



adaptTo()

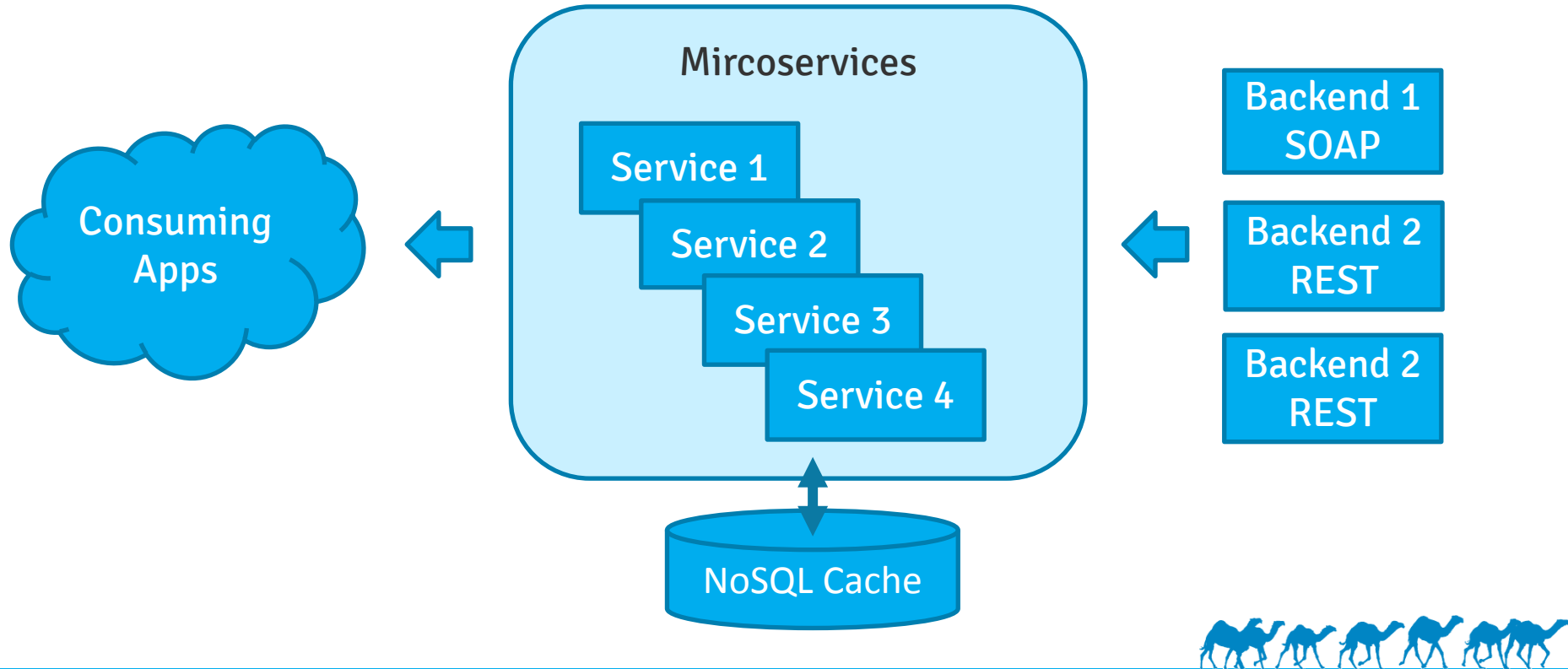
APACHE SLING & FRIENDS TECH MEETUP
BERLIN, 28-30 SEPTEMBER 2015



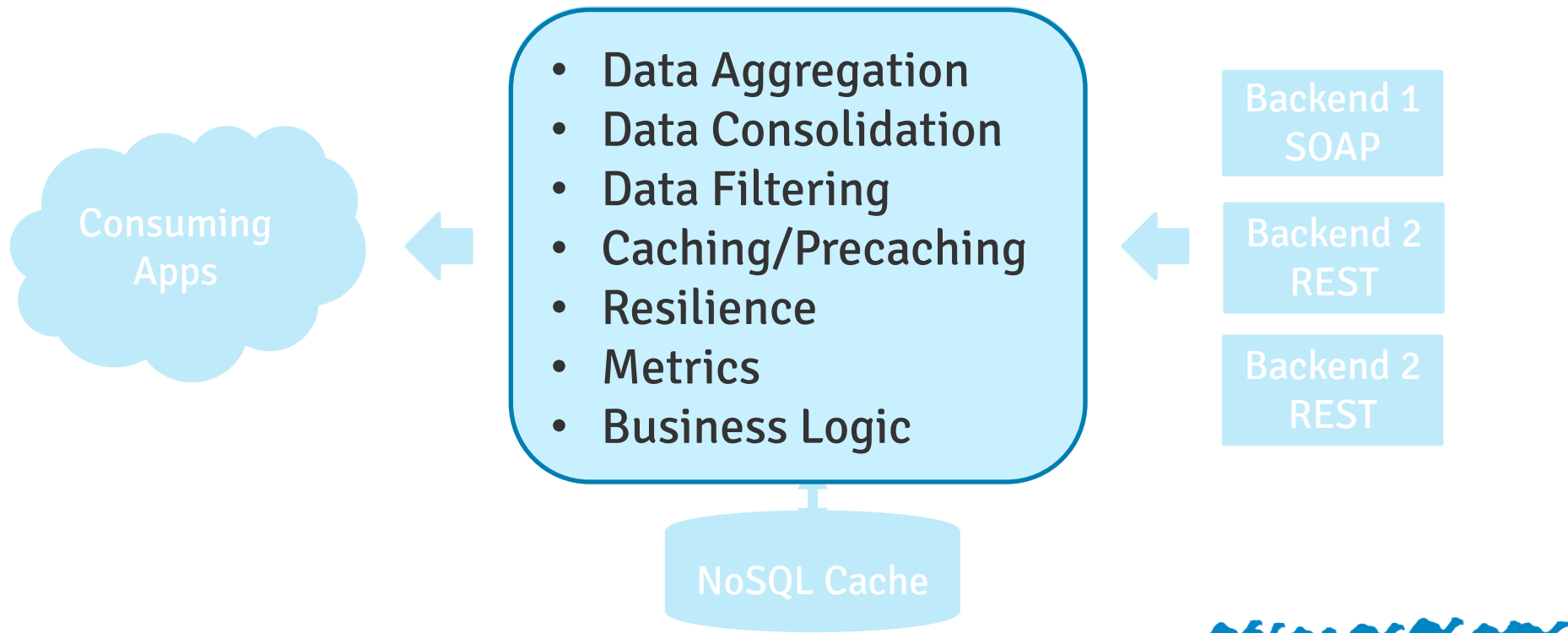
wcm.io Caravan – OSGi Microservices

Stefan Seifert, pro!vision GmbH

Our Microservice Scenario



Our Microservice Scenario



- Open Source Project (ASL 2.0)
- For RESTful Microservices
- Collection of modular libraries
 - Use only what you need



