WebSphere Commerce V6.0 Feature Pack 5

DOM integration simulation environment and problem determination

This presentation introduces the DOM integration simulation environment and DOM integration related problem determination.

Agenda

- DOM integration simulation environment
- Problem determination

The DOM integration simulation environment is introduced. This simulation environment helps you understand DOM integration concepts and implementation. Some problem determination topics follow.

Section

Simulation environment

This section introduces the DOM integration simulation environment.

DOM integration simulation lab

- A lab is provided to simulate production deployment
  - WebSphere® Commerce Developer
    - Development platform with WebSphere Commerce test server
  - WebSphere Integration Developer
    - Integration platform with WebSphere ESB test server
  - OMS simulator delivered as two modules
    - OMS simulator JEE application installs on WebSphere Application Server
    - OMS simulator mediator installs on WebSphere ESB server

A lab is provided to help you understand DOM integration implementation. This lab takes you through setting up a test environment to simulate a DOM system. There are three main parts to running the simulation. WebSphere Commerce Developer is used, as usual, as the test server for WebSphere Commerce. WebSphere Integration Developer is introduced as a test environment to run WebSphere Enterprise Service Bus. The role of the enterprise service bus is to mediate between WebSphere Commerce service messages and the message format of the DOM system. Taking the place of the DOM system is an OMS simulator. The simulator has two main parts. The first is a simple JEE application and database that imitate a backend system. This can be installed in your WebSphere Commerce test server or any other WebSphere Application Server. The second is an ESB mediator that converts between the message format defined by WebSphere Commerce and the message format of the simple JEE application. The mediator is loaded into WebSphere Integration Developer and added to the WebSphere ESB test server.

DOM integration simulation environment
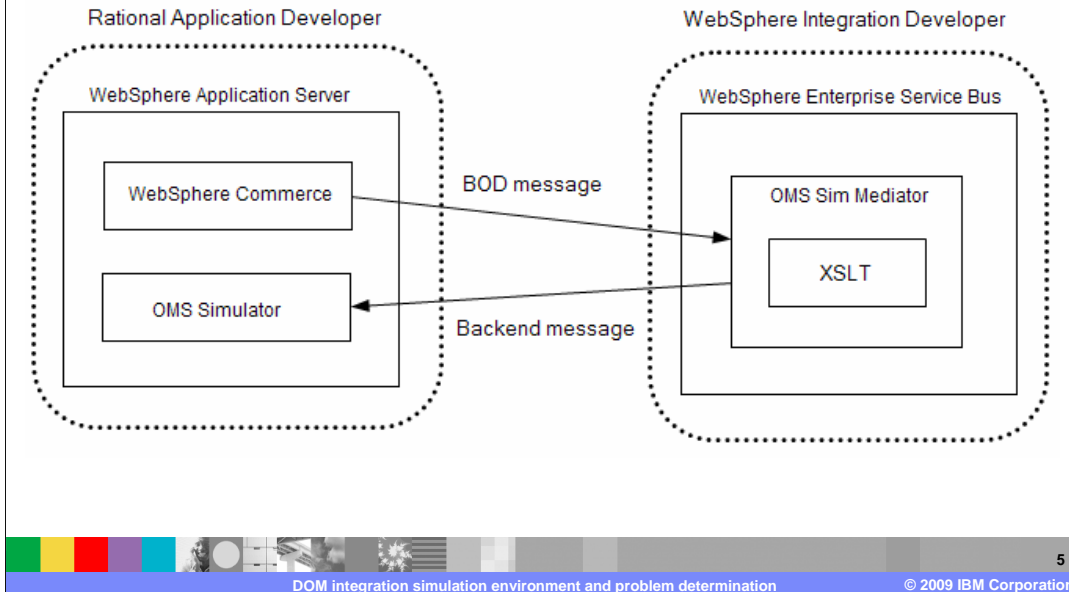
This diagram shows the simulation environment created in the lab. The lab in IBM Education Assistant provides detailed information on configuring a test environment. When setting this up yourself, you are not restricted to running the OMS Simulator within your WebSphere Commerce test environment.

