

springboot 使用线程池创建异步方法调用

1. springboot启动时添加ExecutorConfig配置类文件

```
19  //
20  @Configuration
21  @EnableAsync
22  public class ExecutorConfig {
23
24      @Value("${async.executor.thread.core_pool_size}")
25      private int corePoolSize;
26      @Value("${async.executor.thread.max_pool_size}")
27      private int maxPoolSize;
28      @Value("${async.executor.thread.queue_capacity}")
29      private int queueCapacity;
30      @Value("${async.executor.thread.name.prefix}")
31      private String namePrefix;
32
33      @Bean(name = "asyncServiceExecutor")
34      public Executor asyncServiceExecutor() {
35          ThreadPoolTaskExecutor executor = new ThreadPoolTaskExecutor();
36          //配置核心线程数
37          executor.setCorePoolSize(corePoolSize);
38          //配置最大线程数
39          executor.setMaxPoolSize(maxPoolSize);
40          //配置队列大小
41          executor.setQueueCapacity(queueCapacity);
42          //配置线程池中的线程的名称前缀
43          executor.setThreadNamePrefix(namePrefix);
44
45          // rejection-policy: 当pool已经达到max size的时候, 如何处理新任务
46          // CALLER_RUNS, 不在新线程中执行任务, 而是有调用者所在的线程来执行
47          executor.setRejectedExecutionHandler(new ThreadPoolExecutor.CallerRunsPolicy());
48          //执行初始化
49          executor.initialize();
50          return executor;
51      }
52  }
```

2. 在启动类上面加入@EnableAsync 注解

```
20  @EnableApolloConfig({"application", "common.PayCommonConfig", "localConfig"})
21  @EnableAsync //线程池注解
22  public class OrderApplication extends SpringMVCConfigureAdapter {
```

3. 创建异步线程接口和普通接口相同

```
17  //
18  public interface AsyncService {
19
20      /**
21       * 异步通知数据
22       * @param orderNotify
23       */
24      void asyncSendNotifyUrl(OrderNotify orderNotify);
25  }
```

4. 创建该接口的实现类，再需要异步处理的方法上添加@Async("xxxx") 注解即可

```
18  * desc : 输入描述
19  * version : v1.0
20  * </pre>
21  */
22  @Service
23  public class AsyncServiceImpl implements AsyncService {
24
25
26      @Autowired
27      private BizNotifyService bizNotifyService;
28
29      /**
30       * 异步通知数据
31       *
32       * @param orderNotify
33       */
34      @Override
35      @Async("asyncServiceExecutor")
36      public void asyncSendNotifyUrl(OrderNotify orderNotify) {
37          try {
38              bizNotifyService.sendNotify(orderNotify);
39          } catch (Exception e) {
40              e.printStackTrace();
41          }
42      }
43
44  }
```