Couchbase



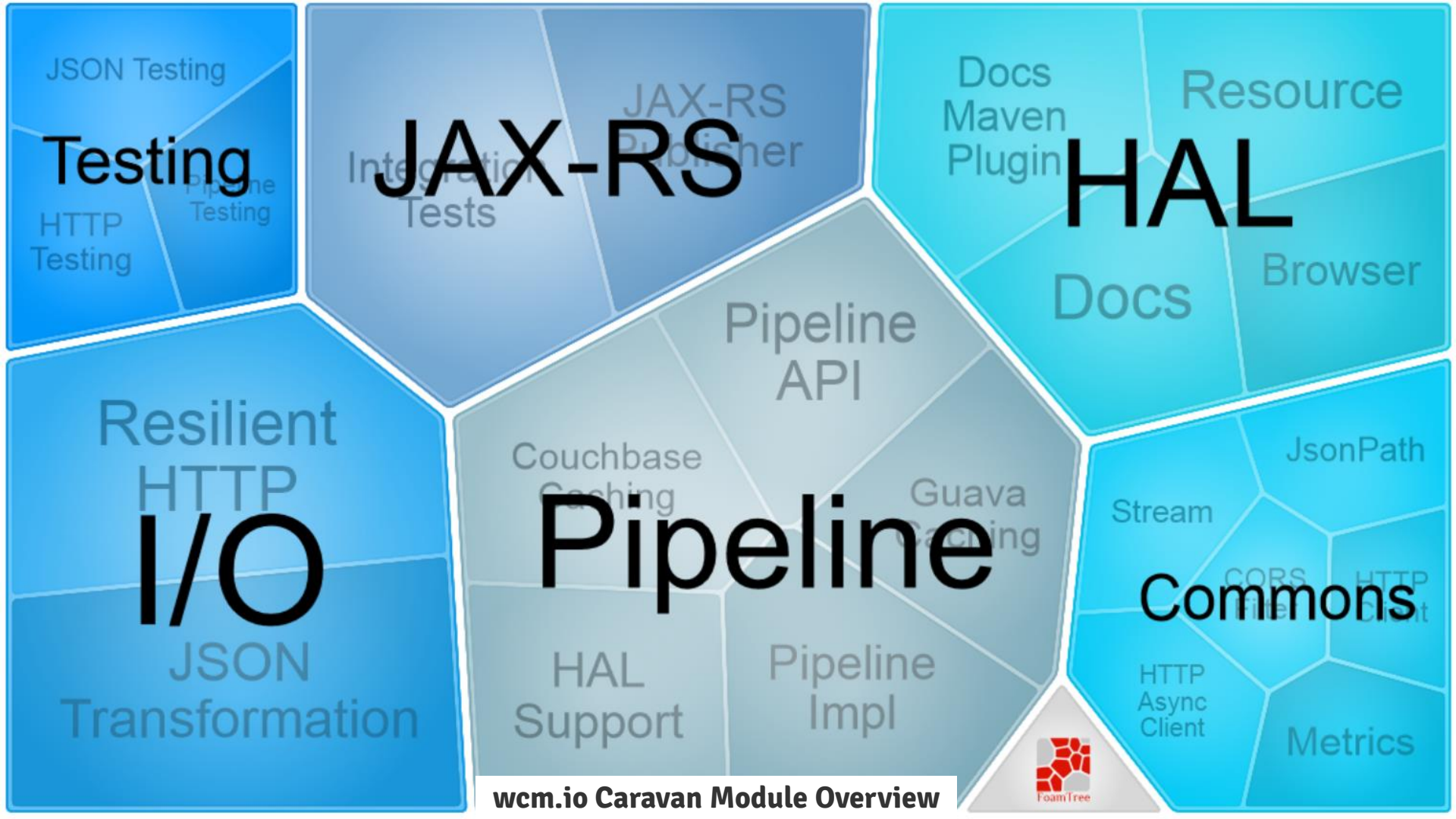
<http://caravan.wcm.io/>



Microservice Stack based on OSGi

- Based on OSGi and Apache Felix
- Uses some Sling Tooling
- Not using Sling Resource API
- No Repository involved
- Uses only REST/HTTP, no OSGi Remoting






Resilient HTTP Client

- Based on the “Netflix Stack”
 - Hystrix for Resilience, Circuit Breaker etc.
 - Ribbon for Software Load Balancing
- Asynchronous processing via RxJava
- RFC 6570 URI Templating
- Apache HTTP Client



- Based on Jersey 
- Publish OSGi components as JAX-RS services
- Separate JAX-RS applications per bundle

