CamilleX Documentation

None

Table of contents

1. 1. CamilleX User Manual	3
2. Getting Started	4
2.1 Basic Tutorial	5

1. 1. CamilleX User Manual

<u>CamilleX</u> new constructs (called XMachines and XContexts) for Event-B modelling. The new constructs are text files which are automatically translated into the corresponding Rodin's Event-B constructs (i.e., Machines and Contexts) accordingly. Facility for translating to and from Rodin's components to Camillex components can be invoked manually. Camillex is inspired by <u>Camille</u> text editor for Rodin and is based on <u>XText</u> technology, hence the name Camillex.

- Getting Started:
- Installation: Information for installing the CamilleX feature.
- Basic tutorial: This tutorial provides a step-by-step walk-through working with CamilleX constructs.

2. Getting Started

2.0.1 2.1 Installation

<u>CamilleX</u> is available from the main Rodin update site (under CamilleX category). There are two versions of the feature, the standard version for users and the SDK version for software developers which include source code.

2.0.2 2.2 Configuration

Windows users must change the workspace text file encoding to *UTF-8*. This can be updated under the Rodin Preferences General/Workspace then in the Text file encoding section, select Other: UTF-8.

2.0.3 2.3 IMPORTANT

Currently, *CamilleX* not only supports *standard* Event-B machines and contexts, but also supports *Machine Inclusion* (for composition), and *Record* extension to the Event-B modelling language.

Since the *XContexts* and *XMachines* are compiled to the Rodin files, the corresponding Rodin contexts and machines will be **OVER-WRITTEN**. Any changes in the Rodin files will not be lost.

DO NOT USE the *CamilleX* if you use modelling plug-ins that use the Rodin files as source such as *UML-B* state-machines and class-diagrams, as the additional modelling elements will be over-written.

2.1 Basic Tutorial

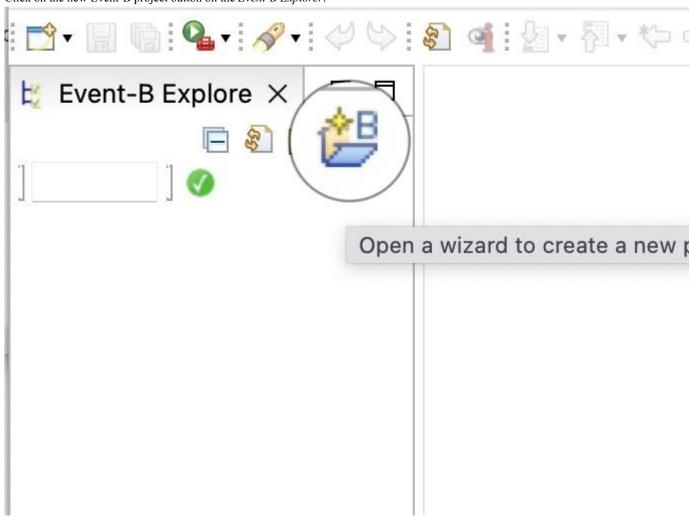
2.4.1 Task 1. Create an Event-B Project

Introduction

The purpose of this task is to create an Event-B project for the CamilleX constructs.

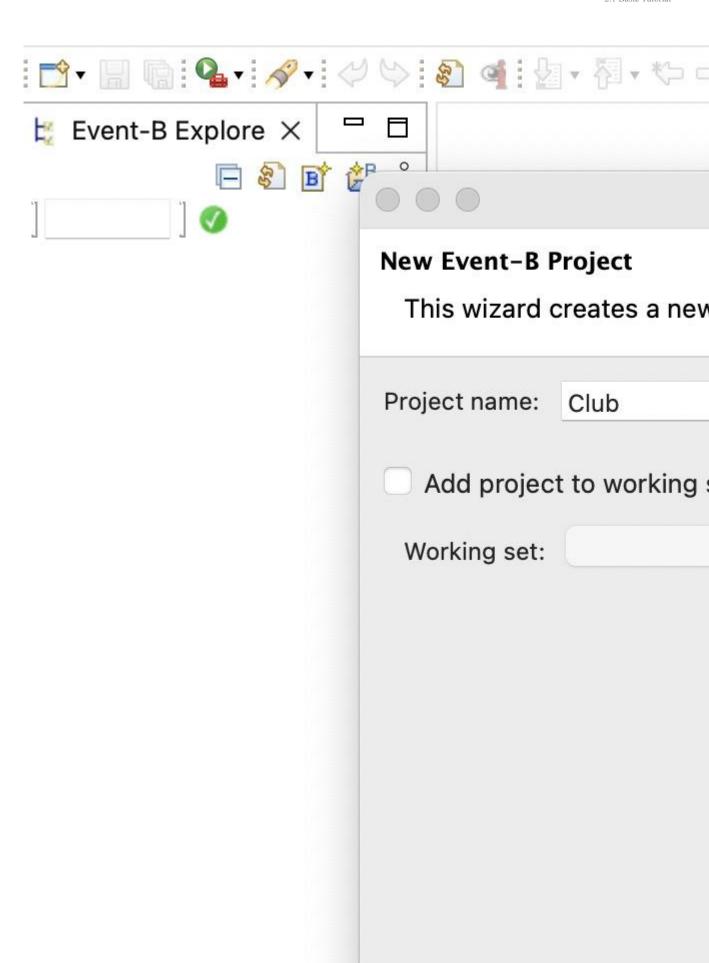
Step 1. Create a New Event-B Project Named Club

• Click on the new Event-B project button on the Event-B Explorer.



(The same wizard can be invoke through the menu File -> New -> Event-B Project)

 \bullet From the pop-up dialog, enter Club as the Project ${\tt name}$

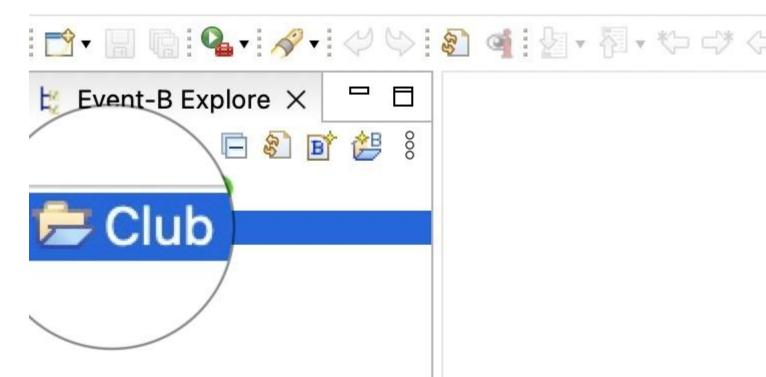


 \bullet Click ${\tt Finish}$ to confirm the creation of the project.

New Event-B Project
This wizard creates a new (empty) Event-B Project i
Project name: Club
Add project to working sets
Working set:

Conclusion

By now, the project ${\tt Club}$ should be visible in the *Event-B Explorer*.



2.4.2 Task 2. Create an XContext

Introduction

The purpose of this task is to create a simple XContext within the newly created project.

Step 1. Create a New XContext Named ${\tt coursesCtx.bucx}$

ullet Use the menu to create a new file File $ext{-> New -> File}$

Create a new XContext named coursesCtx.bucx using the New File wizard (see the following figure). Important: A pop-up dialog will be displayed asking to convert the club project to XText project, please answer Yes