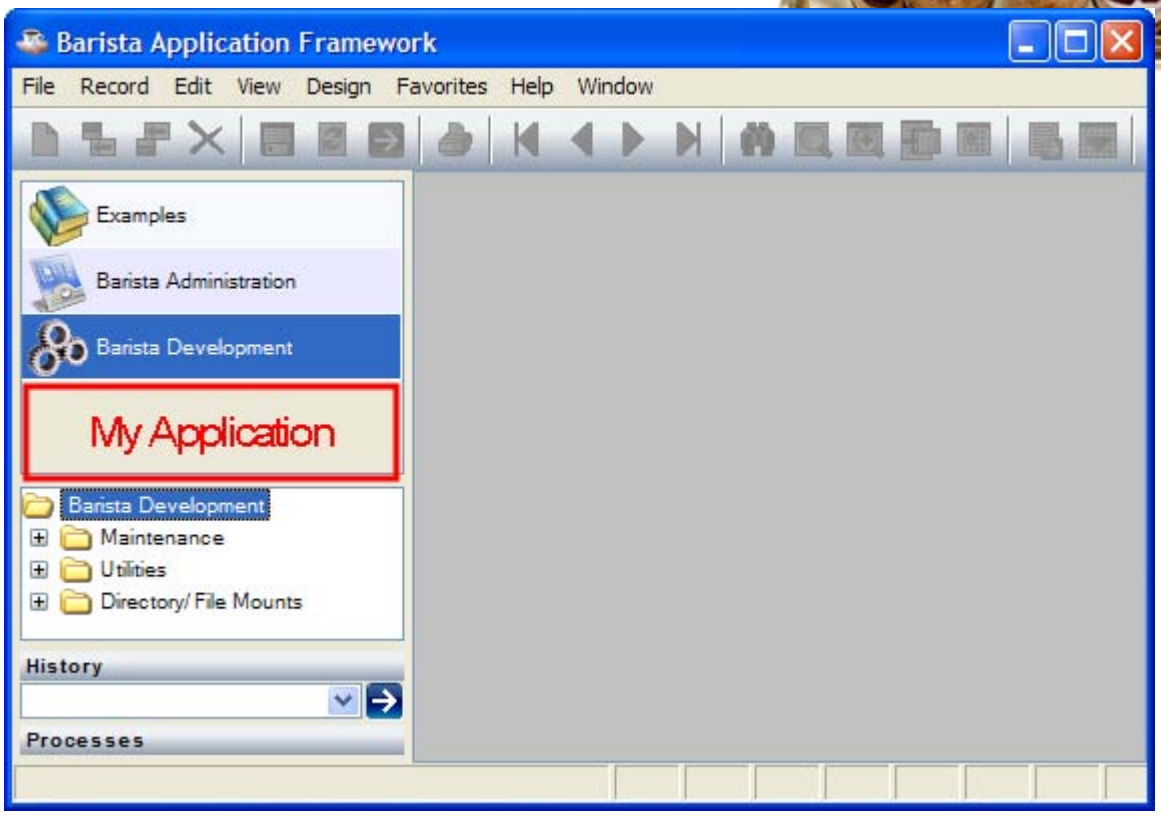
From BASIS DD to Barista Application in Five Easy Steps

By Jim Douglas

Your current BASIS Data Dictionary is perfect raw material for your first Barista-brewed application. Barista facilitates the extremely rapid creation and modernization of business applications. Cut out the enormously time-consuming GUI design and management tasks normally associated with the creation of a GUI application.

Follow these steps and transform your venerable application to a tasty eye-catching delight!

The goal is to create a new Barista application as shown below:



The steps are:

STEP 1. Define a Barista Application

STEP 2. Import to Barista Dictionary

STEP 3. Build Barista Forms

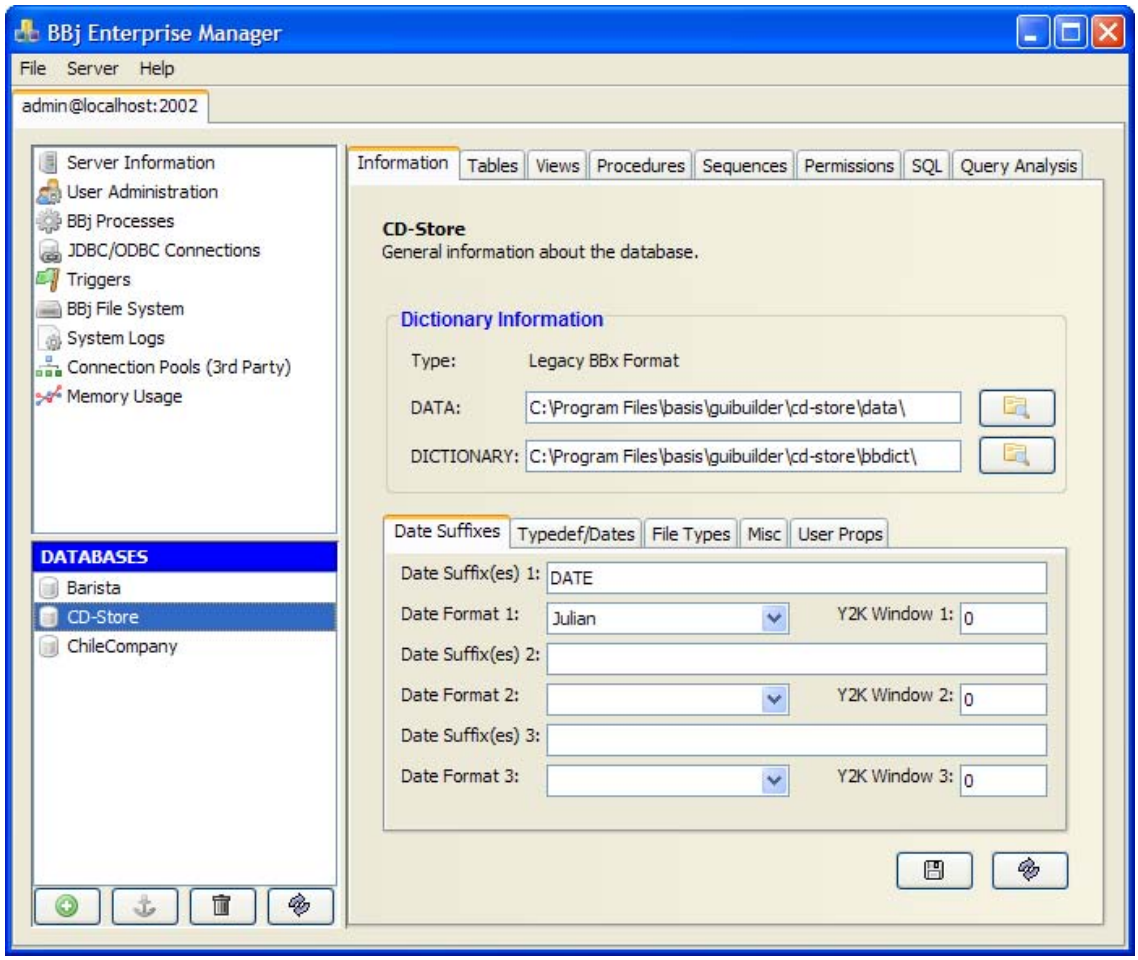
STEP 4. Create a Menu System

STEP 5. Test Drive

Jim Douglas
Software Engineer
Contractor

continued...

We'll use the CD-Store sample database, which can be found here in Enterprise Manager:



STEP 1. Define a Barista Application

Detailed documentation for this process can be found in Creating and Synchronizing Applications.

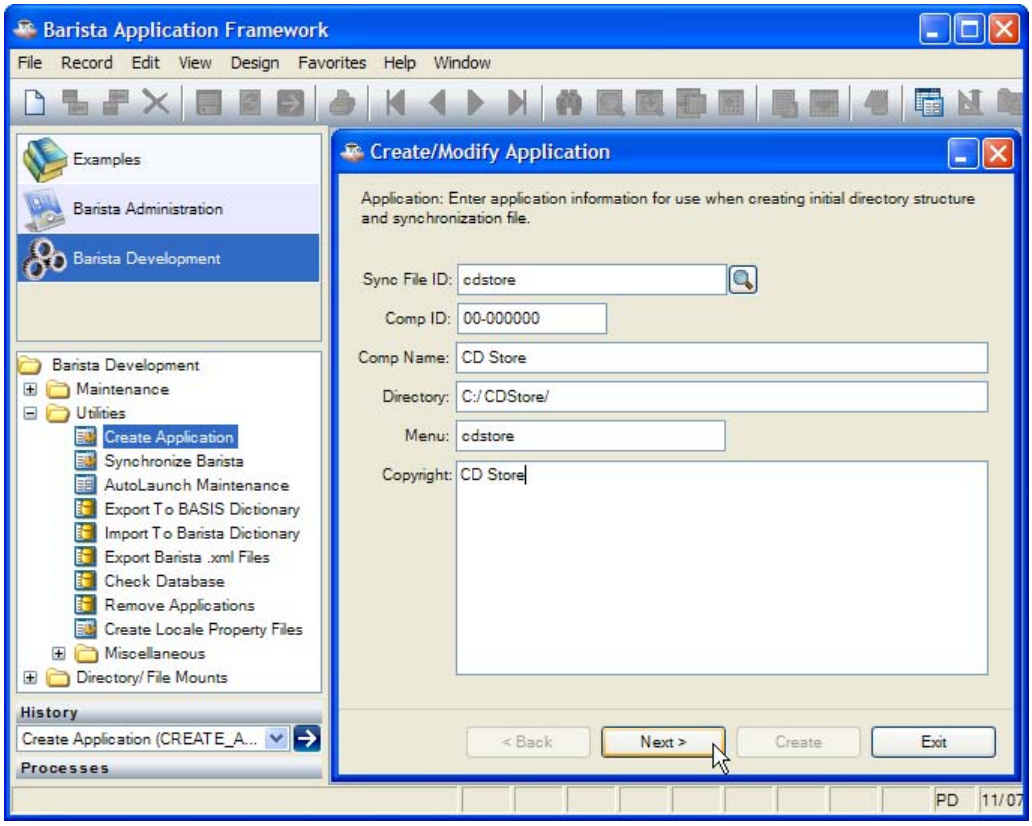
The first step is to define an application schema using the "Create Application" wizard. This process creates the directory structure that will contain our application.

1. From the **Barista Development** menu, select **Utilities, Create Application**.
2. Enter the following values:

Sync File ID:	`cdstore`
Comp ID:	`00000000`
Comp Name:	`CD Store`
Directory:	`C:/CDstore/`
Menu:	`cdstore`
Copyright:	`CDStore`

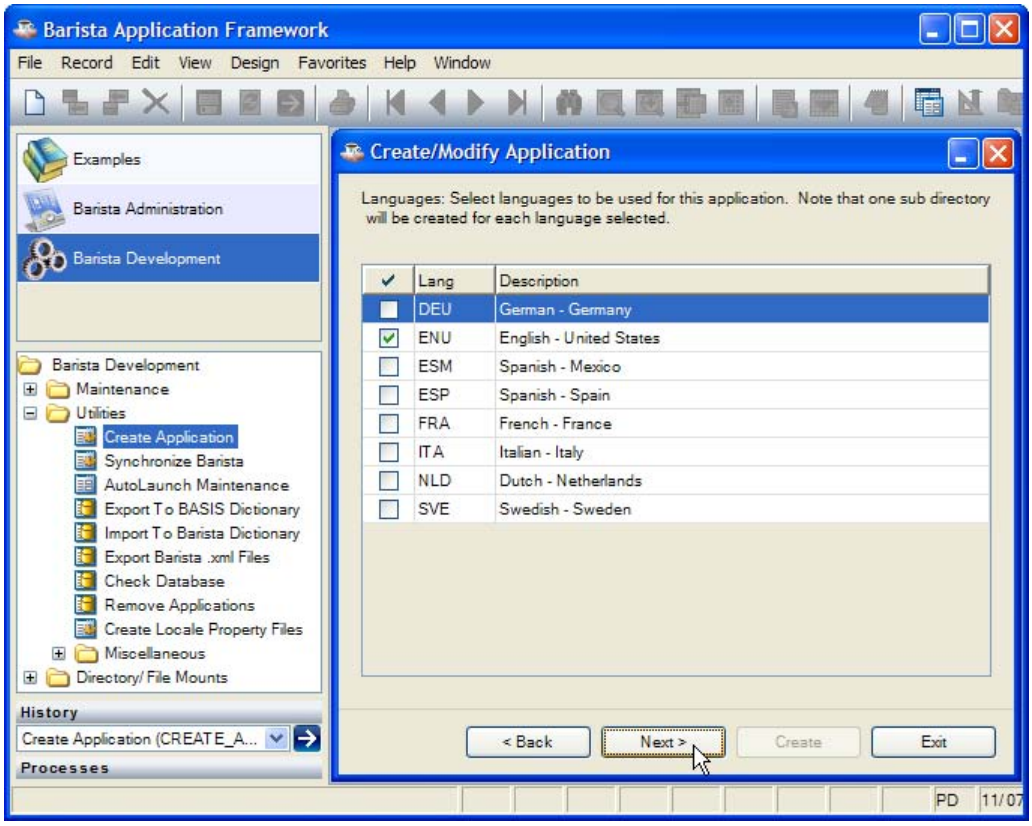
continued...

3. Click [Next>].



4. Select one or more language codes. (The current default language is initially selected.)

5. Click [Next>].



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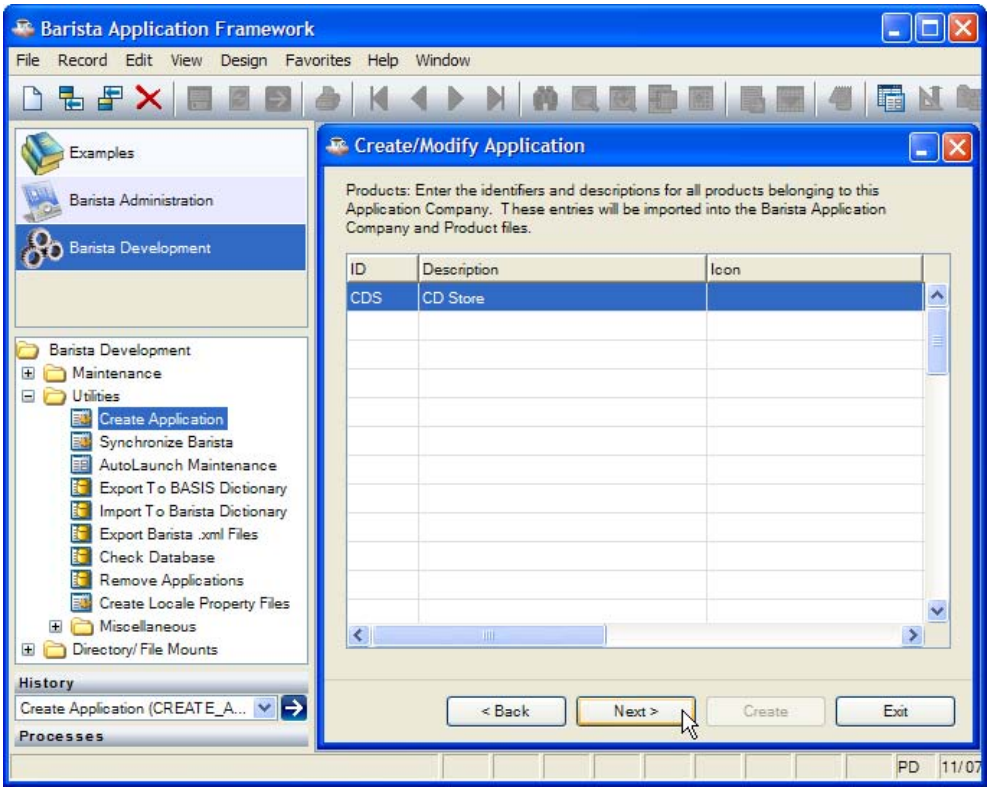
6. Enter the following values:

