



ImpEx

Exercise

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GOAL

In this exercise, you will see how to import data using ImpEx, the out-of-the-box import/export tool of SAP Commerce Cloud. You will learn the basics of creating and updating data in the platform using ImpEx files.

INSTRUCTIONS

Preparation

Start the server. That's it.

If you ever want to perform the exercise over again, reset your environment by navigating to `MYPATH/workspace/TrainingLabTools/class_setup` and running:

```
ant -f class_setup_tasks.xml clean-slate
```

Overview

To complete this exercise, you will need to modify two ImpEx files provided for you, the first for the mandatory steps, the second for the optional steps. (We recommend using Eclipse to edit the `.impex` file, since a dedicated ImpEx editor is available as part of the installed “SAP Hybris Commerce Development Tools for Eclipse” plugin).

The two files are located here:

```
TrainingLabTools/exercise_Impex/resources/projectdata-impex-exercise.impex
```

```
TrainingLabTools/exercise_Impex/resources/projectdata-opt-impex-exercise.impex
```

We're going to complete the ImpEx statements in the first of these files so that they create a new category and product, link them together, then add Classification Attributes to the product.

When you're done editing the ImpEx file, you can manually import them in the HAC by going to the *Console > ImpEx Import > Import script* tab and uploading the file (recommended).

(You *could* simply copy-and-paste the ImpEx content into the editor area in the HAC's *Console > ImpEx Import > Import content* tab and import/execute from there, but in *this* case, importing the file will be much simpler overall, given all the scattered macros the file contains).

Step 1 - Create a new Category

- 1.1 Modify `projectdata-impex-exercise.impex` so that it will add/update a new category that we will use as the parent for a new product. This category should have the following information:

code	sapSponsored
name	sponsored by SAP
allowedPrincipals(uid)	customergroup
catalog version	(look at the macro \$catalogVersion)

The **code** field should be specified as **unique**.

Step 2 - Importing a new Product

- 2.1 Modify the **INSERT_UPDATE Product** header and add the appropriate value lines below it to create an SD Card with the following values:

code	commerceSDCard
name	SD Card powered by SAP Commerce
supercategories of product	sapSponsored (look at the macro \$productsupercategories)
catalog version	(look at the macro \$catalogVersion)

- 2.2 **Now** go to the **HAC > Console > ImpEx Import** and import the contents of this ImpEx file (remember to copy all the macros at the beginning of the file).

2A Navigate to the **HAC**

2B Open Console -> ImpEx Import

2C Perform an import, either by

1. Importing the ImpEx file in the *Import script* tab
2. Copying and pasting the ImpEx code in the text area under the *Import content* tab

After a successful import, feel free to verify (via Backoffice) that your Product got created with the right data, and that it belongs to the assigned Category.

Step 3 - Importing Classification Attributes

If you take a look at **projectdata-impex-exercise.impex**, you will see that the category you created was assigned to a classifying category (code 828), which means the product gains the attributes associated with that category.

- 3.1 You now need to supply values for these properties. You can do so at the bottom of the file, by uncommenting and completing the last two lines to update the product with the following *attribute:value* information. Make sure to read the *TODO Step 3* comment in the impex file to identify the macros corresponding to the following feature descriptors:

Internal Memory	16384
Read Speed	100
Flash card Type	Secure Digital High-Capacity (SDHC)
approval status	(look at the macro \$approved)

Hint: If you are not sure how to add the values above to product using ImpEx, you can check the solution file under `$MYPATH/workspace/TrainingLabTools/exercise_Impex/solution/projectdata-impex-exercise.impex`

- 3.2 Now go to the **HAC** to import the contents of this ImpEx file once again.

- 3.3 You have **now** added the SD Card product to the Staged catalog.

To apply these changes to the online (active) catalog, go to **Backoffice**.

Click on Catalog | Categories and choose the newly created category "sapSponsored" and synchronize it.

Please **note** that the synchronization will fail, as show below:

The screenshot displays two panels from the SAP S/4HANA interface. The 'Categories' panel on the left shows a table with two entries, both labeled 'sapSponsored' and 'sponsored by SAP'. Both entries have a red square icon in the 'Sync Stat...' column, indicating a failed synchronization. The 'Processes' panel on the right shows a process named 'Items Synchronization (2)' with the description 'sync electronicsProductCatalog: Staged->Online'. The process status is 'FAILED' in a red box, and it failed on 'Fri, Apr 21, 4:10 PM'.

No worry, the synchronization is actually successful; You can search for “sapSponsored” again, and as you may notice in the list of categories above, there are 2 “sapSponsored” categories: the original in *staged*, and the synchronized *online* version. The *failed* status is because the product “commerceSDCard” has not yet been synced, and as there is no online version of “commerceSDCard”, the online version “sapSponsored” category can’t refer to it, which leads to an inconsistency between the staged and online category items. This will be resolved in a moment, when you synchronize the product.

