
- Add new features as Microservices
 - How to make new features (microservices) talk to the monolith?

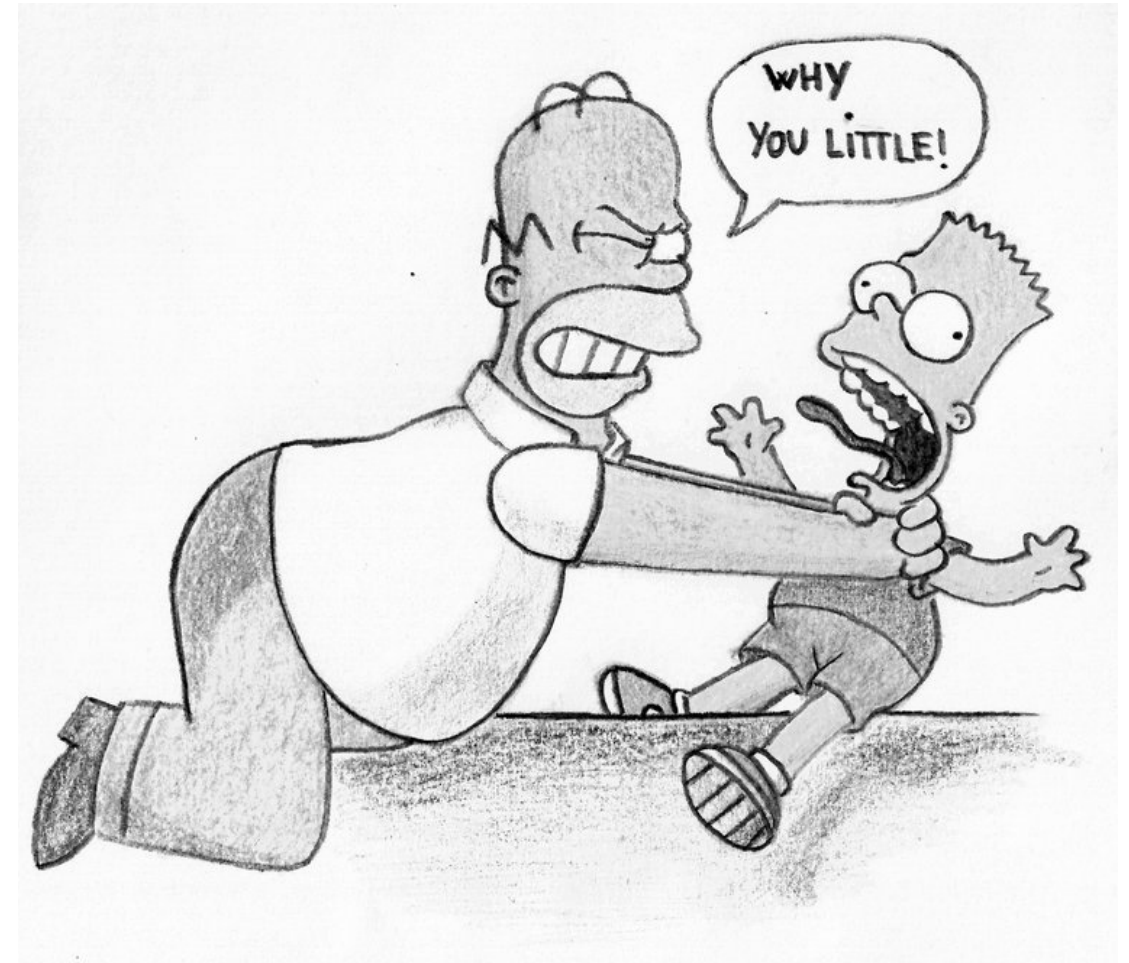
The Anti-corruption Layer

- Allows the integration of two systems without domain models corrupt each other.
- Essentially an API contract
- Based on 3 sub-modules:
 - Façade – system integration
 - Adapter – protocol translation
 - Translator – model translation



Strangling the Monolith

- Identify bounded contexts.
- Prioritize – each ones will benefit most?



Remedies when moving into Cloud

| Anti-Cloud Pattern | Remedy |
|---|--|
| Multiple Inbound protocols like RMI, JMX, Custom-TCP | TCP Routing, Tunneling |
| Persistence in local VMs like Caches, Transaction logs, CMS | External managed data services, Persistent volume support, sshfs service, EBS & S3 blob store, mount external NFS |
| JTA & 2-pc commit | Use standalone transaction managers like Atomikos and Bitronix. Introduce eventual consistency patterns |
| Spaghetti Configuration | Externalize, plugin config via Config Server , init script in .profile.d directory that injects the config. as environment variables |

<http://cloud.rohitkelpure.com/2015/08/porting-strategies-for-migrating-apps.html>

Labs!!