ID: `CDS`
Description: `CD Store`

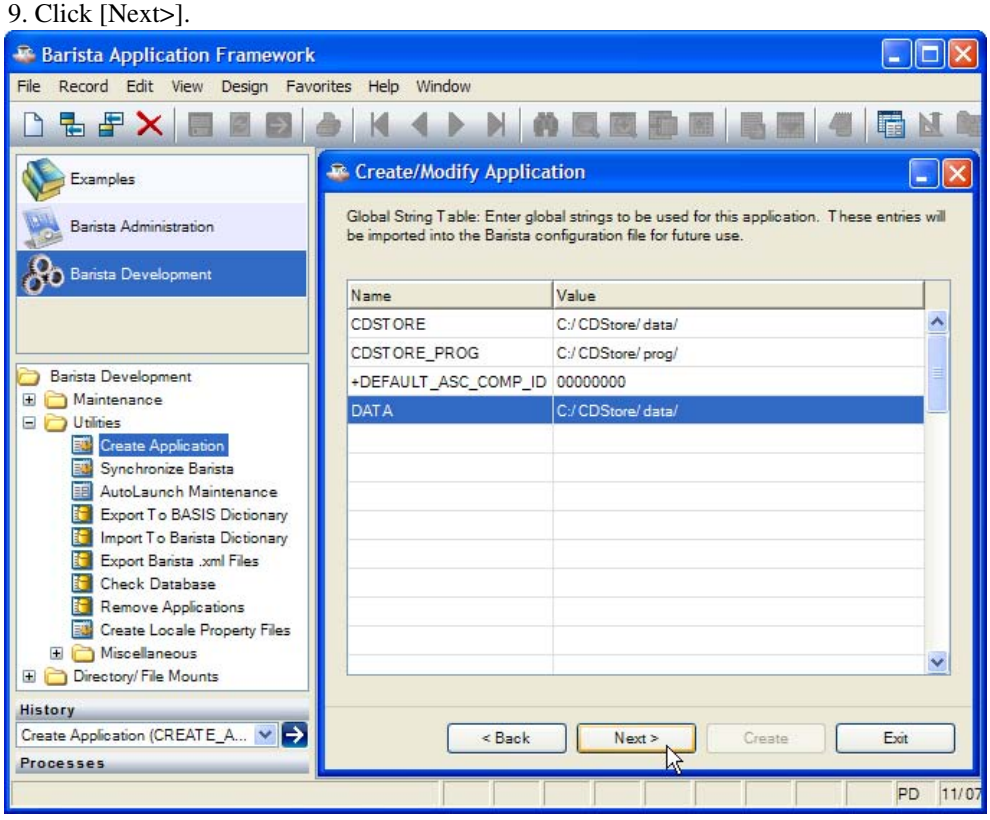
7. Click [Next>].



8. Add the following global string value to the list:

Name: `DATA`
Value: *(Copy from the CDSTORE value)*

9. Click [Next>].



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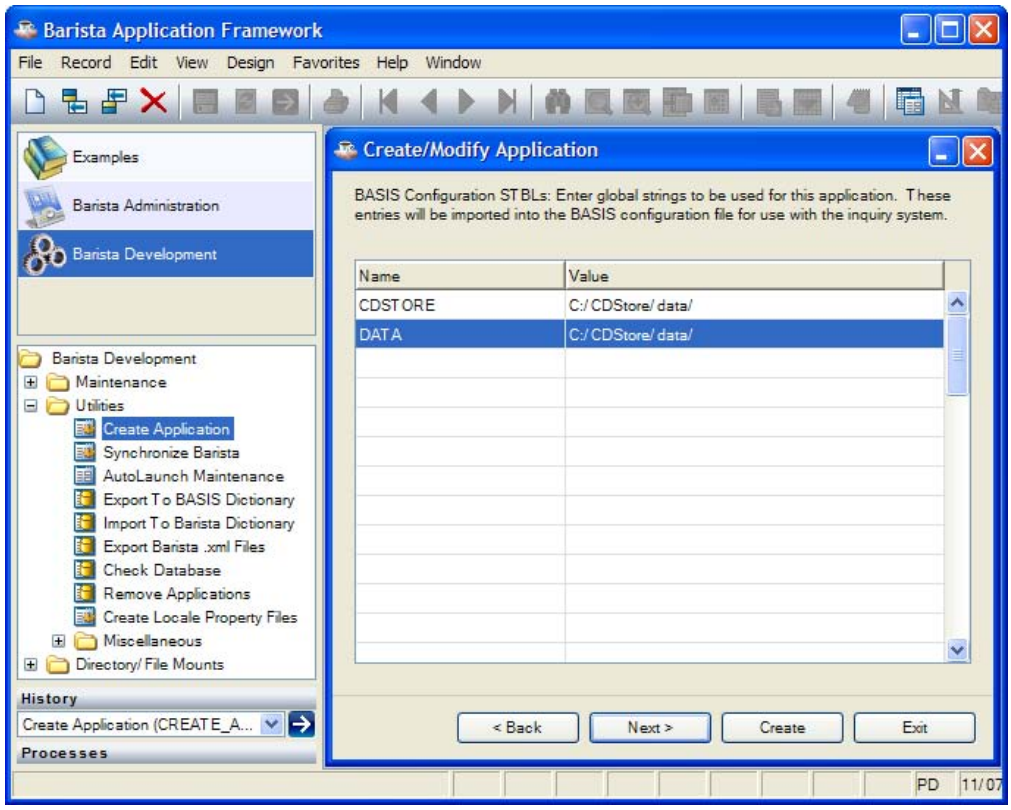
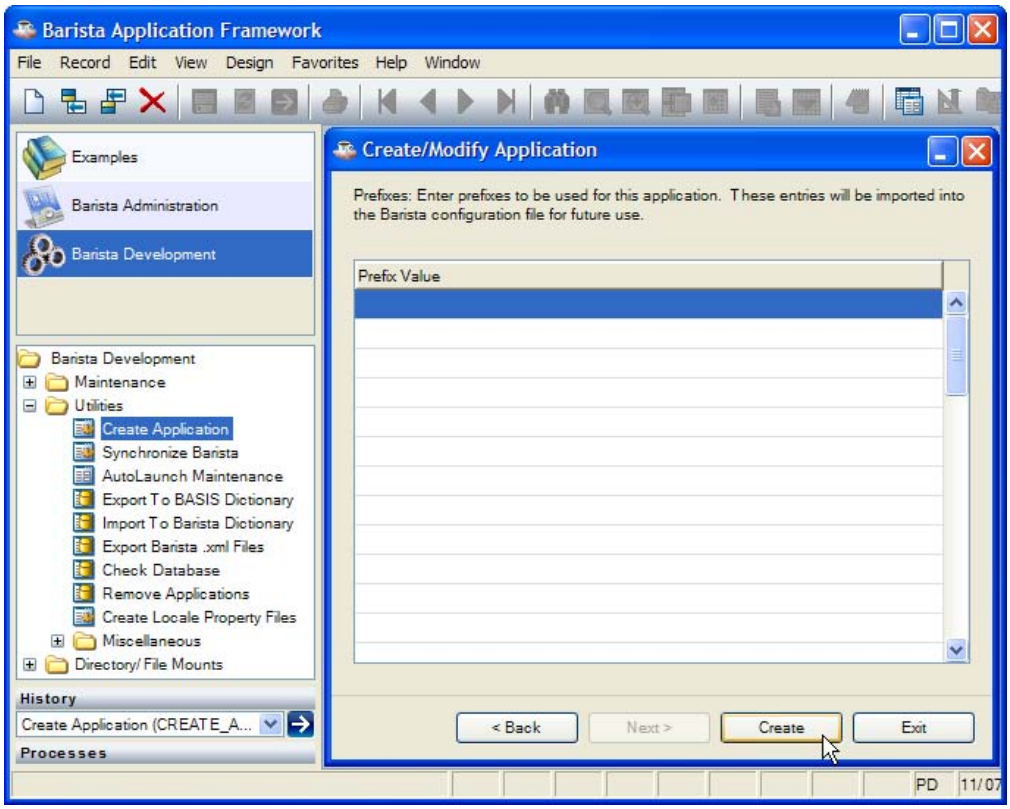
10. Add the following global string value to the list:
    Name: `DATA`
    Value: *(Copy from the CDSTORE value)*

11. Click [Next>].



If you plan to write any programs that depend on the prefix to find files and/or programs, enter the directories (e.g. `C:/CDStore/prog/` and `C:/CDStore/data/`). Our test application won't use prefix entries, so we can skip this step.



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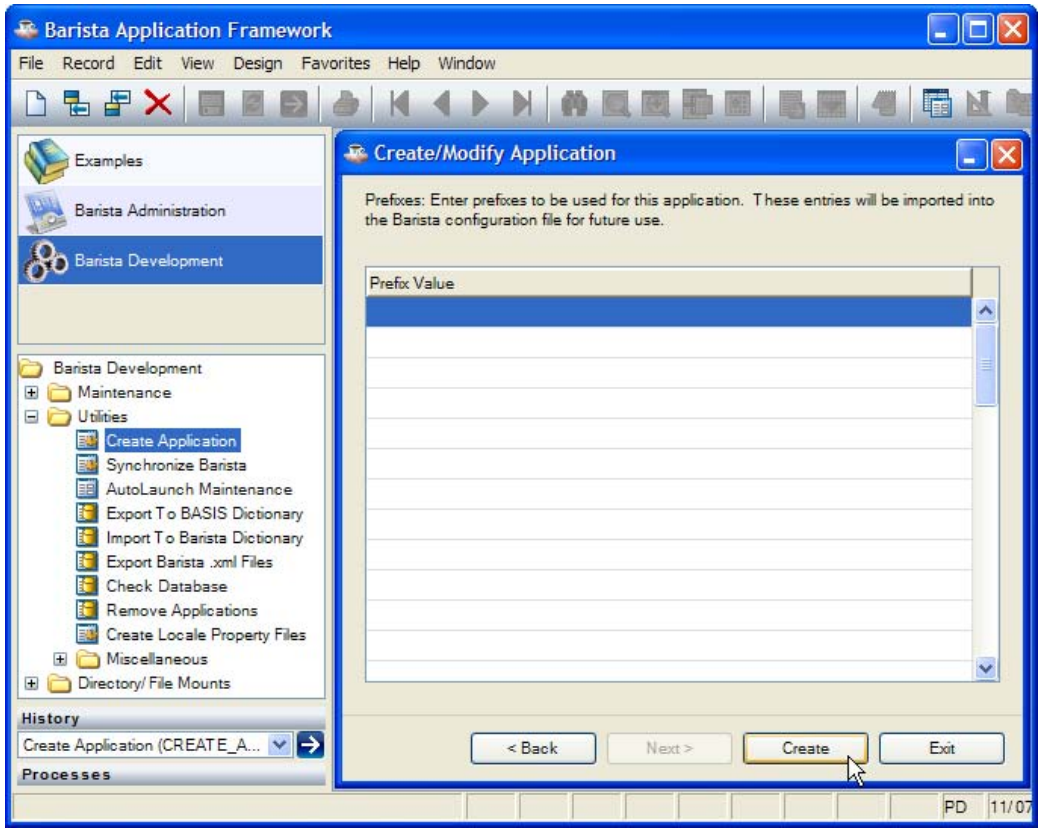
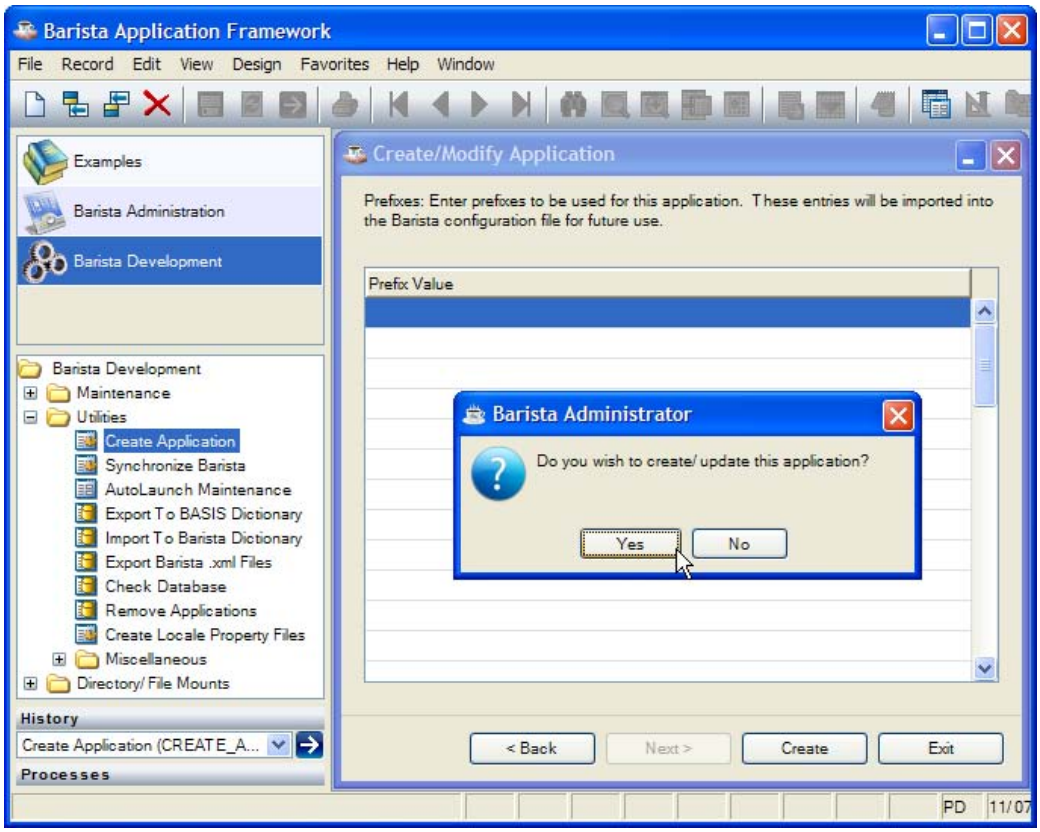
12. Click [Create].



