Common Lisp ODATA Client

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CL-ODATA-CLIENT is a Common Lisp client for accessing ODATA services.

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4.1 ODATA-CLIENT package

ODATA-CLIENT   [PACKAGE]
    Provides core functions for interacting with an ODATA service.

External definitions

Variables

ACCESS-TOKEN   [ODATA-CLIENT]
    ODATA service api token.

ODATA-BASE   [ODATA-CLIENT]
    ODATA service base url.

Macros

ODATA-CLIENT:WITH-ODATA-BASE (*base* **&body** *body*)   [Macro]

Functions

ODATA-CLIENT:ODATA-POST (*uri data* **&key** *(json-encode t)*   [Function]
        authorization)
    Make a POST request to ODATA service at *URI*.
    DATA is the *data* to be posted. It is encoded using ⟨undefined⟩ [ENCODE-JSON-
    TO-STRING], page ⟨undefined⟩.

ODATA-CLIENT:ODATA-GET* (*uri* **&rest** *args* **&key** *$filter $expand*)   [Function]
    Make an [ODATA-GET], page 4 request using [*ODATA-BASE*], page 4 as URL
    base.

ODATA-CLIENT:ODATA-PUT (*uri data* **&key** *(json-encode t)*   [Function]
        authorization)
    Make a PUT (update) request to ODATA service at *URI*.
    DATA is the *data* to be posted. It is encoded using ⟨undefined⟩ [ENCODE-JSON-
    TO-STRING], page ⟨undefined⟩.

ODATA-CLIENT:ODATA-PATCH (*uri data* **&key** *(json-encode t)*   [Function]
        authorization)
    Make a PATCH request to ODATA service at *URI*.
    DATA is the *data* to be posted. It is encoded using ⟨undefined⟩ [ENCODE-JSON-
    TO-STRING], page ⟨undefined⟩.

ODATA-CLIENT:ODATA-GET (*url* **&key** *$filter $expand authorization*)   [Function]
    ⟨undefined⟩ [GET], page ⟨undefined⟩ request on an ODATA service at *URL*.
    $filter is an ODATA *$filter* expression.
    $expand is an ODATA *$expand* expression.

AUTHORIZATION is the *authorization* token.

See: `http://docs.oasis-open.org/odata/odata/v4.0/errata03/os/complete/`
`part1-protocol/odata-v4.0-errata03-os-part1-protocol-complete.html#`
`_The_$filter_System`

Classes

`ODATA-CLIENT:ODATA-REQUEST-ERROR`   [Class]
Class precedence list: `odata-request-error, error, serious-condition,`
`condition, t`

4.2 ODATA/LANG package

`ODATA/LANG`   [PACKAGE]
This package exports functions that are meant to be used with arrows syntax to
interact with an ODATA service.

External definitions

Functions

`ODATA/LANG:UPDATE-LINK` (*url data*)   [Function]
Update an already existent link.

A successful PUT request to a single-valued navigation property's reference resource
changes the related entity.

Example: change the Airline of a Flight

(-> +trip-pin-modify+
(collection "People")
(id "russellwhyte")
(path "Trips(0)"
"PlanItems(11)"
"Microsoft.OData.SampleService.Models.TripPin.Flight"
"Airline")
(update-link '(("@odata.context" . ,(⟨undefined⟩ [quri:render-uri], page ⟨undefined⟩
+trip-pin-modify+))
("@odata.id" . "Airlines('FM')"))))

`ODATA/LANG:ID` (*url id*)   [Function]
Get ODATA resource *id*.

`ODATA/LANG:FCALL` (*url name* **&rest** *args*)   [Function]
Call the ODATA action with *name NAME* and arguments *ARGS*.

Actions are operations exposed by an OData service that MAY have side effects when invoked. Actions MAY return data but MUST ⟨undefined⟩ [NOT], page ⟨undefined⟩ be further composed with additional path segments.

See: `https://docs.oasis-open.org/odata/odata/v4.01/odata-v4.01-part1-protocol.html#sec_Actions`

ODATA/LANG:$ORDERBY (*url property* **&optional** (*order :asc*))   [Function]

ODATA/LANG:PROPERTY (*url name*)   [Function]
Access the resource property with *name NAME*.

ODATA/LANG:$TOP (*url top*)   [Function]

ODATA/LANG:$FILTER (*url exp*)   [Function]
Add ODATA filter parameter to the current request.

The $filter system query option allows clients to filter a collection of resources that are addressed by a request *URL*. The expression specified with $filter is evaluated for each resource in the collection, and only items where the expression evaluates to true are included in the response. Resources for which the expression evaluates to false or to null, or which reference properties that are unavailable due to permissions, are omitted from the response.

See: ⟨undefined⟩ [ODATA-CLIENT::compile-$filter], page ⟨undefined⟩
See: `https://www.odata.org/getting-started/basic-tutorial/#filter`

ODATA/LANG:$SKIP (*url skip*)   [Function]

ODATA/LANG:DEL (*url*)   [Function]
Perform a resource deletion request at ODATA service at *URL*.

ODATA/LANG:PATH (*url* **&rest** *path*)   [Function]

ODATA/LANG:$VALUE (*url*)   [Function]

ODATA/LANG:$SEARCH (*url exp*)   [Function]

ODATA/LANG:$SELECT (*url exp*)   [Function]

ODATA/LANG:LINK (*url data*)   [Function]
Add a link to a related entity.

Relationships from one entity to another are represented as navigation properties. A successful [POST], page 7 request to a navigation property's references collection adds a relationship to an existing entity.

Example: add 'vincentcalabrese' to friends of 'scottketchum'

(-> +trip-pin-modify+
(collection "People") (id "scottketchum")
(property "Friends") ($ref)

(link '(("@odata.context" . ,(⟨undefined⟩ [quri:render-uri], page ⟨undefined⟩ +trip-pin-modify+))
("@odata.id" . "People('vincentcalabrese')"))))

ODATA/LANG:POST (*msgraph::url* **&optional** *msgraph::data*)   [Function]

ODATA/LANG:FETCH (*msgraph::url* **&optional** *type*)   [Function]

ODATA/LANG:UPDATE (*url data*)   [Function]
    Perform a resource update (PUT request) with *DATA* to ODATA service at *URL*.

ODATA/LANG:SINGLETON (*url name*)   [Function]
    Access the ODATA singleton with *name NAME* at *URL*.
    See: `https://www.odata.org/getting-started/advanced-tutorial/#querySingleton` .

ODATA/LANG:COLLECTION (*url name*)   [Function]
    Access the resource collection at *NAME*.

ODATA/LANG:CREATE (*url data*)   [Function]
    Perform a resource creation request with *DATA* at ODATA service at *URL*.

ODATA/LANG:PATCH (*url data*)   [Function]
    Perform a resource [PATCH], page 7 request with *DATA* to ODATA service at *URL*.

ODATA/LANG:$REF (*url*)   [Function]

ODATA/LANG:$EXPAND (*url exp*)   [Function]

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