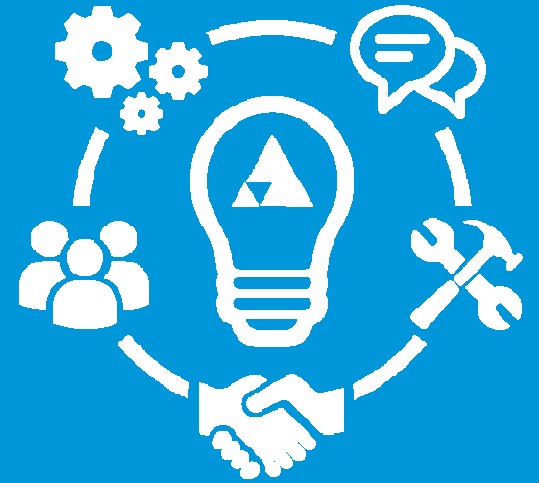


Uniface Dev Conf

Thomas S Shore III
Subject Matter Expert

March 3, 2016

UNIFACE
Advanced Development Technology



Uniface and REST



Agenda

- What is REST?
- Required facilities
- Functionality
- Uniface Examples



What is REST?

As REST is an acronym for REpresentational State
Transfer



What is REST?

- Uniform Interface
- Stateless
- Cacheable
- Client Server
- Layered System
- Code on Demand



Invocation

- Maps “typical” CRUD to HTTP methods
 - Create = POST
 - Retrieve = GET
 - Update = PUT
 - Delete = DELETE
- Plus
 - HEAD – Existence Check
 - OPTIONS – What do you support?



Mechanics

- Resources and their information
 - /globalprocs
 - /globalprocs/SYSTEM_LIBRARY
 - /globalprocs/SYSTEM_LIBRARY/GLOBAL_SORT
 - /xref/APICUSTOMER
 - Try this



Commercial Examples

- What could possibly go wrong :
 - Open the roof
- PETA would not be happy
 - Storage Example



Results

Here's a list of the most important status codes:

- **Success codes:**
 - 200 - OK (the default)
 - 201 - Created
 - 202 - Accepted (often used for delete requests)
- **User error codes:**
 - 400 - Bad Request (generic user error/bad data)
 - 401 - Unauthorized (this area requires you to log in)
 - 404 - Not Found (bad URL)
 - 405 - Method Not Allowed (wrong HTTP method)
 - 409 - Conflict (i.e. trying to create the same resource with a PUT request)



Output

- Accept header with a value of:
 - "application/xml" or
 - application/json
- ?Format=csv/json/xml



What's new with Uniface?

- `http://HostServer:Port/uniface/Servlet/ComponentName{.PublicOperation}{{/PathInput} | {?QueryString}}`
- For example: `http://example.com:8080/uniface/wrd/products.getInfo?/a=chairs&b=red/`
 - PathInput—optional; string of input parameters in the form:
 - `Value{/Value}`
 - The PathInput is used for semantic URLs. Input path parameters are put into the PATHINPUT channel of \$webinfo.
 - QueryString—optional; string of input parameters in the form:
 - `Key=Value{&Key=Value}`
 - The list can contain key=value pairs or value-only parameters but not both. The QueryString is used in non-semantic URLs.
 - For dynamic server pages, the parameters are put in the HTTPREQUESTPARAMS channel of \$webinfo.
 - For static server pages, they are put into the INPUT channel of \$webinfo.

\$webinfo

- **PATHINPUT**

- The PATHINPUT channel is used in both dynamic and static server pages for RESTful URLs. For more information, see [Uniface URL Format.](#)
- If the request was formatted as a RESTful URL, the PATHINPUT channel contains an associative list of input parameters.



