Unified model integration approach using Microsoft .NET framework

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The new approach for the integration of models into the environmental modeling system is presented. Development of the model integration class library is inspired by the OpenMI framework developed within the FP5 EU project HarmonIT. The models integration into the modeling system using presented approach requires development of the model wrapper library which defines data structure and interaction with the model kernel. Use of presented approach gives a possibility to develop a unified set of the data editing and visualization controls as well as generic use of model input/output data management tools. An implementation of the system using .NET Framework and Microsoft SQL Server 2000 and system interaction with the third-party OpenMI compliant models is presented.