How to Define and Document Microservice Contracts



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Microservices Architectural Design Patterns Playbook



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Microservices Architecture



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Overview

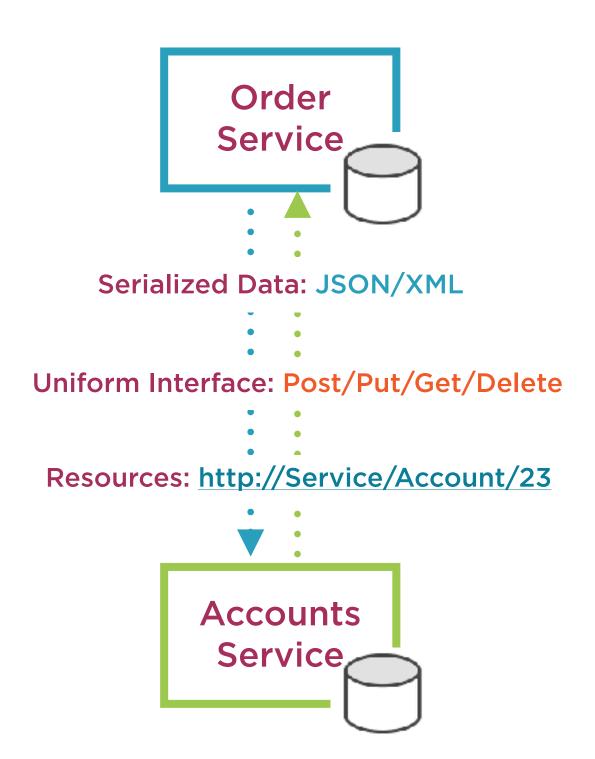
Introduction

Defining Microservice Contracts

Documenting Microservice Contracts

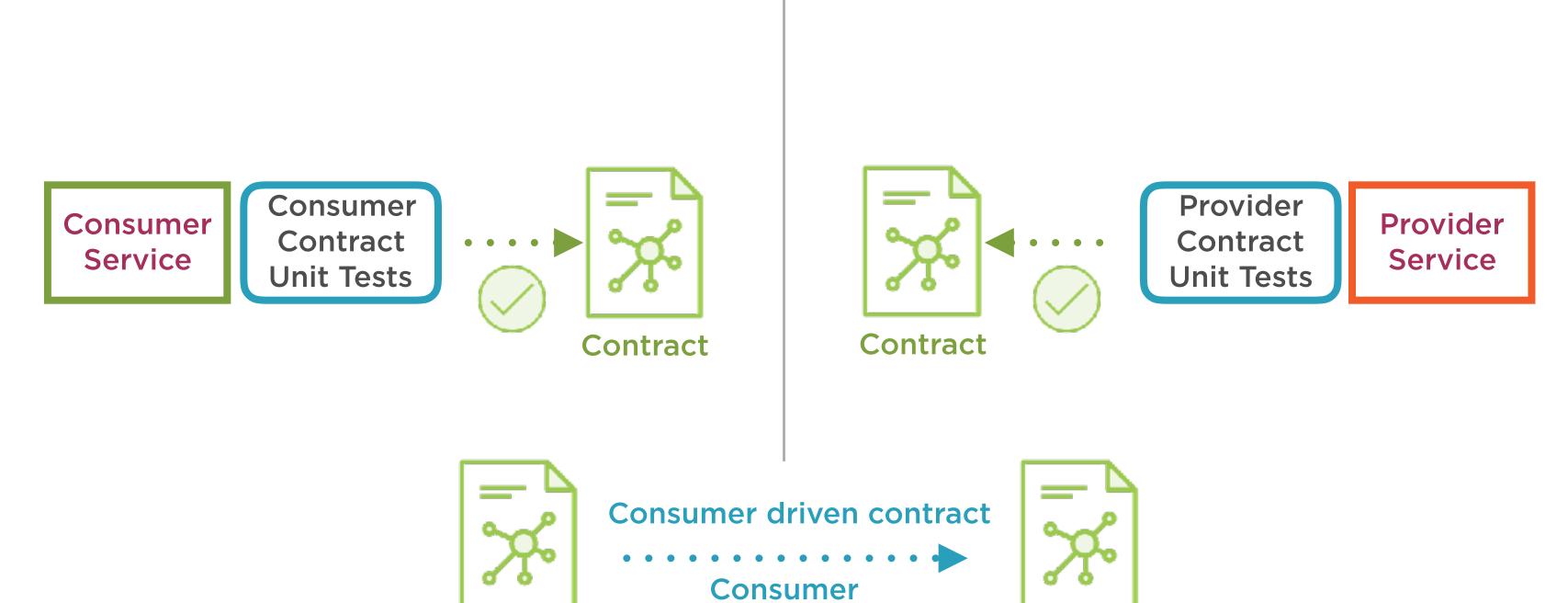
