JMS Configuration Tips

Here some common configuration to validate (note that when possible the sample value is the default):

• The resource adapter thread pool ("worker threads" or WorkManager) limits the number of max work threads:

```
<Resource id="my resource adapter" ....>
  # using -1 will make the server using cached threads (unbounded)
  # min recommanded: maxSessions + 1 (for connect())
  threadPoolSize = 30
</Resource>
```

• Then the MDB container itself has a upper bound through InstanceLimit which controls the max MDB instance count:

```
<Container id="my mdb container" type="MESSAGE">
    # -1 will disable it
    # min recommanded = maxSessions
    InstanceLimit = 10
</Container>
```

• ActiveMQ maxSessions controls how many sessions a MDB can use:

```
@MessageDriven(activationConfig = {
     @javax.ejb.ActivationConfigProperty(propertyName = "maxSessions",
propertyValue = "1"),
     @javax.ejb.ActivationConfigProperty(propertyName = "destination",
propertyValue = "target-queue")
})
public static class MyMdb implements MessageListener {
    @Override
    public void onMessage(final Message message) {
        // ...
    }
}
```

• The ConnectionFactory has also an instance pool through geronimoconnector logic, configuration can make the behavior changing but this is controlled through pool related variables (the pool and resource properties are merged in the definition):

```
<Resource id="my connection factory" type="ConnectionFactory">
    # recommanded to be aligned on maxSessions
    PoolMaxSize = 10
    # for 100% MDB (no client) you can evaluate to turn it off/false, for client it can still be useful depending what you do
    Pooling = true
</Resource>
```

## **Slow consumption**

If you find you have a slow consumption of messages there are several options to have a look (activemq website explains it very well) but one very impacting option can be the prefetch size.