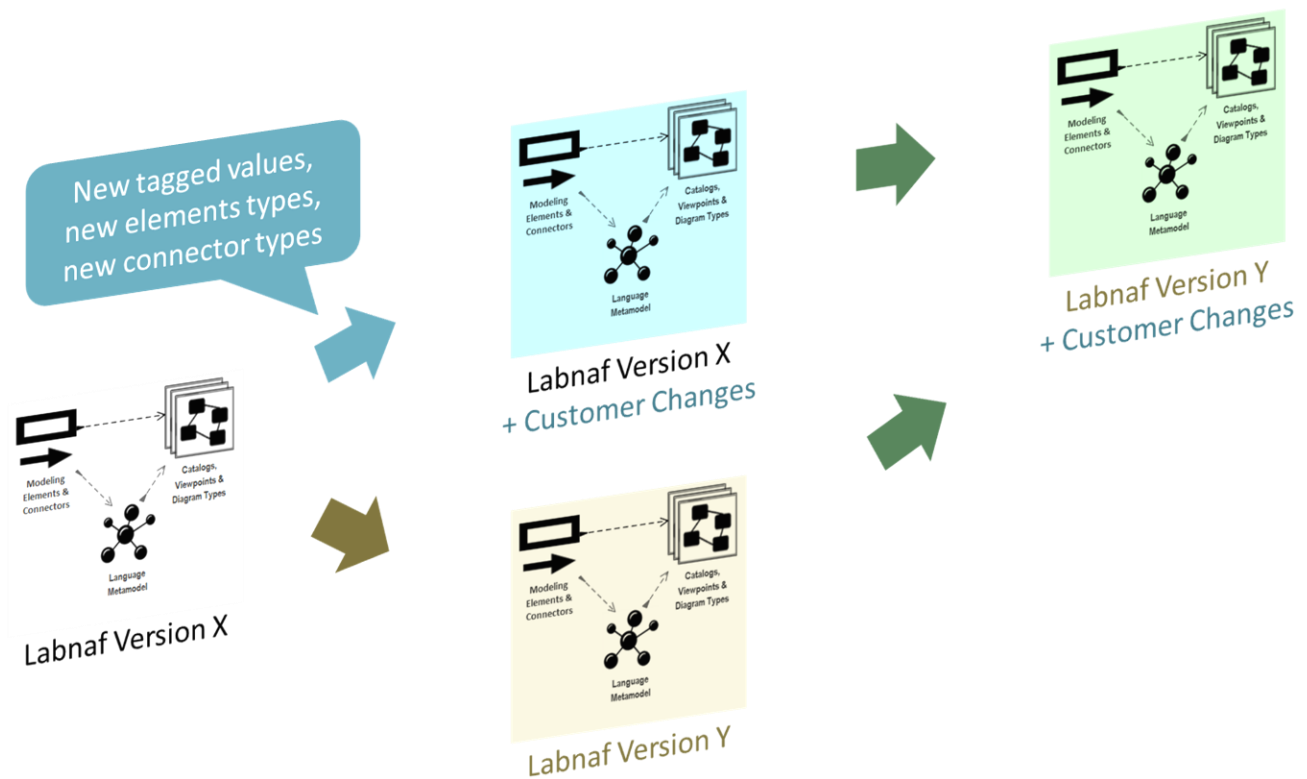# Merging Your Customizations into a New Version of Labnaf

Labnaf 6.0

Overview

While subsequent Labnaf versions enrich the Labnaf framework, including the modeling language, you might be using the Labnaf Customization Workbench to make your own changes in parallel.

For example, you might customize Labnaf version 5, while in parallel, we are creating version 6.

In that case, how shall you merge your changes with Labnaf version 6?

Labnaf provides two options for language customization

1. Instant Metamodel Manager and the Instant Metadata Manager

The **Instant Metamodel Manager** and the **Instant Metadata Manager** are provided by the Labnaf AddIn i.e. directly in the modeling environment.

Using these tools, you can decide to

- use the standard built-in metamodel, customize it, or create your own user-defined metamodel from scratch,
- visualize, create, rename, delete and synchronize element properties,
- <mark>automatically merge new versions of Labnaf with your own metamodel and metadata (properties) customizations.</mark>

2. Customize the Labnaf MDG Using the Customization Workbench

This is used for **advanced customizations**.

The **Customization Workbench** is used for customizing the Labnaf MDG including, properties/tagged values, element types, connector types, toolboxes, diagram types, and metamodel (still using the Labnaf end user language itself).

To activate this customization mode, start the Customization Workbench, and select the "Load MDG from Files" option.
This overrides the above features on (1).

<mark>In this case Labnaf still automatically merges the new Labnaf metamodel version with your own customizations, since Labnaf metamodels are entirely controlled by Labnaf .</mark>

<mark style="background:yellow">But for the other parts of the language specifications, which are defined in the MDG, you need to rely on Sparx tools.</mark>

Steps for Merging Parallel MDG Customizations

a) *Prepare your future model merge*

Create a separate package with diagrams documenting the items that you are changing along with some explanations
It could be in the MDG or in the metamodel.

b) *Identify what has changes*

There are several options:

- By looking at your above documentation
- Or by using Sparx EA's compare utility
- Or by using LemonTree

c) *Merge changes made by Labnaf with your own changes*

- By replaying either the changes made by Labnaf or by you,
- Or by using LemonTree which will do everything automatically for you.

Suggestions
Always use the Labnaf Instant Metamodel Manager to merge new Labnaf metamodel version with your own customizations.
For merging MDG repositories, the most effective option is to use LemonTree which will let you

- Clearly identify and visualize what changed have been made between the three versions (original + 2 sets of parallel branches),
- Resolve conflicts in case the same items have been changes in two different parallel branches,
- Merge the different versions following specific preferences and decisions of your own.