

Decentralized Governance Design Toolkit Development Document V1.0

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1 Introduction

We propose that finding a sound governance solution for various ecosystems with decentralized features is a design problem. As the idea of decentralization is gradually introduced into different application domains and contexts, there is an increasing need to develop a model based approach that is suitable for designing decentralized governance models. From the model development perspective, different ecosystems and governance cases face different contexts and the required components/system components will be different. To avoid serious problems such as system centralization, inefficiencies or missing important information that may arise from improper design, we developed a model-based approach to design decentralized governance, positioned as DECENT. In this document we explain how to install and import the DECENT libraries.

2 Instructions

2.1 Requirements

Please meet all the software and hardware requirements¹ and follow the installation steps in ADOxx official website².

2.2 Getting started in ADOxx development toolkit

To get you started with using DECENT modeling language toolkit library to model your own governance models in ADOxx, please consider the following basic steps to start and login to the tool. The whole process is also presented as a video on this webpage.

For the following steps, we do assume that the installation of ADOxx was concluded successfully.

- Start the Development Toolkit platform in your own equipment and environment.
- Use the default development user, password(user: *Admin*, password: *password*) and database name as *customize(defined during the setup process or “adoxxdb”)*, see in Fig. 1. Then, you can see the development environment.
- Download the DECENT modeling language toolkit library from this webpage. Select the library management button in the toolbar and import the DECENT library downloaded before. You may need to assign new names for libraries and create new model group according to the prompt information.

¹https://www.adoxx.org/live/hardware_software-requirements-15

²<https://www.adoxx.org/live/download-15>

- Select user management in the toolbar and create your own User. You need to set UserName, UserPassword (you need it to log into the modeling toolkit) and application library (here is the DECENT library you just imported in). You also need to assign a User Group for your own user, see Fig. 2.
- Select model management in the toolbar and assign the models to your model group created before, see Fig. 3.
- Select library management again and export DECENT library (with the suffix: *.adl*) in your own file system.

3 Acknowledgement

Alexander Völz and Dr. Wilfrid Utz from OmiLab³ provided constructive and valuable guidance on the development process in the ADOxx platform. We are grateful thank you.

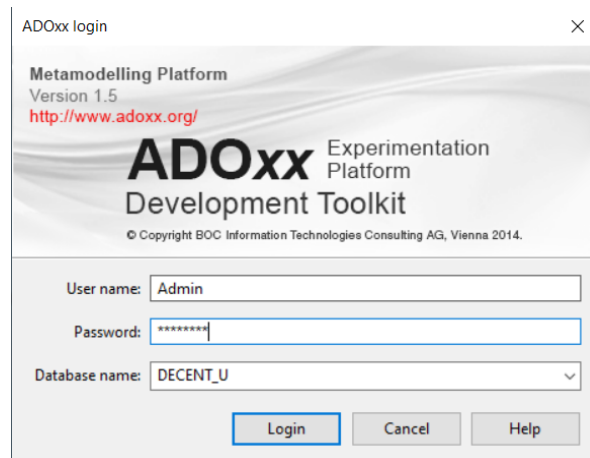


Figure 1: ADOxx development toolkit example of login

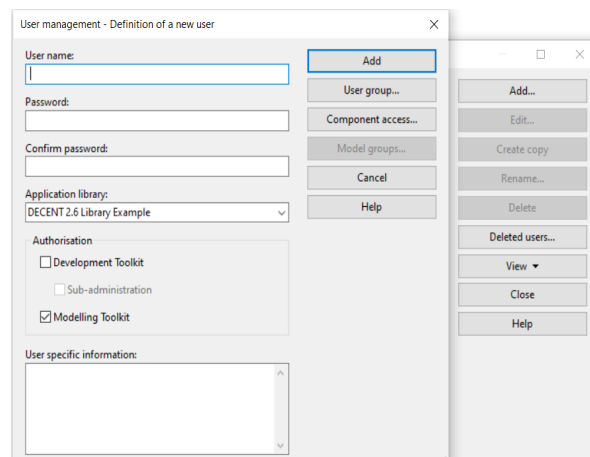


Figure 2: User creation in ADOxx

³<https://www.omilab.org/>

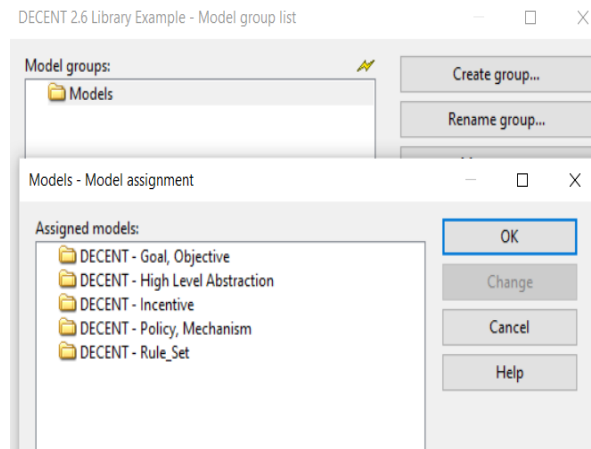


Figure 3: Model assignment in ADOxx

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