

Circuit Breaker Pattern Config

1. Add following dependency in Gateway Server

```
groupId : org.springframework.cloud  
artifactId: spring-cloud-starter-circuitbreaker-reactor-resilience4j
```

2. Update the routing configuration to add new filter in gateway server as follow –

```
routeLocatorBuilder.routes()  
    .route(p -> p  
        .path("/synergybank/accounts/**")  
        .filters(f ->  
            f.rewritePath("/synergybank/accounts/(?<segment>.*)",  
                "/${segment}")  
            .circuitBreaker(config ->  
                config.setName("accountsCircuitBreaker"))  
        .uri("lb://ACCOUNTS").build())
```

3. Add following properties in the application.yml file of gateway server –

```
resilience4j.circuitbreaker.config.default.slidingWindowSize = 10  
resilience4j.circuitbreaker.config.default.permittedNumberOfCallsInHalfOpen  
State = 2  
resilience4j.circuitbreaker.config.default.failureRateThreshold = 50  
resilience4j.circuitbreaker.config.default.waitDurationInOpenState = 10000
```

4. Verify –

- Setup a breakpoint in Accounts CREATE microservice and do not release it.
- Try to make account CREATE API Call from postman.
- Check the circuit breaker actuator link –
<http://localhost:8072/actuator/circuitbreakerevents?name=accountsCircuitBreaker>
- Try to make multiple account CREATE API Call from postman and verify the result.

