

GeneXus[™]
by **Globant**

Menus

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GeneXus™

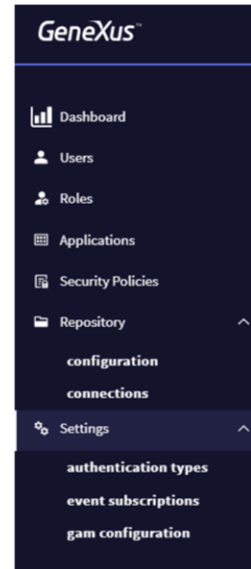
Menus in GAM

Using GAM menu options

GeneXus[™]

In this video, we will talk about the menus and different options provided by GAM to use in our GeneXus applications.

Definition



With GAM, you can dynamically define menus in Web applications at runtime, depending on the Permissions and Roles of the logged-in user.

This is to be able to filter the menu options according to the permission(s) the end user has. For this reason, GAM will return the menu structure depending on the user's permissions so that this structure can be loaded at runtime with any User Control.

In an application you can define as many menus and submenus as you want, as shown in the sample image; each option will have an associated permission and resource.

GAM_Course_GX18

Active

EDIT

DELETE

MORE OPTIONS

Permissions

Menus

Revoke

General

Id	2
GUID	2faeaa3f-dfd8-4b77-bca6-656c50b20fb0
Name	GAM_Course_GX18
Description	GAM Course
Version	gx18
Company	
Copyright	
Use absolute URL by Environment	<input checked="" type="checkbox"/>
Home Object	

Configuration

Remote Authentication SSO Rest STS Environment Settings

Client ID HSc8eSyQiiUR4d9tThVOJ7CuQLK8yHTGvesBgT

Client secret sE1XBJ8t55LLmbwqqhYu5B1WrnxgL900cp0IFx5A

Oauth single user access?

WEB (Identity Provider, SSO)

Allow authentication?

REST OAuth (Mobile, GAMRemoteRest)

Allow authentication v.2.0 ?

The menu can be configured using the GAM Web back office or from the GAM API.

We will focus on how to do it from the back office.

First, we select the application where we want to define the Menu, and click on the button "More options" > "Menus" on the right side.

GAM_Course_GX18 application menus

ADD

Try a Search

Name

[Menu 1](#)

OPTIONS EDIT DELETE

General

Application	GAM_Course_GX18
GUID	e3a78be3-1af7-42fe-859f-9c35d63ec458
Id	1
Name	<input type="text" value="Menu 1"/>
Description	<input type="text" value="Menu for application"/>

Next, we click on Add to add the menu, where we have to enter a name and its description.

GAM_Course_GX18 application menus

ADD

Try a Search

Name

[Menu 1](#)

OPTIONS

EDIT

DELETE

Application: GAM_Course_GX18 - Menu: Menu 1

ADD

Try a Search

Menu name

[Option1](#)

Type

Simple

UP

DOWN

EDIT

DELETE

Once the menu is defined, from the “Options” button we can add the different options and submenus that we want the defined menu to have. Also, we can reorder, edit, or delete them.

Option1

General	
Application	GAM_Course_GX18
Menu	Menu 1
GUID	368abe0b-0df9-4736-8931-9c7ba9efabb2
Name	<input type="text" value="Option1"/>
Description	<input type="text"/>
Option Type	<input type="text" value="Simple"/> <div style="border: 1px solid gray; padding: 2px; display: inline-block;"> Option Type <input type="text" value="Menu"/> </div>
Permission	<input type="text" value="users_FullControl"/> <div style="border: 1px solid gray; padding: 2px; display: inline-block;"> SubMenu <input type="text" value=""/> </div>
Resource	<input type="text" value="wwusers"/>
Resource Parameters	<input type="text"/>

Clicking on the Add button will open the following screen, where we can define the name and description of the option, its type (if it is simple or a submenu), the associated permission, and the resource to which it will point; if it has parameters, we will be able to include them.

