IBM® WebSphere® Commerce V7 Feature Pack 1 – Lab exercise

Configuring value added tax

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What this exercise is about

In this tutorial, you will learn how to configure VAT tax calculation for a store. Once the store is configured, you can optionally add customizations to display VAT information in the Elite store front.

This tutorial should take approximately 30 min to complete.

What you should be able to do

After completing this exercise, you should be able to:

- Configure a store to use the VAT tax calculation method

Introduction

The following naming conventions are used in the exercises:

Reference Variable	Description
<WCDE_INSTALL_DIR>	WebSphere Commerce Developer installation directory
<WCDE_HOST>	Hostname for WebSphere Commerce Developer
<LAB_FILE_DIR>	Location lab files were extracted to

The archive file file, VATLab.zip, provided with this lab contains the files referenced in these lab instructions.

Requirements

Before beginning this lab, ensure you have:

- Installed WebSphere Commerce V7 fix pack 1

- Installed WebSphere Commerce V7 feature pack 1

- Completed feature enablement

Part 1: View the default tax calculations

In this part of the lab, you will view the default tax calculation in the Elite store so you can compare it to the calculation after VAT is enabled.

____ 1.   Open WebSphere Commerce Developer and start your test server.

____ 2.   View the current tax rate in the Elite store.

    __ a. Launch the Elite store using the hintsandtips.html page at **<WCDE>\hintsandtips.html**.

    __ b. Log in to the store using a previously registered test account. If you have not previously registered a shopper for the Elite store, you can use the site administrator account instead.

    __ c. Navigate to the category **Brakes > Tires** and add the product **All season passenger tire** to your order.

    __ d. Proceed with the checkout flow until you reach the **Shipping & Billing Method** page. Scroll down and take note of the amount of tax charged on your order. It should be $8. Also note that the tax is included in the order total.

Product		Expedite Shipping	Availability	Qty	Each	Total
	All season passenger tire SKU: A0000511 Change Attributes Contract: Elite Contract number 1234 ❌ Remove	☐	In-Stock	1	$200.00	$200.00

Promotional code: [   ] **Apply**

Order Subtotal:	$200.00
ⓘ Discount:	($40.00)
Tax:	$8.00
Shipping:	$10.00
Shipping Tax:	$0.00
Order Total:	**$178.00**

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Part 2: Enable VAT calculations

In this part of the lab, you will enable VAT calculation for the Elite starter store.

____ 1. Review the VAT documentation.

___ a. Open the WebSphere Commerce Information Center and navigate to **Developing > Controller layer > Application developer > Tax codes > Value Added Tax > Enabling Value Added Tax (VAT) at store level**.

___ b. Review the VAT configuration concepts.

Note: If you find the following steps require too much typing, the SQL queries can be copied from the file <LAB_FILE_DIR>\VATLab\SQLStatements.txt. If you are completing this lab in your own environment you may need to change the store ID value.

____ 2. Enable the VAT calculation method. The VAT calculation rule combine method is used for calculating both sales tax (usage ID -3) and shipping tax (usage ID -4) so two entries in CALMETHOD are needed

___ a. Find the store ID for the Elite store by following the steps below.

1) Open a browser window and go to **https://localhost/webapp/wcs/admin/servlet/db.jsp**

2) Enter the SQL below to look up the Elite store ID.

```
select storeent_id from storeent where identifier='Elite';
```

3) Click **Submit Query**.

4) Record the store ID.

___ b. Enter the SQL below to add the VAT calculation methods. The CALMETHOD_IDs 1 and 2 are shown here for example. You can use any available primary key.

```
insert into calmethod
(CALMETHOD_ID,STOREENT_ID,CALUSAGE_ID,TASKNAME,DESCRIPTION,SUBCLASS,
NAME) values(1, <store_id>,-3,
'com.ibm.commerce.order.calculation.VATCalculationRuleCombineCmd',
'default method to identify sales tax rules (referenced by
STENCALUSG.ACTRC_CALMETHOD_ID) when Value-Added-Tax is
enabled',5,'VATCalculationRuleCombine (sales tax)');


insert into calmethod
(CALMETHOD_ID,STOREENT_ID,CALUSAGE_ID,TASKNAME,DESCRIPTION,SUBCLASS,
NAME) values(2, <store_id>,-4,
'com.ibm.commerce.order.calculation.VATCalculationRuleCombineCmd',
'default method to identify shipping tax rules (referenced by
STENCALUSG.ACTRC_CALMETHOD_ID) when Value-Added-Tax is
enabled',5,'VATCalculationRuleCombine (shipping tax)');
```

___ c. Click **Submit Query.**

____ 3. Configure the sales tax and shipping tax calculation usage for the Elite store. The STENCALUSG table defines the various calculation methods used for each type of calculation in the store.