13. Click [Yes].



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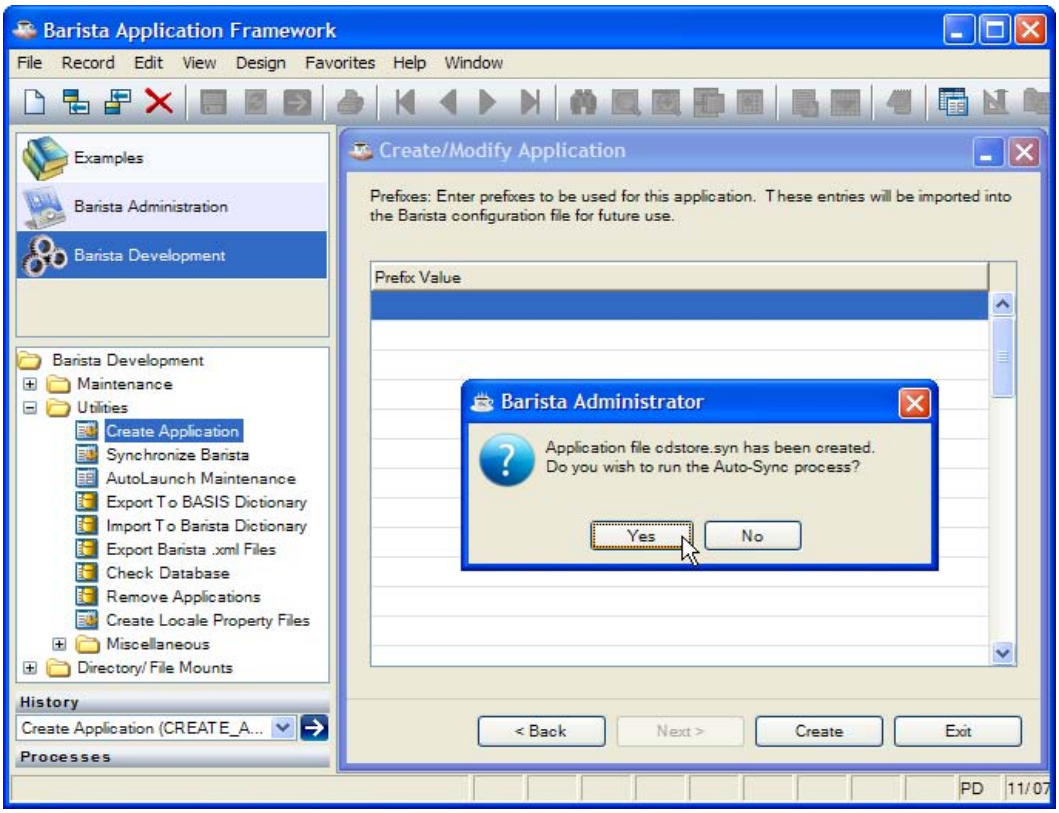
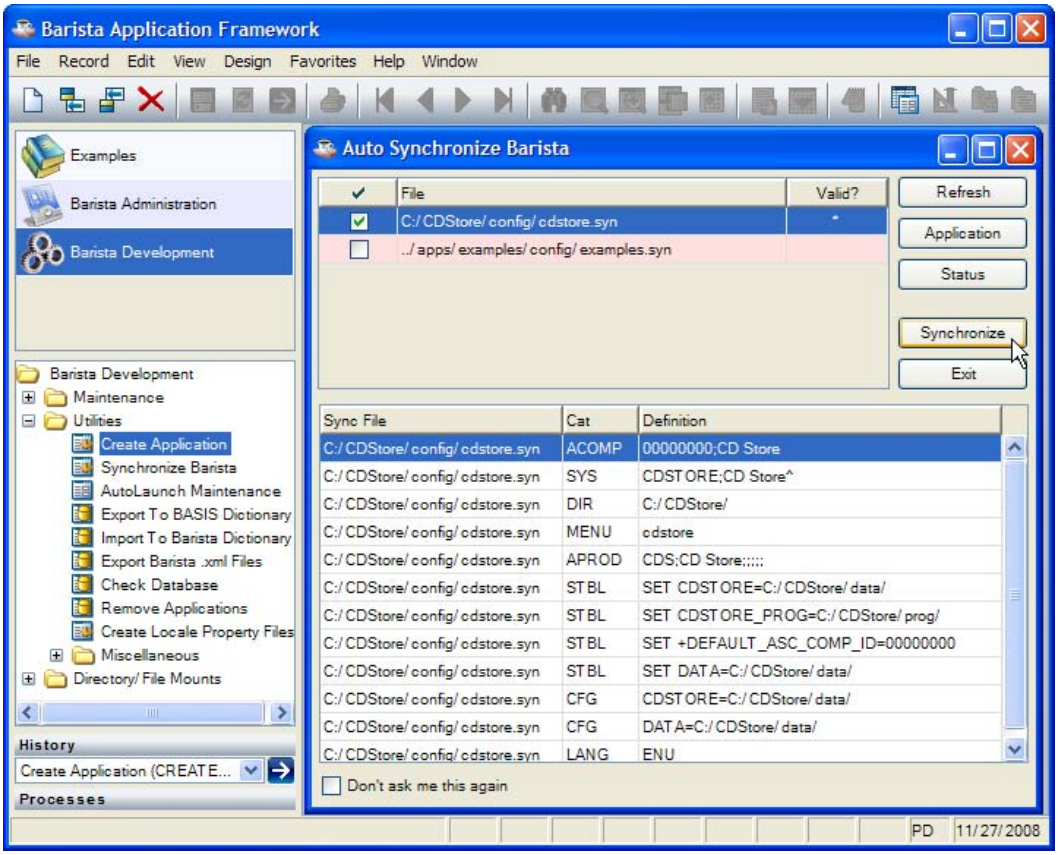
14. Click [Yes].



15. Click [Sync].



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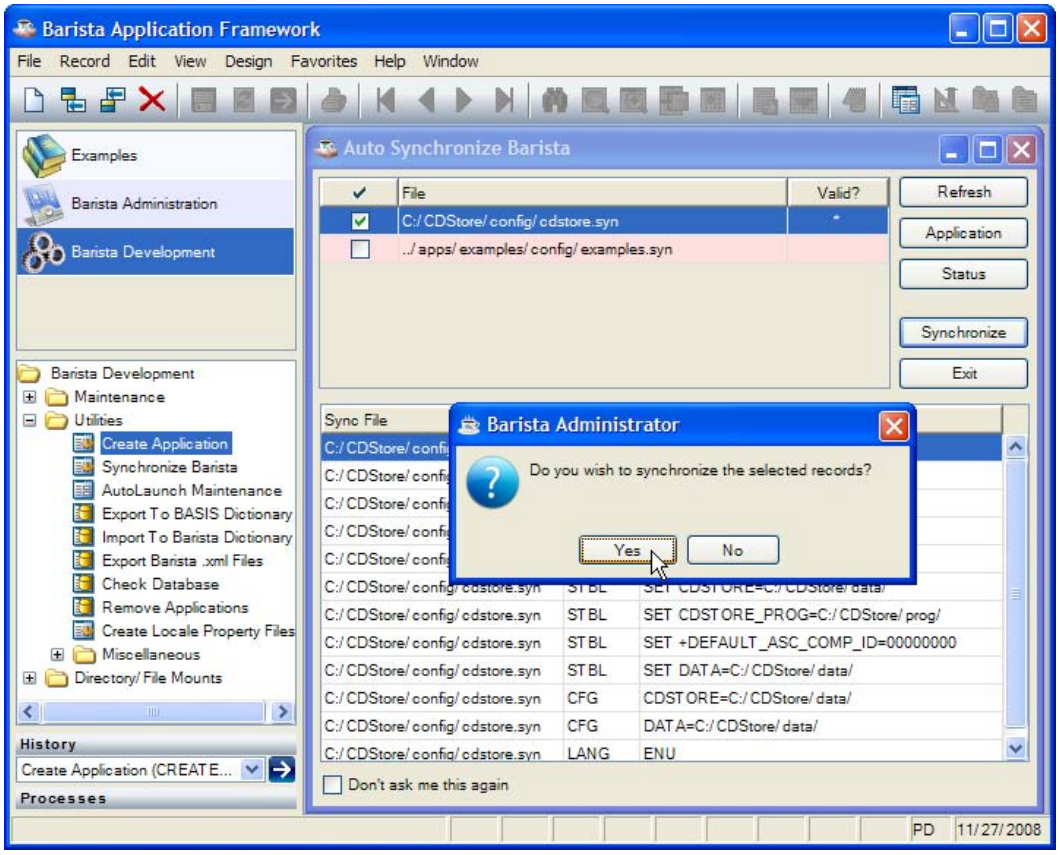
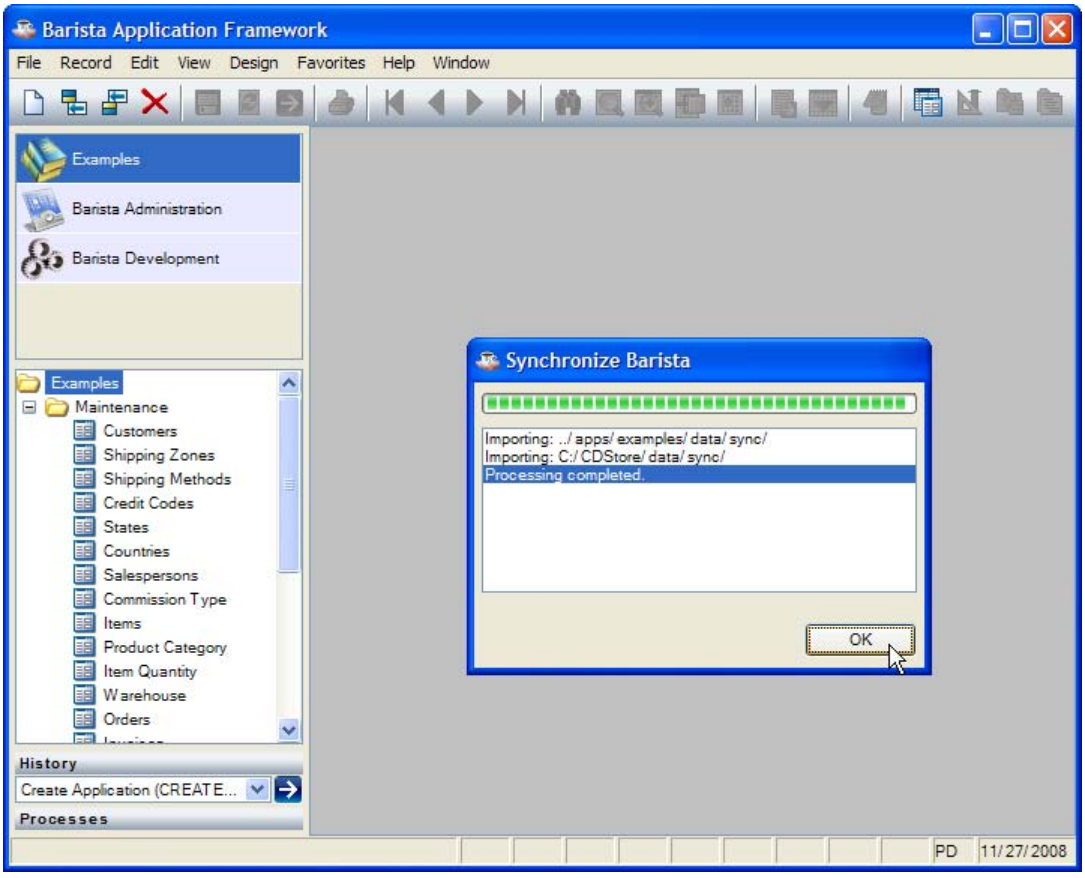
16. Click [Yes].



17. Click [OK].



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At this point, the application schema – the basic directory structure for your application – has been created:

```
[C:\]tree/f CDStore

C:\CDStore
├──config
│   └──enu
│      └ cdstore.syn
├──data
│   ├──arc
│   │   └──enu
│   ├──bar
│   ├──cdf
│   ├──def
│   │   └──enu
│   └──sync
└──prog
```

18. Copy the data file from its original location:

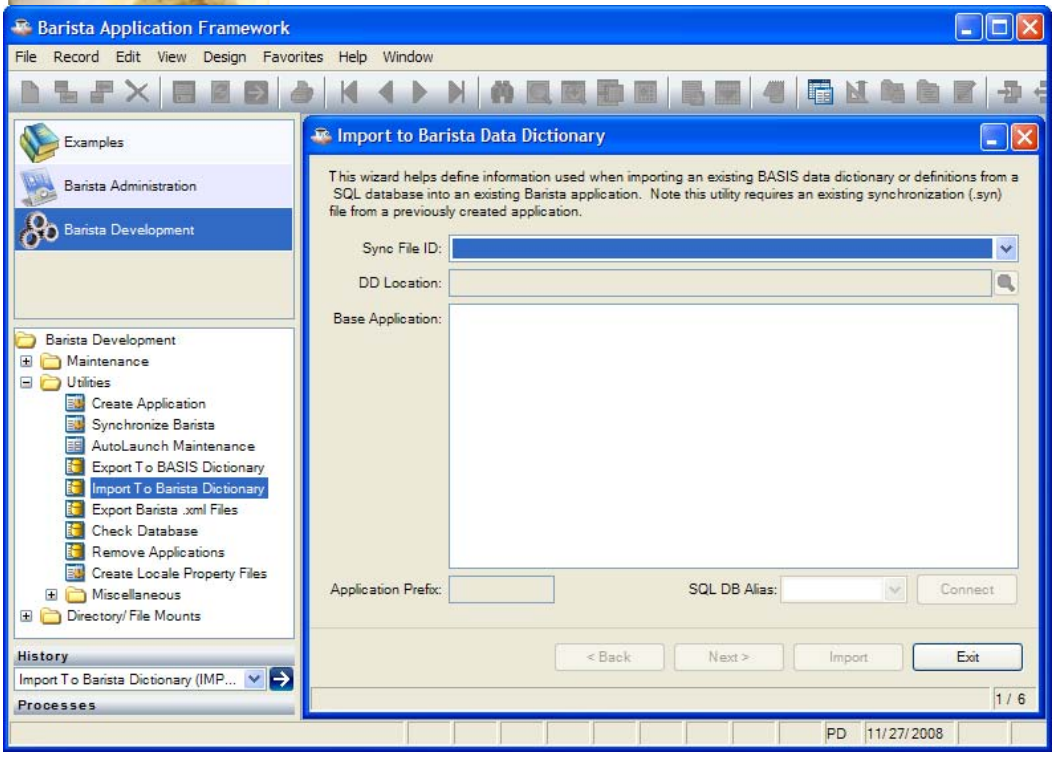
```
From: C:\Program Files\basis\guibuilder\cd-store\data\cd-store

To: C:\CDStore\data\cd-store
```

STEP 2. Import to Barista Dictionary

Detailed documentation for this process can be found in BASIS DD Definition Import Utility.

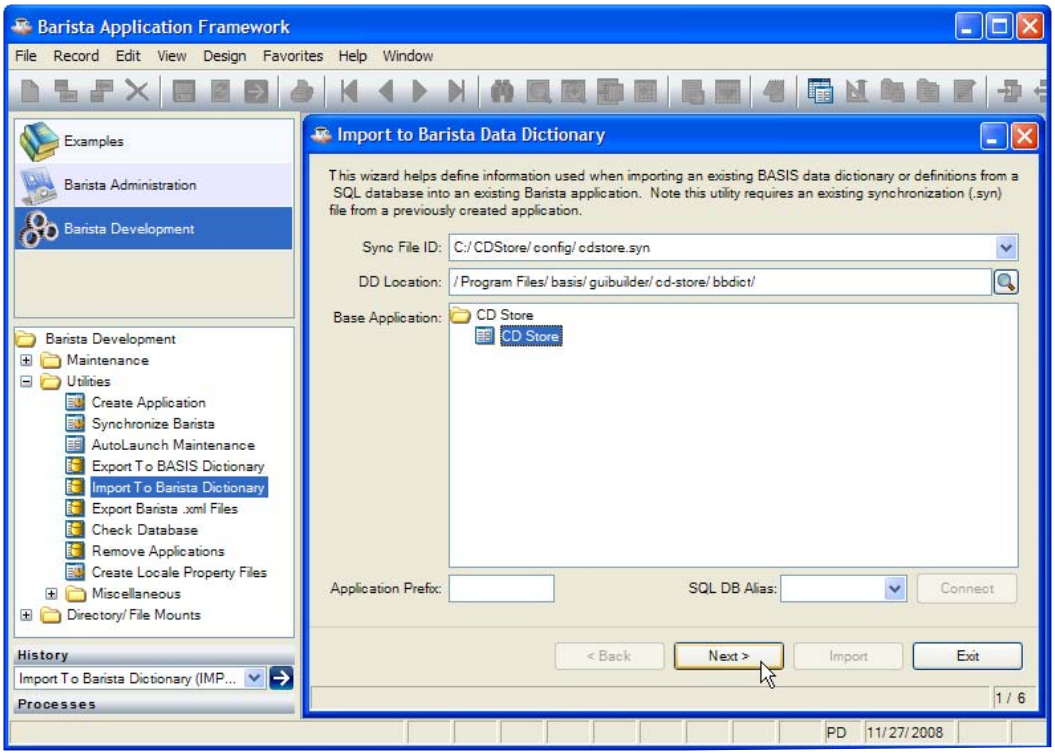
1. From the **Barista Development** menu, select **Utilities, Import to Barista Dictionary**



