# GeneXus Server

Conflicts and conflict resolution

GeneXus

When working with GeneXus and GeneXus Server in Merge mode, conflicts may arise between modifications made by different developers to the same object.

## Conflict



A conflict occurs when modifications made by one developer overlap with modifications made by another.

In most cases, there is no automatic way to solve the problem and therefore the developer will have to do it manually.

At what point can a conflict occur? When performing an Update operation, a warning message will be displayed.

Name	Туре
🖃 🥅 Team	Team
👇 📍 TeamId	Numeric(4.0)
P TeamName	Character(25)
- 🛃 CountryId	Numeric(4.0)
🖌 🖌 CountryName	Character(20)
🖃 들 Player	Player
PlayerId	Numeric(4.0)
PlayerName	Character(20)

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nding Commit	s (3/3) Ignored Objects						YC
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la 🔄 Co	untry Transaction	Country	4/9/2018 16:16	Root Module	Modified	4/9/2018 15:48	ARTECH\acaggia.
🗟 🖏 Tea	im Attribute	Team Name	5/10/2018 10:49		Modified	9/7/2018 10:08	ARTECH\acaggia.

For example:

From the WorldCup KB the TeamName attribute is set as Character(25):

The changes are saved and a Commit operation is performed.

Team       Team         TeamId       Numeric(4.0)         TeamName       Character(35)         CountryId       Numeric(4.0)         Player       Player         Player       Player         Player       Player         Player       Character(20)         Player       Player         Player       Player         Numeric(4.0)       Character(20)	e .	Type										
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Now, in the WorldCupDiego KB, the TeamName attribute is set as Character(35). It is saved and an attempt is made to Commit, but without knowing the modifications already sent by the other developer.

If you look at this message in the Output window, you'll see that when trying to perform a Commit operation, a message indicates that a new definition exists in the server and that it isn't locally integrated. Therefore, performing the corresponding Update operation first is recommended. So, we select the Update option and run the Update operation:

The message indicates that when GeneXus Server finds a conflict, a new revision of the object will be created in the local KB with its status in the server.

The conflicting object will be highlighted in red in the list of objects with pending Commit, until this conflict is solved.

- Merge
- Maintain local changes only
- Maintain server-side changes only

Let's see the possible scenarios to solve the conflict:

#### Merge

It's the most common scenario, where the changes made locally and on the server must be integrated. In this case, the developer will have to resolve the conflict manually, checking both definitions that generate the conflict and reapplying the changes made locally so that a new revision of the object is generated in the local KB.

Once this manual merge is made, the Commit operation can be performed to update the object in GeneXus Server.

#### Maintain local changes only

The developer will have to restore the revision with the object version containing these local changes. To this end, he/she will need to use the options History, Set as Active, or Restore this revision, and then the corresponding Commit of the object to GeneXus Server.

#### Maintain server-side changes only

In this scenario, the conflict should be marked as resolved by simply rightclicking on the object in the Commit dialog box and selecting "Mark as resolved."





Let's solve this conflict:

Locally, the TeamName attribute is set as Character (35).

We open the Team Development dialog box, and from the Commit window we right-click on the object and select the option Compare with server object.

The Comparer is opened, and we can see that the attribute in the server is set as Character (25).

New TeamName definition.				
Pending Commits (0'1) Ignored Objects				
Name / Type	Description		Modified On	Module
🖌 🔊 Team. Attribute	Team Name		5/10/2018 10:59	
			Open	F12
		411 411	Blame	
		10	Show differences	
			History CTRL+	MAYUSCULAS+H
		t	References	CTRL+F12
		×	Delete	SUPR
			Move to Changese	• •
			Remove from Char	ngeset
		1	Mark as resolved	
			View changes until	
			View remote change	542
			View conflict resol	ution
			Add to 'Ignored Ol	bjects'
			Update	
			Export Objects	
		0	Revert	
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		10	Advertising to the subscripts	ablast

Name	Туре
🖃 🥅 Team	Team
- 📍 TeamId	Numeric(4.0)
	Character(25)
🛛 🛃 CountryId	Numeric(4.0)
🖌 🖌 CountryName	Character(20)
🚊 🔚 Player	Player
PlayerId	Numeric(4.0)
PlayerName	Character(20)

We leave this definition as valid so we return to the Commit window, rightclick and select Mark as resolved.

We can verify the result by opening the Team local transaction and confirming that the TeamName is now set as Character (25).



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