GeneXus 15
Simplify Change

TEST INSTRUCTIONS

Run time test

BASIC PROCESSES

Plan Ceibal

TEST SET

These instructions will show you the procedures for testing in the GeneXus development environment, what times to measure and how to register them.

The tests should be conducted with the computer not connected to any external power supply, using Windows 10 64bits and with power saving settings disabled.

This will cause the computer to use all its processing power.

These tests measure the run time of different processes.

The following should be timed:

1. Basic:
    a. Starting GeneXus
    b. Creating a KB
    c. First Build
2. On existing samples:
    a. Creating a KB
    b. First Build

The results should be registered in tables with the following format:

BASIC PROCEDURES	
TASK	**RUN TIME**
Starting GeneXus	30 seconds
Creating a KB	60 seconds
First Build * / Creating database and running web	40 seconds

PROCEDURES ON SAMPLES	
TASK	**RUN TIME**
Creating a KB	120 seconds
First Build * / Creating database and running web	240 seconds

Ideal and maximum times

BASIC PROCESSES

TASK	IDEAL	ACCEPTABLE MAXIMUM
Starting GeneXus	17 seconds	30 seconds
Creating a KB	48 seconds	70 seconds
First Build * / Creating database and running web	30 seconds	60 seconds

* with two transactions created

Ideal and maximum times

SAMPLE-BASED TASKS

TASK	IDEAL	ACCEPTABLE MAXIMUM
Creating a KB	100 seconds	120 seconds
First Build * / Creating database and running web	210 seconds	420 seconds

* with two transactions created

1.a - Running the software

Start GeneXus by double-clicking on the icon on the desktop.

Depending on your computer settings, you may be asked for permission to pick up GX. Select "ACCEPT" to continue.

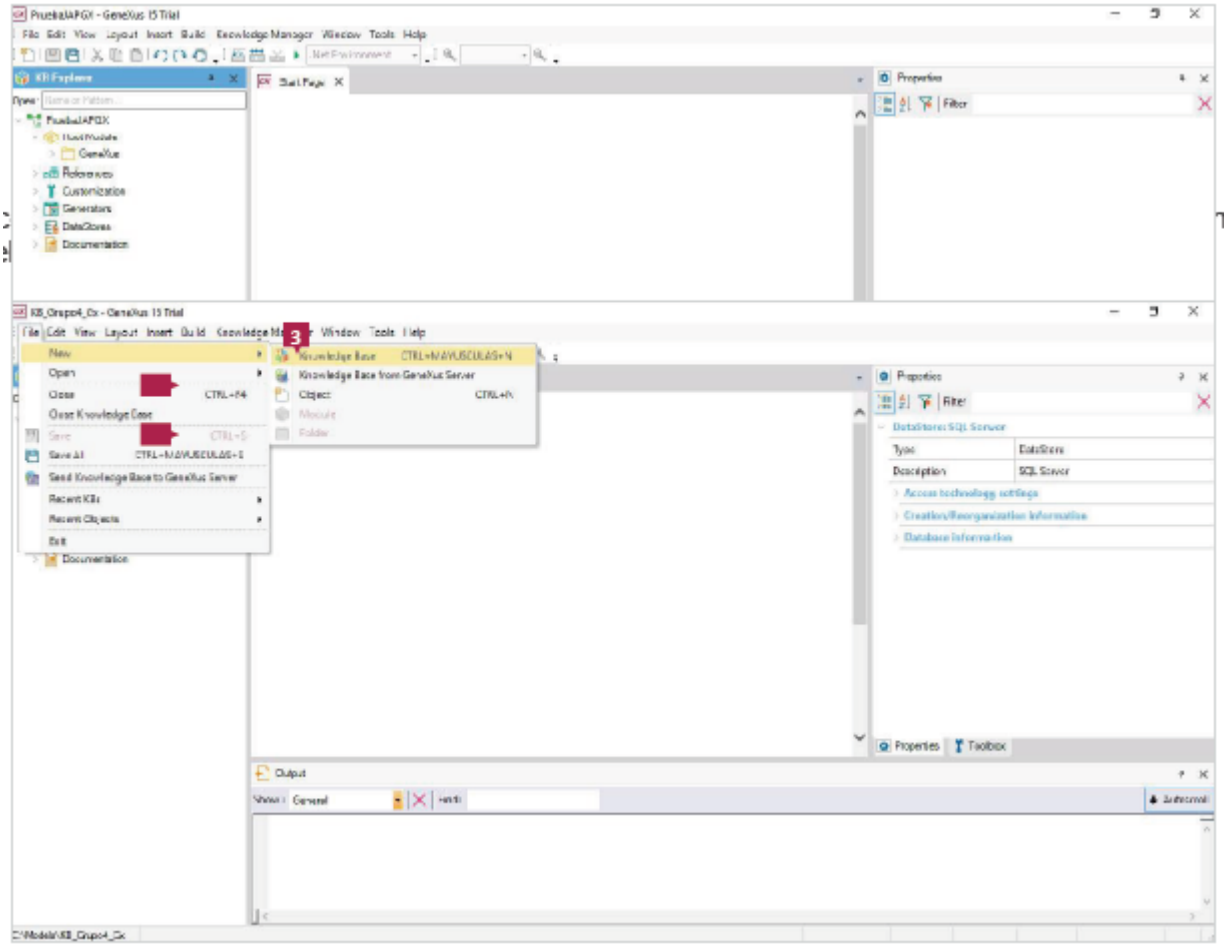
The stopwatch should be started when the following image appears on the screen:

Ready to start!

