

RESTful Web Services

Astik Anand

B130542CS, Batch-A

astikanand@gmail.com

Department of Computer Science and Engineering

National Institute of Technology Calicut, Kerala

❖ Abstract

- A Web service is a Web page that is meant to be consumed by an autonomous program and requires an architectural style to make sense of them as there need not be a human being on the receiver end to make sense of theme.
- REST(Representational State Transfer) represents the model of how the modern Web should work. It is an architectural pattern that distils the way the Web already works.
- REST provides a set of architectural constraints that, when applied as a whole, emphasizes scalability of component interactions, generality of interfaces, independent deployment of components, and intermediary components to reduce interaction latency, enforce security, and encapsulate legacy systems.
- RESTful Web services play important role in distributed web applications. Performance of Web services affects overall performance of applications.
- Using features of REST, HTTP, and the REST frameworks like Jersey, Restlet, RESTEasy the latency and system resource consumption of application is improved.
- Performance of RESTful web services is improved using techniques such as fast manipulation of strings, streaming large representations, compressing SOAP response, partial representation, using Caching techniques and using conditional methods. It is observed that performances of RESTful Web services increases by approximately 40% if above techniques are used.

❖ References

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