

5 Lessons Learned Working on a Large Microservices Project

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Introduction

For the purposes of this discussion, some assumptions about microservices and projects:

- Correctly sized
- Consistent tech
- Multiple teams

Dealing with multiple teams

- Staggered start of teams and people
- Seed people on new teams
- Lead developers meet, attend other standups when possible
- Dev swap for a day, rotate people every quarter
- Allows for temporary rotation to balance workload

Evolutionary Design

Microservices can be designed incrementally.

- Have a general idea of the services
- Combine or extract services as needed
- Each service team adds code incrementally
- Have stewards of each service, not owners
- Good automated tests allow for common code ownership
- Coordinate changes across teams

...but

Stuff is going to break

- That's OK
- Collaborate to fix the issue, revert if necessary

Template generator

Using yeoman generator can help get a team started and keep code base standard

- Create a template for each type of project
- Then use it for **updating** each project
 - Dependencies
 - Documentation
- Run once per sprint, have lead developers resolve conflicts
- Move standard code to template repository

Template generator

- Need to have some governance/guidance about what to add
- CI/Dev ops team was interested in using template for testing pipelines

Docker, Docker, Docker



Decide how to start services for development and production

- Use Docker
- Manually Start
- Make both work and let people decide which one works for them
- Docker compose files can be generated/updated with yeoman

Facilitated Code Reviews

There is value when all developers get together in one room, but that is very expensive so keep it efficient

- Code reviews for each team
 - Discussions allowed with time limit, try to make decisions
- Get all developers together once or twice a month
 - Each team get fixed amount of time
 - Show something team has worked on or discovered
 - Allows for a few questions, but not longer discussions

THANK YOU!

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Social



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