


# Metrics suite for maintainability of eXtensible Markup Language web services

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The eXtensible Markup Language (XML) web services are emerging as the de-facto mechanism for exchanging structured information between applications. The large popularity and acceptance of web services led the developers to adopt the best practices of web service implementation and to find the ways for managing and maintaining web services more effectively. Maintainability, one of the important factors, which affects the quality of XML web services, can be controlled by the proper software metrics that are specifically designed and developed for it. In this paper, we present a suite of metrics to evaluate the quality of the XML web service in terms of its maintainability. The present suite of metrics includes: data weight of a web service description language, distinct message ratio metric, message entropy metric and message repetition scale metric. All the proposed metrics have been evaluated theoretically and validated empirically. A comparative study with similar measures proves the worth of the metric suite.

**Published in:**

[Software, IET](#) (Volume:5 , [Issue: 3](#))

**Date of Publication:**

June 2011

Page(s):

320 - 341

ISSN :

1751-8806

INSPEC Accession Number:

12035766

Digital Object Identifier :

[10.1049/iet-sen.2010.0089](https://doi.org/10.1049/iet-sen.2010.0089)

Date of Current Version :

09 June 2011

Issue Date :

June 2011

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