At this point, you see the GeneXus IDE on the screen ready to start working. The stopwatch must be stopped here and the time reading must be registered.

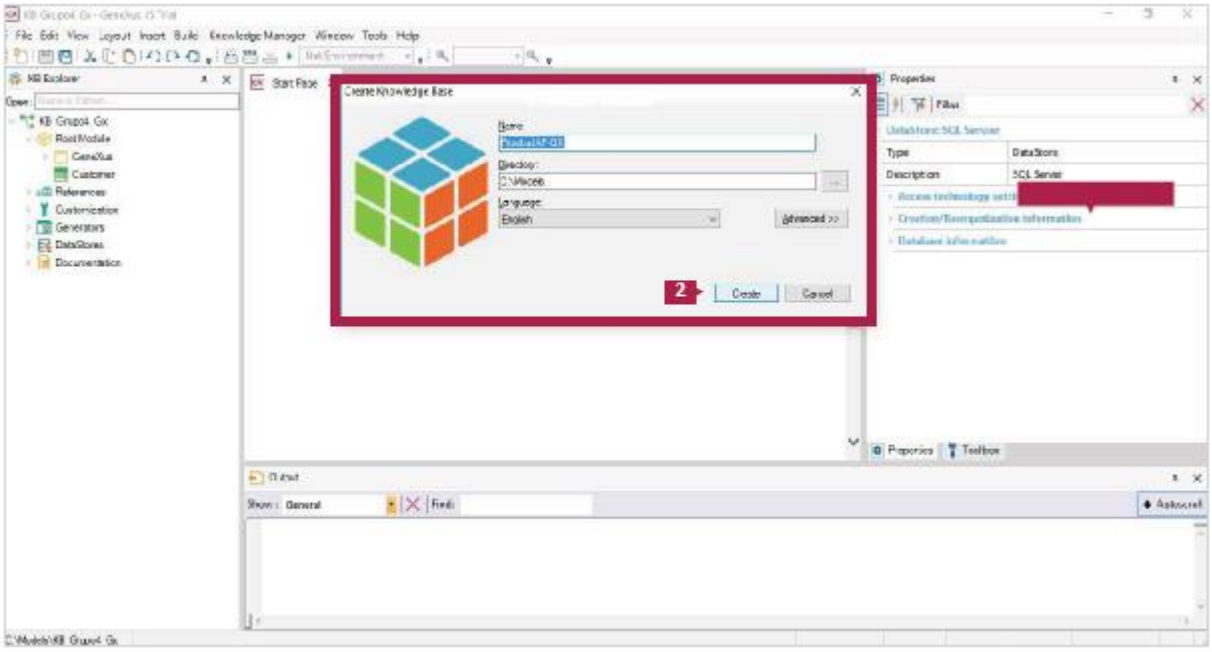
1.b - Creating the Knowledge Base (KB)

To start, the first thing you have to do is create your KB (Knowledge Base).
Go to FILE> NEW> KNOWLEDGE BASE as stated in the image.

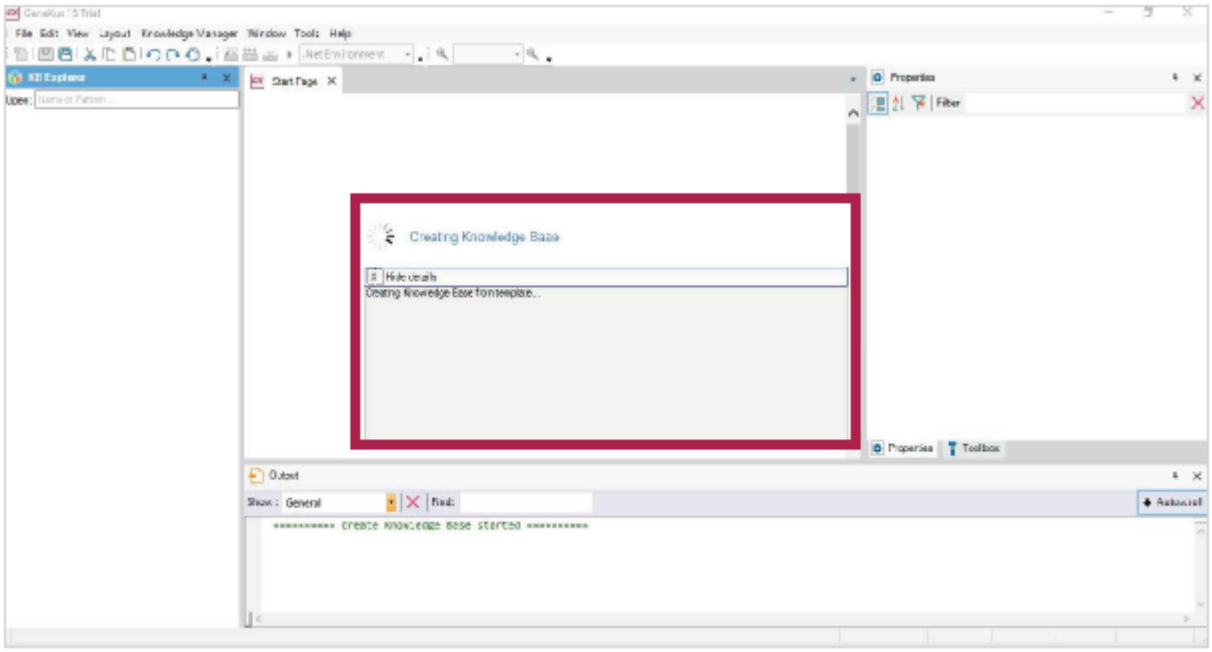


Creating the Knowledge Base (KB)

