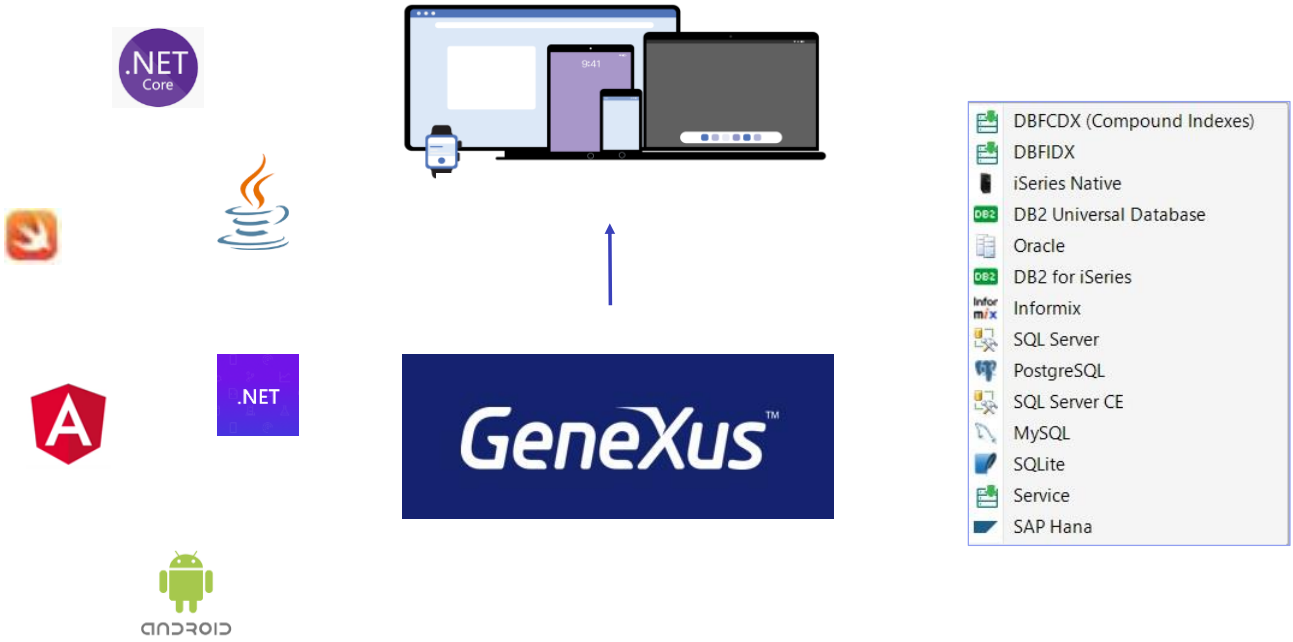
Introduction to Environments

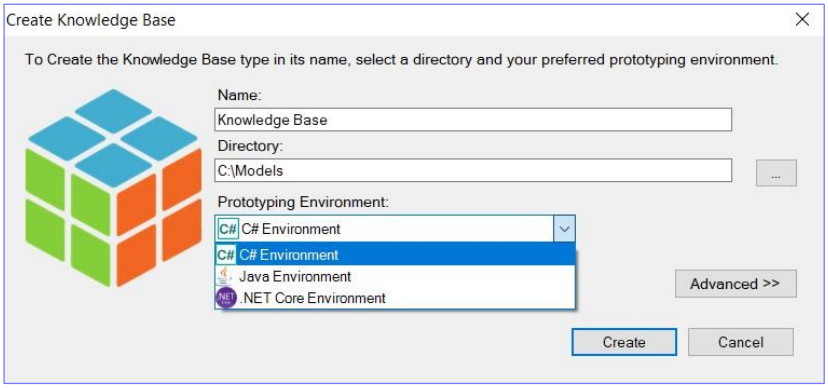
GeneXus™



As we already know, one of the great benefits of GeneXus is that it allows you to generate applications for different platforms, with a web interface or for mobile devices, generating code in different programming languages or storing the application data in different databases.

