SESSION FIVE

Microservices

Route to Microservices with Existing Applications

Focus on Agility.

- Focus on Operational Issues
- Develop New Functionality Around Single Process Applications
 - Facades
 - Adapters
 - Translators
- Kill the Monolith
 - Refactor Existing Functionality
- Long Term
 - Monolith Withering
 - Reliable Core Functionality

12-Factor Compliance Checklist

Configuration

- No file based access to resources
- Run code on demand
- Coordinate cross service configurations
- Route public requests

Management

- Read and write persistent data
- Add and remove resources
- Record internal and external events
- Isolate resources and failures

Resiliency

- Measure performance and health
- Detect and determine failure
 - Plan failures
 - Provoke failures
- Recover failures
- Work tomorrow

Materializing Cloud Readiness



Cloud Ready

- No filesystem requirements
- Self-contained application
- Platform managed ports and addressing
- Consume off platform services using platform semantics



Cloud Friendly

- Twelve factor applications
- Horizontally scalable
- Leverage platform for HA



Cloud Resilient

- Design for failure
- Apps are unaffected by dependent service failure
- Proactive testing for failure
- Metrics and monitoring baked in
- Cloud agnostic runtime implementation



Cloud Native

- Microservice architecture and principles
- API first design



SESSION ONE

Questions?