2. Complete the fields as follows:
   a. In **Sync File ID,** select the synchronization file created in the **Create Application Utility.**
   b. In **DD Location**, enter the directory containing the BASIS dictionary files you wish to access. Note this directory is normally named bbdict/ and will contain files named `FILE.1, FIELD.1`, etc. Press the magnifying glass to launch the "File Open" dialog and search for the directory.
   c. In **Base Application**, select the target application for the incoming data files.
   d. In **Application Prefix**, add a prefix, if desired, which will be applied to all file and field names when they are imported into Barista.
   e. Leave **SQL DB Alias** blank

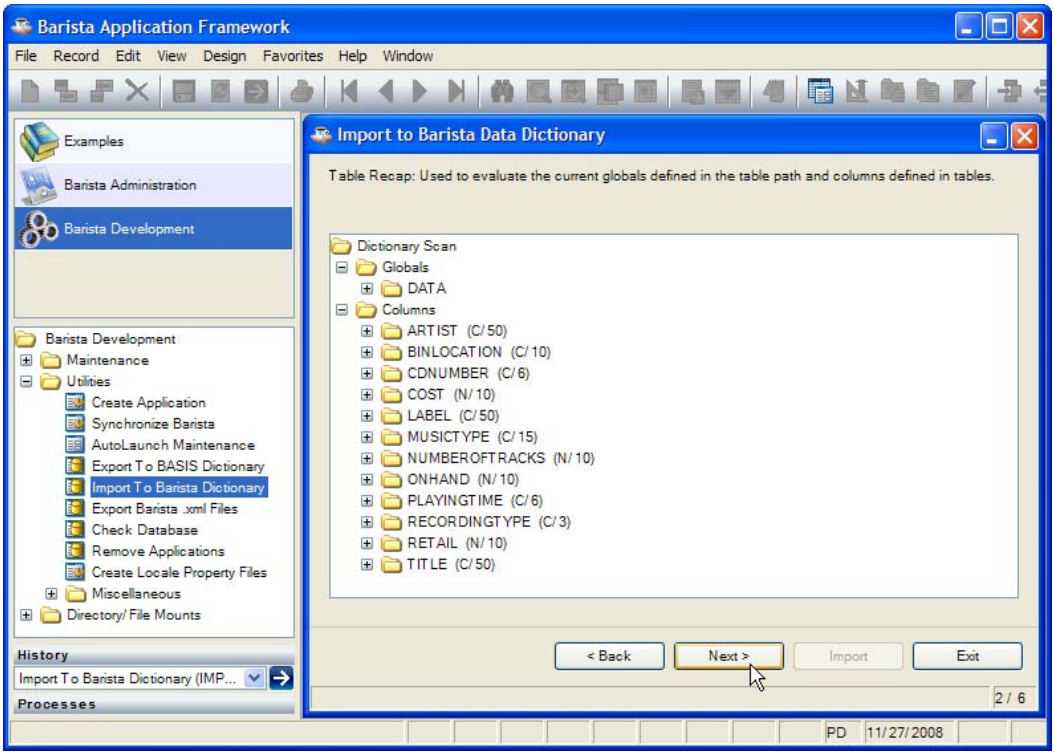
continued...

3. Click [Next>].



4. If required, enter the parameters to rename globals contained in the file path name in the BASIS dictionary.

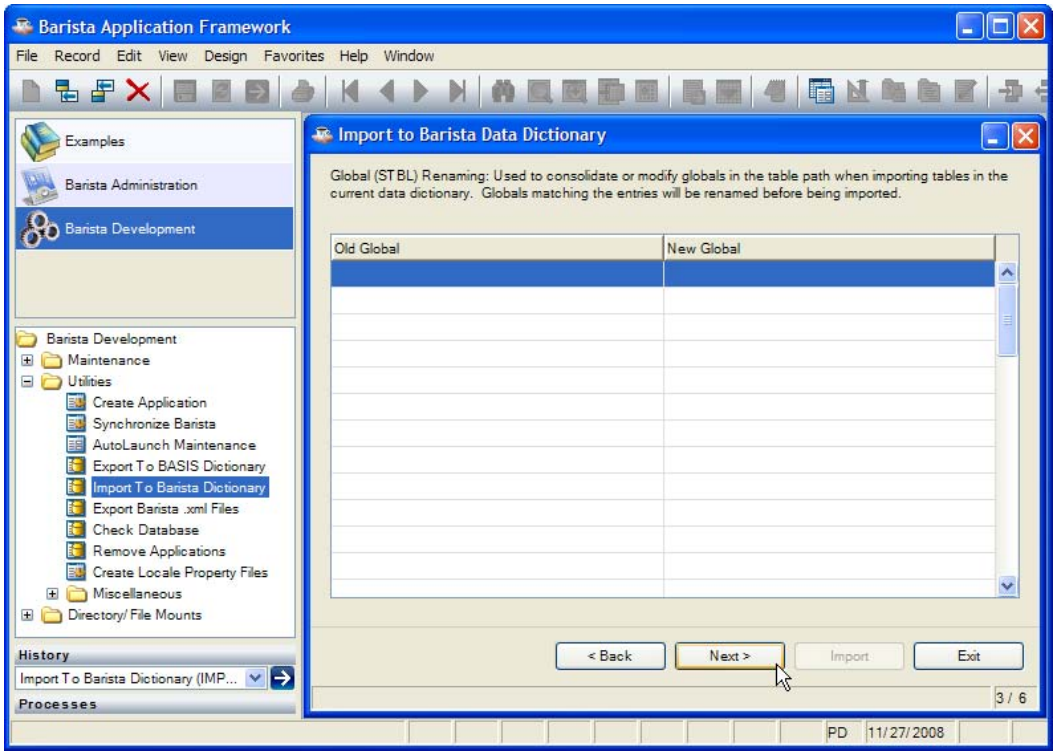
5. Click [Next>].



6. Barista displays a summary of the information as it will be imported.

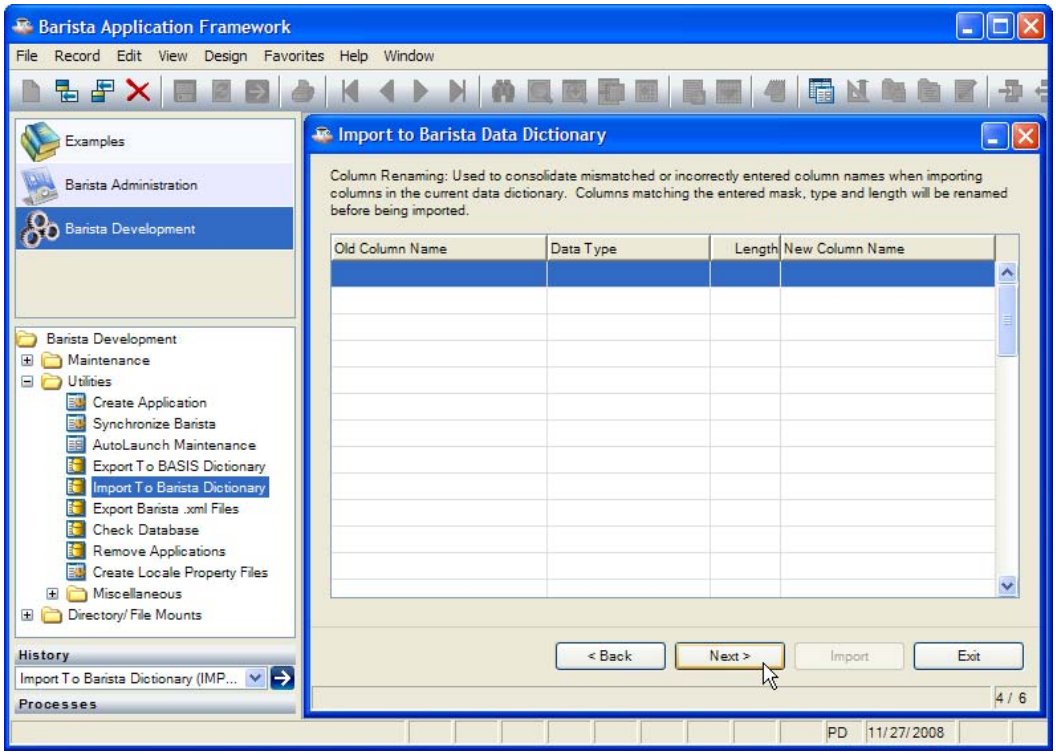
continued...

7. [Click Next>].



8. If required, enter the parameters to rename and consolidate column names from the original dictionary (CUST_ NUM, CUSTOMER_NUM & CUST_NO into CUSTOMER ID, for example).

9. [Click Next>].



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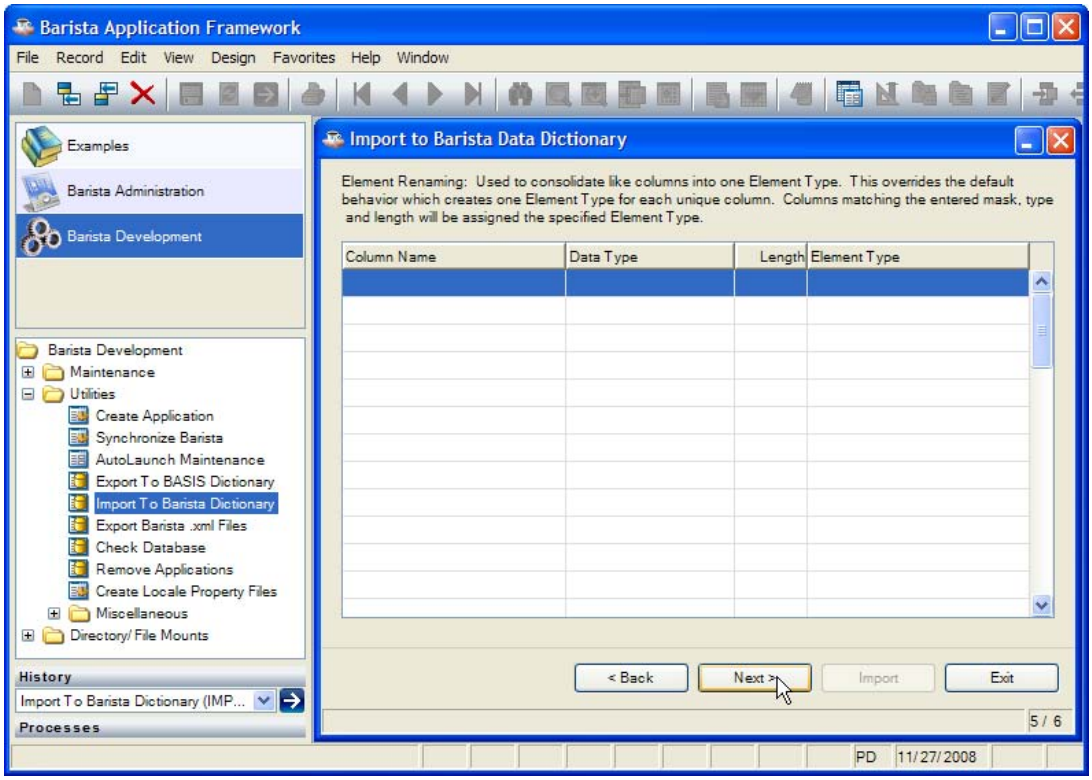
10. Enter the parameters to rename and consolidate element names from the original dictionary (DESC, DESCRIP & ITEM_DESC into DESC_30, for example).

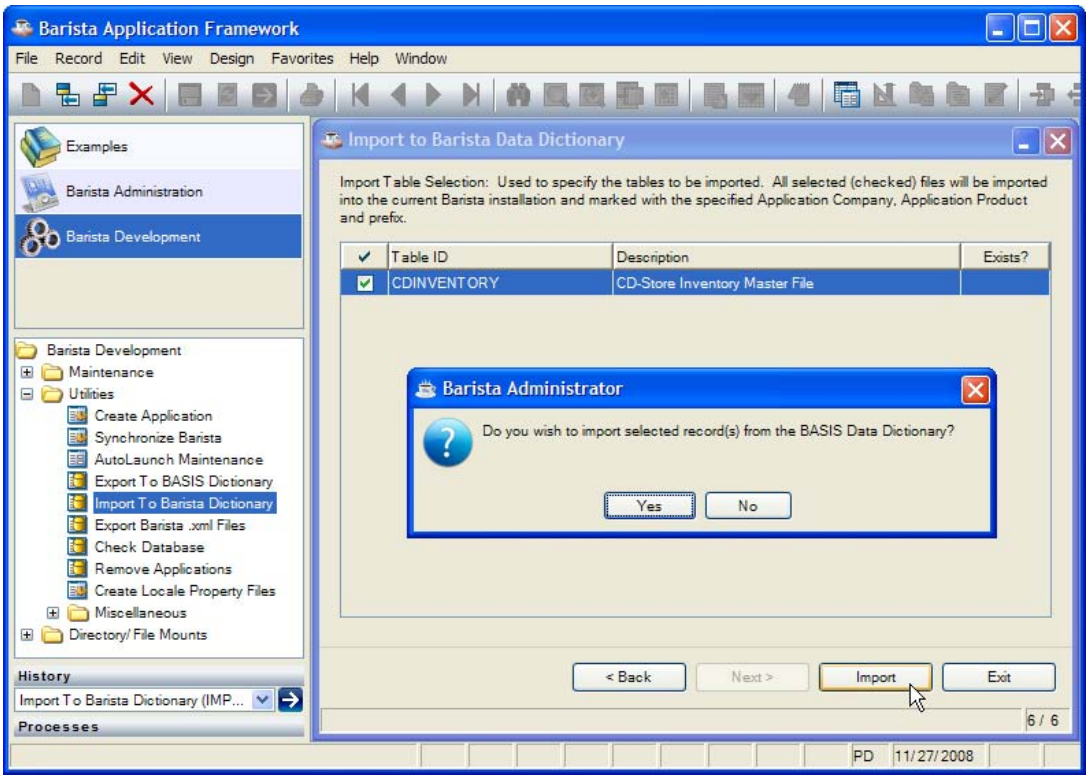
11. [Click Next>] .



12. A list of all files defined in the source dictionary will be displayed. Click the check box for the CDINVENTORY table (the only table in this database).

