

ABSTRACT

Data communication networking has a great effect in increasing the amount of client request, in any service type, to server, which means more bandwidth will be needed. While resource what we called bandwidth is not grew along with the increasing. Extra bandwidth is hard to realize because it will not only spend a lots of cost, and also takes time and energy. For that, another resource optimizing is on developing. One of it, is designing the object compression.

In one case like XML Web Service, which takes SOAP (Simple Object Access Protocol) as protocol in exchanging data-package into network. Client request fulfillment by server will impose network, cause in many cases SOAP response is greater than SOAP request, more than that SOAP should carry and serve all information from server to clients. In order to deducting network's load, object compression becomes a solution to handle revolving traffic in limited bandwidth available.

Through this final assignment, bandwidth consumption, compression-decompression time and service process time on XML Web Service with compressed SOAP will be analyzed compare to uncompressed one using the .NET technology, between a server and a few clients for approximately same requesting time. Object compression is built using Microsoft Visual C# .NET by deflate compression algorithm, in its implementation on real LAN network.