

## **Overview and architecture of a component modeling tool**

ANDREEA VESCAN and SIMONA MOTOGNA

**ABSTRACT.** Component-based development (CBD) advocates the acquisition, adaptation, and integration of reusable software components to rapidly develop and deploy complex software systems with minimum engineering effort and resource cost.

The paper first presents previous results regarding component-based development and describes the used architecture.

Further, the paper provides the steps (scenarios) when using a tool for developing a component-based system by assembling components: finding and selecting components or create new components; adapting components; syntactic system assembling, providing data and control flow; analyzing composition behavior, and deploying the system.

The previous work done by the authors is also described and an analysis about how to integrate them into the tool development is done.

BABEȘ-BOLYAI UNIVERSITY  
COMPUTER SCIENCE DEPARTMENT  
M. KOGĂLNICEANU 1  
400084 CLUJ-NAPOCA, ROMÂNIA  
*E-mail address:* camelia@ubbcluj.ro  
*E-mail address:* avescan@cs.ubbcluj.ro