DDD & Microservices

At last, some boundaries!

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Why do I like microservices?

- Autonomous teams with isolated implementation.
- Acknowledge the rough and tumble of enterprises.
- Cattle not pets.
- A philosophical break from the past — gives us a chance to shake assumptions.
Possibly, some other people mean something else:
What I’m saying may not apply to that!
Services and Messages
How do they understand the messages?
Bounded Context

• context  The setting in which a word or statement appears that determines its meaning

• bounded context  The conditions under which a particular model is defined and applicable.
Context Map

A

B

partners

Context Map

A

B

partners
Context Map
Asymmetrical Relationships

![Diagram of asymmetrical relationships with context names and an arrow labeled "relationship" pointing from one context to another, on point toward power)](image-url)
Context Map
Context Map

A ⊃ a ⊃ A
B ⊃ b ⊃ B
C

conforms

partners
Context Map

A conforms B

A partners B
Models need to be clear, not big.

- Useful models need crisp definitions.
- Definitions require clear context.
- Useful models need simple assertions.
- Assertions require boundaries.
There are always multiple models.
Context Map
Context Map

Fiction!
Map what is.
Not all of a large system will be well designed.
Context Map
Patterns describe good places to be.
Interchange context
Why not logical boundaries?

• Smart people point out that most of what I want is the logical partitioning of the system.

• We’ve had decades to get that to work.

• Some techniques are too subtle to survive the rough and tumble.
Wrap up

• Subtle design (such as DDD) requires concrete boundaries.

• Lots of services recreate some of the old problems.

• Context Maps help visualize and communicate about those problems.

• Modest use of interchange contexts is one way of organizing coherent services.
Not all of a large system will be well designed.
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