## Spring-tx 事物源码解析

## 示例代码

```
@Transactional
@Service
public class DemoUserServiceImpl implements DemoUserService {
             @Autowired
             private DemoUserMapper demoUserMapper;
             @Override
             public void addDemoUser(DemoUser demoUser) {
                                       demoUserMapper.insert(demoUser);
                                       int i = 1 / 0;
 }
@Test
public void test() {
demoUserService. addDemoUser (DemoUser. builder ()
. name ("事物测试11111"). age (100)
 . build());
Spring-tx 是如何 创建事物 提交事物 事物回滚?
   1 CglibAopProxy AOP Intercept()
    * General purpose AOP callback. Used when the target is dynamic or when the
         proxy is not frozen.
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                                                                                                               oolean <u>setProxyContext</u> = false
                                                                                                          Object target = n
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       > 10 proxy = {DemoUserServiceImpl$$EnhancerBySpringCGLIB$$129a8452@7137} "com.yh.mybatisplus.demouser.service.impl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserServiceImpl.DemoUserSer
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1.1. 跟踪方法
 // We need to create a method invocation..
```

```
// We need to create a method invocation...
retVal = new CglibMethodInvocation(proxy, target, method, args, targetClass, chain, methodProxy).proceed();
```

```
// We start with an index of -1 and increment early.
if (this.currentInterceptorIndex == this.interceptorsAndDynamicMethodMatchers.size() - 1) {
   return invokeJoinpoint();
}
```

```
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                                           // We start with an index of -1 and increment early.
if (this.currentInterceptorIndex == this.interceptorsAndDynamicMethodMatchers.size() - 1) {
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                                                  return invokeJoinpoint();
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                                            Object interceptorOrInterceptionAdvice = interceptorOrInterceptionAdvice: TransactionInterceptor@7258
this.interceptorsAndDynamicMethodMatchers.get(++this.currentInterceptorIndex); interceptorsAndDynamicMethodMatchers.get(++this.currentInterceptorIndex);
                                                  InterceptorAndDynamicMethodMatcher dm =
                                                                                                                                                                                                                              # zc
      mx.mog m
                                                        return dm.interceptor.invoke( invocation: this);
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                                                        return proceed();
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                                                            ((MethodInterceptor) interceptorOrInterceptionAdvice).invoke(
```

TransactionInterceptor

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```
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                              public TransactionInterceptor(PlatformTransactionManager ptm, Properties attributes) {
                                                                                                                                                                                         > 🕟 Profile
                                   setTransactionManager(ptm)
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                              @Override
                              @Nullable
                           public Object invoke(MethodInvocation invocation) th
                                                                                               ows Thowable {
                                   // Work <mark>out the target class: may be {@code null</mark>.
// The TransactionAttributeSource should be passed the target class
         ₹ re
                                   // Adapt to TransactionAspectSupport's invokeWithinTransaction...
return invokeWithinTransaction(invocation.getMethod(), targetClass, new CoroutinesInvocationCallback() {
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   springeas
  @Override
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                                        public Object getTarget() { return invocation.getThis(); }
```

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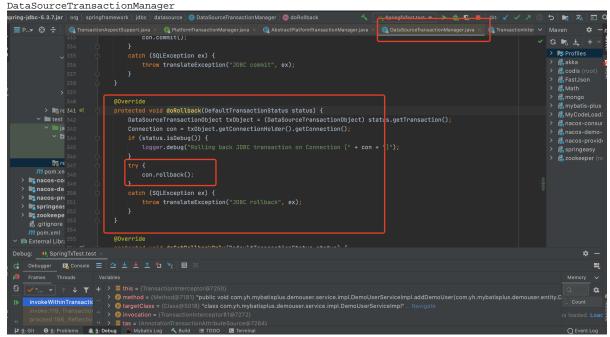
```
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                                                                                           if (txAttr == null || !(ptm instanceof CallbackPreferringPlatformTransactionManager)) {
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                                                                                                     TransactionInfo txInfo = createTransactionIfNecessary(ptm, txAttr, joinpointIdentification);
                                                                                                    Object retVal;
                                                                                                              // This will normally result in a target object being invoked.
retVal = invocation.proceedWithInvocation(); invocation: Trans
                                                                                                     catch (Throwable ex) {
                                                                                                              // target invocation exception
completeTransactionAfterThrowing(txInfo, ex);
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                                                                                                   if (retYal != null && vavrPresent = false && VavrDelegate.isVavrTry(retYal)) {
// Set rollback-only in case of Vavr failure matching our rollback rules...
                                                                                                              TransactionStatus status = txInfo.getTransactionStatus();
if (status != null && txAttr != null) {
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                                                                         public final Method getMethod() { return this.method; }
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                                                                                   Object interceptorOrInterceptionAdvice =
                                                                                   if (interceptorOrInterceptionAdvice instanceof InterceptorAndDynamicMethodMatcher) {
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        y ... v 1 V T + Ethis = (CglibAopProxy$CglibMethodInvocation@7233) "ReflectiveMethodInvocation: public void com.yh.mybatisplus.demouser.service.impl.DemoUserS... View on this.currentInterceptorIndex = 0

> on this.currentInterceptorIndex = 0

> on this.interceptorsAndDynamicMethodMatchers = (ArrayList@7222) size = 1
```

completeTransactionAfterThrowing(txInfo, ex);

3.2



4 end

GitHub