

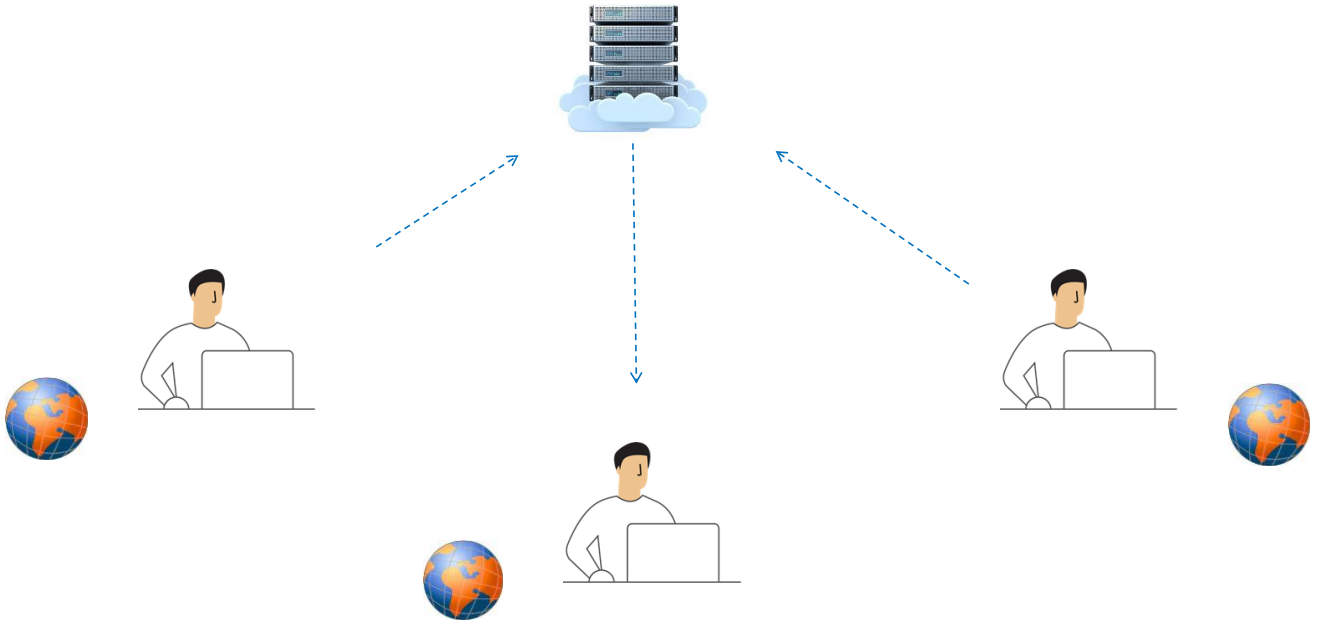
# GeneXus Server

## Versioning Modes



We already know that GeneXus Server enables us to share and centralize the management of a GeneXus knowledge base by means of a central repository. .

# GeneXus Server



It might be possible to have more than one user with the need to modify one single object at the same time, so GeneXus Server must be capable of controlling such process in order to ensure that the changes made by one user are not overwritten by those made by the other user.