\$webinfo

- HTTPREQUESTHEADERS
 - What should I send?
 - What is accepted
- HTTPRESPONSEHEADERS
 - What is allowed



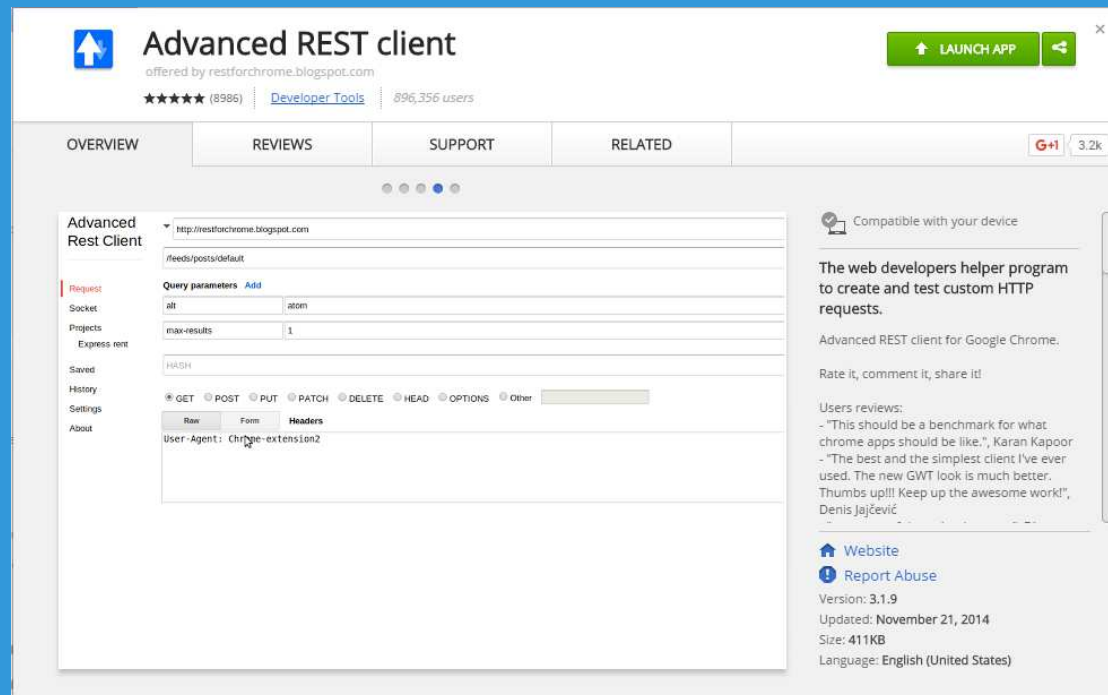
Output

- XMLENCODER



Testing facility

- <https://chrome.google.com/webstore/detail/advanced-rest-client/hgmloofddffdnphfgcellkdfbfbjeloo?hl=en-US>



▶ http://localhost:8080/uniface/wrd/REPAPI/xref/APICUSTOMER

● GET ● POST ● PUT ● PATCH ● DELETE ● HEAD ● OPTIONS ● Other

RawFormHeaders

Clear

Send

Status200 OK Loading time: 580 ms

Request headersUser-Agent: Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/45.0.2454.101 Safari/537.36
Content-Type: text/plain; charset=utf-8
Accept */*
Accept-Encoding: gzip, deflate, sdch
Accept-Language: en-US,en;q=0.8
Cookie: JSESSIONID=A898904A0E26492AB62057F71B38934C

Response headersServer: Apache-Coyote/1.1
Cache-Control: no-cache
Date: Wed, 14 Oct 2015 18:00:10 GMT
Access-Control-Allow-Origin: http://localhost
Allow-Origin: http://localhost
Expires: Thu, 01 Jan 1970 00:00:00 GMT
Content-Type: text/json; charset=UTF-8
Content-Length: 11994

RawJSONResponse

Copy to clipboard Save as file

[53]
-0: {
 type: "Include"
 name: "SYSTEM_LIBRARY_DEFPARAM (Include)"
 referencedby: ""
 objecttype: "Component"
 object: "APICUSTOMER"
 tricescape: ""
}

Thank You! Questions?

