Scaling out architectural decision making

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Why scale decision making?

What did we do?

What did we learn?
Why scale decision making?
Our context: Hypergrowth
Hypergrowth feels like you’re building the rocket as it's flying.
Decisions
Decisions

Design | Architecture

Easier to change | Harder to change

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Decisions

Code layout within a service
Method/function design
Library

BE <-> FE error standard
Sync versus Async
Standard “across” services

Easier to change
Harder to change
Decisions

Decision
Quality    Buy-in    Time
Decisions

Fast AND good
Decisions

How we used to make decisions...
Pain Points

Meetings

Information

Locations

Visibility
Why scale decision making?

What did we do?
Practices

- RFCs
- Working Groups
- Architecture Guild

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Request For Comments
Hyper Text Coffee Pot Control Protocol (HTCPCP/1.0)

Status of this Memo

This memo provides information for the Internet community. It does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

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Abstract

This document describes HTCPCP, a protocol for controlling, monitoring, and diagnosing coffee pots.

1. Rationale and Scope

There is coffee all over the world. Increasingly, in a world in which computing is ubiquitous, the computists want to make coffee. Coffee brewing is an art, but the distributed intelligence of the web-connected world transcends art. Thus, there is a strong, dark, rich requirement for a protocol designed expressoily for the brewing of coffee. Coffee is brewed using coffee pots. Networked coffee pots require a control protocol if they are to be controlled.
Refactoring
RFC: RFC for the RFC Process (yes, really!)

- Proposed solution
  - What is an RFC?
  - When to Write an RFC?
  - How to write an RFC?
  - What is important to cover in the RFC?
  - What is NOT important to cover in the RFC?
  - The "right" RFC stakeholders
  - During "Draft the RFC"

Scope

RFC aims to collect input to improve this clarity.

- RFCs
  - Technology
  - Technology

Update: 2018.11.14

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Refactoring
83
Practices

RFCs

Working Groups

Architecture Guild
Working Groups
Design Committee

Informed
Consulted
Speed

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Listening for pain points

Often about gaps

Many perspectives

Multiplier
Example: Error Handling
Example: Error Handling

iOS
Android
Web
Internal

Service A
Service B
Service C
Service D
Example: Error Handling

JSON?
Structure
What details?
Already translated?
Example: Error Handling

Result: Adoption of RFC7807

- Problem details object (type, status, detail, userMessage, instance)
- Content-Type = application/problem+json
- Only used for 400 and 500 responses
- Use of 207 (batch request/response)
Practices

- RFCs
- Working Groups
- Architecture Guild
Architecture Guild
What?

- Representatives across the entire tech
- Entire company wide cross cutting topics
- Decision making authority
Who?

iOS    Android    Web    Security    Data
Internal Tools    SRE    BE    QE    Staff Engineers
Segment    Location (BCN, NYC)
Example: Updating Tech Radar
Example: Security Scanning in CD Pipe
Why scale decision making?

What did we do?

What did we learn?
Learnings
Learnings

Pain Points

Meetings
Information
Locations
Visibility
Learnings

Listen  Observe  Refactor
Learnings

Iterate

Listen  Observe  Refactor
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Questions? @patkua