## Versioning Modes

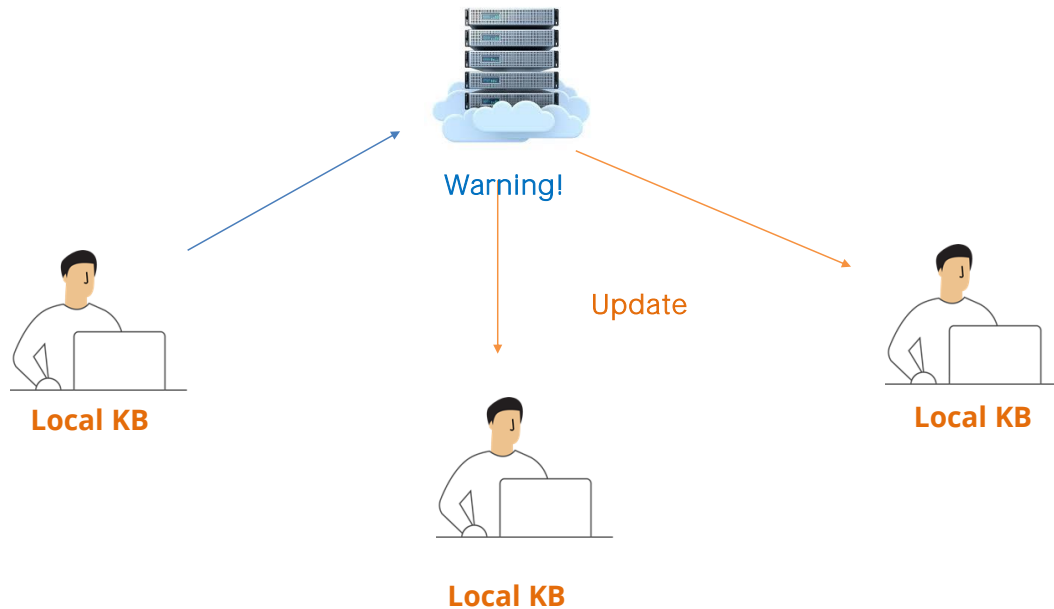
- Merge Mode (recommended)
- Lock Mode

To this end, GeneXus Server provides two different versioning models to apply in teamwork:

- Merge Mode (the mode recommended), and
- Lock Mode

Both strategies are intended to solve the same basic problem, that is, allowing users to share and edit information while protecting against changes made to be overwritten on top of one another in the centralized KB.

## Merge Mode



Let's now consider the concept relative to the Merge mode.

This working mode enables users to modify any object in their respective local copies of the KB. This is possible due to the use of automatic integration tools that ensure that all the changes made by different users on a single object will be integrated prior to being included in the repository.

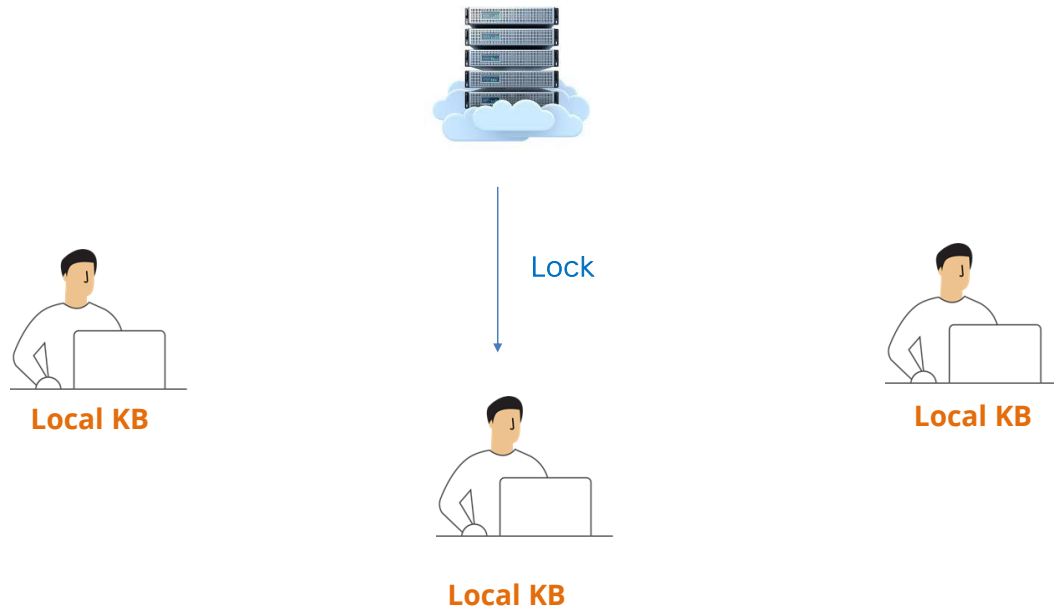
It should be borne in mind that, in this working mode, when two or more users have modified the same object, then only the first user will be able to do the Commit. Upon trying their own Commits, all other users will be informed that they must first do the update of the object in question. The update will do the merge between the local copy and the changes made to the server version. Users will be enabled to do their Commits only after such update has taken place.

In most cases, the merge process is automatic, but sometimes it isn't.

For instance, when both users have modified the same line in the source of a procedure, there is no way of knowing what the outcome will be or which modifications should prevail over others.

In these cases, the user will be warned about the situation, and will also be offered the possibility of comparing both definitions to solve the conflict created.

## Lock Mode



Let's now see the concept that relates to the Lock mode.

This working mode is an alternative strategy with which GeneXus Server enables only one user at a time for making changes to an object. When working in this mode, GeneXus sets up all objects in the KB as read only.

To modify any object, a user must first obtain a server lock that will only enable one user in order to prevent simultaneous modifications.

It is also important to mention that both working models are equally safe and capable of efficiently preventing the overwriting of the work done by different users.

# GeneXus™

[training.genexus.com](http://training.genexus.com)  
[wiki.genexus.com](http://wiki.genexus.com)  
[training.genexus.com/certifications](http://training.genexus.com/certifications)