13. Click [Import].

14. Click [Yes].



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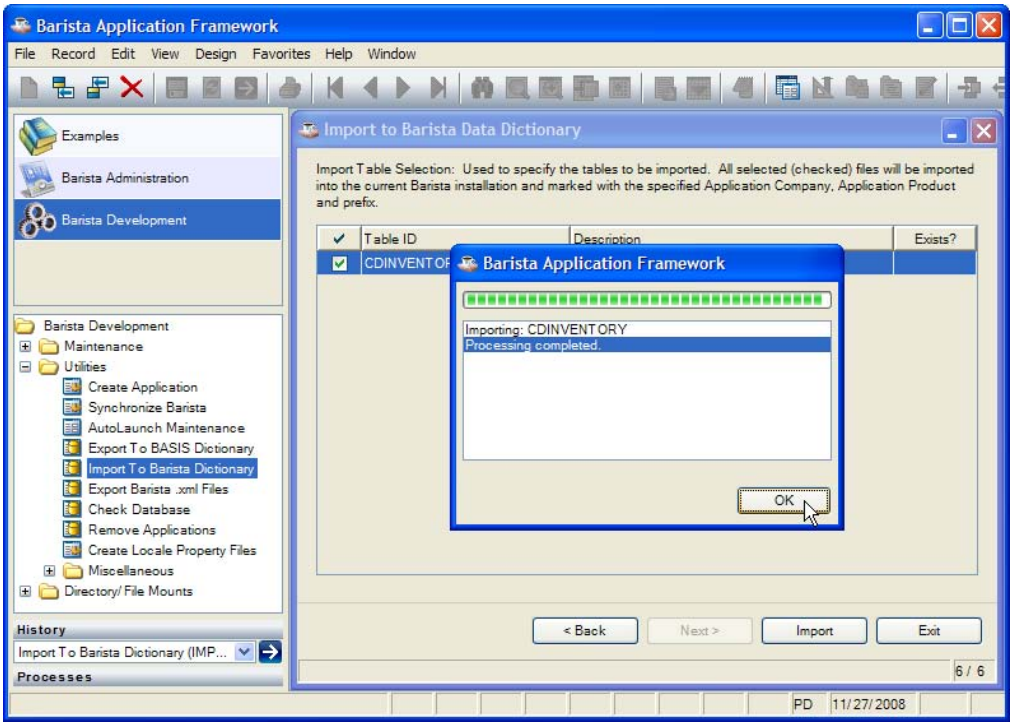
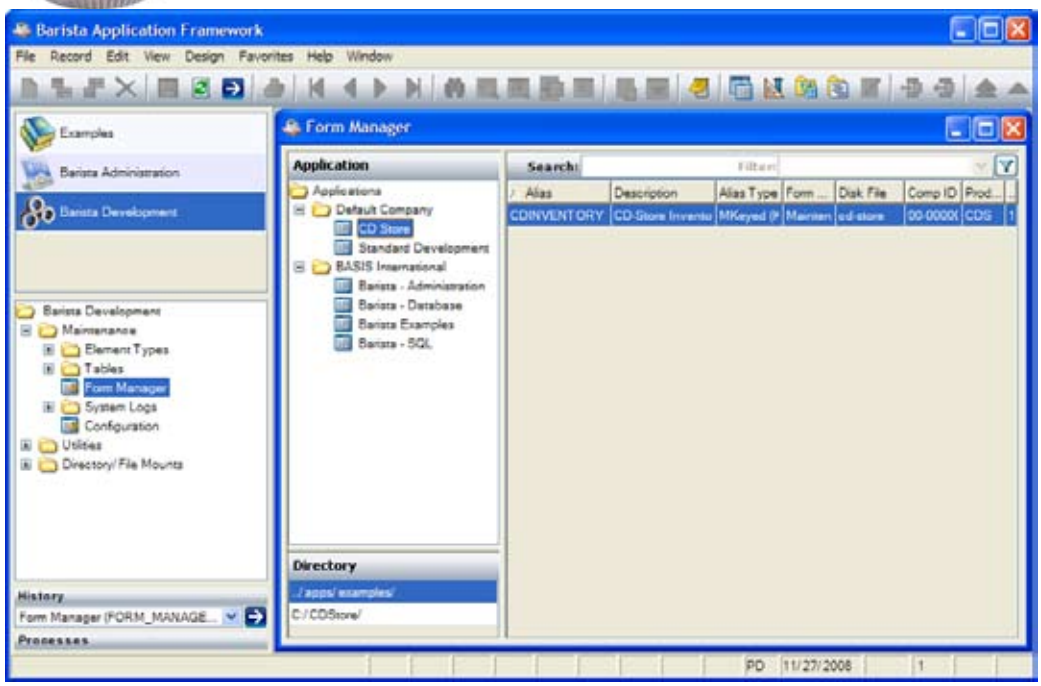
15. [Click OK].



The import process is now complete.

STEP 3. Build Barista Forms

1. From the **Barista Development** menu, select **Maintenance, Form Manager.**



2. Double-click `CDINVENTORY` located in the list on the right (or enter the search string CD).

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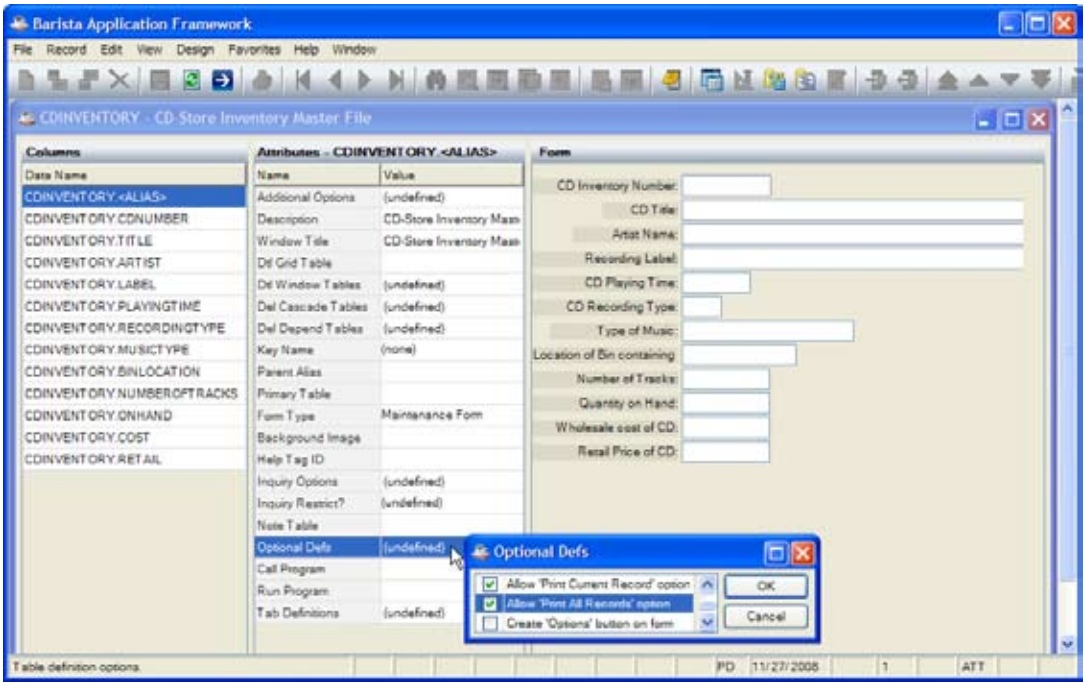
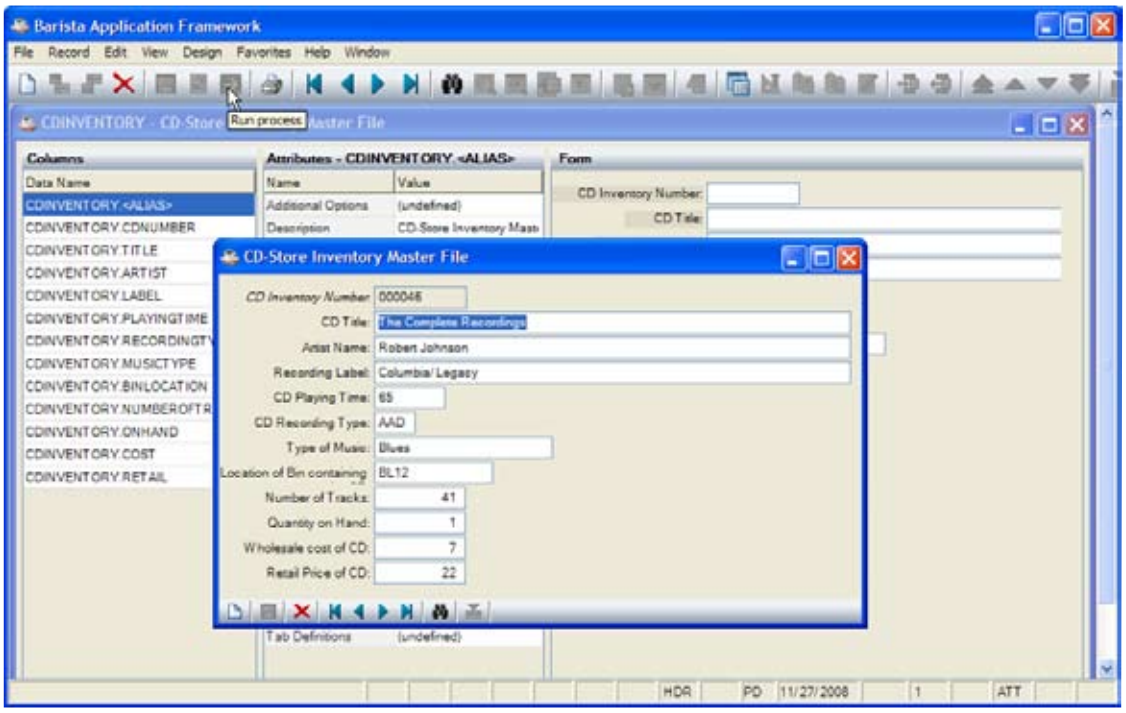
3. Double-click (undefined) next to `Optional Defs` located in the list on the right (or enter the search string undefined).

4. Click the check boxes corresponding to the two print-related options:
   a. `Allow 'Print Current Record' option`
   b. `Allow 'Print All Records' option`

5. Click `[OK]`.



6. Press [F5] or click the [Run process] tool button to test your Barista form.



7. Close the form.

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STEP 4. Create a Menu System

Now it's time to pull it all together.

1. Select a 32x32 icon for your application (http://images.google.com/images?q=cd+icon&imgsz=icon).

   Example: http://www.iconarchive.com/show/isimple-system-icons-by-fasticon/cd-icon.html

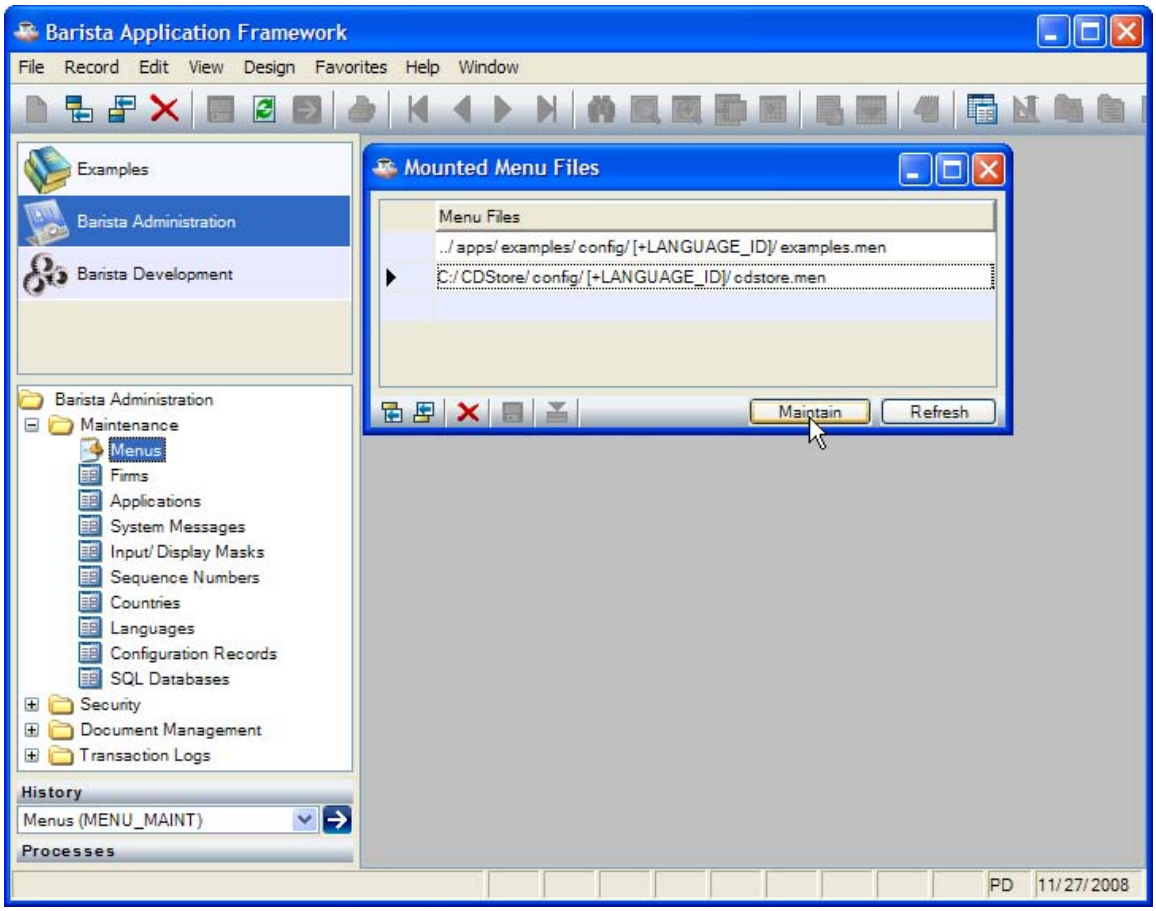
2. Save that icon to: `barista/sys/images/im_menua_cdstore.png`.

Next, start creating the menu.

3. From the **Barista Administration** menu, select **Maintenance**, **Menus**.

4. Select the `CDStore` menu file.

5. Click [Maintain].



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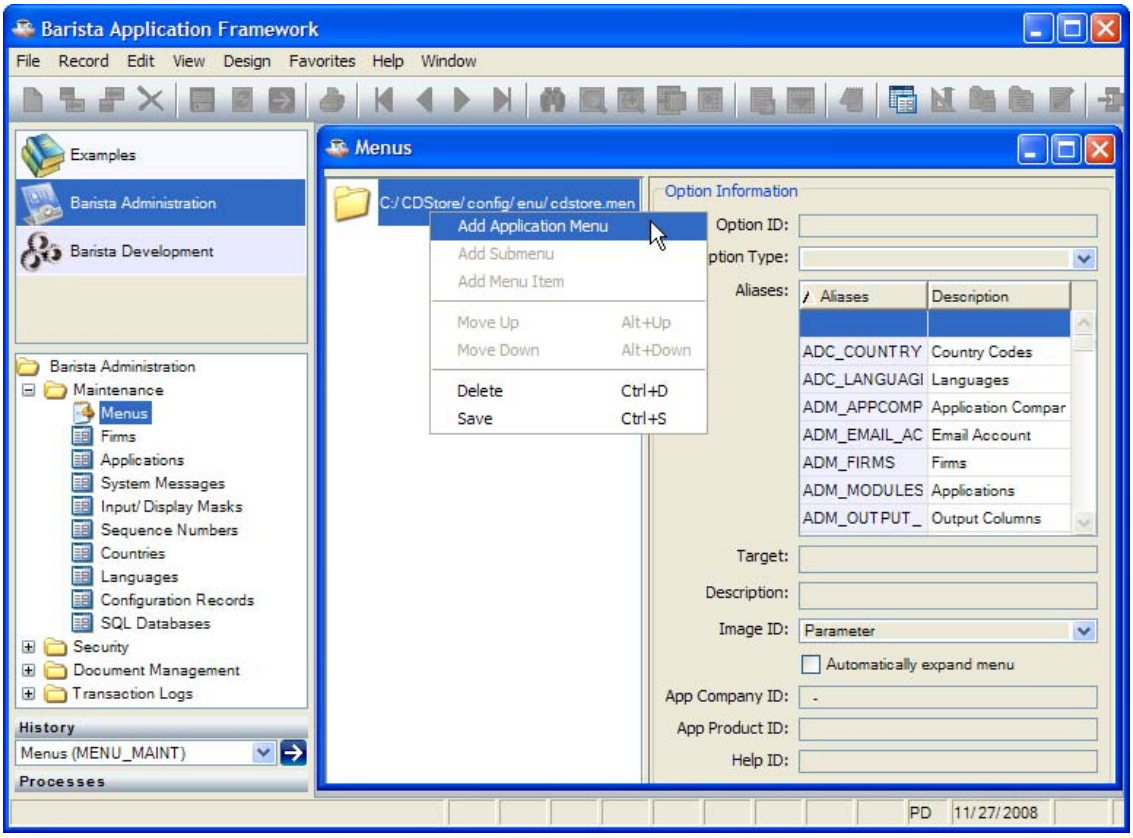
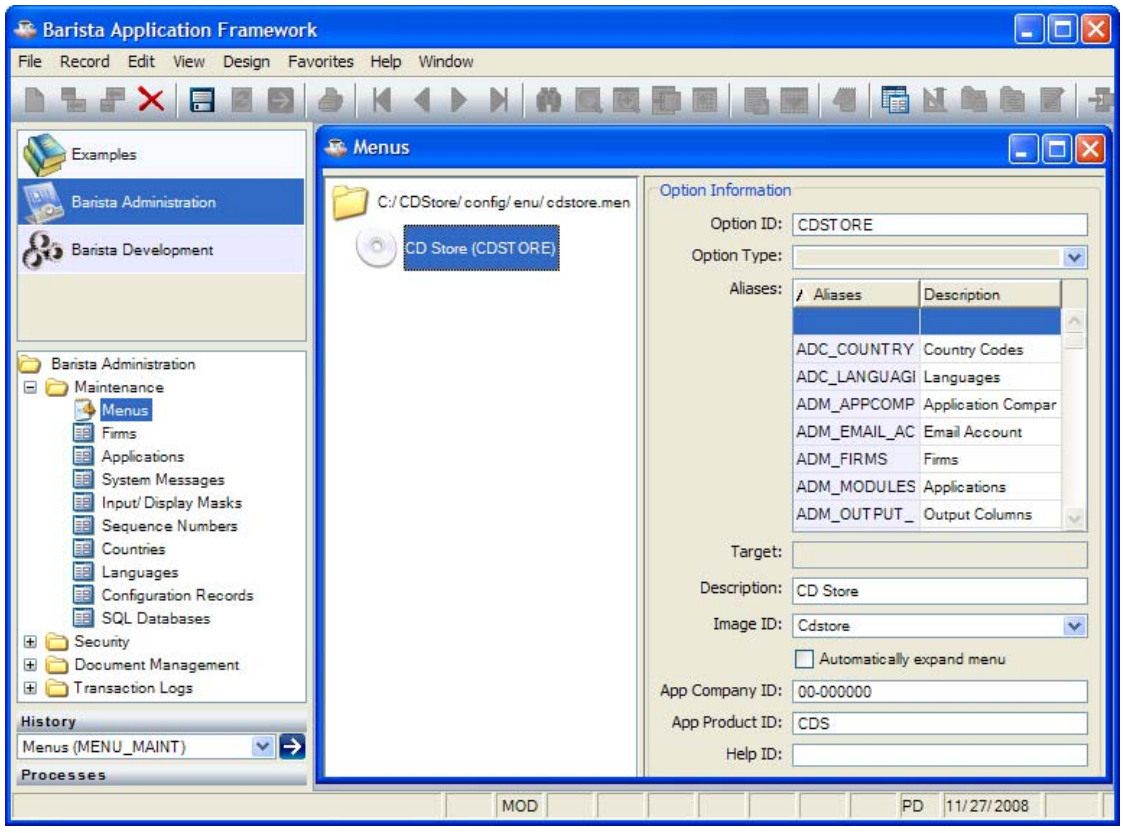
6. Right-click on the menu root and select **Add Application Menu**.



