Unified Framework for Driving Transformations

Labnaf Language Transformer

Reference Guide

See also the "**Labnaf Language Transformer - User Guide**"

WARNING

NEVER use the language transformer on your production repository before performing all necessary tests.
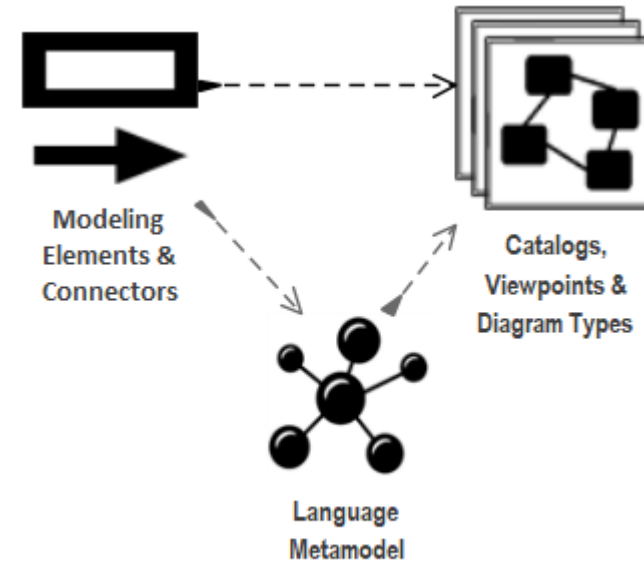
ALWAYS <u>test</u> your language transformer commands <u>using a repository backup.</u>

ALWAYS carefully check the resulting transformations and possible side effects. For example items could be deleted because you misspelled a type.
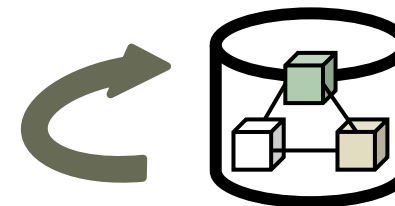
ALWAYS remember that type and stereotype names are <u>case sensitive</u>.

Labnaf Customization Steps

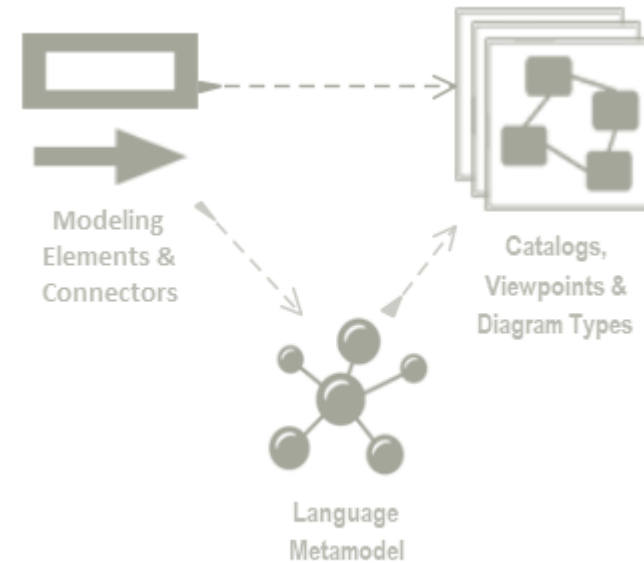1. Customize the language following your organization requirements

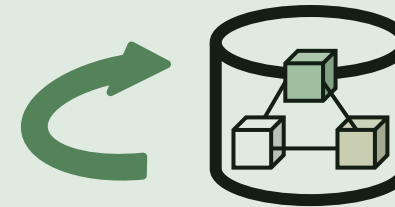2. Adapt existing repository content

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Labnaf Language Transformer

1. Customize the language

Modeling Elements & Connectors

Catalogs, Viewpoints & Diagram Types
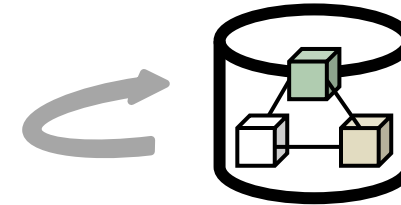
Language Metamodel

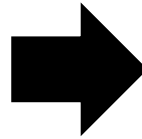2. **Adapt existing repository content**

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The Language Transformer adapts the language in existing repository content