All this information is defined in an Environment, an execution environment.

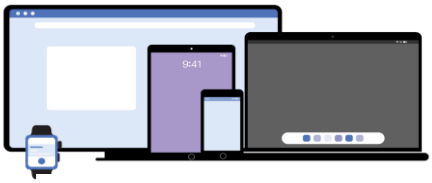
GeneXus Full version - Environments



Remember that GeneXus has a full version and a trial version with certain limitations, among which are the programming languages and databases available.

A default environment is created when the knowledge base is created. If we have a full version of GeneXus, the dialog box asks the user to select the programming language that will be used for the application back end. The rest of the information must be configured through its properties.

Front end and Back end

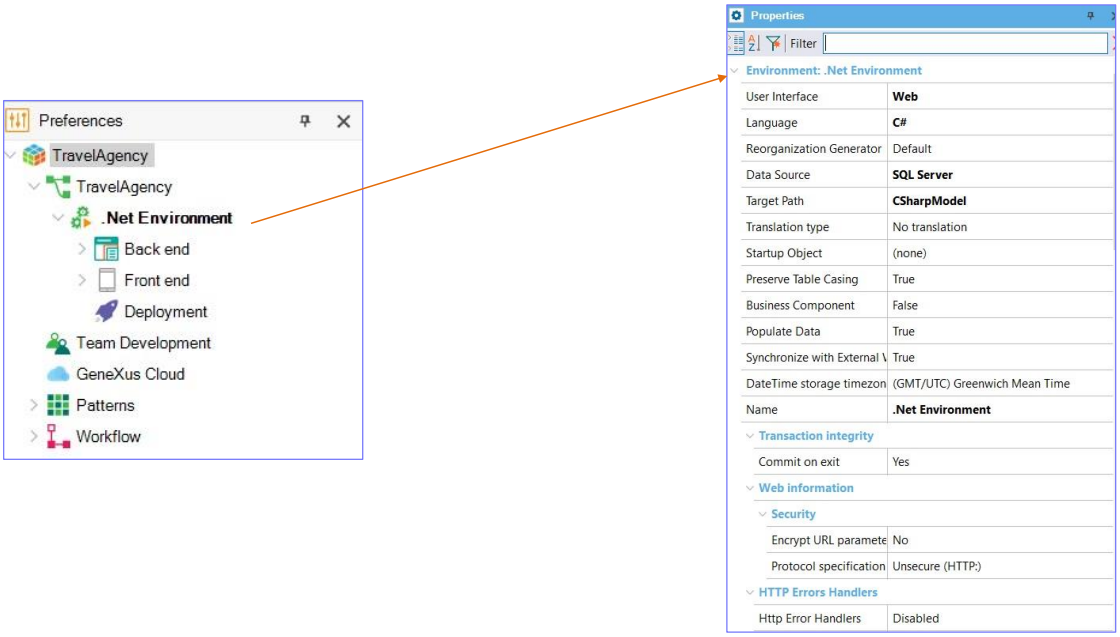


FRONT-END

BACK-END

Remember that the Front end is the part of the application that interacts with the users, while the Back end of an application takes care of all its logic and programs, as well as the connection to the database, servers, etc.

