Advantech AE Technical Share Document

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Category	■FAQ □SOP	Related OS	N/A
Abstract	WISE-4000, What's the RESTful structure of WISE		
Keyword	RESTful, WISE, http method, HTML, programing		
Related Product	WISE-4000		

■ **Problem Description:**

This documentation explains the meaning of RESTful and the RESTful web service that WISE provide.
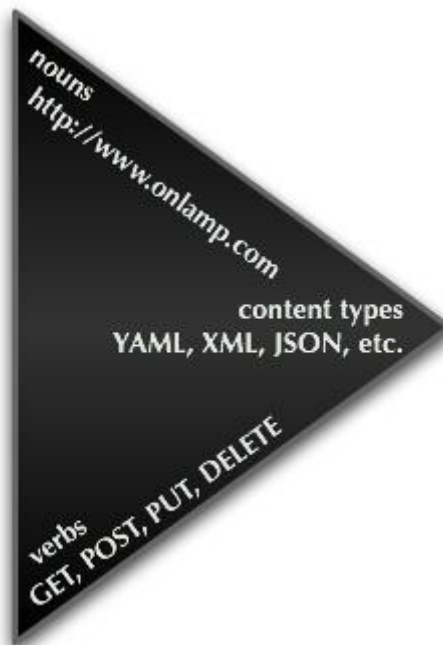
■ **Brief Solution - Step by Step:**

REST is the short for Representational State Transfer. It's a software architecture style widely used for creating scalable web services. It is web standards based architecture and uses HTTP Web service. APIs that adhere to the REST architectural constraints are called RESTful APIs. HTTP-based RESTful APIs are defined with these aspects:

- ◆ base URI, such as http://example.com/resources/
- ◆ an Internet media type for the data. This is often JSON but can be any other valid Internet media type (e.g., XML, Atom, microformats, images, etc.)
- ◆ standard HTTP methods (e.g., GET, PUT, POST, or DELETE)

User could find the REST resources for WISE-4000 series in the appendix b of user manual. Take the web-service that related to DI as an example, you could find it meets the definition of RESTful.

URL structure:

http://10.0.0.1/di_value/slot_index   (Collection URI)
http://10.0.0.1/di_value/slot_index/ch_num   (Element URI)

Internet media type:
application/json
{
   "Ch":2,
   "Md":1,
   "Stat":0,
   "Val":3378,
   "Cnting":0,
   "ClrCnt":1,
   "OvLch": 0
}
(Please note that ADAM-6000-CE and ADAM-6200 series use **XML** as the Internet media type)

HTTP methods:

GET:Returns the representation of all of digital input value resource.
PUT:Replace all of digital input value resource
PATCH:Apply partial modifications to digital input value resource.