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REST is a software architecture style for distributed systems. RESTful web services are services built using the REST architecture. A RESTful web service is based on the following design principles:

- **Resources and representations** - Resources are entities or pieces of specific information made accessible by a RESTful web service. Each resource is referenced with a unique Uniform Resource Identifier (URI). The client and the RESTful service interact with each other by exchanging the representations of these resources. A RESTful web service also specifies the type of representation supported for each of the resource type. XML, HTML, and JavaScript Object Notation (JSON) are some of the popular representation types used by RESTful web services.  
Example - A subscriber's voice mailbox is a resource exposed by the CUE PI service. The CUE PI service provides and accepts XML representation for this resource.
- **Uniform Interface** - A RESTful service provides a uniform set of operations for all the resources. RESTful web services typically map the four main HTTP methods POST, GET, PUT, and DELETE to the operations they perform, that is, create, retrieve, update, and delete, respectively.
- **Statelessness** - Each request from client to server must contain all the information necessary to understand the request and cannot take advantage of any stored context on the server. In other words, the web service is not responsible for keeping any information about the state of its clients. The client is responsible for tracking its own actions (if it needs to).