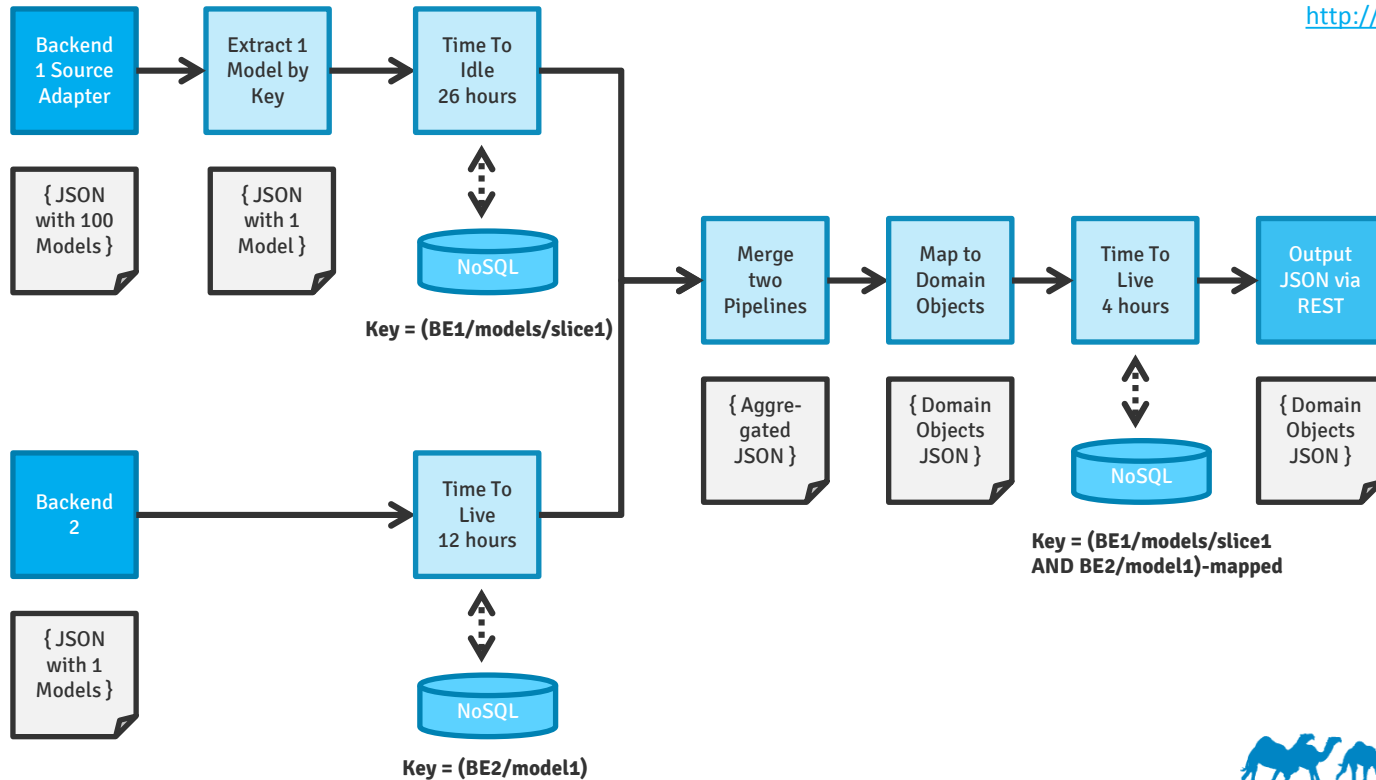


- Hypertext Application Language (HAL)
- HAL Resource Builder
- Integrates HAL Browser
- HAL documentation generated from sources



JSON Pipelining

<http://caravan.wcm.io/pipeline/>



- HTTP Resilient Client: Stable
- JAX-RS Integration: Stable
- Pipelining, HAL Resource API: Works well, but APIs need to be refactored
- Metrics: First Steps



JSON Testing

Testing

Pipeline Testing

HTTP Testing

JAX-RS
Integration Tests

JAX-RS
Publisher

Docs
Maven
Plugin

Resource

HAL

Docs

Browser

Resilient

HTTP

I/O

JSON
Transformation

Pipeline
API

Couchbase
Caching

Pipeline

Guava
Caching

HAL
Support

Pipeline
Impl

Stream

JsonPath

Commons

CORS
Filter

HTTP
Client

HTTP
Async
Client

Metrics