To create the KB, we must assign a "Name" to the project and click on "Create"

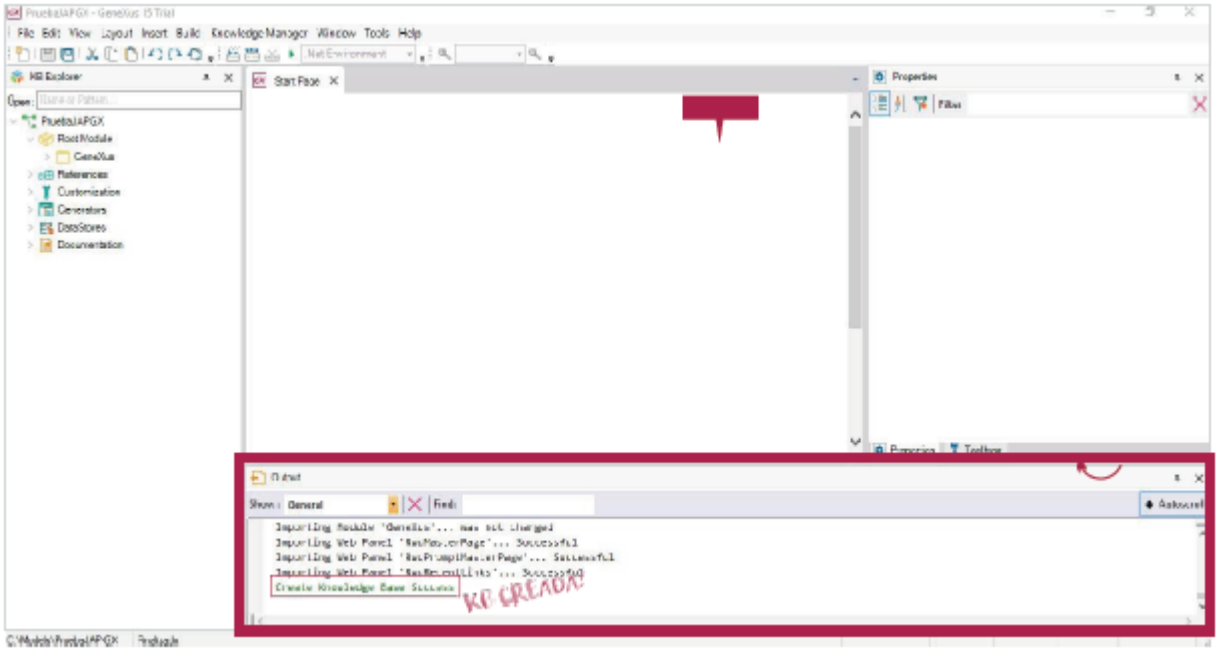


Here, GeneXus will begin to create a series of programs that will be used during the project.
You must start the stopwatch when you see the following on the screen:



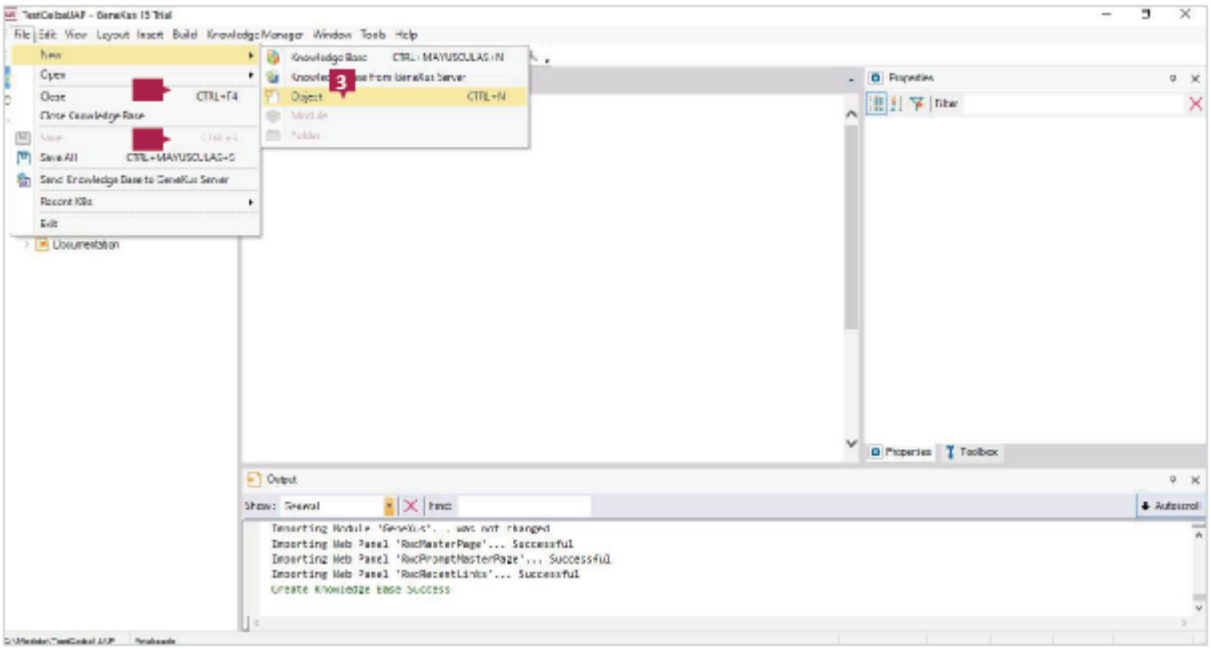
Creating the Knowledge Base (KB)