7. Enter the following values:

Description: `CD Store`
Image ID: `Cdstore (barista/sys/images/im_menua_cdstore.png)`
App Company ID: `00-000000`
App Product ID: `CDS`



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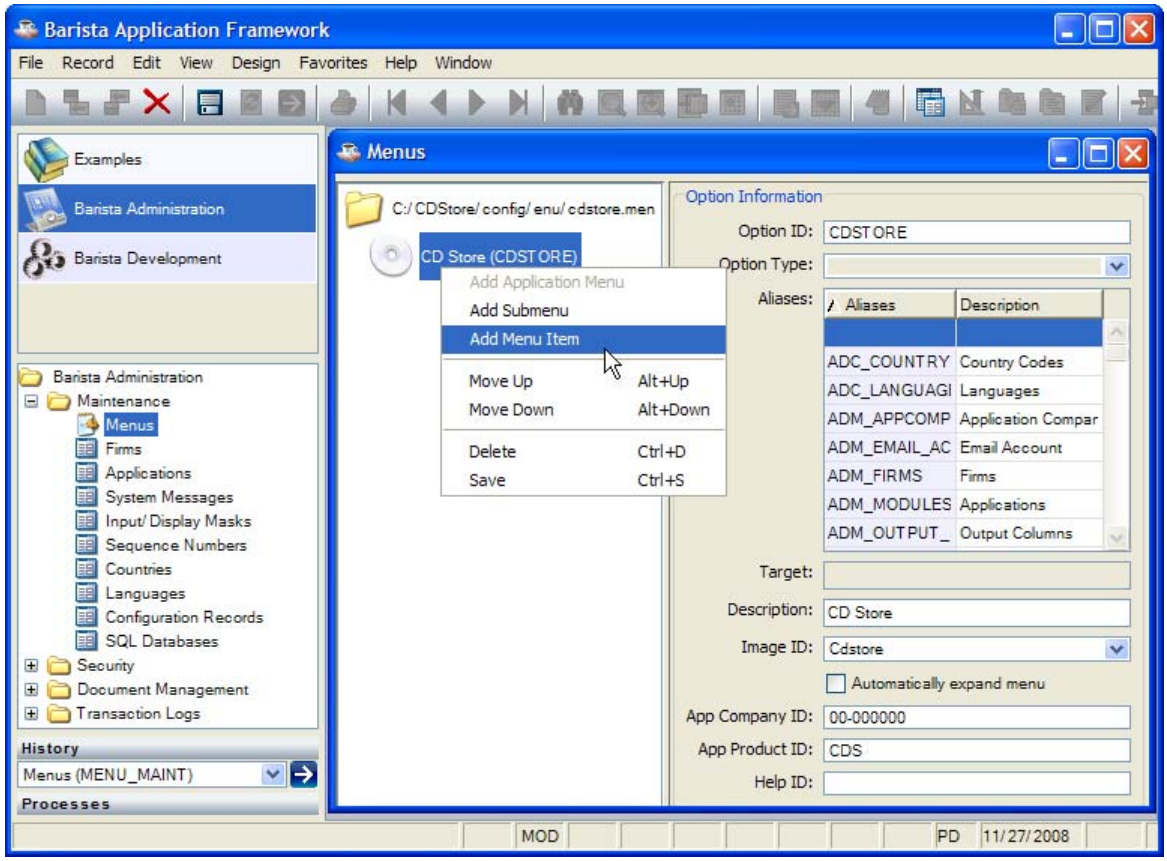
8. Right-click on the CD Store application menu and select **Add Menu Item**.

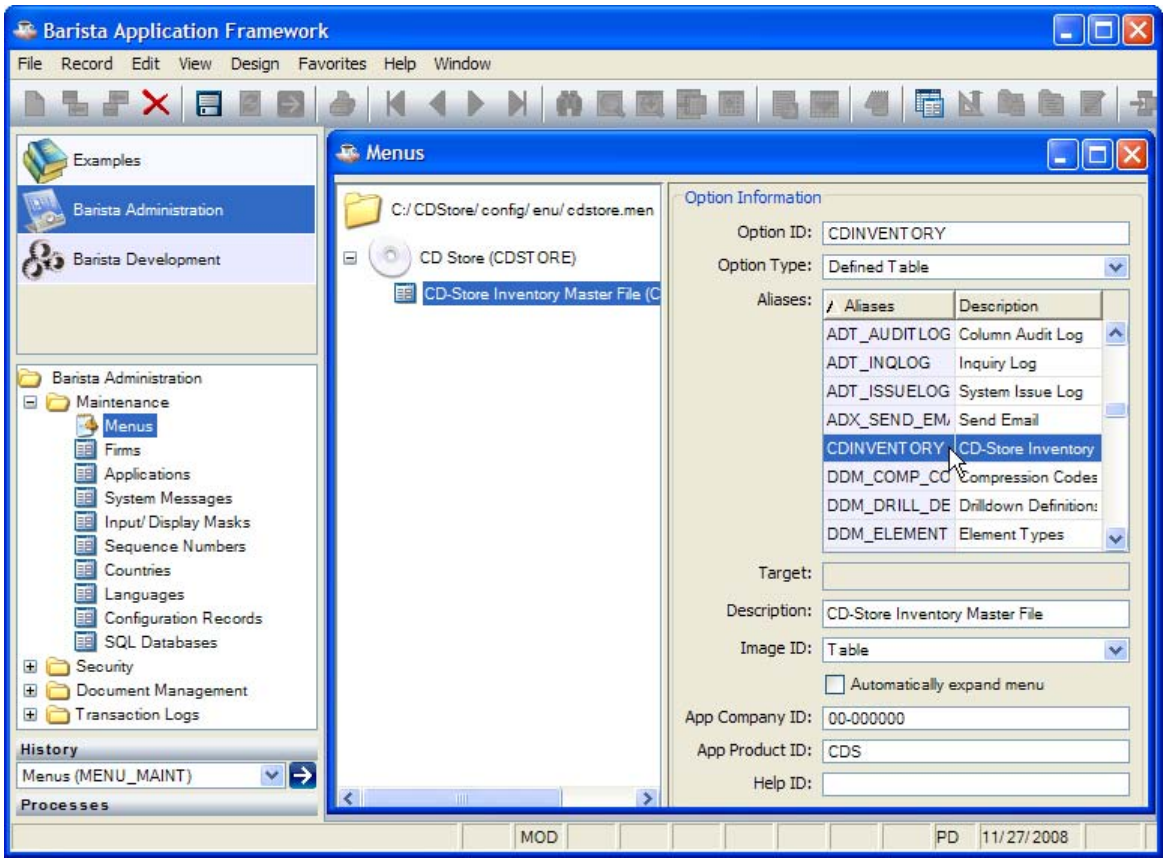


9. Select the CDINVENTORY alias from the grid.

10. Enter the following values (some will be filled in for you):

Option ID: `CDINVENTORY`
Option Type: `Defined Table`
Description: `CD-Store Inventory Master File`
Image ID: `Table`
App Company ID: `00-000000`
App Product ID: `CDS`

continued...



If you have an additional BBx® program that works with this database; you can add it to the menu too. The following sample program reads the CD-Store data file and prints an inventory evaluation report to the screen:

```
rem ' Inventory Evaluation Report
template$ = "SKU:C(6*),TITLE:C(50*),ARTIST:C(50*),*:C(50*),*:C(6*),*:C(3*),*:C(15*),"
template$ = template$ + "*:C(10*),*:N(10),QTY:N(10),COST:N(10),RETAIL:N(10)"
dim rec$:template$

cdstore=unt,total=0
open (cdstore)stbl("DATA")+"CD-Store"
print 'backgr','blue',"Inventory Evaluation Report",@(71),date(0),'lf',@(79)
print "SKU",@(7),"Artist/Title",@(50),"Unit Cost",@(62),"On Hand",@(74),"Total"
loop:
  read record(cdstore,end=endloop)rec$
  cost=rec.qty*rec.cost,total=total+cost
  print rec.sku$,@(7),rec.title$+" "+rec.artist$,
  print @(49),rec.cost:"$#####0.00",
  print @(62),rec.qty:"######0",
  print @(69),cost:"$#####0.00"
  goto loop
endloop:
  print @(7),"Total",@(69),total:"$#####0.00"
  input "Click [RETURN] to exit",*
release
```

11. Save that program as `C:\CDStore\prog\inventory.src`.

12. Add the following menu item:

Option Type:	`Application Program`
Target:	`[CDSTORE_PROG]inventory.src`
Description:	`Inventory Evaluation Report`
Image ID:	`Report`
App Company ID:	`00-000000`
App Product ID:	`CDS`

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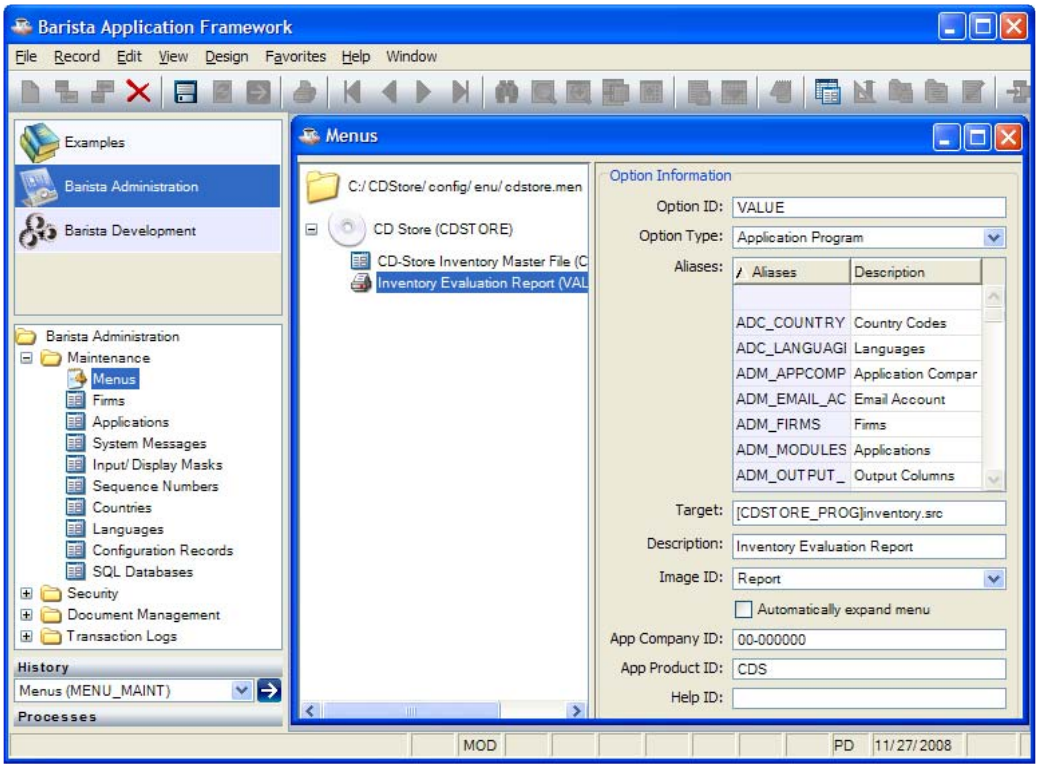
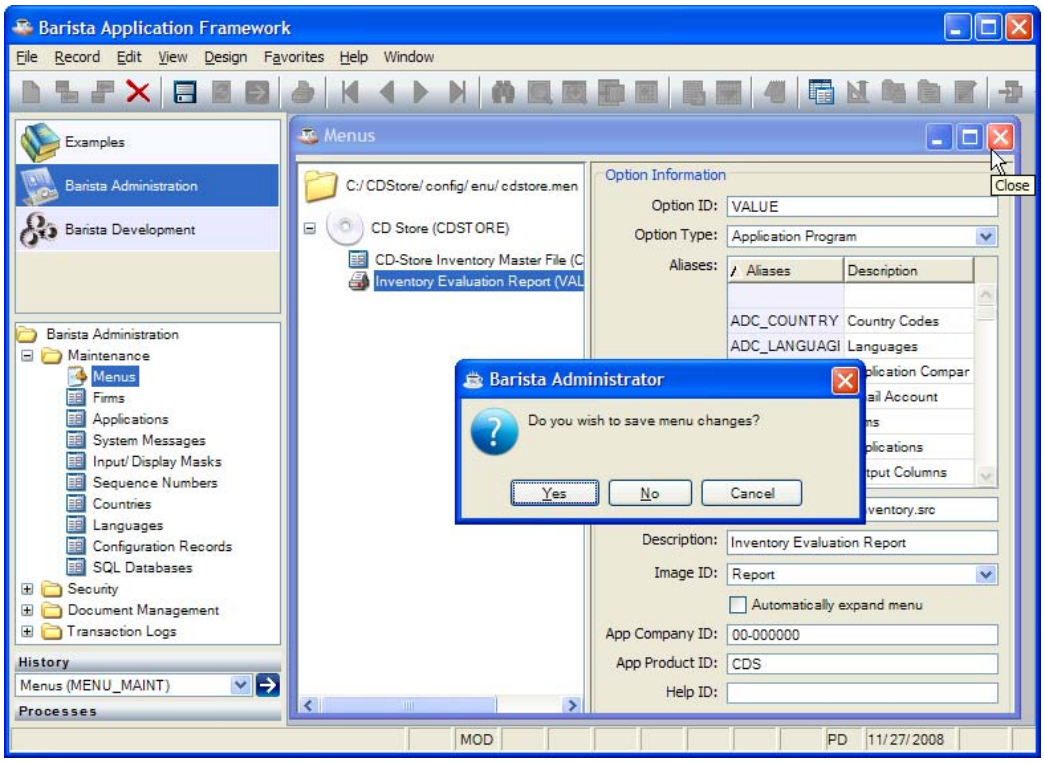


