

JSON-WSP

(JavaScript Object Notation Web-Service Protocol)

JSON-WSP

Web service protocol that uses JSON for

- service description
- requests
- responses

Similar to JSON-RPC

Objects

JSON-WSP specifies four JSON objects:

- description
- request
- response
- fault

Communication

- HTTP GET?
 - Response: 'Requests for HelloService jsonwsp interface must be posted'
- **HTTP POST!**

Service description

It can describe itself (methods, types...) like

- WSDL for SOAP
- IDL for CORBA

Description

```
{  
  "version": "1.1",  
  "url": "http://localhost:8888/HelloService/jsonwsp",  
  "servicename": "HelloService",  
  "type": "jsonwsp/description",  
  "types": {  
    //types  
  },  
  "methods": {  
    //methods  
  }  
}
```

Description types

```
"types": {  
  //types  
}
```

```
"Pokemon": {  
  "attacks": {  
    "type": [  
      "Attack"  
    ]  
  },  
  "hp": {  
    "type": "number"  
  },  
  "name": {  
    "type": "string"  
  }  
}
```

```
"Attack": {  
  "damage": {  
    "type": "number"  
  },  
  "name": {  
    "type": "string"  
  }  
}
```

Description methods

```
"methods": {  
  "pokemon": {  
    "ret_info": {  
      "doc_lines": [],  
      "type": "Pokemon"  
    },  
    "doc_lines": [],  
    "params": {  
      "name": {  
        "def_order": 1,  
        "doc_lines": [],  
        "type": "string",  
        "optional": false  
      }  
    }  
  }  
}
```


Request

```
{  
  "type": "jsonwsp/request",  
  "version": "1.0",  
  "methodname": "helloWorld",  
  "args": {  
    "name": "Krzysio"  
  },  
  "mirror": 3  
}
```

Response

```
{  
  "type": "jsonwsp/response",  
  "version": "1.0",  
  "methodname": "helloWorld",  
  "servicenumber": 1,  
  "servicename": "HelloService",  
  "result": "Hello Krzysio",  
  "reflection": "3"  
}
```



Faults

Fault codes

- incompatible
- server
- client

Fault

```
{
  "type": "jsonwsp/fault",
  "version": "1.0",
  "fault": {
    "code": "client",
    "string": "Too much hp",
    "detail": [
      ...
    ],
    "filename": "pokemonservice",
    "lineno": 34,
    "hint": ""
  },
  "reflection": "1"
}
```

Attachments

- In description **can be used as a primitive type**
- The MIME Multipart/Related Content-type

Ladon

- Web service framework
- Python
- Protocols
 - JSON-WSP
 - XML-RPC
 - JSON-RPC
 - SOAP

Instructions

<https://github.com/KrzysztofR-PUT/jsonwsp>