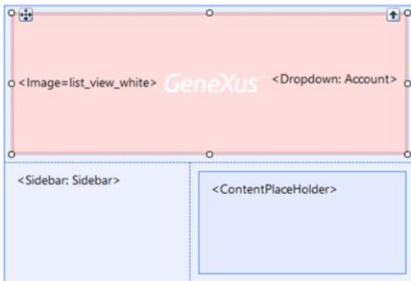
In the permissions combo box, we will find all the GAM permissions defined for that application, including the automatic permissions generated by GeneXus and the permissions created by the user. Please keep in mind that the permission is only used to decide if the option should be displayed to the user or not, but it is not checked when executing the resource.

With the Type option, if we choose Menu, we must have previously created another Menu to select it there and make reference to it.

With the resource field, we can reference any GeneXus object that can be executed from a URL.

If the object is inside a module, the module must be included in the field. In turn, from GeneXus 16 Upgrade 10 onwards, relative URLs can be used to reference it.

How to show it



```

Sidebar.Visible = false
&GAMApplication = GAMApplication.Get()

If not &GAMApplication.GUID.IsEmpty()   GetUserMenu
    &GAMMenuOptionList = &GAMApplication.GetUserMainMenu(&GAMMenuAdditionalParameters, &GAMEErrorCollection)
    &SidebarItems = ConvertGAMMenuToSidebar(&GAMMenuOptionList.Nodes)
    Sidebar.Visible = True
Endif

```

```

SidebarItems input &MenuItem in &GAMMenuOptionList
{
    &GAMRepository = GAMRepository.Get()   if &GAMRepository.GUID.IsEmpty()
    SidebarItem
    {
        id       = Trim(&MenuItem.Id.ToString())
        title    = &MenuItem.Name.Trim()
        target   = &MenuItem.Link   if &MenuItem.Nodes.Count = 0
        &Image.FromImage(&MenuItem.Icon)
        icon     = &Image.ImageURI
        hasSubItems = iif(&MenuItem.Nodes.Count > 0, true, false)
        &SidebarItems = GAMGetBackendMenu(&MenuItem.Nodes)   if &MenuItem.Nodes.Count > 0
        SidebarSubItems input &SubmenuItem in &SidebarItems
        {
            SubItem
            {
                id       = Format('!%1_%2',&MenuItem.Id, &SubmenuItem.Id.Trim())
                title    = &SubmenuItem.title.Trim()
                target   = &SubmenuItem.target
            }
        }
    }
}

```

The menu has been created, so let's see how to display it in our application.

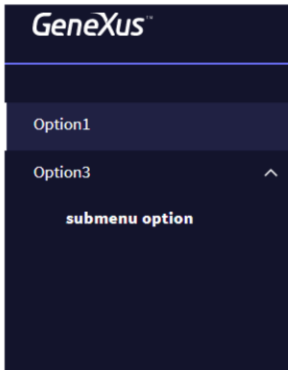
To do this, we can use the example of the GAM Web back office menu, contained in the GAMExampleMasterPage object. As we've said before, this and all examples can be found in the GeneXus installation and imported as XPZ.

Now we go to our own implementation, and in the Master Page we define a component of Sidebar type. In the Start event, we implement it as follows.

We obtain the application, and then we obtain the Main Menu. For the defined menu to be Main, we must set it in the application properties from the web back office. Otherwise, we can use the GetUserMenu method to which we indicate the identifier of the menu we want to obtain.

Once this is done, we create a procedure like the following one, which will be in charge of converting the options of our menu into sidebar items.

All we have to do now is Build and confirm that the menu is available.



Application: GAM_Course_GX18 - Menu: Menu 1

Menu name	Type
Option1	Simple
Option2	Simple
Option3	Menu

Application: GAM_Course_GX18 - Menu: SubMenu1

Menu name	Type
SubMenuOption	Simple

As I showed at the beginning, the image we see is an example Menu. More specifically, that of the application shown in the previous images.

Note that the options of the defined menu match, and that option 3 is a submenu, created as another menu separate from the current one.

Option 2 is not displayed, since it is associated with a resource that the logged-in user is not authorized to access and, as we said before, this check is performed to verify whether each menu item should be displayed or not.

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