Introduction

Microservice Contract



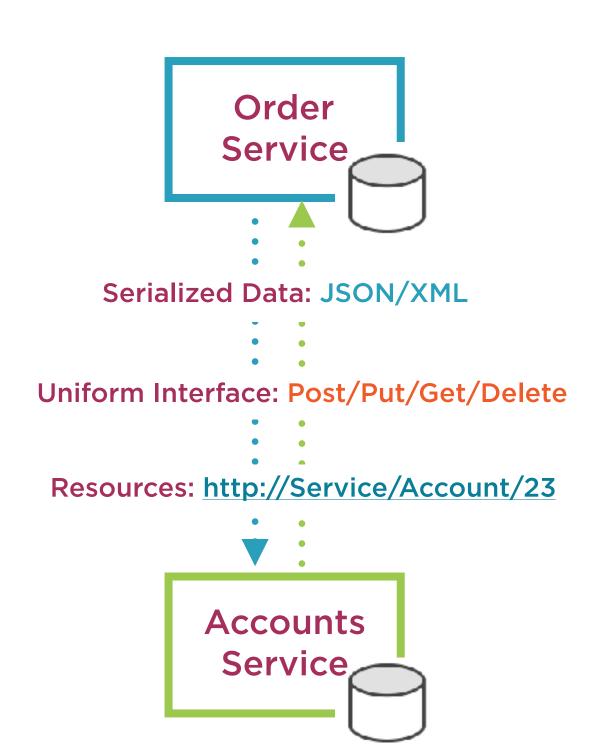
Defining Microservice Contracts

Consumer Driven Contract Design



shares contract

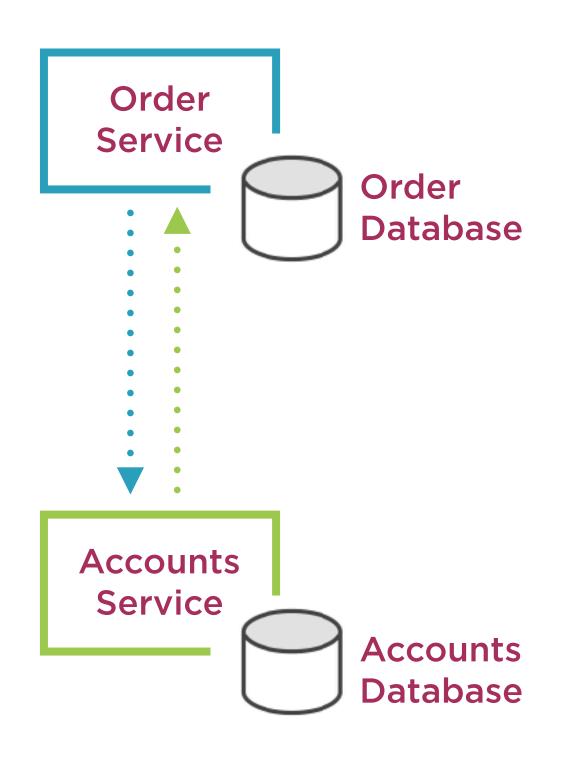
Resource Based Microservice



Restful microservice style

- GET
 - https://myApi.net/v2/order/{order-id}
- POST
 - https://myApi.net/v2/order/
- PUT
 - https://myApi.net/v2/order/
- DELETE
 - https://myApi.net/v2/order/{order-id}

