## 6<sup>th</sup> Aug 2004

# Import Price – Birth of a New Loader

by red1

The Best Lessons In Life Are From Mistakes. Just Do Not Repeat Them.

- redl

#### Why do we need an Import Price?

So that we can import the client's Price Lists in text format into the Database's PriceList Versions. Such a Price List won't use the Compiere Price Engine as the client's case may be:

- a. Having unique PriceLists figures such as ending in 88 cts.
- b. Not following any rules that the PriceList Setup can handle
- c. Already having present long winded PriceLists in foreign format and too tedious to be setup again in Compiere.

Basically you want to create an Import Price just like the other Imports – Products, Business Partners, and Accounts.

Since Compiere do not have a PriceList Import at the moment (up to version 251e), you can get to learn how to go about creating one, which will come in handy whenever you feel you need to do it again for any other table.

There are two items on the Compiere Menu that handles the Import Process as shown here:

- a. Import Loader Format
- b. Import File Loader

This Process basically takes the raw PriceList Data in text format and Load it into I\_Price. Then a Java or SQL Process will bring it into the target PriceLists.

Now we shall begin.

If you open up the Import Loader Format, you will see that it does not have an Import Price. So we will need to create one.



NOTE: Its good if you can get hold of Compiere's User Manual that is sold on the Compiere's Webstore at <u>www.compiere.org</u>. In it, Chapter 17 on Utilities explains the definition and steps involved in the Import Process. Here we will only focus on the process of creating a new one. We will not overlap as this is weary work and redundant.

#### Creating new Table – I\_Price

Open the Table and Column Window from the System Menu. You should log in as the System Aministrator with System/System in the User-Id and Password.

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DB rable Name	ImportPrice	8		
Name	ImportPrice			
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Entity Type	User maintained 🔹		Create Columns from [	nB
			oreate Columns from E	
Record saved				[ 1/1 ]

Name it **ImportPrice**. Set the *Data Access Level* to Client only as its meant to be executed by the Admin of the Client and not by the Organisation or the System Administrator. Leave the *Entity-Type* as **User maintained** as you do not want your work to be overwritten when you upgrade your version through a migration later (another service that has to be purchased from Compiere and it requires an online connection when migrating).

You do not click on the *Create Columns from DB* as we do not have the DB Table, which is created later instead, by the *Synchronise* button at the next Tab.

Now we go to the next Tab to populate the columns.

### Creating The Columns

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Table	ization	Table	DB Column Name	System Element	Length Name	Reference	Dynamic Validation
		ImportPrice	AD_Client_ID	AD_Client_ID	22 Client	Table Direct	~AD_Client Security validation~
Column		ImportPrice	AD_Org_ID	AD_Org_ID	22 Organization	Table Direct	AD_Org Security validation
		ImportPrice	Created	Created	7 Created	Date+Time	
1		ImportPrice	CreatedBy	CreatedBy	22 Created By	Table	10
		ImportPrice	I_IsImported	I_IsImported	1 Imported	Yes-No	10
		ImportPrice	I_Price_ID	I_Price_ID	22 Import Price ID	ID	10
		ImportPrice	IsActive	IsActive	1 Active	Yes-No	10
		ImportPrice	PriceList	PriceList	22 List Price	Amount	10
		ImportPrice	Processed	Processed	1 Processed	Yes-No	10
		ImportPrice	ProductValue	ProductValue	40 Search Key	String	0
		ImportPrice	Updated	Updated	7 Updated	Date+Time	
		ImportPrice	UpdatedBy	UpdatedBy	22 Updated By	Table	
	•						•
Process co	mpleted s	successfully (U	Jpdated - ALTER TABL	E ImportPrice MODIFY	UpdatedBy NUMBER(10))		12/12

You should create the columns as shown above. The **AD\_Client\_ID**, **AD\_Org\_ID**, **Created**, **CreatedBy**, **Updated**, **UpdatedBy**, **IsActive** fields are compulsory fields for Compiere database operations. You have to patiently create them. Take note of their *Reference* and other values as shown above. Our own fields are **PriceList** and **ProductValue**. These two fields are the foreign PriceList info that we are importing for. Your text file will thus has only those two which is what product? (ProductValue) has what price? (PriceList). The other fields – **Processed**, **I\_IsImported** is for reference during the Import Process. The I\_Price\_ID is the Table's unique primary index key and you need not bother about it as it is handled by Compiere automatically. Just create it with the *Reference* set to **ID**. Otherwise Compiere wouldn't know.

