# Netty4 Chat

相比于[netty3 chat demo](../chat_netty3/),netty4chat要修改底层的实现 一些底层的方法由于做了封装所有不需要改动 - channel的一些方法改变

@Override  
 public void write(Object message) {  
 channel.writeAndFlush(message);  
 }  
 @Override  
 public boolean isConnected() {  
 return channel.isActive();  
 }  
 @Override  
 public void setAttachment(Object attachment) {  
 channel.attr(ATTACHMENT\_KEY).set(attachment);  
 }

* 启动的一些改变

EventLoopGroup bossGroup = new NioEventLoopGroup();  
 EventLoopGroup workerGroup = new NioEventLoopGroup();  
  
 try {  
 // 设置循环线程组事例  
 b.group(bossGroup, workerGroup);  
  
 // 设置channel工厂  
 b.channel(NioServerSocketChannel.class);  
  
 // 设置管道  
 b.childHandler(new ChannelInitializer<SocketChannel>() {  
 @Override  
 public void initChannel(SocketChannel ch) throws Exception {  
 ch.pipeline().addLast(new RequestDecoder());  
 ch.pipeline().addLast(new ResponseEncoder());  
 ch.pipeline().addLast(new ServerHandler());  
 }  
 });

* ChannelBuffer变成ByteBuffer

//3.0  
public static ChannelBuffer getBuffer() {  
 ChannelBuffer dynamicBuffer = ChannelBuffers.dynamicBuffer();  
 return dynamicBuffer;  
   
//4.0  
UnpooledByteBufAllocator  
PooledByteBufAllocator //需要释放对象  
//释放buffer  
ReferenceCountUtil.release(writeBuffer);  
  
private static ByteBufAllocator bufAllocator = PooledByteBufAllocator.DEFAULT;  
public static ByteBuf getBuffer() {  
 ByteBuf buffer = bufAllocator.heapBuffer();  
 buffer = buffer.order(BYTE\_ORDER);  
 return buffer;

* 写法的改变

FrameDecoder -> ByteToMessageDecoder  
  
OneToOneEncoder -> MessageToByteEncoder  
  
4.0和5.0的区别messageReceive channelRead0//(netty5里面是messageReceive)

* 4.0的业务线程池可以自己有序处理

EventLoopGroup cookerGroup = new NioEventLoopGroup();  
 ch.pipeline().addLast(cookerGroup,new ServerHandler());