The stopwatch should be stopped when the "Create Knowledge Base Success" message is displayed on "Output"



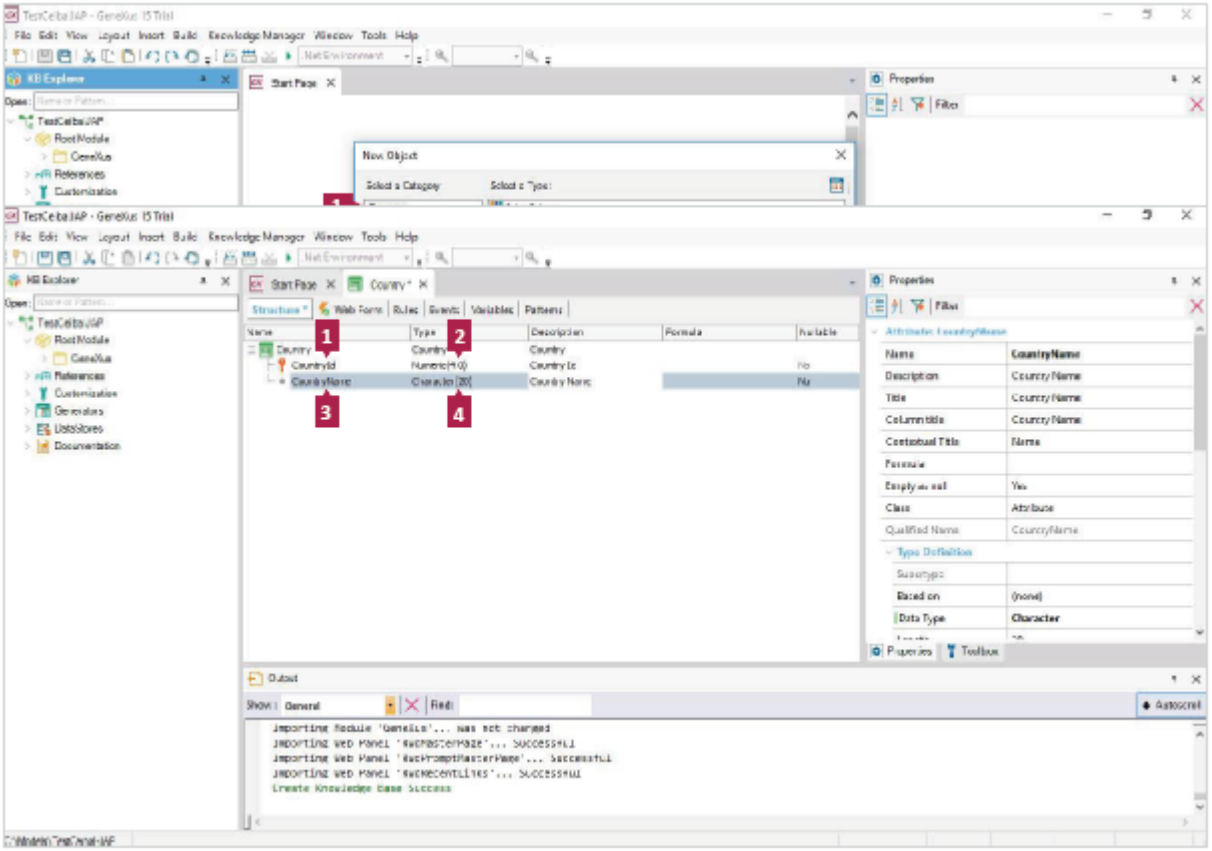
Creating the first transactions

With your KB created, you must begin to create the objects that will represent the entities in the reality of the project. These objects are called "Transactions". To do this, go to FILE> NEW> OBJECT



Creating the first transactions

A window will deploy, and you must select the "Common" category (Select a Category). In the category type (Select a Type), choose "TRANSACTION". Like with every new object, you must give it a name. We will call this one “Country.” Then click on "CREATE".



GeneXus will have created our first "Transaction" object. At this point we will assign the first attribute: "ConuntryId" with type "Numeric (4.0)". Then enter and automatically create the second attribute, which we will call "CountryName" with type "Character (20)".

