Simple Scalability - Microservices on PaaS

Colin Humphreys

@hatofmonkeys
Please ask questions via the mobile app!

Engage
Simple Patterns
Organisational
Architectural
Operational
Simple Patterns
Organisational
Architectural
Operational
Organisational

Fast feedback
Teams deliver business value
Measurable metrics
Organisational

Four pairs
Two-pizzas
Authoritative PO
What are we doing?
When is it done?
Organisational

T-shaped people
Organisational

Domain-Driven Design
Have a conversation
Organisational

Inception
Iteration Planning Meeting
Retrospective
Simple Patterns
Organisational
Architectural
Operational
Partitioning Strategies
Single-responsibility
Bounded contexts
Create pipelines of microservices

```bash
cat text.txt | grep hello | sort
```
Communication Strategies
Sync – HTTPS/json
Async – Msg Q/json
Communication Strategies
Design for failure
Circuit breakers

Architectural
Architectural

Data
Immutable idempotent events
Data
12-factor applications
'PaaS' compatible
Let microservices die
Simple Patterns
Organisational
Architectural
Operational
Operational

Continuously deliver
Start with CD pipeline 'helloworld'
Operational

Words

accept → wordcount → view

github.com/hatofmonkeys/microservices-demo
Blue/green deployed front-end
Shock absorber
Operational

Deploy to local containers
Operational

Deploy to PaaS
Operational

Deploy to your PaaS
Operational

Deploy to your IaaS
Operational

Deploy what you need
When you need it
Operational Scaling
Instrumentation

Response time of function

Error rate

Trace ID
Simple Patterns
Organisational
Architectural
Operational
But I have a monolith!
Shake it
But I must Docker!
Fock it

github.com/cloudcredo/cloudfocker
Please evaluate this talk via the mobile app!

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