Implementation of a Novel System for Cross Platform Communication of Diversified Applications over Network

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 128
Number 9

Year of Publication: 2015

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10.5120/ijca2015906631

Abstract

Enterprises of all ends are trying to integrate and manage the data within a single sign on system. With the drastic increase in the usage of internet in the last decade, it has been observed that more and more use of web services throughout the industry. Data today is stored in various forms and structure in different OS, mainframes etc, the optimum way of managing this data and the most efficient way to access and retrieve this data is the need of the hour. This is where the versatility of web services comes into picture which enables enterprises and consumers to integrate numerous diversified platforms together to satisfy the essential requirements. This explores a dire need of a cost effective and efficient system that can integrate various cross platform applications to work together in a systematic environment. The aim of this research paper is to design and implement an organized system to demonstrate the data flow, architecture and the techniques used to integrate an ERP system with web applications. This is done by using a SOAP web service which integrates ASP.NET, Java and Database applications. Microsoft .NET as a platform for developing enterprise software is emerging for integration with SAP Enterprise.
Interest in Web services is rapidly increased from their inception. To exchange information among various applications in a standard way is the main goal of web services. This communication between the applications is based on SOAP and REST principle. Web service is a software system designed to support interoperable machine-to-machine interaction over a network. Currently, it has been emphasized quality and security of web services. Therefore, in this paper, the authors highlighted some standard trends such as SOAP, WSDL, UDDI for web services and the security policies to protect user information. This system is in Visual Studio 2010 development environment, using C# programming language, ASP.NET, ADO.NET and SQL Server database to jointly develop a B/S structure of ERP system.

References


Index Terms

Computer Science     Networks
Keywords

SOAP, WSDL, UDDI, REST, Web Services, Single sign on, ASP.NET, ADO.NET, SQL Server, SAP.