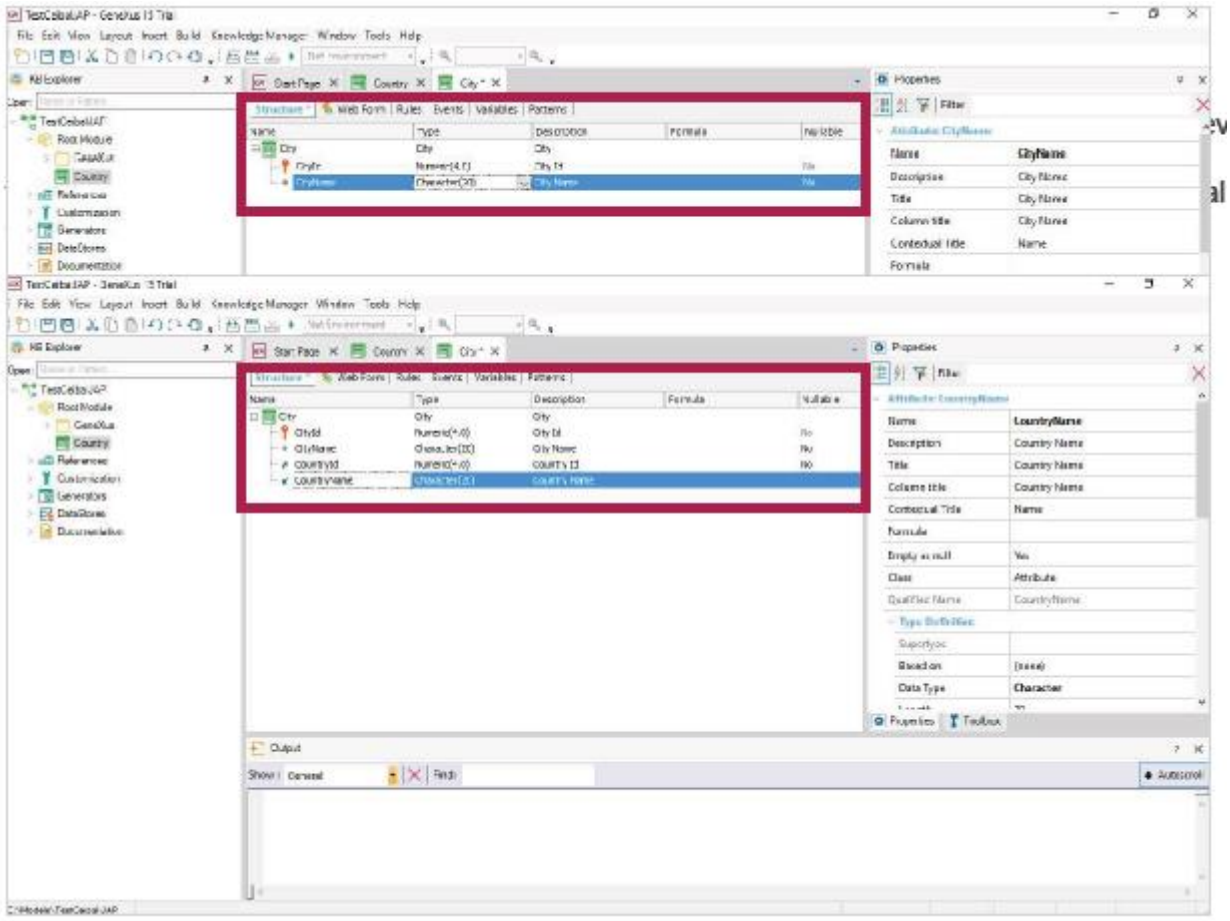
1 2 3 4

1 2 3 4

Now you must SAVE your project by pressing CTRL + S on the computer keyboard.

Creating the first transactions

Now you need to create a second transaction. Repeat the above procedure, but you will call this one "City". You must also assign it attributes, but referring to the transaction you are working on. You will call it "CityId" of the Numeric (4.0) type and "CityName" of the Character (20) type.