Next page is an example in single row view.

Table and Column SuperU	iser@System.* [REDHUAN{REDHUAN-compiere-compiere}]	
Table Table Column DB Column Name System Element Name Description Comment/Help	ImportPrice AD_Client_D AD_Client_D Client Client Client Tenant for this installation. A Client is a company or a legal entity. You cannot share data between Clients. Tenant is a synonym for Client.	
Length	✓ Active     ✓ Version     0.00	
Reference Default Logic	Table Direct   Dynamic Validation   AD_Client Security validatio	
Read Only Logic	Key column       Parent link column         Mandatory       Updateable         Encrypted       Always Updateable	
Callout	Identifier  Selection Column  Translated	
Entity Type	User maintained Synchronize Column	

Again in review, take note of the Reference and Dynamic Validation needed for this **AD\_Client\_ID** field. Ensure that *System Elements* are filled in. They are for the persistency of the fields during integrative operations by Compiere such as during printing or query.

You can refer to other tables and see their settings for an idea how they need to be setup. Notice the *Synchronise Column*. This is the reverse of the *Create Columns from DB* earlier. You must now use this on all the columns created. Ensure that you get a successful reply at the bottom of the Window. You can see one now in the window above.

When you come to the **I\_Price\_ID**, you will have to create its own *System Element*. You can easily do that by right-clicking on the box and select **Zoom** to pull up the **Element** Window.

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Table	Client	System		Organization	*	
Column	Table	ImportPrice				
	)B Column Name	I_Price_ID				
	System Element					
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Data refreshed						*6/12

Here is the Element Window. Not much work here.

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5		> [ ] ] ] ] ( ) ] ] ] ] ] ] ] ] ] ] ] ] ] ]	
Element	Client	System Organization *	
Used in Column	DB Column Name Name Print Text Description Comment/Help	I_Price_ID I_Price_ID I_Price_ID	
ſ	Entity Type [ PO Name [	Active User maintained	
Record saved			[ 1/1 ]

Return back to the **Column Window.** Check that its *Reference* is **ID.** Again remember to *Synchronise* or else the Table and Columns won't be created in the database.

Now we turn our attention to bringing the new Import Table into the Loader.

🦸 Import I	oader Format	SuperUser@Ga	rdenWorld.FCH1 [REDHUAN{REDHUAN	-compiere-compiere}]		
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Import	Client	Organization	Name	Description	Active	Table
Format	System	*	Accounting - Accounts	Based on the format of AccountingUS.cvs i	V	I_Eleme
Format	System	*	Accounting - Balance Sheet	US Balance Sheet info in the format of Acco	V	I_Repor
Field	System	*	Accounting - Profit&Loss Statement	US Profit & Loss Statement info in the form	V	I_Repor
	System	*	Accounting - Tax Balance Sheet	US Tax (1120) Balance Sheet info in the for	r	I_Repor
	System	*	Accounting - Tax Profit&Loss Statement	US Tax (1120) Profit & Loss Statement info	V	L_Repor
	GardenWorld	*	Example BPartner	GardenWorld Business Partners Example	r	I_BPartr
	GardenWorld	*	Example Invoice	Example Invoice for Garden World	V	I_Invoice
	GardenWorld	*	Example Journal	GeradenWorld GL Journal Example	r	I_GLJOU
	GardenWorld	*:	Example Order	Garden World Example Order	ľ	I_Order
						•
Changes ig	nored					2/9

As you can see that the present Import Loader does not have the Import Price format so we will now create it in here. You may choose the format. Here it is Tab separated as our data has leading zeros which is harder to control in comma separated values.