13. Click the close box.

14. Click [Yes] to save your menu system changes.



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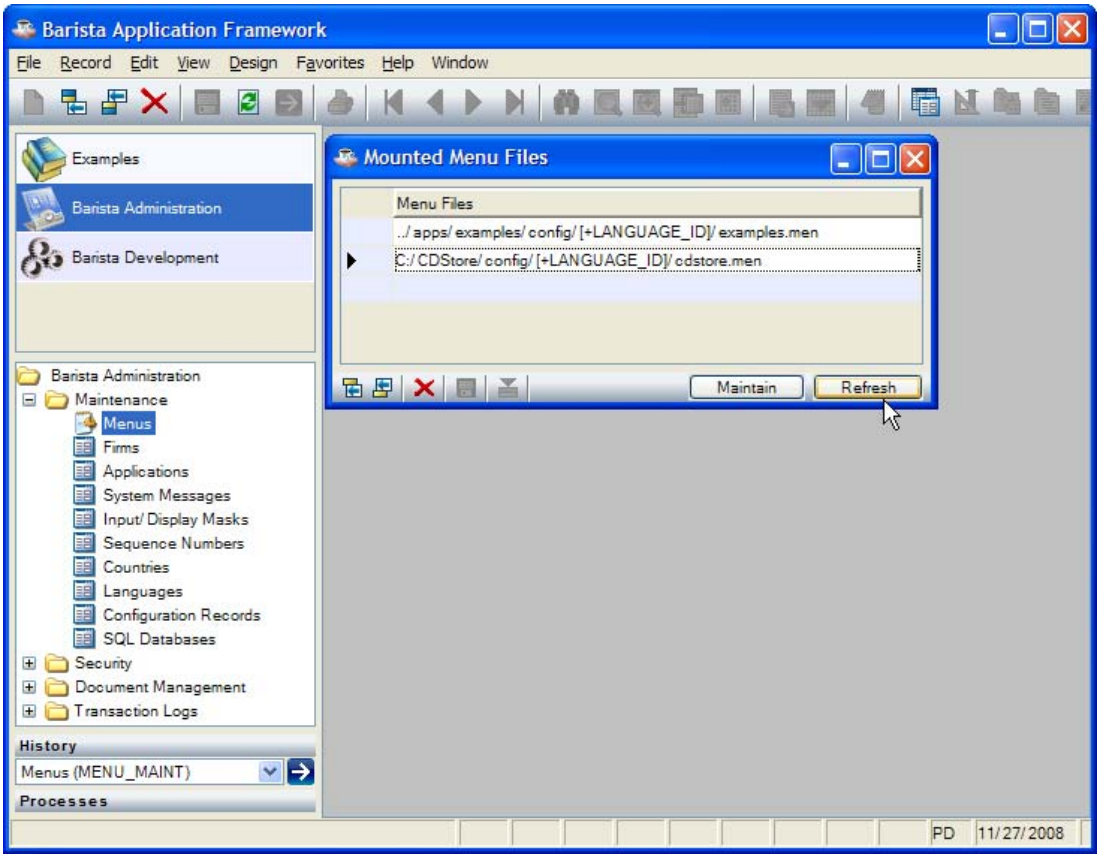
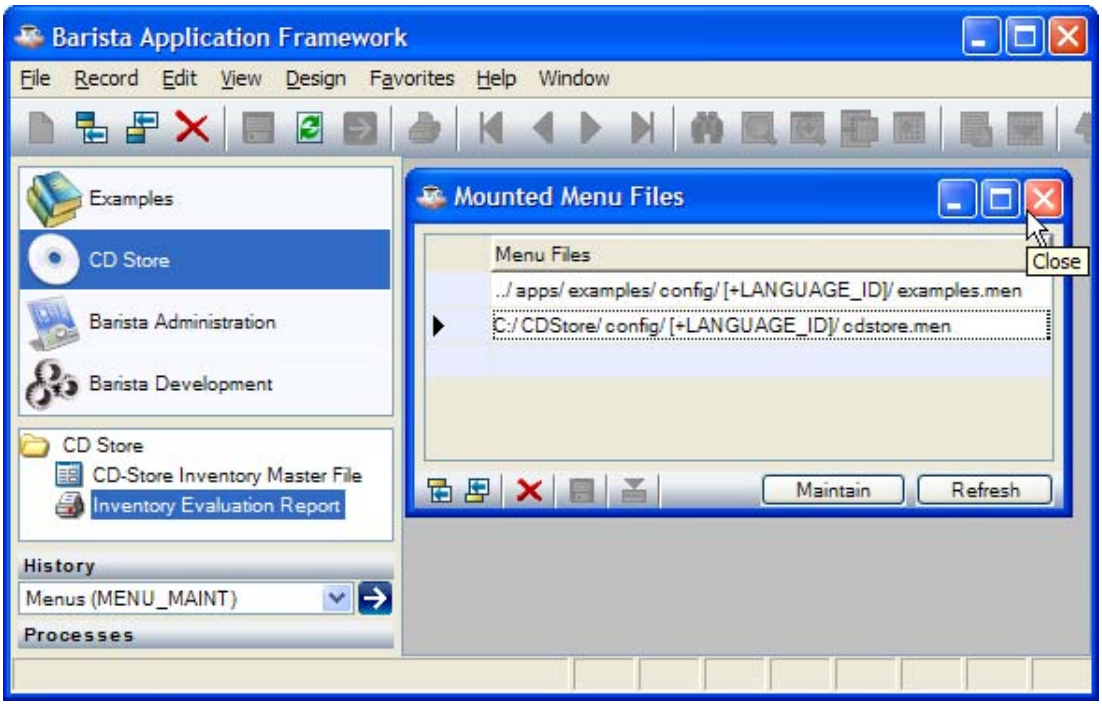
15. Click [Refresh] to activate the new menu.



16. Click the close box to close the menu editor.



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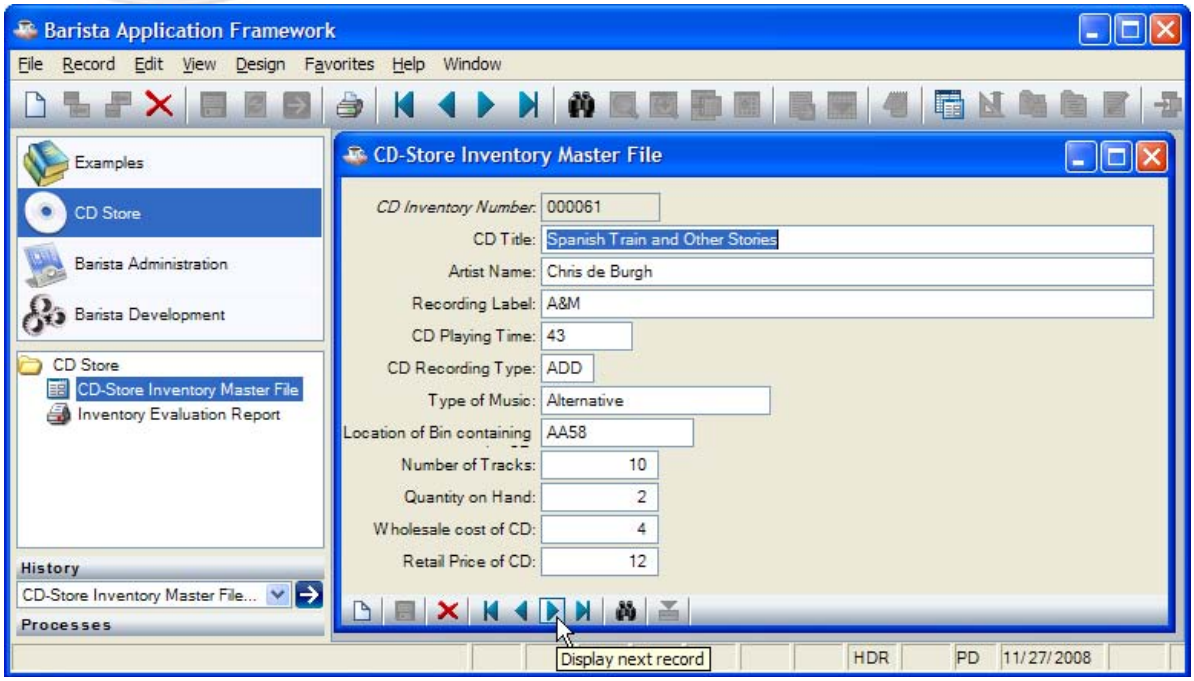
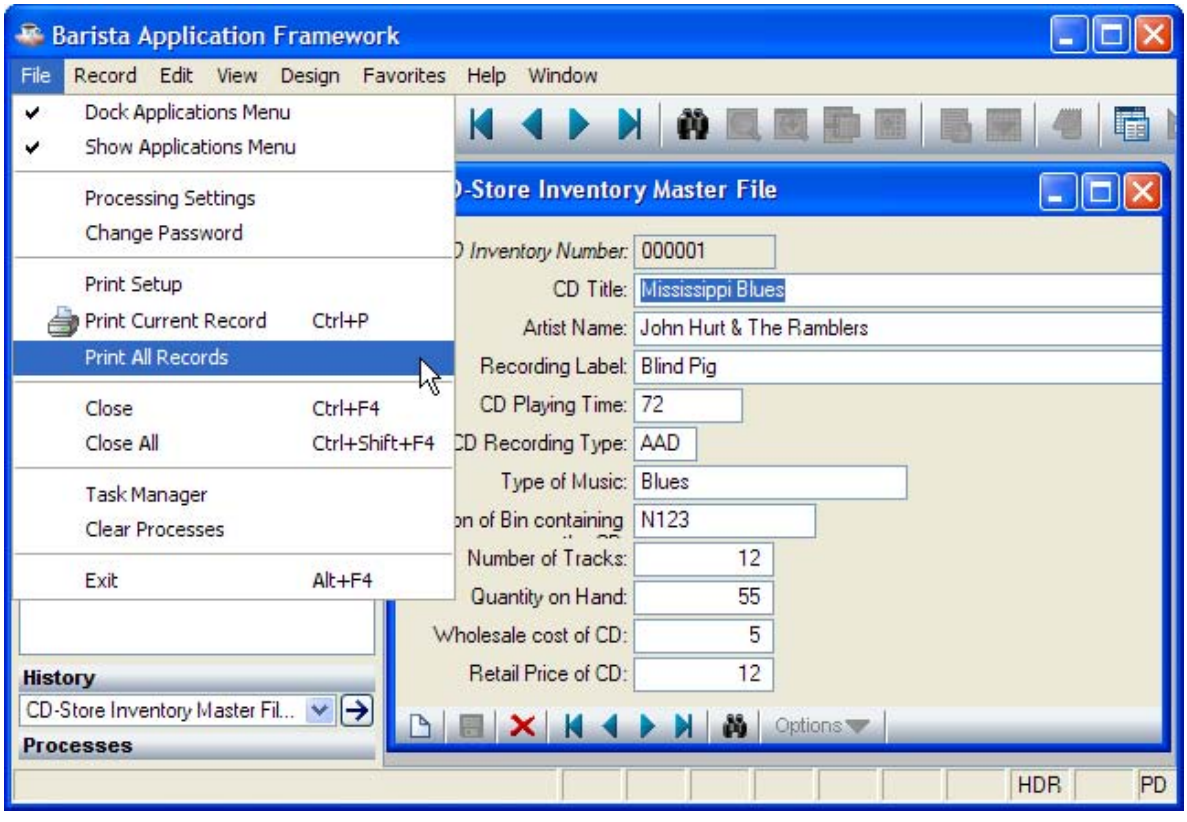
STEP 5. Test Drive

1. From the CD Store menu, select **CD-Store Inventory Master File.**



2. Select **File, Print All Records** to bring up the **Barista Printing System**.



3. Resize the columns.

4. Select one or more output formats.

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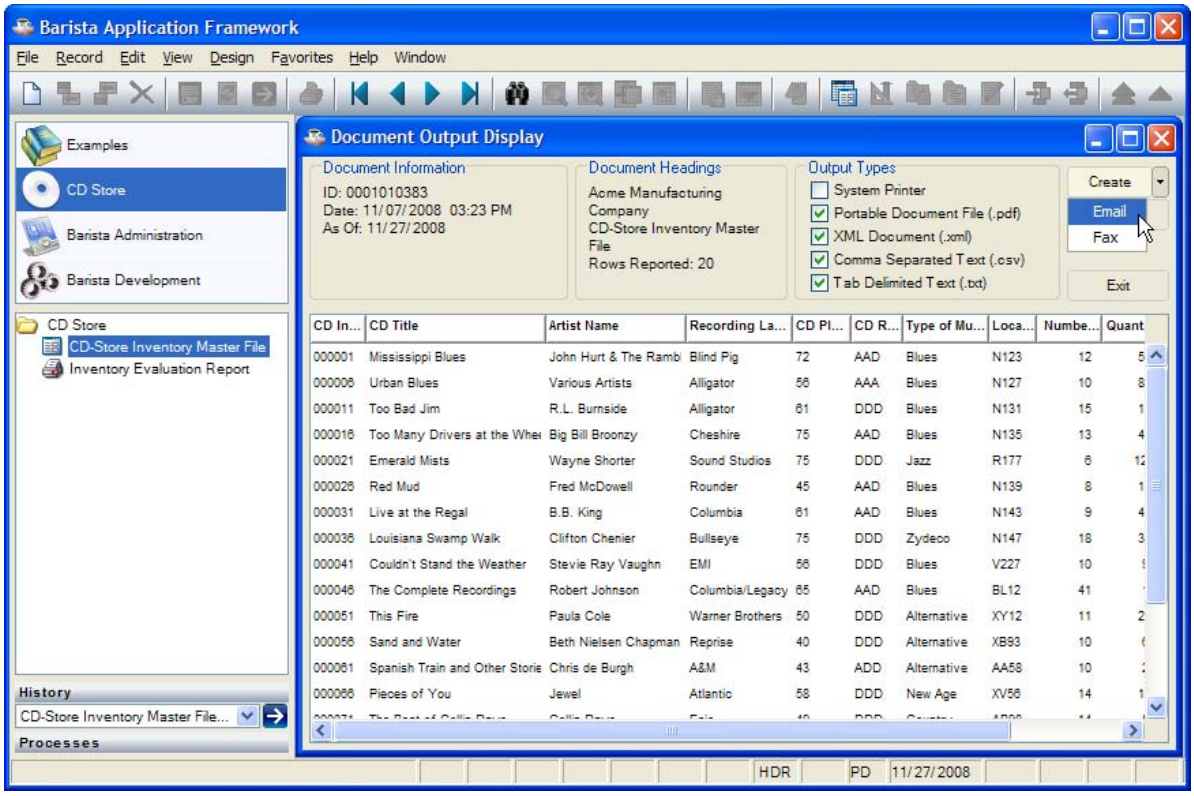
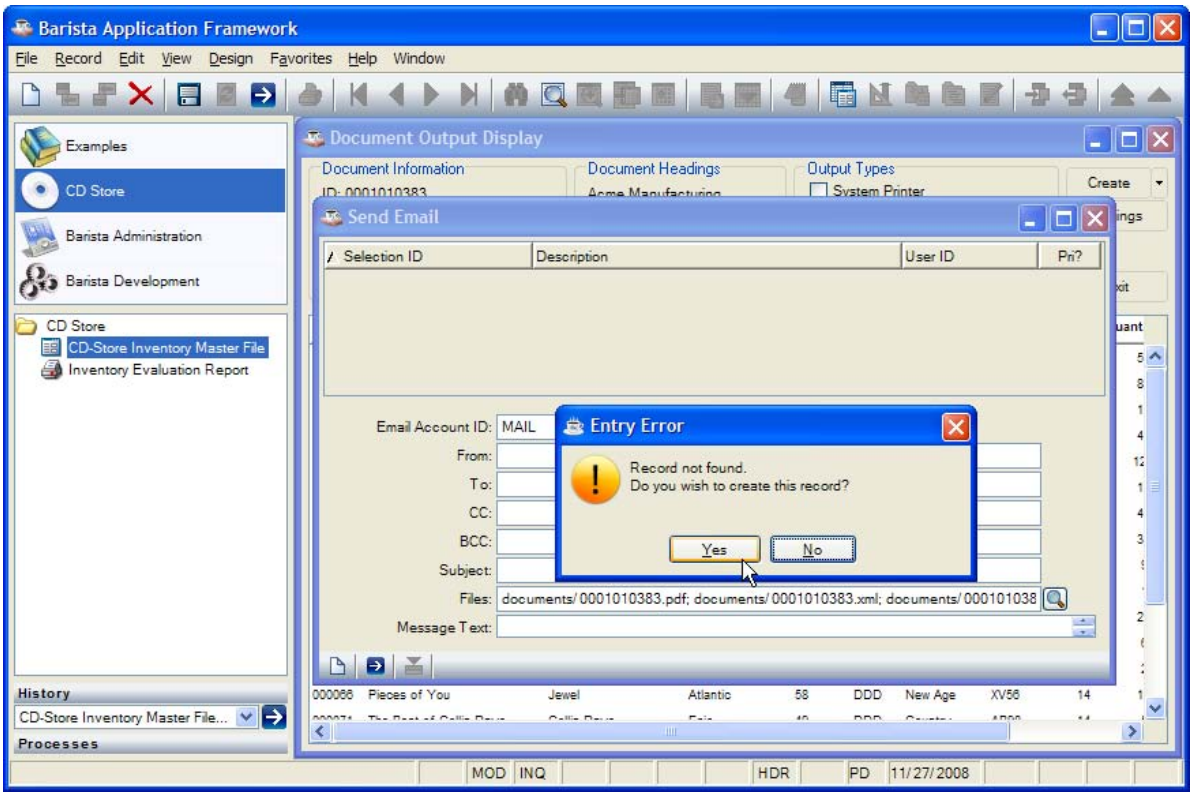
5. Click the dropdown arrow on the [Create] button and select [Email]. *(Skip this step if you don't have access to e-mail.)*