___ a. Enter the SQL below to configure the tax calculations. The Elite store does not have an existing shipping tax configuration (usage ID -4) defined. This means you need to insert a new row into

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STENCALUSG rather than update an existing row. Use the CALMETHOD_IDs from step 2 as the values for ACTRC_CALMETHOD_ID.

```
update stencalusg set ACTRC_CALMETHOD_ID=1 where
storeent_id=<store_id> and calusage_id=-3;


insert into stencalusg (storeent_id, calusage_id, actcc_calmethod_id,
actrc_calmethod_id,calmethod_id_app,calmethod_id_sum,usageflags,calme
thod_id_ini,sequence) values(<store_id>,-4,-61,2,-232,-233,1,-
231,4.0);
```

__ b. Click **Submit Query.**

____ 4. Register the VAT command implementations. These command implementations replace the existing Order command implementations and ensure that VAT tax is correctly applied throughout the order flow. The Information Center provides details on the role of each updated command in the tax calculation process.

__ a. Enter the SQL below to register the new commands.

```
insert into cmdreg(STOREENT_ID,INTERFACENAME,CLASSNAME,TARGET)
values(<store_id>,
'com.ibm.commerce.taxation.commands.GetDisplayTaxesCmd','com.ibm.comm
erce.taxation.commands.GetDisplayVATTaxesCmdImpl', 'Local');


insert into cmdreg(STOREENT_ID,INTERFACENAME,CLASSNAME,TARGET)
values(<store_id>,
'com.ibm.commerce.order.commands.OrderCalculateCmd','com.ibm.commerce
.order.commands.VATPromotionEngineOrderCalculateCmdImpl', 'Local');


insert into cmdreg(STOREENT_ID,INTERFACENAME,CLASSNAME, TARGET)
values(<store_id>,'com.ibm.commerce.order.commands.GetOrderTotalAmoun
tCmd','com.ibm.commerce.order.commands.VATGetOrderTotalAmountCmdImpl'
,'Local');


insert into cmdreg(STOREENT_ID,INTERFACENAME,CLASSNAME, TARGET)
values(<store_id>,'com.ibm.commerce.orderitems.commands.GetOrderItems
TotalAmountCmd','com.ibm.commerce.orderitems.commands.VATGetOrderItem
sTotalAmountCmdImpl','Local');


insert into cmdreg(STOREENT_ID,INTERFACENAME,CLASSNAME, TARGET)
values(<store_id>,'com.ibm.commerce.order.commands.GetHistoryOrderTot
alAmountCmd','com.ibm.commerce.order.commands.VATGetHistoryOrderTotal
AmountCmdImpl','Local');


insert into cmdreg(STOREENT_ID,INTERFACENAME,CLASSNAME, TARGET)
values(<store_id>,'com.ibm.commerce.order.commands.GetOrderReleaseTot
alAmountCmd','com.ibm.commerce.order.commands.VATGetOrderReleaseTotal
AmountCmdImpl','Local');
```

__ b. Click **Submit Query.**

____ 5. Restart your test server.

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Part 3: View the VAT tax calculations

In this part of the lab, you will verify that VAT tax calculations are now being applied in the Elite store. The prices in the Elite store are now interpreted as including VAT. The calculation method you enabled in Part 2 will do a reverse calculation to determine the portion of the price that is tax based on the tax rate defined for the store.

____ 1.   View the tax rate in the Elite store.

__ a. Launch the Elite store using the hintsandtips.html page.

__ b. Log in to the store using a previously registered test account. If you have not previously registered a shopper for the Elite store, you can use the site administrator account instead.

__ c. Navigate to the category **Brakes > Tires** and add the product **All season passenger tire** to your order.

__ d. Proceed with the checkout flow until you reach the **Shipping & Billing Method** page. Scroll down and take note of the amount of tax charged on your order. It should be $7.62. Note that this tax amount is shown for display purpose only. It is not included in the order total.

Product		Expedite Shipping	Availability	Qty	Each	Total
	All season passenger tire SKU: A0000511 Change Attributes Contract: Elite Contract number 1234 ✖ Remove	☐	In-Stock	1	$200.00	$200.00

Promotional code: [   ] **Apply**

Order Subtotal:	$200.00
ⓘ Discount:	($40.00)
Tax:	$7.62
Shipping:	$10.00
Shipping Tax:	$0.00
Order Total:	**$170.00**

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Part 4: (Optional) Display VAT information in the store front

If you want to explore VAT tax enablement further, the Information Center provides some examples on how to show additional VAT in the store front. The examples include: Displaying VAT information on a product display page and Displaying VAT information on an order item display page.

To try out these examples, navigate to:

Developing > Controller layer > Application developer > Tax codes > Value Added Tax (VAT) > Displaying VAT information on product display pages

Developing > Controller layer > Application developer > Tax codes > Value Added Tax (VAT) > Displaying VAT information on order item display pages

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Part 5: What you did in this exercise

In this tutorial you learned how to configure VAT tax calculation for a store.

You should now understand how to complete the following tasks:

- Configure a store to use the VAT tax calculation method

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