

# Simple MDB and CDI

Example `simple-mdb-and-cdi` can be browsed at <https://github.com/apache/tomee/tree/master/examples/simple-mdb-and-cdi>

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## ChatBean

```
package org.superbiz.mdb;

import javax.annotation.Resource;
import javax.ejb.MessageDriven;
import javax.inject.Inject;
import javax.jms.Connection;
import javax.jms.ConnectionFactory;
import javax.jms.DeliveryMode;
import javax.jms.JMSException;
import javax.jms.Message;
import javax.jms.MessageListener;
import javax.jms.MessageProducer;
import javax.jms.Queue;
import javax.jms.Session;
import javax.jms.TextMessage;

@MessageDriven
public class ChatBean implements MessageListener {

    @Resource
    private ConnectionFactory connectionFactory;

    @Resource(name = "AnswerQueue")
    private Queue answerQueue;

    @Inject
    private ChatRespondCreator responder;

    public void onMessage(Message message) {
        try {

            final TextMessage textMessage = (TextMessage) message;
            final String question = textMessage.getText();
            final String response = responder.respond(question);

            if (response != null) {
                respond(response);
            }
        } catch (JMSException e) {
            throw new IllegalStateException(e);
        }
    }
}
```

```

    }
}

private void respond(String text) throws JMSException {

    Connection connection = null;
    Session session = null;

    try {
        connection = connectionFactory.createConnection();
        connection.start();

        // Create a Session
        session = connection.createSession(false, Session.AUTO_ACKNOWLEDGE);

        // Create a MessageProducer from the Session to the Topic or Queue
        MessageProducer producer = session.createProducer(answerQueue);
        producer.setDeliveryMode(DeliveryMode.NON_PERSISTENT);

        // Create a message
        TextMessage message = session.createTextMessage(text);

        // Tell the producer to send the message
        producer.send(message);
    } finally {
        // Clean up
        if (session != null) session.close();
        if (connection != null) connection.close();
    }
}
}
}

```

## ChatRespondCreator

```

package org.superbiz.mdb;

public class ChatRespondCreator {
    public String respond(String question) {
        if ("Hello World!".equals(question)) {
            return "Hello, Test Case!";
        } else if ("How are you?".equals(question)) {
            return "I'm doing well.";
        } else if ("Still spinning?".equals(question)) {
            return "Once every day, as usual.";
        }
        return null;
    }
}
}

```

# beans.xml

```
<!--  
  
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-->  
</beans/>
```

## ChatBeanTest

```
package org.superbiz.mdb;  
  
import junit.framework.TestCase;  
  
import javax.annotation.Resource;  
import javax.ejb.embeddable.EJBContainer;  
import javax.jms.Connection;  
import javax.jms.ConnectionFactory;  
import javax.jms.JMSException;  
import javax.jms.MessageConsumer;  
import javax.jms.MessageProducer;  
import javax.jms.Queue;  
import javax.jms.Session;  
import javax.jms.TextMessage;  
  
public class ChatBeanTest extends TestCase {  
  
    @Resource  
    private ConnectionFactory connectionFactory;  
  
    @Resource(name = "ChatBean")  
    private Queue questionQueue;  
  
    @Resource(name = "AnswerQueue")  
    private Queue answerQueue;
```

```

public void test() throws Exception {
    EJBContainer.createEJBContainer().getContext().bind("inject", this);

    final Connection connection = connectionFactory.createConnection();

    connection.start();

    final Session session = connection.createSession(false, Session
.AUTO_ACKNOWLEDGE);

    final MessageProducer questions = session.createProducer(questionQueue);

    final MessageConsumer answers = session.createConsumer(answerQueue);

    sendText("Hello World!", questions, session);

    assertEquals("Hello, Test Case!", receiveText(answers));

    sendText("How are you?", questions, session);

    assertEquals("I'm doing well.", receiveText(answers));

    sendText("Still spinning?", questions, session);

    assertEquals("Once every day, as usual.", receiveText(answers));
}

private void sendText(String text, MessageProducer questions, Session session)
throws JMSEException {

    questions.send(session.createTextMessage(text));
}

private String receiveText(MessageConsumer answers) throws JMSEException {

    return ((TextMessage) answers.receive(1000)).getText();
}
}

```