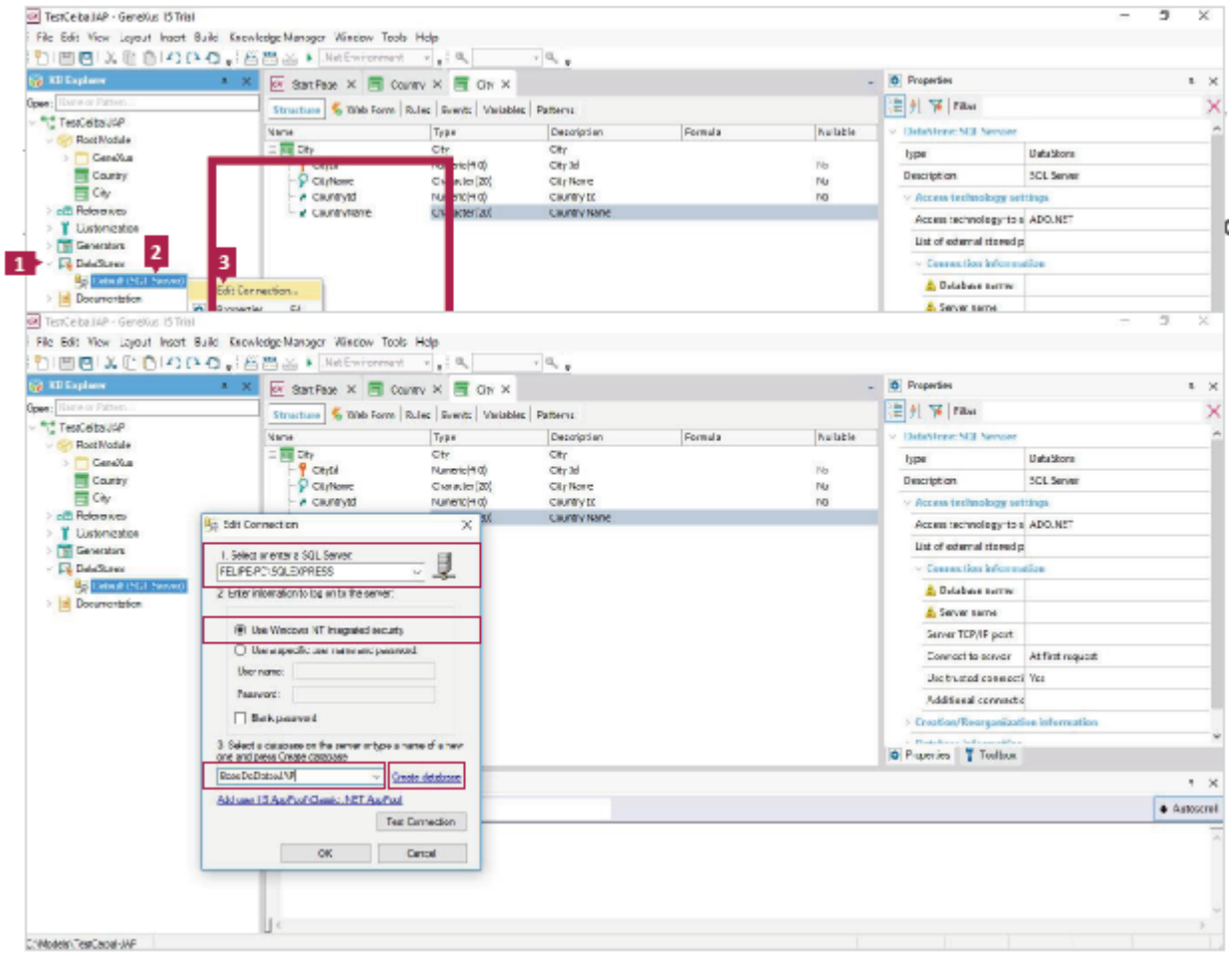


What you must do now is include in your "City" Transaction the attributes of the Country Transaction, so that a relationship between them is generated. For this, you must continue to describe attributes within "City". Pressing ENTER on the keyboard will generate a new attribute, which you will call "CountryId". By default GeneXus will bring you the information automatically. Do the same to enter "CountryName". It should look the same as in the image:

Now you must SAVE your project by pressing CTRL + S on the computer keyboard.

Configuring the Database

You are almost ready to run your first app. Now you just need to configure the Database (DB). To do this you must deploy the item "DATA STORES" on the left panel (KB Explorer) and right-click on "DEFAULT (SQL SERVER)" and then click on "EDIT CONNECTION". You must edit the connection in this window. To do this, mark in the first drop-down tab the first option shown (xxxxx\SQLEXPRESS). In the next step, mark the option "USE WINDOWS NT INTEGRATED SECURITY" as shown in the image. And finally you must give your database a name. Enter "basededatosjap," then click on the blue text next to it: "CREATE DATA BASE" and finally "OK."



Running your app

To compile your app, press F5 on the keyboard. You must start the stopwatch here. GeneXus will process the information and automatically create all the necessary elements for your software to run.

CAUTION! Whoever is doing the work must watch out for the next screen, since they must press "CREATE" for GeneXus to finish the operation. (Time is still running).

The clock should stop when the following image is displayed on the Internet browser. That will be the run time of the app (*from the moment you pressed F5 to when it is visible on the browser*).