Import Loader Format SuperUser@GardenWorld.FCH1 [REDHUAN{REDHUAN-compiere-compiere}]	
<u>File Edit View Go Tools H</u> elp	
<u>&gt; 19 21 2 46 1 2 72 4 2 2 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>	
Import Format         Client         GardenWorld         Organization           Format         Name         ImportPrice	
Description A loader format to import price lists from client's previous pricings	
✓ Active	
Table ImportPrice	
Format Tab Separated	
Copy Lines	
Inserted	+*3/10

🥙 Import	Loader Format Su	perUser@WOFS.Feng	Shui Caf	e [REDHUAN{P	EDHUAN-com	piere-compi	ere}]	
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Import	Import Format	Sequence Name	Active	Column	Data Type	Start No	End No Decimal Point	Data Format
Format	ImportPrice	10 Product		ProductValue	String	1	0.	
Format	ImportPrice	20 PriceLis	t 🖌	PriceList	Number	2	0.	
Field	-							10
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Changes ig	gnored							2/2

As explained prior, we create only two fields in this format. Note the Start No is important. Without them, your loading will not work. Keep them in sequence.

If you open up the Table and Column definition of the Import Loader, which defines the AD\_ImpFormat table, you will see that the AD\_Table\_ID column is validated by AD\_Table\_Import Tables List.

File Edit Yew @o Tools Help     Table Client System Organization   Table D_ImpFormat   DB Column Name AD_Table_D   System Element AD_Table_D   Name Table   Description Table for the Fields   Comment/Help The Table indicates the table in which a field or fields reside.   Image: Active Version   Output 0.00 Image: Active   Default Logic Image: Active   Image: Active Dynamic Validation   AD_Table Direct Dynamic Validation   AD_Table Direct Dynamic Validation   Image: Active Image: Active   I	🖉 Table and Column SuperUs	ser@System.* [REDHUAN{REDHUAN-compiere-compiere}]			
Table   Column   Table   Column   Table   DB Column Name   AD_mpFormat   DB Column Name   AD_mable_ID   System Element   AD_mable_ID   Name   Table   Description   Table   Comment/Help   The Table indicates the table in which a field or fields reside.   Image: Active   Version   0.00 Image: Active   Version   Default Logic   Image: Active   Default Logic   Image: Active   Default Logic   Image: Active   Image: Active   Default Logic   Image: Active   Image: Active   Default Logic   Image: Active   Image: Active <	<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>T</u> ools <u>H</u>	<u>f</u> elp			
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Column Table   AD_ImpFormat   DB Column Name   AD_Table_ID   System Element   AD_Table_ID   Name   Table   Description   Table for the Fields   Comment/Help   The Table indicates the table in which a field or fields reside.   Impf Active   Version   0.00 Import Table Description   Length   22 Import Table Import Tables   Default Logic   Import Table Direct   Default Logic   Import Table Column   Import Table Column   Import Table Direct   Default Logic   Import Table Column   Import Table Co	Table Client	System	Organization	*	
DB Column Name AD_Table_ID System Element AD_Table_ID Name Table Description Table for the Fields Comment/Help The Table indicates the table in which a field or fields reside.   Active Version 0.00  Length 22  Reference Table Direct Dynamic Validation AD_Table Import Tables Default Logic Key column Key column Mandatory Updateable Encrypted	Column Table	AD_ImpFormat			
System Element AD_Table_ID Name Table Description Table for the Fields Comment/Help The Table indicates the table in which a field or fields reside.	DB Column Name	AD_Table_ID			
Name Table   Description Table for the Fields   Comment/Help The Table indicates the table in which a field or fields reside.   Image: Active Version   Image: Active Image: Active   Image: Active Image: Ac	System Element	AD_Table_ID			
Description       Table for the Fields         Comment/Help       The Table indicates the table in which a field or fields reside.         Image: Active       Version         Image: Active       Image: Active	Name	Table			
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Active     Version     0.00      Length     C22      Reference     Table Direct     Default Logic     Key column     Key column     Mandatory     Dupdateable     Dupdateable     Cncrypted					
Length       22         Reference       Table Direct         Default Logic          Key column       Parent link column         Mandatory       Updateable         Encrypted       Always Updateable		Z Active	Version		0.00
Reference       Table Direct       Dynamic Validation       AD_Table Import Tables         Default Logic       Import Table       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import Tables       Import Tables         Import Key column       Import Tables       Import	Length	22 📓			
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You can check that list under the Reference Window. You may create a new search key for Price List. I myself rush through this part, and arent sure if this is needed and how it ties in. Perhaps you should skip this part first, do the next exercise, and carry on if things work out.

