



LAB- Using Pollable Channels in EI

In this lab you will be understanding how to use various Pollable channels in spring integration

In this lab, you will be working on **02-using-pollablechannel-start** project

Step1

In this step, you will understand how to use QueueChannel

1) Open 02-pollable-channels-demo.xml and observe the configuration

Now, modify the configuration of orderschannel to make it as as queue channel with a capacity of 3

The configuration should look like below :

```
<int:channel id="orderschannel" >
    <int:queue capacity="3"/>
</int:channel>
```

2) Open PollableChannelsDemo.java and observe the code. We are sending 5 messages to orderschannel. Run it.

Did you observe the exception ?

Can you tell why this exception occurred ?

Now fix it by configuring a poller inside service activator as shown below :

```
<int:service-activator input-channel="orderschannel"
    ref="orderProcessServiceImpl" method="processOrder" >

    <int:poller fixed-rate="1000" />
</int:service-activator>
```

Now, run the PollableChannelsDemo and observe that after sending 4 messages, there is a delay. Why is it so? Can you explain?

3) We want to configure the poller as global poller. So, remove the poller from service-activator and configure as below :

```
<int:poller fixed-rate="1000" default="true"/>
```

Now, run the PollableChannelsDemo and observe that it runs as earlier



4) How many threads were polling till now ?

If you want to configure multiple polling thread, you need to configure a task-executor and attach it to poller as shown below :

```
<task:executor id="te" pool-size="3-5" queue-capacity="20" />
<int:poller fixed-rate="1000" default="true" task-executor="te"/>
```

Now run PollableChannelsDemo and observe that the messages are processed by multiple poller threads

5) How to modify the queue channel as priority channel ?

Try to do it. See my presentation for syntax.

Now try to add priority to the message in PollableChannelsDemo and run it

6) Modify the channel as rendezvous channel and run PollableChannelsDemo.

Did you observe that main thread waits until the message is picked up by poller thread?

Congratulations !! You know how to use all Pollable Channels