GeneXus Full version - Environments

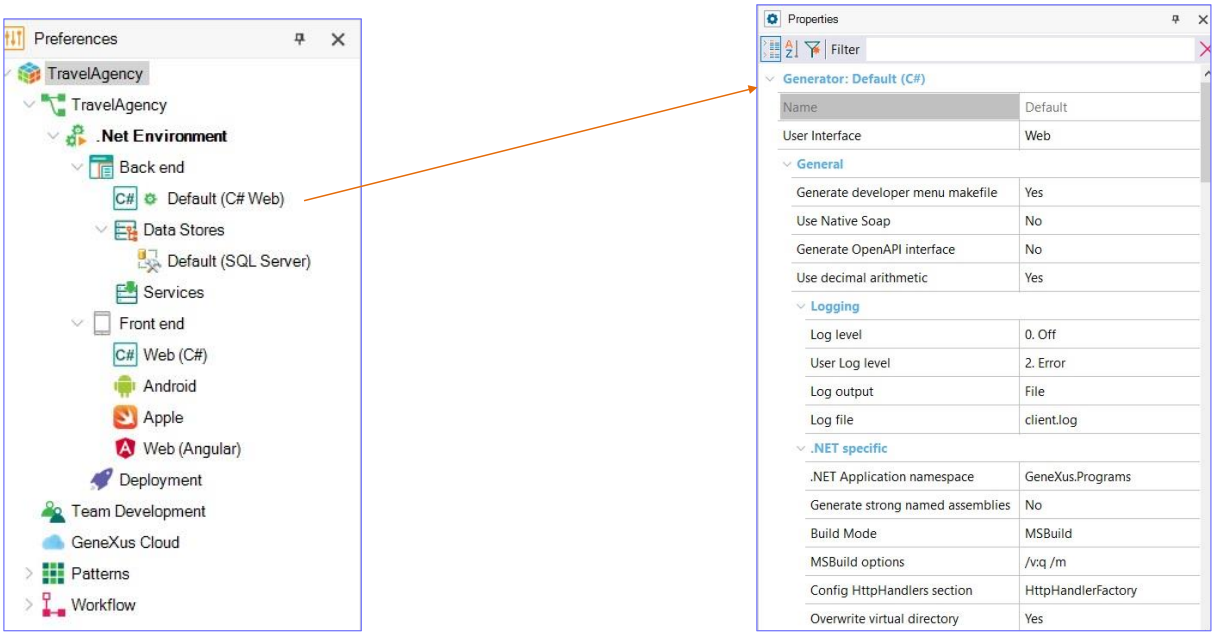


In the IDE of a full version of GeneXus, all the Environment information is in the Preferences window. We can see it has several properties defined that determine the execution platform and its characteristics.

An Environment is composed of the following nodes:

- Back end
- Front end
- And Deployment

GeneXus Full version – Environments

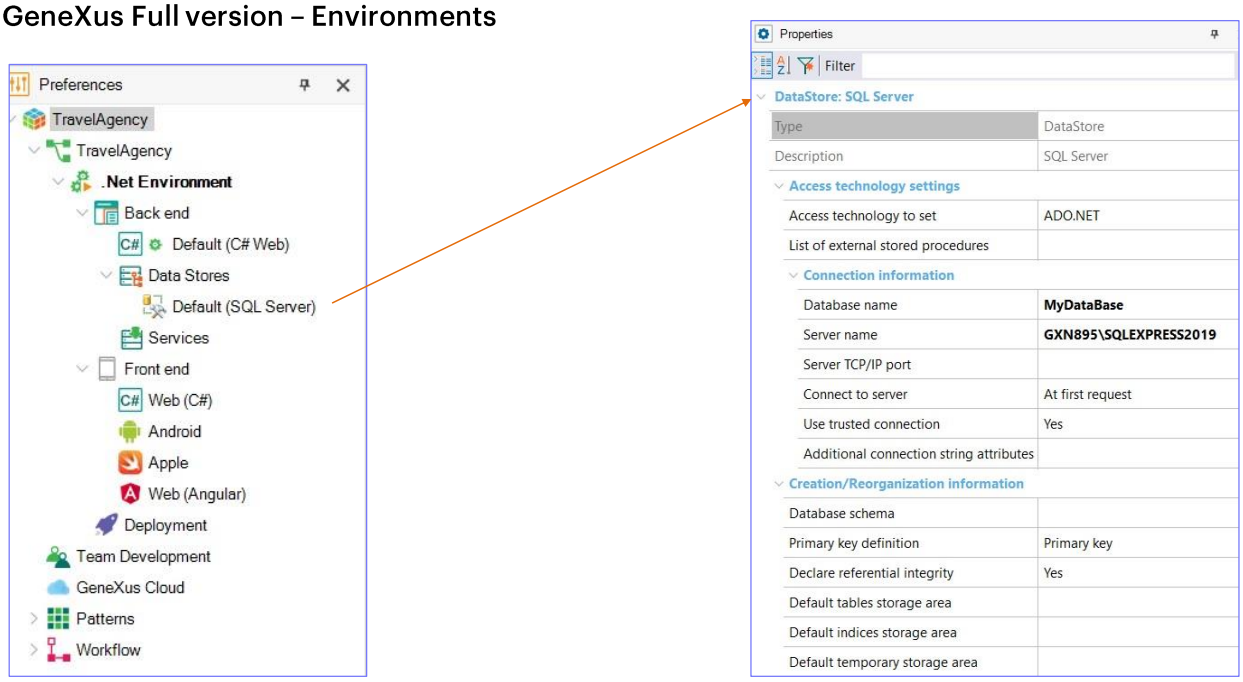


In the Back end node, you define the programming languages that will be used to generate it. It could be C#, Java, .Net Core. We already see the default generator, which was indicated when the knowledge base was created.

It is possible to define more generators under this node, simply by right-clicking and choosing New generator.

The generator properties define characteristics of the generated objects, the server or the programming language to be used.

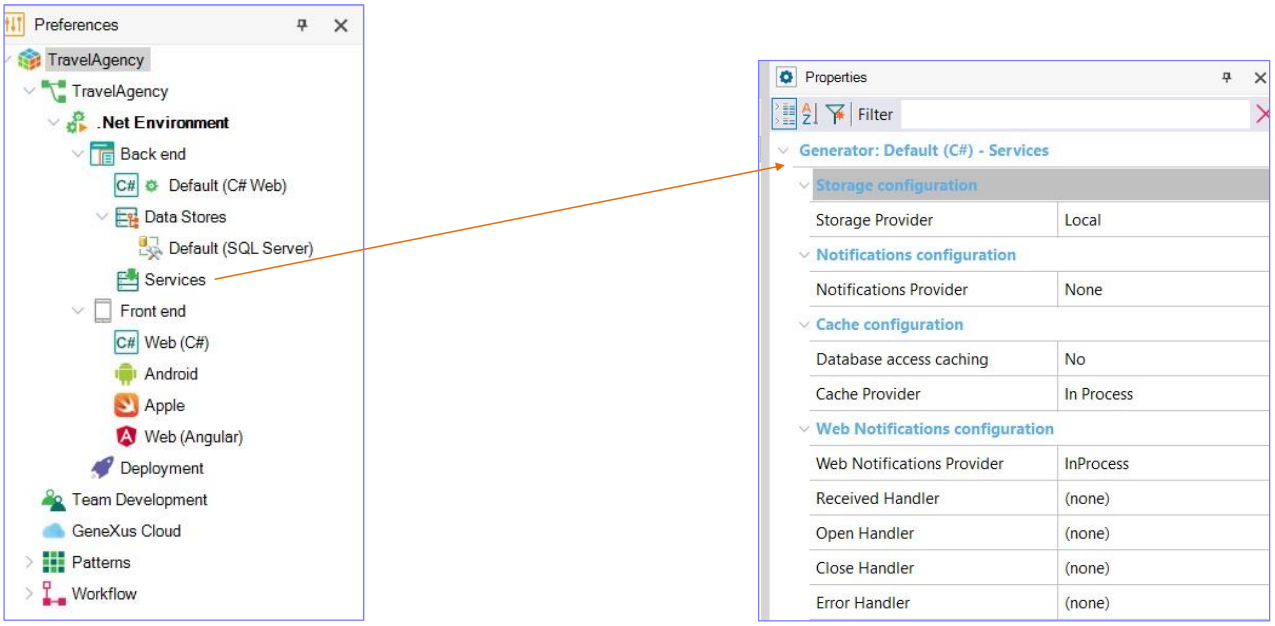
GeneXus Full version – Environments



Let's go now to the Data Stores node. Here we define the type of database where we will store our application data, and it is also possible to define other databases that we can access to query information.