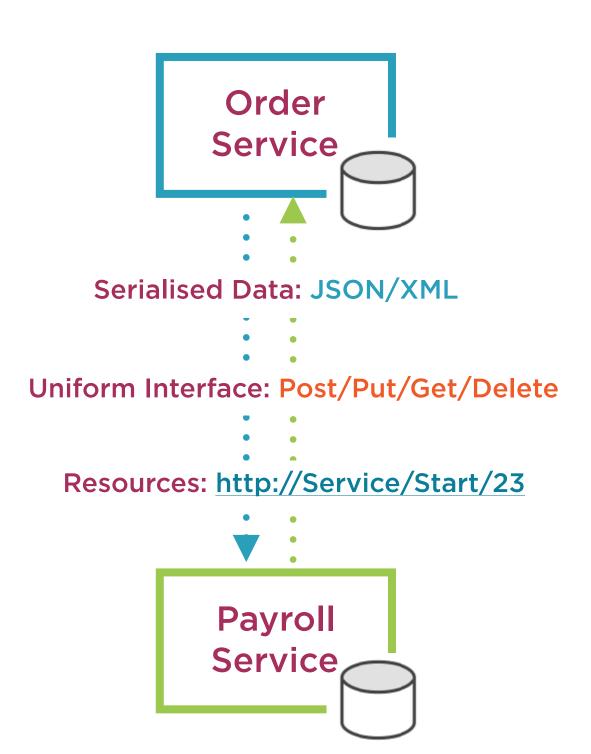
Action Based Microservice



Restful microservice style using actions

- GET
 - https://myApi.net/calctimesheet/{id}
- GET
 - https://myApi.net/taxemployee/{id}
- GET
 - https://myApi.net/startenrollment/{id}
- GET
 - https://myApi.net/startpayroll/{date}

Task Based Microservice

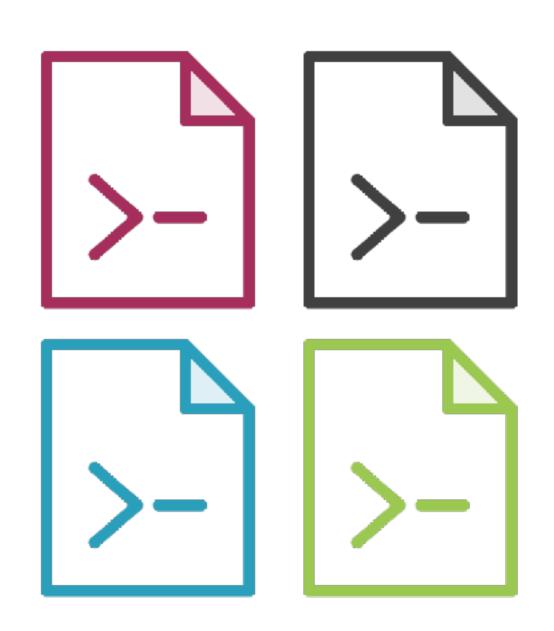


Restful microservice style using tasks

- POST to start task
 - https://myPayrollApi.net/start/{id}
- GET to retrieve task status
 - https://myPayrollApi.net/task/{task-id}
- DELETE to cancel task
 - https://myPayrollApi.net/task/{task-id}

Documenting Microservice Contracts

Interface Definition Languages



Way to document microservice contracts

- Before or after implementation

Platform and language independent

Computer readable format

Supporting tools provide extra functionality

- Generate mock APIs
- Code generators for client and or service
- Validate client requests and server responses
- Generate documentation
- Tools that produce websites to call your API
- Generate test suites for your API endpoints

Summary

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