# LABNAF REPOSITORIES 7 - OVERVIEW

A Labnaf repository contains structured strategy and architecture content. It covers the entire enterprise visualization and transformation modeling value chain, with end-to-end traceability.

Strategy and architecture data are captured using one single language, that is the Labnaf language.

It can also contain and trace down into detailed design and implementation content. The sample repository contains some examples. Design and implementation data are captured using UML and any specific implementation code.

Hence, to cover the entire transformation process, you only need one model repository and two modeling languages (Labnaf and UML), cross-discipline communication and collaboration gets much straightforward.

## **PACKAGE CONTENT**

#### ROOT FOLDER

The exact content depends on the Labnaf software and edition. Each provides a specific set of repositories.

See the Labnaf product editions for details.

Labnaf Bare Repository for Essential Hands-on	<ul> <li>A repository that is used only for the "Essential Hands-on - Building Labnaf APM Catalogs From Zero". The production repositories are usually started using the Startup Repository instead.</li> <li>The bare repository structure only includes configuration items.</li> <li>Reusable diagrams and elements (auto-legends)</li> <li>Configurable templates for diagram generation</li> <li>Model templates for tabular reports (generated Excel documents)</li> <li>Model templates for configuring value calculations</li> </ul>
Labnaf Startup Repository Extralite	<ul> <li>Initial model repository structure including <ul> <li>A configurable language metamodel with dynamic alignment of the model validation rules</li> <li>Canonical and configurable repository structure of packages, elements and diagrams that one can copy from</li> <li>Reusable diagrams and elements (auto-legends)</li> <li>Configurable templates for diagram generation</li> <li>Model templates for tabular reports (generated Excel documents)</li> <li>Model templates for configuring value calculations</li> </ul> </li> </ul>
Labnaf Startup Repository	<ul> <li>Adds the following items to the Labnaf Startup Model Repository Extralite:</li> <li>Customizable default metamodel including navigable documentation</li> </ul>

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(initial production repository)	<ul> <li>Sample steps for you Enterprise Architecture metamodel evolution</li> <li>Placeholder and initial content for you own metamodel (if you want to replace the default metamodel)</li> <li>Model templates for configuring value initialization</li> <li>Document templates for solution architecture, principles, standards and other document types. Generated format: Word, PDF, RTF.</li> <li>Configurable element and connector type documentation</li> <li>Configurable viewpoint documentation</li> <li>Configurable flows of viewpoints</li> <li>Configurable sets of mandatory viewpoints following different scenarios (e.g. project types). Used also for crating dynamic project dashboards showing existing and missing mandatory viewpoints.</li> <li>Collection of predefined charts and dashboards for enterprise visualization, application portfolio management, strategy definition and strategy execution</li> <li>Charts require a SQL Server database (Fiel-based databases have limitations)</li> </ul>
Labnaf Sample Repository	<ul> <li>Adds the following items to the Labnaf Startup Model Repository:</li> <li>Extensive examples of Labnaf model repository content.</li> <li>Collection of predefined charts and dashboards for project/solution architecture</li> </ul>
	limitations)
Labnaf Guidance Repository	<ul> <li>Adds the following items to the Labnaf Sample Model Repository:</li> <li>Navigable Labnaf end user guidance</li> </ul>
	This is the original model repository from which the <u>online guidance</u> is generated. Enables easy search, navigation and even customization of the guidance.
	To be deployed on a separate database so that search and navigation focus on the guidance only.
	Charts require a SQL Server database (Fiel-based databases have limitations)

# Sample and Guidance Repositories contain features that rely on SQL Server

The Sample Repository and the Guidance Repository contain a set of sample models for educational purpose and for demos.

They also includes a "Canonical repository structure" (that you can cut and paste from at any level)

#### The following features in these repositories database are designed for SQL Server.

- Value calculation
- Value initialization
- Some heat maps

File-based repositories do not provide SQL capabilities needed to properly support these features.

If you want to use or evaluate these features, please transfer the provided file-based repositories to a SQL Server database.

Please look for the feature "Create a Project in a SQL Server Database" in the <u>Sparx Systems' Enterprise Architect</u> documentation.

#### DOC (FOLDER)

Labnaf Documentation and pointers to on-line documentation

#### SAMPLE\_CUSTOM\_PROPERTIES (FOLDER)

Sample <u>Tagged Value Type</u> definitions and related <u>Template Package</u> content that you can import in your repository.

Each pair of corresponding files is stored in a specific sub-folder.

#### To import Tagged Value types

- Select the Sparx EA option Import Reference Data
- Select the Tagged\_Value\_Types.xml file
- Click on "Tagged Value Types"
- Press Import
- Select the option <u>UML Types > Tagged Value Types</u> to see or manually modify the list of tagged value types.

#### To import a template package

## SAMPLE\_GENERAL\_TYPES (FOLDER)

A set of "General Types" values that can be imported in your repository, as an alternative to the default Sparx Enterprise Architect general types.

Example for Requirements Priorities: Must Have, Should Have, Could Have, Won't Have (for now), ?

#### To import general types,

- Select the Sparx EA option Import Reference Data
- Select the input xml file
- Select "Priority Types"
- Press Import

#### **USING THE REPOSITORIES**

Once **Sparx Enterprise Architect** and the **Labnaf Addin** have been installed, you can simply double-click on one of these repositories to open it.

#### USING THE SAMPLE AND GUIDANCE REPOSITORIES

The sample and guidance repository can be used

- for educational purpose as it contains several sample models.
- for demos including
  - On demand diagram generation (from the user interface)
  - o Labnaf PowerShell execution (running or scheduling commands)
- to copy model repository substructures that you can paste in your own repository

#### USING A STARTUP REPOSITORY

A startup repository is the initial state of your shared production repository.

You can quickly start modeling using the **StartupRepository** or **StartupRepository\_Extralite repository.** 

The general Labnaf Product Installation document guides you through the installation of a startup repository on a SQL Server DBMS repository.

You can also use the Labnaf Customization Workbench and the Labnaf PowerShell to conduct and schedule miscellaneous tasks. For example:

- Import existing content from models or from raw data
- Transform the content from/to any other language including ArchiMate, BPMN, SysML, UML...
- Define new element properties for example application contact data
- Calculate some data automatically, for example application, or process complexity
- Assign individuals to specific catalogs, projects or functional domains
- Validate the model content, on demand or periodically, and automatically send error emails messages to the assigned individuals
- Change the metamodel in one click and push one button to make it your new model validation rule
- Make the validation preventive i.e. users can not enter invalid model content
- Publish your architecture data in Word format on demand or periodically
- Model Excel document templates including properties, tagged values and consolidated relationship matrices.
- Generate the Excel documents
- Publish the model repository content into an HTML site that enables email discussions about diagrams
- Periodically backup your repository content into a file-based database. You can use these also to compare repository content to any earlier version.