## **Abstract**

The practical of using web service is widely used for providing data to the public. Such as Yahoo that provides web services in order that public can access Yahoo services. Based on the survey, 75% of companies declared the spread of Web services will be focused internally. Also based on company surveys, 64% of companies stating that Interface and data integration became focus in the implementation of web services. Web service is software systems designed to support interoperability and interaction among machines in a network. Usually web services using xml technology in data exchange. But, along with technological development, found a format to exchange data using JSON technologies. This book will discuss how the performance of web services using JSON and XML, in this case the protocol used is the JSON-RPC and XML-RPC. XML-RPC is an XML specification that describes the mechanism of remote procedure calls using XML. JSON-RPC is web service protocol which is almost identical to XML only differ at callings procedurenya using the JSON format. Based on the results of research that has been done. JSON-RPC has a more performance than XML-RPC, because in exchange messagenya use JSON format, while XML-RPC uses XML format. JSON format is specifically designed for DTO (Data Transfer Object), but in XML not only for DTO but also serves as a DP (Data Presistence).

**Keywords**: web service, XML, JSON, XML-RPC, JSON-RPC, performance,RPC.