- **ChangeElementType**

- **ChangeConnectorType**

- **ChangeDiagramType**

- **ChangeDiagramTypesDefinedInCsv**

- **TemplateMetamodelFromActiveMetamodel**

- **TvRename**

- **TvDelete**

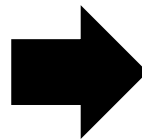www.labnaf.one

lnxf usage

lnxf

```
Usage : lnxf Command [arguments]

Available Commands:

    ChangeElementType

    ChangeConnectorType

    ChangeDiagramType

    ChangeDiagramTypesDefinedInCsv

    TemplateMetamodelFromActiveMetamodel

    TvRename

    TvDelete
```

lnxf {command name}

Example: if you type « lnxf TvRename » you get the following info:

```
Command: TvRename

Description: Rename tag.


Usage : lnxf TvRename [arguments]

Arguments:

    RepoPathName: Model repository path name.

    FromTagName: Name of the tag to be renamed.

    ToTagName: New tag name.

    [ElementType]: Restrict the scope to this element type.

    [ElementStereotype]: Restrict the scope to this element stereotype.
```

When a command parameter has some spaces in the middle

- Put the command parameter between parentheses
- Do the same for variables which, when they will be resolved, might contain some spaces

<u>Example:</u>

"%LNXF%" ChangeDiagramType "%REPO%" * "BPMN2.0::Business Process" Activity "Labnaf - Enterprise Function::Functional Landscape"

ChangeElementType

To change the type and/or the stereotype of existing <u>elements</u> in a repository:

```
ChangeElementType: Start (2024-04-30 16:19:04)
Labnaf commands log dir: C:\Users\User\Desktop\Labnaf_Cmd_Output\Log

Command: ChangeElementType

Description: Change element types and stereotypes in a model repository.

Usage : "C:\Program Files\Labnaf\LanguageTransformer\lnxf.exe" ChangeElementType [arguments]

Arguments:

    SourceRepoPathName: Path name of the source model repository where the elements must be changed. ** NOT NEEDED IN A LABNAF POWERSCRIPT FILE (.lpsc) **

    FromType: The element type to be changed OR '*' if the type is not a selection criteria.

    FromStereotype: The element stereotype to be changed OR '-' for changing elements without a stereotype.

    ToType: The new element type to be set for each element OR 'DerivedType' to derive the type from the following stereotype

    ToStereotype: The new element stereotype to be set for each element OR '-' for removing the stereotype (if any).

    [ToTagName]: The name of the tag to be added to each element.

    [ToTagValue]: The tag value for that named tag.
```

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ChangeConnectorType

To change the type and/or the stereotype of existing connectors in a repository:

```
Command: ChangeConnectorType

Description: Change connector types and stereotypes in a model repository following criteria.
Element and connector types can be replaced by the constant 'DerivedType' to indicate that they need to be automatically derived from the stereotype that follows.

Usage : "C:\Program Files\Labnaf\LanguageTransformer\lnxf.exe" ChangeConnectorType [arguments]

Arguments:

    SourceRepoPathName: Path name of the source model repository where the connectors must be changed. ** NOT NEEDED IN A LABNAF POWERSCRIPT FILE (.lpsc) **

    /all|/selective: Change all connectors of a certain type and stereotype or only a selected subset based on source and destination types and stereotypes.

    /samedirection|/reversedirection: Keep or reverse the connector direction. If the connector direction is reversed, please perform a repository integrity check to finalise updates.

    FromType: The connector type to be changed OR '*' if the type is not a selection criteria.

    FromStereotype: The connector stereotype to be changed OR '-' for changing connectors without a stereotype.

    ToType: The new connector type to be set for each selected connector.

    ToStereotype: The new connector stereotype to be set for each selected connector.

    [SrcElmType]: Change the connector type only when the connector's source element is of this type.

    [SrcElmStereotype]: Change the connector type only when the connector's source element is of this stereotype.

    [DestElmType]: Change the connector type only when the connector's destination element is of this type.

    [DestElmStereotype]: Change the connector type only when the connector's destination element is of this stereotype.
```

