Makale 6 – Comparation

Current integration technologies for distributed systems in Cloud environment are generally supported on textual data description languages (XML and JSON) and HTTP protocol. These technologies especially designed for human-level interaction and that creates integration problems. In this section we will do comparison with these current technologies and our new approach.

SOA is usually implemented by Web Services with WSDL, which is a set of conventions on XML usage to describe services at the interface level and SOAP as a message protocol, which is again based on XML.

REST also requires that data types, which are usually, called media types and standardized or previously agreed, when they are application specific.

Our approach is designed to work with binary messages.

Portal

SOA

REST, which is usually implemented by messages directly on HTTP, using its main verbs as a fixed set of operations.

Our approach does not depend on any particular transport protocol, relying solely on message delivery. Any existing server can be used, based on HTTP, WebSockets or any other protocol. In fact, several servers can be used simultaneously, receiving messages that are handed over to the message handlers that are able to process them.

Interoerability

Current Web-level interoperability technologies are greatly constrained by the initial decision of basing Web interoperability on data (not services) and text markup as the main description and representation mechanism. This has had profound consequences in the way technologies have evolved, with disadvantages such as textual parsing overheads, full interoperability only (based on schema sharing) and cumbersome syntax (e.g., WSDL, BPEL) because everything must be described as data.

Building interoperability on compliance and conformance avoids the problem of having to define schemas as separate documents and to agree upon them beforehand. As long as compliance and conformance hold, any two resources can interoperate, even if they were designed unawares to each other.