Do that now by clicking on Catalog | Products, choosing the newly created product “commerceSDCard”, and synchronizing it.

The synchronization should finish successfully.

Verify

To verify your solution, go to the **HAC** and run the `verifyImpexExercise` Groovy script.

Solution

If you don't wish to complete this exercise manually, you can install the solution provided:

Navigate to `MYPATH/TrainingLabTools/exercise_Impex` and execute:

```
ant -f impex_tasks.xml solution
```

Synchronize electronicsProductCatalog



If you run the solution directly without doing the exercise yourself, as the **solution** ant target above only imports data into the staged catalog version, please manually synchronize **electronicsProductCatalog** from staged to online in Backoffice. Otherwise, the verification script will fail, as it only checks the data in the online catalog version.

OPTIONAL STEPS

In tonight's encore performance, you will add multi-dimensional VariantCategories, VariantValueCategories, and a new GenericVariant product. Modify the file, `projectdata-opt-impex-exercise.impex`, when performing these optional steps.

Our site wants to offer for sale a photographer's multifunctional jacket that can be used to carry cameras and accessories without the need for a camera bag.

This jacket can have:

- A choice of number of pockets (2, 3 or 4);
- A size (S, M, L or XL)
- A color

Optional Step 4 - Create a new VariantCategory

4.1 Since a VariantCategory for colors (B2C_Color) already exists OOTB, let's just use it as our main VariantCategory.

Modify `projectdata-opt-impex-exercise.impex` to add two additional VariantCategories:

- **B2C_Fit** for the number of pockets
- **B2C_Size** for the size of the jacket

Remember that **B2C_Color** is the main variant category (i.e., has no supercategory e.g., in the commented ImpEx line) and is the supercategory of **B2C_Fit**, which is the supercategory of **B2C_Size**.

Optional Step 5 - Create a new VariantValueCategory

5.1 Now we need to add VariantValueCategories to allow customer to select the features they want.

In this case, we need to add values for number of pockets (B2C_Fit), values for size (B2C_Size), and add a new color (black) under B2C_Color (careful here, there are already 3 color VariantValueCategories OOTB – B2C_Red [seq.1], B2C_Green [seq.2], and B2C-Blue [seq.3] – so *your* sequence attribute value for B2C_Black should be 4).

For example, refer to the following:

B2C_Fit (B2C_2P already exists in the ImpEx, please add 3 and 4 pockets):

<i>code</i>	<i>name</i>	<i>supercategory</i>	<i>sequence</i>
B2C_2P	2 Pockets	B2C_Fit	1

B2C_Size (B2C_S already exists in the ImpEx, please add M, L and XL):

<i>code</i>	<i>name</i>	<i>supercategory</i>	<i>sequence</i>
B2C_S	S	B2C_Size	1

B2C_Color (Already done for you, just examine the color and its sequence number):

<i>Code</i>	<i>name</i>	<i>supercategory</i>	<i>sequence</i>
B2C_Black	Black	B2C_Color	4

Optional Step 6 - Create a new GenericVariant Product

The ImpEx file already inserts the base product and a single variant product, the 3-pocket Black Large Jacket (see the script for details).

6.1 Add another variant product, this one a 4-pocket Red Medium Jacket.

Product attributes:

code	24097000_2
base product	24097000
name	Photographer Jacket Organizer 4 Pockets Red M
summary	Photographer Jacket Organizer Color Red, Size M
EAN	829024859728
supercategories	B2C_4P, B2C_M, B2C_Red
description	Write here a long description

6.2 Use the **HAC->Console->Impex Import** page to import your ImpEx file. Either import the file itself, or copy/paste the file's content into the ImpEx text area.

6.3 Once you have made the changes using ImpEx, it's a bit tricky to synchronize selected items, thanks to the complexity of the VariantCategory and VariantValueCategory structure, which needs to be strictly enforced. Instead of carefully synchronizing elements in a strict order, it's far easier to synchronize the entire electronicsProductCatalog version. Do so now.

6.4 There is no automated verification (Groovy) script for these option steps.

Verify your work manually by going to Backoffice (Administration Cockpit) and searching Catalog→Products for the base product, (24097000). In the search-result list, you'll see the base **and** GenericVariant products – notice the special icons used in the Status column to distinguish base products from their associated variant products.

Select the base product for viewing/editing. In the AdvancedEditor pane, click the Variants tab and scroll down to the Product Variants list to see the fruits of your labor. Feel free to double-click on one of them to drill-down and see each GenericVariant product's supercategories (to validate the assigned VariantValueCategories).

RECAP

In this exercise you saw how to insert/update data in the SAP Commerce Cloud using ImpEx. ImpEx can also be used to **export** data, but this is outside the scope of this exercise.

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