

Data Population associated with Transactions

*GeneXus® 15*

Country X

Structure Web Form Win Form Rules

Name	Type
Country	Country
CountryId	Id
CountryName	Name

## Data

Data Provider	True
Used to	Populate data
Business Component	True

Country\_DataProvider X

Source Rules Variables Help Documentation

```
1 CountryCollection
2 {
3   Country
4   {
5     CountryId = 1
6     CountryName = "Uruguay"
7   }
8   Country
9   {
10    CountryId = 2
11    CountryName = "Argentina"
12  }
13  Country
14  {
15    CountryId = 3
16    CountryName = "Mexico"
17  }
18  Country
19  {
20    CountryId = 4
21    CountryName = "United States"
22  }
23  Country
24  {
25    CountryId = 5
26    CountryName = "Japan"
27  }
28 }
```

Currency X	
Structure Web Form Win Form Rules	
Name	Type
Currency	Currency
CurrencyCode	Character(3)
CurrencyName	Name

## Data

Data Provider	True
Used to	Populate data



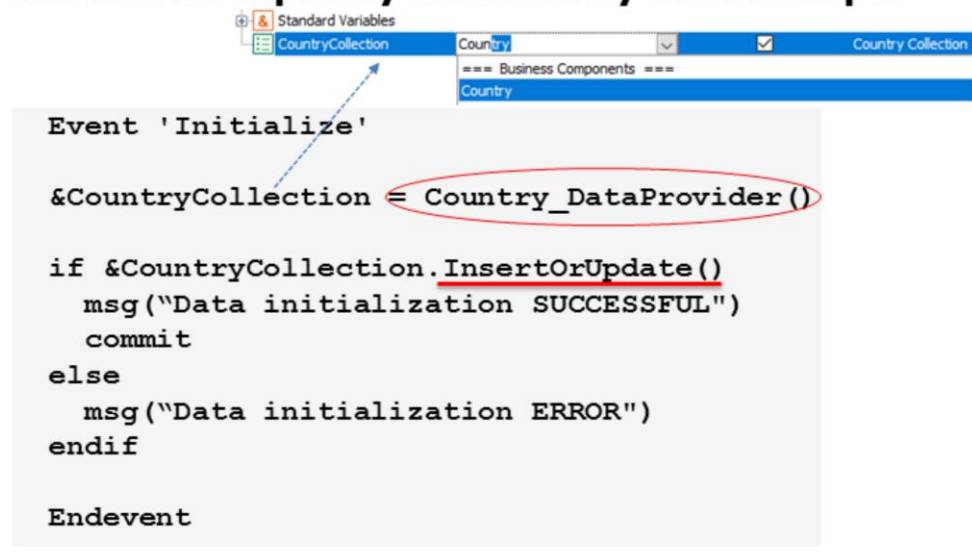
Currency\_DataProvider X

Source Rules Variables Help Documentation

```
1 CurrencyCollection
2 {
3   Currency
4   {
5     CurrencyCode = "UYU"
6     CurrencyName = "Uruguayan Peso"
7   }
8   Currency
9   {
10    CurrencyCode = "ARS"
11    CurrencyName = "Argentine Peso"
12  }
13  Currency
14  {
15    CurrencyCode = "BRL"
16    CurrencyName = "Brazilian Real"
17  }
18  Currency
19  {
20    CurrencyCode = "USD"
21    CurrencyName = "US Dollar"
22  }
23  Currency
24  {
25    CurrencyCode = "EUR"
26    CurrencyName = "Euro"
27  }
28 }
29 }
```

- The Data Provider may be executed several times:
  - When the physical table(s) associated with the Transaction require(s) structural changes.
  - When the Data Provider is modified.
- The operation that will be executed is an UPSERT.
- Because the Data Provider can be run several times, the developer has to define an idempotent behavior.

## Data Providers created by GeneXus to populate can also be explicitly executed by the developer



The screenshot displays the GeneXus IDE interface. At the top, the 'Standard Variables' pane shows a variable named 'CountryCollection' with a dropdown menu set to 'Country'. Below this, the 'Business Components' pane shows a 'Country' component. The main area shows the 'Event 'Initialize'' handler. The code in the handler is as follows:

```
Event 'Initialize'  
  
  &CountryCollection = Country_DataProvider()  
  
  if &CountryCollection.InsertOrUpdate()  
    msg("Data initialization SUCCESSFUL")  
    commit  
  else  
    msg("Data initialization ERROR")  
  endif  
  
Endevent
```

A blue arrow points from the 'CountryCollection' variable in the code to the 'CountryCollection' variable in the 'Standard Variables' pane. The 'Country\_DataProvider()' call is circled in red.

Besides being automatically executed whenever GeneXus detects it has to run it, the the Country\_DataProvider can also be explicitly executed by the developer, as shown.