End of Test 01

GeneXus 15
Simplify Change

TEST INSTRUCTIONS

TEST 02

Run Time Test

SAMPLE-BASED PROCESSES

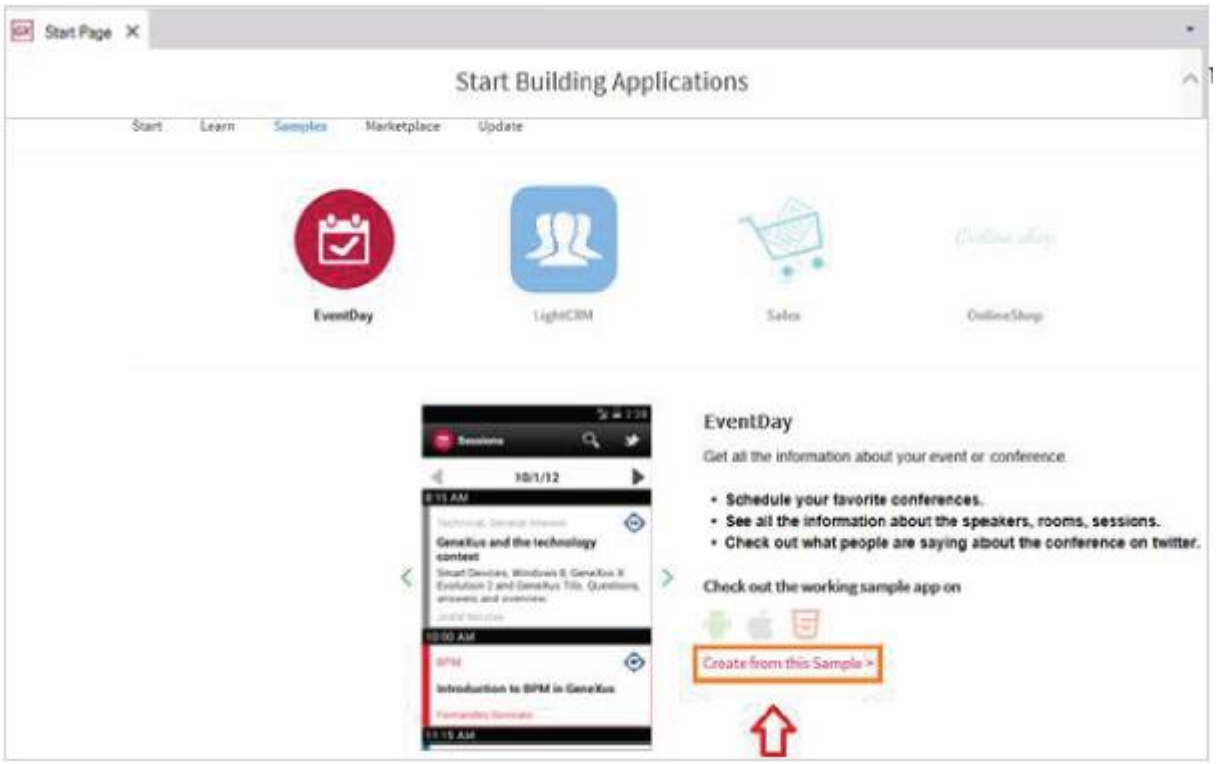
Plan Ceibal

Creating a new Knowledge Base (KB)

Same as 1.b in the instructions.

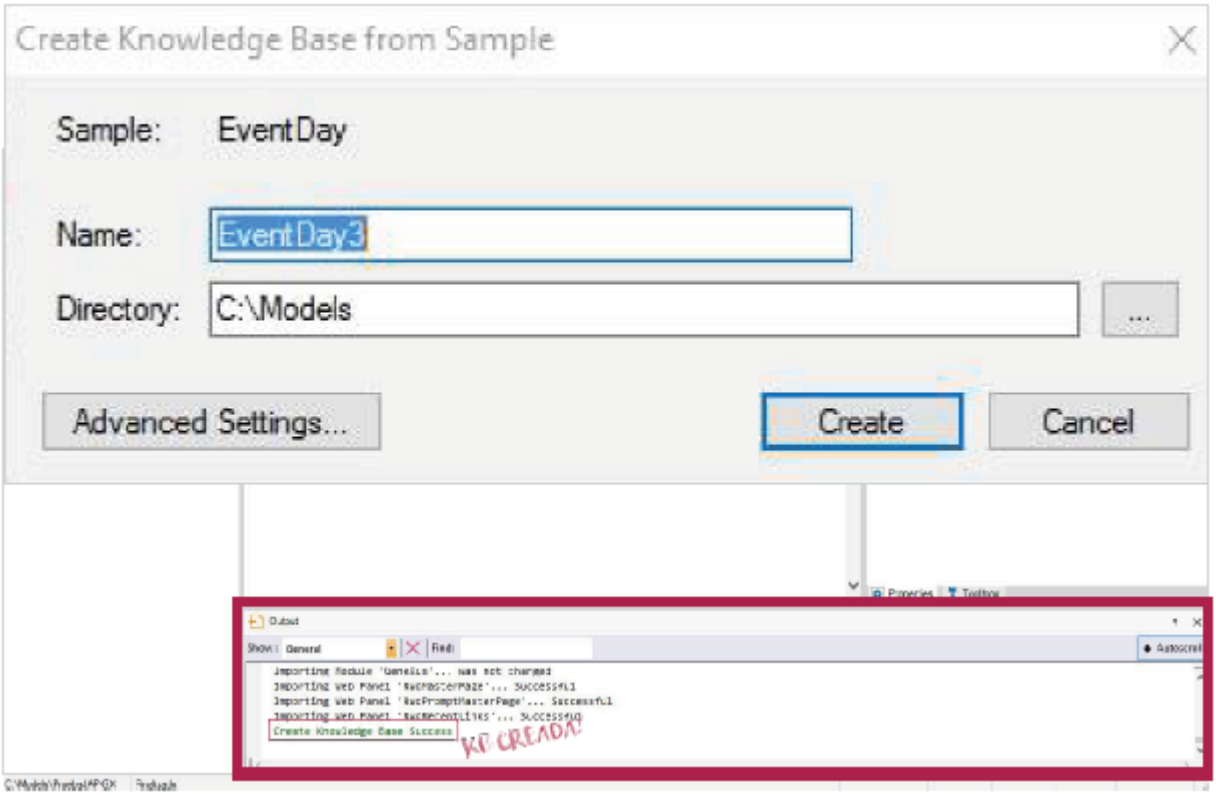
Working on Samples

Unlike Test 01, this time we will work on GeneXus SAMPLES. This means we are going to ask you to automatically create a set of procedures for us in order to work on a predetermined basis. To do this, select the "EVENT DAY" option on the "START PAGE" tab. Then indicate you want to work on this sample (as shown in the image).



Working on "Samples"

As we did in Test 01, we must assign a NAME to our KB. In this case we will give it the name that GeneXus suggests by default. As you click on the "CREATE" button, start the stopwatch.



STOP The clock when the OUTPUT indicates that the KB has been created.

