

Example.java - Notepad

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```
class Example {  
    public static void main(String args[]) {  
        int i;  
        for(i=1;i<=10;i++){  
            System.out.print(" " + i);  
            try{  
                Thread.sleep(1000);  
            }  
            catch(Exception ex) {  
                ex.printStackTrace();  
            }  
        }  
    }  
}
```

```
C:\Users\Babji\Desktop>javac Example.java
```

```
C:\Users\Babji\Desktop>java Example
```

```
1 2 3 4 5 6 7 8 9 10
```

```
C:\Users\Babji\Desktop>
```

Eureka [8761]

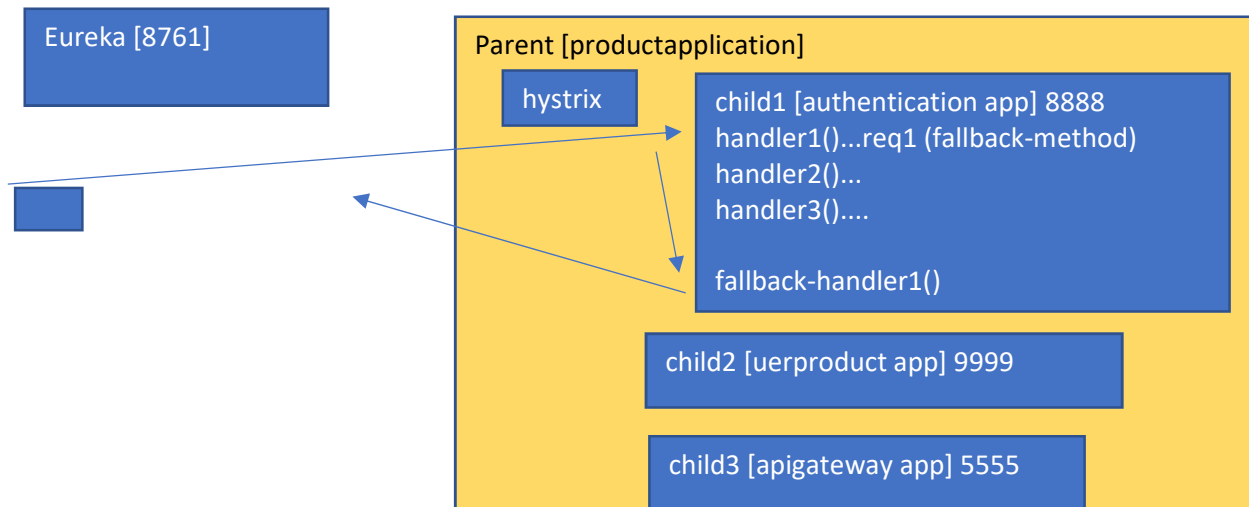
Parent [productapplication]

hystrix

child1 [authentication app] 8888

child2 [uerproduct app] 9999

child3 [apigateway app] 5555



Steps to enable Hystrix on authentication application  
and enable fallback method for particular request handler method

Step 1      Makesure authentication application is ready

Step 2      add depedency to authentication application pom

```
<!-- https://mvnrepository.com/artifact/org.springframework.cloud/spring-cloud-starter-netflix-hystrix -->
<dependency>
  <groupId>org.springframework.cloud</groupId>
  <artifactId>spring-cloud-starter-netflix-hystrix</artifactId>
  <version>2.2.10.RELEASE</version>
</dependency>
```

Step 3 Enable Hystrix at application level

```
1 usage
8  @SpringBootApplication
9  @EnableEurekaClient
10 @EnableHystrix
11 public class AuthappApplication {
12
13     public static void main(String[] args) {
14
15
16
17     }
18 }
```

Step 4 Enable fallback for request handler method in controller  
if logincheck() takes morethan X amount of time, then fallback method should run

```
36 // if logincheck() takes morethan x amount of time to process -> call fallback method
37 @PostMapping("/authenticate")
38 @HystrixCommand(fallbackMethod = "fallbackLoginCheck",commandKey = "loginkey", groupKey = "login")
39 @HystrixProperty(name="execution.isolation.thread.timeoutInMilliseconds", value="1000")
40 @Controller
41 public class AuthController {
42     @RequestMapping("/login")
43     public ResponseEntity<?> loginCheck(@RequestBody User user){
44         User result = userService.loginCheck(user.getUserId(), user.getPassword());
45         if(result!=null){
46             Map<String, String> key = securityTokenGenerator.generateToken(result);
47             return new ResponseEntity<>(key,HttpStatus.OK);
48         }
49         else{
50             return new ResponseEntity<>(body: "Authentication failed",HttpStatus.NOT_FOUND);
51         }
52     }
53 }
```

Step 5 define fallback method

```
51 // fallback method
52 public ResponseEntity<?> fallbackLoginCheck(@RequestBody User user){
53     String message = "Login service is busy, please try after sometime";
54     return new ResponseEntity<>(message,HttpStatus.GATEWAY_TIMEOUT);
55 }
```

Solutions if timeout doesnot work

```
35 //http://localhost:8888/auth-app/v1/authenticate [POST]
36 @PostMapping("/authenticate")
37 @HystrixCommand(fallbackMethod = "authenticateFallBack",commandKey = "loginKey",groupKey = "login")
38 @HystrixProperty(name = "execution.isolation.thread.timeoutInMilliseconds",value = "2_000")
39 public ResponseEntity<?>authenticate(@RequestBody User user){
```

```
@HystrixCommand(fallbackMethod = "fallbackLoginCheck",
commandProperties = {
    @HystrixProperty(name =
"execution.isolation.thread.timeoutInMilliseconds", value = "5000")
})
```