11. Krzysztof Marek, Michał Śmiałek, Kamil Rybiński, Radosław Roszczyk and Marek Wdowiak: BalticLSC: Low-code Software Development Platform for Large Scale Computations

In modern times, innovation often requires performing complex computations in a short amount of time. However, for many small organisations and freelance innovators, largescale computations remain beyond reach because of the small accessibility of computation resources and the lack of knowledge required to use them efficiently. The BalticLSC Platform is a software development and computing environment created to address this issue. This paper presents the associated software development process. The platform users can perform advanced computations using ready applications or develop new applications quickly from available components. This can be done using a visual notation called the Computation Application Language (CAL). CAL programs are developed in a dedicated online editor, through selecting and connecting reusable computation modules. If a required module is missing, it can be quickly created by encapsulating code inside a standardised container. The platform's ultimate goal is to relieve the developers from the need to understand the complexity of the distributed parallel computation environment. The platform was implemented in the form of an online software development portal. Validation of the platform consisted in the development of applications and modules by students not experienced in programming. The results of this validation acknowledge the required platform's characteristics.