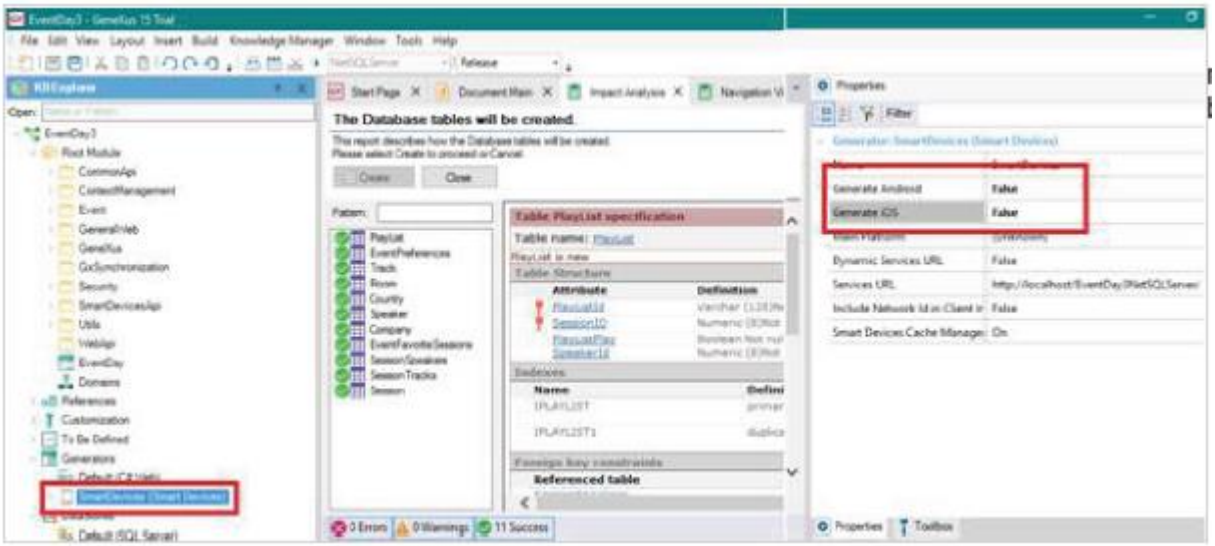
Configuring the Database

As in Test 01, we must also configure the DB here. Repeat exactly the same procedure as in the "Configuring the Database" section, only this time we must enter a different name from the previous one so that they are not repeated.

Modifying properties for Smart Devices

After having configured our DB, it is necessary to modify some options in the KB EXPLORER column. For this we will deploy the content of "GENERATORS" and just click on "SMART DEVICES" as shown by the image.

In the column on the right (PROPERTIES), assign the value FALSE to the items indicated in the image.

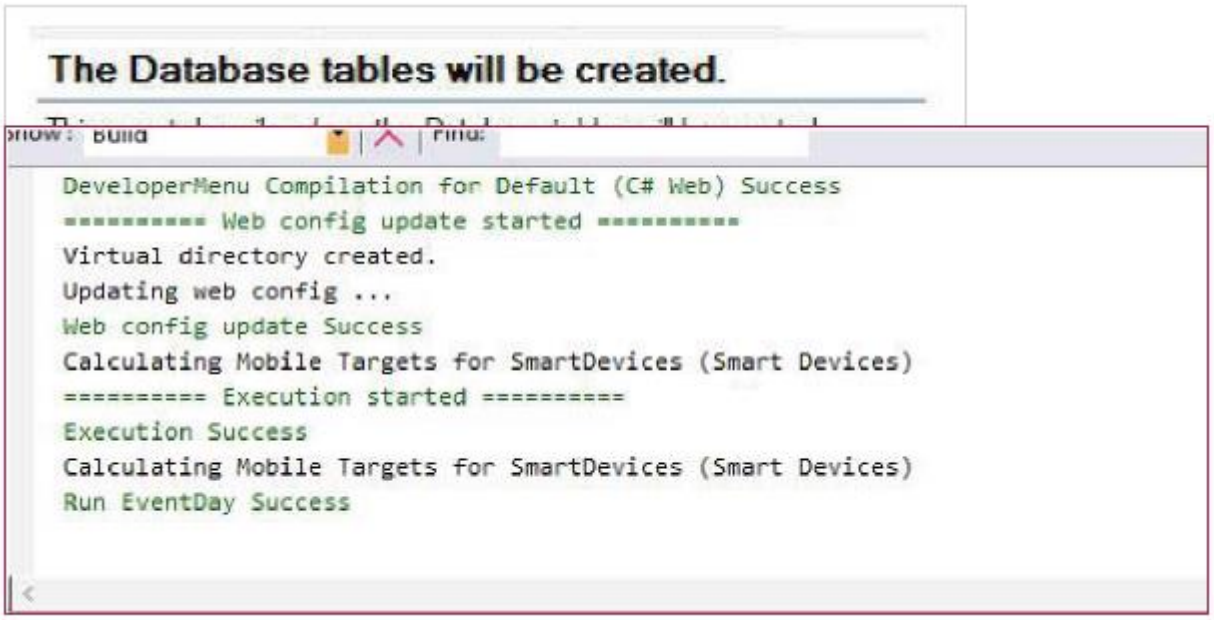


After working on these configurations, we are in a position to compile our sample-based app. The running procedure will be the same as in Test 01.

Running our app

To compile our application we must press F5 on the keyboard. We must start the stopwatch here. GeneXus will process the information and automatically create all the necessary elements for our software to run.

CAUTION! Whoever is doing the work must watch out for the next screen, since they must press "CREATE" for GeneXus to finish the operation. (Time is still running).



The stopwatch should be stopped when OUTPUT displays the message "RUN EVENTDAY SUCCESS"

End of Test 02