DOM integration simulation setup

- Publish DOM enhancements SAR

- Install and configure OMS simulator
  - ▶ WebSphere ESB mediator
  - ▶ OMS simulator JEE application

- Configure Web services message transport

- Test store order scenario
  - ▶ Update inventory with Web services test client
  - ▶ Try shopping flow

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In the lab you will complete the DOM integration simulation setup. This includes publishing the DOM enhancement SAR, installing and configuring the OMS simulator and configuring the Web services message transport. Once you have the environment up and running you are able to test out the buy online, pickup in-store scenario in the Madisons starter store. You will also explore accessing the external inventory services provided by the simulator using a Web services test client.

Section

Problem determination

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This section introduces some common errors, root causes and solutions.

Failure symptoms and check points/solution

- Publishing DOM.sar fails
  - ▶ Confirm publishing parameters match the ones in table below

Name	Value
Catalog store	Madisons
Presentation store	Madisons
Customer facing store	Madisons
Sample data	Housewares delta

- After publishing the DOM extension, the Store Locator link is not displayed
  - ▶ Delete the temp files in the WebSphere Application Server profile's temp directory

You need to publish the DOM.sar store archive on top of the Madisons starter store to enable DOM integration. DOM.sar contains all starter store assets you need for the DOM integration feature. If publishing DOM.sar fails, you should check the parameters you used for publishing. The values for the parameters must match the ones shown in the table. The store publishing log goes to the WebSphere Application Server's profile's SystemOut.log. You can look there for additional error information.

After you publish DOM.sar, you might not see the Store Locator link in the header of the store page. If this happens, you need to delete the temporary files in WebSphere Application Server profile's temp directory. This action will force the store JSP™ files to be recompiled.

Failure symptoms and check points/solution

- Inventory availability does not show correctly
    - ▸ Check the inventory configurations in table **INVCNF** and **INVCNFREL**, make sure inventory configurations are correct

- Online store inventory availability does not behave as before
    - ▸ Make sure online store inventory has been configured in **INVCNF** and **INVCNFREL**

If you notice that inventory availability does not show up correctly in the store front, you need to check the inventory configurations in table **INVCNF and INVCNFREL.** You should check the FLAG column in table INVCNF to confirm the correct bit values for your inventory cache are used. You should also check table INVCNFREL to confirm the correct inventory configuration has been assigned for your stores and catalog entries.

The online store's inventory is managed by the DOM system after DOM integration is enabled. You need to configure an inventory cache policy for the online store inventory too. You need to make sure your configuration is correct.

Failure symptoms and check points/solution

- Error occurs when trying to load the Order Summary page
  - ▶ Error shown in store page

    Error:CMN3101E The system is unavailable due to "CMN0409E"

  - ▶ Error in WebSphere Application Server profile log SystemOut.log

    CommerceSrvr E com.ibm.commerce.messaging.outboundservice.Messaging
    loadAdminData(Integer,Integer,Integer) CMN8413E: The messaging system cannot find an appropriate profile for
    MSGTYPE_ID "1002" to match an active transport of the STORE_ID "11301" in table PROFILE. Ensure that the
    MSGTYPE has been assigned to an active transport under the store or site.

  - ▶ Where the check
    - WebSphere Commerce administration console
  - ▶ What to check
    - Check if transport has been added and activated
    - Check if correct message types have been created and correct parameter values have been used for these message types

You might encounter an error when trying to load the Order Summary page. If the errors shown on the store page and in SystemOut.log match the errors shown here, you need to check your transport and message types configuration. You need to make sure they have been added correctly in the administration console.

Trace strings related to DOM integration

- Trace strings can be used to assist DOM integration debugging

  =info: com.ibm.commerce.foundation.=all:

  com.ibm.websphere.commerce.WC_SERVER=all:

  com.ibm.websphere.commerce.WC_ORDER=all:

  com.ibm.websphere.commerce.WC_INVENTORY=all

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To debug errors that occur after you enable DOM integration, you can turn on tracing. The trace strings that provide information on DOM related processes are shown here.

Summary

- DOM integration simulation
- Problem determination

In summary, you can use the lab provided to set up a simulation environment to help you understand the DOM integration. Several problem determination topics were discussed.

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