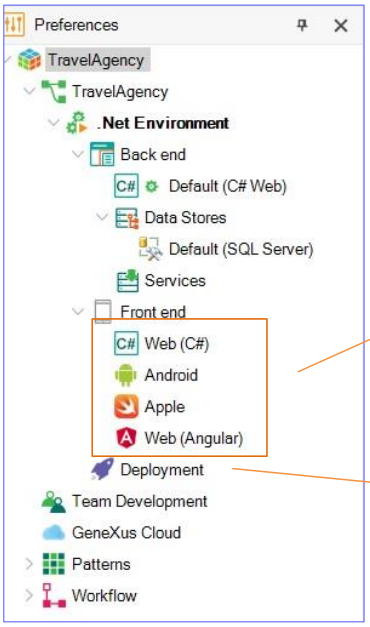
If we look at the Data Store properties, we can define the database connection data, such as the server address, user, password, database version, etc.

GeneXus Full version – Environments



As for the Services node, in its properties we can configure the management of services, storage configurations, notifications, etc.

GeneXus Full version – Environments



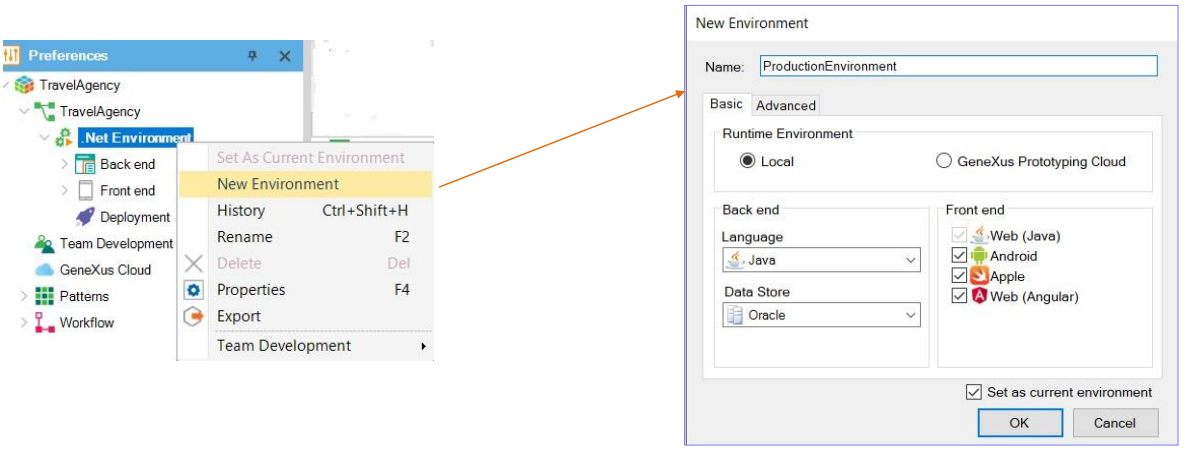
Available generators for Front end design

Deployment Unit: indicates the set of objects to be integrated when deploying.

Let's go now to the Front end node. Here we see the set of generators available to design this component of the application, and finally the Deployment node, where you can define different deployment units.

It should be mentioned that a Deployment unit indicates the set of objects to be integrated when making the deployment.