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ChangeDiagramType

To change the type and/or the stereotype of existing <u>diagrams</u> in a repository:

```
Command: ChangeDiagramType

Description: Change diagram types in a model repository.

Usage : lnxf ChangeDiagramType [arguments]

Arguments:

    SourceRepoPathName: Path name of the source model repository where the diagrams must be changed.

    FromType: The diagram type to be selected OR '*' if the type is not a selection criteria.

    FromStereotype: The diagram stereotype to be selected.

    ToType: The new diagram type to be set for each selected diagram.

    ToStereotype: The new diagram stereotype to be set for each selected diagram.
```

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ChangeDiagramTypesDefinedInCSV

To change multiple types and/or stereotypes of existing diagrams in a repository:

```
Command: ChangeDiagramTypesDefinedInCsv

Description: Change diagram types in a model repository based on a CSV configuration file.
Wild cards '*' and '-' used in command ChangeDiagramType are applicable.

Usage : lnxf ChangeDiagramTypesDefinedInCsv [arguments]

Arguments:

  SourceRepoPathName: Path name of the source model repository where the diagrams must be changed.

  CsvConfigPathName: Path name of the CSV configuration file.
    The first row in the CSV file is fixed and contains the field headers:
    FromType,FromStereotype,ToType,ToStereotype

  [CsvFieldDelimiter]: The field delimiter in the CSV configuration file (default is ',')
```

Sample input CSV

	A	B	C	D
1	FromType	FromStereotype	ToType	ToStereotype
2	Logical	LABN::Corporate Strategy Map	Logical	Labnaf - Vision::Corporate Strategy Map
3	Logical	LABN::Goals	Logical	Labnaf - Vision::Goals
4	Logical	LABN::Principles	Logical	Labnaf - Vision::Principles
5	Logical	LABN::Standards (as rules)	Logical	Labnaf - Vision::Standards (as rules)
6	Logical	LABN::Demands	Logical	Labnaf - Vision::Demands
7	Logical	LABN::High Level Requirements Roadmap	Logical	Labnaf - Vision::High Level Requirements Roadmap

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TemplateMetamodelFromActiveMetamodel

Creates a template metamodel package for building your own metamodel from scratch. What you get is a new package with new elements of the same type and stereotype as in the current metamodel but without any connection.

<u>Prerequisite</u>: The original reference metamodel must exist in the repository.

To easily create the new metamodel from scratch:

```
Command: TemplateMetamodelFromActiveMetamodel

Description: Create a template metamodel package for building you own metamodel from scratch.


Usage : lnxf TemplateMetamodelFromActiveMetamodel [arguments]

Arguments:

   RepoPathName: Model repository path name.
```
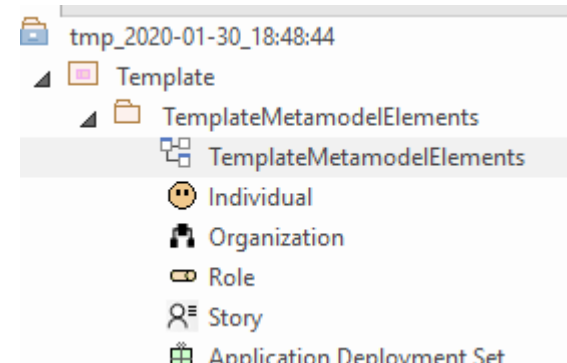
When the process is completed, a package contains the list of metamodel elements.

tmp_2020-01-30_18:48:44
- Template
  - TemplateMetamodelElements
    - TemplateMetamodelElements
    - Individual
    - Organization
    - Role
    - Story
    - Application Deployment Set

TvRename

To <u>rename</u> a tagged value for existing elements in a repository:

```
Command: TvRename

Description: Rename tag.


Usage : lnxf TvRename [arguments]

Arguments:

    RepoPathName: Model repository path name.

    FromTagName: Name of the tag to be renamed.

    ToTagName: New tag name.

    [ElementType]: Restrict the scope to this element type.

    [ElementStereotype]: Restrict the scope to this element stereotype.
```

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TvDelete

To delete a tagged value for existing elements in a repository:

```
Command: TvDelete

Description: Delete tag.


Usage : lnxf TvDelete [arguments]

Arguments:

   RepoPathName: Model repository path name.

   TagName: Name of the tag to be deleted.

   [ElementType]: Restrict the scope to this element type.

   [ElementStereotype]: Restrict the scope to this element stereotype.
```

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