E-MAIL
If this is the first time you have used the Barista e-mail system, a prompt to create an e-mail account will appear.

6. Enter an Account ID.

7. Click [Yes] to create an e-mail account.



8. Enter your SMTP e-mail host.

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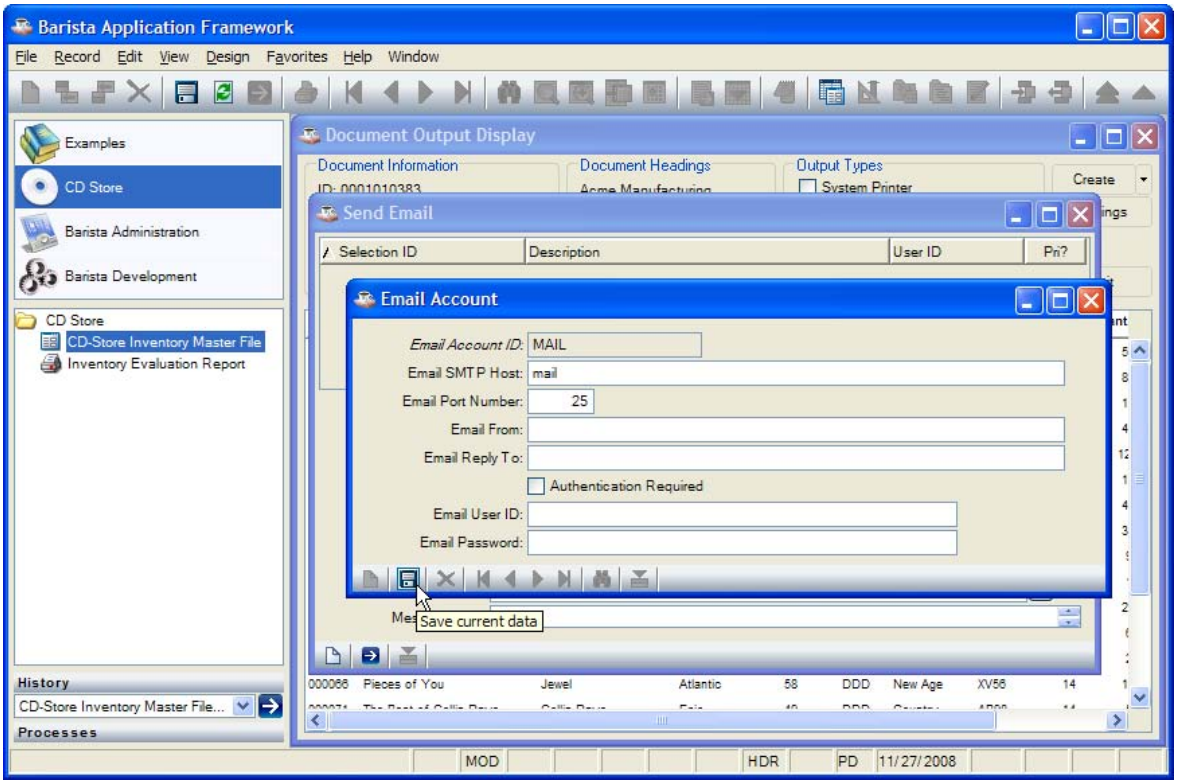
9. Enter the port number used by that host (some e-mail systems use port 25; others, including Apple's .Mac/MobileMe service, use port 587).

10. If your e-mail server requires authentication, check "Authentication Required" and fill in the **Email User ID** and **Email Password.**

11. Click the [Save] button.



12. Close the **Email Accounts** screen to return to the **Send Email** screen.

13. Fill in the standard e-mail fields (from, to, subject, etc).

14. Click [Run] (or press [F5]) to send the e-mail.

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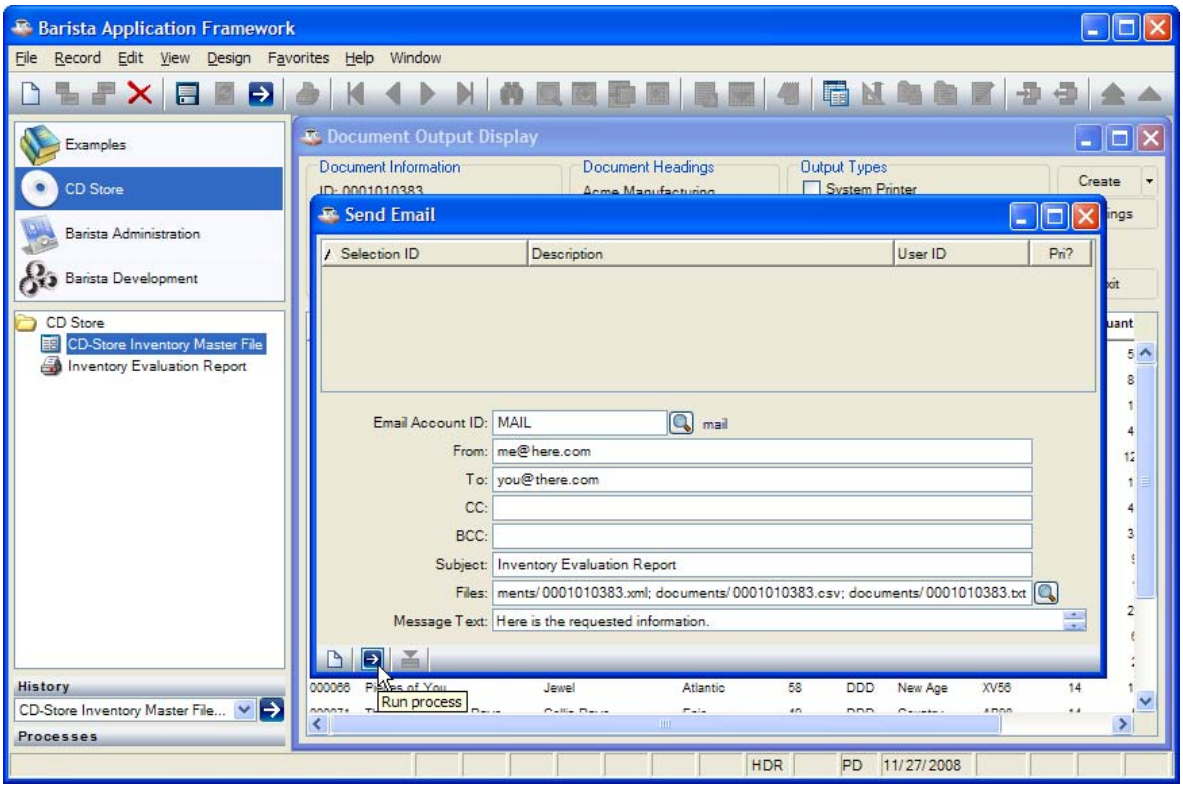
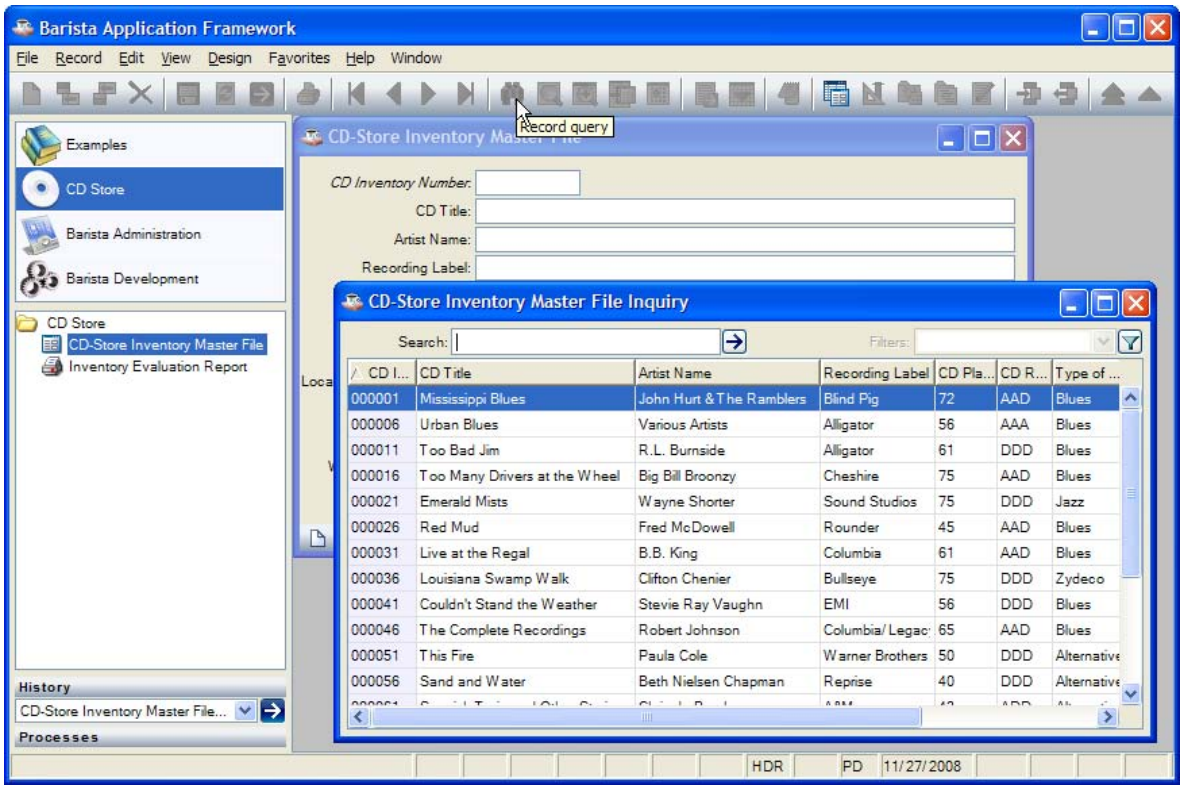


15. Close the Document Output Display form.

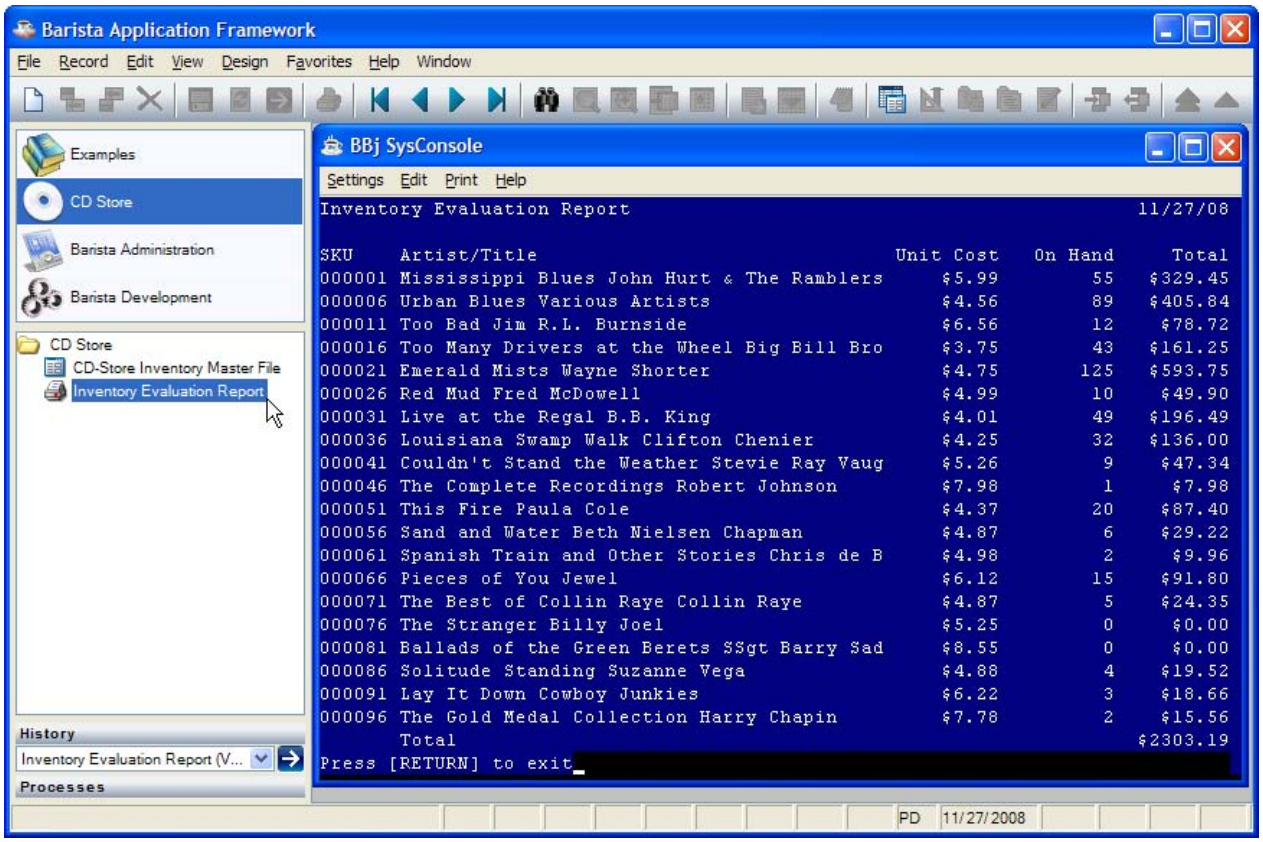
16. Click the "Record Query" button to query records in the table.



continued...

17. Click the close box to close this program.

18. To run your custom program (inventory.src), select **Inventory Value Report** from the CD Store menu.



Summary

Armed with a data dictionary definition of your BBx data file and Barista, you're just five steps away from giving your solution a modern cross-platform graphical user interface. So go and add some luster and shine to your trusted and proven solution today!