

A hybrid re-composition based on components and web services

Authors

Khadidja Bentlemsan, Djamal Bennouar, Dalila Tamzalit, Khaled Walid Hidouci

Publication date

2020/7/3

Journal

International Journal of Computers and Applications

Volume

42

Issue

5

Pages

449-462

Publisher

Taylor & Francis

Description

For many years, component-based software engineering has been the most promising software engineering approach to develop complex software systems. However, with the increasing adoption of internet technologies, the demand for dynamic and flexible approaches is becoming essential. Thus, the service-oriented software engineering has emerged. Both approaches have strengths and weaknesses; it can be difficult to identify the appropriate approach that perfectly suits a particular system's need, principally in highly dynamic environments. In order to take full advantages of both approaches, the hybrid approach between component and service (HACS) has been proposed. HACS makes possible a definition of a hybrid, flexible, and controllable architecture consisting simultaneously of component and web services and respecting the software architect administration rules. In this paper, the dynamic ...