GeneXus Full version – How to create a new Environment



GeneXus allows us to define different execution environments for the same knowledge base.
For example, it is possible to define an execution environment for the development stage where we connect to a database with test data, and then another production environment where we define the server and database for the finished application.

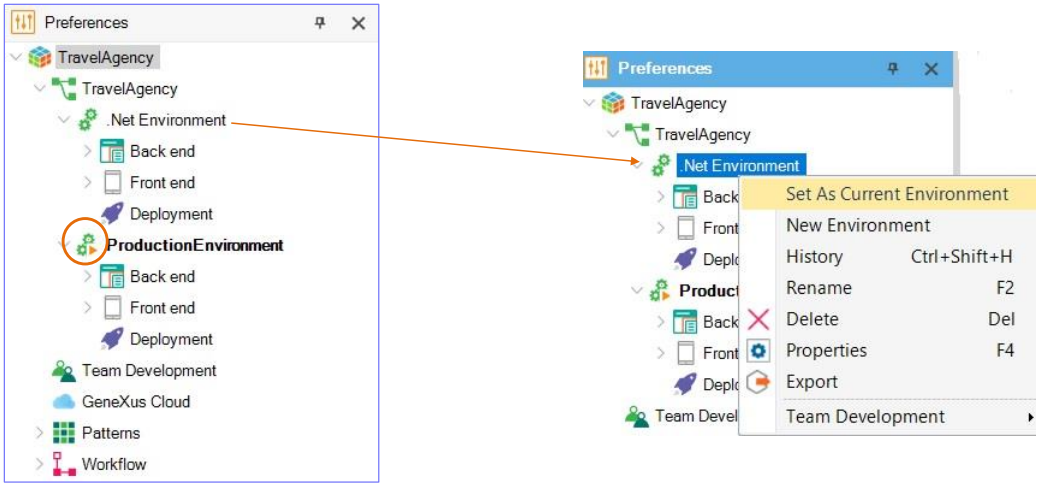
Let's then define a new environment.

To do so, we click on the name of the environment already defined, right-click and select New Environment.
We must indicate:

- The name of the new environment. We will set it as a production environment.
- Next, we need to indicate if it is going to be prototyped locally or in the GeneXus cloud.
- Choose the language for the back end,
- select the data store that will be used,
- and the Front-end generators.

Note that if you select that you are going to prototype in the GeneXus cloud, the option to choose the Data Store is disabled.

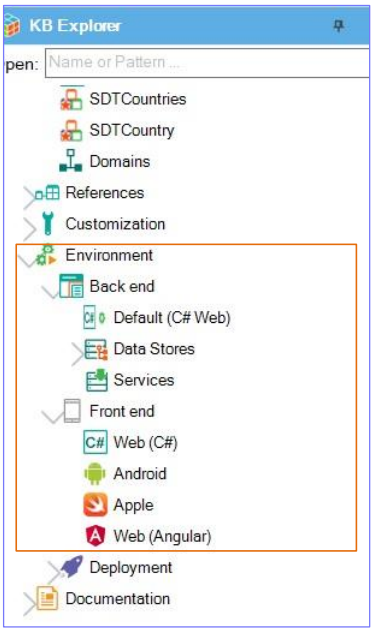
GeneXus Full version – Current Environment



Once the new environment is defined, note that the one with the name highlighted, and the play icon, will be the active environment and the one that will be applied when you press F5.

To build the application in the other environment, just right-click on the name of that environment, and select Set as current environment.

GeneXus Trial version – Default Environment



Finally, if you are using the trial version of GeneXus, it is not possible to define new environments.

When creating the knowledge base, the only execution environment that will prototype in the GeneXus cloud is defined by default; it will have C# as generator for the Back end, and C#, Android, Apple, and Angular for the Front end generation.

If we go now to the IDE of the GeneXus trial version, we see that the Environments node is integrated in the KBExplorer window.

We can see the options of the Back end and also the Front end. If we right-click on it, we see that there is no option to define a new environment.

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