🖋 Reference	e Sup	erUser@Systen	n.* [REDHUAN{REDHUAN	l-compiere-co	mpiere}]					
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Reference	ent	Organization	Reference	Search Key	Name	Description	Active	Entity Type	Valid from	Valid to
	tem	*	AD_ImpFormat Type_L	A	Accounts		~	Dictionary		
List	tem	*	AD_ImpFormat Type_L	В	Business Partner		V	Dictionary		
Validation	tem	*	AD_ImpFormat Type_L	La	PriceList		V	User maint		
Table	tem	*	AD_ImpFormat Type_L	E	Exchange Rates		V	Dictionary		
Validation	tem	*	AD_ImpFormat Type_L	Ĵ.	Inventory Count		V	Dictionary		
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nserted										+*3

When we are ready to execute the Import Process into the I\_Price table, we call the text source data. Here in the example below its Pricea2XX.txt which has only two test records. Then we select our Import Format which pulls from the Import Loader Format that we have created.

Import File Loader SuperUser@WOFS.Feng Shui Cafe [REDHUAN{REDHUAN-compiere-compie	iere}] 🔳 🗖 🔀
<u>File View T</u> ools <u>H</u> elp	
Pricea2XX.txt Records=2, Length=18 Import Format ImportPrice	▼ < 1 ≥
001000100001 33.00 001000100002 33.00	
Value PriceList 0010001	
	X

Pushing the process button, shall bring you to the next screen.

ℓ Impor	rt File Loader SuperUser@WOFS.Feng Shui Cafe [REDHUAN{REDHUA	🗵
<u>F</u> ile		
<b>i</b> )	Rows in file / loaded and ready to import:	
٦r	2 / 2#	
		~

Success!! You can go into TOAD or Oracle EMC to examine the contents of your work.

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Next will be the SQL Process to bring the I\_Price data into the M\_ProductPrice table according to the respective PriceListVersions.

Here are the two SQL Procedures that we used to achieve that. The first one populate the M\_Product\_ID for reference during the second process.

Create or Replace procedure SetProdID AS CURSOR PriceArray IS SELECT p.M\_Product\_ID, p.Value FROM M\_Product p ORDER BY p.Value; BEGIN

FOR r IN PriceArray LOOP UPDATE ImportPrice SET Product\_ID=r.M\_Product\_ID WHERE ProductValue=r.Value; DBMS\_OUTPUT\_PUT\_LINE(' Processing ' || r.M\_Product\_ID);

END LOOP;

COMMIT; END SetProdID; This second procedure needs the PriceListVersion to be hardcoded. When tested succesfully if needed to be a permanent feature in your Compiere application, you can incorporate them into a Java class and attached it to the ImportPrice window just like the other Import Windows. In my case, I didn't have the time and it isn't the priority in face of a long list of other work.

Create or Replace Procedure CopyPrice

AS v\_Mem1 NUMBER; v\_Mem2 NUMBER;

CURSOR PriceArray IS SELECT ip.Product\_ID, ip.Price FROM ImportPrice ip ORDER BY ip.Product\_ID; BEGIN

FOR r IN PriceArray LOOP v\_Mem1:=r.Price; v\_Mem2:=r.Product\_ID; UPDATE M\_ProductPrice SET PriceList=r.Price WHERE M\_Product\_ID=r.Product\_ID AND M\_PriceList\_Version\_ID=1000002 AND AD\_Client\_ID<>11; --DBMS\_OUTPUT.PUT\_LINE(' Processing - ' ||v\_Mem1 || v\_Mem2); \*/ END LOOP;

COMMIT; END CopyPrice;

That's all folks!

Please sign my guestbook to show any gratitude. <u>http://red1.org/guestbook</u> If you have money to spare, donate to any orphanage in your vicinity, in my name.

You can email me at red1@red1.org

If you aren't lazy like me, give me some challenge in the <u>http://red1.org/forum</u> but stick to the subject matter. I can't cover all the bases.

The Best Lessons In Life Are From Mistakes. Just Do Not Repeat Them. - red1

guess I just did! 😊

Import Price